

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
 Data File : BG020287.D  
 Acq On : 18 Dec 2015 22:49  
 Operator : UM/SJ  
 Sample : G4768-08  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N32

Manual Integrations  
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Quant Time: Dec 21 10:17:04 2015  
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Sat Dec 19 00:45:12 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.10  | 152  | 16801    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.91 | 136  | 70277    | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.72 | 164  | 48619    | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.47 | 188  | 126975   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.75 | 240  | 178195   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 25.01 | 264  | 164282   | 20.00 | ng/ul | 0.00     |

| System Monitoring Compounds    | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-------|-------|----------|
| 3) 1,4-Dioxane-d8              | 3.47  | 96   | 248      | 0.81  | ng/uL | 0.00     |
| 5) Phenol-d5                   | 7.24  | 99   | 8698     | 5.87  | ng/ul | 0.00     |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.41  | 67   | 23793    | 26.92 | ng/ul | 0.00     |
| 9) 2-Chlorophenol-d4           | 7.62  | 132  | 24964    | 23.17 | ng/ul | 0.00     |
| 13) 4-Methylphenol-d8          | 8.79  | 113  | 16995    | 13.41 | ng/ul | 0.00     |
| 19) Nitrobenzene-d5            | 9.26  | 128  | 16526    | 30.17 | ng/ul | 0.00     |
| 22) 2-Nitrophenol-d4           | 9.98  | 143  | 18704    | 30.68 | ng/ul | 0.00     |
| 26) 2,4-Dichlorophenol-d3      | 10.52 | 165  | 32502    | 26.32 | ng/ul | 0.00     |
| 29) 4-Chloroaniline-d4         | 11.04 | 131  | 3426     | 2.47  | ng/ul | 0.00     |
| 44) Dimethylphthalate-d6       | 14.12 | 166  | 126629   | 32.20 | ng/ul | 0.00     |
| 47) Acenaphthylene-d8          | 14.42 | 160  | 140408   | 30.69 | ng/ul | 0.00     |
| 52) 4-Nitrophenol-d4           | 14.91 | 143  | 4127m    | 5.85  | ng/ul | 0.00     |
| 58) Fluorene-d10               | 15.71 | 176  | 114403   | 32.07 | ng/ul | 0.00     |
| 63) 4,6-Dinitro-2-methylphenol | 15.82 | 200  | 21123    | 28.06 | ng/ul | 0.00     |
| 71) Anthracene-d10             | 17.57 | 188  | 203500   | 34.78 | ng/ul | 0.00     |
| 79) Pyrene-d10                 | 19.85 | 212  | 260213   | 31.33 | ng/ul | 0.00     |
| 90) Benzo(a)pyrene-d12         | 24.79 | 264  | 289069   | 35.28 | ng/ul | 0.00     |

| Target Compounds        | R.T.  | QIon | Response | Conc  | Units  | Ovalue |
|-------------------------|-------|------|----------|-------|--------|--------|
| 28) Naphthalene         | 10.96 | 128  | 161350   | 43.96 | ng/ul  | 99     |
| 34) 2-Methylnaphthalene | 12.56 | 142  | 15086    | 5.38  | ng/ul  | 94     |
| 48) Acenaphthylene      | 14.45 | 152  | 5210     | 1.07  | ng/ul  | 94     |
| 50) Acenaphthene        | 14.79 | 153  | 16625    | 5.08  | ng/ul  | 95     |
| 54) Dibenzofuran        | 15.12 | 168  | 9257     | 1.90  | ng/ul  | 94     |
| 59) Fluorene            | 15.77 | 166  | 13078    | 3.35  | ng/ul  | 98     |
| 70) Phenanthrene        | 17.51 | 178  | 54398    | 7.83  | ng/ul  | 99     |
| 75) Carbazole           | 17.87 | 167  | 6598     | 1.11  | ng/ul# | 92     |
| 77) Fluoranthene        | 19.51 | 202  | 15045    | 1.85  | ng/ul  | 98     |
| 80) Pyrene              | 19.88 | 202  | 11906    | 1.10  | ng/ul  | 99     |

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

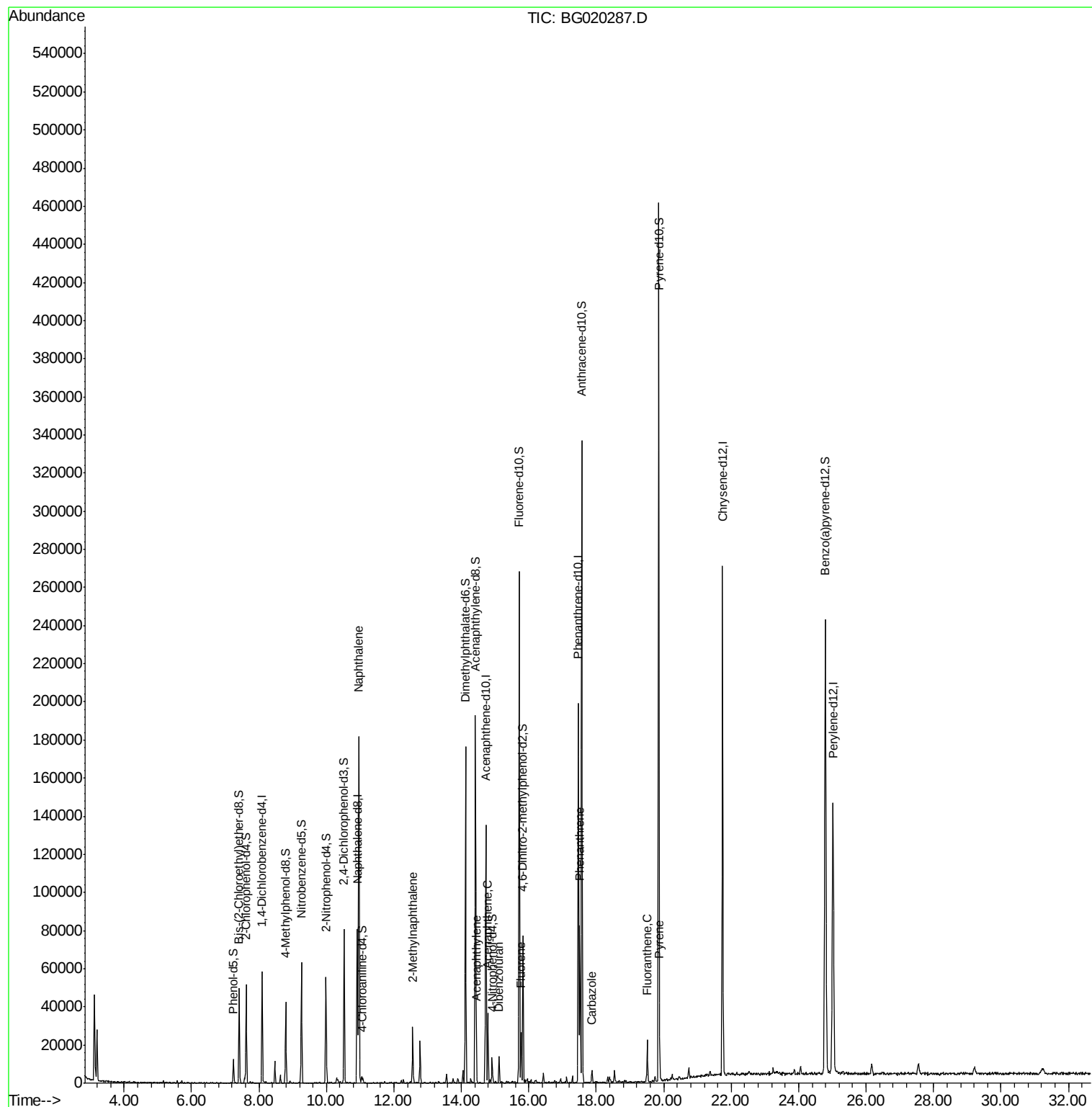
Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020287.D  
Acq On : 18 Dec 2015 22:49  
Operator : UM/SJ  
Sample : G4768-08  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

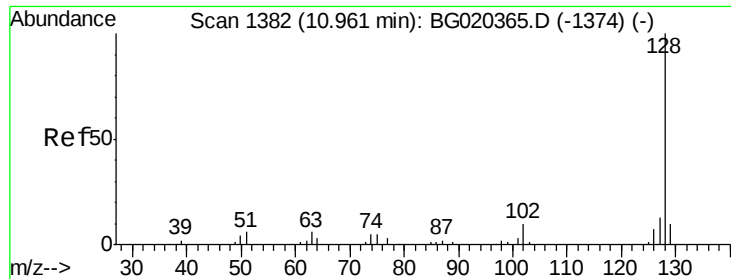
Instrument :  
BNA\_G  
ClientSampleId :  
D9N32

Quant Time: Dec 21 10:17:04 2015  
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION  
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Response via : Initial Calibration

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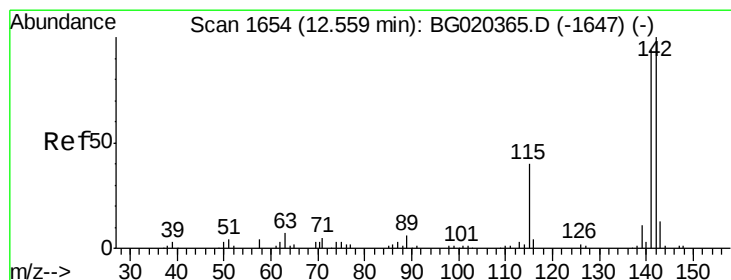
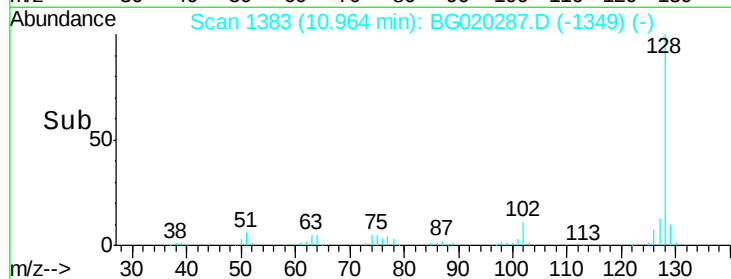
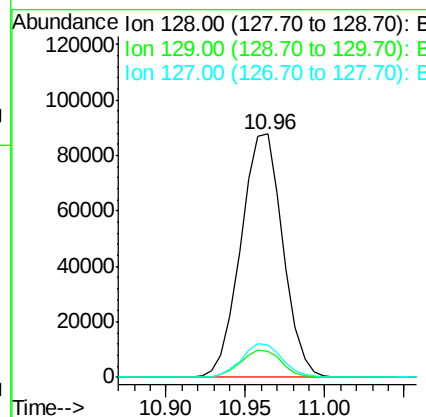
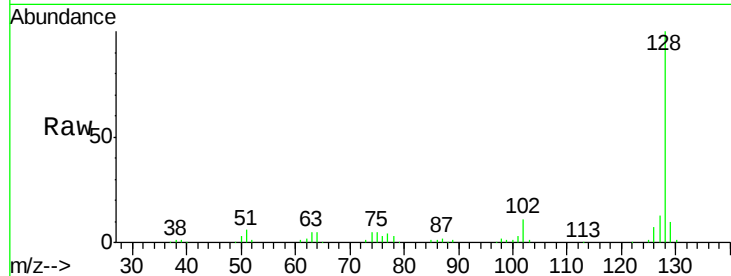
#28  
Naphthalene  
Concen: 43.96 ng/ul  
RT: 10.96 min Scan# 1383  
Delta R.T. 0.00 min  
Lab File: BG020287.D  
Acq: 18 Dec 2015 22:49

Instrument :  
BNA\_G  
ClientSampleId :  
D9N32

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 10.4  | 8.6   | 12.8  |
| 127     | 13.3  | 10.1  | 15.1  |

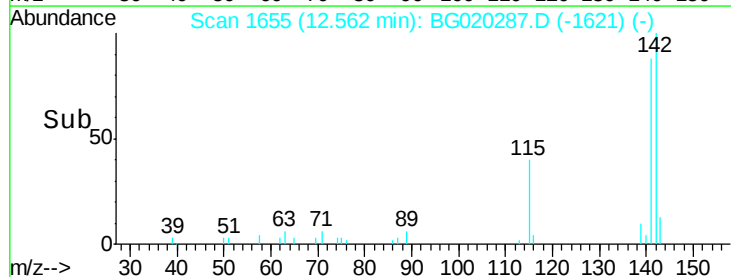
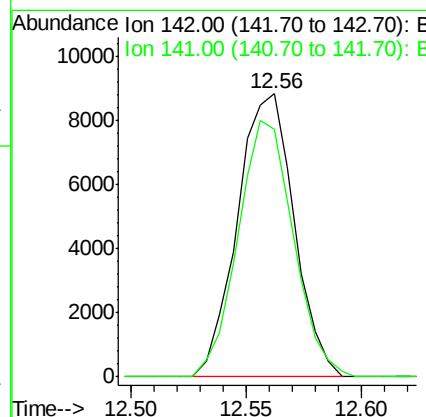
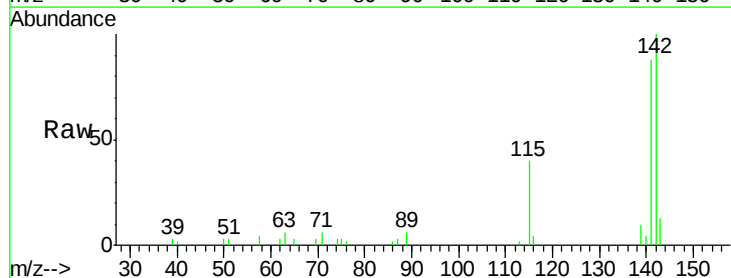
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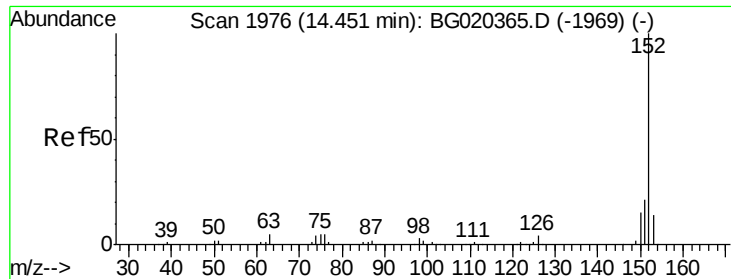
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#34  
2-Methylnaphthalene  
Concen: 5.38 ng/ul  
RT: 12.56 min Scan# 1655  
Delta R.T. 0.00 min  
Lab File: BG020287.D  
Acq: 18 Dec 2015 22:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 87.5  | 74.9  | 112.3 |





#48

Acenaphthylene

Concen: 1.07 ng/ul

RT: 14.45 min Scan# 1976

Delta R.T. 0.00 min

Lab File: BG020287.D

Acq: 18 Dec 2015 22:49

Instrument :

BNA\_G

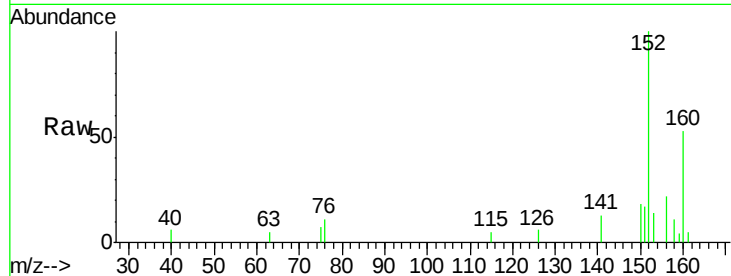
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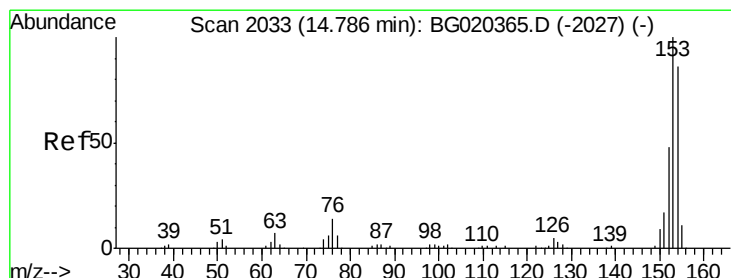
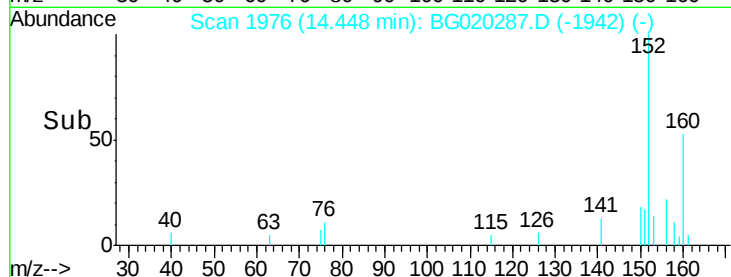
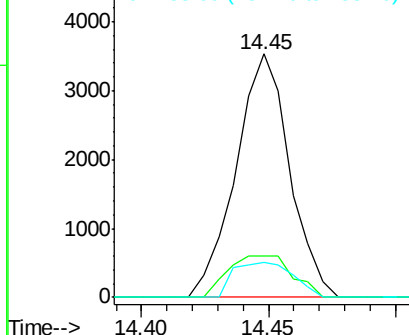
|           |       |       |      |
|-----------|-------|-------|------|
| Tot Ion:  | 152   | Resp: | 5210 |
| Ion Ratio | Lower | Upper |      |
| 152       | 100   |       |      |
| 151       | 17.3  | 16.4  | 24.6 |
| 153       | 14.3  | 10.4  | 15.6 |

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Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 151.00 (150.70 to 151.70): E  
Ion 153.00 (152.70 to 153.70): E



#50

Acenaphthene

Concen: 5.08 ng/ul

RT: 14.79 min Scan# 2034

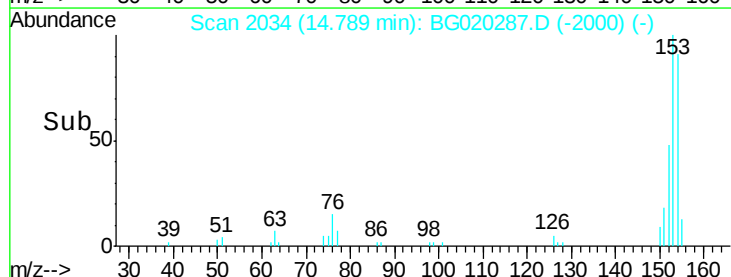
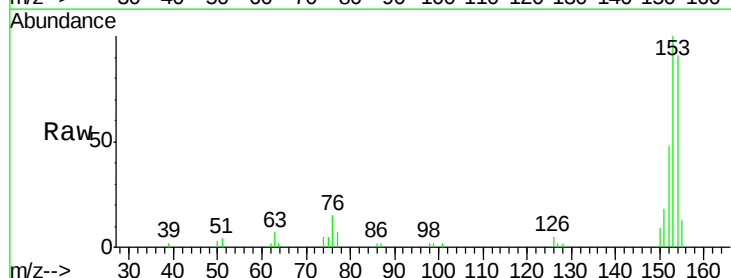
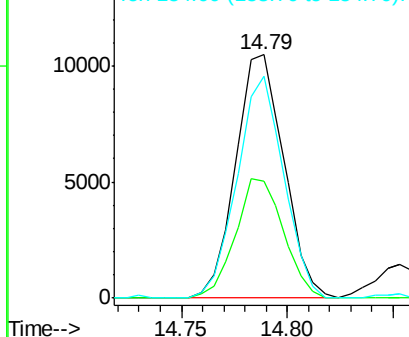
Delta R.T. 0.00 min

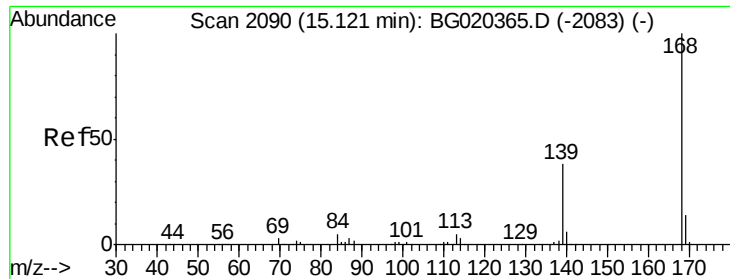
Lab File: BG020287.D

Acq: 18 Dec 2015 22:49

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 153   | Resp: | 16625 |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 47.9  | 37.6  | 56.4  |
| 154       | 91.0  | 67.9  | 101.9 |

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





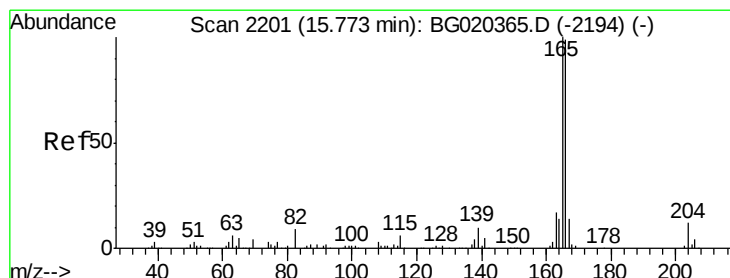
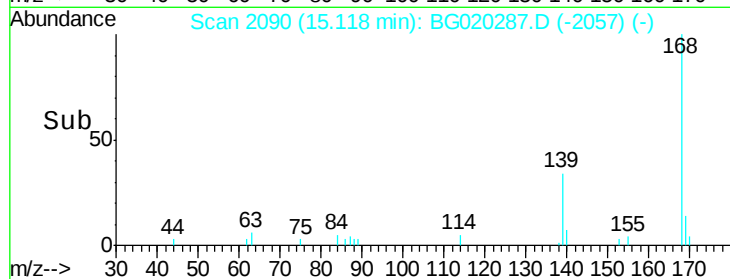
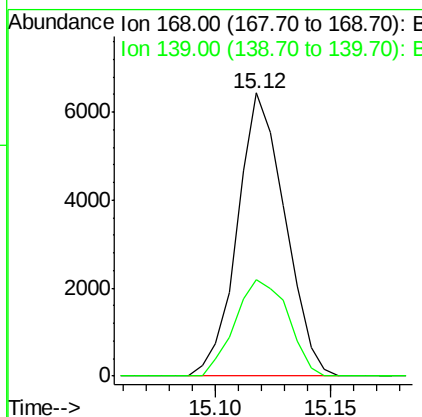
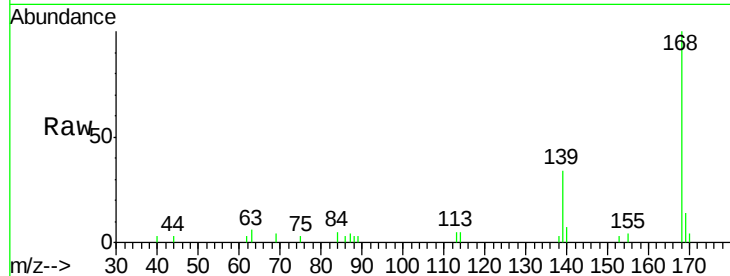
#54  
Dibenzenofuran  
Concen: 1.90 ng/ul  
RT: 15.12 min Scan# 2090  
Delta R.T. -0.01 min  
Lab File: BG020287.D  
Acq: 18 Dec 2015 22:49

Instrument :  
BNA\_G  
ClientSampleId :  
D9N32

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 168     | 100   |       |       |
| 139     | 34.3  | 30.5  | 45.7  |

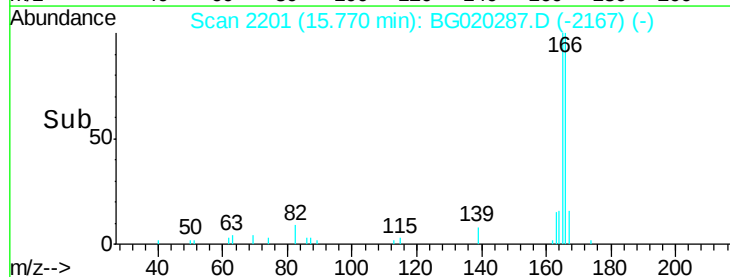
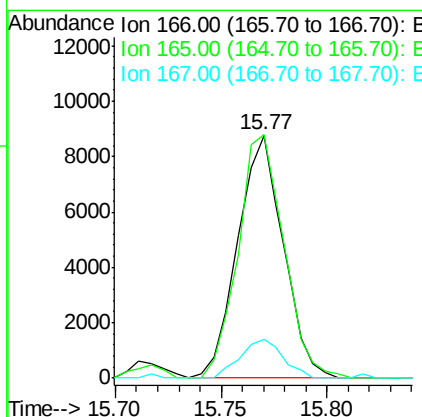
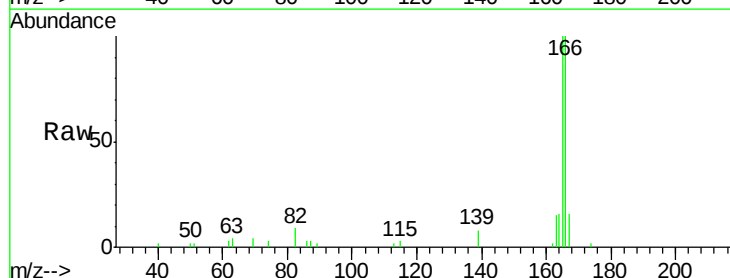
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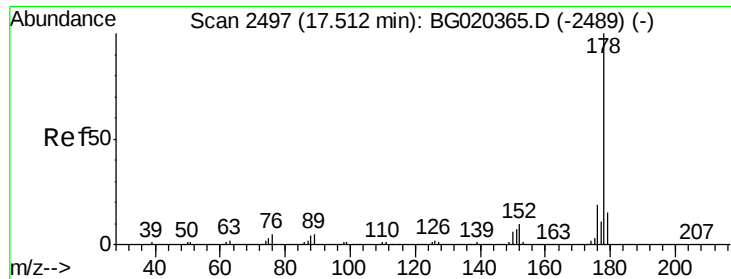
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#59  
Fluorene  
Concen: 3.35 ng/ul  
RT: 15.77 min Scan# 2201  
Delta R.T. 0.00 min  
Lab File: BG020287.D  
Acq: 18 Dec 2015 22:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 100.2 | 81.4  | 122.0 |
| 167     | 15.9  | 11.2  | 16.8  |





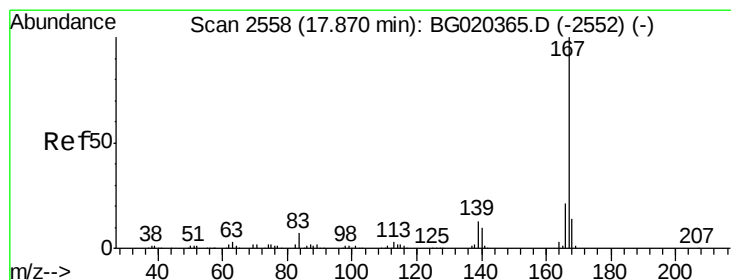
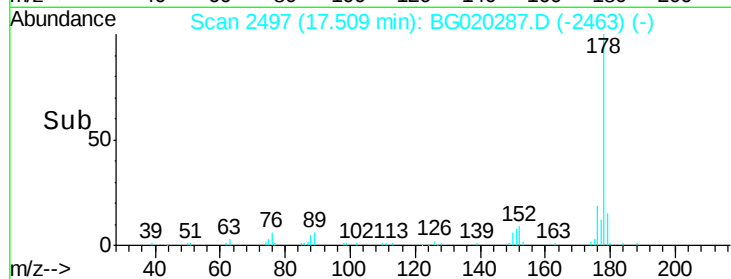
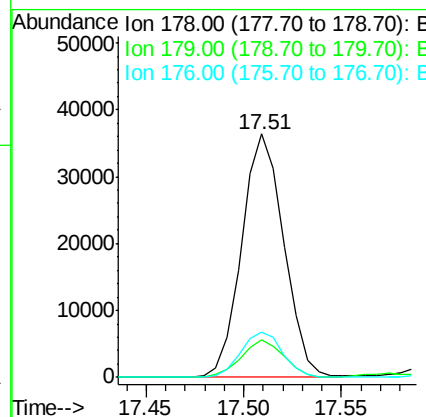
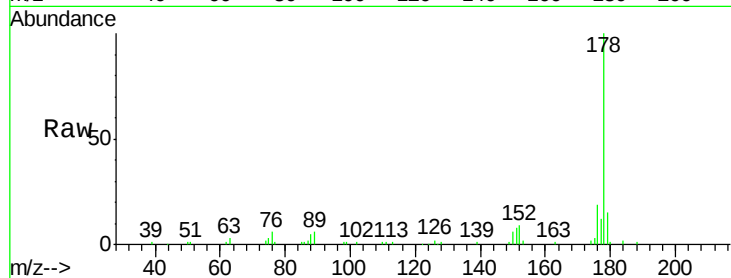
#70  
 Phenanthrene  
 Concen: 7.83 ng/ul  
 RT: 17.51 min Scan# 2497  
 Delta R.T. 0.00 min  
 Lab File: BG020287.D  
 Acq: 18 Dec 2015 22:49

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N32

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.4  | 12.9  | 19.3  |
| 176     | 18.6  | 15.3  | 22.9  |

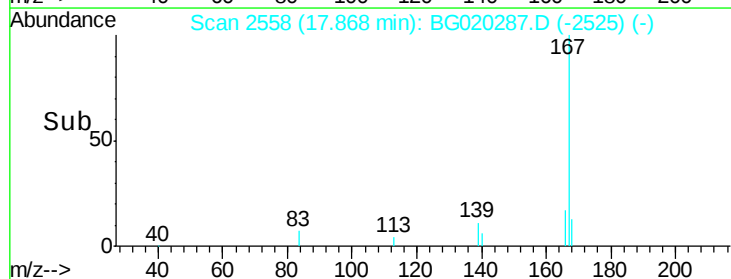
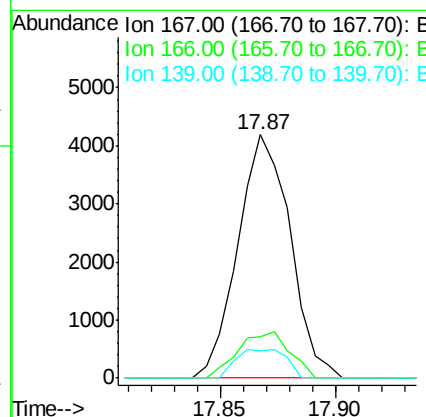
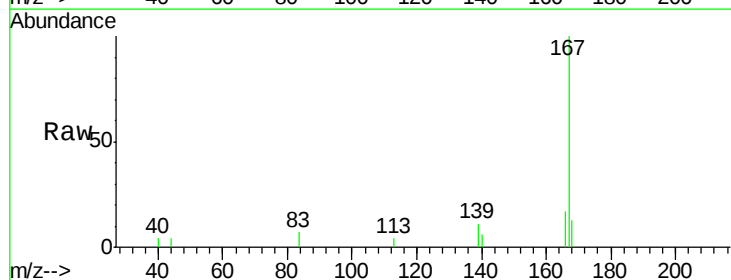
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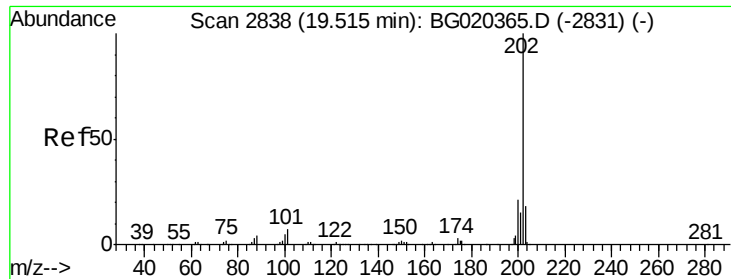
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#75  
 Carbazole  
 Concen: 1.11 ng/ul  
 RT: 17.87 min Scan# 2558  
 Delta R.T. -0.01 min  
 Lab File: BG020287.D  
 Acq: 18 Dec 2015 22:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 16.8  | 17.0  | 25.6# |
| 139     | 10.9  | 10.1  | 15.1  |





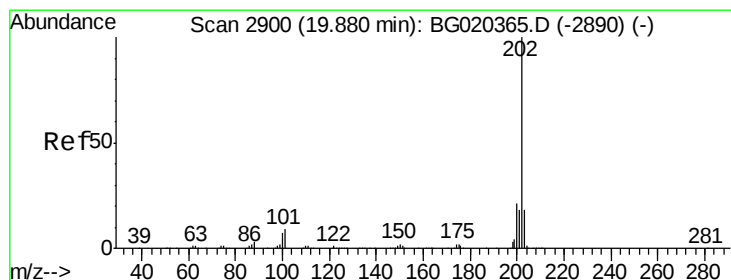
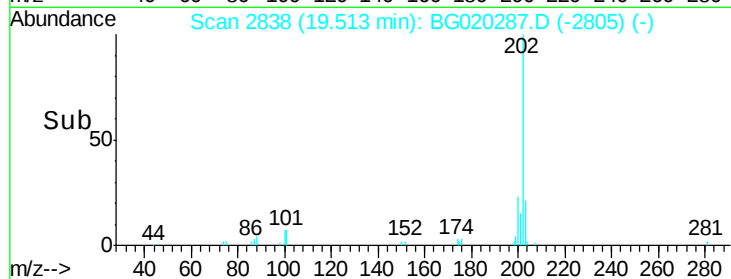
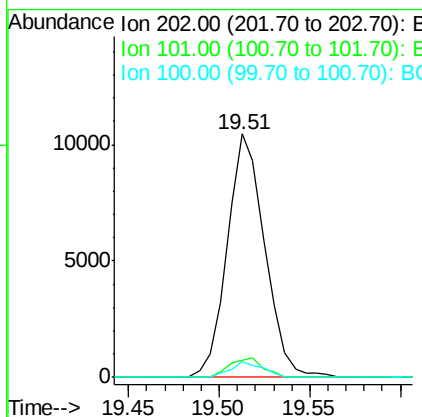
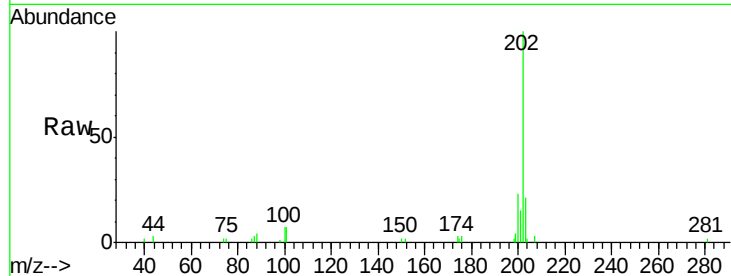
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 Fluoranthene  
 Concen: 1.85 ng/ul  
 RT: 19.51 min Scan# 2838  
 Delta R.T. -0.01 min  
 Lab File: BG020287.D  
 Acq: 18 Dec 2015 22:49

Instrument :  
 BNA\_G  
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 D9N32

| Tot Ion | Ion | Ratio | Resp  | Lower | Upper |
|---------|-----|-------|-------|-------|-------|
| 202     | 100 |       | 15045 |       |       |
| 101     | 6.9 | 6.2   | 9.4   |       |       |
| 100     | 6.5 | 5.1   | 7.7   |       |       |

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#80  
 Pyrene  
 Concen: 1.10 ng/ul  
 RT: 19.88 min Scan# 2900  
 Delta R.T. -0.01 min  
 Lab File: BG020287.D  
 Acq: 18 Dec 2015 22:49

| Tgt Ion | Ion | Ratio | Resp  | Lower | Upper |
|---------|-----|-------|-------|-------|-------|
| 202     | 100 |       | 11906 |       |       |
| 101     | 9.0 | 7.0   | 10.4  |       |       |
| 100     | 7.6 | 6.4   | 9.6   |       |       |

