

Data Path : Z:\HPCHEM1\BNA E\DATA\BE111115\  
 Data File : BE091131.D  
 Acq On : 12 Nov 2015 6:37  
 Operator : UM/NP  
 Sample : G4322-01  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 A4HR2

Manual Integrations  
 APPROVED

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 11/16/2015 12:42:16 PM

Quant Time: Nov 13 18:04:43 2015  
 Quant Method : Z:\HPCHEM1\BNA E\METHODS\SOM02.2-EPA-SIM-BE102715.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Nov 13 13:56:00 2015  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|--------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.89  | 152  | 3406     | 0.40   | ng/ul  | 0.00     |
| 4) Naphthalene-d8           | 9.57  | 136  | 18999    | 0.40   | ng/ul  | 0.00     |
| 8) Acenaphthene-d10         | 13.40 | 164  | 10656    | 0.40   | ng/ul  | 0.00     |
| 12) Phenanthrene-d10        | 16.12 | 188  | 27155m   | 0.40   | ng/ul  | -0.01    |
| 18) Chrysene-d12            | 20.28 | 240  | 36595    | 0.40   | ng/ul  | 0.00     |
| 22) Perylene-d12            | 22.19 | 264  | 30653m   | 0.40   | ng/ul  | 0.00     |
| System Monitoring Compounds |       |      |          |        |        |          |
| 2) 1,4-Dioxane-d8           | 2.93  | 96   | 9068     | 3.70   | ng/uL  | -0.03    |
| 6) 2-Methylnaphthalene-d10  | 11.07 | 152  | 3382     | 0.13   | ng/ul  | 0.00     |
| 16) Fluoranthene-d10        | 18.12 | 212  | 9800     | 0.13   | ng/ul  | 0.00     |
| Target Compounds            |       |      |          | Ovalue |        |          |
| 5) Naphthalene              | 9.61  | 128  | 4387     | 0.09   | ng/ul  | 98       |
| 9) Acenaphthylene           | 13.14 | 152  | 5718     | 0.11   | ng/ul  | 99       |
| 10) Acenaphthene            | 13.46 | 153  | 1168     | 0.03   | ng/ul# | 90       |
| 11) Fluorene                | 14.45 | 166  | 1721     | 0.04   | ng/ul# | 95       |
| 14) Phenanthrene            | 16.16 | 178  | 200799   | 0.64   | ng/ul  | 98       |
| 15) Anthracene              | 16.25 | 178  | 41760m   | 0.15   | ng/ul  |          |
| 17) Fluoranthene            | 18.15 | 202  | 457444   | 1.25   | ng/ul  | 89       |
| 19) Pyrene                  | 18.53 | 202  | 447251   | 1.08   | ng/ul# | 79       |
| 20) Benzo(a)anthracene      | 20.25 | 228  | 44795    | 0.48   | ng/ul  | 96       |
| 21) Chrysene                | 20.32 | 228  | 61455    | 0.57   | ng/ul  | 98       |
| 23) Benzo(b)fluoranthene    | 21.62 | 252  | 53356    | 0.56   | ng/ul  | 94       |
| 24) Benzo(k)fluoranthene    | 21.65 | 252  | 49380    | 0.50   | ng/ul  | 97       |
| 25) Benzo(a)pyrene          | 22.09 | 252  | 56341    | 0.64   | ng/ul  | 92       |
| 26) Indeno(1,2,3-cd)pyrene  | 23.83 | 276  | 144346m  | 0.39   | ng/ul  |          |
| 27) Dibenzo(a,h)anthracene  | 23.78 | 278  | 8448     | 0.10   | ng/ul# | 73       |
| 28) Benzo(a,h,i)perylene    | 24.39 | 276  | 136977   | 0.35   | ng/ul  | 94       |

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

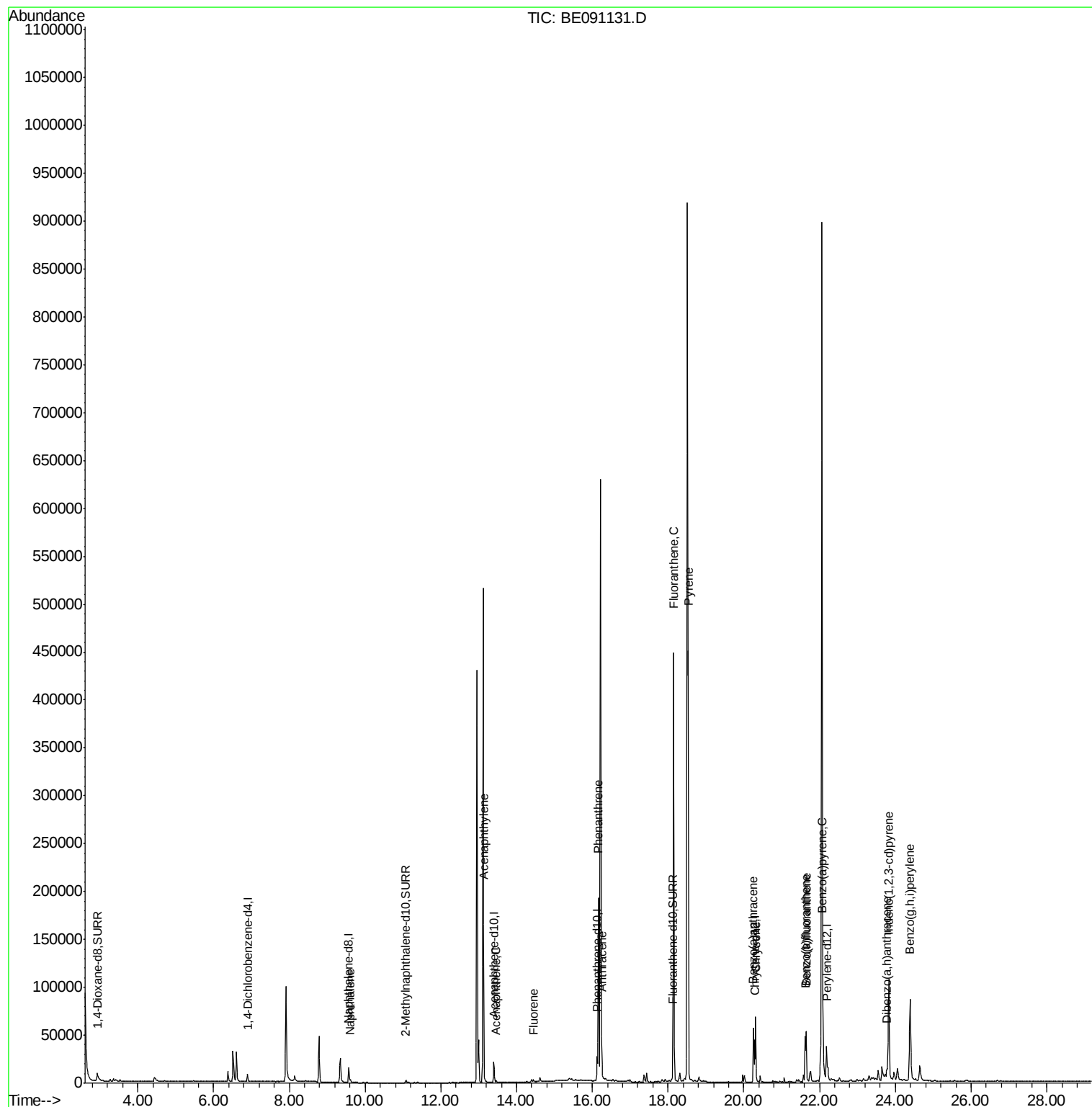
Data Path : Z:\HPCHEM1\BNA E\DATA\BE111115\  
Data File : BE091131.D  
Acq On : 12 Nov 2015 6:37  
Operator : UM/NP  
Sample : G4322-01  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

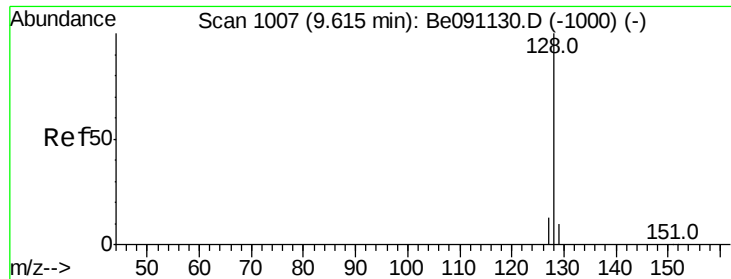
Instrument :  
BNA\_E  
ClientSampleId :  
A4HR2

Manual Integrations  
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11/16/2015 12:42:16 PM

Quant Time: Nov 13 18:04:43 2015  
Quant Method : Z:\HPCHEM1\BNA E\METHODS\SOM02.2-EPA-SIM-BE102715.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Nov 13 13:56:00 2015  
Response via : Initial Calibration





#5

Naphthalene

Concen: 0.09 ng/ul

RT: 9.61 min Scan# 1007

Delta R.T. -0.00 min

Lab File: BE091131.D

Acq: 12 Nov 2015 6:37

Instrument :

BNA\_E

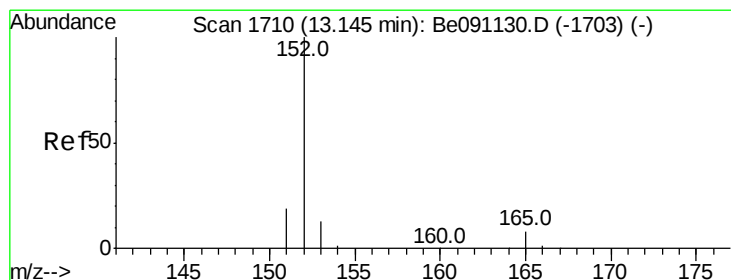
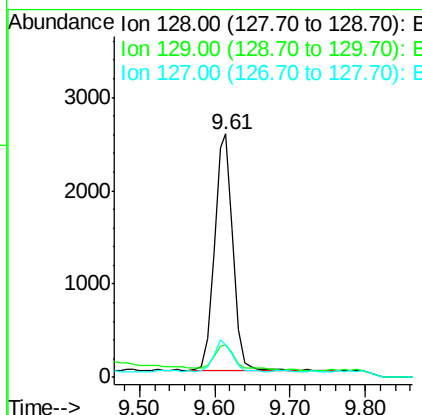
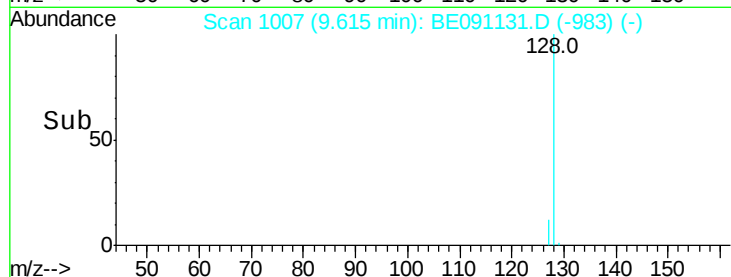
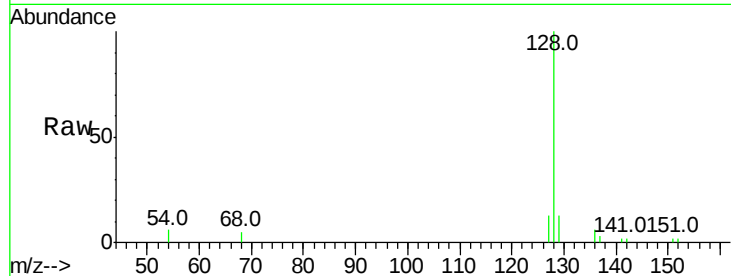
ClientSampleId :

A4HR2

|           |       |       |      |
|-----------|-------|-------|------|
| Tot Ion:  | 128   | Resp: | 4387 |
| Ion Ratio | Lower | Upper |      |
| 128       | 100   |       |      |
| 129       | 13.5  | 9.8   | 14.8 |
| 127       | 13.5  | 10.7  | 16.1 |

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#9

Acenaphthylene

Concen: 0.11 ng/ul

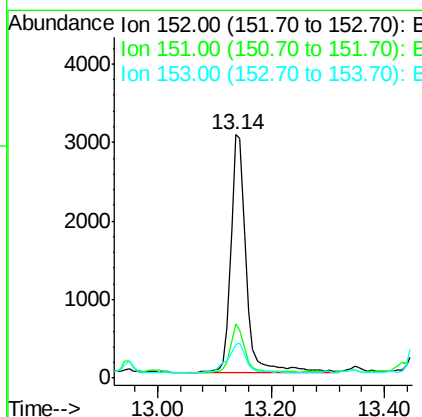
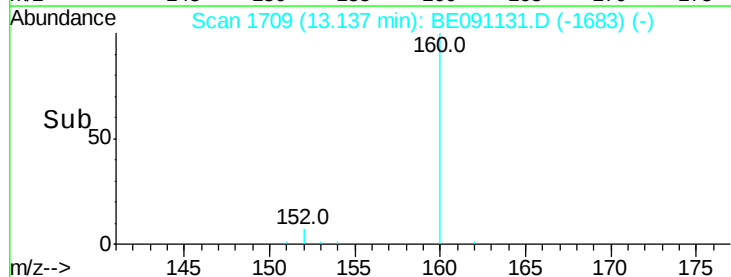
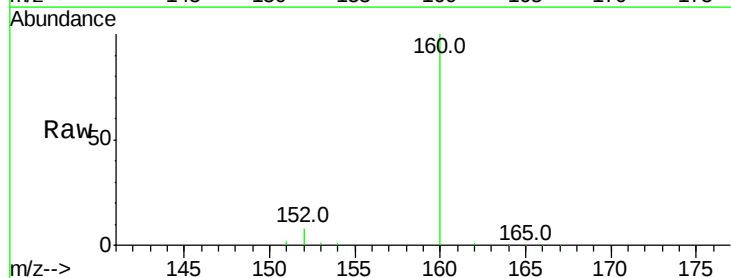
RT: 13.14 min Scan# 1709

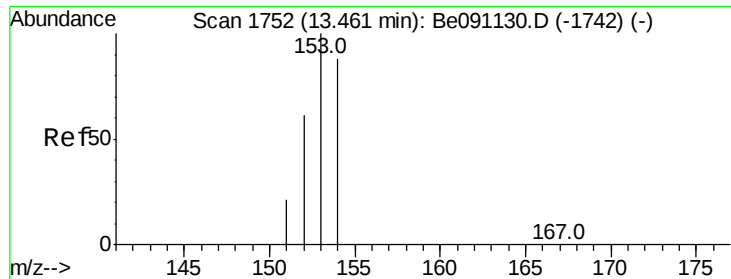
Delta R.T. -0.01 min

Lab File: BE091131.D

Acq: 12 Nov 2015 6:37

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 152   | Resp: | 5718 |
| Ion Ratio | Lower | Upper |      |
| 152       | 100   |       |      |
| 151       | 22.2  | 16.8  | 25.2 |
| 153       | 14.1  | 11.3  | 16.9 |





#10

Acenaphthene

Concen: 0.03 ng/ul

RT: 13.46 min Scan# 1752

Delta R.T. -0.00 min

Lab File: BE091131.D

Acq: 12 Nov 2015 6:37

Instrument :

BNA\_E

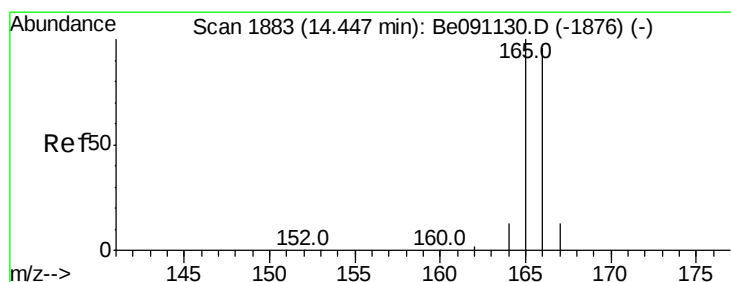
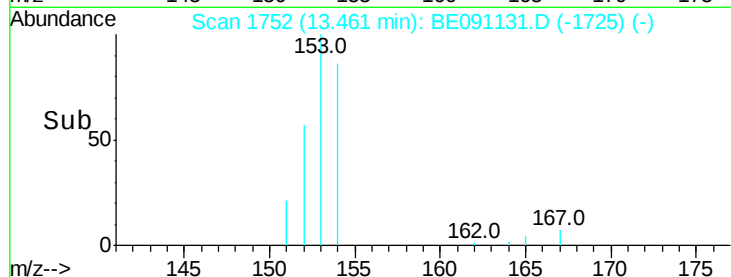
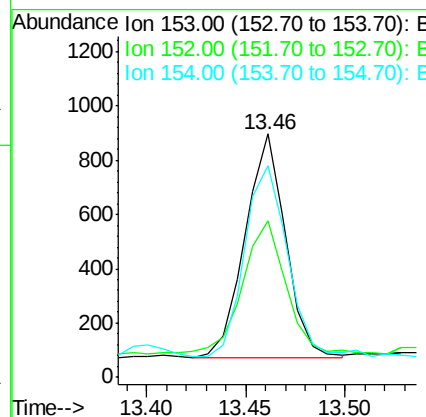
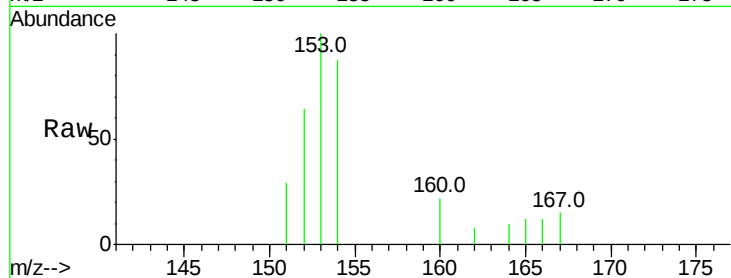
ClientSampleId :

A4HR2

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 153   | Resp: | 1168  |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 64.3  | 42.3  | 63.5# |
| 154       | 86.8  | 64.7  | 97.1  |

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#11

Fluorene

Concen: 0.04 ng/ul

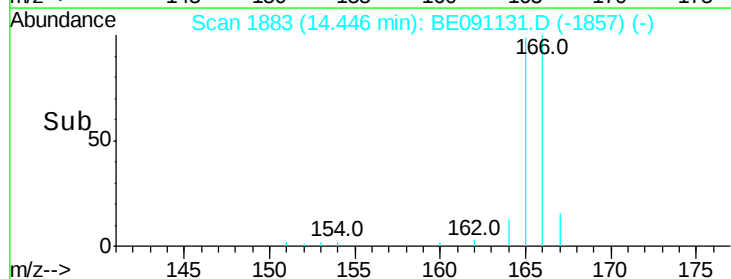
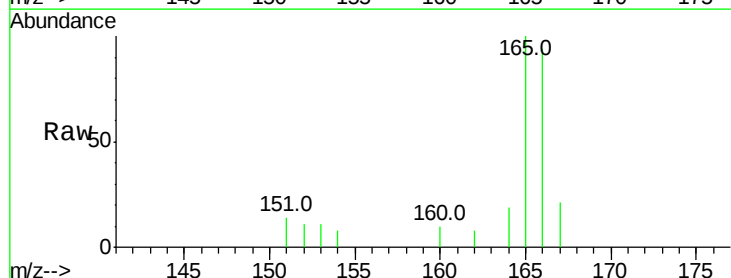
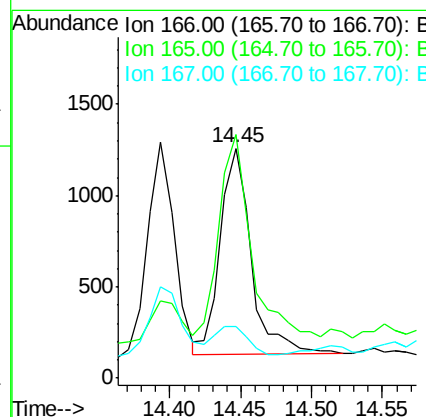
RT: 14.45 min Scan# 1883

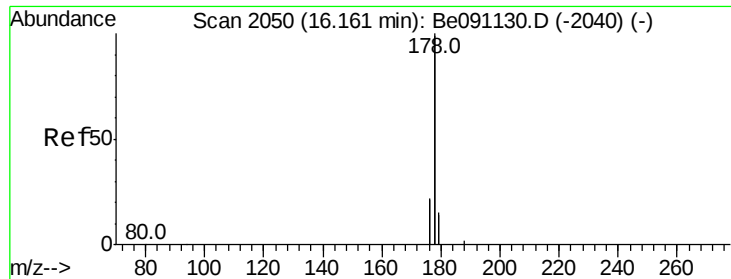
Delta R.T. -0.01 min

Lab File: BE091131.D

Acq: 12 Nov 2015 6:37

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 166   | Resp: | 1721  |
| Ion Ratio | Lower | Upper |       |
| 166       | 100   |       |       |
| 165       | 106.0 | 87.6  | 131.4 |
| 167       | 22.3  | 11.1  | 16.7# |





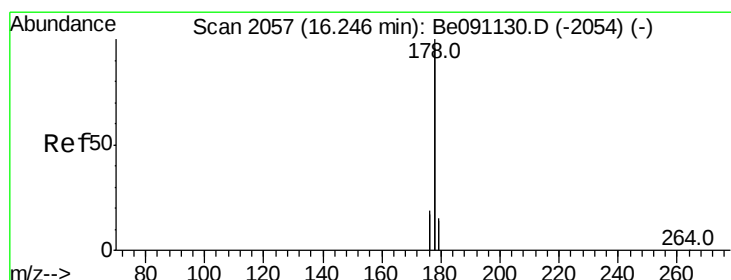
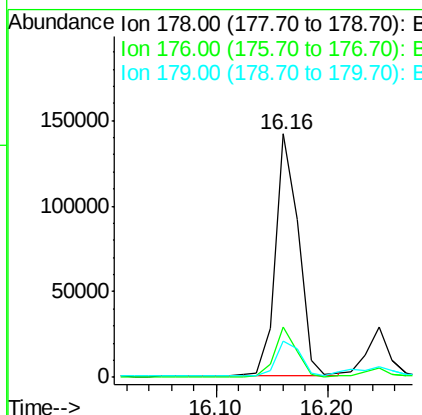
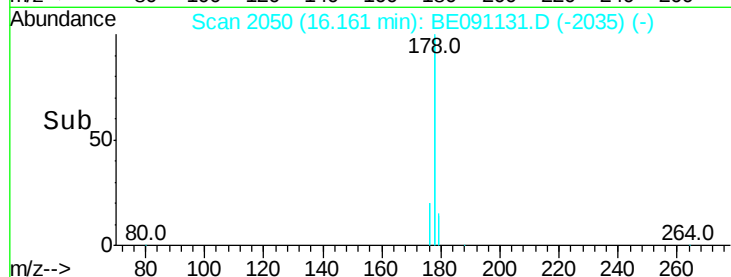
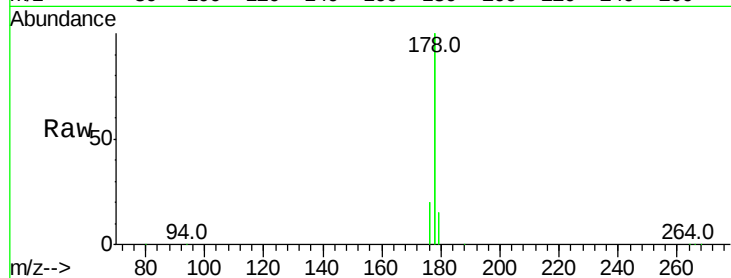
#14  
Phenanthrene  
Concen: 0.64 ng/ul  
RT: 16.16 min Scan# 2050  
Delta R.T. -0.01 min  
Lab File: BE091131.D  
Acq: 12 Nov 2015 6:37

Instrument :  
BNA\_E  
ClientSampleId :  
A4HR2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 20.4  | 16.2  | 24.4  |
| 179     | 14.7  | 12.8  | 19.2  |

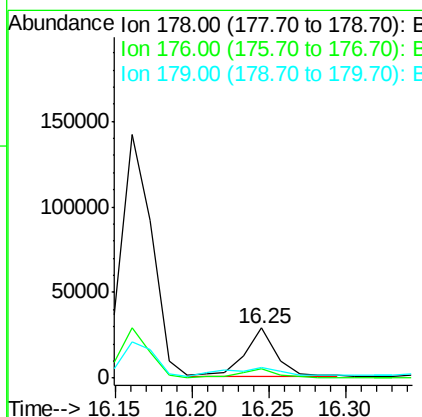
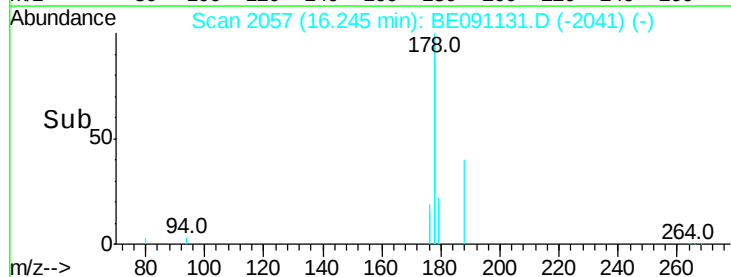
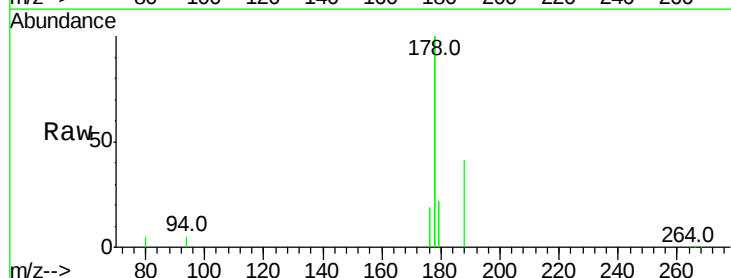
Manual Integrations  
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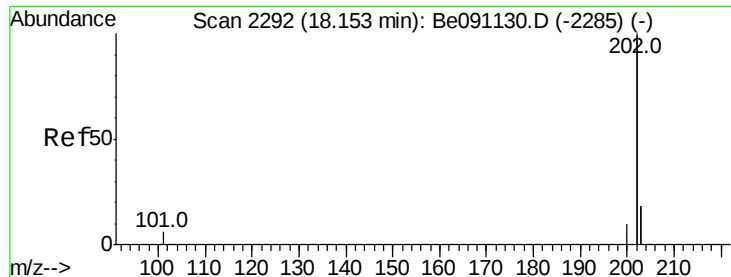
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#15  
Anthracene  
Concen: 0.15 ng/ul m  
RT: 16.25 min Scan# 2057  
Delta R.T. -0.00 min  
Lab File: BE091131.D  
Acq: 12 Nov 2015 6:37

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.0  | 15.8  | 23.8  |
| 179     | 22.3  | 13.3  | 19.9# |





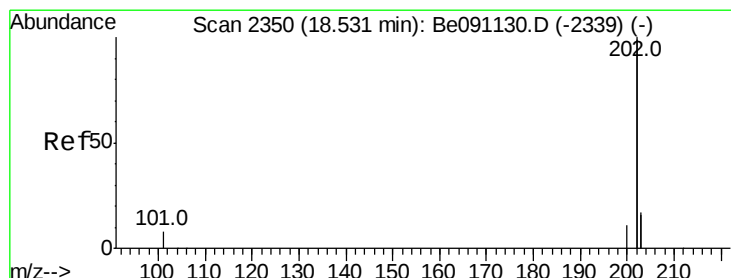
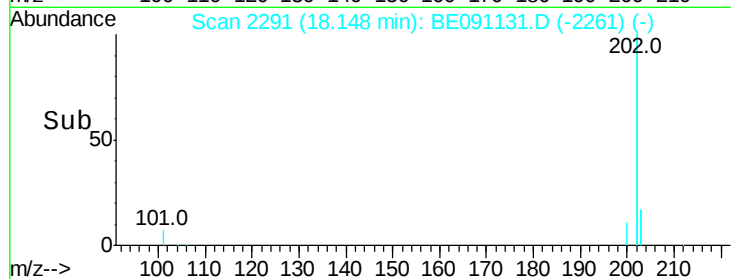
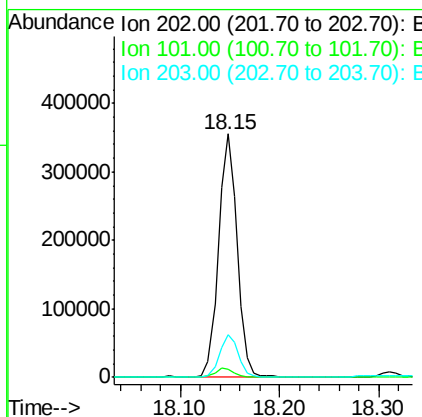
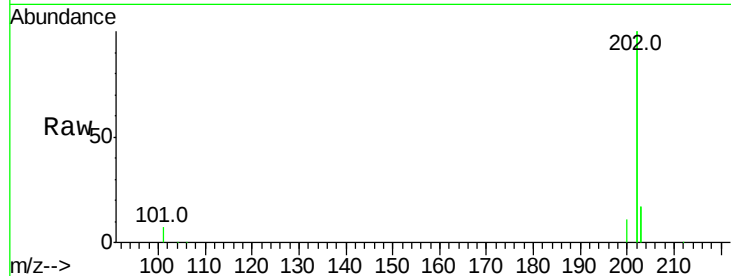
#17  
Fluoranthene  
Concen: 1.25 ng/ul  
RT: 18.15 min Scan# 2291  
Delta R.T. -0.01 min  
Lab File: BE091131.D  
Acq: 12 Nov 2015 6:37

Instrument :  
BNA\_E  
ClientSampleId :  
A4HR2

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 3.5   | 0.0        | 33.1  |
| 203     | 17.4  | 0.0        | 37.2  |

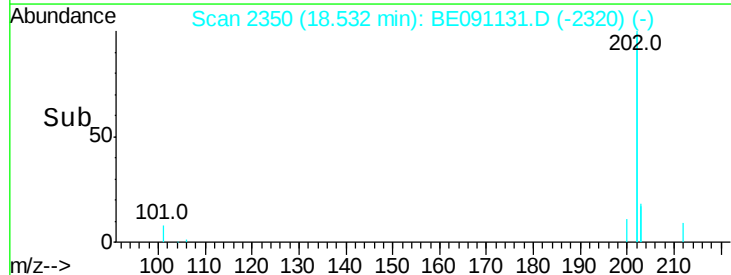
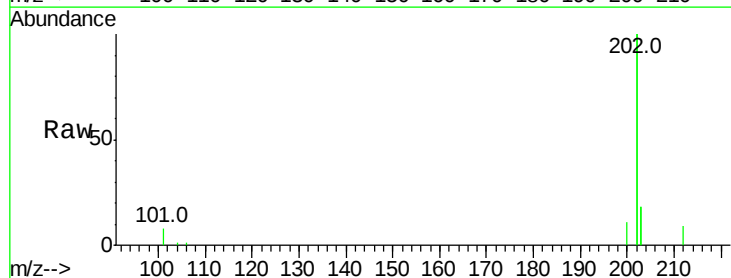
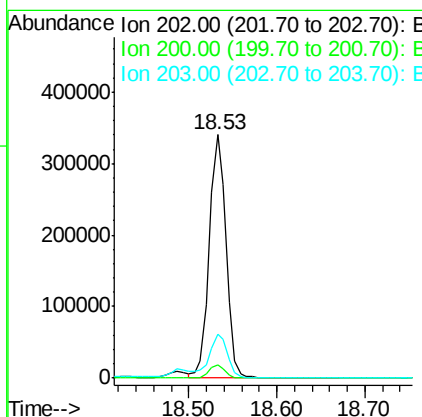
Manual Integrations  
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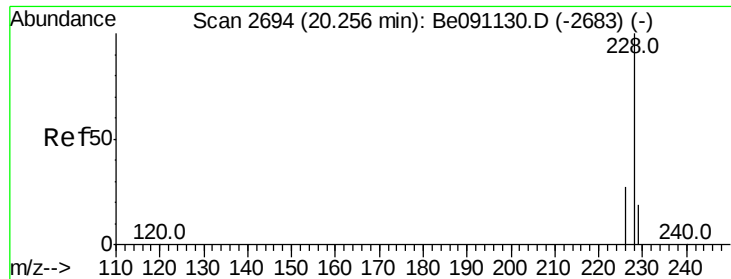
Mmdadoda  
11/16/2015 12:42:16 PM



#19  
Pyrene  
Concen: 1.08 ng/ul  
RT: 18.53 min Scan# 2350  
Delta R.T. -0.01 min  
Lab File: BE091131.D  
Acq: 12 Nov 2015 6:37

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 200     | 5.3   | 18.0       | 27.0# |
| 203     | 17.9  | 13.8       | 20.6  |





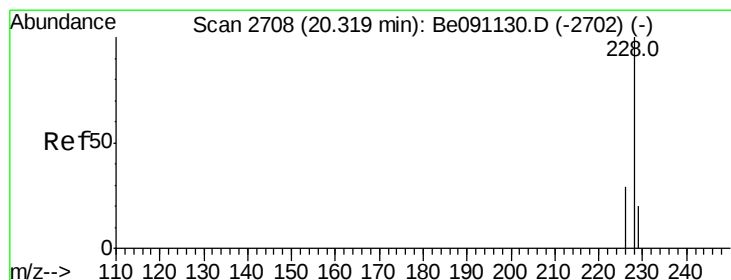
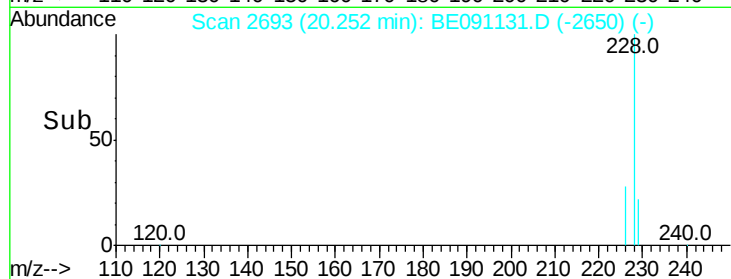
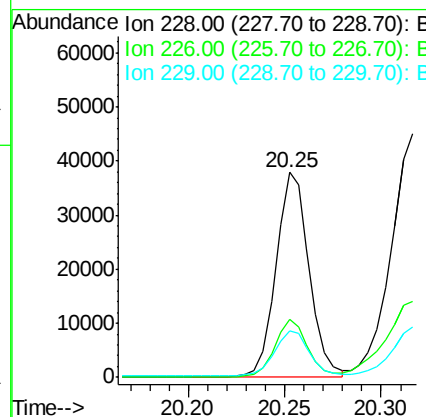
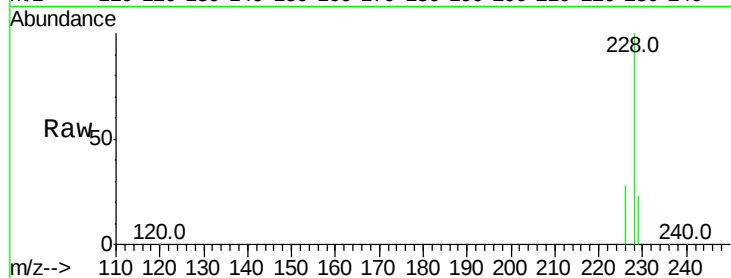
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Benzo(a)anthracene  
Concen: 0.48 ng/ul  
RT: 20.25 min Scan# 2693  
Delta R.T. -0.00 min  
Lab File: BE091131.D  
Acq: 12 Nov 2015 6:37

Instrument :  
BNA\_E  
ClientSampleId :  
A4HR2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.2  | 23.0  | 34.4  |
| 229     | 22.7  | 15.2  | 22.8  |

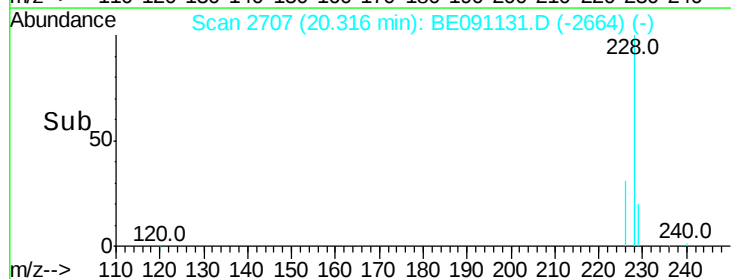
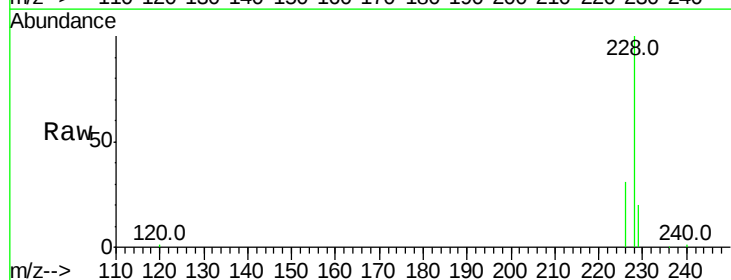
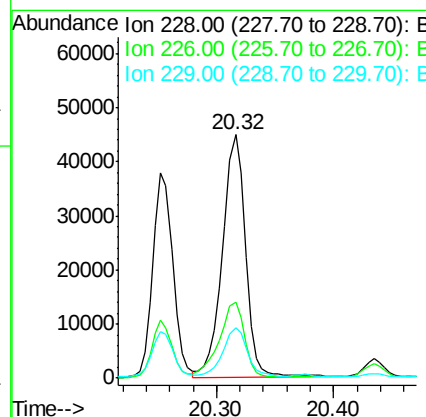
Manual Integrations  
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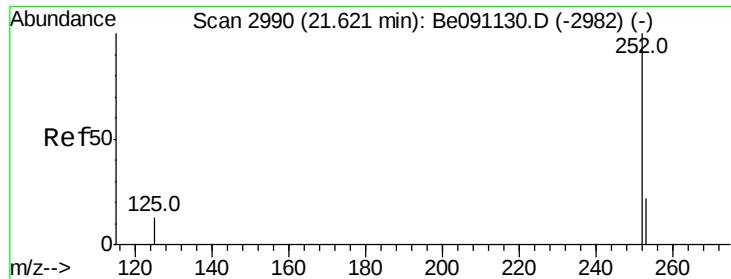
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#21  
Chrysene  
Concen: 0.57 ng/ul  
RT: 20.32 min Scan# 2707  
Delta R.T. -0.00 min  
Lab File: BE091131.D  
Acq: 12 Nov 2015 6:37

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.2  | 25.7  | 38.5  |
| 229     | 20.4  | 15.2  | 22.8  |





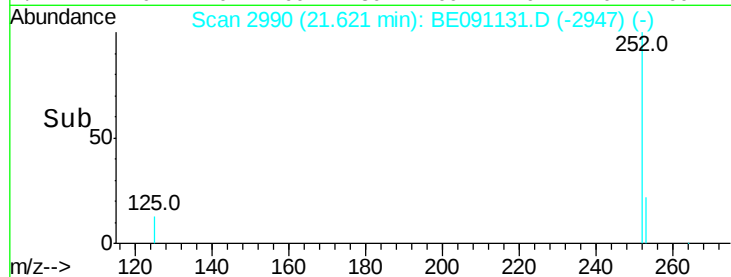
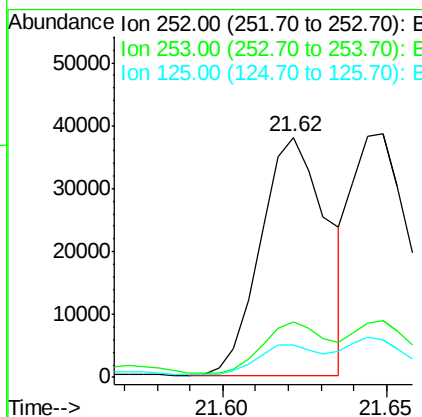
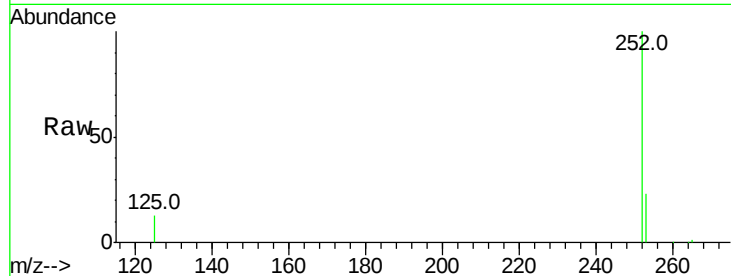
#23  
Benzo(b)fluoranthene  
Concen: 0.56 ng/ul  
RT: 21.62 min Scan# 2990  
Delta R.T. -0.00 min  
Lab File: BE091131.D  
Acq: 12 Nov 2015 6:37

Instrument :  
BNA\_E  
ClientSampleId :  
A4HR2

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 23.3  | 0.0        | 48.0  |
| 125     | 13.4  | 0.0        | 36.6  |

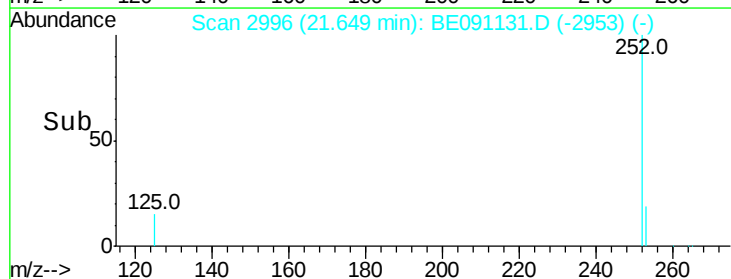
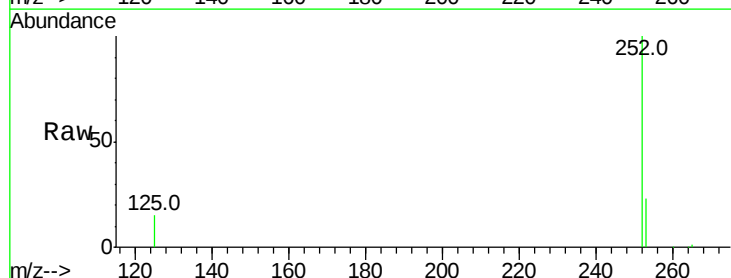
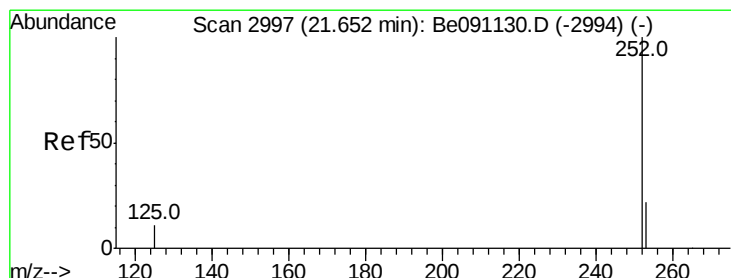
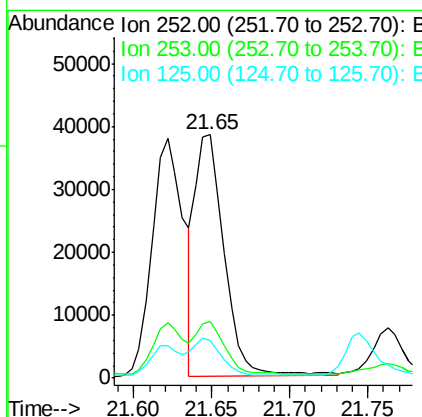
Manual Integrations  
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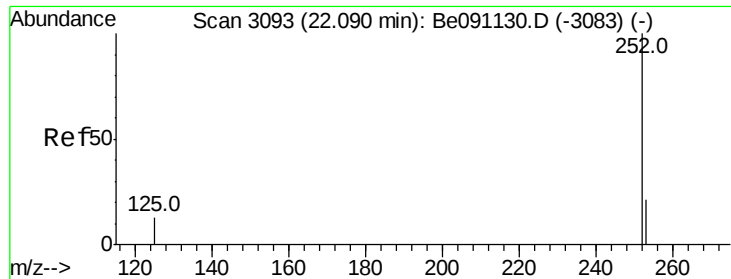
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#24  
Benzo(k)fluoranthene  
Concen: 0.50 ng/ul  
RT: 21.65 min Scan# 2996  
Delta R.T. -0.00 min  
Lab File: BE091131.D  
Acq: 12 Nov 2015 6:37

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 23.4  | 20.8       | 31.2  |
| 125     | 15.4  | 12.2       | 18.4  |





#25

Benzo(a)pyrene

Concen: 0.64 ng/ul

RT: 22.09 min Scan# 3093

Delta R.T. -0.00 min

Lab File: BE091131.D

Acq: 12 Nov 2015 6:37

Instrument :

BNA\_E

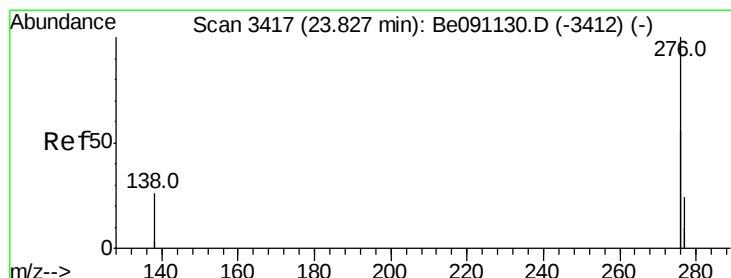
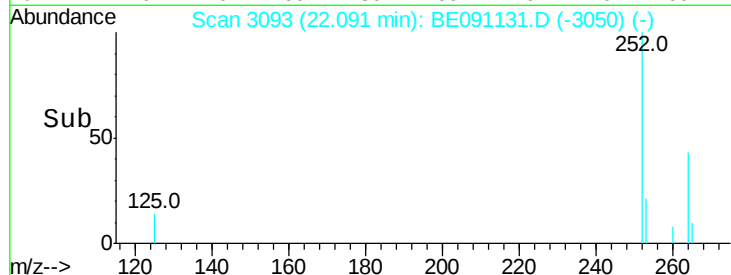
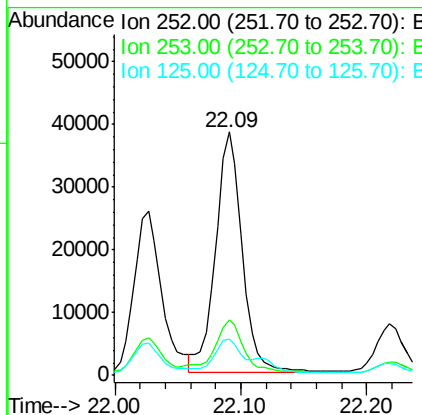
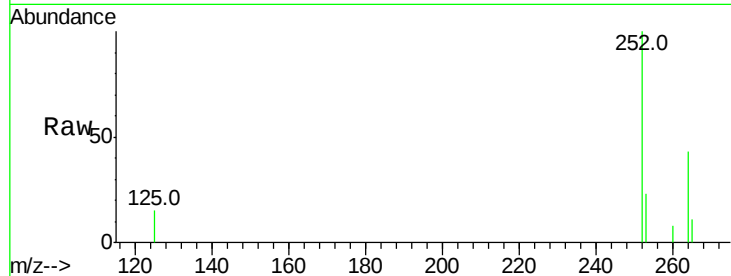
ClientSampleId :

A4HR2

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 252   | Resp: | 56341 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 22.7  | 21.8  | 32.8  |
| 125       | 14.6  | 14.5  | 21.7  |

Manual Integrations  
APPROVED

Mmdadoda  
11/16/2015 12:42:16 PM



#26

Indeno(1,2,3-cd)pyrene

Concen: 0.39 ng/ul m

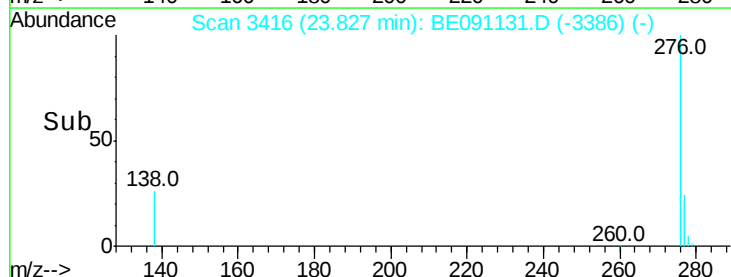
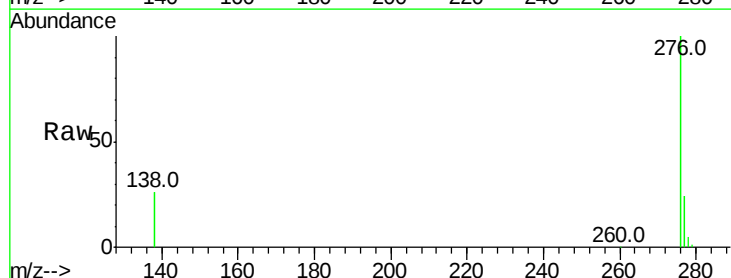
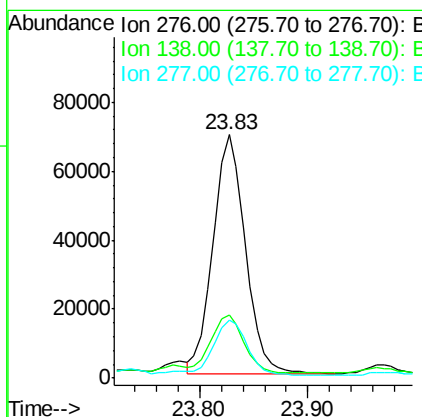
RT: 23.83 min Scan# 3416

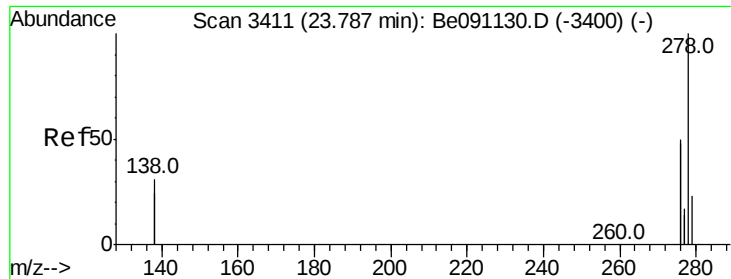
Delta R.T. -0.01 min

Lab File: BE091131.D

Acq: 12 Nov 2015 6:37

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 276   | Resp: | 144346 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 24.7  | 27.5  | 41.3#  |
| 277       | 25.3  | 19.3  | 28.9   |





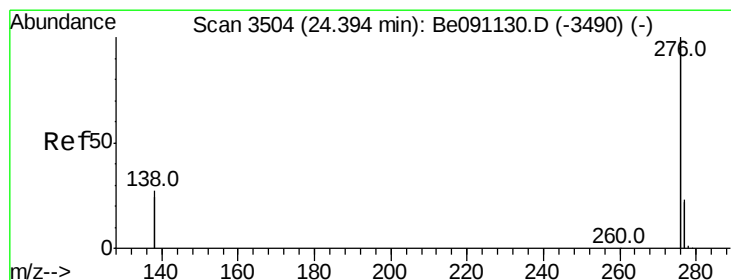
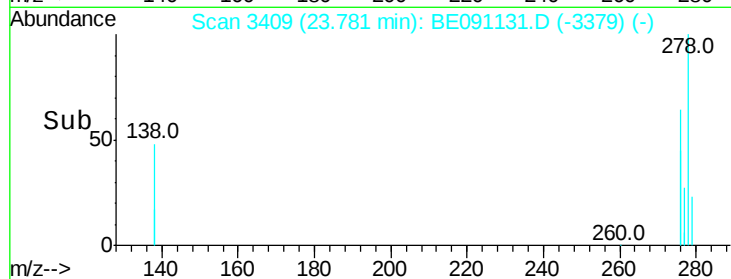
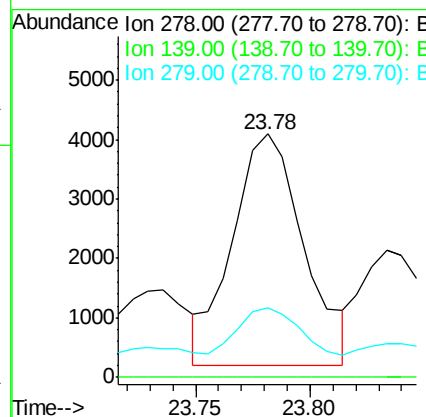
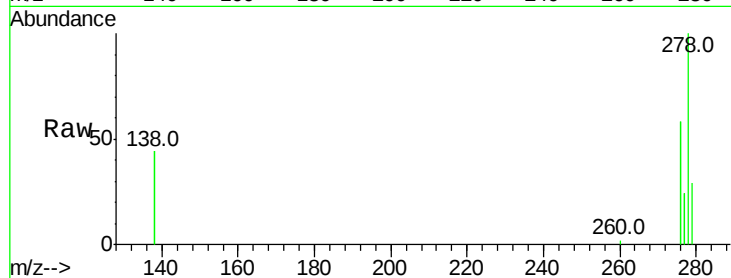
#27  
Dibenzo(a,h)anthracene  
Concen: 0.10 ng/ul  
RT: 23.78 min Scan# 3409  
Delta R.T. -0.01 min  
Lab File: BE091131.D  
Acq: 12 Nov 2015 6:37

Instrument :  
BNA\_E  
ClientSampleId :  
A4HR2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 0.0   | 21.7  | 32.5# |
| 279     | 28.5  | 21.9  | 32.9  |

Manual Integrations  
APPROVED

Mmdadoda  
11/16/2015 12:42:16 PM



#28  
Benzo(g,h,i)perylene  
Concen: 0.35 ng/ul  
RT: 24.39 min Scan# 3503  
Delta R.T. 0.00 min  
Lab File: BE091131.D  
Acq: 12 Nov 2015 6:37

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 25.0  | 21.3  | 31.9  |
| 138     | 26.9  | 25.5  | 38.3  |

