

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL031319\  
 Data File : VL033314.D  
 Acq On : 14 Mar 2019 13:36  
 Operator : SY/AP  
 Sample : K1758-02  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 BP-VPB201-AIR-DW-20190305

Manual Integrations  
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 3/15/2019 10:42:06 PM

Quant Time: Mar 15 15:55:25 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL031319AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 15 2019  
 QLast Update : Thu Mar 14 00:01:31 2019  
 Response via : Initial Calibration

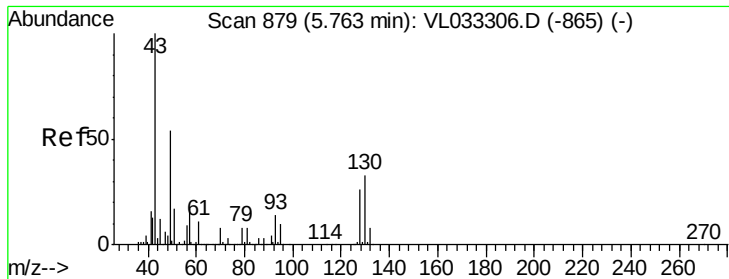
| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.76  | 49   | 766952   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.29  | 114  | 1698120  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.24 | 117  | 1917091  | 10.00 | ppbv  | 0.00     |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 68) 1-Bromo-4-Fluorobenzene | 14.58  | 95    | 1519063  | 10.38    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 103.80% |

| Target Compounds           | R.T. | QIon | Response | Conc  | Units  | Qvalue |
|----------------------------|------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane | 3.08 | 85   | 66604    | 0.469 | ppbv   | 96     |
| 3) Chlorodifluoromethane   | 3.02 | 51   | 30811m   | 0.308 | ppbv   |        |
| 4) Chloromethane           | 3.17 | 50   | 25029    | 0.462 | ppbv   | 99     |
| 9) Propene                 | 3.05 | 41   | 27882    | 0.618 | ppbv # | 74     |
| 11) Trichlorofluoromethane | 4.00 | 101  | 32290    | 0.226 | ppbv   | 97     |
| 13) Ethanol                | 3.67 | 45   | 96903m   | 7.012 | ppbv   |        |
| 15) Acetone                | 3.90 | 43   | 219795m  | 2.084 | ppbv   |        |
| 19) Isopropyl Alcohol      | 4.05 | 45   | 33053m   | 0.512 | ppbv   |        |
| 20) Methylene Chloride     | 4.41 | 84   | 121007   | 2.834 | ppbv   | 97     |
| 26) Hexane                 | 5.78 | 57   | 91889    | 1.024 | ppbv # | 47     |
| 34) 2-Butanone             | 5.34 | 43   | 33371    | 0.284 | ppbv   | 98     |
| 35) Carbon Tetrachloride   | 7.13 | 117  | 7813     | 0.060 | ppbv   | 90     |
| 36) Benzene                | 7.01 | 78   | 55195m   | 0.331 | ppbv   |        |
| 53) Toluene                | 9.95 | 91   | 232154   | 1.216 | ppbv   | 98     |

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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 879

Delta R.T. 0.00 min

Lab File: VL033314.D

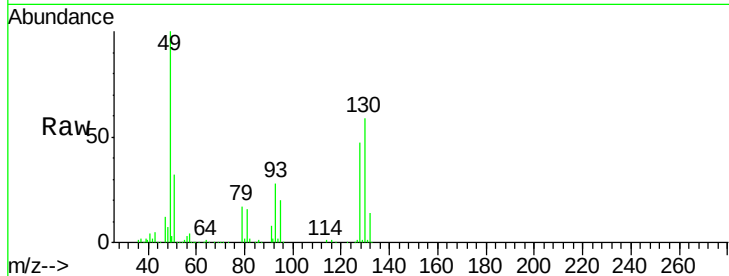
Acq: 14 Mar 2019 13:36

Instrument :

MSVOA\_L

ClientSampleId :

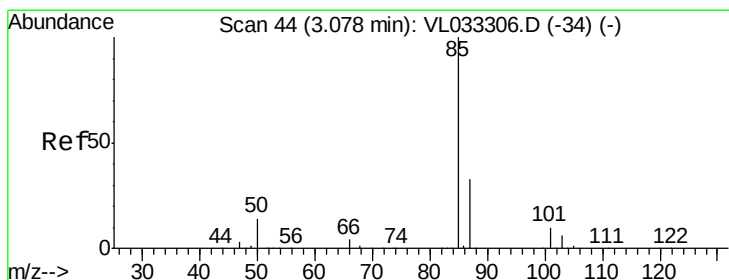
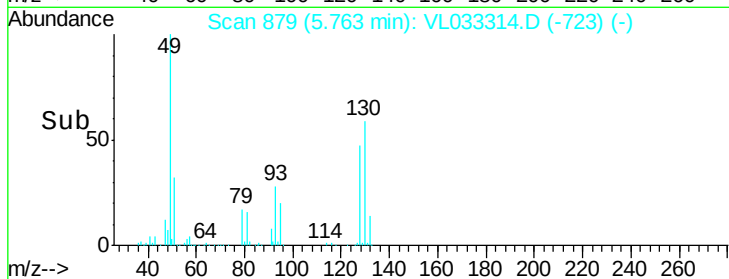
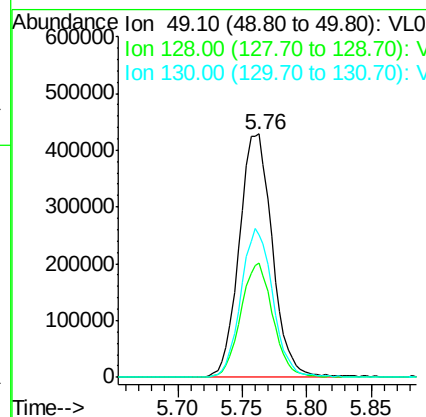
BP-VPB201-AIR-DW-20190305



|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 49    | Resp: | 766952 |
| Ion Ratio | Lower | Upper |        |
| 49        | 100   |       |        |
| 128       | 45.7  | 23.4  | 70.3   |
| 130       | 59.2  | 29.9  | 89.7   |

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#2

Dichlorodifluoromethane

Concen: 0.469 ppbv

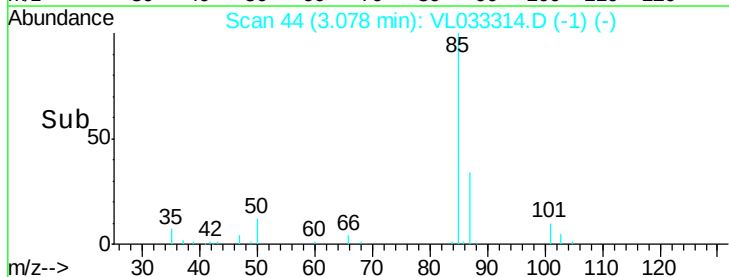
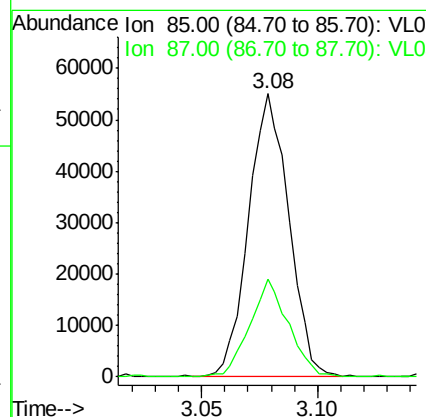
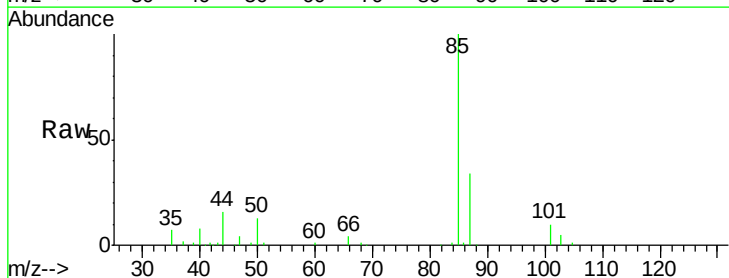
RT: 3.08 min Scan# 44

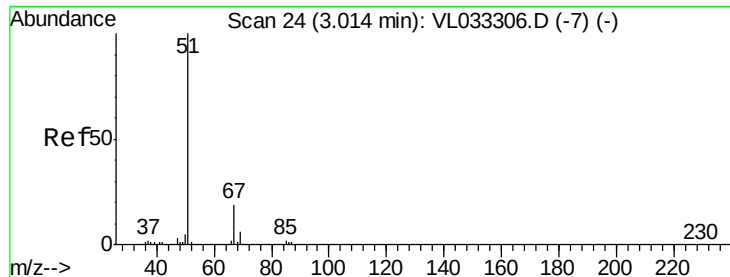
Delta R.T. 0.00 min

Lab File: VL033314.D

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|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 85    | Resp: | 66604 |
| Ion Ratio | Lower | Upper |       |
| 85        | 100   |       |       |
| 87        | 34.4  | 25.8  | 38.8  |





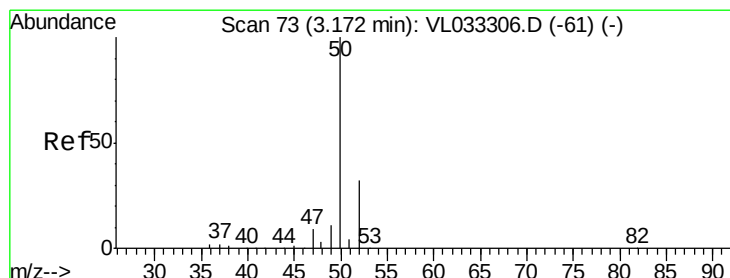
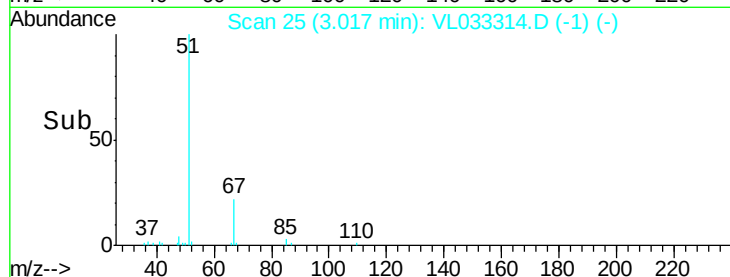
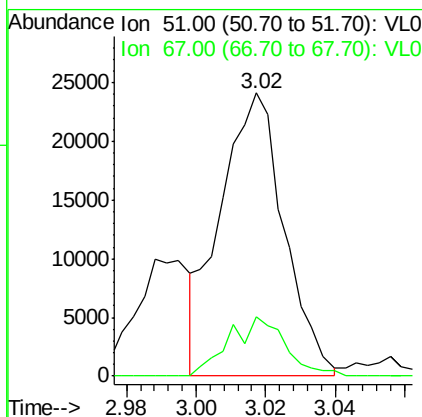
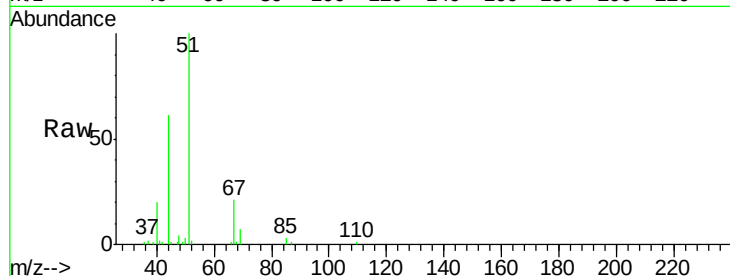
#3  
Chlorodifluoromethane  
Concen: 0.308 ppbv  
RT: 3.02 min Scan# 25  
Delta R.T. 0.00 min  
Lab File: VL033314.D  
Acq: 14 Mar 2019 13:36

Instrument :  
MSVOA\_L  
ClientSampleId :  
BP-VPB201-AIR-DW-20190305

Tgt Ion: 51 Resp: 30811  
Ion Ratio Lower Upper  
51 100  
67 18.6 14.9 22.3

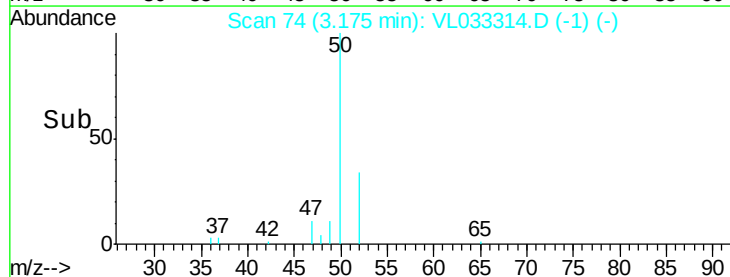
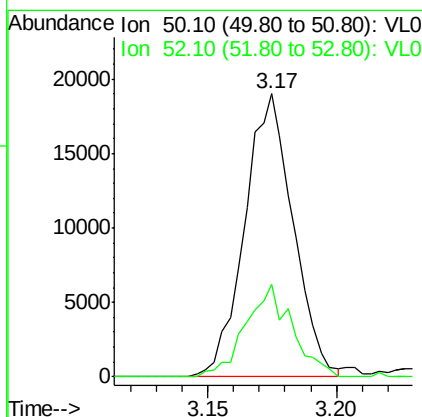
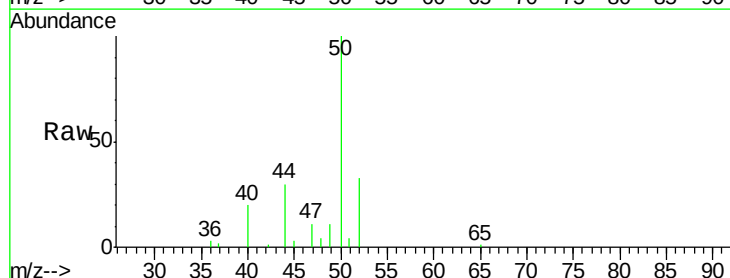
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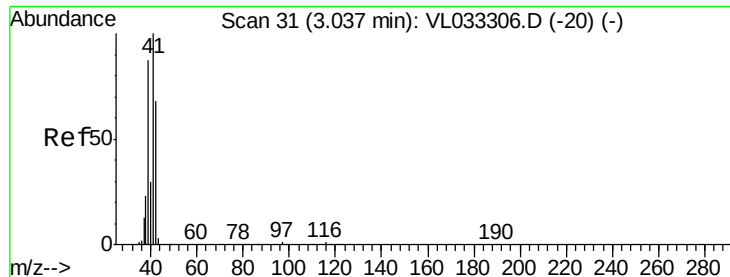
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#4  
Chloromethane  
Concen: 0.462 ppbv  
RT: 3.17 min Scan# 74  
Delta R.T. 0.01 min  
Lab File: VL033314.D  
Acq: 14 Mar 2019 13:36

Tgt Ion: 50 Resp: 25029  
Ion Ratio Lower Upper  
50 100  
52 32.5 25.7 38.5





#9

Propene

Concen: 0.618 ppbv

RT: 3.05 min Scan# 36

Delta R.T. 0.02 min

Lab File: VL033314.D

Acq: 14 Mar 2019 13:36

Instrument :

MSVOA\_L

ClientSampleId :

BP-VPB201-AIR-DW-20190305

Tgt Ion: 41 Resp: 27882

Ion Ratio Lower Upper

41 100

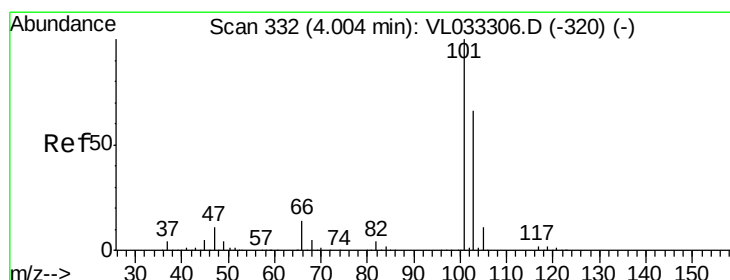
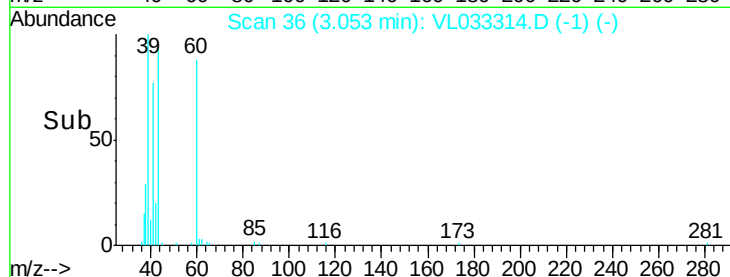
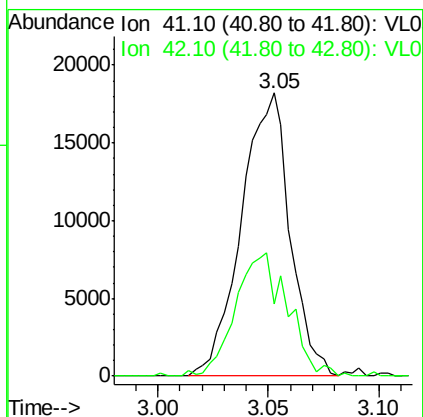
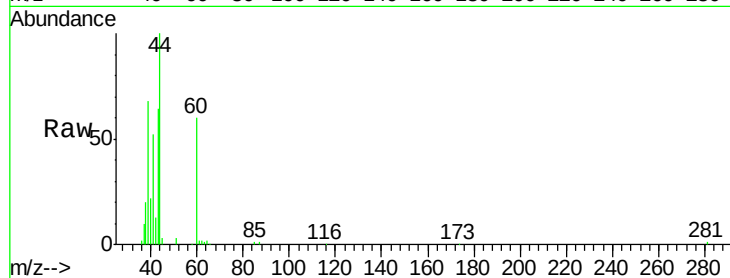
42 46.9 54.4 81.6#

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#11

Trichlorofluoromethane

Concen: 0.226 ppbv

RT: 4.00 min Scan# 332

Delta R.T. 0.00 min

Lab File: VL033314.D

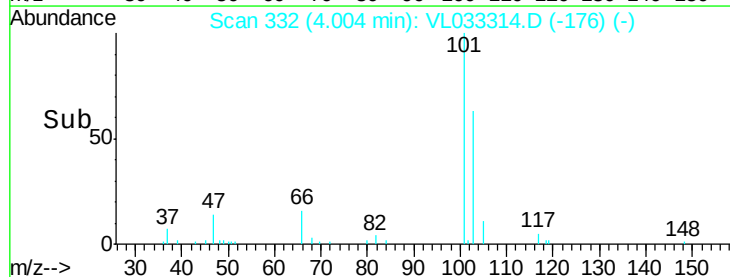
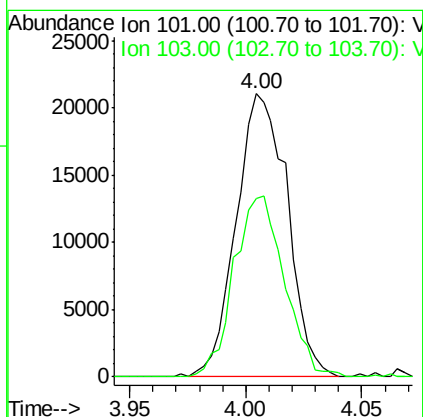
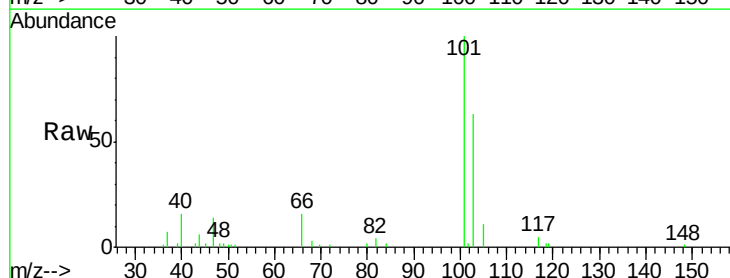
Acq: 14 Mar 2019 13:36

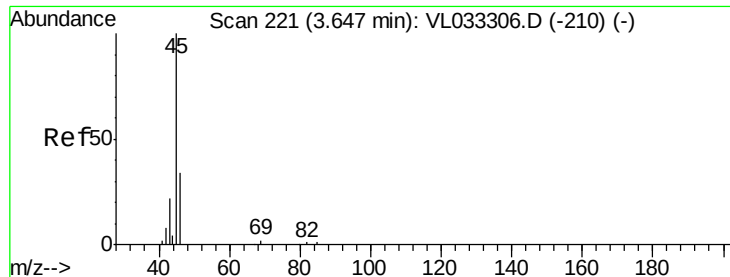
Tgt Ion: 101 Resp: 32290

Ion Ratio Lower Upper

101 100

103 63.2 52.5 78.7





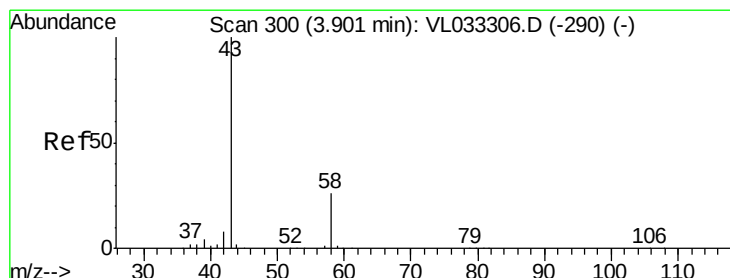
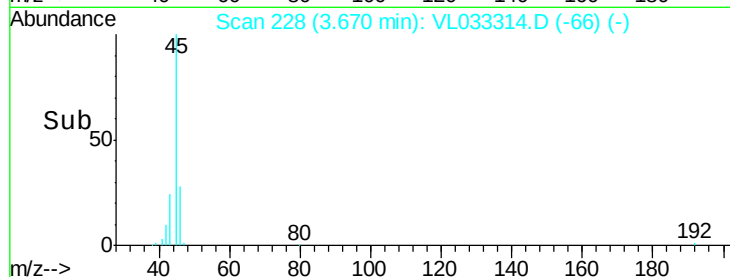
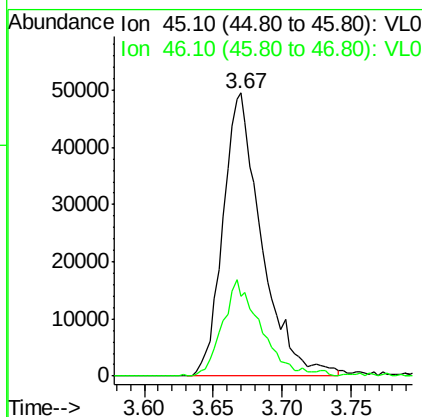
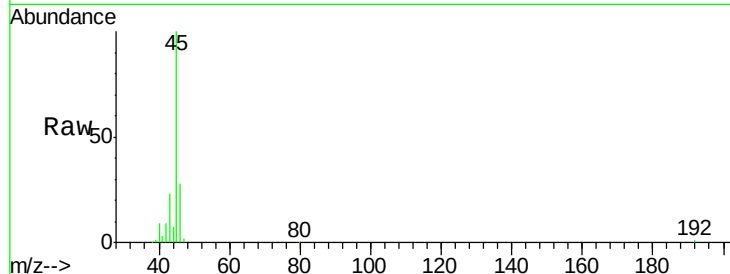
#13  
Ethanol  
Concen: 7.012 ppbv m  
RT: 3.67 min Scan# 228  
Delta R.T. 0.02 min  
Lab File: VL033314.D  
Acq: 14 Mar 2019 13:36

Instrument :  
MSVOA\_L  
ClientSampleId :  
BP-VPB201-AIR-DW-20190305

Tgt Ion: 45 Resp: 96903  
Ion Ratio Lower Upper  
45 100  
46 34.1 14.9 59.5

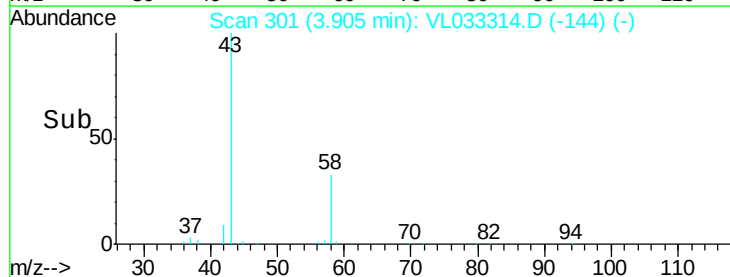
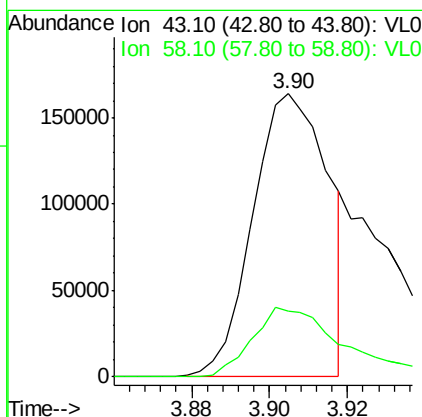
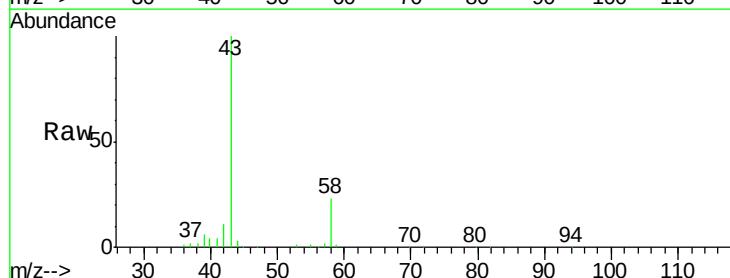
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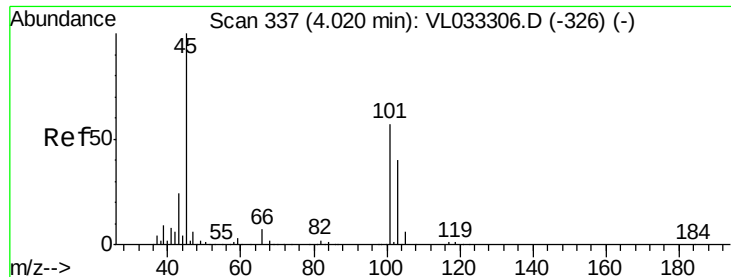
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#15  
Acetone  
Concen: 2.084 ppbv m  
RT: 3.90 min Scan# 301  
Delta R.T. 0.00 min  
Lab File: VL033314.D  
Acq: 14 Mar 2019 13:36

Tgt Ion: 43 Resp: 219795  
Ion Ratio Lower Upper  
43 100  
58 29.8 20.6 31.0





#19

Isopropyl Alcohol

Concen: 0.512 ppbv m

RT: 4.05 min Scan# 347

Delta R.T. 0.03 min

Lab File: VL033314.D

Acq: 14 Mar 2019 13:36

Instrument :

MSVOA\_L

ClientSampleId :

BP-VPB201-AIR-DW-20190305

Tgt Ion: 45 Resp: 33053

Ion Ratio Lower Upper

45 100

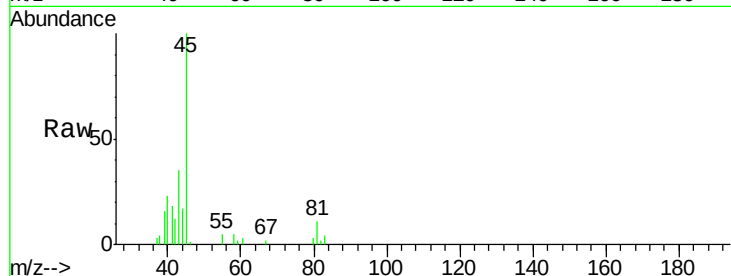
58 0.0 1.4 2.0#

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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

4.05

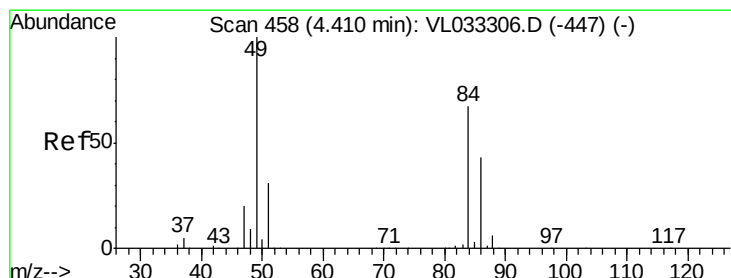
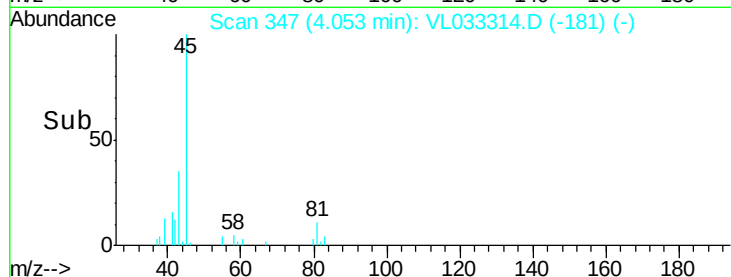
15000

10000

5000

0

Time-->



#20

Methylene Chloride

Concen: 2.834 ppbv

RT: 4.41 min Scan# 458

Delta R.T. 0.00 min

Lab File: VL033314.D

Acq: 14 Mar 2019 13:36

Tgt Ion: 84 Resp: 121007

Ion Ratio Lower Upper

84 100

49 142.5 115.4 173.2

51 42.5 35.7 53.5

86 61.4 52.6 78.8

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

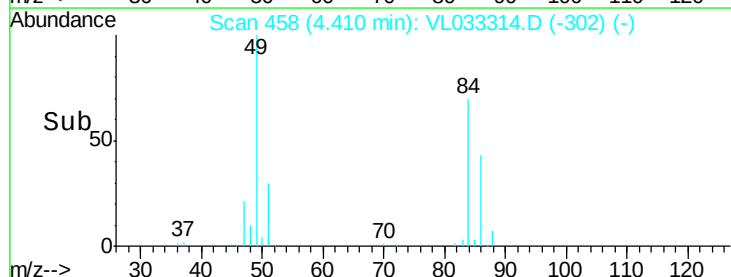
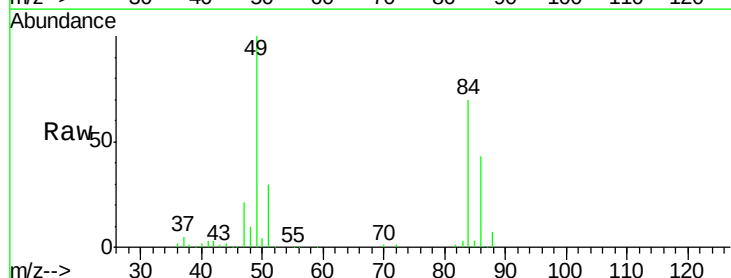
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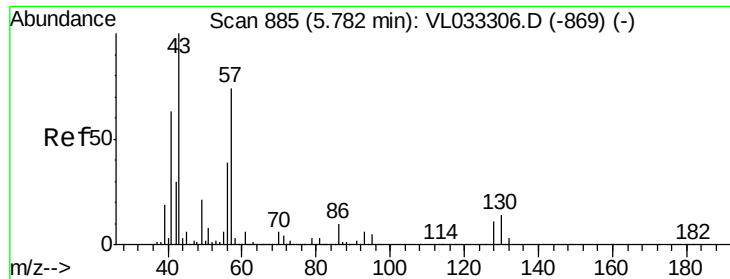
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50000

0

Time-->





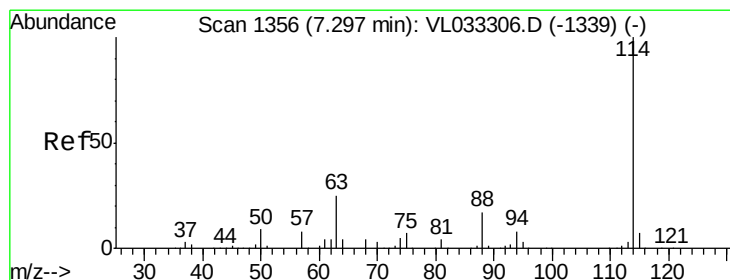
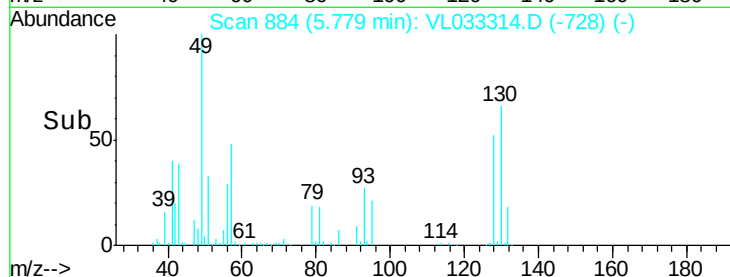
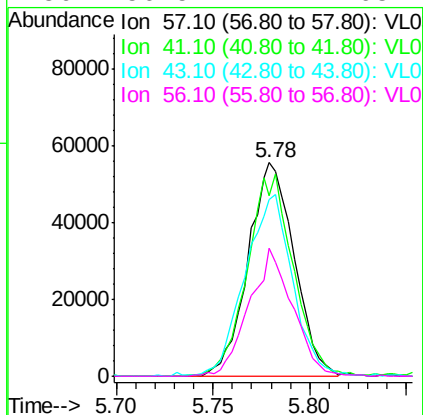
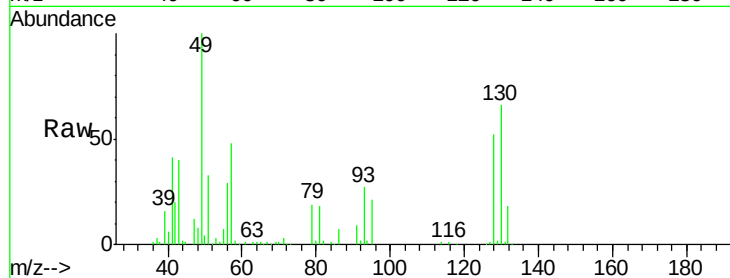
#26  
Hexane  
Concen: 1.024 ppbv  
RT: 5.78 min Scan# 884  
Delta R.T. 0.00 min  
Lab File: VL033314.D  
Acq: 14 Mar 2019 13:36

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MSVOA\_L  
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Tgt Ion: 57 Resp: 91889  
Ion Ratio Lower Upper  
57 100  
41 95.4 71.6 107.4  
43 88.4 179.2 268.8#  
56 56.5 42.2 63.2

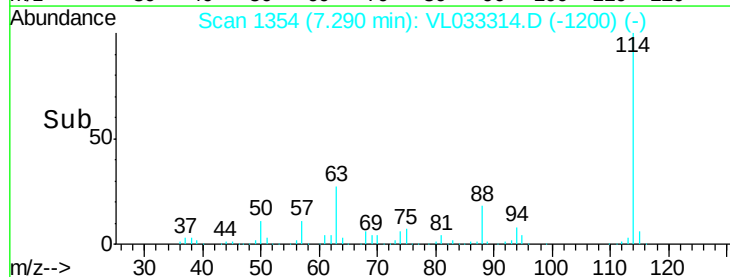
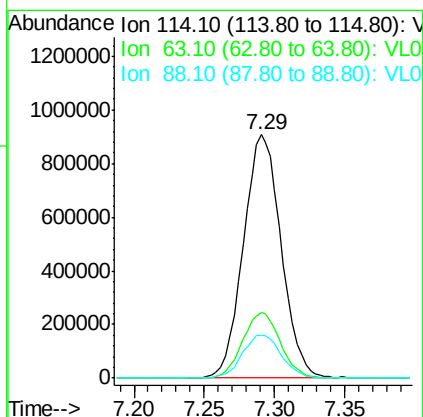
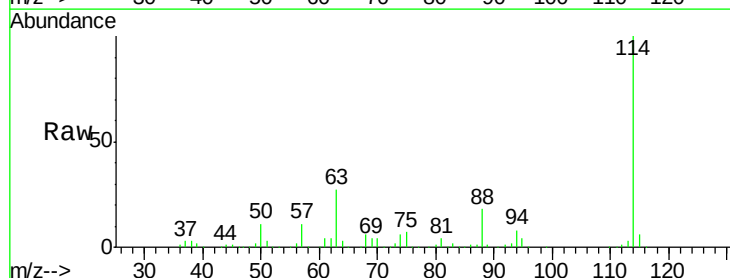
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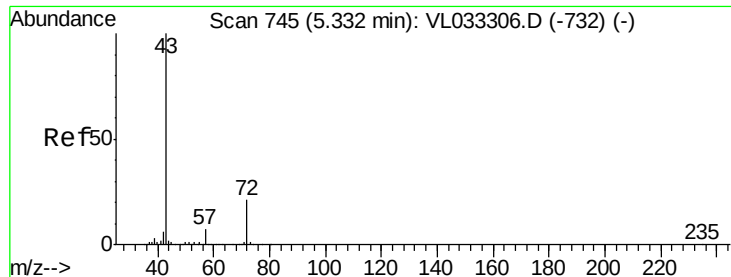


#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 7.29 min Scan# 1354  
Delta R.T. -0.01 min  
Lab File: VL033314.D  
Acq: 14 Mar 2019 13:36

Tgt Ion: 114 Resp: 1698120  
Ion Ratio Lower Upper  
114 100  
63 27.3 21.3 31.9  
88 18.3 14.5 21.7







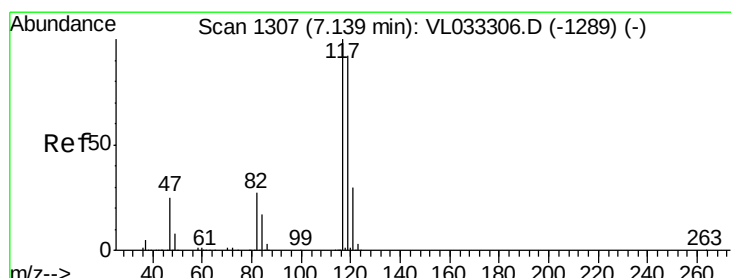
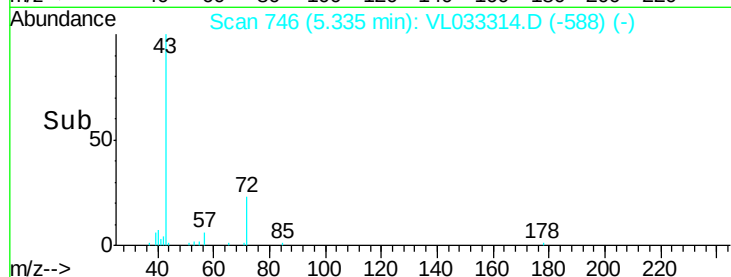
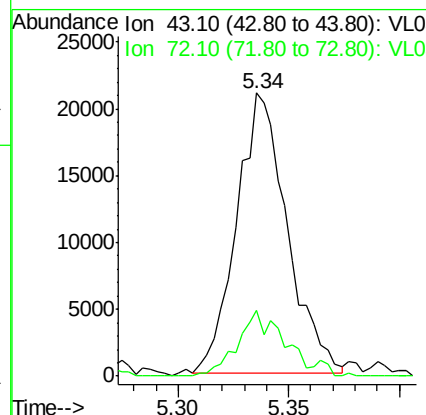
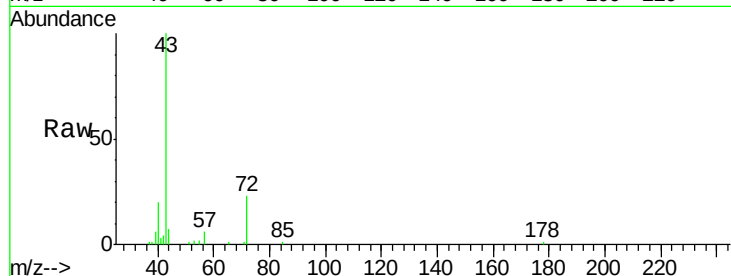
#34  
2-Butanone  
Concen: 0.284 ppbv  
RT: 5.34 min Scan# 746  
Delta R.T. 0.01 min  
Lab File: VL033314.D  
Acq: 14 Mar 2019 13:36

Instrument :  
MSVOA\_L  
ClientSampleId :  
BP-VPB201-AIR-DW-20190305

Tgt Ion: 43 Resp: 33371  
Ion Ratio Lower Upper  
43 100  
72 22.5 17.2 25.8

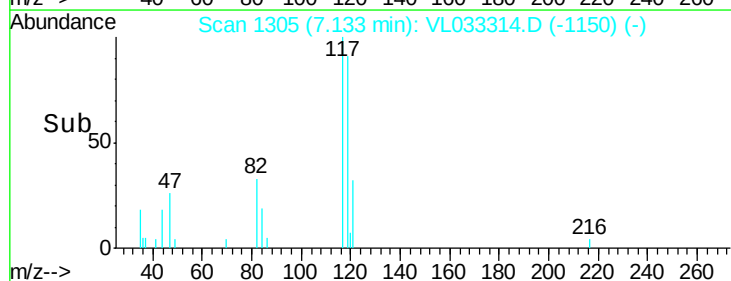
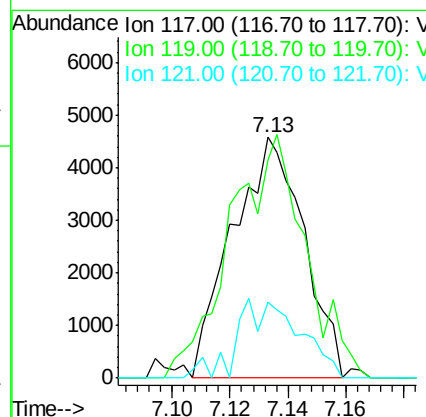
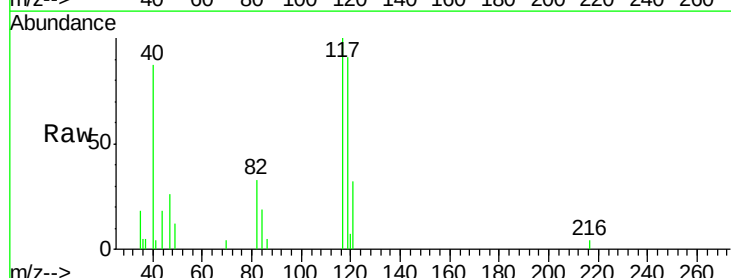
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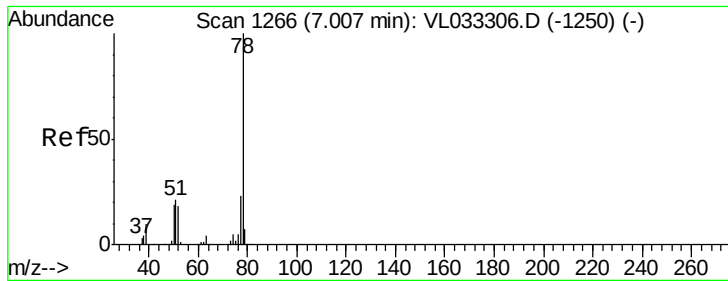
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#35  
Carbon Tetrachloride  
Concen: 0.060 ppbv  
RT: 7.13 min Scan# 1305  
Delta R.T. -0.00 min  
Lab File: VL033314.D  
Acq: 14 Mar 2019 13:36

Tgt Ion: 117 Resp: 7813  
Ion Ratio Lower Upper  
117 100  
119 82.5 75.9 113.9  
121 31.7 25.2 37.8





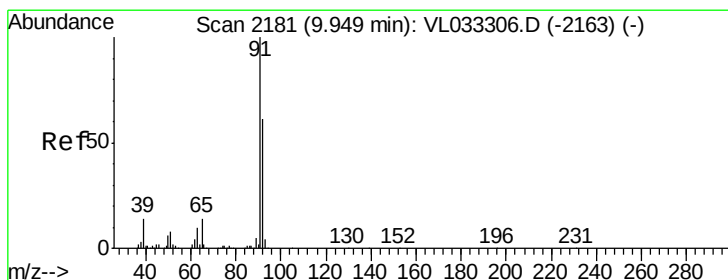
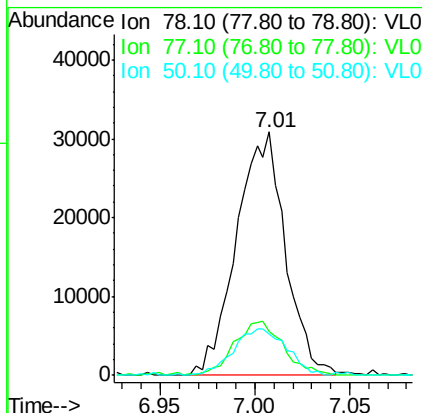
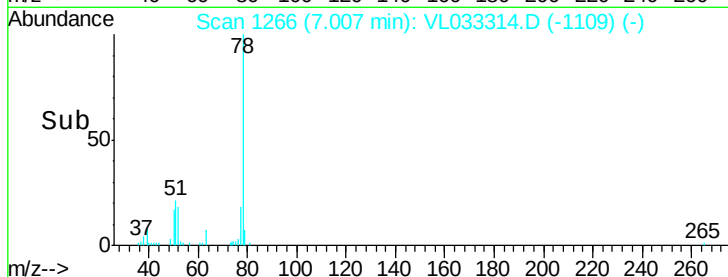
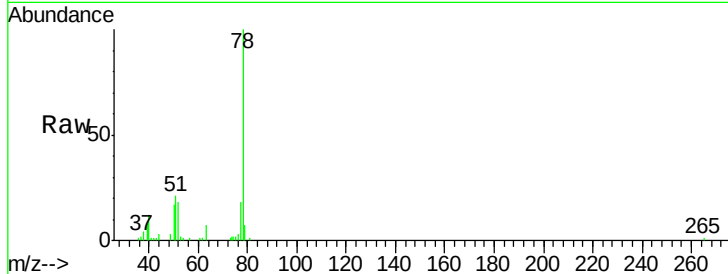
#36  
Benzene  
Concen: 0.331 ppbv m  
RT: 7.01 min Scan# 1266  
Delta R.T. 0.00 min  
Lab File: VL033314.D  
Acq: 14 Mar 2019 13:36

Instrument :  
MSVOA\_L  
ClientSampleId :  
BP-VPB201-AIR-DW-20190305

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 78      | 100   |       |       |
| 77      | 18.1  | 18.6  | 28.0# |
| 50      | 16.9  | 15.2  | 22.8  |

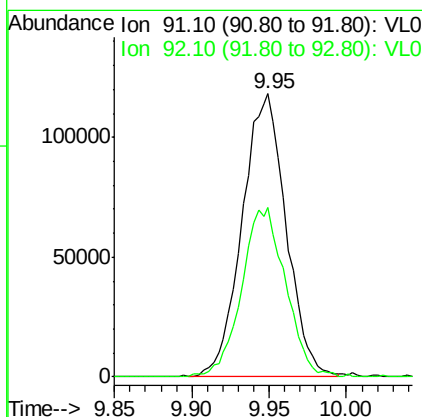
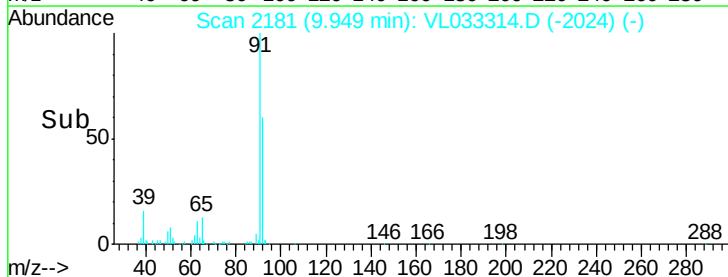
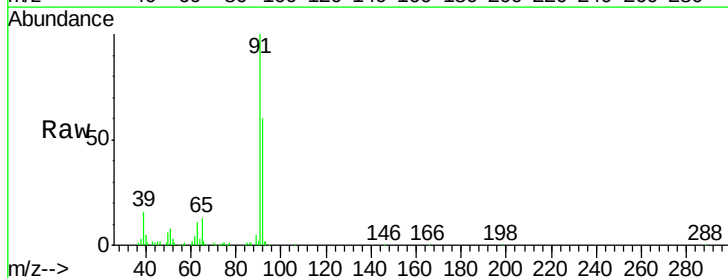
Manual Integrations  
APPROVED

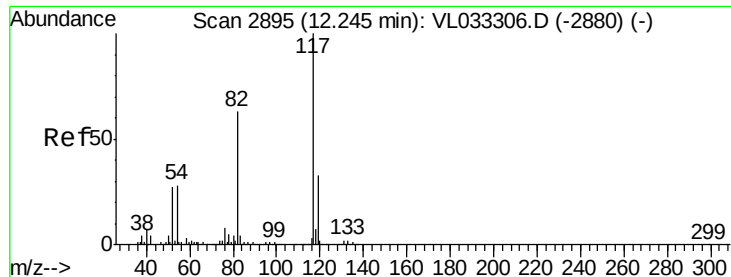
MMDadoda  
3/15/2019 10:42:06 PM



#53  
Toluene  
Concen: 1.216 ppbv  
RT: 9.95 min Scan# 2181  
Delta R.T. 0.00 min  
Lab File: VL033314.D  
Acq: 14 Mar 2019 13:36

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 60.6  | 47.4  | 71.2  |





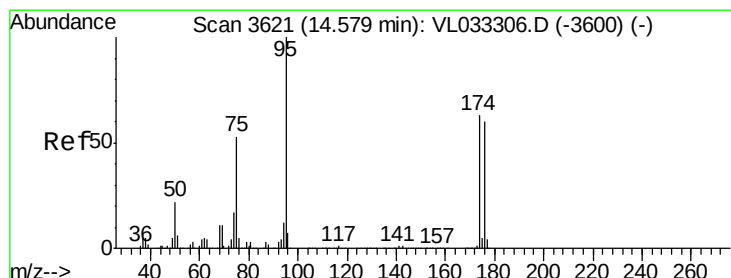
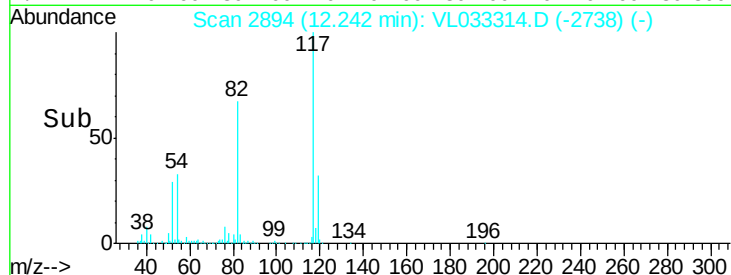
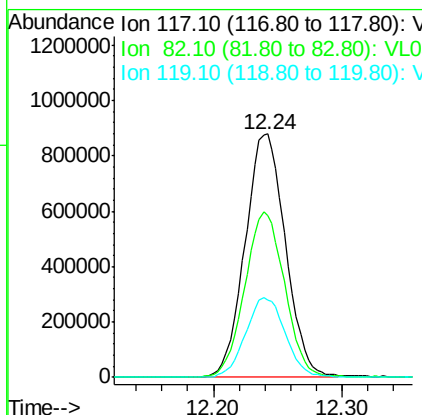
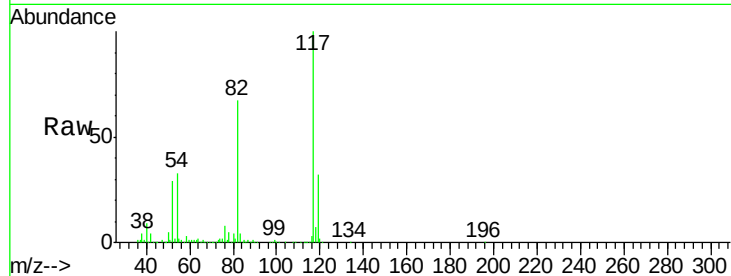
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.24 min Scan# 2894  
Delta R.T. 0.00 min  
Lab File: VL033314.D  
Acq: 14 Mar 2019 13:36

Instrument :  
MSVOA\_L  
ClientSampleId :  
BP-VPB201-AIR-DW-20190305

Tgt Ion: 117 Resp: 1917091  
Ion Ratio Lower Upper  
117 100  
82 68.0 51.3 76.9  
119 32.4 27.0 40.4

Manual Integrations  
APPROVED

MMDadoda  
3/15/2019 10:42:06 PM



#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.376 ppbv  
RT: 14.58 min Scan# 3620  
Delta R.T. -0.00 min  
Lab File: VL033314.D  
Acq: 14 Mar 2019 13:36

Tgt Ion: 95 Resp: 1519063  
Ion Ratio Lower Upper  
95 100  
174 63.9 51.9 77.9  
175 4.6 3.9 5.9

