

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
 Data File : BG020300.D  
 Acq On : 19 Dec 2015 7:27  
 Operator : UM/SJ  
 Sample : G4768-20  
 Misc :  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N44

Manual Integrations  
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 12/22/2015 2:13:20 PM

Quant Time: Dec 20 04:23:47 2015  
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Sat Dec 19 04:52:13 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.09  | 152  | 19740    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.94 | 136  | 70362    | 20.00 | ng/ul | 0.03     |
| 36) Acenaphthene-d10      | 14.73 | 164  | 57810    | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.47 | 188  | 134867   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.74 | 240  | 181229   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 25.02 | 264  | 171412   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |       |       |      |
|--------------------------------|-------|-----|--------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.47  | 96  | 501    | 1.40  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 7.24  | 99  | 13508  | 7.76  | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.41  | 67  | 31675  | 30.50 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.62  | 132 | 33725  | 26.64 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.79  | 113 | 23798  | 15.99 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.26  | 128 | 21991  | 40.09 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.99  | 143 | 25787  | 42.25 | ng/ul | 0.01 |
| 26) 2,4-Dichlorophenol-d3      | 10.54 | 165 | 42125  | 34.07 | ng/ul | 0.02 |
| 29) 4-Chloroaniline-d4         | 11.04 | 131 | 4047m  | 2.91  | ng/ul | 0.00 |
| 44) Dimethylphthalate-d6       | 14.14 | 166 | 145638 | 31.15 | ng/ul | 0.01 |
| 47) Acenaphthylene-d8          | 14.42 | 160 | 174556 | 32.08 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 14.92 | 143 | 7321   | 8.73  | ng/ul | 0.00 |
| 58) Fluorene-d10               | 15.72 | 176 | 133741 | 31.53 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.83 | 200 | 21781  | 27.24 | ng/ul | 0.00 |
| 71) Anthracene-d10             | 17.57 | 188 | 206947 | 33.30 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.85 | 212 | 249557 | 29.54 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 24.79 | 264 | 275069 | 32.17 | ng/ul | 0.00 |

## Target Compounds

|                         |       |     |          |         |        | Ovalue |
|-------------------------|-------|-----|----------|---------|--------|--------|
| 6) Phenol               | 7.27  | 94  | 4746     | 2.55    | ng/ul# | 87     |
| 11) 2-Methylphenol      | 8.53  | 108 | 38045    | 26.75   | ng/ul  | 93     |
| 14) Acetophenone        | 8.92  | 105 | 20771    | 8.91    | ng/ul# | 92     |
| 16) 4-Methylphenol      | 8.86  | 108 | 49730    | 31.60   | ng/ul  | 95     |
| 24) 2,4-Dimethylphenol  | 10.08 | 107 | 241096m  | 162.23  | ng/ul  |        |
| 28) Naphthalene         | 11.04 | 128 | 8320248  | 2264.37 | ng/ul# | 46     |
| 34) 2-Methylnaphthalene | 12.58 | 142 | 1465578  | 522.18  | ng/ul  | 100    |
| 35) 1-Methylnaphthalene | 12.80 | 142 | 852762   | 316.04  | ng/ul# | 96     |
| 41) 1,1'-Biphenyl       | 13.57 | 154 | 453934   | 104.08  | ng/ul  | 98     |
| 48) Acenaphthylene      | 14.45 | 152 | 299488   | 51.82   | ng/ul  | 99     |
| 50) Acenaphthene        | 14.81 | 153 | 1616582  | 415.70  | ng/ul  | 93     |
| 54) Dibenzofuran        | 15.13 | 168 | 1361392  | 235.33  | ng/ul  | 92     |
| 59) Fluorene            | 15.78 | 166 | 958994   | 206.43  | ng/ul  | 98     |
| 70) Phenanthrene        | 17.53 | 178 | 1558991m | 211.33  | ng/ul  |        |
| 72) Anthracene          | 17.61 | 178 | 117266m  | 15.67   | ng/ul  |        |
| 75) Carbazole           | 17.90 | 167 | 2066969  | 328.77  | ng/ul# | 87     |
| 77) Fluoranthene        | 19.52 | 202 | 255136   | 29.59   | ng/ul  | 98     |
| 80) Pyrene              | 19.88 | 202 | 150764   | 13.74   | ng/ul  | 99     |

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

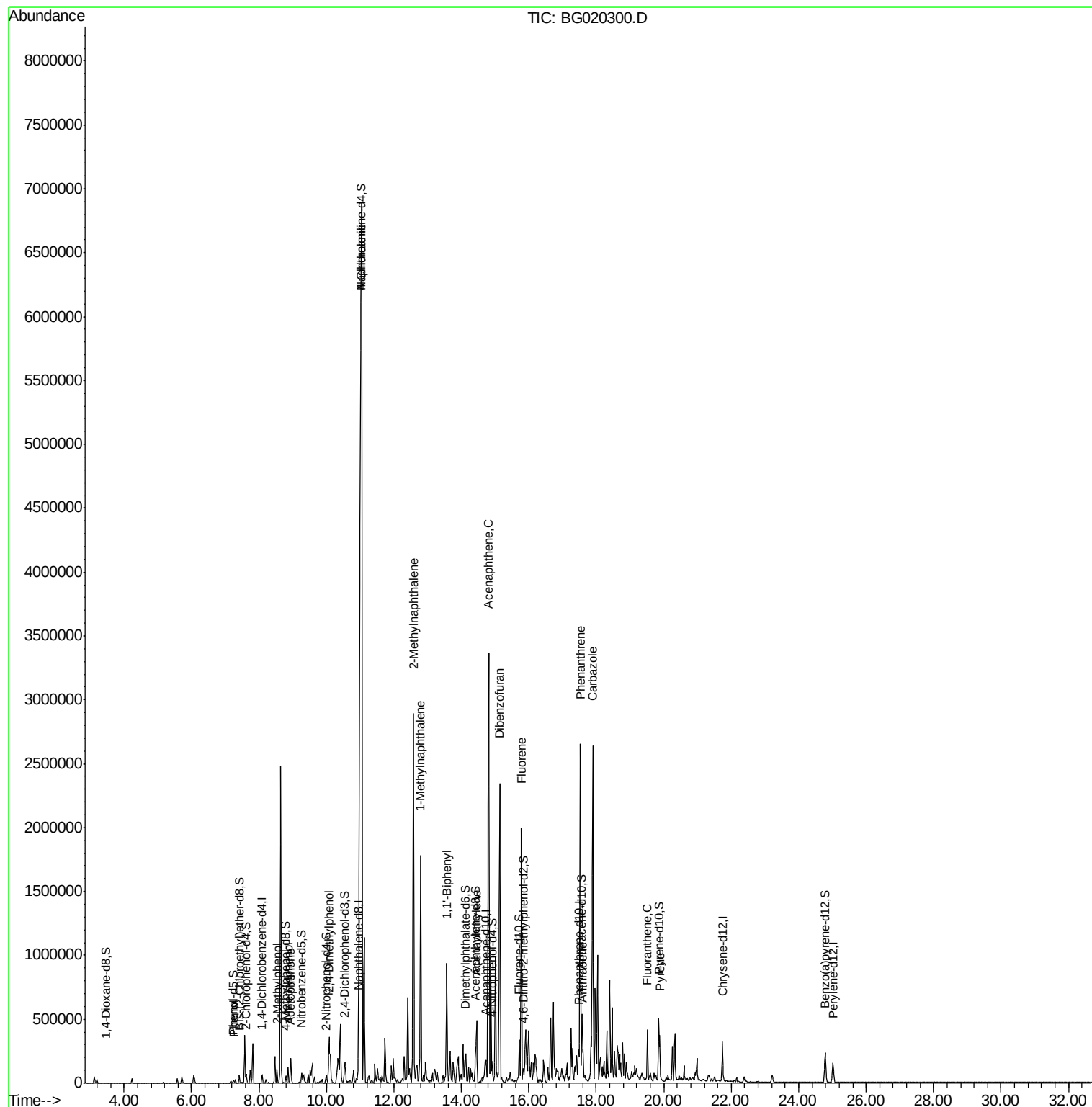
Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020300.D  
Acq On : 19 Dec 2015 7:27  
Operator : UM/SJ  
Sample : G4768-20  
Misc :  
ALS Vial : 32 Sample Multiplier: 1

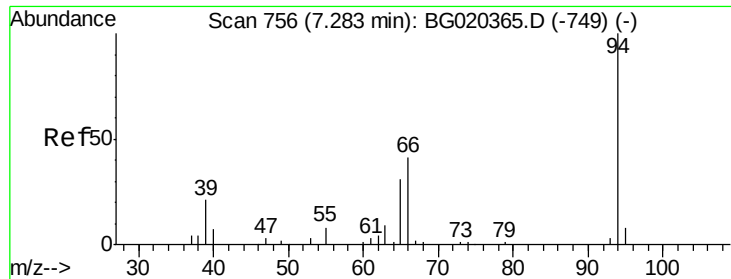
Instrument :  
BNA\_G  
ClientSampleId :  
D9N44

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Quant Time: Dec 20 04:23:47 2015  
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Sat Dec 19 04:52:13 2015  
Response via : Initial Calibration





#6

Phenol

Concen: 2.55 ng/ul

RT: 7.27 min Scan# 754

Delta R.T. -0.00 min

Lab File: BG020300.D

Acq: 19 Dec 2015 7:27

Instrument :

BNA\_G

ClientSampleId :

D9N44

Tot Ion: 94 Resp: 4746

Ion Ratio Lower Upper

94 100

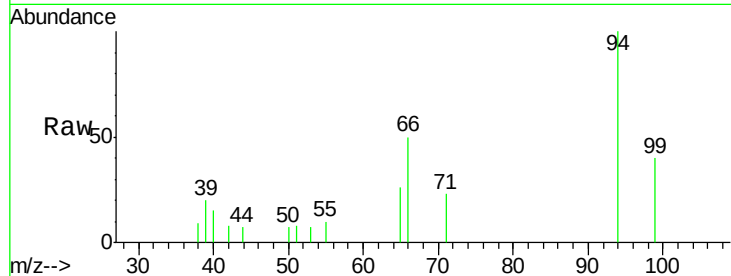
65 26.2 26.3 39.5#

66 50.4 33.3 49.9#

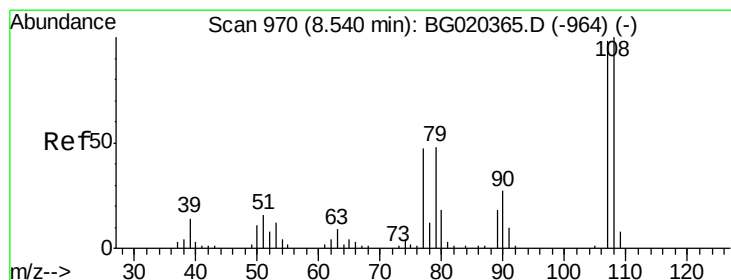
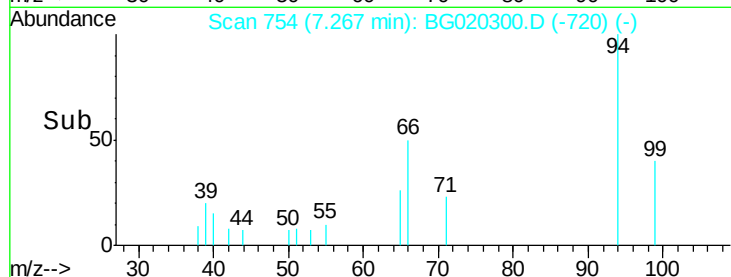
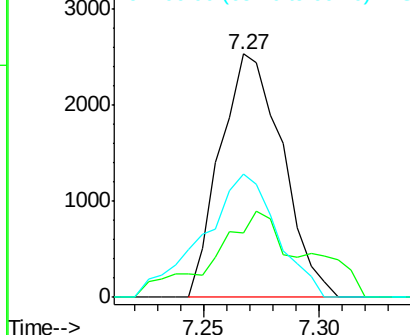
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Abundance Ion 94.00 (93.70 to 94.70): BGC  
Ion 65.00 (64.70 to 65.70): BGC  
Ion 66.00 (65.70 to 66.70): BGC



#11

2-Methylphenol

Concen: 26.75 ng/ul

RT: 8.53 min Scan# 969

Delta R.T. -0.00 min

Lab File: BG020300.D

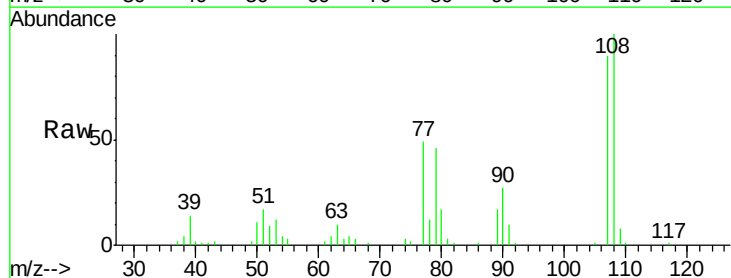
Acq: 19 Dec 2015 7:27

Tgt Ion: 108 Resp: 38045

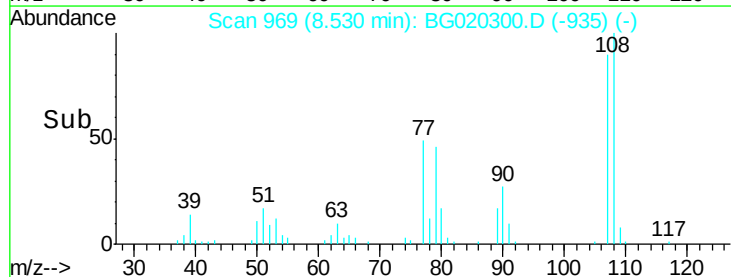
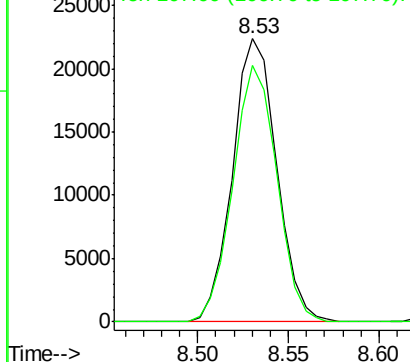
Ion Ratio Lower Upper

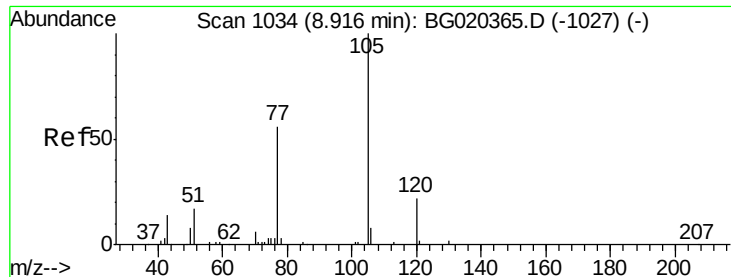
108 100

107 90.4 67.5 101.3



Abundance Ion 108.00 (107.70 to 108.70): E  
Ion 107.00 (106.70 to 107.70): E





#14

Acetophenone

Concen: 8.91 ng/ul

RT: 8.92 min Scan# 1036

Delta R.T. 0.00 min

Lab File: BG020300.D

Acq: 19 Dec 2015 7:27

Instrument :

BNA\_G

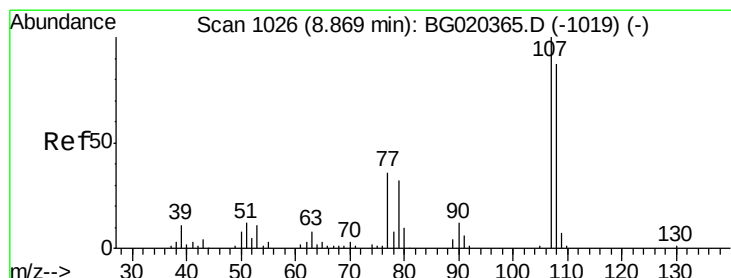
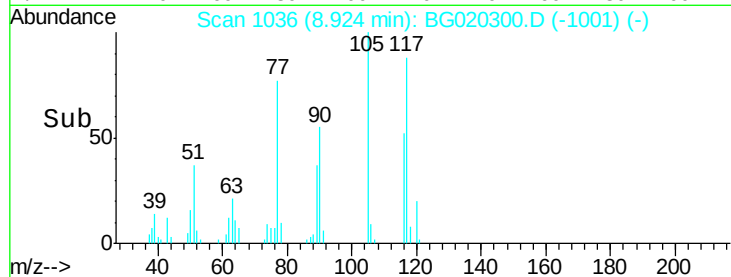
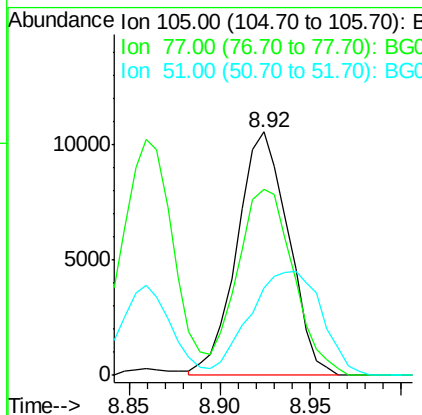
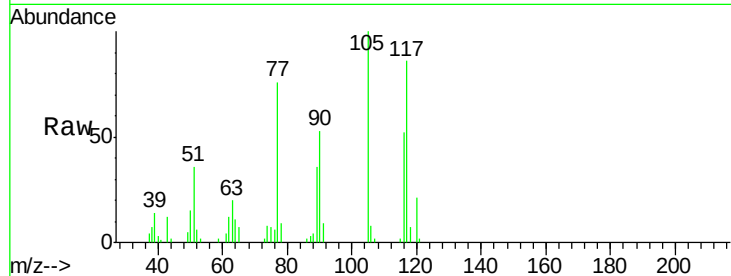
ClientSampleId :

D9N44

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 105   | Resp: | 20771 |
| Ion Ratio | Lower | Upper |       |
| 105       | 100   |       |       |
| 77        | 76.3  | 65.2  | 97.8  |
| 51        | 36.1  | 22.6  | 33.8# |

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#16

4-Methylphenol

Concen: 31.60 ng/ul

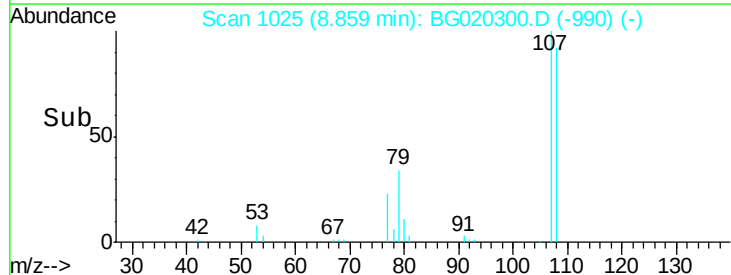
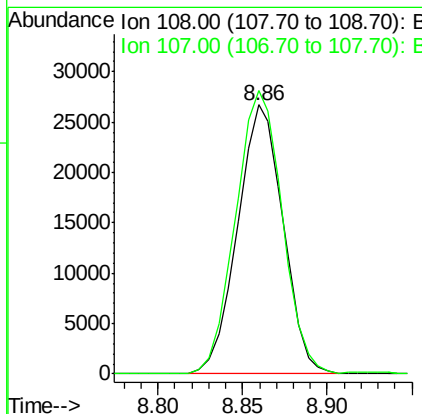
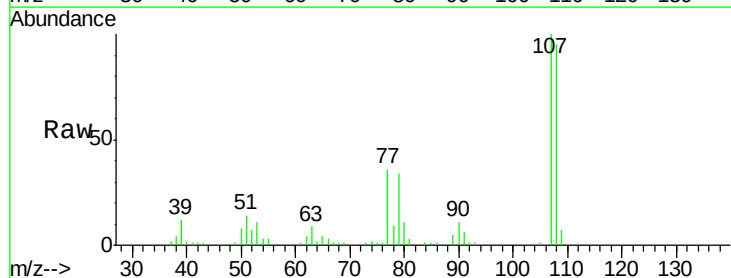
RT: 8.86 min Scan# 1025

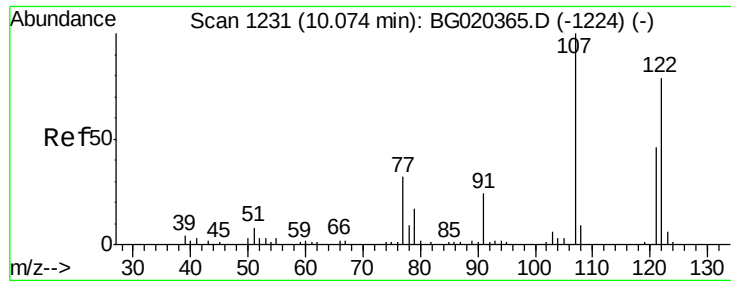
Delta R.T. 0.00 min

Lab File: BG020300.D

Acq: 19 Dec 2015 7:27

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 108   | Resp: | 49730 |
| Ion Ratio | Lower | Upper |       |
| 108       | 100   |       |       |
| 107       | 105.3 | 88.9  | 133.3 |





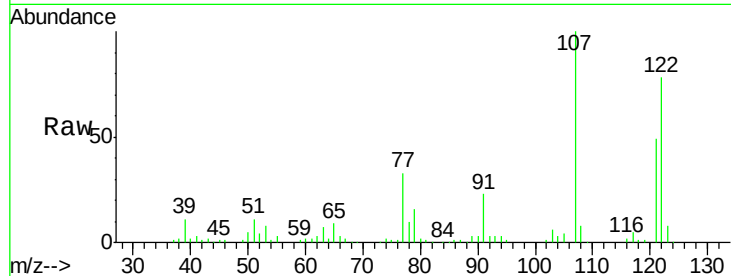
#24  
2,4-Dimethylphenol  
Concen: 162.23 ng/ul m  
RT: 10.08 min Scan# 1233  
Delta R.T. 0.02 min  
Lab File: BG020300.D  
Acq: 19 Dec 2015 7:27

Instrument :  
BNA\_G  
ClientSampleId :  
D9N44

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 107     | 100   | 241096 |       |       |
| 121     | 48.7  | 39.0   | 58.4  |       |
| 122     | 78.3  | 62.1   | 93.1  |       |

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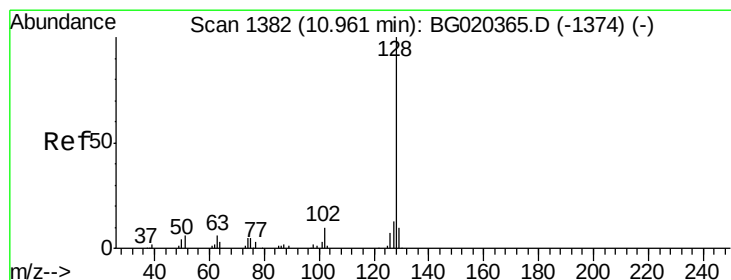
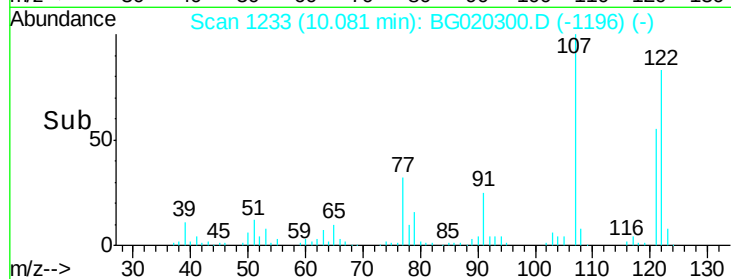
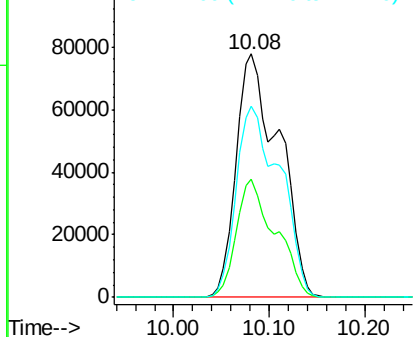


Abundance

Ion 107.00 (106.70 to 107.70): E

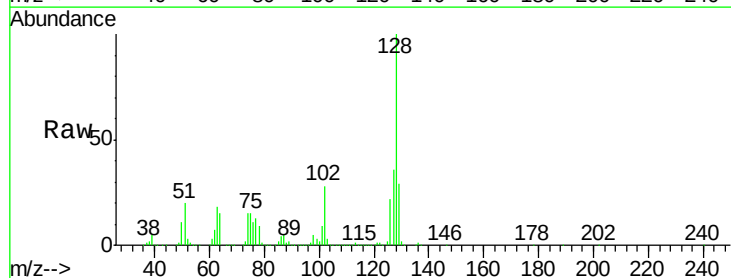
Ion 121.00 (120.70 to 121.70): E

Ion 122.00 (121.70 to 122.70): E



#28  
Naphthalene  
Concen: 2264.37 ng/ul  
RT: 11.04 min Scan# 1396  
Delta R.T. 0.08 min  
Lab File: BG020300.D  
Acq: 19 Dec 2015 7:27

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 128     | 100   | 8320248 |       |       |
| 129     | 29.1  | 8.6     | 12.8# |       |
| 127     | 35.8  | 10.1    | 15.1# |       |

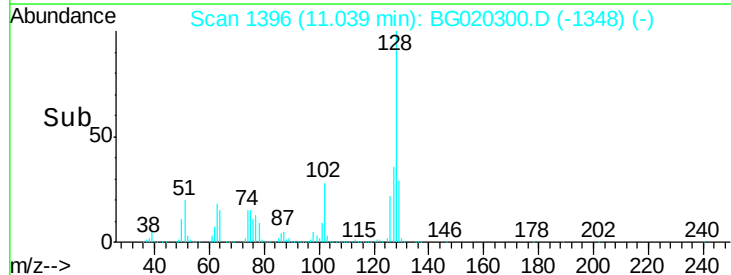
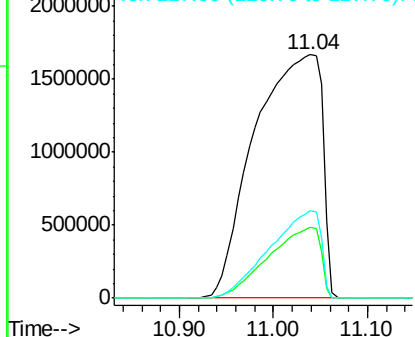


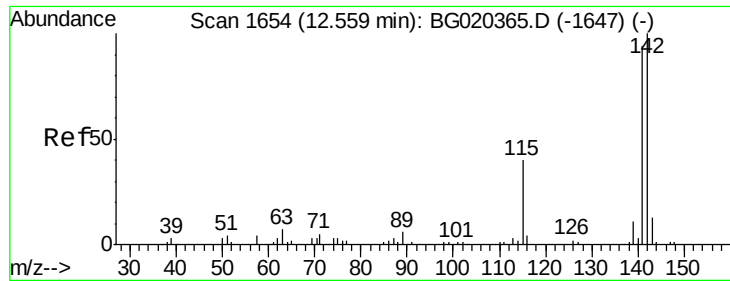
Abundance

Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E





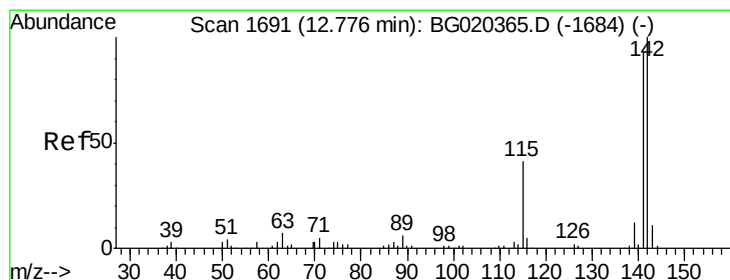
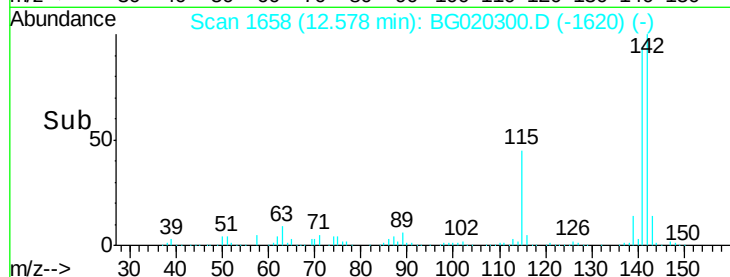
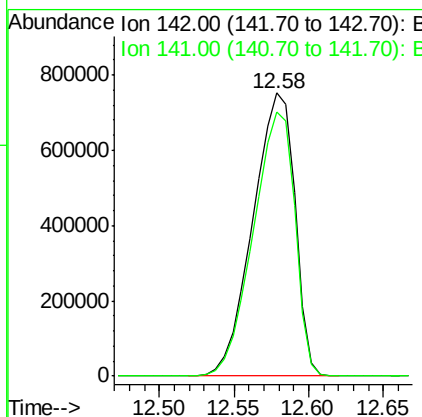
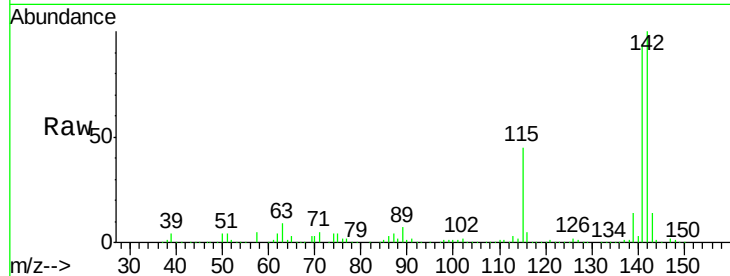
#34  
2-Methylnaphthalene  
Concen: 522.18 ng/ul  
RT: 12.58 min Scan# 1658  
Delta R.T. 0.02 min  
Lab File: BG020300.D  
Acq: 19 Dec 2015 7:27

Instrument :  
BNA\_G  
ClientSampleId :  
D9N44

Tot Ion:142 Resp: 1465578  
Ion Ratio Lower Upper  
142 100  
141 93.5 74.9 112.3

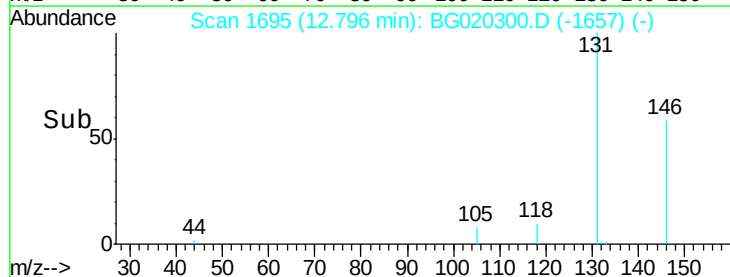
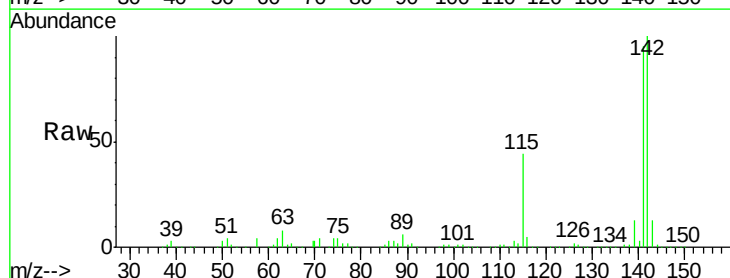
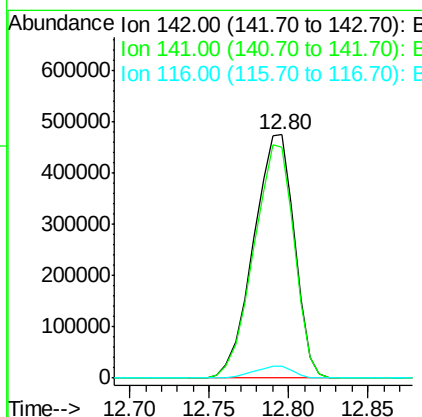
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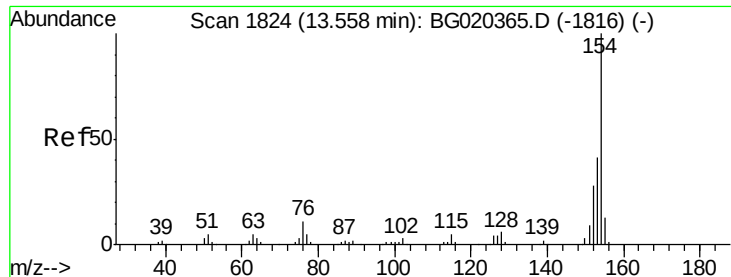
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#35  
1-Methylnaphthalene  
Concen: 316.04 ng/ul  
RT: 12.80 min Scan# 1695  
Delta R.T. 0.02 min  
Lab File: BG020300.D  
Acq: 19 Dec 2015 7:27

Tgt Ion:142 Resp: 852762  
Ion Ratio Lower Upper  
142 100  
141 94.9 73.0 109.6  
116 4.8 3.0 4.6#





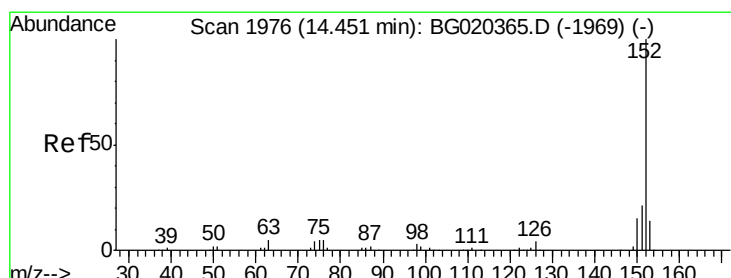
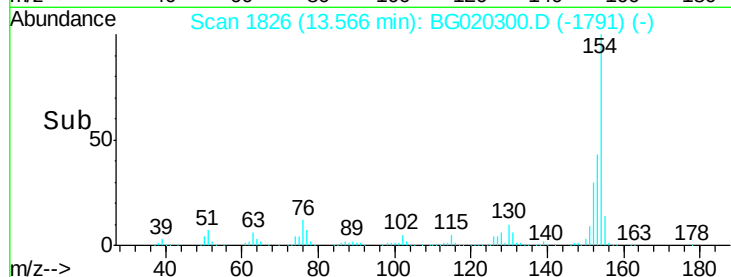
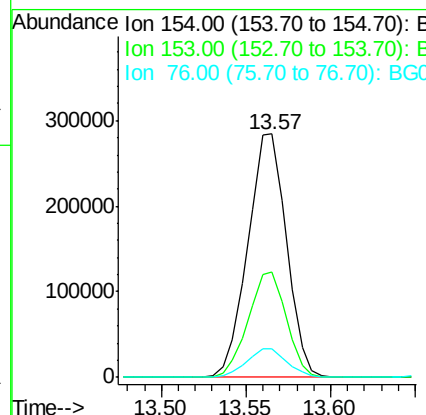
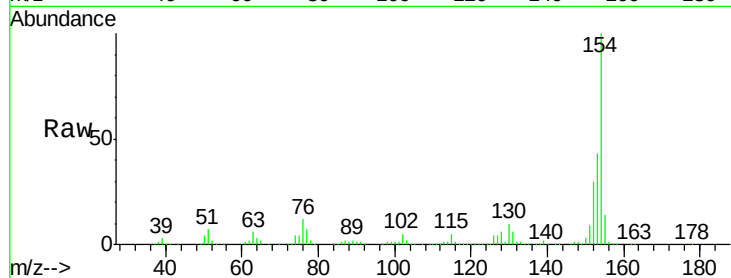
#41  
 1,1'-Biphenyl  
 Concen: 104.08 ng/ul  
 RT: 13.57 min Scan# 1826  
 Delta R.T. 0.00 min  
 Lab File: BG020300.D  
 Acq: 19 Dec 2015 7:27

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N44

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 154   | Resp: | 453934 |
| Ion Ratio | Lower | Upper |        |
| 154       | 100   |       |        |
| 153       | 43.3  | 35.5  | 53.3   |
| 76        | 11.8  | 10.4  | 15.6   |

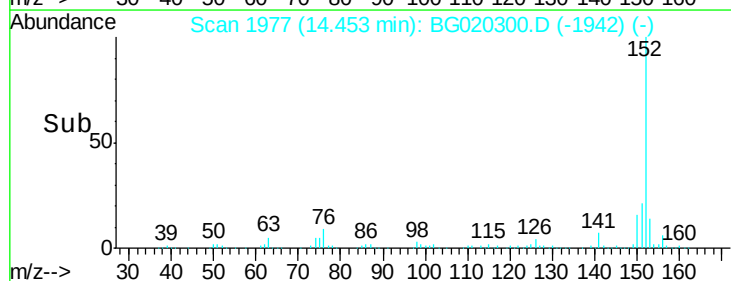
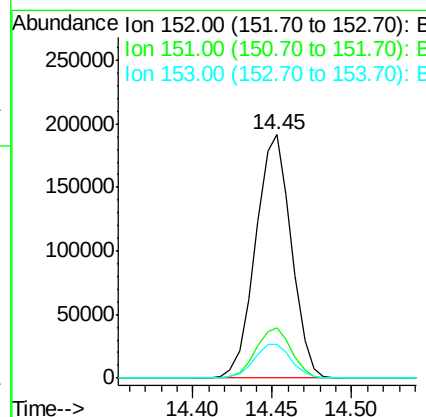
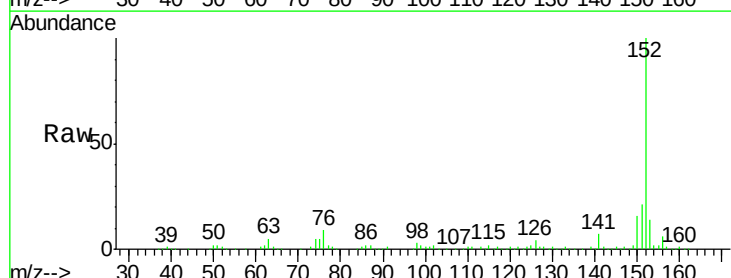
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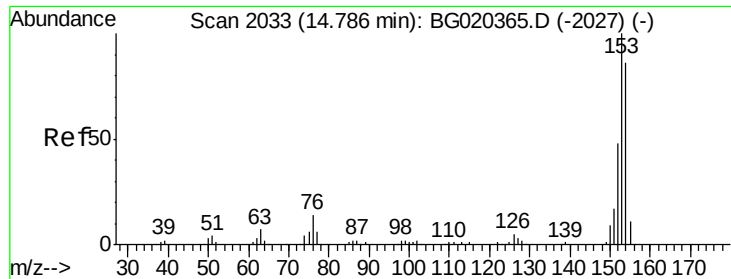
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#48  
 Acenaphthylene  
 Concen: 51.82 ng/ul  
 RT: 14.45 min Scan# 1977  
 Delta R.T. 0.00 min  
 Lab File: BG020300.D  
 Acq: 19 Dec 2015 7:27

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 152   | Resp: | 299488 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 151       | 20.8  | 16.4  | 24.6   |
| 153       | 13.9  | 10.4  | 15.6   |





#50

Acenaphthene

Concen: 415.70 ng/ul

RT: 14.81 min Scan# 2038

Delta R.T. 0.02 min

Lab File: BG020300.D

Acq: 19 Dec 2015 7:27

Instrument :

BNA\_G

ClientSampleId :

D9N44

Tot Ion:153 Resp: 1616582

Ion Ratio Lower Upper

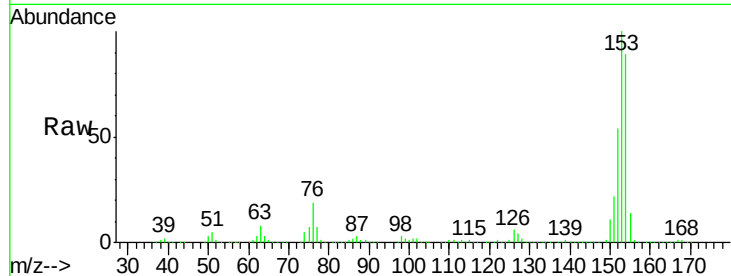
153 100

152 53.9 37.6 56.4

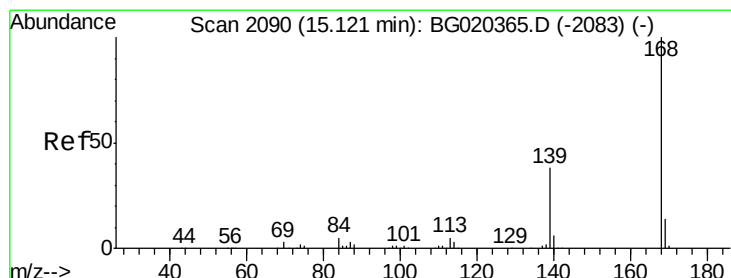
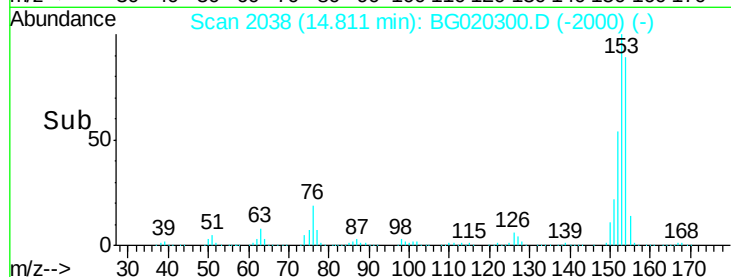
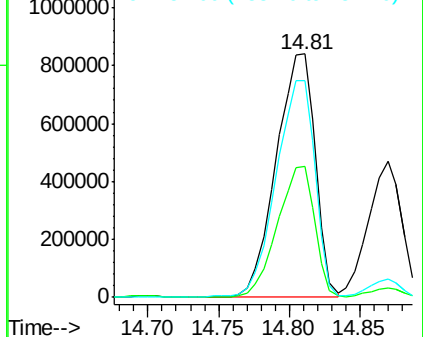
154 89.0 67.9 101.9

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Abundance Ion 153.00 (152.70 to 153.70): E  
Ion 152.00 (151.70 to 152.70): E  
Ion 154.00 (153.70 to 154.70): E



#54

Dibenzofuran

Concen: 235.33 ng/ul

RT: 15.13 min Scan# 2093

Delta R.T. 0.02 min

Lab File: BG020300.D

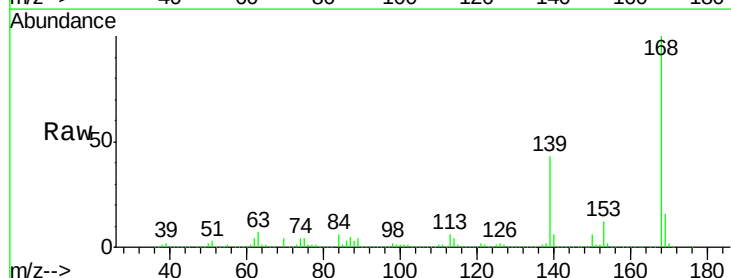
Acq: 19 Dec 2015 7:27

Tgt Ion:168 Resp: 1361392

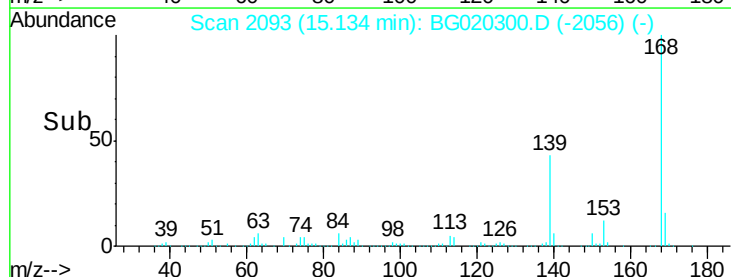
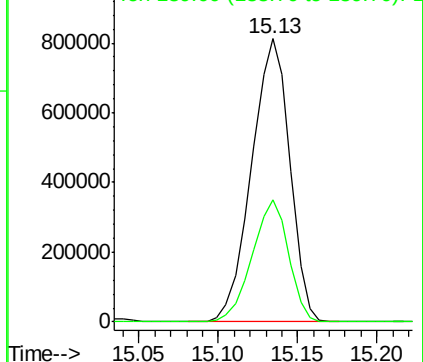
Ion Ratio Lower Upper

168 100

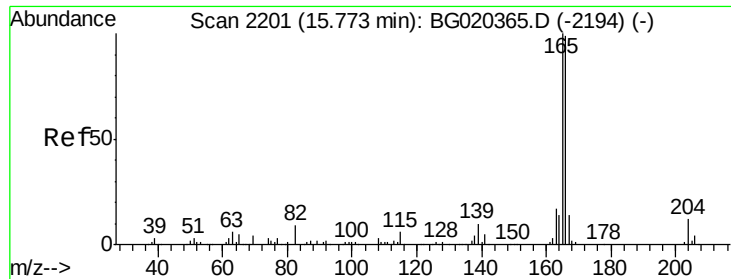
139 43.2 30.5 45.7



Abundance Ion 168.00 (167.70 to 168.70): E  
Ion 139.00 (138.70 to 139.70): E







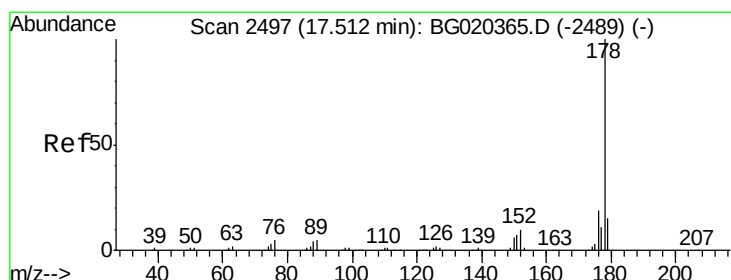
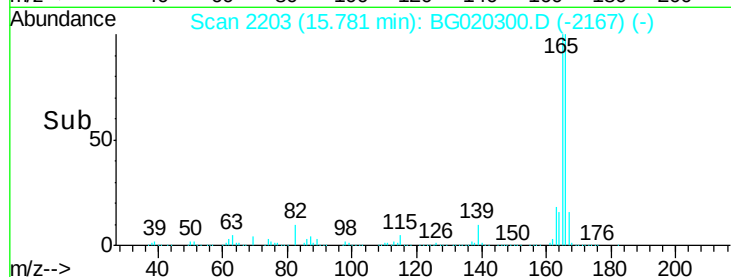
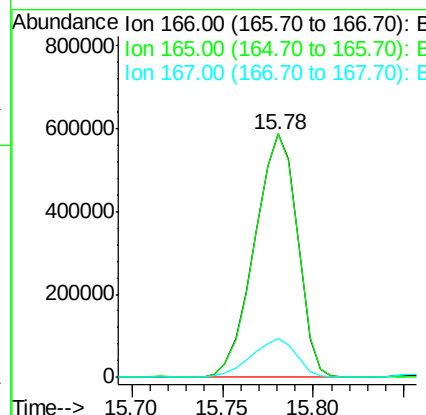
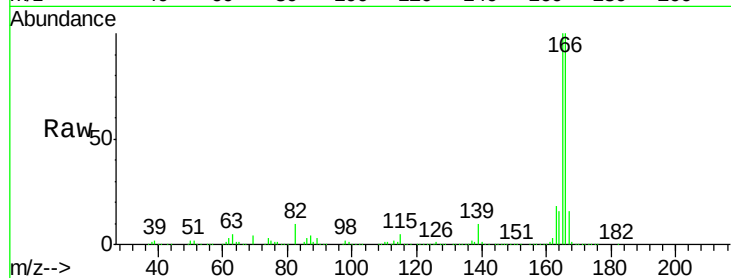
#59  
Fluorene  
Concen: 206.43 ng/ul  
RT: 15.78 min Scan# 2203  
Delta R.T. 0.01 min  
Lab File: BG020300.D  
Acq: 19 Dec 2015 7:27

Instrument :  
BNA\_G  
ClientSampleId :  
D9N44

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 166     | 100   |      |       |       |
| 165     | 100.1 | 81.4 | 122.0 |       |
| 167     | 15.8  | 11.2 | 16.8  |       |

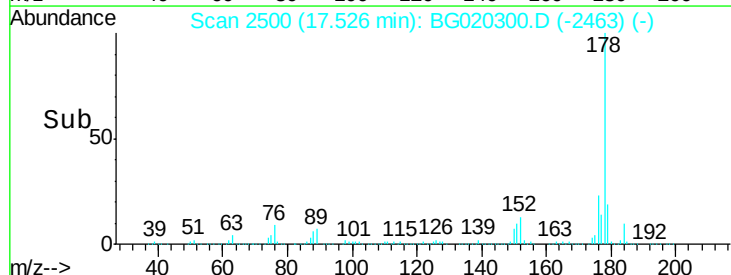
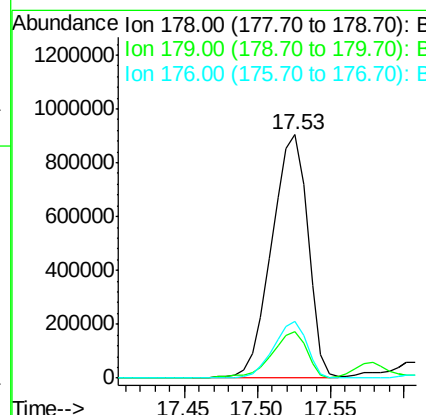
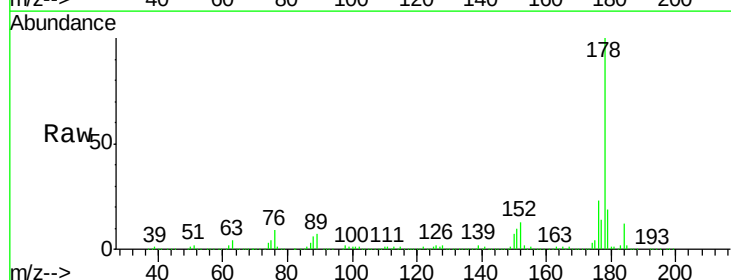
Manual Integrations  
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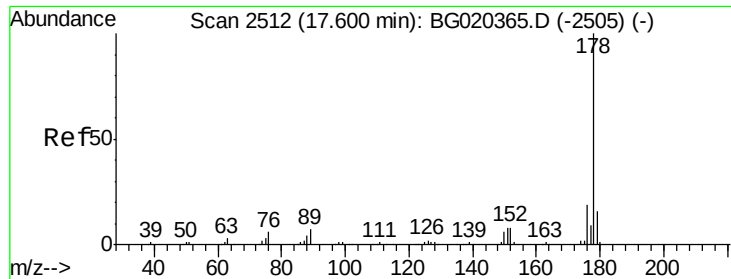
apatel  
12/22/2015 2:13:20 PM



#70  
Phenanthrene  
Concen: 211.33 ng/ul m  
RT: 17.53 min Scan# 2500  
Delta R.T. 0.02 min  
Lab File: BG020300.D  
Acq: 19 Dec 2015 7:27

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 178     | 100   |      |       |       |
| 179     | 19.0  | 12.9 | 19.3  |       |
| 176     | 23.2  | 15.3 | 22.9  |       |





#72

Anthracene

Concen: 15.67 ng/ul m

RT: 17.61 min Scan# 2514

Delta R.T. 0.00 min

Lab File: BG020300.D

Acq: 19 Dec 2015 7:27

Instrument :

BNA\_G

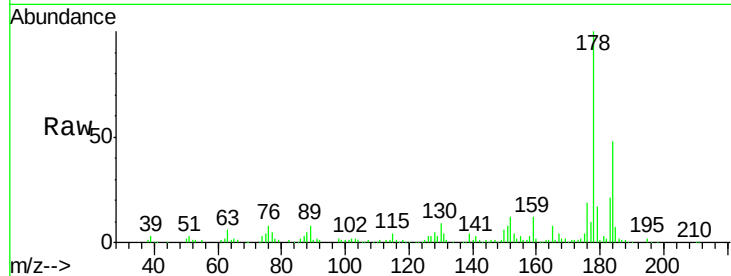
ClientSampleId :

D9N44

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 17.2  | 12.3  | 18.5  |
| 176     | 19.0  | 14.3  | 21.5  |

Manual Integrations  
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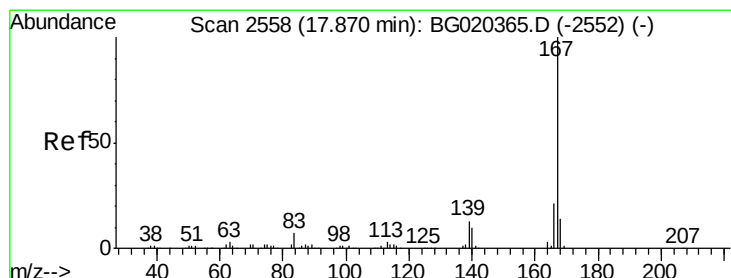
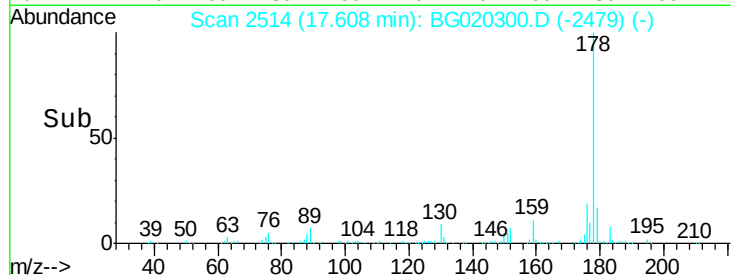
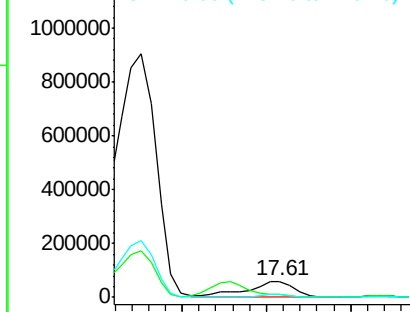
apatel  
12/22/2015 2:13:20 PM



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E



#75

Carbazole

Concen: 328.77 ng/ul

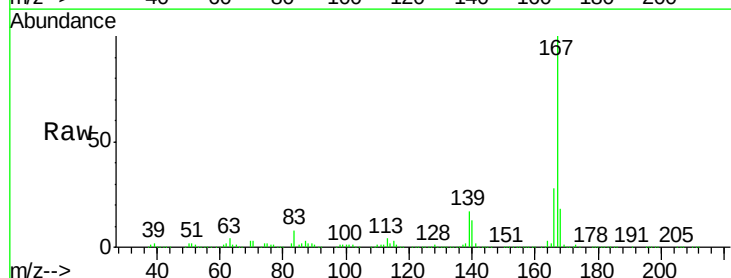
RT: 17.90 min Scan# 2563

Delta R.T. 0.03 min

Lab File: BG020300.D

Acq: 19 Dec 2015 7:27

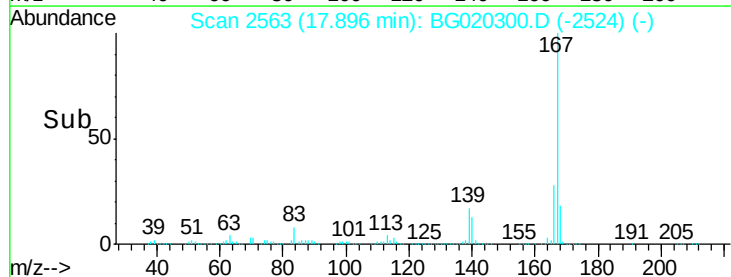
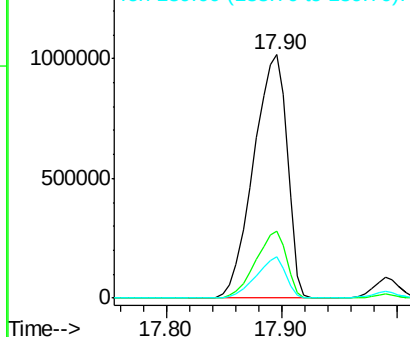
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 27.8  | 17.0  | 25.6# |
| 139     | 16.7  | 10.1  | 15.1# |

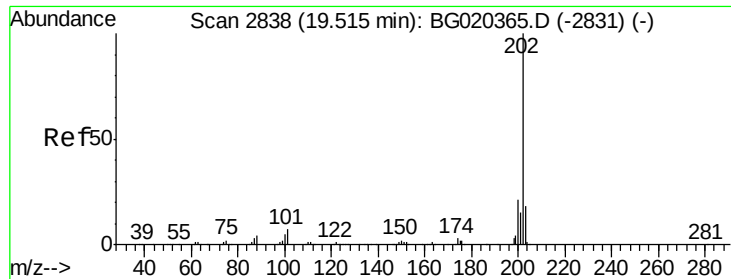


Abundance Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E





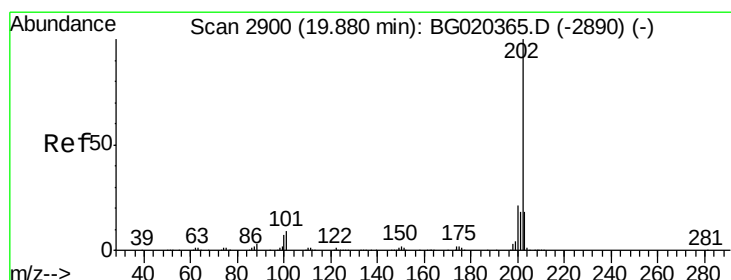
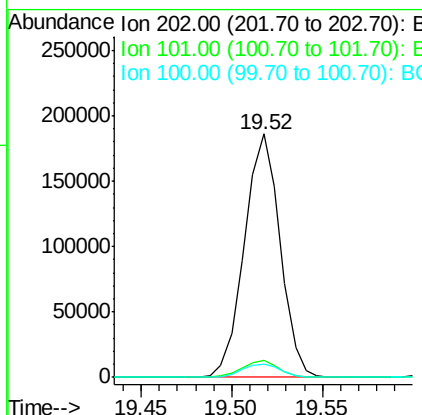
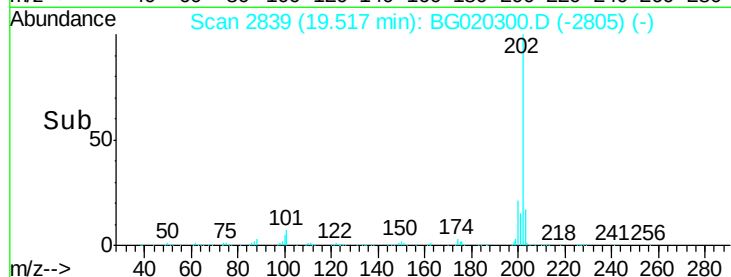
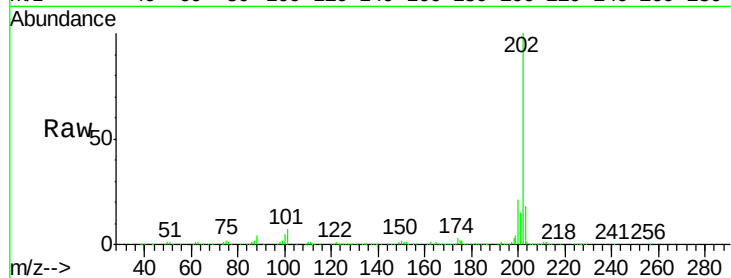
#77  
 Fluoranthene  
 Concen: 29.59 ng/ul  
 RT: 19.52 min Scan# 2839  
 Delta R.T. -0.00 min  
 Lab File: BG020300.D  
 Acq: 19 Dec 2015 7:27

Instrument :  
 BNA\_G  
 ClientSampled :  
 D9N44

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 7.1   | 6.2        | 9.4   |
| 100     | 5.4   | 5.1        | 7.7   |

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 12/22/2015 2:13:20 PM



#80  
 Pyrene  
 Concen: 13.74 ng/ul  
 RT: 19.88 min Scan# 2901  
 Delta R.T. 0.00 min  
 Lab File: BG020300.D  
 Acq: 19 Dec 2015 7:27

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 8.8   | 7.0        | 10.4  |
| 100     | 7.3   | 6.4        | 9.6   |

