

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG110716\  
 Data File : BG024732.D  
 Acq On : 7 Nov 2016 17:11  
 Operator : UM/SJ  
 Sample : SSTDCCC040  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 SSTDCCC040

Quant Time: Nov 08 00:02:09 2016  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\8270-BG102516.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Oct 26 11:14:13 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.26  | 152  | 106293   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 11.09 | 136  | 431536   | 20.00 | ng    | -0.01    |
| 38) Acenaphthene-d10      | 14.88 | 164  | 337836   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10      | 17.62 | 188  | 784275   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 21.92 | 240  | 1045366  | 20.00 | ng    | -0.01    |
| 86) Perylene-d12          | 25.34 | 264  | 1134285  | 20.00 | ng    | -0.02    |

## System Monitoring Compounds

|                          |       |     |         |       |    |       |
|--------------------------|-------|-----|---------|-------|----|-------|
| 5) 2-Fluorophenol        | 5.79  | 112 | 550957  | 84.95 | ng | 0.00  |
| 7) Phenol-d6             | 7.40  | 99  | 751969  | 84.53 | ng | 0.00  |
| 23) Nitrobenzene-d5      | 9.44  | 82  | 791913  | 83.55 | ng | -0.01 |
| 41) 2,4,6-Tribromophenol | 16.37 | 330 | 470032  | 93.13 | ng | 0.00  |
| 44) 2-Fluorobiphenyl     | 13.50 | 172 | 1739853 | 85.60 | ng | -0.01 |
| 78) Terphenyl-d14        | 20.20 | 244 | 2908729 | 83.14 | ng | -0.01 |

## Target Compounds

|                                |       |     |        |       |    | Qvalue |
|--------------------------------|-------|-----|--------|-------|----|--------|
| 2) 1,4-Dioxane                 | 3.66  | 88  | 115416 | 43.56 | ng | 91     |
| 3) Pyridine                    | 4.07  | 79  | 334563 | 42.17 | ng | 92     |
| 4) n-Nitrosodimethylamine      | 3.99  | 42  | 165521 | 40.31 | ng | # 85   |
| 6) Aniline                     | 7.58  | 93  | 468360 | 41.56 | ng | 96     |
| 8) 2-Chlorophenol              | 7.82  | 128 | 275814 | 41.83 | ng | 93     |
| 9) Benzaldehyde                | 7.39  | 77  | 219992 | 40.02 | ng | 97     |
| 10) Phenol                     | 7.43  | 94  | 392793 | 42.83 | ng | 92     |
| 11) bis(2-Chloroethyl)ether    | 7.67  | 93  | 286304 | 41.56 | ng | 93     |
| 12) 1,3-Dichlorobenzene        | 8.15  | 146 | 342852 | 42.00 | ng | 98     |
| 13) 1,4-Dichlorobenzene        | 8.30  | 146 | 344007 | 42.67 | ng | 99     |
| 14) 1,2-Dichlorobenzene        | 8.62  | 146 | 325259 | 41.96 | ng | 93     |
| 15) Benzyl Alcohol             | 8.50  | 79  | 349892 | 42.28 | ng | 95     |
| 16) 2,2'-oxybis(1-Chloropropan | 8.77  | 45  | 511910 | 40.05 | ng | 96     |
| 17) 2-Methylphenol             | 8.69  | 107 | 253687 | 41.75 | ng | 98     |
| 18) Hexachloroethane           | 9.35  | 117 | 134160 | 43.29 | ng | 89     |
| 19) n-Nitroso-di-n-propylamine | 9.06  | 70  | 282912 | 43.15 | ng | # 85   |
| 20) 3+4-Methylphenols          | 9.02  | 107 | 353709 | 43.35 | ng | 96     |
| 22) Acetophenone               | 9.09  | 105 | 467101 | 42.14 | ng | # 89   |
| 24) Nitrobenzene               | 9.48  | 77  | 436286 | 41.38 | ng | 96     |
| 25) Isophorone                 | 10.00 | 82  | 733771 | 41.62 | ng | 99     |
| 26) 2-Nitrophenol              | 10.19 | 139 | 178402 | 45.58 | ng | 97     |
| 27) 2,4-Dimethylphenol         | 10.23 | 122 | 288427 | 42.10 | ng | 90     |
| 28) bis(2-Chloroethoxy)methane | 10.47 | 93  | 382569 | 41.94 | ng | 99     |
| 29) 2,4-Dichlorophenol         | 10.73 | 162 | 311638 | 43.34 | ng | 95     |
| 30) 1,2,4-Trichlorobenzene     | 10.94 | 180 | 356493 | 41.79 | ng | 98     |
| 31) Naphthalene                | 11.14 | 128 | 911835 | 42.36 | ng | 97     |
| 32) Benzoic acid               | 10.36 | 122 | 219073 | 38.39 | ng | 90     |
| 33) 4-Chloroaniline            | 11.25 | 127 | 399494 | 42.74 | ng | 96     |
| 34) Hexachlorobutadiene        | 11.41 | 225 | 288100 | 43.15 | ng | 93     |
| 35) Caprolactam                | 12.02 | 113 | 106810 | 40.57 | ng | 93     |
| 36) 4-Chloro-3-methylphenol    | 12.34 | 107 | 385948 | 44.46 | ng | 98     |
| 37) 2-Methylnaphthalene        | 12.72 | 142 | 672713 | 42.83 | ng | 97     |
| 39) 1,2,4,5-Tetrachlorobenzene | 13.08 | 216 | 483073 | 42.40 | ng | 98     |
| 40) Hexachlorocyclopentadiene  | 13.05 | 237 | 279951 | 43.63 | ng | 95     |

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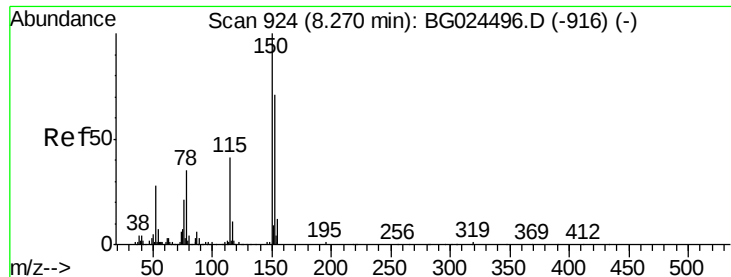
Instrument :  
 BNA\_G  
 ClientSampleId :  
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Quant Time: Nov 08 00:02:09 2016  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\8270-BG102516.M  
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 QLast Update : Wed Oct 26 11:14:13 2016  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-------|-------|----------|
| 42) 2,4,6-Trichlorophenol      | 13.32 | 196  | 302922   | 44.23 | ng    | 99       |
| 43) 2,4,5-Trichlorophenol      | 13.39 | 196  | 315813   | 42.65 | ng    | # 94     |
| 45) 1,1'-Biphenyl              | 13.72 | 154  | 998701   | 42.60 | ng    | 97       |
| 46) 2-Chloronaphthalene        | 13.76 | 162  | 748198   | 41.91 | ng    | 100      |
| 47) 2-Nitroaniline             | 13.97 | 65   | 315620   | 43.18 | ng    | 98       |
| 48) Acenaphthylene             | 14.61 | 152  | 1185351  | 43.30 | ng    | 96       |
| 49) Dimethylphthalate          | 14.32 | 163  | 1029289  | 42.92 | ng    | 98       |
| 50) 2,6-Dinitrotoluene         | 14.45 | 165  | 231945   | 45.30 | ng    | 89       |
| 51) Acenaphthene               | 14.94 | 154  | 784484   | 38.44 | ng    | 99       |
| 52) 3-Nitroaniline             | 14.79 | 138  | 225060   | 42.48 | ng    | 94       |
| 53) 2,4-Dinitrophenol          | 14.99 | 184  | 194186   | 52.34 | ng    | 99       |
| 54) Dibenzofuran               | 15.27 | 168  | 1203445  | 42.65 | ng    | 99       |
| 55) 4-Nitrophenol              | 15.07 | 139  | 198228   | 42.94 | ng    | # 84     |
| 56) 2,4-Dinitrotoluene         | 15.23 | 165  | 331037   | 44.49 | ng    | # 98     |
| 57) Fluorene                   | 15.92 | 166  | 992019   | 42.40 | ng    | 97       |
| 58) 2,3,4,6-Tetrachlorophenol  | 15.50 | 232  | 338767   | 44.13 | ng    | # 91     |
| 59) Diethylphthalate           | 15.67 | 149  | 1054939  | 41.95 | ng    | 99       |
| 60) 4-Chlorophenyl-phenylether | 15.90 | 204  | 557438   | 42.46 | ng    | 98       |
| 61) 4-Nitroaniline             | 15.95 | 138  | 250033   | 43.20 | ng    | 93       |
| 62) Azobenzene                 | 16.20 | 77   | 1025299  | 40.88 | ng    | 98       |
| 64) 4,6-Dinitro-2-methylphenol | 16.00 | 198  | 242300   | 44.84 | ng    | 96       |
| 65) n-Nitrosodiphenylamine     | 16.12 | 169  | 883234   | 41.19 | ng    | 98       |
| 66) 4-Bromophenyl-phenylether  | 16.80 | 248  | 402934   | 42.32 | ng    | 92       |
| 67) Hexachlorobenzene          | 16.92 | 284  | 460490   | 43.77 | ng    | # 92     |
| 68) Atrazine                   | 17.05 | 200  | 365160   | 39.71 | ng    | 97       |
| 69) Pentachlorophenol          | 17.26 | 266  | 283590   | 40.85 | ng    | 96       |
| 70) Phenanthrene               | 17.66 | 178  | 1656946  | 41.45 | ng    | 98       |
| 71) Anthracene                 | 17.75 | 178  | 1697840  | 42.10 | ng    | 97       |
| 72) Carbazole                  | 18.02 | 167  | 1529161  | 41.57 | ng    | 99       |
| 73) Di-n-butylphthalate        | 18.55 | 149  | 1767060  | 41.67 | ng    | 99       |
| 74) Fluoranthene               | 19.66 | 202  | 2156699  | 42.68 | ng    | 97       |
| 76) Benzidine                  | 19.83 | 184  | 958655   | 38.92 | ng    | 98       |
| 77) Pyrene                     | 20.02 | 202  | 2219211  | 43.43 | ng    | 100      |
| 79) Butylbenzylphthalate       | 20.88 | 149  | 892279   | 41.88 | ng    | 98       |
| 80) Benzo(a)anthracene         | 21.89 | 228  | 2386927  | 41.56 | ng    | 99       |
| 81) 3,3'-Dichlorobenzidine     | 21.81 | 252  | 960924   | 41.48 | ng    | 96       |
| 82) Chrysene                   | 21.97 | 228  | 2270826  | 41.52 | ng    | 99       |
| 83) Bis(2-ethylhexyl)phthalate | 21.75 | 149  | 1260737  | 41.37 | ng    | # 98     |
| 84) Di-n-octyl phthalate       | 23.03 | 149  | 2132629  | 42.17 | ng    | # 93     |
| 85) Indeno(1,2,3-cd)pyrene     | 29.29 | 276  | 3142093  | 41.62 | ng    | # 76     |
| 87) Benzo(b)fluoranthene       | 24.25 | 252  | 2606571  | 42.51 | ng    | 99       |
| 88) Benzo(k)fluoranthene       | 24.25 | 252  | 2606571  | 44.02 | ng    | 96       |
| 89) Benzo(a)pyrene             | 25.19 | 252  | 2490060  | 41.56 | ng    | 97       |
| 90) Dibenzo(a,h)anthracene     | 29.36 | 278  | 2678890  | 40.74 | ng    | 98       |
| 91) Benzo(g,h,i)perylene       | 30.53 | 276  | 2662488  | 40.53 | ng    | 98       |

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





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 8.26 min Scan# 923

Delta R.T. -0.01 min

Lab File: BG024732.D

Acq: 7 Nov 2016 17:11

Instrument :

BNA\_G

ClientSampleId :

SSTDCCC040

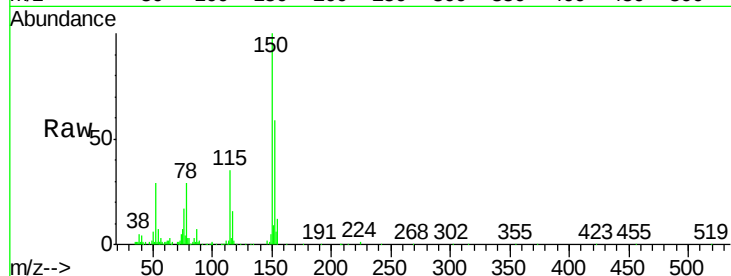
Tgt Ion:152 Resp: 106293

Ion Ratio Lower Upper

152 100

150 168.6 114.0 171.0

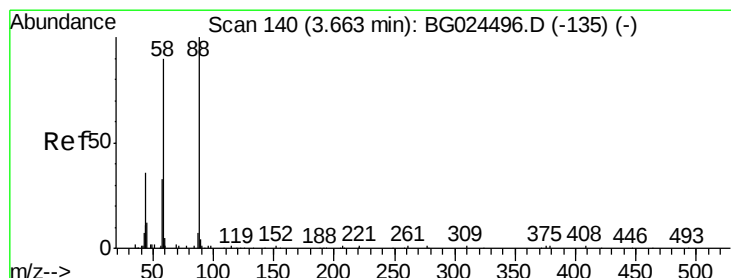
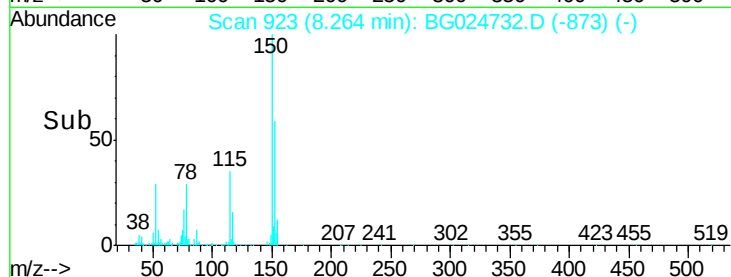
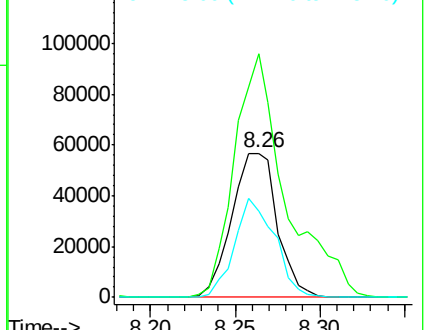
115 59.5 48.1 72.1



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: 43.56 ng

RT: 3.66 min Scan# 139

Delta R.T. -0.01 min

Lab File: BG024732.D

Acq: 7 Nov 2016 17:11

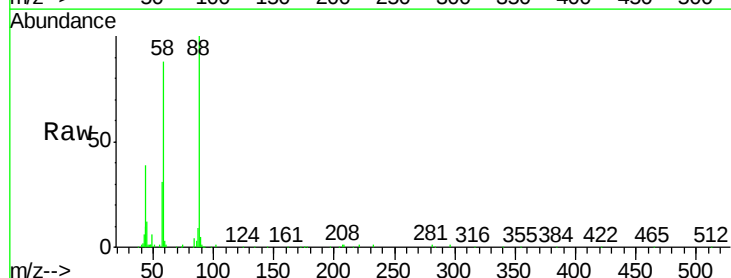
Tgt Ion: 88 Resp: 115416

Ion Ratio Lower Upper

88 100

58 89.5 79.4 119.2

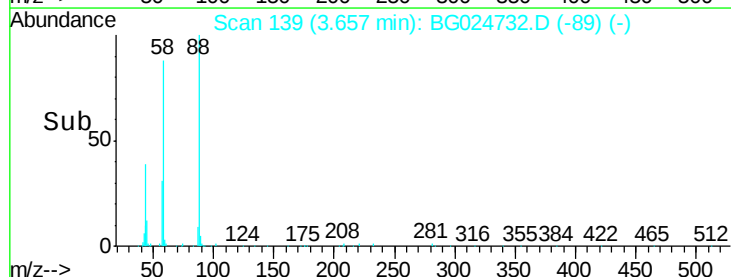
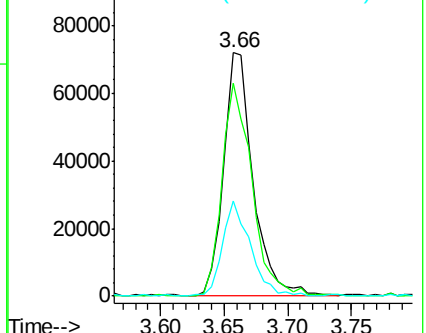
43 37.5 33.8 50.6

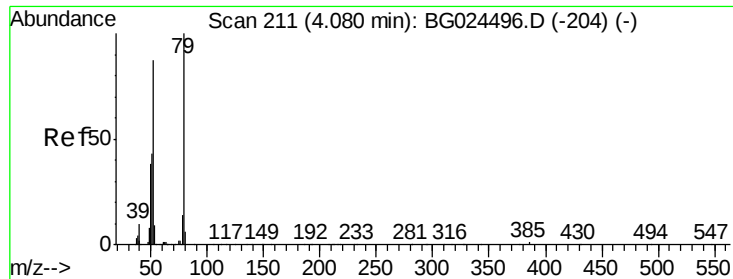


Abundance Ion 88.00 (87.70 to 88.70): BGC

Ion 58.00 (57.70 to 58.70): BGC

Ion 43.00 (42.70 to 43.70): BGC





#3

Pyridine

Concen: 42.17 ng

RT: 4.07 min Scan# 209

Delta R.T. -0.01 min

Lab File: BG024732.D

Acq: 7 Nov 2016 17:11

Instrument :

BNA\_G

ClientSampleId :

SSTDCCC040

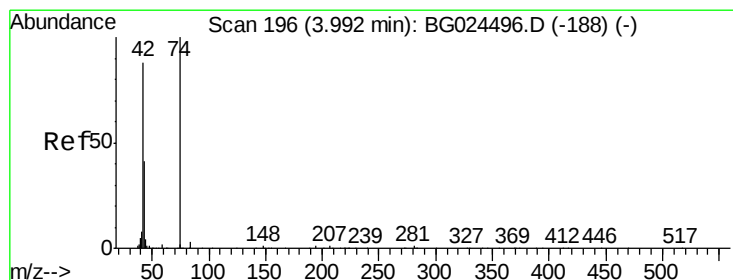
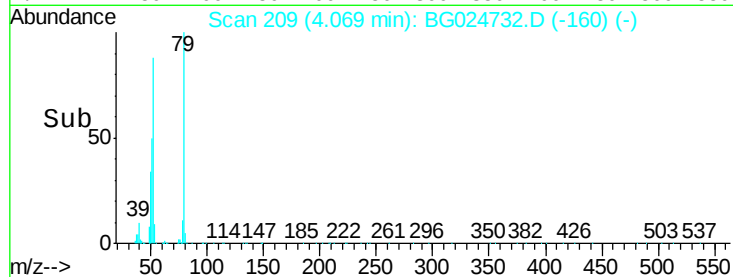
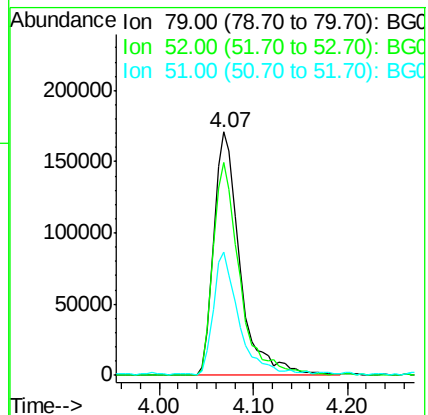
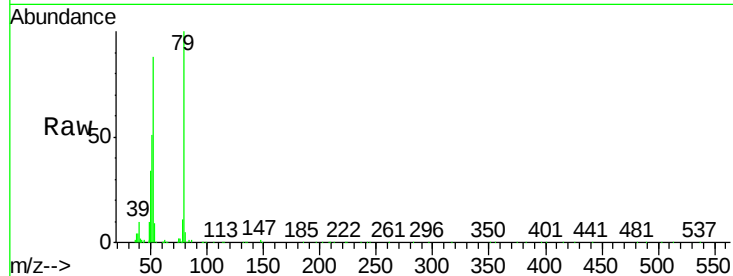
Tgt Ion: 79 Resp: 334563

Ion Ratio Lower Upper

79 100

52 87.6 77.8 116.6

51 50.9 43.2 64.8



#4

n-Nitrosodimethylamine

Concen: 40.31 ng

RT: 3.99 min Scan# 195

Delta R.T. -0.01 min

Lab File: BG024732.D

Acq: 7 Nov 2016 17:11

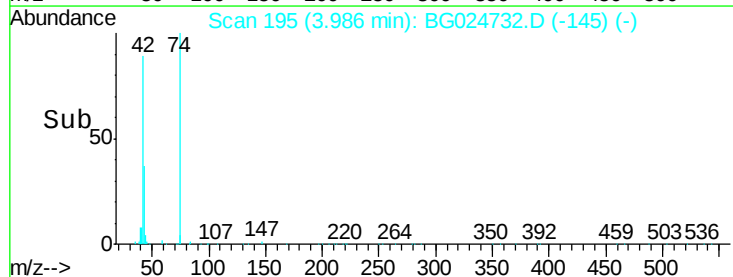
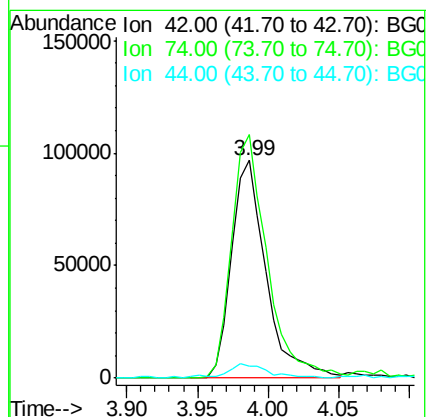
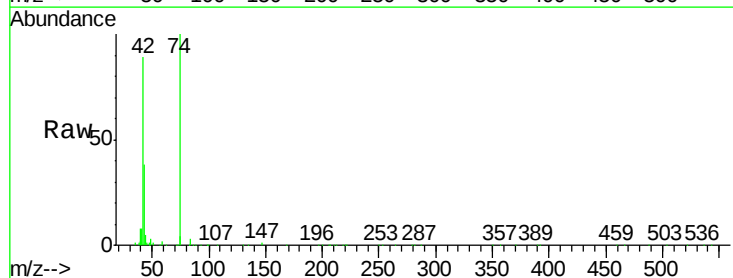
Tgt Ion: 42 Resp: 165521

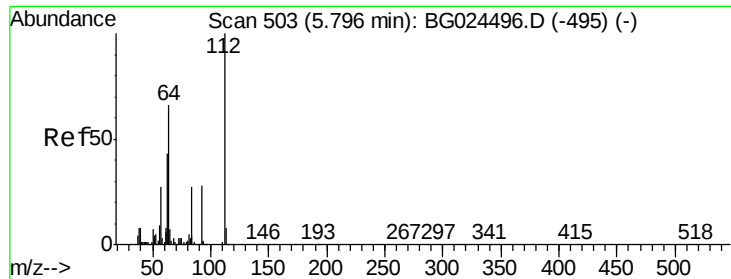
Ion Ratio Lower Upper

42 100

74 111.8 76.7 115.1

44 5.7 6.1 9.1#





#5

2-Fluorophenol

Concen: 84.95 ng

RT: 5.79 min Scan# 502

Delta R.T. -0.01 min

Lab File: BG024732.D

Acq: 7 Nov 2016 17:11

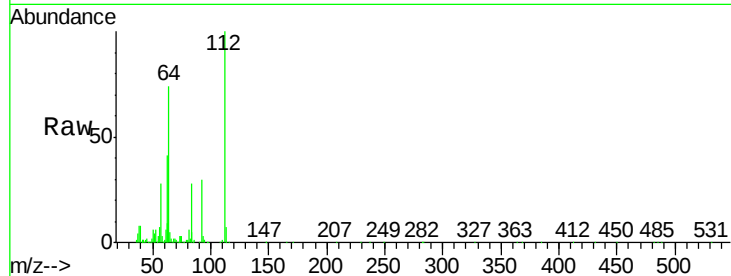
Instrument :

BNA\_G

ClientSampleId :

SSTDCCC040

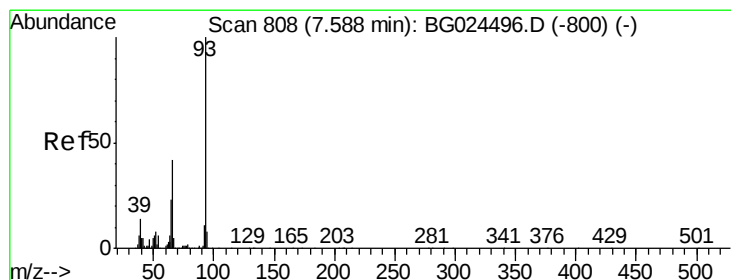
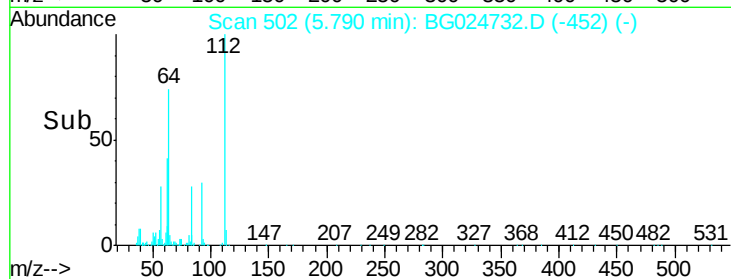
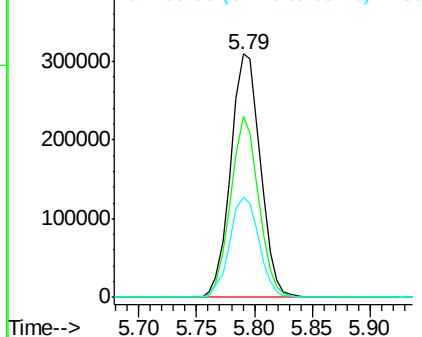
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 112   | Resp: | 550957 |
| Ion Ratio | Lower | Upper |        |
| 112       | 100   |       |        |
| 64        | 74.2  | 61.8  | 92.6   |
| 63        | 41.4  | 37.2  | 55.8   |



Abundance Ion 112.00 (111.70 to 112.70): BGC

Ion 64.00 (63.70 to 64.70): BGC

Ion 63.00 (62.70 to 63.70): BGC



#6

Aniline

Concen: 41.56 ng

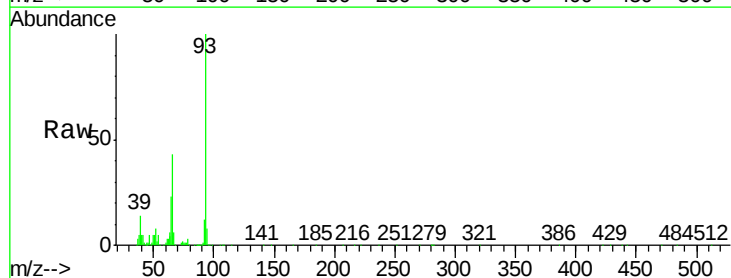
RT: 7.58 min Scan# 807

Delta R.T. -0.01 min

Lab File: BG024732.D

Acq: 7 Nov 2016 17:11

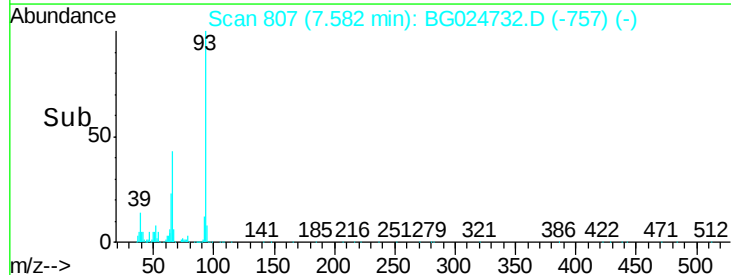
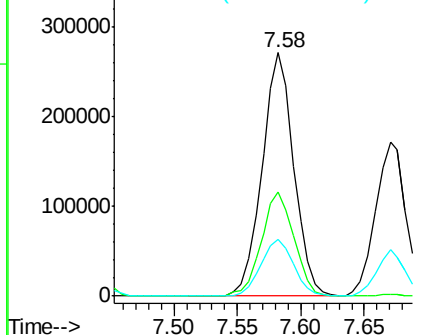
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 93    | Resp: | 468360 |
| Ion Ratio | Lower | Upper |        |
| 93        | 100   |       |        |
| 66        | 42.6  | 35.4  | 53.2   |
| 65        | 23.3  | 21.2  | 31.8   |

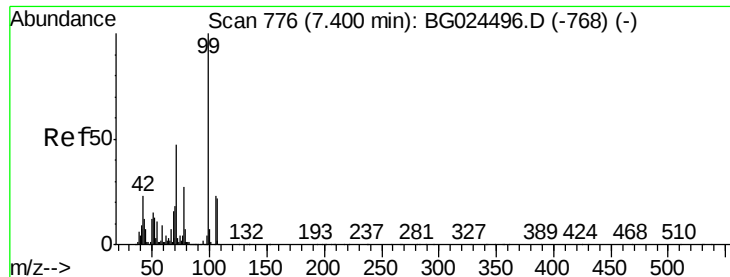


Abundance Ion 93.00 (92.70 to 93.70): BGC

Ion 66.00 (65.70 to 66.70): BGC

Ion 65.00 (64.70 to 65.70): BGC





#7

Phenol-d6

Concen: 84.53 ng

RT: 7.40 min Scan# 776

Delta R.T. -0.00 min

Lab File: BG024732.D

Acq: 7 Nov 2016 17:11

Instrument :

BNA\_G

ClientSampleId :

SSTDCCC040

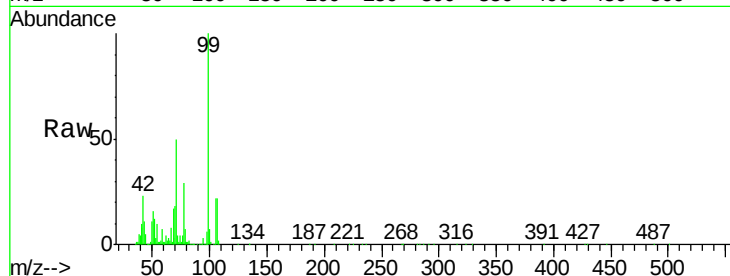
Tgt Ion: 99 Resp: 751969

Ion Ratio Lower Upper

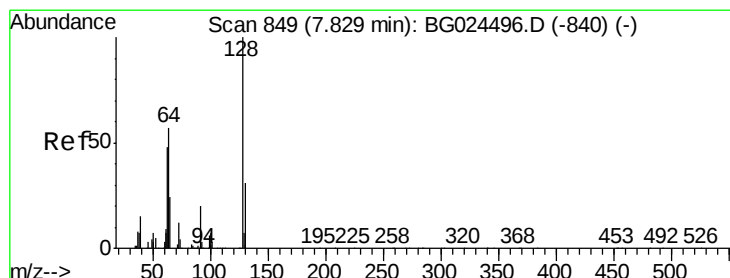
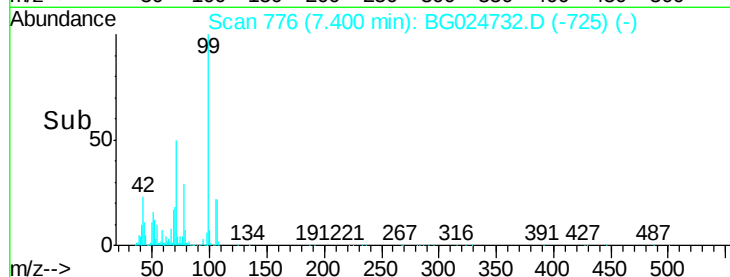
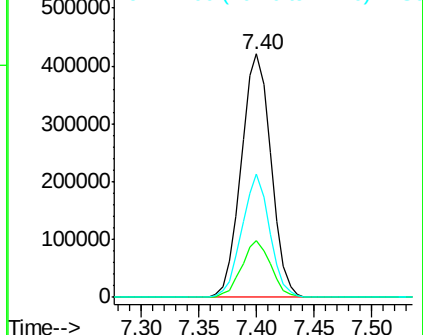
99 100

42 23.3 20.5 30.7

71 50.4 37.6 56.4



Abundance Ion 99.00 (98.70 to 99.70): BGC  
Ion 42.00 (41.70 to 42.70): BGC  
Ion 71.00 (70.70 to 71.70): BGC



#8

2-Chlorophenol

Concen: 41.83 ng

RT: 7.82 min Scan# 847

Delta R.T. -0.01 min

Lab File: BG024732.D

Acq: 7 Nov 2016 17:11

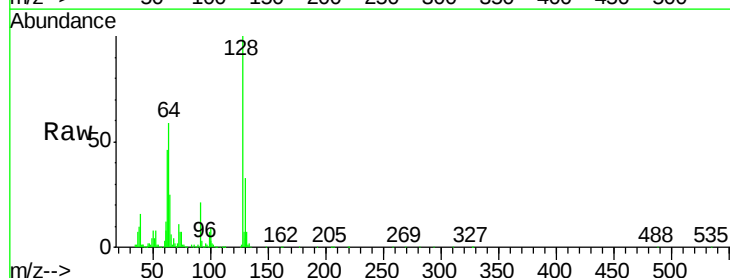
Tgt Ion: 128 Resp: 275814

Ion Ratio Lower Upper

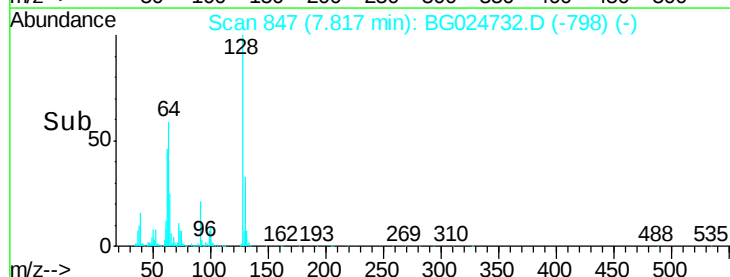
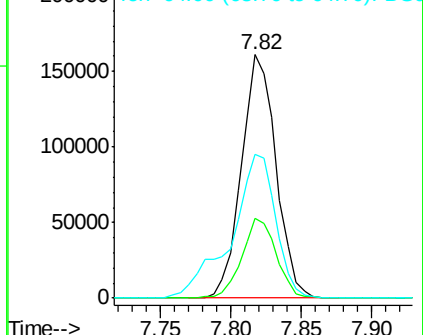
128 100

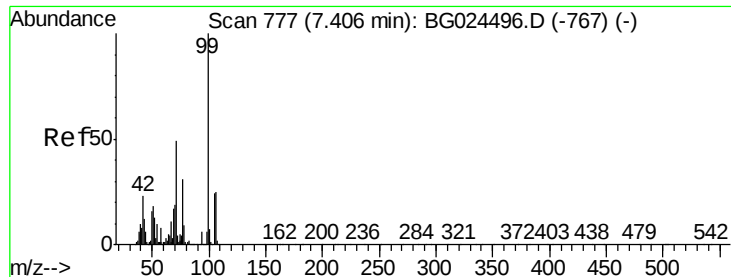
130 32.9 11.4 51.4

64 58.8 46.6 86.6



Abundance Ion 128.00 (127.70 to 128.70): BGC  
Ion 130.00 (129.70 to 130.70): BGC  
Ion 64.00 (63.70 to 64.70): BGC





#9

Benzaldehyde

Concen: 40.02 ng

RT: 7.39 min Scan# 775

Delta R.T. -0.01 min

Lab File: BG024732.D

Acq: 7 Nov 2016 17:11

Instrument :

BNA\_G

ClientSampleId :

SSTDCCC040

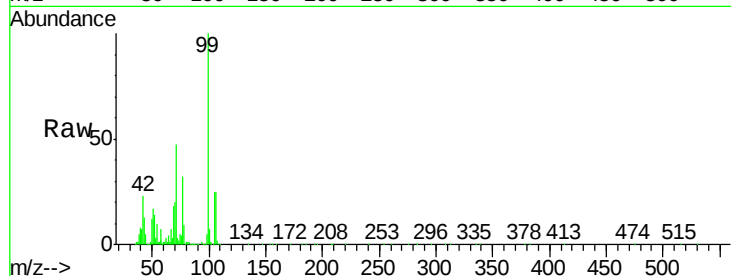
Tgt Ion: 77 Resp: 219992

Ion Ratio Lower Upper

77 100

105 79.8 60.9 100.9

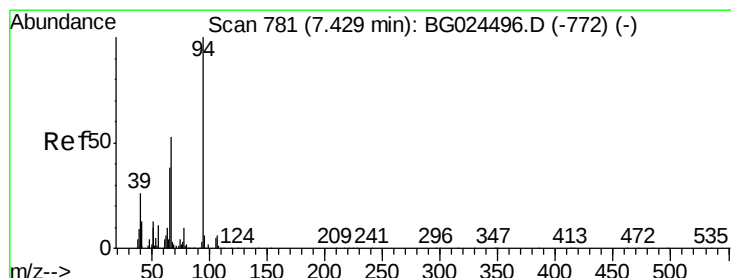
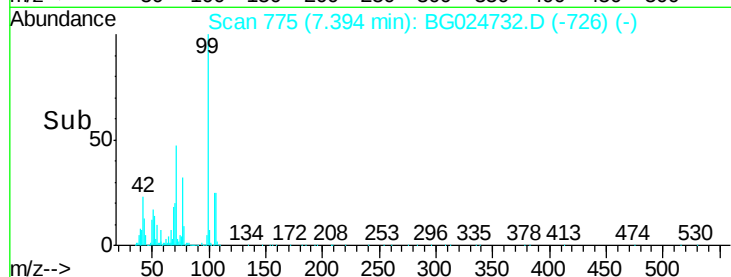
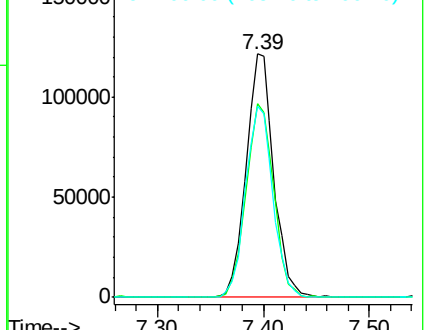
106 78.8 55.1 95.1



Abundance Ion 77.00 (76.70 to 77.70): BGC

Ion 105.00 (104.70 to 105.70): BGC

Ion 106.00 (105.70 to 106.70): BGC



#10

Phenol

Concen: 42.83 ng

RT: 7.43 min Scan# 781

Delta R.T. -0.00 min

Lab File: BG024732.D

Acq: 7 Nov 2016 17:11

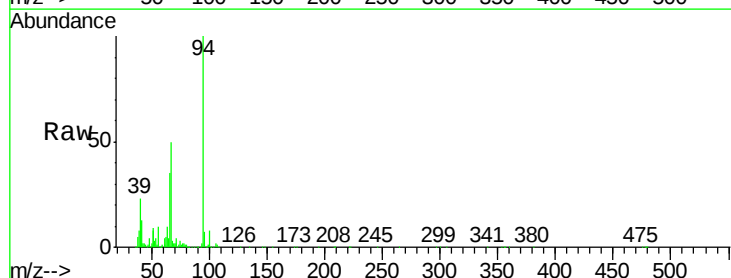
Tgt Ion: 94 Resp: 392793

Ion Ratio Lower Upper

94 100

65 34.8 20.6 60.6

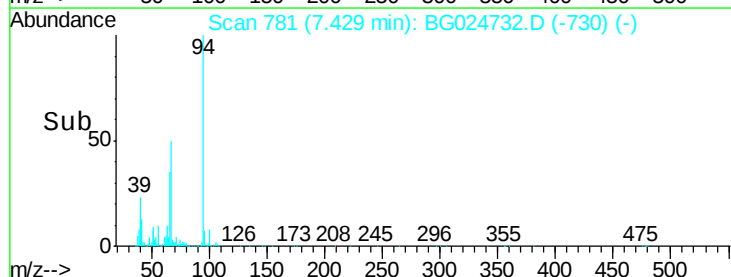
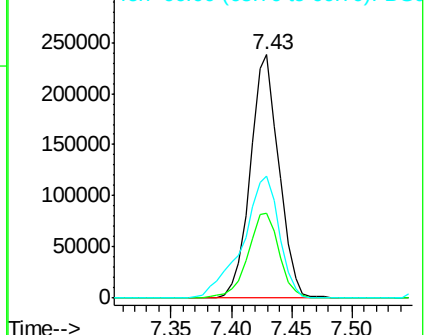
66 50.2 35.5 75.5

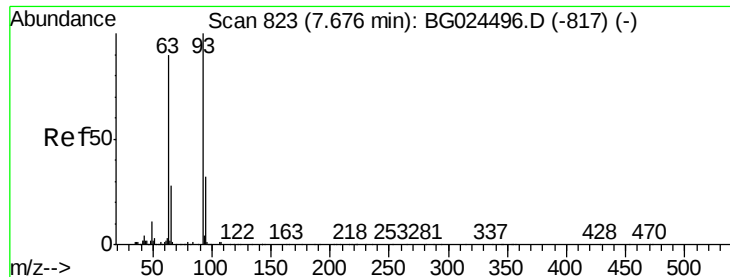


Abundance Ion 94.00 (93.70 to 94.70): BGC

Ion 65.00 (64.70 to 65.70): BGC

Ion 66.00 (65.70 to 66.70): BGC



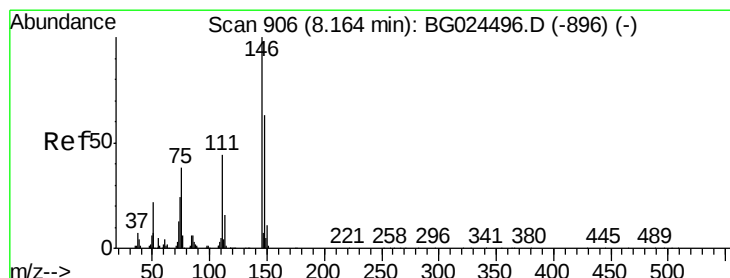
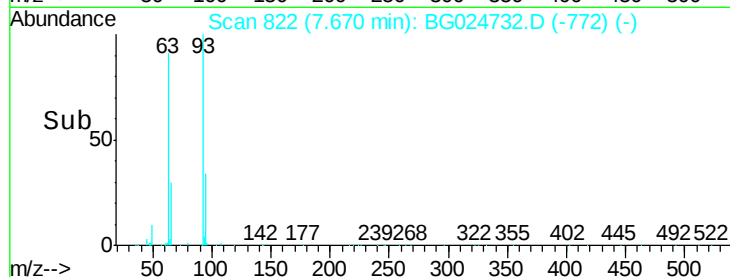
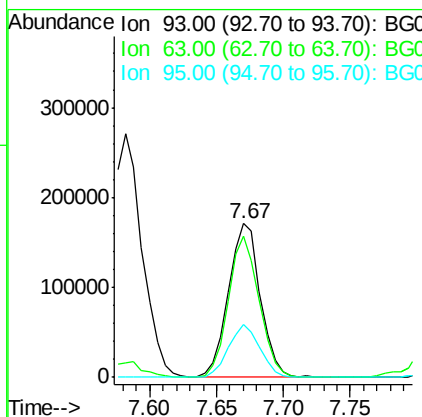
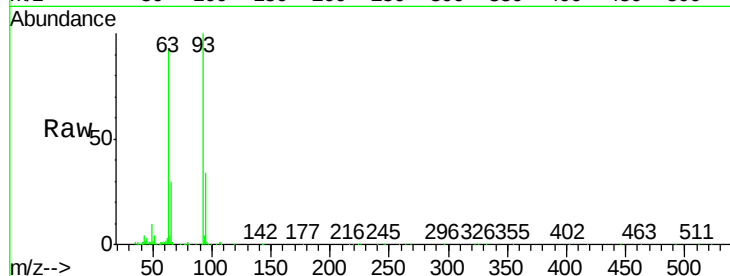


#11  
bis(2-Chloroethyl)ether  
Concen: 41.56 ng  
RT: 7.67 min Scan# 822  
Delta R.T. -0.01 min  
Lab File: BG024732.D  
Acq: 7 Nov 2016 17:11

Instrument :  
BNA\_G  
ClientSampleId :  
SSTDCCC040

Tgt Ion: 93 Resp: 286304  

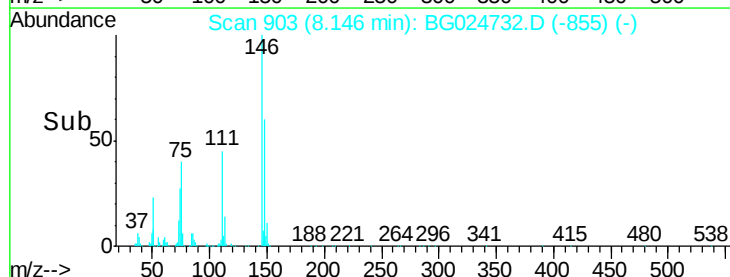
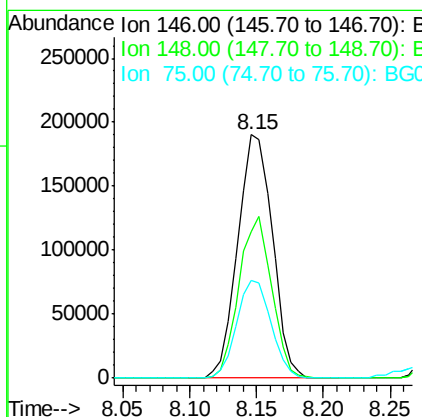
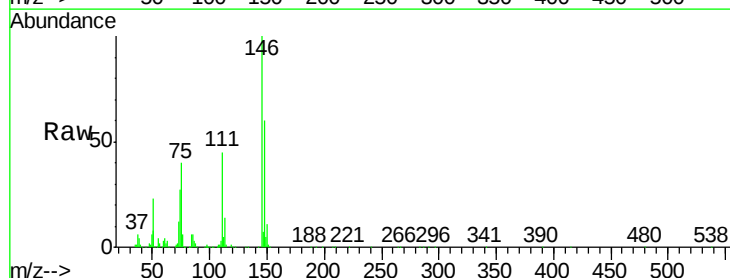
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 93  | 100   |       |       |
| 63  | 91.6  | 78.5  | 118.5 |
| 95  | 34.0  | 9.8   | 49.8  |



#12  
1,3-Dichlorobenzene  
Concen: 42.00 ng  
RT: 8.15 min Scan# 903  
Delta R.T. -0.02 min  
Lab File: BG024732.D  
Acq: 7 Nov 2016 17:11

Tgt Ion: 146 Resp: 342852  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 146 | 100   |       |       |
| 148 | 59.9  | 49.2  | 73.8  |
| 75  | 40.3  | 33.4  | 50.2  |





#13

1,4-Dichlorobenzene

Concen: 42.67 ng

RT: 8.30 min Scan# 929

Delta R.T. -0.01 min

Lab File: BG024732.D

Acq: 7 Nov 2016 17:11

Instrument :

BNA\_G

ClientSampleId :

SSTDCCC040

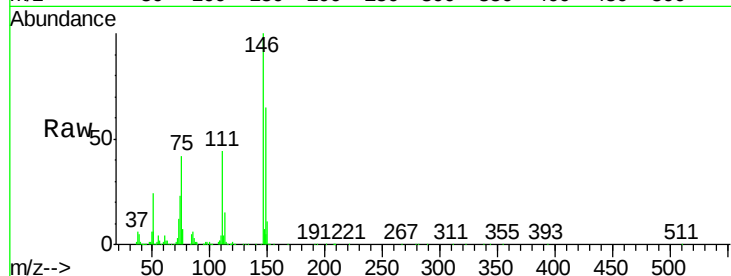
Tgt Ion:146 Resp: 344007

Ion Ratio Lower Upper

146 100

148 65.4 52.2 78.2

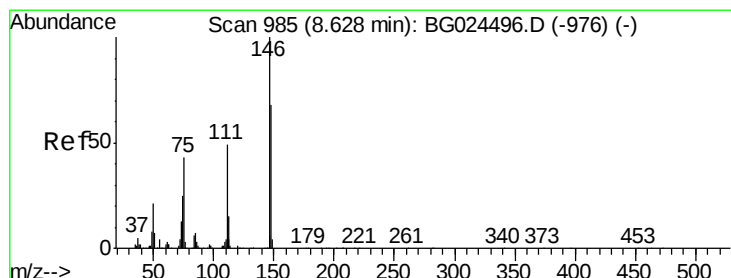
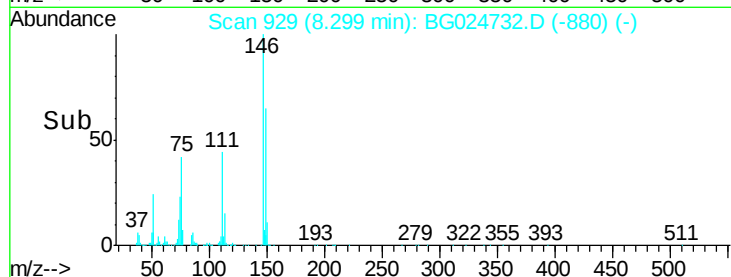
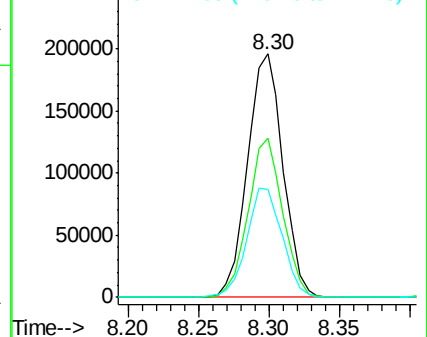
111 44.5 37.0 55.6



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: 41.96 ng

RT: 8.62 min Scan# 984

Delta R.T. -0.01 min

Lab File: BG024732.D

Acq: 7 Nov 2016 17:11

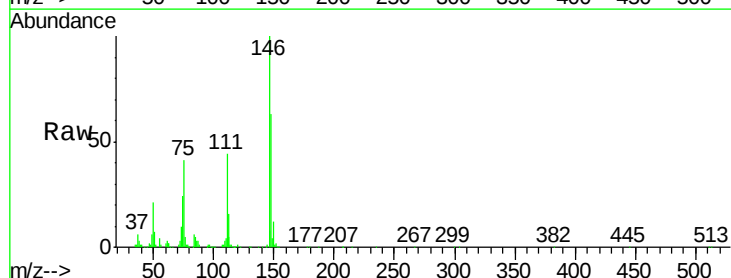
Tgt Ion:146 Resp: 325259

Ion Ratio Lower Upper

146 100

148 63.1 54.6 81.8

111 43.9 39.7 59.5



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

