

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL080824\  
 Data File : VL041508.D  
 Acq On : 8 Aug 2024 11:41  
 Operator : SY/MD  
 Sample : P3454-01DL 4X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :

Quant Time: Aug 09 05:53:29 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Tue Aug 06 01:32:58 2024  
 Response via : Initial Calibration

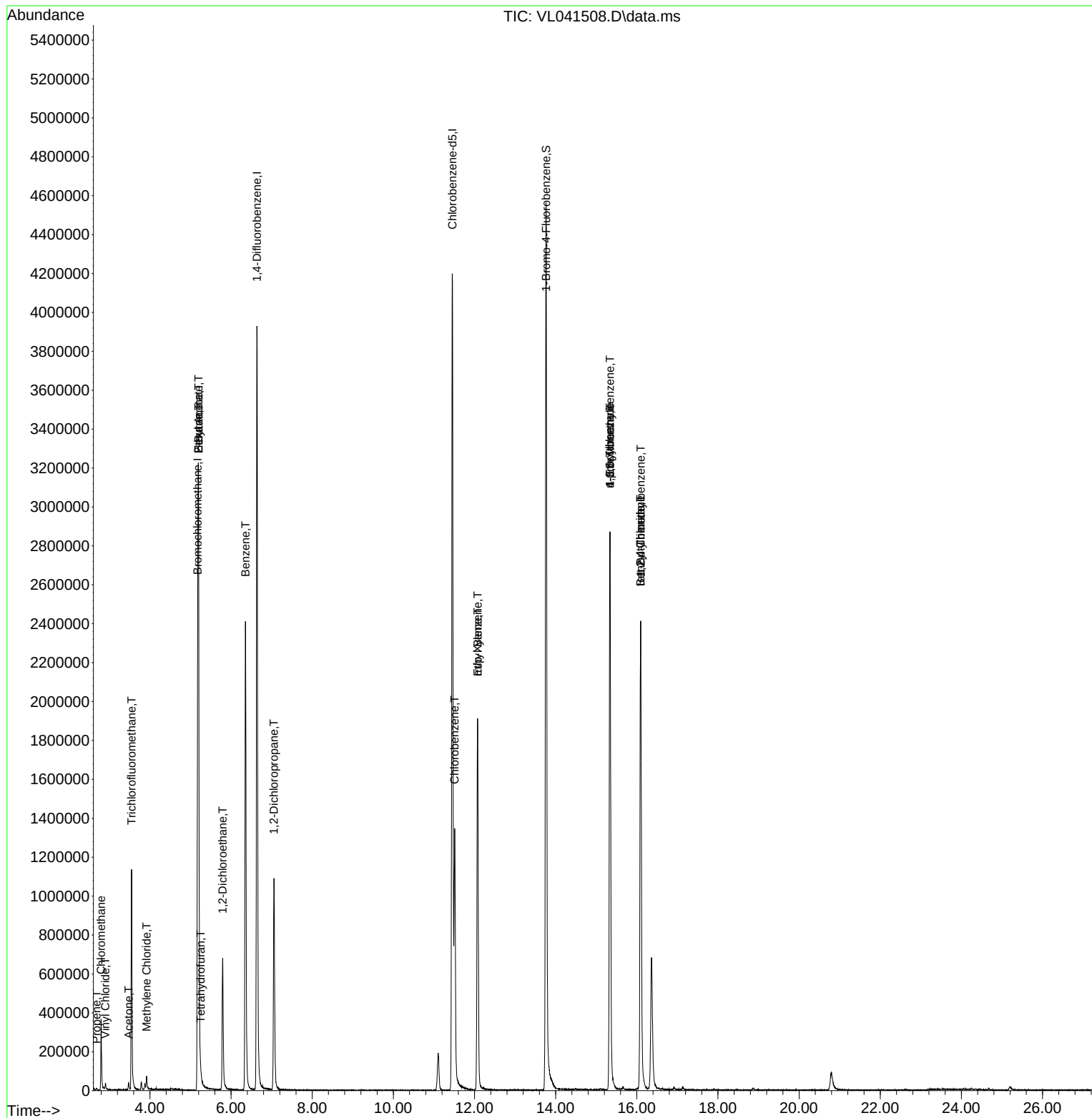
| Compound                    | R.T.   | QIon  | Response | Conc     | Units      | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|------------|----------|
| -----                       |        |       |          |          |            |          |
| Internal Standards          |        |       |          |          |            |          |
| 1) Bromochloromethane       | 5.176  | 49    | 1093918  | 10.000   | ppbv       | -0.01    |
| 33) 1,4-Difluorobenzene     | 6.639  | 114   | 2968543  | 10.000   | ppbv       | 0.00     |
| 55) Chlorobenzene-d5        | 11.452 | 117   | 2764278  | 10.000   | ppbv       | # 0.00   |
| System Monitoring Compounds |        |       |          |          |            |          |
| 68) 1-Bromo-4-Fluorobenzene | 13.764 | 95    | 2200195  | 10.343   | ppbv       | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | = 103.400% |          |
| Target Compounds            |        |       |          |          |            |          |
|                             |        |       |          |          | Qvalue     |          |
| 4) Chloromethane            | 2.796  | 50    | 295465   | 4.266    | ppbv       | 98       |
| 5) Vinyl Chloride           | 2.902  | 62    | 23270    | 0.341    | ppbv       | 91       |
| 9) Propene                  | 2.684  | 41    | 2919     | 0.049    | ppbv       | 83       |
| 11) Trichlorofluoromethane  | 3.546  | 101   | 732015   | 4.380    | ppbv       | 98       |
| 15) Acetone                 | 3.475  | 43    | 23978    | 0.193    | ppbv #     | 81       |
| 20) Methylene Chloride      | 3.918  | 84    | 20323    | 0.438    | ppbv       | 88       |
| 25) Ethyl Acetate           | 5.198  | 43    | 694053   | 2.811    | ppbv #     | 75       |
| 26) Hexane                  | 5.198  | 57    | 992836   | 9.693    | ppbv #     | 37       |
| 34) 2-Butanone              | 5.198  | 43    | 689704   | 4.803    | ppbv #     | 54       |
| 36) Benzene                 | 6.356  | 78    | 2022211  | 9.323    | ppbv       | 100      |
| 37) 1,2-Dichloroethane      | 5.793  | 62    | 586595   | 4.832    | ppbv       | 100      |
| 39) 1,2-Dichloropropane     | 7.057  | 63    | 382718   | 4.609    | ppbv       | 96       |
| 41) Tetrahydrofuran         | 5.253  | 42    | 4423     | 0.054    | ppbv #     | 39       |
| 57) Chlorobenzene           | 11.510 | 112   | 813133   | 4.132    | ppbv       | 99       |
| 58) Ethyl Benzene           | 12.076 | 91    | 1733818  | 5.442    | ppbv       | 98       |
| 59) m/p-Xylene              | 12.076 | 91    | 1733818  | 6.304    | ppbv #     | 78       |
| 64) n-propylbenzene         | 15.336 | 120   | 1074987  | 10.396   | ppbv #     | 1        |
| 65) tert-Butylbenzene       | 16.092 | 119   | 224119   | 0.627    | ppbv #     | 66       |
| 66) Benzyl Chloride         | 16.092 | 91    | 235553   | 10.280   | ppbv #     | 66       |
| 72) 4-Ethyltoluene          | 15.339 | 105   | 2337633  | 7.631    | ppbv #     | 82       |
| 73) 1,3,5-Trimethylbenzene  | 15.339 | 105   | 2337633  | 8.858    | ppbv       | 98       |
| 74) 1,2,4-Trimethylbenzene  | 16.095 | 105   | 2031342  | 6.621    | ppbv #     | 70       |
| -----                       |        |       |          |          |            |          |

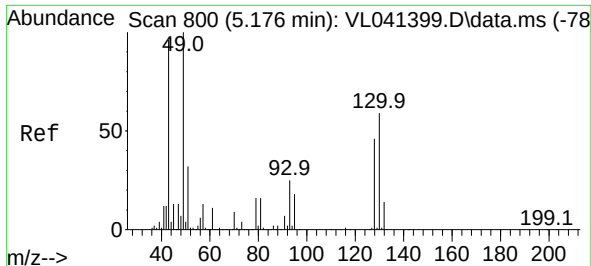
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL080824\  
Data File : VL041508.D  
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Sample : P3454-01DL 4X  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :

Quant Time: Aug 09 05:53:29 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Aug 06 01:32:58 2024  
Response via : Initial Calibration

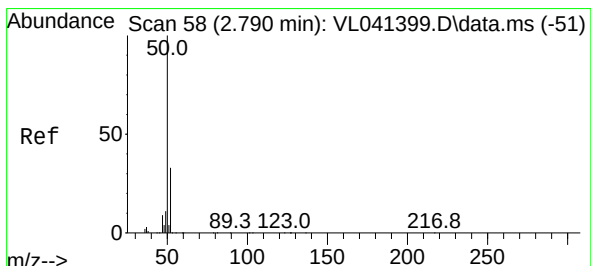
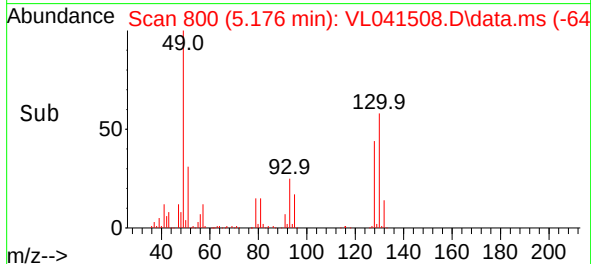
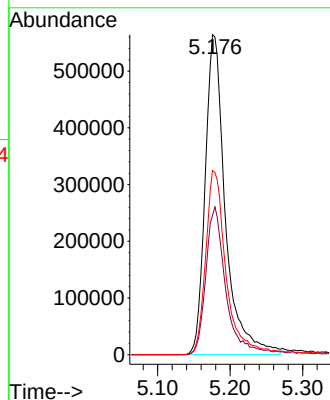
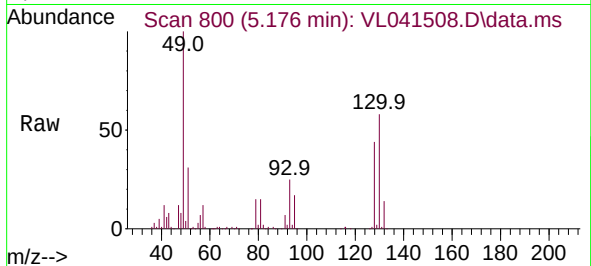




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.176 min Scan# 80  
Delta R.T. -0.013 min  
Lab File: VL041508.D  
Acq: 8 Aug 2024 11:41

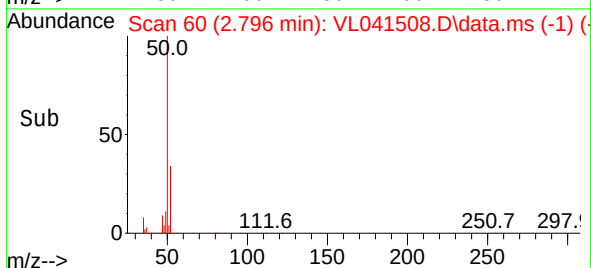
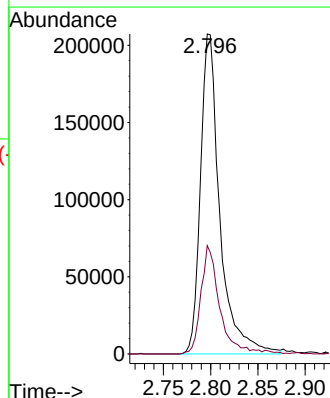
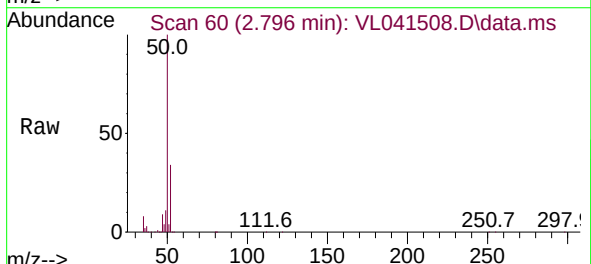
Instrument :  
MSVOA\_L  
ClientSampleId :

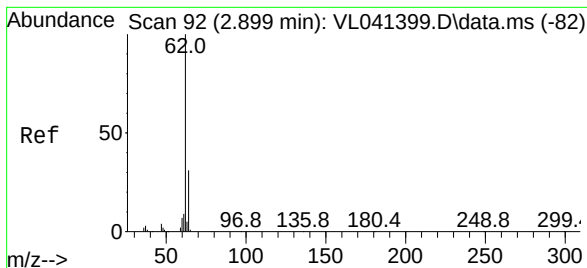
Tgt Ion: 49 Resp: 1093918  
Ion Ratio Lower Upper  
49 100  
128 46.6 23.8 71.4  
130 60.3 30.8 92.4



#4  
Chloromethane  
Concen: 4.266 ppbv  
RT: 2.796 min Scan# 60  
Delta R.T. -0.019 min  
Lab File: VL041508.D  
Acq: 8 Aug 2024 11:41

Tgt Ion: 50 Resp: 295465  
Ion Ratio Lower Upper  
50 100  
52 33.9 26.1 39.1

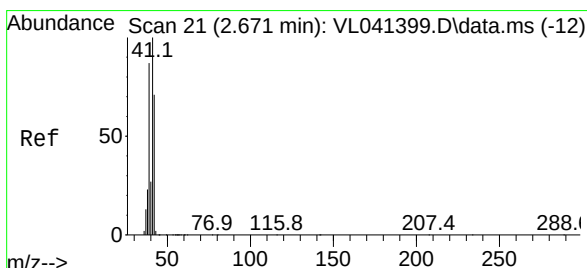
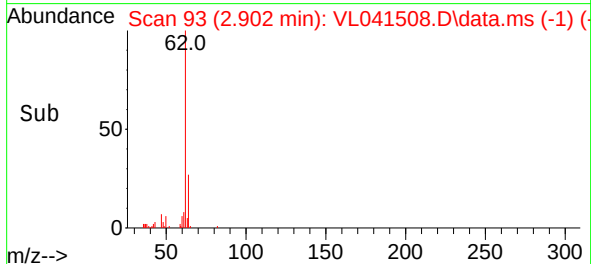
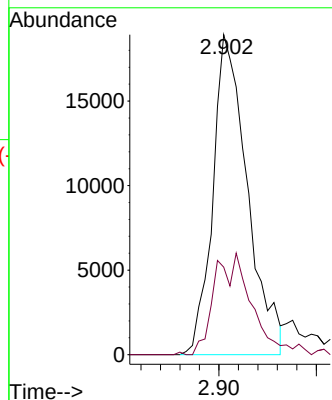
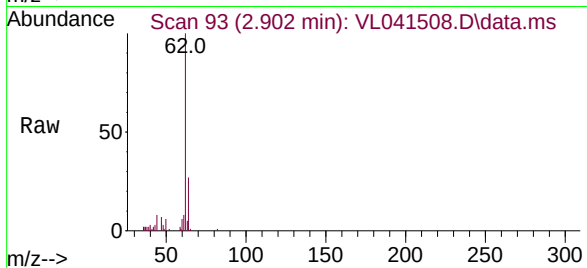




#5  
Vinyl Chloride  
Concen: 0.341 ppbv  
RT: 2.902 min Scan# 91  
Delta R.T. -0.019 min  
Lab File: VL041508.D  
Acq: 8 Aug 2024 11:41

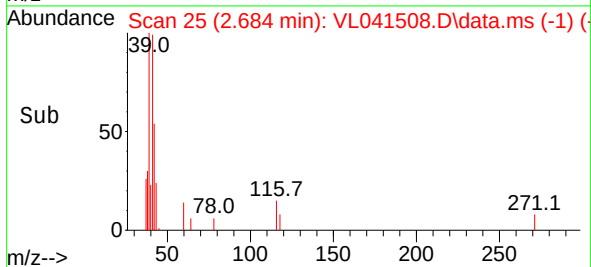
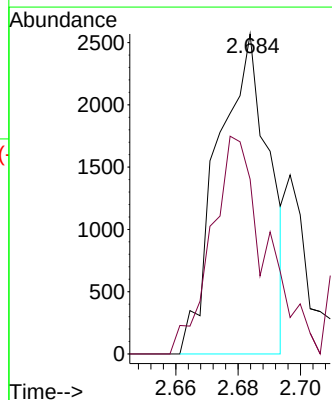
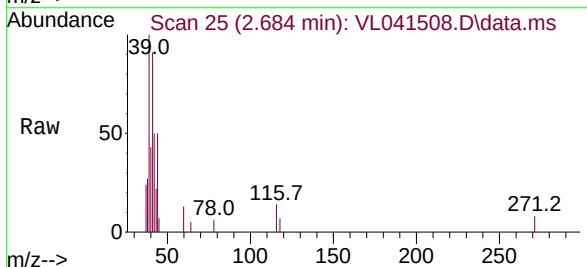
Instrument :  
MSVOA\_L  
ClientSampleId :

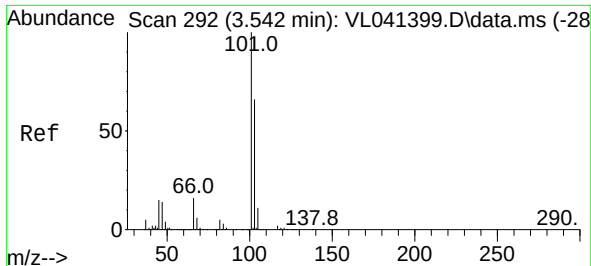
Tgt Ion: 62 Resp: 23270  
Ion Ratio Lower Upper  
62 100  
64 26.5 25.0 37.4



#9  
Propene  
Concen: 0.049 ppbv  
RT: 2.684 min Scan# 25  
Delta R.T. -0.013 min  
Lab File: VL041508.D  
Acq: 8 Aug 2024 11:41

Tgt Ion: 41 Resp: 2919  
Ion Ratio Lower Upper  
41 100  
42 83.5 55.9 83.9





#11

Trichlorofluoromethane

Concen: 4.380 ppbv

RT: 3.546 min Scan# 20

Delta R.T. -0.016 min

Lab File: VL041508.D

Acq: 8 Aug 2024 11:41

Instrument :

MSVOA\_L

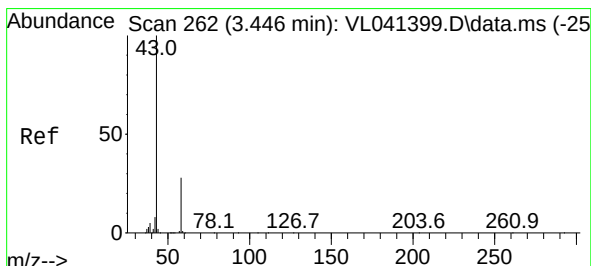
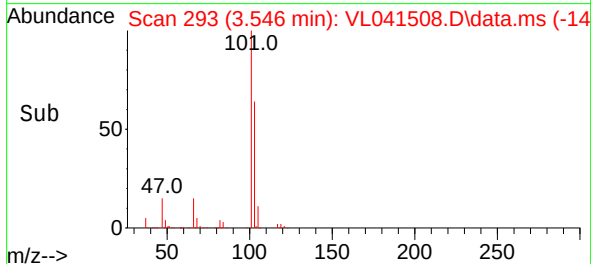
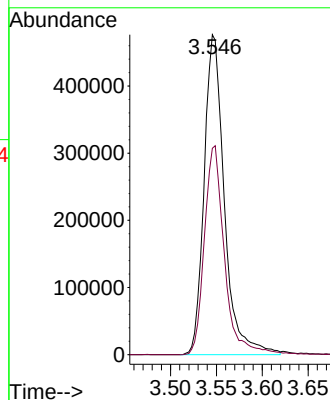
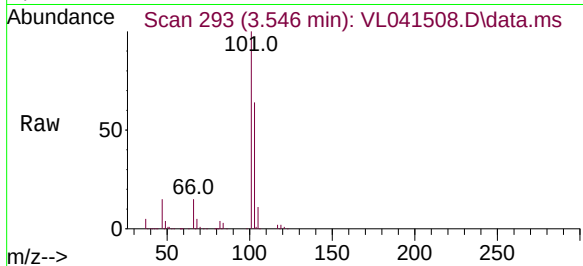
ClientSampleId :

Tgt Ion:101 Resp: 732015

Ion Ratio Lower Upper

101 100

103 64.5 52.6 79.0



#15

Acetone

Concen: 0.193 ppbv

RT: 3.475 min Scan# 271

Delta R.T. 0.006 min

Lab File: VL041508.D

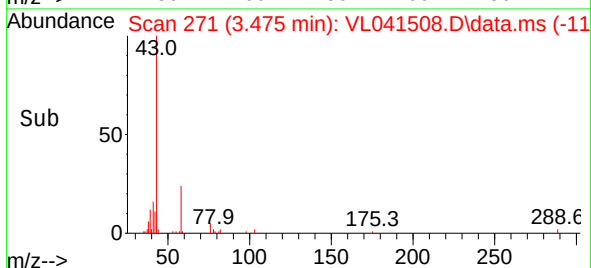
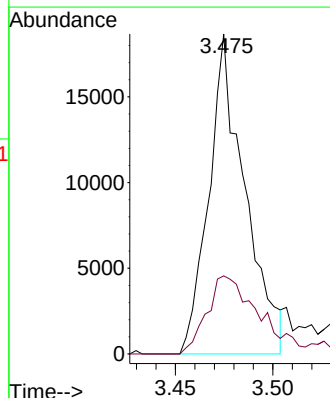
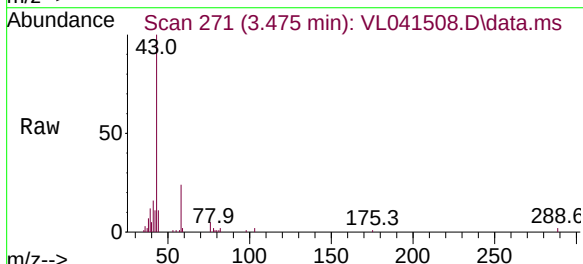
Acq: 8 Aug 2024 11:41

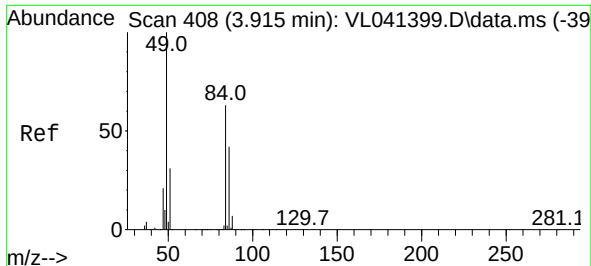
Tgt Ion: 43 Resp: 23978

Ion Ratio Lower Upper

43 100

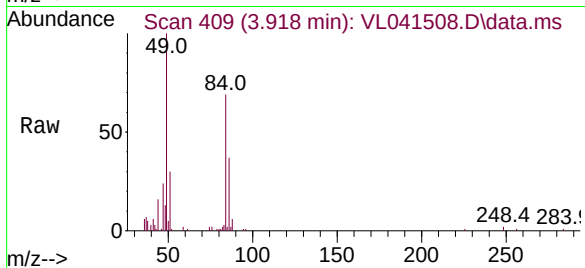
58 36.6 21.4 32.2#



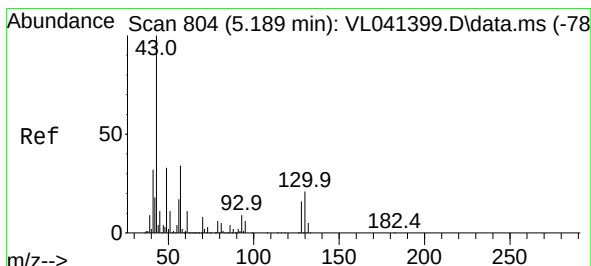
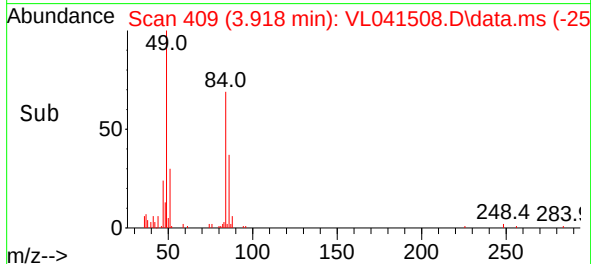
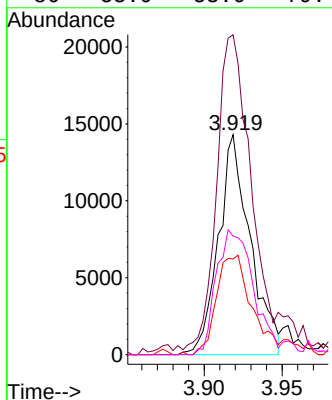


#20  
Methylene Chloride  
Concen: 0.438 ppbv  
RT: 3.918 min Scan# 408  
Delta R.T. -0.013 min  
Lab File: VL041508.D  
Acq: 8 Aug 2024 11:41

Instrument :  
MSVOA\_L  
ClientSampleId :

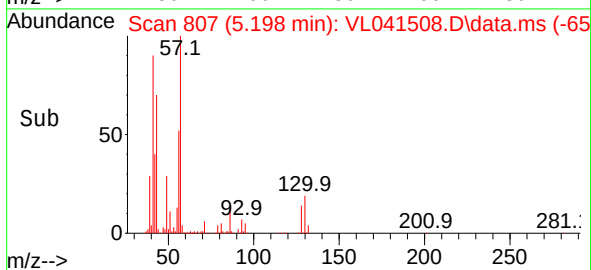
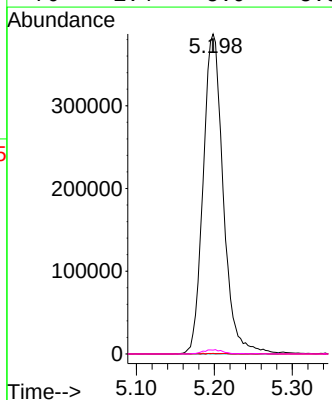
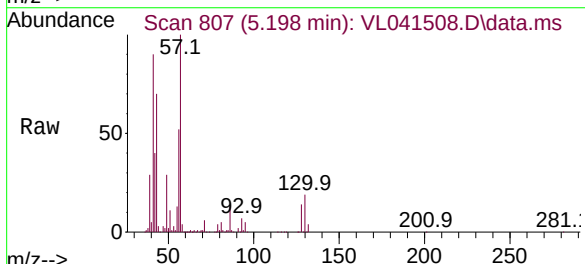


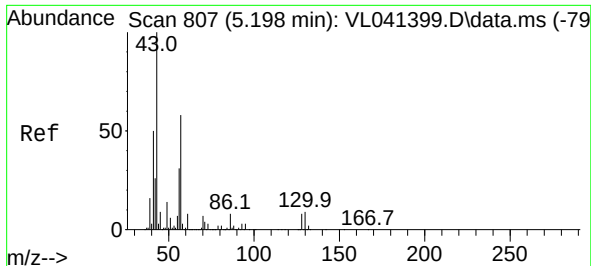
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 20323 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 141.5 | 126.6 | 190.0 |
| 51       | 43.5  | 38.6  | 58.0  |
| 86       | 53.9  | 53.0  | 79.4  |



#25  
Ethyl Acetate  
Concen: 2.811 ppbv  
RT: 5.198 min Scan# 807  
Delta R.T. -0.003 min  
Lab File: VL041508.D  
Acq: 8 Aug 2024 11:41

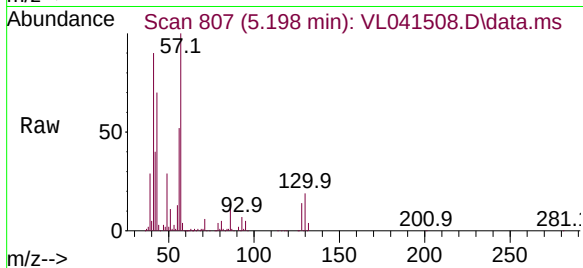
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 694053 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 45       | 0.2   | 8.5   | 12.7#  |
| 61       | 0.2   | 8.0   | 12.0#  |
| 70       | 1.4   | 5.9   | 8.9#   |



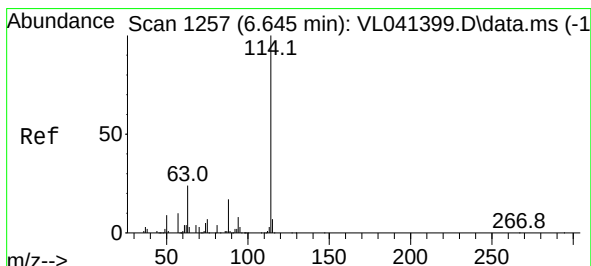
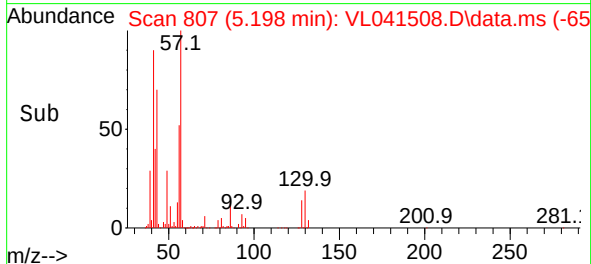
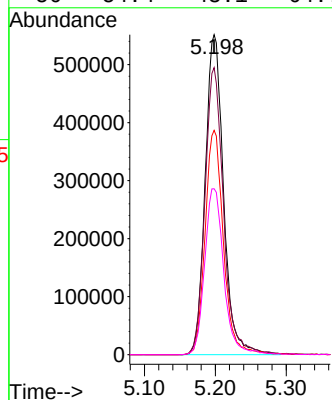


#26  
Hexane  
Concen: 9.693 ppbv  
RT: 5.198 min Scan# 807  
Delta R.T. -0.013 min  
Lab File: VL041508.D  
Acq: 8 Aug 2024 11:41

Instrument :  
MSVOA\_L  
ClientSampleId :

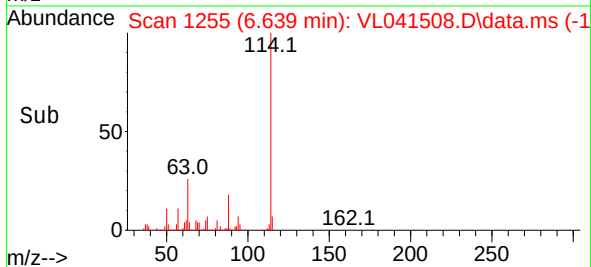
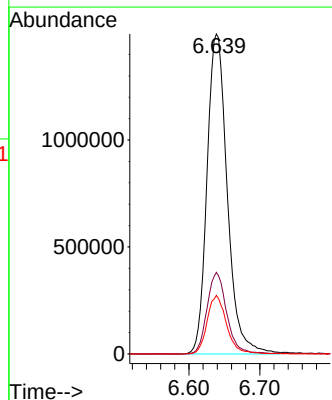
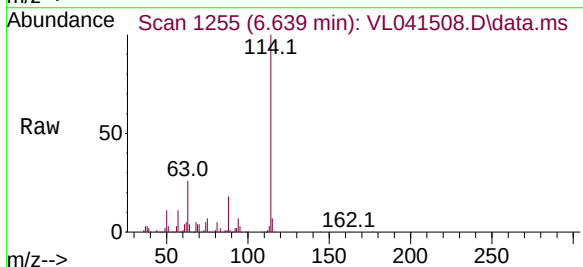


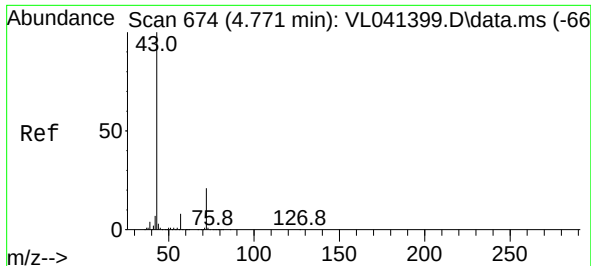
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 992836 |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 91.4  | 74.0  | 111.0  |
| 43       | 70.3  | 193.6 | 290.4  |
| 56       | 54.4  | 43.1  | 64.7   |



#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 6.639 min Scan# 1255  
Delta R.T. -0.010 min  
Lab File: VL041508.D  
Acq: 8 Aug 2024 11:41

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 114   | Resp: | 2968543 |
| Ion      | Ratio | Lower | Upper   |
| 114      | 100   |       |         |
| 63       | 25.1  | 20.3  | 30.5    |
| 88       | 17.7  | 14.3  | 21.5    |





#34

2-Butanone

Concen: 4.803 ppbv

RT: 5.198 min Scan# 80

Delta R.T. 0.415 min

Lab File: VL041508.D

Acq: 8 Aug 2024 11:41

Instrument :

MSVOA\_L

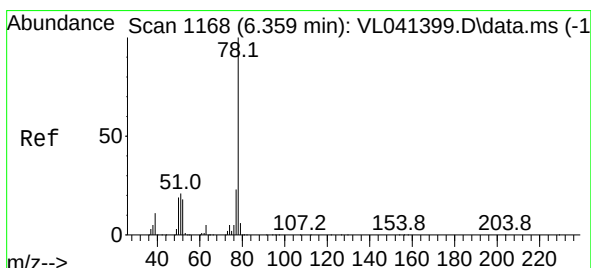
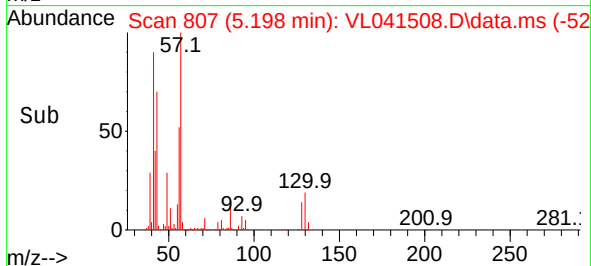
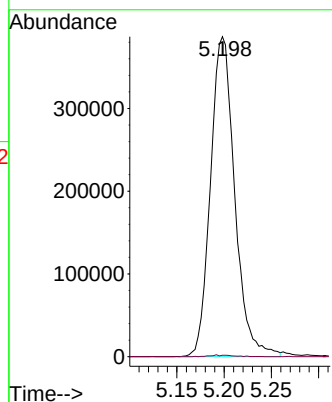
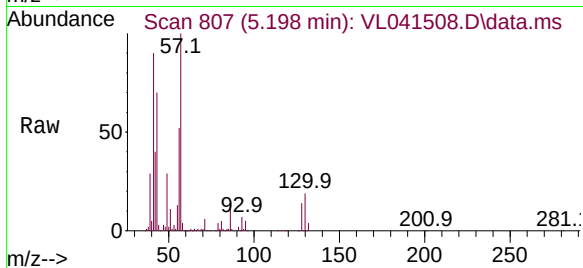
ClientSampleId :

Tgt Ion: 43 Resp: 689704

Ion Ratio Lower Upper

43 100

72 0.0 17.3 25.9#



#36

Benzene

Concen: 9.323 ppbv

RT: 6.356 min Scan# 1167

Delta R.T. -0.013 min

Lab File: VL041508.D

Acq: 8 Aug 2024 11:41

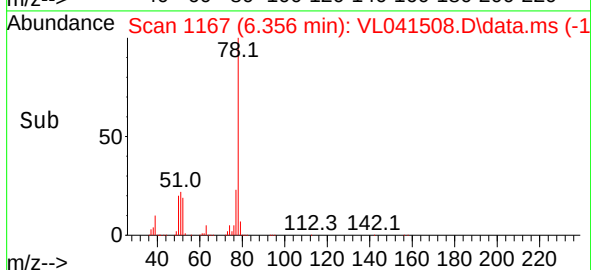
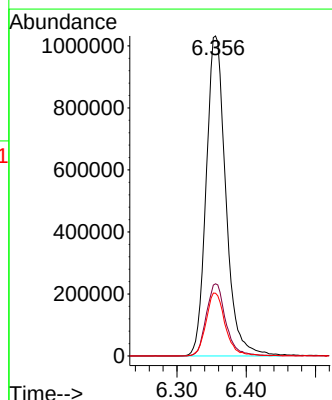
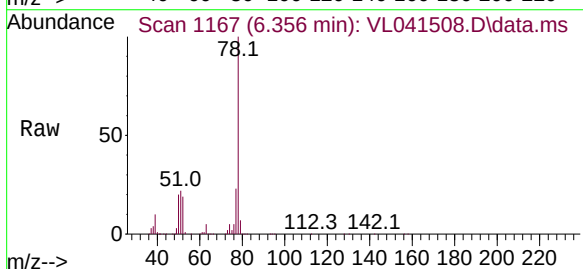
Tgt Ion: 78 Resp: 2022211

Ion Ratio Lower Upper

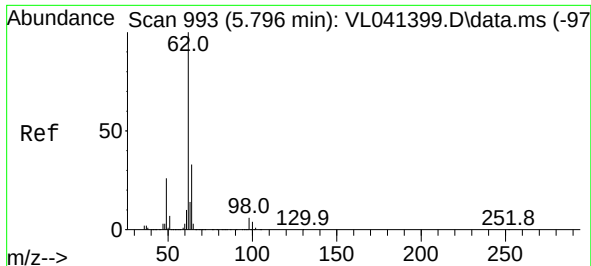
78 100

77 22.6 18.1 27.1

50 19.6 15.5 23.3







#37

1,2-Dichloroethane

Concen: 4.832 ppbv

RT: 5.793 min Scan# 993

Delta R.T. -0.013 min

Lab File: VL041508.D

Acq: 8 Aug 2024 11:41

Instrument :

MSVOA\_L

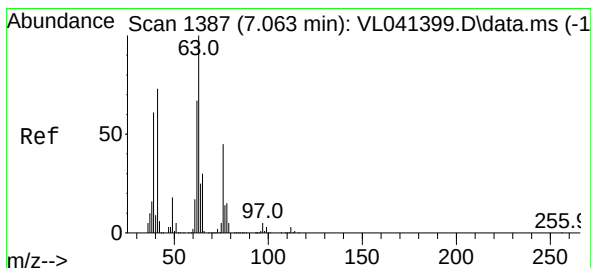
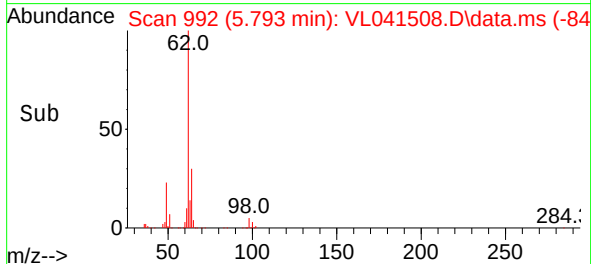
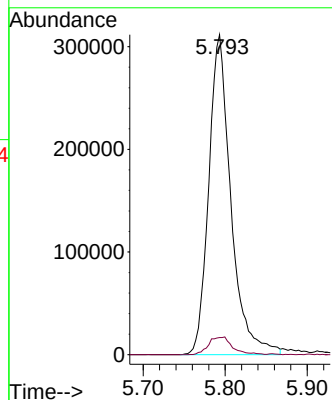
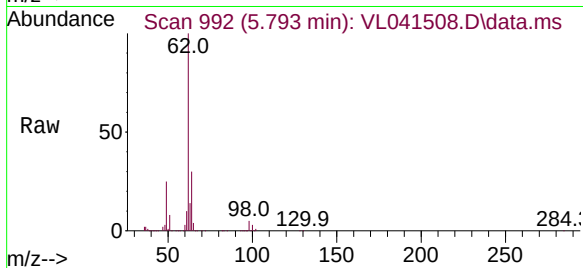
ClientSampleId :

Tgt Ion: 62 Resp: 586595

Ion Ratio Lower Upper

62 100

98 6.1 5.0 7.4



#39

1,2-Dichloropropane

Concen: 4.609 ppbv

RT: 7.057 min Scan# 1385

Delta R.T. -0.013 min

Lab File: VL041508.D

Acq: 8 Aug 2024 11:41

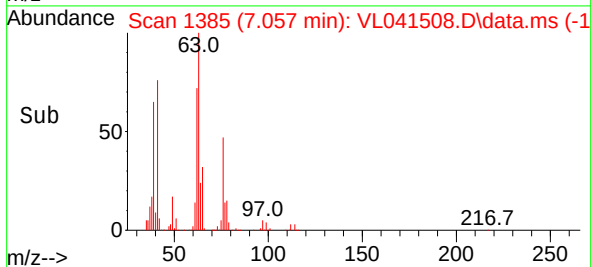
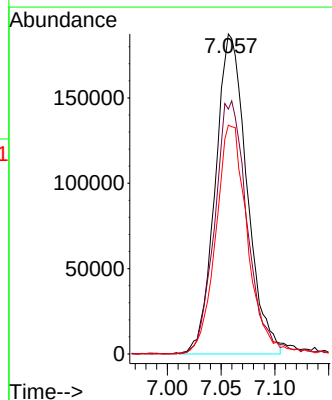
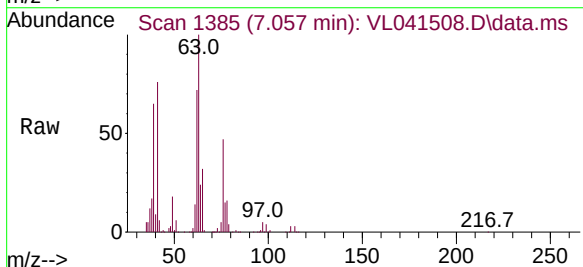
Tgt Ion: 63 Resp: 382718

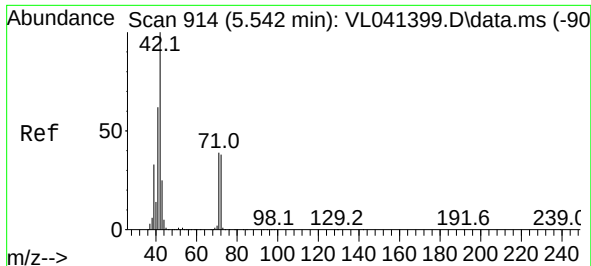
Ion Ratio Lower Upper

63 100

41 76.2 58.3 87.5

62 71.2 53.9 80.9





#41

Tetrahydrofuran

Concen: 0.054 ppbv

RT: 5.253 min Scan# 81

Delta R.T. -0.299 min

Lab File: VL041508.D

Acq: 8 Aug 2024 11:41

Instrument :

MSVOA\_L

ClientSampleId :

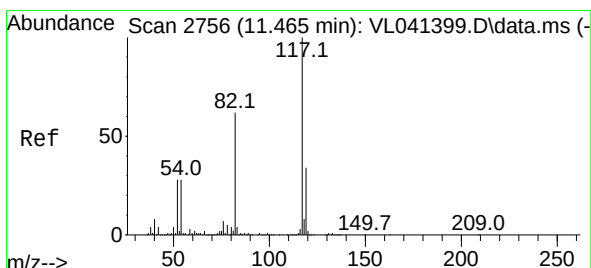
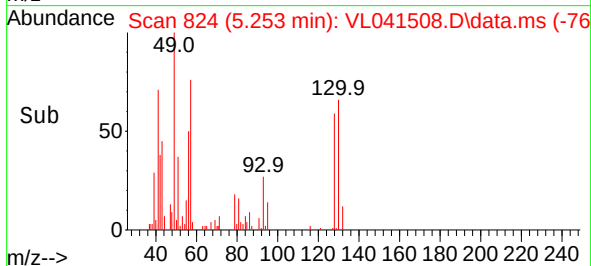
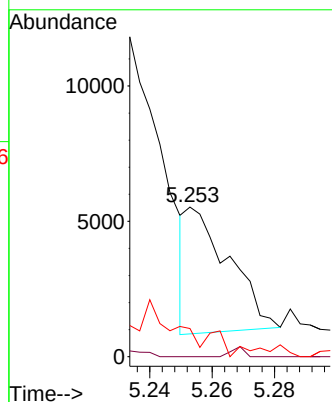
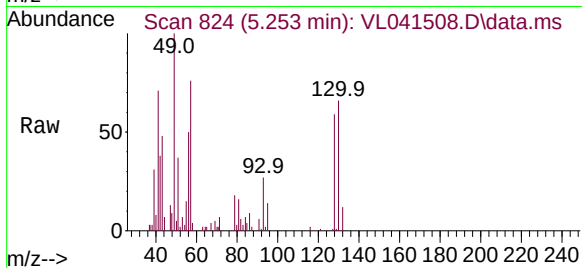
Tgt Ion: 42 Resp: 4423

Ion Ratio Lower Upper

42 100

72 2.4 31.2 46.8#

71 0.0 30.5 45.7#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.452 min Scan# 2752

Delta R.T. -0.010 min

Lab File: VL041508.D

Acq: 8 Aug 2024 11:41

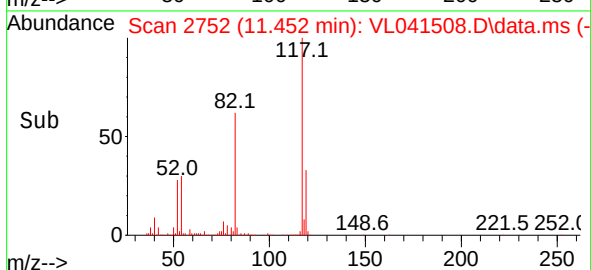
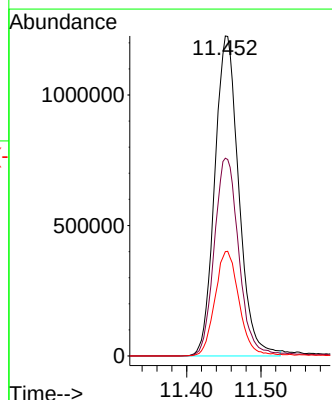
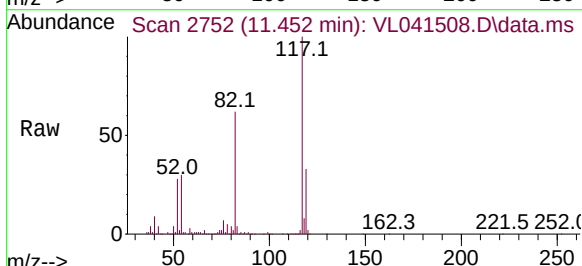
Tgt Ion:117 Resp: 2764278

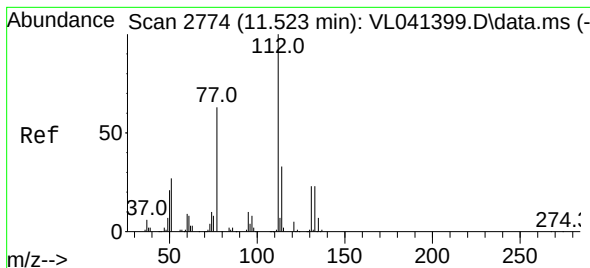
Ion Ratio Lower Upper

117 100

82 64.2 51.0 76.6

119 33.6 45.2 67.8#

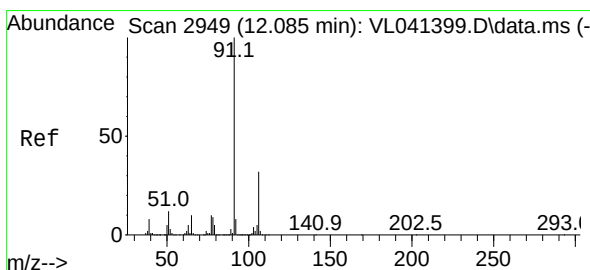
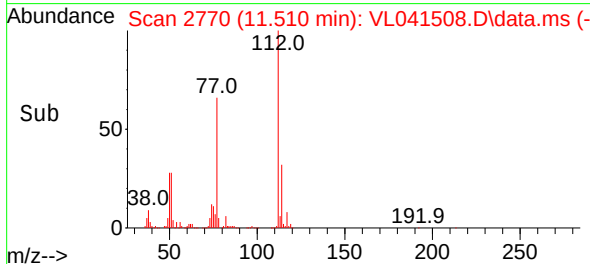
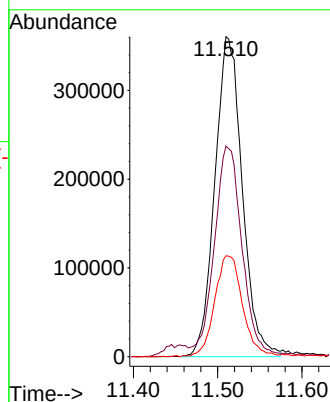
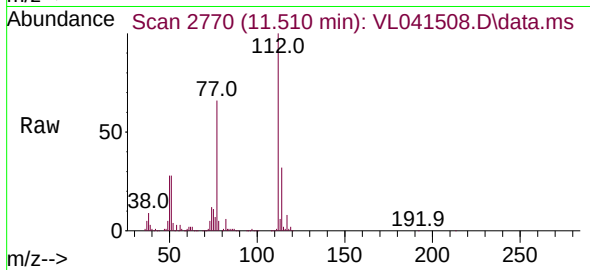




#57  
Chlorobenzene  
Concen: 4.132 ppbv  
RT: 11.510 min Scan# 21  
Delta R.T. -0.010 min  
Lab File: VL041508.D  
Acq: 8 Aug 2024 11:41

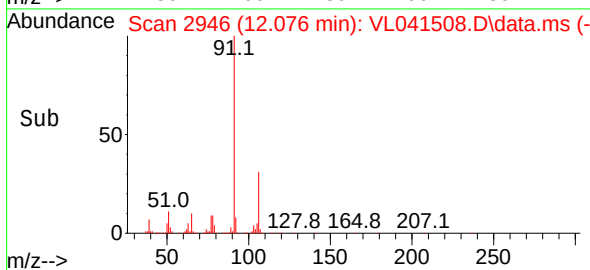
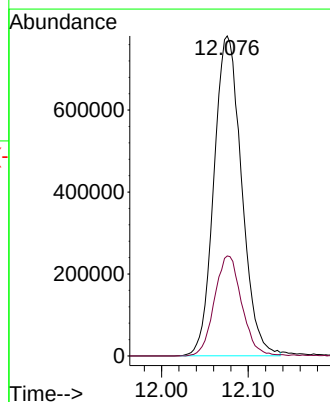
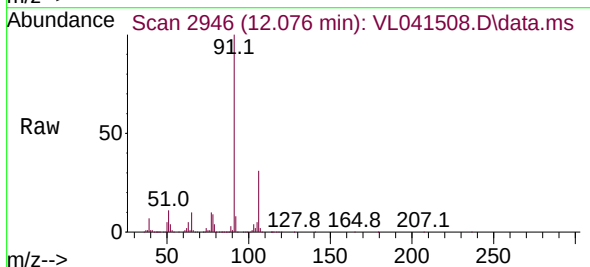
Instrument :  
MSVOA\_L  
ClientSampleId :

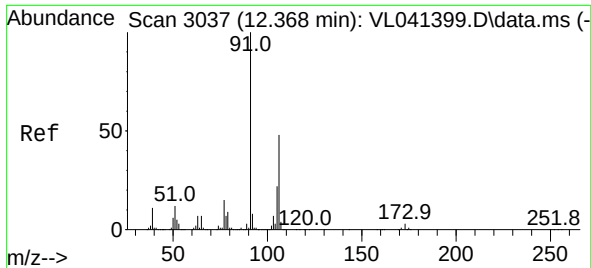
Tgt Ion:112 Resp: 813133  
Ion Ratio Lower Upper  
112 100  
77 64.7 51.1 76.7  
114 31.6 29.5 36.1



#58  
Ethyl Benzene  
Concen: 5.442 ppbv  
RT: 12.076 min Scan# 2946  
Delta R.T. -0.010 min  
Lab File: VL041508.D  
Acq: 8 Aug 2024 11:41

Tgt Ion: 91 Resp: 1733818  
Ion Ratio Lower Upper  
91 100  
106 31.2 25.8 38.8





#59

m/p-Xylene

Concen: 6.304 ppbv

RT: 12.076 min Scan# 20

Delta R.T. -0.293 min

Lab File: VL041508.D

Acq: 8 Aug 2024 11:41

Instrument :

MSVOA\_L

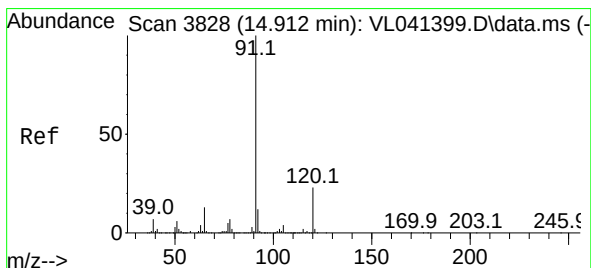
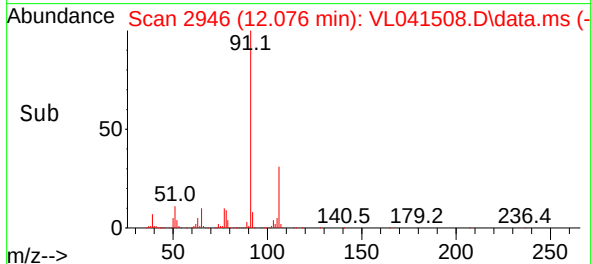
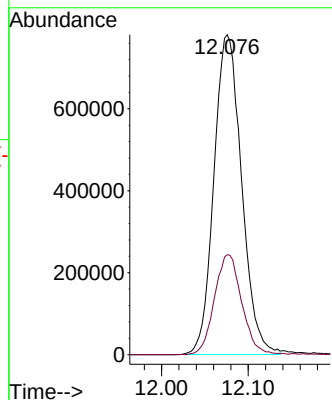
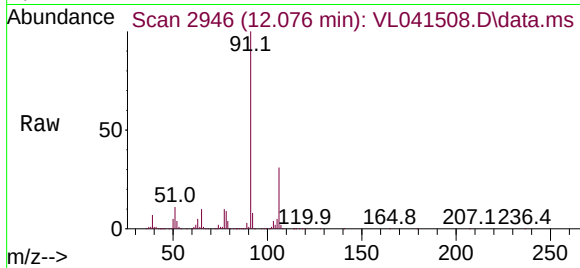
ClientSampleId :

Tgt Ion: 91 Resp: 1733818

Ion Ratio Lower Upper

91 100

106 31.2 36.3 54.5#



#64

n-propylbenzene

Concen: 10.396 ppbv

RT: 15.336 min Scan# 3960

Delta R.T. 0.424 min

Lab File: VL041508.D

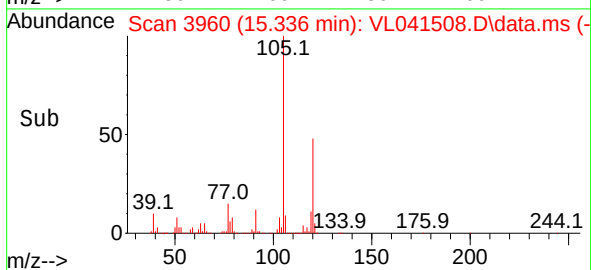
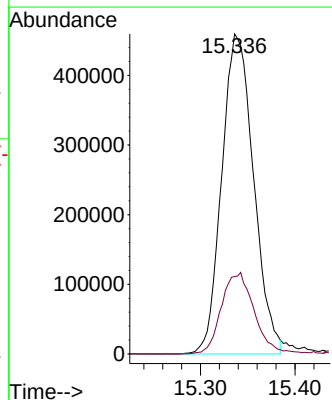
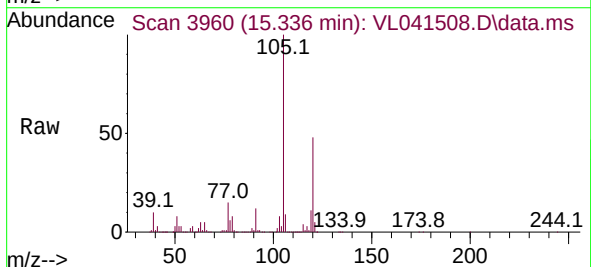
Acq: 8 Aug 2024 11:41

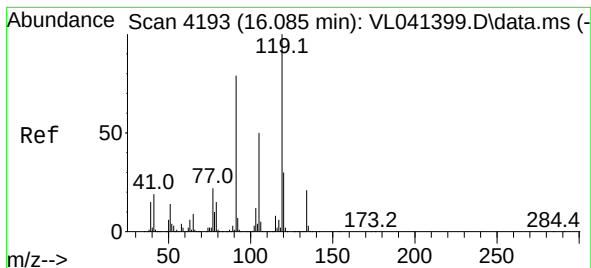
Tgt Ion:120 Resp: 1074987

Ion Ratio Lower Upper

120 100

91 0.0 361.4 542.0#





#65

tert-Butylbenzene

Concen: 0.627 ppbv

RT: 16.092 min Scan# 4195

Delta R.T. 0.010 min

Lab File: VL041508.D

Acq: 8 Aug 2024 11:41

Instrument :

MSVOA\_L

ClientSampleId :

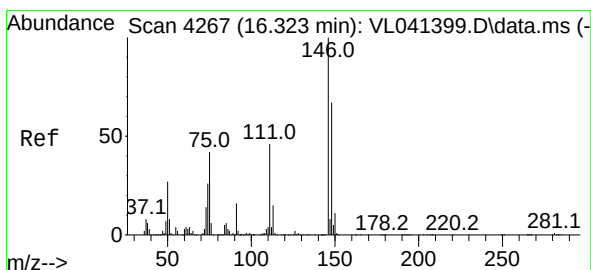
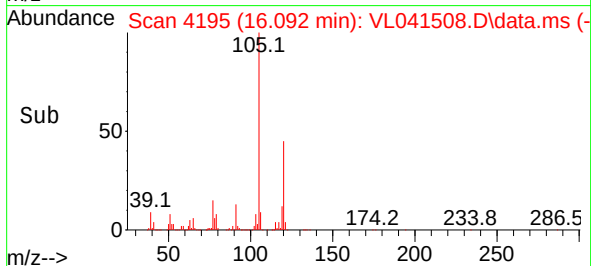
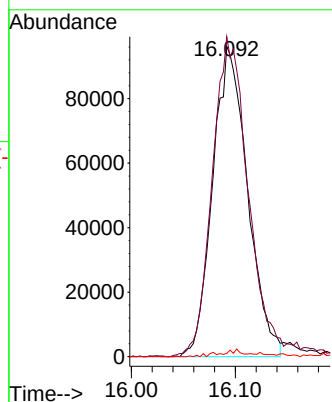
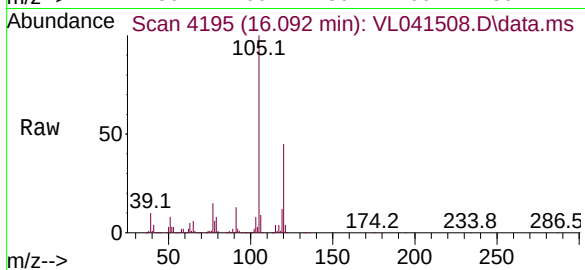
Tgt Ion:119 Resp: 224119

Ion Ratio Lower Upper

119 100

91 109.4 64.2 96.2#

134 1.9 15.7 23.5#



#66

Benzyl Chloride

Concen: 10.280 ppbv

RT: 16.092 min Scan# 4195

Delta R.T. -0.228 min

Lab File: VL041508.D

Acq: 8 Aug 2024 11:41

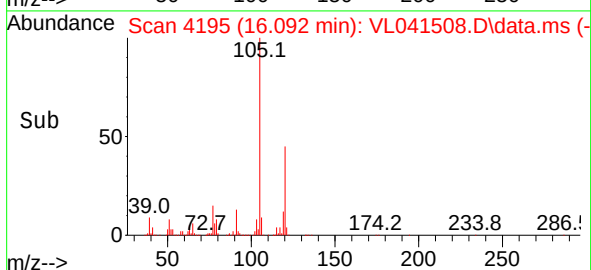
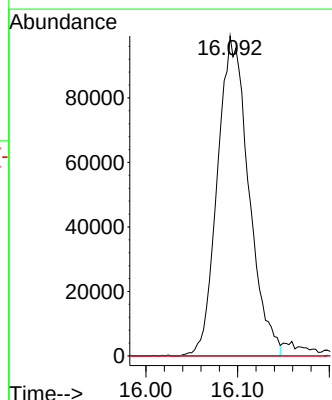
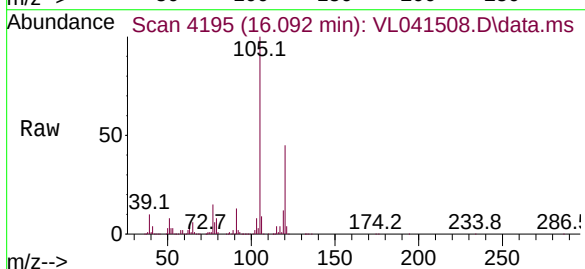
Tgt Ion: 91 Resp: 235553

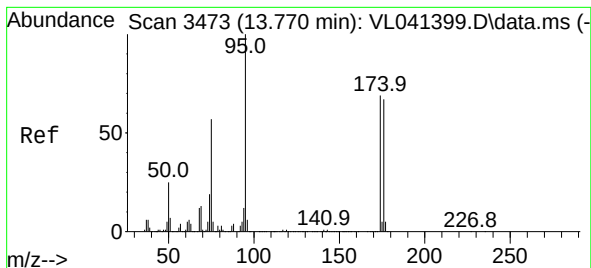
Ion Ratio Lower Upper

91 100

126 0.0 13.8 20.8#

128 0.0 4.4 6.6#





#68

1-Bromo-4-Fluorobenzene

Concen: 10.343 ppbv

RT: 13.764 min Scan# 3471

Delta R.T. -0.003 min

Lab File: VL041508.D

Acq: 8 Aug 2024 11:41

Instrument :

MSVOA\_L

ClientSampleId :

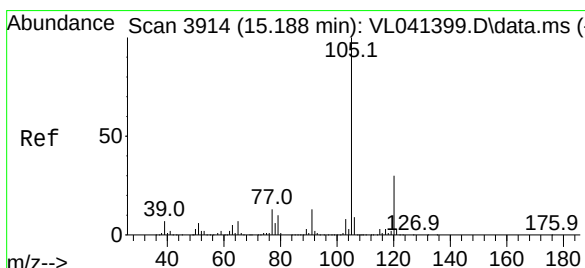
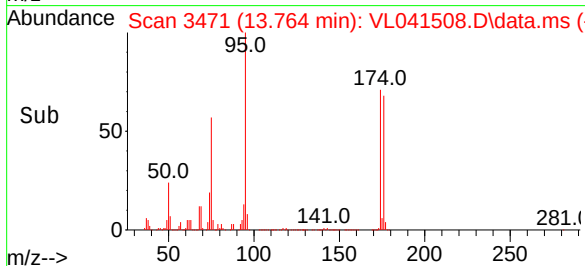
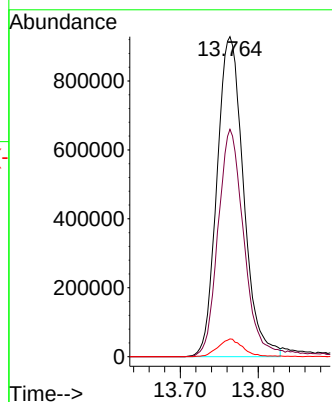
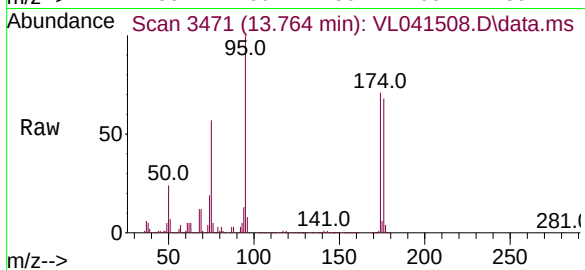
Tgt Ion: 95 Resp: 2200195

Ion Ratio Lower Upper

95 100

174 71.7 56.3 84.5

175 5.3 4.0 6.0



#72

4-Ethyltoluene

Concen: 7.631 ppbv

RT: 15.339 min Scan# 3961

Delta R.T. 0.151 min

Lab File: VL041508.D

Acq: 8 Aug 2024 11:41

Tgt Ion:105 Resp: 2337633

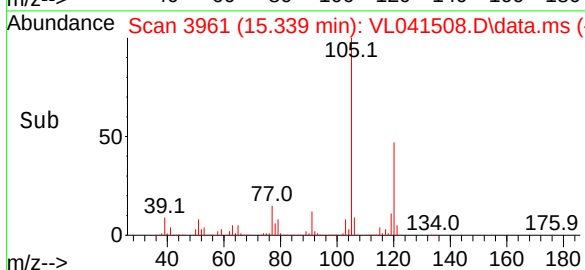
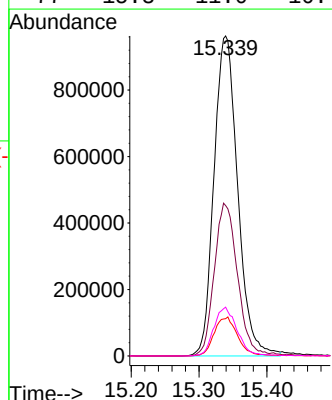
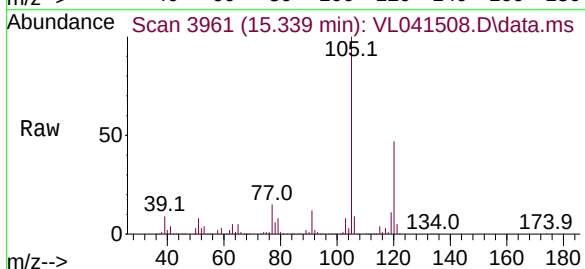
Ion Ratio Lower Upper

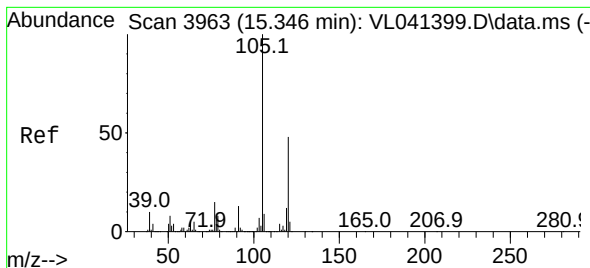
105 100

120 47.3 24.2 36.2#

91 12.3 10.4 15.6

77 15.3 11.0 16.4





#73

1,3,5-Trimethylbenzene

Concen: 8.858 ppbv

RT: 15.339 min Scan# 3961

Delta R.T. -0.006 min

Lab File: VL041508.D

Acq: 8 Aug 2024 11:41

Instrument :

MSVOA\_L

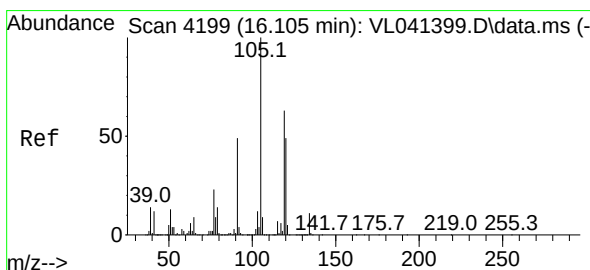
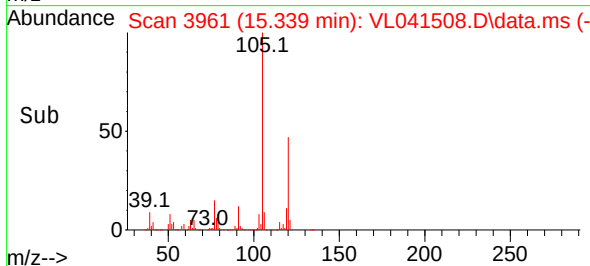
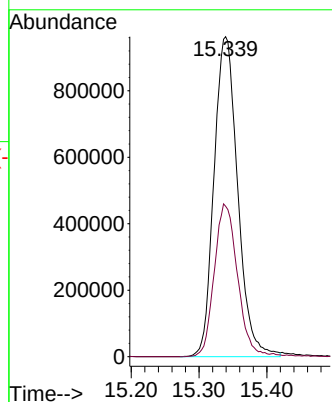
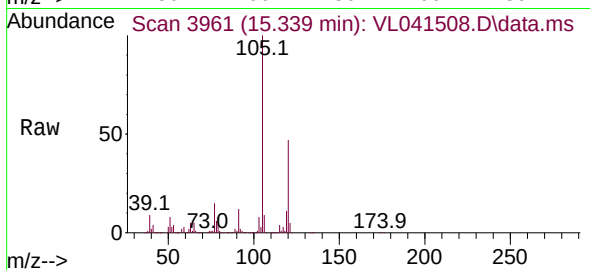
ClientSampleId :

Tgt Ion:105 Resp: 2337633

Ion Ratio Lower Upper

105 100

120 47.0 38.6 57.8



#74

1,2,4-Trimethylbenzene

Concen: 6.621 ppbv

RT: 16.095 min Scan# 4196

Delta R.T. -0.006 min

Lab File: VL041508.D

Acq: 8 Aug 2024 11:41

Tgt Ion:105 Resp: 2031342

Ion Ratio Lower Upper

105 100

120 43.6 39.5 59.3

91 11.2 39.8 59.8#

77 13.8 18.2 27.4#

