

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL111125\  
 Data File : VL043189.D  
 Acq On : 11 Nov 2025 13:47  
 Operator : SY/MD  
 Sample : Q3530-15 0.03 MDL  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 MDL-AIR-03-QT4-2025

Quant Time: Nov 12 01:05:10 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL101425AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Wed Oct 15 02:12:58 2025  
 Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.800 | 49   | 138118   | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.978 | 114  | 363473   | 10.000 | ppbv  | 0.02     |
| 55) Chlorobenzene-d5    | 8.898 | 117  | 307571   | 10.000 | ppbv  | 0.01     |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 68) 1-Bromo-4-Fluorobenzene | 10.390 | 95    | 224002   | 9.370    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 93.700% |

| Target Compounds              |       |     |       |        |        | Qvalue |
|-------------------------------|-------|-----|-------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.505 | 85  | 691   | 0.035  | ppbv # | 79     |
| 3) Chlorodifluoromethane      | 1.483 | 51  | 724   | 0.034  | ppbv   | 95     |
| 4) Chloromethane              | 1.541 | 50  | 353   | 0.045  | ppbv # | 85     |
| 5) Vinyl Chloride             | 1.586 | 62  | 177   | 0.023  | ppbv # | 44     |
| 6) Bromomethane               | 1.674 | 94  | 206   | 0.049  | ppbv # | 77     |
| 7) Chloroethane               | 1.712 | 64  | 88    | 0.028  | ppbv # | 42     |
| 8) Dichlorotetrafluoroethane  | 1.560 | 85  | 531   | 0.033  | ppbv # | 73     |
| 9) Propene                    | 1.784 | 41  | 568   | 0.060  | ppbv   | 85     |
| 10) Heptane                   | 5.007 | 43  | 219   | 0.008  | ppbv # | 49     |
| 11) Trichlorofluoromethane    | 1.887 | 101 | 754   | 0.039  | ppbv # | 39     |
| 12) 1,1,2-Trichlorotrifluo... | 2.153 | 101 | 439   | 0.028  | ppbv # | 28     |
| 13) Ethanol                   | 1.437 | 45  | 36575 | 10.494 | ppbv   | 100    |
| 14) Bromoethene               | 1.793 | 108 | 145   | 0.025  | ppbv # | 1      |
| 15) Acetone                   | 1.845 | 43  | 2653  | 0.143  | ppbv # | 86     |
| 16) 1,3-Butadiene             | 1.619 | 39  | 455   | 0.051  | ppbv   | 95     |
| 17) tert-Butyl alcohol        | 2.056 | 59  | 924   | 0.036  | ppbv   | 97     |
| 18) 1,1-Dichloroethene        | 2.046 | 96  | 262   | 0.039  | ppbv # | 48     |
| 19) Isopropyl Alcohol         | 1.437 | 45  | 36575 | 3.154  | ppbv # | 36     |
| 20) Methylene Chloride        | 2.072 | 84  | 1936  | 0.263  | ppbv # | 78     |
| 21) Allyl Chloride            | 2.111 | 41  | 707   | 0.052  | ppbv # | 79     |
| 22) trans-1,2-Dichloroethene  | 2.353 | 96  | 329   | 0.041  | ppbv   | 91     |
| 23) Vinyl Acetate             | 2.480 | 43  | 387   | 0.014  | ppbv # | 55     |
| 24) 1,1-Dichloroethane        | 2.418 | 63  | 625   | 0.040  | ppbv # | 87     |
| 25) Ethyl Acetate             | 2.852 | 43  | 511   | 0.011  | ppbv # | 75     |
| 26) Hexane                    | 2.842 | 57  | 482   | 0.023  | ppbv # | 52     |
| 27) Carbon Disulfide          | 2.159 | 76  | 722   | 0.037  | ppbv # | 1      |
| 28) Methyl tert-Butyl Ether   | 2.450 | 73  | 122   | 0.013  | ppbv   | 91     |
| 29) Chloroform                | 2.861 | 83  | 1110  | 0.036  | ppbv   | 89     |
| 30) Cyclohexane               | 3.881 | 84  | 107   | 0.006  | ppbv # | 1      |
| 31) cis-1,2-Dichloroethene    | 2.735 | 61  | 299   | 0.015  | ppbv # | 64     |
| 32) 1,1,1-Trichloroethane     | 3.383 | 97  | 1204  | 0.038  | ppbv   | 96     |
| 34) 2-Butanone                | 2.577 | 43  | 1710  | 0.070  | ppbv   | 95     |
| 35) Carbon Tetrachloride      | 3.787 | 117 | 765   | 0.029  | ppbv # | 47     |
| 36) Benzene                   | 3.677 | 78  | 399   | 0.012  | ppbv # | 12     |
| 37) 1,2-Dichloroethane        | 3.237 | 62  | 714   | 0.036  | ppbv # | 68     |
| 38) Trichloroethene           | 4.580 | 130 | 155   | 0.011  | ppbv # | 3      |
| 39) 1,2-Dichloropropane       | 3.978 | 63  | 92480 | 7.389  | ppbv # | 26     |
| 40) 1,4-Dioxane               | 4.315 | 88  | 50    | 0.009  | ppbv # | 1      |
| 41) Tetrahydrofuran           | 3.069 | 42  | 71    | 0.005  | ppbv # | 37     |
| 42) Bromodichloromethane      | 4.512 | 83  | 729   | 0.027  | ppbv # | 41     |
| 43) Methyl Methacrylate       | 4.907 | 69  | 287   | 0.017  | ppbv # | 64     |
| 44) 2,2,4-Trimethylpentane    | 4.671 | 57  | 757   | 0.013  | ppbv # | 2      |
| 45) t-1,3-Dichloropropene     | 6.444 | 75  | 158   | 0.009  | ppbv # | 43     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL111125\  
 Data File : VL043189.D  
 Acq On : 11 Nov 2025 13:47  
 Operator : SY/MD  
 Sample : Q3530-15 0.03 MDL  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

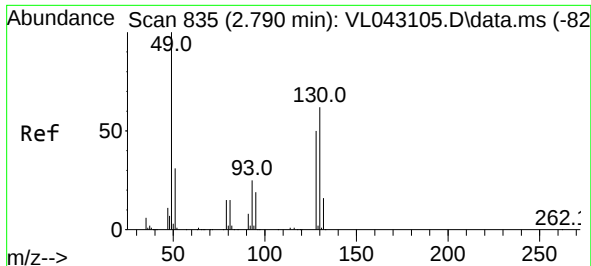
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 MDL-AIR-03-QT4-2025

Quant Time: Nov 12 01:05:10 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL101425AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Wed Oct 15 02:12:58 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |    |
|-------------------------------|--------|------|----------|-------|-------|----------|----|
| 46) cis-1,3-Dichloropropene   | 5.626  | 75   | 214      | 0.010 | ppbv  | #        | 37 |
| 47) 1,1,2-Trichloroethane     | 6.609  | 97   | 49       | 0.004 | ppbv  | #        | 68 |
| 48) Dibromochloromethane      | 7.412  | 129  | 29       | 0.001 | ppbv  | #        | 10 |
| 49) Bromoform                 | 9.522  | 173  | 28       | 0.002 | ppbv  | #        | 27 |
| 50) 4-Methyl-2-Pentanone      | 5.784  | 43   | 80       | 0.002 | ppbv  | #        | 60 |
| 51) 2-Hexanone                | 7.464  | 43   | 97       | 0.004 | ppbv  | #        | 27 |
| 52) Tetrachloroethene         | 8.263  | 164  | 12       | 0.001 | ppbv  | #        | 1  |
| 53) Toluene                   | 6.972  | 91   | 48       | 0.001 | ppbv  | #        | 20 |
| 54) 1,2-Dibromoethane         | 7.668  | 107  | 316      | 0.015 | ppbv  |          | 83 |
| 56) 1,1,1,2-Tetrachloroethane | 8.933  | 131  | 161      | 0.008 | ppbv  | #        | 1  |
| 57) Chlorobenzene             | 8.933  | 112  | 897      | 0.031 | ppbv  | #        | 50 |
| 58) Ethyl Benzene             | 9.542  | 91   | 347      | 0.007 | ppbv  |          | 95 |
| 59) m/p-Xylene                | 9.552  | 91   | 419      | 0.010 | ppbv  | #        | 29 |
| 60) o-Xylene                  | 9.979  | 91   | 536      | 0.013 | ppbv  | #        | 32 |
| 61) Styrene                   | 9.872  | 104  | 66       | 0.004 | ppbv  | #        | 1  |
| 62) Isopropylbenzene          | 10.555 | 105  | 1302     | 0.017 | ppbv  | #        | 84 |
| 63) 1,1,2,2-Tetrachloroethane | 9.982  | 83   | 394      | 0.014 | ppbv  | #        | 25 |
| 64) n-propylbenzene           | 11.011 | 120  | 48       | 0.002 | ppbv  | #        | 1  |
| 65) tert-Butylbenzene         | 11.536 | 119  | 385      | 0.006 | ppbv  | #        | 1  |
| 66) Benzyl Chloride           | 11.636 | 91   | 28       | 0.004 | ppbv  | #        | 65 |
| 67) sec-Butylbenzene          | 11.782 | 105  | 1355     | 0.014 | ppbv  |          | 97 |
| 69) p-Isopropyltoluene        | 11.950 | 119  | 101      | 0.001 | ppbv  | #        | 48 |
| 70) n-Butylbenzene            | 12.299 | 91   | 689      | 0.009 | ppbv  | #        | 81 |
| 71) 2-Chlorotoluene           | 10.982 | 91   | 40       | 0.001 | ppbv  |          | 86 |
| 72) 4-Ethyltoluene            | 11.141 | 105  | 245      | 0.005 | ppbv  | #        | 61 |
| 73) 1,3,5-Trimethylbenzene    | 11.218 | 105  | 780      | 0.018 | ppbv  | #        | 62 |
| 74) 1,2,4-Trimethylbenzene    | 11.558 | 105  | 170      | 0.004 | ppbv  | #        | 42 |
| 75) 1,3-Dichlorobenzene       | 11.633 | 146  | 71       | 0.003 | ppbv  | #        | 23 |
| 76) 1,4-Dichlorobenzene       | 11.691 | 146  | 283      | 0.010 | ppbv  | #        | 22 |
| 77) 1,2-Dichlorobenzene       | 11.623 | 146  | 455      | 0.017 | ppbv  |          | 75 |
| 78) Hexachloro-1,3-Butadiene  | 13.895 | 225  | 651      | 0.032 | ppbv  | #        | 83 |
| 79) Naphthalene               | 13.529 | 128  | 322      | 0.007 | ppbv  | #        | 69 |
| 80) Naphthalene,2-methyl-     | 14.607 | 142  | 57       | 0.004 | ppbv  | #        | 33 |
| 81) 1,2,4-Trichlorobenzene    | 13.458 | 180  | 50       | 0.002 | ppbv  | #        | 82 |

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

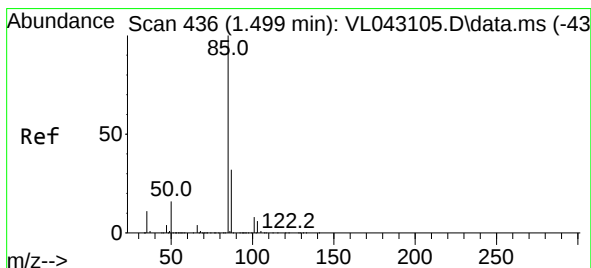
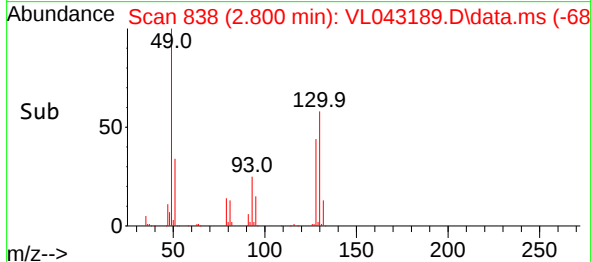
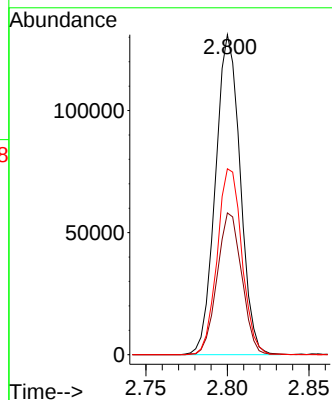
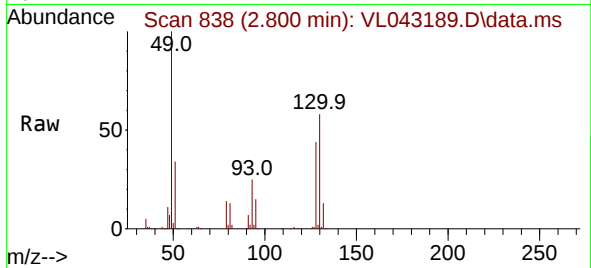




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.800 min Scan# 81  
Delta R.T. 0.010 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

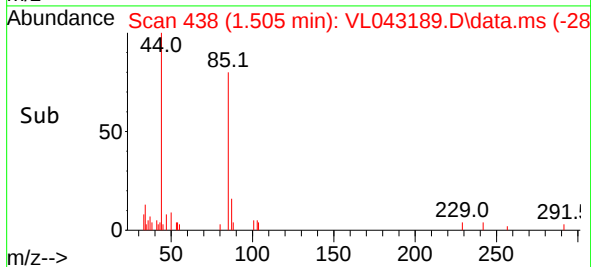
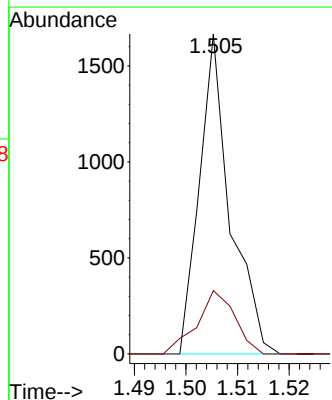
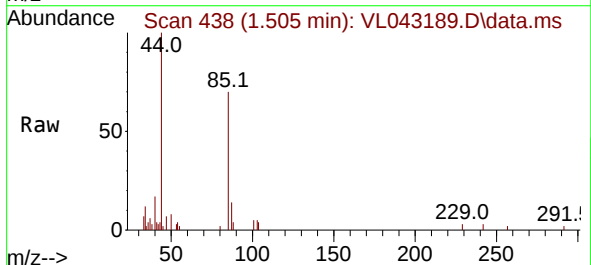
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

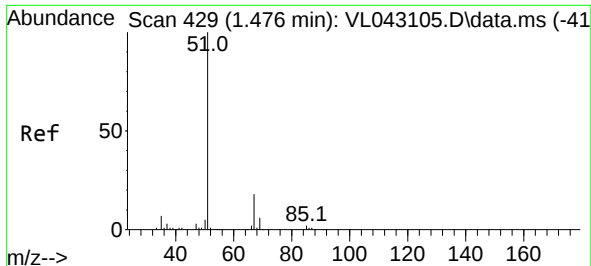
Tgt Ion: 49 Resp: 138118  
Ion Ratio Lower Upper  
49 100  
128 44.2 24.4 73.4  
130 58.0 31.0 93.0



#2  
Dichlorodifluoromethane  
Concen: 0.035 ppbv  
RT: 1.505 min Scan# 438  
Delta R.T. 0.006 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion: 85 Resp: 691  
Ion Ratio Lower Upper  
85 100  
87 19.8 25.3 37.9

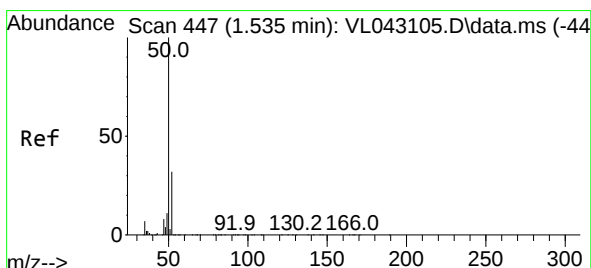
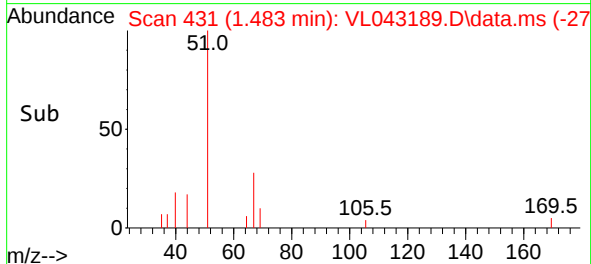
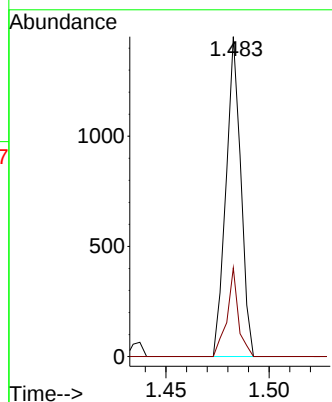
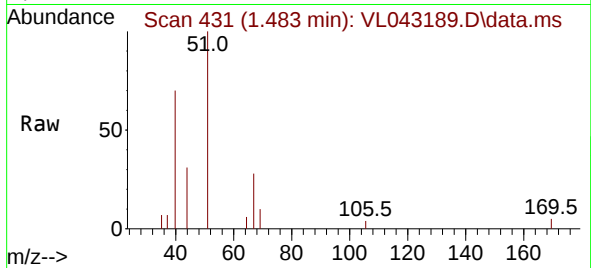




#3  
Chlorodifluoromethane  
Concen: 0.034 ppbv  
RT: 1.483 min Scan# 41  
Delta R.T. 0.006 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

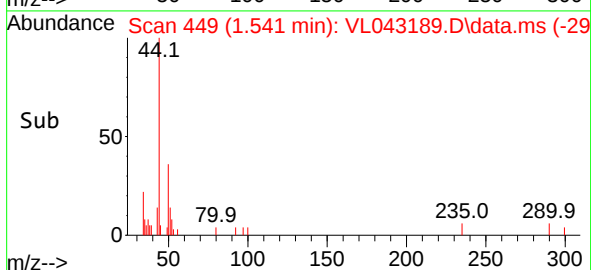
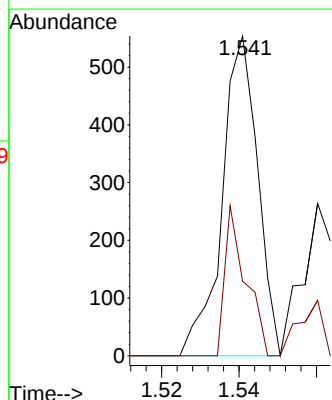
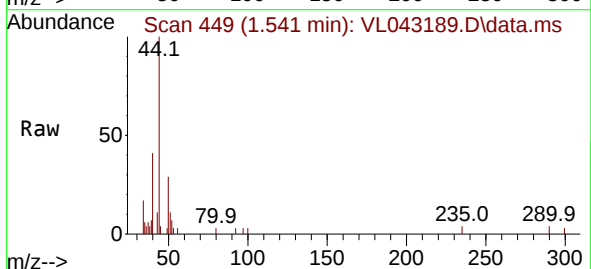
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

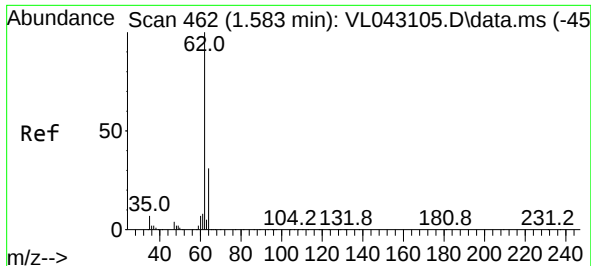
Tgt Ion: 51 Resp: 724  
Ion Ratio Lower Upper  
51 100  
67 21.3 15.1 22.7



#4  
Chloromethane  
Concen: 0.045 ppbv  
RT: 1.541 min Scan# 449  
Delta R.T. 0.006 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion: 50 Resp: 353  
Ion Ratio Lower Upper  
50 100  
52 23.3 25.2 37.8#

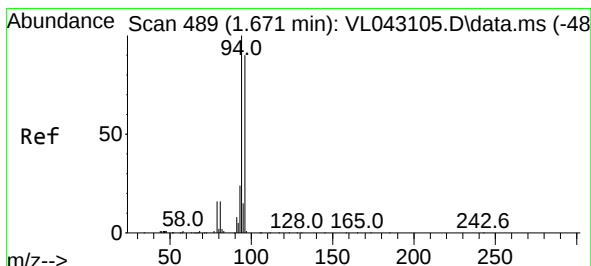
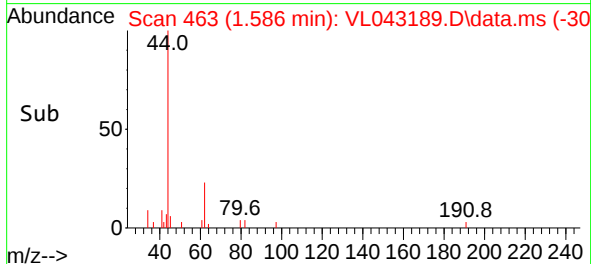
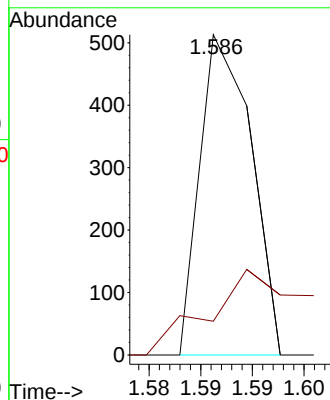
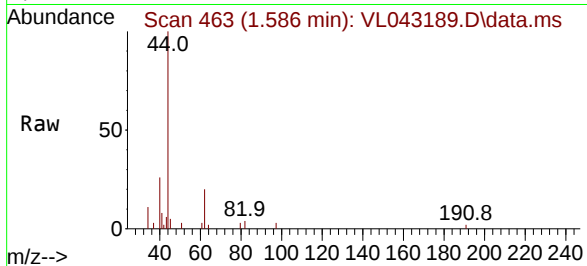




#5  
 Vinyl Chloride  
 Concen: 0.023 ppbv  
 RT: 1.586 min Scan# 41  
 Delta R.T. 0.003 min  
 Lab File: VL043189.D  
 Acq: 11 Nov 2025 13:47

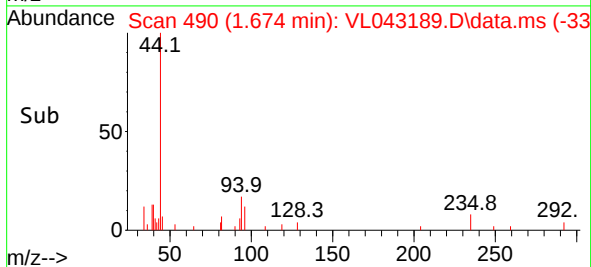
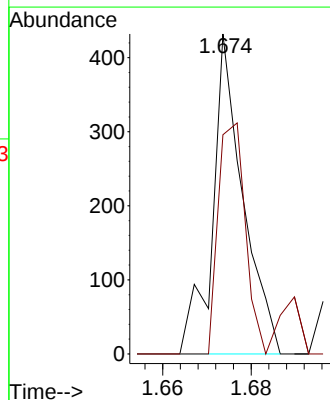
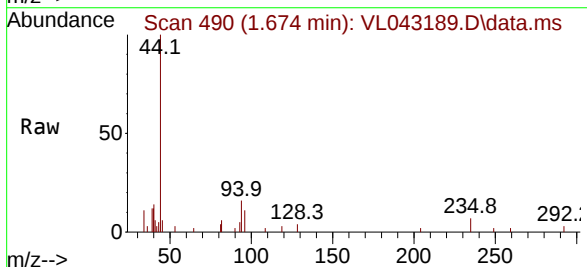
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 MDL-AIR-03-QT4-2025

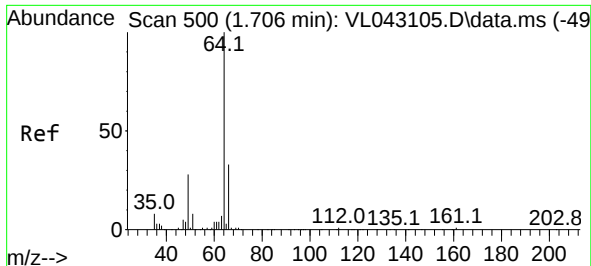
Tgt Ion: 62 Resp: 177  
 Ion Ratio Lower Upper  
 62 100  
 64 0.0 24.6 36.8#



#6  
 Bromomethane  
 Concen: 0.049 ppbv  
 RT: 1.674 min Scan# 490  
 Delta R.T. 0.003 min  
 Lab File: VL043189.D  
 Acq: 11 Nov 2025 13:47

Tgt Ion: 94 Resp: 206  
 Ion Ratio Lower Upper  
 94 100  
 96 68.5 72.2 108.4#

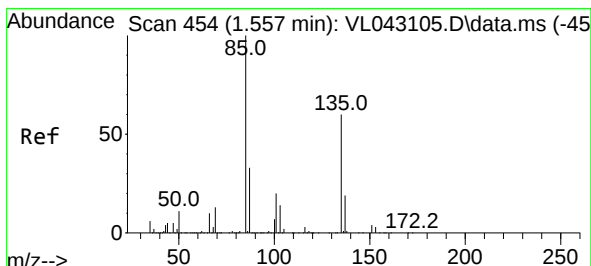
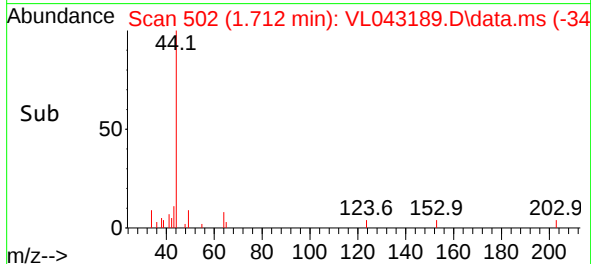
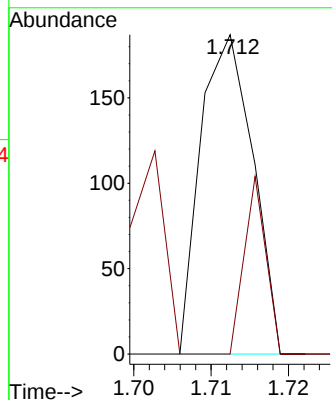
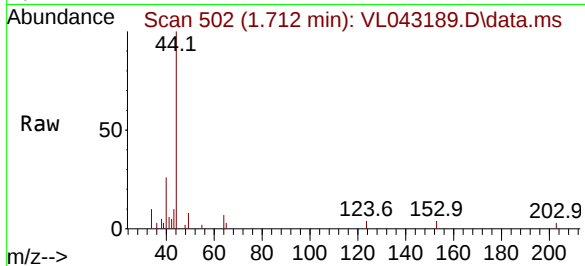




#7  
Chloroethane  
Concen: 0.028 ppbv  
RT: 1.712 min Scan# 500  
Delta R.T. 0.006 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

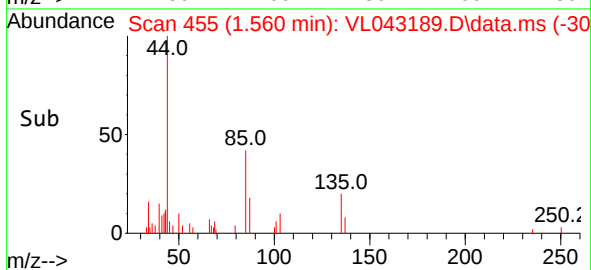
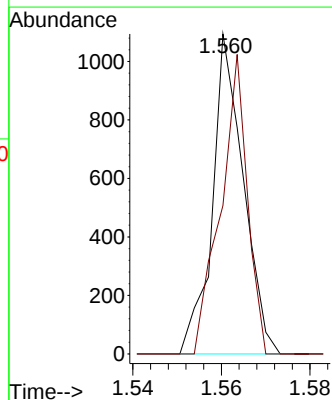
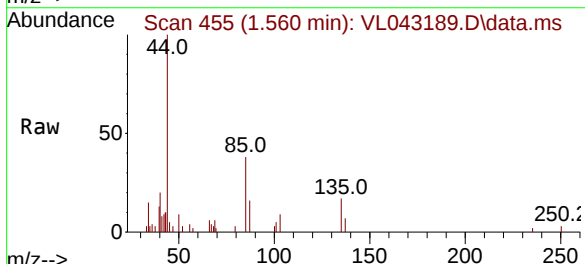
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

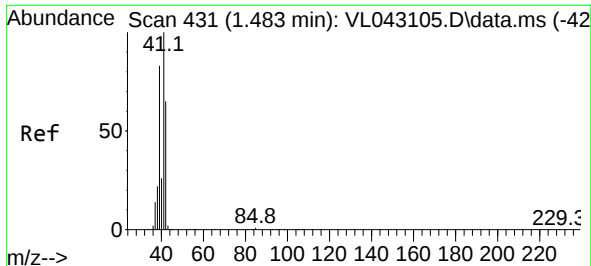
Tgt Ion: 64 Resp: 88  
Ion Ratio Lower Upper  
64 100  
66 0.0 26.0 39.0#



#8  
Dichlorotetrafluoroethane  
Concen: 0.033 ppbv  
RT: 1.560 min Scan# 455  
Delta R.T. 0.003 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion: 85 Resp: 531  
Ion Ratio Lower Upper  
85 100  
135 80.6 48.2 72.4#





#9

Propene

Concen: 0.060 ppbv

RT: 1.784 min Scan# 51

Delta R.T. 0.301 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

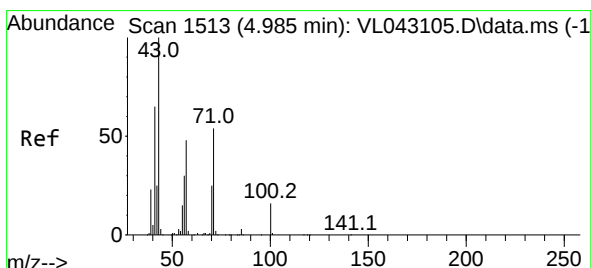
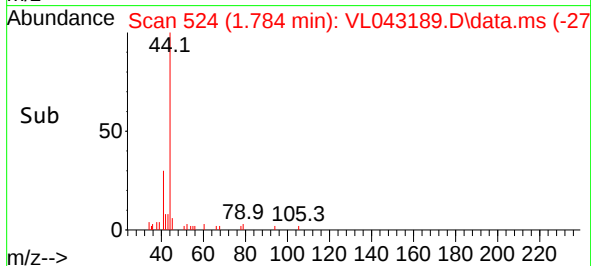
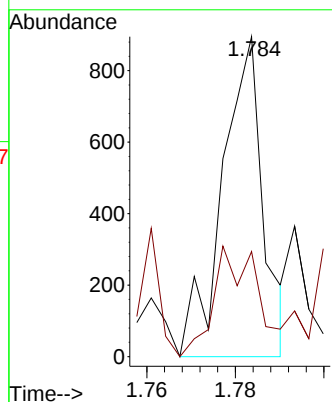
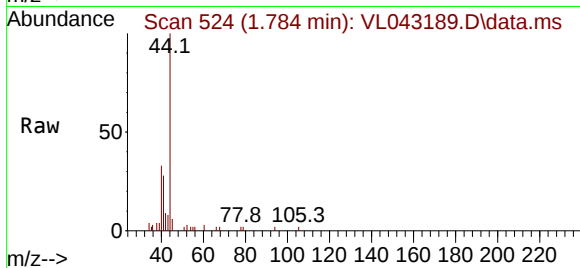
MDL-AIR-03-QT4-2025

Tgt Ion: 41 Resp: 568

Ion Ratio Lower Upper

41 100

42 81.0 55.1 82.7



#10

Heptane

Concen: 0.008 ppbv

RT: 5.007 min Scan# 1520

Delta R.T. 0.022 min

Lab File: VL043189.D

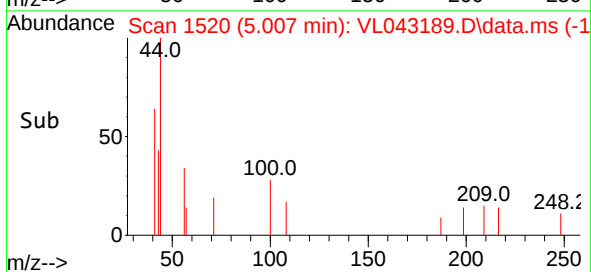
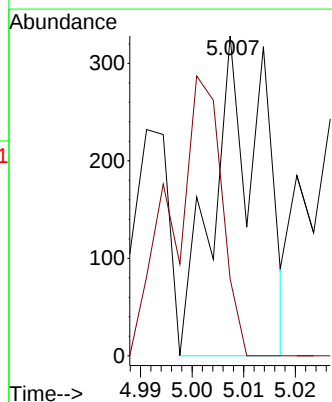
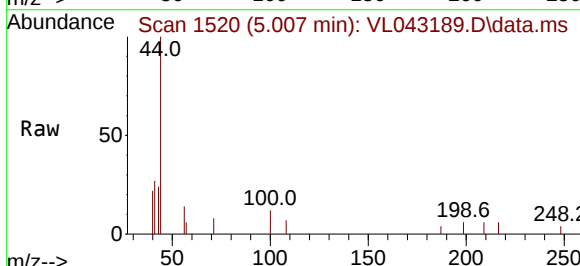
Acq: 11 Nov 2025 13:47

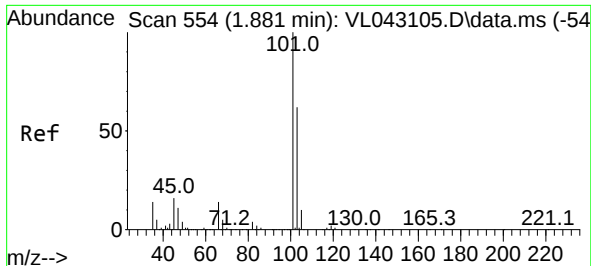
Tgt Ion: 43 Resp: 219

Ion Ratio Lower Upper

43 100

57 86.8 40.8 61.2#

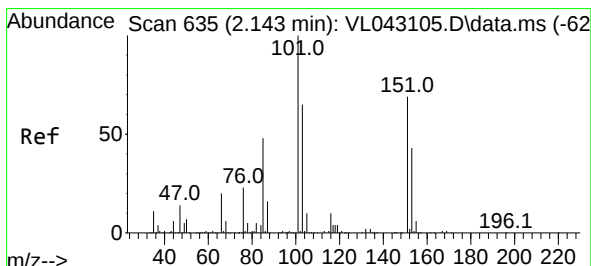
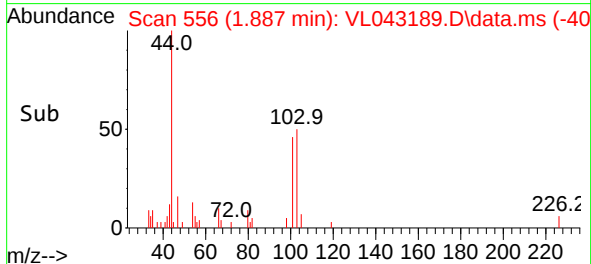
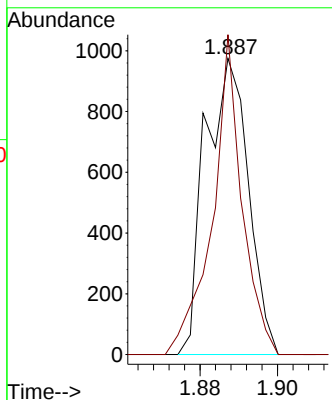
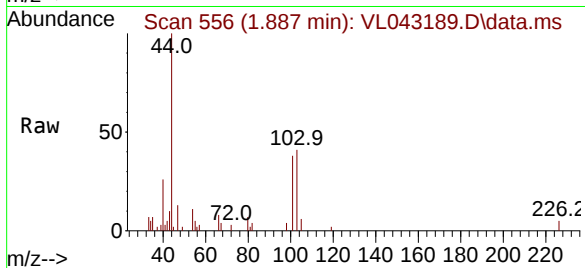




#11  
Trichlorofluoromethane  
Concen: 0.039 ppbv  
RT: 1.887 min Scan# 51  
Delta R.T. 0.006 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

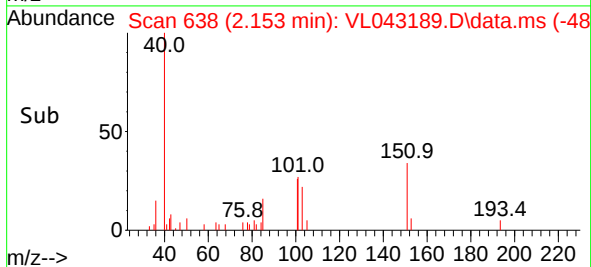
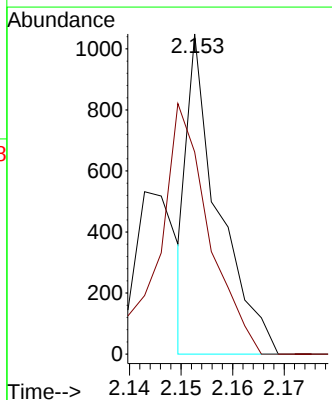
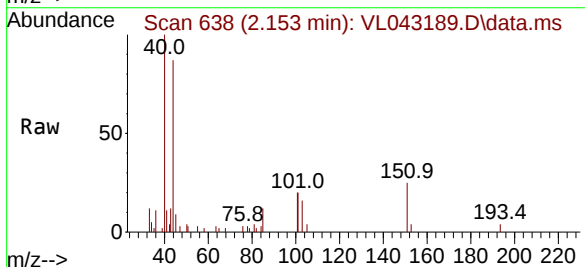
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

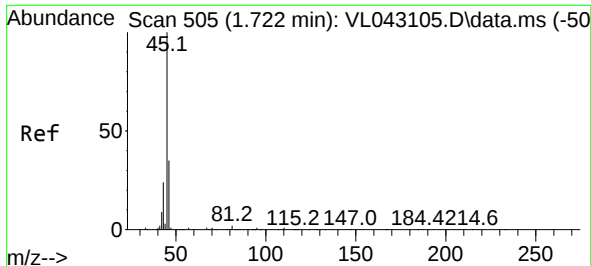
Tgt Ion:101 Resp: 754  
Ion Ratio Lower Upper  
101 100  
103 108.0 49.3 73.9#



#12  
1,1,2-Trichlorotrifluoroethane  
Concen: 0.028 ppbv  
RT: 2.153 min Scan# 638  
Delta R.T. 0.010 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion:101 Resp: 439  
Ion Ratio Lower Upper  
101 100  
151 126.4 54.7 82.1#

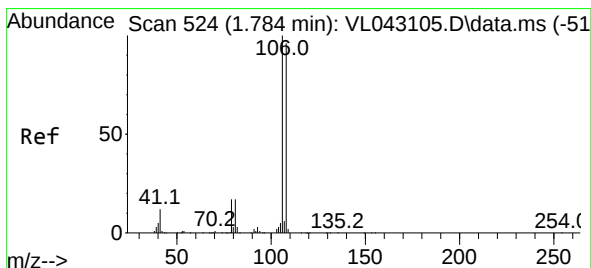
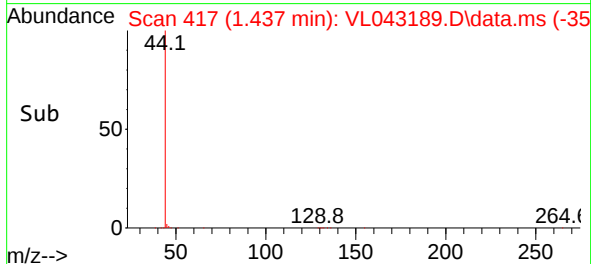
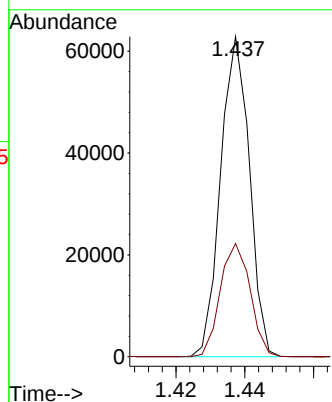
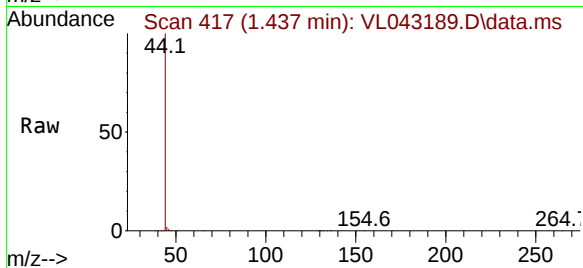




#13  
 Ethanol  
 Concen: 10.494 ppbv  
 RT: 1.437 min Scan# 417  
 Delta R.T. -0.285 min  
 Lab File: VL043189.D  
 Acq: 11 Nov 2025 13:47

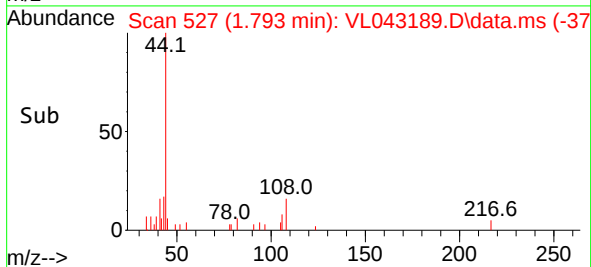
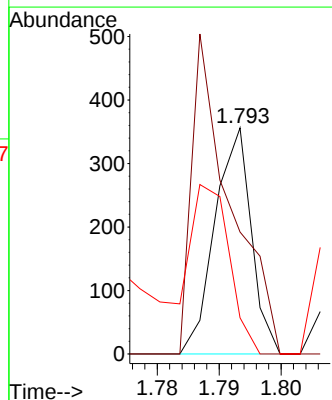
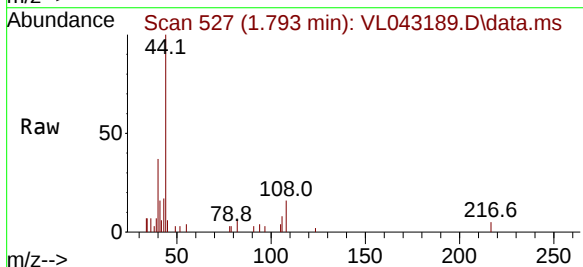
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 MDL-AIR-03-QT4-2025

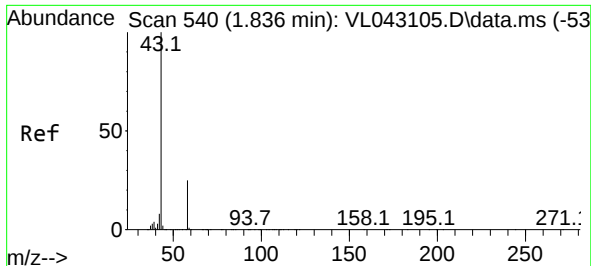
Tgt Ion: 45 Resp: 36575  
 Ion Ratio Lower Upper  
 45 100  
 46 36.7 14.7 58.9



#14  
 Bromoethene  
 Concen: 0.025 ppbv  
 RT: 1.793 min Scan# 527  
 Delta R.T. 0.010 min  
 Lab File: VL043189.D  
 Acq: 11 Nov 2025 13:47

Tgt Ion: 108 Resp: 145  
 Ion Ratio Lower Upper  
 108 100  
 106 150.3 84.4 126.6#  
 79 229.0 15.3 22.9#





#15

Acetone

Concen: 0.143 ppbv

RT: 1.845 min Scan# 54

Delta R.T. 0.010 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

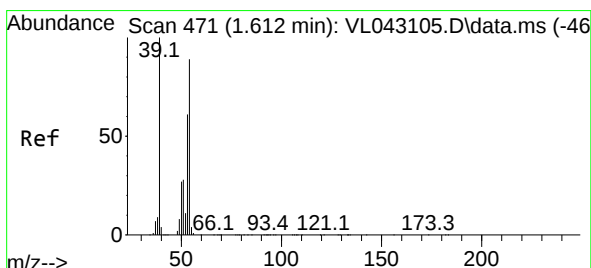
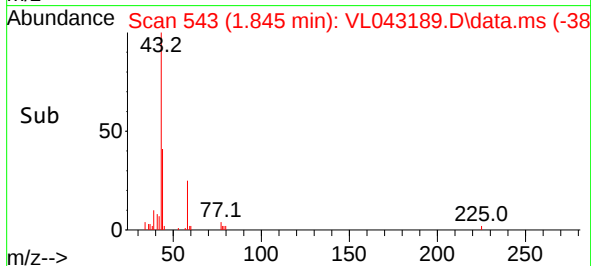
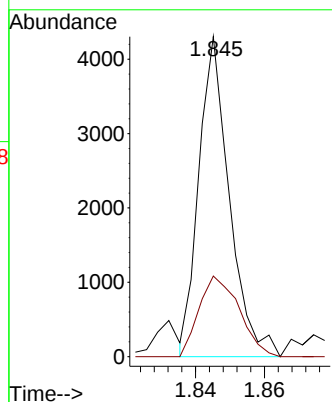
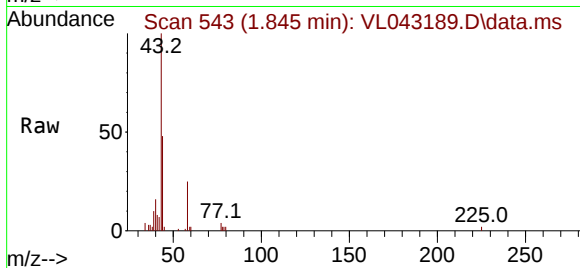
MDL-AIR-03-QT4-2025

Tgt Ion: 43 Resp: 2653

Ion Ratio Lower Upper

43 100

58 33.2 20.8 31.2#



#16

1,3-Butadiene

Concen: 0.051 ppbv

RT: 1.619 min Scan# 473

Delta R.T. 0.006 min

Lab File: VL043189.D

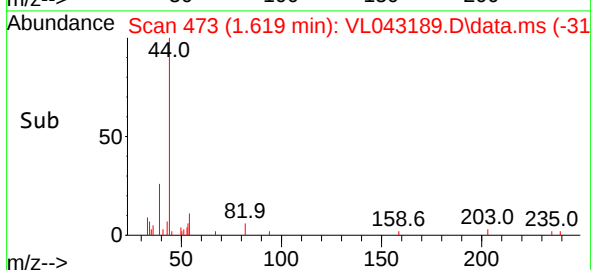
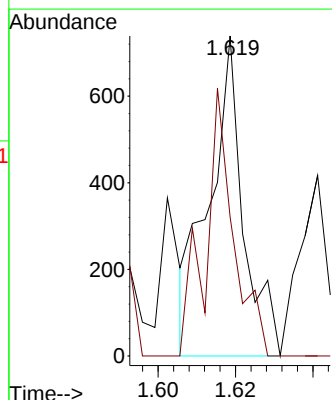
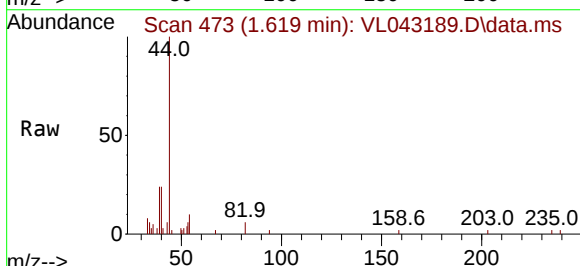
Acq: 11 Nov 2025 13:47

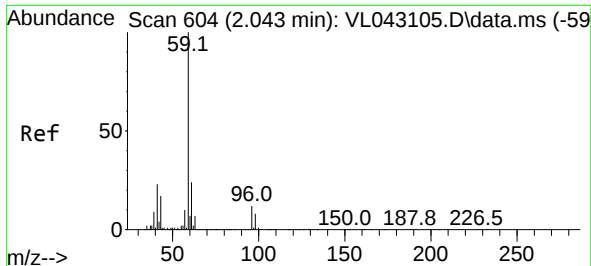
Tgt Ion: 39 Resp: 455

Ion Ratio Lower Upper

39 100

54 77.6 59.0 88.4





#17

tert-Butyl alcohol

Concen: 0.036 ppbv

RT: 2.056 min Scan# 604

Delta R.T. 0.013 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

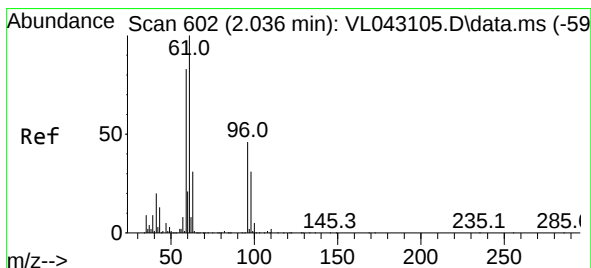
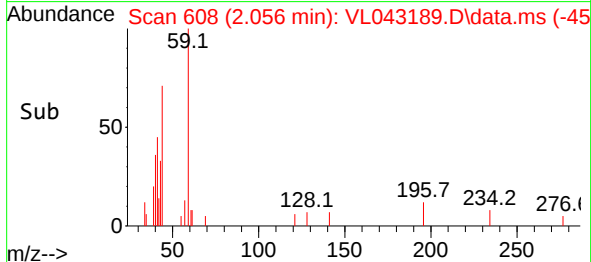
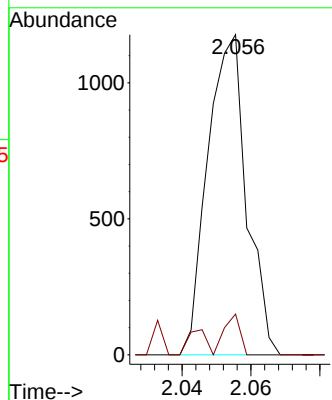
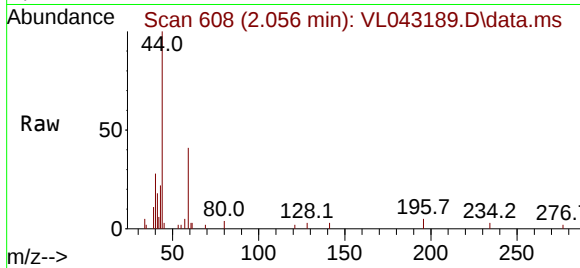
MDL-AIR-03-QT4-2025

Tgt Ion: 59 Resp: 924

Ion Ratio Lower Upper

59 100

57 11.6 8.2 12.4



#18

1,1-Dichloroethene

Concen: 0.039 ppbv

RT: 2.046 min Scan# 605

Delta R.T. 0.010 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

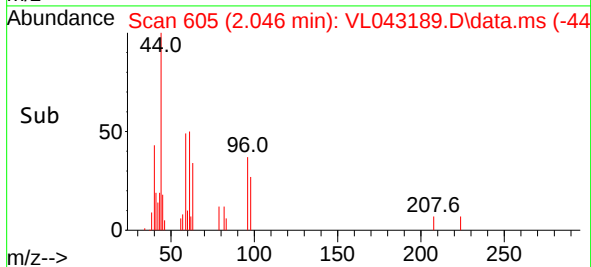
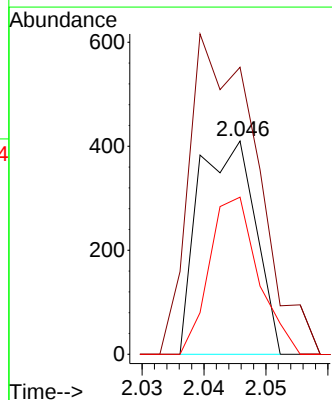
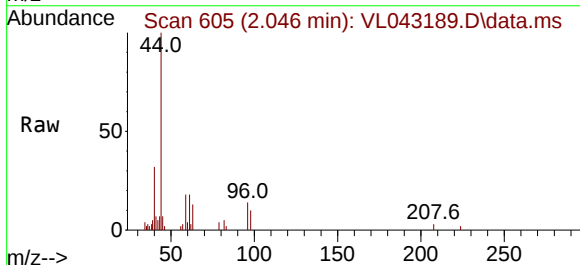
Tgt Ion: 96 Resp: 262

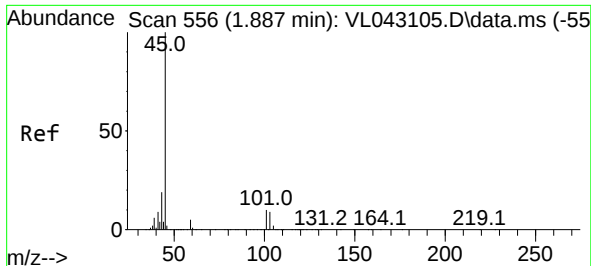
Ion Ratio Lower Upper

96 100

61 112.0 173.4 260.0#

98 73.7 53.2 79.8





#19

Isopropyl Alcohol

Concen: 3.154 ppbv

RT: 1.437 min Scan# 417

Delta R.T. -0.450 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

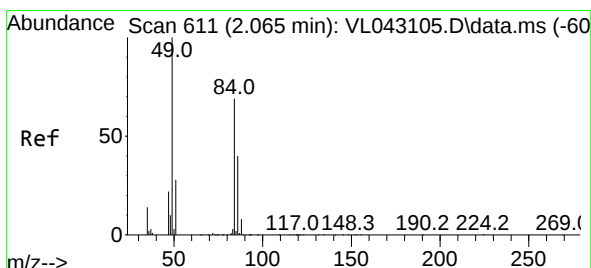
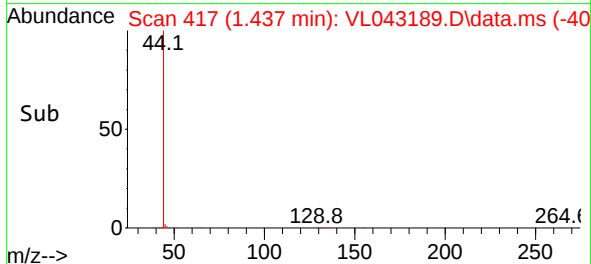
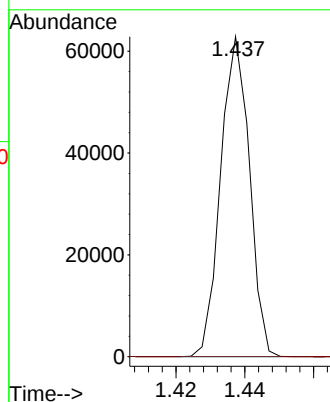
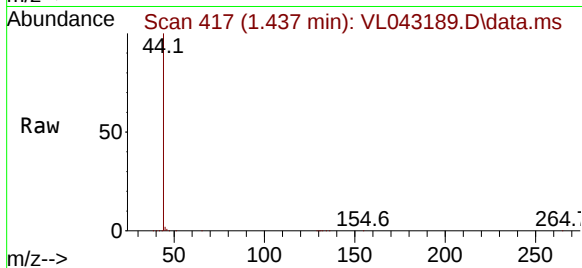
MDL-AIR-03-QT4-2025

Tgt Ion: 45 Resp: 36575

Ion Ratio Lower Upper

45 100

58 0.0 31.3 46.9#



#20

Methylene Chloride

Concen: 0.263 ppbv

RT: 2.072 min Scan# 613

Delta R.T. 0.006 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Tgt Ion: 84 Resp: 1936

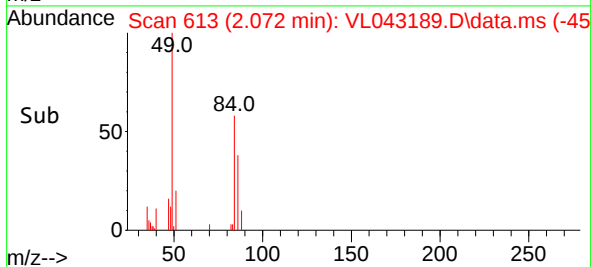
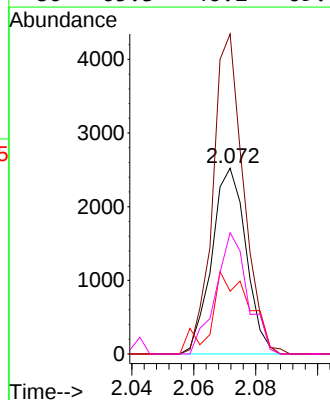
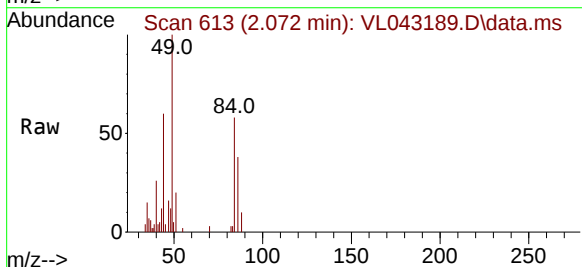
Ion Ratio Lower Upper

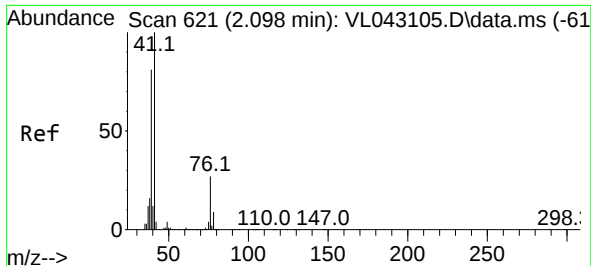
84 100

49 181.2 116.6 175.0#

51 33.8 34.8 52.2#

86 65.3 46.2 69.4





#21

Allyl Chloride

Concen: 0.052 ppbv

RT: 2.111 min Scan# 61

Delta R.T. 0.013 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

MDL-AIR-03-QT4-2025

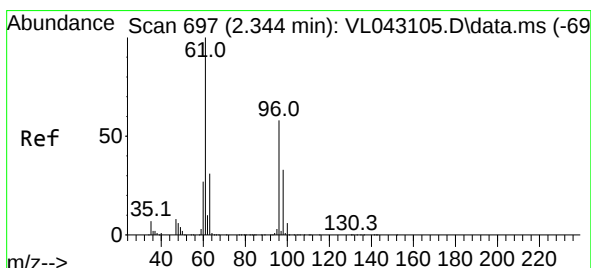
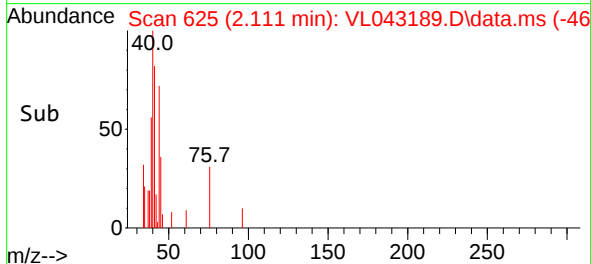
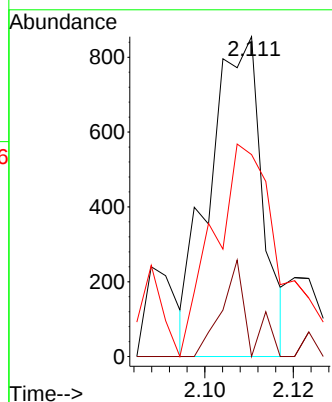
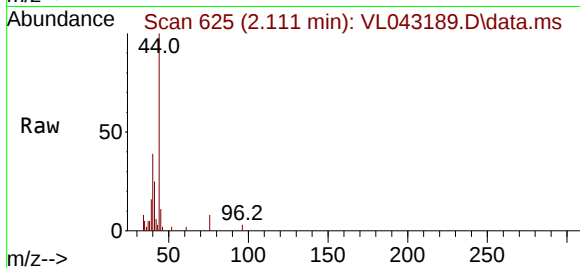
Tgt Ion: 41 Resp: 707

Ion Ratio Lower Upper

41 100

76 17.4 21.5 32.3#

39 95.2 60.8 91.2#



#22

trans-1,2-Dichloroethene

Concen: 0.041 ppbv

RT: 2.353 min Scan# 700

Delta R.T. 0.010 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

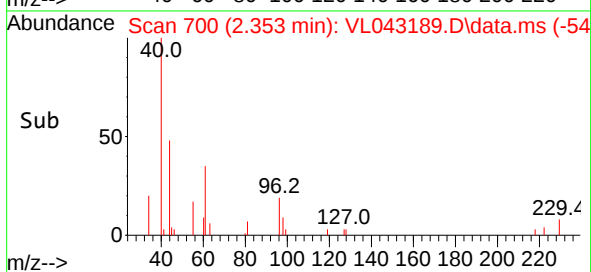
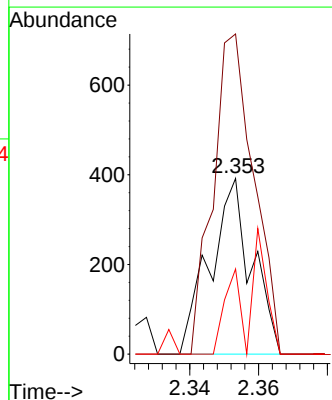
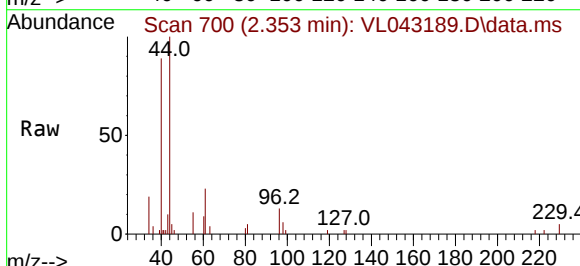
Tgt Ion: 96 Resp: 329

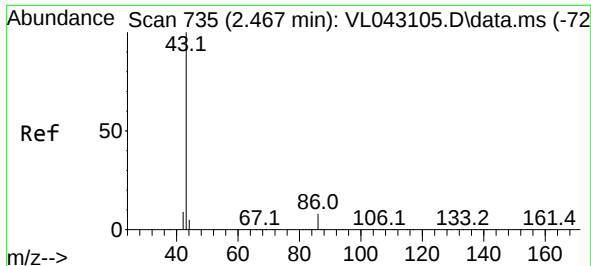
Ion Ratio Lower Upper

96 100

61 182.1 137.0 205.6

98 48.5 45.5 68.3

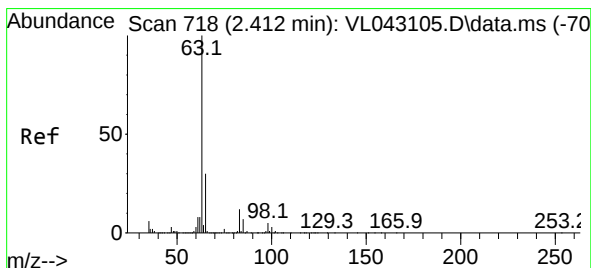
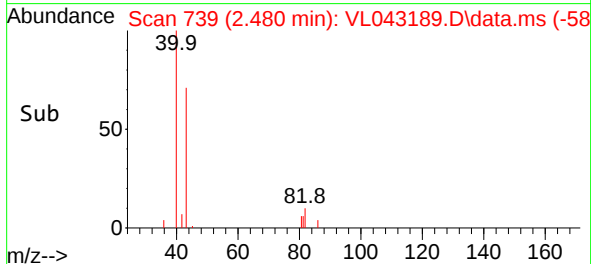
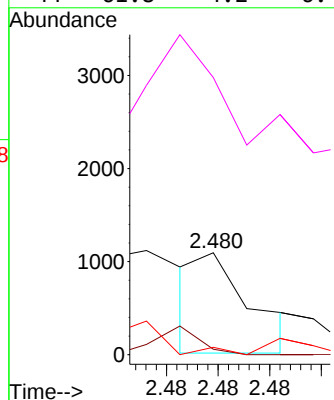
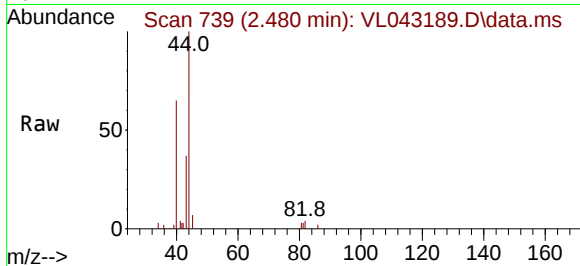




#23  
 Vinyl Acetate  
 Concen: 0.014 ppbv  
 RT: 2.480 min Scan# 71  
 Delta R.T. 0.013 min  
 Lab File: VL043189.D  
 Acq: 11 Nov 2025 13:47

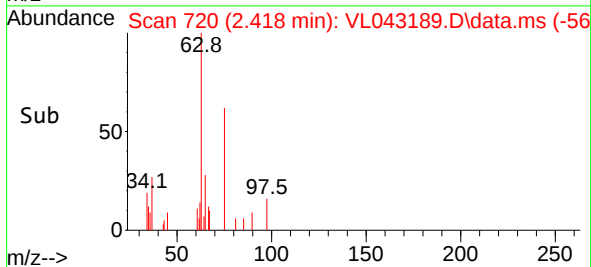
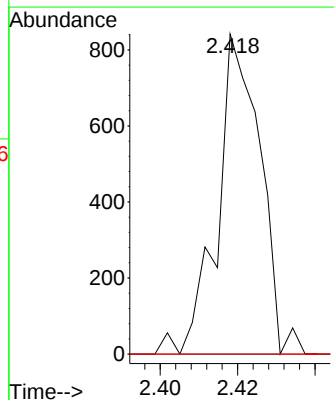
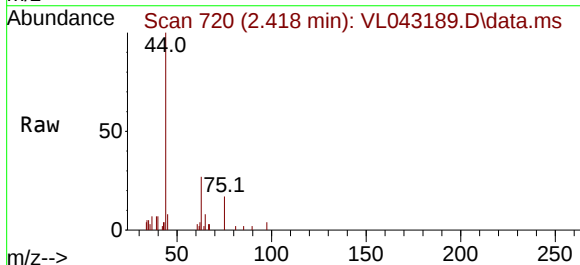
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 MDL-AIR-03-QT4-2025

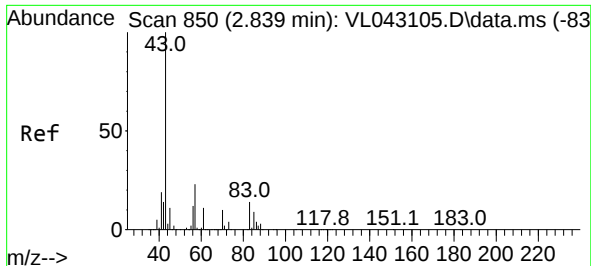
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 387   |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 86       | 9.0   | 6.2   | 9.2   |
| 42       | 12.3  | 7.6   | 11.4# |
| 44       | 61.8  | 4.2   | 6.4#  |



#24  
 1,1-Dichloroethane  
 Concen: 0.040 ppbv  
 RT: 2.418 min Scan# 720  
 Delta R.T. 0.006 min  
 Lab File: VL043189.D  
 Acq: 11 Nov 2025 13:47

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 63    | Resp: | 625   |
| Ion      | Ratio | Lower | Upper |
| 63       | 100   |       |       |
| 98       | 0.0   | 2.6   | 7.8#  |
| 100      | 0.0   | 1.5   | 4.4#  |

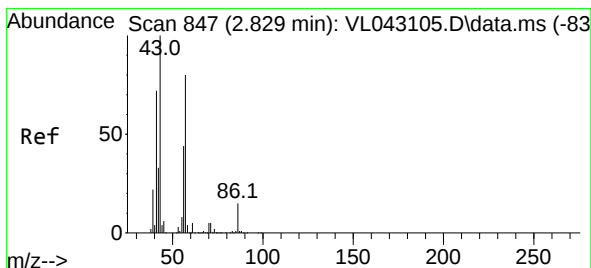
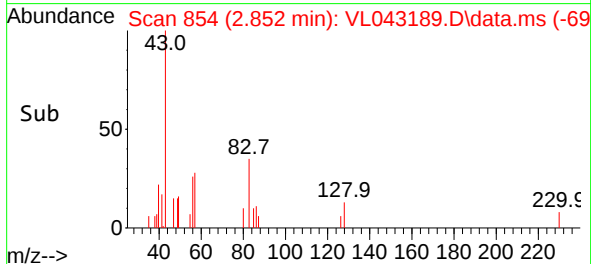
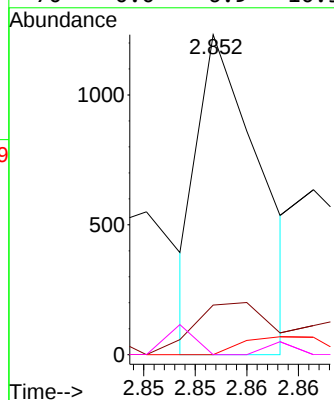
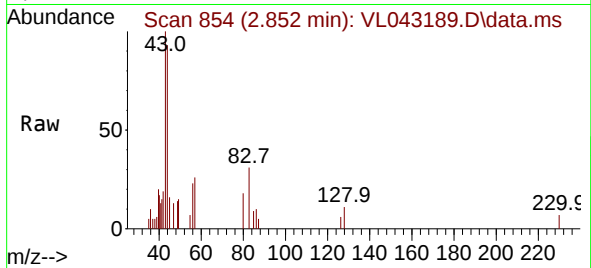




#25  
Ethyl Acetate  
Concen: 0.011 ppbv  
RT: 2.852 min Scan# 81  
Delta R.T. 0.013 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

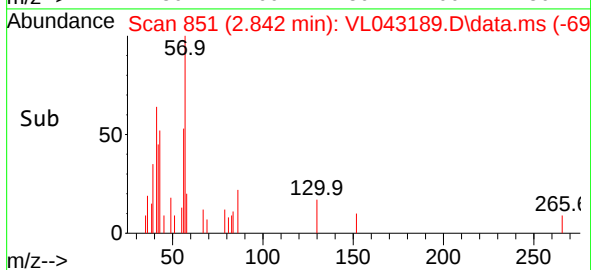
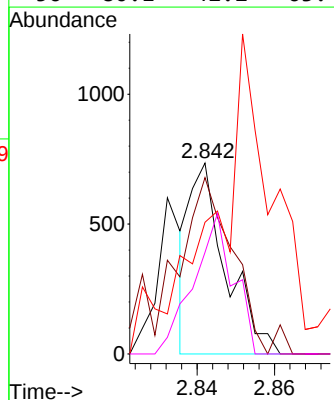
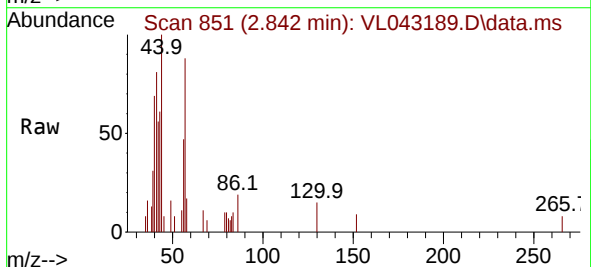
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

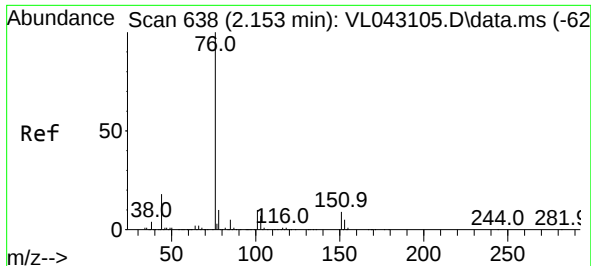
|     |         |       |       |
|-----|---------|-------|-------|
| Tgt | Ion: 43 | Resp: | 511   |
| Ion | Ratio   | Lower | Upper |
| 43  | 100     |       |       |
| 45  | 0.0     | 7.8   | 11.8# |
| 61  | 0.0     | 7.0   | 10.6# |
| 70  | 0.0     | 6.9   | 10.3# |



#26  
Hexane  
Concen: 0.023 ppbv  
RT: 2.842 min Scan# 851  
Delta R.T. 0.013 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

|             |              |
|-------------|--------------|
| Tgt Ion: 57 | Resp: 482    |
| Ion Ratio   | Lower Upper  |
| 57 100      |              |
| 41 157.1    | 71.4 107.0#  |
| 43 289.6    | 178.5 267.7# |
| 56 80.1     | 42.2 63.4#   |





#27

Carbon Disulfide

Concen: 0.037 ppbv

RT: 2.159 min Scan# 640

Delta R.T. 0.006 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

MDL-AIR-03-QT4-2025

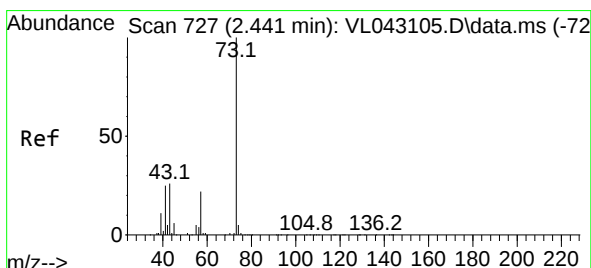
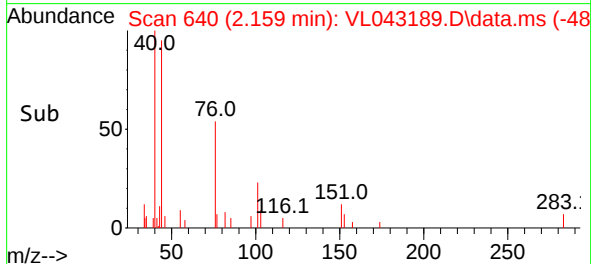
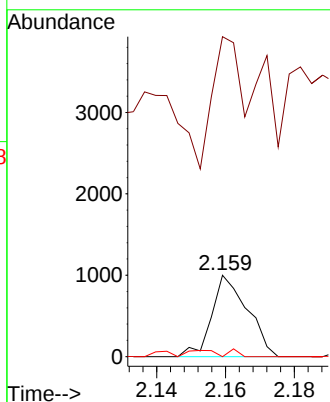
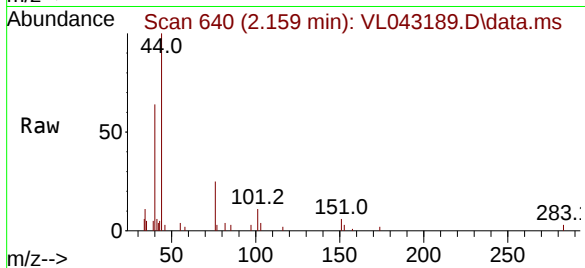
Tgt Ion: 76 Resp: 722

Ion Ratio Lower Upper

76 100

44 667.6 16.7 25.1#

78 11.8 9.3 13.9



#28

Methyl tert-Butyl Ether

Concen: 0.013 ppbv

RT: 2.450 min Scan# 730

Delta R.T. 0.010 min

Lab File: VL043189.D

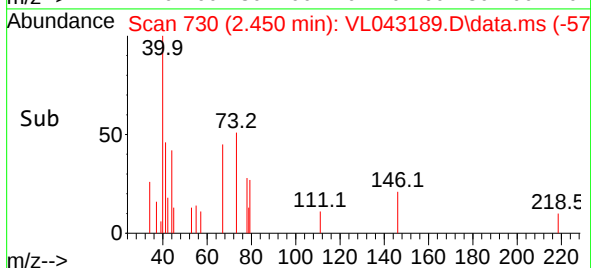
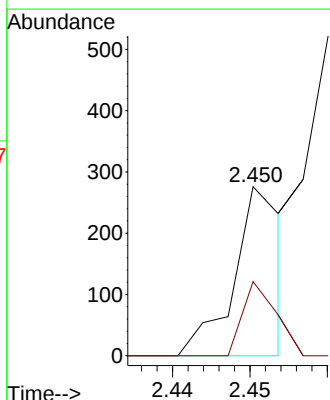
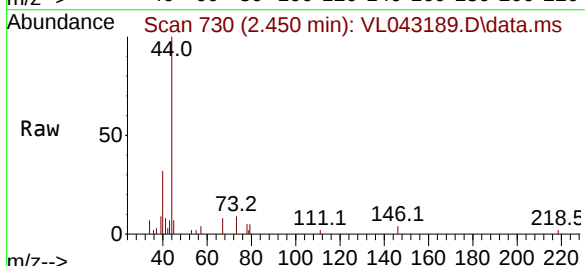
Acq: 11 Nov 2025 13:47

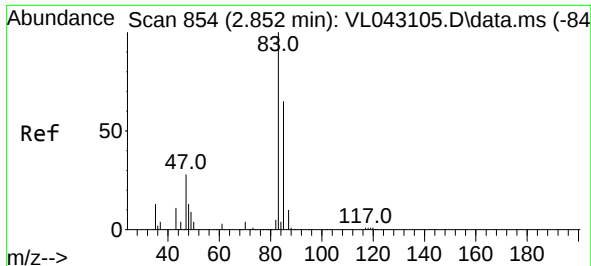
Tgt Ion: 73 Resp: 122

Ion Ratio Lower Upper

73 100

57 30.3 20.5 30.7





#29

Chloroform

Concen: 0.036 ppbv

RT: 2.861 min Scan# 8

Delta R.T. 0.010 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

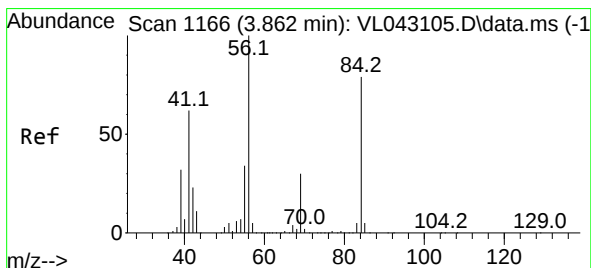
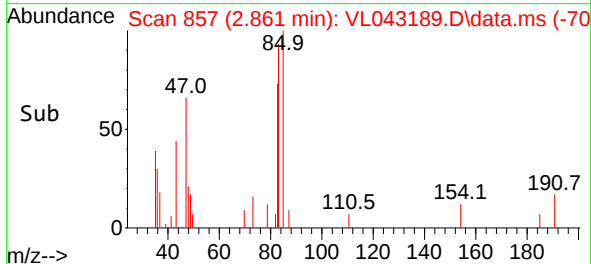
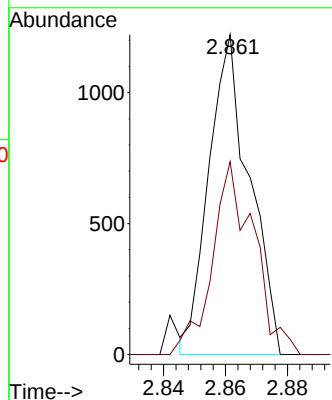
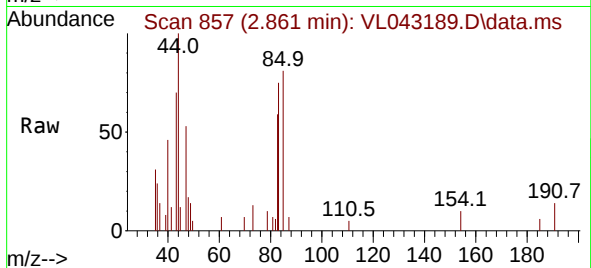
MDL-AIR-03-QT4-2025

Tgt Ion: 83 Resp: 1110

Ion Ratio Lower Upper

83 100

85 55.9 51.8 77.6



#30

Cyclohexane

Concen: 0.006 ppbv

RT: 3.881 min Scan# 1172

Delta R.T. 0.019 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

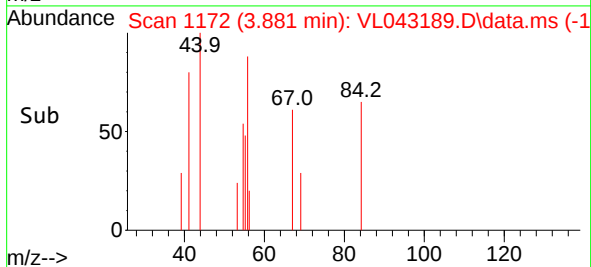
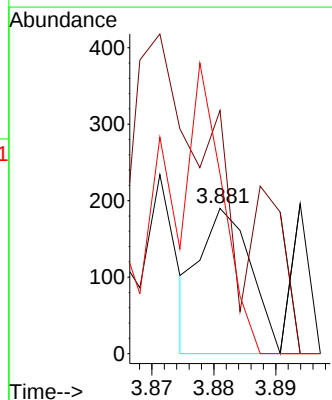
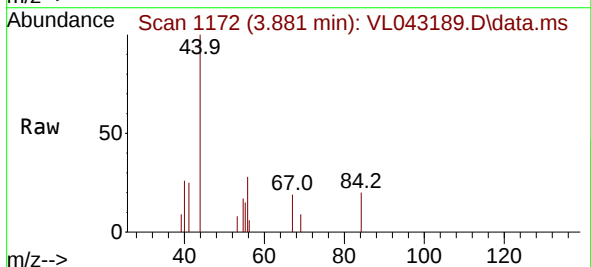
Tgt Ion: 84 Resp: 107

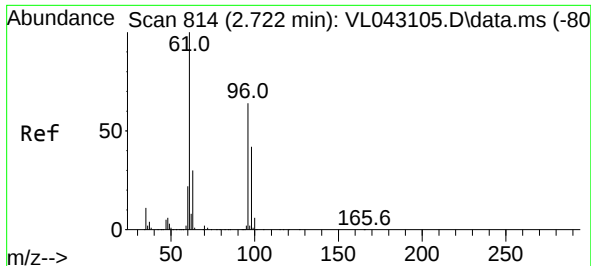
Ion Ratio Lower Upper

84 100

56 0.0 100.9 151.3#

41 274.8 63.8 95.6#

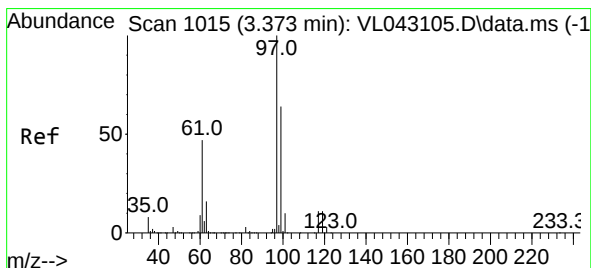
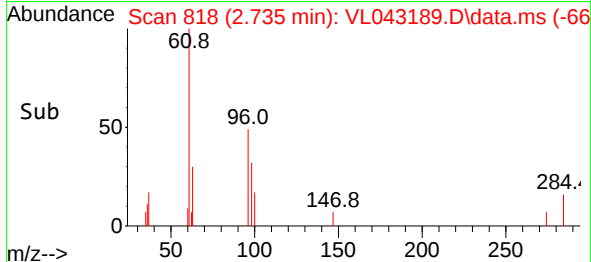
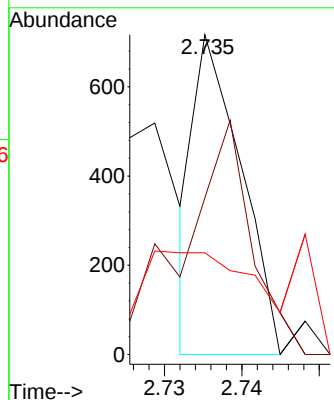
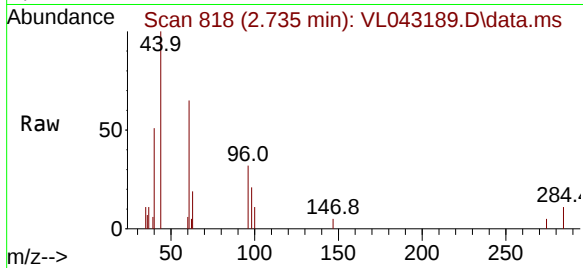




#31  
 cis-1,2-Dichloroethene  
 Concen: 0.015 ppbv  
 RT: 2.735 min Scan# 814  
 Delta R.T. 0.013 min  
 Lab File: VL043189.D  
 Acq: 11 Nov 2025 13:47

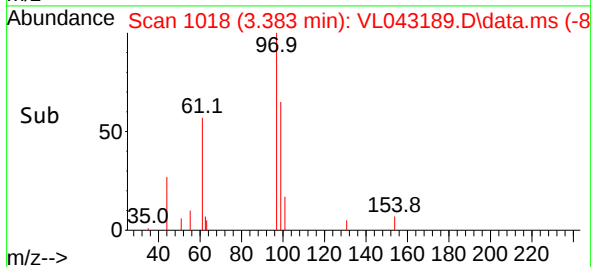
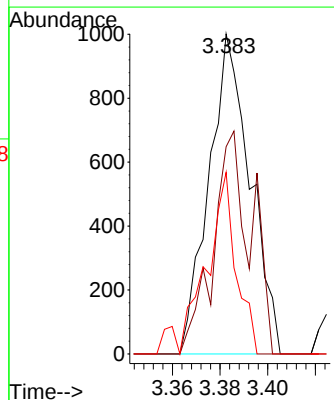
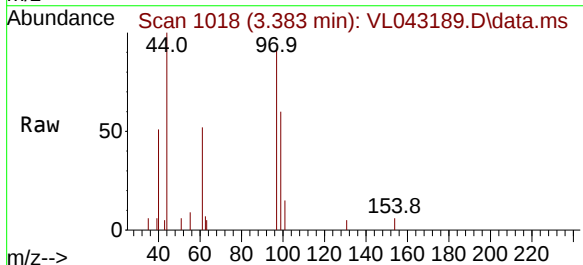
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 MDL-AIR-03-QT4-2025

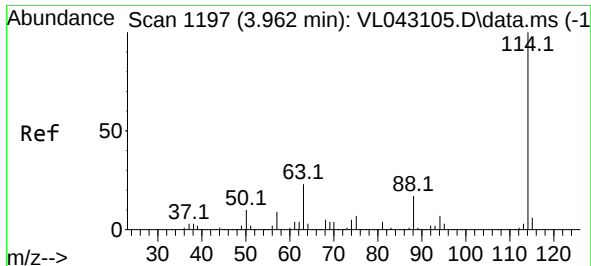
Tgt Ion: 61 Resp: 299  
 Ion Ratio Lower Upper  
 61 100  
 96 35.8 51.0 76.6#  
 98 18.7 33.5 50.3#



#32  
 1,1,1-Trichloroethane  
 Concen: 0.038 ppbv  
 RT: 3.383 min Scan# 1018  
 Delta R.T. 0.010 min  
 Lab File: VL043189.D  
 Acq: 11 Nov 2025 13:47

Tgt Ion: 97 Resp: 1204  
 Ion Ratio Lower Upper  
 97 100  
 99 63.6 51.3 76.9  
 61 42.4 38.4 57.6

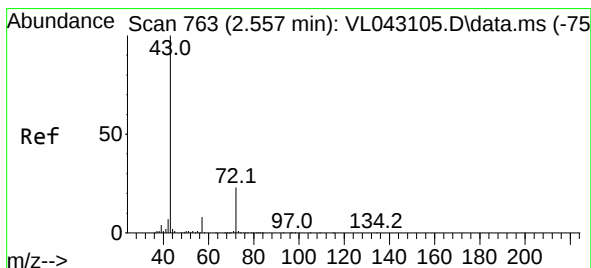
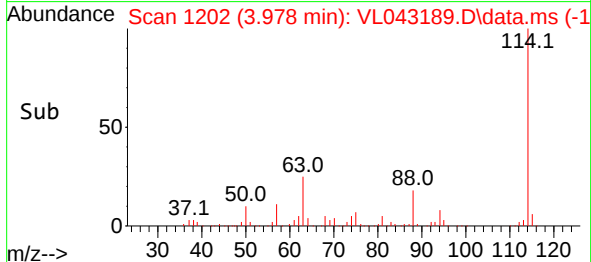
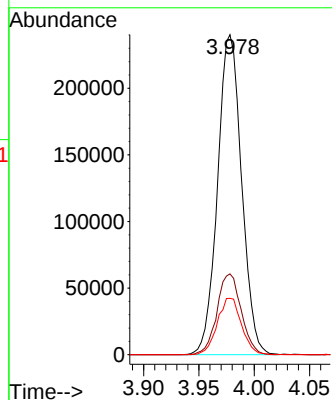
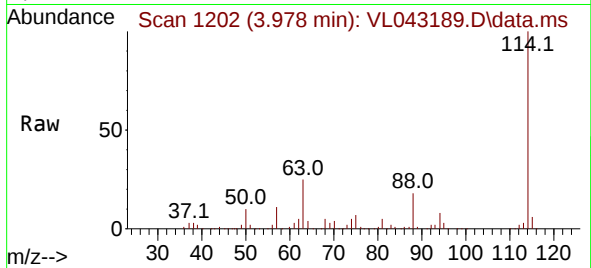




#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 3.978 min Scan# 1197  
Delta R.T. 0.016 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

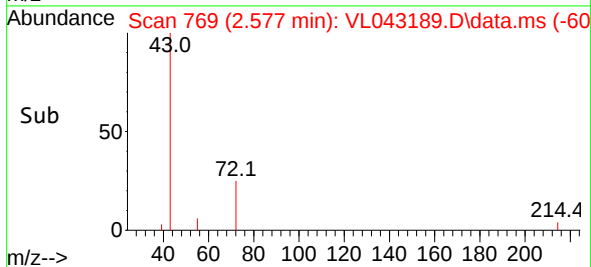
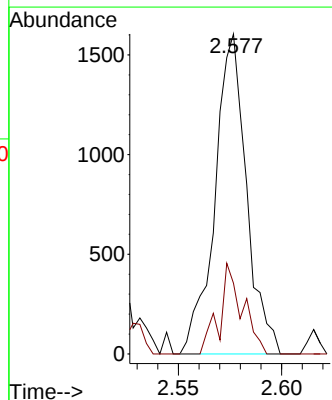
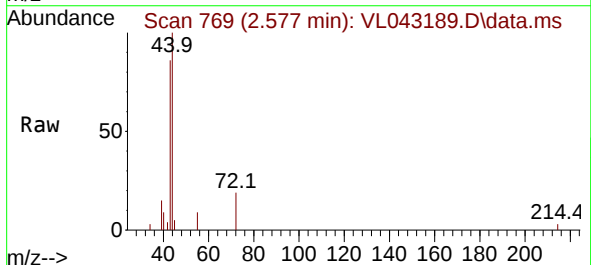
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

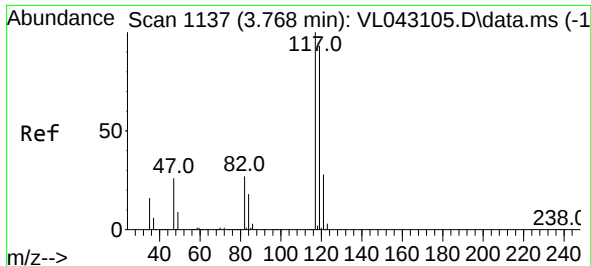
Tgt Ion:114 Resp: 363473  
Ion Ratio Lower Upper  
114 100  
63 25.5 19.3 28.9  
88 17.7 13.9 20.9



#34  
2-Butanone  
Concen: 0.070 ppbv  
RT: 2.577 min Scan# 769  
Delta R.T. 0.019 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion: 43 Resp: 1710  
Ion Ratio Lower Upper  
43 100  
72 20.7 18.4 27.6

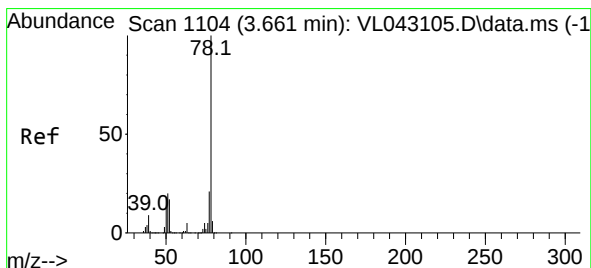
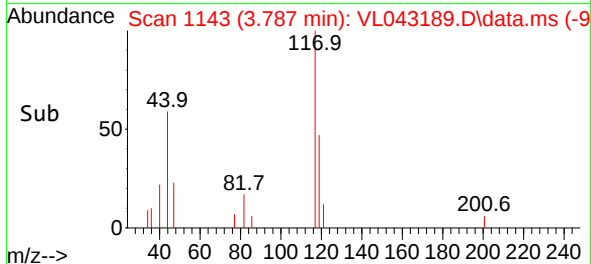
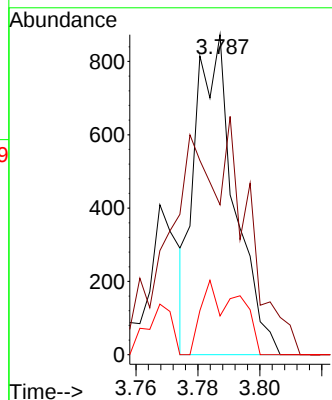
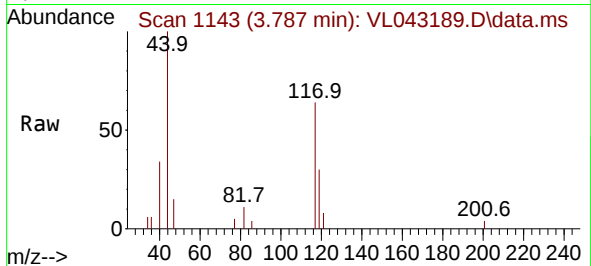




#35  
Carbon Tetrachloride  
Concen: 0.029 ppbv  
RT: 3.787 min Scan# 1137  
Delta R.T. 0.019 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

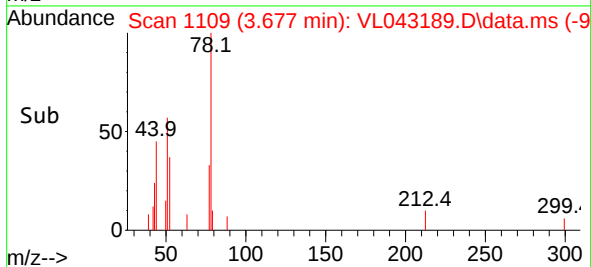
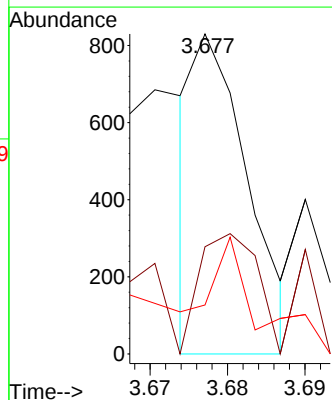
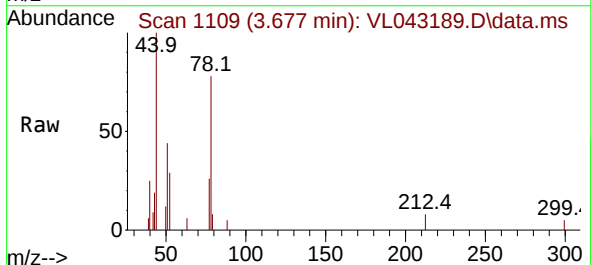
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

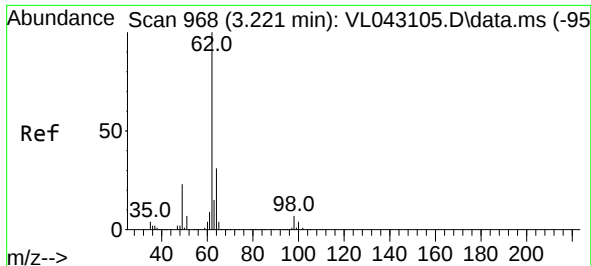
Tgt Ion:117 Resp: 765  
Ion Ratio Lower Upper  
117 100  
119 35.2 74.1 111.1#  
121 12.1 22.2 33.2#



#36  
Benzene  
Concen: 0.012 ppbv  
RT: 3.677 min Scan# 1109  
Delta R.T. 0.016 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion: 78 Resp: 399  
Ion Ratio Lower Upper  
78 100  
77 43.4 17.0 25.6#  
50 78.6 14.6 22.0#





#37

1,2-Dichloroethane

Concen: 0.036 ppbv

RT: 3.237 min Scan# 91

Delta R.T. 0.016 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

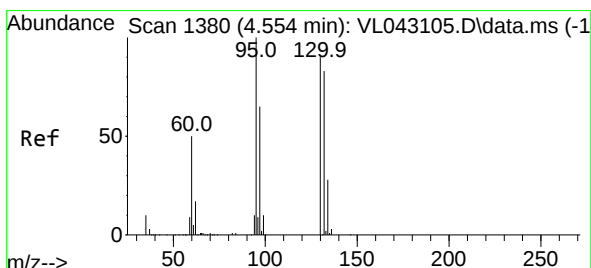
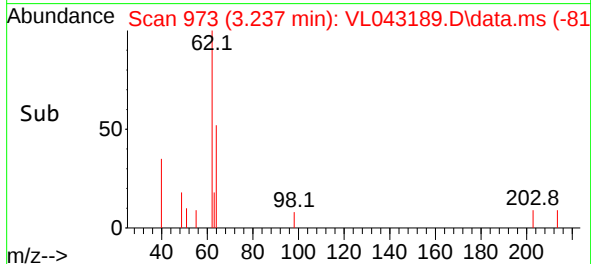
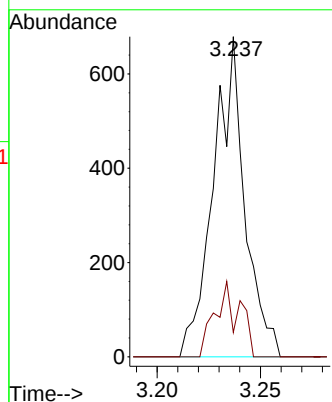
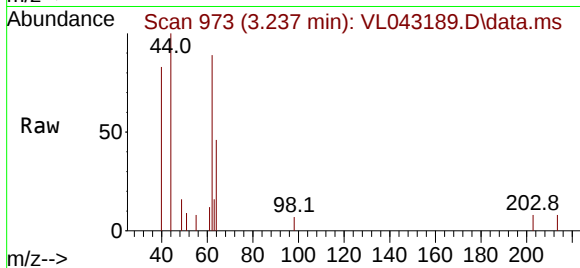
MDL-AIR-03-QT4-2025

Tgt Ion: 62 Resp: 714

Ion Ratio Lower Upper

62 100

98 18.3 5.8 8.6#



#38

Trichloroethene

Concen: 0.011 ppbv

RT: 4.580 min Scan# 1388

Delta R.T. 0.026 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Tgt Ion:130 Resp: 155

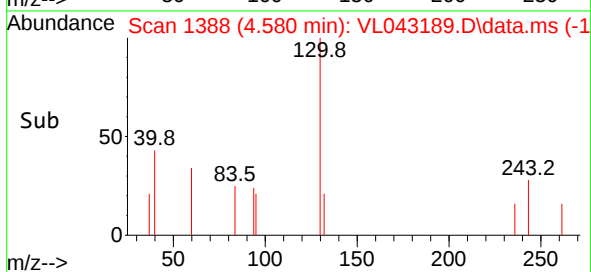
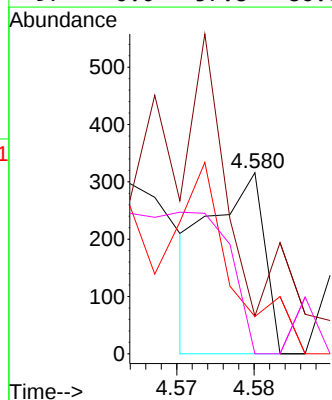
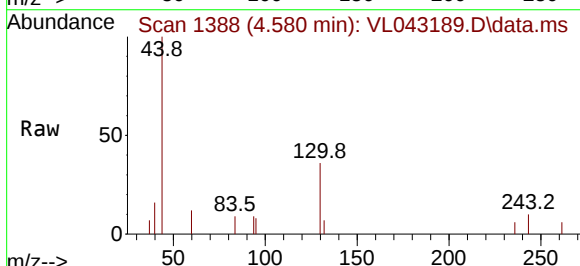
Ion Ratio Lower Upper

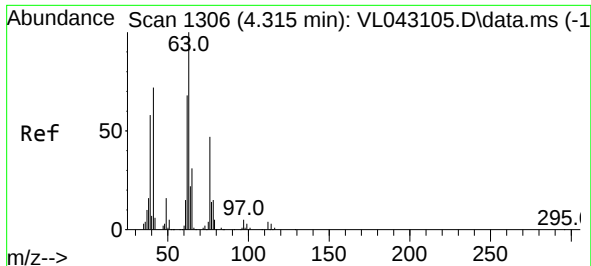
130 100

95 0.0 88.6 133.0#

132 0.0 73.4 110.0#

97 0.0 57.8 86.6#





#39

1,2-Dichloropropane

Concen: 7.389 ppbv

RT: 3.978 min Scan# 11

Delta R.T. -0.337 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

MDL-AIR-03-QT4-2025

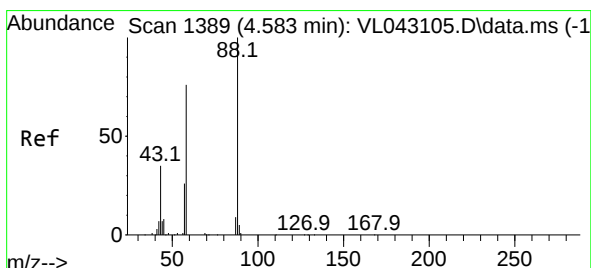
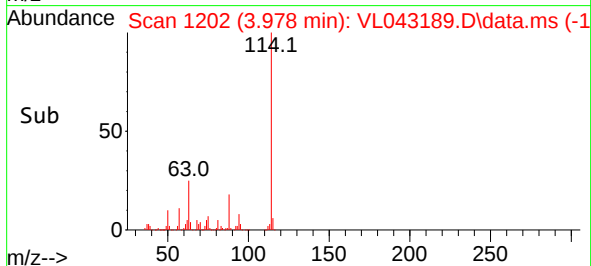
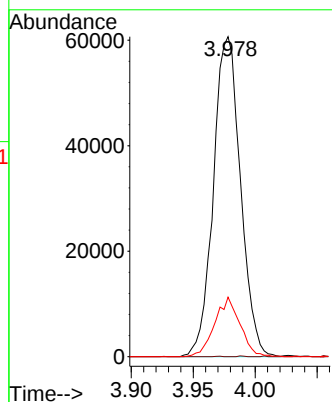
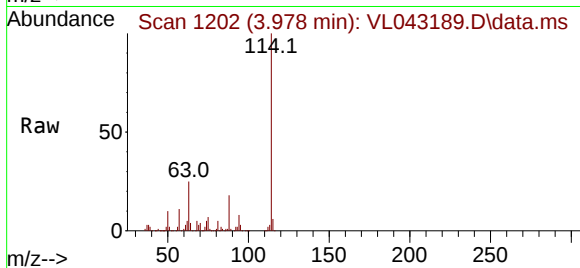
Tgt Ion: 63 Resp: 92480

Ion Ratio Lower Upper

63 100

41 0.0 58.0 87.0#

62 18.6 54.7 82.1#



#40

1,4-Dioxane

Concen: 0.009 ppbv

RT: 4.315 min Scan# 1306

Delta R.T. -0.269 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Tgt Ion: 88 Resp: 50

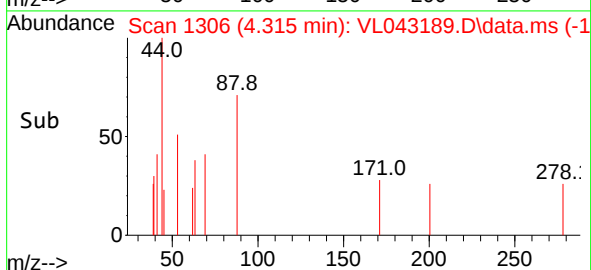
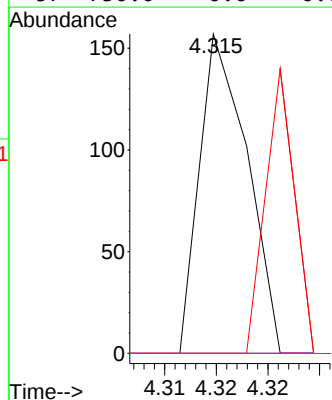
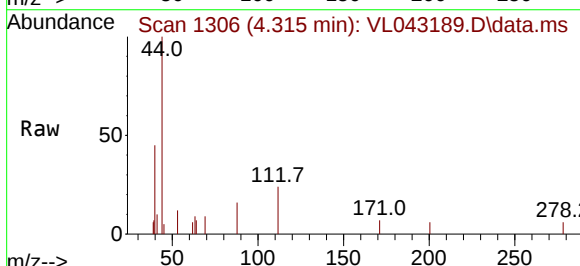
Ion Ratio Lower Upper

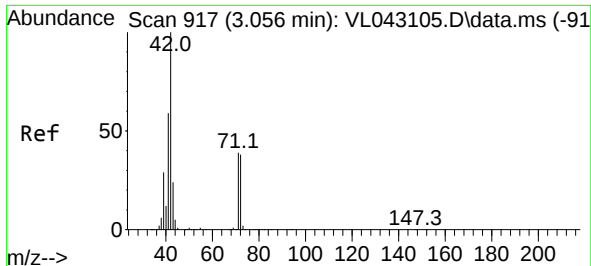
88 100

58 186.0 61.1 91.7#

43 660.0 24.0 36.0#

57 730.0 0.0 0.0#

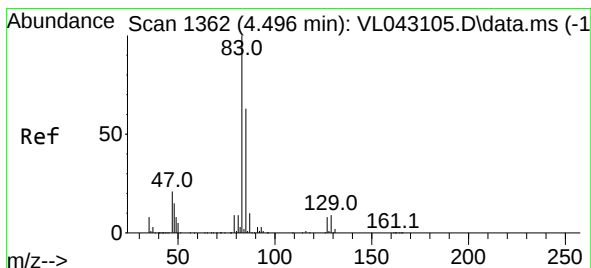
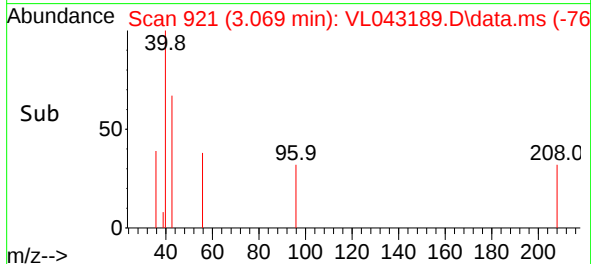
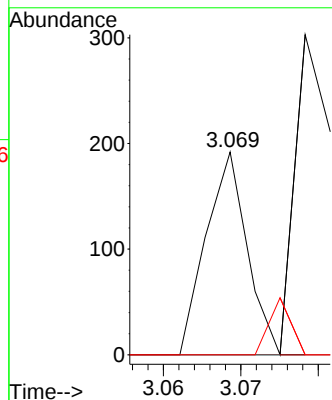
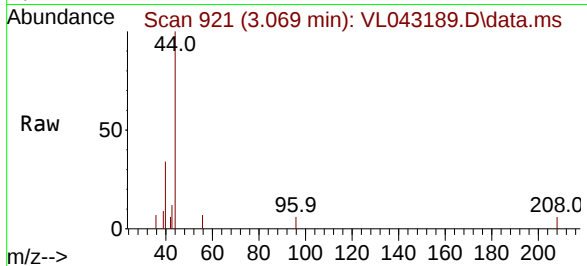




#41  
Tetrahydrofuran  
Concen: 0.005 ppbv  
RT: 3.069 min Scan# 917  
Delta R.T. 0.013 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

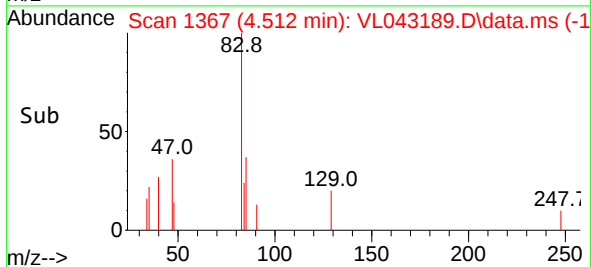
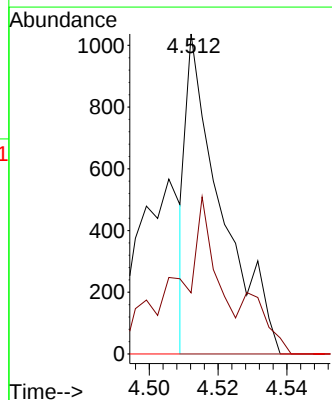
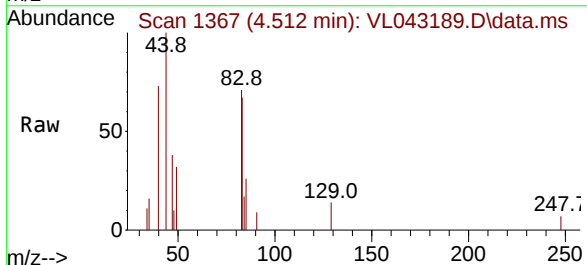
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

Tgt Ion: 42 Resp: 71  
Ion Ratio Lower Upper  
42 100  
72 0.0 31.3 46.9#  
71 0.0 30.4 45.6#



#42  
Bromodichloromethane  
Concen: 0.027 ppbv  
RT: 4.512 min Scan# 1367  
Delta R.T. 0.016 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion: 83 Resp: 729  
Ion Ratio Lower Upper  
83 100  
85 14.1 50.6 75.8#  
127 0.0 6.3 9.5#

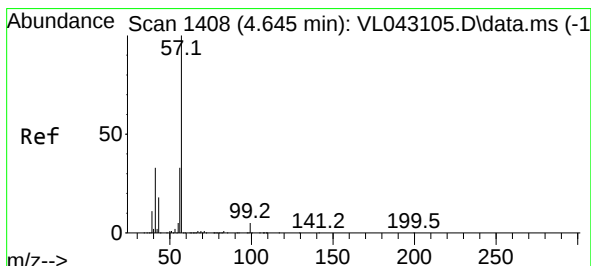
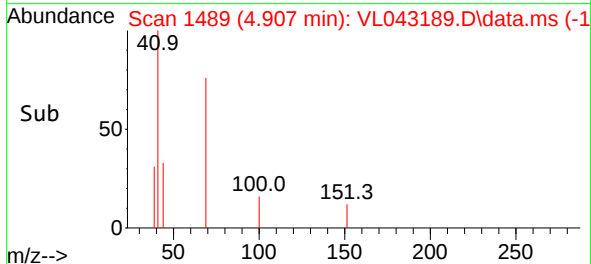
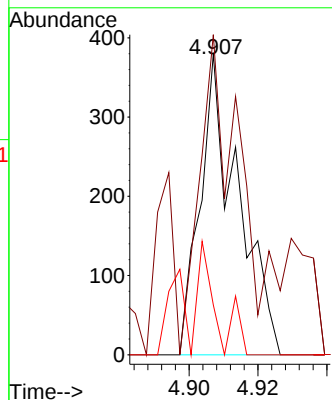
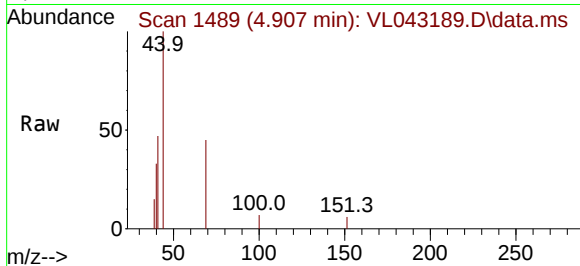




#43  
Methyl Methacrylate  
Concen: 0.017 ppbv  
RT: 4.907 min Scan# 1416  
Delta R.T. 0.026 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

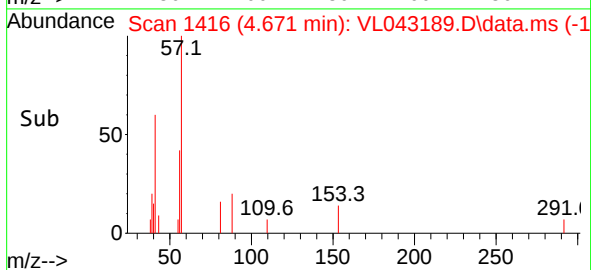
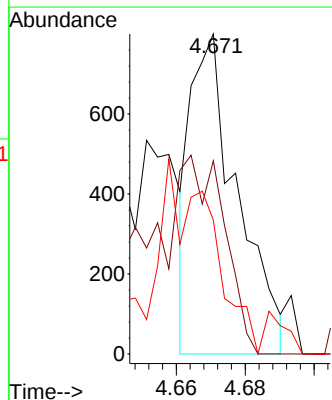
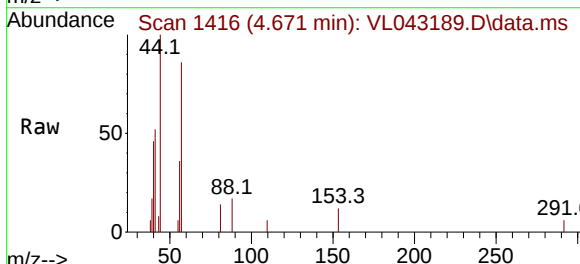
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

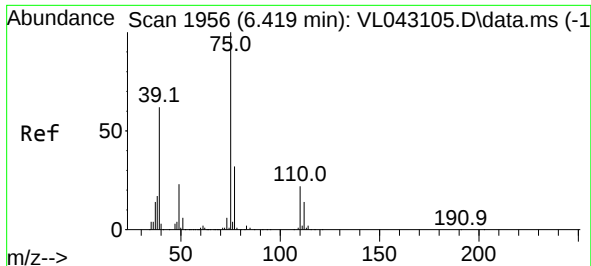
Tgt Ion: 69 Resp: 287  
Ion Ratio Lower Upper  
69 100  
41 204.9 120.5 180.7#  
100 31.7 29.0 43.4



#44  
2,2,4-Trimethylpentane  
Concen: 0.013 ppbv  
RT: 4.671 min Scan# 1416  
Delta R.T. 0.026 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion: 57 Resp: 757  
Ion Ratio Lower Upper  
57 100  
41 110.6 26.3 39.5#  
56 0.0 25.9 38.9#





#45

t-1,3-Dichloropropene

Concen: 0.009 ppbv

RT: 6.444 min Scan# 1956

Delta R.T. 0.026 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

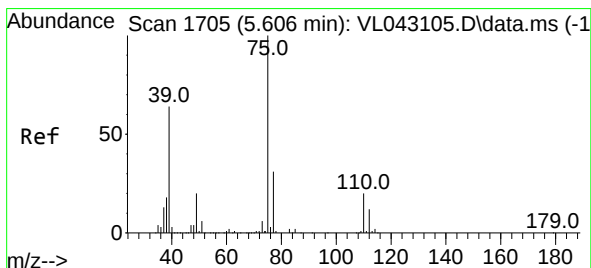
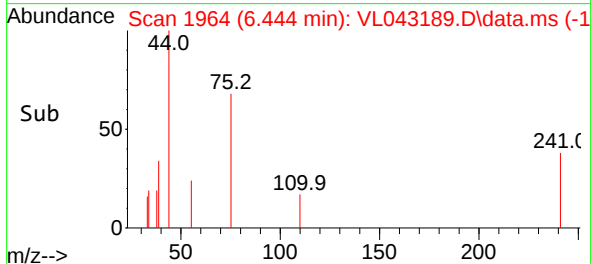
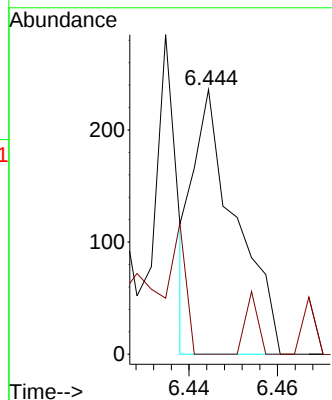
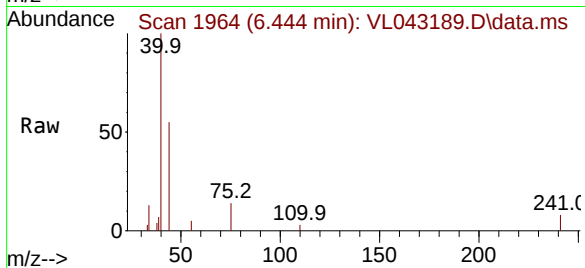
MDL-AIR-03-QT4-2025

Tgt Ion: 75 Resp: 158

Ion Ratio Lower Upper

75 100

77 0.0 25.4 38.2#



#46

cis-1,3-Dichloropropene

Concen: 0.010 ppbv

RT: 5.626 min Scan# 1711

Delta R.T. 0.019 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

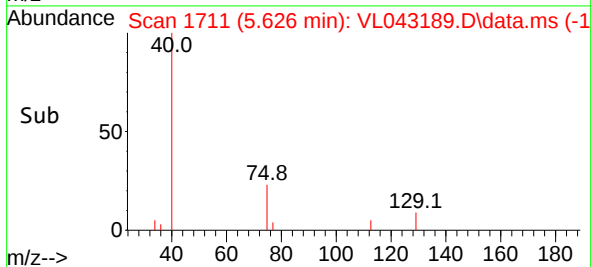
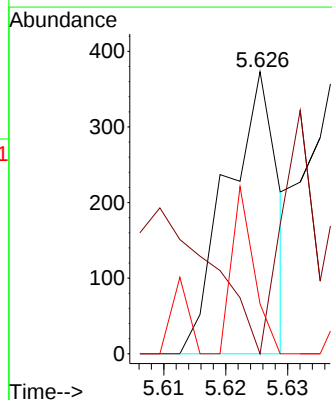
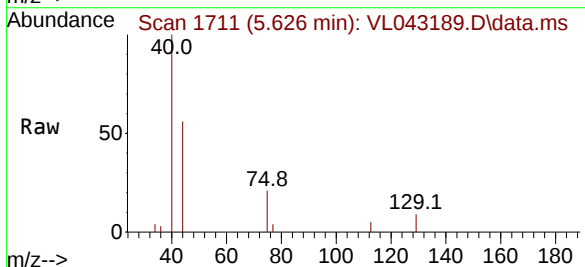
Tgt Ion: 75 Resp: 214

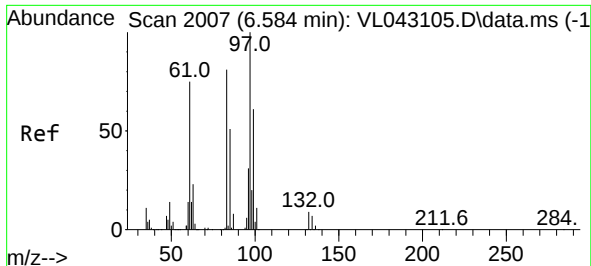
Ion Ratio Lower Upper

75 100

39 0.0 51.0 76.6#

77 17.7 25.0 37.4#





#47

1,1,2-Trichloroethane

Concen: 0.004 ppbv

RT: 6.609 min Scan# 20

Delta R.T. 0.026 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

MDL-AIR-03-QT4-2025

Tgt Ion: 97 Resp: 49

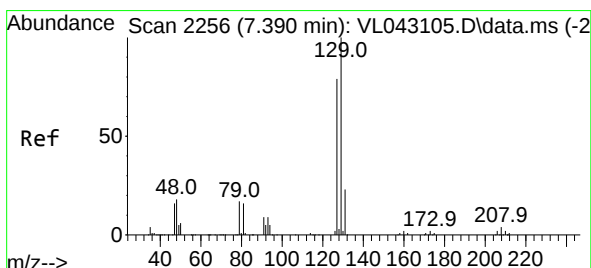
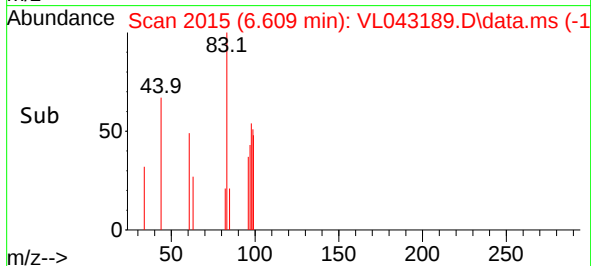
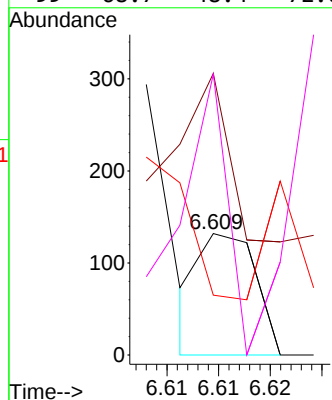
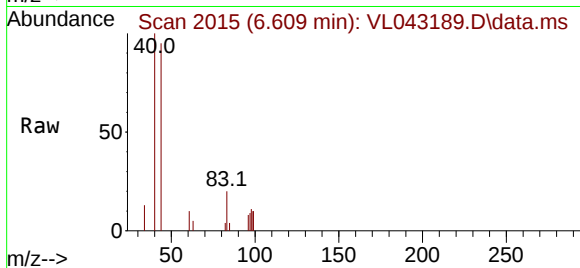
Ion Ratio Lower Upper

97 100

83 61.6 64.6 96.8#

85 0.0 40.6 60.8#

99 68.7 48.4 72.6



#48

Dibromochloromethane

Concen: 0.001 ppbv

RT: 7.412 min Scan# 2263

Delta R.T. 0.022 min

Lab File: VL043189.D

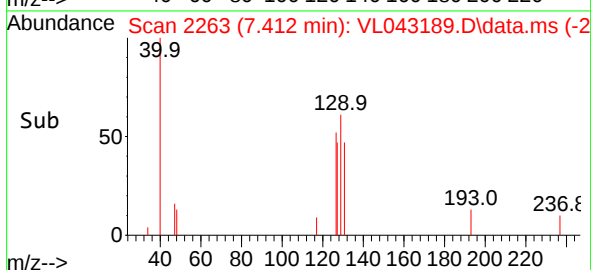
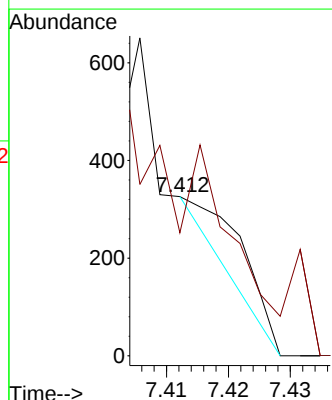
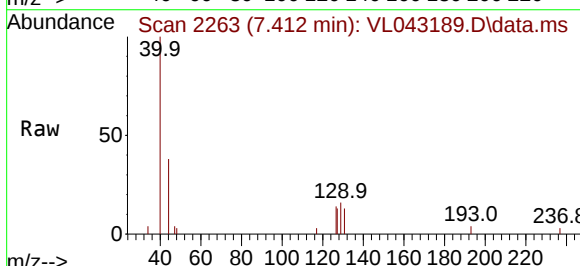
Acq: 11 Nov 2025 13:47

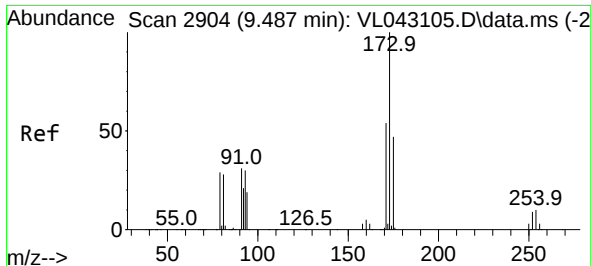
Tgt Ion: 129 Resp: 29

Ion Ratio Lower Upper

129 100

127 0.0 39.3 117.9#





#49

Bromoform

Concen: 0.002 ppbv

RT: 9.522 min Scan# 2904

Delta R.T. 0.035 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

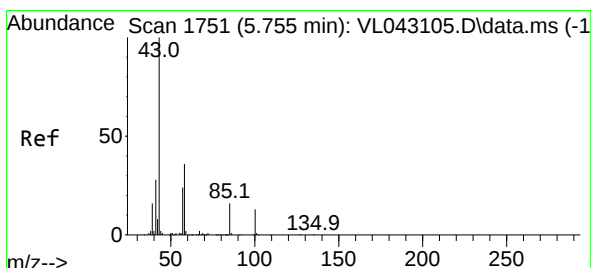
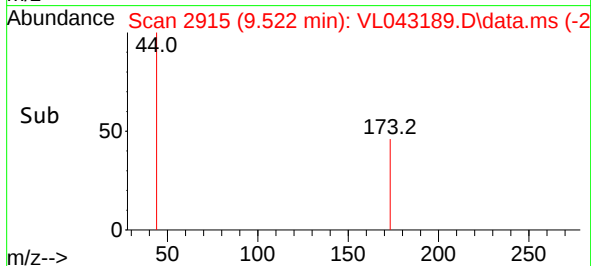
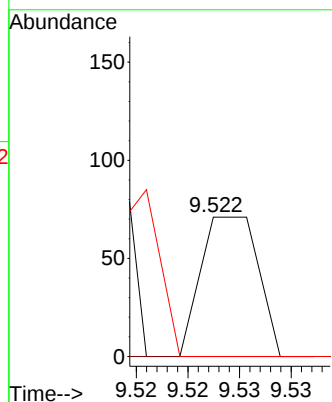
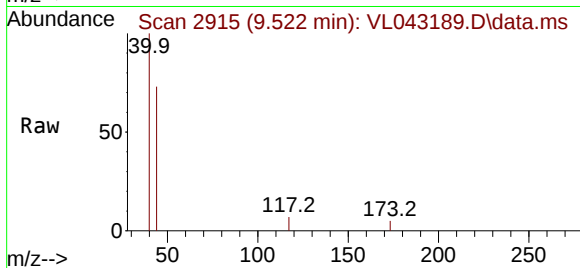
Instrument :

MSVOA\_L

ClientSampleId :

MDL-AIR-03-QT4-2025

|             |       |            |
|-------------|-------|------------|
| Tgt Ion:173 | Resp: | 28         |
| Ion Ratio   | Lower | Upper      |
| 173         | 100   |            |
| 175         | 0.0   | 38.8 58.2# |
| 171         | 0.0   | 41.7 62.5# |



#50

4-Methyl-2-Pentanone

Concen: 0.002 ppbv

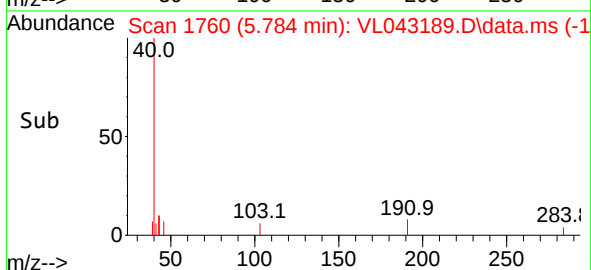
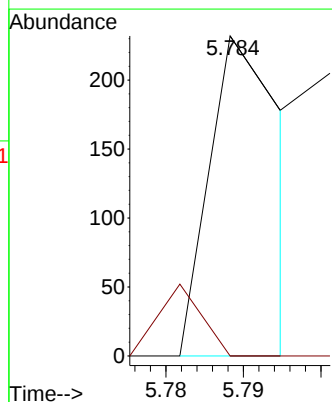
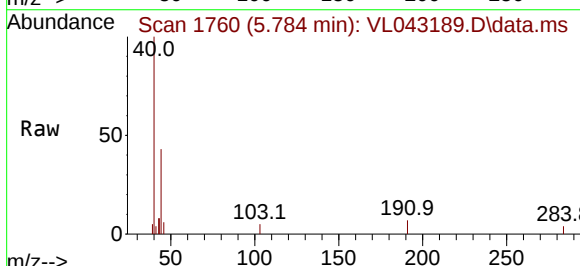
RT: 5.784 min Scan# 1760

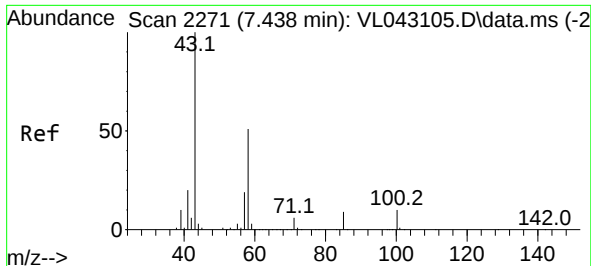
Delta R.T. 0.029 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

|             |       |            |
|-------------|-------|------------|
| Tgt Ion: 43 | Resp: | 80         |
| Ion Ratio   | Lower | Upper      |
| 43          | 100   |            |
| 58          | 12.5  | 29.1 43.7# |

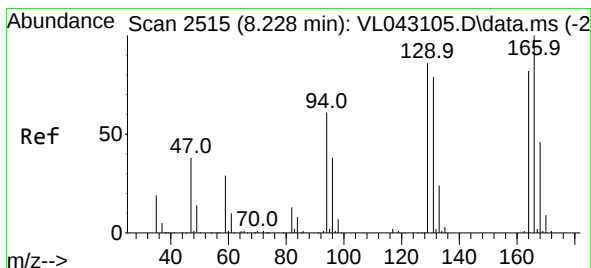
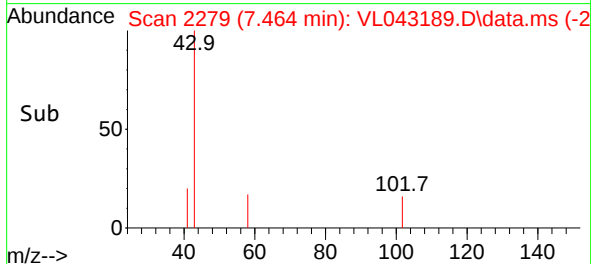
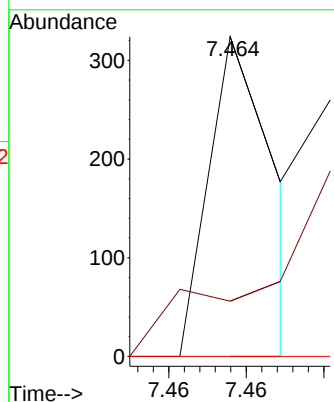
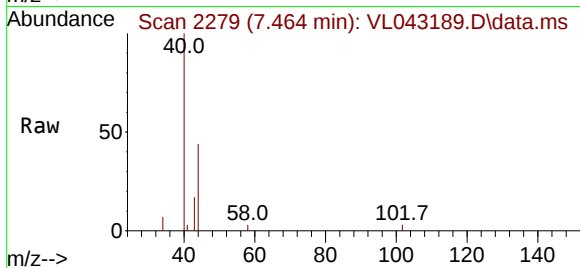




#51  
2-Hexanone  
Concen: 0.004 ppbv  
RT: 7.464 min Scan# 21  
Delta R.T. 0.026 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

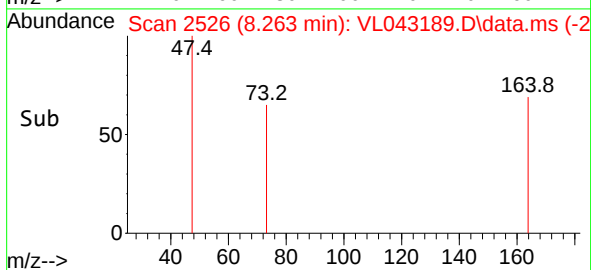
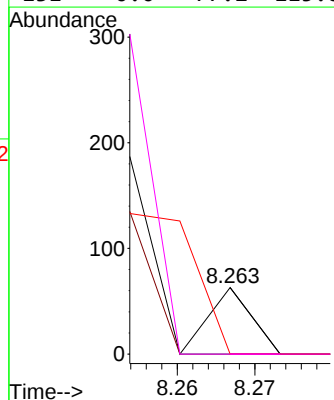
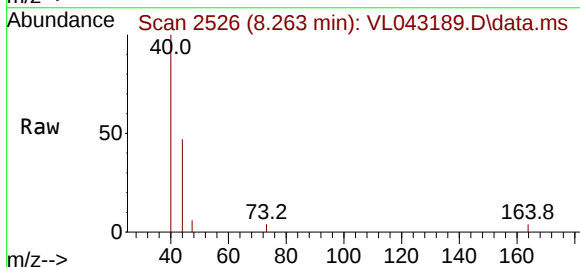
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

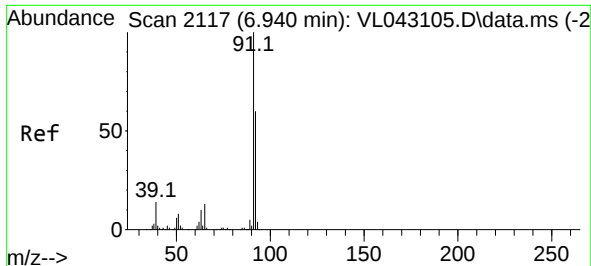
Tgt Ion: 43 Resp: 97  
Ion Ratio Lower Upper  
43 100  
58 0.0 40.4 60.6#  
98 0.0 0.1 0.1#



#52  
Tetrachloroethene  
Concen: 0.001 ppbv  
RT: 8.263 min Scan# 2526  
Delta R.T. 0.035 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion: 164 Resp: 12  
Ion Ratio Lower Upper  
164 100  
166 0.0 97.6 146.4#  
129 0.0 84.5 126.7#  
131 0.0 77.2 115.8#

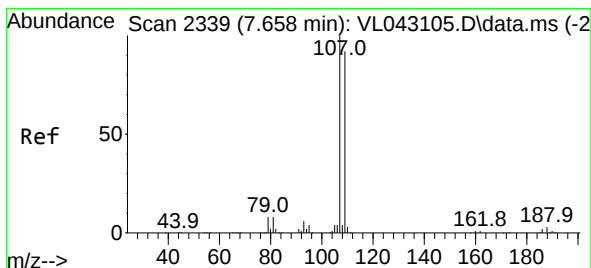
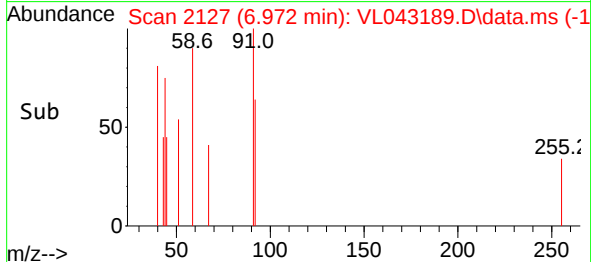
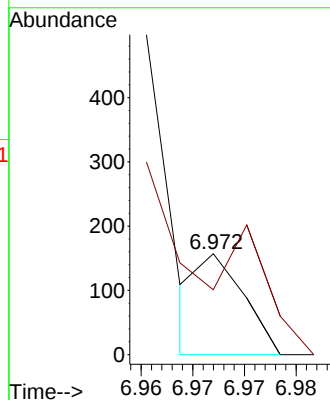
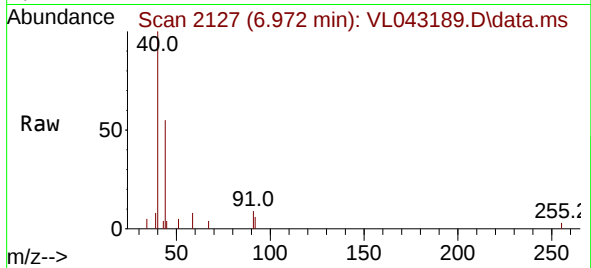




#53  
Toluene  
Concen: 0.001 ppbv  
RT: 6.972 min Scan# 2117  
Delta R.T. 0.032 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

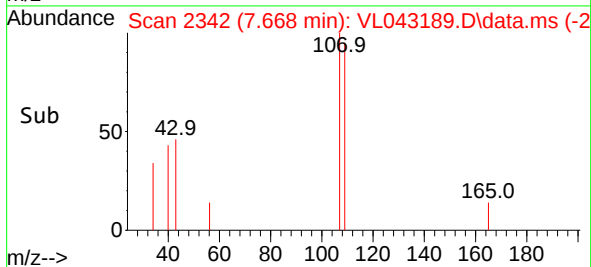
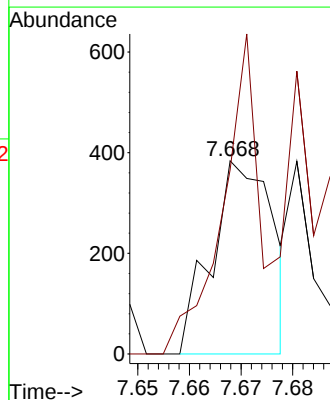
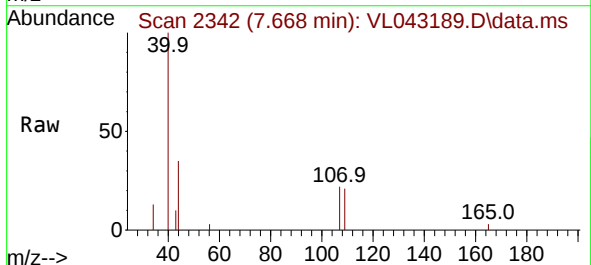
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

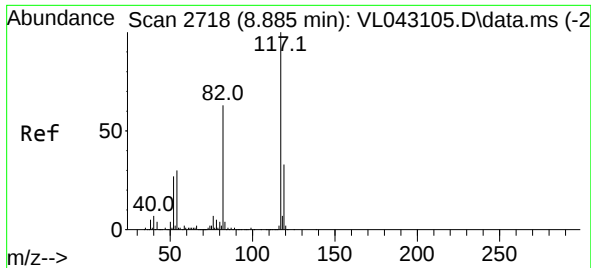
Tgt Ion: 91 Resp: 48  
Ion Ratio Lower Upper  
91 100  
92 0.0 48.8 73.2#



#54  
1,2-Dibromoethane  
Concen: 0.015 ppbv  
RT: 7.668 min Scan# 2342  
Delta R.T. 0.010 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion: 107 Resp: 316  
Ion Ratio Lower Upper  
107 100  
109 75.8 73.4 110.2

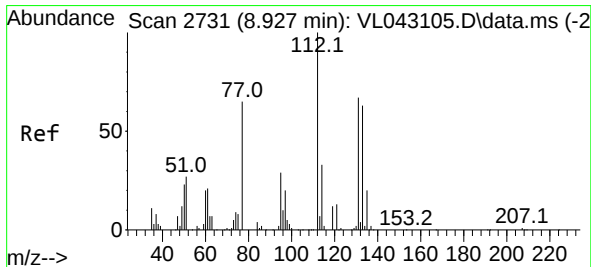
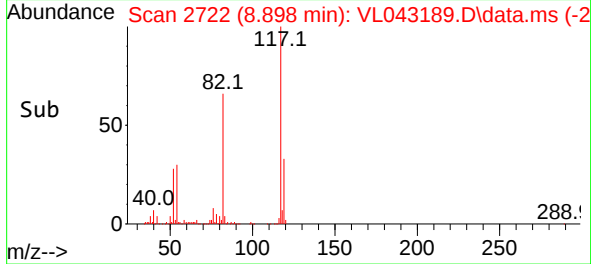
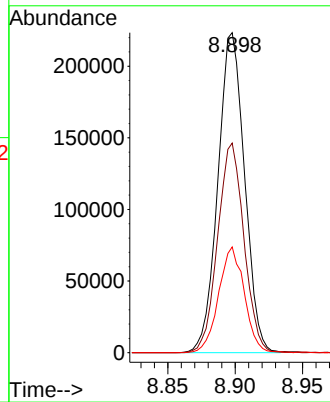
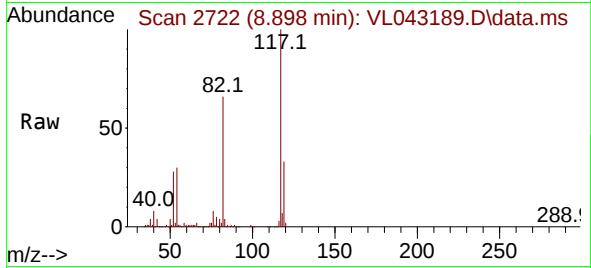




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 8.898 min Scan# 21  
Delta R.T. 0.013 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

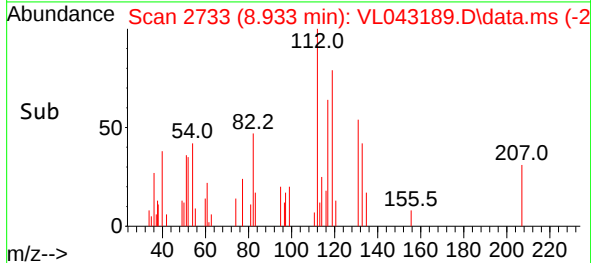
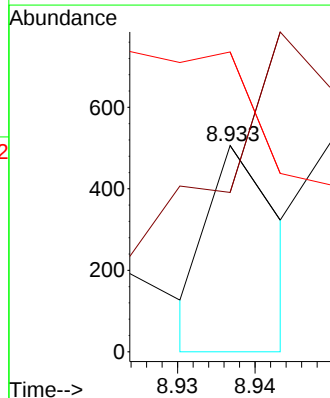
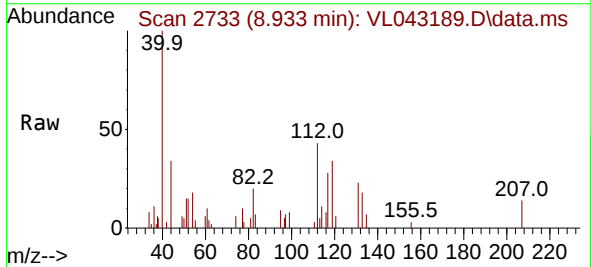
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

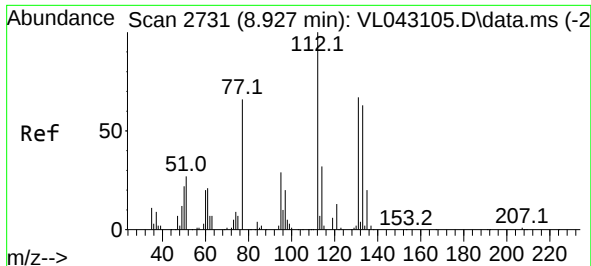
Tgt Ion:117 Resp: 307571  
Ion Ratio Lower Upper  
117 100  
82 64.6 53.8 80.8  
119 32.0 25.4 38.0



#56  
1,1,1,2-Tetrachloroethane  
Concen: 0.008 ppbv  
RT: 8.933 min Scan# 2733  
Delta R.T. 0.006 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion:131 Resp: 161  
Ion Ratio Lower Upper  
131 100  
133 649.7 75.7 113.5#  
119 0.0 50.6 76.0#





#57

Chlorobenzene

Concen: 0.031 ppbv

RT: 8.933 min Scan# 21

Delta R.T. 0.006 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

MDL-AIR-03-QT4-2025

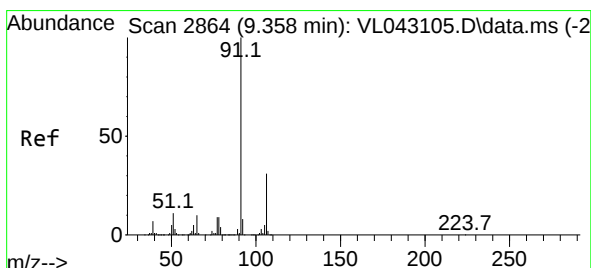
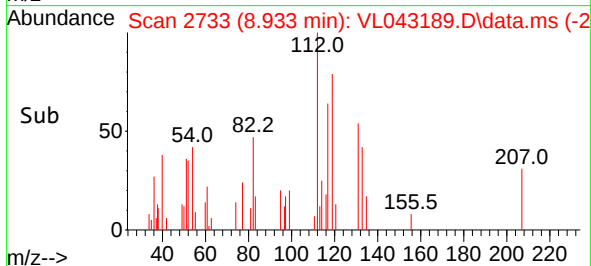
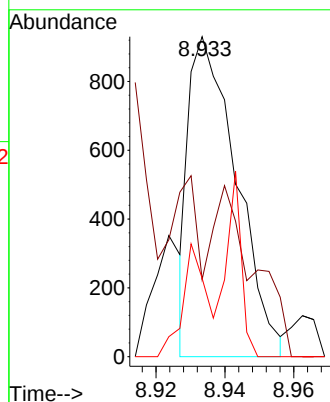
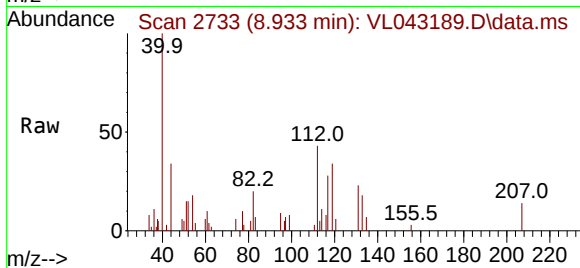
Tgt Ion:112 Resp: 897

Ion Ratio Lower Upper

112 100

77 12.0 53.3 79.9#

114 26.1 29.3 35.8#



#58

Ethyl Benzene

Concen: 0.007 ppbv

RT: 9.542 min Scan# 2921

Delta R.T. 0.184 min

Lab File: VL043189.D

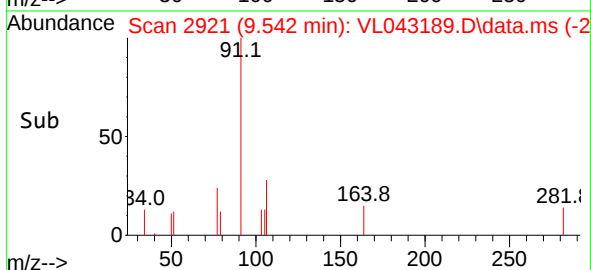
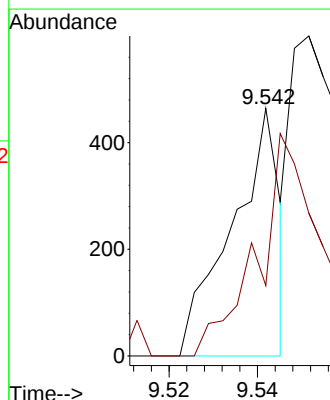
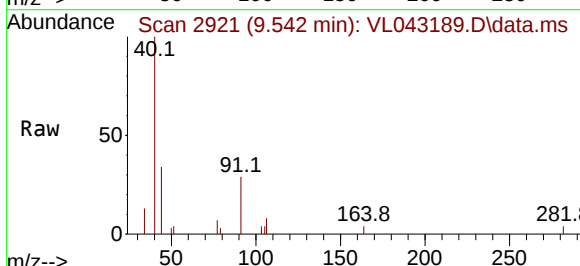
Acq: 11 Nov 2025 13:47

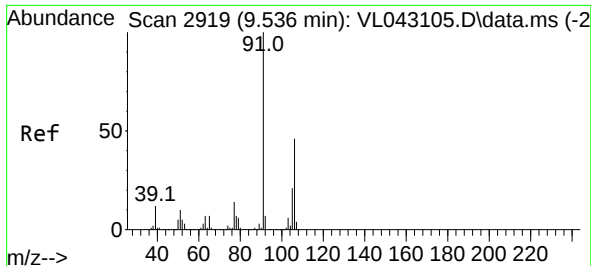
Tgt Ion: 91 Resp: 347

Ion Ratio Lower Upper

91 100

106 28.4 24.8 37.2

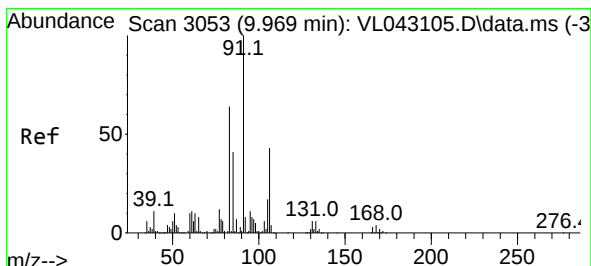
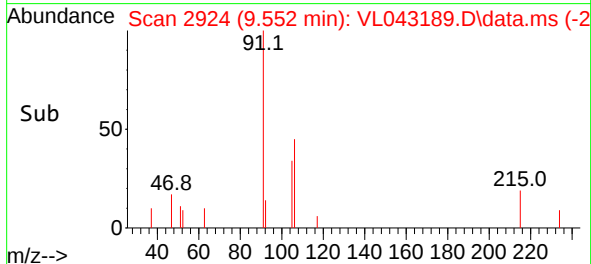
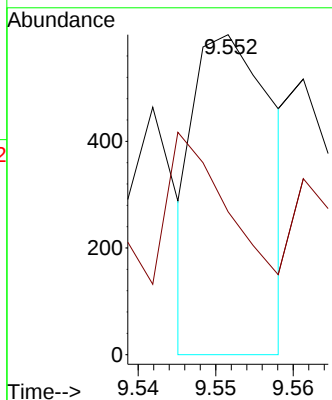
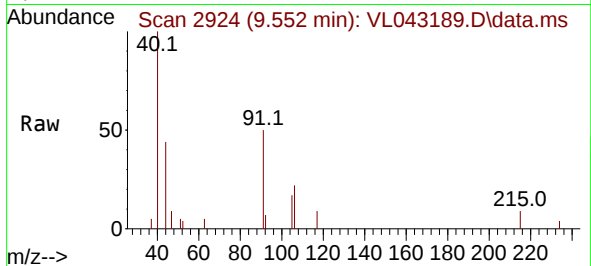




#59  
m/p-Xylene  
Concen: 0.010 ppbv  
RT: 9.552 min Scan# 2919  
Delta R.T. 0.016 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

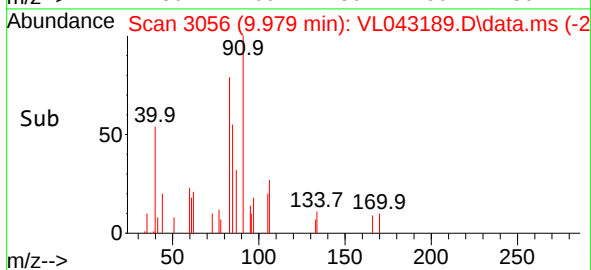
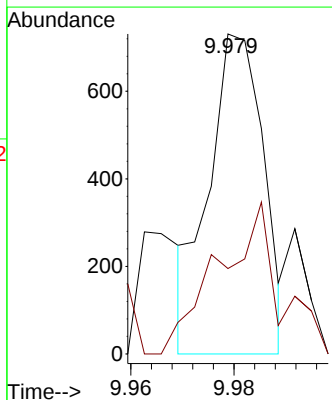
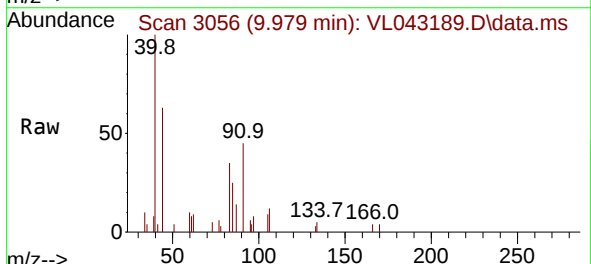
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

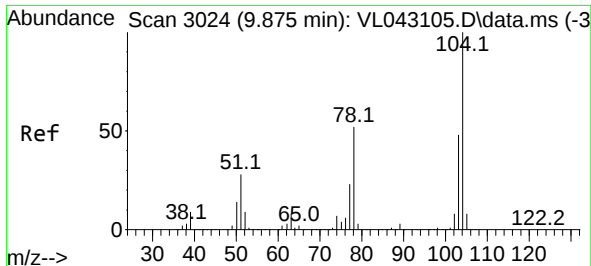
Tgt Ion: 91 Resp: 419  
Ion Ratio Lower Upper  
91 100  
106 0.0 38.0 57.0#



#60  
o-Xylene  
Concen: 0.013 ppbv  
RT: 9.979 min Scan# 3056  
Delta R.T. 0.010 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion: 91 Resp: 536  
Ion Ratio Lower Upper  
91 100  
106 0.0 21.9 65.8#

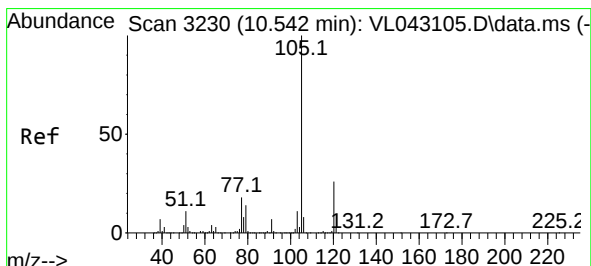
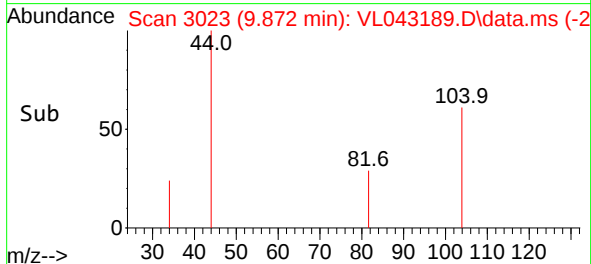
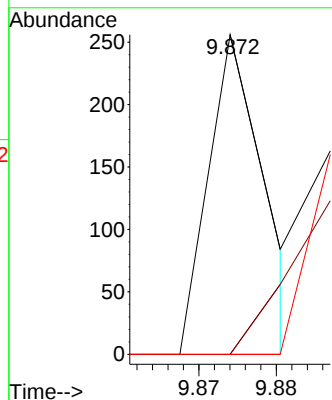
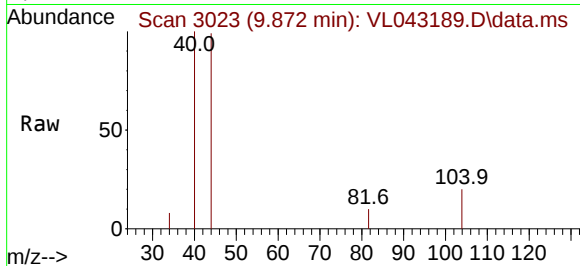




#61  
Styrene  
Concen: 0.004 ppbv  
RT: 9.872 min Scan# 3024  
Delta R.T. -0.003 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

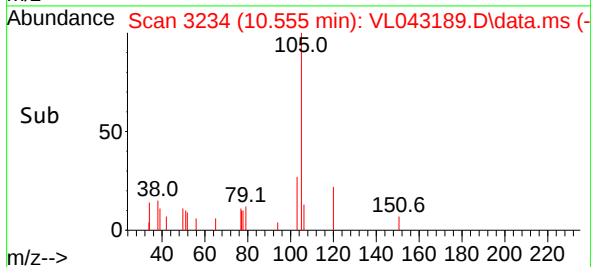
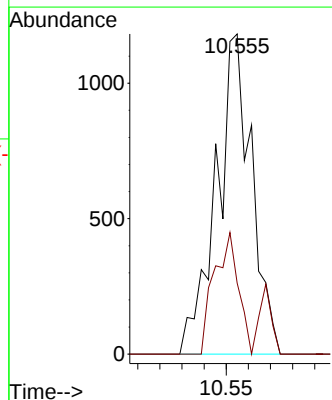
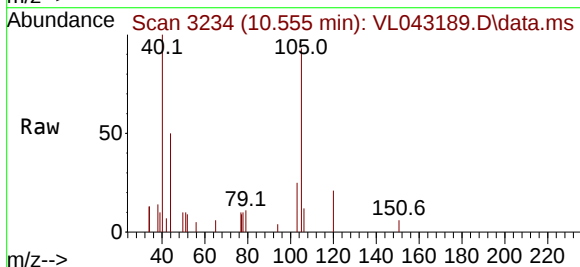
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

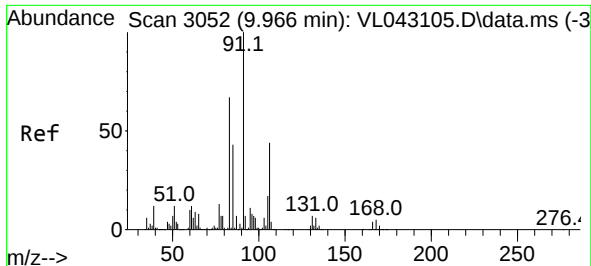
Tgt Ion:104 Resp: 66  
Ion Ratio Lower Upper  
104 100  
78 124.2 40.2 60.2#  
103 157.6 36.9 55.3#



#62  
Isopropylbenzene  
Concen: 0.017 ppbv  
RT: 10.555 min Scan# 3234  
Delta R.T. 0.013 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion:105 Resp: 1302  
Ion Ratio Lower Upper  
105 100  
120 33.6 20.2 30.4#





#63

1,1,2,2-Tetrachloroethane

Concen: 0.014 ppbv

RT: 9.982 min Scan# 3052

Delta R.T. 0.016 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

MDL-AIR-03-QT4-2025

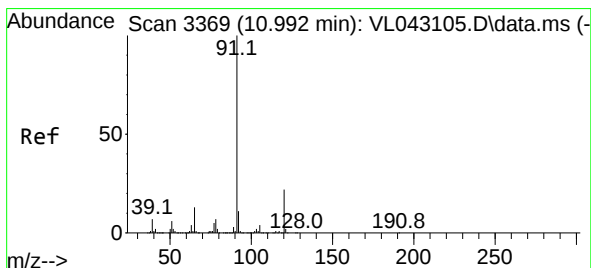
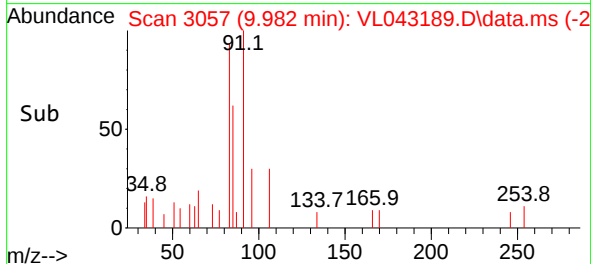
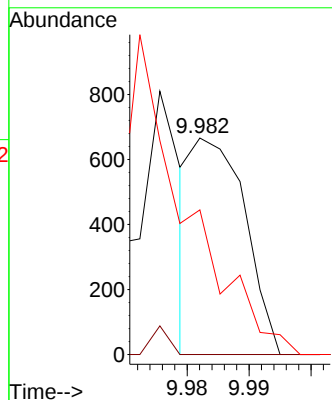
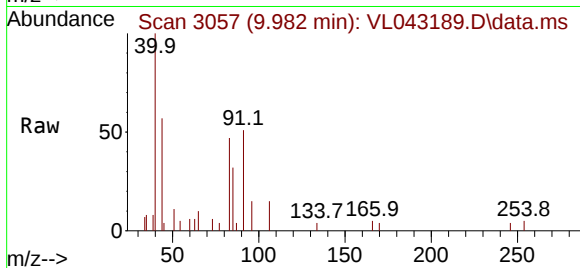
Tgt Ion: 83 Resp: 394

Ion Ratio Lower Upper

83 100

131 0.0 4.8 14.3#

85 0.0 32.0 96.0#



#64

n-propylbenzene

Concen: 0.002 ppbv

RT: 11.011 min Scan# 3375

Delta R.T. 0.019 min

Lab File: VL043189.D

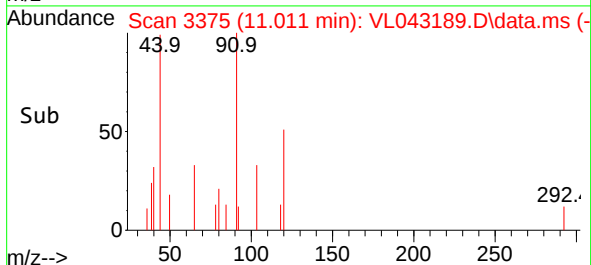
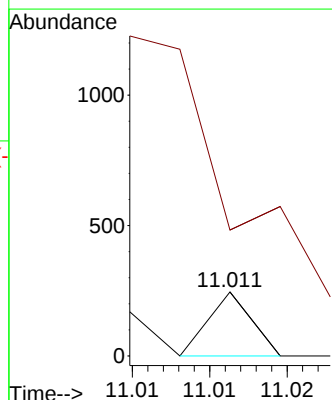
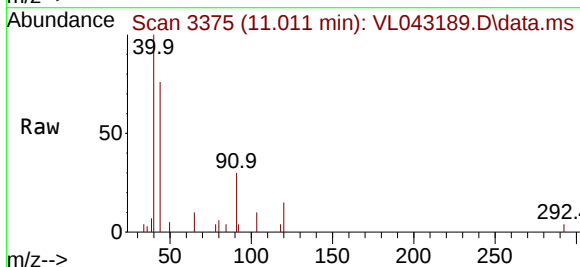
Acq: 11 Nov 2025 13:47

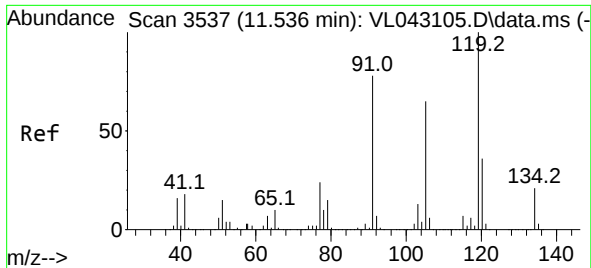
Tgt Ion: 120 Resp: 48

Ion Ratio Lower Upper

120 100

91 0.0 361.6 542.4#

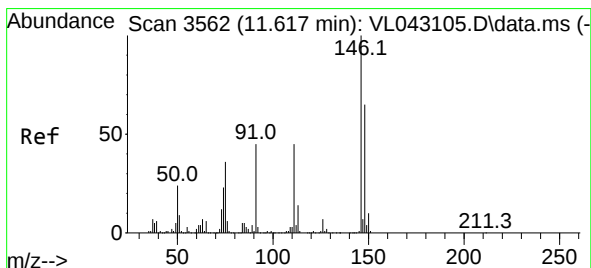
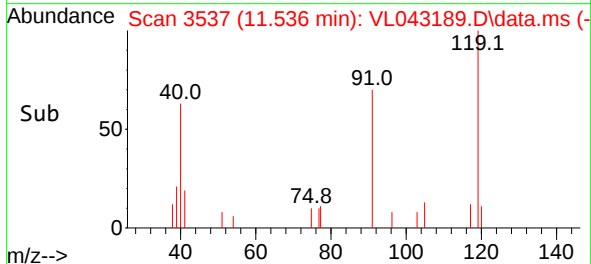
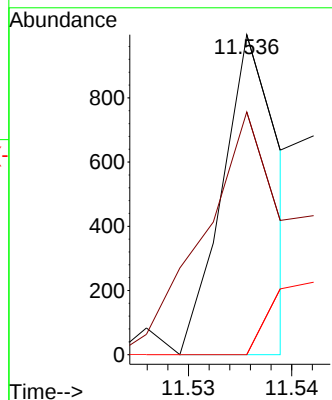
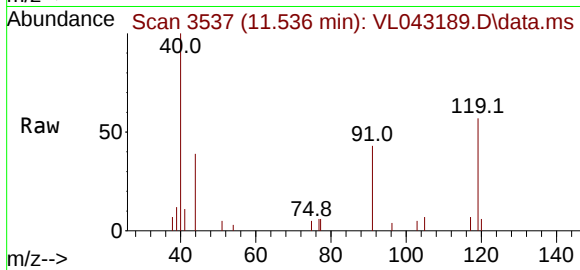




#65  
tert-Butylbenzene  
Concen: 0.006 ppbv  
RT: 11.536 min Scan# 3537  
Delta R.T. -0.000 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

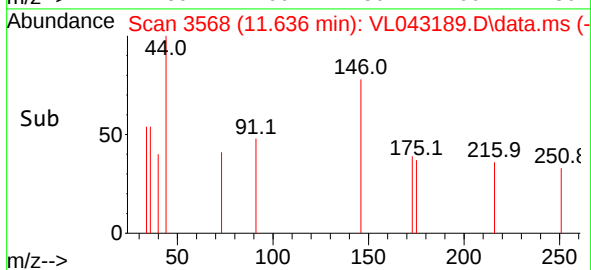
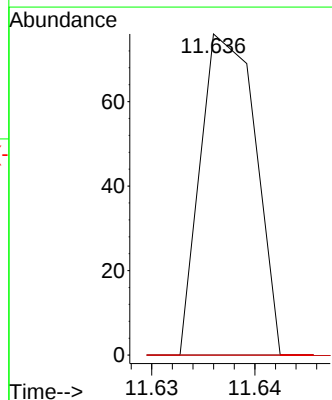
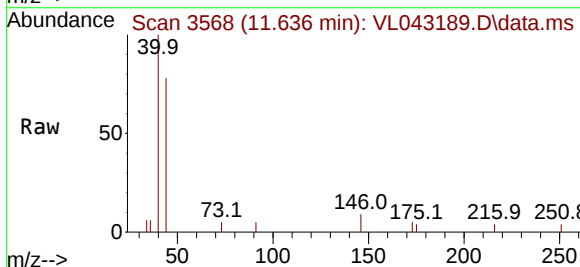
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

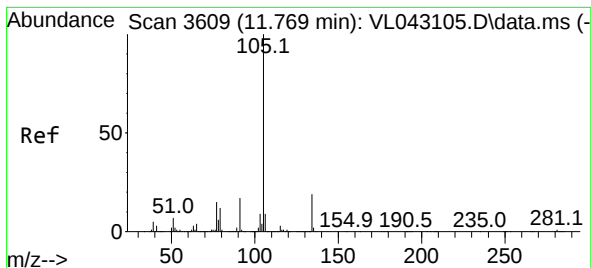
Tgt Ion:119 Resp: 385  
Ion Ratio Lower Upper  
119 100  
91 209.6 63.4 95.0#  
134 0.0 17.3 25.9#



#66  
Benzyl Chloride  
Concen: 0.004 ppbv  
RT: 11.636 min Scan# 3568  
Delta R.T. 0.019 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion: 91 Resp: 28  
Ion Ratio Lower Upper  
91 100  
126 0.0 14.6 22.0#  
128 0.0 4.6 6.8#





#67

sec-Butylbenzene

Concen: 0.014 ppbv

RT: 11.782 min Scan# 3

Delta R.T. 0.013 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

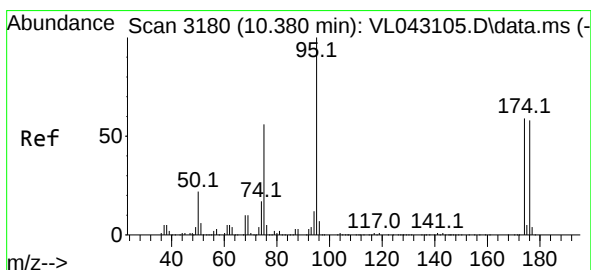
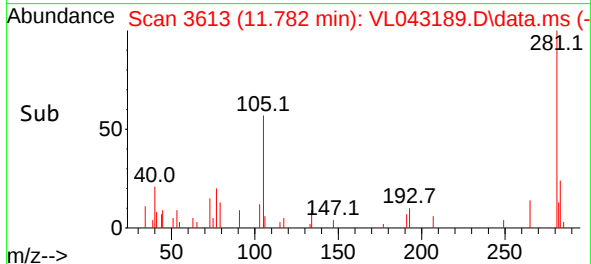
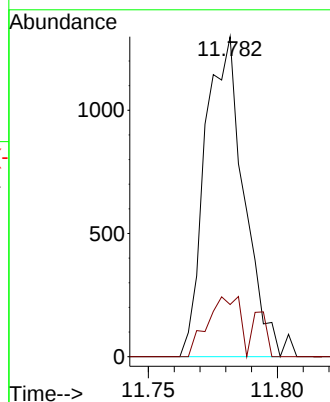
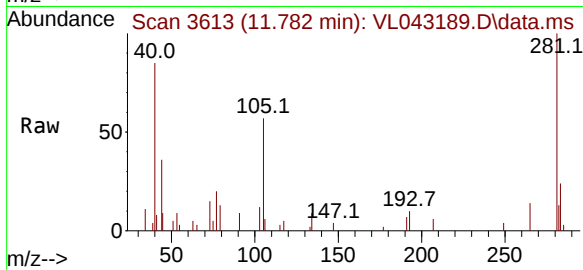
MDL-AIR-03-QT4-2025

Tgt Ion:105 Resp: 1355

Ion Ratio Lower Upper

105 100

134 20.8 15.5 23.3



#68

1-Bromo-4-Fluorobenzene

Concen: 9.370 ppbv

RT: 10.390 min Scan# 3183

Delta R.T. 0.010 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

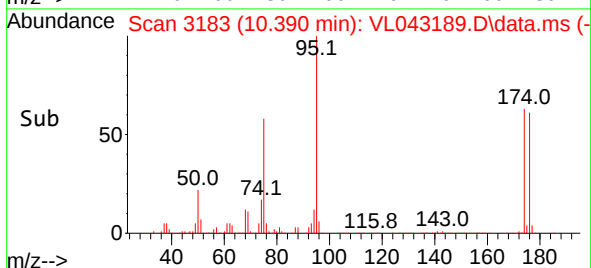
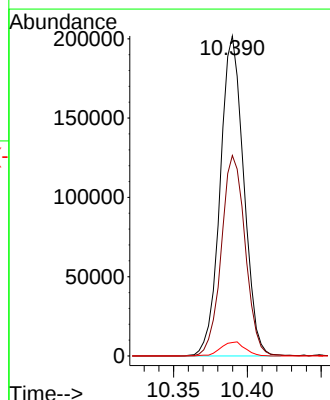
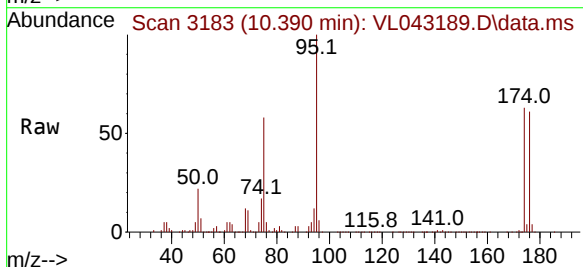
Tgt Ion: 95 Resp: 224002

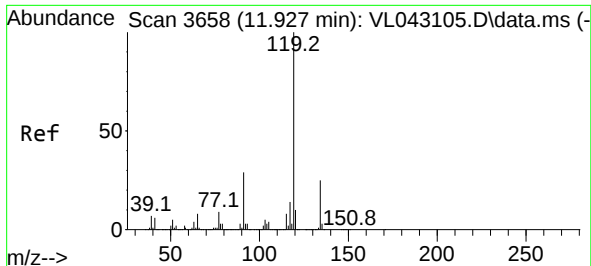
Ion Ratio Lower Upper

95 100

174 63.7 48.3 72.5

175 4.5 3.8 5.8





#69

p-Isopropyltoluene

Concen: 0.001 ppbv

RT: 11.950 min Scan# 3

Delta R.T. 0.023 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

MDL-AIR-03-QT4-2025

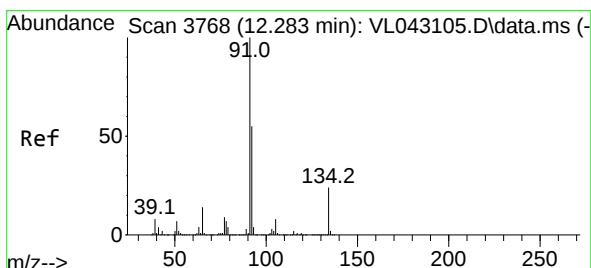
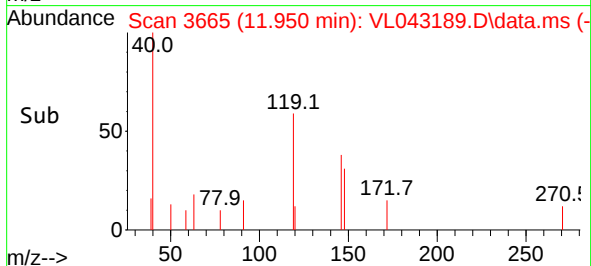
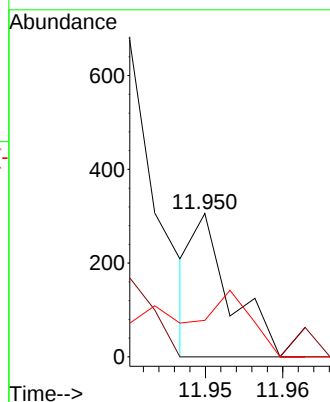
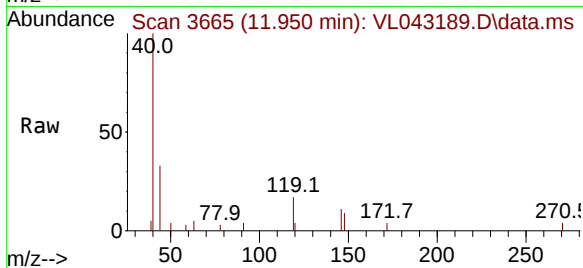
Tgt Ion:119 Resp: 101

Ion Ratio Lower Upper

119 100

134 0.0 20.3 30.5#

91 0.0 22.6 33.8#



#70

n-Butylbenzene

Concen: 0.009 ppbv

RT: 12.299 min Scan# 3773

Delta R.T. 0.016 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

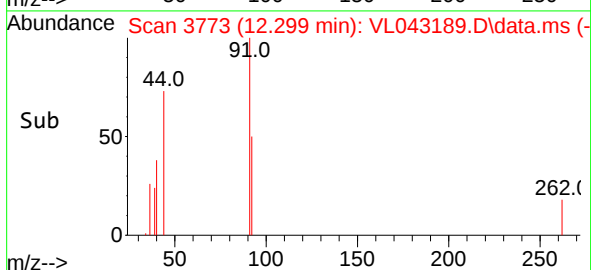
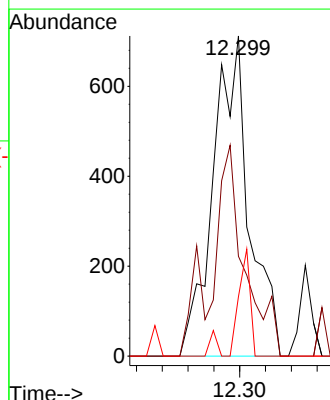
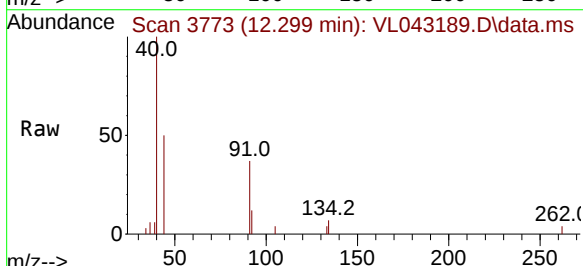
Tgt Ion: 91 Resp: 689

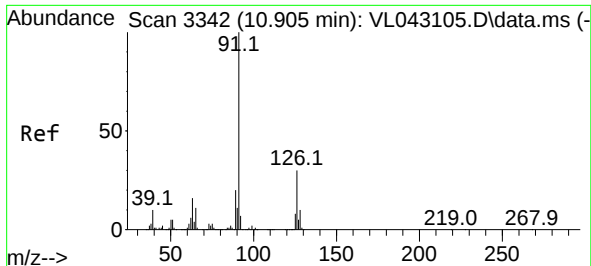
Ion Ratio Lower Upper

91 100

92 60.2 44.5 66.7

134 0.0 19.3 28.9#

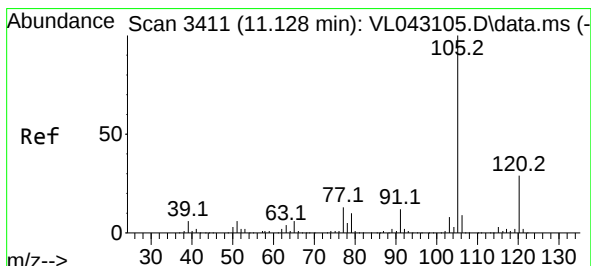
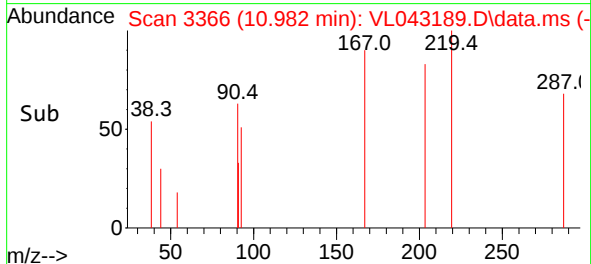
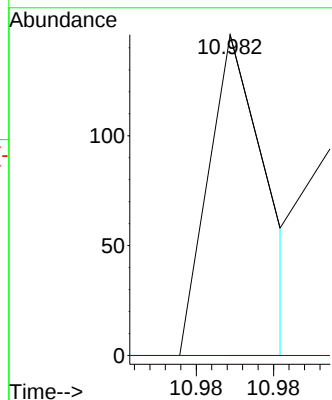
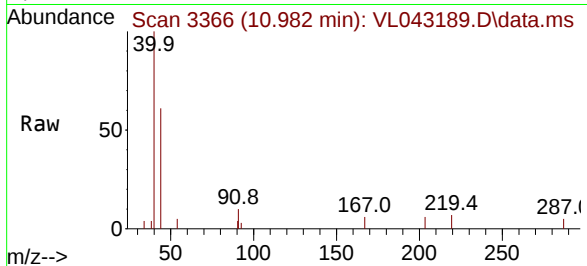




#71  
2-Chlorotoluene  
Concen: 0.001 ppbv  
RT: 10.982 min Scan# 31  
Delta R.T. 0.078 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

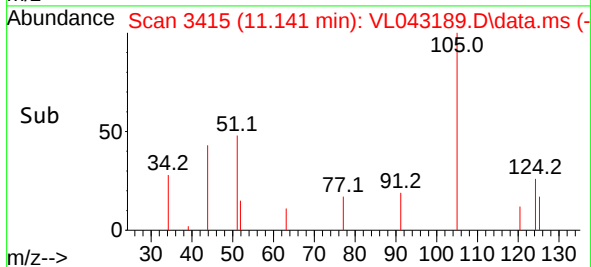
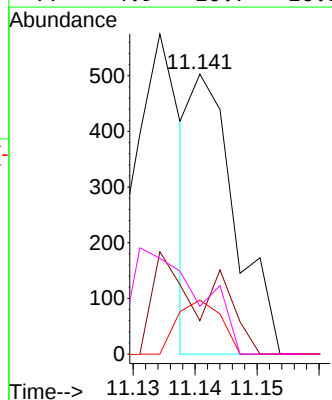
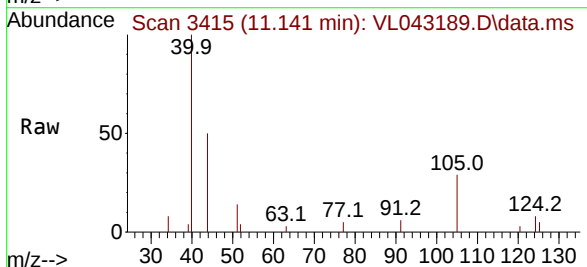
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

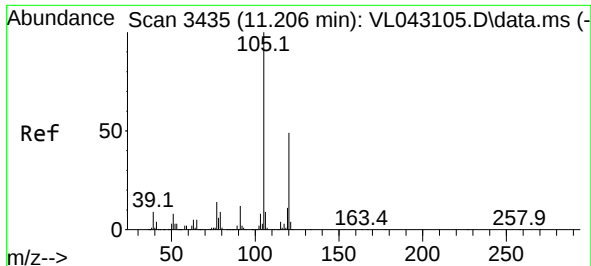
Tgt Ion: 91 Resp: 40  
Ion Ratio Lower Upper  
91 100  
126 37.5 12.0 48.0



#72  
4-Ethyltoluene  
Concen: 0.005 ppbv  
RT: 11.141 min Scan# 3415  
Delta R.T. 0.013 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion: 105 Resp: 245  
Ion Ratio Lower Upper  
105 100  
120 0.0 24.2 36.4#  
91 19.6 10.0 15.0#  
77 4.9 10.7 16.1#

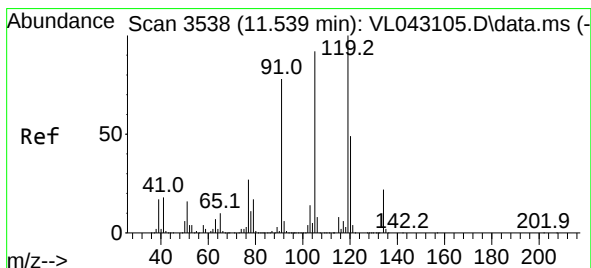
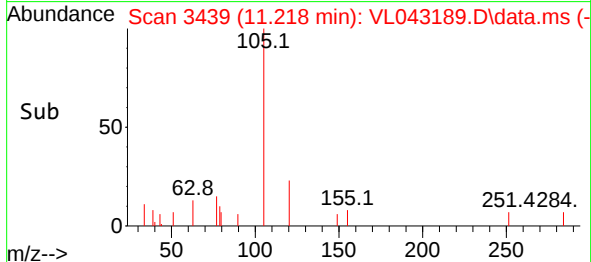
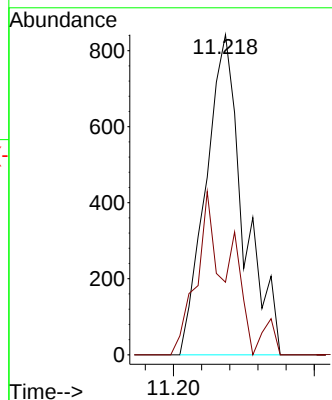
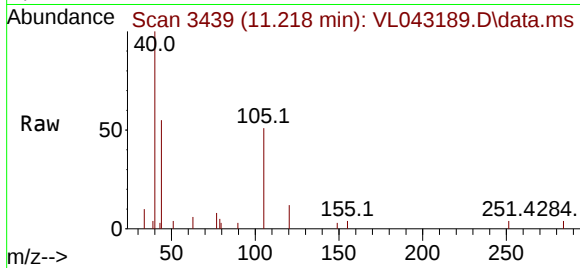




#73  
1,3,5-Trimethylbenzene  
Concen: 0.018 ppbv  
RT: 11.218 min Scan# 3435  
Delta R.T. 0.013 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

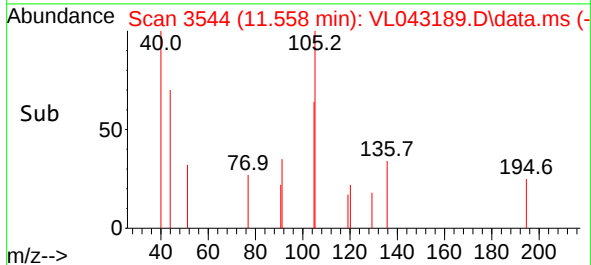
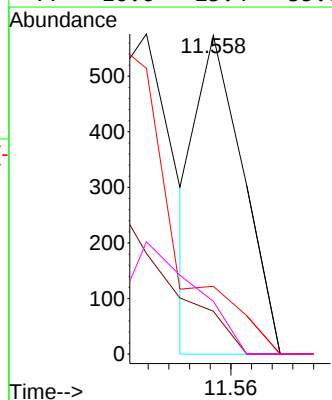
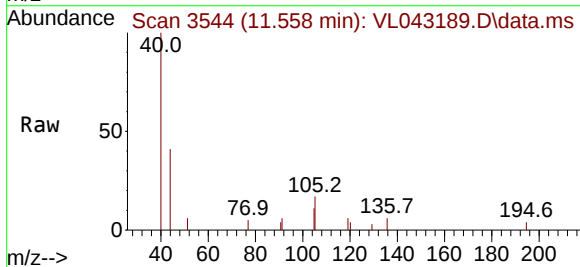
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

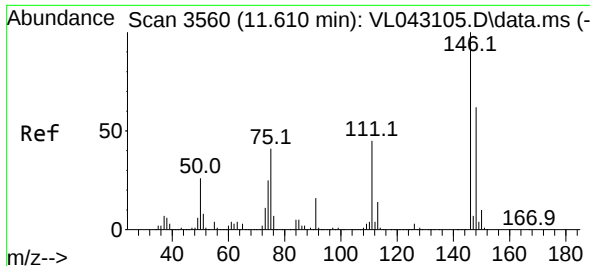
Tgt Ion:105 Resp: 780  
Ion Ratio Lower Upper  
105 100  
120 22.7 39.0 58.6#



#74  
1,2,4-Trimethylbenzene  
Concen: 0.004 ppbv  
RT: 11.558 min Scan# 3544  
Delta R.T. 0.019 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion:105 Resp: 170  
Ion Ratio Lower Upper  
105 100  
120 13.4 42.8 64.2#  
91 21.3 68.3 102.5#  
77 16.6 23.4 35.0#

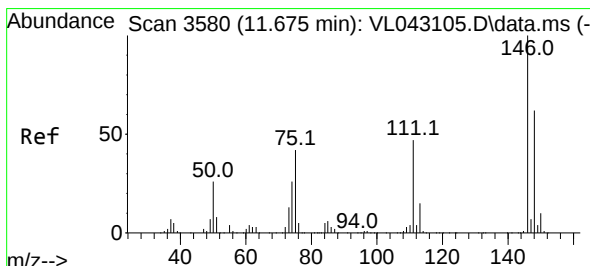
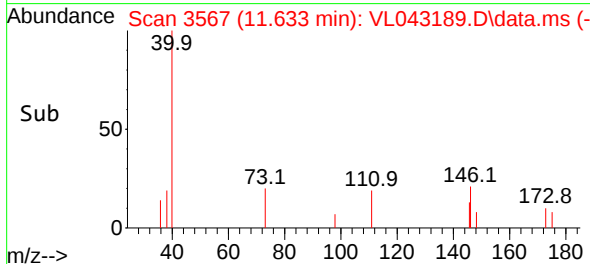
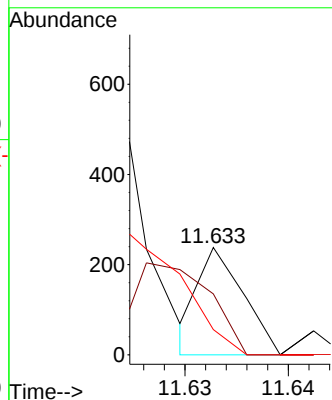
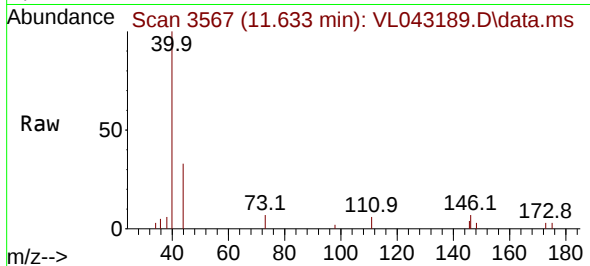




#75  
1,3-Dichlorobenzene  
Concen: 0.003 ppbv  
RT: 11.633 min Scan# 3567  
Delta R.T. 0.022 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

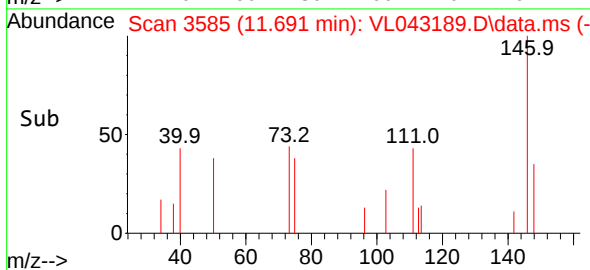
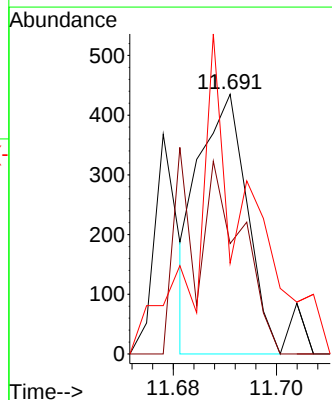
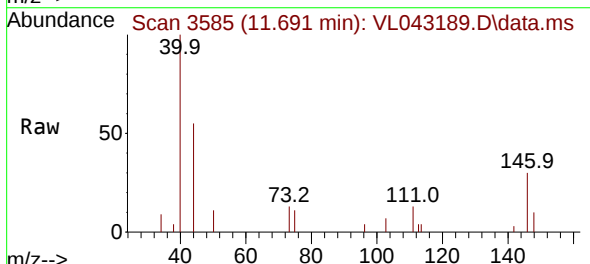
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

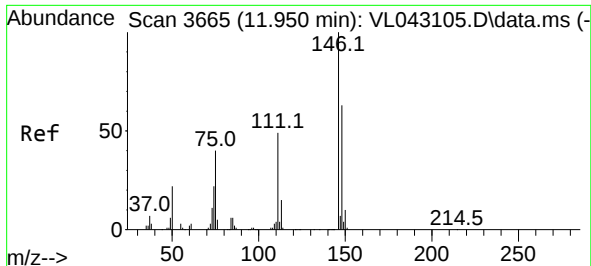
Tgt Ion:146 Resp: 71  
Ion Ratio Lower Upper  
146 100  
111 0.0 23.3 69.9#  
148 0.0 31.6 95.0#



#76  
1,4-Dichlorobenzene  
Concen: 0.010 ppbv  
RT: 11.691 min Scan# 3585  
Delta R.T. 0.016 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

Tgt Ion:146 Resp: 283  
Ion Ratio Lower Upper  
146 100  
111 0.0 22.4 67.0#  
148 129.0 31.6 94.7#

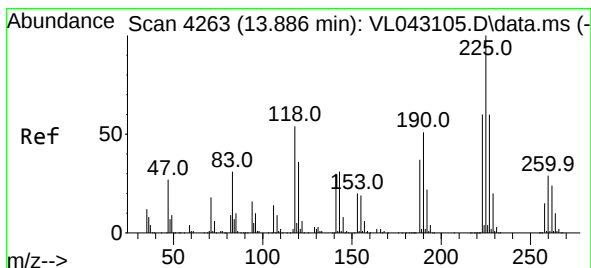
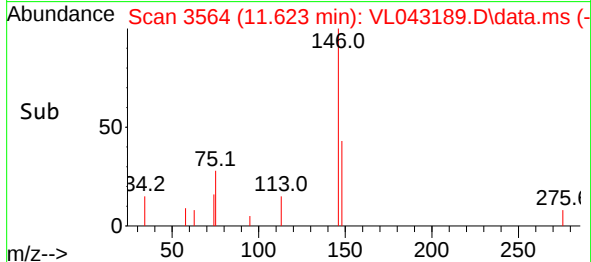
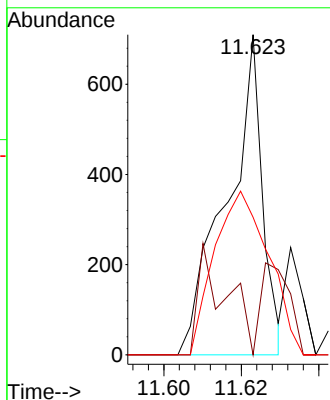
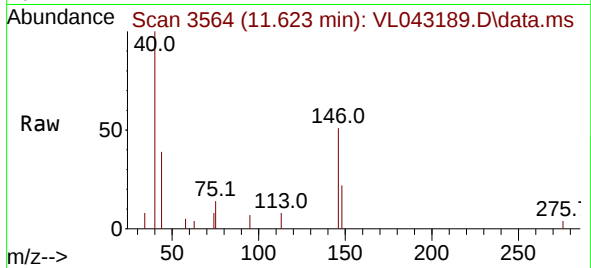




#77  
1,2-Dichlorobenzene  
Concen: 0.017 ppbv  
RT: 11.623 min Scan# 311  
Delta R.T. -0.327 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

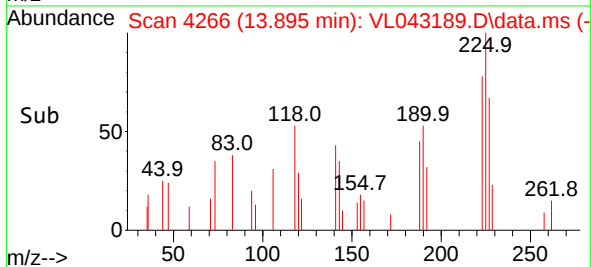
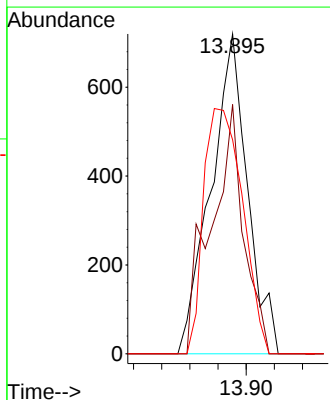
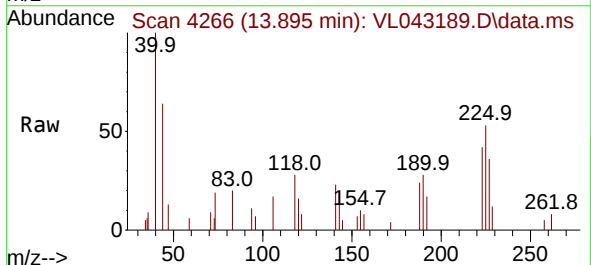
Instrument :  
MSVOA\_L  
ClientSampleId :  
MDL-AIR-03-QT4-2025

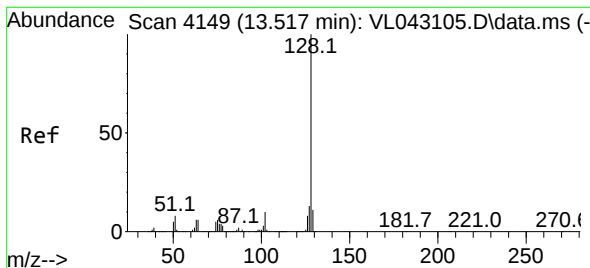
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 146   | Resp: | 455  |
| Ion Ratio | Lower | Upper |      |
| 146       | 100   |       |      |
| 111       | 27.3  | 24.0  | 72.0 |
| 148       | 77.8  | 31.1  | 93.3 |



#78  
Hexachloro-1,3-Butadiene  
Concen: 0.032 ppbv  
RT: 13.895 min Scan# 4266  
Delta R.T. 0.010 min  
Lab File: VL043189.D  
Acq: 11 Nov 2025 13:47

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 225   | Resp: | 651  |
| Ion Ratio | Lower | Upper |      |
| 225       | 100   |       |      |
| 223       | 69.1  | 50.2  | 75.4 |
| 227       | 81.7  | 49.6  | 74.4 |





#79

Naphthalene

Concen: 0.007 ppbv

RT: 13.529 min Scan# 4149

Delta R.T. 0.013 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

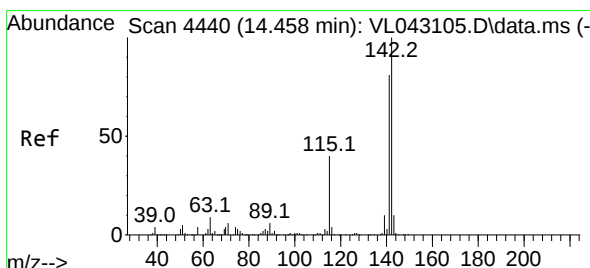
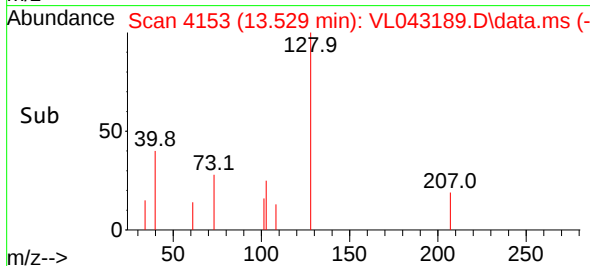
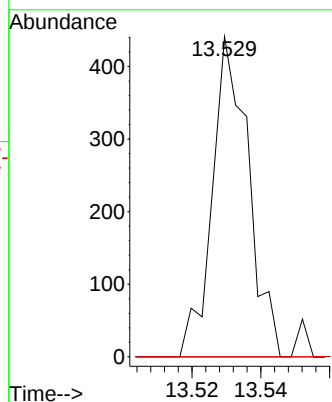
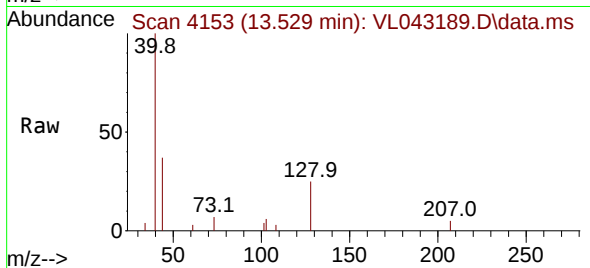
Instrument :

MSVOA\_L

ClientSampleId :

MDL-AIR-03-QT4-2025

|             |       |            |
|-------------|-------|------------|
| Tgt Ion:128 | Resp: | 322        |
| Ion Ratio   | Lower | Upper      |
| 128         | 100   |            |
| 127         | 0.0   | 10.5 15.7# |
| 129         | 0.0   | 9.1 13.7#  |



#80

Naphthalene,2-methyl-

Concen: 0.004 ppbv

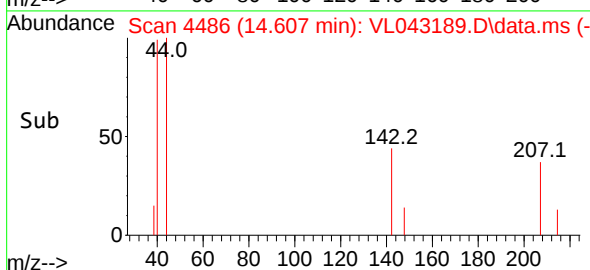
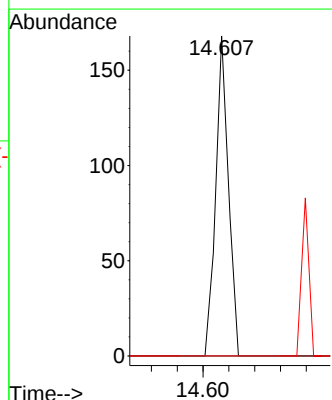
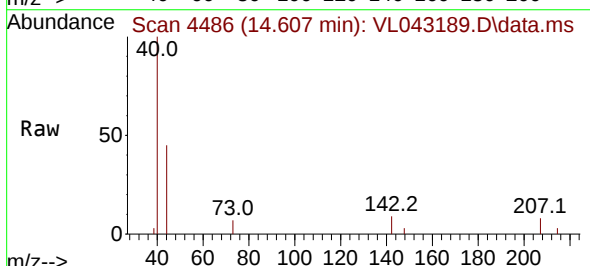
RT: 14.607 min Scan# 4486

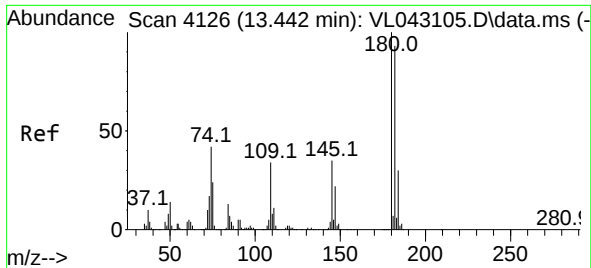
Delta R.T. 0.149 min

Lab File: VL043189.D

Acq: 11 Nov 2025 13:47

|             |       |            |
|-------------|-------|------------|
| Tgt Ion:142 | Resp: | 57         |
| Ion Ratio   | Lower | Upper      |
| 142         | 100   |            |
| 141         | 0.0   | 64.6 97.0# |
| 115         | 28.1  | 30.2 45.4# |





#81

1,2,4-Trichlorobenzene

Concen: 0.002 ppbv

RT: 13.458 min Scan# 41

Delta R.T. 0.016 min

Lab File: VL043189.D

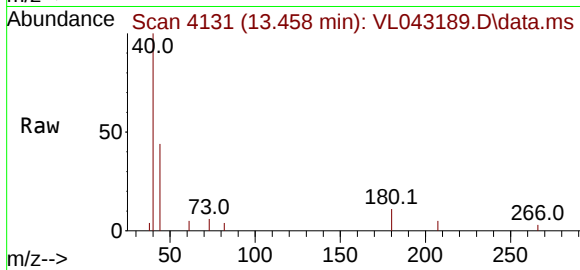
Acq: 11 Nov 2025 13:47

Instrument :

MSVOA\_L

ClientSampleId :

MDL-AIR-03-QT4-2025



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 180   | Resp: | 50    |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 100.0 | 75.5  | 113.3 |
| 184      | 0.0   | 23.9  | 35.9# |

