

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120220\  
 Data File : BN012821.D  
 Acq On : 02 Dec 2020 15:56  
 Operator : CG/JU  
 Sample : L4865-19  
 Misc :  
 ALS Vial : 48 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 C0AZ9

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Quant Time: Dec 02 17:02:50 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN112020.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 02 12:19:27 2020  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.42  | 152  | 743      | 0.40  | ng/ul  | 0.00     |
| 2) Naphthalene-d8           | 10.18 | 136  | 3088     | 0.40  | ng/ul  | 0.00     |
| 6) Acenaphthene-d10         | 14.07 | 164  | 1774     | 0.40  | ng/ul  | 0.00     |
| 10) Phenanthrene-d10        | 16.83 | 188  | 3811     | 0.40  | ng/ul  | 0.00     |
| 16) Chrysene-d12            | 21.05 | 240  | 3388     | 0.40  | ng/ul  | 0.00     |
| 20) Perylene-d12            | 23.16 | 264  | 3283     | 0.40  | ng/ul  | 0.00     |
| System Monitoring Compounds |       |      |          |       |        |          |
| 4) 2-Methylnaphthalene-d10  | 11.79 | 152  | 644      | 0.14  | ng/ul  | 0.00     |
| 14) Fluoranthene-d10        | 18.87 | 212  | 1493     | 0.15  | ng/ul  | 0.00     |
| Target Compounds            |       |      |          |       | Ovalue |          |
| 3) Naphthalene              | 10.23 | 128  | 653      | 0.070 | ng/ul# | 81       |
| 5) 2-Methylnaphthalene      | 11.86 | 142  | 393      | 0.066 | ng/ul  | 97       |
| 7) Acenaphthylene           | 13.79 | 152  | 1527     | 0.177 | ng/ul  | 96       |
| 8) Acenaphthene             | 14.14 | 153  | 500      | 0.069 | ng/ul  | 94       |
| 9) Fluorene                 | 15.13 | 166  | 1089     | 0.136 | ng/ul# | 94       |
| 12) Phenanthrene            | 16.87 | 178  | 46204    | 3.484 | ng/ul  | 96       |
| 13) Anthracene              | 16.96 | 178  | 4341     | 0.377 | ng/ul  | 99       |
| 15) Fluoranthene            | 18.90 | 202  | 126885   | 8.288 | ng/ul  | 97       |
| 17) Pyrene                  | 19.27 | 202  | 101423   | 6.693 | ng/ul  | 99       |
| 18) Benzo(a)anthracene      | 21.03 | 228  | 43358    | 3.571 | ng/ul  | 98       |
| 19) Chrysene                | 21.08 | 228  | 58866    | 3.882 | ng/ul  | 99       |
| 21) Benzo(b)fluoranthene    | 22.54 | 252  | 81736m   | 5.412 | ng/ul  |          |
| 22) Benzo(k)fluoranthene    | 22.57 | 252  | 29368m   | 1.686 | ng/ul  |          |
| 23) Benzo(a)pyrene          | 23.07 | 252  | 48267    | 3.396 | ng/ul# | 80       |
| 24) Indeno(1,2,3-cd)pyrene  | 25.22 | 276  | 38296    | 2.060 | ng/ul# | 96       |
| 25) Dibenzo(a,h)anthracene  | 25.23 | 278  | 8797     | 0.589 | ng/ul  | 95       |
| 26) Benzo(a,h,i)perylene    | 25.85 | 276  | 34439    | 2.059 | ng/ul  | 95       |

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

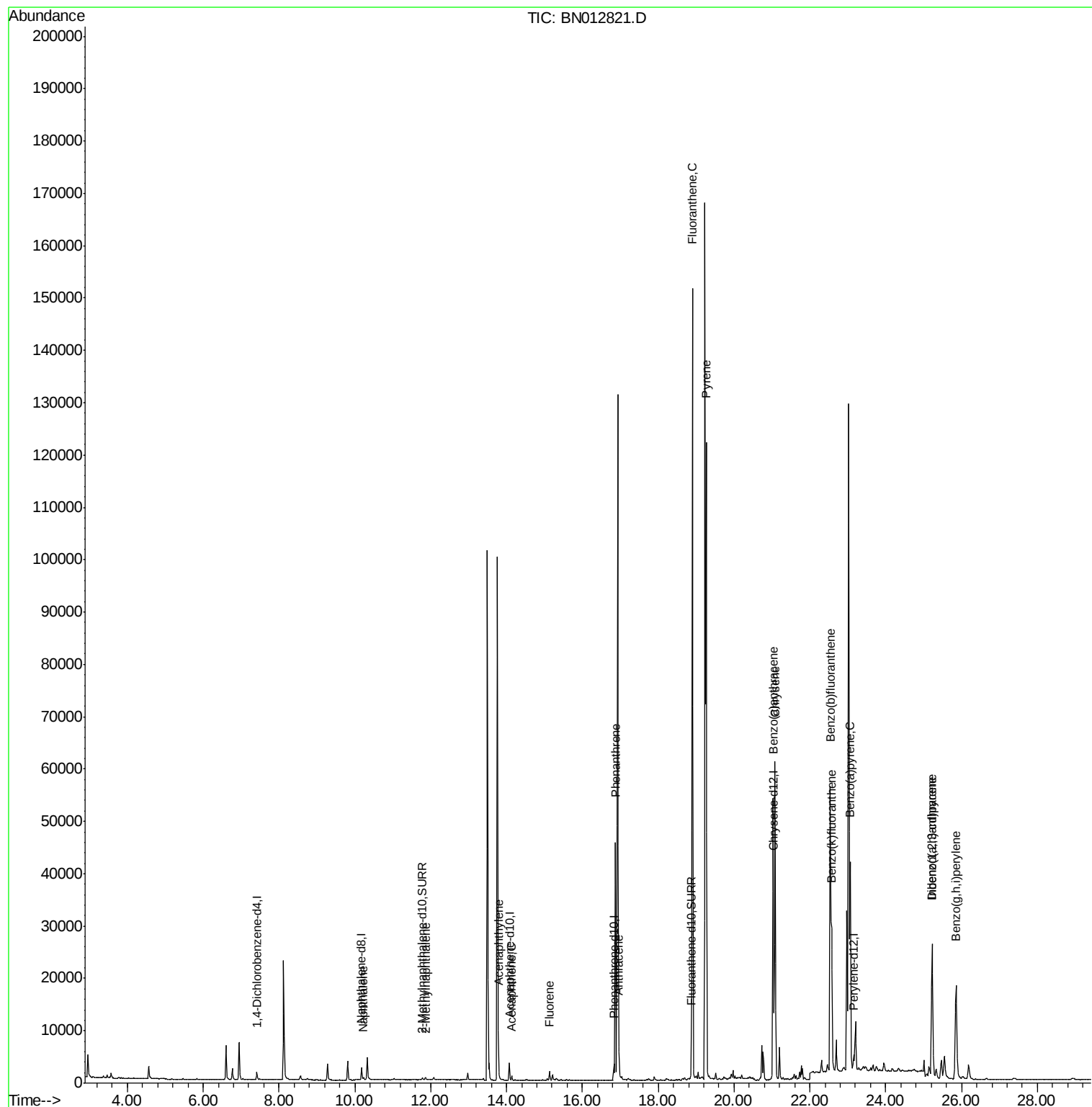
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120220\  
Data File : BN012821.D  
Acq On : 02 Dec 2020 15:56  
Operator : CG/JU  
Sample : L4865-19  
Misc :  
ALS Vial : 48 Sample Multiplier: 1

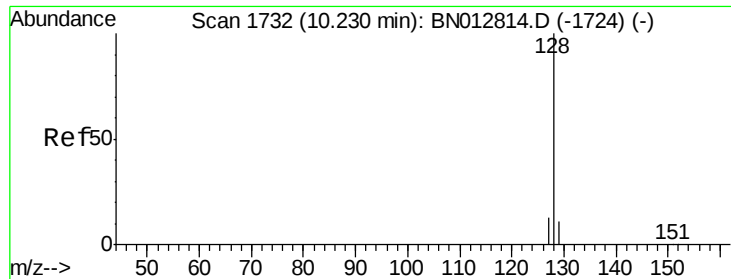
Instrument :  
BNA\_N  
ClientSampleId :  
C0AZ9

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Quant Time: Dec 02 17:02:50 2020  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN112020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Dec 02 12:19:27 2020  
Response via : Initial Calibration





#3

Naphthalene

Concen: 0.070 ng/ul

RT: 10.23 min Scan# 1732

Delta R.T. 0.00 min

Lab File: BN012821.D

Acq: 02 Dec 2020 15:56

Instrument :

BNA\_N

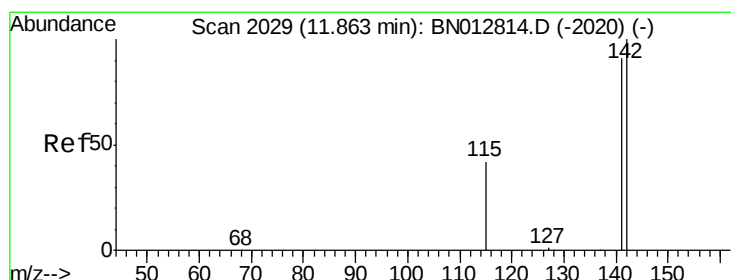
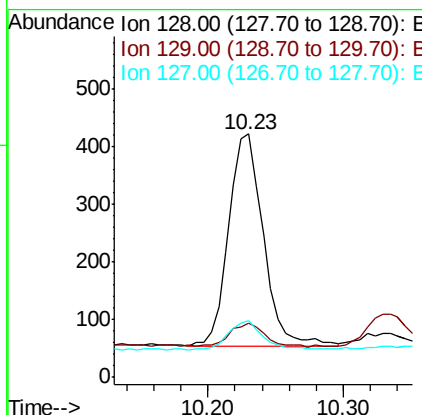
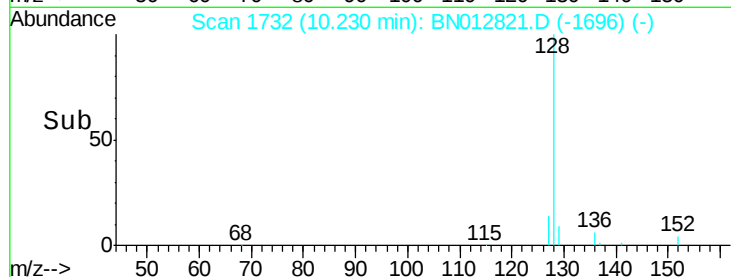
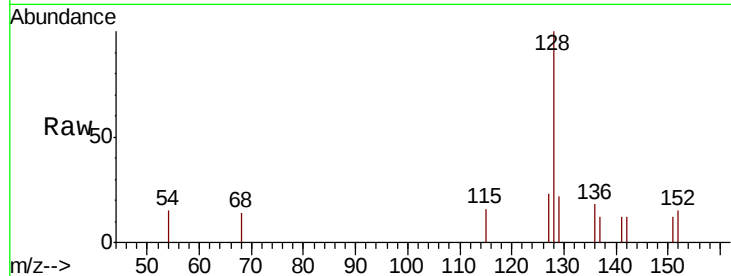
ClientSampleId :

C0AZ9

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 128   | Resp: | 653   |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 129      | 22.3  | 11.2  | 16.8# |
| 127      | 23.5  | 12.5  | 18.7# |

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#5

2-Methylnaphthalene

Concen: 0.066 ng/ul

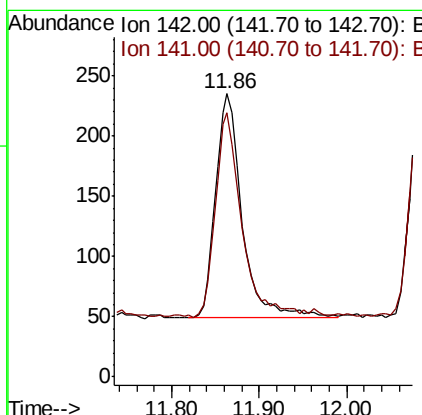
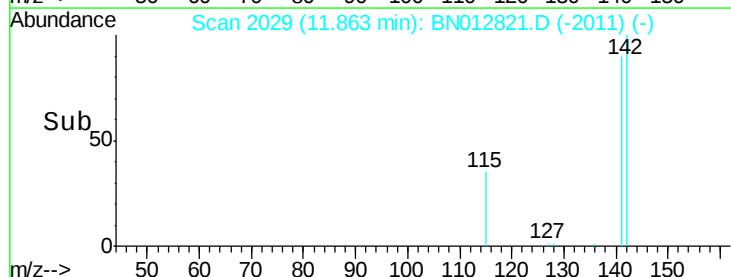
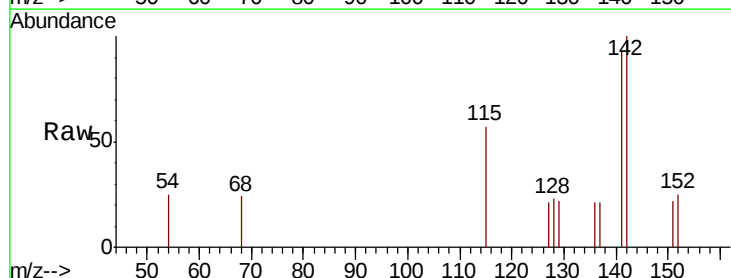
RT: 11.86 min Scan# 2029

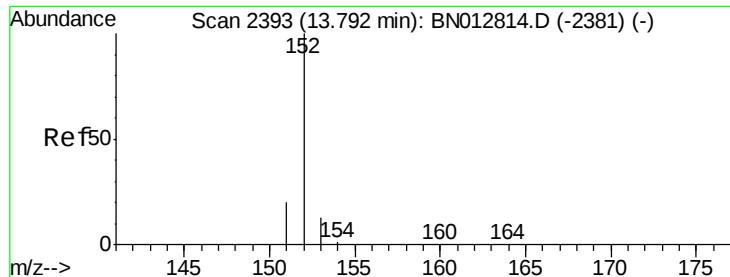
Delta R.T. 0.00 min

Lab File: BN012821.D

Acq: 02 Dec 2020 15:56

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 142   | Resp: | 393   |
| Ion      | Ratio | Lower | Upper |
| 142      | 100   |       |       |
| 141      | 93.4  | 72.3  | 108.5 |





#7

Acenaphthylene

Concen: 0.177 ng/ul

RT: 13.79 min Scan# 2393

Delta R.T. 0.00 min

Lab File: BN012821.D

Acq: 02 Dec 2020 15:56

Instrument :

BNA\_N

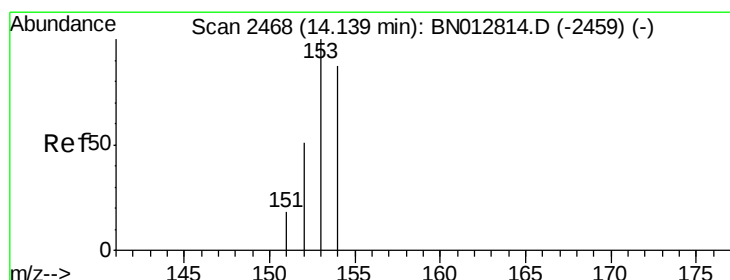
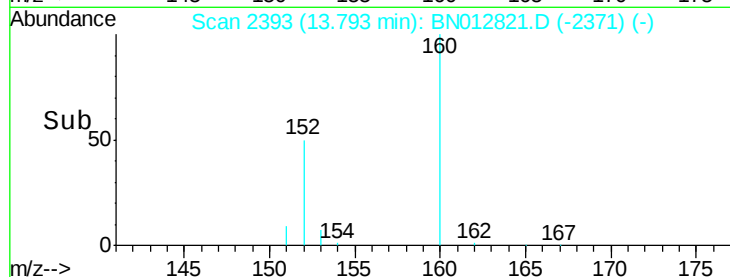
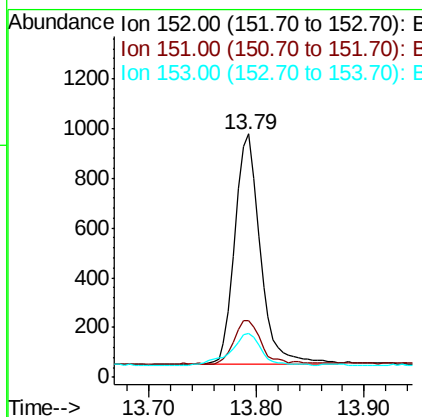
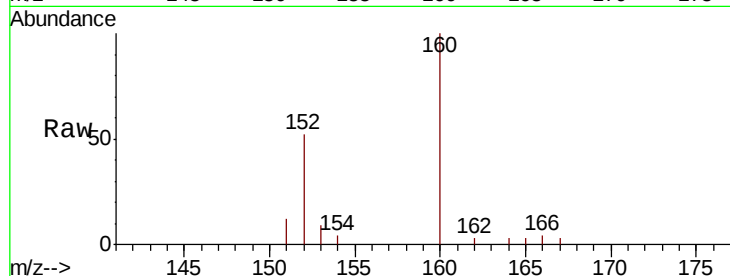
ClientSampleId :

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|           |       |       |      |
|-----------|-------|-------|------|
| Tot Ion:  | 152   | Resp: | 1527 |
| Ion Ratio | Lower | Upper |      |
| 152       | 100   |       |      |
| 151       | 23.2  | 17.1  | 25.7 |
| 153       | 18.0  | 12.6  | 19.0 |

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#8

Acenaphthene

Concen: 0.069 ng/ul

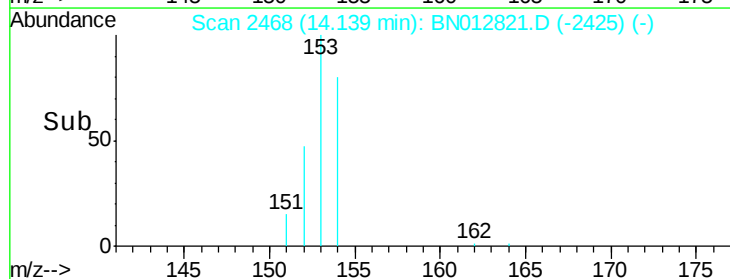
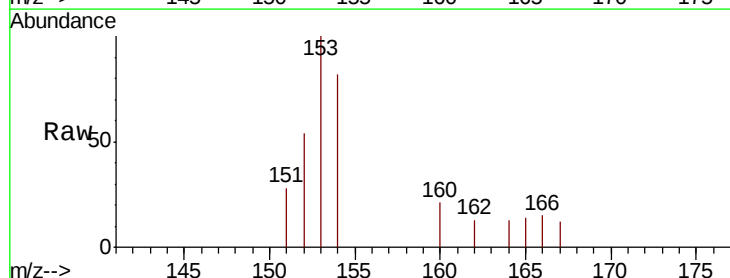
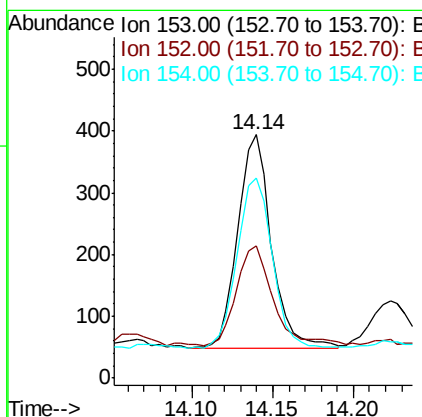
RT: 14.14 min Scan# 2468

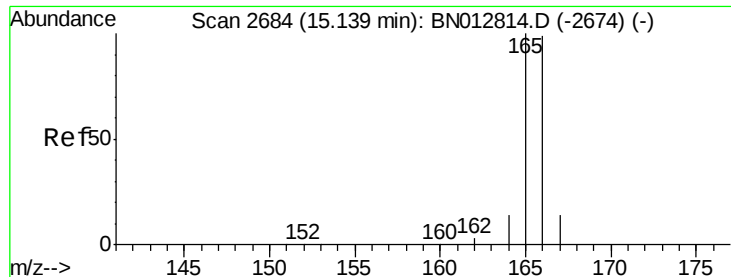
Delta R.T. 0.00 min

Lab File: BN012821.D

Acq: 02 Dec 2020 15:56

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 153   | Resp: | 500   |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 54.3  | 41.4  | 62.0  |
| 154       | 82.2  | 70.9  | 106.3 |





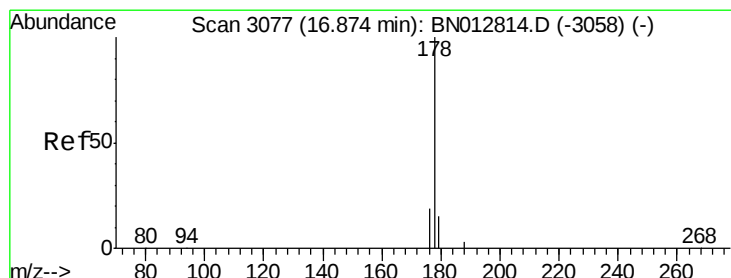
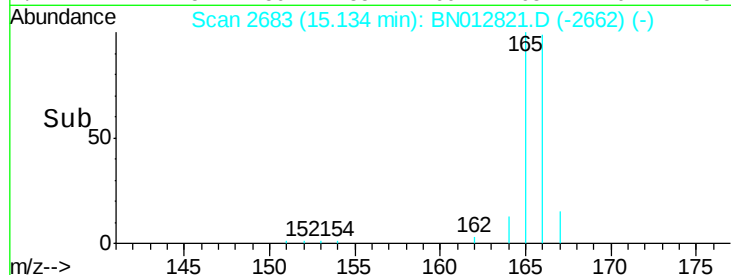
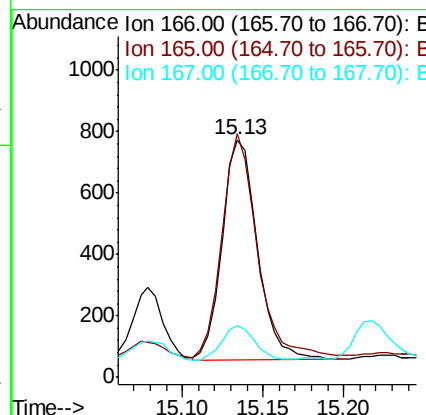
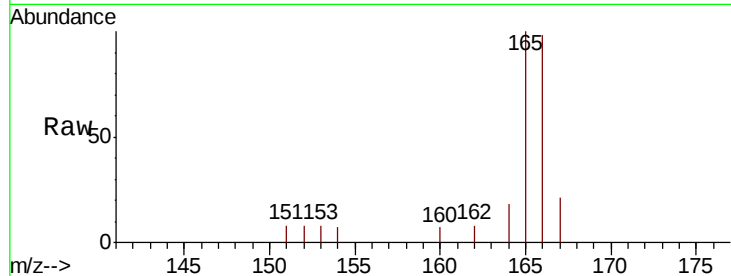
#9  
**Fluorene**  
 Concen: 0.136 ng/ul  
 RT: 15.13 min Scan# 2683  
 Delta R.T. -0.00 min  
 Lab File: BN012821.D  
 Acq: 02 Dec 2020 15:56

Instrument :  
 BNA\_N  
 ClientSampleId :  
 C0AZ9

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 102.5 | 78.5  | 117.7 |
| 167     | 21.6  | 12.7  | 19.1  |

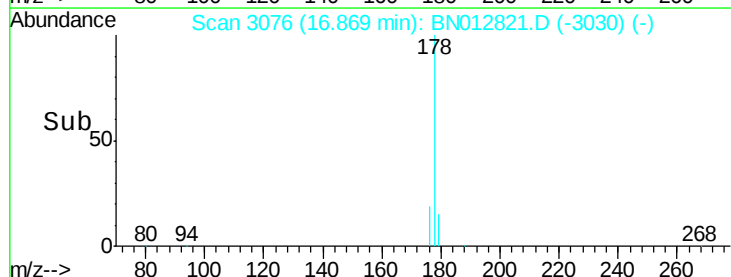
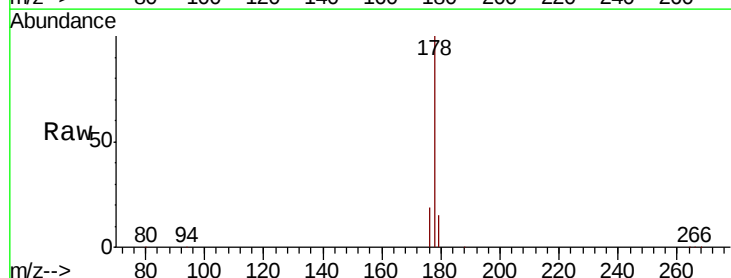
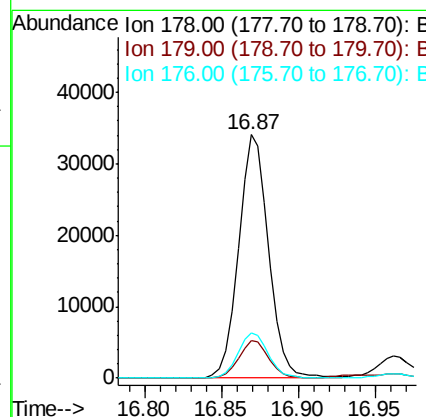
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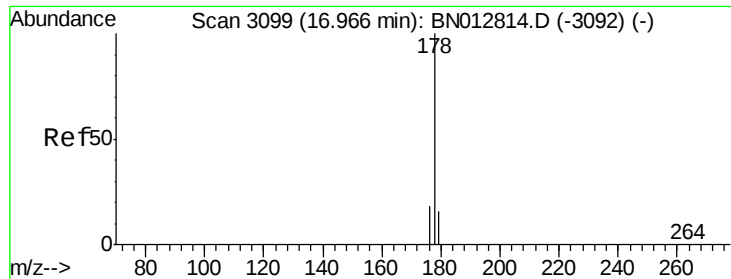
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#12  
**Phenanthrene**  
 Concen: 3.484 ng/ul  
 RT: 16.87 min Scan# 3076  
 Delta R.T. -0.00 min  
 Lab File: BN012821.D  
 Acq: 02 Dec 2020 15:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.3  | 13.8  | 20.6  |
| 176     | 18.8  | 16.7  | 25.1  |





#13

Anthracene

Concen: 0.377 ng/ul

RT: 16.96 min Scan# 3098

Delta R.T. -0.00 min

Lab File: BN012821.D

Acq: 02 Dec 2020 15:56

Instrument :

BNA\_N

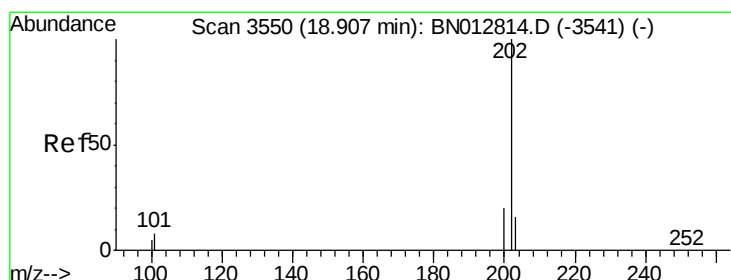
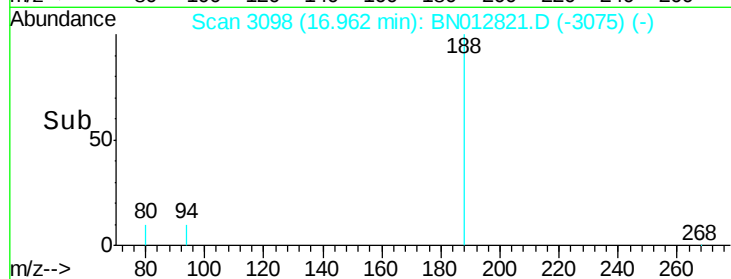
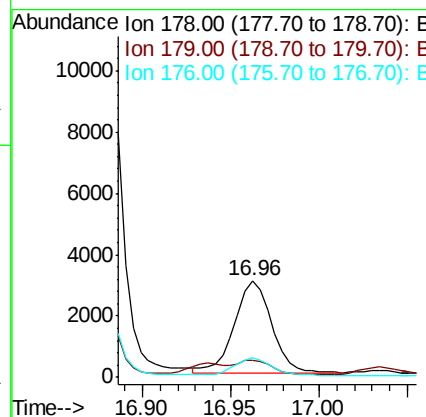
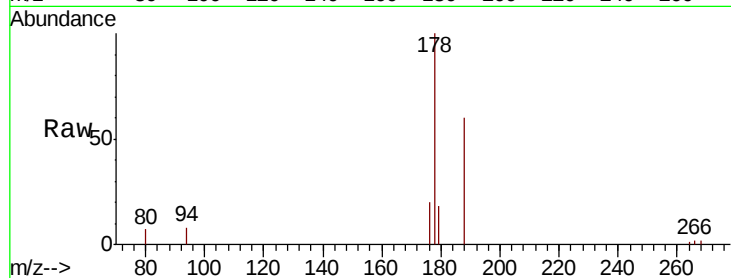
ClientSampled :

C0AZ9

|           |       |       |      |
|-----------|-------|-------|------|
| Tot Ion:  | 178   | Resp: | 4341 |
| Ion Ratio | Lower | Upper |      |
| 178       | 100   |       |      |
| 179       | 18.1  | 14.8  | 22.2 |
| 176       | 19.6  | 16.3  | 24.5 |

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#15

Fluoranthene

Concen: 8.288 ng/ul

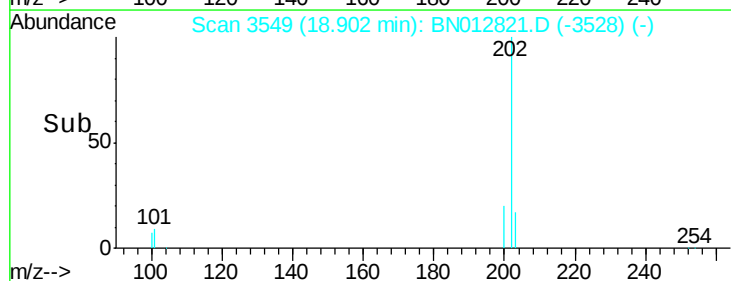
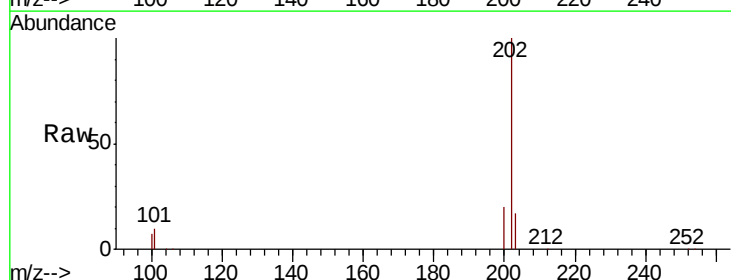
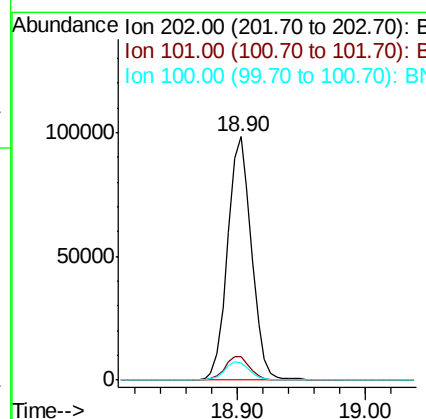
RT: 18.90 min Scan# 3549

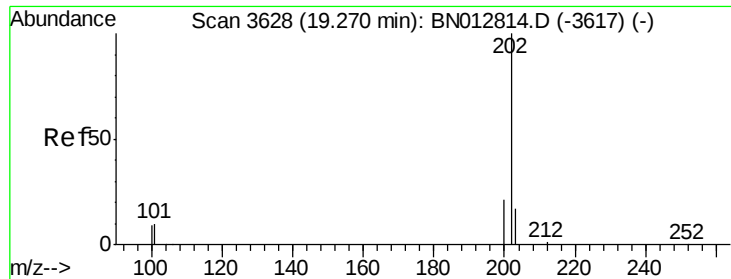
Delta R.T. -0.00 min

Lab File: BN012821.D

Acq: 02 Dec 2020 15:56

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 126885 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 9.5   | 0.0   | 30.5   |
| 100       | 7.2   | 0.0   | 28.4   |





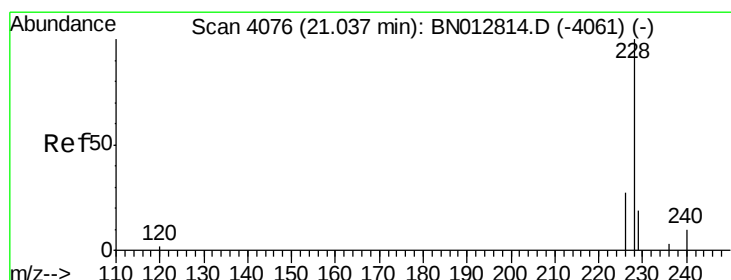
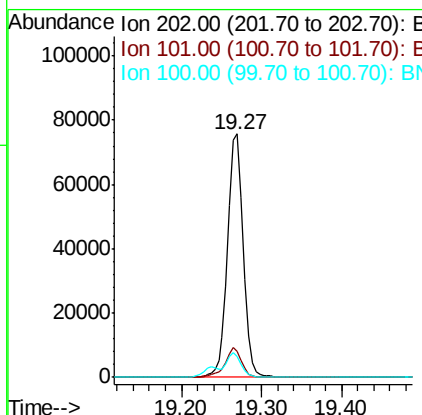
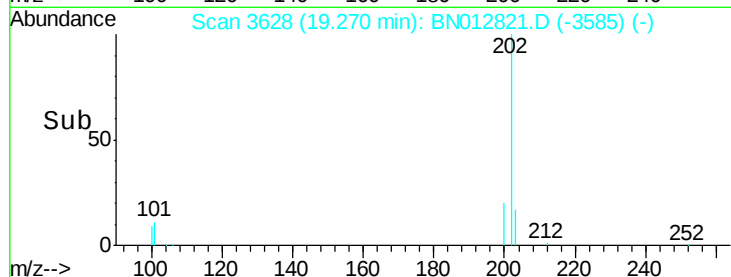
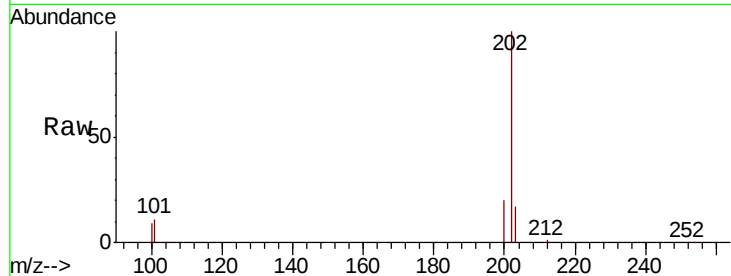
#17  
Pvrene  
Concen: 6.693 ng/ul  
RT: 19.27 min Scan# 3628  
Delta R.T. 0.00 min  
Lab File: BN012821.D  
Acq: 02 Dec 2020 15:56

Instrument :  
BNA\_N  
ClientSampleId :  
C0AZ9

| Tot Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 202     | 100   |            |            |
| 101     | 10.8  | 8.9        | 13.3       |
| 100     | 8.7   | 7.4        | 11.2       |

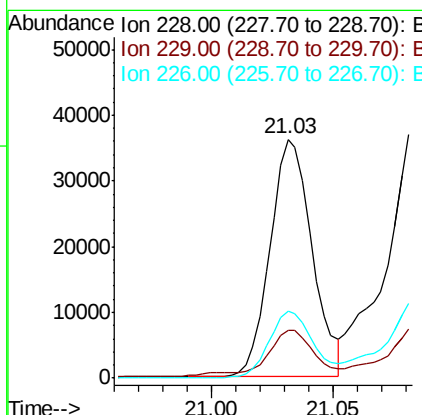
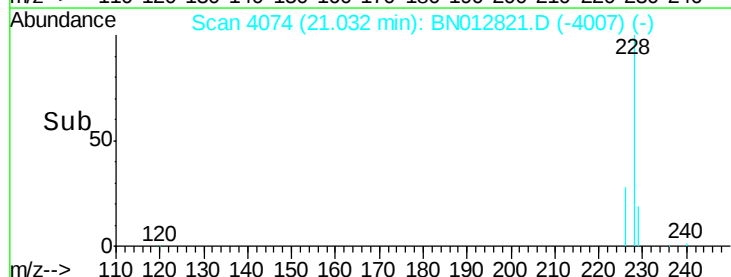
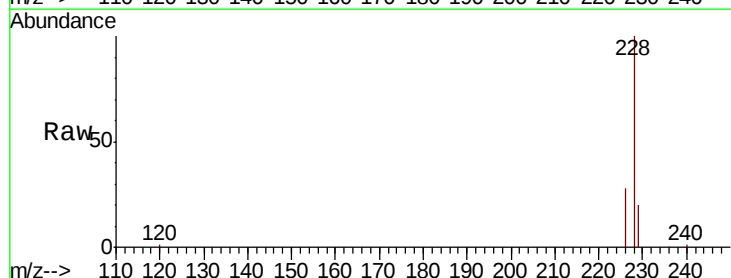
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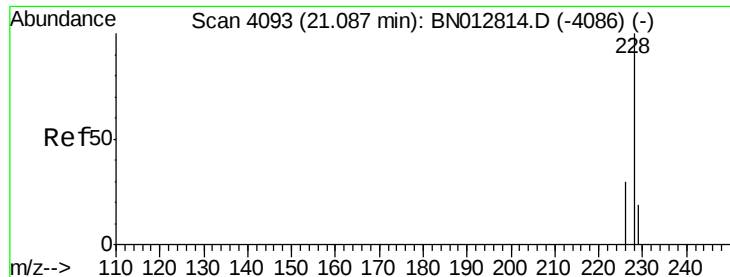
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#18  
Benzo(a)anthracene  
Concen: 3.571 ng/ul  
RT: 21.03 min Scan# 4074  
Delta R.T. -0.01 min  
Lab File: BN012821.D  
Acq: 02 Dec 2020 15:56

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 228     | 100   |            |            |
| 229     | 19.9  | 16.9       | 25.3       |
| 226     | 28.0  | 23.1       | 34.7       |





#19

Chrysene

Concen: 3.882 ng/ul

RT: 21.08 min Scan# 4092

Delta R.T. -0.00 min

Lab File: BN012821.D

Acq: 02 Dec 2020 15:56

Instrument :

BNA\_N

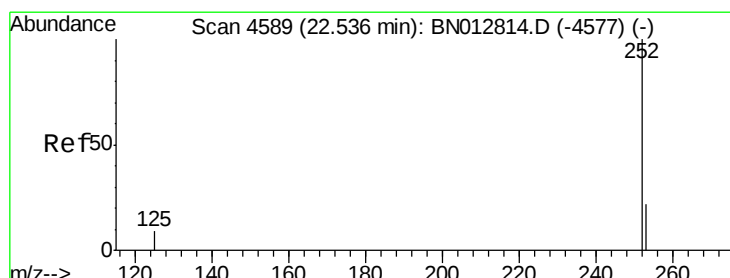
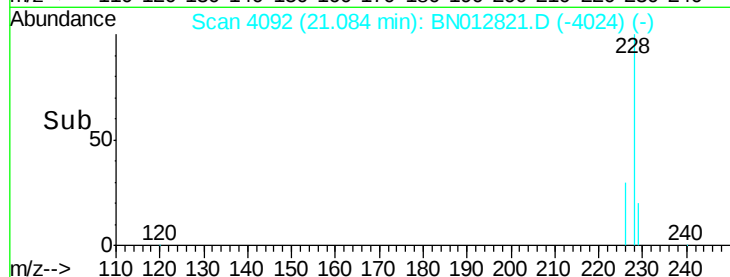
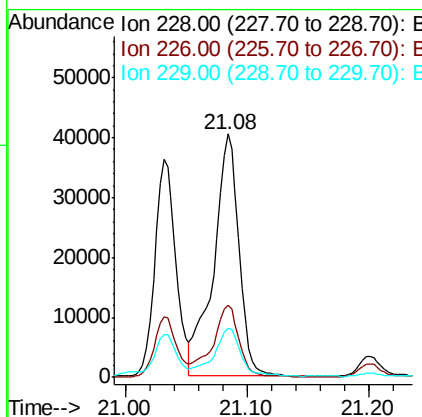
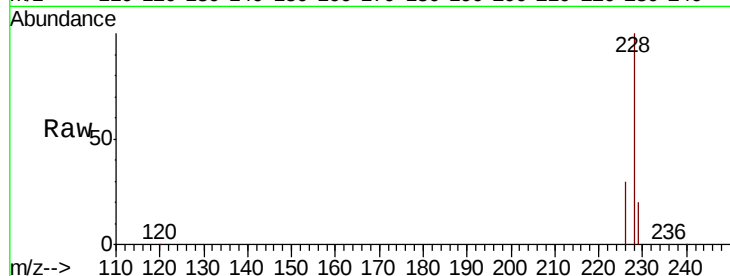
ClientSampled :

C0AZ9

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 228   | Resp: | 58866 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 29.9  | 24.4  | 36.6  |
| 229       | 20.4  | 16.1  | 24.1  |

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#21

Benzo(b)fluoranthene

Concen: 5.412 ng/ul m

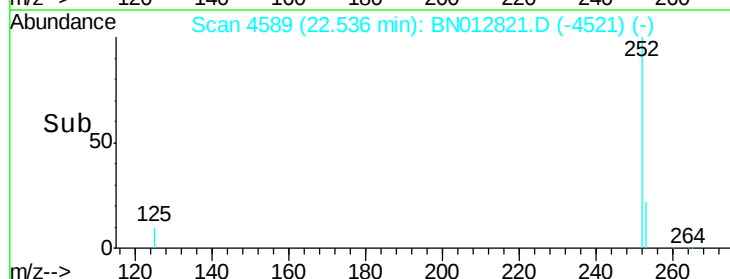
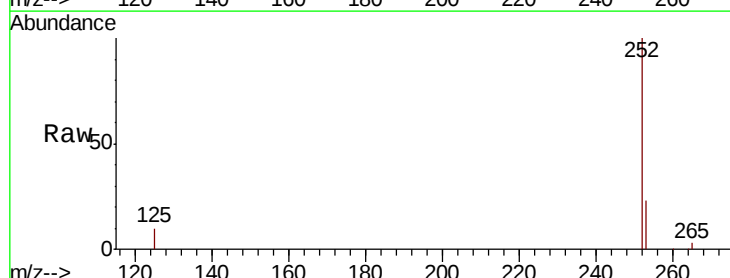
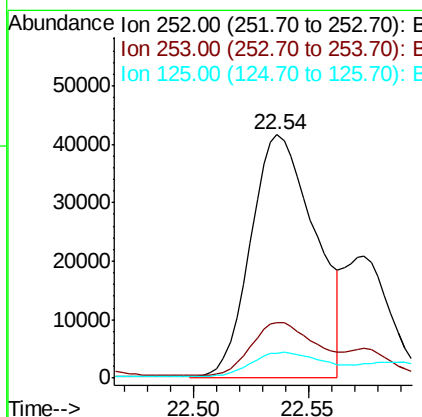
RT: 22.54 min Scan# 4589

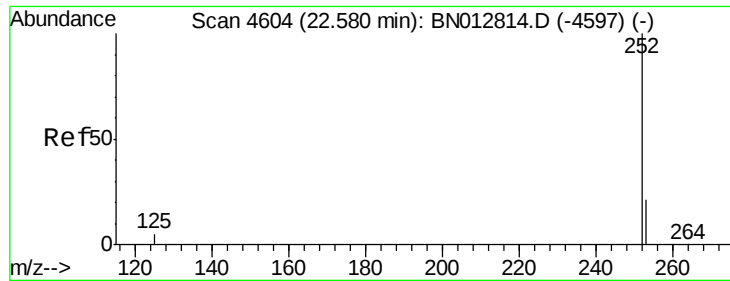
Delta R.T. 0.00 min

Lab File: BN012821.D

Acq: 02 Dec 2020 15:56

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 81736 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 22.8  | 0.0   | 58.4  |
| 125       | 10.2  | 0.0   | 28.6  |





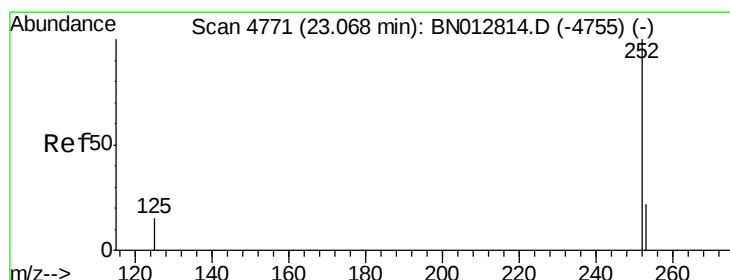
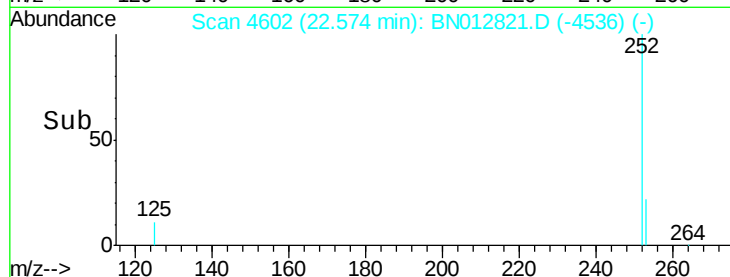
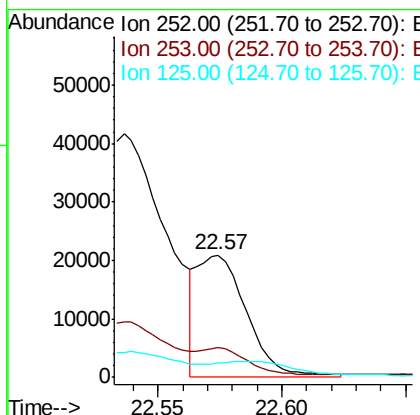
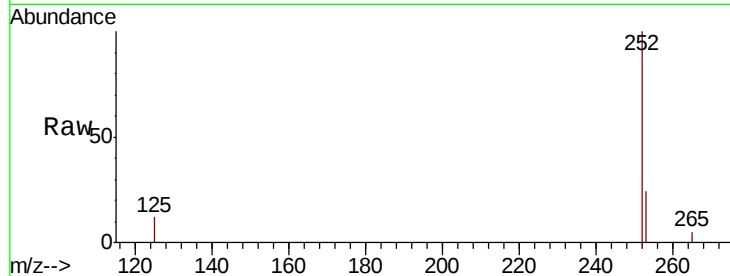
#22  
Benzo(k)fluoranthene  
Concen: 1.686 ng/ul m  
RT: 22.57 min Scan# 4602  
Delta R.T. -0.01 min  
Lab File: BN012821.D  
Acq: 02 Dec 2020 15:56

Instrument :  
BNA\_N  
ClientSampleId :  
C0AZ9

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.9  | 23.4  | 35.2  |
| 125     | 11.9  | 10.2  | 15.2  |

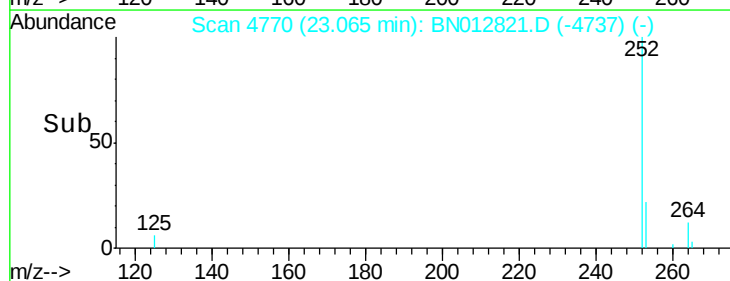
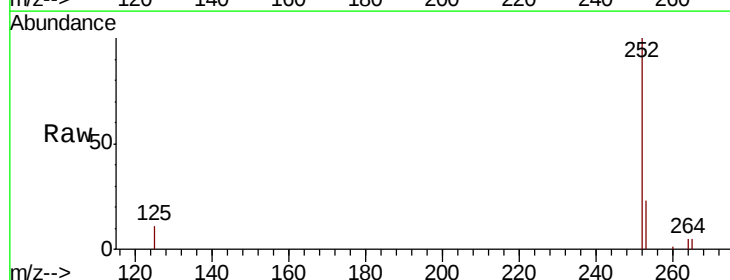
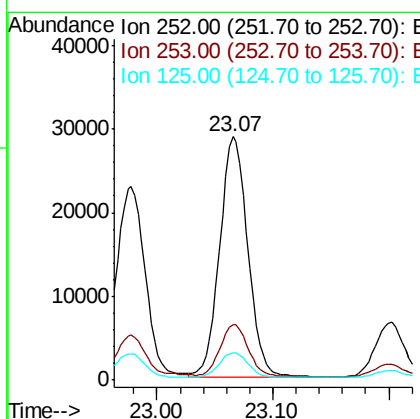
Manual Integrations  
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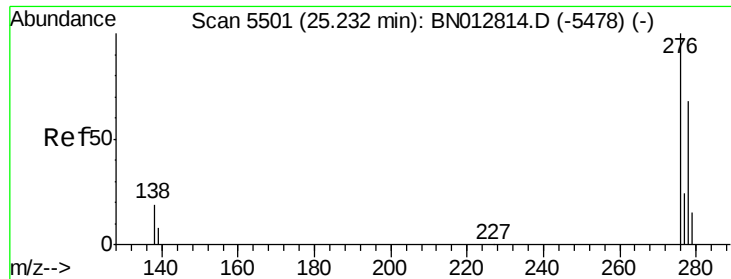
mohammad  
12/3/2020 3:44:10 PM



#23  
Benzo(a)pyrene  
Concen: 3.396 ng/ul  
RT: 23.07 min Scan# 4770  
Delta R.T. -0.00 min  
Lab File: BN012821.D  
Acq: 02 Dec 2020 15:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.9  | 27.6  | 41.4# |
| 125     | 11.4  | 17.0  | 25.4# |





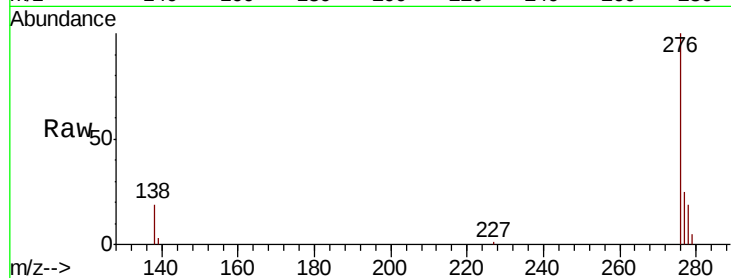
#24  
Indeno(1,2,3-cd)pyrene  
Concen: 2.060 ng/u1  
RT: 25.22 min Scan# 5498  
Delta R.T. -0.01 min  
Lab File: BN012821.D  
Acq: 02 Dec 2020 15:56

Instrument :  
BNA\_N  
ClientSampleId :  
C0AZ9

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 18.7  | 16.5  | 24.7  |
| 227     | 0.1   | 0.1   | 0.1   |

Manual Integrations  
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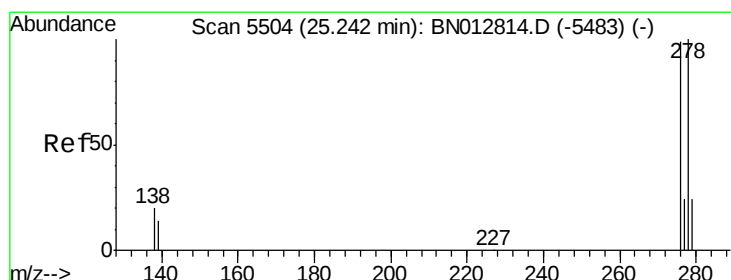
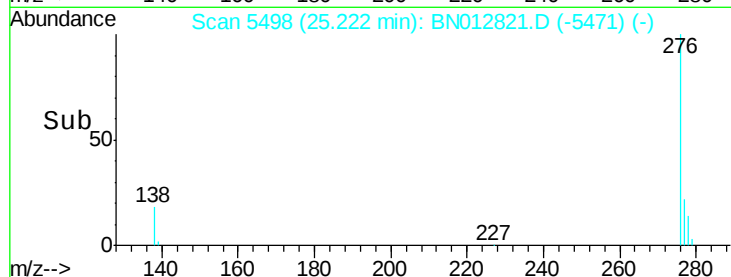
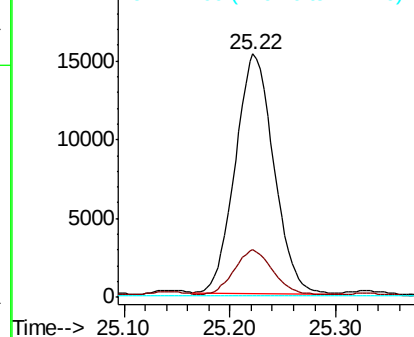


Abundance

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: 0.589 ng/u1  
RT: 25.23 min Scan# 5501  
Delta R.T. -0.01 min  
Lab File: BN012821.D  
Acq: 02 Dec 2020 15:56

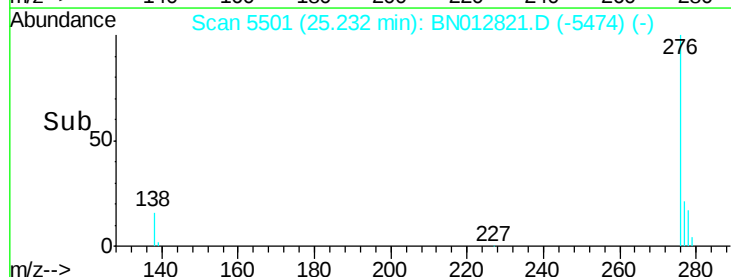
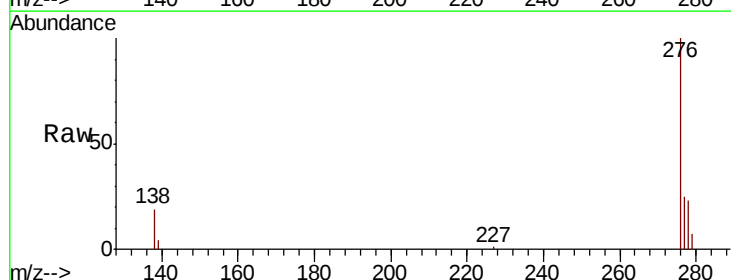
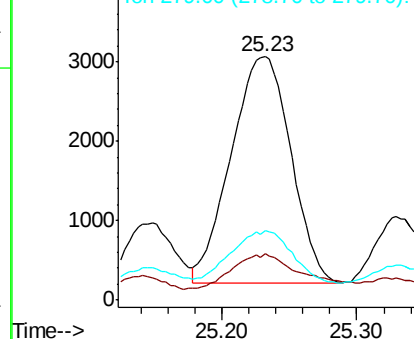
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 18.9  | 13.8  | 20.8  |
| 279     | 28.5  | 25.6  | 38.4  |

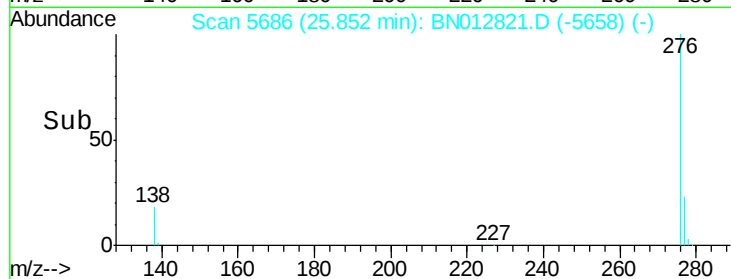
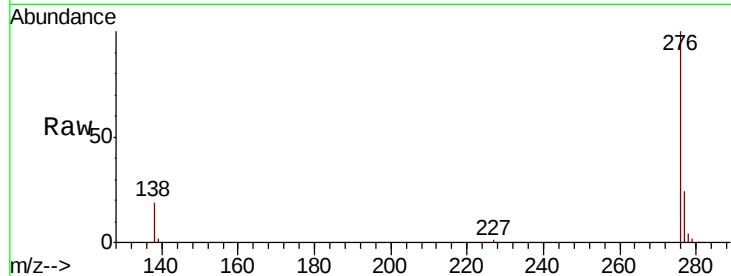
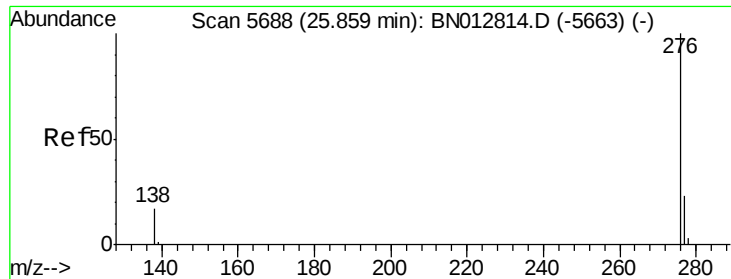
Abundance

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(a,h,i)perylene

Concen: 2.059 ng/ul

RT: 25.85 min Scan# 5686

Delta R.T. -0.01 min

Lab File: BN012821.D

Acq: 02 Dec 2020 15:56

Instrument :

BNA\_N

ClientSampleId :

C0AZ9

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 276   | Resp: | 34439 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 19.1  | 16.3  | 24.5  |
| 277       | 23.9  | 21.8  | 32.8  |

Manual Integrations  
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