

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL062918\  
 Data File : VL032172.D  
 Acq On : 30 Jun 2018 15:48  
 Operator : SY/AP  
 Sample : J3601-08DL 10X  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 RESIDENT-C-CRAWL-SPACEDL

Quant Time: Jul 02 00:52:10 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL062918AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Fri Jun 29 22:27:58 2018  
 QLast Update : Fri Jun 29 22:27:58 2018  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.85  | 49   | 1384341  | 10.00 | ppbv  | -0.02    |
| 33) 1,4-Difluorobenzene | 7.38  | 114  | 3324068  | 10.00 | ppbv  | -0.02    |
| 55) Chlorobenzene-d5    | 12.34 | 117  | 3519634  | 10.00 | ppbv  | -0.02    |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 14.68  | 95    | 2479015  | 9.21     | ppbv | -0.02  |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 92.10% |

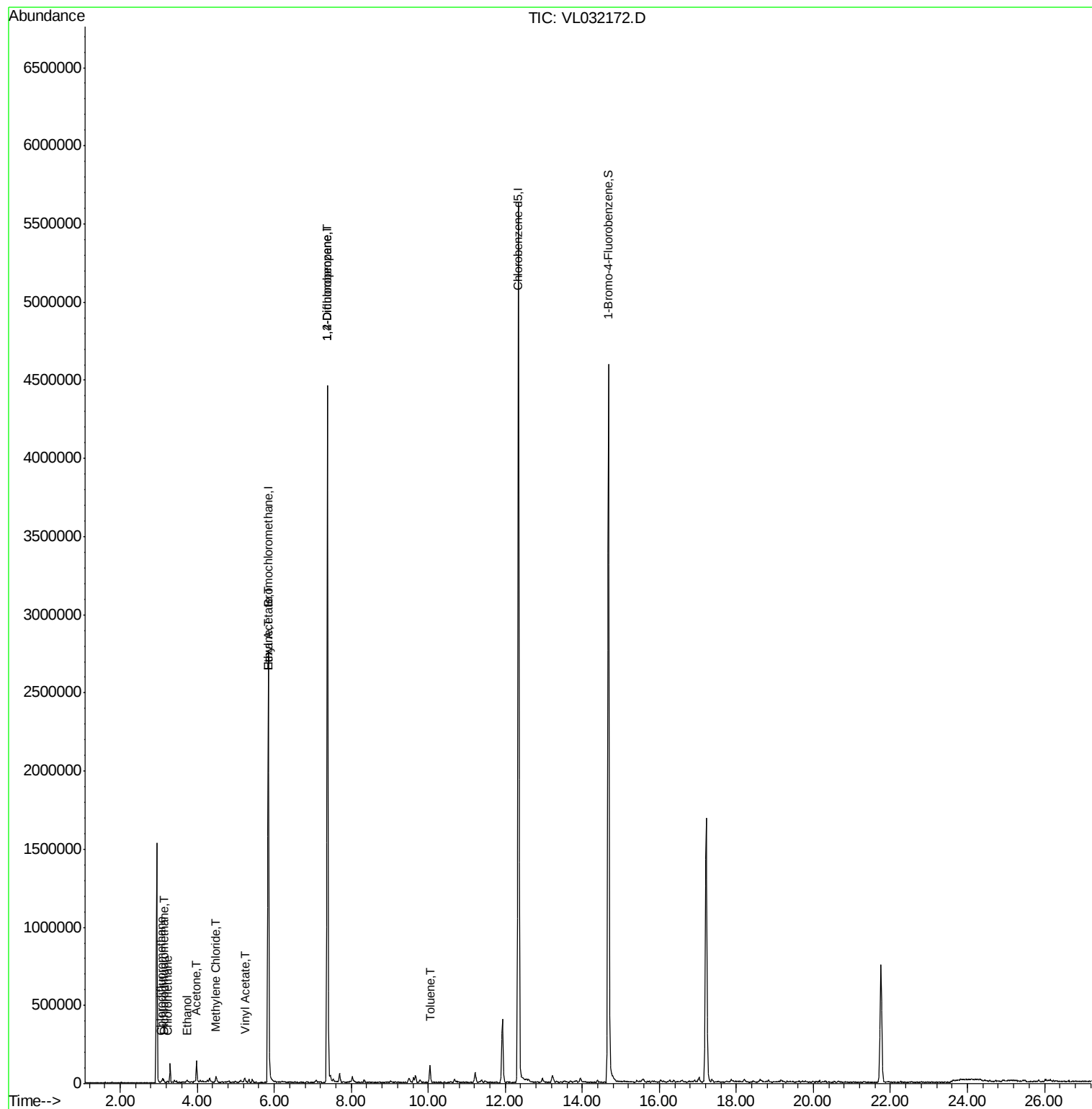
| Target Compounds           | R.T.  | QIon | Response | Conc  | Units  | Qvalue |
|----------------------------|-------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane | 3.13  | 85   | 6555     | 0.036 | ppbv   | 95     |
| 3) Chlorodifluoromethane   | 3.07  | 51   | 7249     | 0.043 | ppbv   | 99     |
| 4) Chloromethane           | 3.23  | 50   | 4166     | 0.046 | ppbv # | 84     |
| 13) Ethanol                | 3.73  | 45   | 4756     | 0.199 | ppbv # | 38     |
| 15) Acetone                | 3.98  | 43   | 135222   | 0.835 | ppbv   | 90     |
| 20) Methylene Chloride     | 4.48  | 84   | 11201    | 0.189 | ppbv # | 80     |
| 23) Vinyl Acetate          | 5.23  | 43   | 19415    | 0.066 | ppbv # | 88     |
| 25) Ethyl Acetate          | 5.86  | 43   | 12703    | 0.038 | ppbv # | 88     |
| 26) Hexane                 | 5.86  | 57   | 11840    | 0.077 | ppbv # | 51     |
| 39) 1,2-Dichloropropane    | 7.38  | 63   | 866027   | 6.825 | ppbv # | 26     |
| 53) Toluene                | 10.05 | 91   | 87166    | 0.224 | ppbv   | 98     |

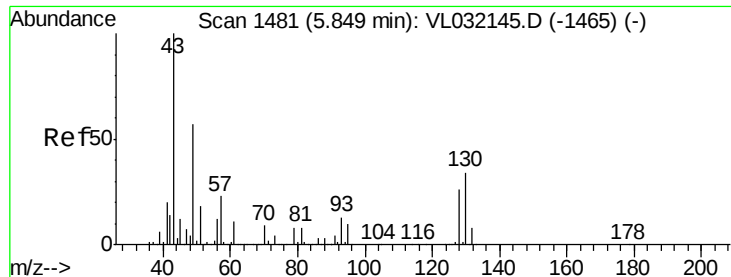
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
MSVOA\_L  
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RESIDENT-C-CRAWL-SPACDL

Quant Time: Jul 02 00:52:10 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_L\METHODS\VL062918AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Jun 29 22:27:58 2018  
QLast Update : Fri Jun 29 22:27:58 2018  
Response via : Initial Calibration

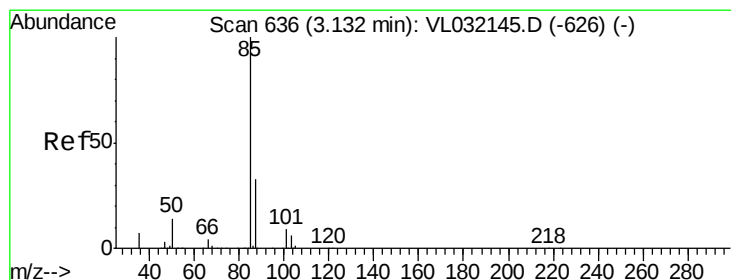
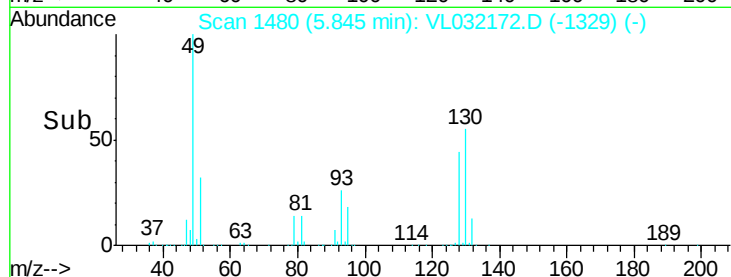
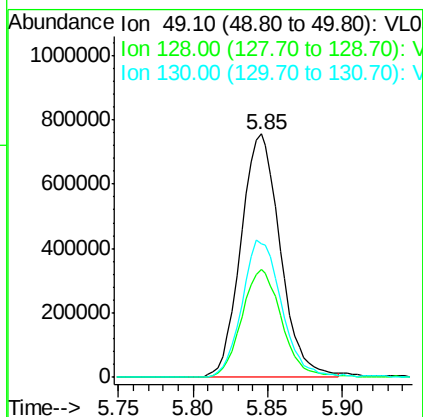
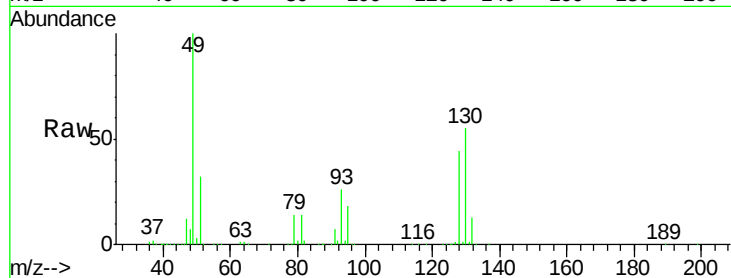




#1  
 Bromochloromethane  
 Concen: 10.000 ppbv  
 RT: 5.85 min Scan# 1480  
 Delta R.T. -0.02 min  
 Lab File: VL032172.D  
 Acq: 30 Jun 2018 15:48

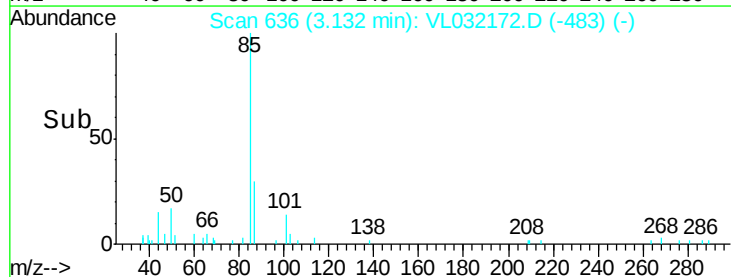
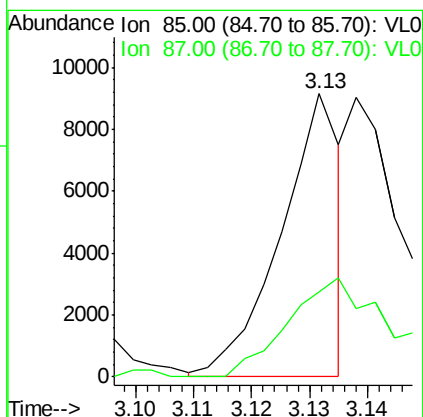
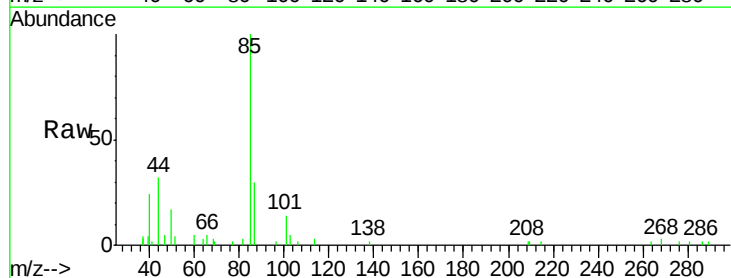
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 RESIDENT-C-CRAWL-SPACEDL

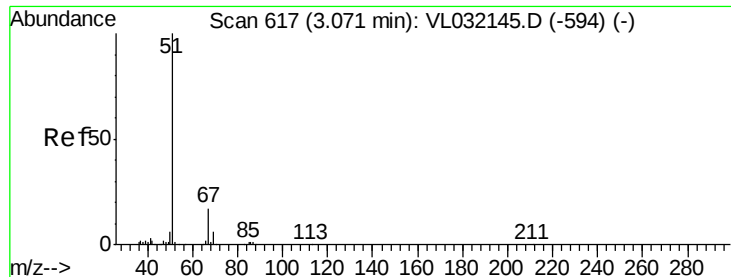
Tgt Ion: 49 Resp: 1384341  
 Ion Ratio Lower Upper  
 49 100  
 128 45.2 23.4 70.0  
 130 57.6 30.3 90.9



#2  
 Dichlorodifluoromethane  
 Concen: 0.036 ppbv  
 RT: 3.13 min Scan# 636  
 Delta R.T. -0.01 min  
 Lab File: VL032172.D  
 Acq: 30 Jun 2018 15:48

Tgt Ion: 85 Resp: 6555  
 Ion Ratio Lower Upper  
 85 100  
 87 30.6 26.7 40.1





#3

Chlorodifluoromethane

Concen: 0.043 ppbv

RT: 3.07 min Scan# 618

Delta R.T. -0.00 min

Lab File: VL032172.D

Acq: 30 Jun 2018 15:48

Instrument :

MSVOA\_L

ClientSampleId :

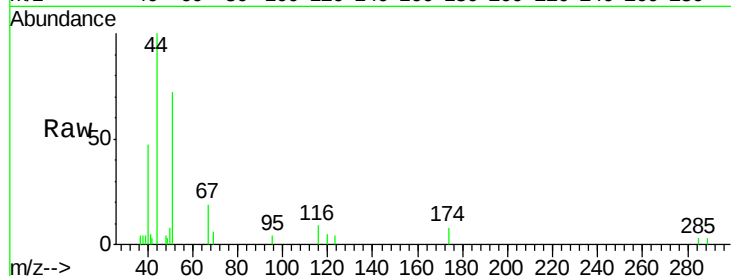
RESIDENT-C-CRAWL-SPACEDL

Tgt Ion: 51 Resp: 7249

Ion Ratio Lower Upper

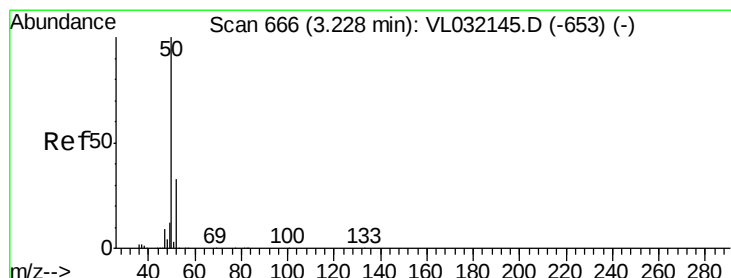
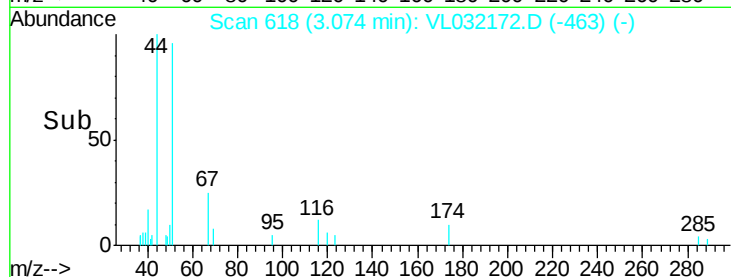
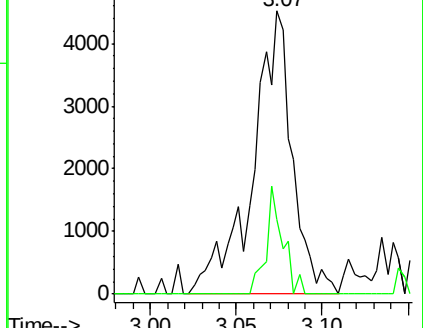
51 100

67 16.1 13.2 19.8



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.046 ppbv

RT: 3.23 min Scan# 666

Delta R.T. -0.01 min

Lab File: VL032172.D

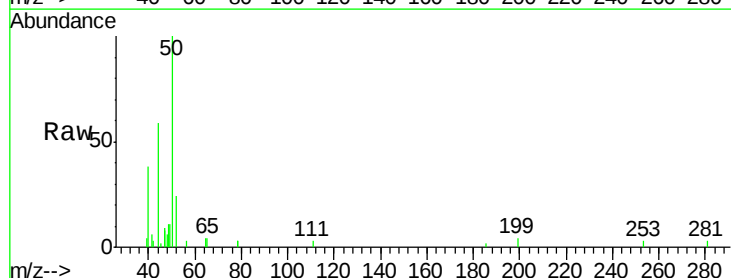
Acq: 30 Jun 2018 15:48

Tgt Ion: 50 Resp: 4166

Ion Ratio Lower Upper

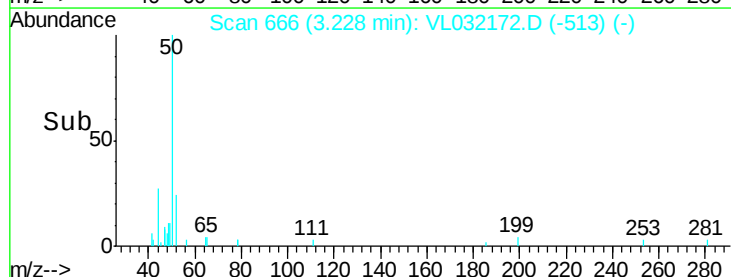
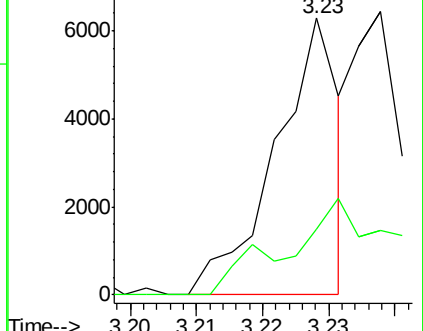
50 100

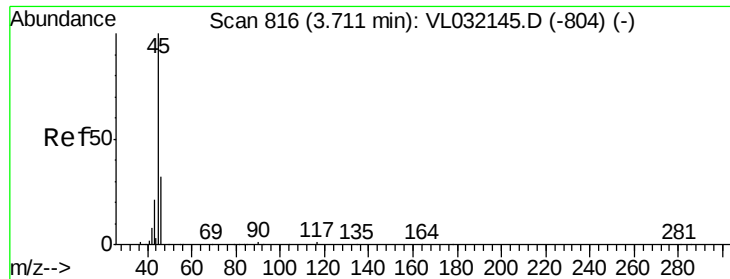
52 23.6 26.0 39.0#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#13

Ethanol

Concen: 0.199 ppbv

RT: 3.73 min Scan# 822

Delta R.T. 0.01 min

Lab File: VL032172.D

Acq: 30 Jun 2018 15:48

Instrument :

MSVOA\_L

ClientSampleId :

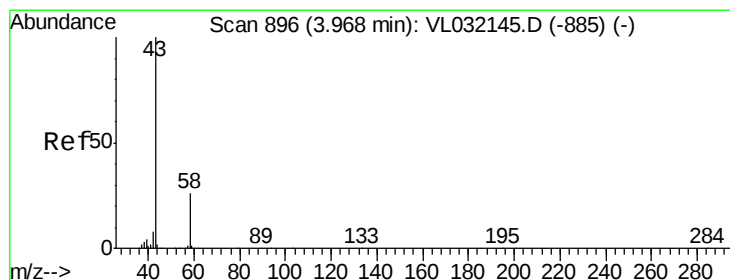
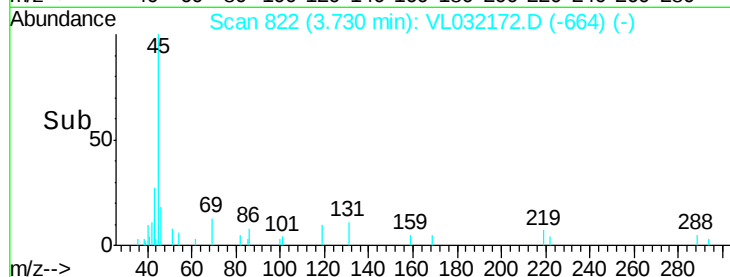
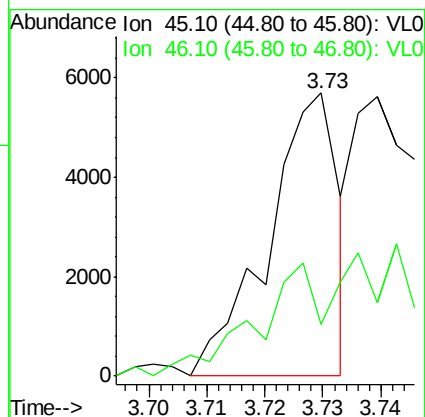
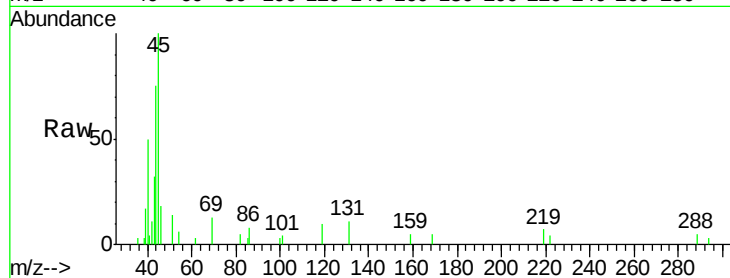
RESIDENT-C-CRAWL-SPACEDL

Tgt Ion: 45 Resp: 4756

Ion Ratio Lower Upper

45 100

46 0.0 14.6 58.4#



#15

Acetone

Concen: 0.835 ppbv

RT: 3.98 min Scan# 900

Delta R.T. 0.00 min

Lab File: VL032172.D

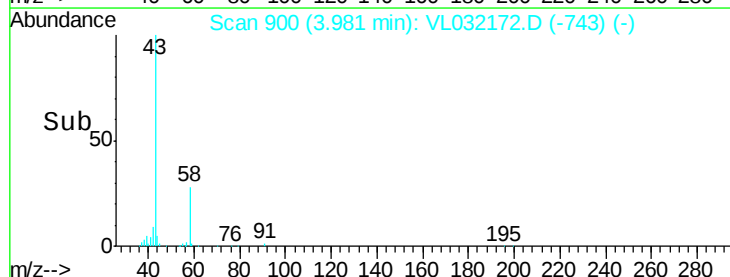
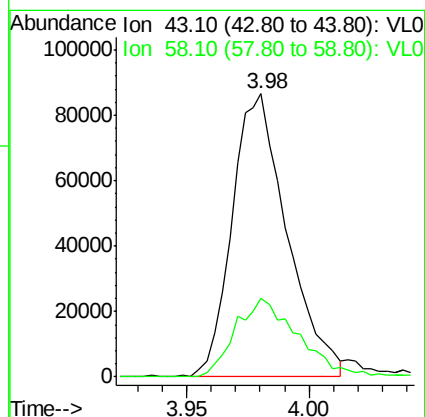
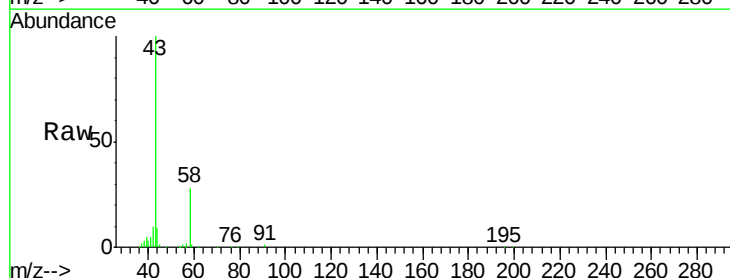
Acq: 30 Jun 2018 15:48

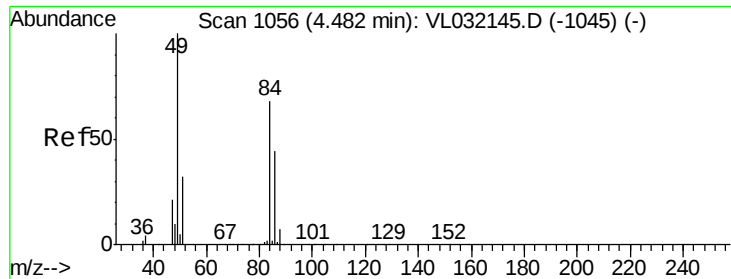
Tgt Ion: 43 Resp: 135222

Ion Ratio Lower Upper

43 100

58 32.0 21.4 32.0

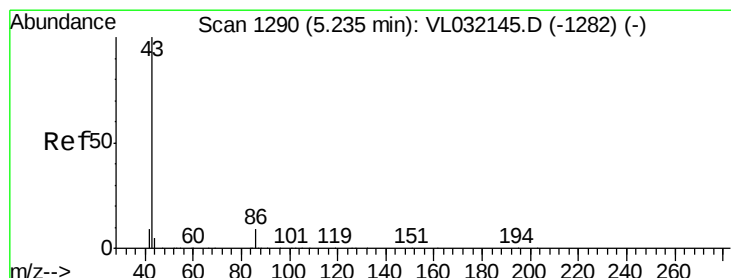
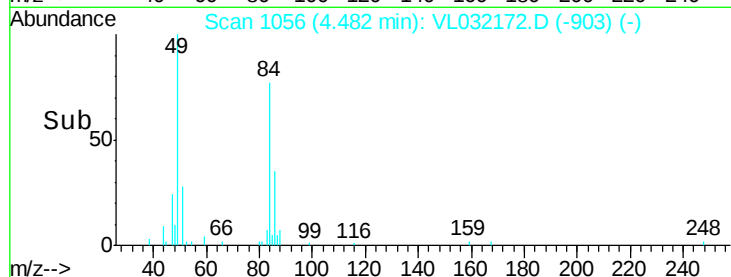
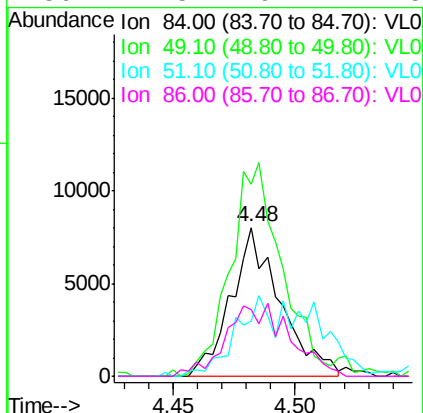
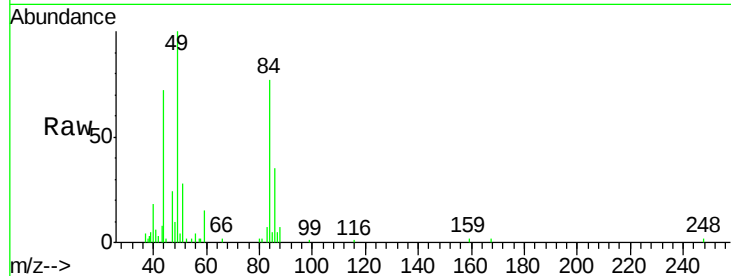




#20  
Methylene Chloride  
Concen: 0.189 ppbv  
RT: 4.48 min Scan# 1056  
Delta R.T. -0.01 min  
Lab File: VL032172.D  
Acq: 30 Jun 2018 15:48

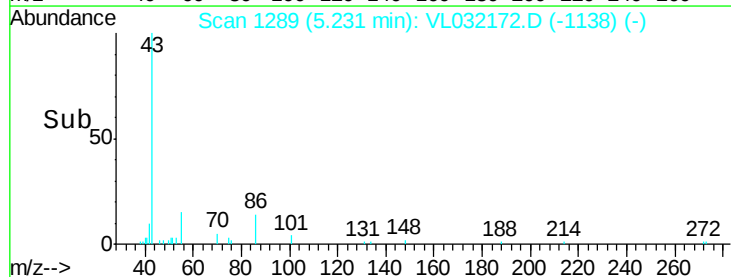
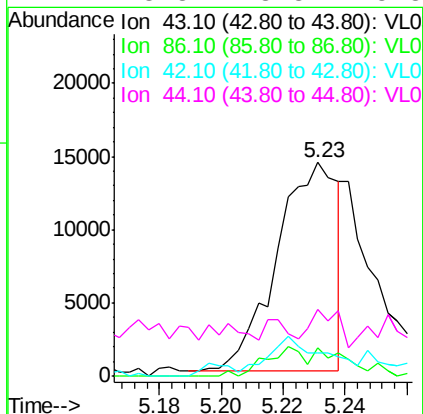
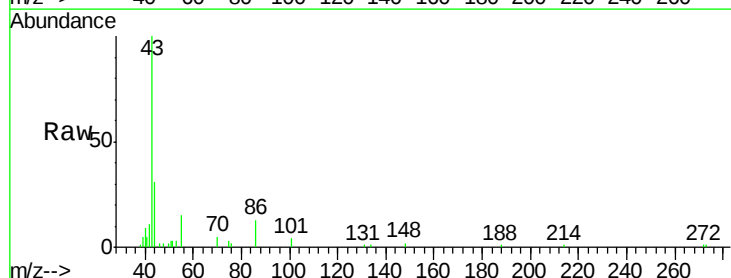
Instrument :  
MSVOA\_L  
ClientSampleId :  
RESIDENT-C-CRAWL-SPACEDL

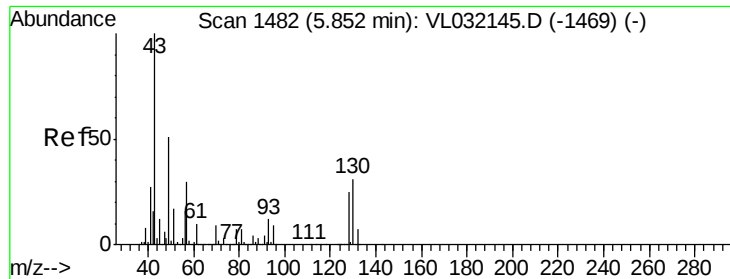
Tgt Ion: 84 Resp: 11201  
Ion Ratio Lower Upper  
84 100  
49 127.3 119.6 179.4  
51 33.5 36.3 54.5#  
86 41.5 49.7 74.5#



#23  
Vinyl Acetate  
Concen: 0.066 ppbv  
RT: 5.23 min Scan# 1289  
Delta R.T. -0.02 min  
Lab File: VL032172.D  
Acq: 30 Jun 2018 15:48

Tgt Ion: 43 Resp: 19415  
Ion Ratio Lower Upper  
43 100  
86 13.7 6.2 9.4#  
42 11.3 6.9 10.3#  
44 8.8 3.8 5.8#

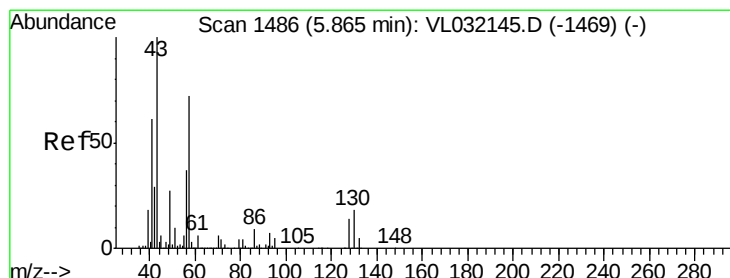
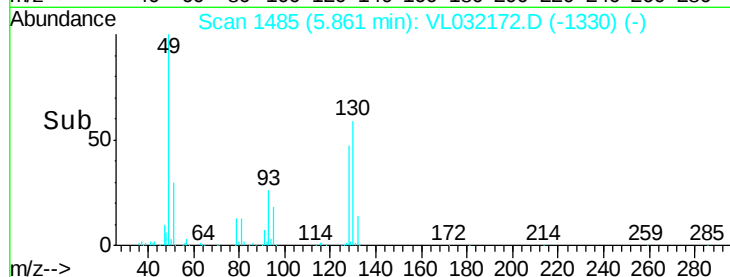
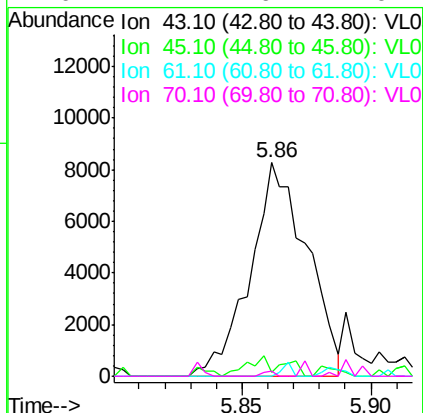
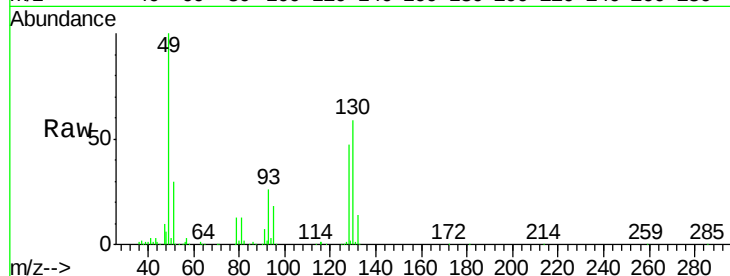




#25  
Ethyl Acetate  
Concen: 0.038 ppbv  
RT: 5.86 min Scan# 1485  
Delta R.T. -0.00 min  
Lab File: VL032172.D  
Acq: 30 Jun 2018 15:48

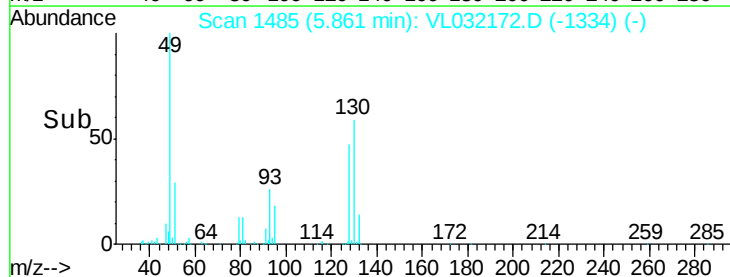
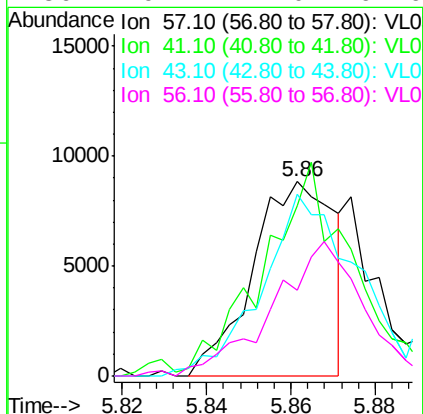
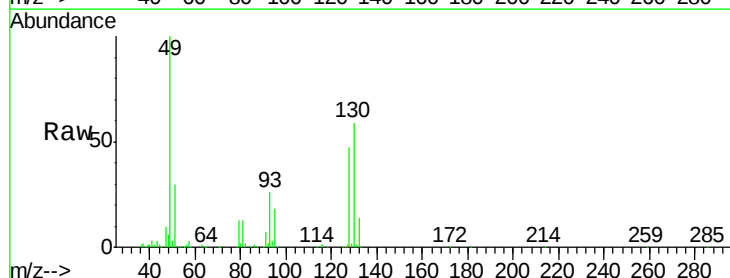
Instrument :  
MSVOA\_L  
ClientSampleId :  
RESIDENT-C-CRAWL-SPACEDL

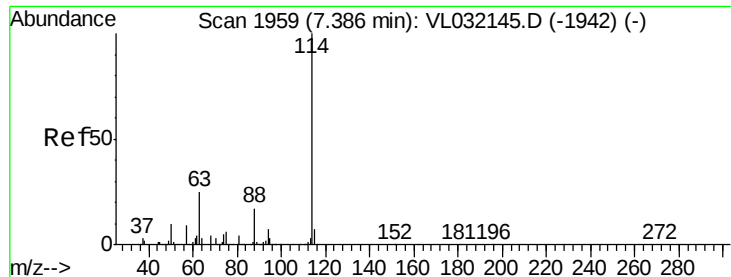
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 12703 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 45       | 8.8   | 7.8   | 11.8  |
| 61       | 3.0   | 7.4   | 11.0# |
| 70       | 1.1   | 6.1   | 9.1#  |



#26  
Hexane  
Concen: 0.077 ppbv  
RT: 5.86 min Scan# 1485  
Delta R.T. -0.02 min  
Lab File: VL032172.D  
Acq: 30 Jun 2018 15:48

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 11840  |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 125.3 | 68.6  | 103.0# |
| 43       | 126.1 | 168.6 | 252.8# |
| 56       | 79.4  | 41.0  | 61.6#  |

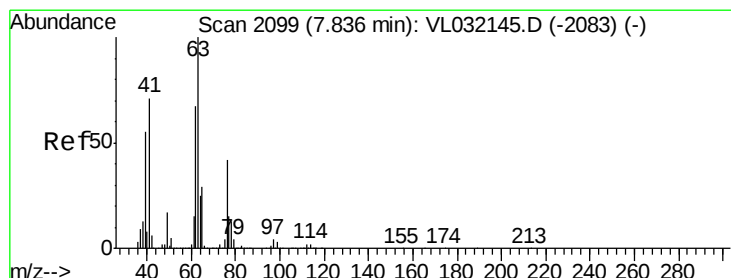
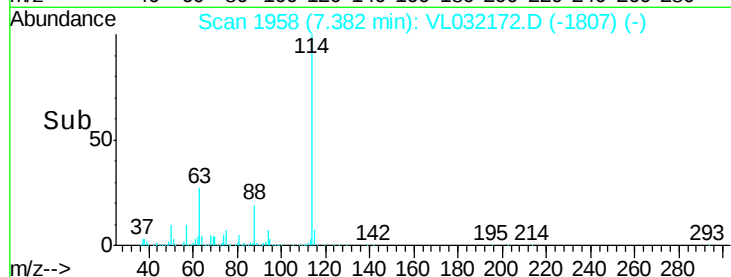
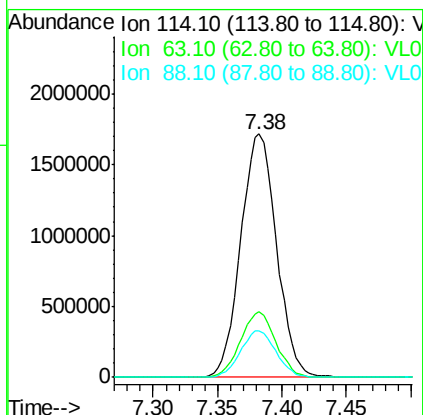
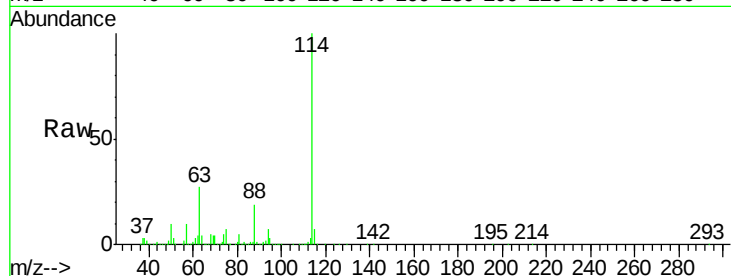




#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.38 min Scan# 1958  
 Delta R.T. -0.02 min  
 Lab File: VL032172.D  
 Acq: 30 Jun 2018 15:48

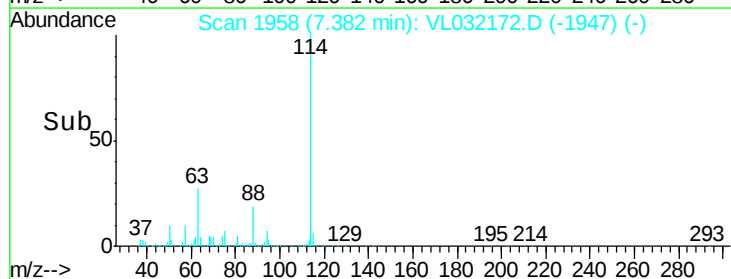
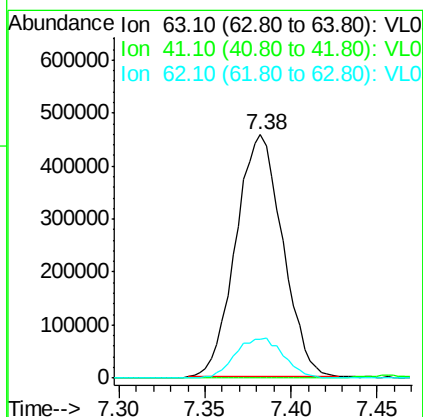
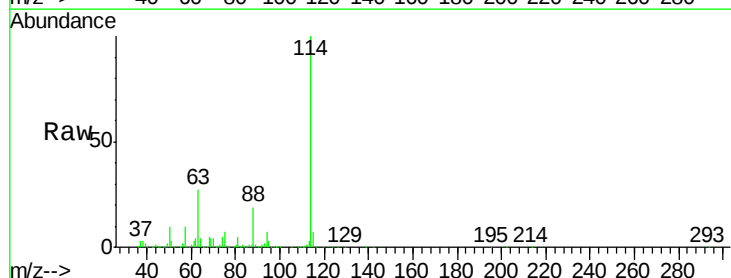
Instrument :  
 MSVOA\_L  
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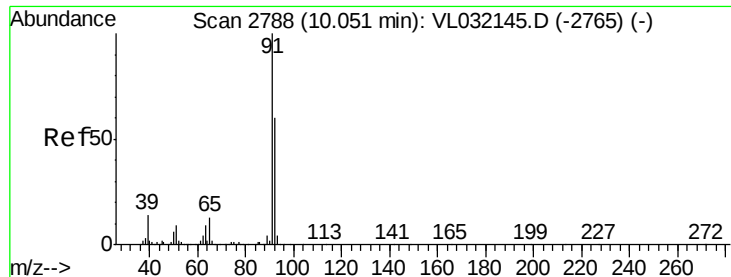
Tgt Ion: 114 Resp: 3324068  
 Ion Ratio Lower Upper  
 114 100  
 63 26.6 19.1 28.7  
 88 19.0 13.9 20.9



#39  
 1,2-Dichloropropane  
 Concen: 6.825 ppbv  
 RT: 7.38 min Scan# 1958  
 Delta R.T. -0.47 min  
 Lab File: VL032172.D  
 Acq: 30 Jun 2018 15:48

Tgt Ion: 63 Resp: 866027  
 Ion Ratio Lower Upper  
 63 100  
 41 0.0 53.3 79.9#  
 62 15.8 54.8 82.2#





#53

Toluene

Concen: 0.224 ppbv

RT: 10.05 min Scan# 2788

Delta R.T. -0.01 min

Lab File: VL032172.D

Acq: 30 Jun 2018 15:48

Instrument :

MSVOA\_L

ClientSampleId :

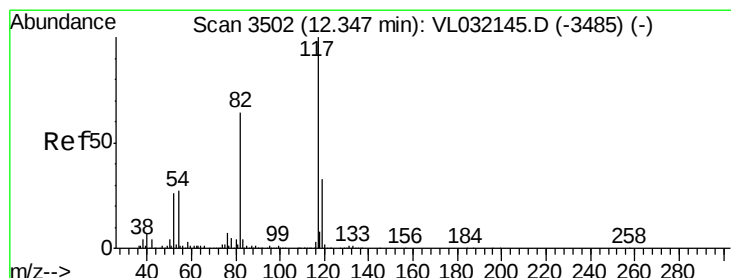
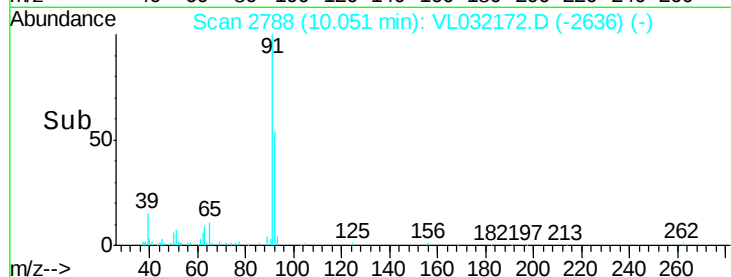
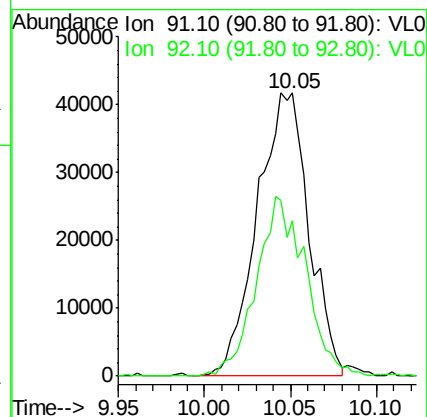
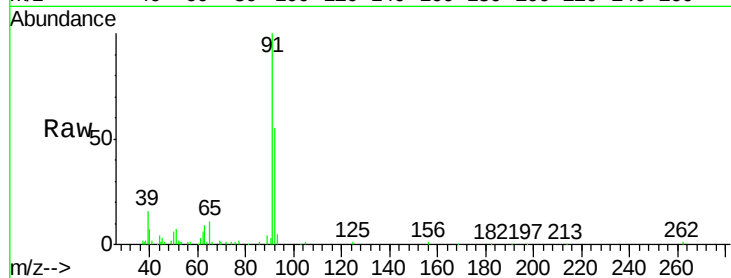
RESIDENT-C-CRAWL-SPACEDL

Tgt Ion: 91 Resp: 87166

Ion Ratio Lower Upper

91 100

92 60.3 49.2 73.8



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.34 min Scan# 3499

Delta R.T. -0.02 min

Lab File: VL032172.D

Acq: 30 Jun 2018 15:48

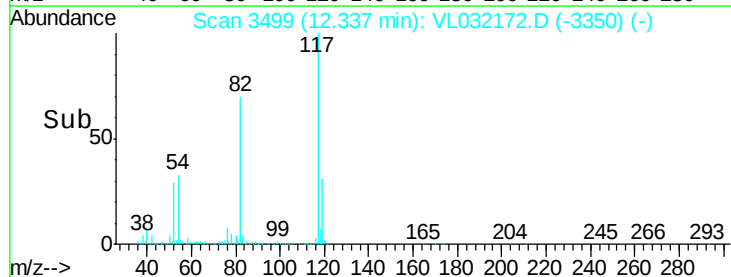
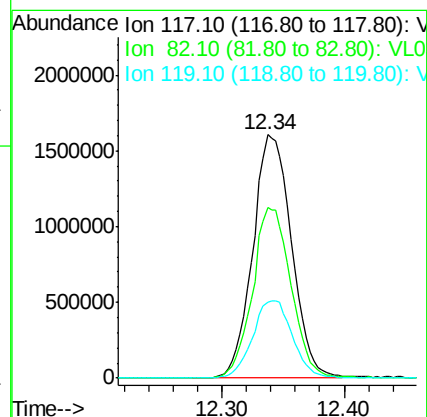
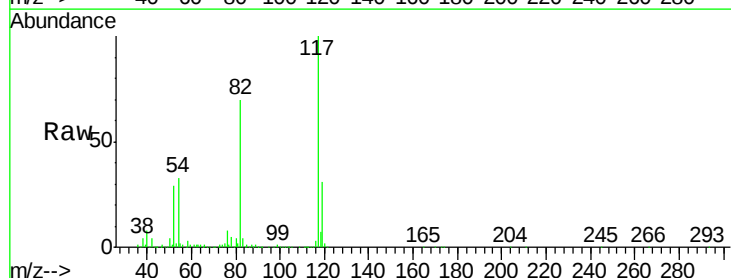
Tgt Ion: 117 Resp: 3519634

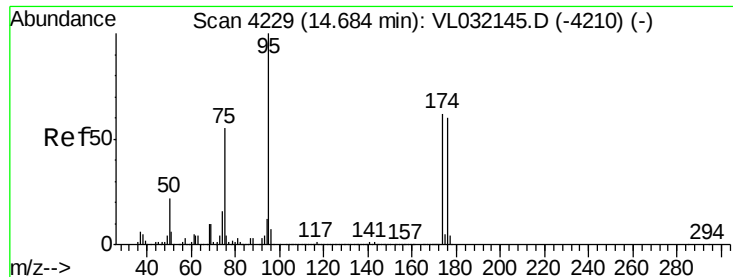
Ion Ratio Lower Upper

117 100

82 70.3 47.8 71.8

119 32.9 43.3 64.9#





#68

1-Bromo-4-Fluorobenzene

Concen: 9.214 ppbv

RT: 14.68 min Scan# 4227

Delta R.T. -0.02 min

Lab File: VL032172.D

Acq: 30 Jun 2018 15:48

Instrument :

MSVOA\_L

ClientSampleId :

RESIDENT-C-CRAWL-SPACEDL

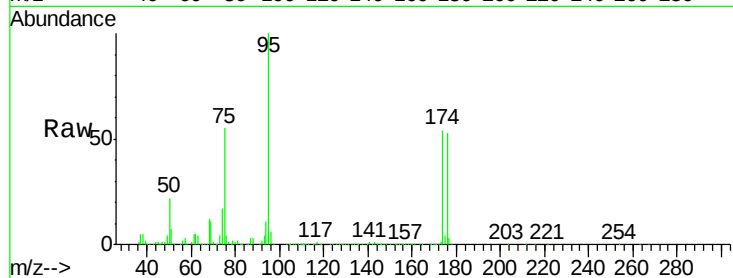
Tgt Ion: 95 Resp: 2479015

Ion Ratio Lower Upper

95 100

174 57.3 52.1 78.1

175 4.1 4.0 6.0



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

