

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN101119\  
 Data File : BN008117.D  
 Acq On : 12 Oct 2019 17:44  
 Operator : JU  
 Sample : K5178-08  
 Misc :  
 ALS Vial : 50 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 BEPF1

Manual Integrations  
 APPROVED

mohammad  
 10/15/2019 7:58:54 AM

Quant Time: Oct 13 04:02:59 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN101019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Oct 11 19:05:54 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|--------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.63  | 152  | 2608     | 0.40   | ng/ul  | -0.01    |
| 2) Naphthalene-d8           | 10.39 | 136  | 12614    | 0.40   | ng/ul  | -0.01    |
| 6) Acenaphthene-d10         | 14.26 | 164  | 8240     | 0.40   | ng/ul  | 0.00     |
| 10) Phenanthrene-d10        | 17.01 | 188  | 19355m   | 0.40   | ng/ul  | 0.00     |
| 16) Chrysene-d12            | 21.21 | 240  | 20709m   | 0.40   | ng/ul  | 0.00     |
| 20) Perylene-d12            | 23.40 | 264  | 20498    | 0.40   | ng/ul  | -0.01    |
| System Monitoring Compounds |       |      |          |        |        |          |
| 4) 2-Methylnaphthalene-d10  | 11.99 | 152  | 4826     | 0.23   | ng/ul  | -0.01    |
| 14) Fluoranthene-d10        | 19.04 | 212  | 16776m   | 0.25   | ng/ul  | 0.00     |
| Target Compounds            |       |      |          | Ovalue |        |          |
| 3) Naphthalene              | 10.44 | 128  | 762      | 0.021  | ng/ul# | 71       |
| 7) Acenaphthylene           | 13.98 | 152  | 3081     | 0.079  | ng/ul# | 92       |
| 8) Acenaphthene             | 14.32 | 153  | 1013     | 0.033  | ng/ul  | 96       |
| 9) Fluorene                 | 15.31 | 166  | 1364     | 0.039  | ng/ul# | 93       |
| 12) Phenanthrene            | 17.05 | 178  | 32341m   | 0.571  | ng/ul  |          |
| 13) Anthracene              | 17.14 | 178  | 6325m    | 0.127  | ng/ul  |          |
| 15) Fluoranthene            | 19.07 | 202  | 94843m   | 1.267  | ng/ul  |          |
| 17) Pyrene                  | 19.44 | 202  | 78706    | 0.955  | ng/ul  | 98       |
| 18) Benzo(a)anthracene      | 21.19 | 228  | 45150    | 0.600  | ng/ul  | 97       |
| 19) Chrysene                | 21.24 | 228  | 51357    | 0.556  | ng/ul  | 98       |
| 21) Benzo(b)fluoranthene    | 22.75 | 252  | 60702m   | 0.910  | ng/ul  |          |
| 22) Benzo(k)fluoranthene    | 22.78 | 252  | 18821m   | 0.249  | ng/ul  |          |
| 23) Benzo(a)pyrene          | 23.30 | 252  | 37597    | 0.535  | ng/ul  | 98       |
| 24) Indeno(1,2,3-cd)pyrene  | 25.57 | 276  | 22674    | 0.274  | ng/ul# | 98       |
| 25) Dibenzo(a,h)anthracene  | 25.58 | 278  | 5077     | 0.078  | ng/ul# | 55       |
| 26) Benzo(a,h,i)perylene    | 26.23 | 276  | 21352    | 0.282  | ng/ul  | 95       |

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

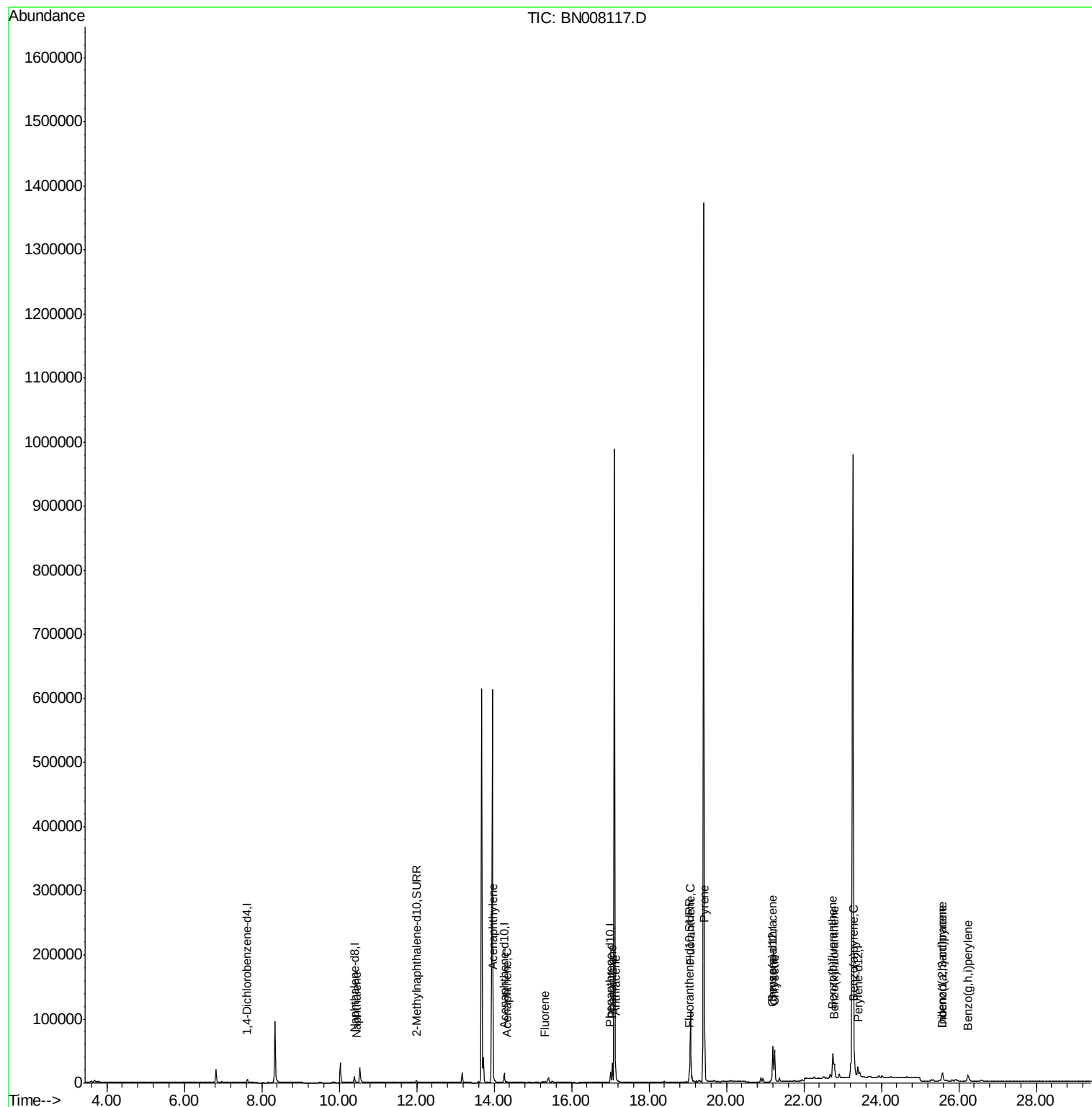
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN101119\  
Data File : BN008117.D  
Acq On : 12 Oct 2019 17:44  
Operator : JU  
Sample : K5178-08  
Misc :  
ALS Vial : 50 Sample Multiplier: 1

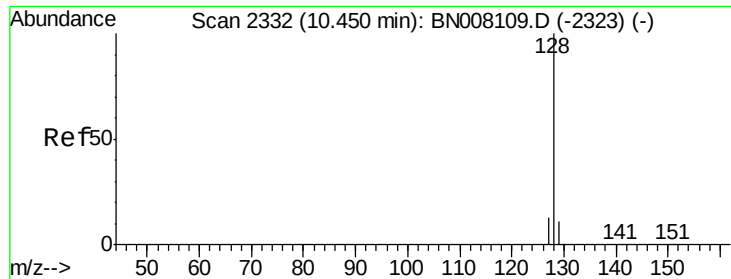
Instrument :  
BNA\_N  
ClientSampleId :  
BEPF1

Manual Integrations  
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Quant Time: Oct 13 04:02:59 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN101019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Oct 11 19:05:54 2019  
Response via : Initial Calibration





#3

Naphthalene

Concen: 0.021 ng/ul

RT: 10.44 min Scan# 2331

Delta R.T. -0.01 min

Lab File: BN008117.D

Acq: 12 Oct 2019 17:44

Instrument :

BNA\_N

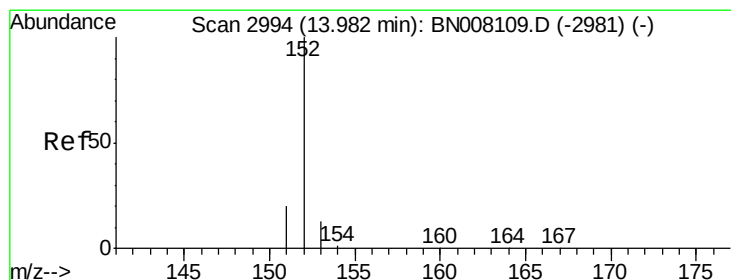
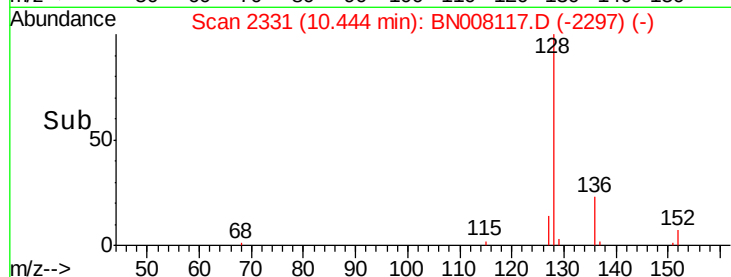
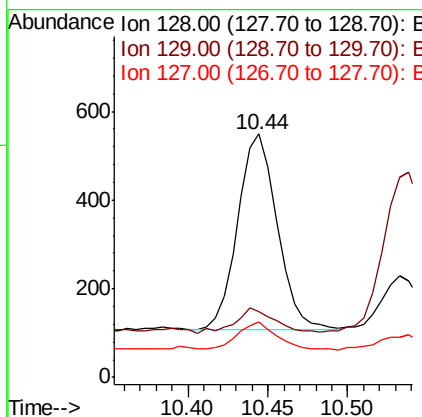
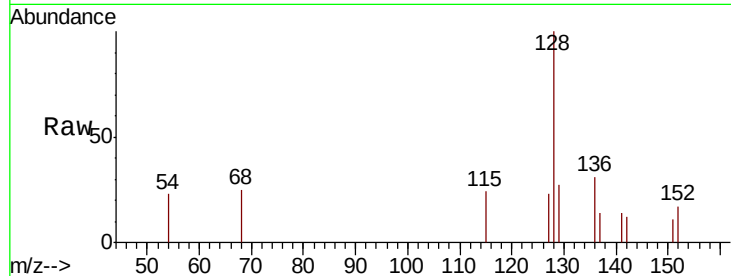
ClientSampleId :

BEPF1

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 128   | Resp: | 762   |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 129       | 27.0  | 9.8   | 14.8# |
| 127       | 23.0  | 11.1  | 16.7# |

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#7

Acenaphthylene

Concen: 0.079 ng/ul

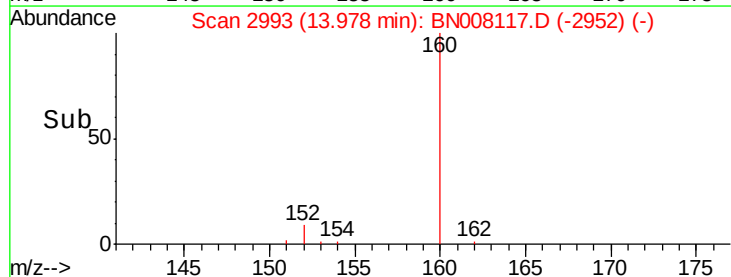
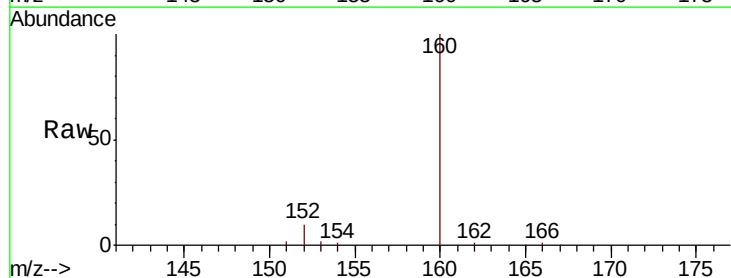
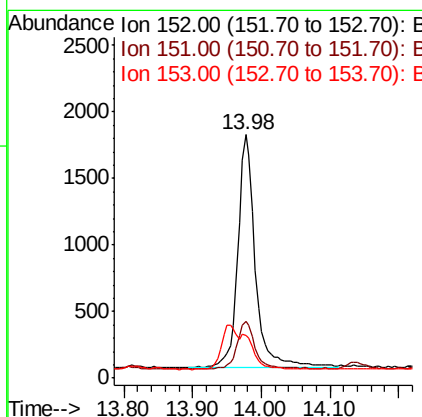
RT: 13.98 min Scan# 2993

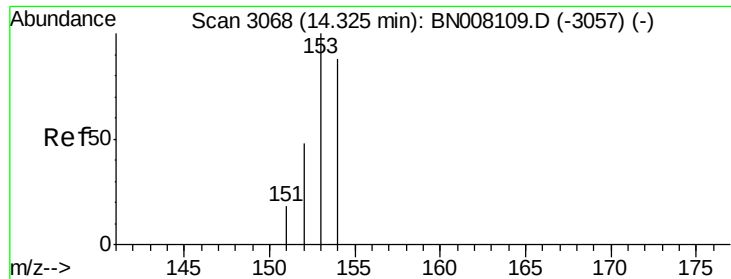
Delta R.T. -0.01 min

Lab File: BN008117.D

Acq: 12 Oct 2019 17:44

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 152   | Resp: | 3081  |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 151       | 23.3  | 16.2  | 24.4  |
| 153       | 17.6  | 11.0  | 16.4# |





#8

Acenaphthene

Concen: 0.033 ng/ul

RT: 14.32 min Scan# 3068

Delta R.T. -0.01 min

Lab File: BN008117.D

Acq: 12 Oct 2019 17:44

Instrument :

BNA\_N

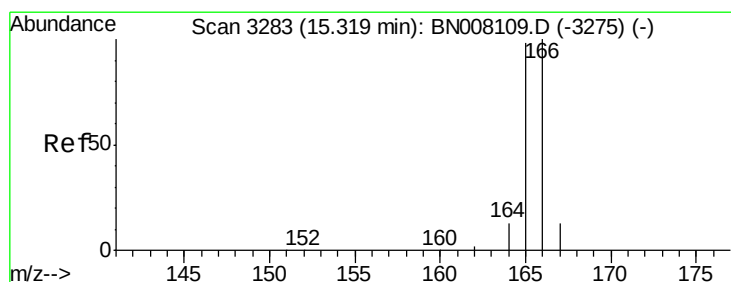
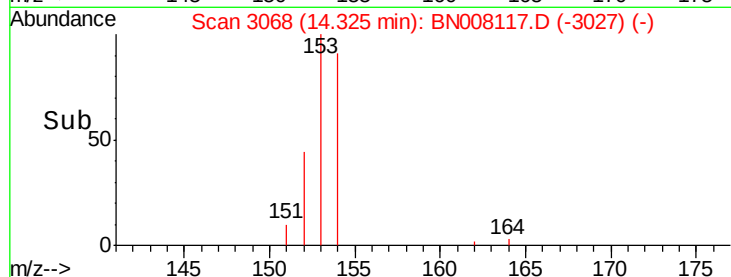
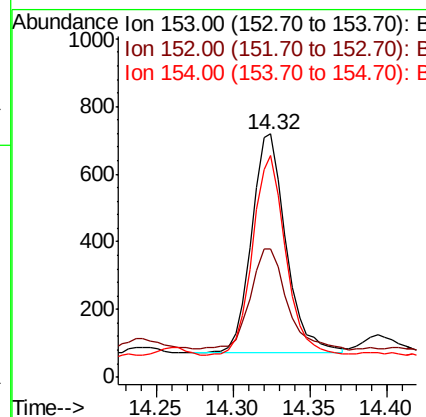
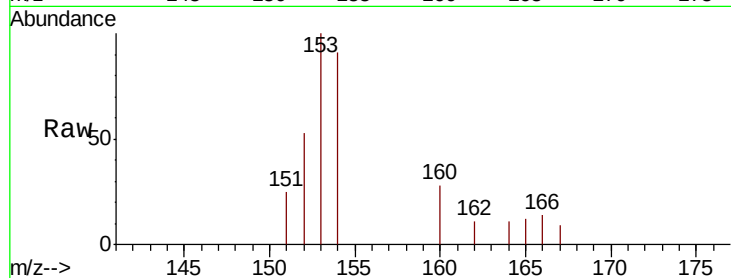
ClientSampled :

BEPF1

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 153   | Resp: | 1013  |
| Ion      | Ratio | Lower | Upper |
| 153      | 100   |       |       |
| 152      | 52.6  | 38.2  | 57.2  |
| 154      | 91.2  | 71.8  | 107.8 |

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#9

Fluorene

Concen: 0.039 ng/ul

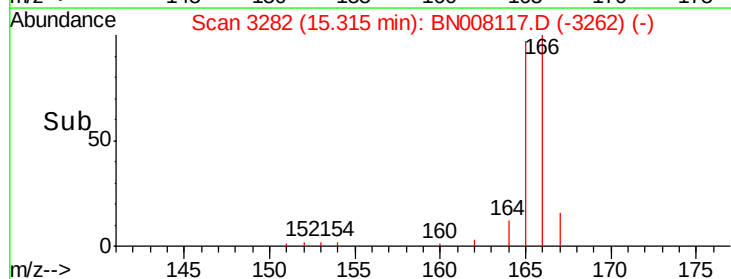
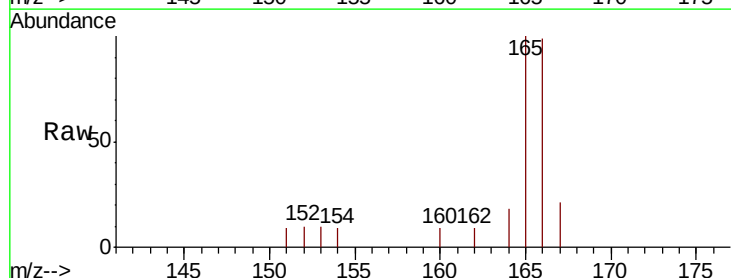
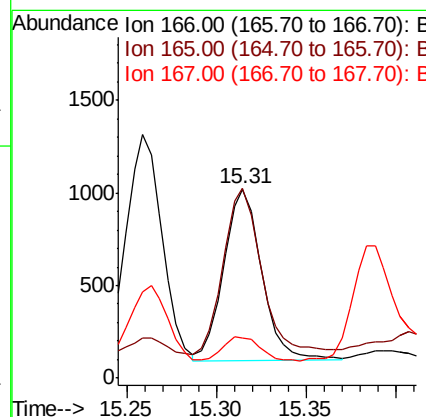
RT: 15.31 min Scan# 3282

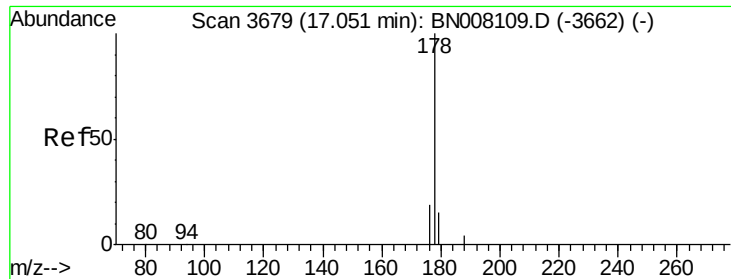
Delta R.T. -0.01 min

Lab File: BN008117.D

Acq: 12 Oct 2019 17:44

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 166   | Resp: | 1364  |
| Ion      | Ratio | Lower | Upper |
| 166      | 100   |       |       |
| 165      | 100.6 | 76.6  | 115.0 |
| 167      | 21.6  | 11.7  | 17.5# |





#12

Phenanthrene

Concen: 0.571 ng/ul m

RT: 17.05 min Scan# 3678

Delta R.T. -0.01 min

Lab File: BN008117.D

Acq: 12 Oct 2019 17:44

Instrument :

BNA\_N

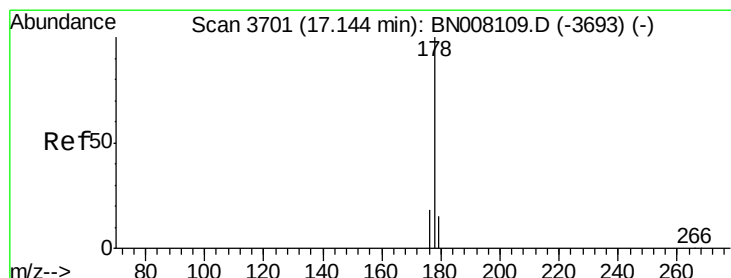
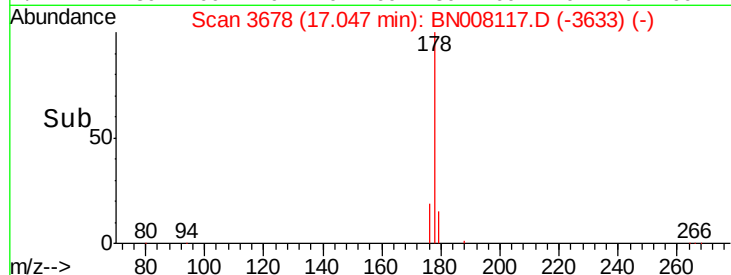
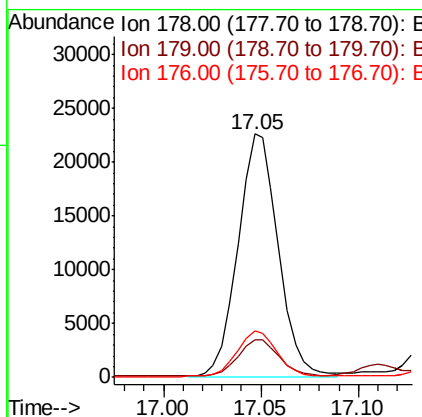
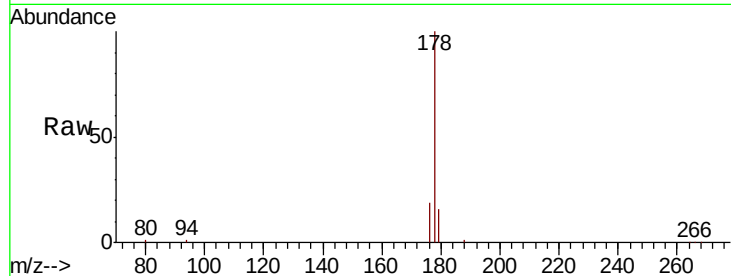
ClientSampleId :

BEPF1

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:178 | Resp: | 32341     |
| Ion Ratio   | Lower | Upper     |
| 178         | 100   |           |
| 179         | 15.6  | 12.8 19.2 |
| 176         | 19.2  | 15.4 23.2 |

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#13

Anthracene

Concen: 0.127 ng/ul m

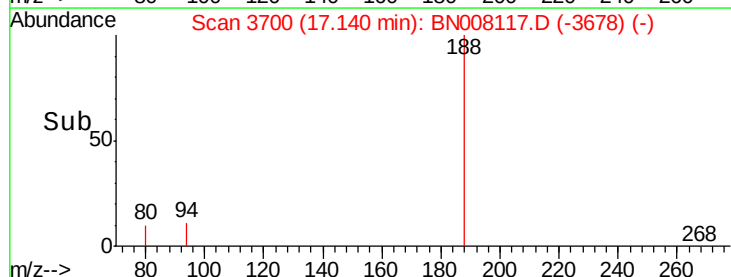
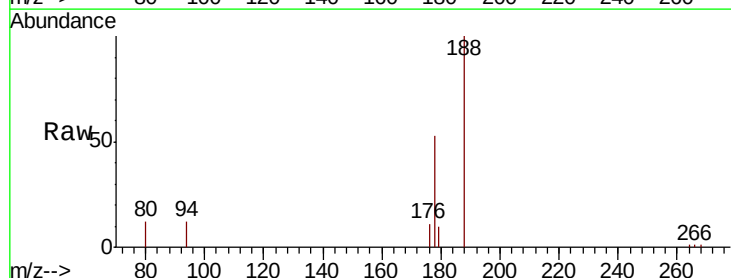
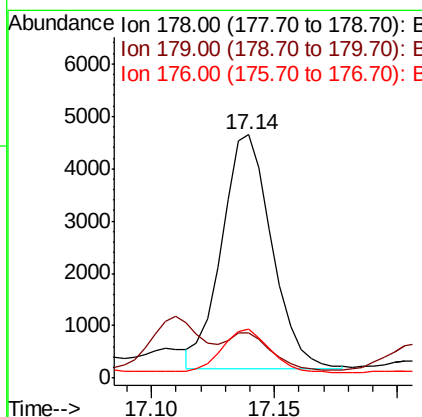
RT: 17.14 min Scan# 3700

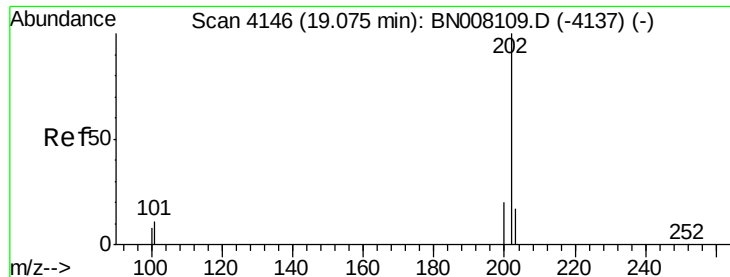
Delta R.T. -0.01 min

Lab File: BN008117.D

Acq: 12 Oct 2019 17:44

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:178 | Resp: | 6325      |
| Ion Ratio   | Lower | Upper     |
| 178         | 100   |           |
| 179         | 18.6  | 13.0 19.6 |
| 176         | 20.0  | 15.0 22.6 |





#15

Fluoranthene

Concen: 1.267 ng/ul m

RT: 19.07 min Scan# 4145

Delta R.T. -0.01 min

Lab File: BN008117.D

Acq: 12 Oct 2019 17:44

Instrument :

BNA\_N

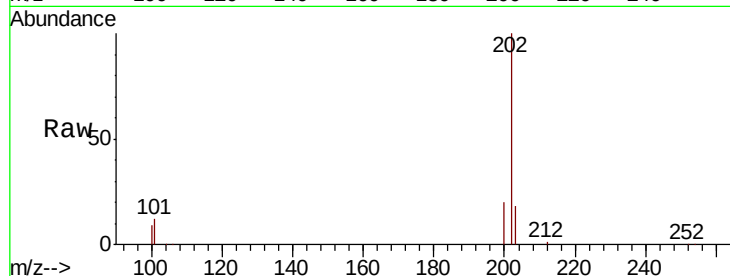
ClientSampleId :

BEPF1

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 202   | Resp: | 94843 |
| Ion Ratio | Lower | Upper |       |
| 202       | 100   |       |       |
| 101       | 11.8  | 0.0   | 31.2  |
| 100       | 9.0   | 0.0   | 28.5  |

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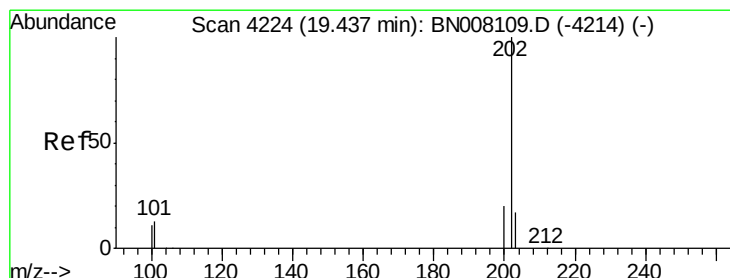
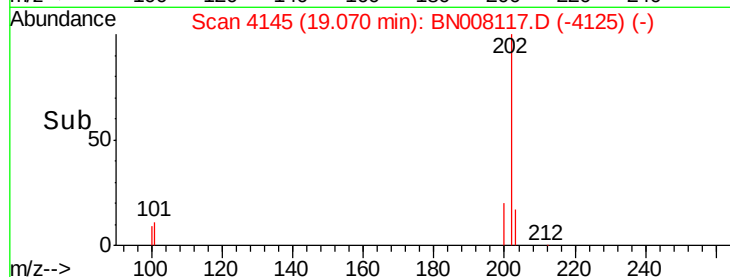
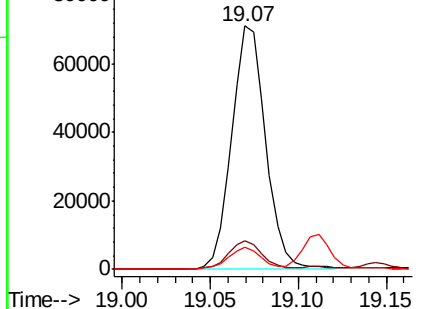
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Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B



#17

Pyrene

Concen: 0.955 ng/ul

RT: 19.44 min Scan# 4224

Delta R.T. -0.00 min

Lab File: BN008117.D

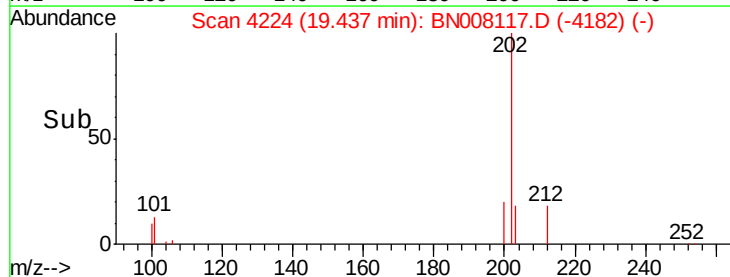
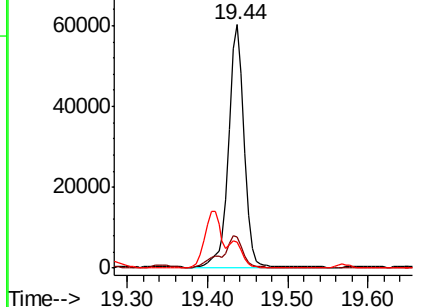
Acq: 12 Oct 2019 17:44

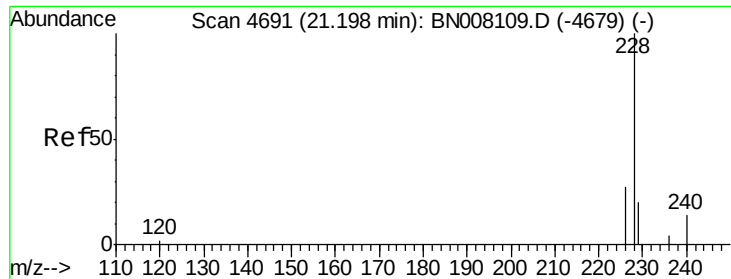
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 202   | Resp: | 78706 |
| Ion Ratio | Lower | Upper |       |
| 202       | 100   |       |       |
| 101       | 12.8  | 10.9  | 16.3  |
| 100       | 10.5  | 8.7   | 13.1  |

Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B





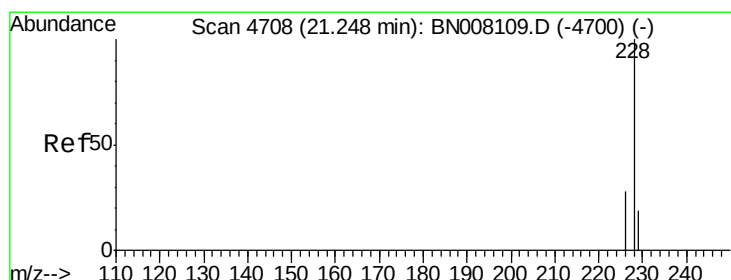
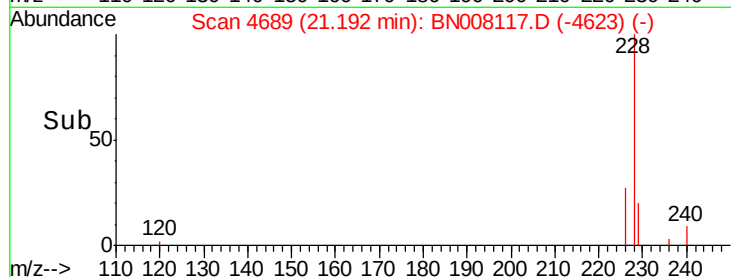
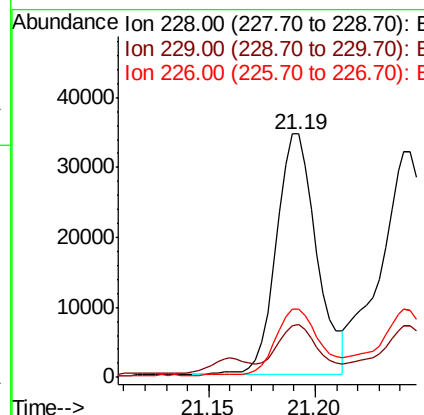
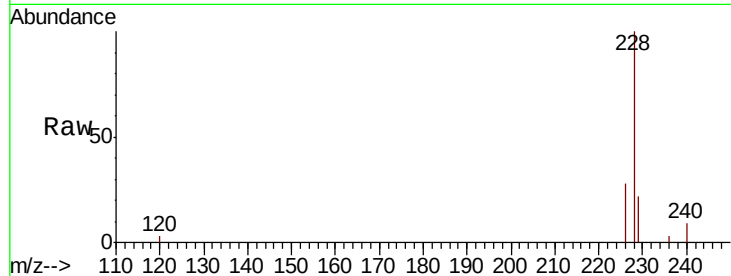
#18  
Benzo(a)anthracene  
Concen: 0.600 ng/ul  
RT: 21.19 min Scan# 4689  
Delta R.T. -0.01 min  
Lab File: BN008117.D  
Acq: 12 Oct 2019 17:44

Instrument :  
BNA\_N  
ClientSampleId :  
BEPF1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 21.8  | 16.2  | 24.2  |
| 226     | 28.3  | 21.4  | 32.0  |

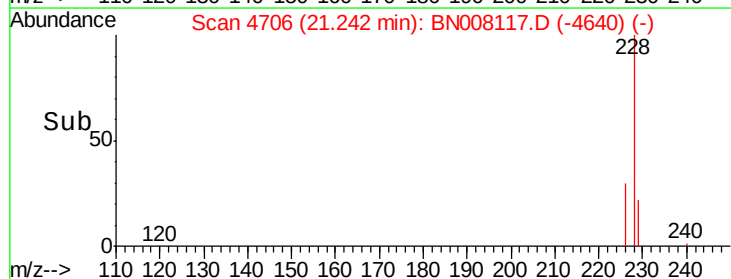
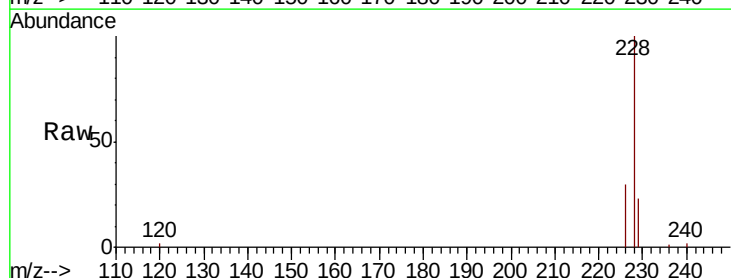
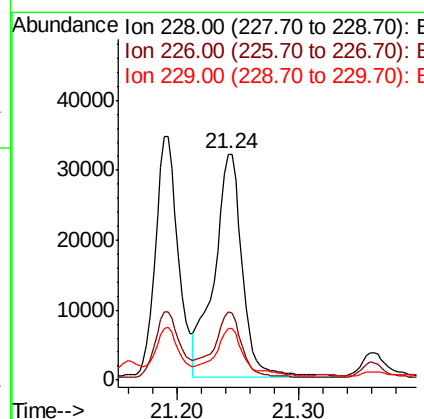
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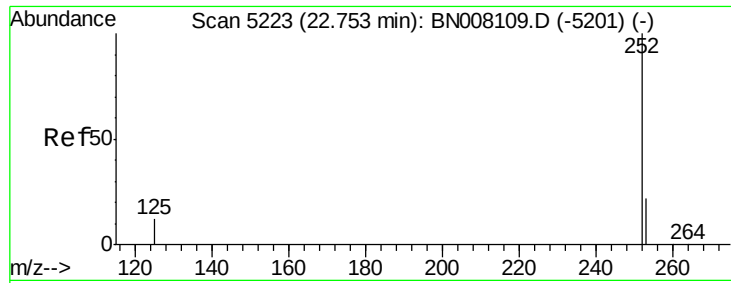
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10/15/2019 7:58:54 AM



#19  
Chrysene  
Concen: 0.556 ng/ul  
RT: 21.24 min Scan# 4706  
Delta R.T. -0.01 min  
Lab File: BN008117.D  
Acq: 12 Oct 2019 17:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.2  | 24.1  | 36.1  |
| 229     | 23.0  | 16.2  | 24.2  |





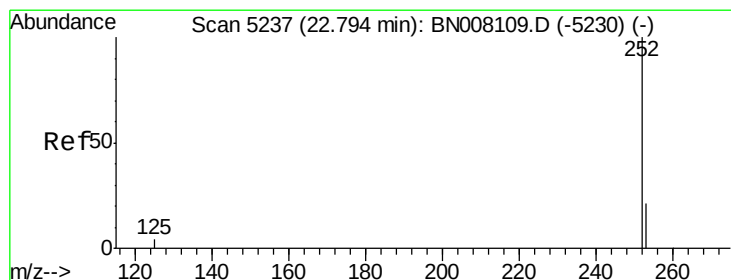
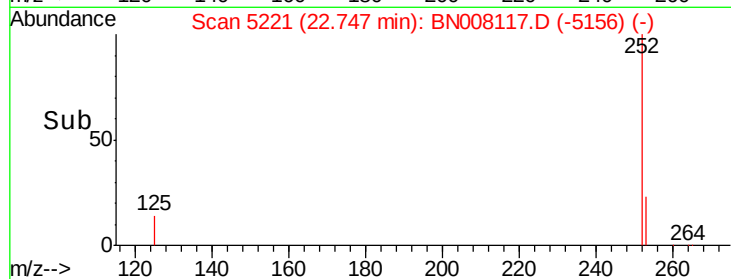
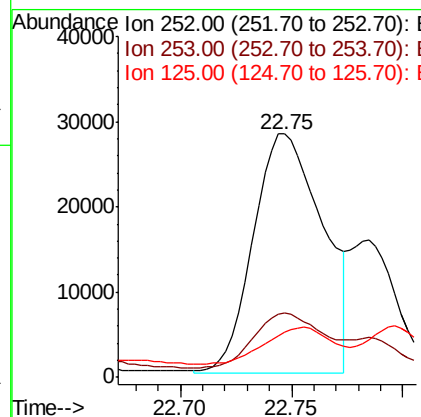
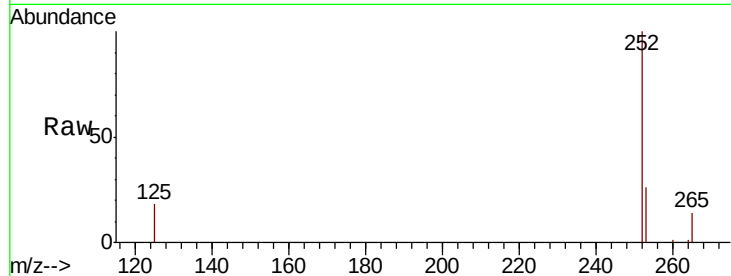
#21  
Benzo(b)fluoranthene  
Concen: 0.910 ng/ul m  
RT: 22.75 min Scan# 5221  
Delta R.T. -0.01 min  
Lab File: BN008117.D  
Acq: 12 Oct 2019 17:44

Instrument :  
BNA\_N  
ClientSampleId :  
BEPF1

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 252     | 100   | 60702 |       |       |
| 253     | 26.3  | 0.0   | 53.4  |       |
| 125     | 18.4  | 0.0   | 32.4  |       |

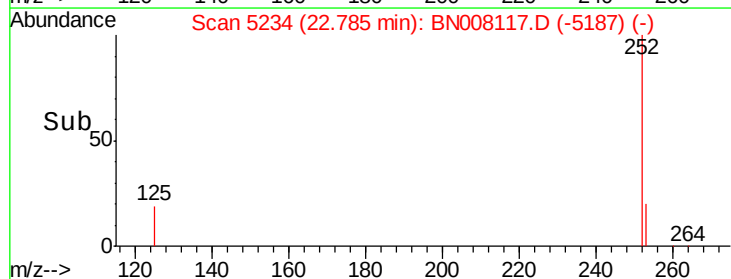
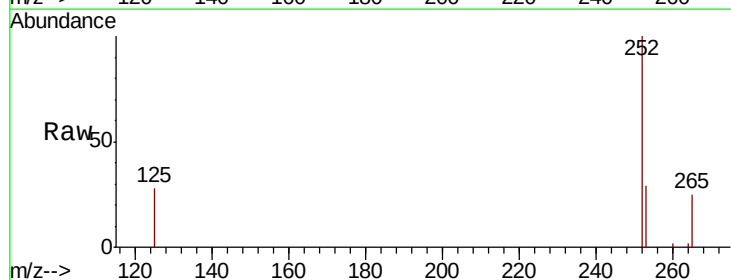
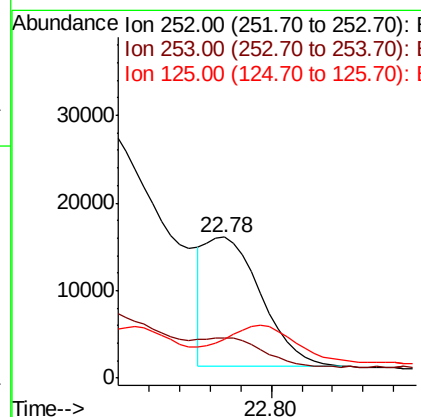
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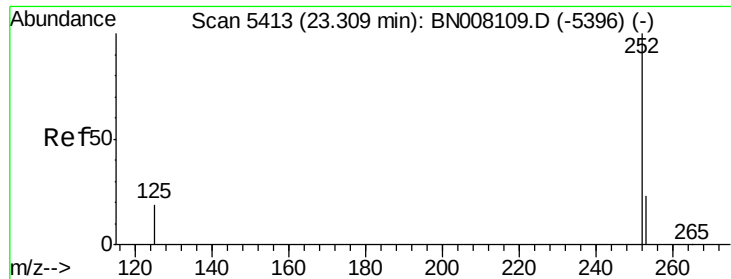


#22  
Benzo(k)fluoranthene  
Concen: 0.249 ng/ul m  
RT: 22.78 min Scan# 5234  
Delta R.T. -0.01 min  
Lab File: BN008117.D  
Acq: 12 Oct 2019 17:44

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 252     | 100   | 18821 |       |       |
| 253     | 28.9  | 21.3  | 31.9  |       |
| 125     | 27.7  | 12.3  | 18.5  |       |







#23

Benzo(a)pyrene

Concen: 0.535 ng/ul

RT: 23.30 min Scan# 5411

Delta R.T. -0.01 min

Lab File: BN008117.D

Acq: 12 Oct 2019 17:44

Instrument :

BNA\_N

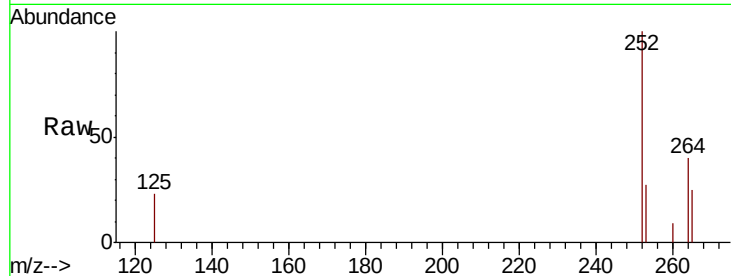
ClientSampleId :

BEPF1

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 252   | Resp: | 37597 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 27.0  | 22.8  | 34.2  |
| 125       | 22.6  | 18.4  | 27.6  |

Manual Integrations  
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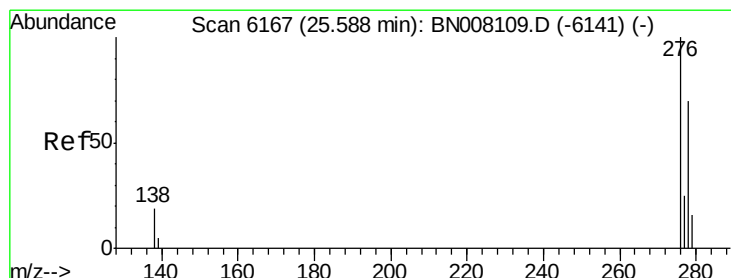
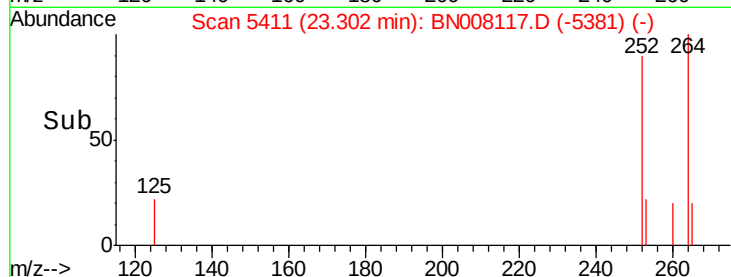
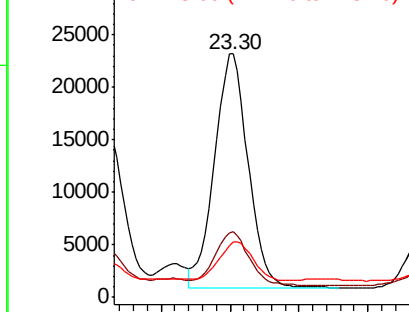


Abundance

Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E



#24

Indeno(1,2,3-cd)pyrene

Concen: 0.274 ng/ul

RT: 25.57 min Scan# 6163

Delta R.T. -0.02 min

Lab File: BN008117.D

Acq: 12 Oct 2019 17:44

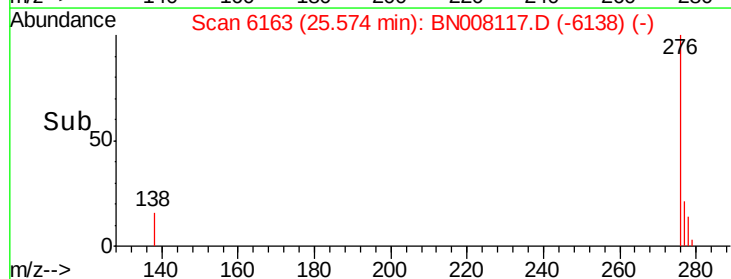
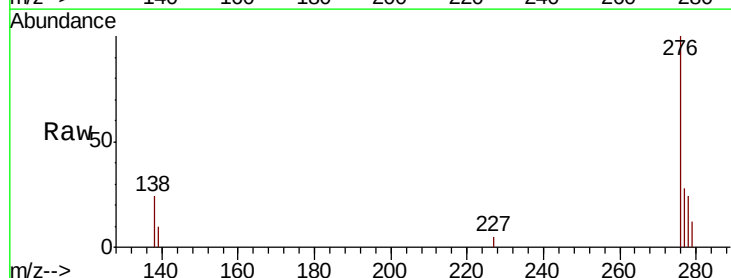
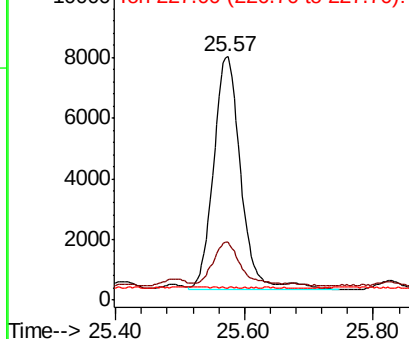
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 22674 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 19.4  | 16.1  | 24.1  |
| 227       | 0.1   | 0.2   | 0.2#  |

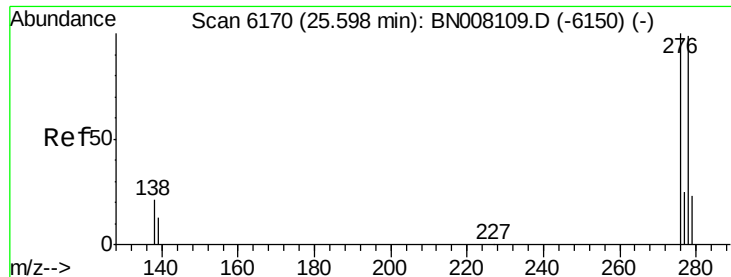
Abundance

Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 227.00 (226.70 to 227.70): E





#25

Dibenzo(a,h)anthracene

Concen: 0.078 ng/ul

RT: 25.58 min Scan# 6164

Delta R.T. -0.03 min

Lab File: BN008117.D

Acq: 12 Oct 2019 17:44

Instrument :

BNA\_N

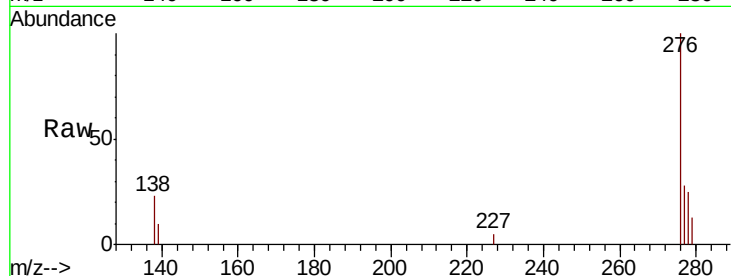
ClientSampleId :

BEPF1

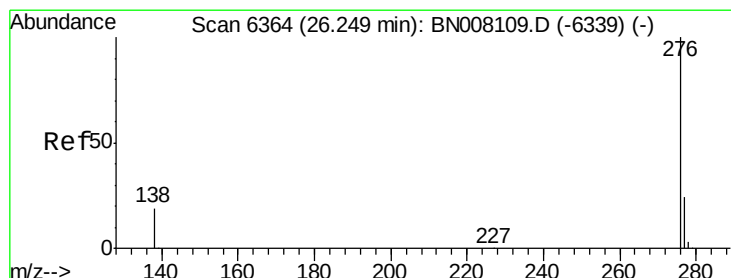
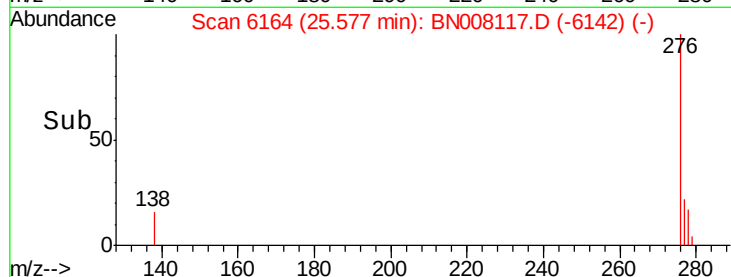
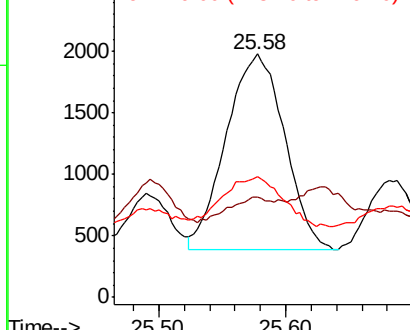
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 278   | Resp: | 5077  |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 41.2  | 15.0  | 22.6# |
| 279       | 49.6  | 22.4  | 33.6# |

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Abundance Ion 278.00 (277.70 to 278.70): E  
Ion 139.00 (138.70 to 139.70): E  
Ion 279.00 (278.70 to 279.70): E



#26

Benzo(g,h,i)perylene

Concen: 0.282 ng/ul

RT: 26.23 min Scan# 6360

Delta R.T. -0.02 min

Lab File: BN008117.D

Acq: 12 Oct 2019 17:44

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 21352 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 23.8  | 17.0  | 25.4  |
| 277       | 27.9  | 20.4  | 30.6  |

Abundance Ion 276.00 (275.70 to 276.70): E  
Ion 138.00 (137.70 to 138.70): E  
Ion 277.00 (276.70 to 277.70): E

