

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122815\  
 Data File : BG020581.D  
 Acq On : 29 Dec 2015 2:22  
 Operator : UM/SJ  
 Sample : G4847-07DL 30X  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N71DL

Manual Integrations  
 APPROVED

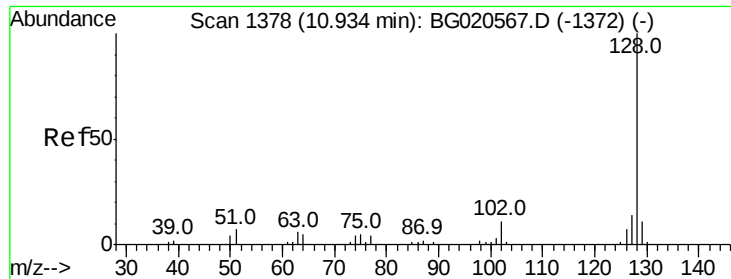
UMANGI  
 12/29/2015 4:55:37 PM

Quant Time: Dec 29 06:20:11 2015  
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Dec 29 05:04:12 2015  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units | Dev(Min)  |
|--------------------------------|-------|------|----------|-------|-------|-----------|
| 1) 1,4-Dichlorobenzene-d4      | 8.07  | 152  | 11732    | 20.00 | ng/ul | 0.00      |
| 18) Naphthalene-d8             | 10.89 | 136  | 53536    | 20.00 | ng/ul | 0.00      |
| 36) Acenaphthene-d10           | 14.71 | 164  | 42486    | 20.00 | ng/ul | 0.00      |
| 62) Phenanthrene-d10           | 17.45 | 188  | 127868   | 20.00 | ng/ul | 0.00      |
| 78) Chrysene-d12               | 21.73 | 240  | 167350   | 20.00 | ng/ul | 0.00      |
| 86) Perylene-d12               | 24.99 | 264  | 158242   | 20.00 | ng/ul | 0.00      |
| System Monitoring Compounds    |       |      |          |       |       |           |
| 3) 1,4-Dioxane-d8              | 0.00  | 96   | 0        | 0.00  | ng/uL |           |
| 5) Phenol-d5                   | 0.00  | 99   | 0d       | 0.00  | ng/ul |           |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.40  | 67   | 276      | 0.49  | ng/ul | 0.00      |
| 9) 2-Chlorophenol-d4           | 7.61  | 132  | 381m     | 0.53  | ng/ul | 0.01      |
| 13) 4-Methylphenol-d8          | 0.00  | 113  | 0        | 0.00  | ng/ul |           |
| 19) Nitrobenzene-d5            | 0.00  | 128  | 0        | 0.00  | ng/ul |           |
| 22) 2-Nitrophenol-d4           | 0.00  | 143  | 0        | 0.00  | ng/ul |           |
| 26) 2,4-Dichlorophenol-d3      | 0.00  | 165  | 0d       | 0.00  | ng/ul |           |
| 29) 4-Chloroaniline-d4         | 0.00  | 131  | 0        | 0.00  | ng/ul |           |
| 44) Dimethylphthalate-d6       | 14.11 | 166  | 3817     | 1.09  | ng/ul | 0.00      |
| 47) Acenaphthylene-d8          | 14.40 | 160  | 4199     | 1.03  | ng/ul | 0.00      |
| 52) 4-Nitrophenol-d4           | 0.00  | 143  | 0        | 0.00  | ng/ul |           |
| 58) Fluorene-d10               | 15.69 | 176  | 3807     | 1.20  | ng/ul | 0.00      |
| 63) 4,6-Dinitro-2-methylphenol | 0.00  | 200  | 0        | 0.00  | ng/ul |           |
| 71) Anthracene-d10             | 17.54 | 188  | 7511     | 1.25  | ng/ul | 0.00      |
| 79) Pyrene-d10                 | 19.83 | 212  | 8480     | 1.17  | ng/ul | 0.00      |
| 90) Benzo(a)pyrene-d12         | 24.76 | 264  | 8334     | 1.04  | ng/ul | 0.00      |
| Target Compounds               |       |      |          |       |       |           |
| 28) Naphthalene                | 10.93 | 128  | 91220    | 32.05 | ng/ul | Ovalue 99 |
| 34) 2-Methylnaphthalene        | 12.53 | 142  | 12854    | 6.10  | ng/ul | 92        |
| 50) Acenaphthene               | 14.77 | 153  | 19080    | 6.62  | ng/ul | 93        |
| 54) Dibenzofuran               | 15.11 | 168  | 14684    | 3.42  | ng/ul | 91        |
| 59) Fluorene                   | 15.75 | 166  | 14408    | 4.14  | ng/ul | 96        |
| 70) Phenanthrene               | 17.49 | 178  | 49424    | 6.95  | ng/ul | 98        |
| 75) Carbazole                  | 17.86 | 167  | 14094    | 2.30  | ng/ul | 96        |
| 77) Fluoranthene               | 19.50 | 202  | 10539    | 1.18  | ng/ul | 98        |

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





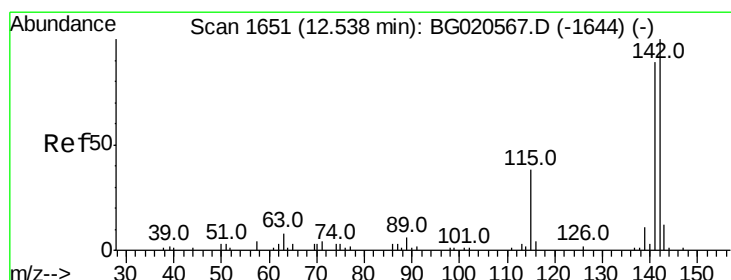
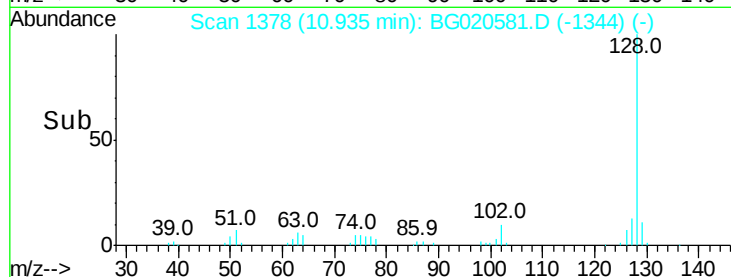
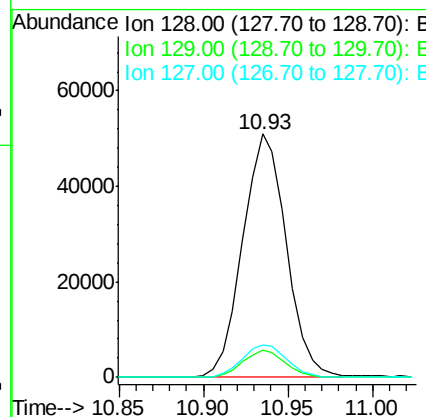
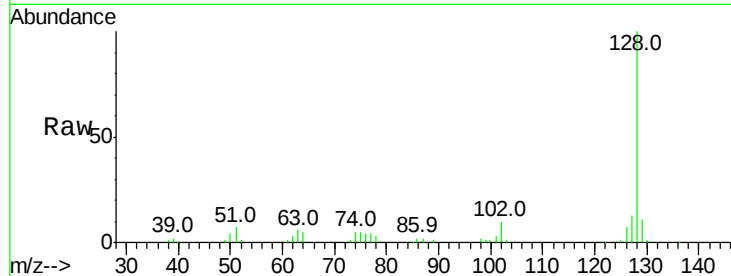
#28  
Naphthalene  
Concen: 32.05 ng/ul  
RT: 10.93 min Scan# 1378  
Delta R.T. 0.00 min  
Lab File: BG020581.D  
Acq: 29 Dec 2015 2:22

Instrument :  
BNA\_G  
ClientSampleId :  
D9N71DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 11.0  | 8.6   | 12.8  |
| 127     | 13.3  | 10.1  | 15.1  |

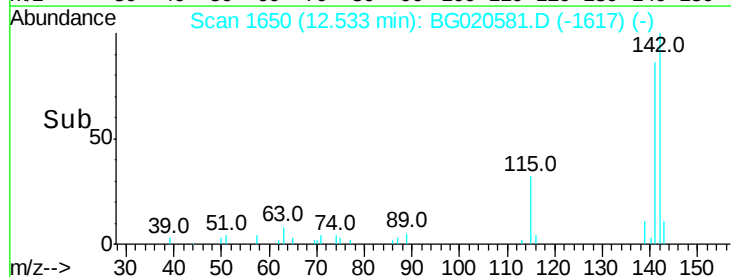
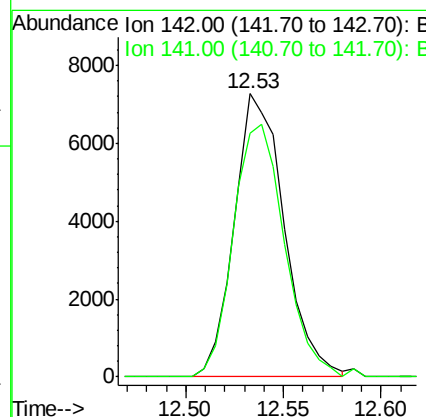
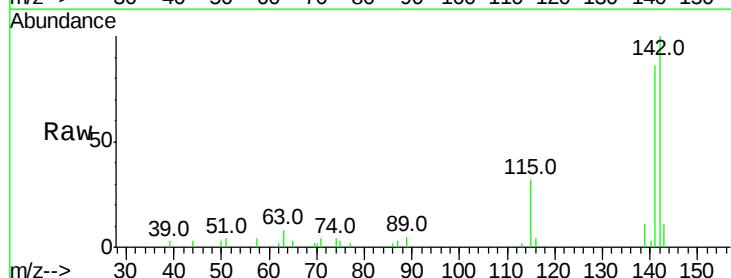
Manual Integrations  
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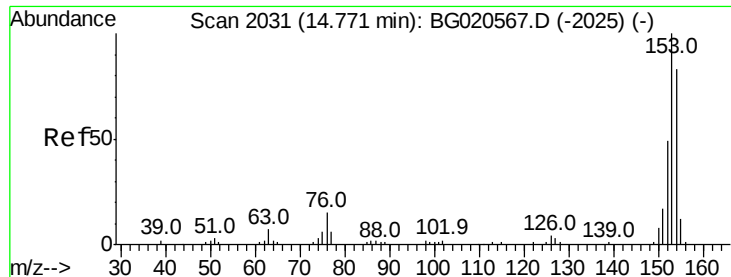
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#34  
2-Methylnaphthalene  
Concen: 6.10 ng/ul  
RT: 12.53 min Scan# 1650  
Delta R.T. -0.00 min  
Lab File: BG020581.D  
Acq: 29 Dec 2015 2:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 86.0  | 74.9  | 112.3 |





#50

Acenaphthene

Concen: 6.62 ng/ul

RT: 14.77 min Scan# 2030

Delta R.T. 0.00 min

Lab File: BG020581.D

Acq: 29 Dec 2015 2:22

Instrument :

BNA\_G

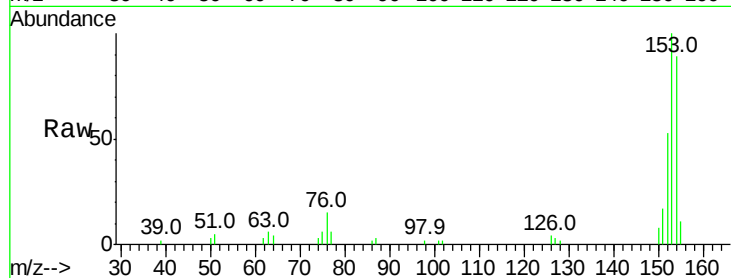
ClientSampleId :

D9N71DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 153   | Resp: | 19080 |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 53.4  | 37.6  | 56.4  |
| 154       | 89.4  | 67.9  | 101.9 |

Manual Integrations  
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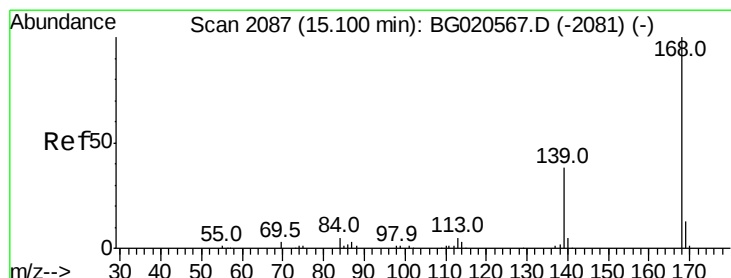
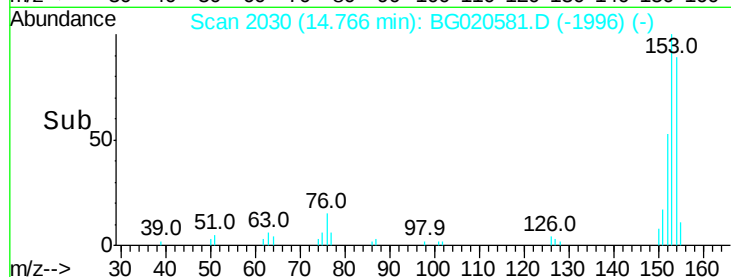
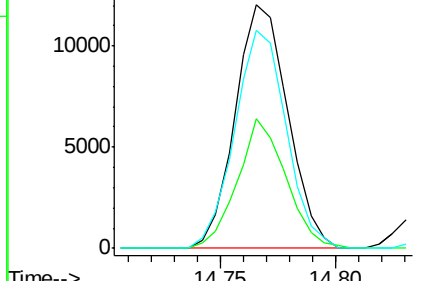
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Abundance Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E

Ion 154.00 (153.70 to 154.70): E



#54

Dibenzofuran

Concen: 3.42 ng/ul

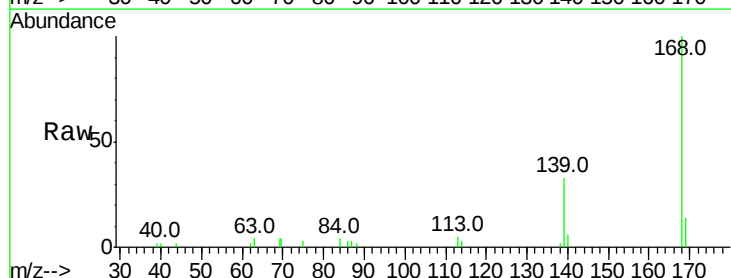
RT: 15.11 min Scan# 2088

Delta R.T. 0.01 min

Lab File: BG020581.D

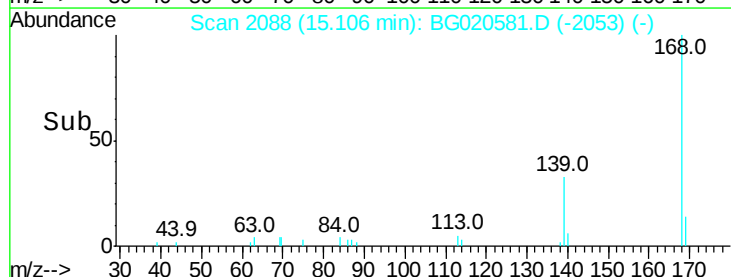
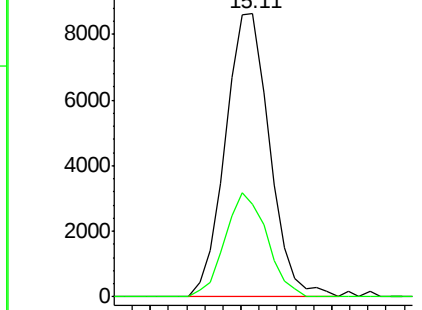
Acq: 29 Dec 2015 2:22

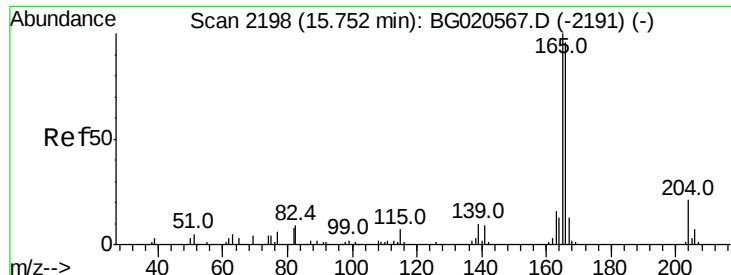
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 168   | Resp: | 14684 |
| Ion Ratio | Lower | Upper |       |
| 168       | 100   |       |       |
| 139       | 32.9  | 30.5  | 45.7  |



Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E





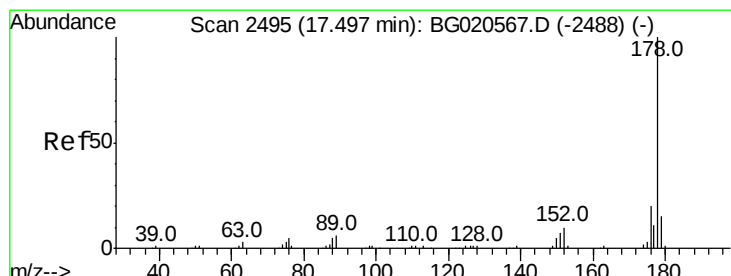
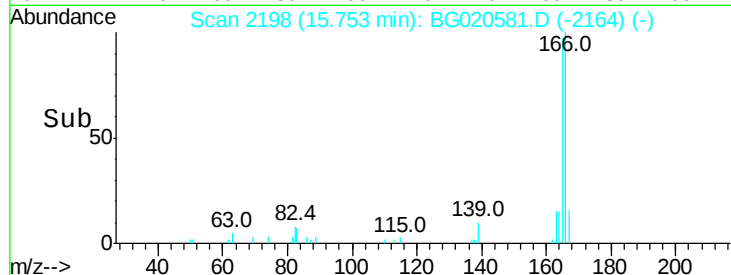
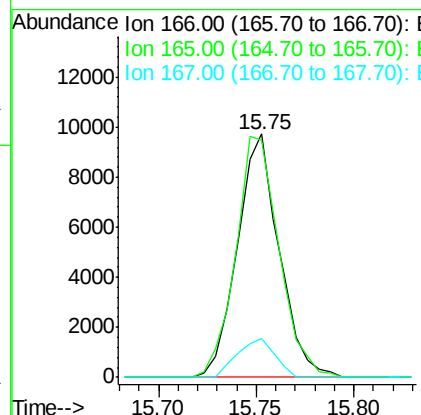
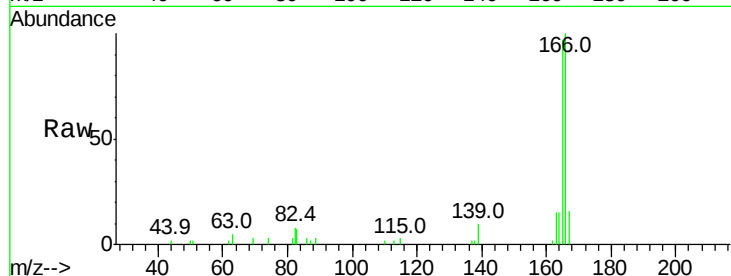
#59  
**Fluorene**  
 Concen: 4.14 ng/ul  
 RT: 15.75 min Scan# 2198  
 Delta R.T. 0.00 min  
 Lab File: BG020581.D  
 Acq: 29 Dec 2015 2:22

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N71DL

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 166     | 100   | 14408 |       |       |
| 165     | 97.2  |       | 81.4  | 122.0 |
| 167     | 16.0  |       | 11.2  | 16.8  |

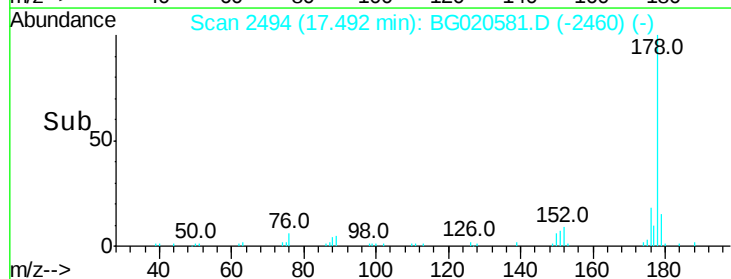
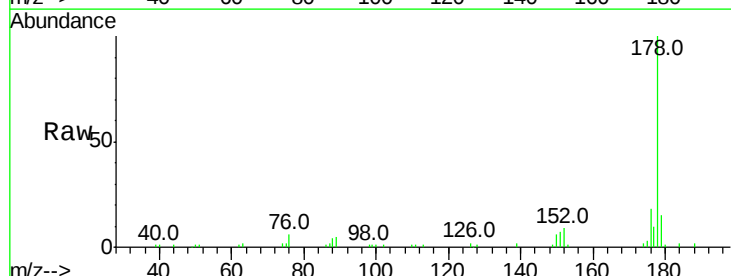
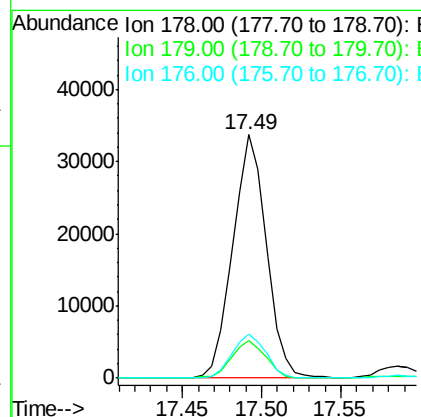
Manual Integrations  
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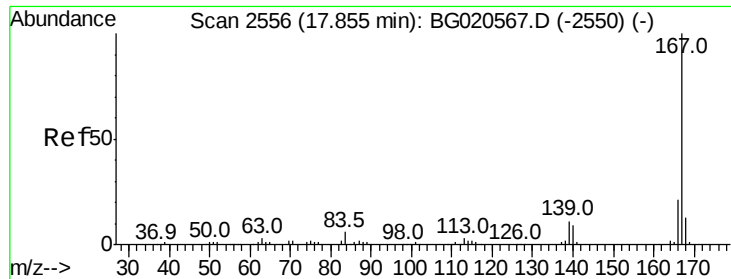
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#70  
**Phenanthrene**  
 Concen: 6.95 ng/ul  
 RT: 17.49 min Scan# 2494  
 Delta R.T. 0.00 min  
 Lab File: BG020581.D  
 Acq: 29 Dec 2015 2:22

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 178     | 100   | 49424 |       |       |
| 179     | 15.4  |       | 12.9  | 19.3  |
| 176     | 18.0  |       | 15.3  | 22.9  |





#75

Carbazole

Concen: 2.30 ng/ul

RT: 17.86 min Scan# 2556

Delta R.T. 0.00 min

Lab File: BG020581.D

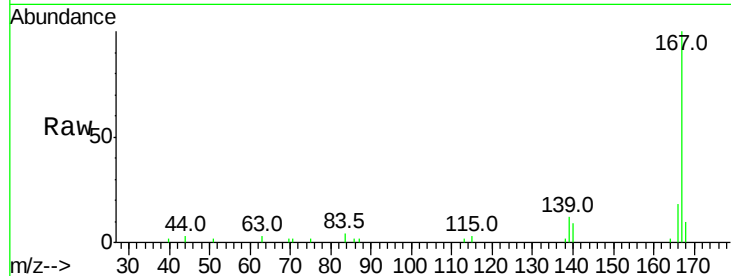
Acq: 29 Dec 2015 2:22

Instrument :

BNA\_G

ClientSampleId :

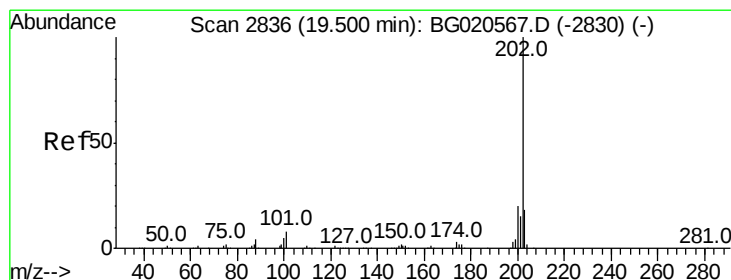
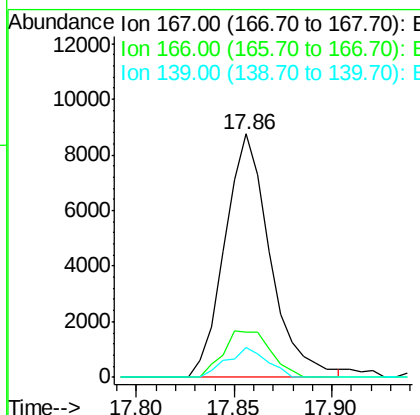
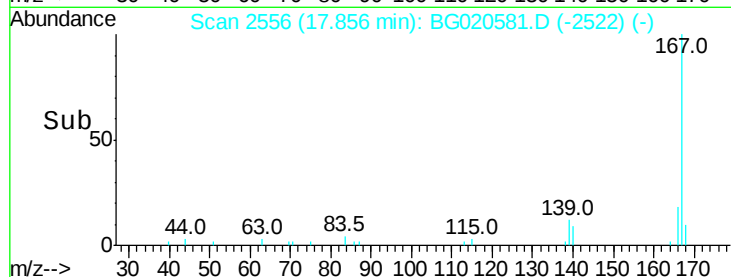
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|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 167   | Resp: | 14094 |
| Ion Ratio | Lower | Upper |       |
| 167       | 100   |       |       |
| 166       | 18.4  | 17.0  | 25.6  |
| 139       | 12.5  | 10.1  | 15.1  |

Manual Integrations  
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#77

Fluoranthene

Concen: 1.18 ng/ul

RT: 19.50 min Scan# 2836

Delta R.T. 0.00 min

Lab File: BG020581.D

Acq: 29 Dec 2015 2:22

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 202   | Resp: | 10539 |
| Ion Ratio | Lower | Upper |       |
| 202       | 100   |       |       |
| 101       | 7.5   | 6.2   | 9.4   |
| 100       | 7.2   | 5.1   | 7.7   |

