

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032822\  
 Data File : VL038774.D  
 Acq On : 28 Mar 2022 16:56  
 Operator : SY/AP  
 Sample : N2078-03DL 4X  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 V-3DL

Quant Time: Mar 29 06:11:09 2022  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032122AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon Mar 21 17:09:26 2022  
 QLast Update : Mon Mar 21 17:09:26 2022  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.67  | 49   | 806210   | 10.00 | ppbv  | 0.01     |
| 33) 1,4-Difluorobenzene | 7.18  | 114  | 2126848  | 10.00 | ppbv  | 0.01     |
| 55) Chlorobenzene-d5    | 12.09 | 117  | 1802084  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.42  | 95    | 1334224  | 9.66     | ppbv | 0.01   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 96.60% |

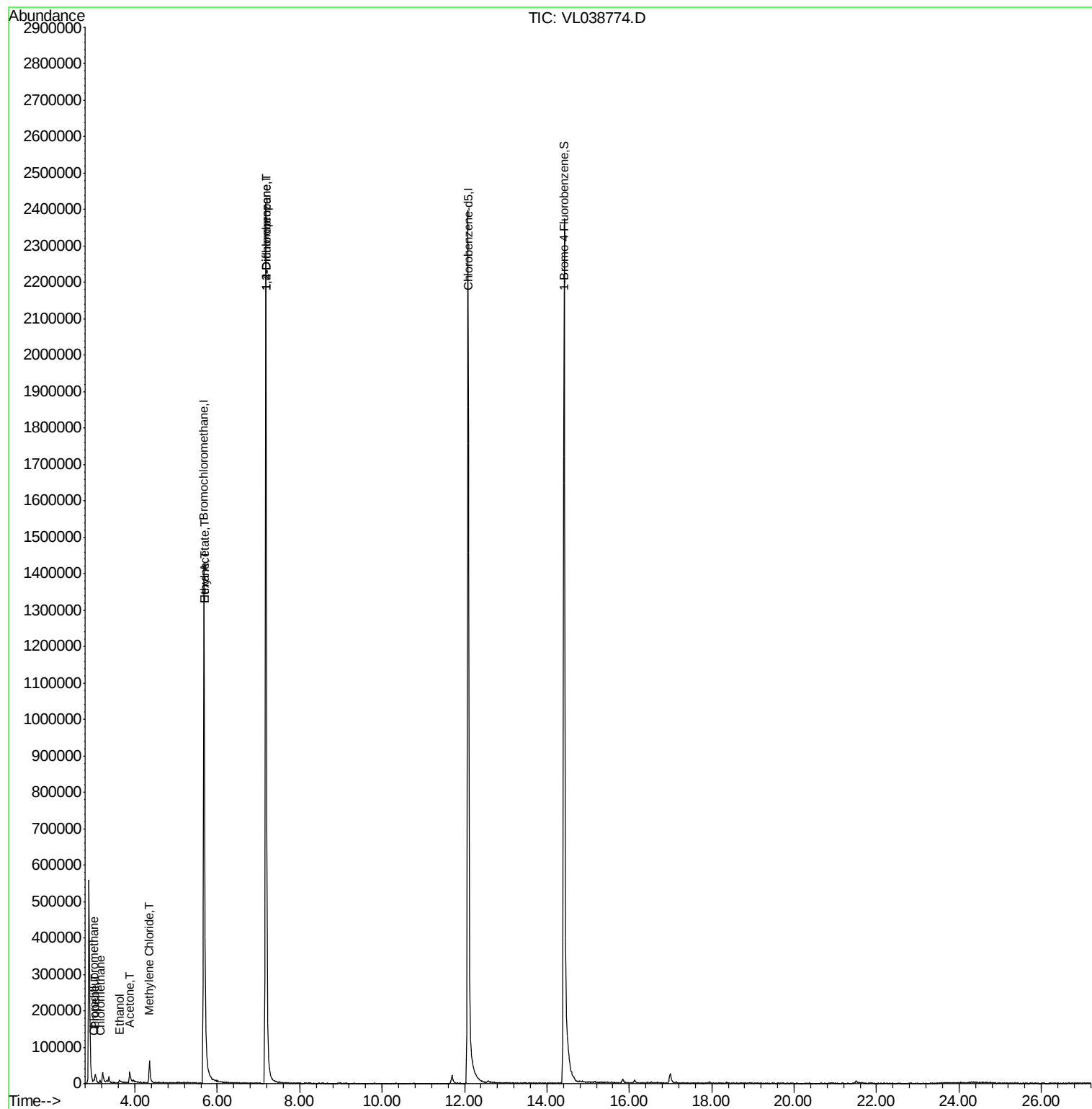
| Target Compounds         | R.T. | QIon | Response | Conc  | Units  | Ovalue |
|--------------------------|------|------|----------|-------|--------|--------|
| 3) Chlorodifluoromethane | 3.00 | 51   | 7180     | 0.084 | ppbv   | 96     |
| 4) Chloromethane         | 3.15 | 50   | 7438     | 0.159 | ppbv # | 86     |
| 9) Propene               | 3.03 | 41   | 5924     | 0.144 | ppbv   | 99     |
| 13) Ethanol              | 3.63 | 45   | 7024     | 1.549 | ppbv # | 31     |
| 15) Acetone              | 3.87 | 43   | 40338    | 0.580 | ppbv   | 94     |
| 20) Methylene Chloride   | 4.35 | 84   | 26932    | 0.919 | ppbv   | 98     |
| 25) Ethyl Acetate        | 5.69 | 43   | 9223     | 0.053 | ppbv # | 76     |
| 26) Hexane               | 5.69 | 57   | 8654     | 0.110 | ppbv # | 35     |
| 39) 1,2-Dichloropropane  | 7.18 | 63   | 500581   | 7.801 | ppbv # | 29     |

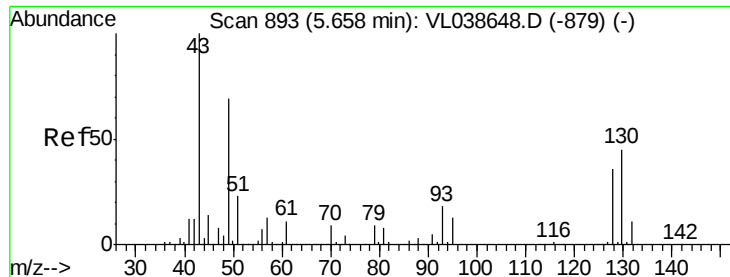
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL032822\  
Data File : VL038774.D  
Acq On : 28 Mar 2022 16:56  
Operator : SY/AP  
Sample : N2078-03DL 4X  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
V-3DL

Quant Time: Mar 29 06:11:09 2022  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032122AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon Mar 21 17:09:26 2022  
QLast Update : Mon Mar 21 17:09:26 2022  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

Acq: 28 Mar 2022 16:56

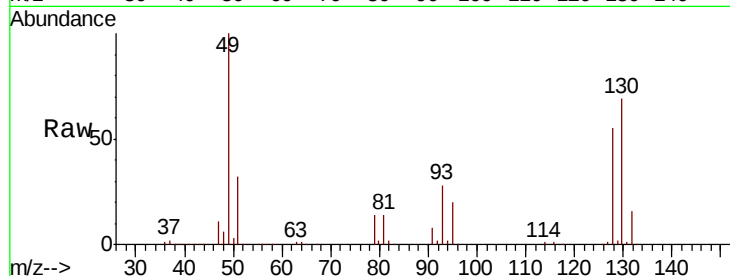
Tot Ion: 49 Resp: 806210

Ion Ratio Lower Upper

49 100

128 57.1 26.2 78.6

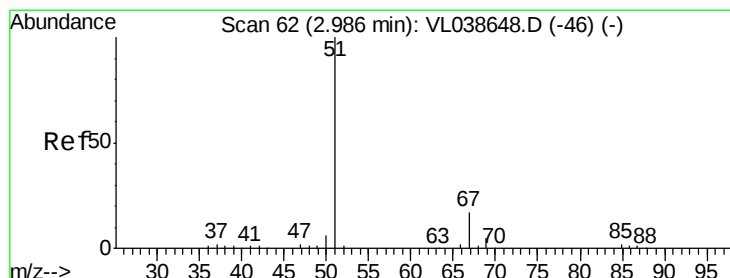
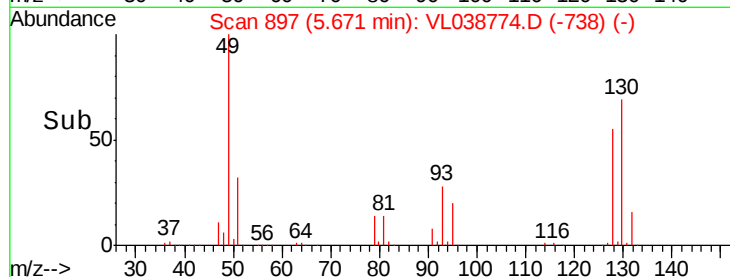
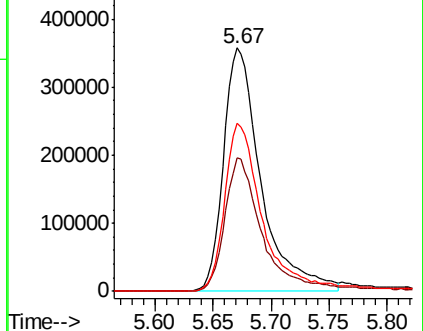
130 72.9 33.7 101.1



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#3

Chlorodifluoromethane

Concen: 0.084 ppbv

RT: 3.00 min Scan# 66

Delta R.T. 0.01 min

Lab File: VL038774.D

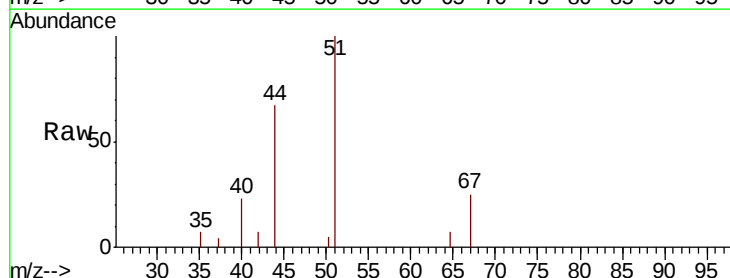
Acq: 28 Mar 2022 16:56

Tgt Ion: 51 Resp: 7180

Ion Ratio Lower Upper

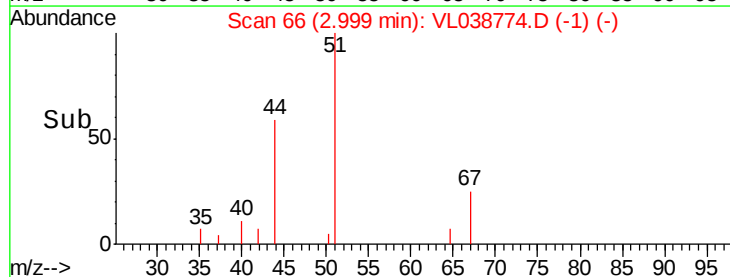
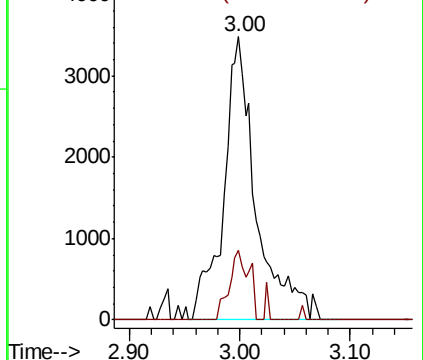
51 100

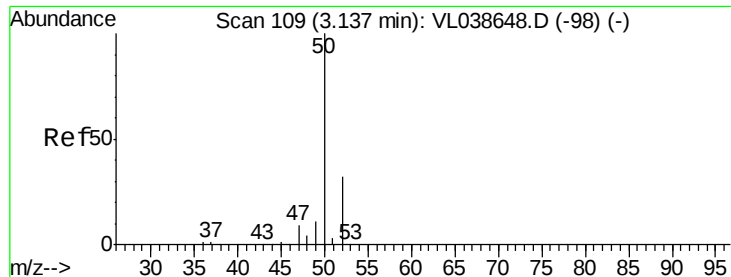
67 15.9 14.1 21.1



Abundance Ion 51.00 (50.70 to 51.70): VL0

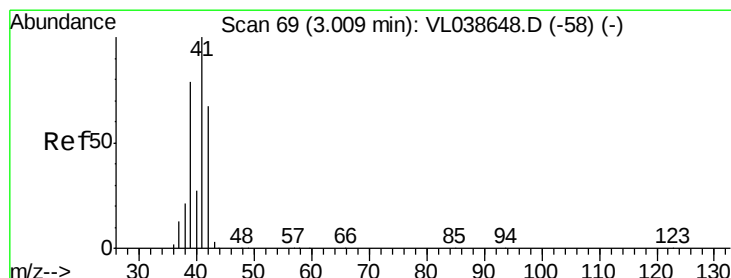
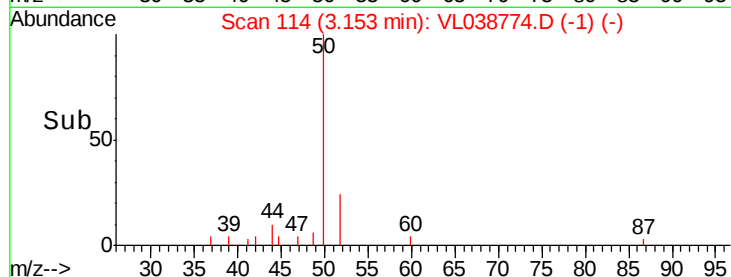
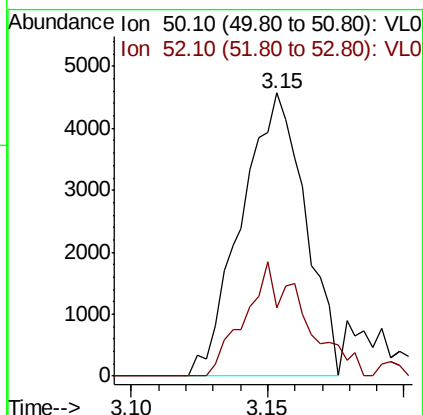
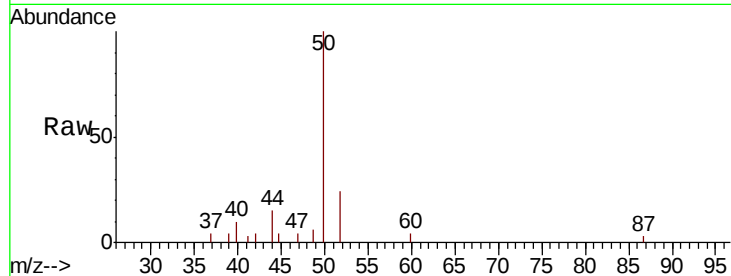
Ion 67.00 (66.70 to 67.70): VL0





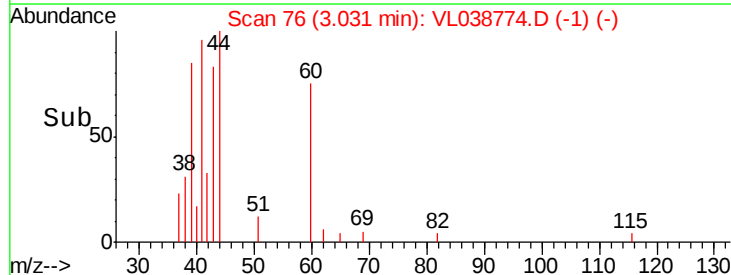
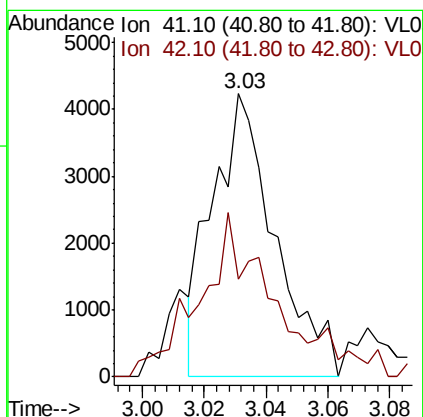
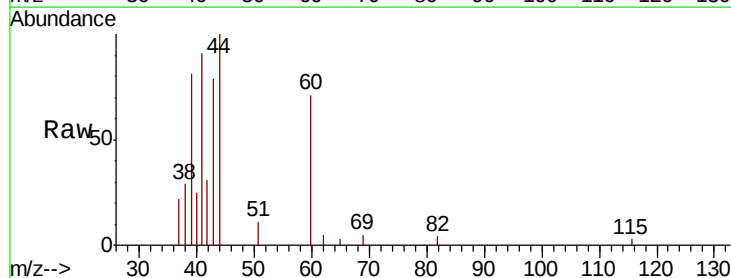
#4  
Chloromethane  
Concen: 0.159 ppbv  
RT: 3.15  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 28 Mar 2022 16:56

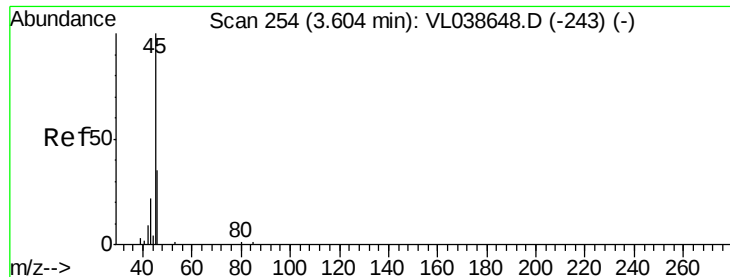
Tot Ion: 50 Resp: 7438  
Ion Ratio Lower Upper  
50 100  
52 24.3 25.5 38.3#



#9  
Propene  
Concen: 0.144 ppbv  
RT: 3.03 min Scan# 76  
Delta R.T. 0.02 min  
Lab File: VL038774.D  
Acq: 28 Mar 2022 16:56

Tgt Ion: 41 Resp: 5924  
Ion Ratio Lower Upper  
41 100  
42 71.2 56.2 84.4





#13

Ethanol

Concen: 1.549 ppbv

RT: 3.63 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

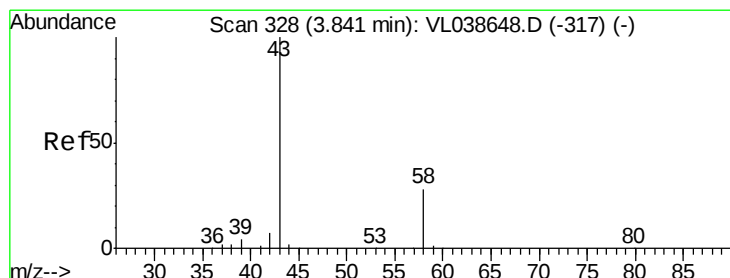
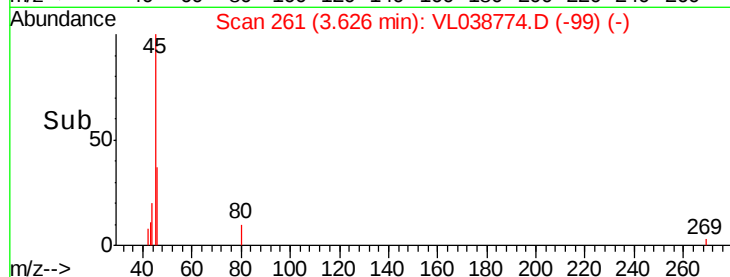
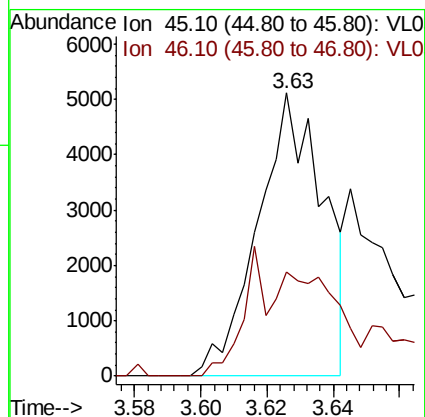
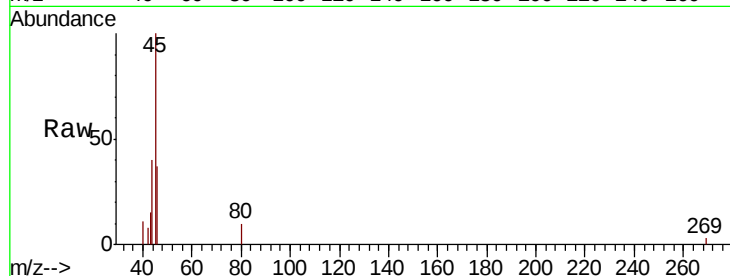
Acq: 28 Mar 2022 16:56

Tot Ion: 45 Resp: 7024

Ion Ratio Lower Upper

45 100

46 79.2 15.1 60.5#



#15

Acetone

Concen: 0.580 ppbv

RT: 3.87 min Scan# 338

Delta R.T. 0.03 min

Lab File: VL038774.D

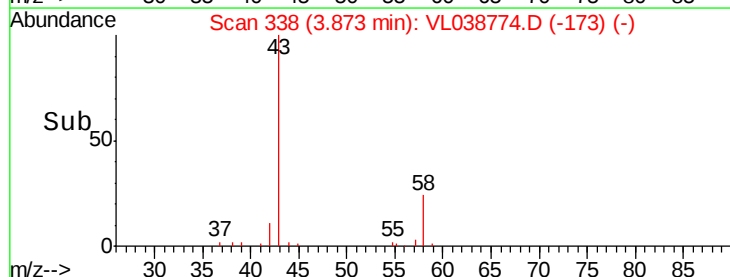
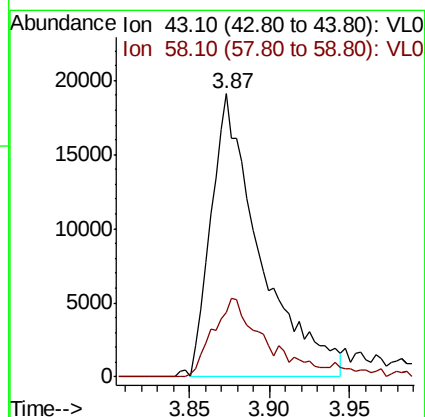
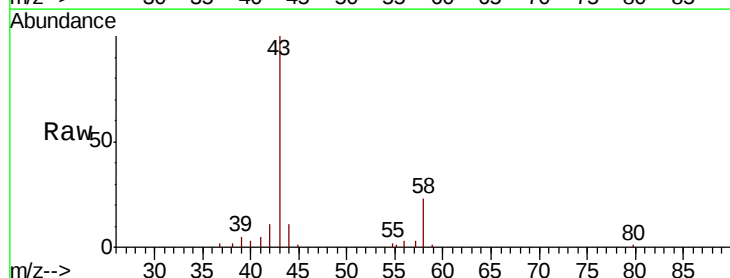
Acq: 28 Mar 2022 16:56

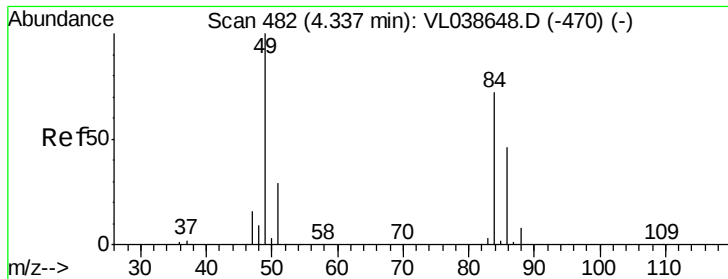
Tgt Ion: 43 Resp: 40338

Ion Ratio Lower Upper

43 100

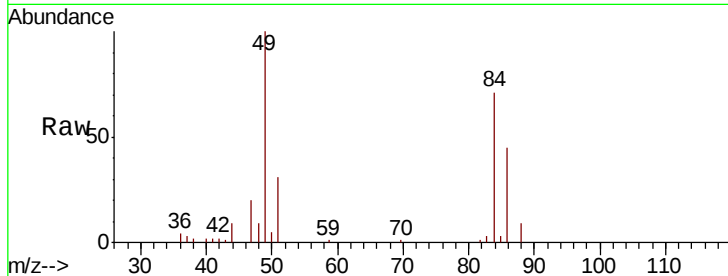
58 32.1 23.3 34.9





#20  
Methvlene Chloride  
Concen: 0.919 ppbv  
RT: 4.35  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 28 Mar 2022 16:56

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 26932 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 140.5 | 111.2 | 166.8 |
| 51       | 43.8  | 32.8  | 49.2  |
| 86       | 63.1  | 51.4  | 77.0  |



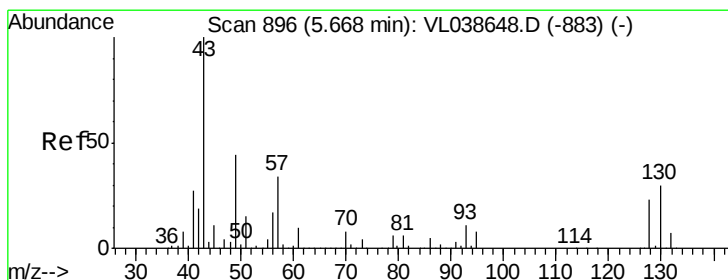
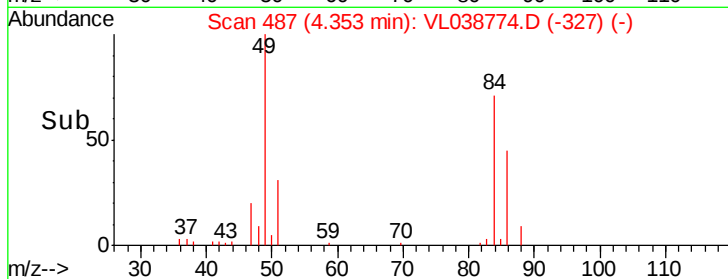
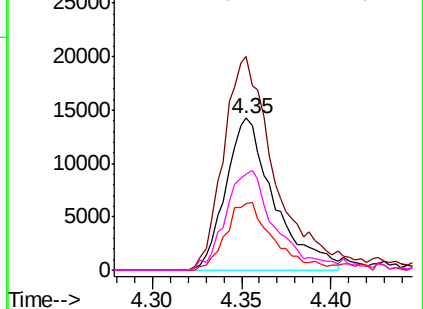
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

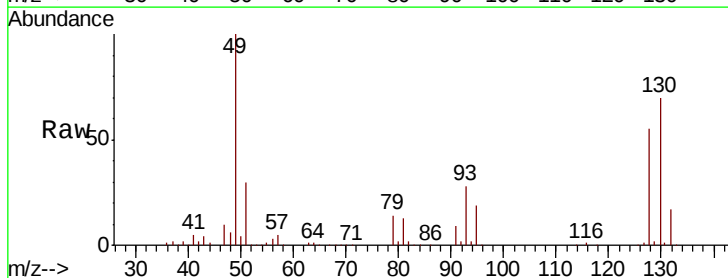
Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#25  
Ethyl Acetate  
Concen: 0.053 ppbv  
RT: 5.69 min Scan# 903  
Delta R.T. 0.02 min  
Lab File: VL038774.D  
Acq: 28 Mar 2022 16:56

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 9223  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 45       | 0.0   | 8.2   | 12.4# |
| 61       | 0.0   | 8.3   | 12.5# |
| 70       | 1.9   | 5.6   | 8.4#  |



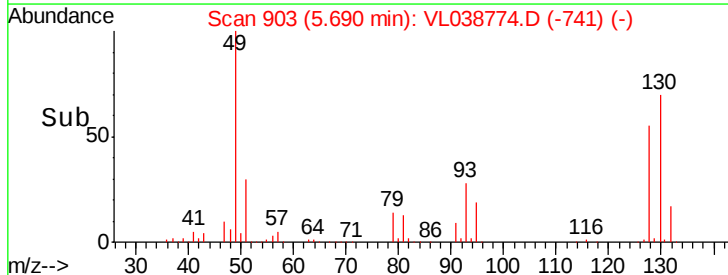
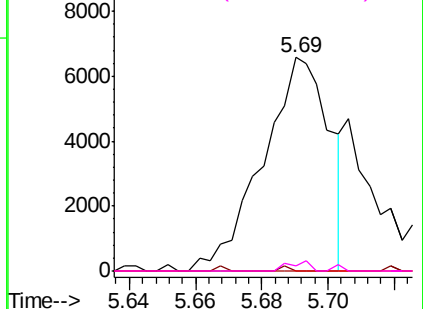
Abundance

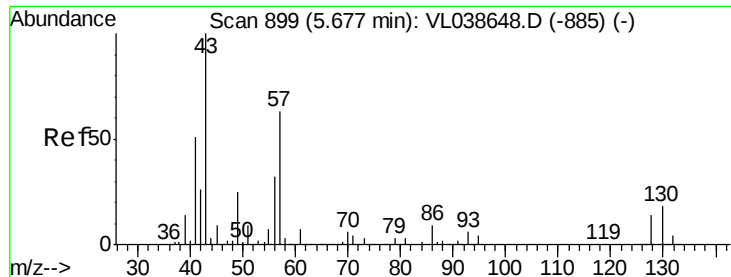
Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

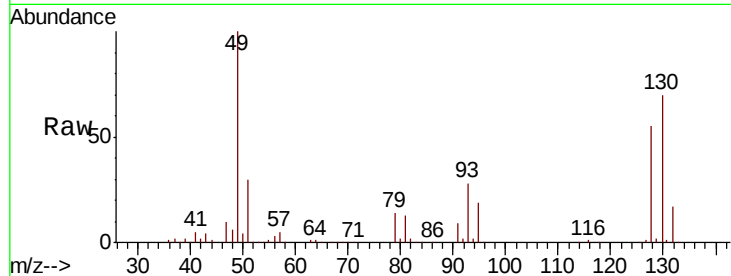
Ion 70.10 (69.80 to 70.80): VL0



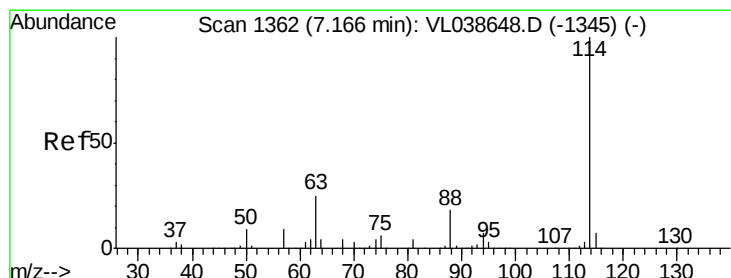
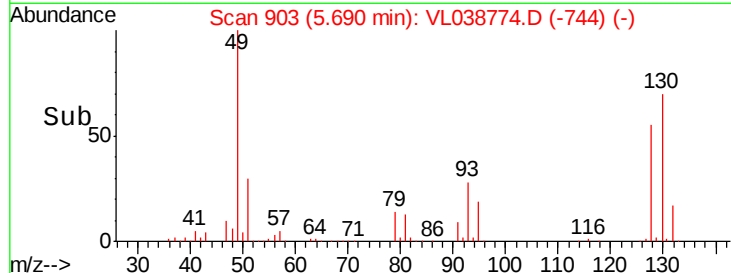
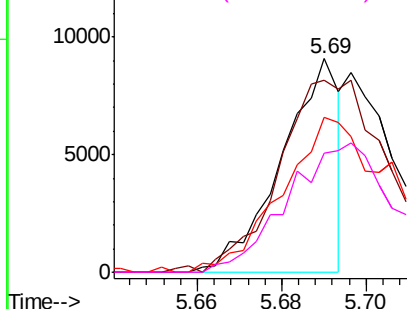


#26  
Hexane  
Concen: 0.110 ppbv  
RT: 5.69  
Instrument: MSVOA\_1  
Delta R.T.:  
Lab File: ClientSampleId:  
V-3DL  
Acq: 28 Mar 2022 16:56

Tot Ion: 57 Resp: 8654  
Ion Ratio Lower Upper  
57 100  
41 195.7 67.0 100.4#  
43 160.6 184.2 276.2#  
56 0.0 42.6 64.0#

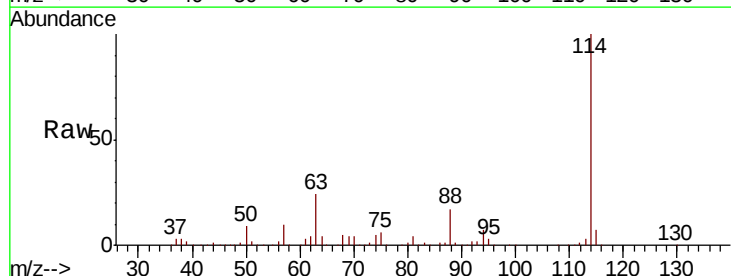


Abundance Ion 57.10 (56.80 to 57.80): VL0  
Ion 41.10 (40.80 to 41.80): VL0  
Ion 43.10 (42.80 to 43.80): VL0  
Ion 56.10 (55.80 to 56.80): VL0

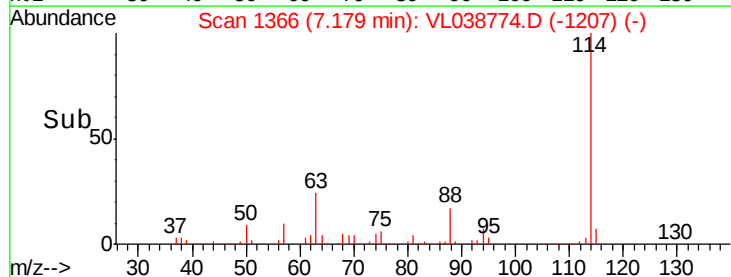
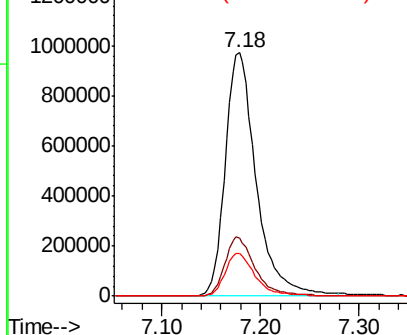


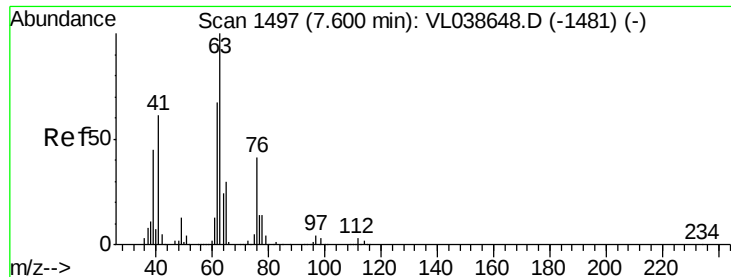
#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 7.18 min Scan# 1366  
Delta R.T. 0.01 min  
Lab File: VL038774.D  
Acq: 28 Mar 2022 16:56

Tgt Ion:114 Resp: 2126848  
Ion Ratio Lower Upper  
114 100  
63 24.0 19.4 29.0  
88 17.5 13.9 20.9



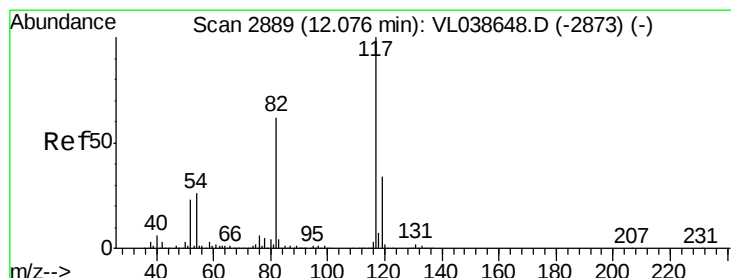
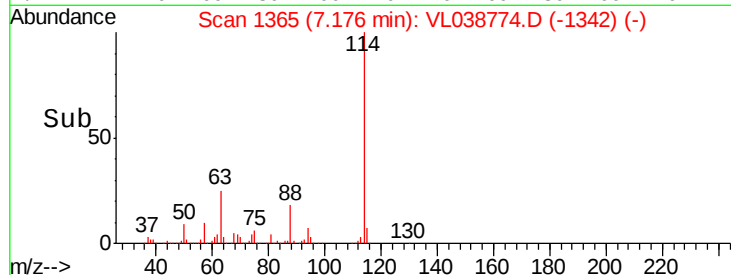
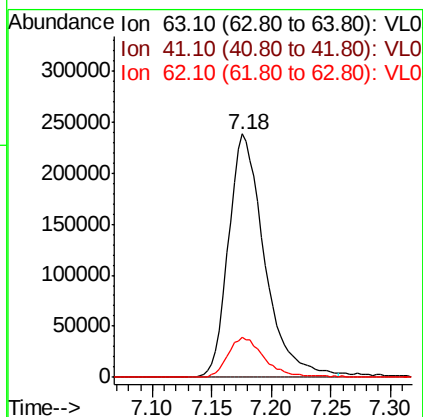
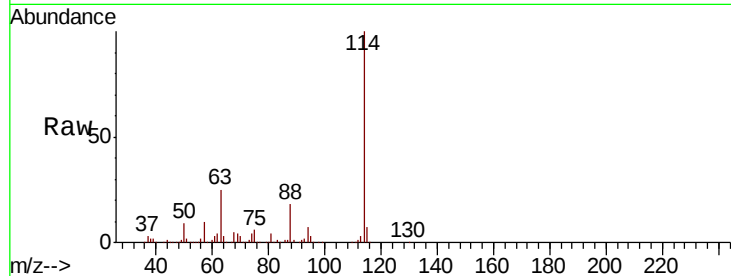
Abundance Ion 114.10 (113.80 to 114.80): V  
Ion 63.10 (62.80 to 63.80): VL0  
Ion 88.10 (87.80 to 88.80): VL0





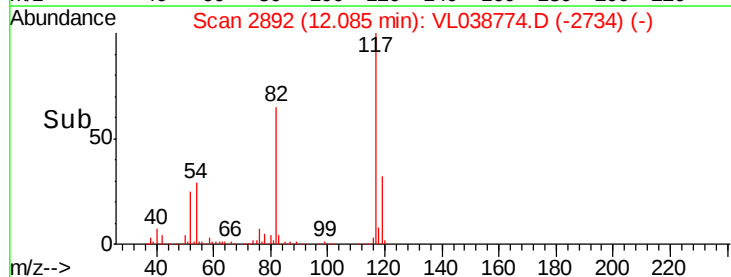
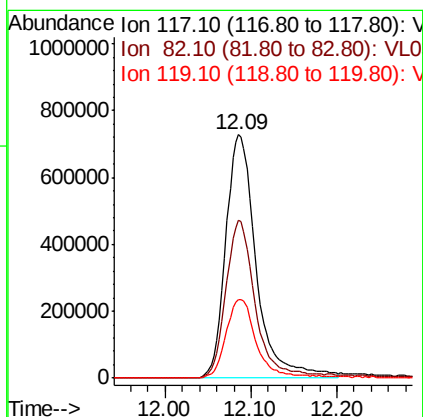
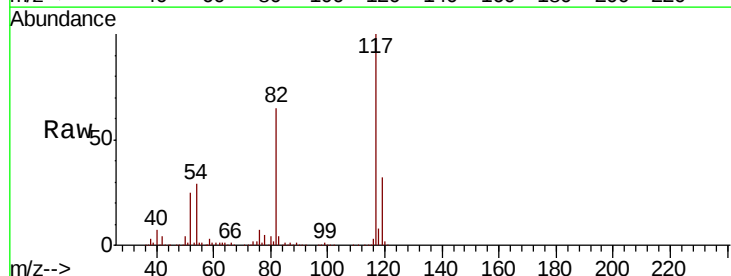
#39  
 1,2-Dichloropropane  
 Concen: 7.801 ppbv  
 RT: 7.18  
 Instrument: MSVOA\_L  
 Delta R.T.:  
 Lab File: ClientSampleId:  
 V-3DL  
 Acq: 28 Mar 2022 16:56

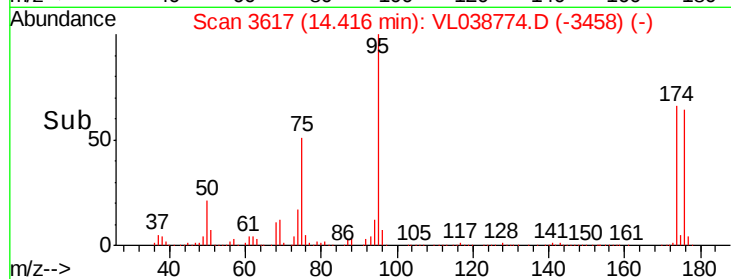
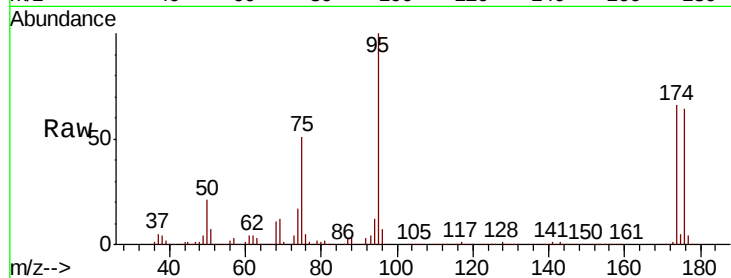
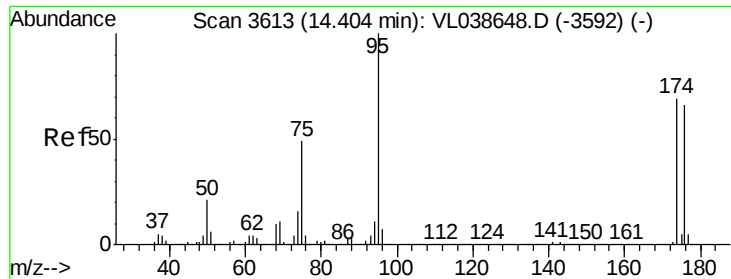
| Tot Ion   | 63    | Resp  | 500581 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 63        | 100   |       |        |
| 41        | 0.0   | 49.0  | 73.6#  |
| 62        | 16.4  | 53.9  | 80.9#  |



#55  
 Chlorobenzene-d5  
 Concen: 10.000 ppbv  
 RT: 12.09 min Scan# 2892  
 Delta R.T.: 0.01 min  
 Lab File: VL038774.D  
 Acq: 28 Mar 2022 16:56

| Tgt Ion   | 117   | Resp  | 1802084 |
|-----------|-------|-------|---------|
| Ion Ratio | Lower | Upper |         |
| 117       | 100   |       |         |
| 82        | 65.9  | 51.6  | 77.4    |
| 119       | 32.7  | 26.9  | 40.3    |





#68

1-Bromo-4-Fluorobenzene

Concen: 9.657 ppbv

RT: 14.42

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

Acq: 28 Mar 2022 18:38

Tot Ion: 95 Resp: 1334224

Ion Ratio Lower Upper

95 100

174 71.9 56.1 84.1

175 5.1 4.2 6.2

