

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN060119\  
 Data File : BN006025.D  
 Acq On : 02 Jun 2019 10:42  
 Operator : JU/SJ  
 Sample : K2928-03DL 10X  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleID :  
 A42B8DL

Manual Integrations  
 APPROVED

Sohil  
 6/4/2019 8:38:41 AM

Quant Time: Jun 03 03:49:08 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN052819MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Sat Jun 01 01:49:29 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.72  | 152  | 536112   | 20.00 | ng/ul | -0.02    |
| 18) Naphthalene-d8        | 10.52 | 136  | 2260246  | 20.00 | ng/ul | -0.02    |
| 35) Acenaphthene-d10      | 14.38 | 164  | 1243026  | 20.00 | ng/ul | -0.02    |
| 61) Phenanthrene-d10      | 17.14 | 188  | 2334910  | 20.00 | ng/ul | -0.02    |
| 77) Chrysene-d12          | 21.36 | 240  | 1439617  | 20.00 | ng/ul | -0.02    |
| 85) Perylene-d12          | 23.65 | 264  | 1660197  | 20.00 | ng/ul | -0.02    |

## System Monitoring Compounds

|                                |       |     |        |      |       |       |
|--------------------------------|-------|-----|--------|------|-------|-------|
| 3) 1,4-Dioxane-d8              | 3.25  | 96  | 7343m  | 0.60 | ng/uL | 0.00  |
| 5) Phenol-d5                   | 6.89  | 99  | 132278 | 2.78 | ng/ul | -0.02 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.06  | 67  | 80001  | 2.95 | ng/ul | -0.02 |
| 9) 2-Chlorophenol-d4           | 7.26  | 132 | 109931 | 3.04 | ng/ul | -0.01 |
| 13) 4-Methylphenol-d8          | 8.43  | 113 | 95629  | 2.49 | ng/ul | -0.02 |
| 19) Nitrobenzene-d5            | 8.88  | 128 | 50341  | 3.47 | ng/ul | -0.01 |
| 22) 2-Nitrophenol-d4           | 9.60  | 143 | 51874  | 3.84 | ng/ul | -0.02 |
| 26) 2,4-Dichlorophenol-d3      | 10.14 | 165 | 96101  | 3.01 | ng/ul | -0.01 |
| 29) 4-Chloroaniline-d4         | 10.65 | 131 | 44956m | 1.07 | ng/ul | -0.02 |
| 43) Dimethylphthalate-d6       | 13.79 | 166 | 311492 | 3.40 | ng/ul | -0.02 |
| 46) Acenaphthylene-d8          | 14.07 | 160 | 388099 | 3.39 | ng/ul | -0.02 |
| 51) 4-Nitrophenol-d4           | 14.59 | 143 | 33191  | 1.99 | ng/ul | -0.02 |
| 57) Fluorene-d10               | 15.38 | 176 | 342059 | 4.45 | ng/ul | -0.02 |
| 62) 4,6-Dinitro-2-methylphenol | 15.51 | 200 | 3040   | 0.32 | ng/ul | -0.02 |
| 70) Anthracene-d10             | 17.24 | 188 | 343093 | 3.45 | ng/ul | -0.02 |
| 78) Pyrene-d10                 | 19.55 | 212 | 290671 | 4.00 | ng/ul | -0.02 |
| 89) Benzo(a)pyrene-d12         | 23.50 | 264 | 251298 | 3.39 | ng/ul | -0.02 |

## Target Compounds

|                            |       |     |         |        | Ovalue |     |
|----------------------------|-------|-----|---------|--------|--------|-----|
| 28) Naphthalene            | 10.57 | 128 | 236269  | 2.203  | ng/ul  | 98  |
| 44) Dimethylphthalate      | 13.84 | 163 | 113193  | 1.236  | ng/ul  | 99  |
| 49) Acenaphthene           | 14.45 | 153 | 304097  | 3.982  | ng/ul  | 99  |
| 53) Dibenzofuran           | 14.78 | 168 | 271778  | 2.521  | ng/ul  | 98  |
| 58) Fluorene               | 15.44 | 166 | 429034  | 5.067  | ng/ul  | 97  |
| 69) Phenanthrene           | 17.18 | 178 | 5403382 | 46.707 | ng/ul  | 99  |
| 71) Anthracene             | 17.27 | 178 | 1480330 | 12.604 | ng/ul  | 100 |
| 74) Carbazole              | 17.54 | 167 | 671506  | 6.347  | ng/ul  | 99  |
| 76) Fluoranthene           | 19.21 | 202 | 6023881 | 48.777 | ng/ul  | 96  |
| 79) Pyrene                 | 19.58 | 202 | 4905786 | 53.795 | ng/ul  | 98  |
| 82) Benzo(a)anthracene     | 21.34 | 228 | 2310521 | 25.531 | ng/ul  | 98  |
| 84) Chrysene               | 21.39 | 228 | 2011306 | 23.829 | ng/ul  | 97  |
| 87) Benzo(b)fluoranthene   | 22.96 | 252 | 2415970 | 25.909 | ng/ul  | 97  |
| 88) Benzo(k)fluoranthene   | 23.01 | 252 | 835594m | 9.746  | ng/ul  |     |
| 90) Benzo(a)pyrene         | 23.55 | 252 | 1738323 | 19.768 | ng/ul  | 98  |
| 91) Indeno(1,2,3-cd)pyrene | 25.95 | 276 | 1122569 | 10.879 | ng/ul  | 100 |
| 92) Dibenzo(a,h)anthracene | 25.96 | 278 | 299704  | 3.489  | ng/ul# | 89  |
| 93) Benzo(g,h,i)perylene   | 26.66 | 276 | 791119  | 9.103  | ng/ul  | 95  |

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

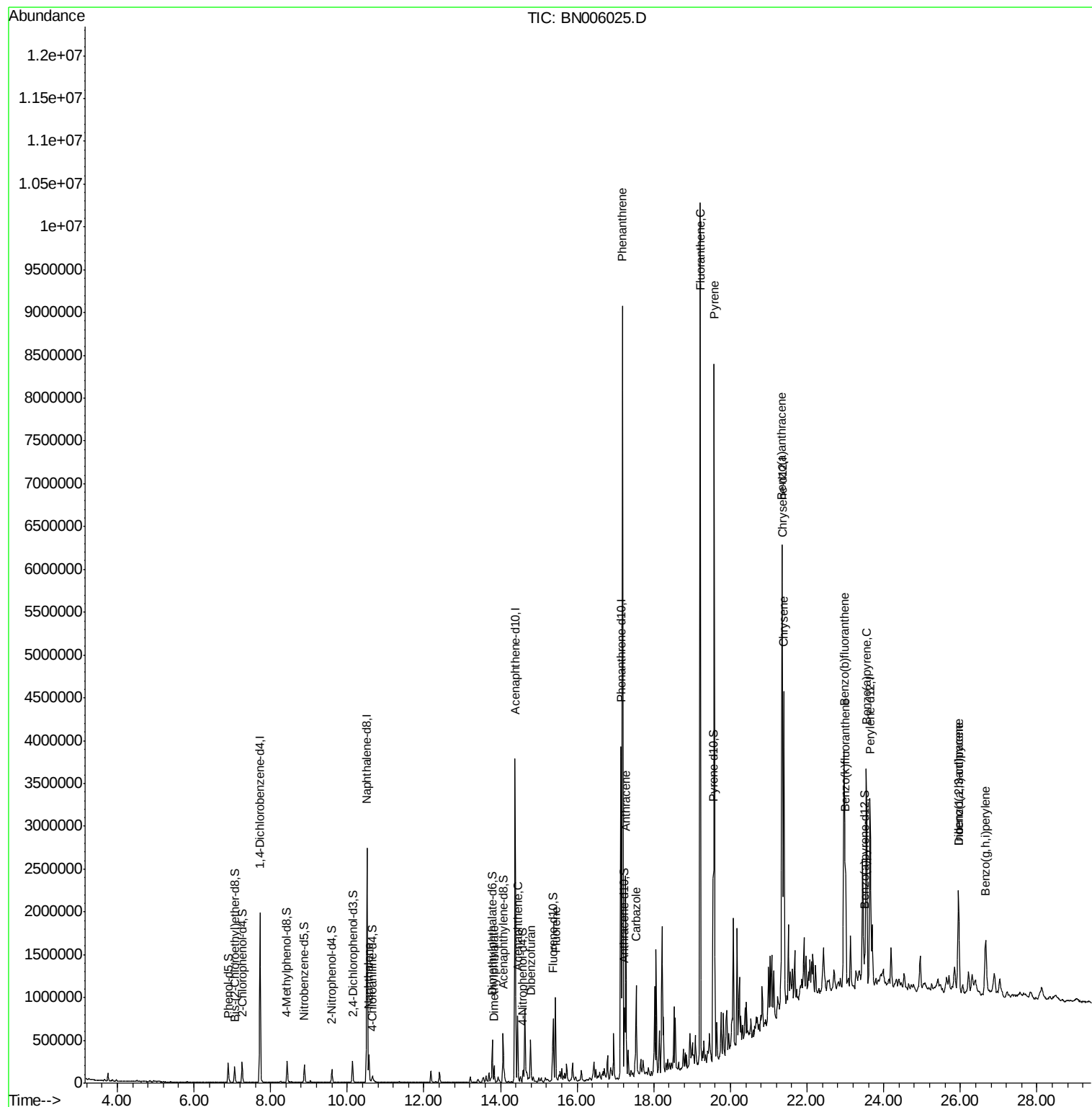
Data Path : Z:\SVOASRV\HPCHEM1\BNA\_N\DATA\BN060119\  
Data File : BN006025.D  
Acq On : 02 Jun 2019 10:42  
Operator : JU/SJ  
Sample : K2928-03DL 10X  
Misc :  
ALS Vial : 26 Sample Multiplier: 1

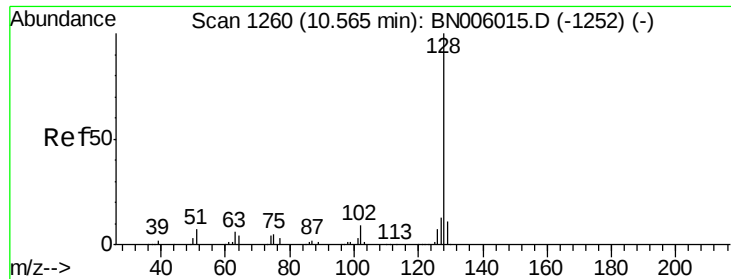
Instrument :  
BNA\_N  
ClientSampleId :  
A42B8DL

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Quant Time: Jun 03 03:49:08 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN052819MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Sat Jun 01 01:49:29 2019  
Response via : Initial Calibration





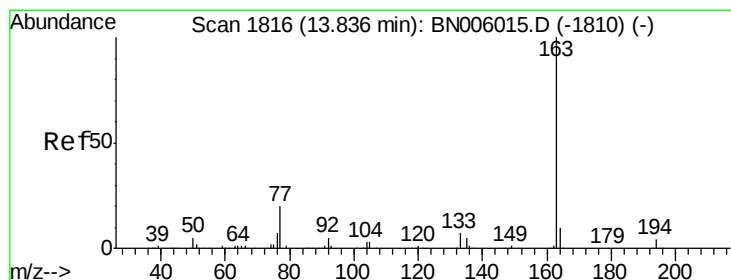
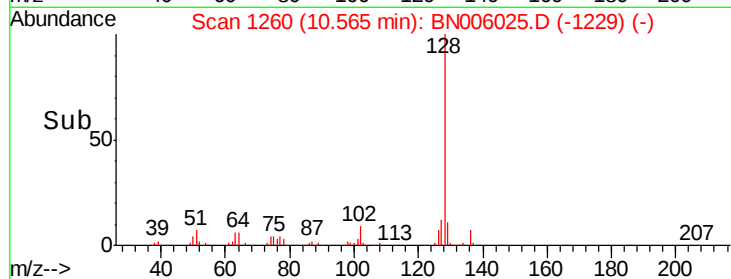
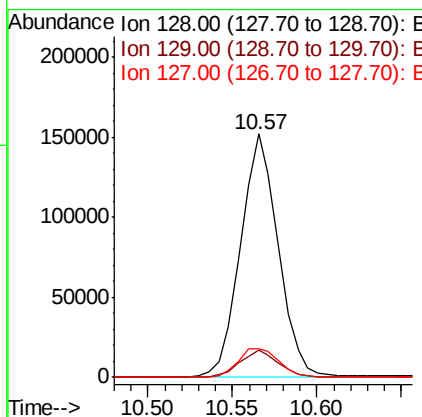
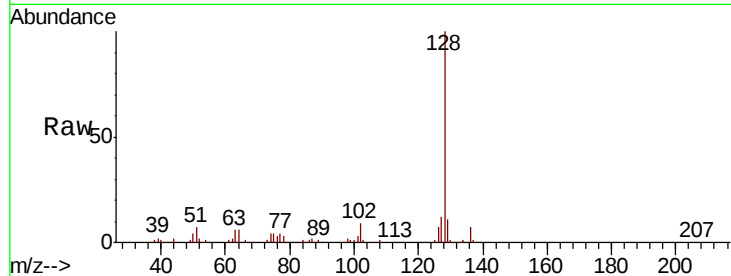
#28  
Naphthalene  
Concen: 2.203 ng/ul  
RT: 10.57 min Scan# 1260  
Delta R.T. -0.02 min  
Lab File: BN006025.D  
Acq: 02 Jun 2019 10:42

Instrument :  
BNA\_N  
ClientSampleId :  
A42B8DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 11.4  | 9.2   | 13.8  |
| 127     | 11.9  | 10.7  | 16.1  |

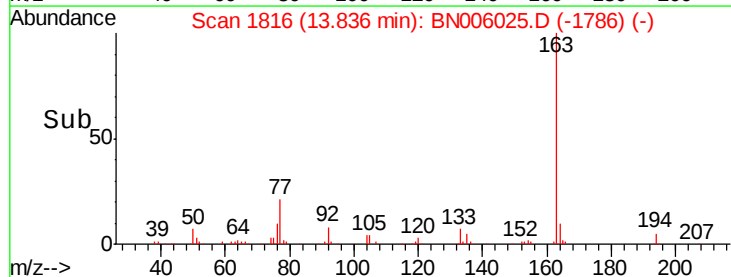
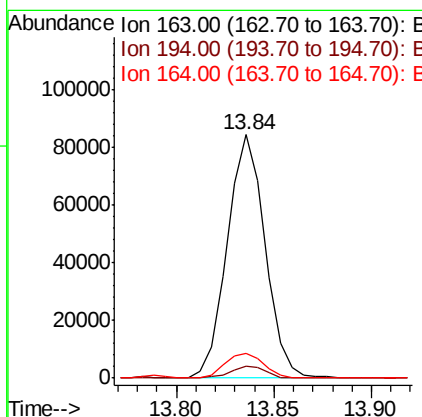
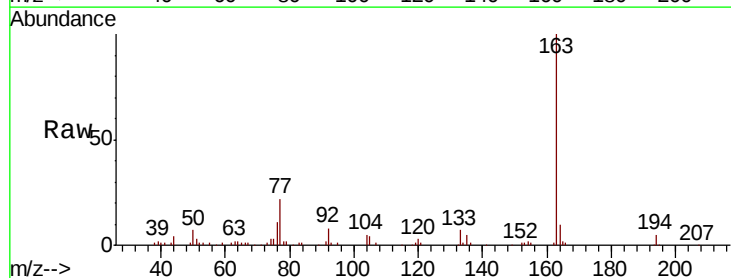
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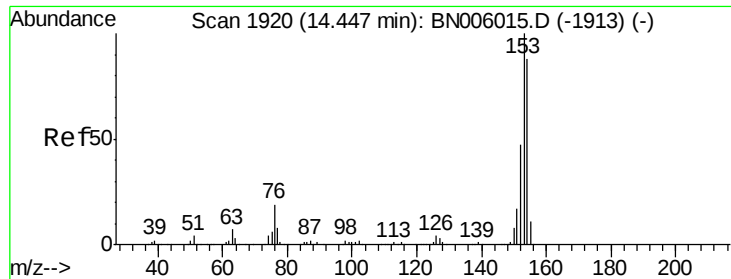
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#44  
Dimethylphthalate  
Concen: 1.236 ng/ul  
RT: 13.84 min Scan# 1816  
Delta R.T. -0.02 min  
Lab File: BN006025.D  
Acq: 02 Jun 2019 10:42

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 4.7   | 3.4   | 5.0   |
| 164     | 10.3  | 8.1   | 12.1  |





#49

Acenaphthene

Concen: 3.982 ng/ul

RT: 14.45 min Scan# 1920

Delta R.T. -0.02 min

Lab File: BN006025.D

Acq: 02 Jun 2019 10:42

Instrument :

BNA\_N

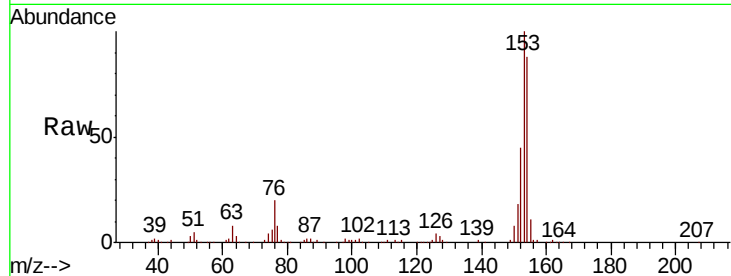
ClientSampled :

A42B8DL

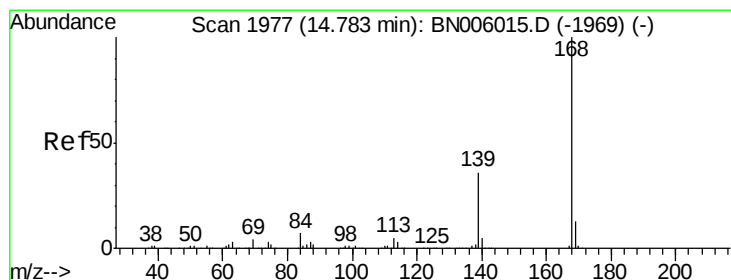
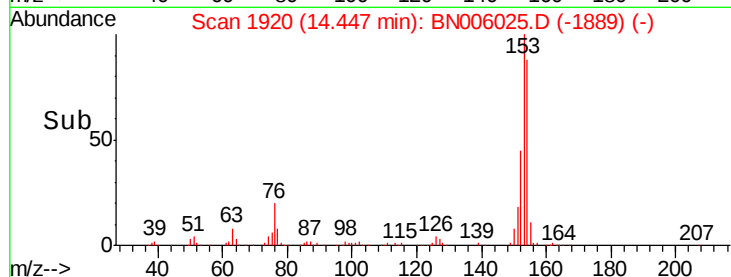
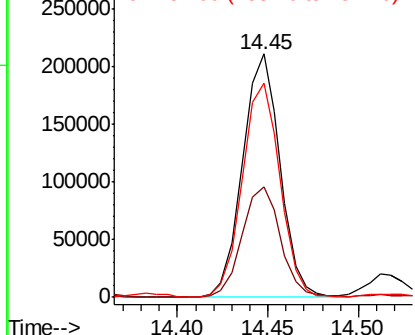
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 153   | Resp: | 304097 |
| Ion Ratio | Lower | Upper |        |
| 153       | 100   |       |        |
| 152       | 45.5  | 37.4  | 56.0   |
| 154       | 88.1  | 71.2  | 106.8  |

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Abundance Ion 153.00 (152.70 to 153.70): E  
Ion 152.00 (151.70 to 152.70): E  
Ion 154.00 (153.70 to 154.70): E



#53

Dibenzofuran

Concen: 2.521 ng/ul

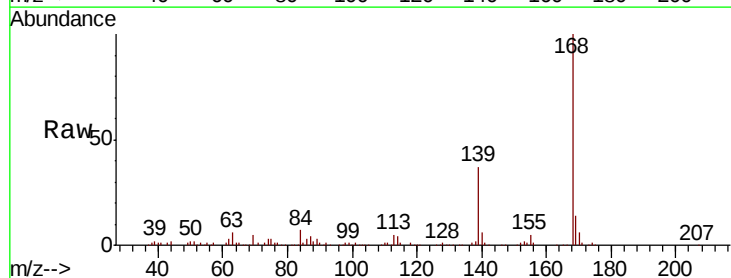
RT: 14.78 min Scan# 1977

Delta R.T. -0.02 min

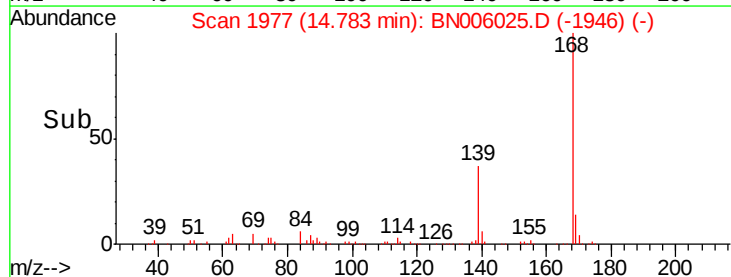
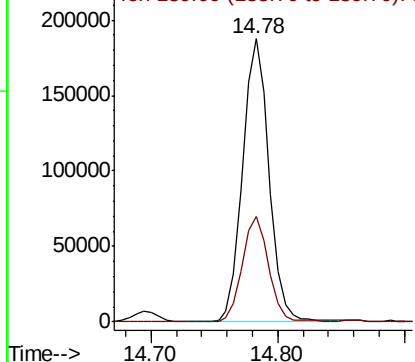
Lab File: BN006025.D

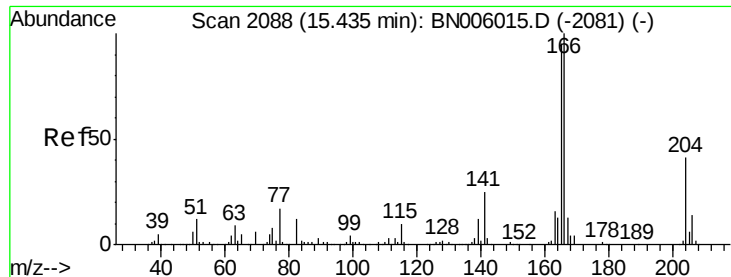
Acq: 02 Jun 2019 10:42

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 168   | Resp: | 271778 |
| Ion Ratio | Lower | Upper |        |
| 168       | 100   |       |        |
| 139       | 37.1  | 30.9  | 46.3   |



Abundance Ion 168.00 (167.70 to 168.70): E  
Ion 139.00 (138.70 to 139.70): E





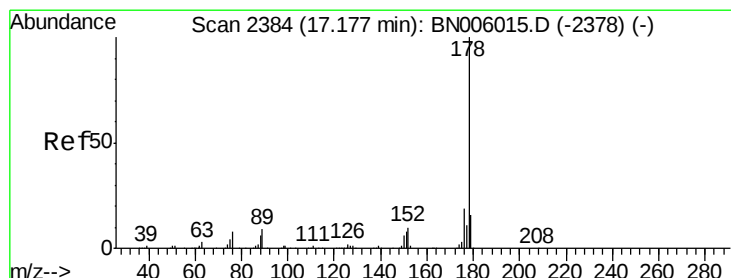
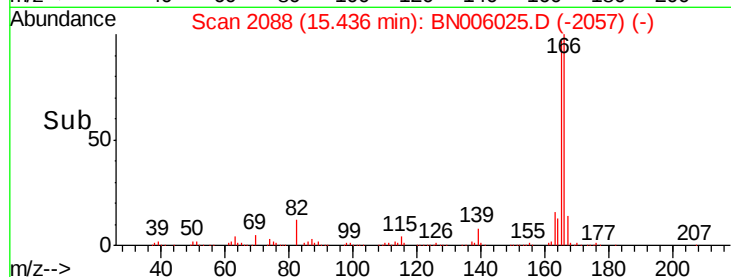
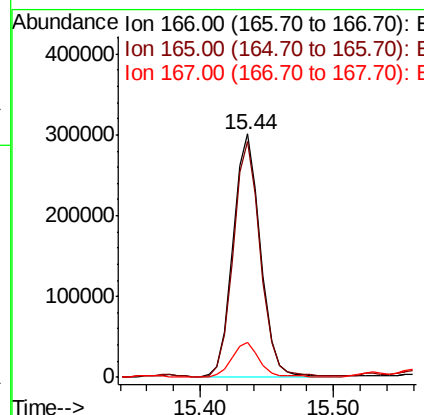
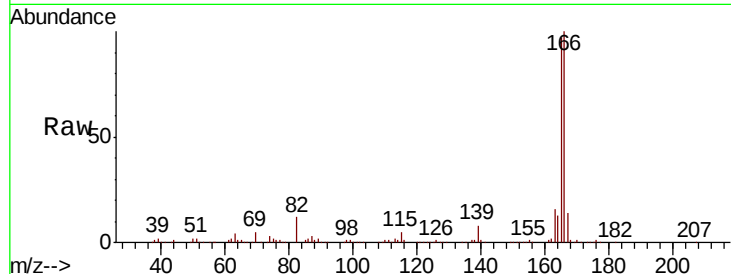
#58  
 Fluorene  
 Concen: 5.067 ng/ul  
 RT: 15.44 min Scan# 2088  
 Delta R.T. -0.02 min  
 Lab File: BN006025.D  
 Acq: 02 Jun 2019 10:42

Instrument :  
 BNA\_N  
 ClientSampleId :  
 A42B8DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 97.2  | 80.0  | 120.0 |
| 167     | 14.2  | 10.7  | 16.1  |

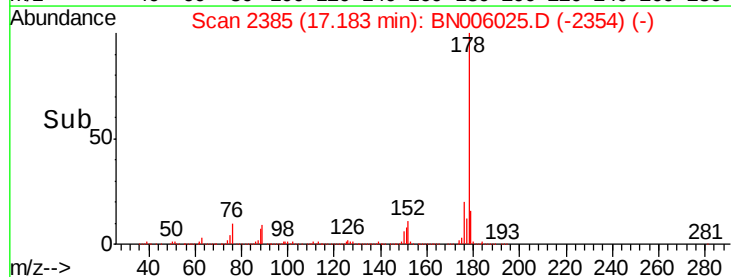
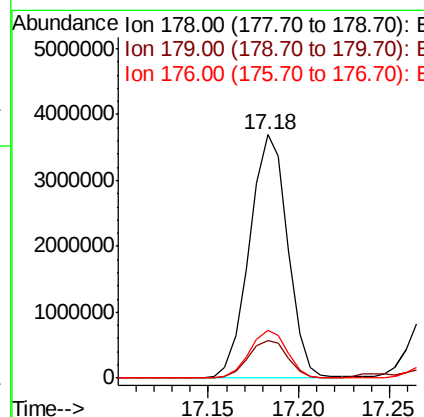
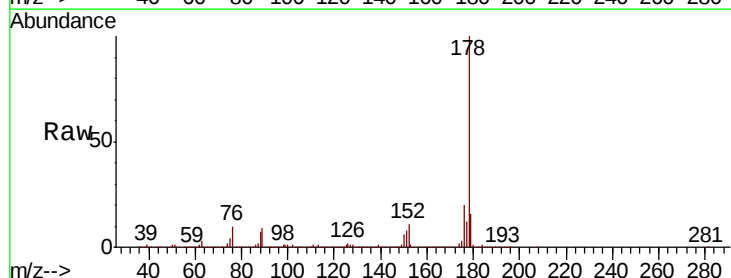
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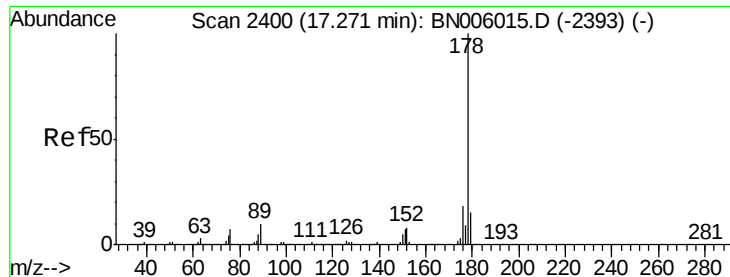
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#69  
 Phenanthrene  
 Concen: 46.707 ng/ul  
 RT: 17.18 min Scan# 2385  
 Delta R.T. -0.02 min  
 Lab File: BN006025.D  
 Acq: 02 Jun 2019 10:42

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.6  | 12.2  | 18.4  |
| 176     | 19.8  | 15.1  | 22.7  |





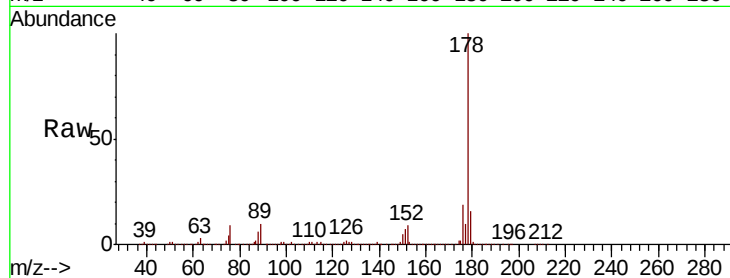
#71  
 Anthracene  
 Concen: 12.604 ng/ul  
 RT: 17.27 min Scan# 2400  
 Delta R.T. -0.02 min  
 Lab File: BN006025.D  
 Acq: 02 Jun 2019 10:42

Instrument :  
 BNA\_N  
 ClientSampled :  
 A42B8DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.8  | 12.3  | 18.5  |
| 176     | 18.9  | 15.1  | 22.7  |

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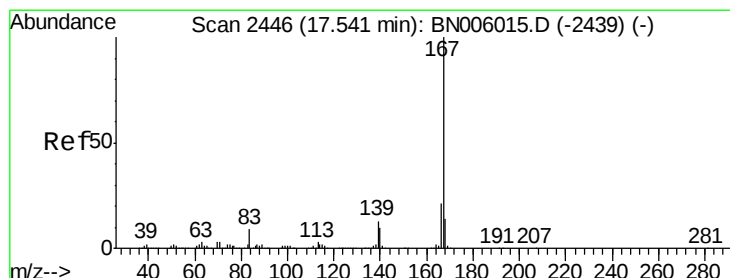
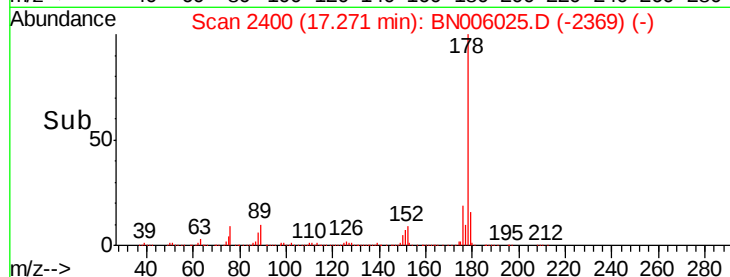
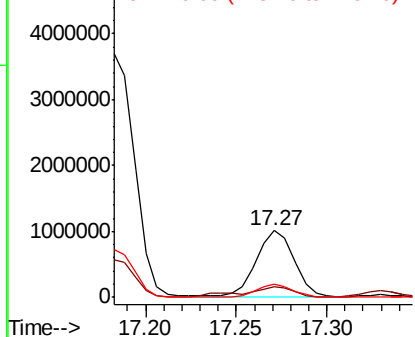


Abundance

Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E



#74  
 Carbazole  
 Concen: 6.347 ng/ul  
 RT: 17.54 min Scan# 2446  
 Delta R.T. -0.02 min  
 Lab File: BN006025.D  
 Acq: 02 Jun 2019 10:42

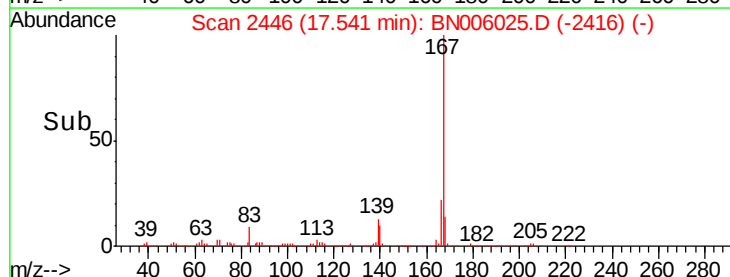
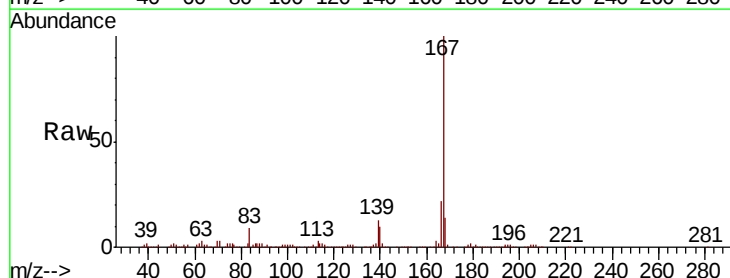
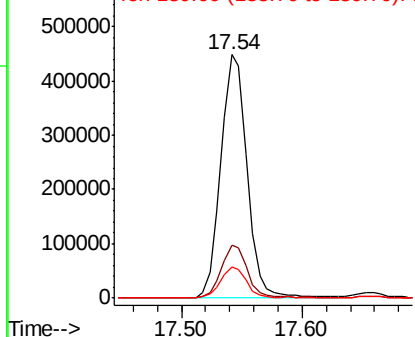
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 21.9  | 17.2  | 25.8  |
| 139     | 12.8  | 10.6  | 16.0  |

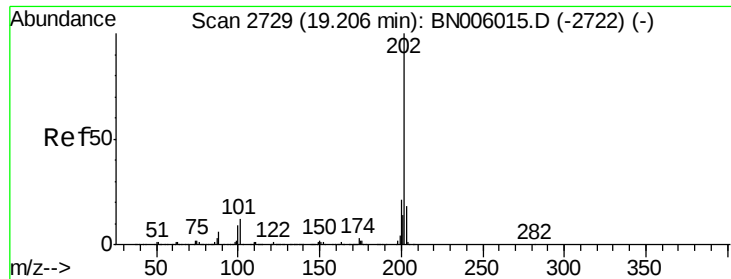
Abundance

Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E





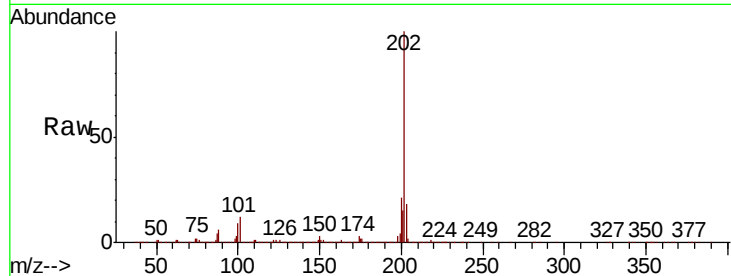
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Fluoranthene  
Concen: 48.777 ng/ul  
RT: 19.21 min Scan# 2730  
Delta R.T. -0.01 min  
Lab File: BN006025.D  
Acq: 02 Jun 2019 10:42

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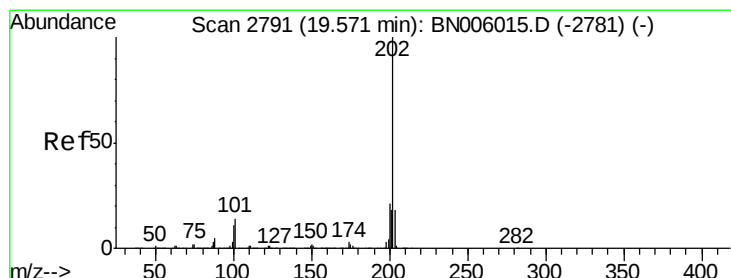
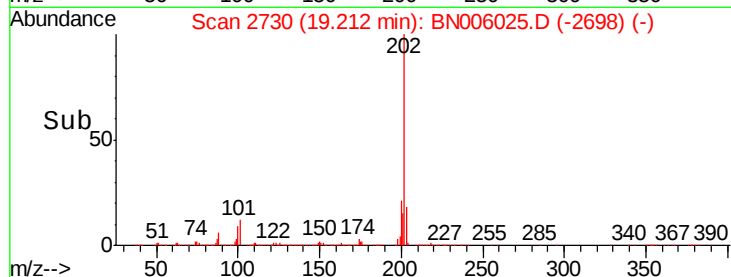
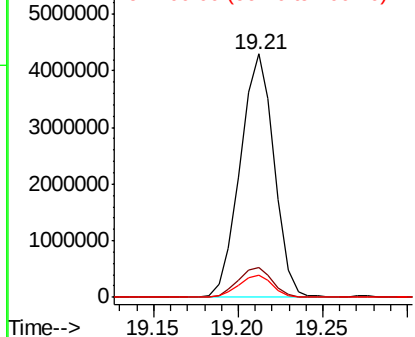
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 12.2  | 8.6   | 12.8  |
| 100     | 9.2   | 6.3   | 9.5   |

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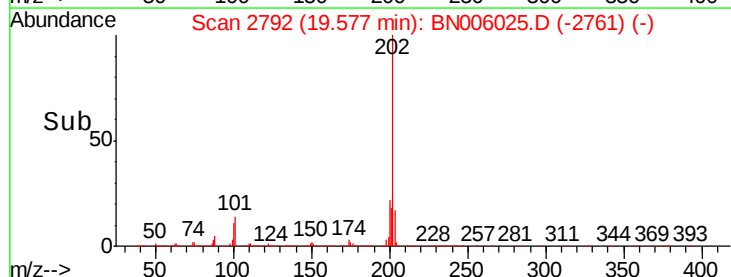
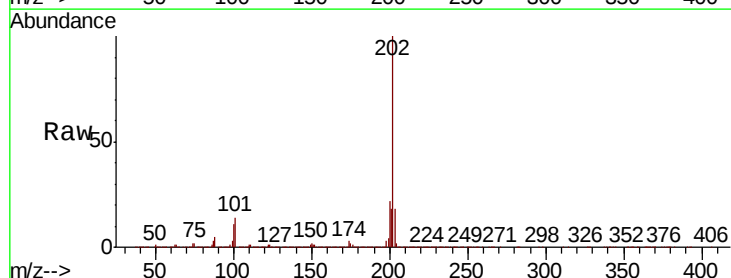
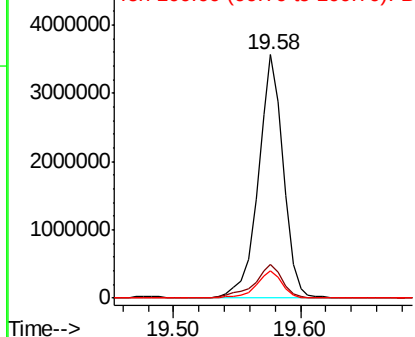
Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 100.00 (99.70 to 100.70): B

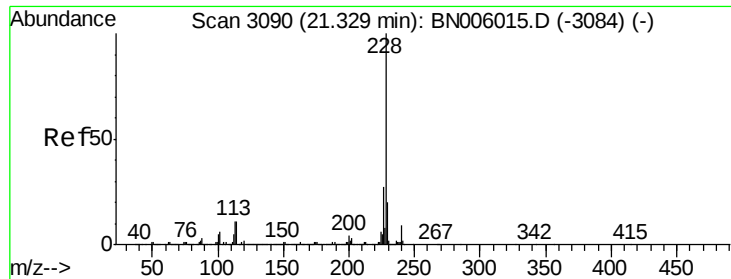


#79  
Pyrene  
Concen: 53.795 ng/ul  
RT: 19.58 min Scan# 2792  
Delta R.T. -0.02 min  
Lab File: BN006025.D  
Acq: 02 Jun 2019 10:42

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 13.6  | 10.3  | 15.5  |
| 100     | 11.1  | 7.9   | 11.9  |

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





#82

Benzo(a)anthracene

Concen: 25.531 ng/ul

RT: 21.34 min Scan# 3092

Delta R.T. -0.02 min

Lab File: BN006025.D

Acq: 02 Jun 2019 10:42

Instrument :

BNA\_N

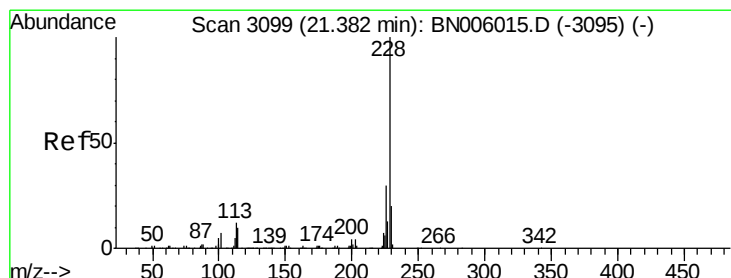
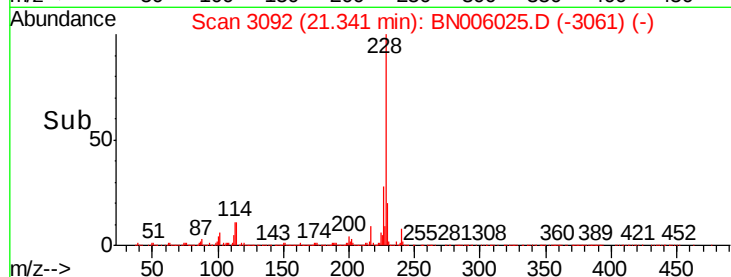
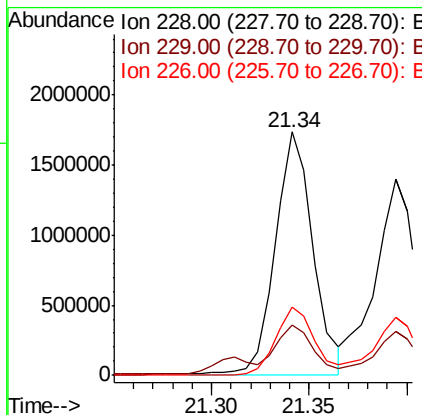
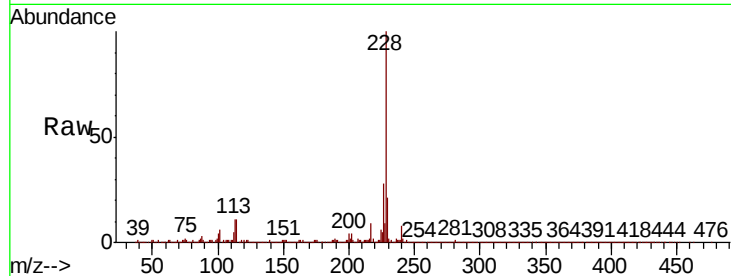
ClientSampleId :

A42B8DL

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 228   | Resp: | 2310521 |
| Ion      | Ratio | Lower | Upper   |
| 228      | 100   |       |         |
| 229      | 20.6  | 15.8  | 23.6    |
| 226      | 28.0  | 21.4  | 32.2    |

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#84

Chrysene

Concen: 23.829 ng/ul

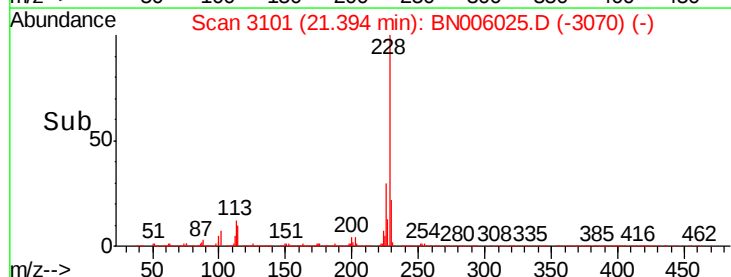
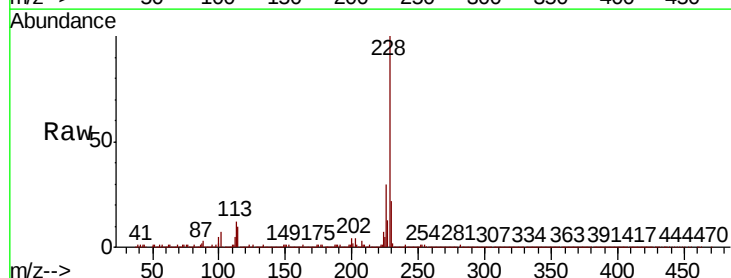
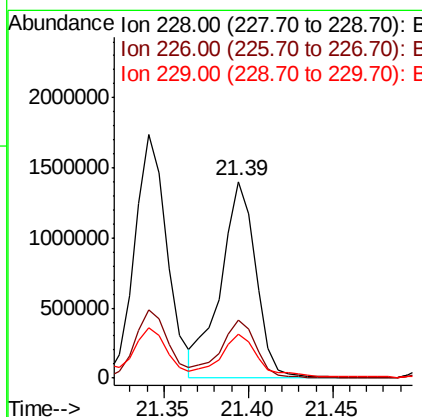
RT: 21.39 min Scan# 3101

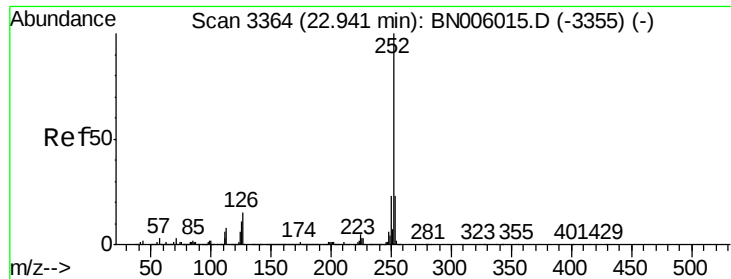
Delta R.T. -0.02 min

Lab File: BN006025.D

Acq: 02 Jun 2019 10:42

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 228   | Resp: | 2011306 |
| Ion      | Ratio | Lower | Upper   |
| 228      | 100   |       |         |
| 226      | 29.7  | 24.0  | 36.0    |
| 229      | 22.5  | 15.4  | 23.0    |





#87

Benzo(b)fluoranthene

Concen: 25.909 ng/ul

RT: 22.96 min Scan# 3368

Delta R.T. -0.02 min

Lab File: BN006025.D

Acq: 02 Jun 2019 10:42

Instrument :

BNA\_N

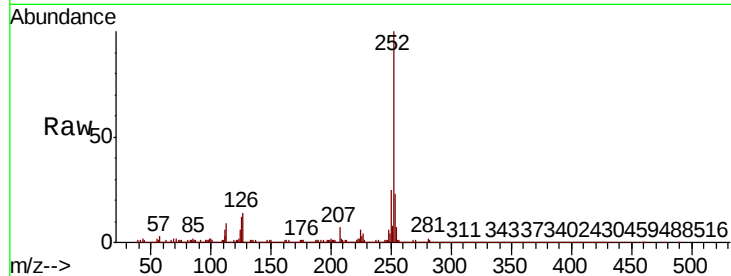
ClientSampled :

A42B8DL

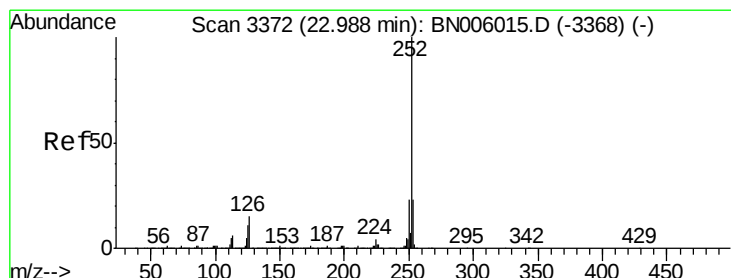
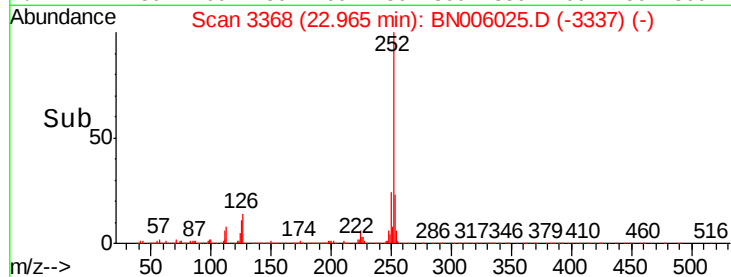
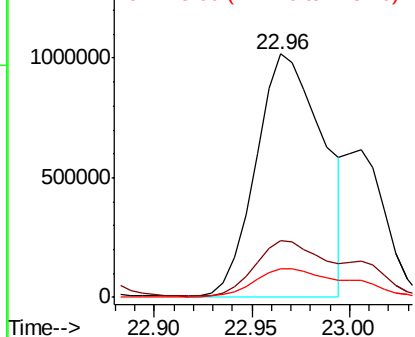
|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 252   | Resp: | 2415970 |
| Ion      | Ratio | Lower | Upper   |
| 252      | 100   |       |         |
| 253      | 23.4  | 17.7  | 26.5    |
| 125      | 11.7  | 8.4   | 12.6    |

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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



#88

Benzo(k)fluoranthene

Concen: 9.746 ng/ul m

RT: 23.01 min Scan# 3375

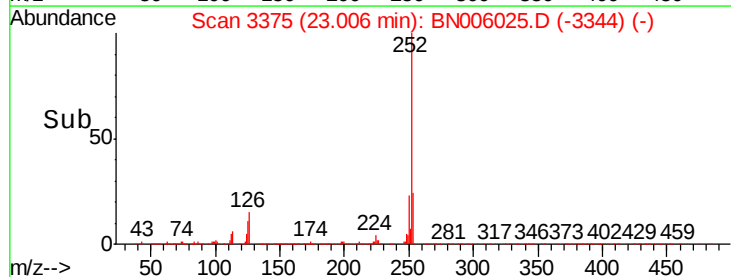
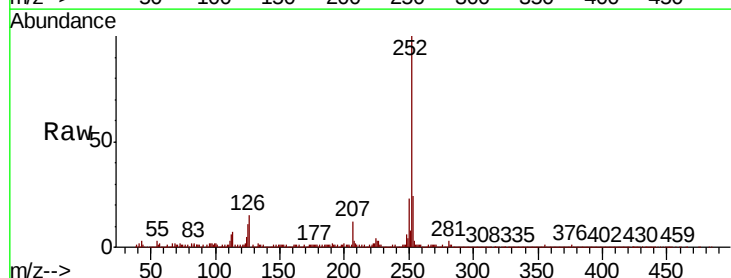
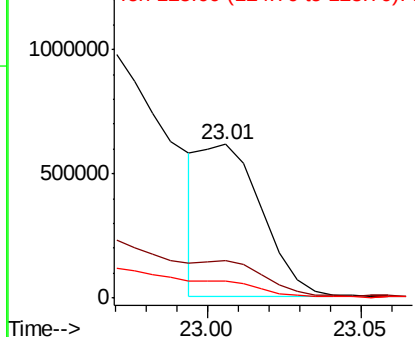
Delta R.T. -0.02 min

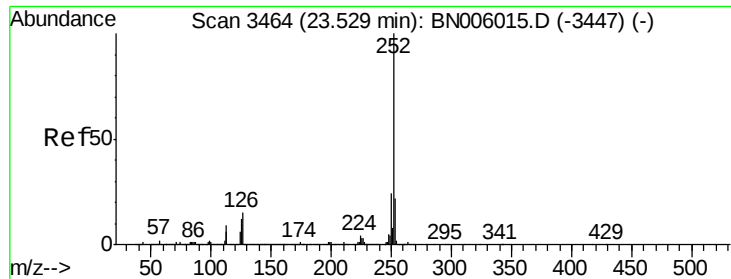
Lab File: BN006025.D

Acq: 02 Jun 2019 10:42

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 252   | Resp: | 835594 |
| Ion      | Ratio | Lower | Upper  |
| 252      | 100   |       |        |
| 253      | 24.3  | 17.4  | 26.0   |
| 125      | 11.3  | 7.5   | 11.3   |

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





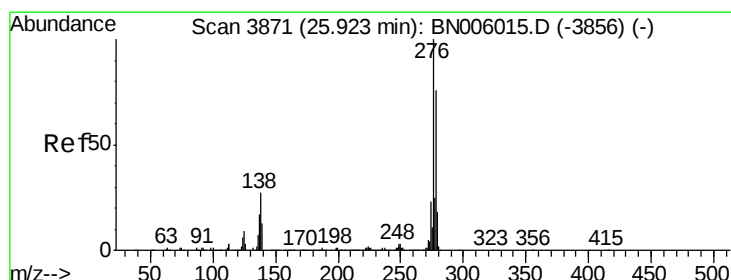
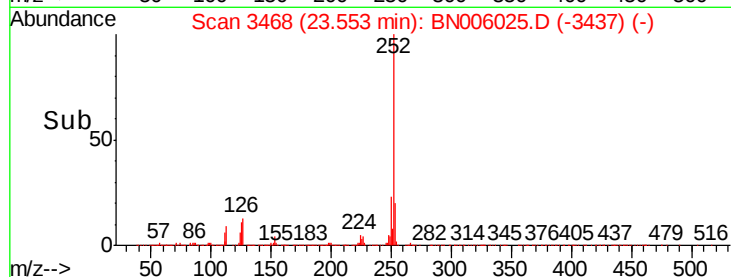
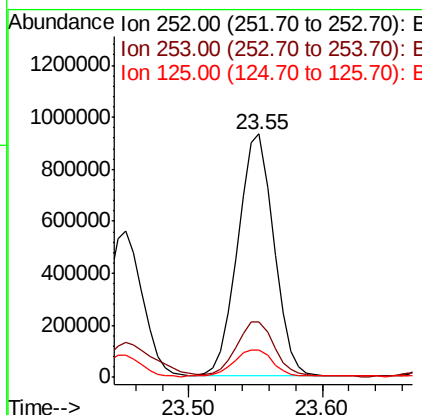
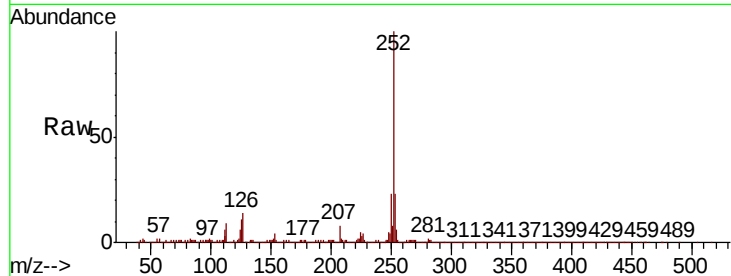
#90  
Benzo(a)pyrene  
Concen: 19.768 ng/ul  
RT: 23.55 min Scan# 3468  
Delta R.T. -0.02 min  
Lab File: BN006025.D  
Acq: 02 Jun 2019 10:42

Instrument :  
BNA\_N  
ClientSampleId :  
A42B8DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.9  | 17.3  | 25.9  |
| 125     | 11.2  | 8.6   | 13.0  |

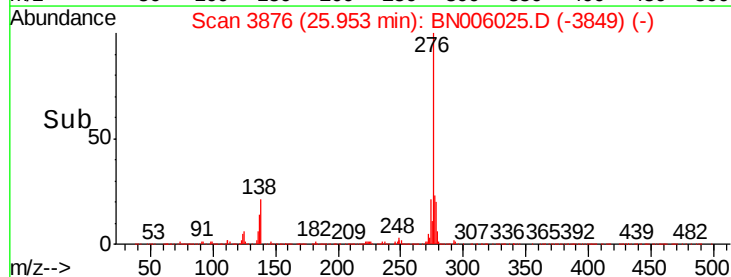
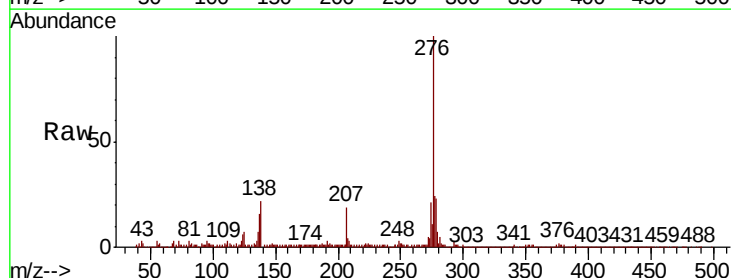
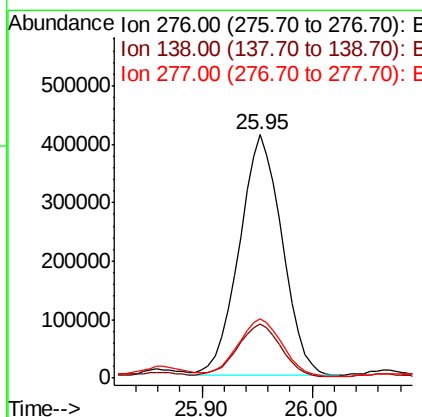
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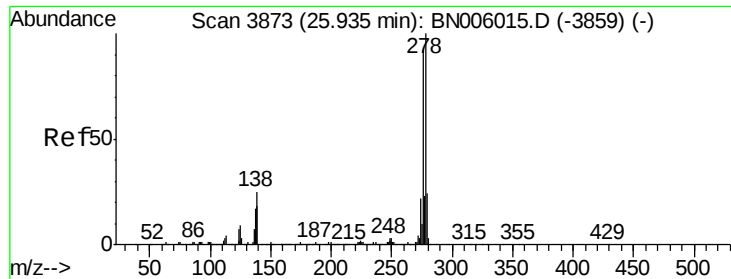
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#91  
Indeno(1,2,3-cd)pyrene  
Concen: 10.879 ng/ul  
RT: 25.95 min Scan# 3876  
Delta R.T. -0.04 min  
Lab File: BN006025.D  
Acq: 02 Jun 2019 10:42

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 22.1  | 17.9  | 26.9  |
| 277     | 24.4  | 19.7  | 29.5  |





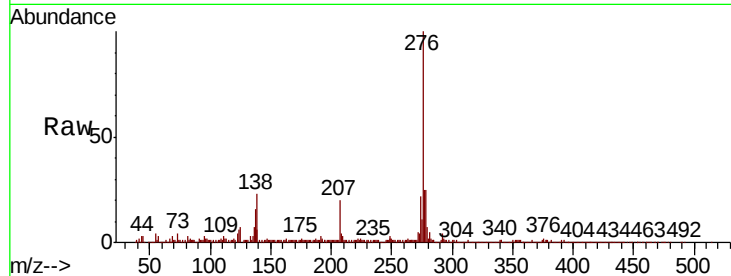
#92  
Dibenzo(a,h)anthracene  
Concen: 3.489 ng/ul  
RT: 25.96 min Scan# 3877  
Delta R.T. -0.04 min  
Lab File: BN006025.D  
Acq: 02 Jun 2019 10:42

Instrument :  
BNA\_N  
ClientSampleId :  
A42B8DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 22.9  | 13.1  | 19.7# |
| 279     | 28.4  | 19.4  | 29.0  |

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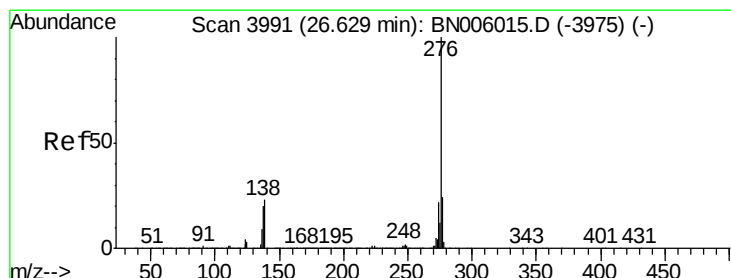
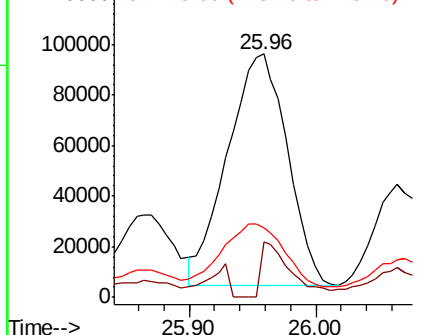
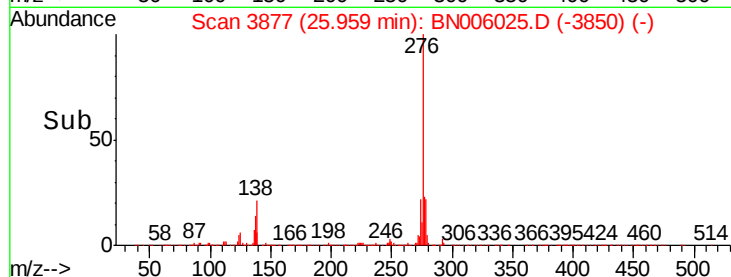


Abundance

Ion 278.00 (277.70 to 278.70): E

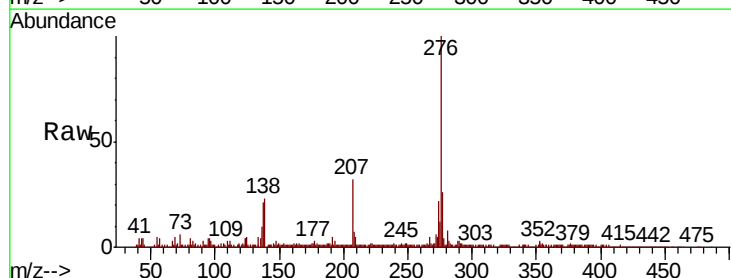
Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E



#93  
Benzo(g,h,i)perylene  
Concen: 9.103 ng/ul  
RT: 26.66 min Scan# 3996  
Delta R.T. -0.04 min  
Lab File: BN006025.D  
Acq: 02 Jun 2019 10:42

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 23.0  | 16.7  | 25.1  |
| 277     | 25.8  | 18.2  | 27.2  |



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

