

Data File : VL033758.D  
Acq On : 23 May 2019 00:01  
Operator : SY/AP  
Sample : K2929-04DL 40X  
Misc : 400ml/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
BPS1-SG-3005-55DL

Quant Time: May 23 04:26:38 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL051719AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri May 17 08:15:41 2019  
QLast Update : Fri May 17 08:15:41 2019  
Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.75  | 49   | 938382   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.28  | 114  | 2237408  | 10.00 | ppbv  | -0.01    |
| 55) Chlorobenzene-d5    | 12.23 | 117  | 2194226  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds  
68) 1-Bromo-4-Fluorobenzene 14.56 95 1817256 10.22 ppbv -0.01  
Spiked Amount 10.000 Range 65 - 135 Recovery = 102.20%

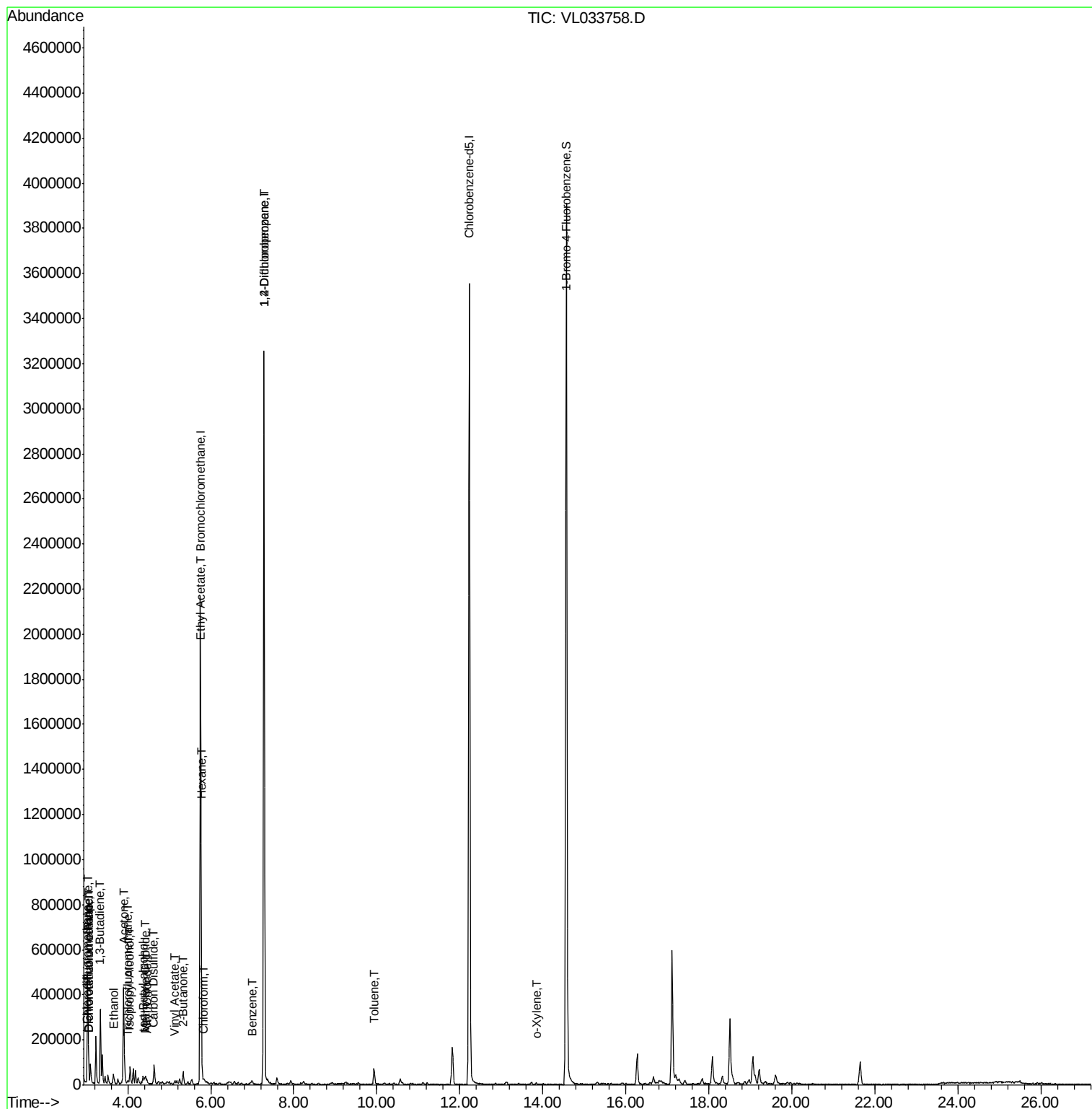
| Target Compounds             | R.T.  | QIon | Response | Conc  | Units  | Qvalue |
|------------------------------|-------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane   | 3.08  | 85   | 7267     | 0.037 | ppbv   | 89     |
| 3) Chlorodifluoromethane     | 3.01  | 51   | 4143     | 0.039 | ppbv   | 95     |
| 8) Dichlorotetrafluoroethane | 3.08  | 85   | 7267     | 0.046 | ppbv # | 16     |
| 9) Propene                   | 3.03  | 41   | 188726   | 4.128 | ppbv   | 90     |
| 11) Trichlorofluoromethane   | 4.00  | 101  | 2096     | 0.011 | ppbv   | 94     |
| 13) Ethanol                  | 3.65  | 45   | 14585    | 0.987 | ppbv # | 38     |
| 15) Acetone                  | 3.90  | 43   | 413411   | 3.175 | ppbv   | 94     |
| 16) 1,3-Butadiene            | 3.34  | 39   | 94428    | 1.821 | ppbv # | 26     |
| 17) tert-Butyl alcohol       | 4.38  | 59   | 5453     | 0.052 | ppbv # | 68     |
| 19) Isopropyl Alcohol        | 4.04  | 45   | 7302     | 0.087 | ppbv # | 94     |
| 20) Methylene Chloride       | 4.40  | 84   | 5275     | 0.105 | ppbv # | 70     |
| 21) Allyl Chloride           | 4.46  | 41   | 2935     | 0.036 | ppbv # | 30     |
| 23) Vinyl Acetate            | 5.14  | 43   | 2772     | 0.016 | ppbv # | 77     |
| 25) Ethyl Acetate            | 5.77  | 43   | 65349    | 0.286 | ppbv # | 92     |
| 26) Hexane                   | 5.78  | 57   | 7440     | 0.076 | ppbv # | 1      |
| 27) Carbon Disulfide         | 4.62  | 76   | 2424     | 0.018 | ppbv # | 1      |
| 29) Chloroform               | 5.84  | 83   | 1867     | 0.010 | ppbv   | 97     |
| 34) 2-Butanone               | 5.33  | 43   | 64736    | 0.467 | ppbv   | 95     |
| 36) Benzene                  | 6.99  | 78   | 8617     | 0.042 | ppbv # | 92     |
| 39) 1,2-Dichloropropane      | 7.28  | 63   | 572018   | 7.538 | ppbv # | 23     |
| 53) Toluene                  | 9.93  | 91   | 30915    | 0.141 | ppbv # | 41     |
| 60) o-Xylene                 | 13.84 | 91   | 3331     | 0.013 | ppbv   | 97     |

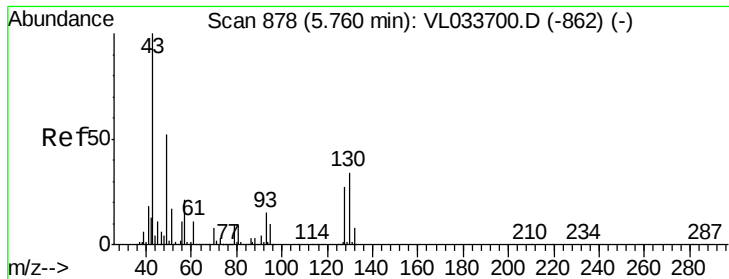
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.75 min Scan# 875

Delta R.T. -0.01 min

Lab File: VL033758.D

Acq: 23 May 2019 00:01

Instrument :

MSVOA\_L

ClientSampleId :

BPS1-SG-3005-55DL

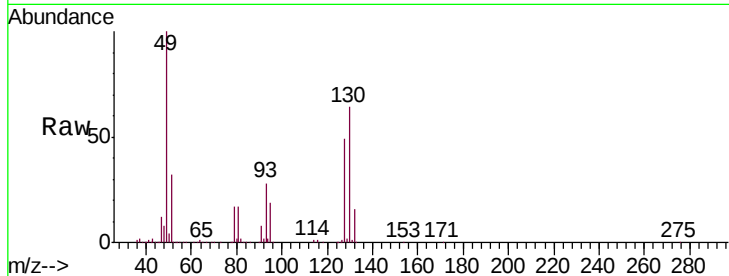
Tgt Ion: 49 Resp: 938382

Ion Ratio Lower Upper

49 100

128 50.1 25.2 75.6

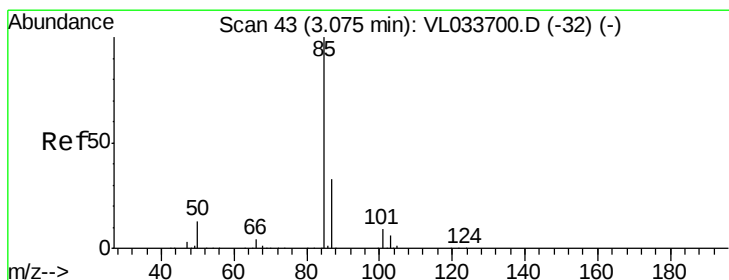
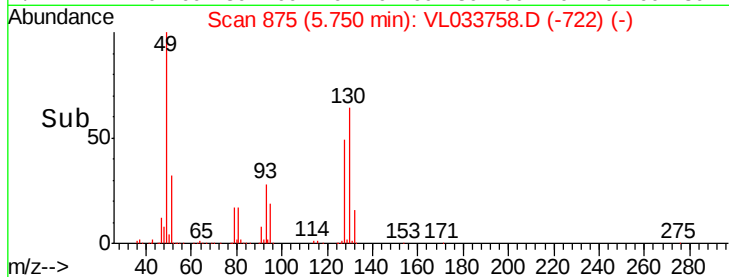
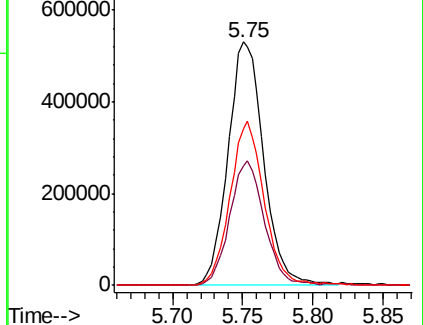
130 65.0 32.5 97.5



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.037 ppbv

RT: 3.08 min Scan# 43

Delta R.T. 0.00 min

Lab File: VL033758.D

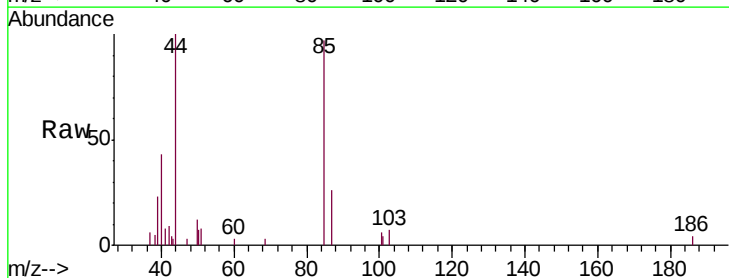
Acq: 23 May 2019 00:01

Tgt Ion: 85 Resp: 7267

Ion Ratio Lower Upper

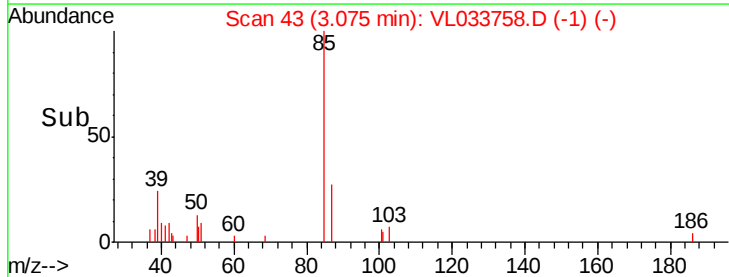
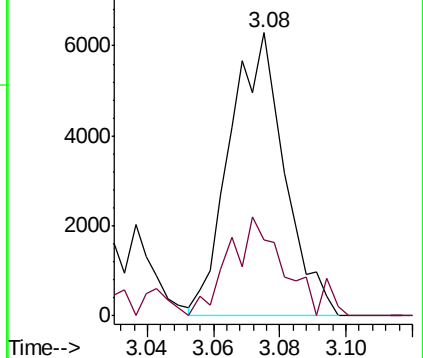
85 100

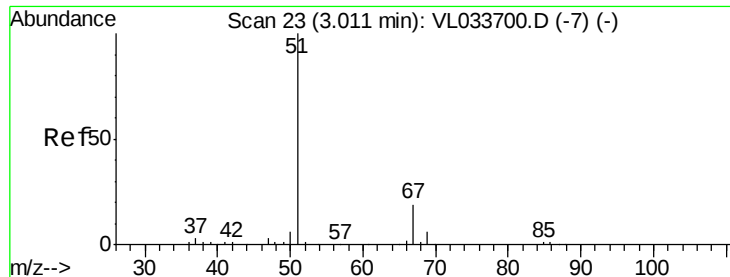
87 26.9 26.3 39.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.039 ppbv

RT: 3.01 min Scan# 22

Delta R.T. -0.00 min

Lab File: VL033758.D

Acq: 23 May 2019 00:01

Instrument :

MSVOA\_L

ClientSampleId :

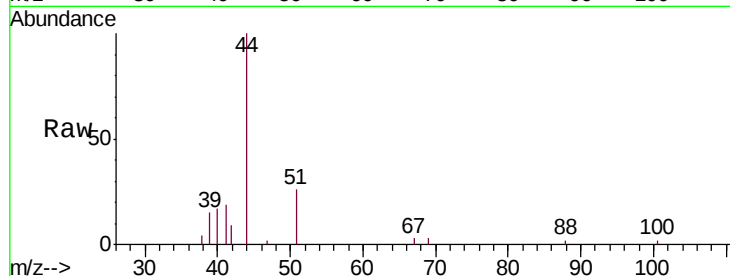
BPS1-SG-3005-55DL

Tgt Ion: 51 Resp: 4143

Ion Ratio Lower Upper

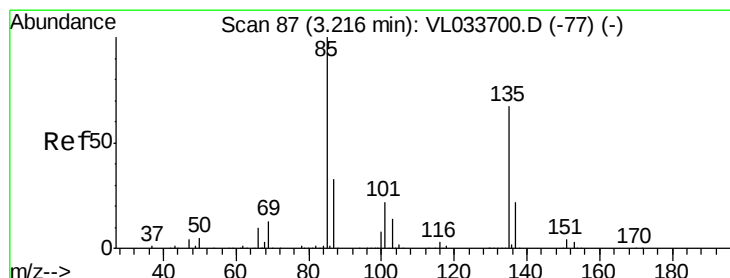
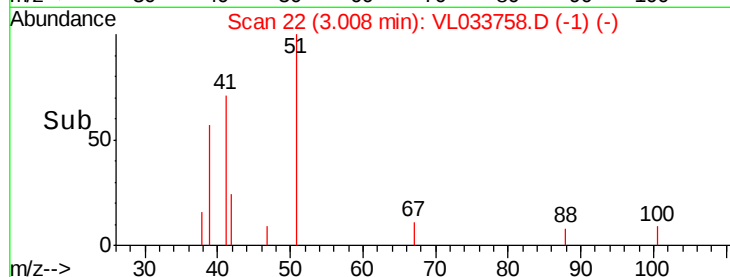
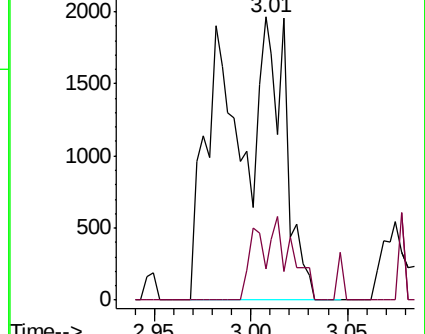
51 100

67 17.3 15.6 23.4



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#8

Dichlorotetrafluoroethane

Concen: 0.046 ppbv

RT: 3.08 min Scan# 43

Delta R.T. -0.14 min

Lab File: VL033758.D

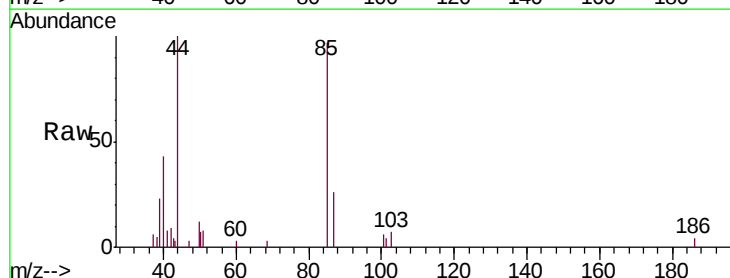
Acq: 23 May 2019 00:01

Tgt Ion: 85 Resp: 7267

Ion Ratio Lower Upper

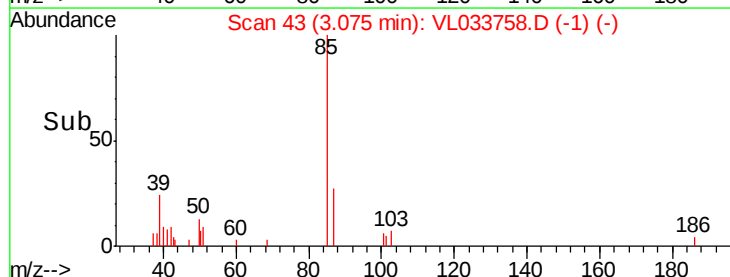
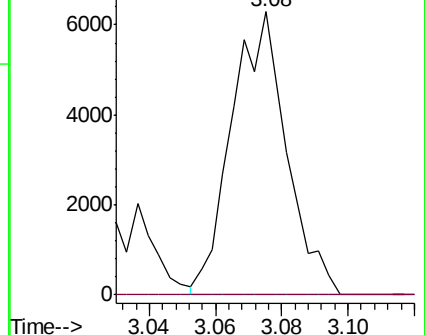
85 100

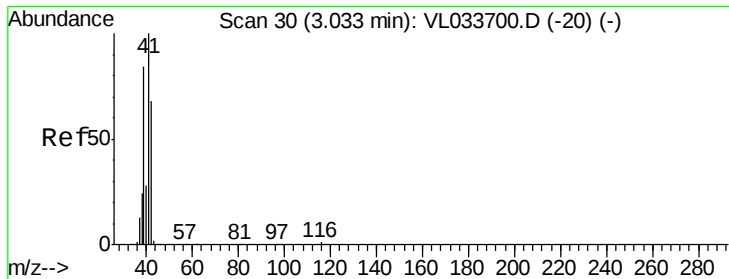
135 0.0 54.5 81.7#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 4.128 ppbv

RT: 3.03 min Scan# 30

Delta R.T. 0.00 min

Lab File: VL033758.D

Acq: 23 May 2019 00:01

Instrument :

MSVOA\_L

ClientSampleId :

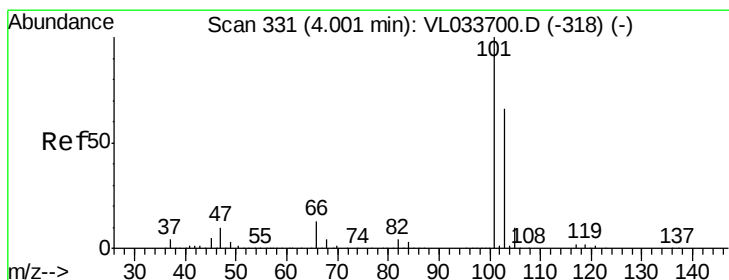
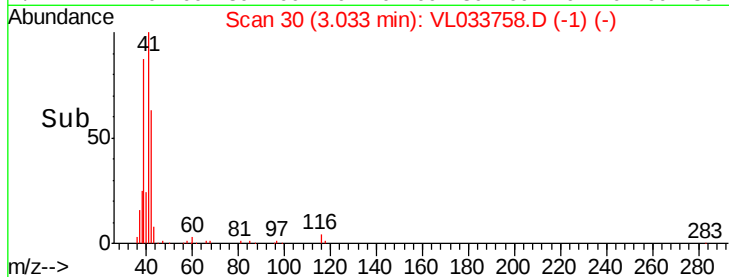
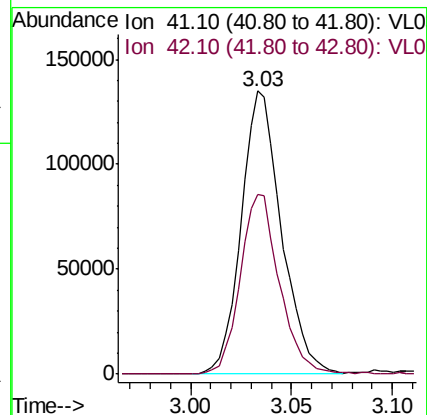
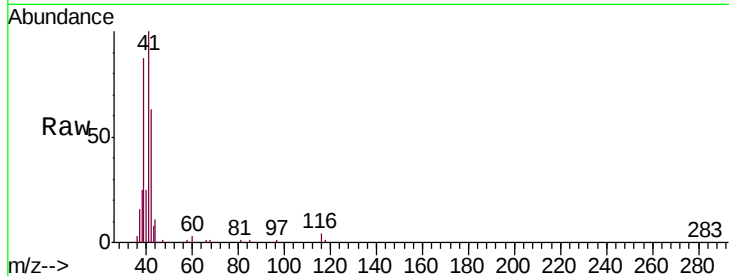
BPS1-SG-3005-55DL

Tgt Ion: 41 Resp: 188726

Ion Ratio Lower Upper

41 100

42 62.2 56.1 84.1



#11

Trichlorofluoromethane

Concen: 0.011 ppbv

RT: 4.00 min Scan# 330

Delta R.T. -0.00 min

Lab File: VL033758.D

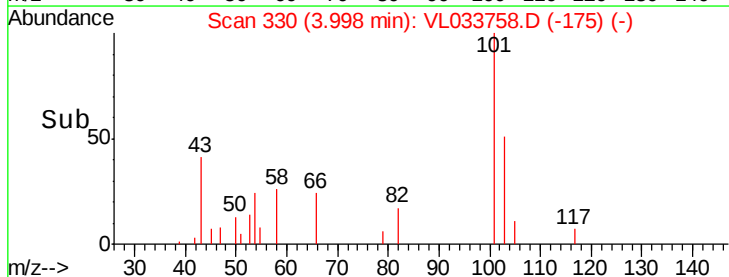
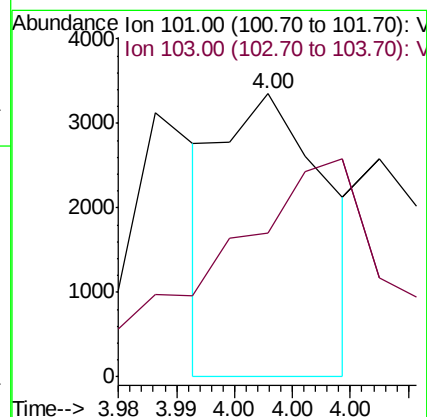
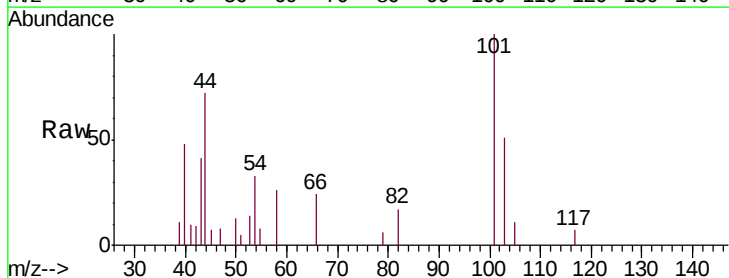
Acq: 23 May 2019 00:01

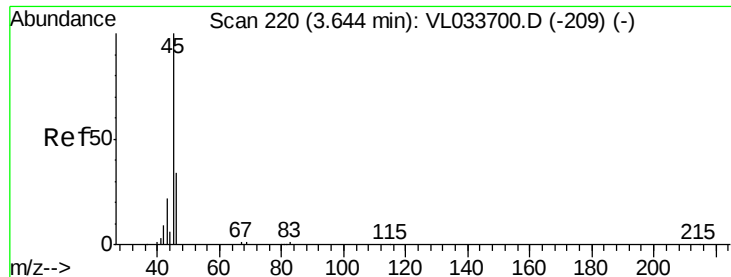
Tgt Ion: 101 Resp: 2096

Ion Ratio Lower Upper

101 100

103 60.7 52.6 78.8

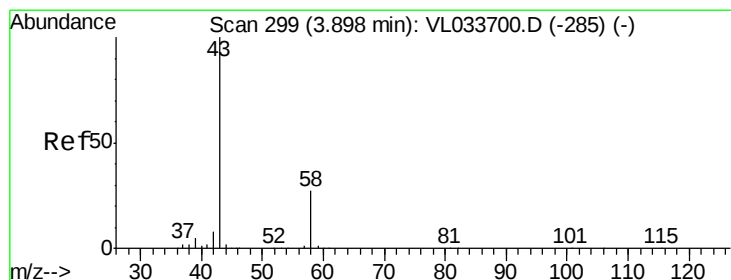
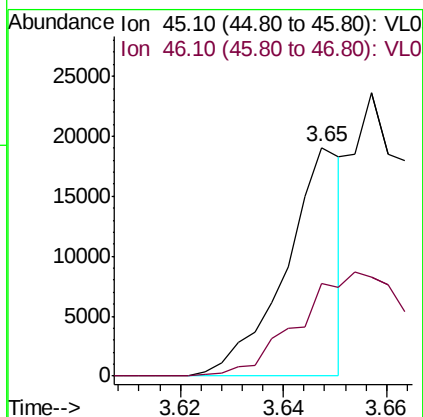
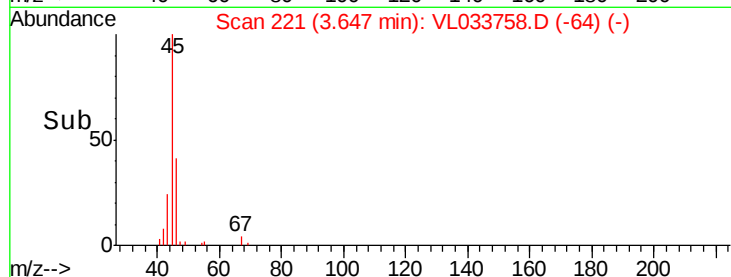
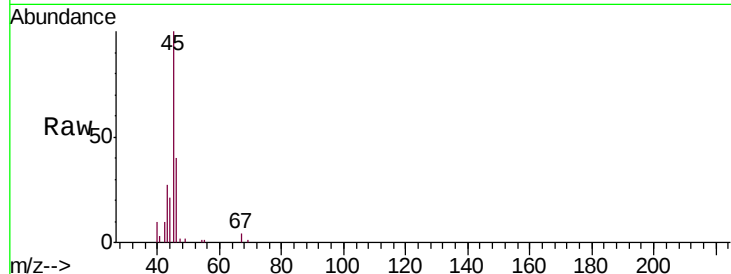




#13  
Ethanol  
Concen: 0.987 ppbv  
RT: 3.65 min Scan# 221  
Delta R.T. 0.00 min  
Lab File: VL033758.D  
Acq: 23 May 2019 00:01

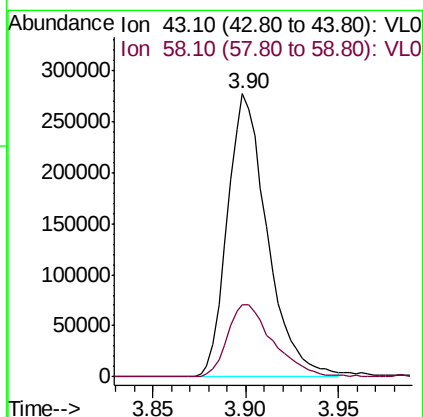
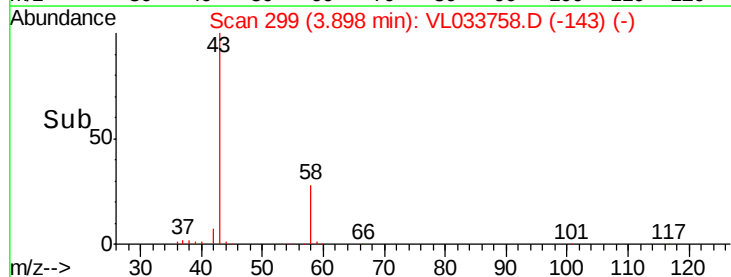
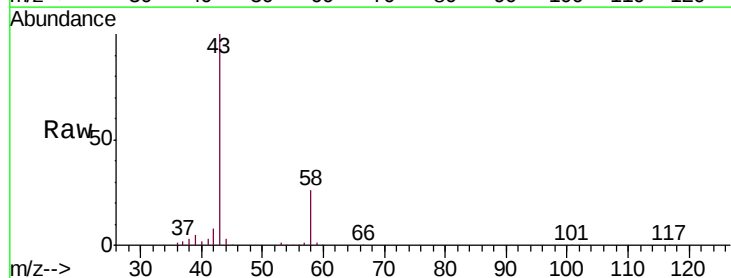
Instrument :  
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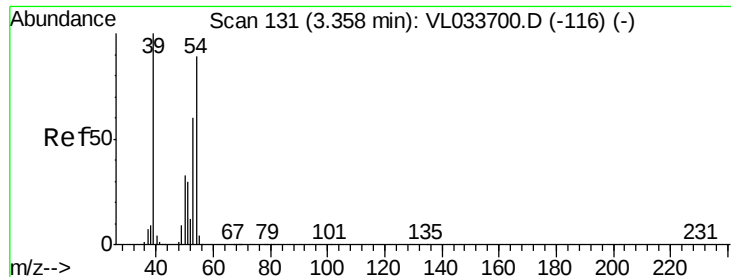
Tgt Ion: 45 Resp: 14585  
Ion Ratio Lower Upper  
45 100  
46 0.0 14.8 59.0#



#15  
Acetone  
Concen: 3.175 ppbv  
RT: 3.90 min Scan# 299  
Delta R.T. 0.00 min  
Lab File: VL033758.D  
Acq: 23 May 2019 00:01

Tgt Ion: 43 Resp: 413411  
Ion Ratio Lower Upper  
43 100  
58 29.9 21.3 31.9

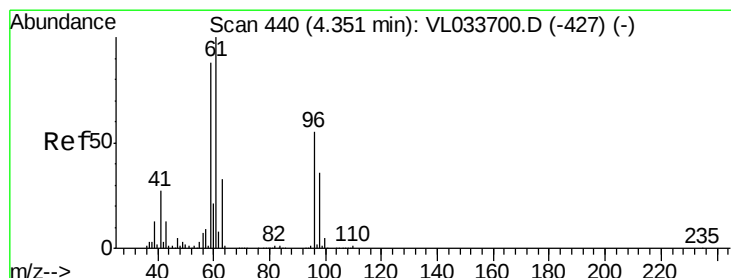
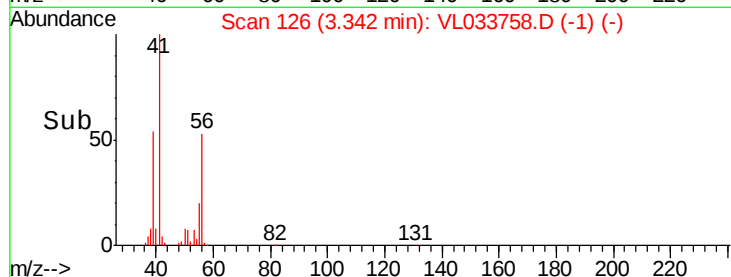
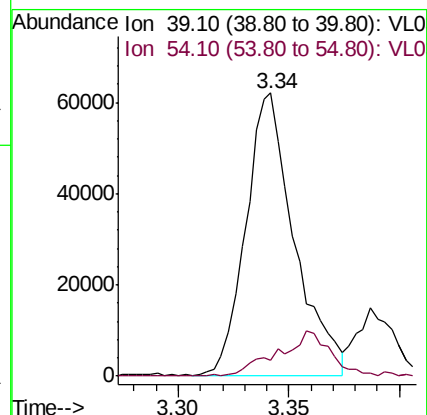
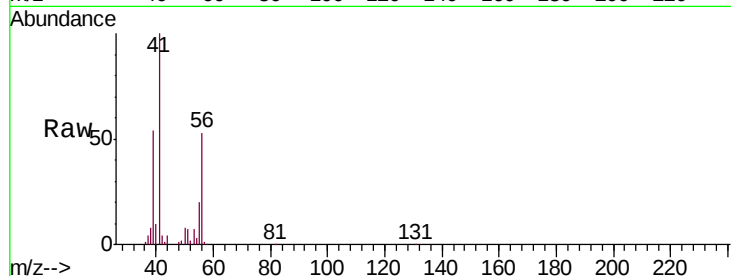




#16  
 1,3-Butadiene  
 Concen: 1.821 ppbv  
 RT: 3.34 min Scan# 126  
 Delta R.T. -0.02 min  
 Lab File: VL033758.D  
 Acq: 23 May 2019 00:01

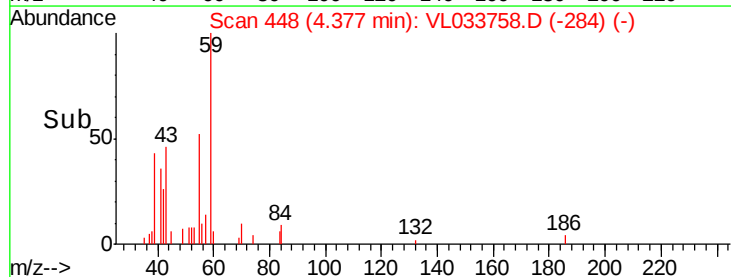
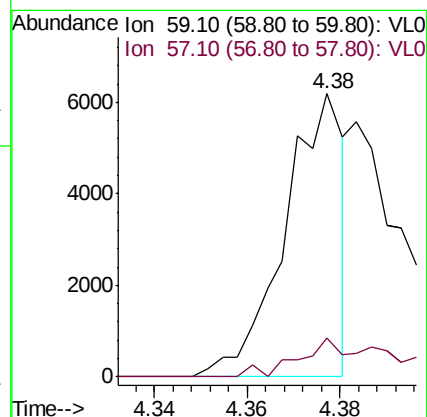
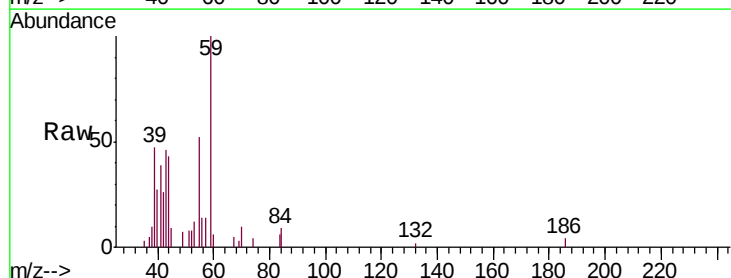
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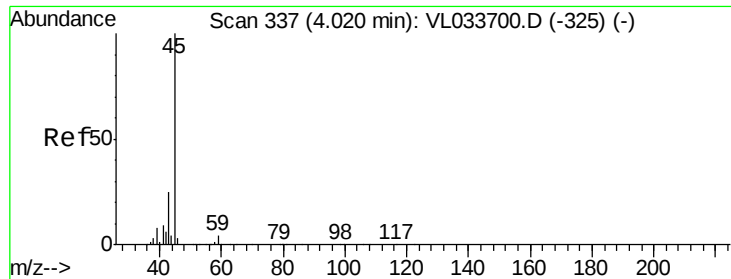
Tgt Ion: 39 Resp: 94428  
 Ion Ratio Lower Upper  
 39 100  
 54 18.0 69.0 103.6#



#17  
 tert-Butyl alcohol  
 Concen: 0.052 ppbv  
 RT: 4.38 min Scan# 448  
 Delta R.T. 0.03 min  
 Lab File: VL033758.D  
 Acq: 23 May 2019 00:01

Tgt Ion: 59 Resp: 5453  
 Ion Ratio Lower Upper  
 59 100  
 57 22.7 8.4 12.6#





#19

Isopropyl Alcohol

Concen: 0.087 ppbv

RT: 4.04 min Scan# 342

Delta R.T. 0.02 min

Lab File: VL033758.D

Acq: 23 May 2019 00:01

Instrument :

MSVOA\_L

ClientSampleId :

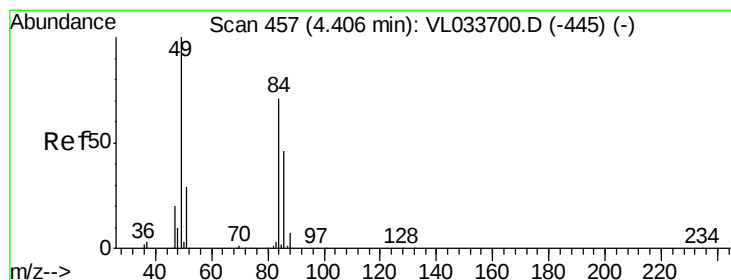
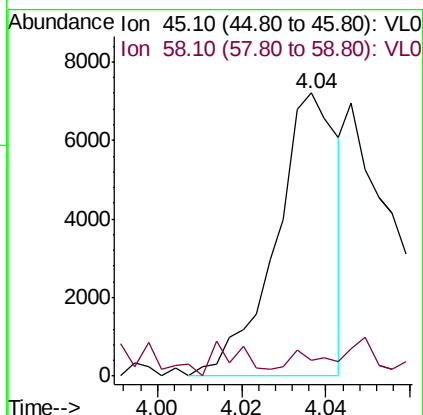
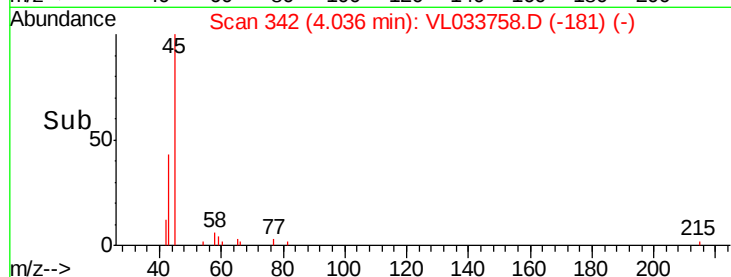
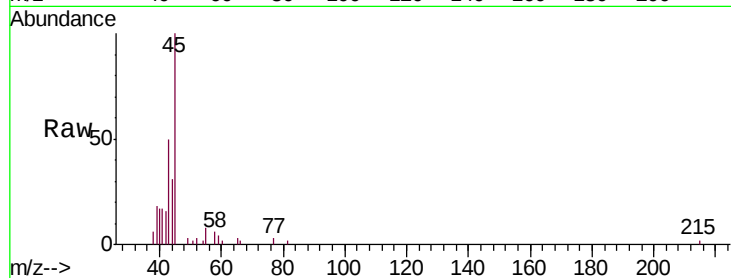
BPS1-SG-3005-55DL

Tgt Ion: 45 Resp: 7302

Ion Ratio Lower Upper

45 100

58 0.0 1.6 2.4#



#20

Methylene Chloride

Concen: 0.105 ppbv

RT: 4.40 min Scan# 456

Delta R.T. -0.00 min

Lab File: VL033758.D

Acq: 23 May 2019 00:01

Tgt Ion: 84 Resp: 5275

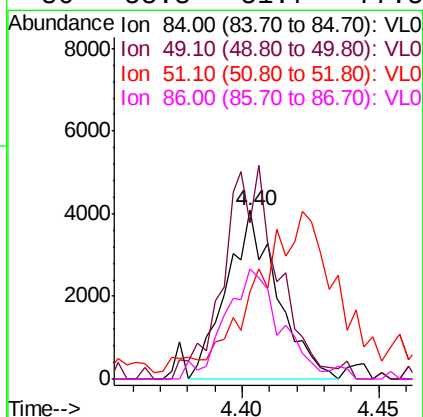
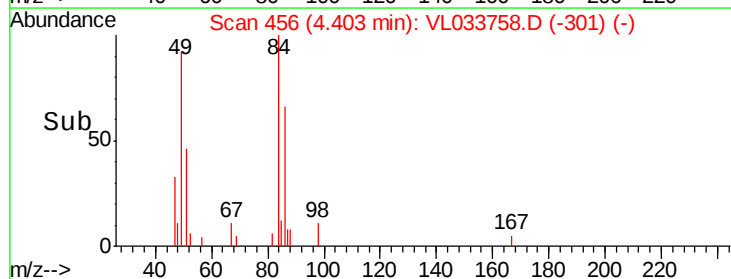
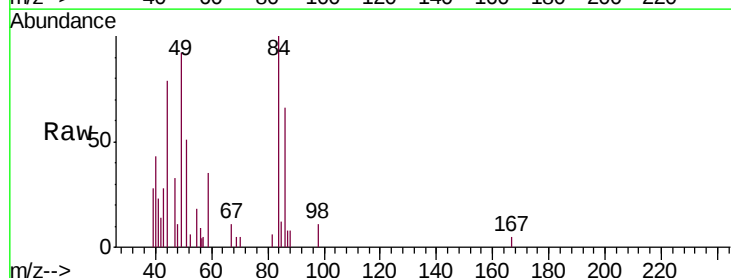
Ion Ratio Lower Upper

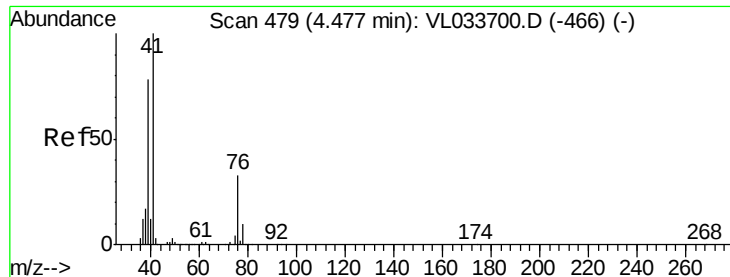
84 100

49 86.7 112.8 169.2#

51 31.4 33.4 50.0#

86 58.3 51.7 77.5

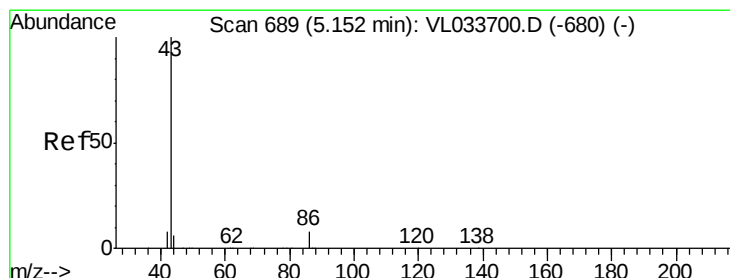
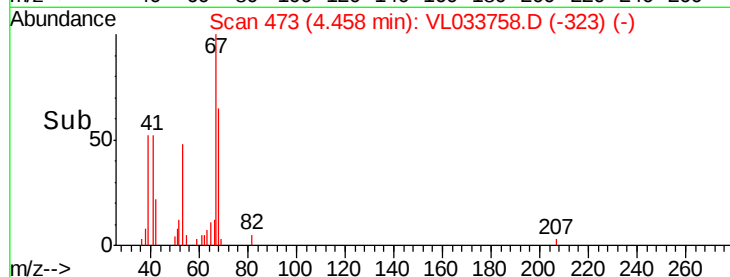
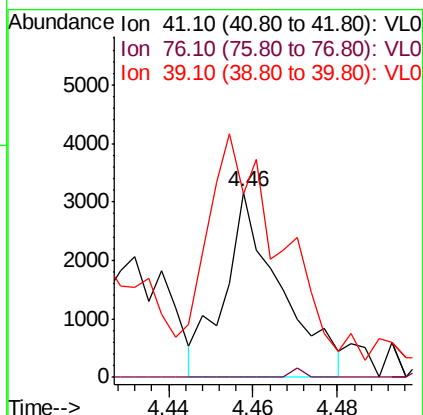
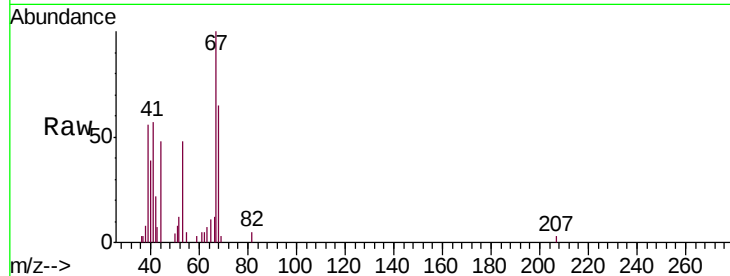




#21  
 Allyl Chloride  
 Concen: 0.036 ppbv  
 RT: 4.46 min Scan# 473  
 Delta R.T. -0.02 min  
 Lab File: VL033758.D  
 Acq: 23 May 2019 00:01

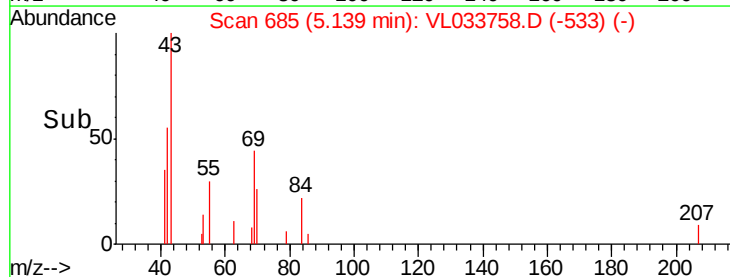
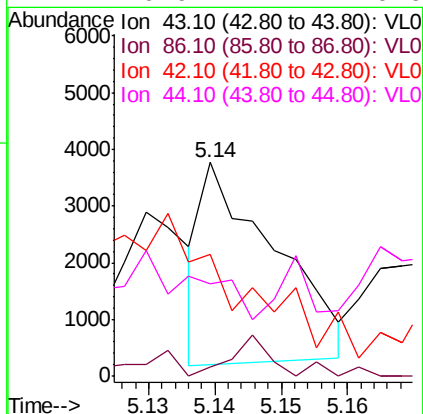
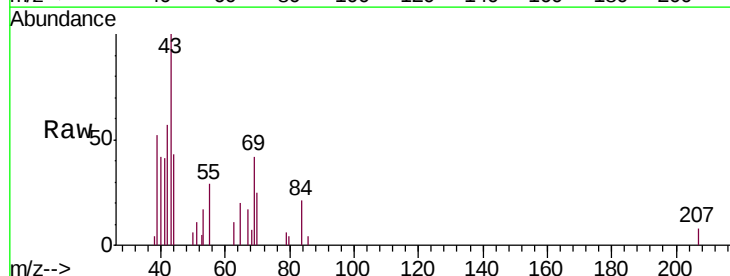
Instrument :  
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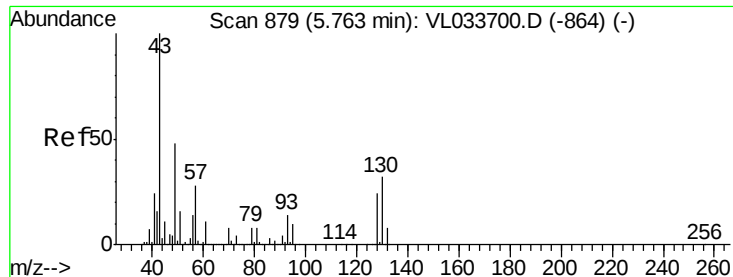
Tgt Ion: 41 Resp: 2935  
 Ion Ratio Lower Upper  
 41 100  
 76 0.0 25.9 38.9#  
 39 147.1 64.6 97.0#



#23  
 Vinyl Acetate  
 Concen: 0.016 ppbv  
 RT: 5.14 min Scan# 685  
 Delta R.T. -0.01 min  
 Lab File: VL033758.D  
 Acq: 23 May 2019 00:01

Tgt Ion: 43 Resp: 2772  
 Ion Ratio Lower Upper  
 43 100  
 86 3.6 6.0 9.0#  
 42 22.9 7.5 11.3#  
 44 10.9 4.4 6.6#

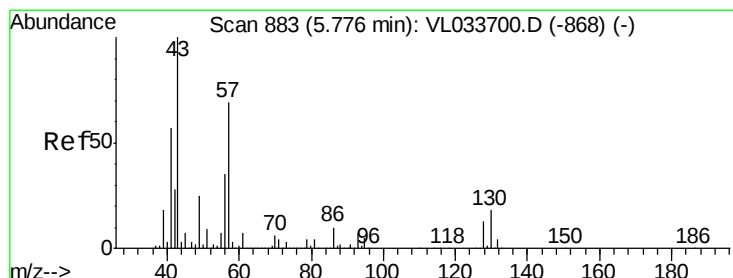
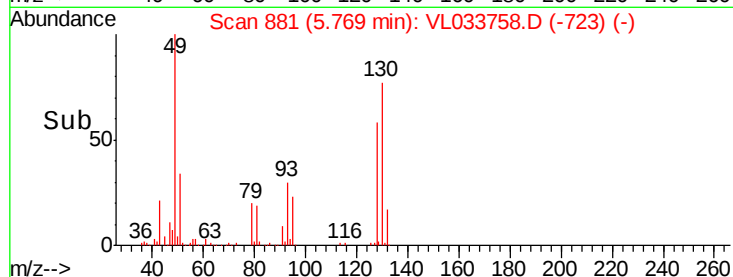
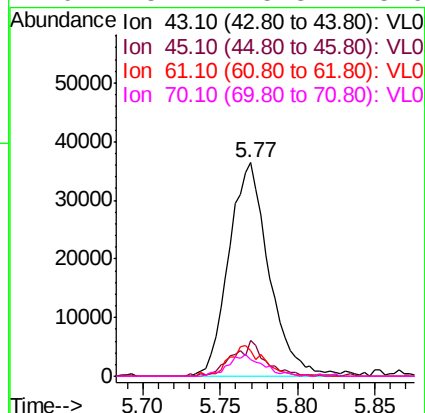
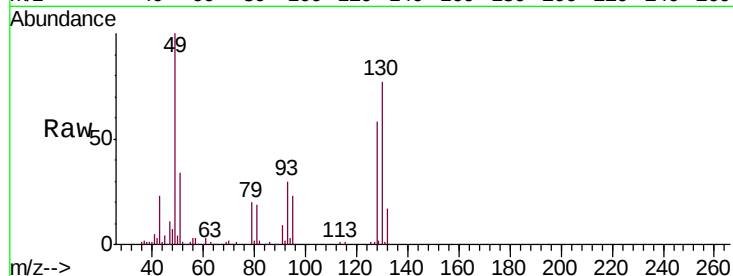




#25  
Ethyl Acetate  
Concen: 0.286 ppbv  
RT: 5.77 min Scan# 881  
Delta R.T. 0.01 min  
Lab File: VL033758.D  
Acq: 23 May 2019 00:01

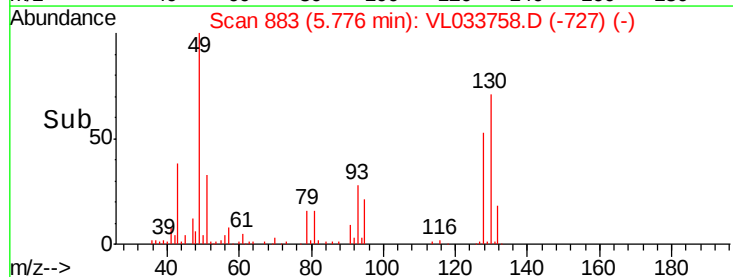
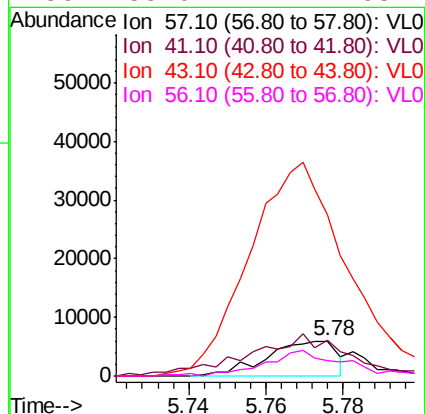
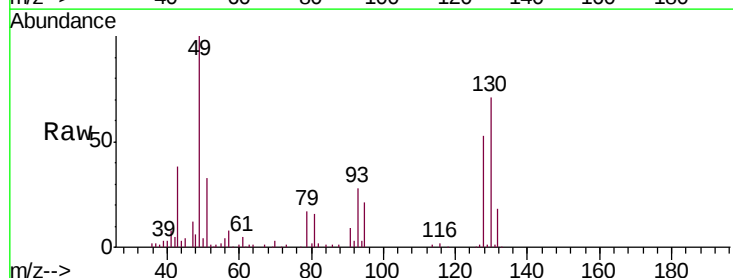
Instrument :  
MSVOA\_L  
ClientSampleId :  
BPS1-SG-3005-55DL

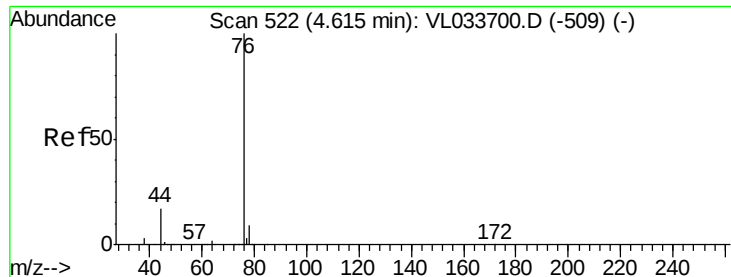
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 65349 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 45       | 14.0  | 7.9   | 11.9# |
| 61       | 12.3  | 7.7   | 11.5# |
| 70       | 8.7   | 5.8   | 8.6#  |



#26  
Hexane  
Concen: 0.076 ppbv  
RT: 5.78 min Scan# 883  
Delta R.T. 0.00 min  
Lab File: VL033758.D  
Acq: 23 May 2019 00:01

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 7440   |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 177.6 | 69.8  | 104.6# |
| 43       | 885.5 | 181.8 | 272.6# |
| 56       | 85.0  | 42.1  | 63.1#  |

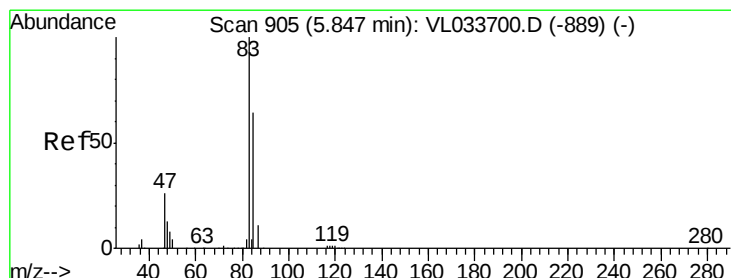
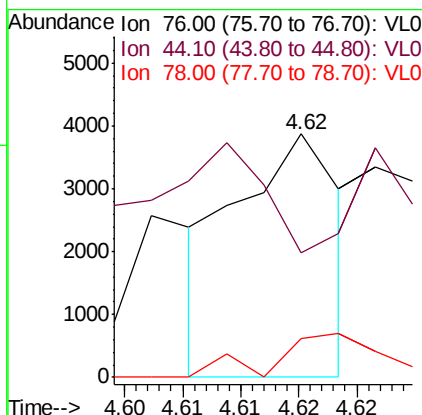
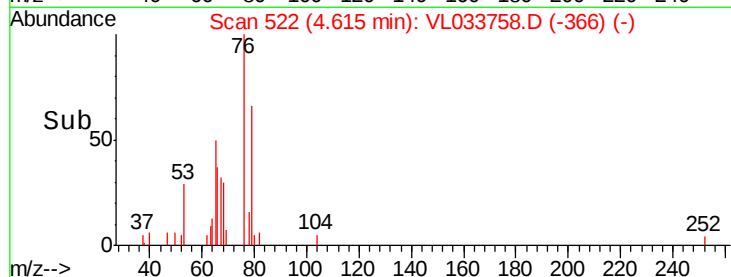
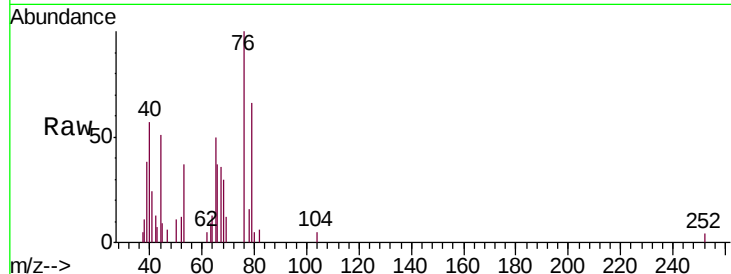




#27  
Carbon Disulfide  
Concen: 0.018 ppbv  
RT: 4.62 min Scan# 522  
Delta R.T. 0.00 min  
Lab File: VL033758.D  
Acq: 23 May 2019 00:01

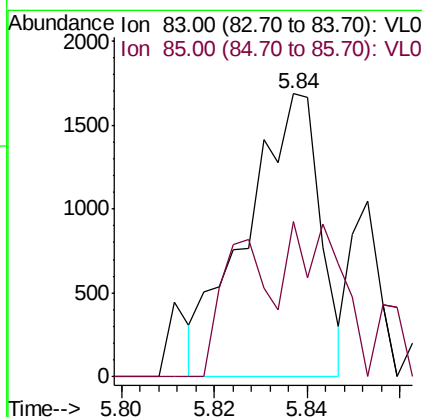
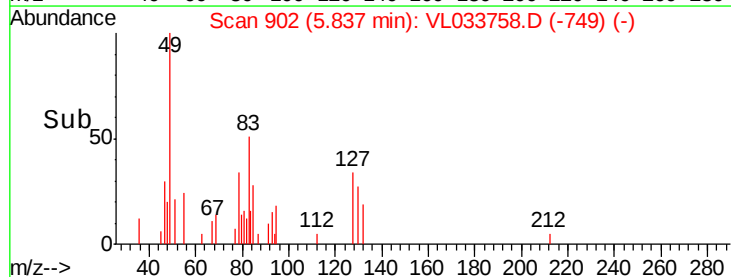
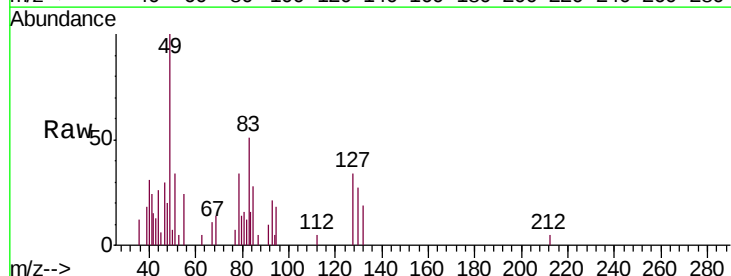
Instrument :  
MSVOA\_L  
ClientSampleId :  
BPS1-SG-3005-55DL

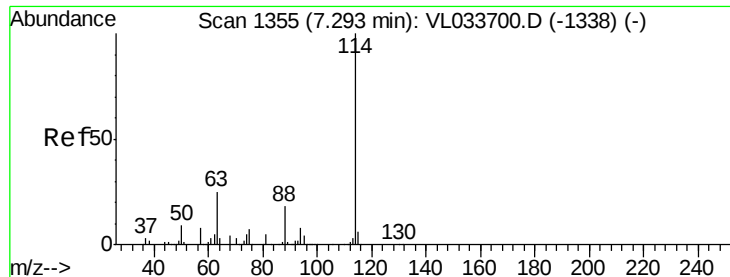
Tgt Ion: 76 Resp: 2424  
Ion Ratio Lower Upper  
76 100  
44 79.0 13.8 20.8#  
78 0.0 7.4 11.0#



#29  
Chloroform  
Concen: 0.010 ppbv  
RT: 5.84 min Scan# 902  
Delta R.T. -0.01 min  
Lab File: VL033758.D  
Acq: 23 May 2019 00:01

Tgt Ion: 83 Resp: 1867  
Ion Ratio Lower Upper  
83 100  
85 66.8 51.5 77.3

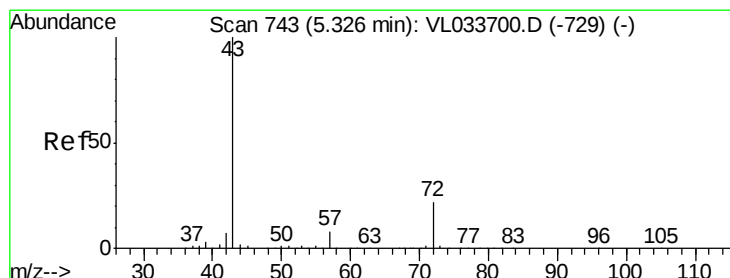
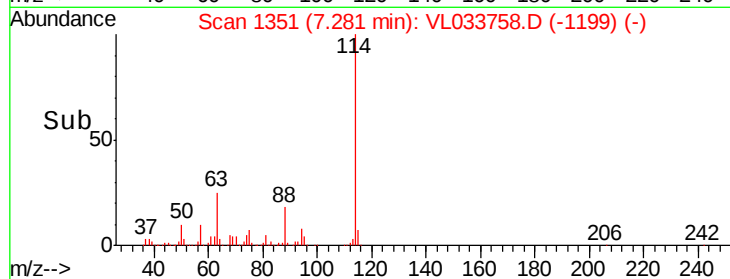
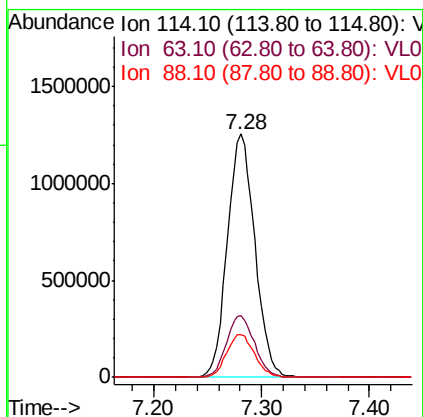
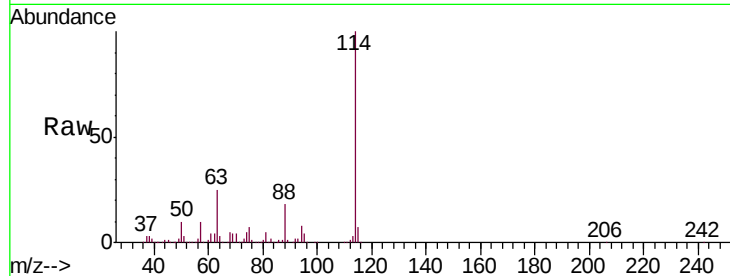




#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.28 min Scan# 1351  
 Delta R.T. -0.01 min  
 Lab File: VL033758.D  
 Acq: 23 May 2019 00:01

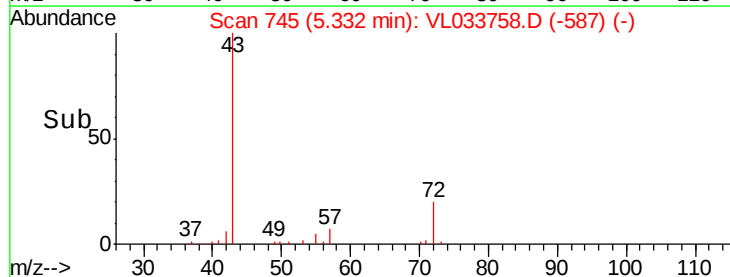
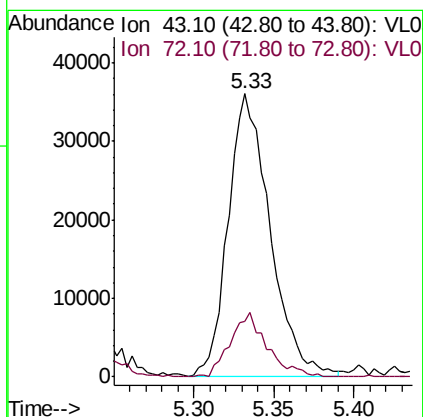
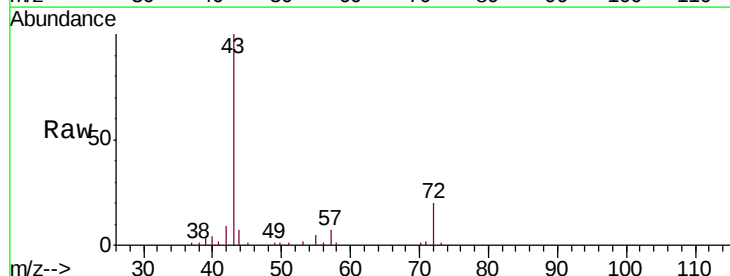
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 BPS1-SG-3005-55DL

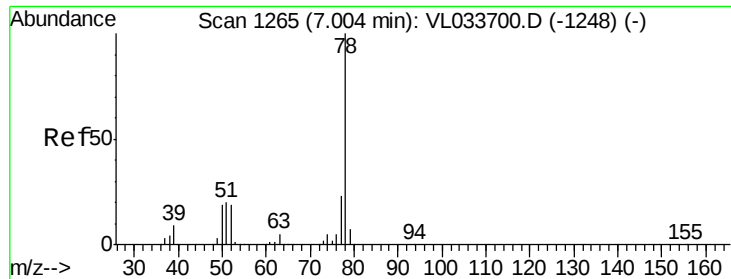
Tgt Ion:114 Resp: 2237408  
 Ion Ratio Lower Upper  
 114 100  
 63 25.6 20.9 31.3  
 88 17.9 14.3 21.5



#34  
 2-Butanone  
 Concen: 0.467 ppbv  
 RT: 5.33 min Scan# 745  
 Delta R.T. 0.01 min  
 Lab File: VL033758.D  
 Acq: 23 May 2019 00:01

Tgt Ion: 43 Resp: 64736  
 Ion Ratio Lower Upper  
 43 100  
 72 19.9 17.8 26.6





#36

Benzene

Concen: 0.042 ppbv

RT: 6.99 min Scan# 1262

Delta R.T. -0.01 min

Lab File: VL033758.D

Acq: 23 May 2019 00:01

Instrument :

MSVOA\_L

ClientSampleId :

BPS1-SG-3005-55DL

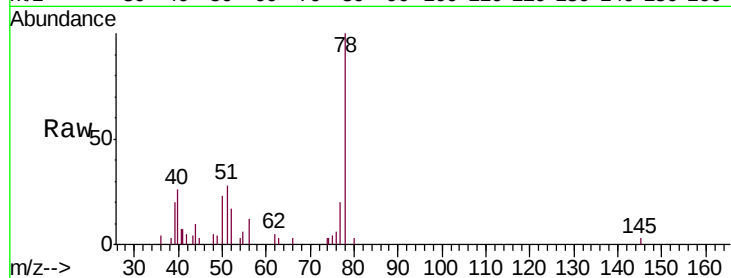
Tgt Ion: 78 Resp: 8617

Ion Ratio Lower Upper

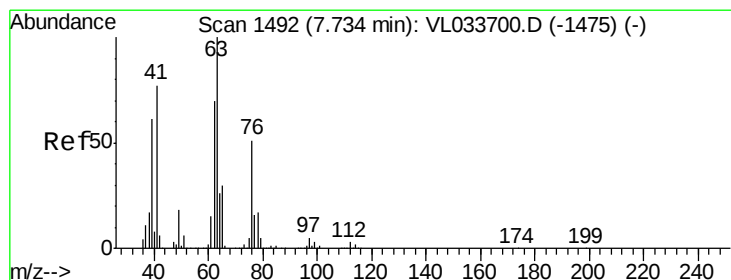
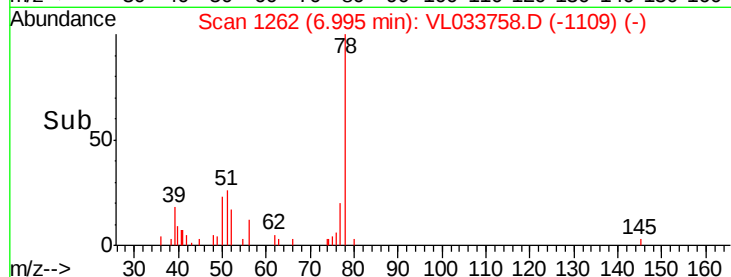
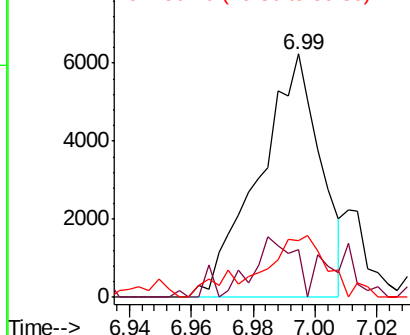
78 100

77 19.6 18.4 27.6

50 23.4 15.5 23.3#



Abundance Ion 78.10 (77.80 to 78.80): VL0  
Ion 77.10 (76.80 to 77.80): VL0  
Ion 50.10 (49.80 to 50.80): VL0



#39

1,2-Dichloropropane

Concen: 7.538 ppbv

RT: 7.28 min Scan# 1351

Delta R.T. -0.45 min

Lab File: VL033758.D

Acq: 23 May 2019 00:01

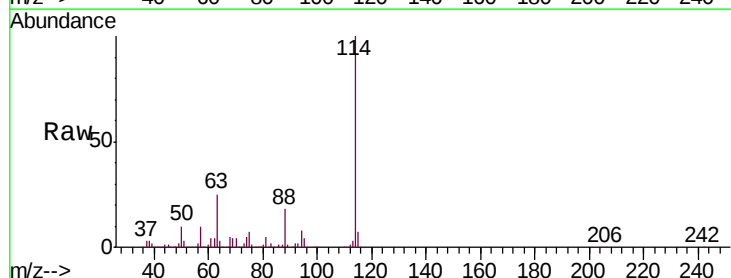
Tgt Ion: 63 Resp: 572018

Ion Ratio Lower Upper

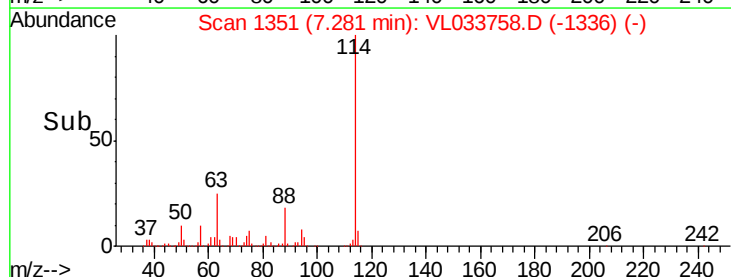
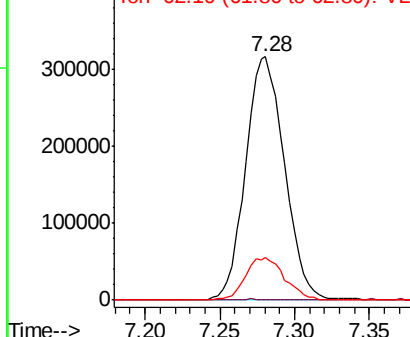
63 100

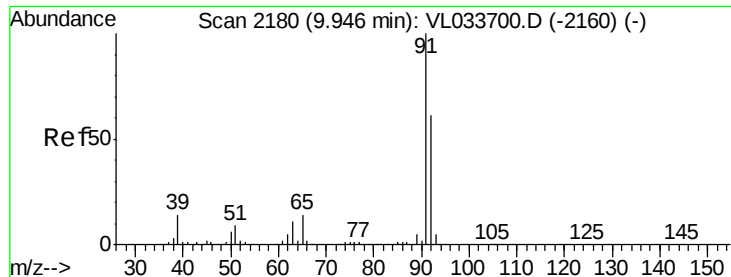
41 0.2 61.5 92.3#

62 17.3 56.2 84.4#



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: 0.141 ppbv

RT: 9.93 min Scan# 2176

Delta R.T. -0.01 min

Lab File: VL033758.D

Acq: 23 May 2019 00:01

Instrument :

MSVOA\_L

ClientSampleId :

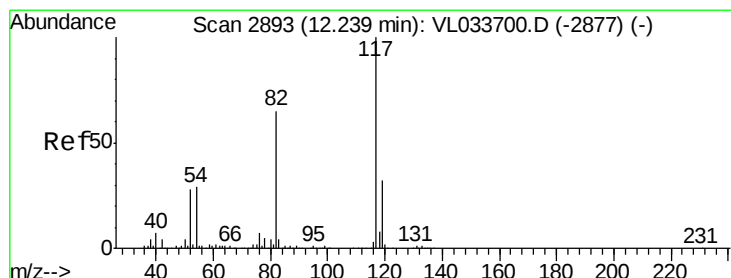
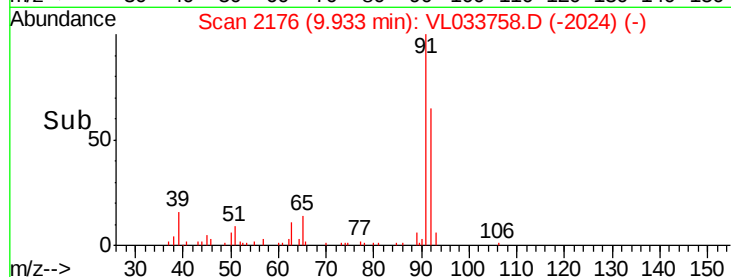
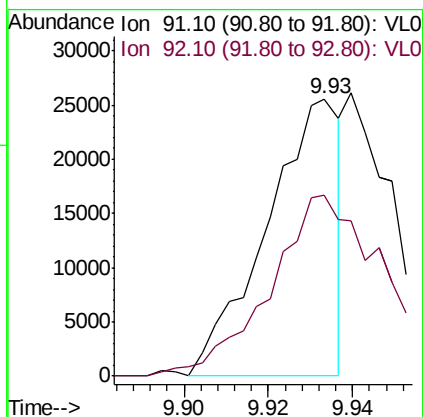
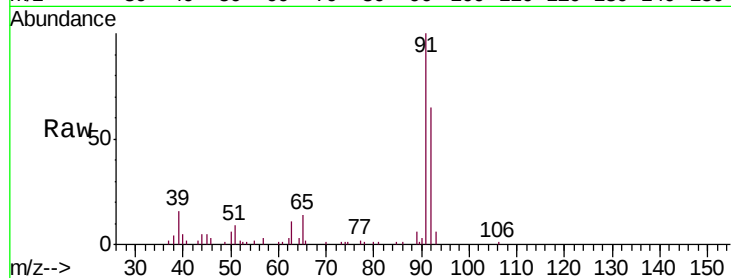
BPS1-SG-3005-55DL

Tgt Ion: 91 Resp: 30915

Ion Ratio Lower Upper

91 100

92 103.9 47.6 71.4#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.23 min Scan# 2890

Delta R.T. -0.01 min

Lab File: VL033758.D

Acq: 23 May 2019 00:01

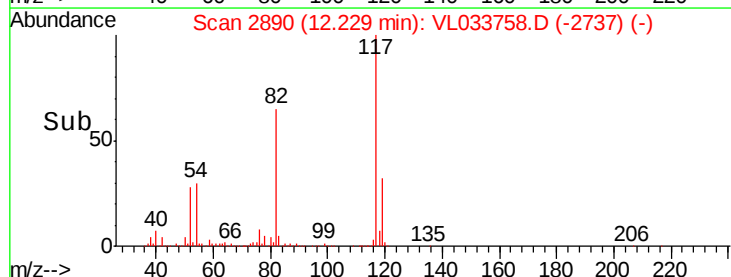
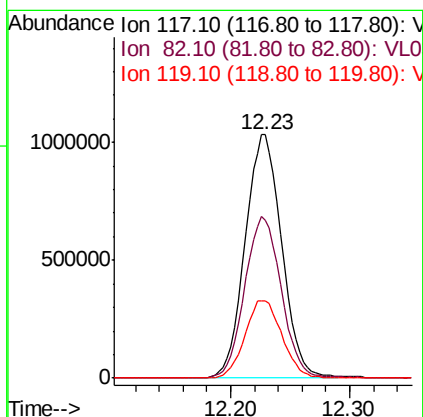
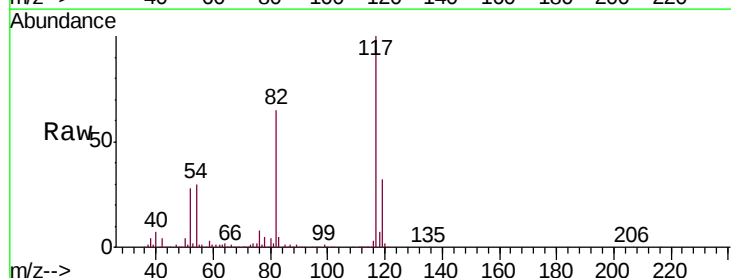
Tgt Ion: 117 Resp: 2194226

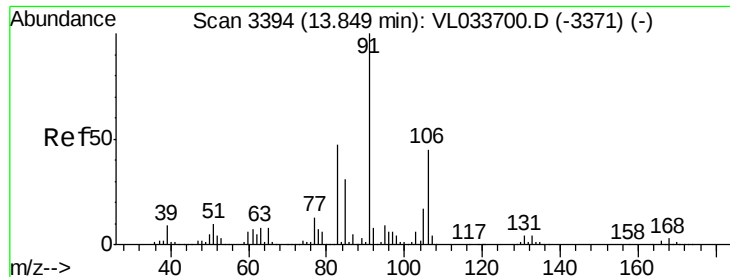
Ion Ratio Lower Upper

117 100

82 67.0 49.4 74.0

119 32.3 24.9 37.3

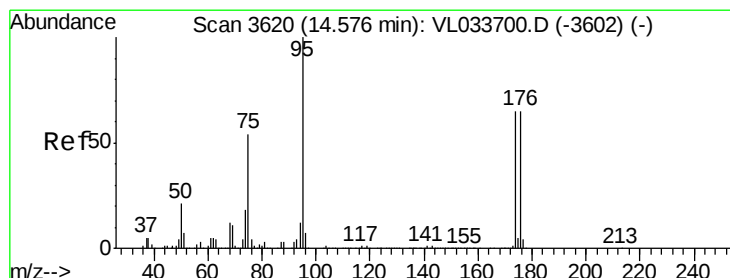
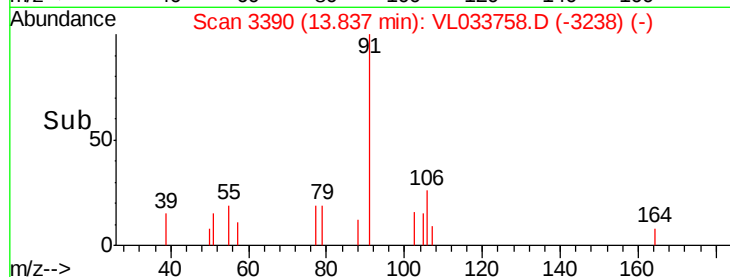
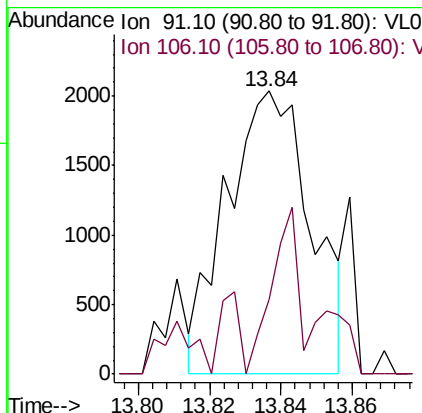
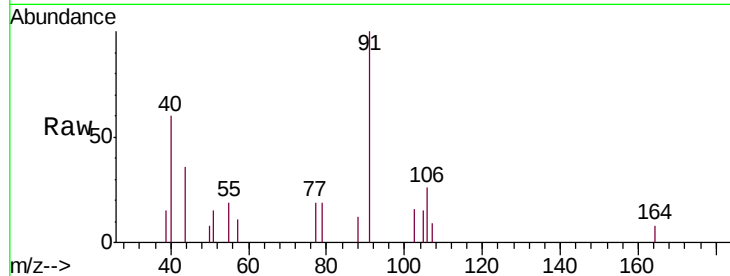




#60  
o-Xylene  
Concen: 0.013 ppbv  
RT: 13.84 min Scan# 3390  
Delta R.T. -0.01 min  
Lab File: VL033758.D  
Acq: 23 May 2019 00:01

Instrument :  
MSVOA\_L  
ClientSampleId :  
BPS1-SG-3005-55DL

Tgt Ion: 91 Resp: 3331  
Ion Ratio Lower Upper  
91 100  
106 41.3 21.6 64.8



#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.216 ppbv  
RT: 14.56 min Scan# 3616  
Delta R.T. -0.01 min  
Lab File: VL033758.D  
Acq: 23 May 2019 00:01

Tgt Ion: 95 Resp: 1817256  
Ion Ratio Lower Upper  
95 100  
174 66.7 53.9 80.9  
175 4.8 3.8 5.8

