

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL112519\  
 Data File : VL034412.D  
 Acq On : 25 Nov 2019 18:59  
 Operator : SY/AP  
 Sample : K5971-04DL 10X  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :

Quant Time: Nov 26 00:44:48 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   | 919894   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.20  | 114  | 1834439  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.14 | 117  | 1786226  | 10.00 | ppbv  | 0.00     |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 14.47  | 95    | 1487066  | 9.90     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 99.00% |

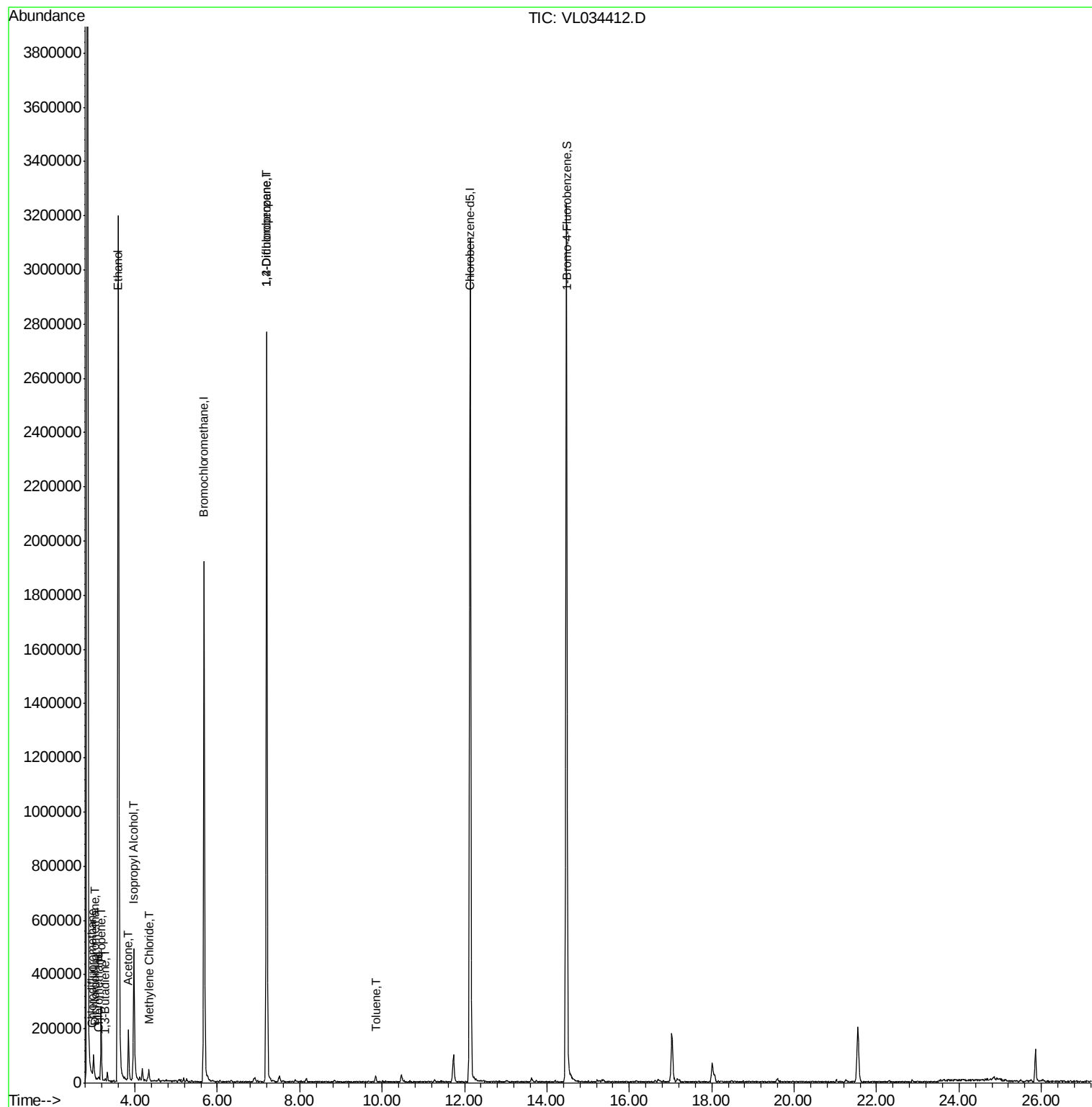
| Target Compounds           | R.T. | QIon | Response | Conc    | Units  | Ovalue |
|----------------------------|------|------|----------|---------|--------|--------|
| 2) Dichlorodifluoromethane | 3.02 | 85   | 15231    | 0.092   | ppbv   | 91     |
| 3) Chlorodifluoromethane   | 2.96 | 51   | 9258     | 0.081   | ppbv # | 83     |
| 4) Chloromethane           | 3.11 | 50   | 2448     | 0.036   | ppbv # | 41     |
| 9) Propene                 | 3.18 | 41   | 69500    | 1.364   | ppbv   | 100    |
| 13) Ethanol                | 3.59 | 45   | 4010615  | 282.551 | ppbv   | 93     |
| 15) Acetone                | 3.84 | 43   | 167678   | 1.273   | ppbv   | 98     |
| 16) 1,3-Butadiene          | 3.28 | 39   | 2351     | 0.041   | ppbv # | 24     |
| 19) Isopropyl Alcohol      | 3.97 | 45   | 556491   | 6.591   | ppbv # | 99     |
| 20) Methylene Chloride     | 4.34 | 84   | 8556     | 0.183   | ppbv # | 90     |
| 39) 1,2-Dichloropropane    | 7.20 | 63   | 539538   | 7.637   | ppbv # | 24     |
| 53) Toluene                | 9.84 | 91   | 9407     | 0.045   | ppbv # | 64     |

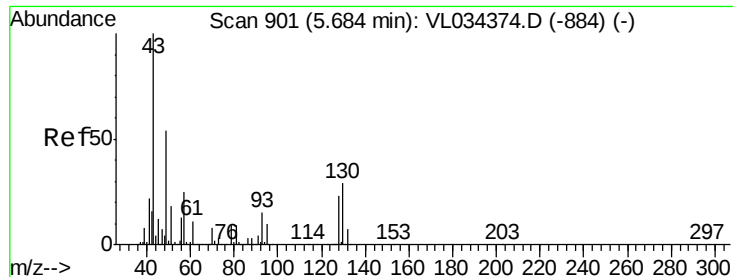
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL112519\  
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ALS Vial : 1 Sample Multiplier: 1

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MSVOA\_L  
ClientSampleId :

Quant Time: Nov 26 00:44:48 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: VL034412.D

Acq: 25 Nov 2019 18:59

Instrument :

MSVOA\_L

ClientSampleId :

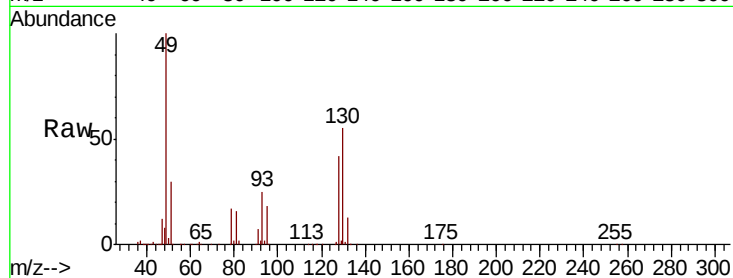
Tot Ion: 49 Resp: 919894

Ion Ratio Lower Upper

49 100

128 43.2 21.8 65.3

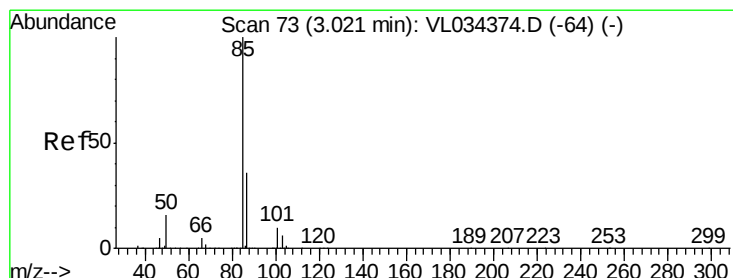
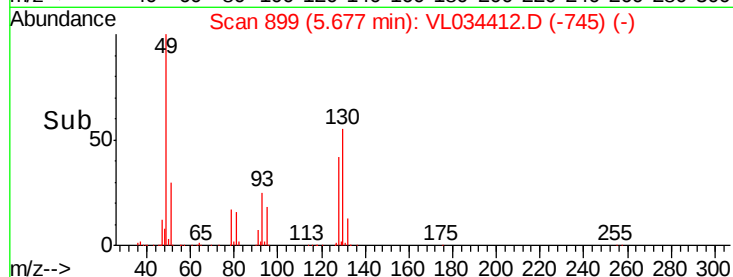
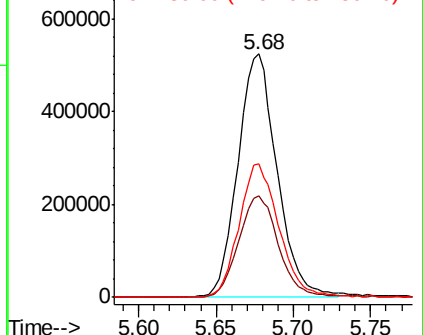
130 56.2 28.0 84.0



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: 0.092 ppbv

RT: 3.02 min Scan# 74

Delta R.T. 0.00 min

Lab File: VL034412.D

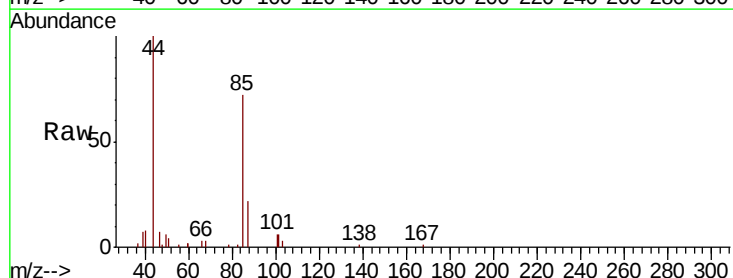
Acq: 25 Nov 2019 18:59

Tgt Ion: 85 Resp: 15231

Ion Ratio Lower Upper

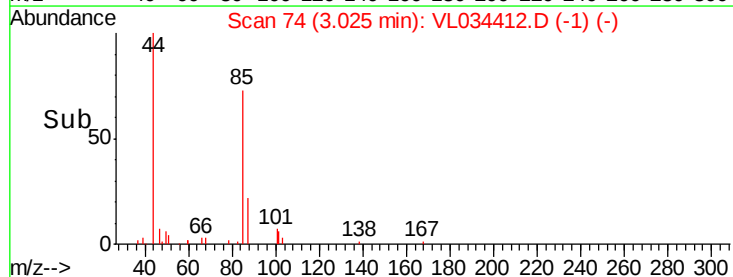
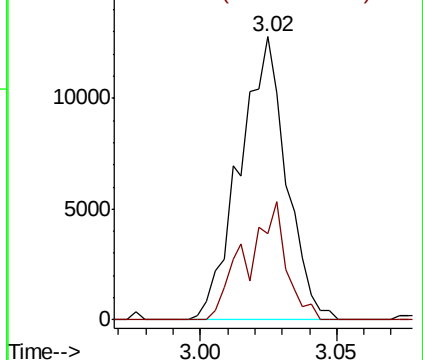
85 100

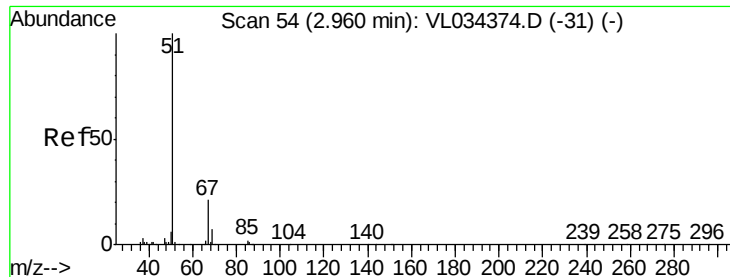
87 30.6 28.5 42.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

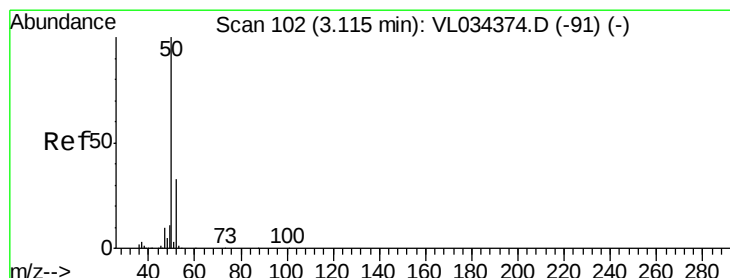
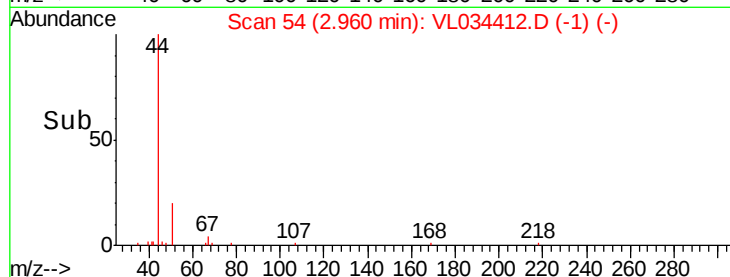
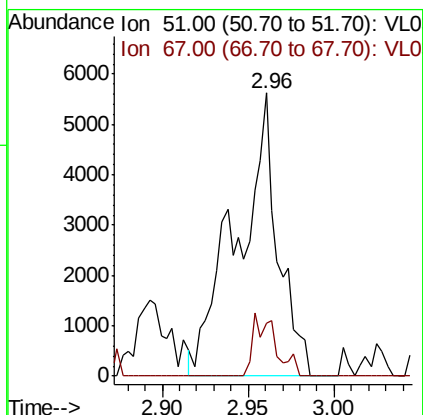
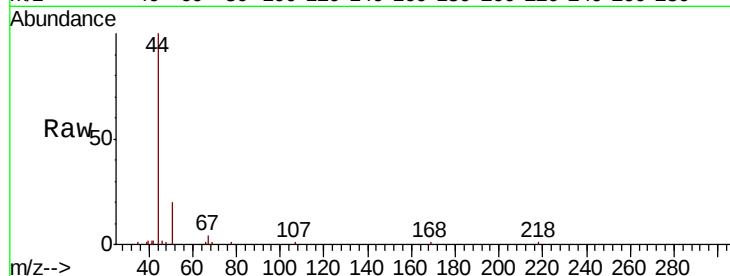




#3  
Chlorodifluoromethane  
Concen: 0.081 ppbv  
RT: 2.96 min Scan# 54  
Delta R.T. 0.00 min  
Lab File: VL034412.D  
Acq: 25 Nov 2019 18:59

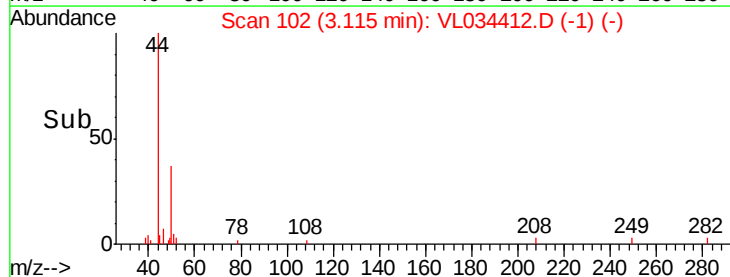
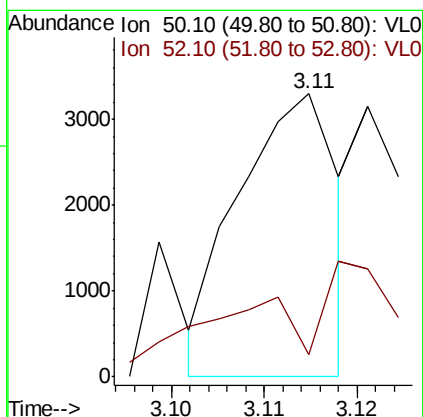
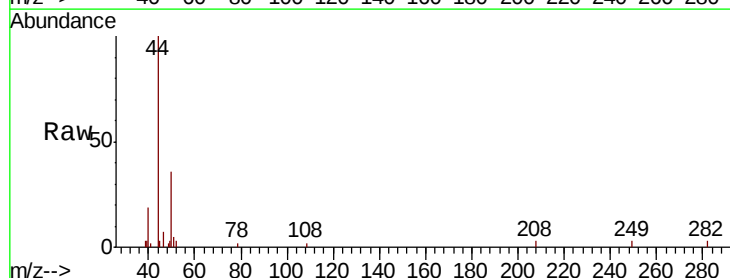
Instrument :  
MSVOA\_L  
ClientSampleId :

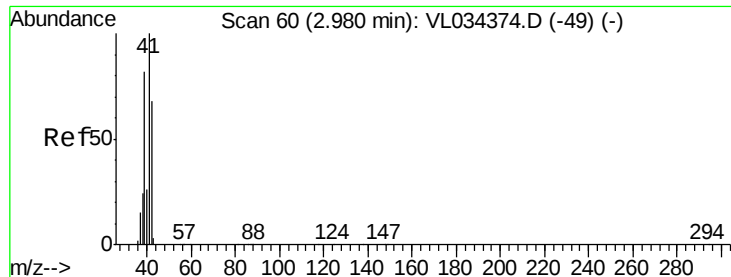
Tot Ion: 51 Resp: 9258  
Ion Ratio Lower Upper  
51 100  
67 12.2 16.2 24.2#



#4  
Chloromethane  
Concen: 0.036 ppbv  
RT: 3.11 min Scan# 102  
Delta R.T. 0.00 min  
Lab File: VL034412.D  
Acq: 25 Nov 2019 18:59

Tgt Ion: 50 Resp: 2448  
Ion Ratio Lower Upper  
50 100  
52 0.0 26.8 40.2#





#9

Propene

Concen: 1.364 ppbv

RT: 3.18 min Scan# 122

Delta R.T. 0.20 min

Lab File: VL034412.D

Acq: 25 Nov 2019 18:59

Instrument :

MSVOA\_L

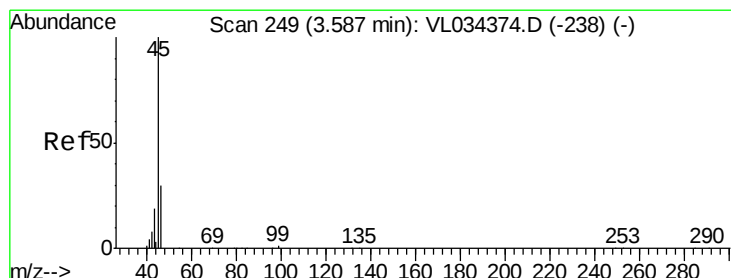
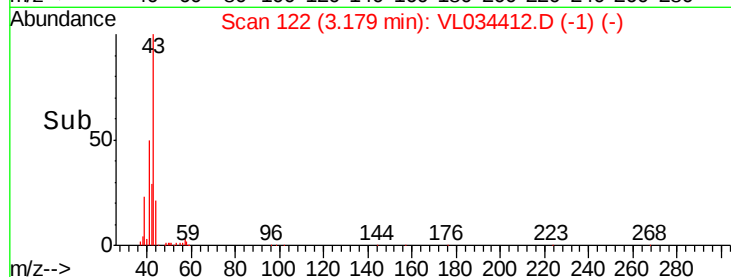
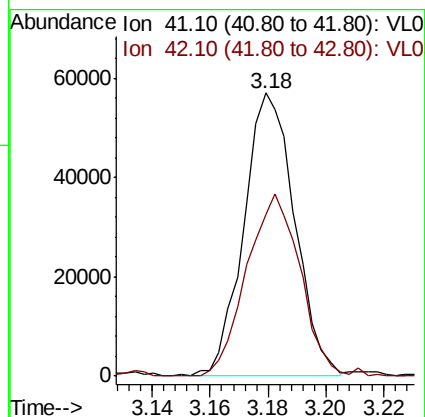
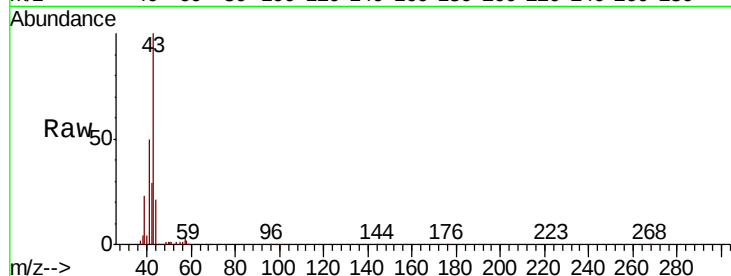
ClientSampleId :

Tot Ion: 41 Resp: 69500

Ion Ratio Lower Upper

41 100

42 68.1 54.6 82.0



#13

Ethanol

Concen: 282.551 ppbv

RT: 3.59 min Scan# 251

Delta R.T. 0.01 min

Lab File: VL034412.D

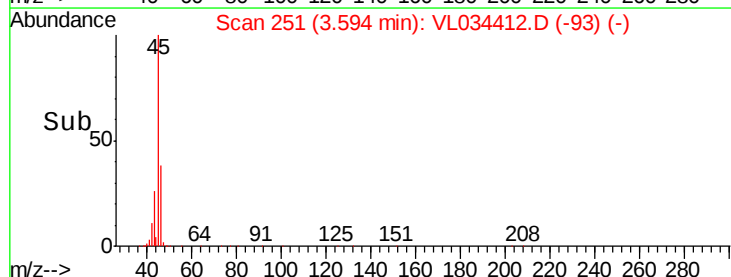
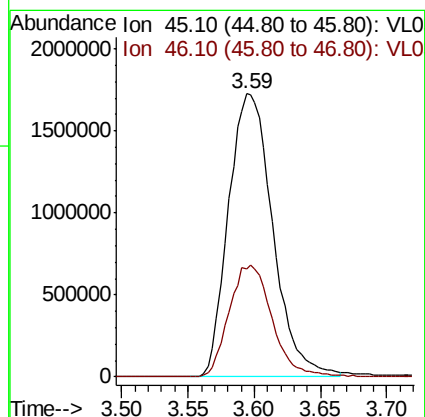
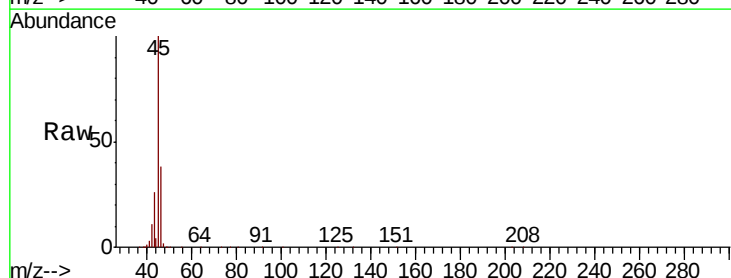
Acq: 25 Nov 2019 18:59

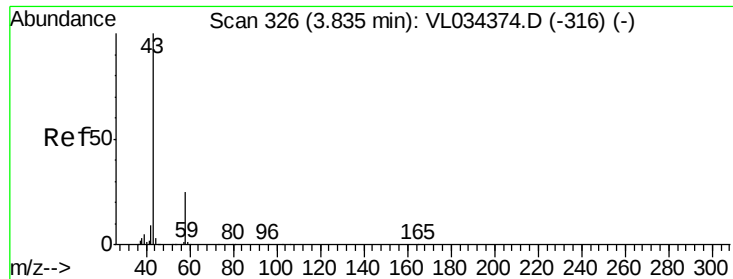
Tgt Ion: 45 Resp: 4010615

Ion Ratio Lower Upper

45 100

46 38.8 13.8 55.4





#15

Acetone

Concen: 1.273 ppbv

RT: 3.84 min Scan# 328

Delta R.T. 0.01 min

Lab File: VL034412.D

Acq: 25 Nov 2019 18:59

Instrument :

MSVOA\_L

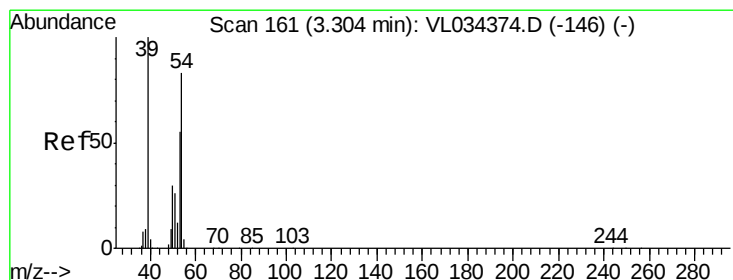
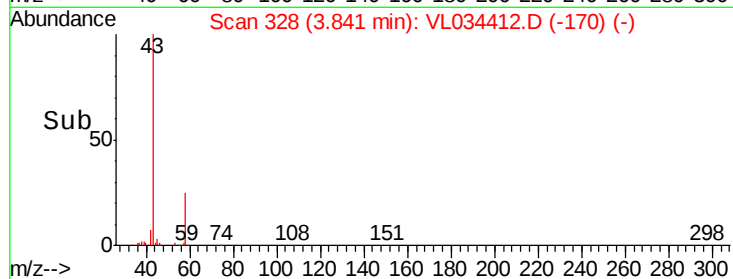
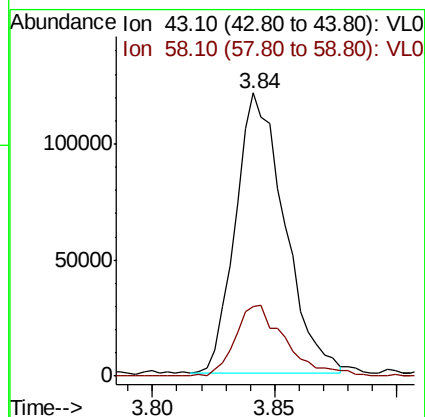
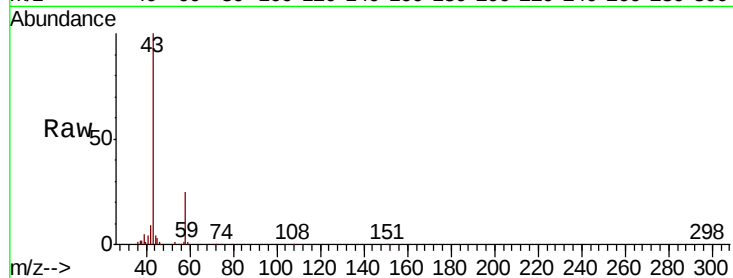
ClientSampleId :

Tot Ion: 43 Resp: 167678

Ion Ratio Lower Upper

43 100

58 26.4 20.2 30.4



#16

1,3-Butadiene

Concen: 0.041 ppbv

RT: 3.28 min Scan# 153

Delta R.T. -0.03 min

Lab File: VL034412.D

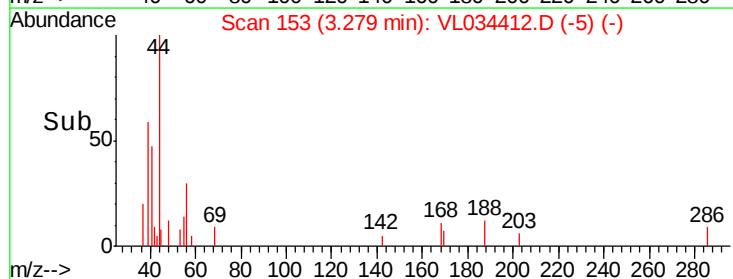
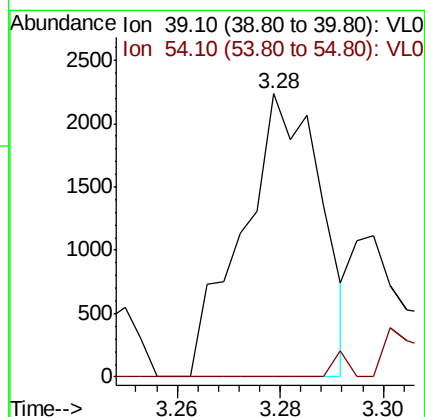
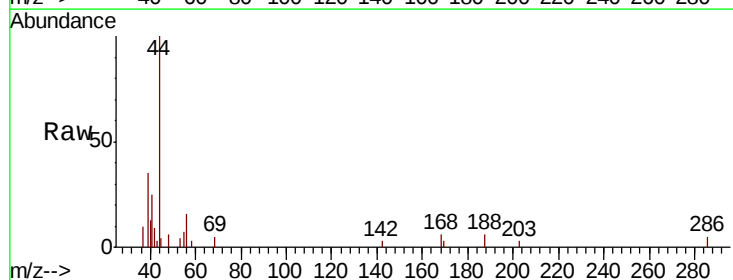
Acq: 25 Nov 2019 18:59

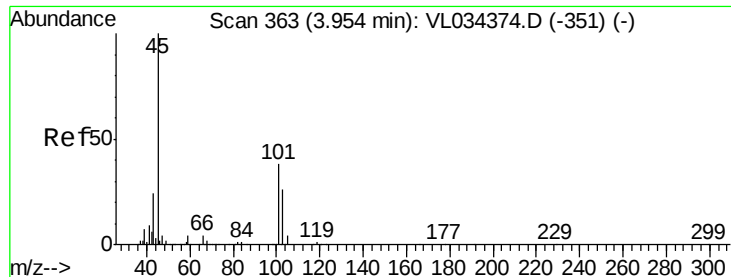
Tgt Ion: 39 Resp: 2351

Ion Ratio Lower Upper

39 100

54 13.6 64.7 97.1#

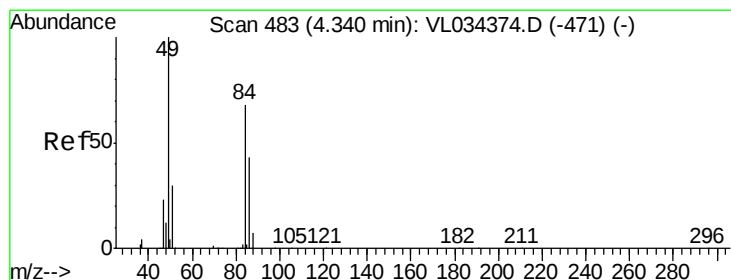
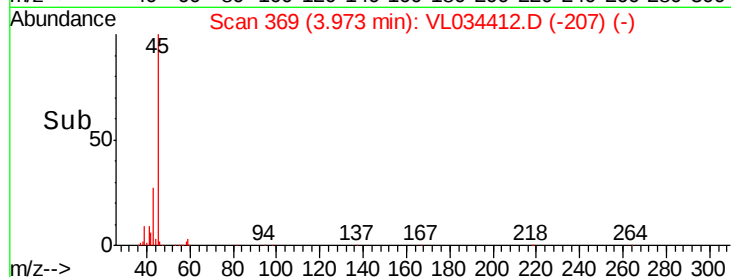
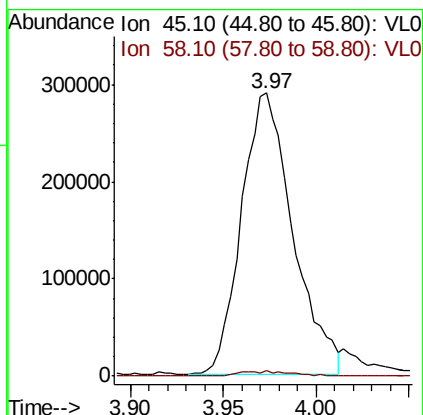
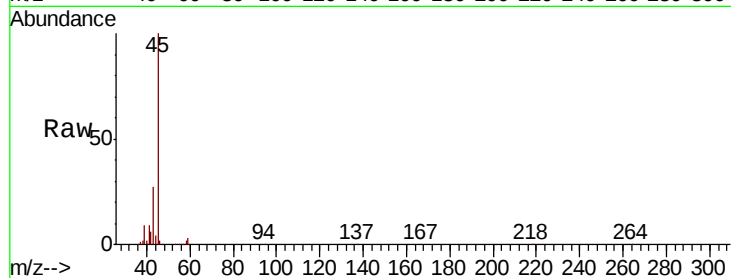




#19  
Isopropyl Alcohol  
Concen: 6.591 ppbv  
RT: 3.97 min Scan# 369  
Delta R.T. 0.02 min  
Lab File: VL034412.D  
Acq: 25 Nov 2019 18:59

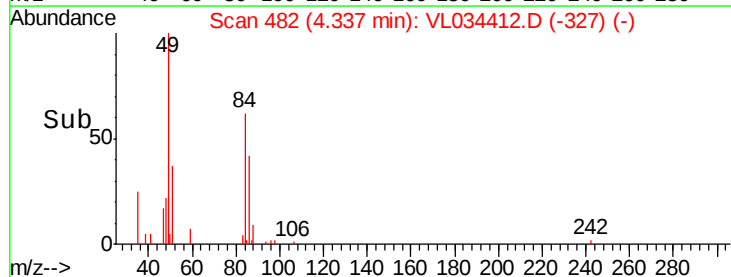
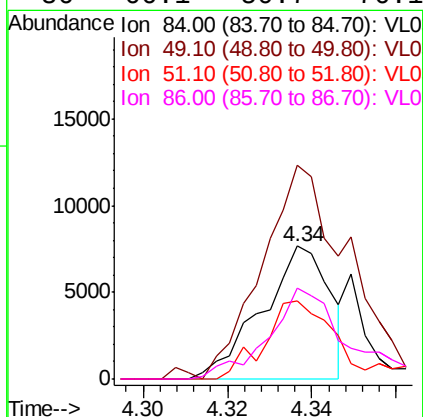
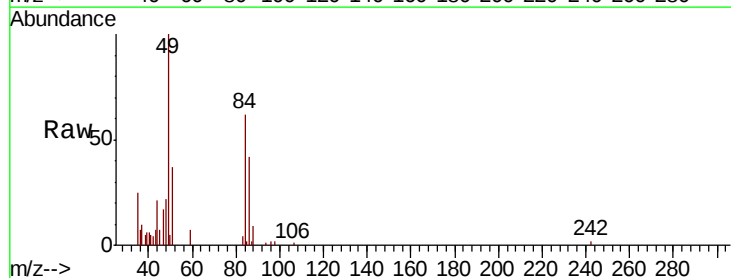
Instrument :  
MSVOA\_L  
ClientSampleId :

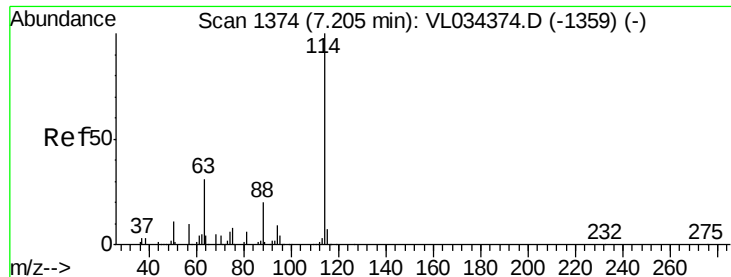
Tot Ion: 45 Resp: 556491  
Ion Ratio Lower Upper  
45 100  
58 2.1 1.3 1.9#



#20  
Methylene Chloride  
Concen: 0.183 ppbv  
RT: 4.34 min Scan# 482  
Delta R.T. -0.00 min  
Lab File: VL034412.D  
Acq: 25 Nov 2019 18:59

Tgt Ion: 84 Resp: 8556  
Ion Ratio Lower Upper  
84 100  
49 159.1 116.8 175.2  
51 57.6 35.6 53.4#  
86 66.1 50.7 76.1

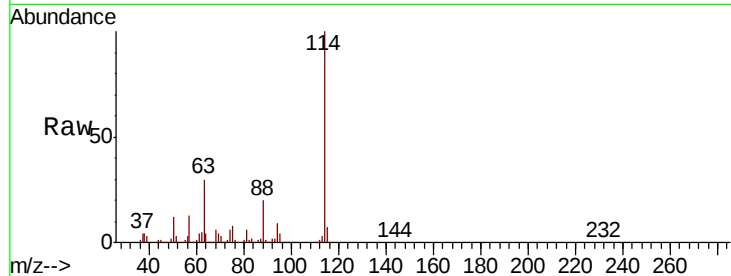




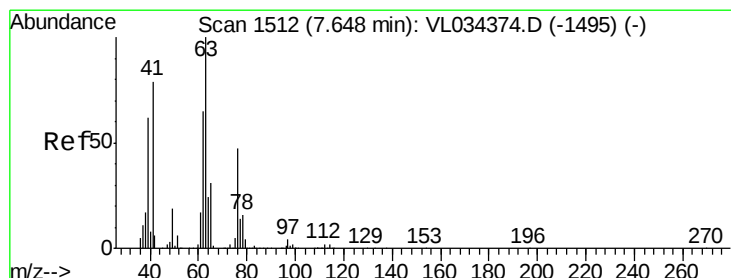
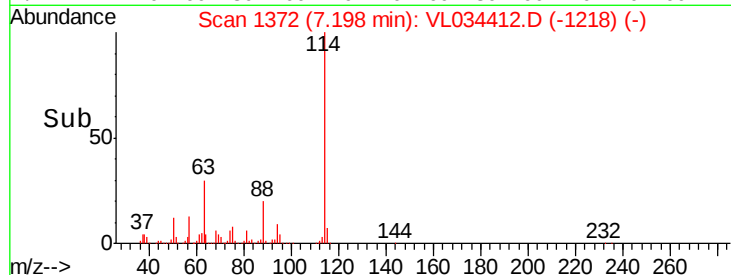
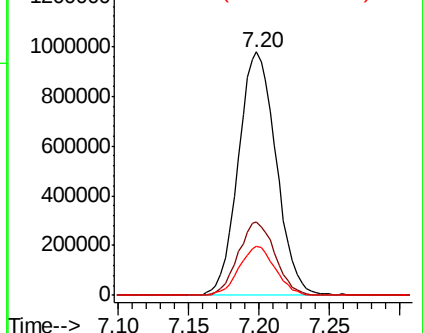
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.20 min Scan# 1372  
 Delta R.T. -0.01 min  
 Lab File: VL034412.D  
 Acq: 25 Nov 2019 18:59

Instrument :  
 MSVOA\_L  
 ClientSampleId :

Tot Ion:114 Resp: 1834439  
 Ion Ratio Lower Upper  
 114 100  
 63 29.6 24.2 36.4  
 88 19.5 15.9 23.9

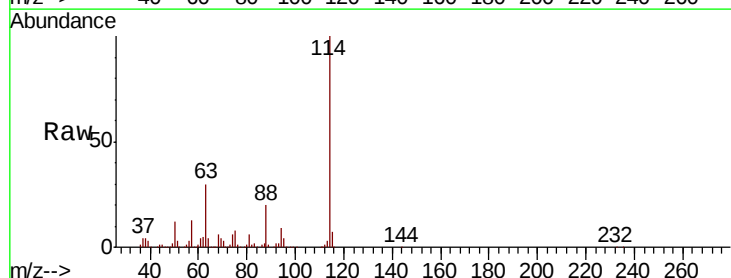


Abundance Ion 114.10 (113.80 to 114.80): VL0  
 Ion 63.10 (62.80 to 63.80): VL0  
 Ion 88.10 (87.80 to 88.80): VL0

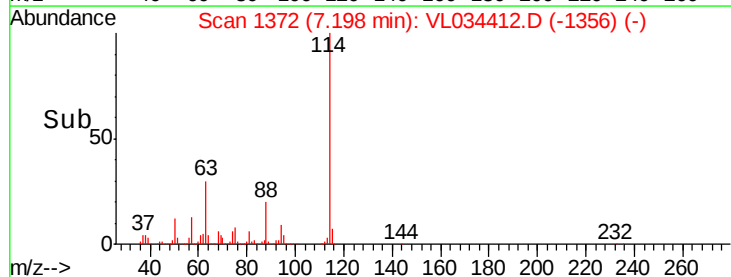
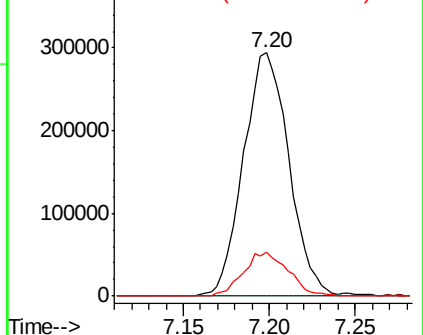


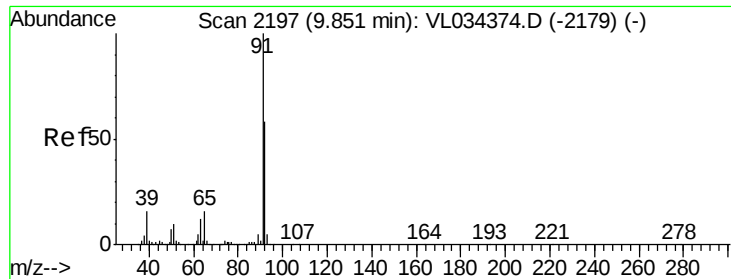
#39  
 1,2-Dichloropropane  
 Concen: 7.637 ppbv  
 RT: 7.20 min Scan# 1372  
 Delta R.T. -0.45 min  
 Lab File: VL034412.D  
 Acq: 25 Nov 2019 18:59

Tgt Ion: 63 Resp: 539538  
 Ion Ratio Lower Upper  
 63 100  
 41 0.0 63.1 94.7#  
 62 18.3 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





#53

Toluene

Concen: 0.045 ppbv

RT: 9.84 min Scan# 2195

Delta R.T. -0.01 min

Lab File: VL034412.D

Acq: 25 Nov 2019 18:59

Instrument :

MSVOA\_L

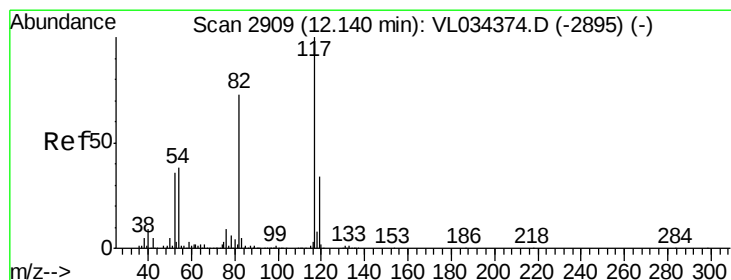
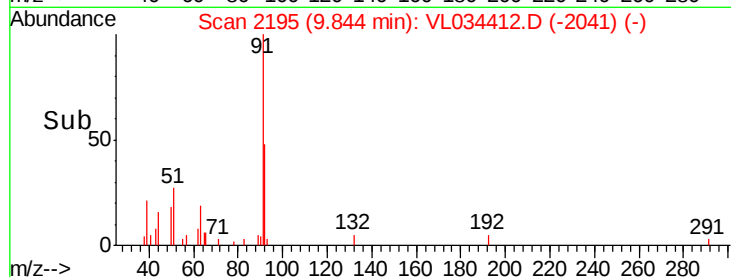
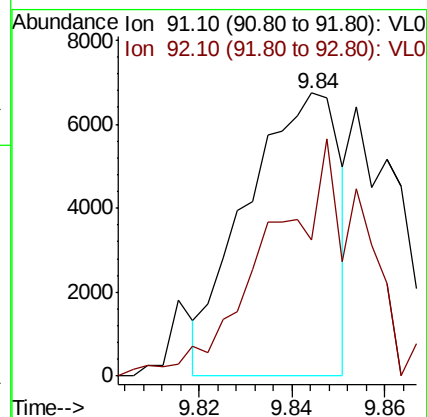
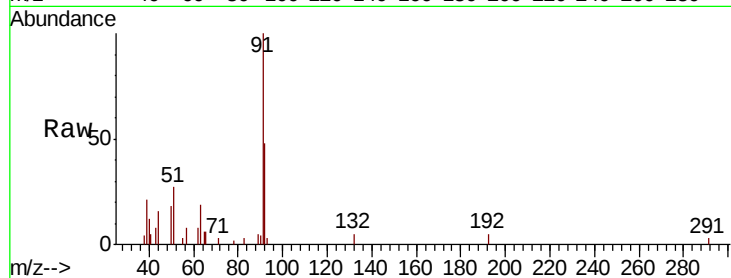
ClientSampleId :

Tot Ion: 91 Resp: 9407

Ion Ratio Lower Upper

91 100

92 87.2 47.9 71.9#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.14 min Scan# 2908

Delta R.T. -0.00 min

Lab File: VL034412.D

Acq: 25 Nov 2019 18:59

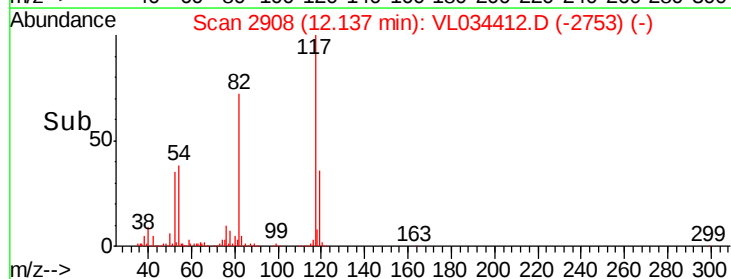
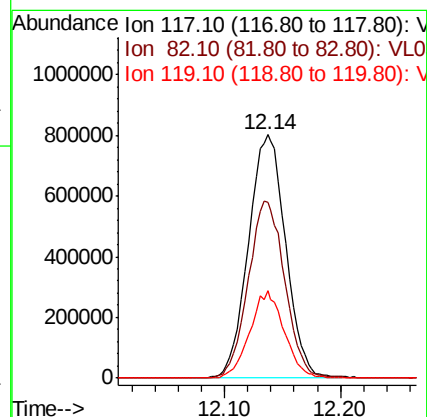
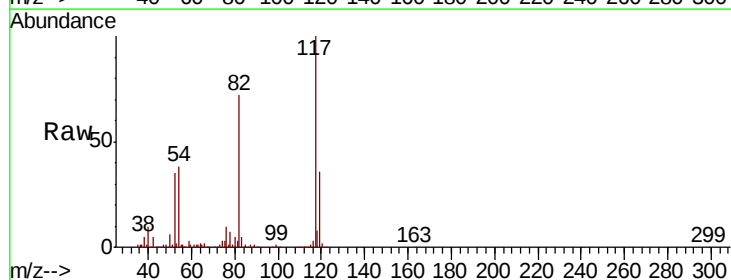
Tgt Ion: 117 Resp: 1786226

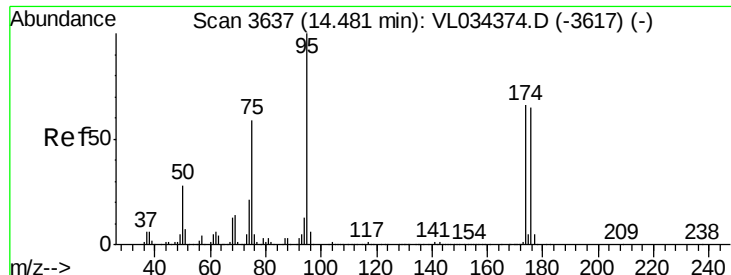
Ion Ratio Lower Upper

117 100

82 72.0 57.5 86.3

119 33.2 25.4 38.2





#68

1-Bromo-4-Fluorobenzene

Concen: 9.896 ppbv

RT: 14.47 min Scan# 3635

Delta R.T. -0.01 min

Lab File: VL034412.D

Acq: 25 Nov 2019 18:59

Instrument :

MSVOA\_L

ClientSampleId :

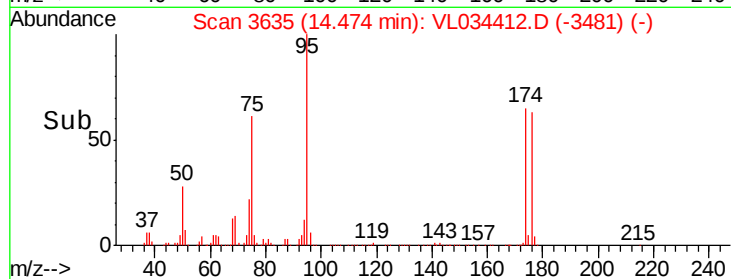
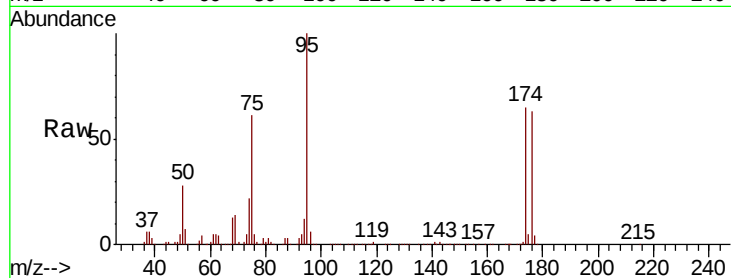
Tot Ion: 95 Resp: 1487066

Ion Ratio Lower Upper

95 100

174 66.8 52.2 78.2

175 4.7 3.8 5.8



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

