

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120219\  
 Data File : BN008812.D  
 Acq On : 02 Dec 2019 13:43  
 Operator : JU  
 Sample : K5851-07  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 C0AA5

Manual Integrations  
 APPROVED

mohammad  
 12/3/2019 2:38:43 PM

Quant Time: Dec 02 14:19:35 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111519.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Dec 02 12:46:36 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|--------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.59  | 152  | 5378     | 0.40   | ng/ul  | 0.00     |
| 2) Naphthalene-d8           | 10.35 | 136  | 21881    | 0.40   | ng/ul  | 0.00     |
| 6) Acenaphthene-d10         | 14.21 | 164  | 12443    | 0.40   | ng/ul  | 0.00     |
| 10) Phenanthrene-d10        | 16.96 | 188  | 26235    | 0.40   | ng/ul  | 0.00     |
| 16) Chrysene-d12            | 21.16 | 240  | 19397    | 0.40   | ng/ul  | 0.00     |
| 20) Perylene-d12            | 23.32 | 264  | 17311    | 0.40   | ng/ul  | 0.00     |
| System Monitoring Compounds |       |      |          |        |        |          |
| 4) 2-Methylnaphthalene-d10  | 11.94 | 152  | 7389     | 0.21   | ng/ul  | 0.00     |
| 14) Fluoranthene-d10        | 18.99 | 212  | 18211    | 0.23   | ng/ul  | 0.00     |
| Target Compounds            |       |      |          | Ovalue |        |          |
| 3) Naphthalene              | 10.39 | 128  | 4831     | 0.073  | ng/ul  | 96       |
| 5) 2-Methylnaphthalene      | 12.01 | 142  | 3270     | 0.071  | ng/ul  | 99       |
| 7) Acenaphthylene           | 13.93 | 152  | 25725    | 0.374  | ng/ul  | 99       |
| 8) Acenaphthene             | 14.27 | 153  | 3583     | 0.070  | ng/ul  | 99       |
| 9) Fluorene                 | 15.27 | 166  | 23697    | 0.395  | ng/ul  | 99       |
| 11) Pentachlorophenol       | 16.62 | 266  | 404      | 0.041  | ng/ul  | 96       |
| 12) Phenanthrene            | 17.00 | 178  | 398783   | 4.507  | ng/ul  | 99       |
| 13) Anthracene              | 17.09 | 178  | 83812    | 1.003  | ng/ul  | 100      |
| 15) Fluoranthene            | 19.02 | 202  | 757602   | 6.970  | ng/ul  | 99       |
| 17) Pyrene                  | 19.39 | 202  | 564938   | 7.260  | ng/ul  | 99       |
| 18) Benzo(a)anthracene      | 21.14 | 228  | 270961   | 3.474  | ng/ul  | 97       |
| 19) Chrysene                | 21.19 | 228  | 284851   | 3.718  | ng/ul  | 97       |
| 21) Benzo(b)fluoranthene    | 22.68 | 252  | 287135m  | 4.022  | ng/ul  |          |
| 22) Benzo(k)fluoranthene    | 22.72 | 252  | 110448m  | 1.560  | ng/ul  |          |
| 23) Benzo(a)pyrene          | 23.23 | 252  | 183134   | 2.733  | ng/ul  | 96       |
| 24) Indeno(1,2,3-cd)pyrene  | 25.45 | 276  | 103649   | 1.323  | ng/ul# | 90       |
| 25) Dibenzo(a,h)anthracene  | 25.46 | 278  | 26762    | 0.423  | ng/ul# | 78       |
| 26) Benzo(g,h,i)perylene    | 26.09 | 276  | 97006    | 1.480  | ng/ul  | 100      |

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

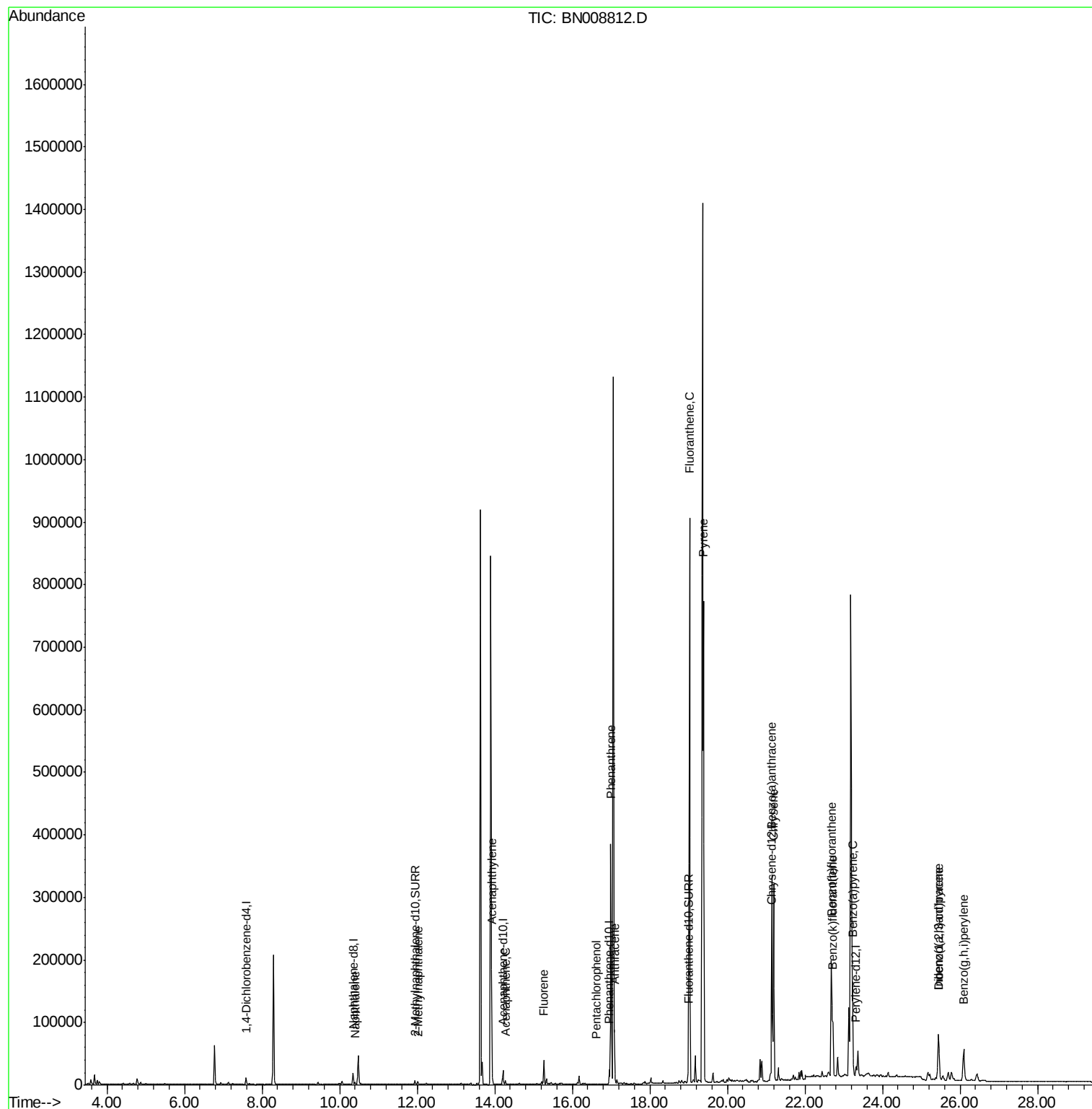
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120219\  
Data File : BN008812.D  
Acq On : 02 Dec 2019 13:43  
Operator : JU  
Sample : K5851-07  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

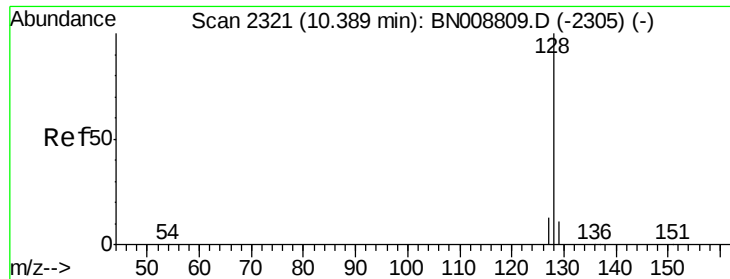
Instrument :  
BNA\_N  
ClientSampleId :  
C0AA5

Manual Integrations  
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Quant Time: Dec 02 14:19:35 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111519.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Dec 02 12:46:36 2019  
Response via : Initial Calibration





#3

Naphthalene

Concen: 0.073 ng/ul

RT: 10.39 min Scan# 2322

Delta R.T. 0.01 min

Lab File: BN008812.D

Acq: 02 Dec 2019 13:43

Instrument :

BNA\_N

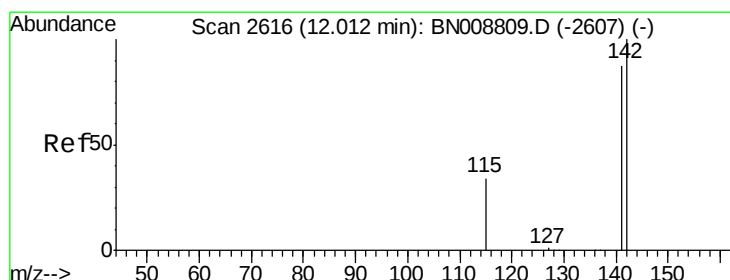
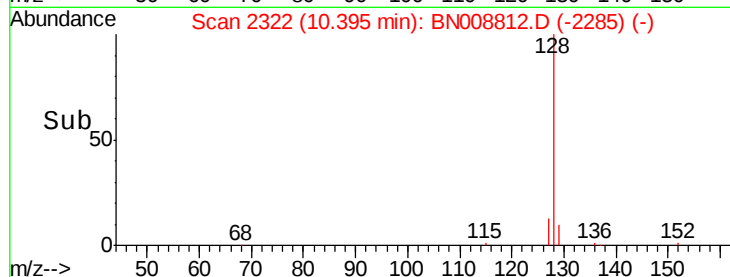
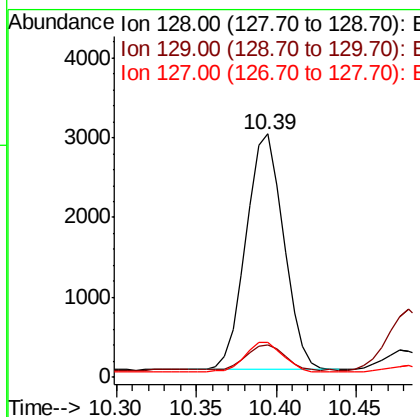
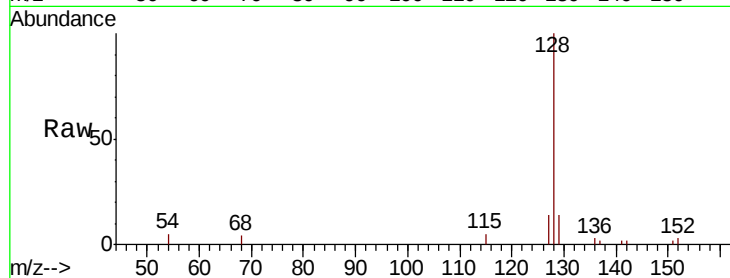
ClientSampleId :

C0AA5

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 128   | Resp: | 4831  |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 129      | 13.5  | 9.1   | 13.7  |
| 127      | 14.2  | 10.7  | 16.1  |

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#5

2-Methylnaphthalene

Concen: 0.071 ng/ul

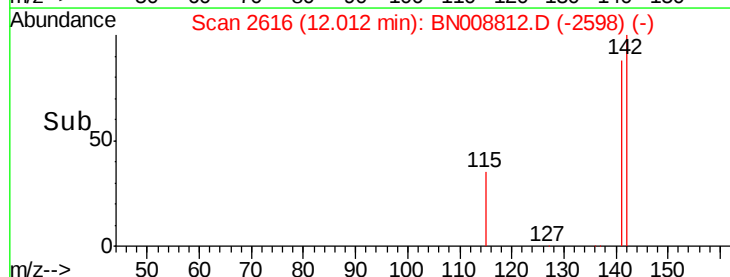
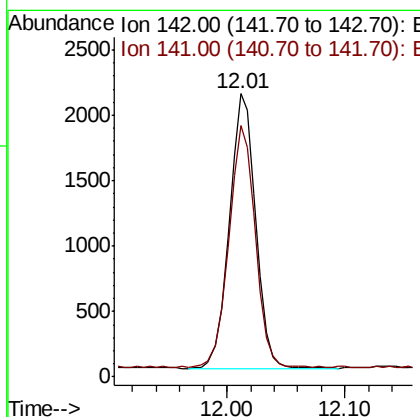
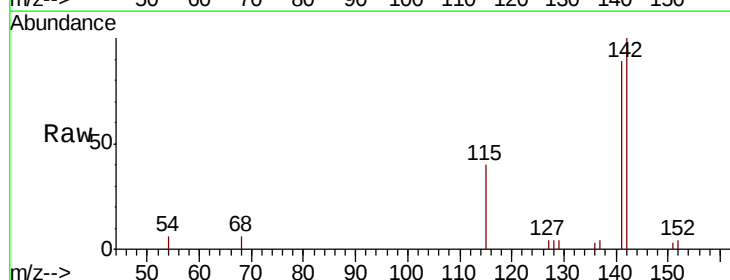
RT: 12.01 min Scan# 2616

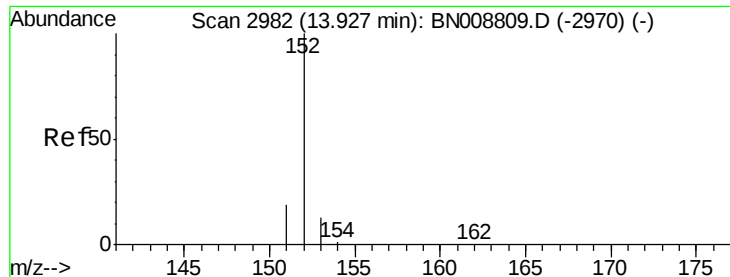
Delta R.T. -0.00 min

Lab File: BN008812.D

Acq: 02 Dec 2019 13:43

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 142   | Resp: | 3270  |
| Ion      | Ratio | Lower | Upper |
| 142      | 100   |       |       |
| 141      | 88.4  | 70.1  | 105.1 |





#7

Acenaphthylene

Concen: 0.374 ng/ul

RT: 13.93 min Scan# 2982

Delta R.T. -0.00 min

Lab File: BN008812.D

Acq: 02 Dec 2019 13:43

Instrument :

BNA\_N

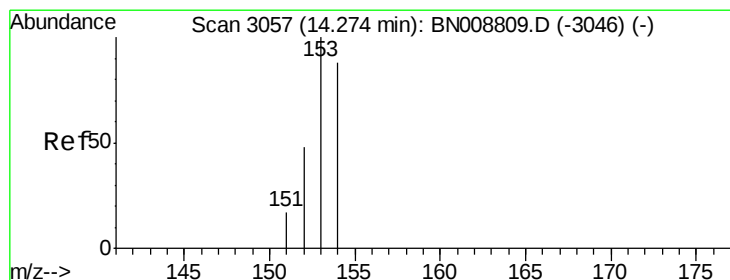
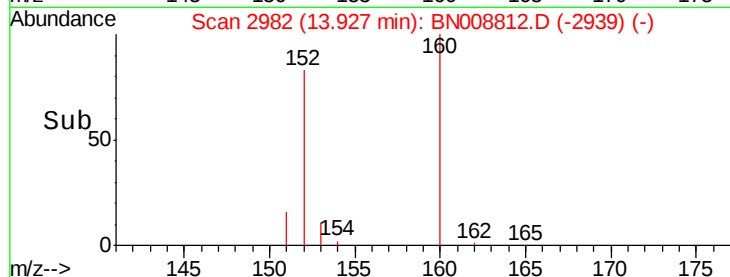
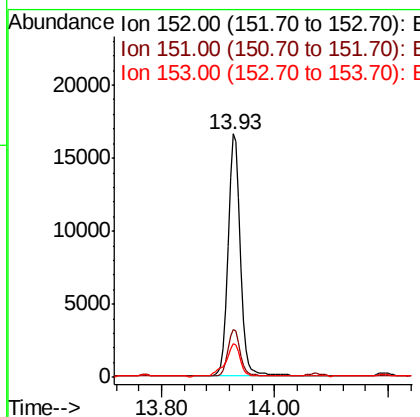
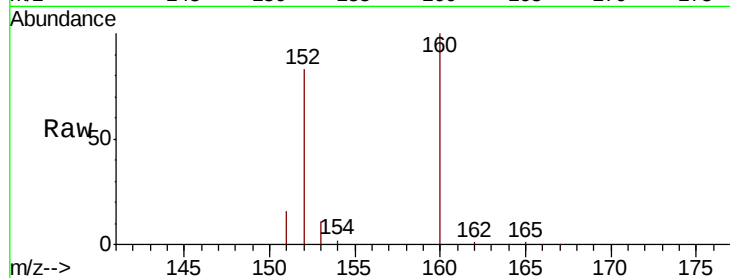
ClientSampleId :

C0AA5

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 152   | Resp: | 25725 |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 151       | 19.8  | 15.8  | 23.6  |
| 153       | 13.6  | 10.6  | 15.8  |

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#8

Acenaphthene

Concen: 0.070 ng/ul

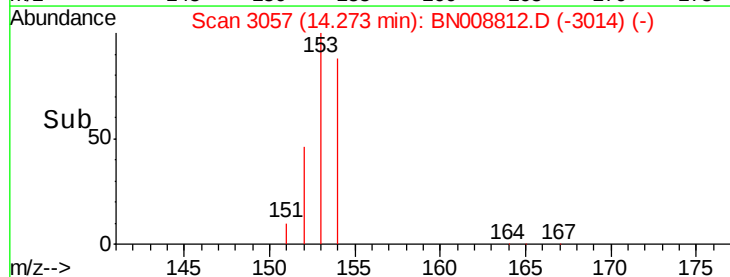
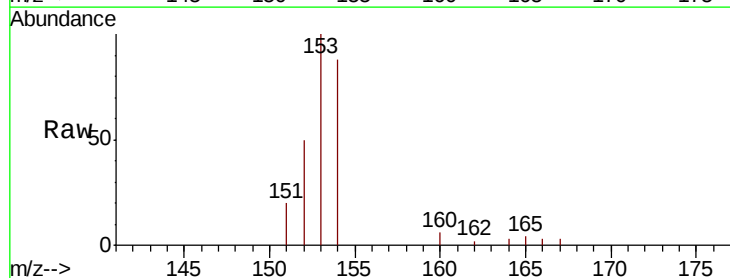
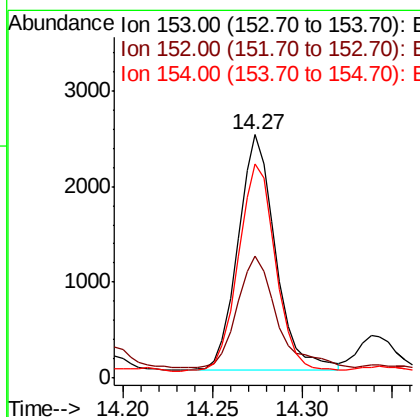
RT: 14.27 min Scan# 3057

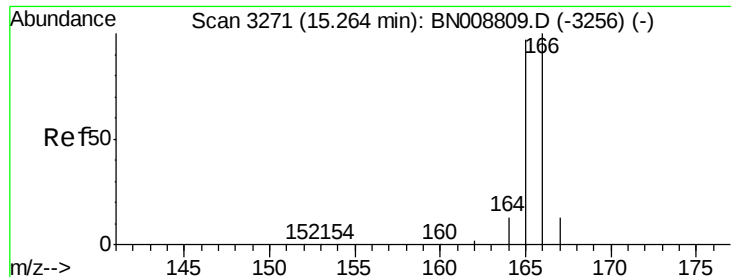
Delta R.T. -0.00 min

Lab File: BN008812.D

Acq: 02 Dec 2019 13:43

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 153   | Resp: | 3583  |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 49.9  | 38.6  | 58.0  |
| 154       | 88.2  | 70.6  | 105.8 |





#9

Fluorene

Concen: 0.395 ng/ul

RT: 15.27 min Scan# 3272

Delta R.T. 0.00 min

Lab File: BN008812.D

Acq: 02 Dec 2019 13:43

Instrument :

BNA\_N

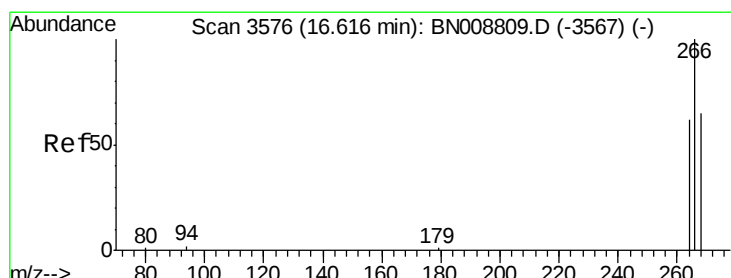
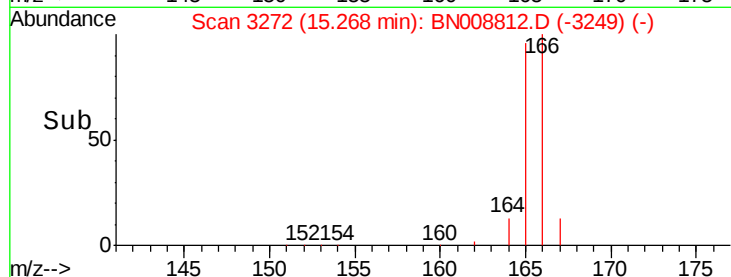
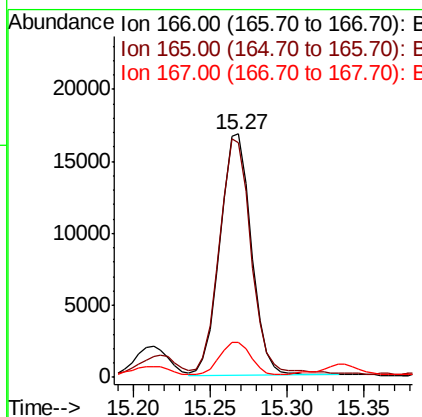
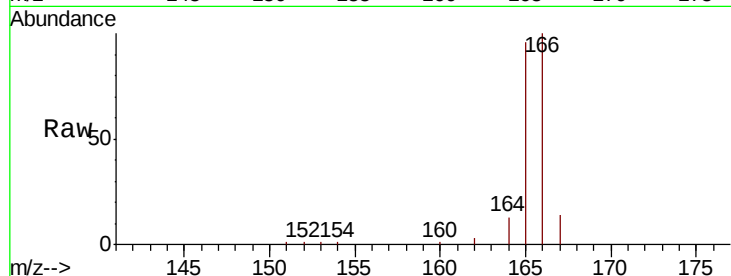
ClientSampleId :

C0AA5

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 166   | Resp: | 23697 |
| Ion Ratio | Lower | Upper |       |
| 166       | 100   |       |       |
| 165       | 96.3  | 77.7  | 116.5 |
| 167       | 14.4  | 11.1  | 16.7  |

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#11

Pentachlorophenol

Concen: 0.041 ng/ul

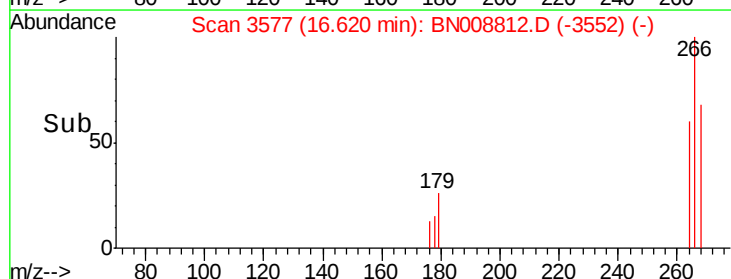
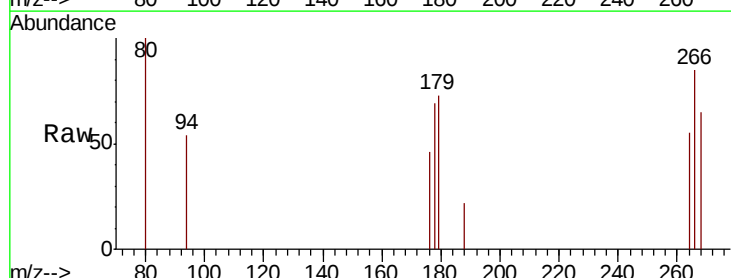
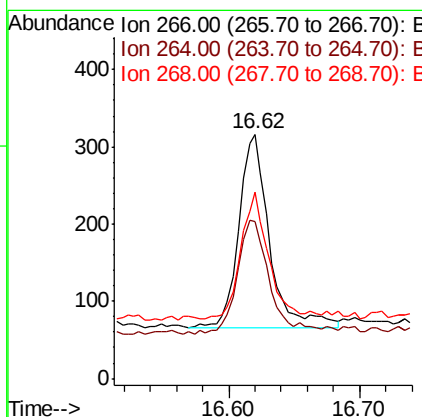
RT: 16.62 min Scan# 3577

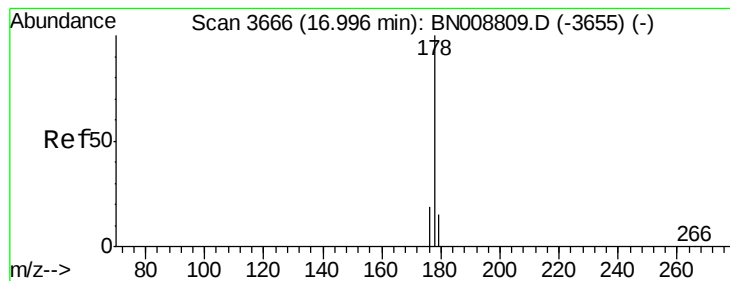
Delta R.T. 0.00 min

Lab File: BN008812.D

Acq: 02 Dec 2019 13:43

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 266   | Resp: | 404  |
| Ion Ratio | Lower | Upper |      |
| 266       | 100   |       |      |
| 264       | 63.6  | 50.4  | 75.6 |
| 268       | 60.4  | 52.2  | 78.4 |





#12

Phenanthrene

Concen: 4.507 ng/ul

RT: 17.00 min Scan# 3666

Delta R.T. -0.00 min

Lab File: BN008812.D

Acq: 02 Dec 2019 13:43

Instrument :

BNA\_N

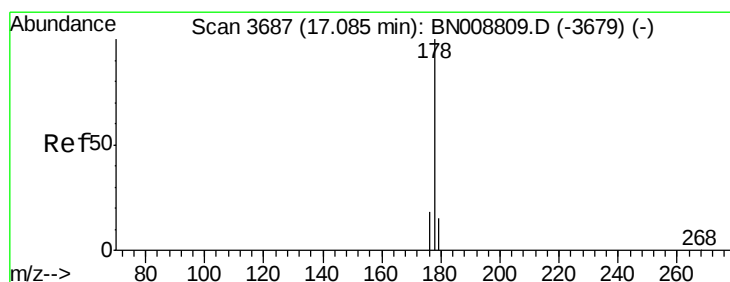
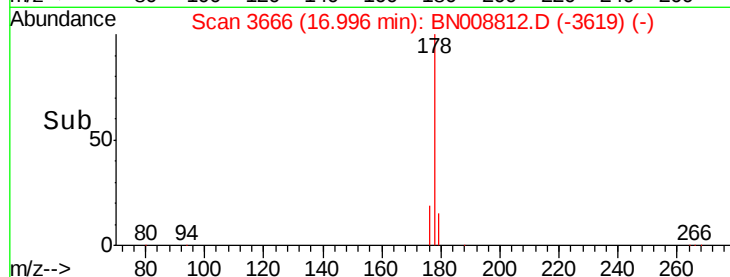
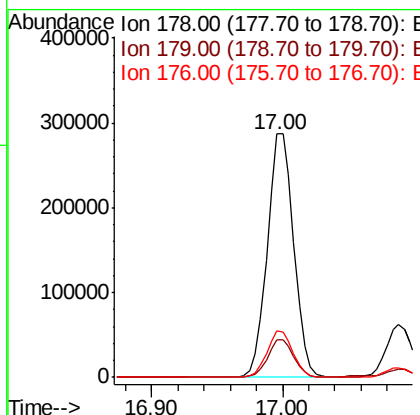
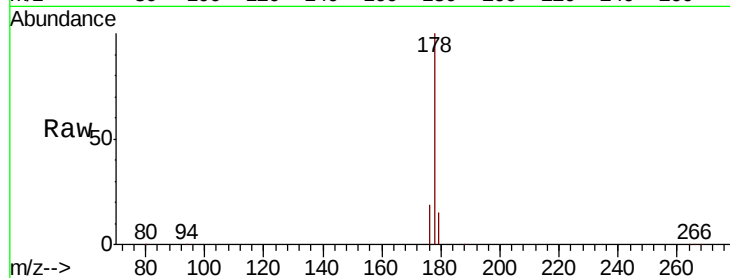
ClientSampleId :

C0AA5

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 178   | Resp: | 398783 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 179       | 15.2  | 12.6  | 18.8   |
| 176       | 18.9  | 15.3  | 22.9   |

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#13

Anthracene

Concen: 1.003 ng/ul

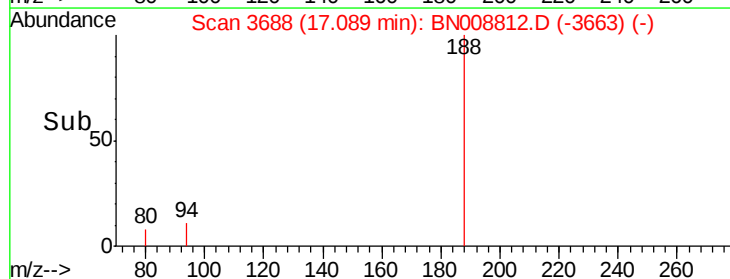
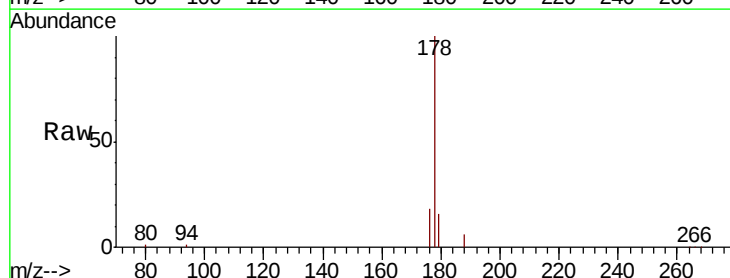
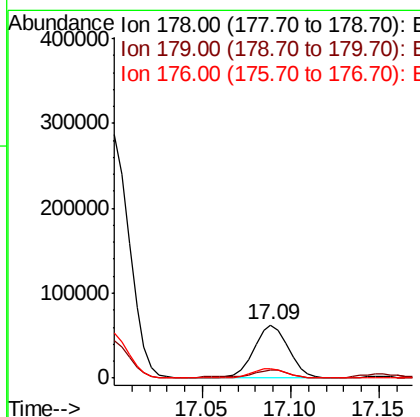
RT: 17.09 min Scan# 3688

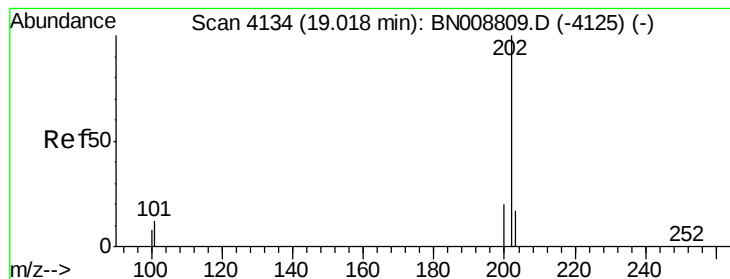
Delta R.T. 0.00 min

Lab File: BN008812.D

Acq: 02 Dec 2019 13:43

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 83812 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 179       | 15.6  | 12.2  | 18.4  |
| 176       | 18.3  | 14.7  | 22.1  |





#15

Fluoranthene

Concen: 6.970 ng/ul

RT: 19.02 min Scan# 4135

Delta R.T. 0.00 min

Lab File: BN008812.D

Acq: 02 Dec 2019 13:43

Instrument :

BNA\_N

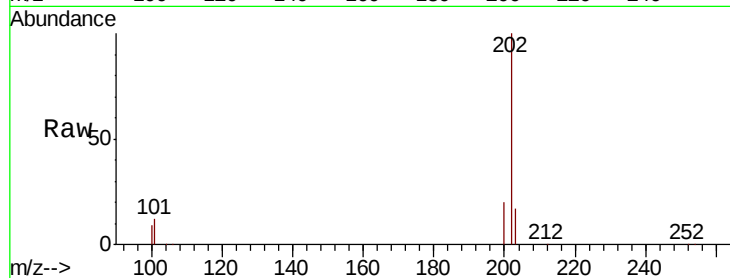
ClientSampleId :

C0AA5

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 202   | Resp: | 757602 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 11.9  | 0.0   | 32.4   |
| 100       | 8.8   | 0.0   | 29.2   |

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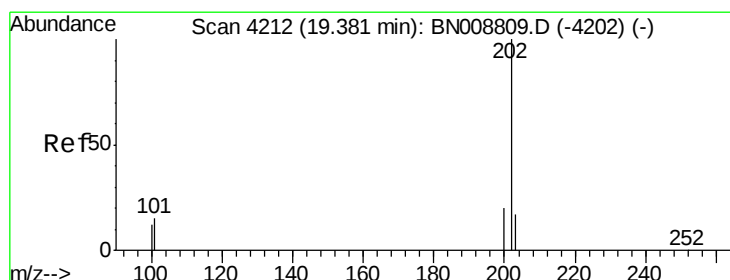
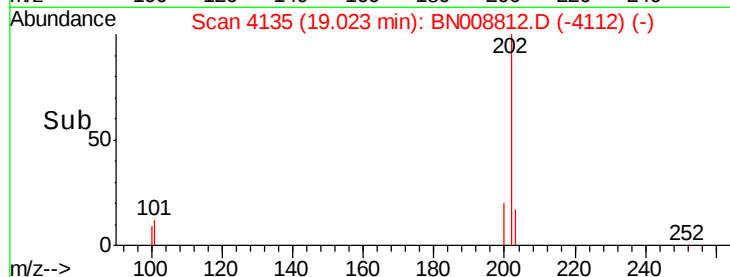
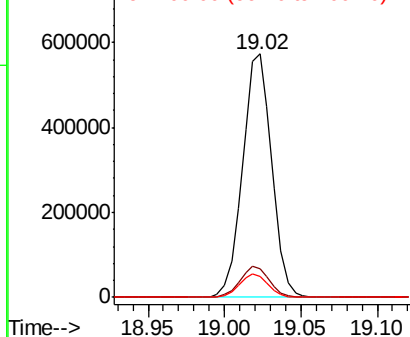


Abundance

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: 7.260 ng/ul

RT: 19.39 min Scan# 4213

Delta R.T. 0.00 min

Lab File: BN008812.D

Acq: 02 Dec 2019 13:43

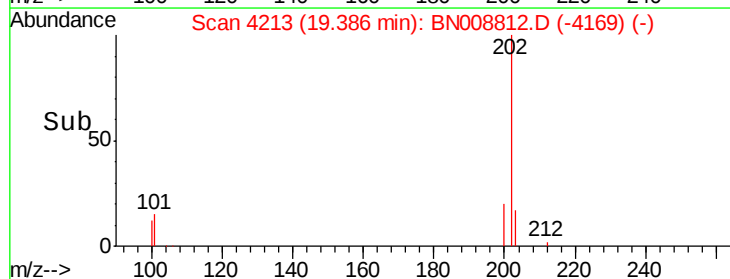
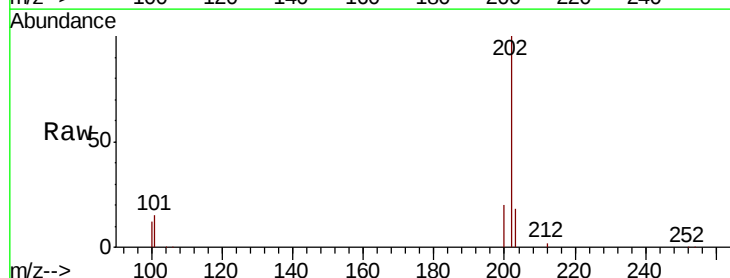
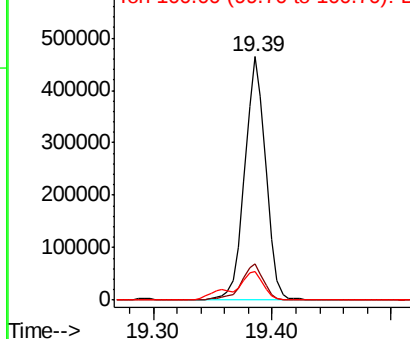
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 564938 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 14.6  | 12.2  | 18.4   |
| 100       | 11.7  | 9.5   | 14.3   |

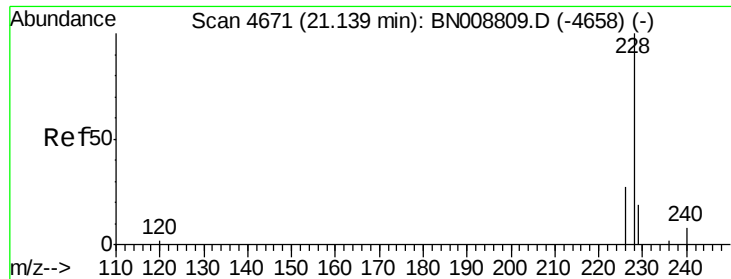
Abundance

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





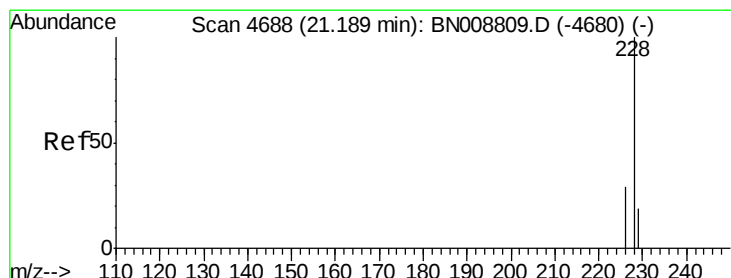
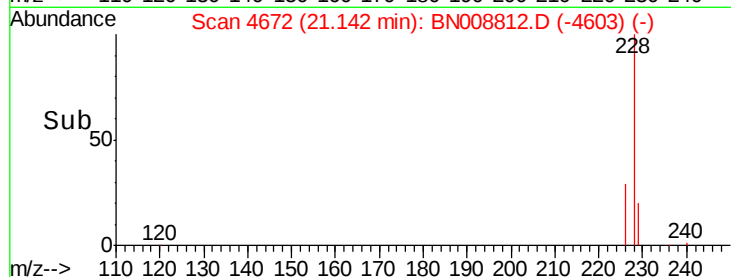
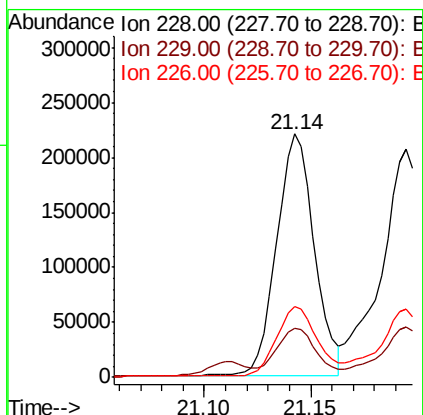
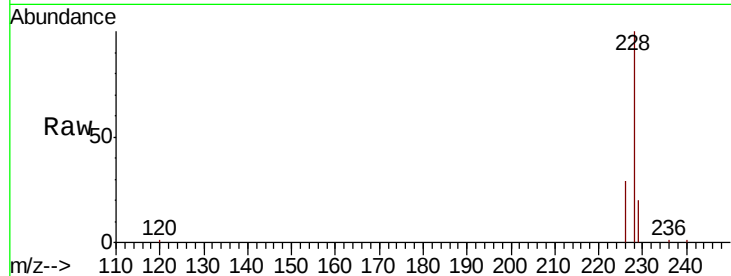
#18  
Benzo(a)anthracene  
Concen: 3.474 ng/ul  
RT: 21.14 min Scan# 4672  
Delta R.T. 0.00 min  
Lab File: BN008812.D  
Acq: 02 Dec 2019 13:43

Instrument :  
BNA\_N  
ClientSampled :  
C0AA5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 20.4  | 15.7  | 23.5  |
| 226     | 29.2  | 21.5  | 32.3  |

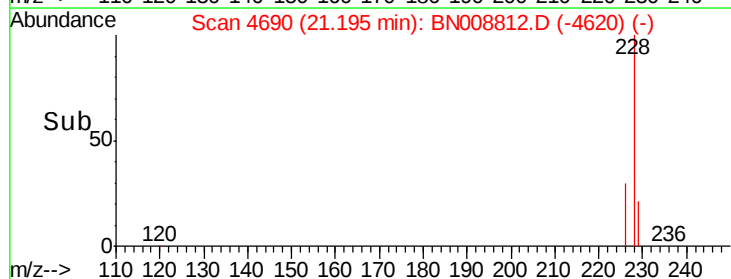
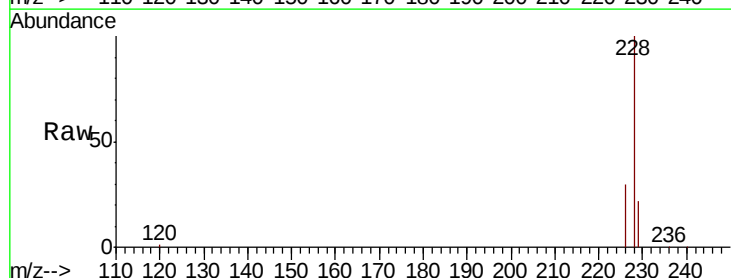
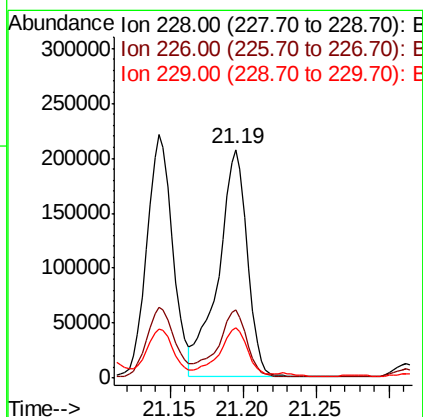
Manual Integrations  
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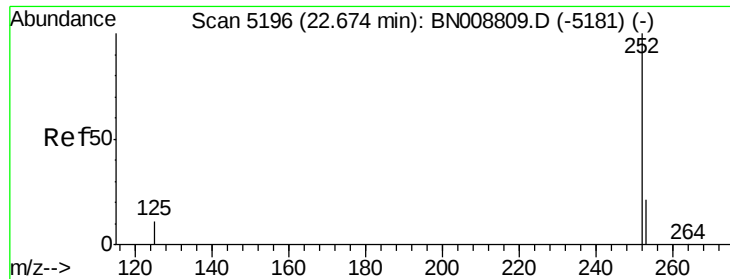
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#19  
Chrysene  
Concen: 3.718 ng/ul  
RT: 21.19 min Scan# 4690  
Delta R.T. 0.01 min  
Lab File: BN008812.D  
Acq: 02 Dec 2019 13:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.1  | 23.8  | 35.6  |
| 229     | 22.0  | 15.6  | 23.4  |





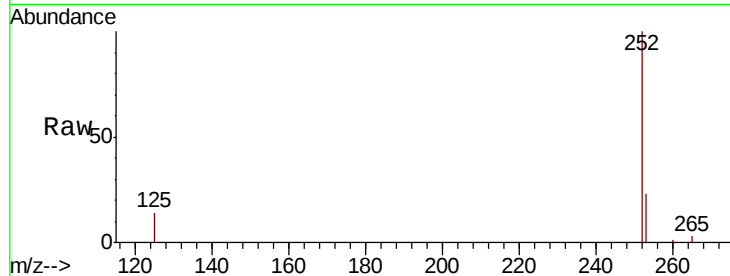
#21  
Benzo(b)fluoranthene  
Concen: 4.022 ng/ul m  
RT: 22.68 min Scan# 5199  
Delta R.T. 0.01 min  
Lab File: BN008812.D  
Acq: 02 Dec 2019 13:43

Instrument :  
BNA\_N  
ClientSampleId :  
C0AA5

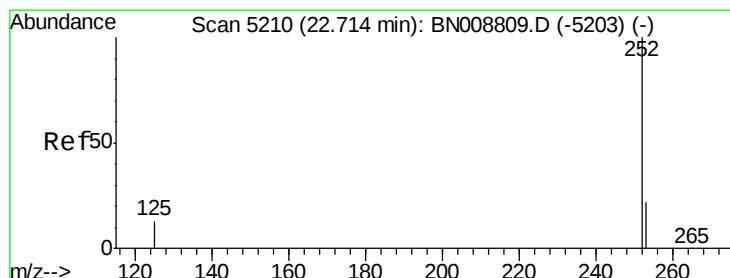
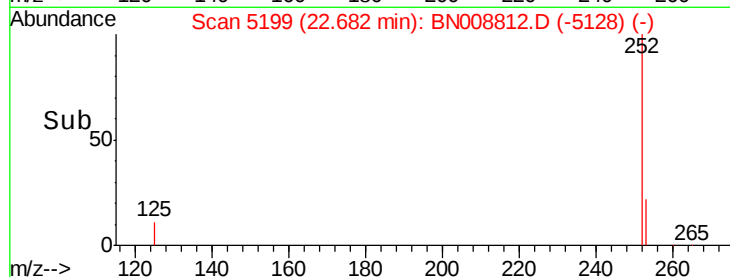
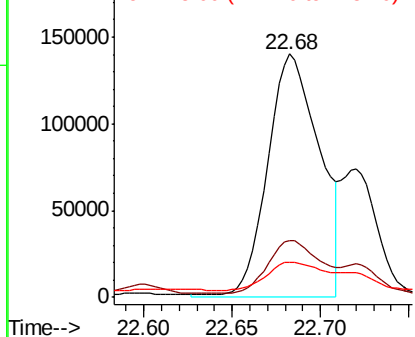
| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 23.4  | 0.0        | 48.6  |
| 125     | 14.4  | 0.0        | 31.6  |

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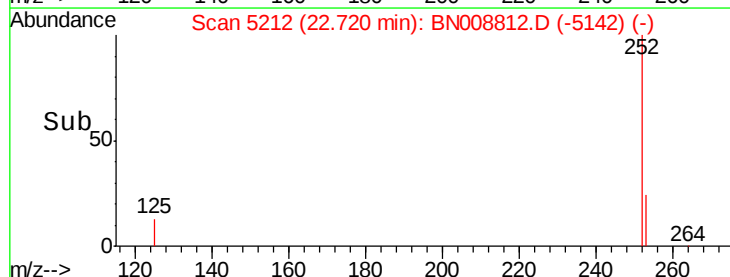
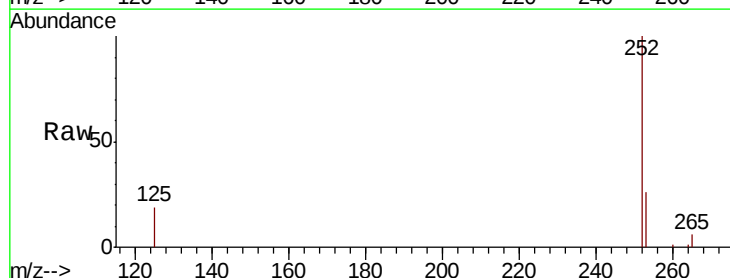
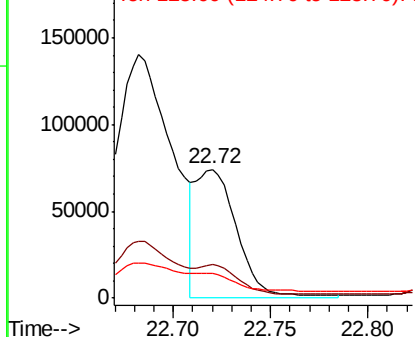
Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

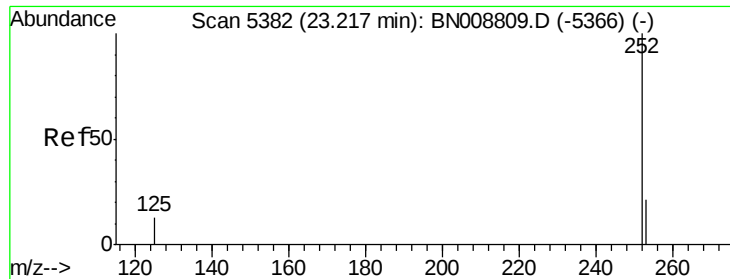


#22  
Benzo(k)fluoranthene  
Concen: 1.560 ng/ul m  
RT: 22.72 min Scan# 5212  
Delta R.T. 0.01 min  
Lab File: BN008812.D  
Acq: 02 Dec 2019 13:43

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 26.2  | 19.6       | 29.4  |
| 125     | 18.9  | 13.8       | 20.6  |

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





#23

Benzo(a)pyrene

Concen: 2.733 ng/ul

RT: 23.23 min Scan# 5386

Delta R.T. 0.01 min

Lab File: BN008812.D

Acq: 02 Dec 2019 13:43

Instrument :

BNA\_N

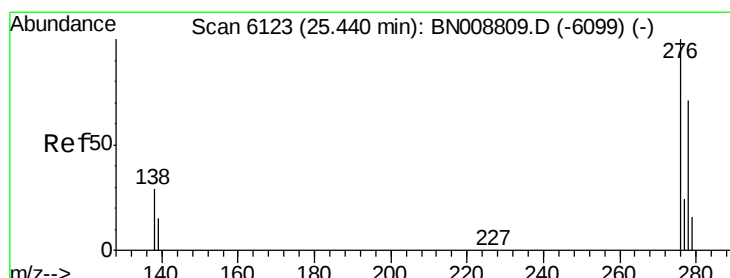
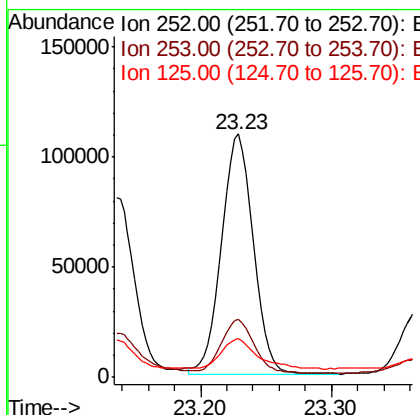
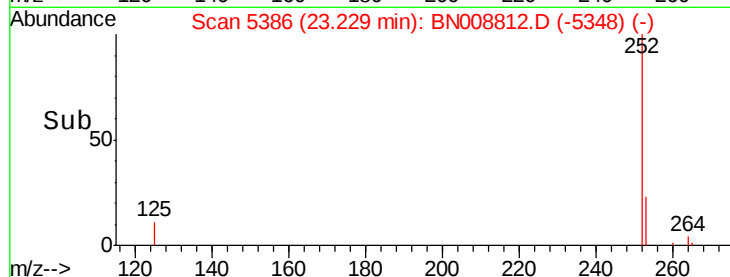
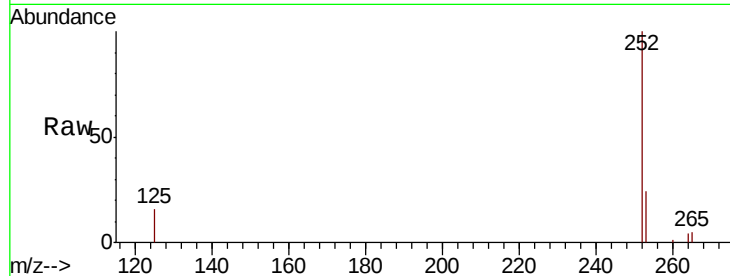
ClientSampled :

C0AA5

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 183134 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.8  | 19.9  | 29.9   |
| 125       | 15.7  | 14.6  | 22.0   |

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#24

Indeno(1,2,3-cd)pyrene

Concen: 1.323 ng/ul

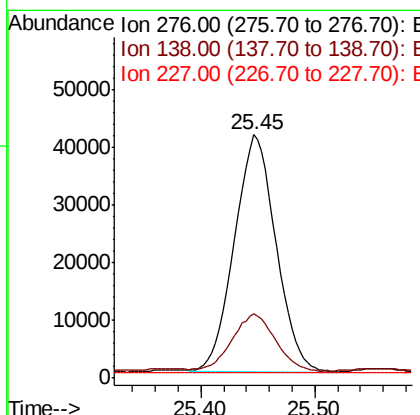
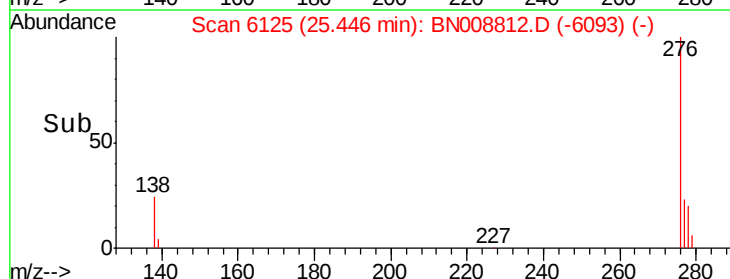
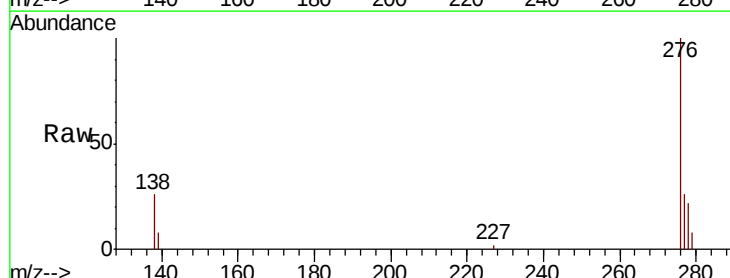
RT: 25.45 min Scan# 6125

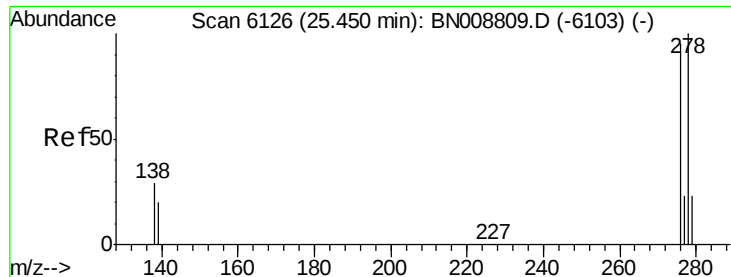
Delta R.T. 0.01 min

Lab File: BN008812.D

Acq: 02 Dec 2019 13:43

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 276   | Resp: | 103649 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 24.5  | 23.8  | 35.6   |
| 227       | 0.0   | 0.2   | 0.2#   |





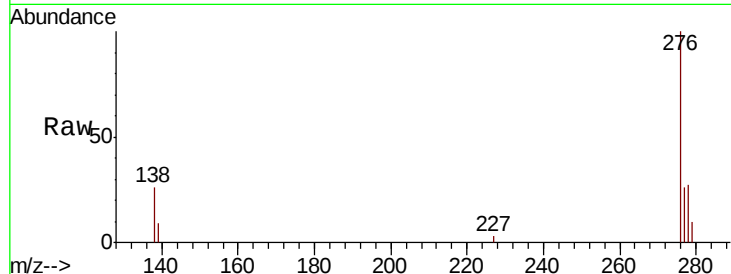
#25  
Dibenzo(a,h)anthracene  
Concen: 0.423 ng/ul  
RT: 25.46 min Scan# 6128  
Delta R.T. 0.01 min  
Lab File: BN008812.D  
Acq: 02 Dec 2019 13:43

Instrument :  
BNA\_N  
ClientSampled :  
C0AA5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 31.9  | 17.4  | 26.0# |
| 279     | 36.5  | 20.5  | 30.7# |

Manual Integrations  
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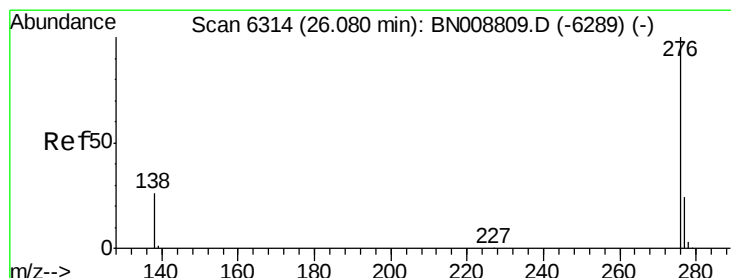
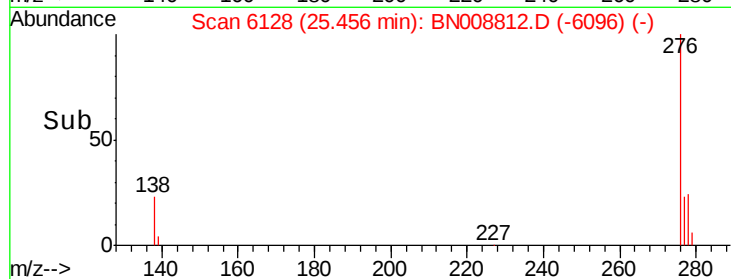
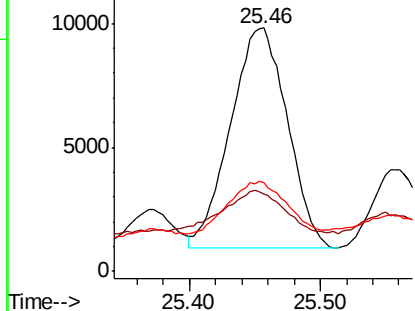


Abundance

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: 1.480 ng/ul  
RT: 26.09 min Scan# 6318  
Delta R.T. 0.01 min  
Lab File: BN008812.D  
Acq: 02 Dec 2019 13:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 27.3  | 21.9  | 32.9  |
| 277     | 25.1  | 19.9  | 29.9  |

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

