

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL110722\  
 Data File : VL039836.D  
 Acq On : 7 Nov 2022 12:22  
 Operator : SY/AP  
 Sample : N5409-01DL 2X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 E062-1100DL

Quant Time: Nov 08 06:13:00 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL110222AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Thu Nov 03 09:27:12 2022  
 Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.195  | 49   | 1023798  | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.652  | 114  | 2805109  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.462 | 117  | 2607776  | 10.000 | ppbv  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 68) 1-Bromo-4-Fluorobenzene | 13.770 | 95    | 2028603  | 10.393   | ppbv | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 103.900% |

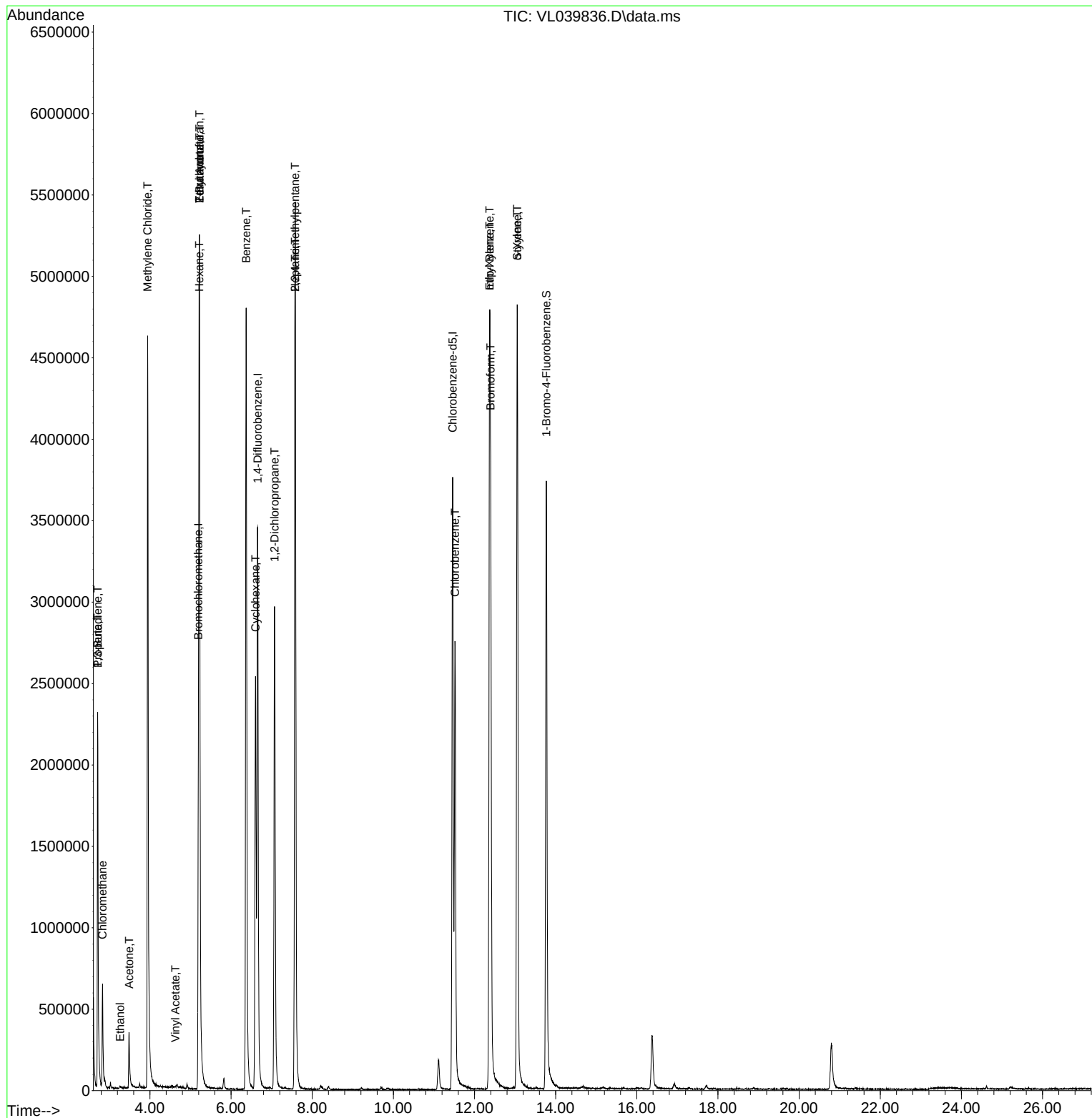
| Target Compounds           | R.T.   | QIon | Response | Conc   | Units  | Qvalue |
|----------------------------|--------|------|----------|--------|--------|--------|
| -----                      |        |      |          |        |        |        |
| 4) Chloromethane           | 2.832  | 50   | 601501   | 7.915  | ppbv   | 98     |
| 9) Propene                 | 2.713  | 41   | 1061327  | 16.689 | ppbv   | 98     |
| 10) Heptane                | 7.581  | 43   | 2910664  | 19.106 | ppbv   | 100    |
| 13) Ethanol                | 3.263  | 45   | 8656     | 1.926  | ppbv # | 18     |
| 15) Acetone                | 3.488  | 43   | 388523   | 3.118  | ppbv   | 99     |
| 16) 1,3-Butadiene          | 2.713  | 39   | 880971   | 15.201 | ppbv # | 5      |
| 20) Methylene Chloride     | 3.944  | 84   | 1788231  | 40.111 | ppbv   | 95     |
| 23) Vinyl Acetate          | 4.626  | 43   | 3765     | 0.076  | ppbv # | 83     |
| 25) Ethyl Acetate          | 5.221  | 43   | 1546727  | 6.026  | ppbv # | 76     |
| 26) Hexane                 | 5.218  | 57   | 2235459  | 19.532 | ppbv # | 37     |
| 30) Cyclohexane            | 6.603  | 84   | 987983   | 10.323 | ppbv   | 95     |
| 34) 2-Butanone             | 5.221  | 43   | 1522342  | 13.155 | ppbv # | 54     |
| 36) Benzene                | 6.372  | 78   | 4497958  | 19.009 | ppbv   | 96     |
| 39) 1,2-Dichloropropane    | 7.073  | 63   | 1235656  | 13.403 | ppbv   | 98     |
| 41) Tetrahydrofuran        | 5.221  | 42   | 804611   | 8.319  | ppbv # | 49     |
| 44) 2,2,4-Trimethylpentane | 7.581  | 57   | 1464218  | 3.666  | ppbv # | 1      |
| 49) Bromoform              | 12.397 | 173  | 1772614  | 13.864 | ppbv   | 99     |
| 57) Chlorobenzene          | 11.520 | 112  | 1749723  | 8.846  | ppbv   | 94     |
| 58) Ethyl Benzene          | 12.372 | 91   | 3805565  | 10.793 | ppbv # | 74     |
| 59) m/p-Xylene             | 12.372 | 91   | 3805565  | 12.930 | ppbv   | 93     |
| 60) o-Xylene               | 13.053 | 91   | 4208615  | 15.093 | ppbv   | 99     |
| 61) Styrene                | 13.053 | 104  | 86538    | 0.504  | ppbv # | 1      |

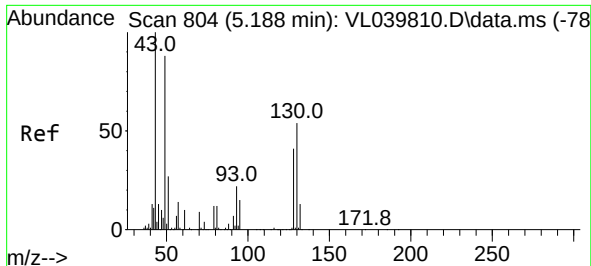
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL110722\  
Data File : VL039836.D  
Acq On : 7 Nov 2022 12:22  
Operator : SY/AP  
Sample : N5409-01DL 2X  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
E062-1100DL

Quant Time: Nov 08 06:13:00 2022  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL110222AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Thu Nov 03 09:27:12 2022  
Response via : Initial Calibration

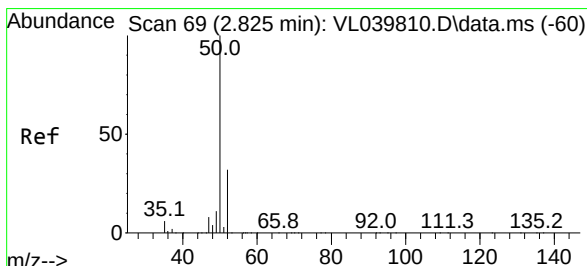
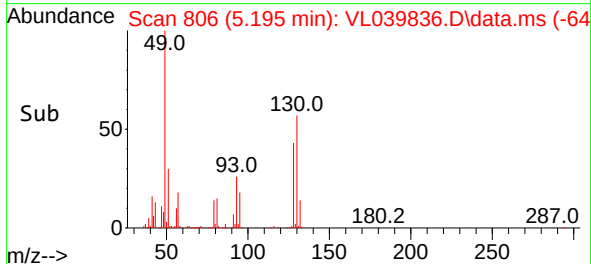
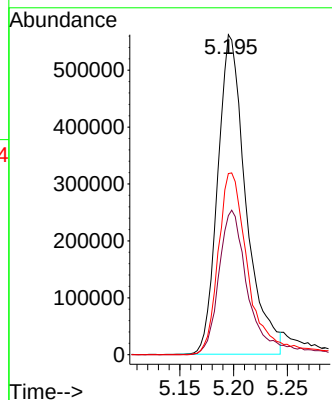
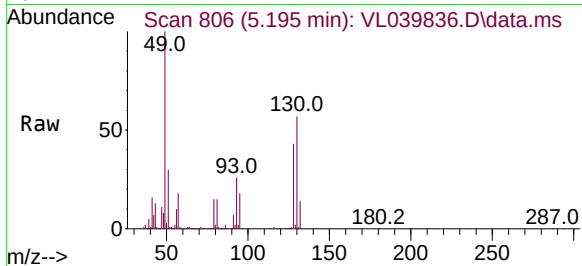




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.195 min Scan# 80  
Delta R.T. 0.007 min  
Lab File: VL039836.D  
Acq: 7 Nov 2022 12:22

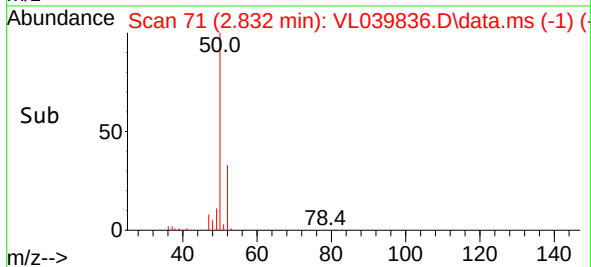
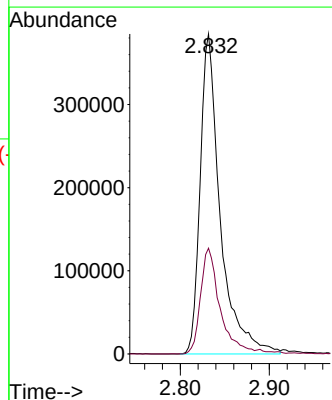
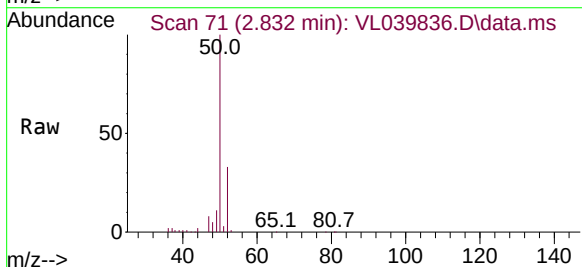
Instrument :  
MSVOA\_L  
ClientSampleId :  
E062-1100DL

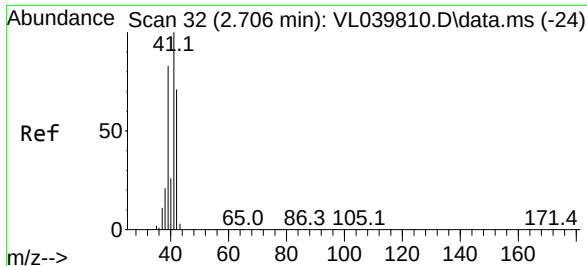
Tgt Ion: 49 Resp: 1023798  
Ion Ratio Lower Upper  
49 100  
128 48.4 24.6 73.6  
130 63.5 31.1 93.2



#4  
Chloromethane  
Concen: 7.915 ppbv  
RT: 2.832 min Scan# 71  
Delta R.T. 0.007 min  
Lab File: VL039836.D  
Acq: 7 Nov 2022 12:22

Tgt Ion: 50 Resp: 601501  
Ion Ratio Lower Upper  
50 100  
52 33.0 25.5 38.3





#9

Propene

Concen: 16.689 ppbv

RT: 2.713 min Scan# 34

Delta R.T. 0.007 min

Lab File: VL039836.D

Acq: 7 Nov 2022 12:22

Instrument :

MSVOA\_L

ClientSampleId :

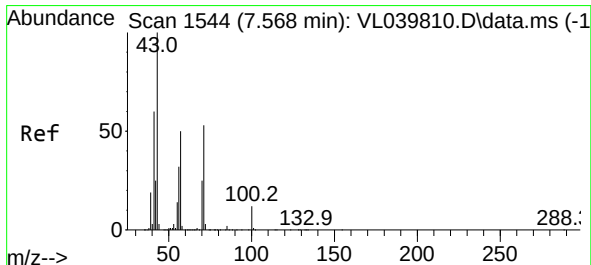
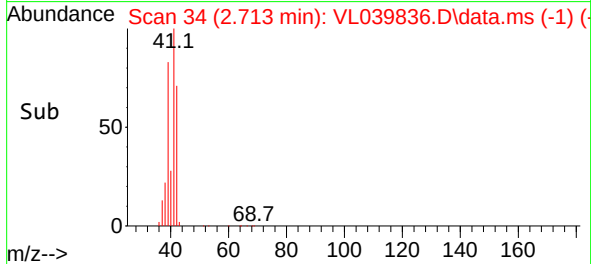
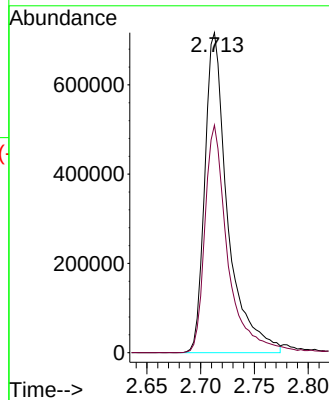
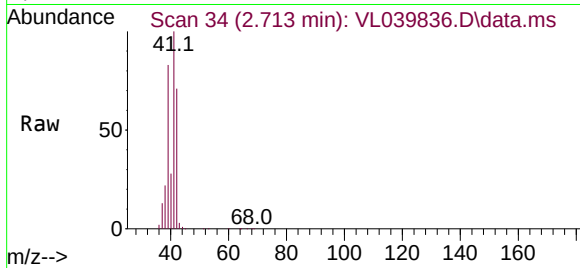
E062-1100DL

Tgt Ion: 41 Resp: 1061327

Ion Ratio Lower Upper

41 100

42 72.3 56.3 84.5



#10

Heptane

Concen: 19.106 ppbv

RT: 7.581 min Scan# 1548

Delta R.T. 0.013 min

Lab File: VL039836.D

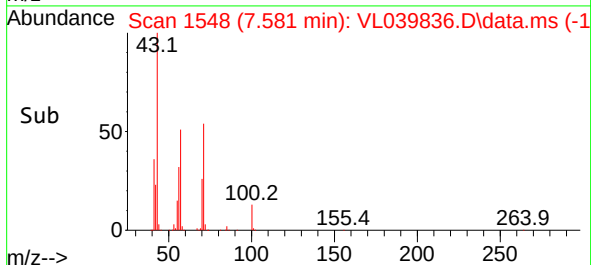
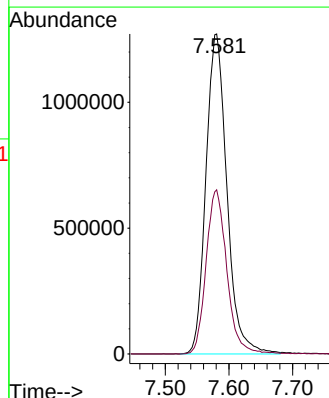
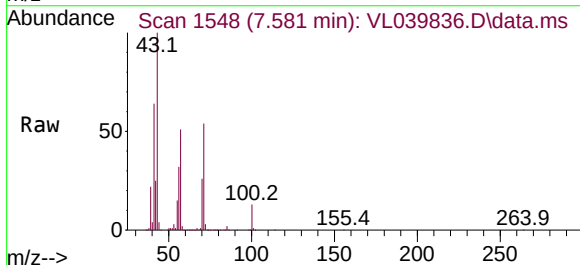
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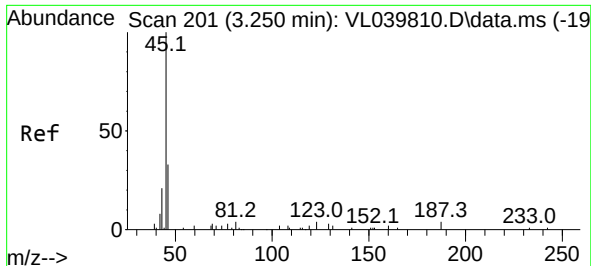
Tgt Ion: 43 Resp: 2910664

Ion Ratio Lower Upper

43 100

57 50.8 40.5 60.7

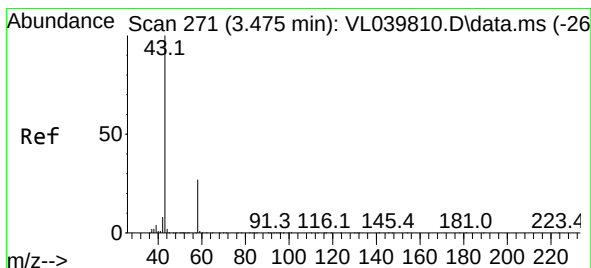
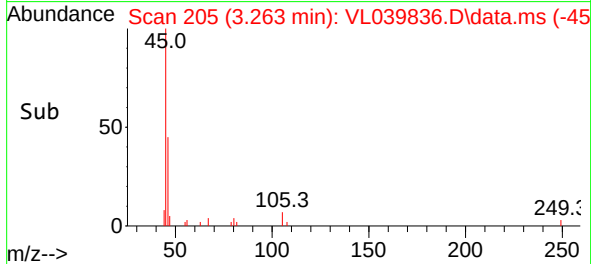
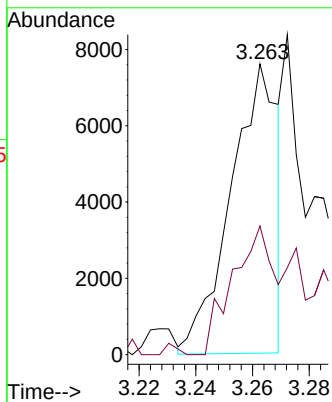
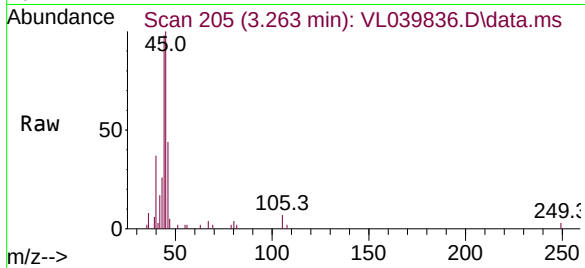




#13  
Ethanol  
Concen: 1.926 ppbv  
RT: 3.263 min Scan# 201  
Delta R.T. 0.013 min  
Lab File: VL039836.D  
Acq: 7 Nov 2022 12:22

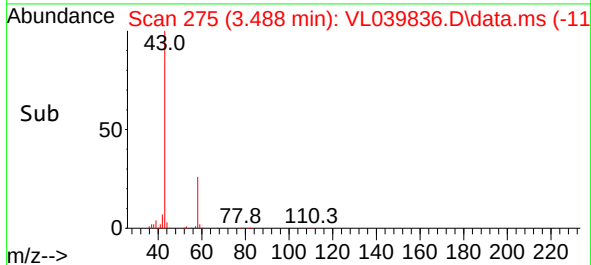
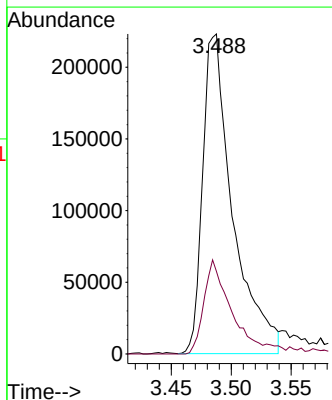
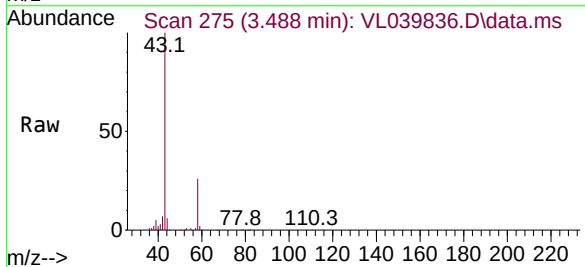
Instrument :  
MSVOA\_L  
ClientSampleId :  
E062-1100DL

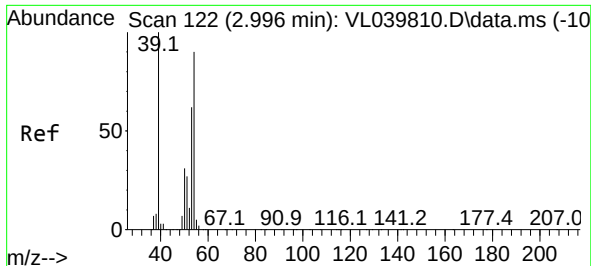
Tgt Ion: 45 Resp: 8656  
Ion Ratio Lower Upper  
45 100  
46 92.3 16.5 65.9#



#15  
Acetone  
Concen: 3.118 ppbv  
RT: 3.488 min Scan# 275  
Delta R.T. 0.013 min  
Lab File: VL039836.D  
Acq: 7 Nov 2022 12:22

Tgt Ion: 43 Resp: 388523  
Ion Ratio Lower Upper  
43 100  
58 29.7 23.2 34.8

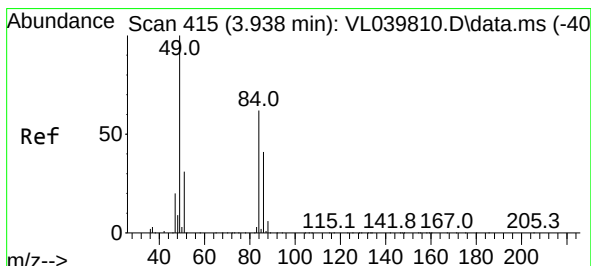
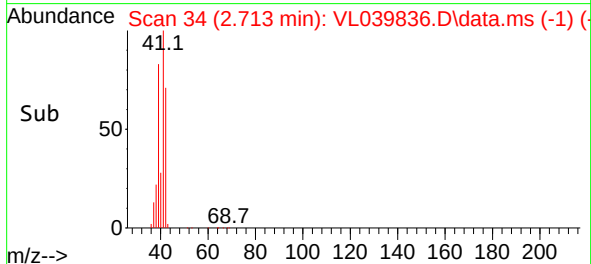
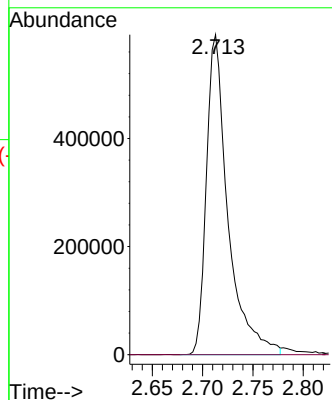
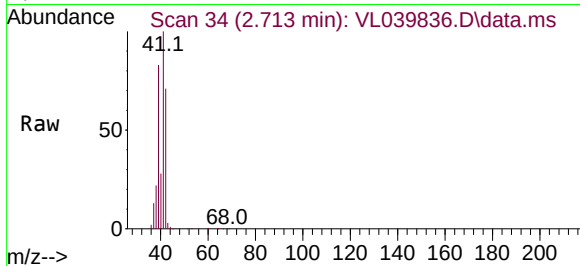




#16  
1,3-Butadiene  
Concen: 15.201 ppbv  
RT: 2.713 min Scan# 34  
Delta R.T. -0.283 min  
Lab File: VL039836.D  
Acq: 7 Nov 2022 12:22

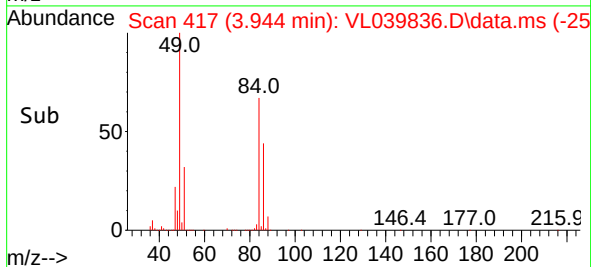
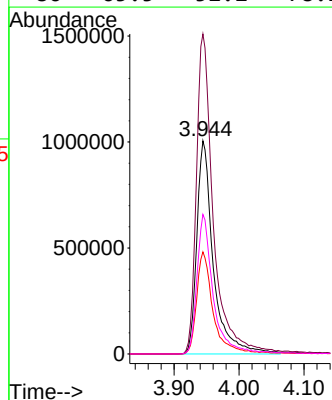
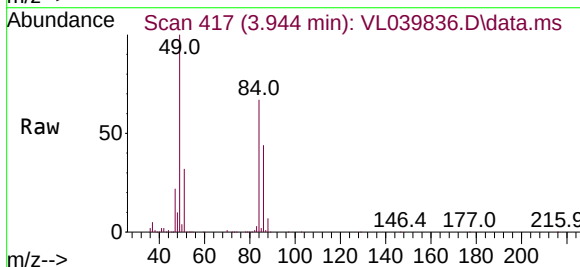
Instrument :  
MSVOA\_L  
ClientSampleId :  
E062-1100DL

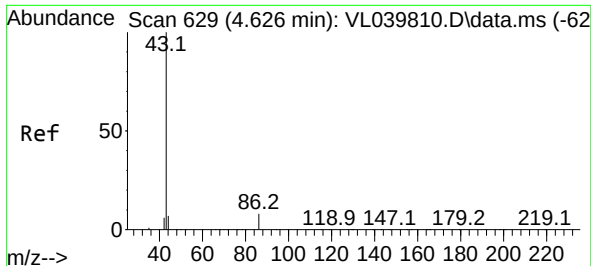
Tgt Ion: 39 Resp: 880971  
Ion Ratio Lower Upper  
39 100  
54 0.0 71.0 106.4#



#20  
Methylene Chloride  
Concen: 40.111 ppbv  
RT: 3.944 min Scan# 417  
Delta R.T. 0.007 min  
Lab File: VL039836.D  
Acq: 7 Nov 2022 12:22

Tgt Ion: 84 Resp: 1788231  
Ion Ratio Lower Upper  
84 100  
49 150.1 128.6 192.8  
51 47.9 40.2 60.4  
86 65.5 52.2 78.2



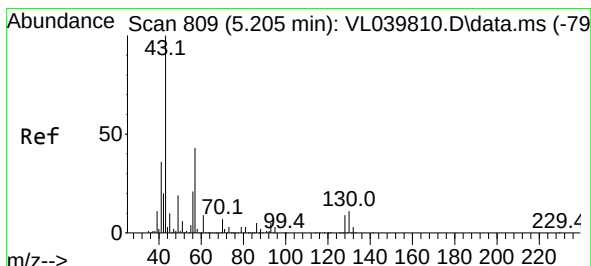
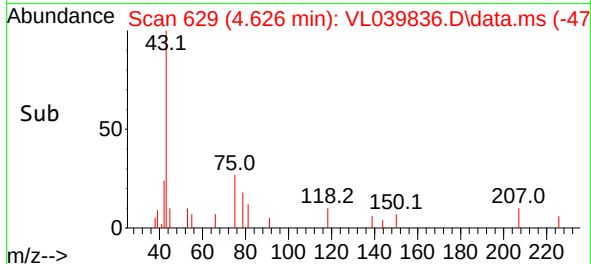
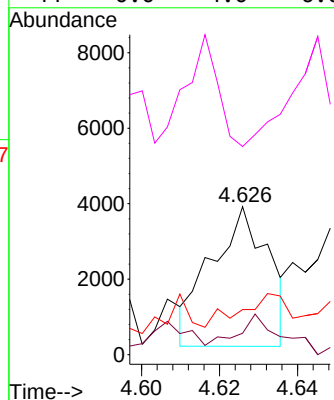
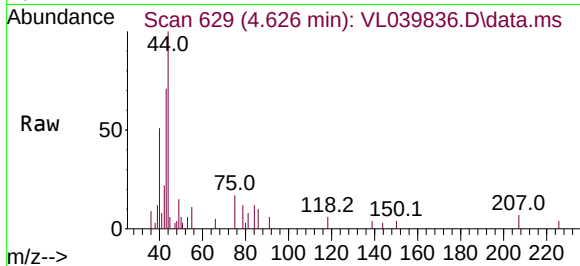


#23  
 Vinyl Acetate  
 Concen: 0.076 ppbv  
 RT: 4.626 min Scan# 61  
 Delta R.T. 0.000 min  
 Lab File: VL039836.D  
 Acq: 7 Nov 2022 12:22

Instrument :  
 MSVOA\_1  
 ClientSampleId :  
 E062-1100DL

Tgt Ion: 43 Resp: 3765

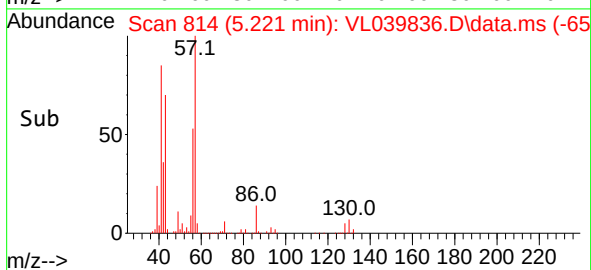
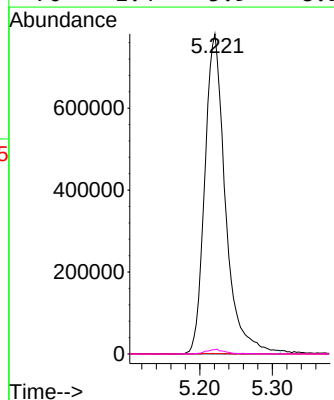
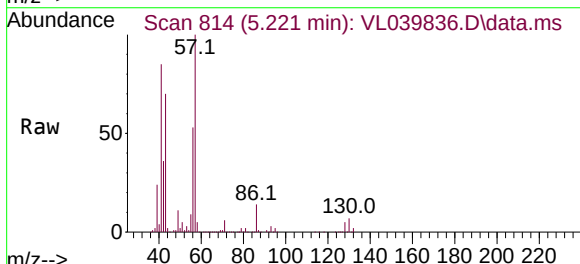
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 86  | 3.4   | 5.0   | 7.4#  |
| 42  | 0.0   | 6.8   | 10.2# |
| 44  | 0.0   | 4.0   | 6.0#  |

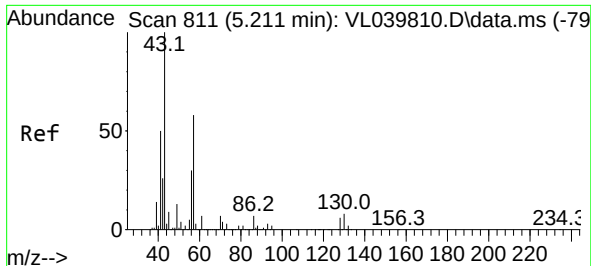


#25  
 Ethyl Acetate  
 Concen: 6.026 ppbv  
 RT: 5.221 min Scan# 814  
 Delta R.T. 0.016 min  
 Lab File: VL039836.D  
 Acq: 7 Nov 2022 12:22

Tgt Ion: 43 Resp: 1546727

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 45  | 0.1   | 8.2   | 12.2# |
| 61  | 0.1   | 8.1   | 12.1# |
| 70  | 1.4   | 5.9   | 8.9#  |



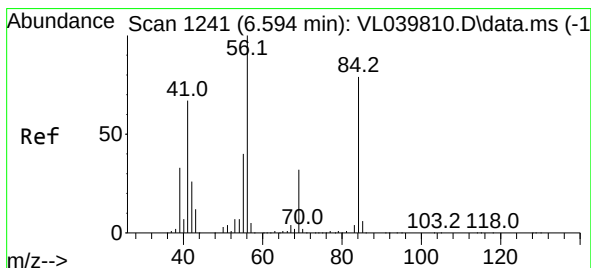
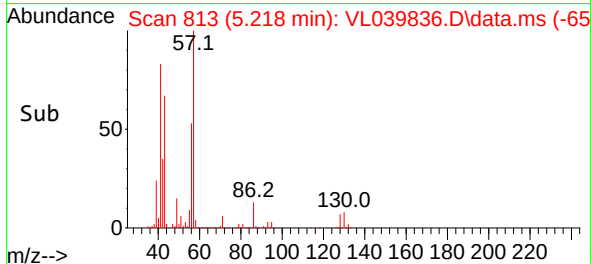
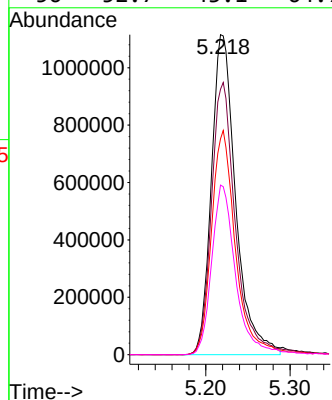
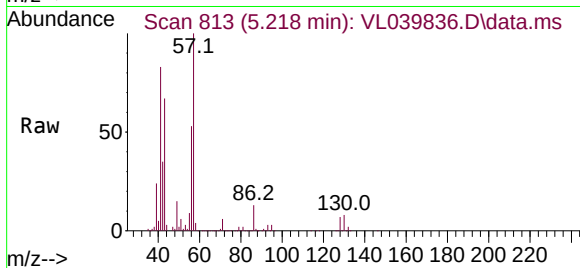


#26  
Hexane  
Concen: 19.532 ppbv  
RT: 5.218 min Scan# 811  
Delta R.T. 0.007 min  
Lab File: VL039836.D  
Acq: 7 Nov 2022 12:22

Instrument :  
MSVOA\_L  
ClientSampleId :  
E062-1100DL

Tgt Ion: 57 Resp: 2235459

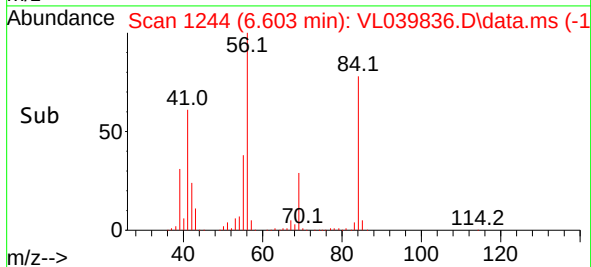
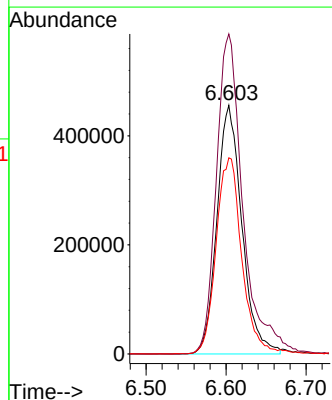
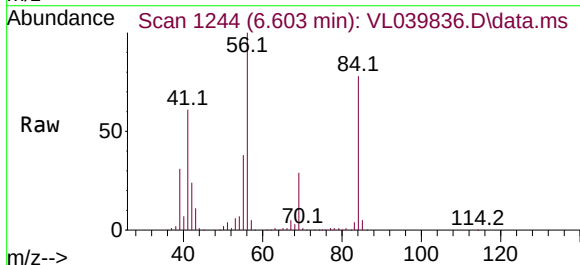
| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 57  | 100   |       |        |
| 41  | 85.6  | 73.7  | 110.5  |
| 43  | 69.8  | 189.8 | 284.8# |
| 56  | 52.7  | 43.1  | 64.7   |



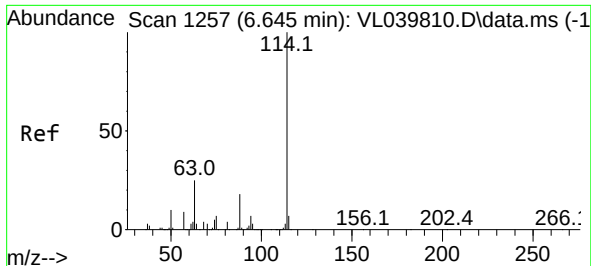
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Cyclohexane  
Concen: 10.323 ppbv  
RT: 6.603 min Scan# 1244  
Delta R.T. 0.010 min  
Lab File: VL039836.D  
Acq: 7 Nov 2022 12:22

Tgt Ion: 84 Resp: 987983

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 84  | 100   |       |       |
| 56  | 137.3 | 114.8 | 172.2 |
| 41  | 81.9  | 68.6  | 103.0 |







#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.652 min Scan# 11

Delta R.T. 0.007 min

Lab File: VL039836.D

Acq: 7 Nov 2022 12:22

Instrument :

MSVOA\_L

ClientSampleId :

E062-1100DL

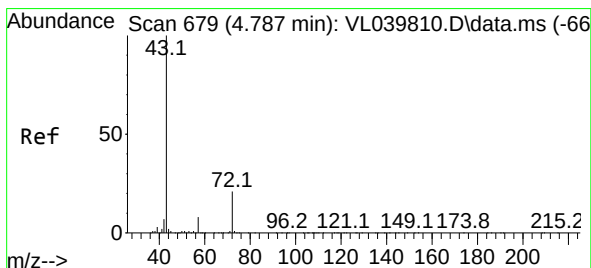
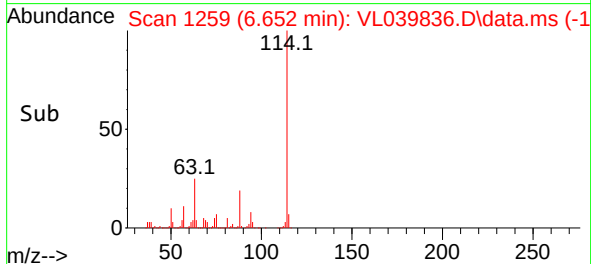
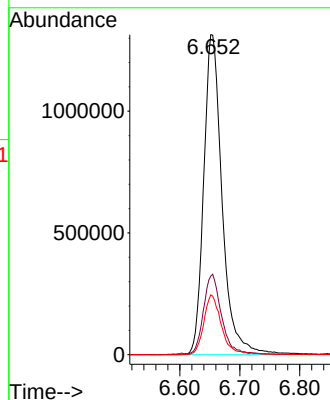
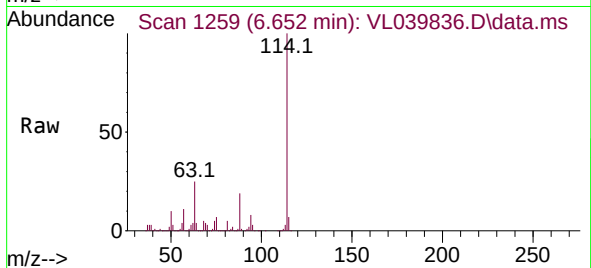
Tgt Ion:114 Resp: 2805109

Ion Ratio Lower Upper

114 100

63 25.3 19.8 29.6

88 18.0 14.4 21.6



#34

2-Butanone

Concen: 13.155 ppbv

RT: 5.221 min Scan# 814

Delta R.T. 0.434 min

Lab File: VL039836.D

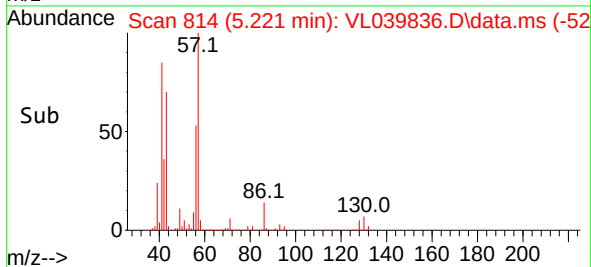
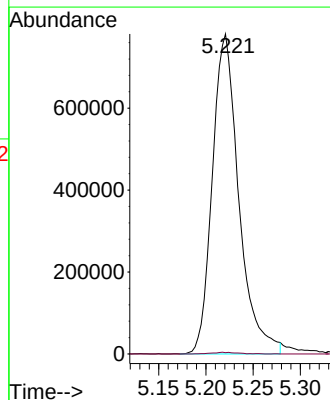
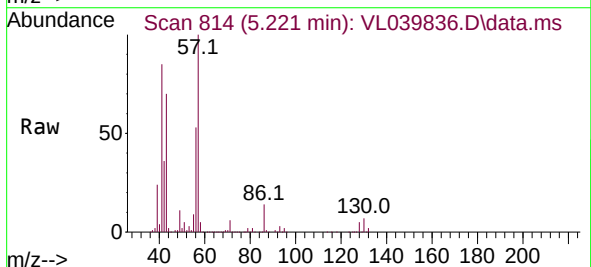
Acq: 7 Nov 2022 12:22

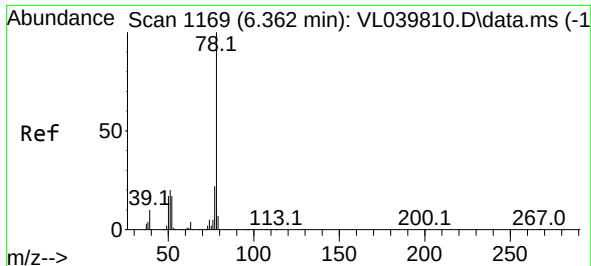
Tgt Ion: 43 Resp: 1522342

Ion Ratio Lower Upper

43 100

72 0.0 17.5 26.3#





#36

Benzene

Concen: 19.009 ppbv

RT: 6.372 min Scan# 1169

Delta R.T. 0.010 min

Lab File: VL039836.D

Acq: 7 Nov 2022 12:22

Instrument :

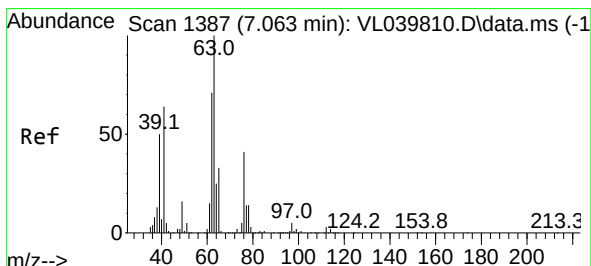
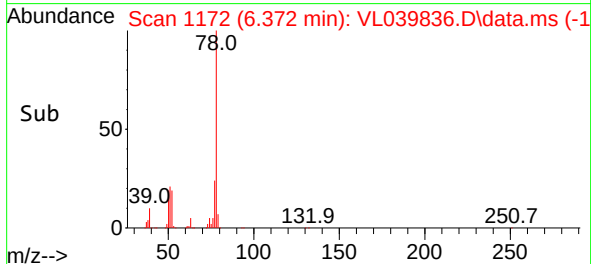
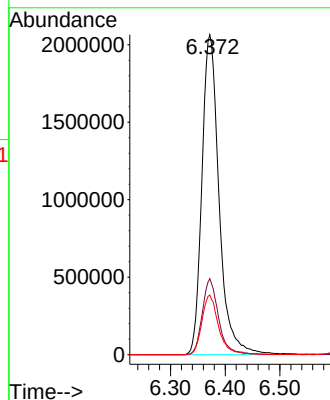
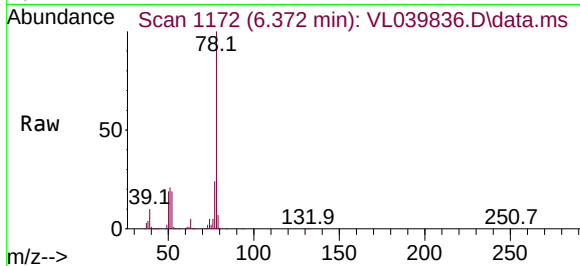
MSVOA\_L

ClientSampleId :

E062-1100DL

Tgt Ion: 78 Resp: 4497958

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 78  | 100   |       |       |
| 77  | 23.8  | 17.4  | 26.2  |
| 50  | 18.7  | 13.9  | 20.9  |



#39

1,2-Dichloropropane

Concen: 13.403 ppbv

RT: 7.073 min Scan# 1390

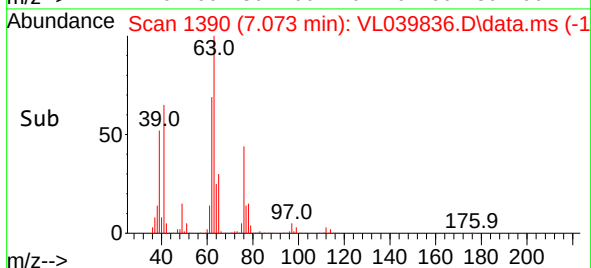
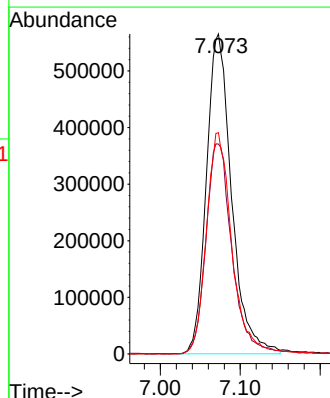
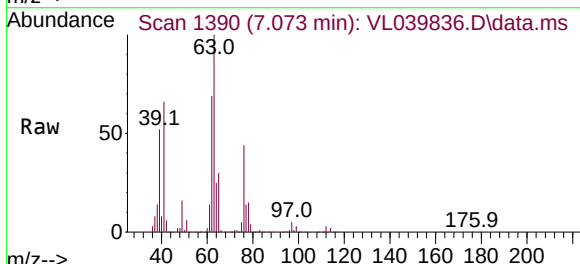
Delta R.T. 0.010 min

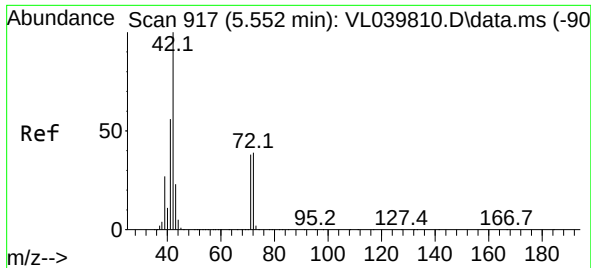
Lab File: VL039836.D

Acq: 7 Nov 2022 12:22

Tgt Ion: 63 Resp: 1235656

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 63  | 100   |       |       |
| 41  | 65.6  | 51.0  | 76.4  |
| 62  | 69.1  | 56.6  | 85.0  |





#41

Tetrahydrofuran

Concen: 8.319 ppbv

RT: 5.221 min Scan# 81

Delta R.T. -0.331 min

Lab File: VL039836.D

Acq: 7 Nov 2022 12:22

Instrument :

MSVOA\_L

ClientSampleId :

E062-1100DL

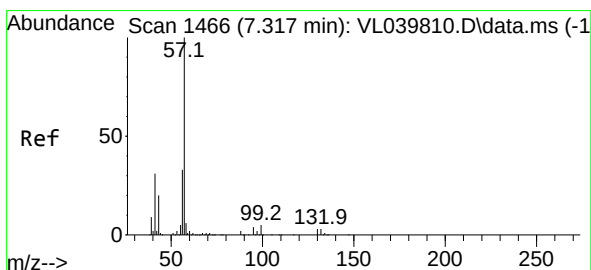
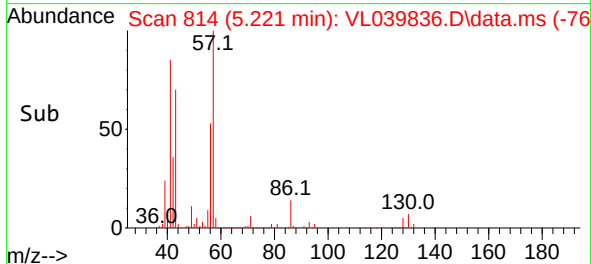
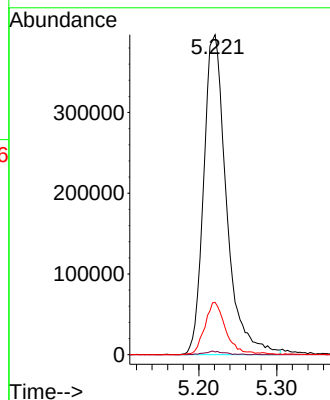
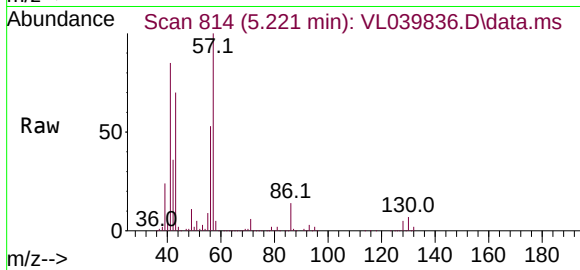
Tgt Ion: 42 Resp: 804611

Ion Ratio Lower Upper

42 100

72 1.0 31.4 47.2#

71 15.4 31.5 47.3#



#44

2,2,4-Trimethylpentane

Concen: 3.666 ppbv

RT: 7.581 min Scan# 1548

Delta R.T. 0.264 min

Lab File: VL039836.D

Acq: 7 Nov 2022 12:22

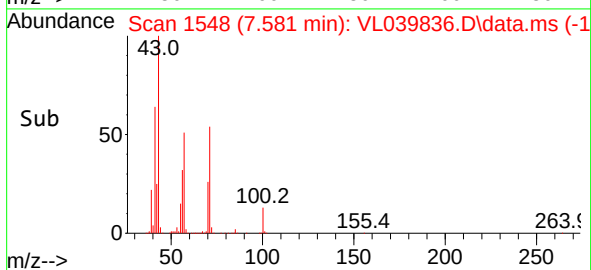
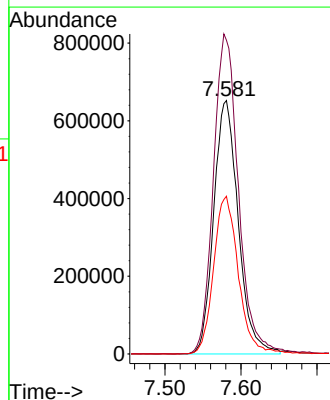
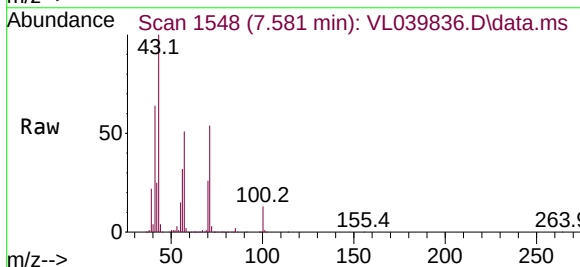
Tgt Ion: 57 Resp: 1464218

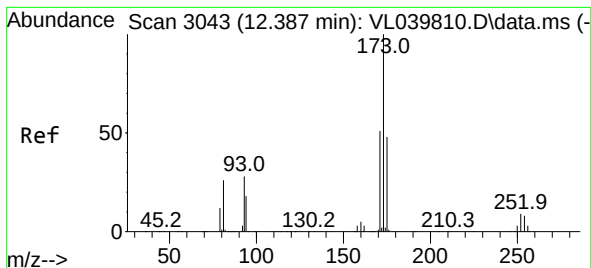
Ion Ratio Lower Upper

57 100

41 129.8 24.6 36.8#

56 63.2 25.4 38.0#





#49

Bromoform

Concen: 13.864 ppbv

RT: 12.397 min Scan# 3043

Delta R.T. 0.010 min

Lab File: VL039836.D

Acq: 7 Nov 2022 12:22

Instrument :

MSVOA\_L

ClientSampleId :

E062-1100DL

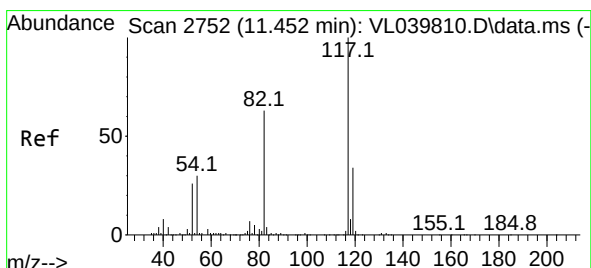
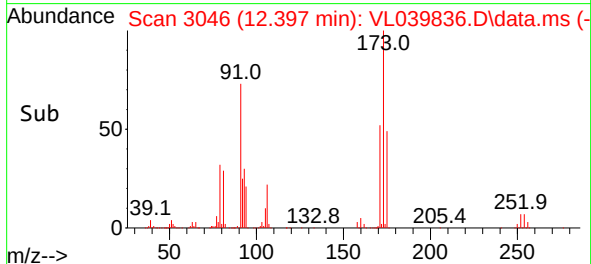
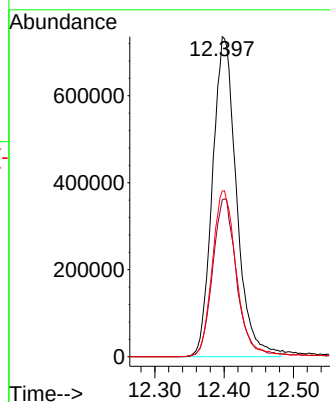
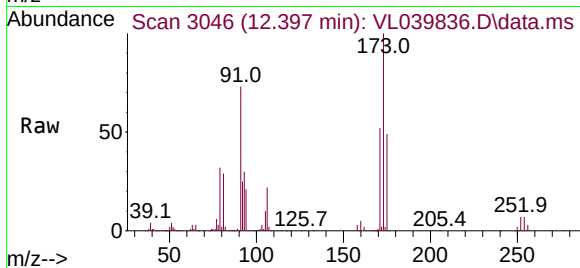
Tgt Ion:173 Resp: 1772614

Ion Ratio Lower Upper

173 100

175 50.1 39.7 59.5

171 53.5 41.7 62.5



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.462 min Scan# 2755

Delta R.T. 0.010 min

Lab File: VL039836.D

Acq: 7 Nov 2022 12:22

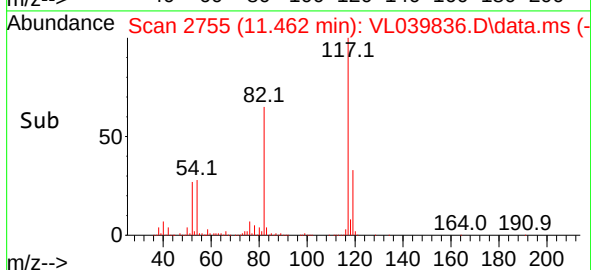
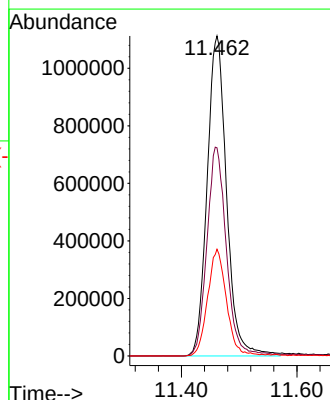
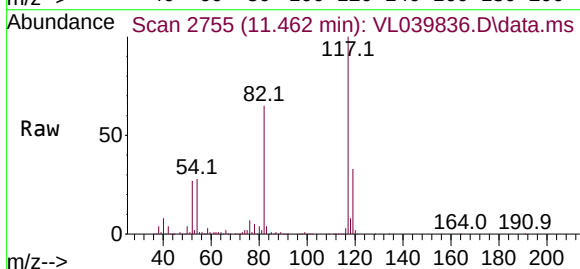
Tgt Ion:117 Resp: 2607776

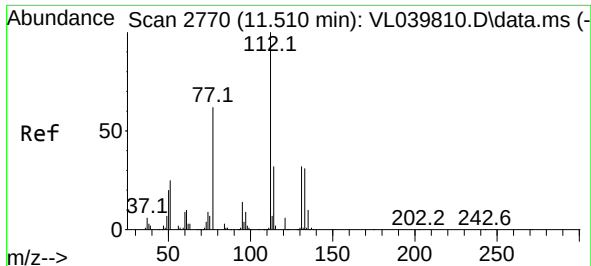
Ion Ratio Lower Upper

117 100

82 66.1 51.0 76.6

119 32.7 24.7 37.1

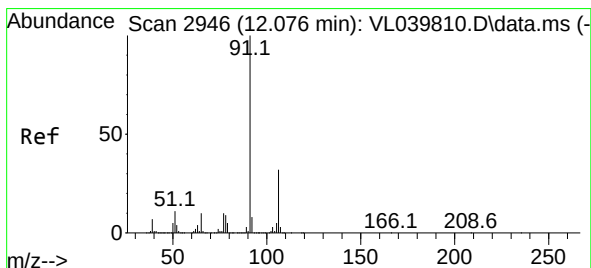
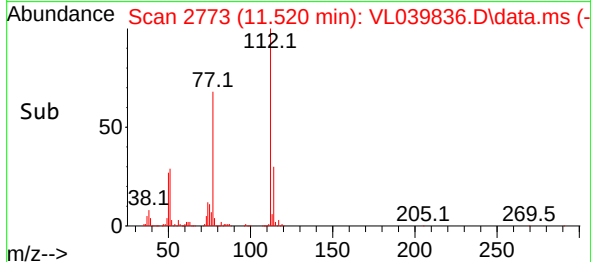
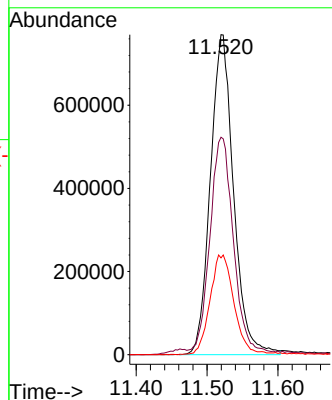
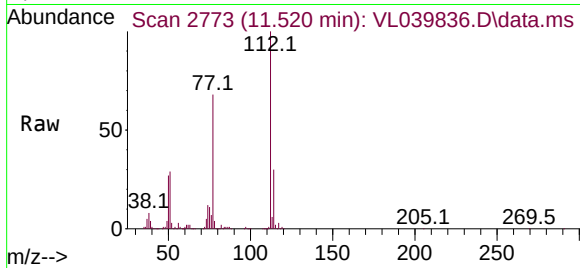




#57  
Chlorobenzene  
Concen: 8.846 ppbv  
RT: 11.520 min Scan# 21  
Delta R.T. 0.010 min  
Lab File: VL039836.D  
Acq: 7 Nov 2022 12:22

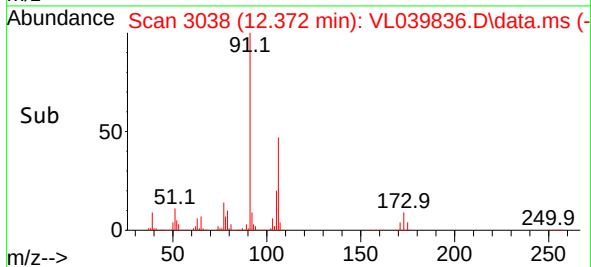
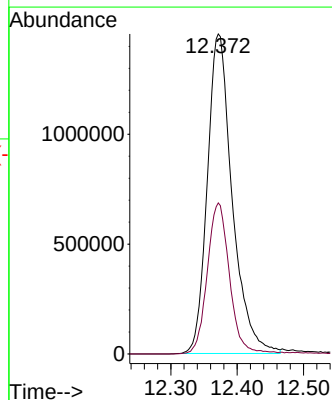
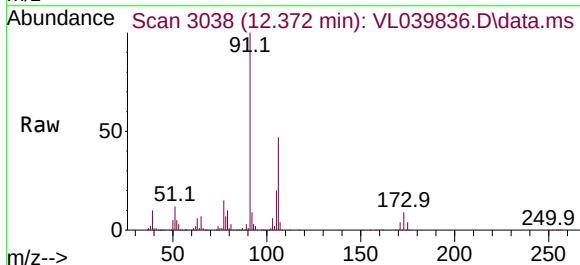
Instrument :  
MSVOA\_1  
ClientSampleId :  
E062-1100DL

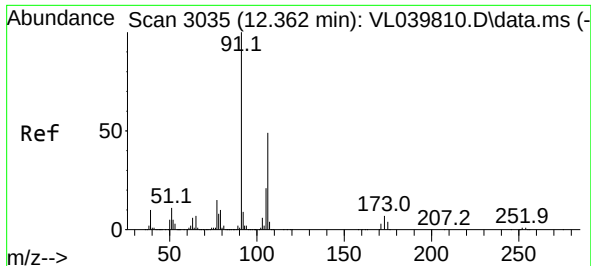
Tgt Ion:112 Resp: 1749723  
Ion Ratio Lower Upper  
112 100  
77 67.2 49.8 74.6  
114 30.1 29.0 35.4



#58  
Ethyl Benzene  
Concen: 10.793 ppbv  
RT: 12.372 min Scan# 3038  
Delta R.T. 0.296 min  
Lab File: VL039836.D  
Acq: 7 Nov 2022 12:22

Tgt Ion: 91 Resp: 3805565  
Ion Ratio Lower Upper  
91 100  
106 47.2 25.9 38.9#





#59

m/p-Xylene

Concen: 12.930 ppbv

RT: 12.372 min Scan# 3038

Delta R.T. 0.010 min

Lab File: VL039836.D

Acq: 7 Nov 2022 12:22

Instrument :

MSVOA\_L

ClientSampleId :

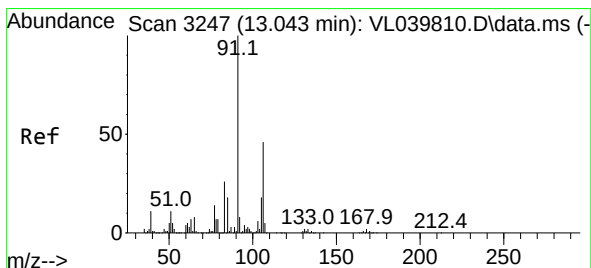
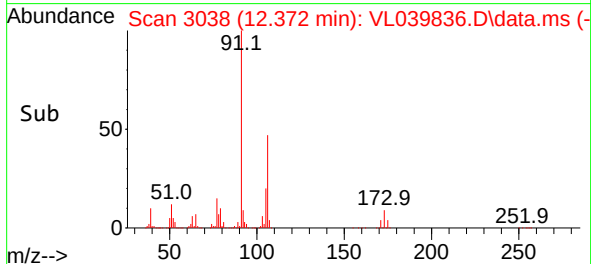
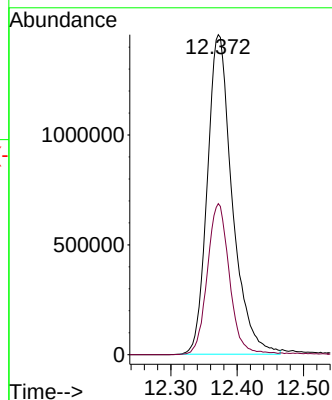
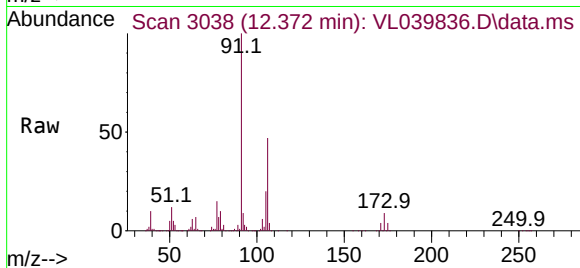
E062-1100DL

Tgt Ion: 91 Resp: 3805565

Ion Ratio Lower Upper

91 100

106 42.2 37.6 56.4



#60

o-Xylene

Concen: 15.093 ppbv

RT: 13.053 min Scan# 3250

Delta R.T. 0.010 min

Lab File: VL039836.D

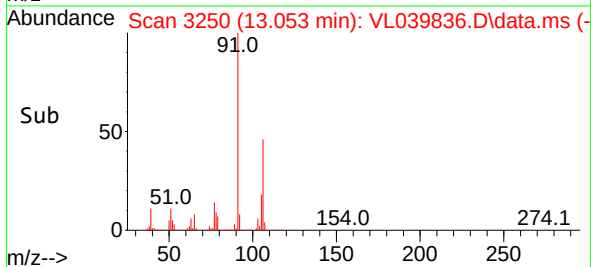
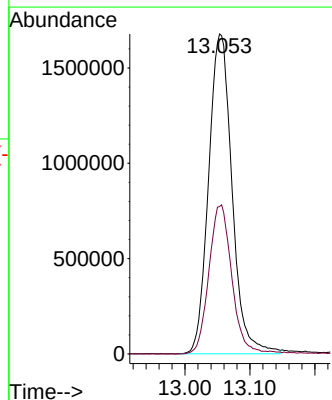
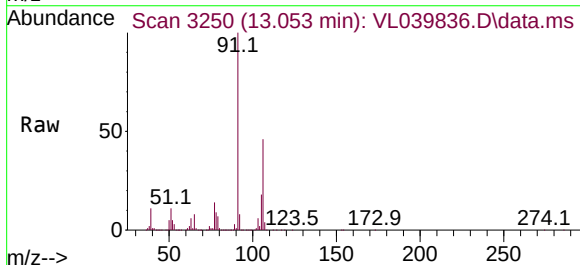
Acq: 7 Nov 2022 12:22

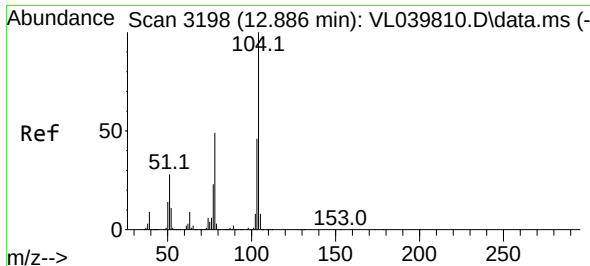
Tgt Ion: 91 Resp: 4208615

Ion Ratio Lower Upper

91 100

106 46.6 23.6 70.8





#61

Styrene

Concen: 0.504 ppbv

RT: 13.053 min Scan# 31

Delta R.T. 0.167 min

Lab File: VL039836.D

Acq: 7 Nov 2022 12:22

Instrument :

MSVOA\_1

ClientSampleId :

E062-1100DL

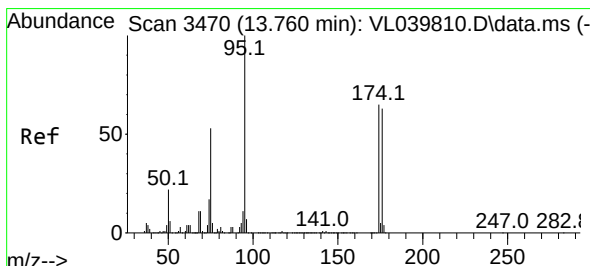
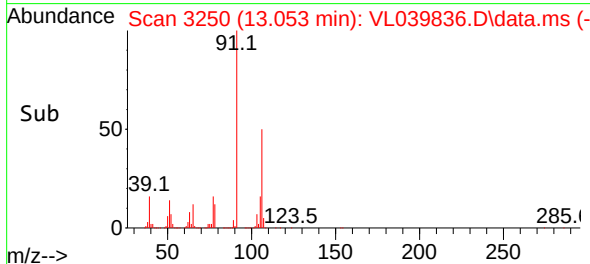
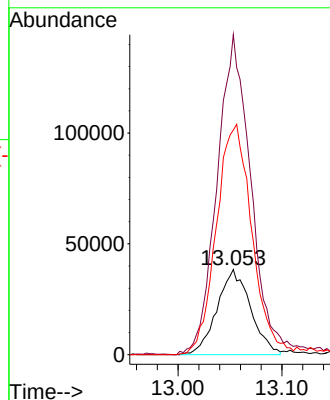
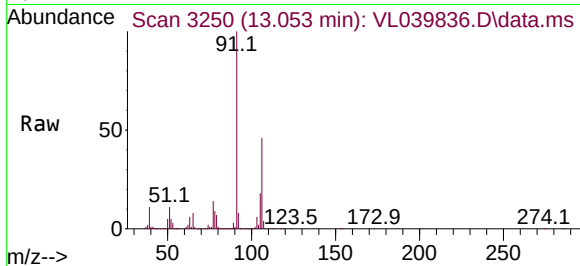
Tgt Ion:104 Resp: 86538

Ion Ratio Lower Upper

104 100

78 386.5 40.2 60.2#

103 295.3 37.5 56.3#



#68

1-Bromo-4-Fluorobenzene

Concen: 10.393 ppbv

RT: 13.770 min Scan# 3473

Delta R.T. 0.010 min

Lab File: VL039836.D

Acq: 7 Nov 2022 12:22

Tgt Ion: 95 Resp: 2028603

Ion Ratio Lower Upper

95 100

174 63.8 53.4 80.0

175 4.6 4.1 6.1

