

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL112519\  
 Data File : VL034416.D  
 Acq On : 25 Nov 2019 21:37  
 Operator : SY/AP  
 Sample : K5971-05DL 10X  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :

Quant Time: Nov 26 00:45:37 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LTue Nov 19 14:15:35 2019  
 QLast Update : Tue Nov 19 14:15:35 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.68  | 49   | 864171   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.19  | 114  | 1703146  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.13 | 117  | 1667739  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.47  | 95    | 1429857  | 10.19    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 101.90% |

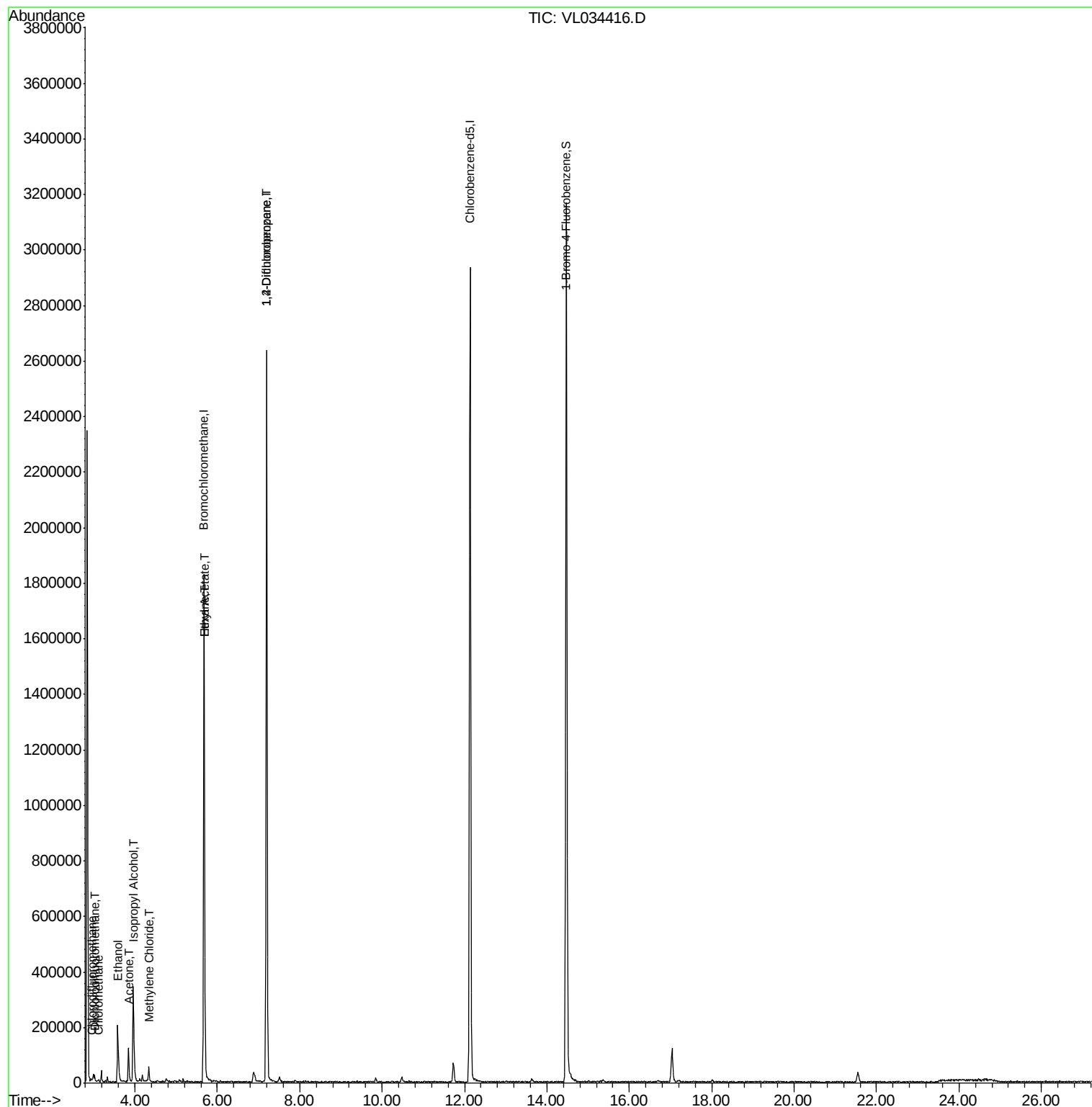
| Target Compounds           | R.T. | QIon | Response | Conc   | Units  | Ovalue |
|----------------------------|------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane | 3.02 | 85   | 14484    | 0.093  | ppbv   | 99     |
| 3) Chlorodifluoromethane   | 2.95 | 51   | 8250     | 0.077  | ppbv # | 82     |
| 4) Chloromethane           | 3.11 | 50   | 1940     | 0.031  | ppbv   | 97     |
| 13) Ethanol                | 3.58 | 45   | 208727   | 15.653 | ppbv   | 98     |
| 15) Acetone                | 3.84 | 43   | 114533   | 0.926  | ppbv   | 98     |
| 19) Isopropyl Alcohol      | 3.96 | 45   | 391272   | 4.933  | ppbv # | 99     |
| 20) Methylene Chloride     | 4.33 | 84   | 7996     | 0.182  | ppbv # | 89     |
| 25) Ethyl Acetate          | 5.69 | 43   | 16053    | 0.073  | ppbv # | 92     |
| 26) Hexane                 | 5.69 | 57   | 16533    | 0.174  | ppbv # | 45     |
| 39) 1,2-Dichloropropane    | 7.19 | 63   | 509837   | 7.773  | ppbv # | 24     |

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

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MSVOA\_L  
ClientSampleId :

Quant Time: Nov 26 00:45:37 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Nov 19 14:15:35 2019  
QLast Update : Tue Nov 19 14:15:35 2019  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 899

Delta R.T. -0.01 min

Lab File: VL034416.D

Acq: 25 Nov 2019 21:37

Instrument :

MSVOA\_L

ClientSampleId :

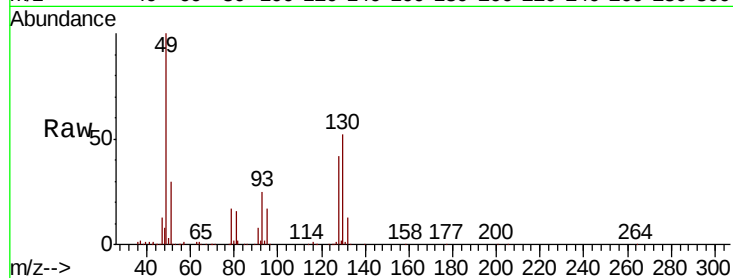
Tot Ion: 49 Resp: 864171

Ion Ratio Lower Upper

49 100

128 43.9 21.8 65.3

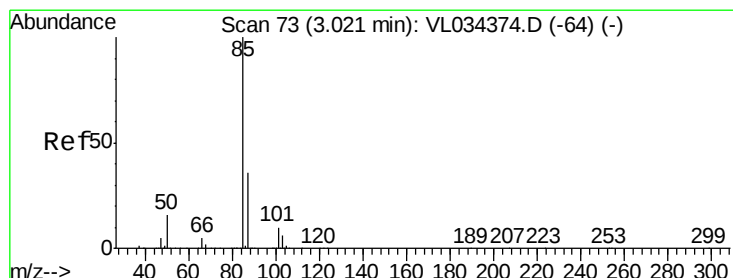
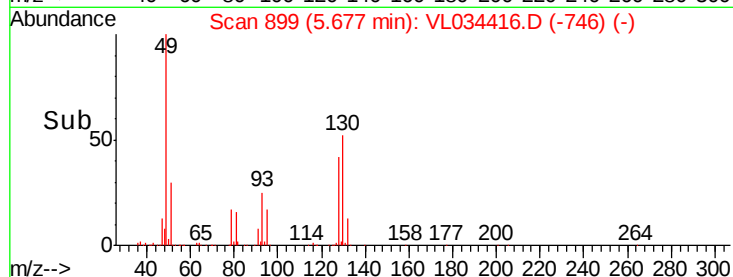
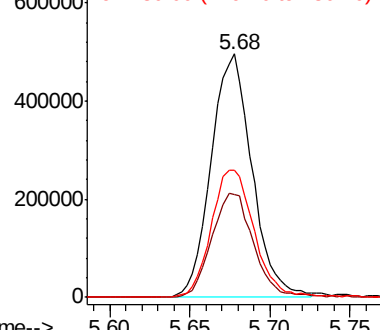
130 55.1 28.0 84.0



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



#2

Dichlorodifluoromethane

Concen: 0.093 ppbv

RT: 3.02 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL034416.D

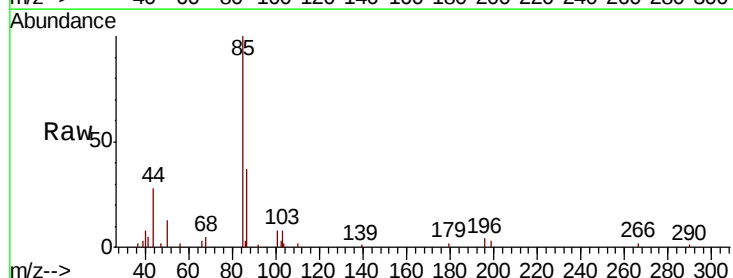
Acq: 25 Nov 2019 21:37

Tgt Ion: 85 Resp: 14484

Ion Ratio Lower Upper

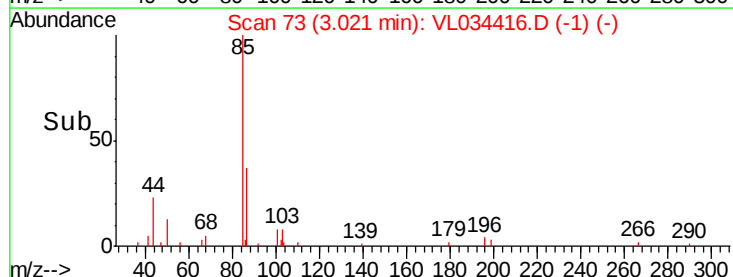
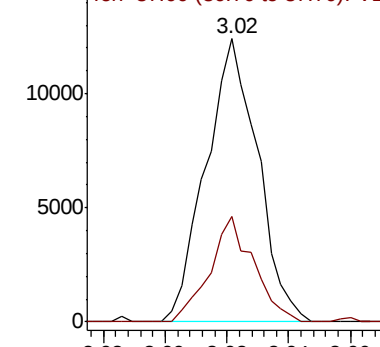
85 100

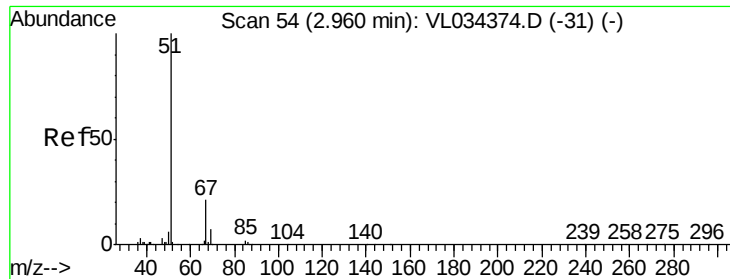
87 36.1 28.5 42.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

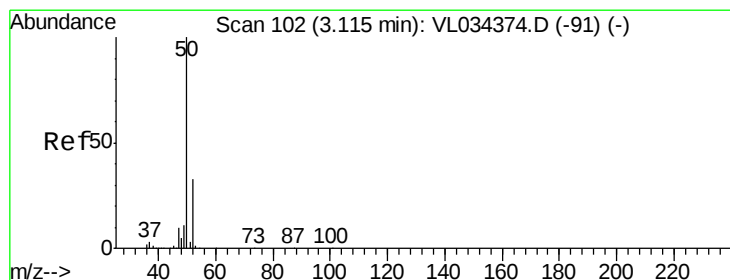
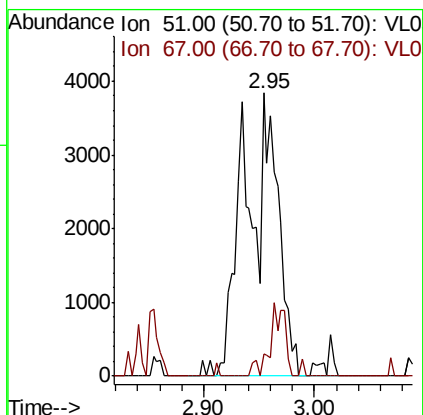
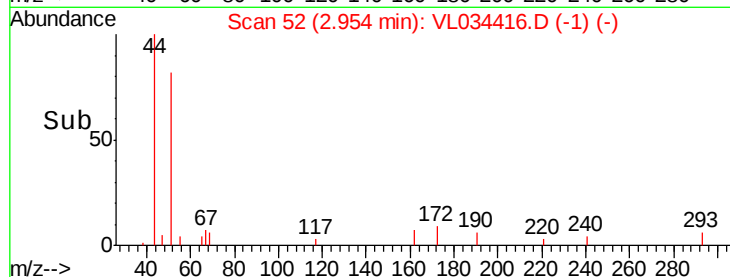
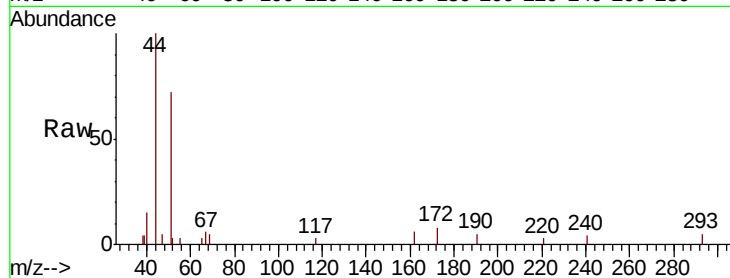




#3  
Chlorodifluoromethane  
Concen: 0.077 ppbv  
RT: 2.95 min Scan# 52  
Delta R.T. -0.01 min  
Lab File: VL034416.D  
Acq: 25 Nov 2019 21:37

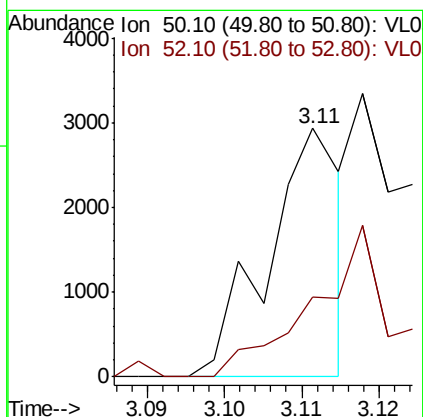
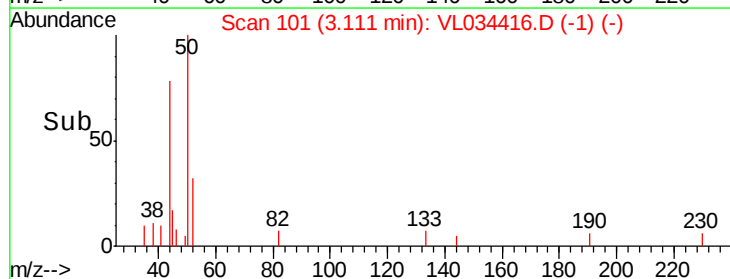
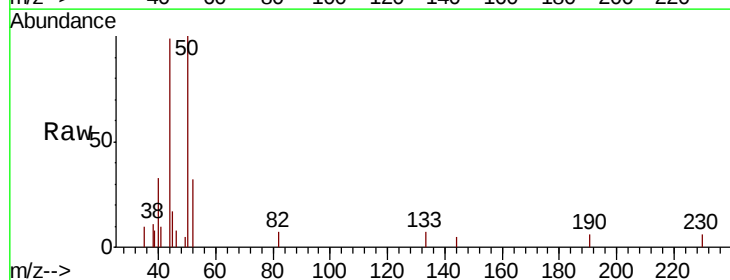
Instrument :  
MSVOA\_L  
ClientSampleId :

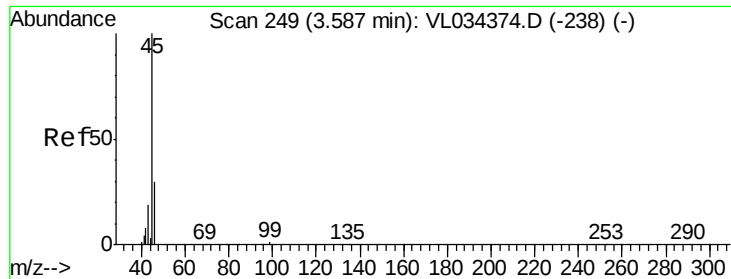
Tot Ion: 51 Resp: 8250  
Ion Ratio Lower Upper  
51 100  
67 11.8 16.2 24.2#



#4  
Chloromethane  
Concen: 0.031 ppbv  
RT: 3.11 min Scan# 101  
Delta R.T. -0.00 min  
Lab File: VL034416.D  
Acq: 25 Nov 2019 21:37

Tgt Ion: 50 Resp: 1940  
Ion Ratio Lower Upper  
50 100  
52 31.9 26.8 40.2





#13

Ethanol

Concen: 15.653 ppbv

RT: 3.58 min Scan# 247

Delta R.T. -0.01 min

Lab File: VL034416.D

Acq: 25 Nov 2019 21:37

Instrument :

MSVOA\_L

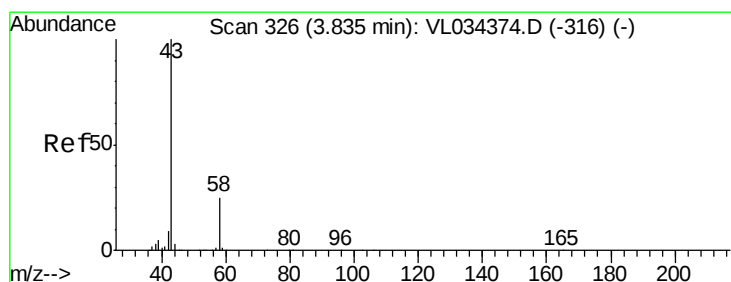
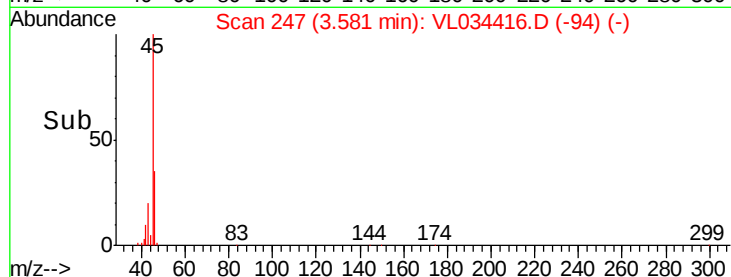
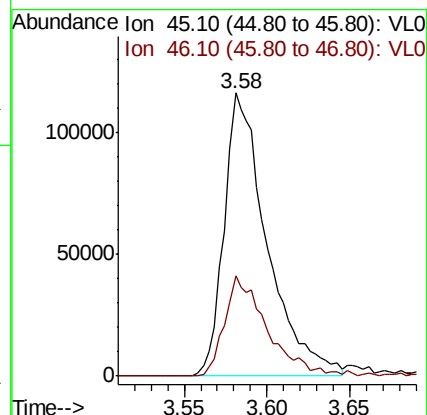
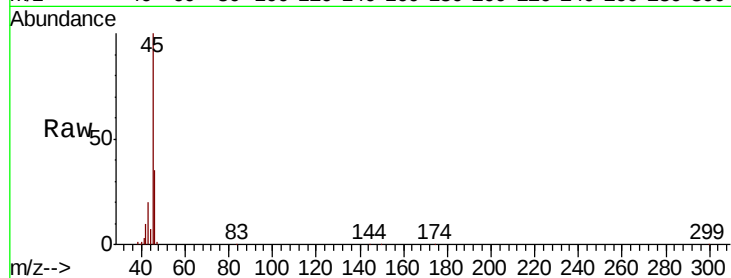
ClientSampleId :

Tot Ion: 45 Resp: 208727

Ion Ratio Lower Upper

45 100

46 35.5 13.8 55.4



#15

Acetone

Concen: 0.926 ppbv

RT: 3.84 min Scan# 328

Delta R.T. 0.01 min

Lab File: VL034416.D

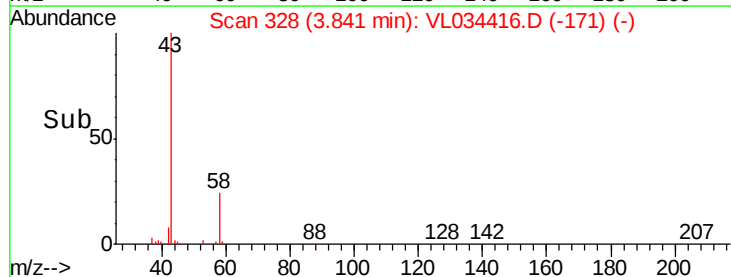
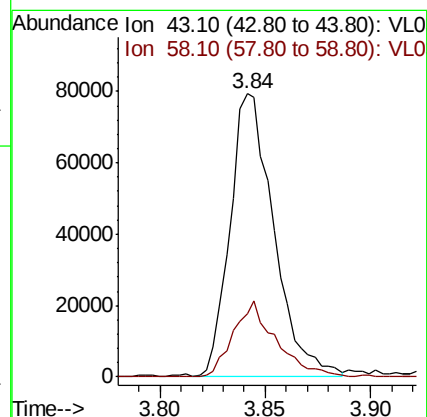
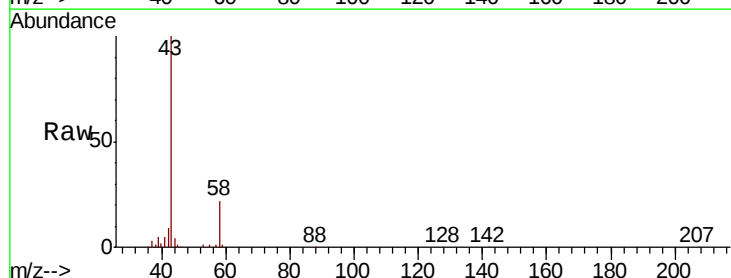
Acq: 25 Nov 2019 21:37

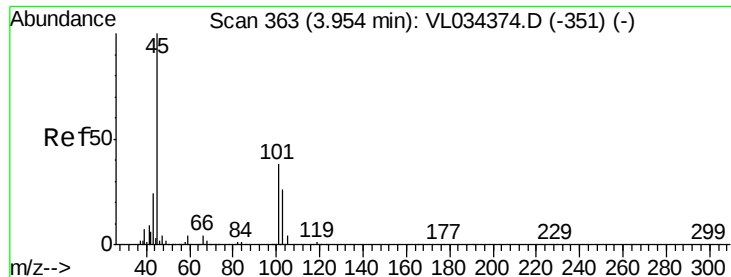
Tgt Ion: 43 Resp: 114533

Ion Ratio Lower Upper

43 100

58 26.3 20.2 30.4



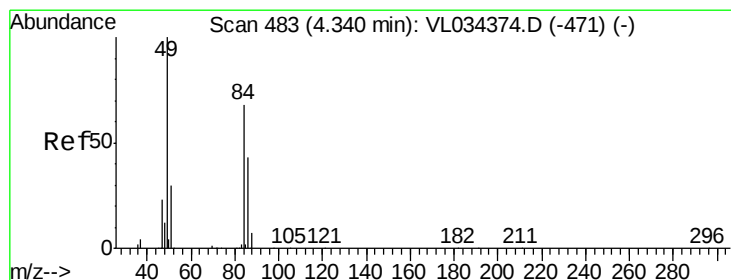
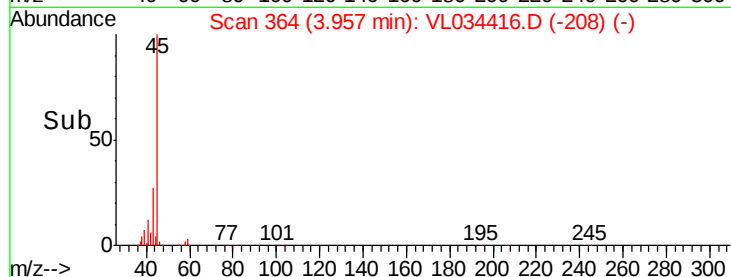
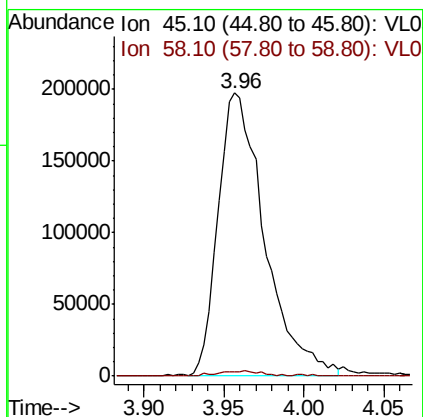
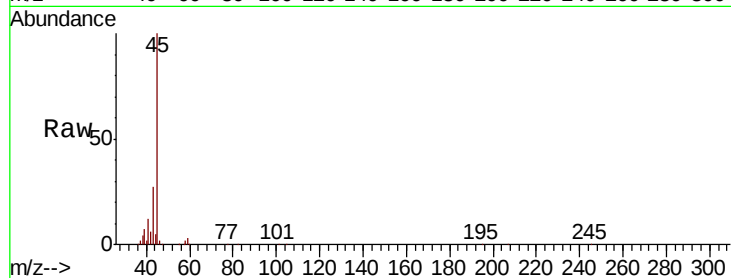


#19

Isopropyl Alcohol  
 Concen: 4.933 ppbv  
 RT: 3.96 min Scan# 364  
 Delta R.T. 0.00 min  
 Lab File: VL034416.D  
 Acq: 25 Nov 2019 21:37

Instrument :  
 MSVOA\_L  
 ClientSampled :

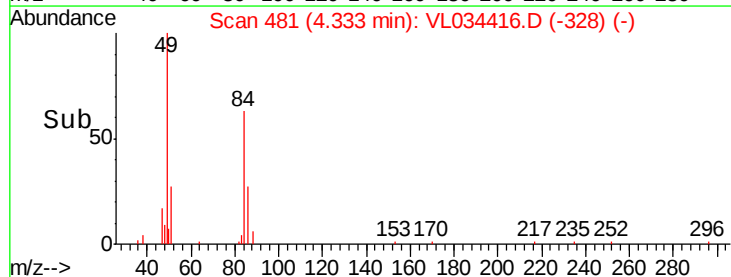
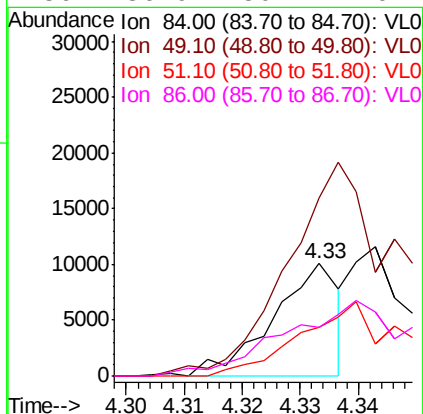
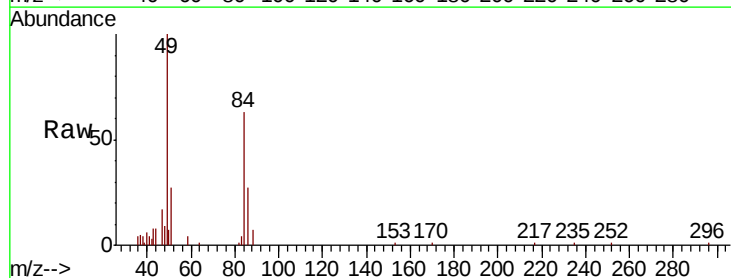
Tot Ion: 45 Resp: 391272  
 Ion Ratio Lower Upper  
 45 100  
 58 2.0 1.3 1.9#

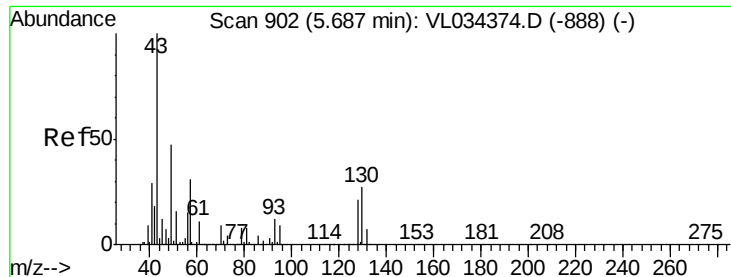


#20

Methylene Chloride  
 Concen: 0.182 ppbv  
 RT: 4.33 min Scan# 481  
 Delta R.T. -0.01 min  
 Lab File: VL034416.D  
 Acq: 25 Nov 2019 21:37

Tgt Ion: 84 Resp: 7996  
 Ion Ratio Lower Upper  
 84 100  
 49 150.1 116.8 175.2  
 51 43.2 35.6 53.4  
 86 36.9 50.7 76.1#

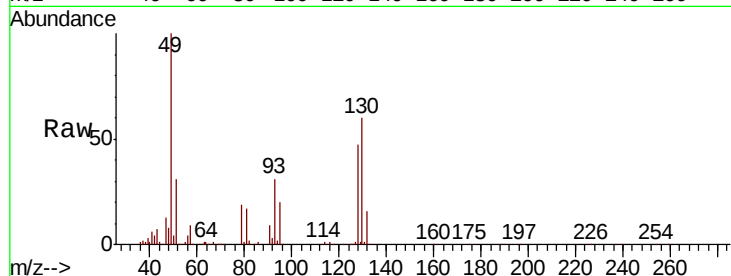




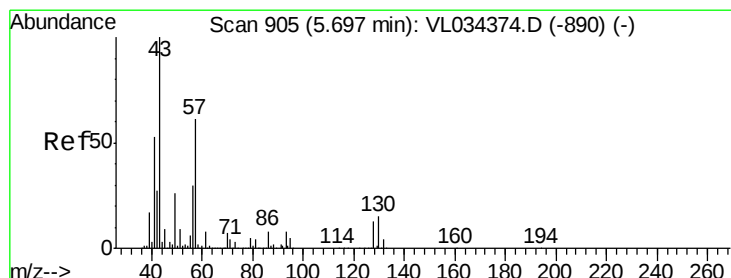
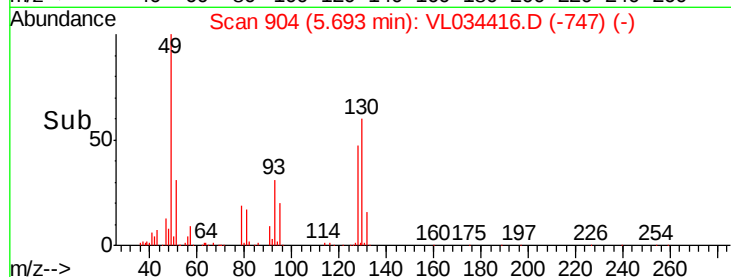
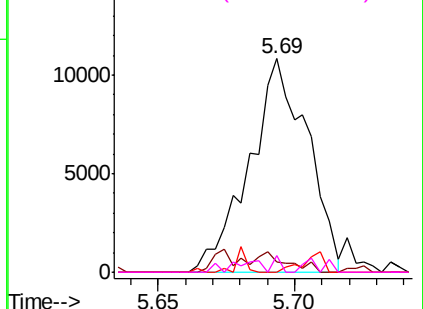
#25  
Ethyl Acetate  
Concen: 0.073 ppbv  
RT: 5.69 min Scan# 904  
Delta R.T. 0.01 min  
Lab File: VL034416.D  
Acq: 25 Nov 2019 21:37

Instrument :  
MSVOA\_L  
ClientSampleId :

|         |       |       |       |
|---------|-------|-------|-------|
| Tot Ion | 43    | Resp: | 16053 |
| Ion     | Ratio | Lower | Upper |
| 43      | 100   |       |       |
| 45      | 10.0  | 8.2   | 12.4  |
| 61      | 2.2   | 7.5   | 11.3# |
| 70      | 5.9   | 5.7   | 8.5   |

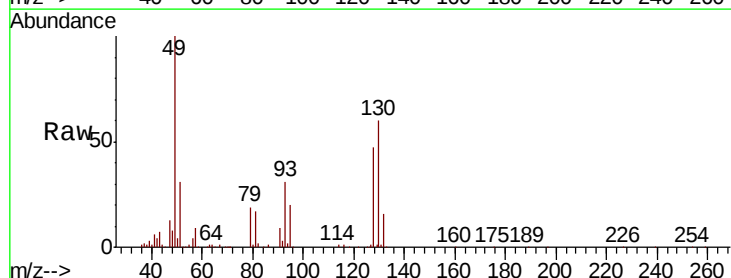


Abundance Ion 43.10 (42.80 to 43.80): VL0  
Ion 45.10 (44.80 to 45.80): VL0  
Ion 61.10 (60.80 to 61.80): VL0  
Ion 70.10 (69.80 to 70.80): VL0

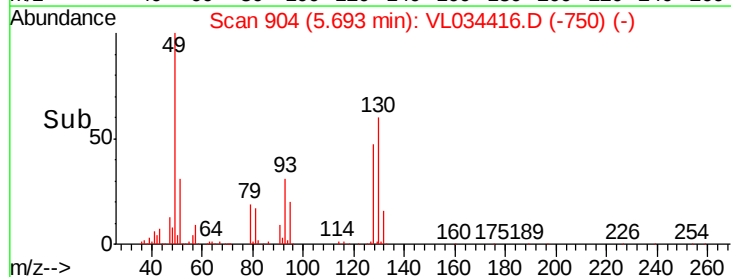
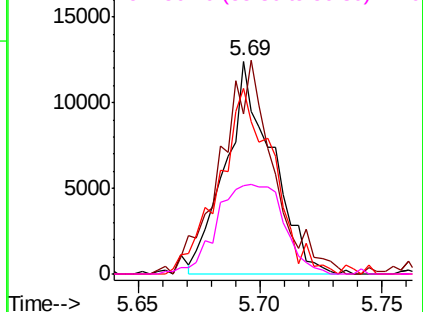


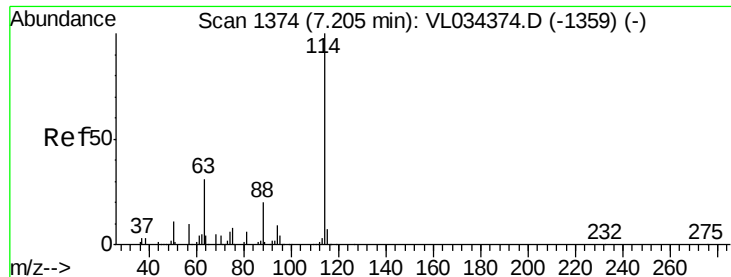
#26  
Hexane  
Concen: 0.174 ppbv  
RT: 5.69 min Scan# 904  
Delta R.T. -0.00 min  
Lab File: VL034416.D  
Acq: 25 Nov 2019 21:37

|         |       |       |        |
|---------|-------|-------|--------|
| Tgt Ion | 57    | Resp: | 16533  |
| Ion     | Ratio | Lower | Upper  |
| 57      | 100   |       |        |
| 41      | 113.2 | 75.0  | 112.4# |
| 43      | 101.6 | 186.6 | 279.8# |
| 56      | 60.7  | 41.5  | 62.3   |



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

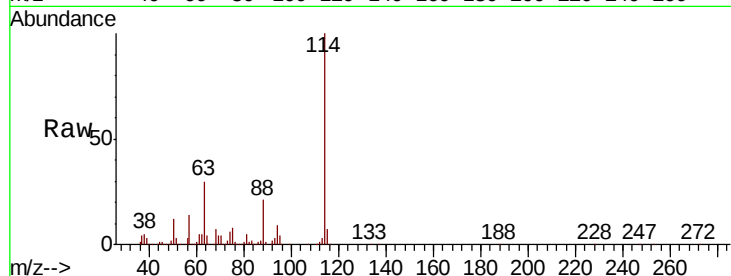




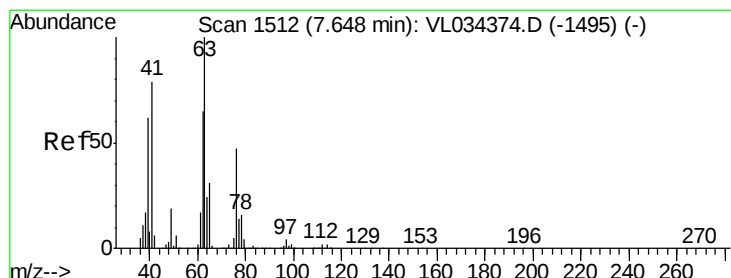
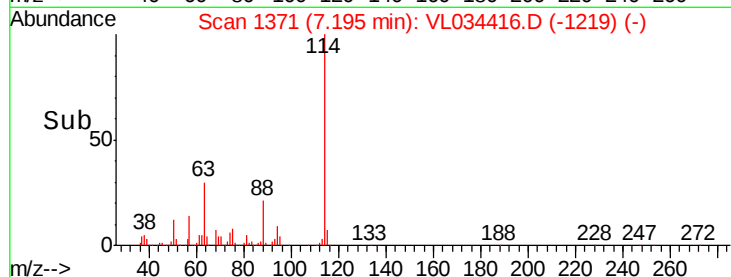
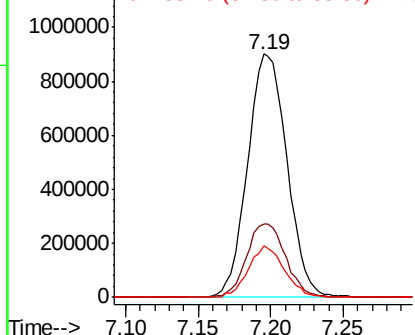
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.19 min Scan# 1371  
 Delta R.T. -0.01 min  
 Lab File: VL034416.D  
 Acq: 25 Nov 2019 21:37

Instrument :  
 MSVOA\_L  
 ClientSampleId :

Tot Ion:114 Resp: 1703146  
 Ion Ratio Lower Upper  
 114 100  
 63 30.0 24.2 36.4  
 88 19.6 15.9 23.9

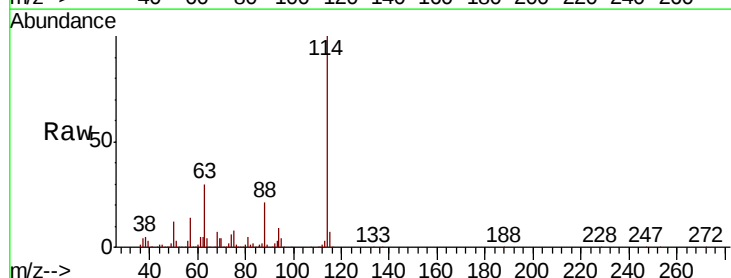


Abundance Ion 114.10 (113.80 to 114.80): V  
 Ion 63.10 (62.80 to 63.80): VL0  
 Ion 88.10 (87.80 to 88.80): VL0

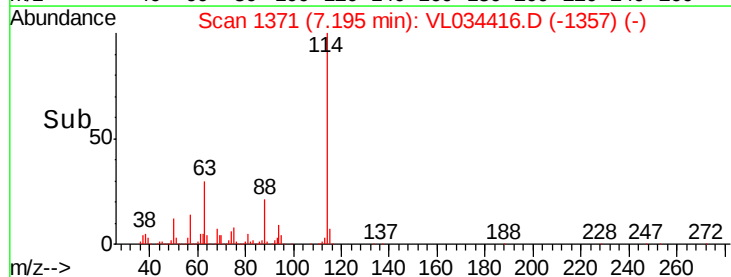
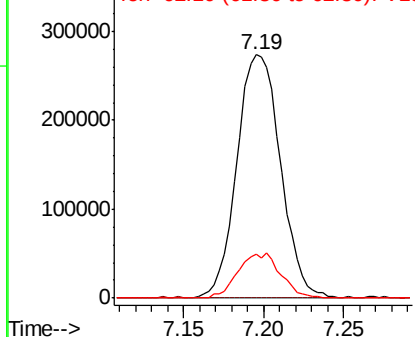


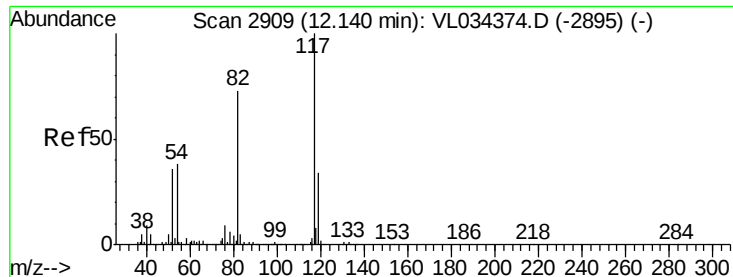
#39  
 1,2-Dichloropropane  
 Concen: 7.773 ppbv  
 RT: 7.19 min Scan# 1371  
 Delta R.T. -0.45 min  
 Lab File: VL034416.D  
 Acq: 25 Nov 2019 21:37

Tgt Ion: 63 Resp: 509837  
 Ion Ratio Lower Upper  
 63 100  
 41 0.0 63.1 94.7#  
 62 18.0 52.3 78.5#



Abundance Ion 63.10 (62.80 to 63.80): VL0  
 Ion 41.10 (40.80 to 41.80): VL0  
 Ion 62.10 (61.80 to 62.80): VL0

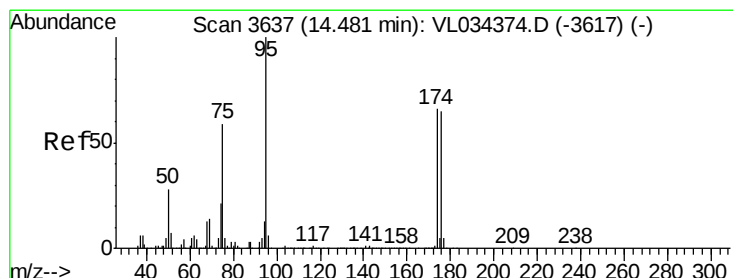
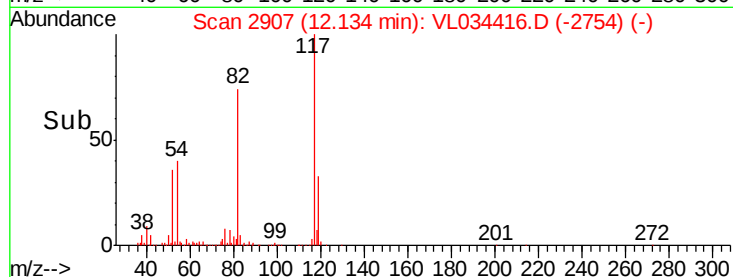
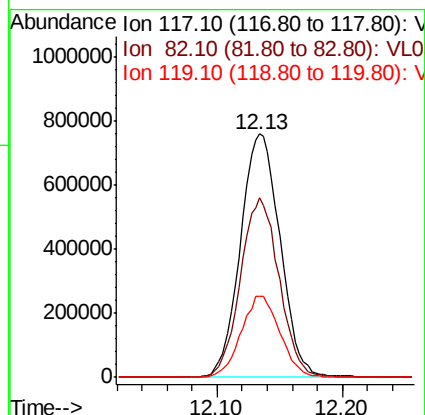
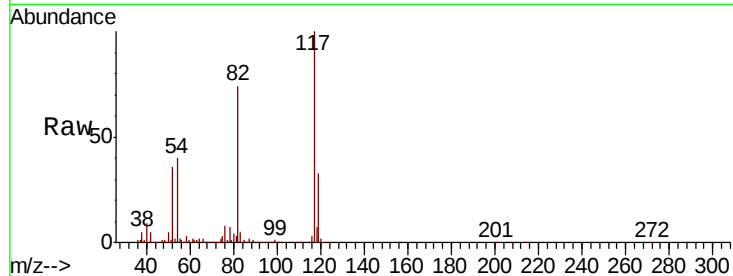




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.13 min Scan# 2907  
Delta R.T. -0.01 min  
Lab File: VL034416.D  
Acq: 25 Nov 2019 21:37

Instrument :  
MSVOA\_L  
ClientSampleId :

Tot Ion:117 Resp: 1667739  
Ion Ratio Lower Upper  
117 100  
82 72.2 57.5 86.3  
119 32.7 25.4 38.2



#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.191 ppbv  
RT: 14.47 min Scan# 3634  
Delta R.T. -0.01 min  
Lab File: VL034416.D  
Acq: 25 Nov 2019 21:37

Tgt Ion: 95 Resp: 1429857  
Ion Ratio Lower Upper  
95 100  
174 65.8 52.2 78.2  
175 4.6 3.8 5.8

