

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120619\  
 Data File : BN008857.D  
 Acq On : 06 Dec 2019 13:40  
 Operator : JU  
 Sample : K6007-01  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 C0BK9

Manual Integrations  
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Quant Time: Dec 06 14:54:53 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 : Fri Dec 06 12:03:45 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|--------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.57  | 152  | 2514     | 0.40   | ng/ul  | 0.00     |
| 2) Naphthalene-d8           | 10.32 | 136  | 11379    | 0.40   | ng/ul  | 0.00     |
| 6) Acenaphthene-d10         | 14.19 | 164  | 7468     | 0.40   | ng/ul  | 0.00     |
| 10) Phenanthrene-d10        | 16.94 | 188  | 16579m   | 0.40   | ng/ul  | 0.00     |
| 16) Chrysene-d12            | 21.14 | 240  | 14818    | 0.40   | ng/ul  | 0.00     |
| 20) Perylene-d12            | 23.29 | 264  | 16725    | 0.40   | ng/ul  | 0.00     |
| System Monitoring Compounds |       |      |          |        |        |          |
| 4) 2-Methylnaphthalene-d10  | 11.92 | 152  | 4953     | 0.27   | ng/ul  | 0.00     |
| 14) Fluoranthene-d10        | 18.97 | 212  | 13926    | 0.28   | ng/ul  | 0.00     |
| Target Compounds            |       |      |          | Ovalue |        |          |
| 3) Naphthalene              | 10.37 | 128  | 3742     | 0.109  | ng/ul# | 94       |
| 5) 2-Methylnaphthalene      | 12.00 | 142  | 2780     | 0.116  | ng/ul  | 100      |
| 7) Acenaphthylene           | 13.91 | 152  | 1478     | 0.036  | ng/ul# | 85       |
| 9) Fluorene                 | 15.25 | 166  | 1517     | 0.042  | ng/ul# | 91       |
| 12) Phenanthrene            | 16.98 | 178  | 19198    | 0.343  | ng/ul  | 100      |
| 13) Anthracene              | 17.07 | 178  | 2185     | 0.041  | ng/ul# | 91       |
| 15) Fluoranthene            | 19.00 | 202  | 24867    | 0.362  | ng/ul  | 100      |
| 17) Pyrene                  | 19.37 | 202  | 24296    | 0.409  | ng/ul  | 98       |
| 18) Benzo(a)anthracene      | 21.13 | 228  | 11622    | 0.195  | ng/ul# | 91       |
| 19) Chrysene                | 21.18 | 228  | 17210    | 0.294  | ng/ul# | 93       |
| 21) Benzo(b)fluoranthene    | 22.66 | 252  | 17890m   | 0.259  | ng/ul  |          |
| 22) Benzo(k)fluoranthene    | 22.70 | 252  | 7188m    | 0.105  | ng/ul  |          |
| 23) Benzo(a)pyrene          | 23.20 | 252  | 11871    | 0.183  | ng/ul# | 89       |
| 24) Indeno(1,2,3-cd)pyrene  | 25.41 | 276  | 9290     | 0.123  | ng/ul# | 98       |
| 25) Dibenzo(a,h)anthracene  | 25.42 | 278  | 2607     | 0.043  | ng/ul# | 47       |
| 26) Benzo(a,h,i)perylene    | 26.05 | 276  | 9965     | 0.157  | ng/ul  | 96       |

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

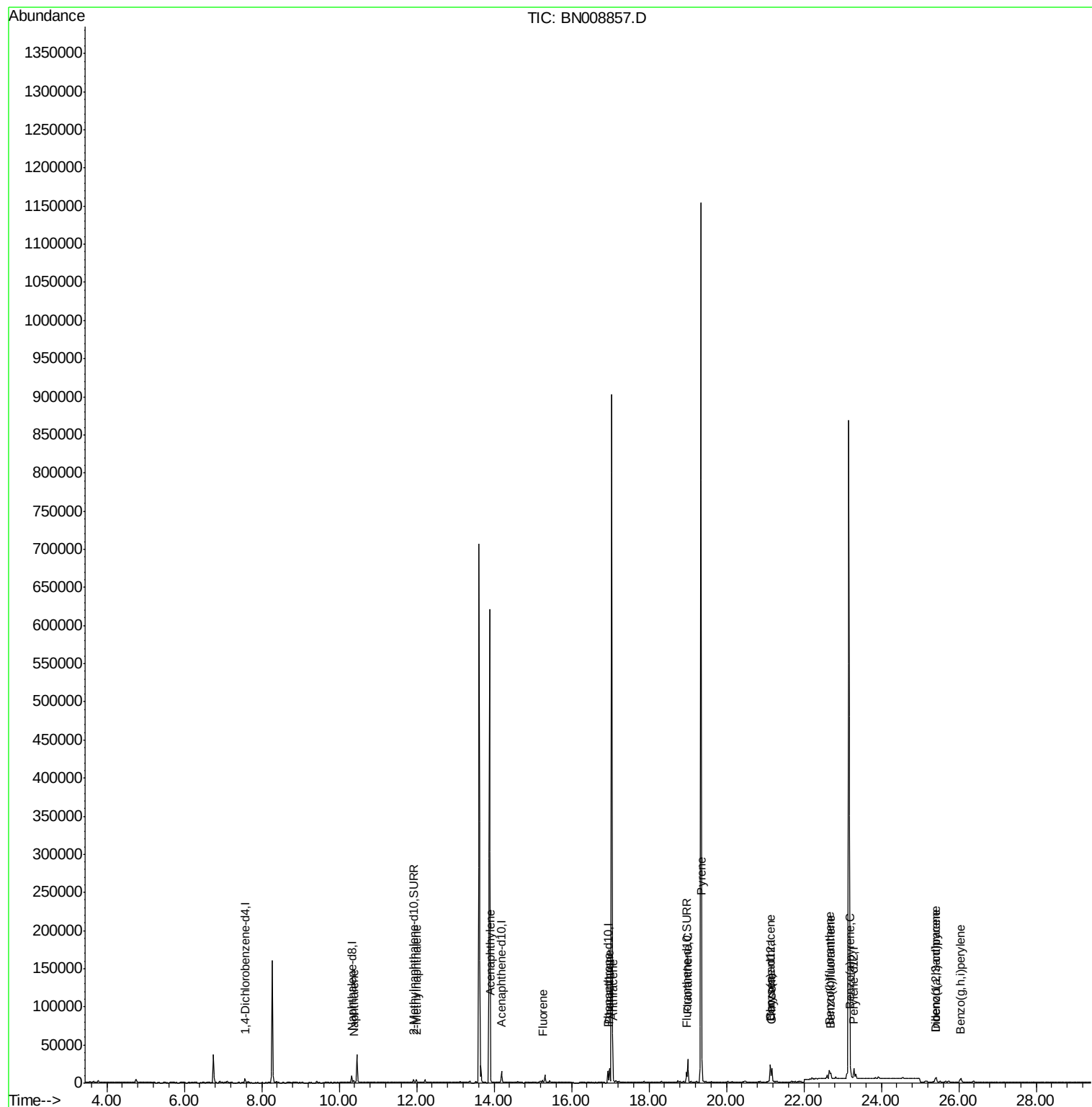
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120619\  
Data File : BN008857.D  
Acq On : 06 Dec 2019 13:40  
Operator : JU  
Sample : K6007-01  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

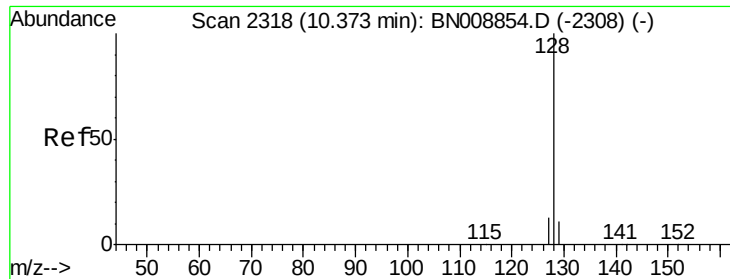
Instrument :  
BNA\_N  
ClientSampleId :  
C0BK9

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Quant Time: Dec 06 14:54:53 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 : Fri Dec 06 12:03:45 2019  
Response via : Initial Calibration





#3

Naphthalene

Concen: 0.109 ng/ul

RT: 10.37 min Scan# 2318

Delta R.T. -0.00 min

Lab File: BN008857.D

Acq: 06 Dec 2019 13:40

Instrument :

BNA\_N

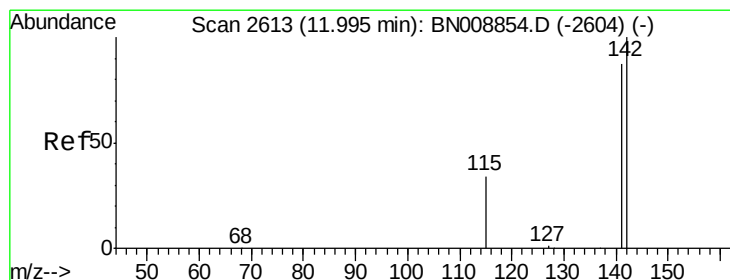
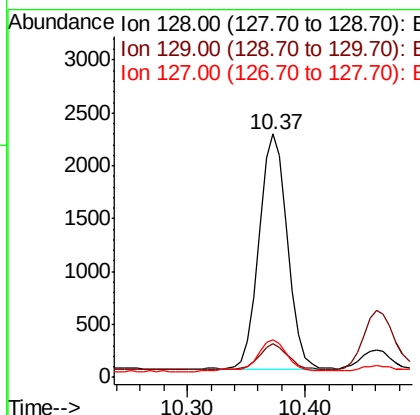
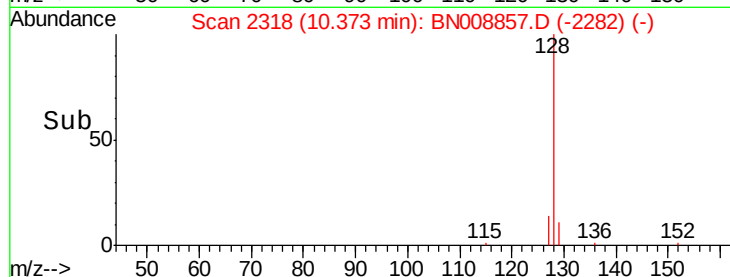
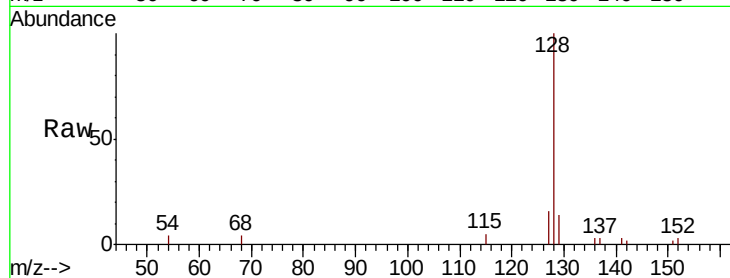
ClientSampleId :

C0BK9

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 13.9  | 9.1   | 13.7# |
| 127     | 15.6  | 10.7  | 16.1  |

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#5

2-Methylnaphthalene

Concen: 0.116 ng/ul

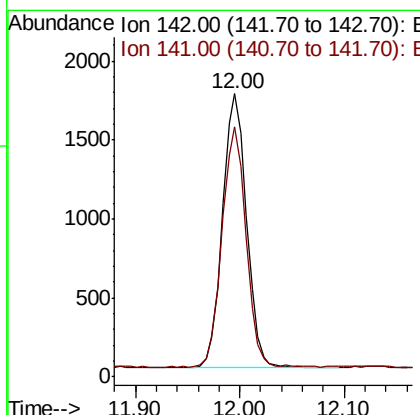
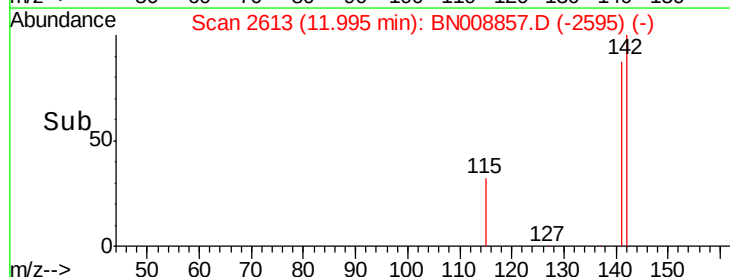
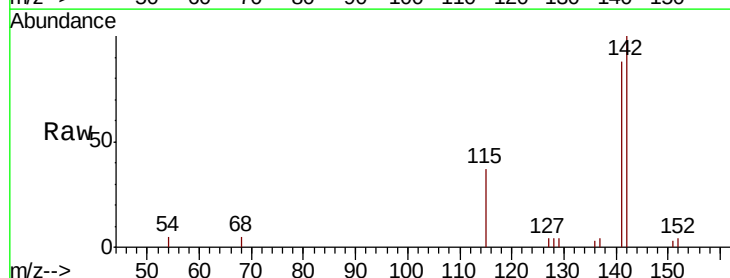
RT: 12.00 min Scan# 2613

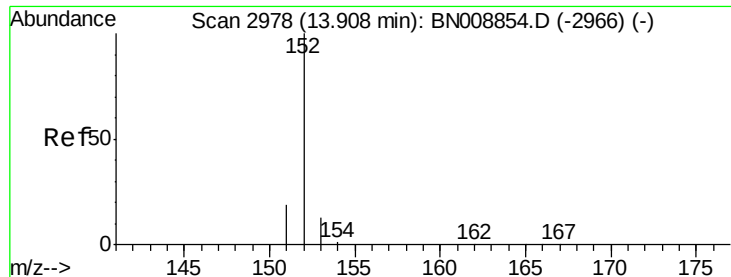
Delta R.T. -0.00 min

Lab File: BN008857.D

Acq: 06 Dec 2019 13:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 87.4  | 70.1  | 105.1 |





#7

Acenaphthylene

Concen: 0.036 ng/ul

RT: 13.91 min Scan# 2979

Delta R.T. 0.00 min

Lab File: BN008857.D

Acq: 06 Dec 2019 13:40

Instrument :

BNA\_N

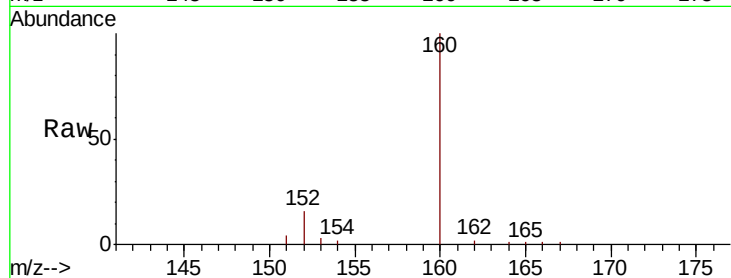
ClientSampleId :

C0BK9

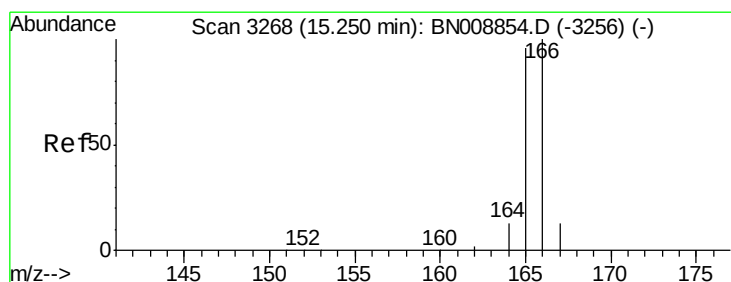
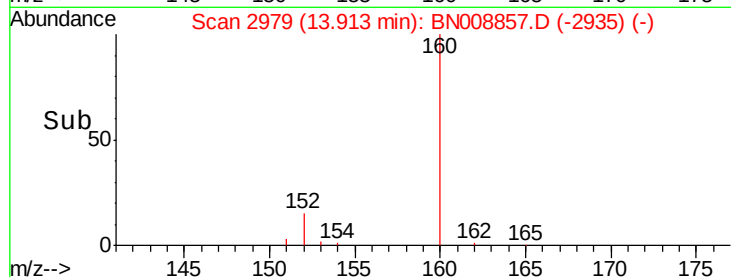
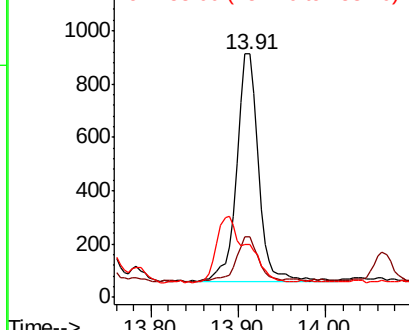
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 152   | Resp: | 1478  |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 151       | 24.8  | 15.8  | 23.6# |
| 153       | 21.9  | 10.6  | 15.8# |

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Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 151.00 (150.70 to 151.70): E  
Ion 153.00 (152.70 to 153.70): E



#9

Fluorene

Concen: 0.042 ng/ul

RT: 15.25 min Scan# 3268

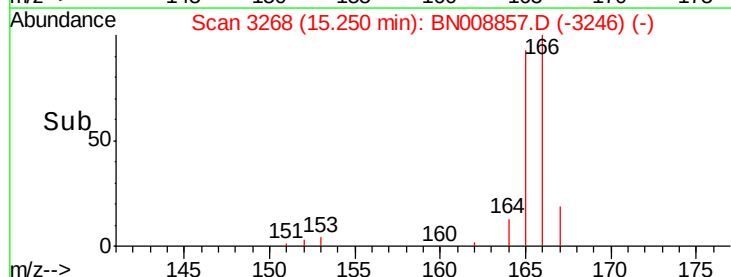
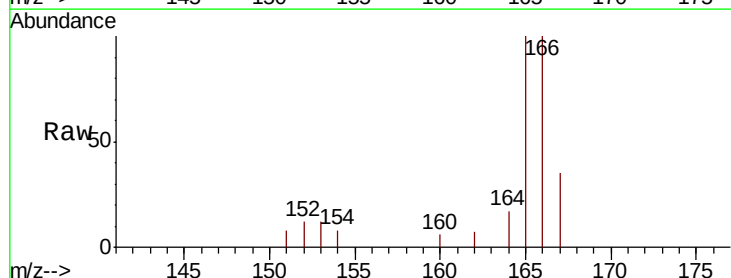
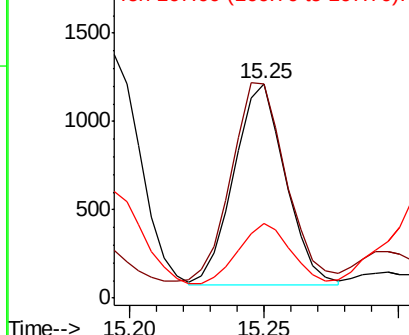
Delta R.T. -0.00 min

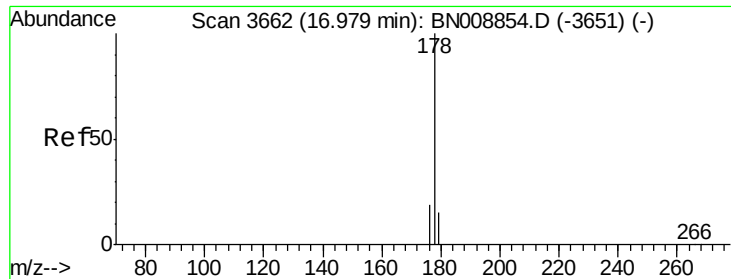
Lab File: BN008857.D

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|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 166   | Resp: | 1517  |
| Ion Ratio | Lower | Upper |       |
| 166       | 100   |       |       |
| 165       | 99.9  | 77.7  | 116.5 |
| 167       | 34.7  | 11.1  | 16.7# |

Abundance Ion 166.00 (165.70 to 166.70): E  
Ion 165.00 (164.70 to 165.70): E  
Ion 167.00 (166.70 to 167.70): E





#12

Phenanthrene

Concen: 0.343 ng/ul

RT: 16.98 min Scan# 3662

Delta R.T. -0.00 min

Lab File: BN008857.D

Acq: 06 Dec 2019 13:40

Instrument :

BNA\_N

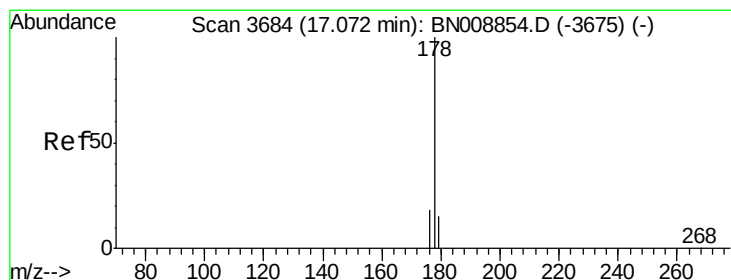
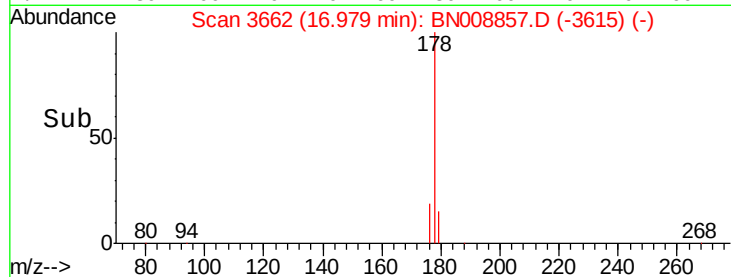
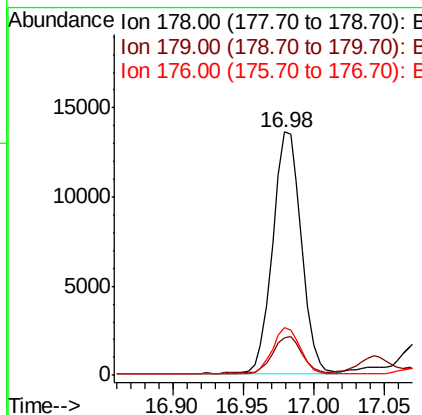
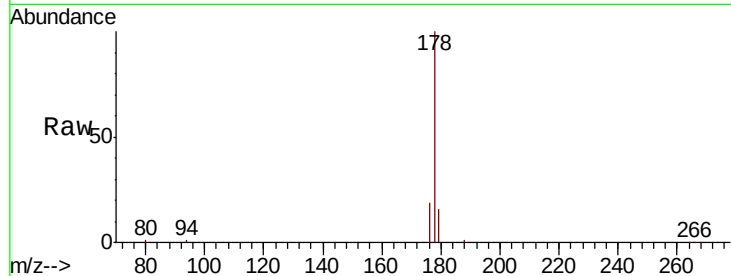
ClientSampleId :

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|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 178   | Resp: | 19198 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 179       | 15.6  | 12.6  | 18.8  |
| 176       | 19.4  | 15.3  | 22.9  |

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#13

Anthracene

Concen: 0.041 ng/ul

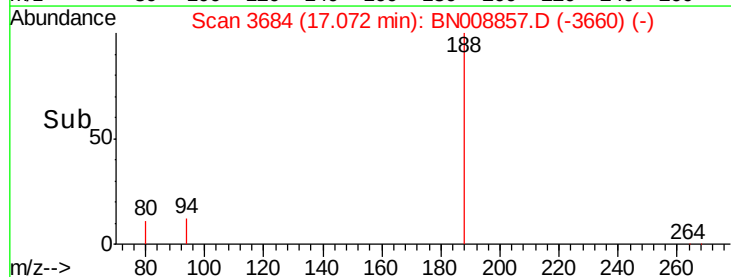
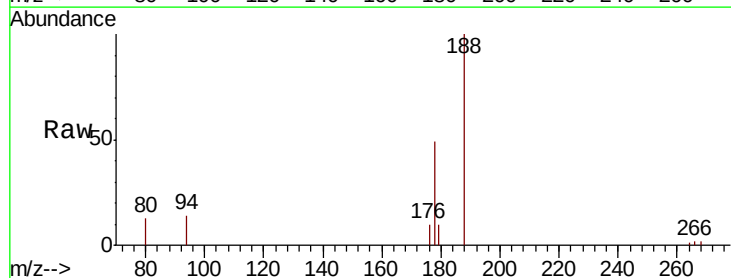
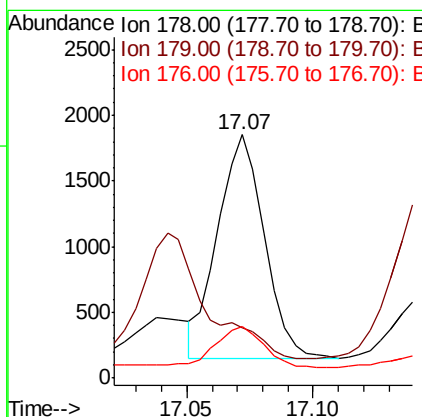
RT: 17.07 min Scan# 3684

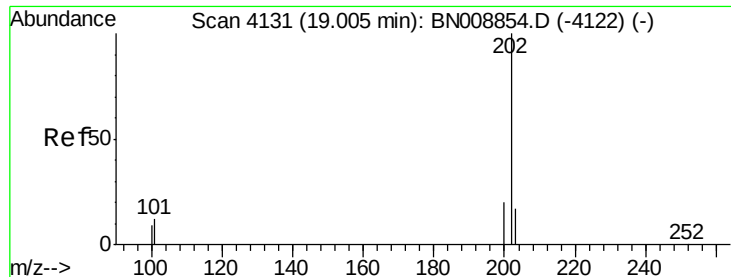
Delta R.T. -0.00 min

Lab File: BN008857.D

Acq: 06 Dec 2019 13:40

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 2185  |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 179       | 20.8  | 12.2  | 18.4# |
| 176       | 21.0  | 14.7  | 22.1  |





#15

Fluoranthene

Concen: 0.362 ng/ul

RT: 19.00 min Scan# 4131

Delta R.T. -0.00 min

Lab File: BN008857.D

Acq: 06 Dec 2019 13:40

Instrument :

BNA\_N

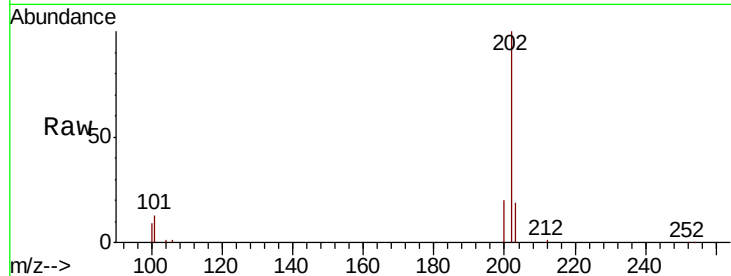
ClientSampled :

C0BK9

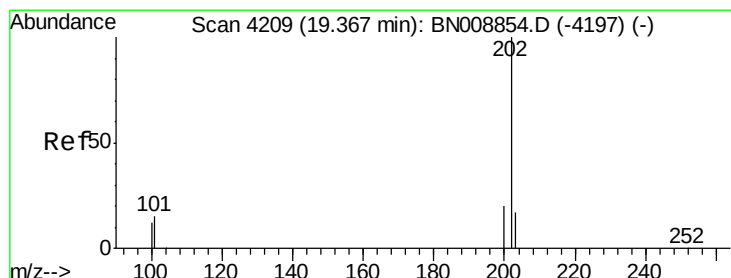
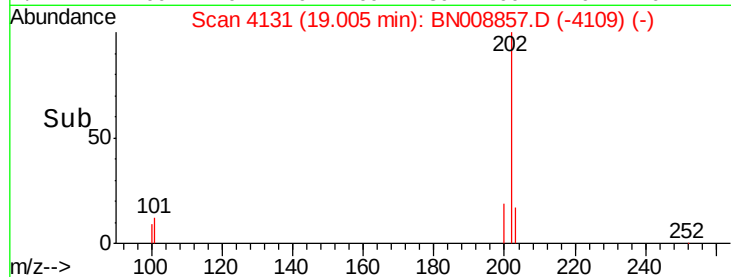
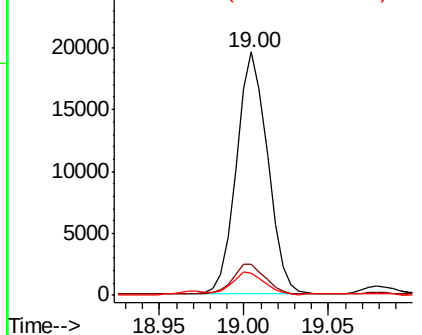
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 202   | Resp: | 24867 |
| Ion Ratio | Lower | Upper |       |
| 202       | 100   |       |       |
| 101       | 12.7  | 0.0   | 32.4  |
| 100       | 9.2   | 0.0   | 29.2  |

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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: 0.409 ng/ul

RT: 19.37 min Scan# 4209

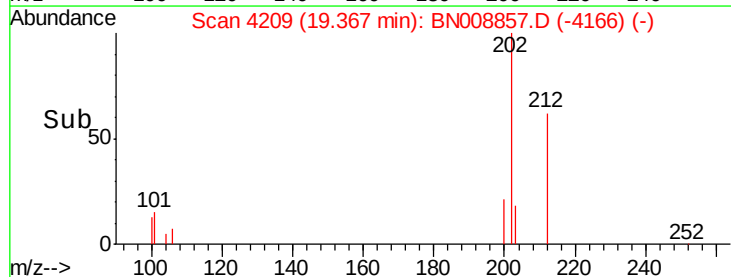
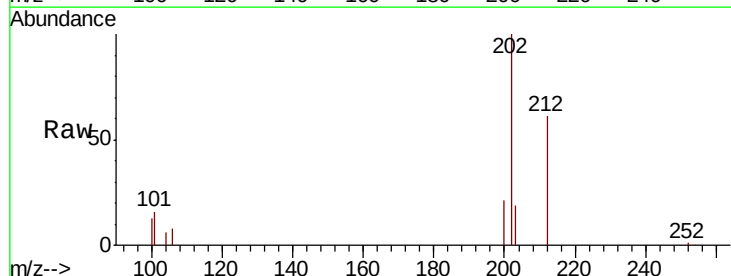
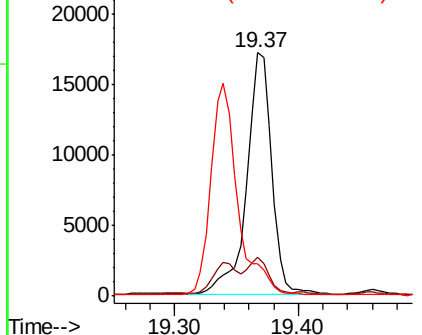
Delta R.T. -0.00 min

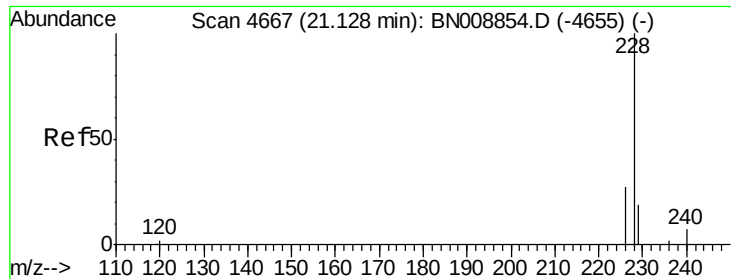
Lab File: BN008857.D

Acq: 06 Dec 2019 13:40

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 202   | Resp: | 24296 |
| Ion Ratio | Lower | Upper |       |
| 202       | 100   |       |       |
| 101       | 15.8  | 12.2  | 18.4  |
| 100       | 13.2  | 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





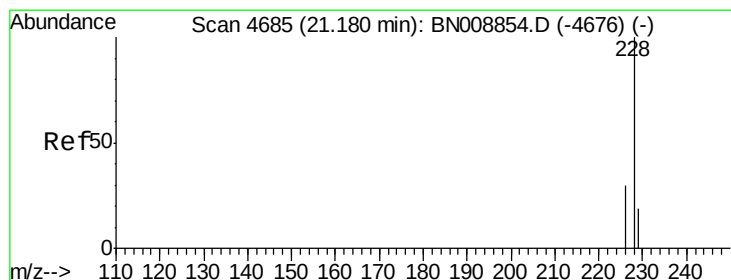
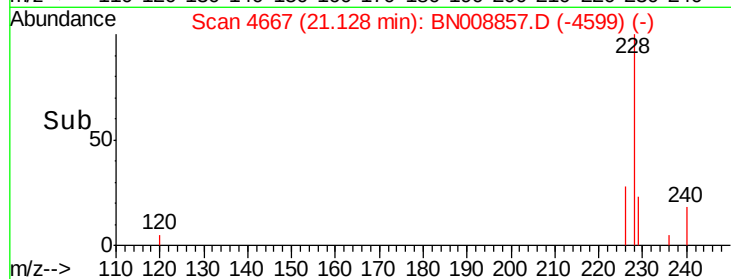
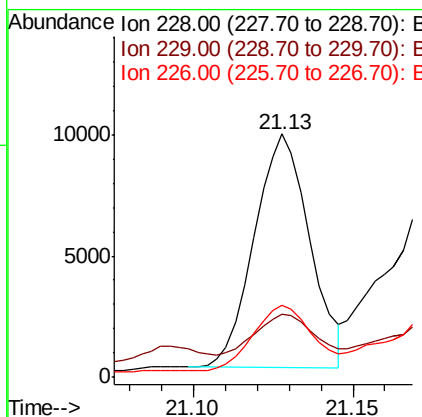
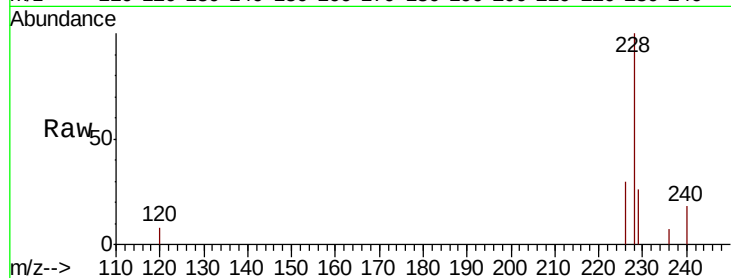
#18  
Benzo(a)anthracene  
Concen: 0.195 ng/ul  
RT: 21.13 min Scan# 4667  
Delta R.T. -0.00 min  
Lab File: BN008857.D  
Acq: 06 Dec 2019 13:40

Instrument :  
BNA\_N  
ClientSampled :  
C0BK9

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 25.8  | 15.7  | 23.5# |
| 226     | 29.7  | 21.5  | 32.3  |

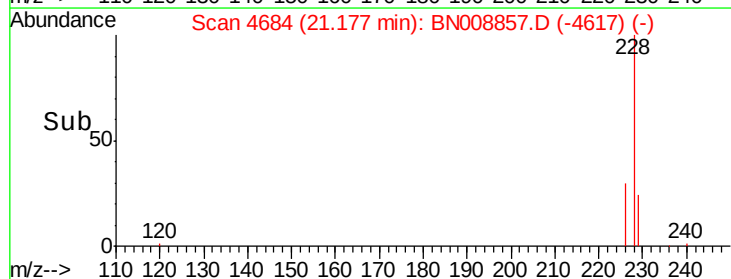
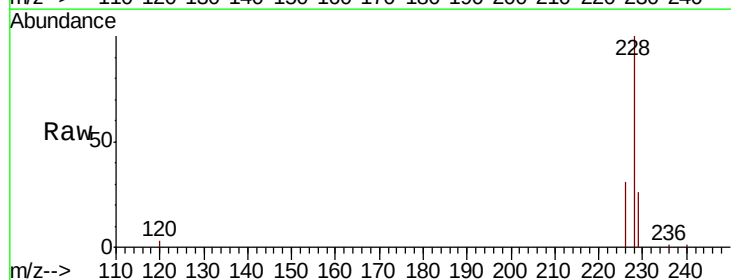
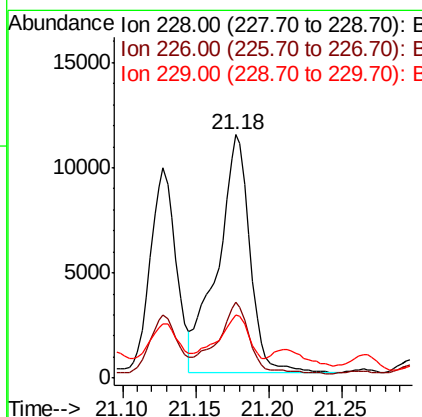
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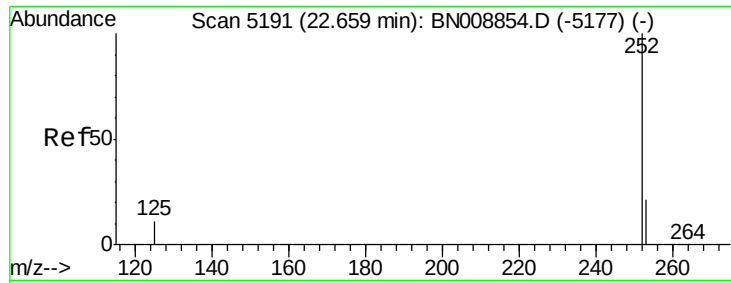
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#19  
Chrysene  
Concen: 0.294 ng/ul  
RT: 21.18 min Scan# 4684  
Delta R.T. -0.00 min  
Lab File: BN008857.D  
Acq: 06 Dec 2019 13:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.1  | 23.8  | 35.6  |
| 229     | 26.2  | 15.6  | 23.4# |





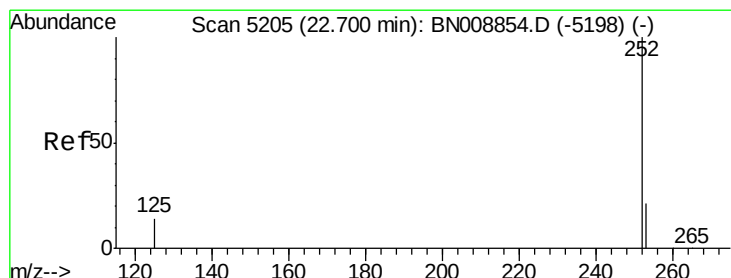
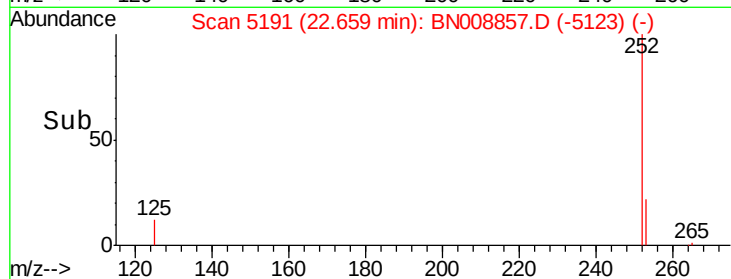
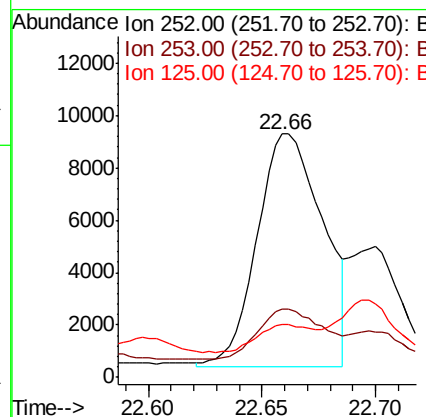
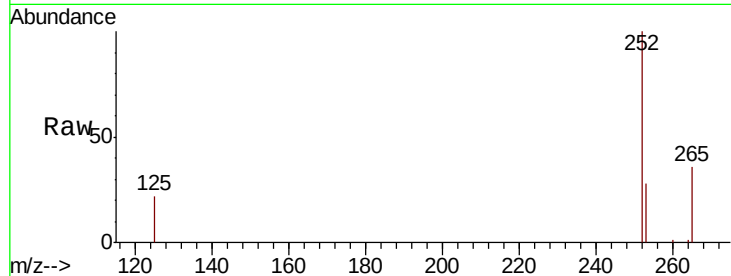
#21  
Benzo(b)fluoranthene  
Concen: 0.259 ng/ul m  
RT: 22.66 min Scan# 5191  
Delta R.T. -0.00 min  
Lab File: BN008857.D  
Acq: 06 Dec 2019 13:40

Instrument :  
BNA\_N  
ClientSampleId :  
C0BK9

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 252     | 100   | 17890 |       |       |
| 253     | 28.3  | 0.0   | 48.6  |       |
| 125     | 21.6  | 0.0   | 31.6  |       |

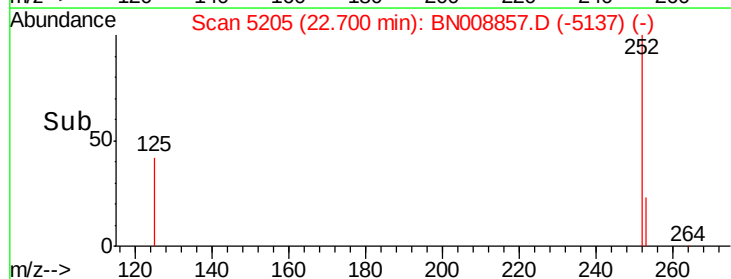
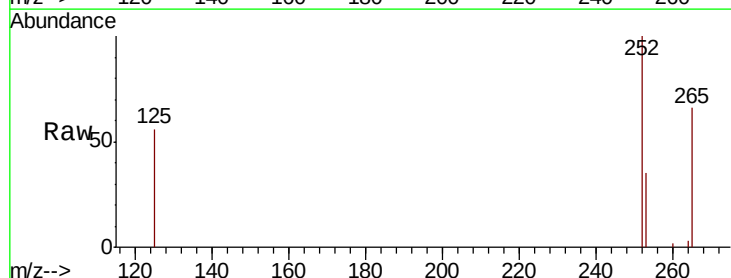
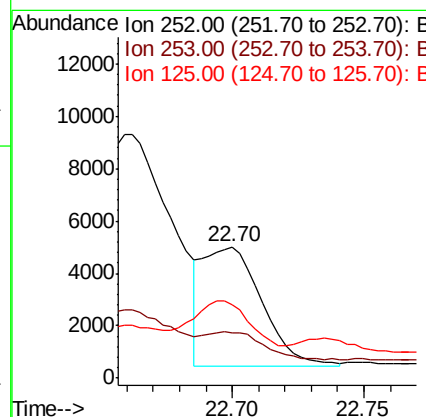
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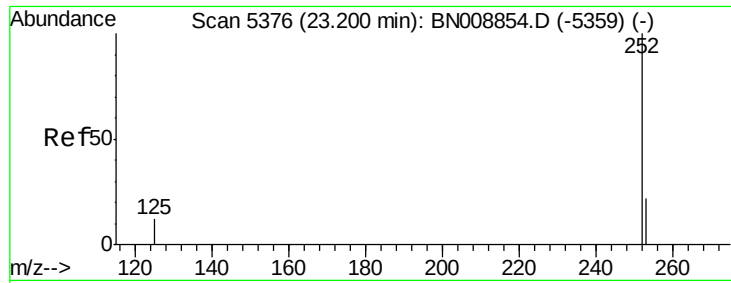


#22  
Benzo(k)fluoranthene  
Concen: 0.105 ng/ul m  
RT: 22.70 min Scan# 5205  
Delta R.T. -0.00 min  
Lab File: BN008857.D  
Acq: 06 Dec 2019 13:40

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 252     | 100   | 7188 |       |       |
| 253     | 34.7  | 19.6 | 29.4# |       |
| 125     | 55.8  | 13.8 | 20.6# |       |







#23

Benzo(a)pyrene

Concen: 0.183 ng/ul

RT: 23.20 min Scan# 5377

Delta R.T. 0.00 min

Lab File: BN008857.D

Acq: 06 Dec 2019 13:40

Instrument :

BNA\_N

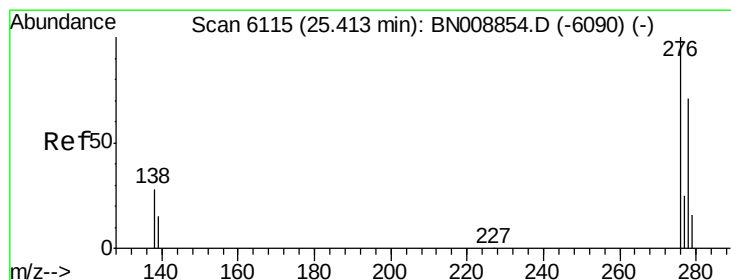
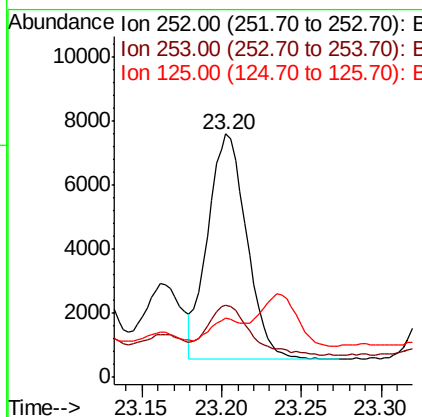
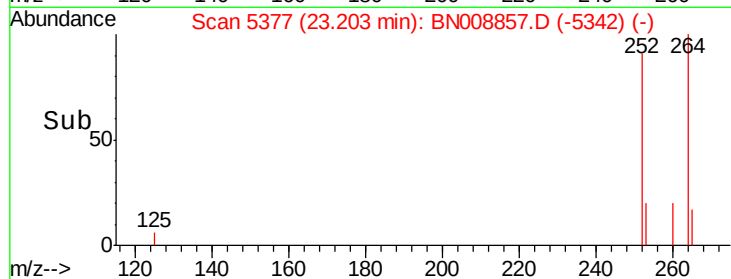
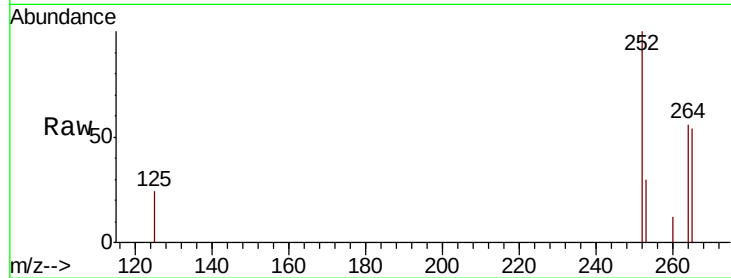
ClientSampleId :

C0BK9

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 252   | Resp: | 11871 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 29.8  | 19.9  | 29.9  |
| 125       | 24.4  | 14.6  | 22.0# |

Manual Integrations  
APPROVED

mohammad  
12/9/2019 3:06:56 PM



#24

Indeno(1,2,3-cd)pyrene

Concen: 0.123 ng/ul

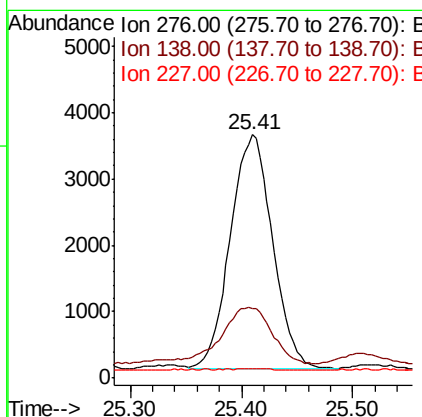
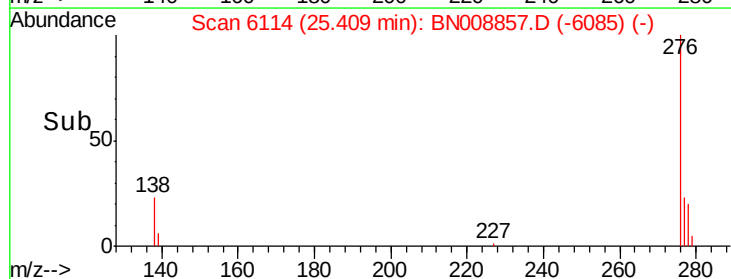
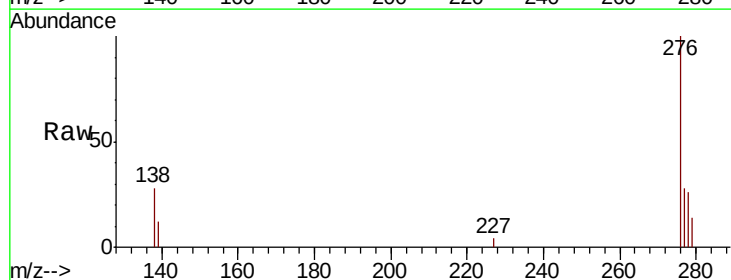
RT: 25.41 min Scan# 6114

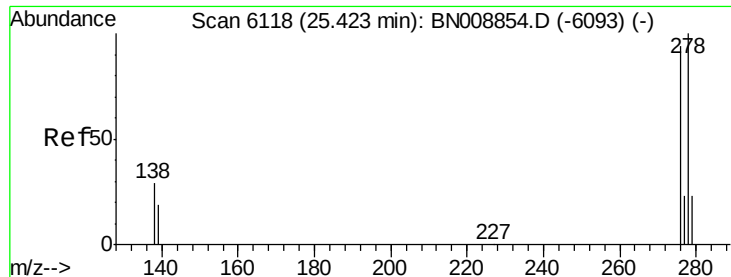
Delta R.T. -0.00 min

Lab File: BN008857.D

Acq: 06 Dec 2019 13:40

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 276   | Resp: | 9290 |
| Ion Ratio | Lower | Upper |      |
| 276       | 100   |       |      |
| 138       | 28.4  | 23.8  | 35.6 |
| 227       | 0.4   | 0.2   | 0.2# |





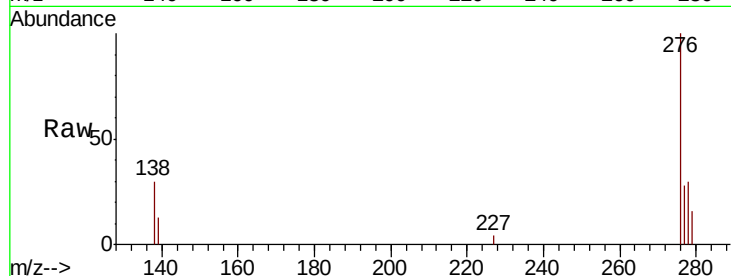
#25  
Dibenzo(a,h)anthracene  
Concen: 0.043 ng/ul  
RT: 25.42 min Scan# 6116  
Delta R.T. -0.01 min  
Lab File: BN008857.D  
Acq: 06 Dec 2019 13:40

Instrument :  
BNA\_N  
ClientSampleId :  
C0BK9

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 44.9  | 17.4  | 26.0# |
| 279     | 54.4  | 20.5  | 30.7# |

Manual Integrations  
APPROVED

mohammad  
12/9/2019 3:06:56 PM

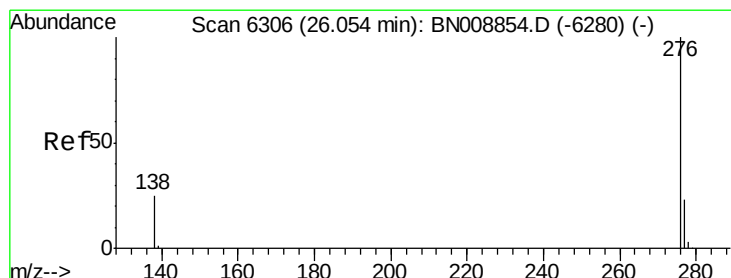
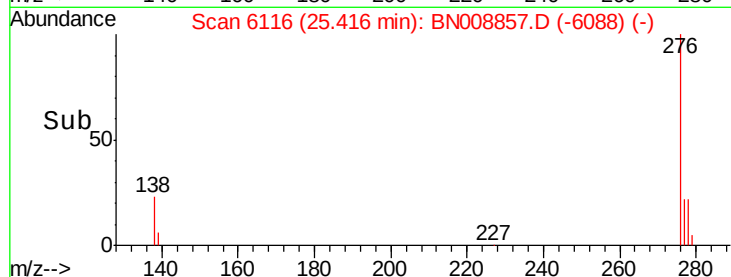
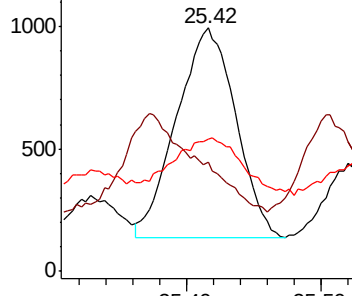


Abundance

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: 0.157 ng/ul  
RT: 26.05 min Scan# 6305  
Delta R.T. -0.00 min  
Lab File: BN008857.D  
Acq: 06 Dec 2019 13:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 29.5  | 21.9  | 32.9  |
| 277     | 26.9  | 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

