

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL032725\  
 Data File : VL042177.D  
 Acq On : 27 Mar 2025 11:03  
 Operator : SY/MD  
 Sample : VSTDICC0.03  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.03

Quant Time: Mar 28 01:36:24 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL032725AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Fri Mar 28 01:31:23 2025  
 Response via : Initial Calibration

| Compound                | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|-------|------|----------|--------|-------|----------|
| -----                   |       |      |          |        |       |          |
| Internal Standards      |       |      |          |        |       |          |
| 1) Bromochloromethane   | 2.787 | 49   | 178058   | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 3.955 | 114  | 512915   | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 8.878 | 117  | 475617   | 10.000 | ppbv  | 0.00     |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 68) 1-Bromo-4-Fluorobenzene | 10.374 | 95    | 389935   | 9.983    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 99.800% |

| Target Compounds             |        |     |        |       | Qvalue |    |
|------------------------------|--------|-----|--------|-------|--------|----|
| 2) Dichlorodifluoromethane   | 1.496  | 85  | 914    | 0.035 | ppbv # | 73 |
| 3) Chlorodifluoromethane     | 1.476  | 51  | 1354   | 0.050 | ppbv # | 1  |
| 4) Chloromethane             | 1.531  | 50  | 675    | 0.063 | ppbv # | 86 |
| 5) Vinyl Chloride            | 1.580  | 62  | 534    | 0.049 | ppbv # | 79 |
| 6) Bromomethane              | 1.670  | 94  | 483    | 0.099 | ppbv # | 9  |
| 7) Chloroethane              | 1.703  | 64  | 361    | 0.084 | ppbv # | 45 |
| 8) Dichlorotetrafluoroethane | 1.554  | 85  | 815    | 0.036 | ppbv # | 79 |
| 13) Ethanol                  | 1.719  | 45  | 312    | 0.329 | ppbv # | 27 |
| 14) Bromoethene              | 1.780  | 108 | 482    | 0.060 | ppbv # | 31 |
| 15) Acetone                  | 1.835  | 43  | 3574   | 0.144 | ppbv # | 63 |
| 16) 1,3-Butadiene            | 1.606  | 39  | 1101   | 0.098 | ppbv # | 57 |
| 17) tert-Butyl alcohol       | 2.043  | 59  | 1215   | 0.039 | ppbv # | 1  |
| 18) 1,1-Dichloroethene       | 2.036  | 96  | 560    | 0.057 | ppbv # | 38 |
| 19) Isopropyl Alcohol        | 1.887  | 45  | 1071   | 0.076 | ppbv # | 30 |
| 20) Methylene Chloride       | 2.059  | 84  | 1823   | 0.197 | ppbv # | 91 |
| 21) Allyl Chloride           | 2.091  | 41  | 1518   | 0.086 | ppbv # | 29 |
| 22) trans-1,2-Dichloroethene | 2.719  | 96  | 586    | 0.051 | ppbv   | 96 |
| 23) Vinyl Acetate            | 2.463  | 43  | 689    | 0.067 | ppbv # | 1  |
| 24) 1,1-Dichloroethane       | 2.412  | 63  | 961    | 0.046 | ppbv # | 72 |
| 26) Hexane                   | 2.819  | 57  | 1040   | 0.042 | ppbv # | 46 |
| 27) Carbon Disulfide         | 2.149  | 76  | 1061   | 0.040 | ppbv # | 1  |
| 29) Chloroform               | 2.848  | 83  | 1619   | 0.044 | ppbv   | 92 |
| 31) cis-1,2-Dichloroethene   | 2.719  | 61  | 846    | 0.033 | ppbv   | 92 |
| 35) Carbon Tetrachloride     | 3.758  | 117 | 1520   | 0.039 | ppbv # | 42 |
| 37) 1,2-Dichloroethane       | 3.214  | 62  | 1029   | 0.035 | ppbv # | 88 |
| 39) 1,2-Dichloropropane      | 3.955  | 63  | 136518 | 7.372 | ppbv # | 23 |
| 57) Chlorobenzene            | 8.924  | 112 | 1382   | 0.031 | ppbv # | 61 |
| 60) o-Xylene                 | 9.959  | 91  | 2844   | 0.042 | ppbv   | 96 |
| 62) Isopropylbenzene         | 10.535 | 105 | 3380   | 0.033 | ppbv   | 95 |
| 65) tert-Butylbenzene        | 11.529 | 119 | 3543   | 0.038 | ppbv   | 98 |
| 67) sec-Butylbenzene         | 11.765 | 105 | 4317   | 0.033 | ppbv   | 92 |
| 71) 2-Chlorotoluene          | 10.898 | 91  | 2666   | 0.034 | ppbv   | 97 |
| 72) 4-Ethyltoluene           | 11.121 | 105 | 3017   | 0.036 | ppbv # | 64 |
| 73) 1,3,5-Trimethylbenzene   | 11.205 | 105 | 3101   | 0.042 | ppbv   | 94 |
| 74) 1,2,4-Trimethylbenzene   | 11.539 | 105 | 5313   | 0.063 | ppbv # | 73 |
| 75) 1,3-Dichlorobenzene      | 11.607 | 146 | 1577   | 0.034 | ppbv   | 90 |
| 77) 1,2-Dichlorobenzene      | 11.947 | 146 | 1591   | 0.035 | ppbv   | 92 |
| 78) Hexachloro-1,3-Butadiene | 13.882 | 225 | 1821   | 0.040 | ppbv   | 94 |

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

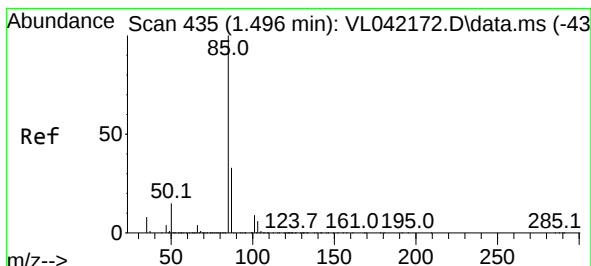
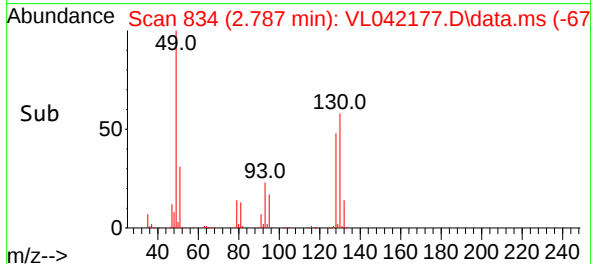
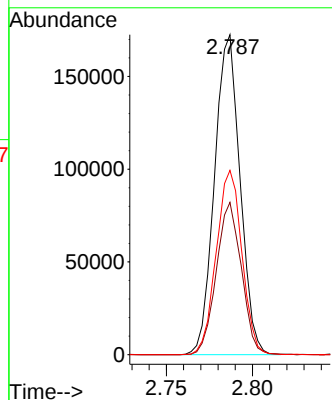
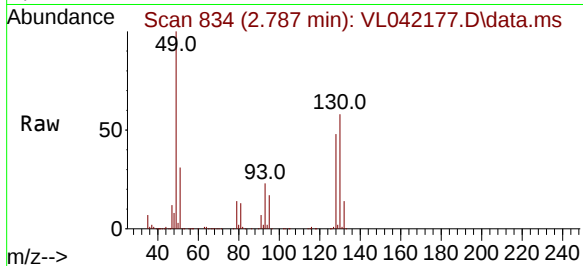




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.787 min Scan# 81  
Delta R.T. 0.003 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

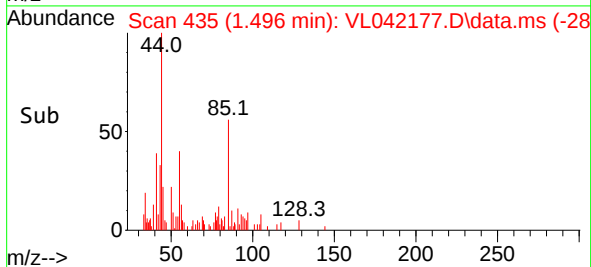
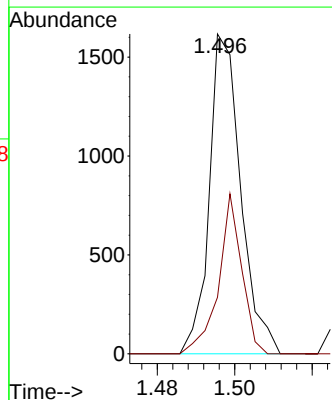
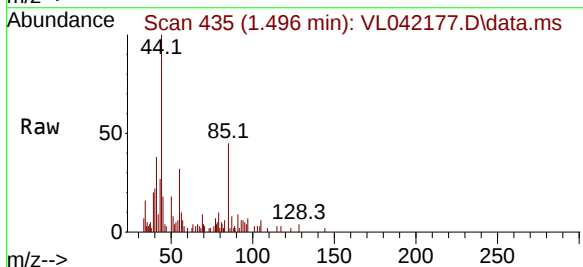
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.03

Tgt Ion: 49 Resp: 178058  
Ion Ratio Lower Upper  
49 100  
128 46.8 22.9 68.5  
130 57.9 28.8 86.4



#2  
Dichlorodifluoromethane  
Concen: 0.035 ppbv  
RT: 1.496 min Scan# 435  
Delta R.T. -0.000 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

Tgt Ion: 85 Resp: 914  
Ion Ratio Lower Upper  
85 100  
87 17.7 26.1 39.1#

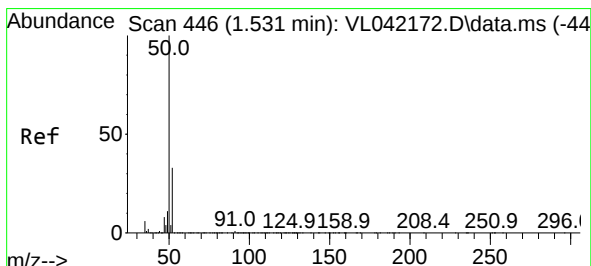
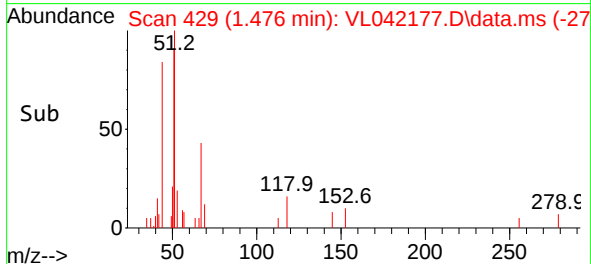
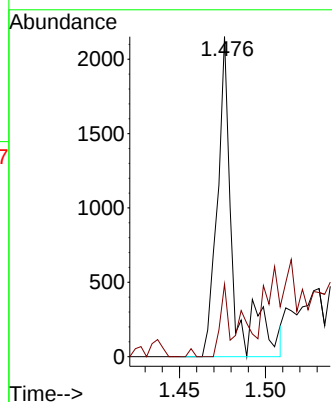
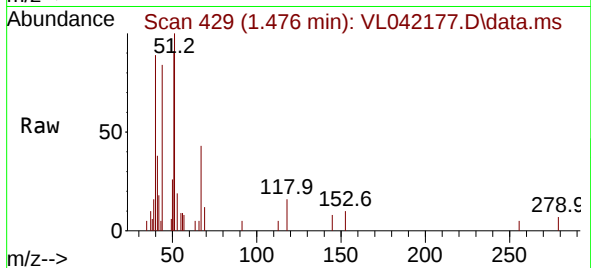




#3  
Chlorodifluoromethane  
Concen: 0.050 ppbv  
RT: 1.476 min Scan# 428  
Delta R.T. 0.003 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

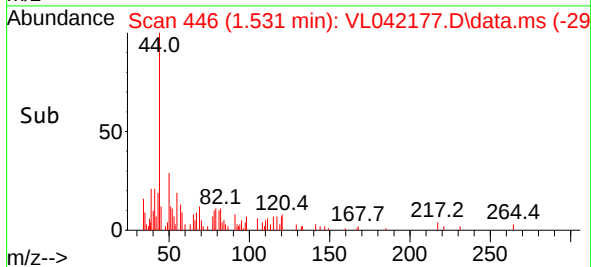
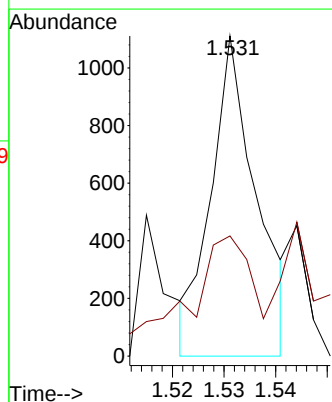
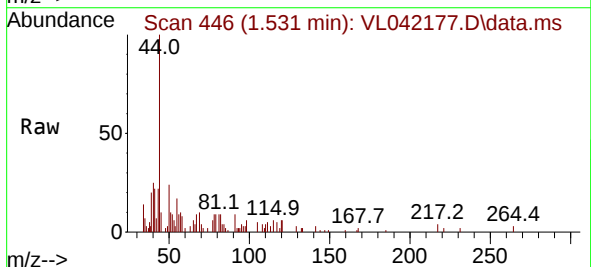
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ClientSampleId :  
VSTDICC0.03

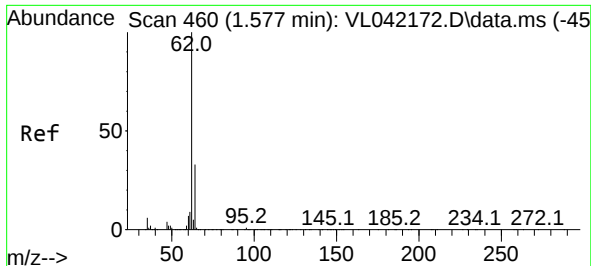
Tgt Ion: 51 Resp: 1354  
Ion Ratio Lower Upper  
51 100  
67 71.0 15.0 22.6#



#4  
Chloromethane  
Concen: 0.063 ppbv  
RT: 1.531 min Scan# 446  
Delta R.T. -0.000 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

Tgt Ion: 50 Resp: 675  
Ion Ratio Lower Upper  
50 100  
52 24.6 26.1 39.1#

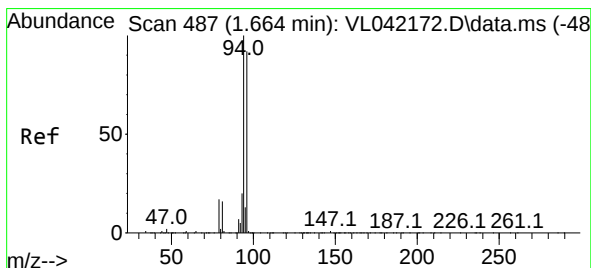
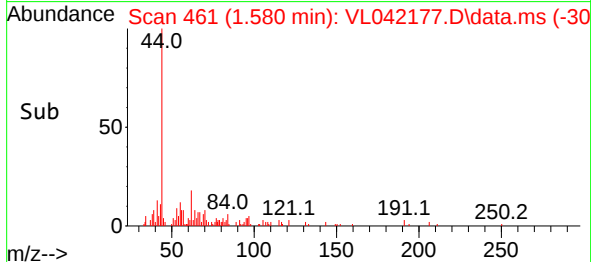
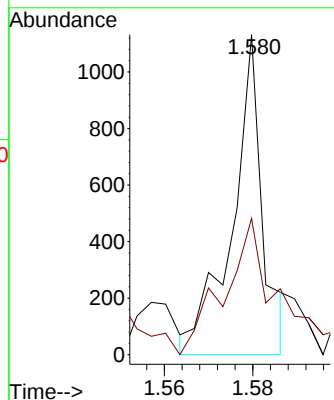
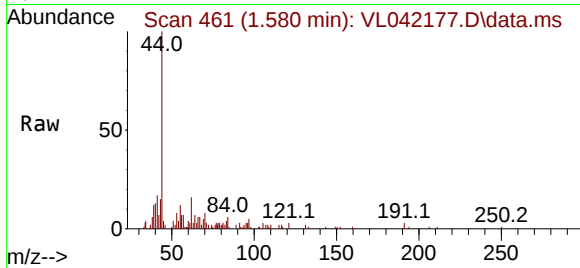




#5  
 Vinyl Chloride  
 Concen: 0.049 ppbv  
 RT: 1.580 min Scan# 461  
 Delta R.T. 0.003 min  
 Lab File: VL042177.D  
 Acq: 27 Mar 2025 11:03

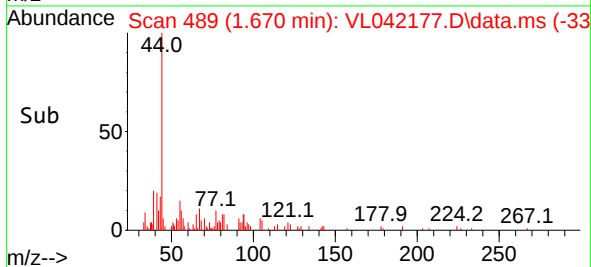
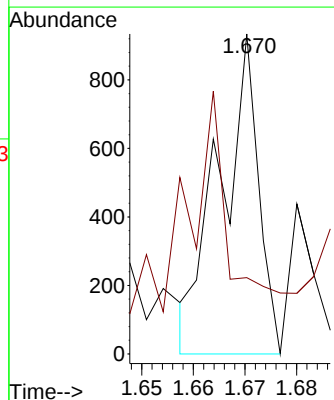
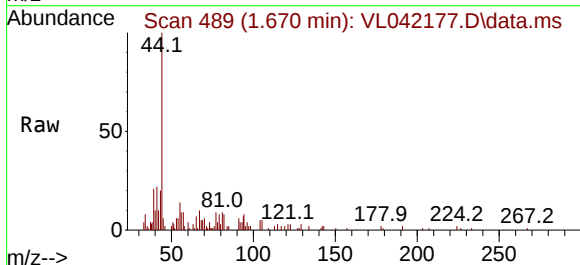
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
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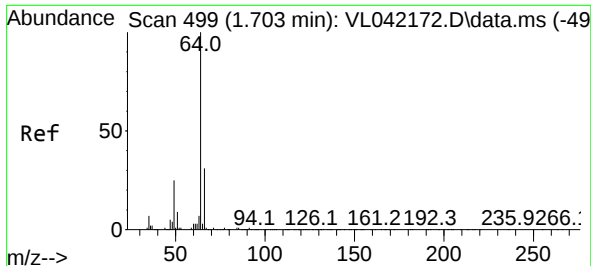
Tgt Ion: 62 Resp: 534  
 Ion Ratio Lower Upper  
 62 100  
 64 45.4 26.6 40.0#



#6  
 Bromomethane  
 Concen: 0.099 ppbv  
 RT: 1.670 min Scan# 489  
 Delta R.T. 0.006 min  
 Lab File: VL042177.D  
 Acq: 27 Mar 2025 11:03

Tgt Ion: 94 Resp: 483  
 Ion Ratio Lower Upper  
 94 100  
 96 4.8 73.1 109.7#

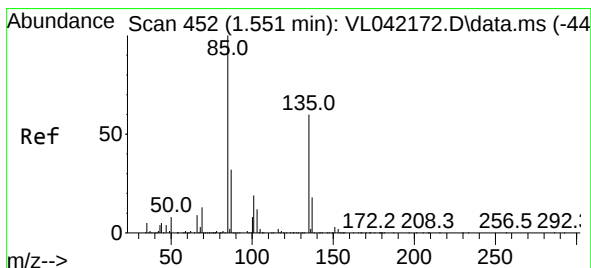
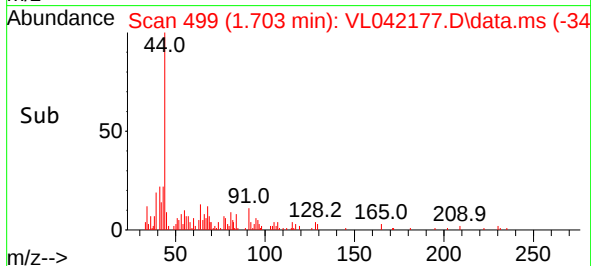
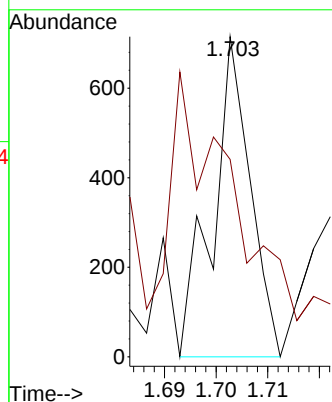
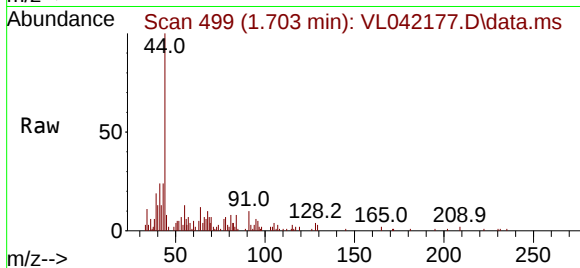




#7  
Chloroethane  
Concen: 0.084 ppbv  
RT: 1.703 min Scan# 499  
Delta R.T. -0.000 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

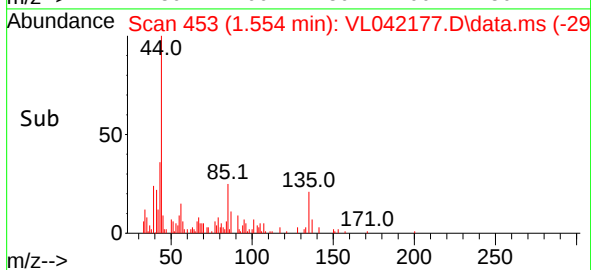
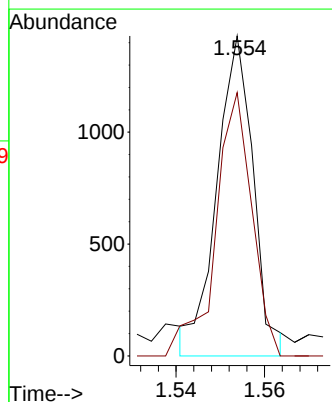
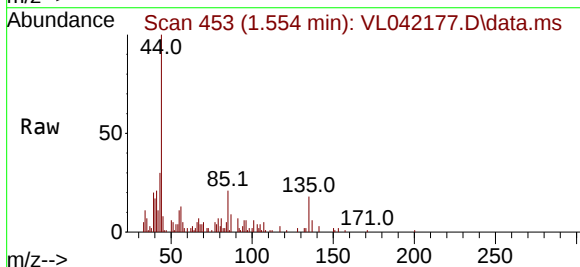
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.03

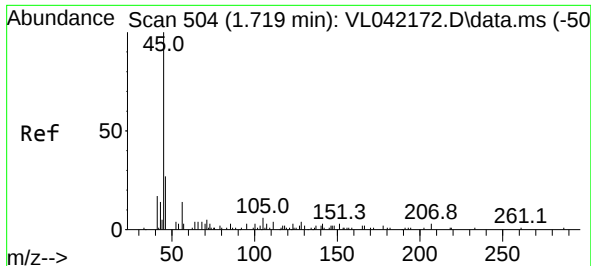
Tgt Ion: 64 Resp: 361  
Ion Ratio Lower Upper  
64 100  
66 61.7 25.2 37.8#



#8  
Dichlorotetrafluoroethane  
Concen: 0.036 ppbv  
RT: 1.554 min Scan# 453  
Delta R.T. 0.003 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

Tgt Ion: 85 Resp: 815  
Ion Ratio Lower Upper  
85 100  
135 82.3 52.4 78.6#

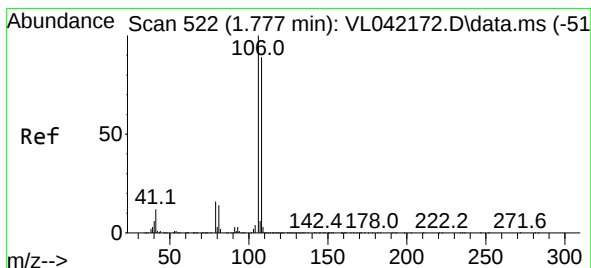
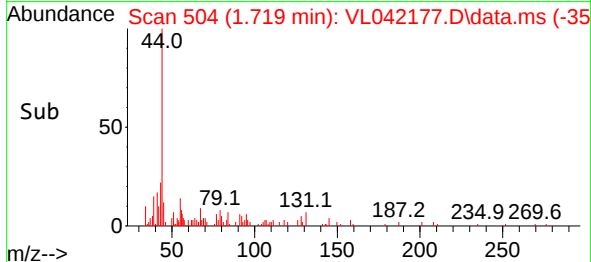
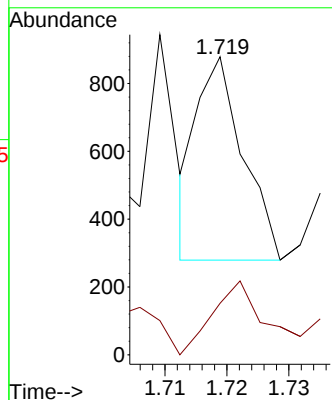
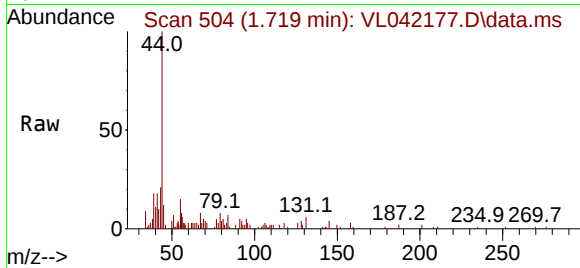




#13  
Ethanol  
Concen: 0.329 ppbv  
RT: 1.719 min Scan# 504  
Delta R.T. -0.000 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

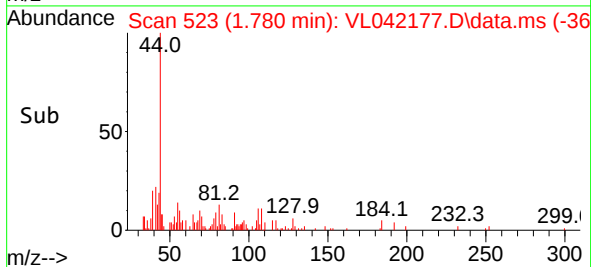
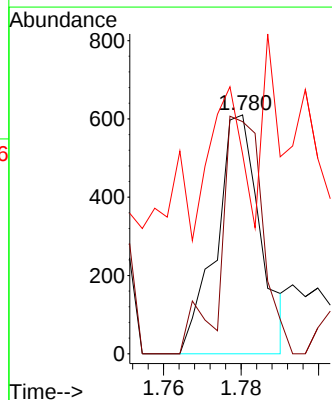
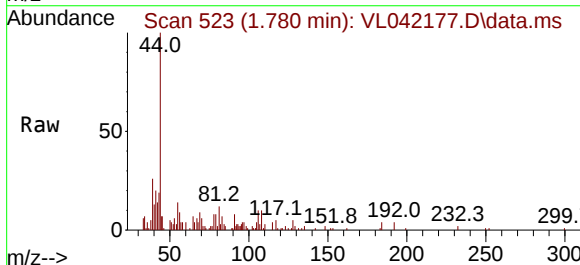
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDIC0.03

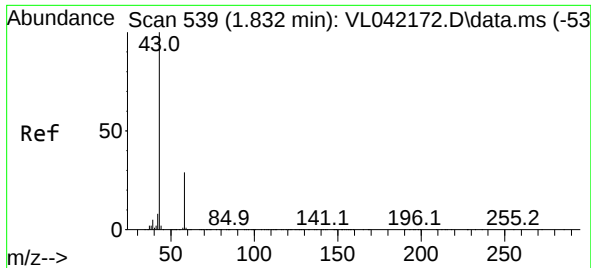
Tgt Ion: 45 Resp: 312  
Ion Ratio Lower Upper  
45 100  
46 0.0 20.2 80.8#



#14  
Bromoethene  
Concen: 0.060 ppbv  
RT: 1.780 min Scan# 523  
Delta R.T. 0.003 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

Tgt Ion:108 Resp: 482  
Ion Ratio Lower Upper  
108 100  
106 100.4 86.8 130.2  
79 208.5 15.0 22.6#

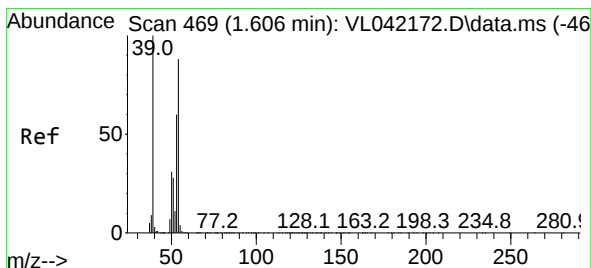
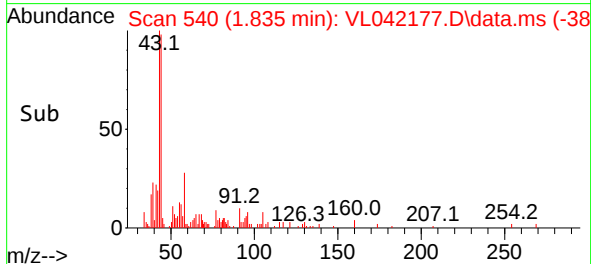
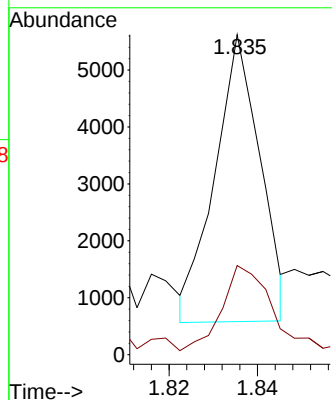
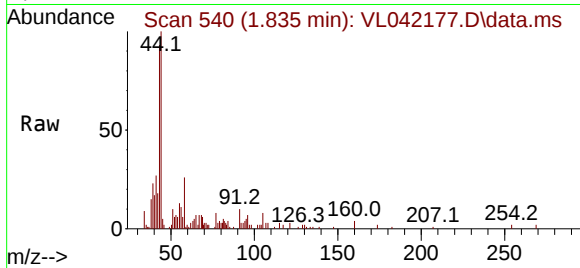




#15  
Acetone  
Concen: 0.144 ppbv  
RT: 1.835 min Scan# 540  
Delta R.T. 0.003 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

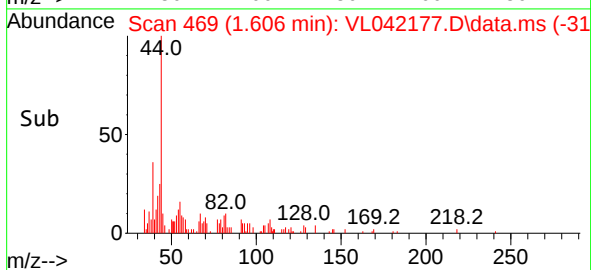
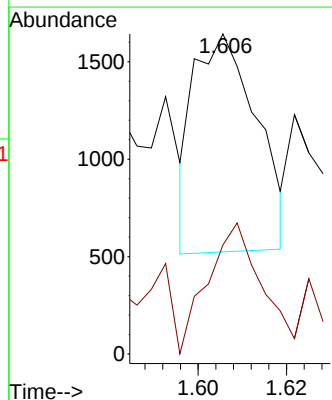
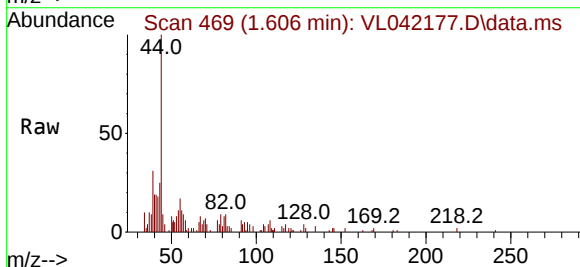
Instrument :  
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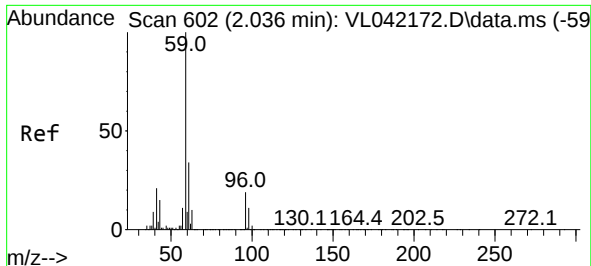
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Ion Ratio Lower Upper  
43 100  
58 48.5 23.2 34.8#



#16  
1,3-Butadiene  
Concen: 0.098 ppbv  
RT: 1.606 min Scan# 469  
Delta R.T. -0.000 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

Tgt Ion: 39 Resp: 1101  
Ion Ratio Lower Upper  
39 100  
54 113.1 60.7 91.1#





#17

tert-Butyl alcohol

Concen: 0.039 ppbv

RT: 2.043 min Scan# 604

Delta R.T. 0.006 min

Lab File: VL042177.D

Acq: 27 Mar 2025 11:03

Instrument :

MSVOA\_L

ClientSampleId :

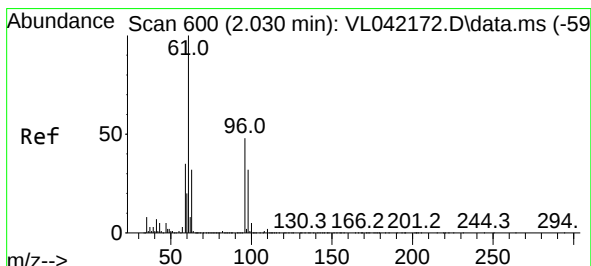
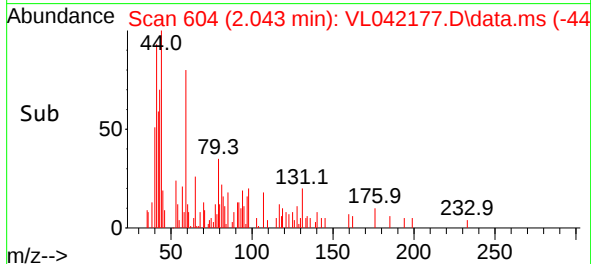
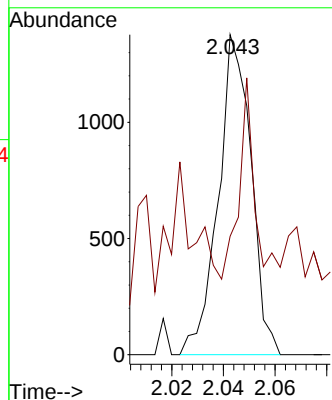
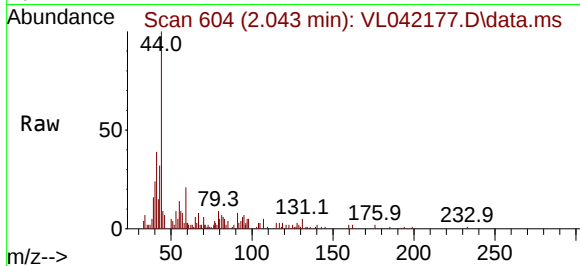
VSTDIC0.03

Tgt Ion: 59 Resp: 1215

Ion Ratio Lower Upper

59 100

57 107.2 8.9 13.3#



#18

1,1-Dichloroethene

Concen: 0.057 ppbv

RT: 2.036 min Scan# 602

Delta R.T. 0.006 min

Lab File: VL042177.D

Acq: 27 Mar 2025 11:03

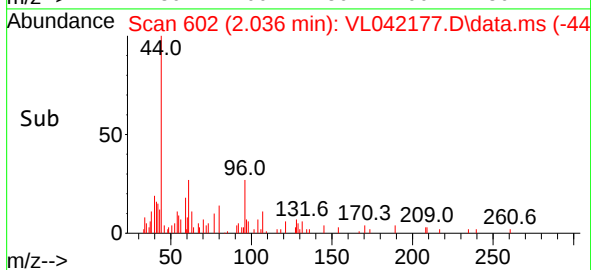
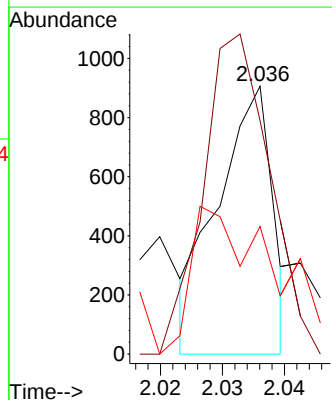
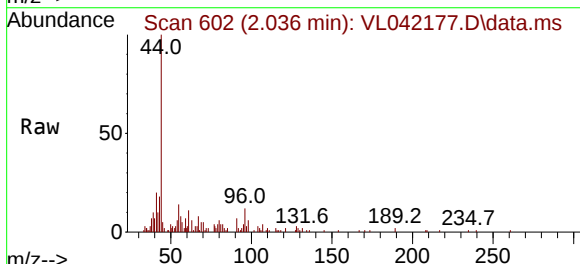
Tgt Ion: 96 Resp: 560

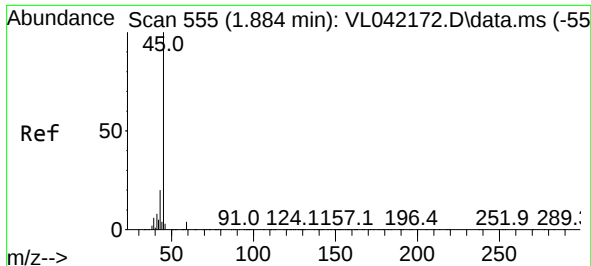
Ion Ratio Lower Upper

96 100

61 87.3 167.6 251.4#

98 56.8 53.5 80.3





#19

Isopropyl Alcohol

Concen: 0.076 ppbv

RT: 1.887 min Scan# 51

Delta R.T. 0.003 min

Lab File: VL042177.D

Acq: 27 Mar 2025 11:03

Instrument :

MSVOA\_L

ClientSampleId :

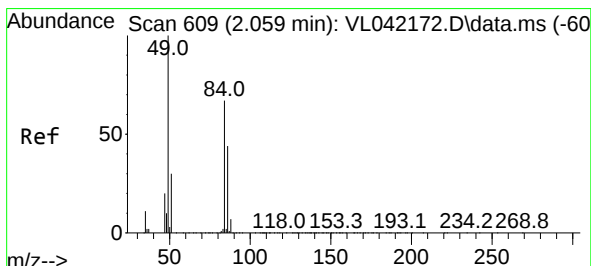
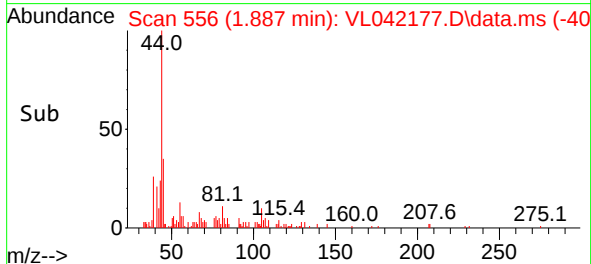
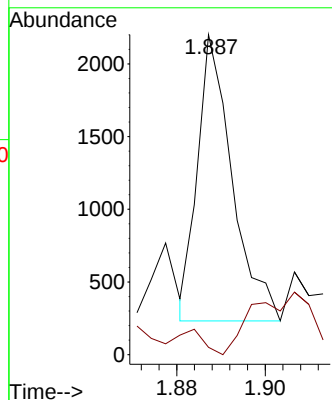
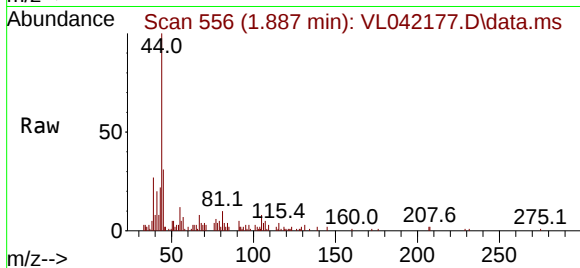
VSTDICC0.03

Tgt Ion: 45 Resp: 1071

Ion Ratio Lower Upper

45 100

58 0.0 36.9 55.3#



#20

Methylene Chloride

Concen: 0.197 ppbv

RT: 2.059 min Scan# 609

Delta R.T. -0.000 min

Lab File: VL042177.D

Acq: 27 Mar 2025 11:03

Tgt Ion: 84 Resp: 1823

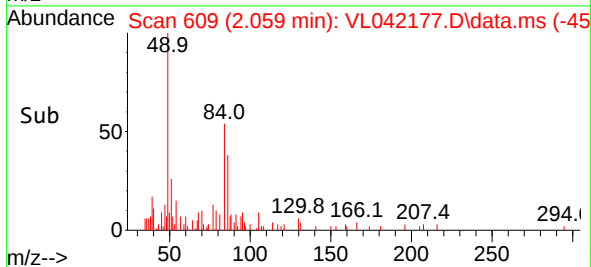
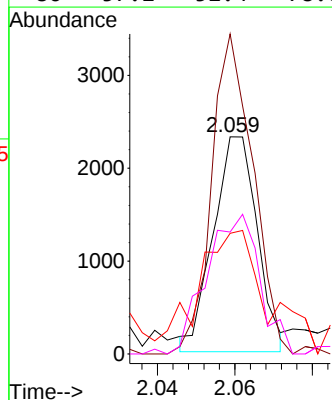
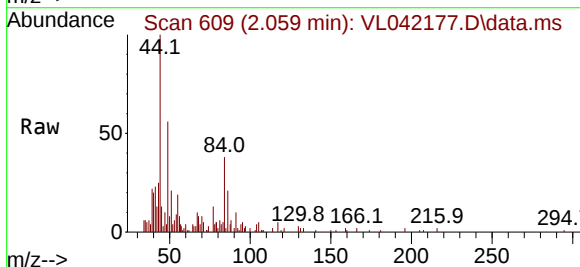
Ion Ratio Lower Upper

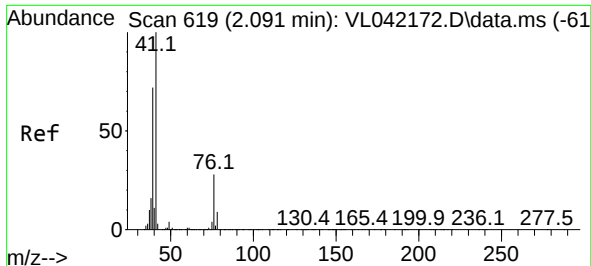
84 100

49 156.6 120.2 180.4

51 34.6 37.4 56.0#

86 57.2 52.4 78.6

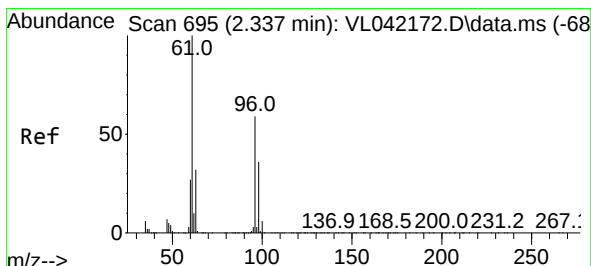
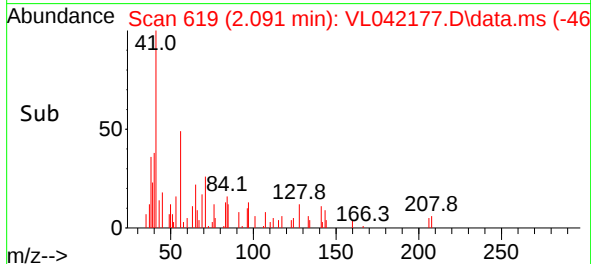
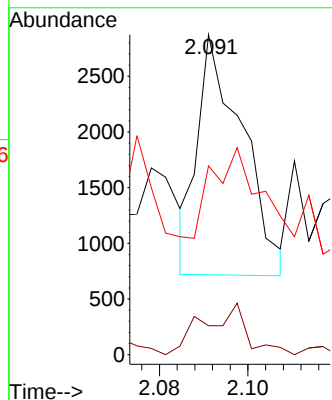
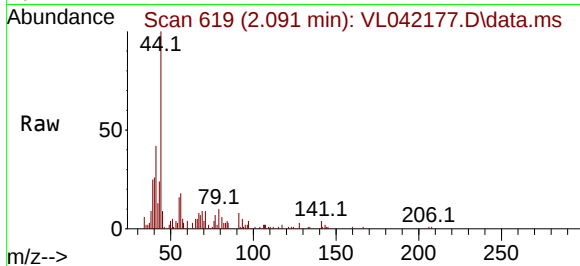




#21  
 Allyl Chloride  
 Concen: 0.086 ppbv  
 RT: 2.091 min Scan# 61  
 Delta R.T. -0.000 min  
 Lab File: VL042177.D  
 Acq: 27 Mar 2025 11:03

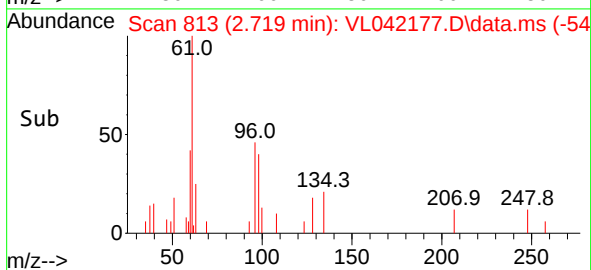
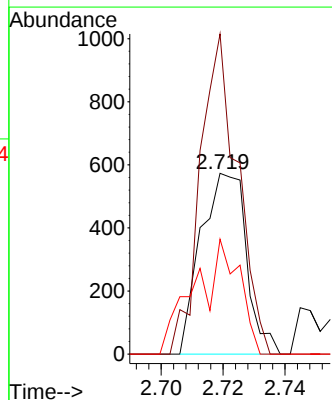
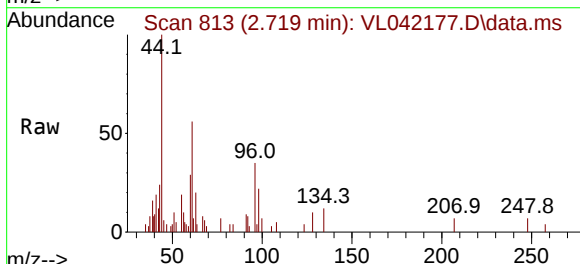
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.03

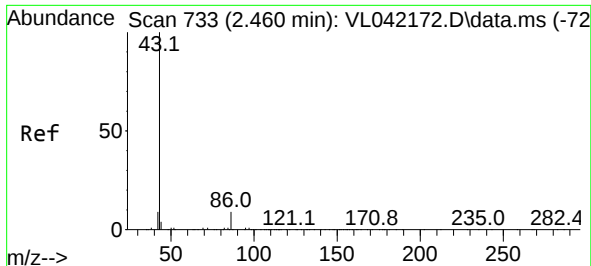
Tgt Ion: 41 Resp: 1518  
 Ion Ratio Lower Upper  
 41 100  
 76 25.9 24.1 36.1  
 39 158.8 61.1 91.7#



#22  
 trans-1,2-Dichloroethene  
 Concen: 0.051 ppbv  
 RT: 2.719 min Scan# 813  
 Delta R.T. 0.382 min  
 Lab File: VL042177.D  
 Acq: 27 Mar 2025 11:03

Tgt Ion: 96 Resp: 586  
 Ion Ratio Lower Upper  
 96 100  
 61 177.1 136.6 204.8  
 98 63.5 49.4 74.2

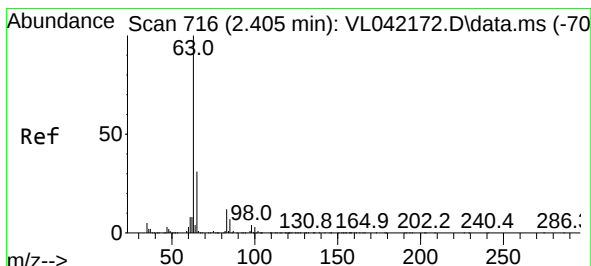
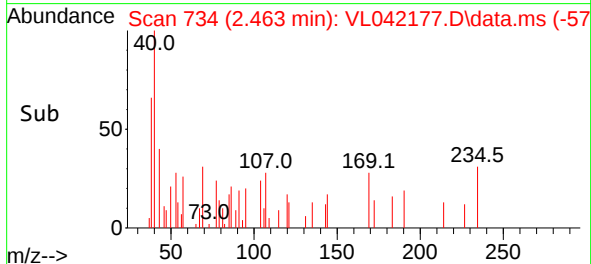
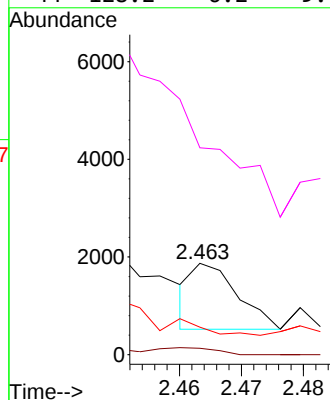
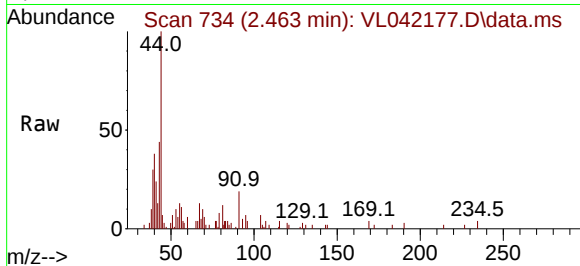




#23  
 Vinyl Acetate  
 Concen: 0.067 ppbv  
 RT: 2.463 min Scan# 718  
 Delta R.T. 0.003 min  
 Lab File: VL042177.D  
 Acq: 27 Mar 2025 11:03

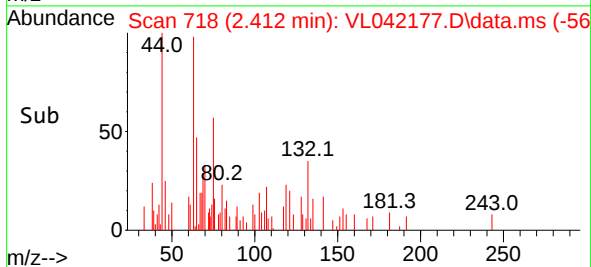
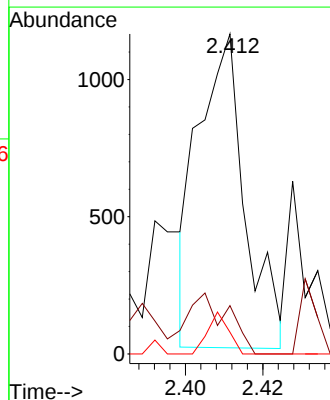
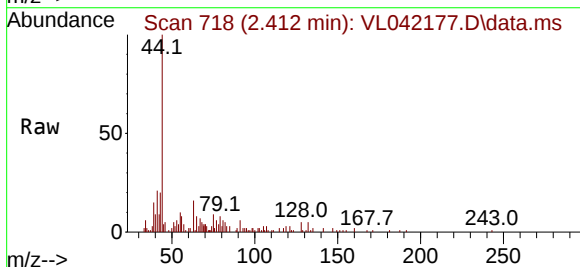
Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 VSTDIC0.03

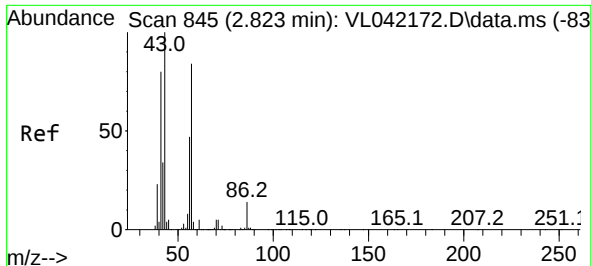
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 689   |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 86       | 9.7   | 5.5   | 8.3#  |
| 42       | 6.8   | 8.6   | 13.0# |
| 44       | 128.2 | 6.2   | 9.4#  |



#24  
 1,1-Dichloroethane  
 Concen: 0.046 ppbv  
 RT: 2.412 min Scan# 718  
 Delta R.T. 0.006 min  
 Lab File: VL042177.D  
 Acq: 27 Mar 2025 11:03

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 63    | Resp: | 961   |
| Ion      | Ratio | Lower | Upper |
| 63       | 100   |       |       |
| 98       | 16.8  | 2.3   | 6.8#  |
| 100      | 7.6   | 1.6   | 4.7#  |

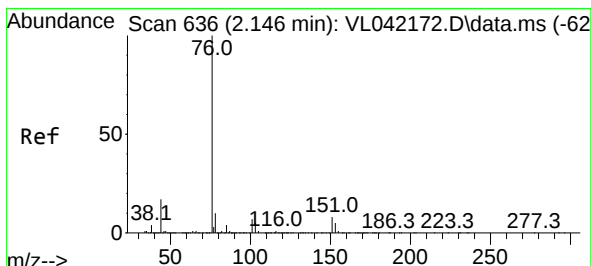
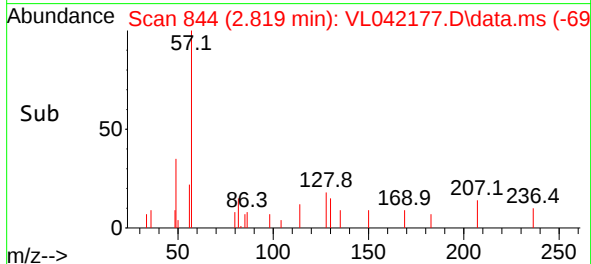
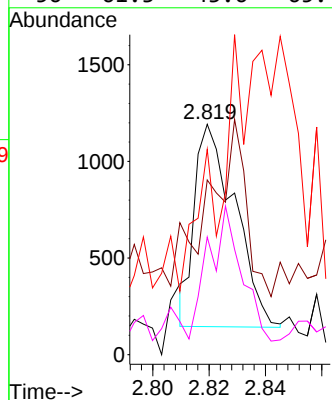
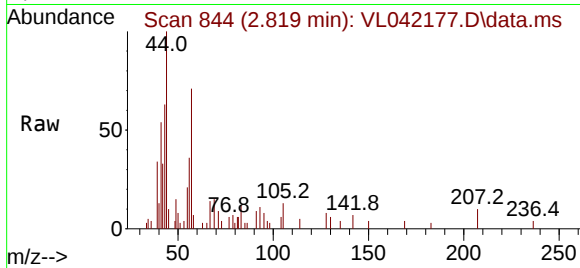




#26  
Hexane  
Concen: 0.042 ppbv  
RT: 2.819 min Scan# 84  
Delta R.T. -0.003 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

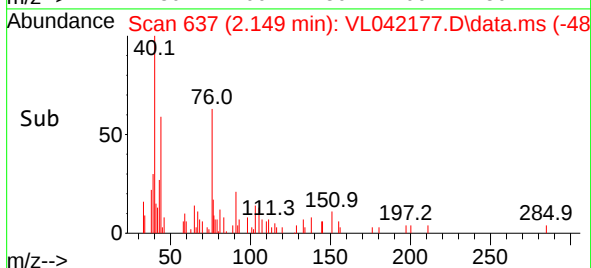
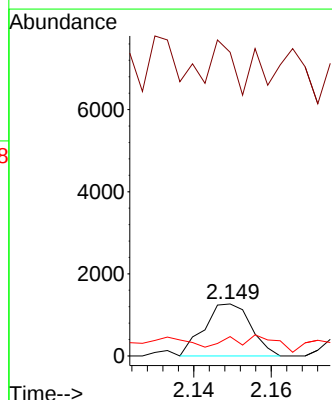
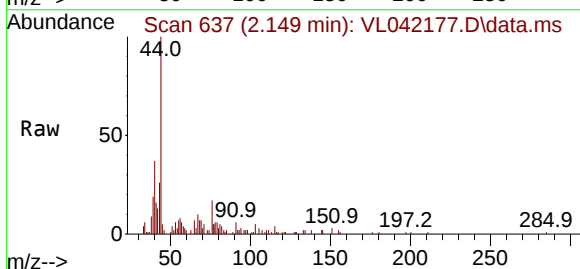
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.03

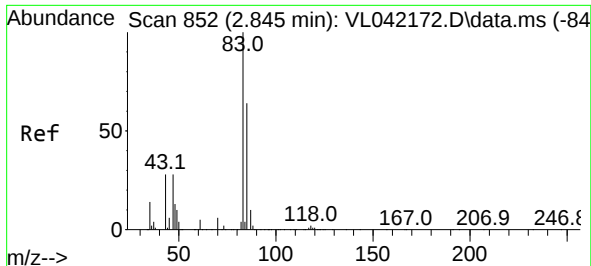
Tgt Ion: 57 Resp: 1040  
Ion Ratio Lower Upper  
57 100  
41 179.4 76.6 114.8#  
43 351.5 207.8 311.8#  
56 61.3 43.6 65.4



#27  
Carbon Disulfide  
Concen: 0.040 ppbv  
RT: 2.149 min Scan# 637  
Delta R.T. 0.003 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

Tgt Ion: 76 Resp: 1061  
Ion Ratio Lower Upper  
76 100  
44 0.0 14.7 22.1#  
78 112.4 9.3 13.9#





#29

Chloroform

Concen: 0.044 ppbv

RT: 2.848 min Scan# 81

Delta R.T. 0.003 min

Lab File: VL042177.D

Acq: 27 Mar 2025 11:03

Instrument :

MSVOA\_L

ClientSampleId :

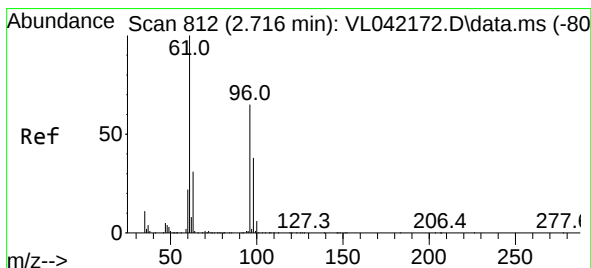
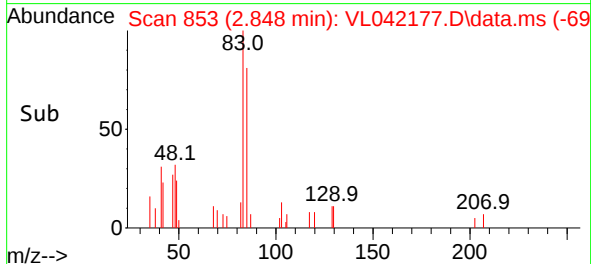
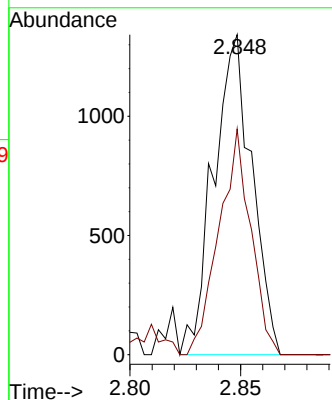
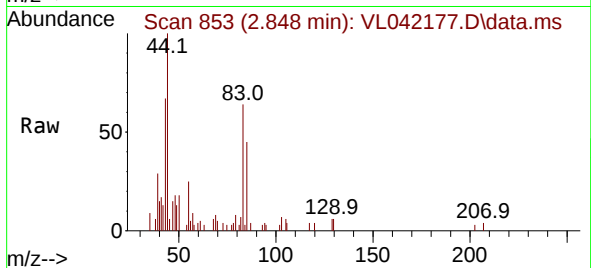
VSTDIC0.03

Tgt Ion: 83 Resp: 1619

Ion Ratio Lower Upper

83 100

85 70.6 51.4 77.2



#31

cis-1,2-Dichloroethene

Concen: 0.033 ppbv

RT: 2.719 min Scan# 813

Delta R.T. 0.003 min

Lab File: VL042177.D

Acq: 27 Mar 2025 11:03

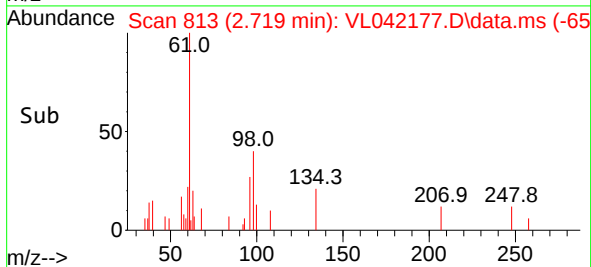
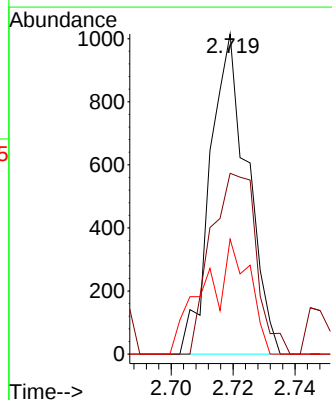
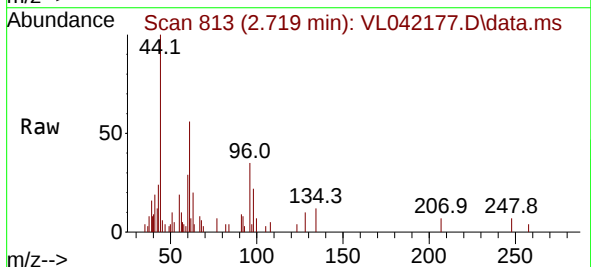
Tgt Ion: 61 Resp: 846

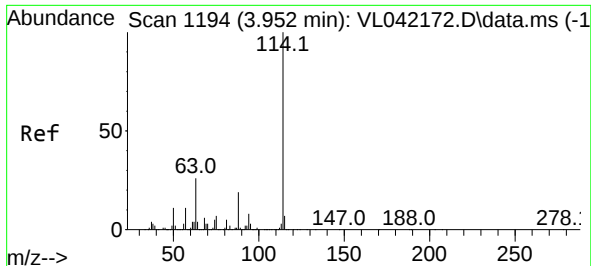
Ion Ratio Lower Upper

61 100

96 56.5 51.8 77.8

98 35.9 30.6 46.0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.955 min Scan# 1195

Delta R.T. 0.003 min

Lab File: VL042177.D

Acq: 27 Mar 2025 11:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICC0.03

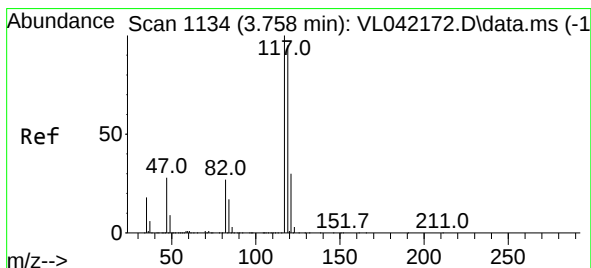
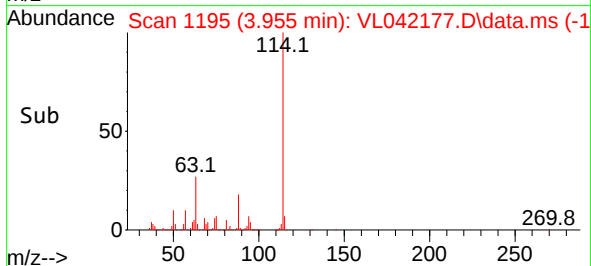
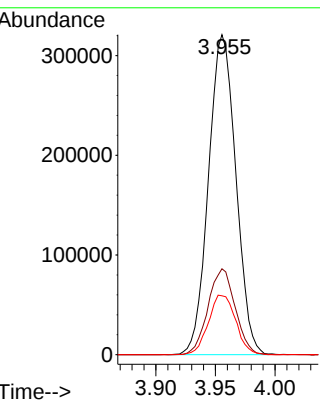
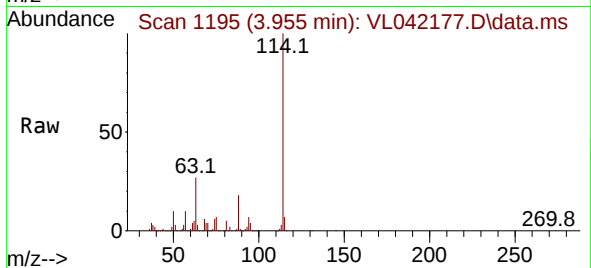
Tgt Ion:114 Resp: 512915

Ion Ratio Lower Upper

114 100

63 26.6 20.7 31.1

88 18.6 15.0 22.4



#35

Carbon Tetrachloride

Concen: 0.039 ppbv

RT: 3.758 min Scan# 1134

Delta R.T. -0.000 min

Lab File: VL042177.D

Acq: 27 Mar 2025 11:03

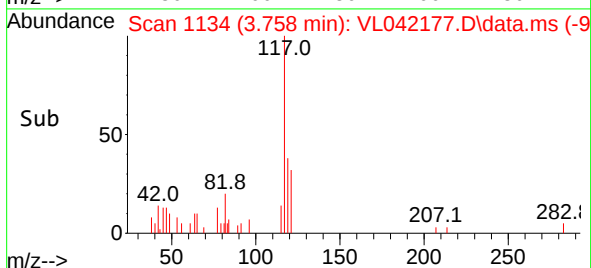
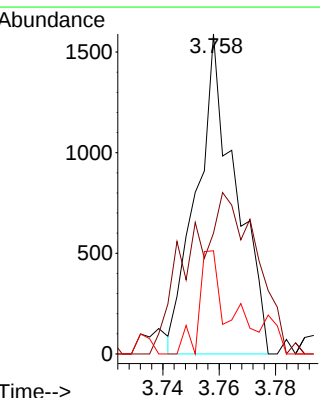
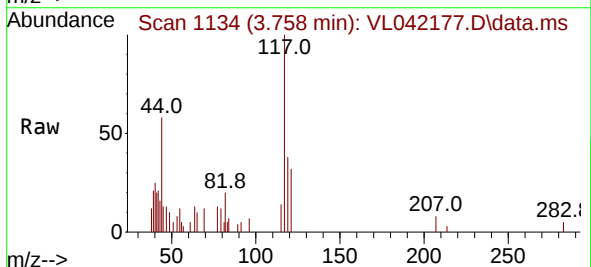
Tgt Ion:117 Resp: 1520

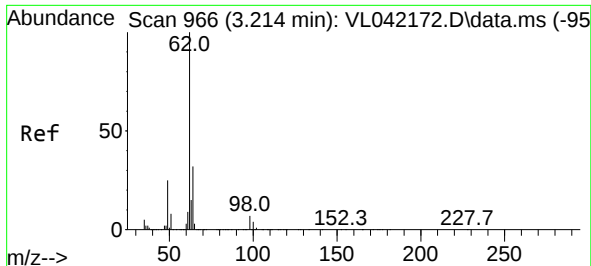
Ion Ratio Lower Upper

117 100

119 22.1 76.2 114.2#

121 32.3 24.2 36.4





#37

1,2-Dichloroethane

Concen: 0.035 ppbv

RT: 3.214 min Scan# 9

Delta R.T. -0.000 min

Lab File: VL042177.D

Acq: 27 Mar 2025 11:03

Instrument :

MSVOA\_L

ClientSampleId :

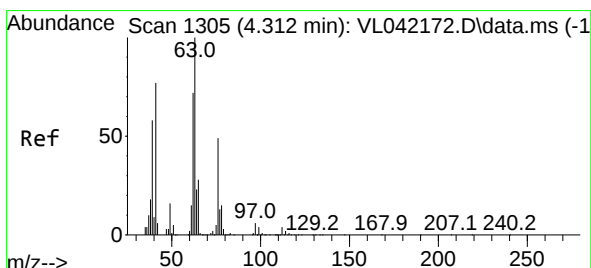
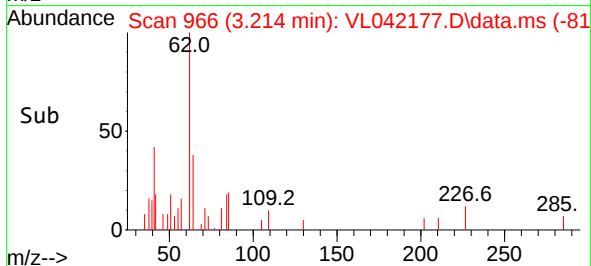
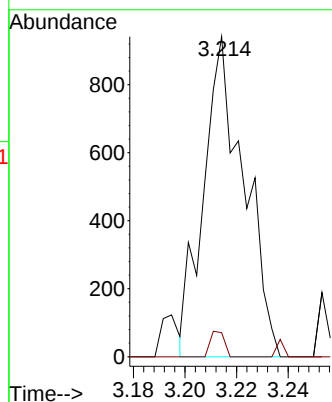
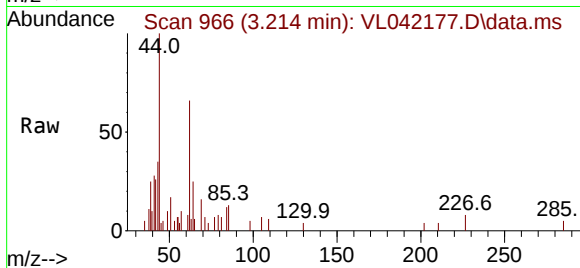
VSTDICC0.03

Tgt Ion: 62 Resp: 1029

Ion Ratio Lower Upper

62 100

98 2.7 5.4 8.2#



#39

1,2-Dichloropropane

Concen: 7.372 ppbv

RT: 3.955 min Scan# 1195

Delta R.T. -0.356 min

Lab File: VL042177.D

Acq: 27 Mar 2025 11:03

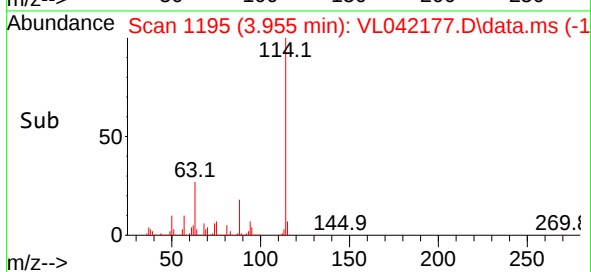
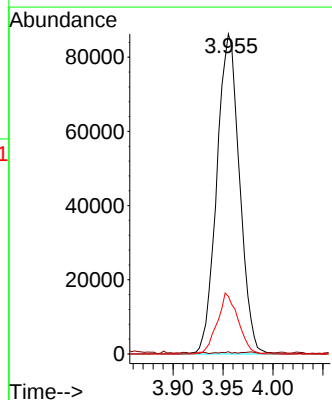
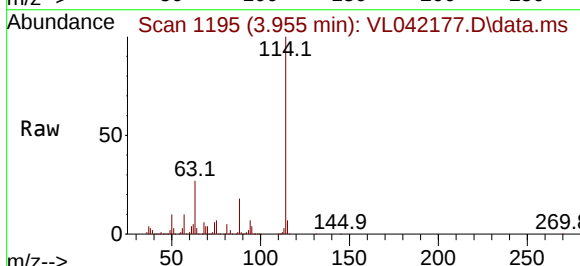
Tgt Ion: 63 Resp: 136518

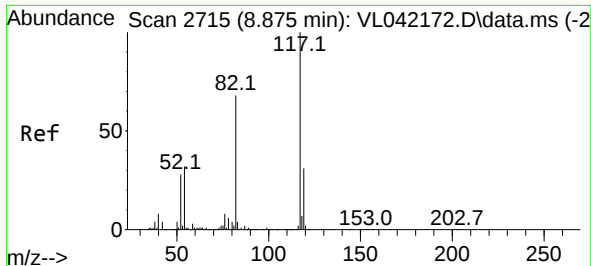
Ion Ratio Lower Upper

63 100

41 0.4 61.7 92.5#

62 18.0 57.6 86.4#

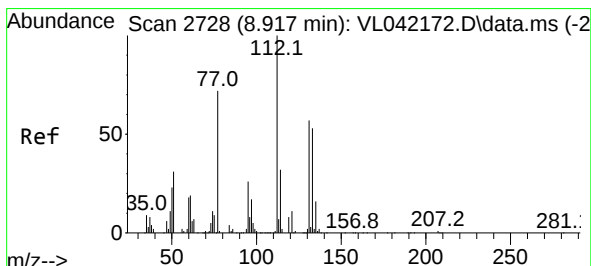
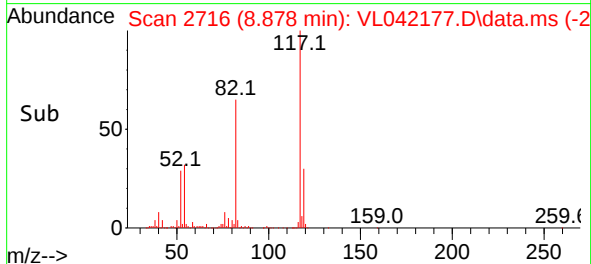
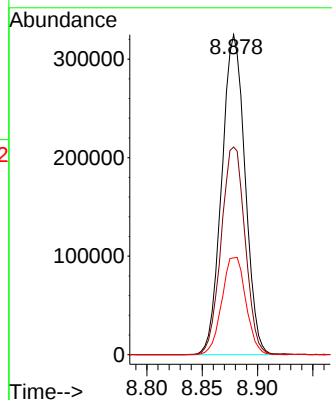
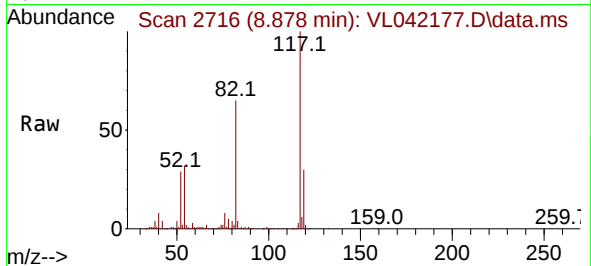




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 8.878 min Scan# 21  
Delta R.T. 0.003 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

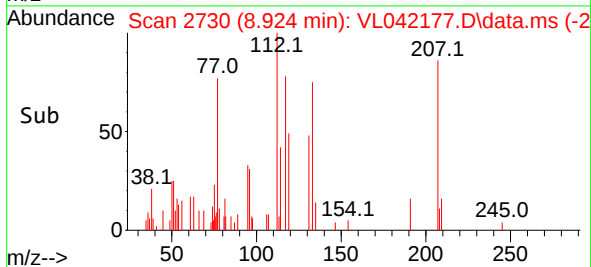
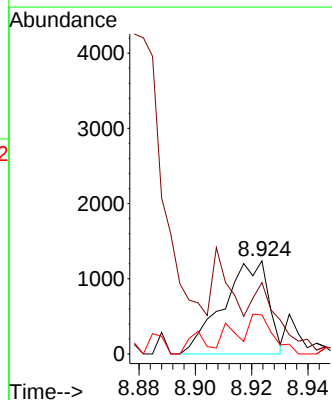
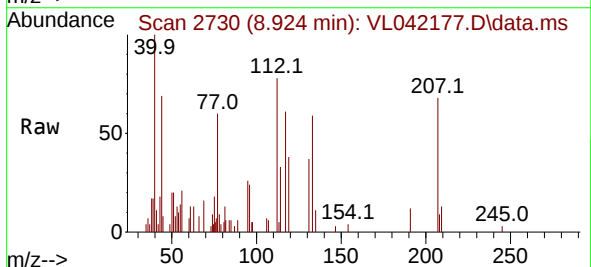
Instrument :  
MSVOA\_1  
ClientSampleId :  
VSTDICC0.03

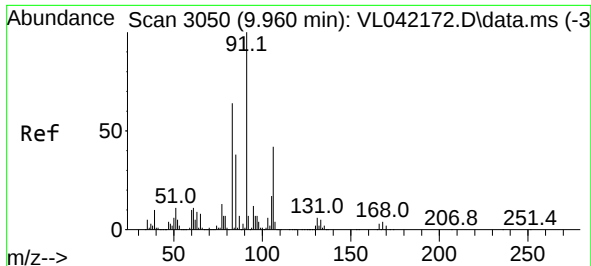
Tgt Ion:117 Resp: 475617  
Ion Ratio Lower Upper  
117 100  
82 66.7 55.8 83.6  
119 31.5 25.5 38.3



#57  
Chlorobenzene  
Concen: 0.031 ppbv  
RT: 8.924 min Scan# 2730  
Delta R.T. 0.006 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

Tgt Ion:112 Resp: 1382  
Ion Ratio Lower Upper  
112 100  
77 32.1 58.2 87.2#  
114 41.8 29.1 35.5#

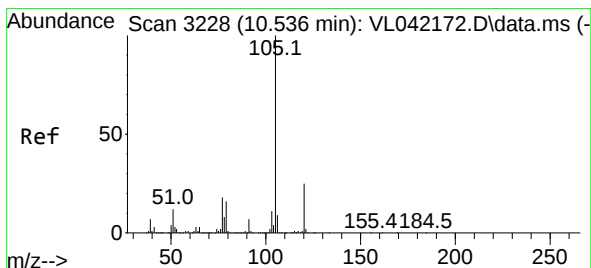
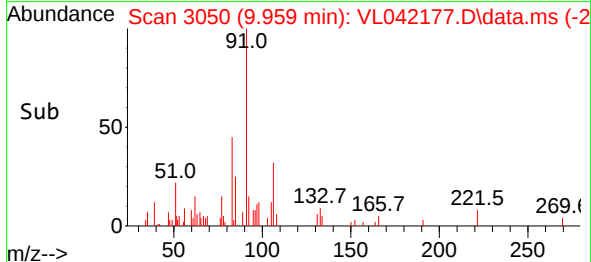
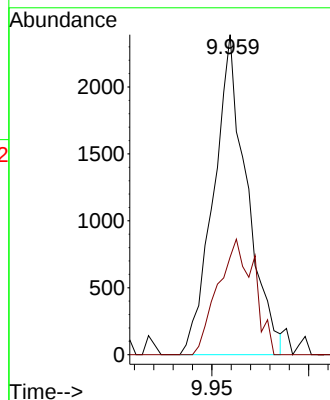
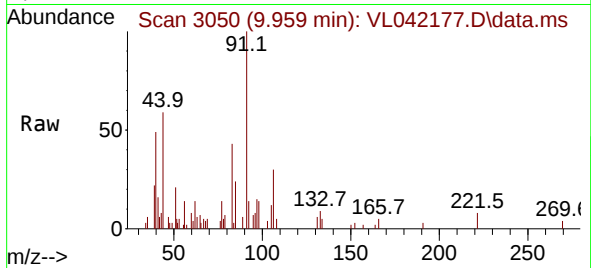




#60  
o-Xylene  
Concen: 0.042 ppbv  
RT: 9.959 min Scan# 3050  
Delta R.T. -0.000 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

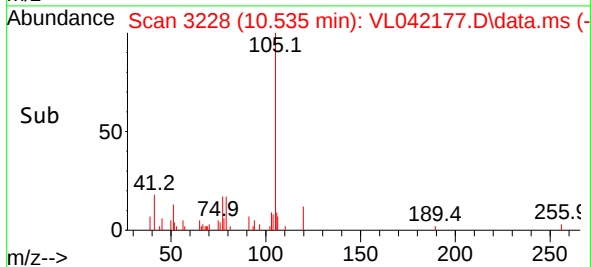
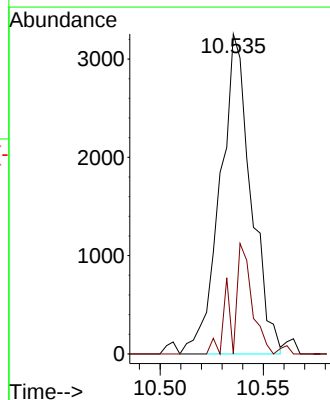
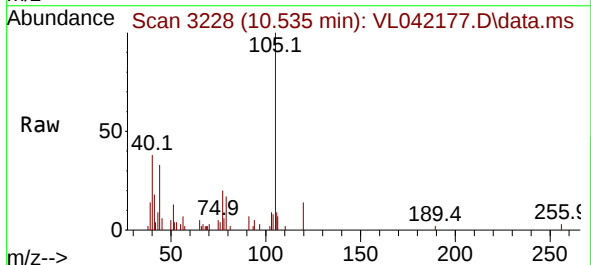
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.03

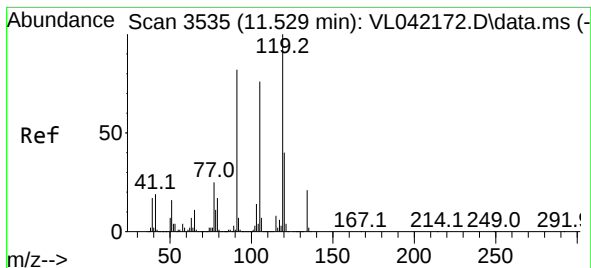
Tgt Ion: 91 Resp: 2844  
Ion Ratio Lower Upper  
91 100  
106 39.4 20.8 62.5



#62  
Isopropylbenzene  
Concen: 0.033 ppbv  
RT: 10.535 min Scan# 3228  
Delta R.T. -0.000 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

Tgt Ion: 105 Resp: 3380  
Ion Ratio Lower Upper  
105 100  
120 22.3 19.9 29.9





#65

tert-Butylbenzene

Concen: 0.038 ppbv

RT: 11.529 min Scan# 3535

Delta R.T. -0.000 min

Lab File: VL042177.D

Acq: 27 Mar 2025 11:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

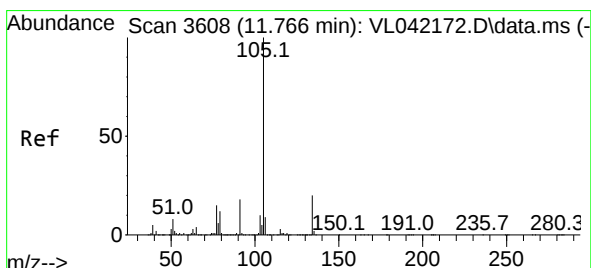
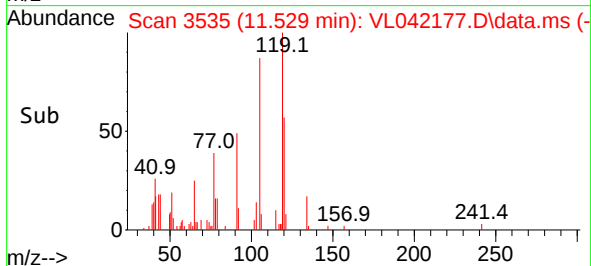
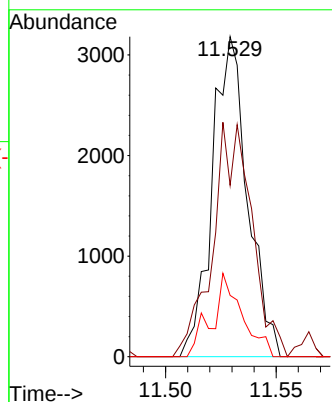
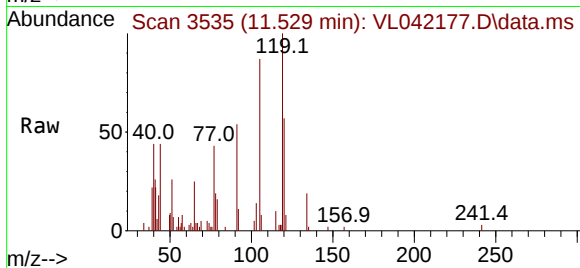
Tgt Ion:119 Resp: 3543

Ion Ratio Lower Upper

119 100

91 83.5 66.0 99.0

134 22.4 16.7 25.1



#67

sec-Butylbenzene

Concen: 0.033 ppbv

RT: 11.765 min Scan# 3608

Delta R.T. -0.000 min

Lab File: VL042177.D

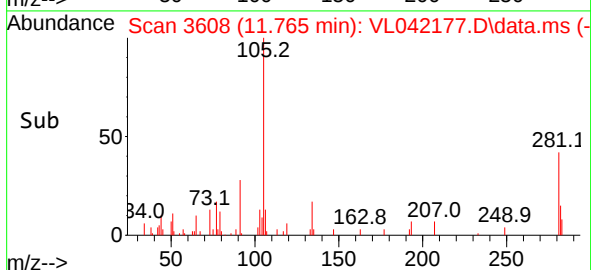
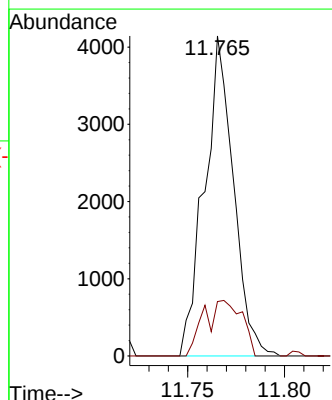
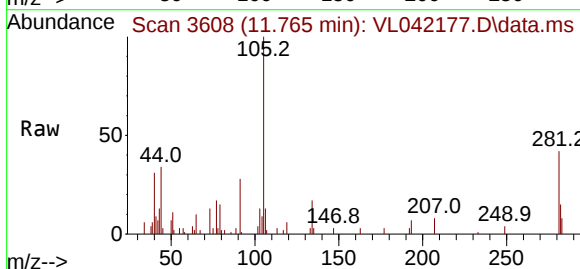
Acq: 27 Mar 2025 11:03

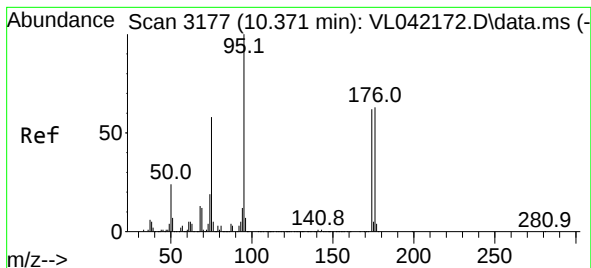
Tgt Ion:105 Resp: 4317

Ion Ratio Lower Upper

105 100

134 22.8 15.5 23.3

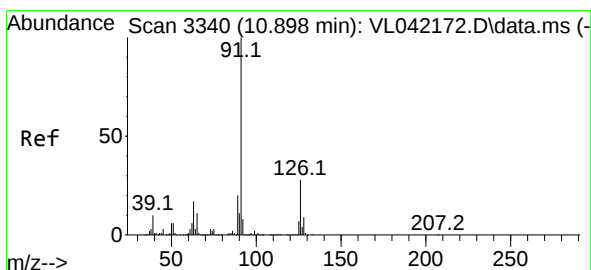
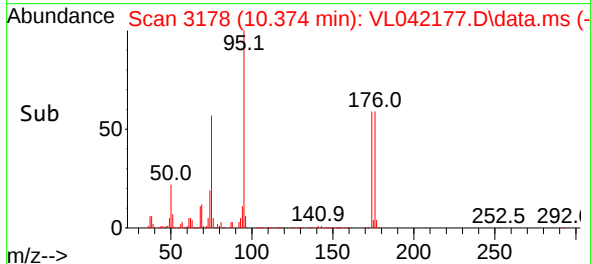
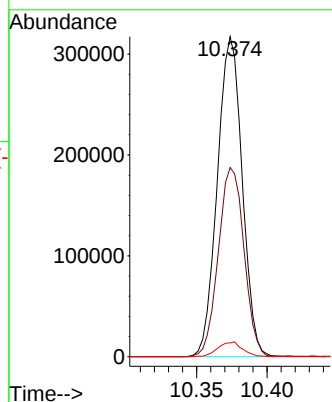
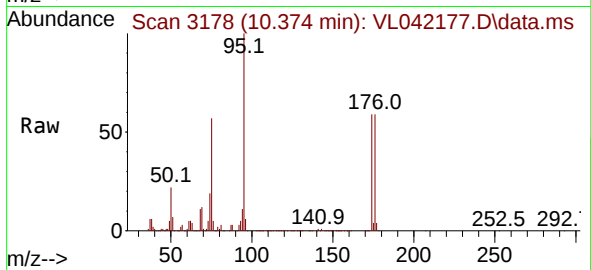




#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.983 ppbv  
RT: 10.374 min Scan# 3177  
Delta R.T. 0.003 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

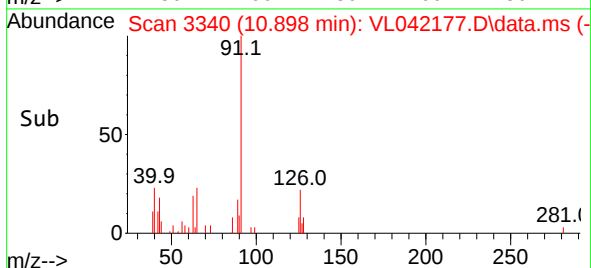
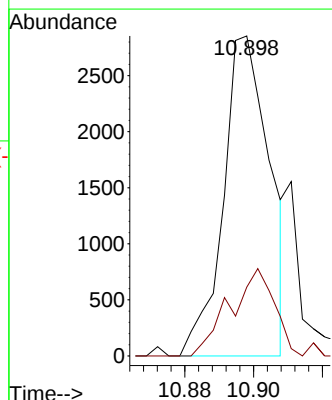
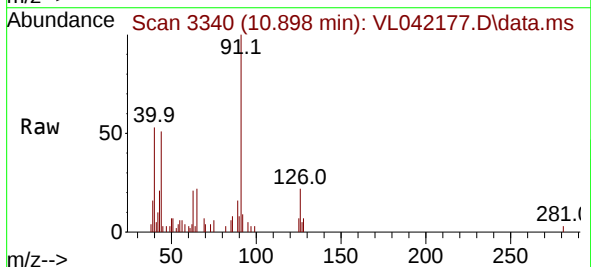
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.03

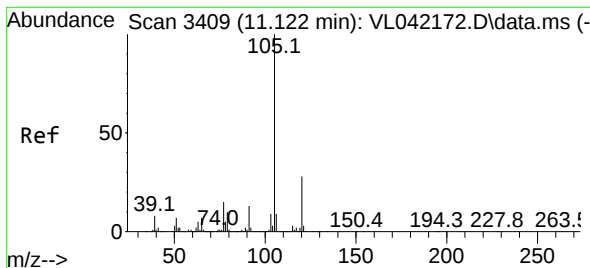
Tgt Ion: 95 Resp: 389935  
Ion Ratio Lower Upper  
95 100  
174 61.2 50.6 76.0  
175 4.6 3.8 5.6



#71  
2-Chlorotoluene  
Concen: 0.034 ppbv  
RT: 10.898 min Scan# 3340  
Delta R.T. -0.000 min  
Lab File: VL042177.D  
Acq: 27 Mar 2025 11:03

Tgt Ion: 91 Resp: 2666  
Ion Ratio Lower Upper  
91 100  
126 27.2 11.6 46.4





#72

4-Ethyltoluene

Concen: 0.036 ppbv

RT: 11.121 min Scan# 3409

Delta R.T. -0.000 min

Lab File: VL042177.D

Acq: 27 Mar 2025 11:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

Tgt Ion:105 Resp: 3017

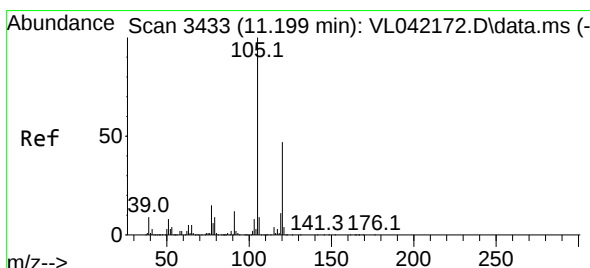
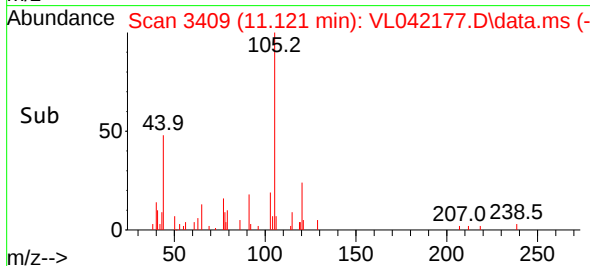
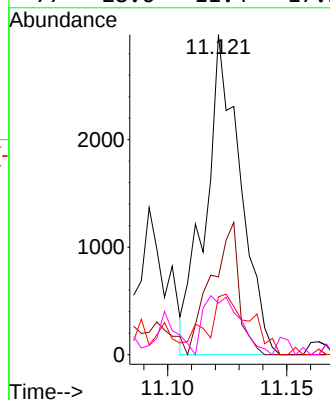
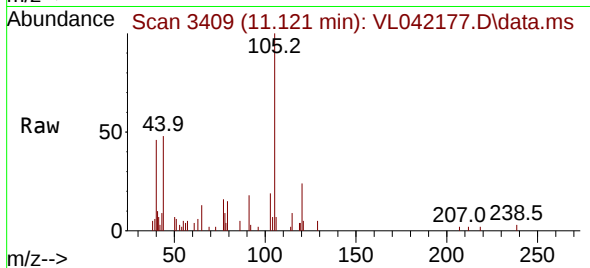
Ion Ratio Lower Upper

105 100

120 44.5 23.4 35.0#

91 34.0 10.3 15.5#

77 28.6 11.4 17.2#



#73

1,3,5-Trimethylbenzene

Concen: 0.042 ppbv

RT: 11.205 min Scan# 3435

Delta R.T. 0.006 min

Lab File: VL042177.D

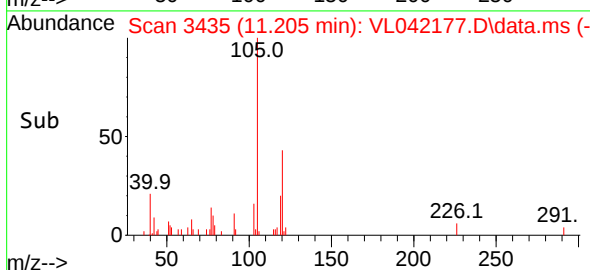
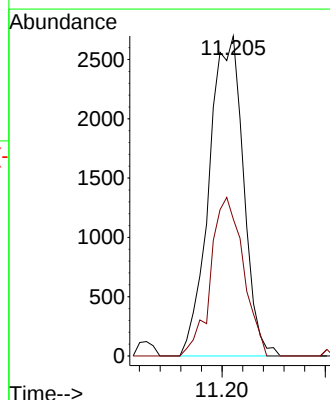
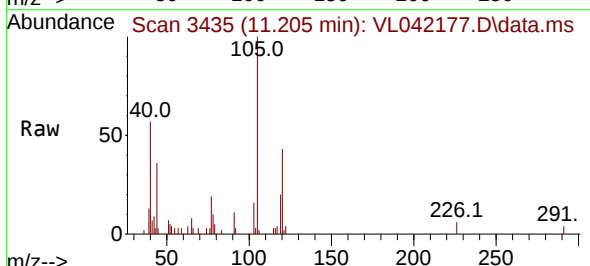
Acq: 27 Mar 2025 11:03

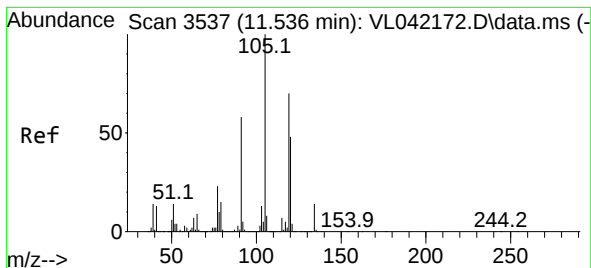
Tgt Ion:105 Resp: 3101

Ion Ratio Lower Upper

105 100

120 42.8 37.4 56.0





#74

1,2,4-Trimethylbenzene

Concen: 0.063 ppbv

RT: 11.539 min Scan# 3537

Delta R.T. 0.003 min

Lab File: VL042177.D

Acq: 27 Mar 2025 11:03

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

Tgt Ion:105 Resp: 5313

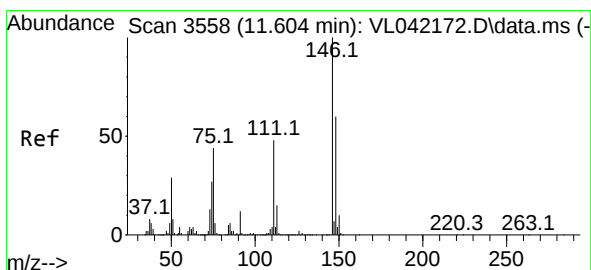
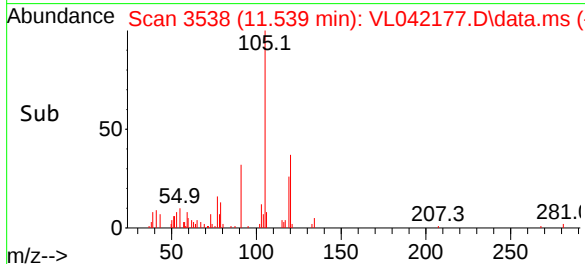
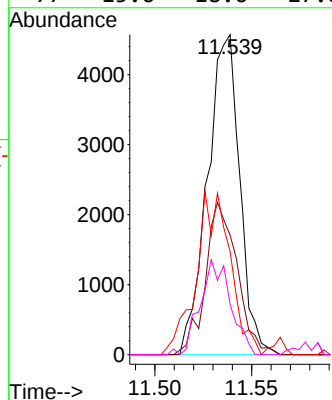
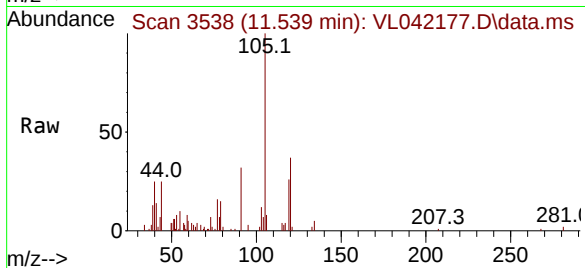
Ion Ratio Lower Upper

105 100

120 37.3 38.6 58.0#

91 26.8 46.2 69.2#

77 15.6 18.6 27.8#



#75

1,3-Dichlorobenzene

Concen: 0.034 ppbv

RT: 11.607 min Scan# 3559

Delta R.T. 0.003 min

Lab File: VL042177.D

Acq: 27 Mar 2025 11:03

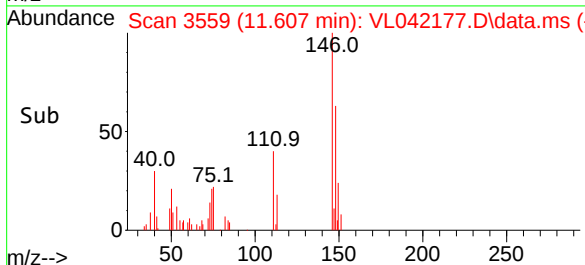
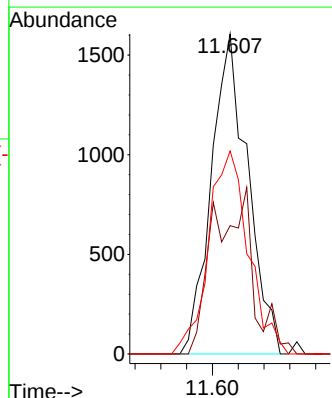
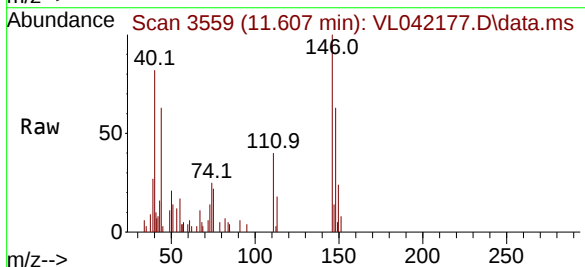
Tgt Ion:146 Resp: 1577

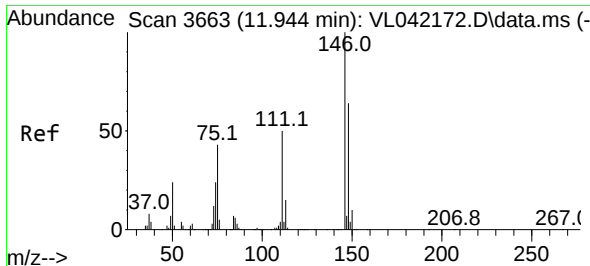
Ion Ratio Lower Upper

146 100

111 56.6 23.8 71.2

148 69.2 31.9 95.9

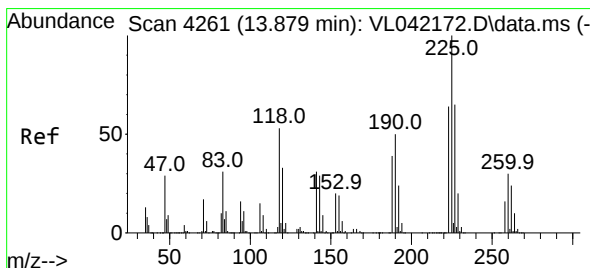
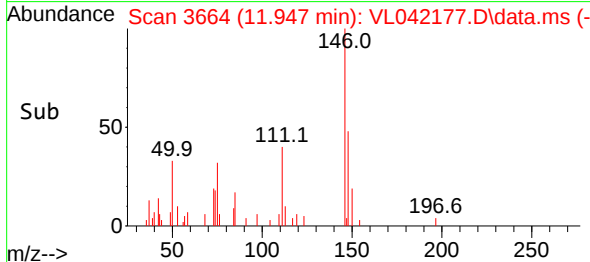
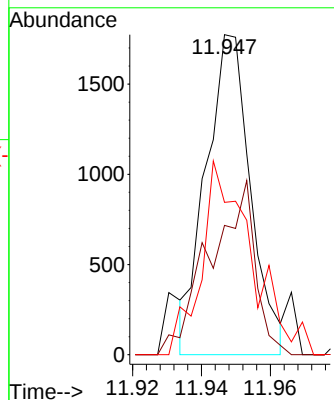
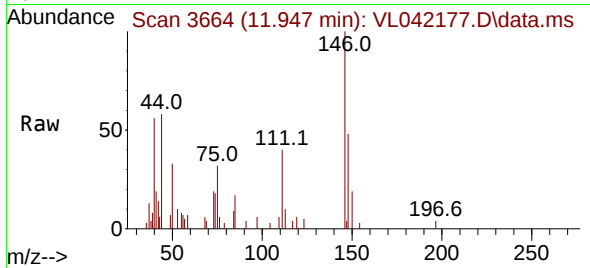




#77  
 1,2-Dichlorobenzene  
 Concen: 0.035 ppbv  
 RT: 11.947 min Scan# 3664  
 Delta R.T. 0.003 min  
 Lab File: VL042177.D  
 Acq: 27 Mar 2025 11:03

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.03

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 1591  |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 55.6  | 24.8  | 74.3  |
| 148      | 68.3  | 31.6  | 94.8  |



#78  
 Hexachloro-1,3-Butadiene  
 Concen: 0.040 ppbv  
 RT: 13.882 min Scan# 4262  
 Delta R.T. 0.003 min  
 Lab File: VL042177.D  
 Acq: 27 Mar 2025 11:03

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 225   | Resp: | 1821  |
| Ion      | Ratio | Lower | Upper |
| 225      | 100   |       |       |
| 223      | 59.6  | 50.6  | 76.0  |
| 227      | 58.0  | 51.2  | 76.8  |

