

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF042016\  
 Data File : BF086308.D  
 Acq On : 20 Apr 2016 14:56  
 Operator : UM/SJ  
 Sample : PB89915BL  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB89915BL

Quant Time: Apr 21 00:49:02 2016  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF042016.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Apr 20 15:45:26 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.86  | 152  | 259338   | 20.00 | ng    | -0.03    |
| 21) Naphthalene-d8        | 8.14  | 136  | 1065264  | 20.00 | ng    | -0.03    |
| 38) Acenaphthene-d10      | 9.90  | 164  | 453502   | 20.00 | ng    | -0.03    |
| 63) Phenanthrene-d10      | 11.38 | 188  | 729542   | 20.00 | ng    | -0.03    |
| 75) Chrysene-d12          | 14.02 | 240  | 441195   | 20.00 | ng    | -0.03    |
| 86) Perylene-d12          | 15.44 | 264  | 437413   | 20.00 | ng    | -0.05    |

## System Monitoring Compounds

|                          |       |     |         |        |    |       |
|--------------------------|-------|-----|---------|--------|----|-------|
| 5) 2-Fluorophenol        | 5.47  | 112 | 1700666 | 114.42 | ng | -0.01 |
| 7) Phenol-d6             | 6.49  | 99  | 2189757 | 112.58 | ng | -0.03 |
| 23) Nitrobenzene-d5      | 7.42  | 82  | 1373195 | 73.83  | ng | -0.03 |
| 41) 2,4,6-Tribromophenol | 10.69 | 330 | 392532  | 111.05 | ng | -0.03 |
| 44) 2-Fluorobiphenyl     | 9.23  | 172 | 2169472 | 93.47  | ng | -0.03 |
| 78) Terphenyl-d14        | 12.97 | 244 | 1305170 | 70.42  | ng | -0.03 |

## Target Compounds

|                                |       |     |         |       |    | Qvalue |
|--------------------------------|-------|-----|---------|-------|----|--------|
| 2) 1,4-Dioxane                 | 2.51  | 88  | 285     | 0.04  | ng | # 22   |
| 4) n-Nitrosodimethylamine      | 3.24  | 42  | 580     | 0.08  | ng | # 1    |
| 6) Aniline                     | 6.54  | 93  | 1095    | 0.04  | ng | # 1    |
| 8) 2-Chlorophenol              | 6.65  | 128 | 1550    | 0.09  | ng | # 1    |
| 9) Benzaldehyde                | 6.49  | 77  | 2888    | 0.21  | ng | # 1    |
| 10) Phenol                     | 6.50  | 94  | 1096    | 0.05  | ng | # 1    |
| 11) bis(2-Chloroethyl)ether    | 6.62  | 93  | 2900    | 0.15  | ng | # 1    |
| 12) 1,3-Dichlorobenzene        | 6.81  | 146 | 468     | 0.02  | ng | # 25   |
| 13) 1,4-Dichlorobenzene        | 6.88  | 146 | 706     | 0.03  | ng | # 42   |
| 14) 1,2-Dichlorobenzene        | 7.04  | 146 | 1068    | 0.06  | ng | # 46   |
| 15) Benzyl Alcohol             | 7.01  | 79  | 21943   | 1.82  | ng | # 45   |
| 16) 2,2'-oxybis(1-Chloropropan | 7.14  | 45  | 716     | 0.03  | ng | # 1    |
| 18) Hexachloroethane           | 7.38  | 117 | 320     | 0.05  | ng | # 2    |
| 19) n-Nitroso-di-n-propylamine | 7.42  | 70  | 178827  | 15.18 | ng | # 82   |
| 22) Acetophenone               | 7.28  | 105 | 240     | 0.01  | ng | # 1    |
| 24) Nitrobenzene               | 7.42  | 77  | 4672    | 0.23  | ng | # 36   |
| 25) Isophorone                 | 7.42  | 82  | 1097059 | 31.13 | ng | # 67   |
| 28) bis(2-Chloroethoxy)methane | 7.90  | 93  | 243     | 0.01  | ng | # 50   |
| 30) 1,2,4-Trichlorobenzene     | 8.09  | 180 | 287     | 0.02  | ng | # 80   |
| 31) Naphthalene                | 8.17  | 128 | 2741    | 0.05  | ng | # 85   |
| 32) Benzoic acid               | 8.14  | 122 | 241     | 0.02  | ng | # 1    |
| 33) 4-Chloroaniline            | 8.17  | 127 | 229     | 0.01  | ng | # 44   |
| 37) 2-Methylnaphthalene        | 8.86  | 142 | 1351    | 0.04  | ng | # 84   |
| 39) 1,2,4,5-Tetrachlorobenzene | 9.02  | 216 | 243     | 0.02  | ng | # 25   |
| 45) 1,1'-Biphenyl              | 9.32  | 154 | 1596    | 0.04  | ng | # 66   |
| 46) 2-Chloronaphthalene        | 9.34  | 162 | 1260    | 0.05  | ng | # 90   |
| 47) 2-Nitroaniline             | 9.23  | 65  | 4027    | 0.44  | ng | # 11   |
| 48) Acenaphthylene             | 9.76  | 152 | 2468    | 0.06  | ng | # 85   |
| 50) 2,6-Dinitrotoluene         | 9.90  | 165 | 56073   | 7.89  | ng | # 32   |
| 51) Acenaphthene               | 9.90  | 154 | 3178    | 0.13  | ng | # 4    |
| 54) Dibenzofuran               | 10.11 | 168 | 1807    | 0.05  | ng | # 76   |
| 55) 4-Nitrophenol              | 10.11 | 139 | 666     | 0.12  | ng | # 3    |
| 56) 2,4-Dinitrotoluene         | 9.90  | 165 | 57516   | 6.51  | ng | # 31   |
| 57) Fluorene                   | 10.45 | 166 | 1472    | 0.06  | ng | # 77   |

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 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
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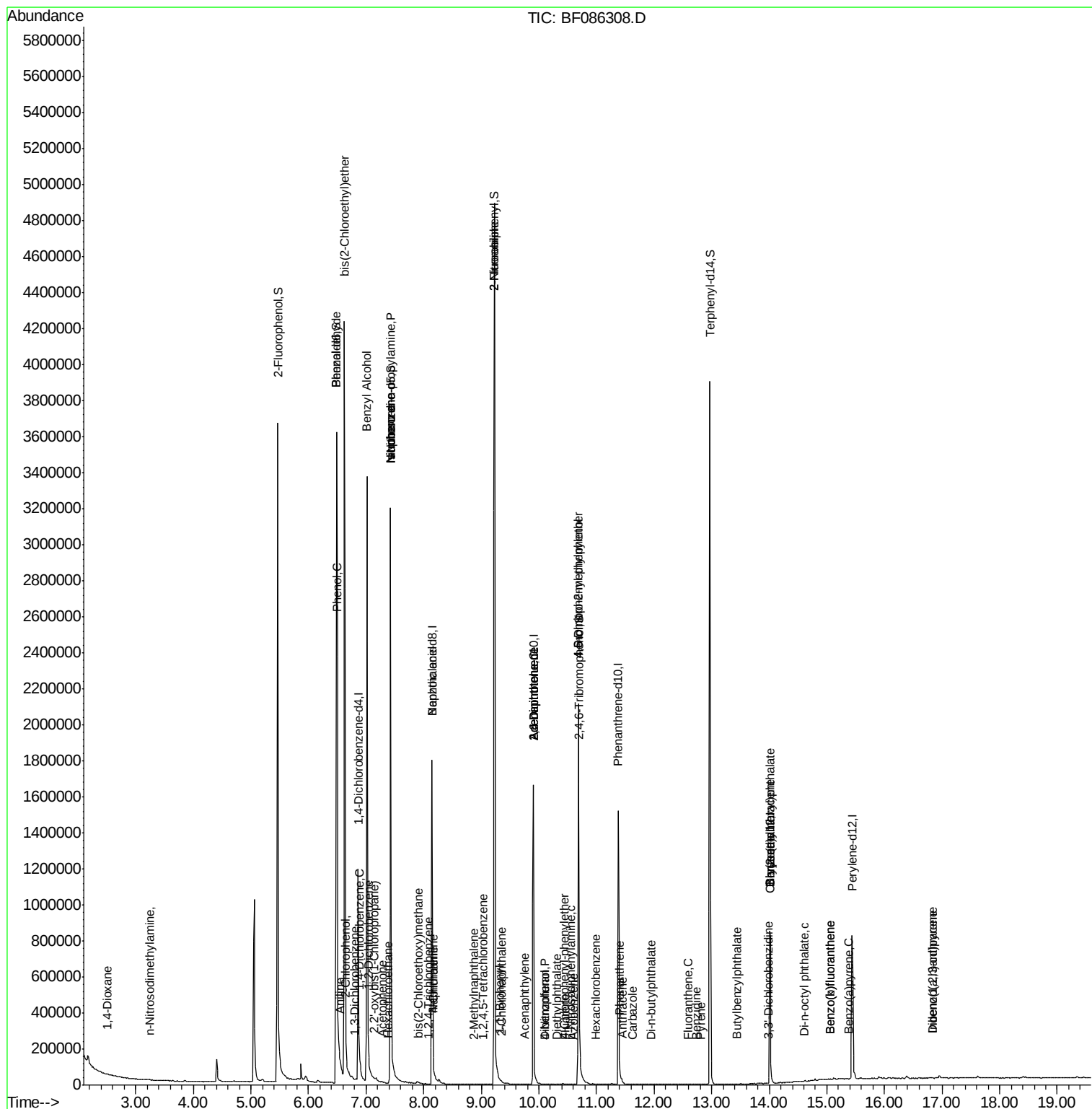
| Internal Standards             | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|--------------------------------|-------|------|----------|------|-------|----------|
| 59) Diethylphthalate           | 10.32 | 149  | 1265     | 0.04 | ng    | # 77     |
| 60) 4-Chlorophenyl-phenylether | 10.44 | 204  | 608      | 0.05 | ng    | # 76     |
| 62) Azobenzene                 | 10.60 | 77   | 1588     | 0.05 | ng    | # 79     |
| 64) 4,6-Dinitro-2-methylphenol | 10.68 | 198  | 844      | 6.38 | ng    | # 1      |
| 65) n-Nitrosodiphenylamine     | 10.56 | 169  | 1250     | 0.05 | ng    | # 63     |
| 66) 4-Bromophenyl-phenylether  | 10.68 | 248  | 24676    | 3.15 | ng    | # 1      |
| 67) Hexachlorobenzene          | 10.99 | 284  | 349      | 0.04 | ng    | # 32     |
| 70) Phenanthrene               | 11.40 | 178  | 2682     | 0.08 | ng    | # 94     |
| 71) Anthracene                 | 11.46 | 178  | 1992     | 0.05 | ng    | # 88     |
| 72) Carbazole                  | 11.63 | 167  | 2119     | 0.06 | ng    | # 57     |
| 73) Di-n-butylphthalate        | 11.95 | 149  | 2305     | 0.05 | ng    | # 77     |
| 74) Fluoranthene               | 12.59 | 202  | 1530     | 0.05 | ng    | # 75     |
| 76) Benzidine                  | 12.74 | 184  | 959      | 0.05 | ng    | # 63     |
| 77) Pyrene                     | 12.82 | 202  | 1496     | 0.05 | ng    | # 89     |
| 79) Butylbenzylphthalate       | 13.44 | 149  | 217      | 0.01 | ng    | # 36     |
| 80) Benzo(a)anthracene         | 14.01 | 228  | 3193     | 0.14 | ng    | # 88     |
| 81) 3,3'-Dichlorobenzidine     | 13.99 | 252  | 297      | 0.02 | ng    | # 26     |
| 82) Chrysene                   | 14.01 | 228  | 3193     | 0.13 | ng    | # 85     |
| 83) Bis(2-ethylhexyl)phthalate | 14.01 | 149  | 716      | 0.04 | ng    | # 28     |
| 84) Di-n-octyl phthalate       | 14.61 | 149  | 1525     | 0.04 | ng    | # 81     |
| 85) Indeno(1,2,3-cd)pyrene     | 16.83 | 276  | 833      | 0.03 | ng    | # 47     |
| 87) Benzo(b)fluoranthene       | 15.06 | 252  | 2181     | 0.09 | ng    | # 59     |
| 88) Benzo(k)fluoranthene       | 15.06 | 252  | 2181     | 0.10 | ng    | # 60     |
| 89) Benzo(a)pyrene             | 15.38 | 252  | 1149     | 0.05 | ng    | # 63     |
| 90) Dibenzo(a,h)anthracene     | 16.84 | 278  | 834      | 0.04 | ng    | # 54     |

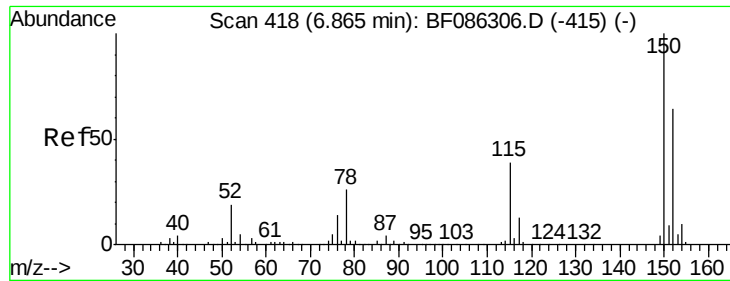
(#) = qualifier out of range (m) = manual integration (+) = signals summed

```
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#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.86 min Scan# 418

Delta R.T. -0.03 min

Lab File: BF086308.D

Acq: 20 Apr 2016 14:56

Instrument :

BNA\_F

ClientSampleId :

PB89915BL

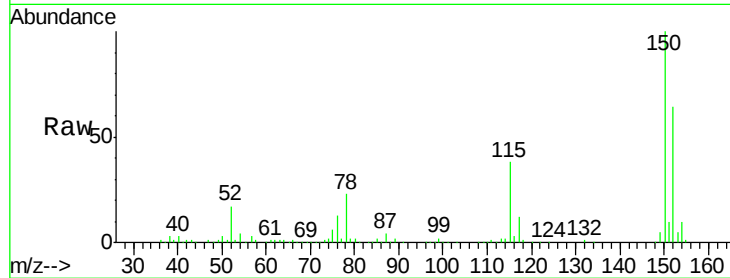
Tgt Ion: 152 Resp: 259338

Ion Ratio Lower Upper

152 100

150 157.4 124.1 186.1

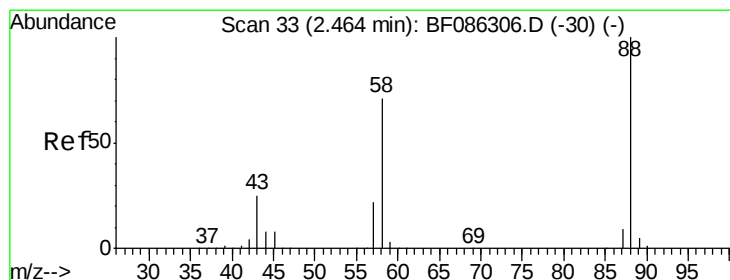
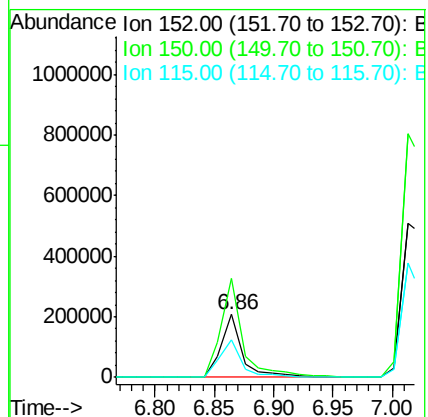
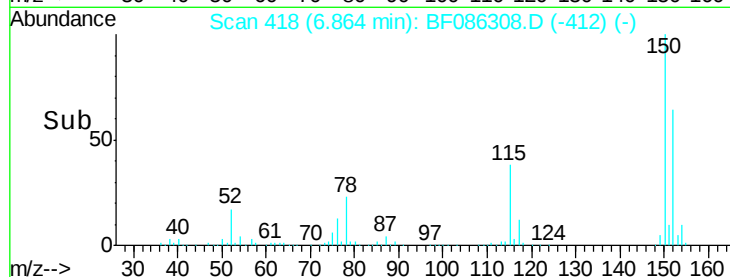
115 59.4 43.9 65.9



Abundance Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

Ion 115.00 (114.70 to 115.70): E



#2

1,4-Dioxane

Concen: 0.04 ng

RT: 2.51 min Scan# 37

Delta R.T. -0.00 min

Lab File: BF086308.D

Acq: 20 Apr 2016 14:56

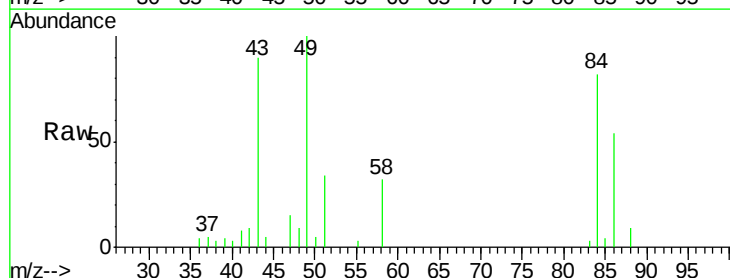
Tgt Ion: 88 Resp: 285

Ion Ratio Lower Upper

88 100

58 0.0 58.4 87.6#

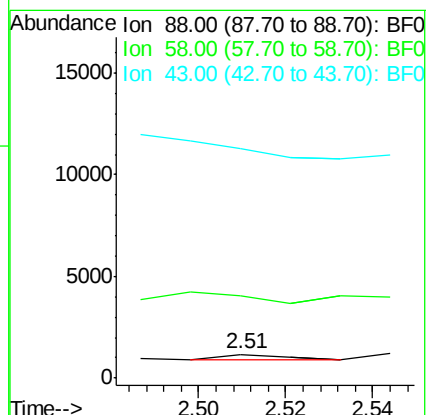
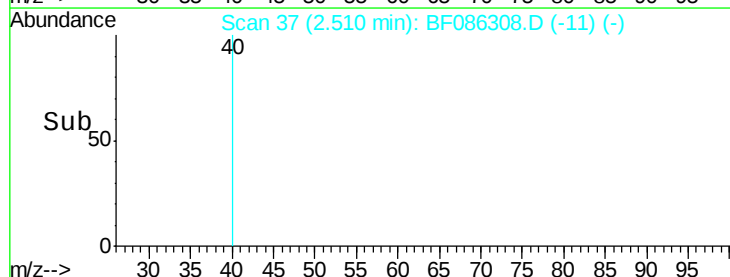
43 0.0 23.3 34.9#

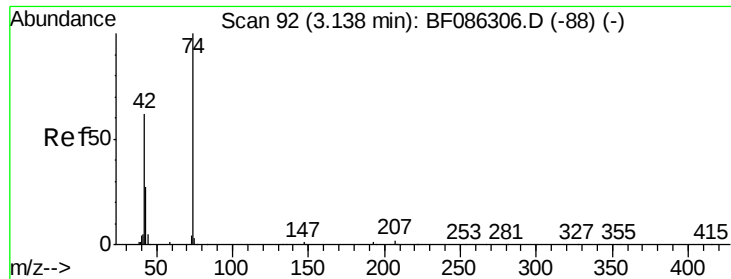


Abundance Ion 88.00 (87.70 to 88.70): BF0

Ion 58.00 (57.70 to 58.70): BF0

Ion 43.00 (42.70 to 43.70): BF0





#4

n-Nitrosodimethylamine

Concen: 0.08 ng

RT: 3.24 min Scan# 101

Delta R.T. 0.05 min

Lab File: BF086308.D

Acq: 20 Apr 2016 14:56

Instrument :

BNA\_F

ClientSampled :

PB89915BL

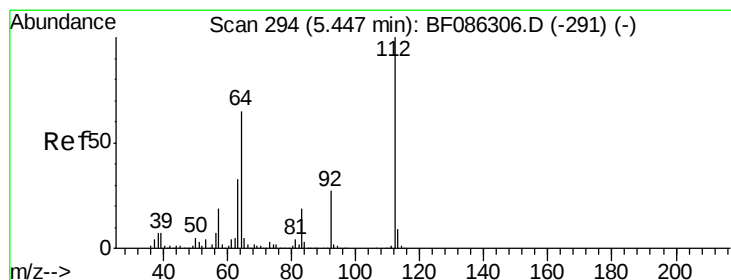
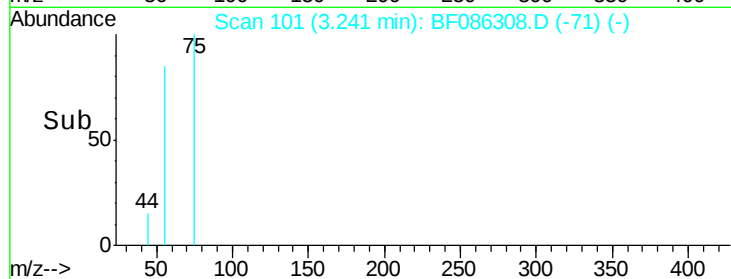
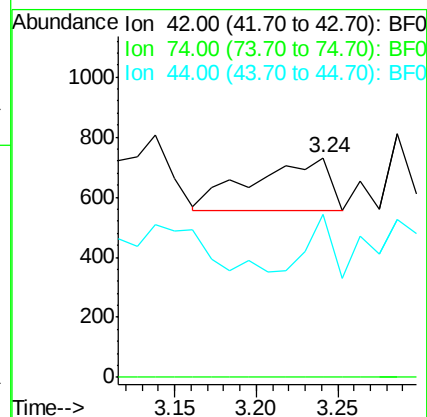
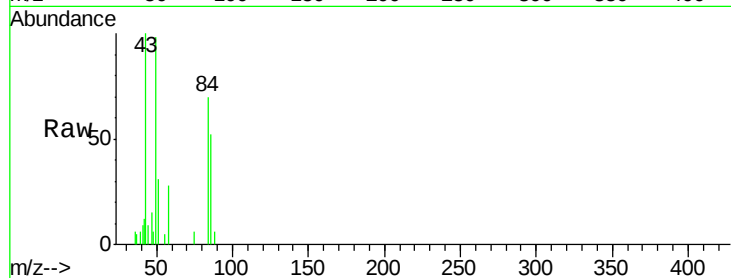
Tgt Ion: 42 Resp: 580

Ion Ratio Lower Upper

42 100

74 0.0 100.5 150.7#

44 74.0 5.4 8.0#



#5

2-Fluorophenol

Concen: 114.42 ng

RT: 5.47 min Scan# 296

Delta R.T. -0.01 min

Lab File: BF086308.D

Acq: 20 Apr 2016 14:56

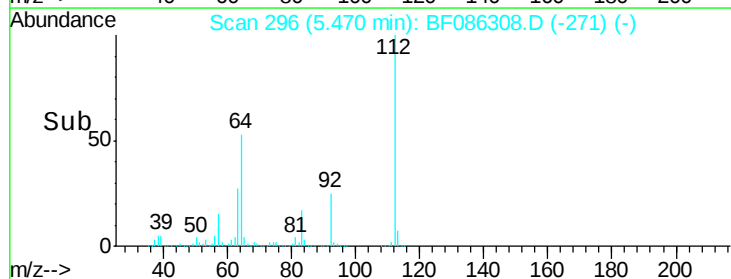
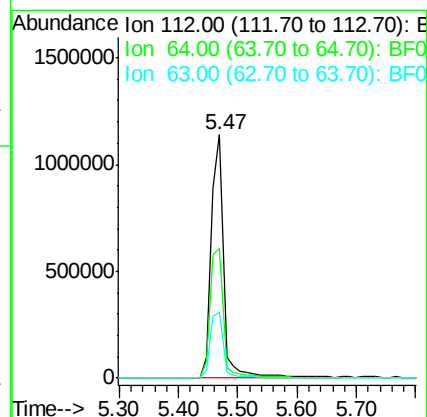
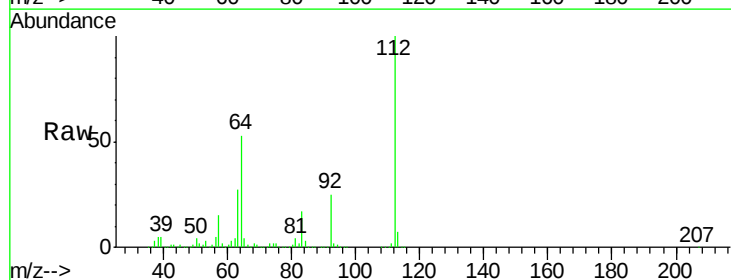
Tgt Ion: 112 Resp: 1700666

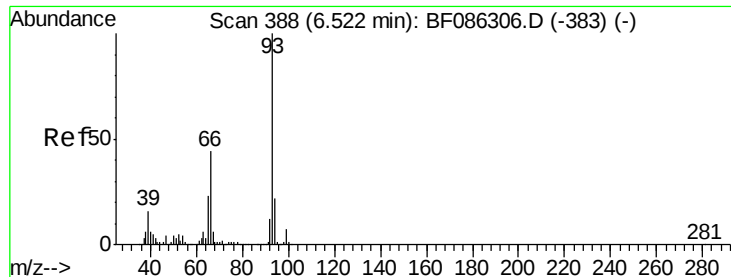
Ion Ratio Lower Upper

112 100

64 53.4 48.1 72.1

63 26.8 25.5 38.3





#6

Aniline

Concen: 0.04 ng

RT: 6.54 min Scan# 390

Delta R.T. -0.01 min

Lab File: BF086308.D

Acq: 20 Apr 2016 14:56

Instrument :

BNA\_F

ClientSampleId :

PB89915BL

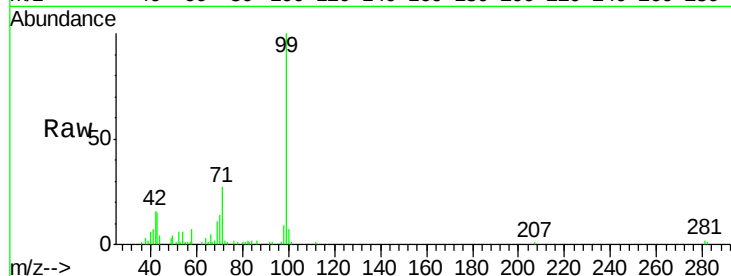
Tgt Ion: 93 Resp: 1095

Ion Ratio Lower Upper

93 100

66 351.3 32.2 48.2#

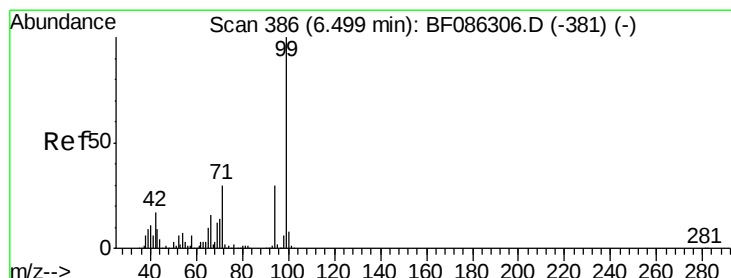
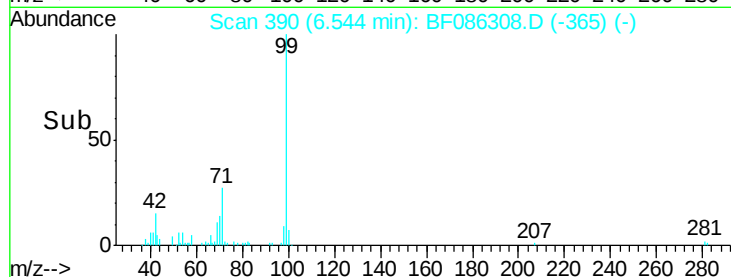
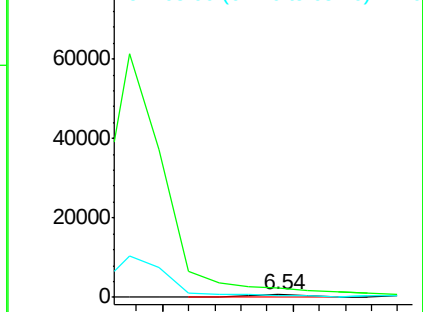
65 70.9 16.4 24.6#



Abundance Ion 93.00 (92.70 to 93.70): BF0

Ion 66.00 (65.70 to 66.70): BF0

Ion 65.00 (64.70 to 65.70): BF0



#7

Phenol-d6

Concen: 112.58 ng

RT: 6.49 min Scan# 385

Delta R.T. -0.03 min

Lab File: BF086308.D

Acq: 20 Apr 2016 14:56

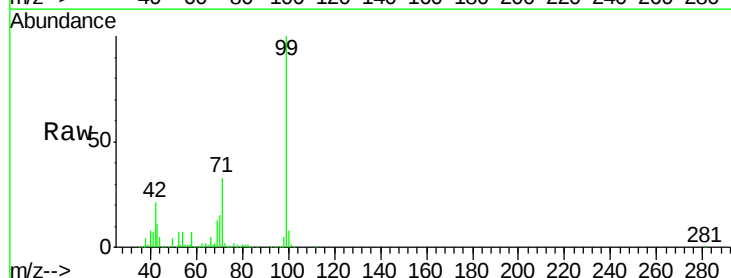
Tgt Ion: 99 Resp: 2189757

Ion Ratio Lower Upper

99 100

42 21.2 15.4 23.2

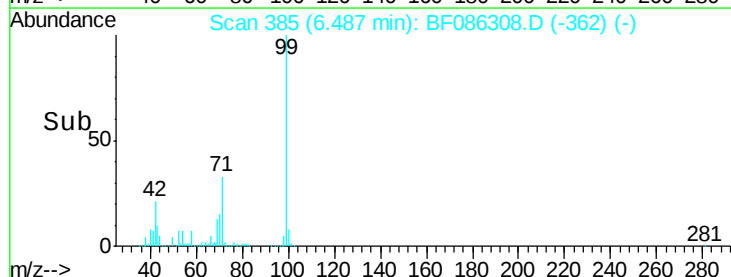
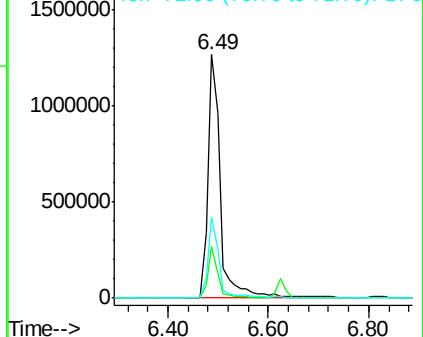
71 33.3 25.6 38.4

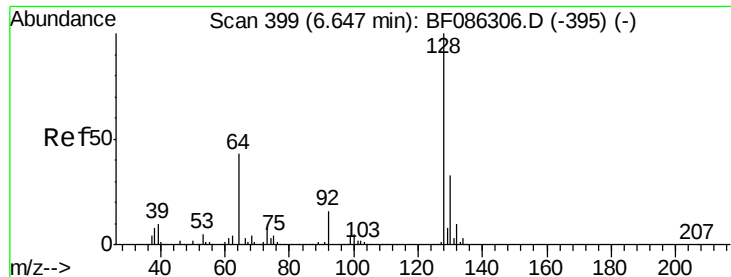


Abundance Ion 99.00 (98.70 to 99.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 71.00 (70.70 to 71.70): BF0





#8

2-Chlorophenol

Concen: 0.09 ng

RT: 6.65 min Scan# 399

Delta R.T. -0.02 min

Lab File: BF086308.D

Acq: 20 Apr 2016 14:56

Instrument :

BNA\_F

ClientSampleId :

PB89915BL

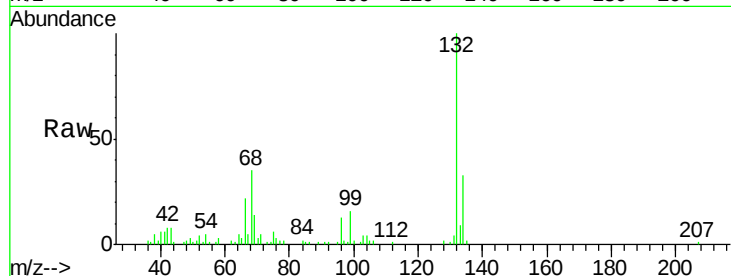
Tgt Ion:128 Resp: 1550

Ion Ratio Lower Upper

128 100

130 48.2 11.8 51.8

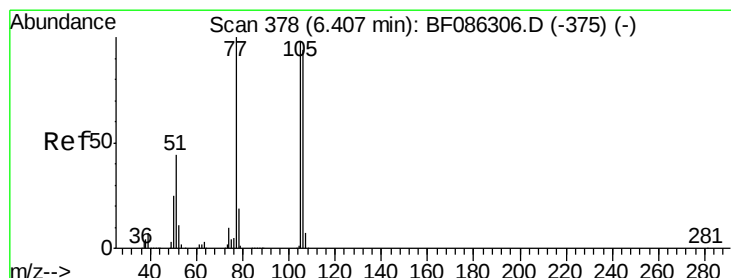
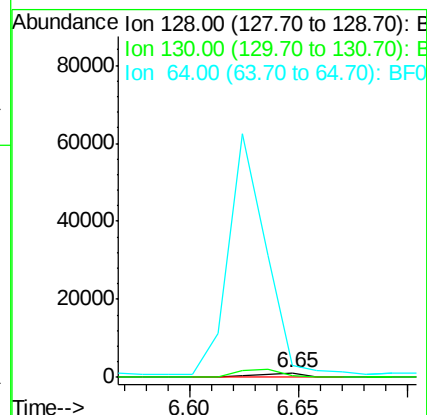
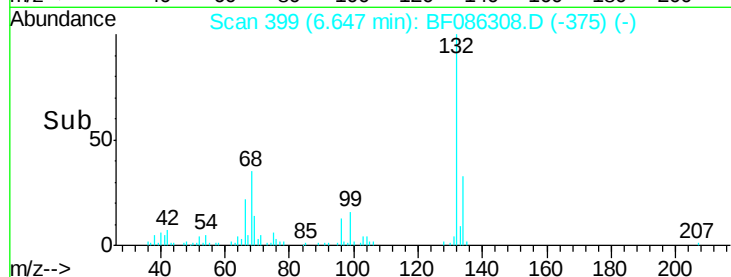
64 246.6 39.5 79.5#



Abundance Ion 128.00 (127.70 to 128.70): E

Ion 130.00 (129.70 to 130.70): E

Ion 64.00 (63.70 to 64.70): BF0



#9

Benzaldehyde

Concen: 0.21 ng

RT: 6.49 min Scan# 385

Delta R.T. 0.05 min

Lab File: BF086308.D

Acq: 20 Apr 2016 14:56

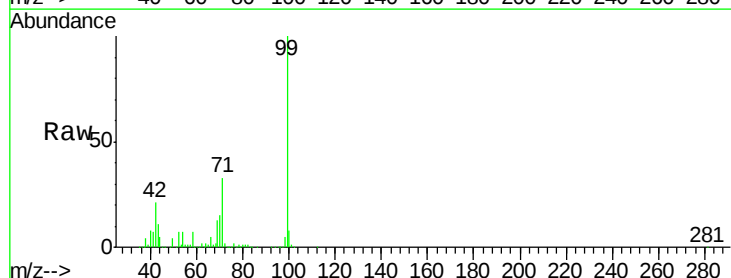
Tgt Ion: 77 Resp: 2888

Ion Ratio Lower Upper

77 100

105 0.0 84.6 124.6#

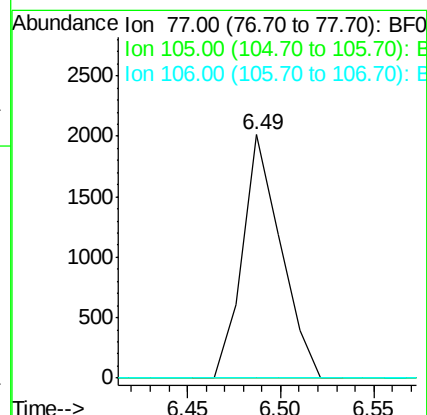
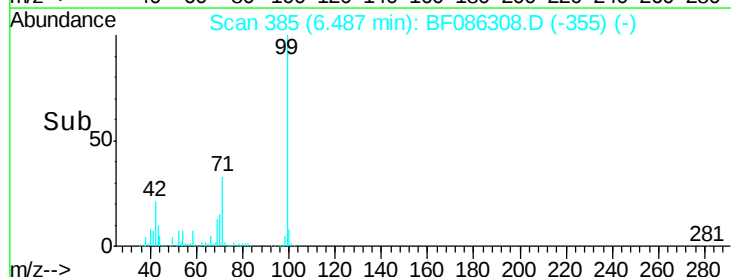
106 0.0 78.6 118.6#

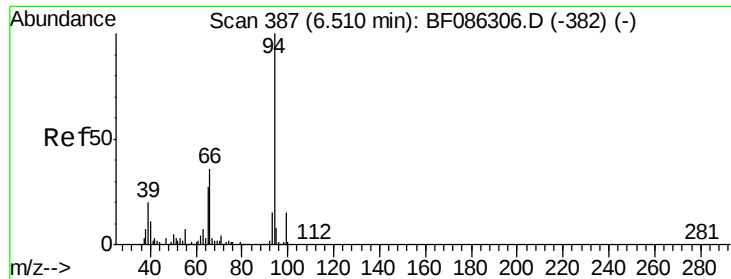


Abundance Ion 77.00 (76.70 to 77.70): BF0

Ion 105.00 (104.70 to 105.70): E

Ion 106.00 (105.70 to 106.70): E





#10

Phenol

Concen: 0.05 ng

RT: 6.50 min Scan# 386

Delta R.T. -0.03 min

Lab File: BF086308.D

Acq: 20 Apr 2016 14:56

Instrument :

BNA\_F

ClientSampleId :

PB89915BL

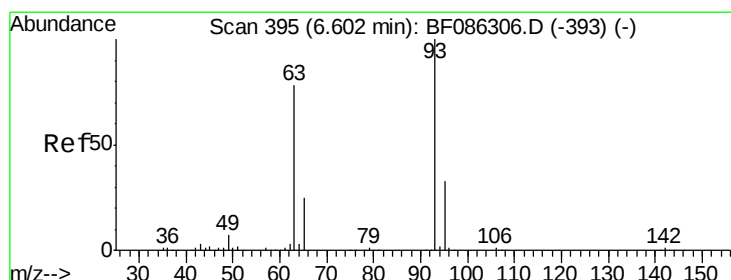
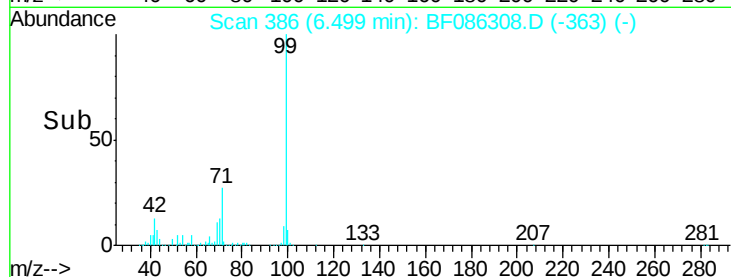
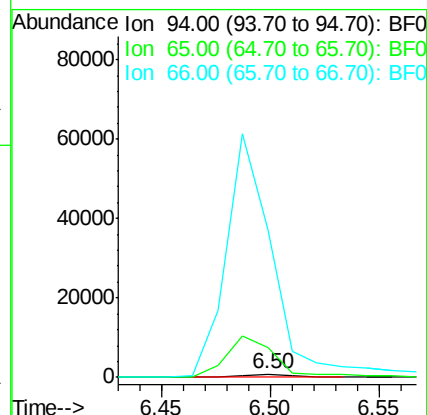
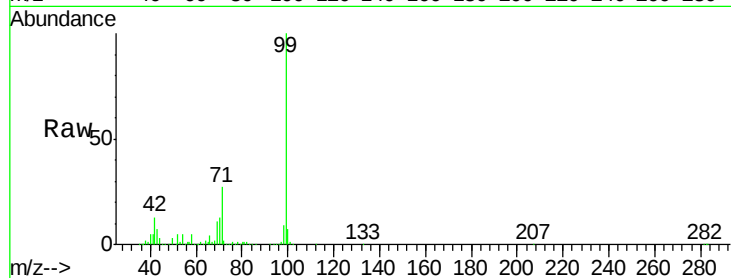
Tgt Ion: 94 Resp: 1096

Ion Ratio Lower Upper

94 100

65 929.5 7.9 47.9#

66 4501.6 16.5 56.5#



#11

bis(2-Chloroethyl)ether

Concen: 0.15 ng

RT: 6.62 min Scan# 397

Delta R.T. -0.00 min

Lab File: BF086308.D

Acq: 20 Apr 2016 14:56

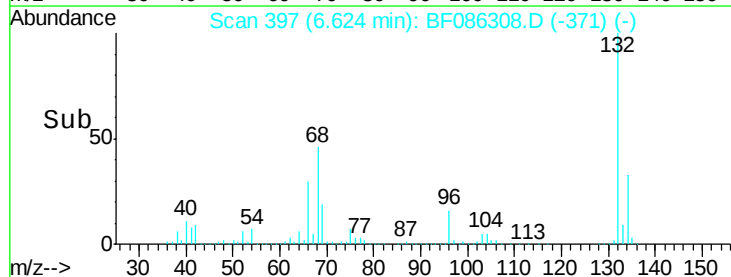
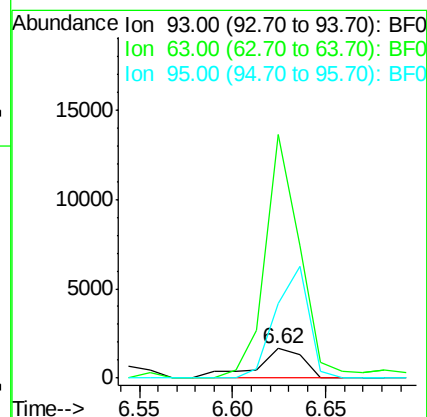
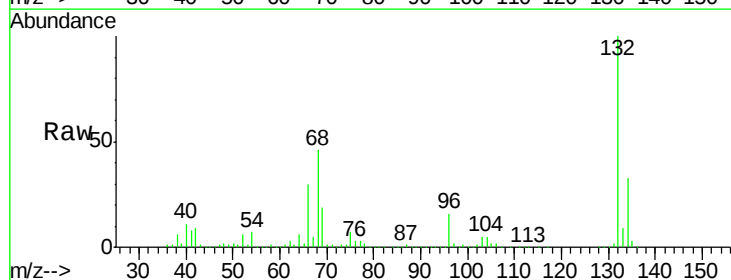
Tgt Ion: 93 Resp: 2900

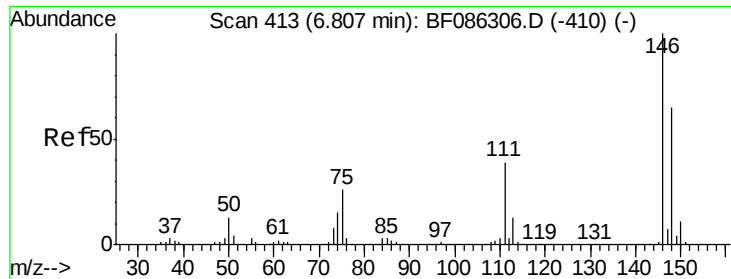
Ion Ratio Lower Upper

93 100

63 817.0 44.4 84.4#

95 250.7 13.1 53.1#

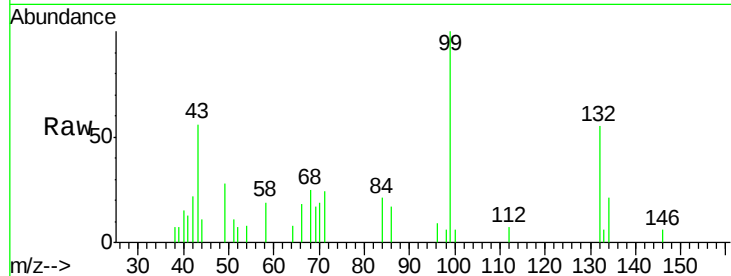




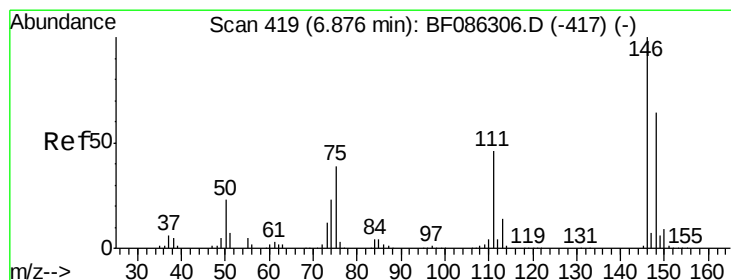
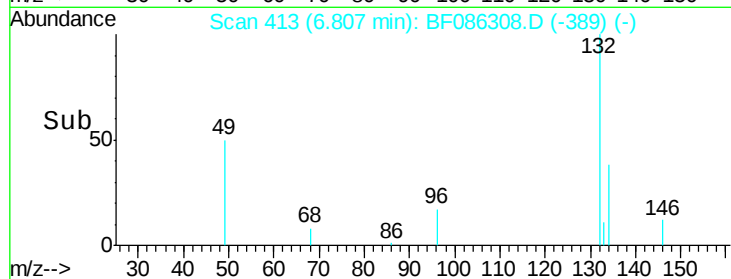
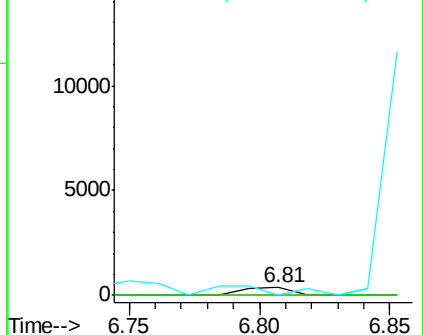
#12  
 1,3-Dichlorobenzene  
 Concen: 0.02 ng  
 RT: 6.81 min Scan# 413  
 Delta R.T. -0.02 min  
 Lab File: BF086308.D  
 Acq: 20 Apr 2016 14:56

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB89915BL

Tgt Ion:146 Resp: 468  
 Ion Ratio Lower Upper  
 146 100  
 148 0.0 51.0 76.4#  
 75 0.0 29.9 44.9#

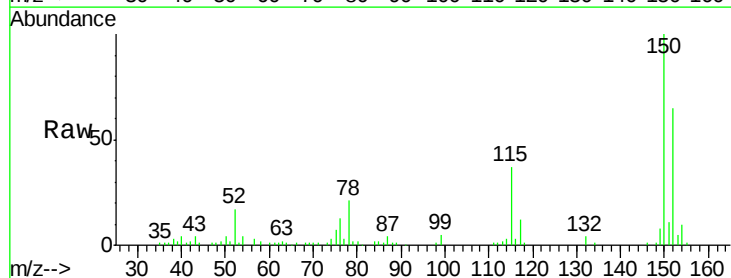


Abundance Ion 146.00 (145.70 to 146.70): E  
 Ion 148.00 (147.70 to 148.70): E  
 Ion 75.00 (74.70 to 75.70): BF0

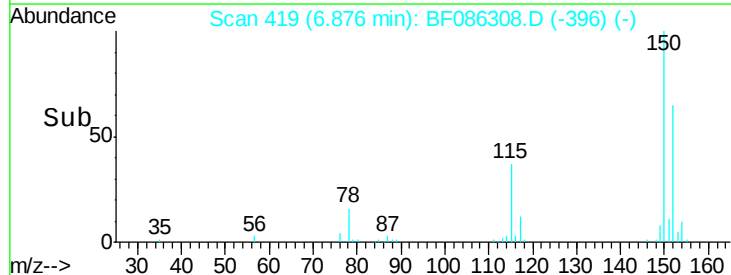
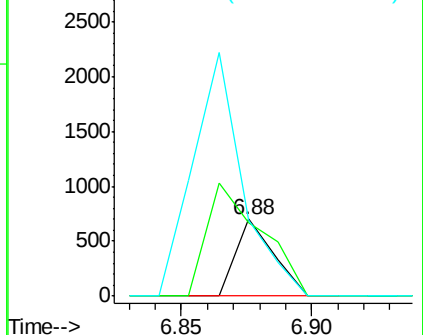


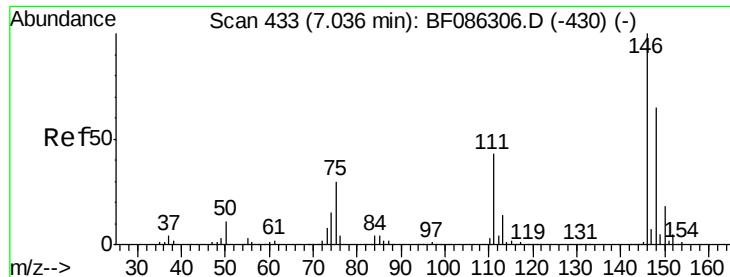
#13  
 1,4-Dichlorobenzene  
 Concen: 0.03 ng  
 RT: 6.88 min Scan# 419  
 Delta R.T. -0.03 min  
 Lab File: BF086308.D  
 Acq: 20 Apr 2016 14:56

Tgt Ion:146 Resp: 706  
 Ion Ratio Lower Upper  
 146 100  
 148 96.1 51.8 77.6#  
 111 98.4 34.9 52.3#



Abundance Ion 146.00 (145.70 to 146.70): E  
 Ion 148.00 (147.70 to 148.70): E  
 Ion 111.00 (110.70 to 111.70): E





#14

1,2-Dichlorobenzene

Concen: 0.06 ng

RT: 7.04 min Scan# 433

Delta R.T. -0.03 min

Lab File: BF086308.D

Acq: 20 Apr 2016 14:56

Instrument :

BNA\_F

ClientSampleId :

PB89915BL

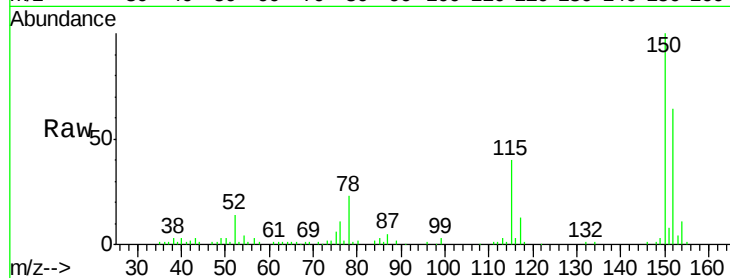
Tgt Ion:146 Resp: 1068

Ion Ratio Lower Upper

146 100

148 72.5 52.2 78.2

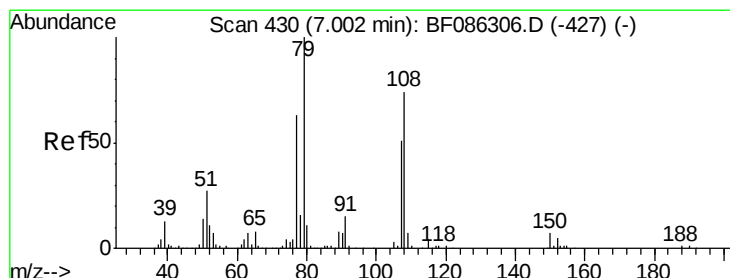
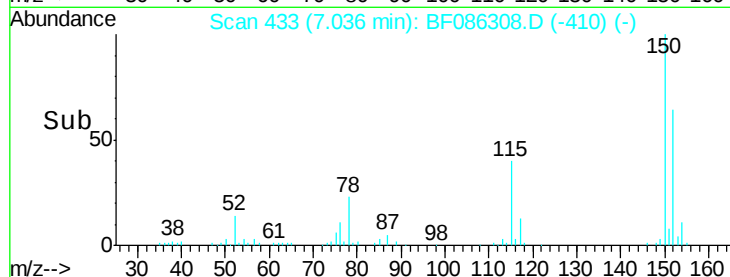
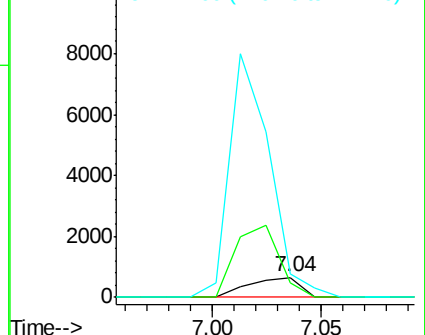
111 117.8 31.0 46.4#



Abundance Ion 146.00 (145.70 to 146.70): E

Ion 148.00 (147.70 to 148.70): E

Ion 111.00 (110.70 to 111.70): E



#15

Benzyl Alcohol

Concen: 1.82 ng

RT: 7.01 min Scan# 431

Delta R.T. -0.02 min

Lab File: BF086308.D

Acq: 20 Apr 2016 14:56

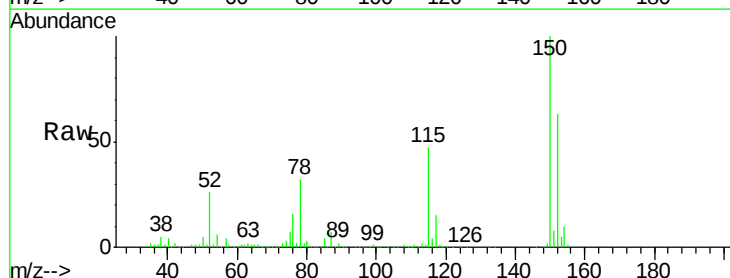
Tgt Ion: 79 Resp: 21943

Ion Ratio Lower Upper

79 100

108 28.8 64.8 97.2#

77 104.4 51.9 77.9#



Abundance Ion 79.00 (78.70 to 79.70): BF0

Ion 108.00 (107.70 to 108.70): E

Ion 77.00 (76.70 to 77.70): BF0

