

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN050319\  
 Data File : BN005468.D  
 Acq On : 04 May 2019 01:17  
 Operator : JU/SJ  
 Sample : K2603-20DL 10X  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleID :  
 GAJ72DL

Manual Integrations  
 APPROVED

mohammad  
 5/7/2019 8:21:32 AM

Quant Time: May 06 02:00:53 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN041919MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Fri May 03 03:02:31 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.59  | 152  | 270757   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.35 | 136  | 1209438  | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.22 | 164  | 759107   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 16.97 | 188  | 1730228  | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.20 | 240  | 1516952  | 20.00 | ng/ul | -0.01    |
| 85) Perylene-d12          | 23.41 | 264  | 1459468  | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |      |       |       |
|--------------------------------|-------|-----|--------|------|-------|-------|
| 3) 1,4-Dioxane-d8              | 3.22  | 96  | 1068   | 0.19 | ng/uL | 0.01  |
| 5) Phenol-d5                   | 6.78  | 99  | 33970  | 1.60 | ng/ul | 0.00  |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.94  | 67  | 22622  | 1.71 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 7.13  | 132 | 27662  | 1.70 | ng/ul | 0.00  |
| 13) 4-Methylphenol-d8          | 8.30  | 113 | 28406  | 1.71 | ng/ul | 0.00  |
| 19) Nitrobenzene-d5            | 8.73  | 128 | 16669  | 2.24 | ng/ul | 0.00  |
| 22) 2-Nitrophenol-d4           | 9.45  | 143 | 15149  | 2.01 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 9.99  | 165 | 30406  | 1.76 | ng/ul | 0.01  |
| 29) 4-Chloroaniline-d4         | 10.50 | 131 | 28040  | 1.57 | ng/ul | 0.00  |
| 43) Dimethylphthalate-d6       | 13.64 | 166 | 122522 | 2.22 | ng/ul | 0.00  |
| 46) Acenaphthylene-d8          | 13.91 | 160 | 150752 | 2.23 | ng/ul | 0.00  |
| 51) 4-Nitrophenol-d4           | 14.47 | 143 | 7585   | 0.87 | ng/ul | 0.03  |
| 57) Fluorene-d10               | 15.22 | 176 | 112762 | 2.44 | ng/ul | 0.00  |
| 62) 4,6-Dinitro-2-methylphenol | 15.37 | 200 | 6152   | 0.79 | ng/ul | 0.01  |
| 70) Anthracene-d10             | 17.07 | 188 | 168535 | 2.32 | ng/ul | 0.00  |
| 78) Pyrene-d10                 | 19.39 | 212 | 188510 | 2.43 | ng/ul | 0.00  |
| 89) Benzo(a)pyrene-d12         | 23.26 | 264 | 139011 | 2.18 | ng/ul | -0.02 |

## Target Compounds

|                            |       |     |          |        | Ovalue |    |
|----------------------------|-------|-----|----------|--------|--------|----|
| 28) Naphthalene            | 10.40 | 128 | 575347   | 10.233 | ng/ul  | 98 |
| 34) 2-Methylnaphthalene    | 12.02 | 142 | 477573   | 11.600 | ng/ul  | 98 |
| 47) Acenaphthylene         | 13.94 | 152 | 1346617  | 20.246 | ng/ul  | 98 |
| 49) Acenaphthene           | 14.29 | 153 | 131281   | 2.891  | ng/ul  | 97 |
| 53) Dibenzofuran           | 14.63 | 168 | 108183   | 1.655  | ng/ul  | 96 |
| 58) Fluorene               | 15.27 | 166 | 962176   | 18.861 | ng/ul  | 94 |
| 69) Phenanthrene           | 17.02 | 178 | 4397509  | 52.187 | ng/ul  | 99 |
| 71) Anthracene             | 17.11 | 178 | 918621   | 10.702 | ng/ul  | 98 |
| 76) Fluoranthene           | 19.05 | 202 | 2395037  | 25.625 | ng/ul  | 95 |
| 79) Pyrene                 | 19.42 | 202 | 3379800  | 34.604 | ng/ul  | 96 |
| 82) Benzo(a)anthracene     | 21.19 | 228 | 1054364m | 11.173 | ng/ul  |    |
| 84) Chrysene               | 21.25 | 228 | 974649   | 11.128 | ng/ul  | 99 |
| 87) Benzo(b)fluoranthene   | 22.76 | 252 | 649352   | 7.915  | ng/ul  | 99 |
| 88) Benzo(k)fluoranthene   | 22.79 | 252 | 197521m  | 2.521  | ng/ul  |    |
| 90) Benzo(a)pyrene         | 23.31 | 252 | 588403   | 7.630  | ng/ul  | 98 |
| 91) Indeno(1,2,3-cd)pyrene | 25.59 | 276 | 248600   | 2.916  | ng/ul  | 99 |
| 92) Dibenzo(a,h)anthracene | 25.60 | 278 | 73210    | 1.012  | ng/ul# | 83 |
| 93) Benzo(g,h,i)perylene   | 26.25 | 276 | 244989m  | 3.475  | ng/ul  |    |

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

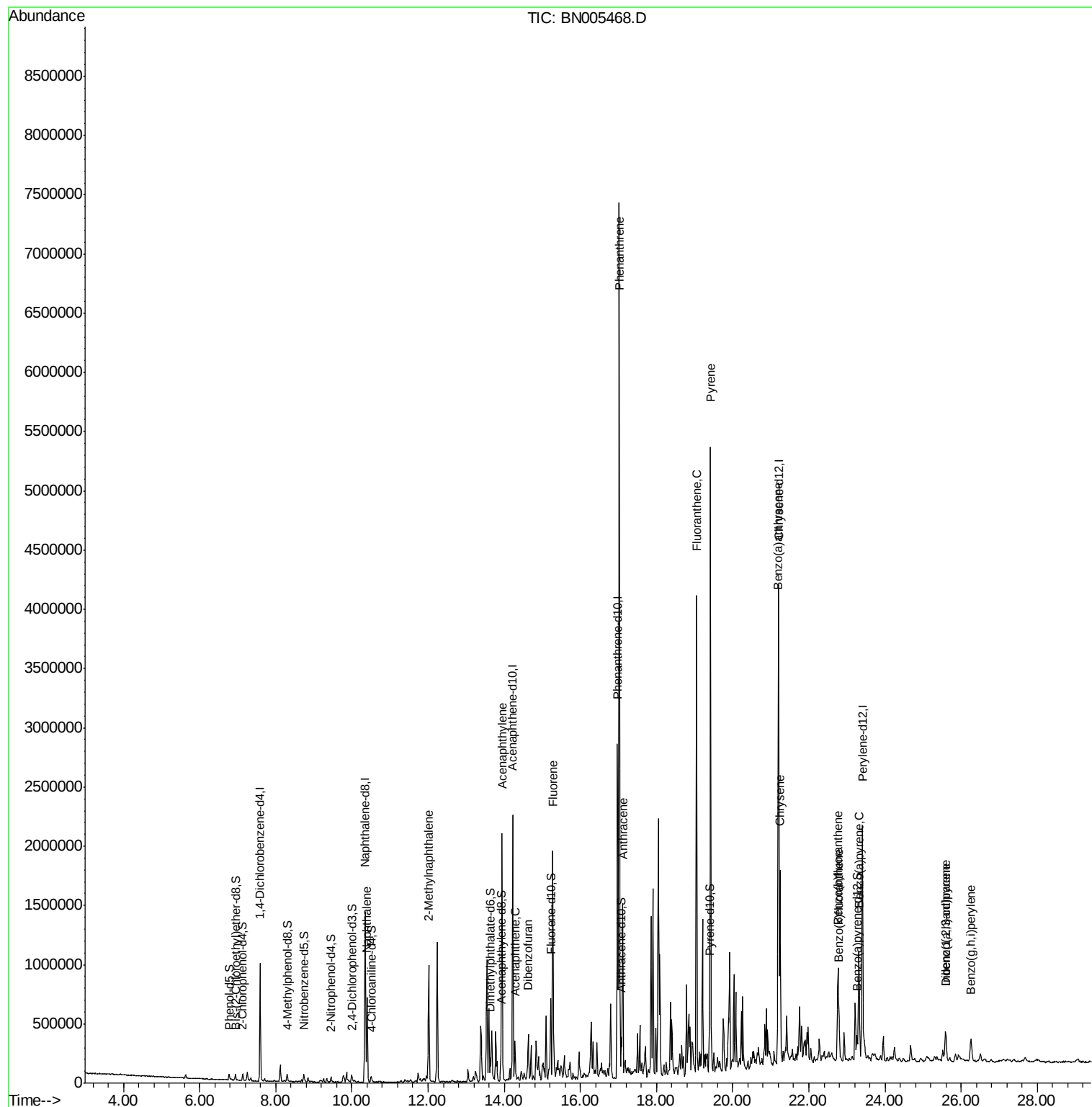
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN050319\  
Data File : BN005468.D  
Acq On : 04 May 2019 01:17  
Operator : JU/SJ  
Sample : K2603-20DL 10X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

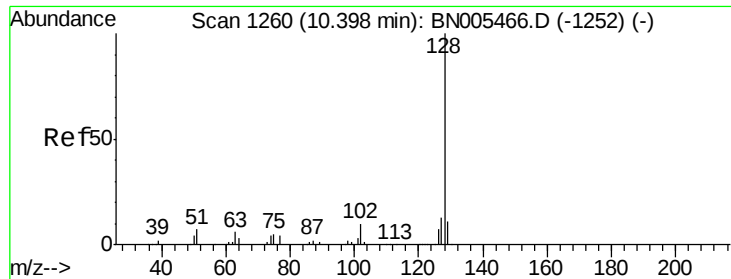
Instrument :  
BNA\_N  
ClientSampleId :  
GAJ72DL

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5/7/2019 8:21:32 AM

Quant Time: May 06 02:00:53 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN041919MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri May 03 03:02:31 2019  
Response via : Initial Calibration





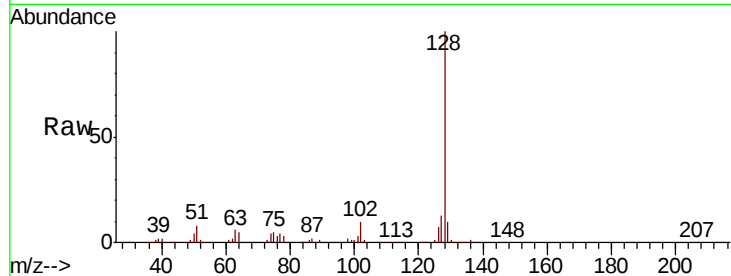
#28  
Naphthalene  
Concen: 10.233 ng/ul  
RT: 10.40 min Scan# 1260  
Delta R.T. -0.00 min  
Lab File: BN005468.D  
Acq: 04 May 2019 01:17

Instrument :  
BNA\_N  
ClientSampleId :  
GAJ72DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 10.3  | 9.2   | 13.8  |
| 127     | 13.0  | 10.7  | 16.1  |

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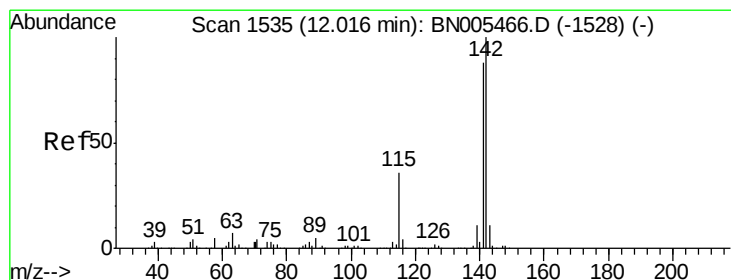
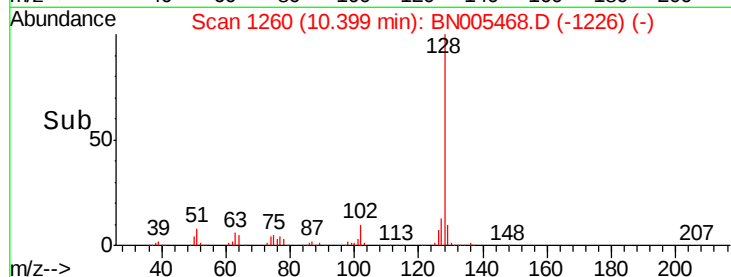
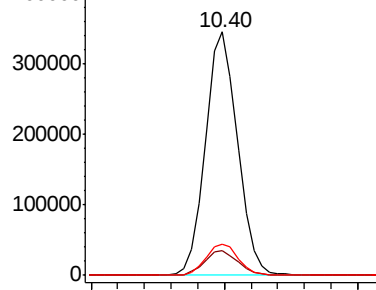


Abundance

Ion 128.00 (127.70 to 128.70): E

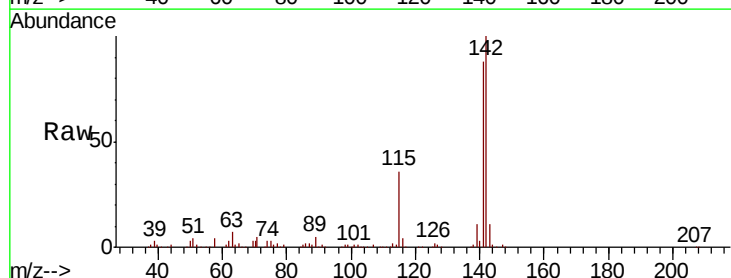
Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E



#34  
2-Methylnaphthalene  
Concen: 11.600 ng/ul  
RT: 12.02 min Scan# 1535  
Delta R.T. -0.01 min  
Lab File: BN005468.D  
Acq: 04 May 2019 01:17

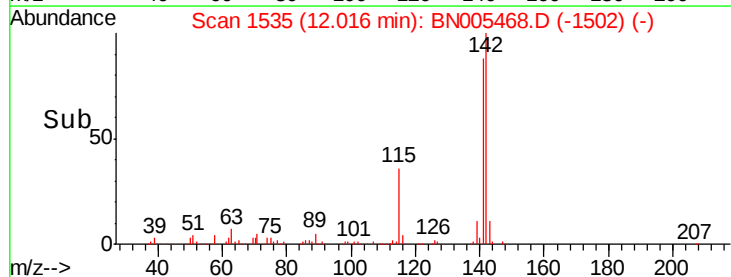
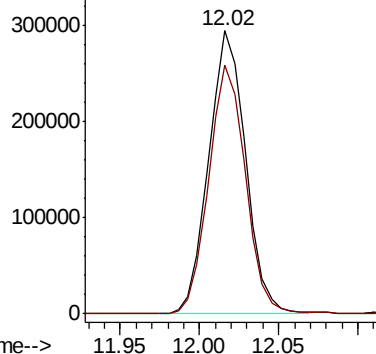
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 88.1  | 72.0  | 108.0 |

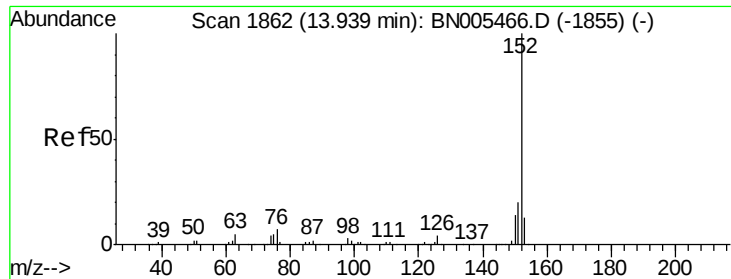


Abundance

Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E





#47

Acenaphthylene

Concen: 20.246 ng/ul

RT: 13.94 min Scan# 1862

Delta R.T. -0.01 min

Lab File: BN005468.D

Acq: 04 May 2019 01:17

Instrument :

BNA\_N

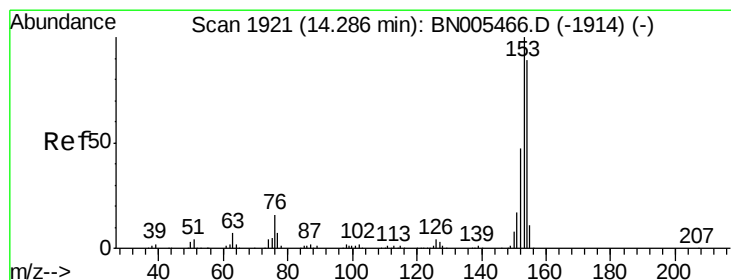
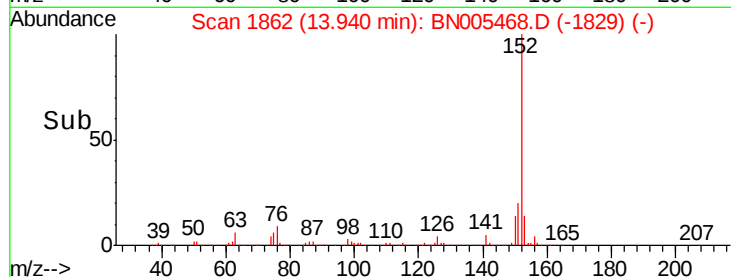
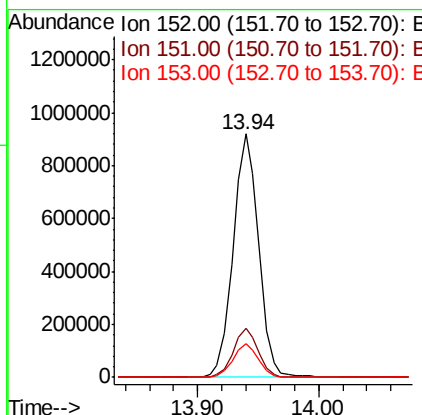
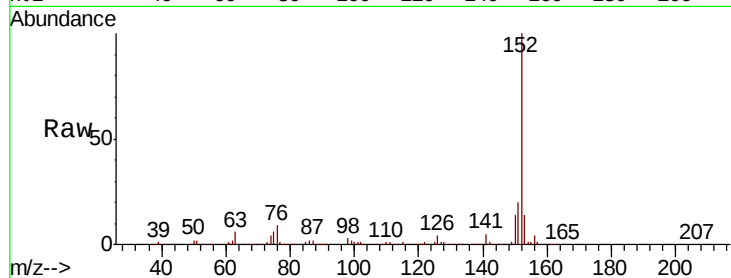
ClientSampleId :

GAJ72DL

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 152   | Resp: | 1346617 |
| Ion      | Ratio | Lower | Upper   |
| 152      | 100   |       |         |
| 151      | 20.4  | 15.8  | 23.8    |
| 153      | 13.8  | 9.8   | 14.8    |

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#49

Acenaphthene

Concen: 2.891 ng/ul

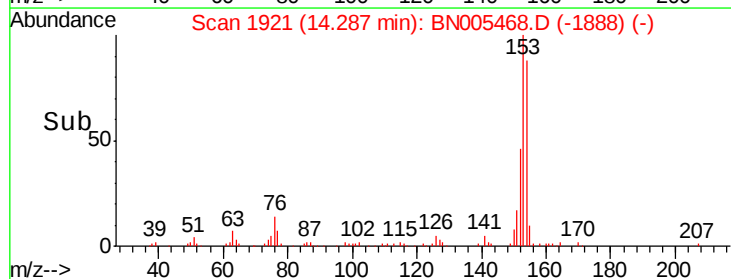
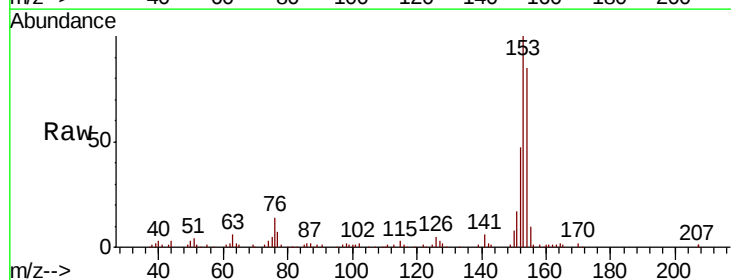
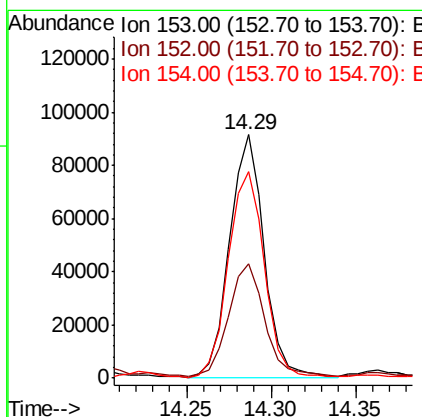
RT: 14.29 min Scan# 1921

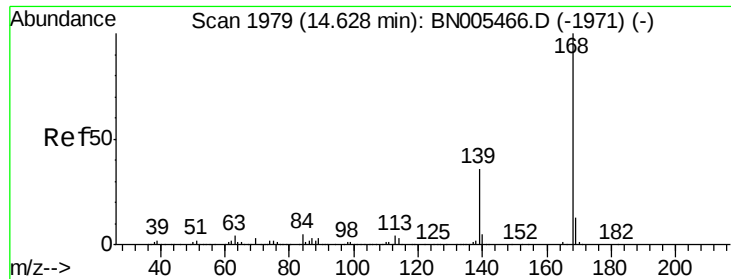
Delta R.T. -0.01 min

Lab File: BN005468.D

Acq: 04 May 2019 01:17

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 153   | Resp: | 131281 |
| Ion      | Ratio | Lower | Upper  |
| 153      | 100   |       |        |
| 152      | 46.8  | 37.4  | 56.0   |
| 154      | 84.9  | 71.2  | 106.8  |





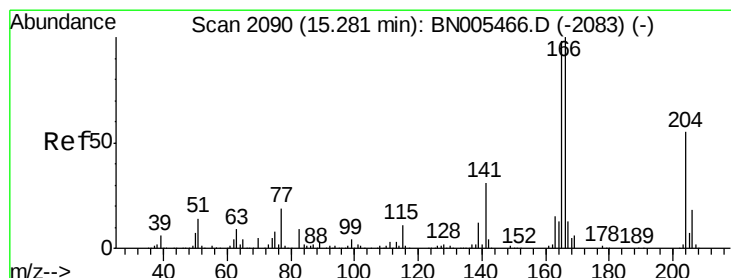
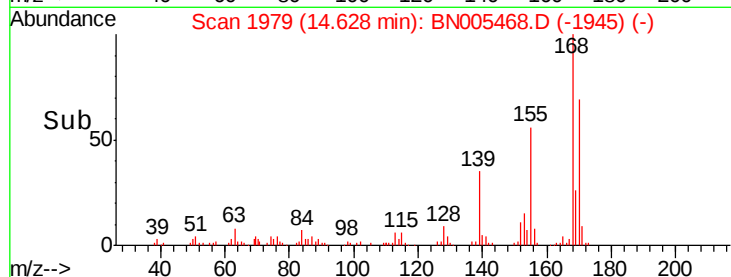
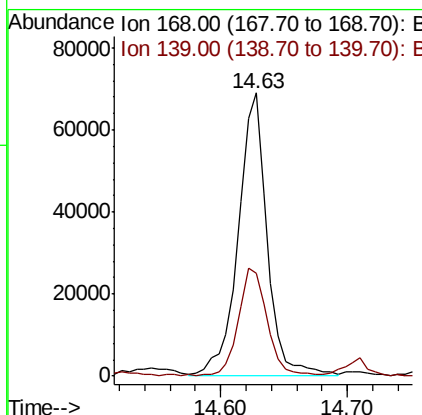
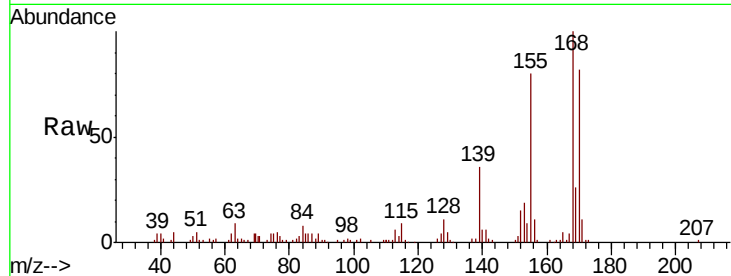
#53  
Dibenzenofuran  
Concen: 1.655 ng/ul  
RT: 14.63 min Scan# 1979  
Delta R.T. -0.00 min  
Lab File: BN005468.D  
Acq: 04 May 2019 01:17

Instrument :  
BNA\_N  
ClientSampleId :  
GAJ72DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 168     | 100   |       |       |
| 139     | 36.4  | 30.9  | 46.3  |

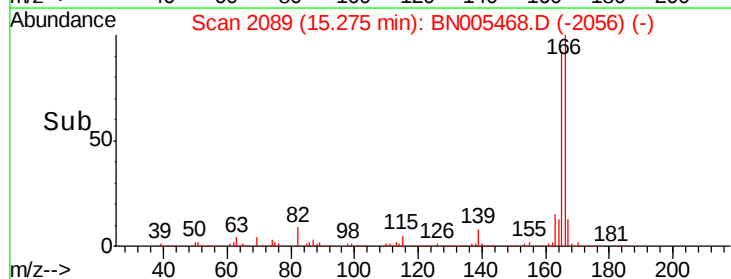
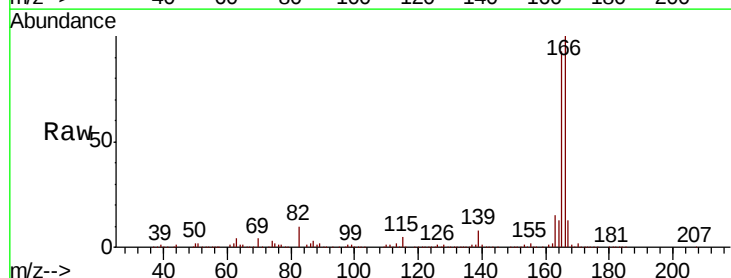
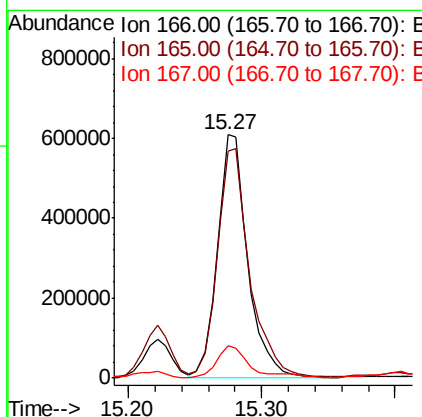
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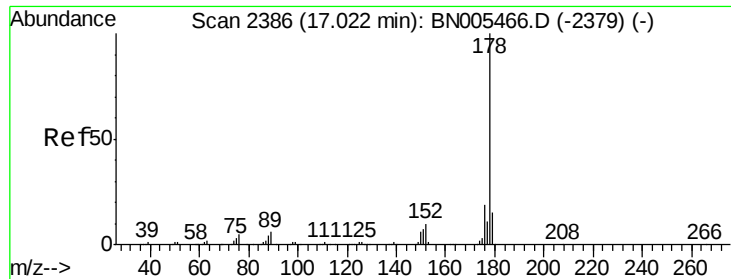
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#58  
Fluorene  
Concen: 18.861 ng/ul  
RT: 15.27 min Scan# 2089  
Delta R.T. -0.01 min  
Lab File: BN005468.D  
Acq: 04 May 2019 01:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 93.5  | 80.0  | 120.0 |
| 167     | 13.3  | 10.7  | 16.1  |





#69

Phenanthrene

Concen: 52.187 ng/ul

RT: 17.02 min Scan# 2386

Delta R.T. -0.00 min

Lab File: BN005468.D

Acq: 04 May 2019 01:17

Instrument :

BNA\_N

ClientSampleId :

GAJ72DL

Tot Ion:178 Resp: 4397509

Ion Ratio Lower Upper

178 100

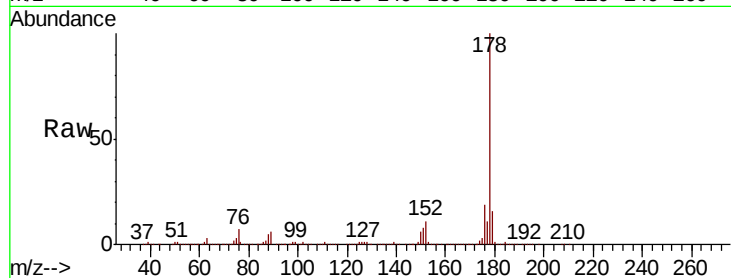
179 15.7 12.2 18.4

176 19.3 15.1 22.7

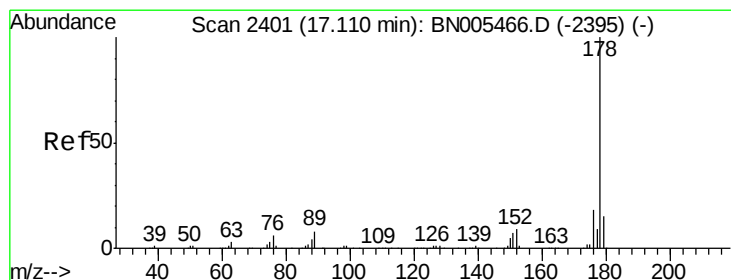
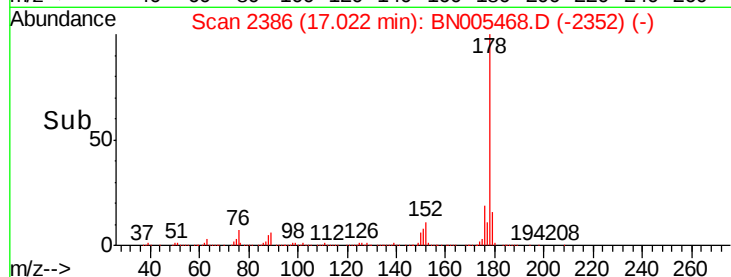
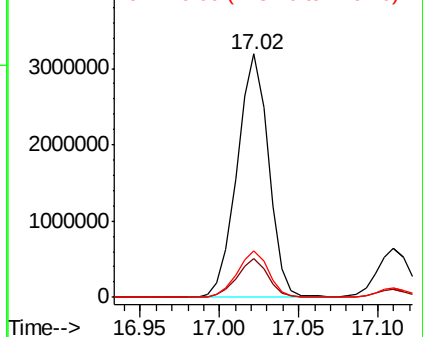
Manual Integrations  
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Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 179.00 (178.70 to 179.70): E  
Ion 176.00 (175.70 to 176.70): E



#71

Anthracene

Concen: 10.702 ng/ul

RT: 17.11 min Scan# 2401

Delta R.T. -0.01 min

Lab File: BN005468.D

Acq: 04 May 2019 01:17

Tgt Ion:178 Resp: 918621

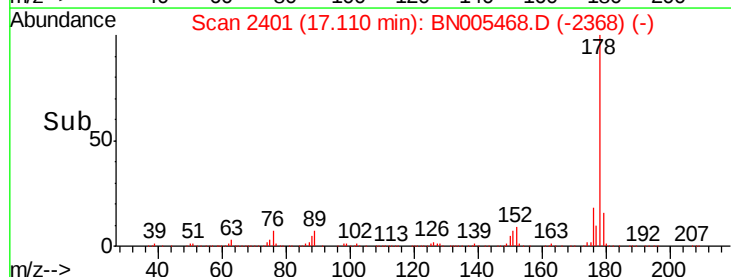
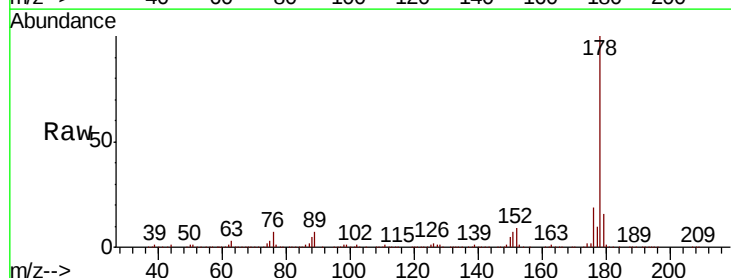
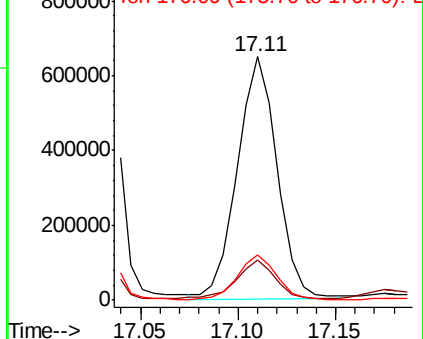
Ion Ratio Lower Upper

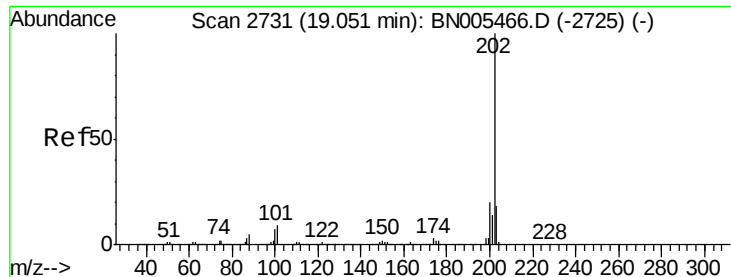
178 100

179 16.4 12.3 18.5

176 18.5 15.1 22.7

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





#76

Fluoranthene

Concen: 25.625 ng/ul

RT: 19.05 min Scan# 2731

Delta R.T. -0.01 min

Lab File: BN005468.D

Acq: 04 May 2019 01:17

Instrument :

BNA\_N

ClientSampleId :

GAJ72DL

Tot Ion:202 Resp: 2395037

Ion Ratio Lower Upper

202 100

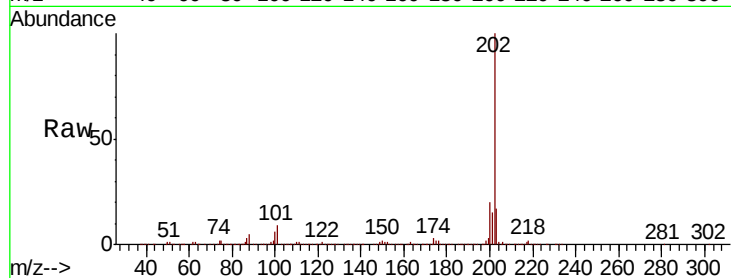
101 8.9 8.6 12.8

100 6.3 6.3 9.5

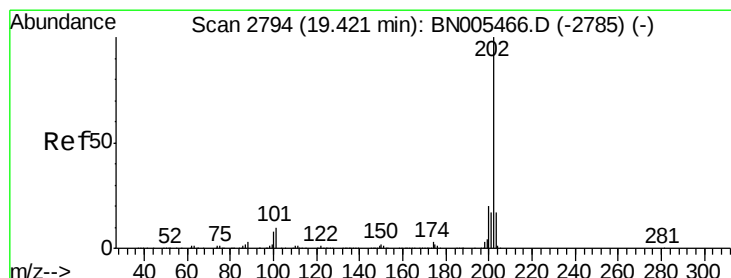
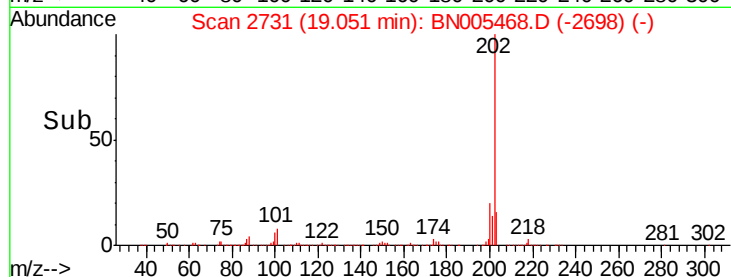
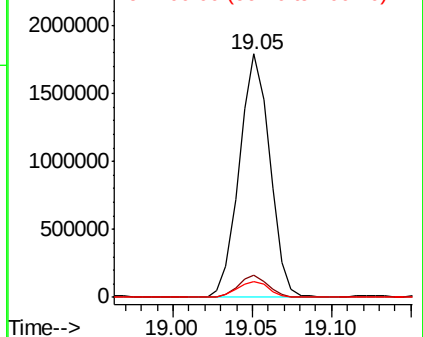
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Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 100.00 (99.70 to 100.70): B



#79

Pyrene

Concen: 34.604 ng/ul

RT: 19.42 min Scan# 2793

Delta R.T. -0.01 min

Lab File: BN005468.D

Acq: 04 May 2019 01:17

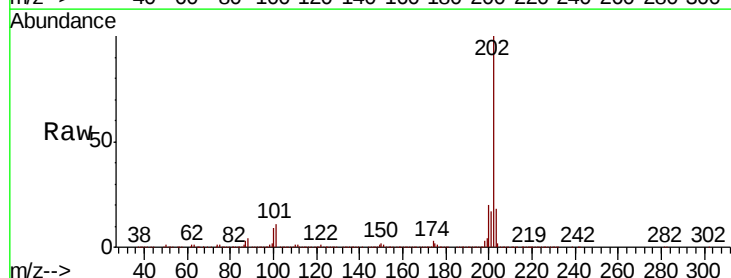
Tgt Ion:202 Resp: 3379800

Ion Ratio Lower Upper

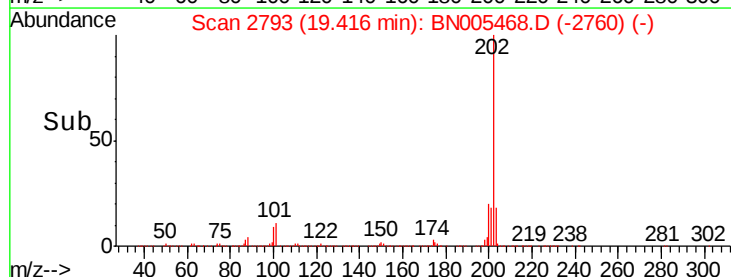
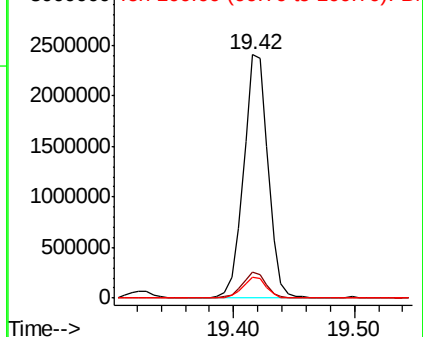
202 100

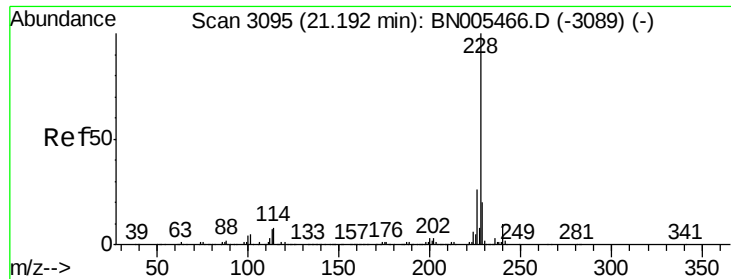
101 10.7 10.3 15.5

100 8.7 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





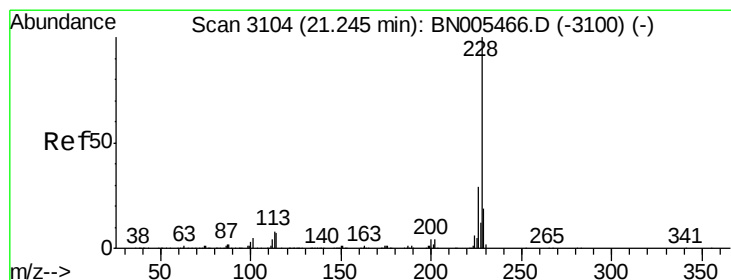
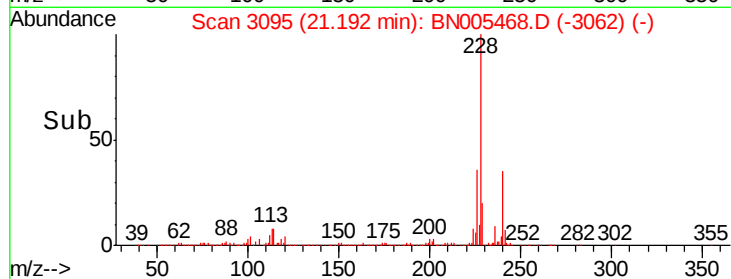
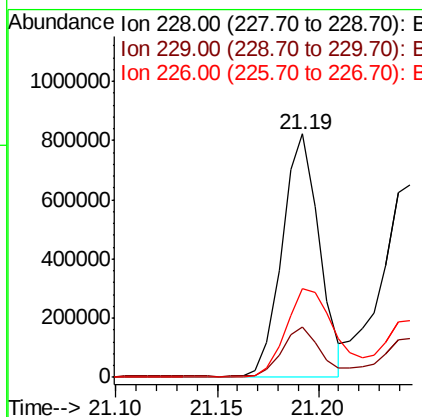
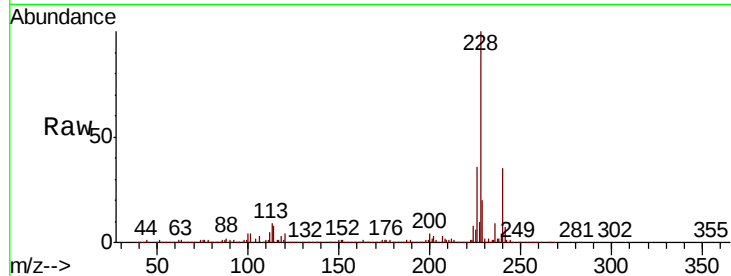
#82  
Benzo(a)anthracene  
Concen: 11.173 ng/ul m  
RT: 21.19 min Scan# 3095  
Delta R.T. -0.01 min  
Lab File: BN005468.D  
Acq: 04 May 2019 01:17

Instrument :  
BNA\_N  
ClientSampled :  
GAJ72DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 20.5  | 15.8  | 23.6  |
| 226     | 36.2  | 21.4  | 32.2  |

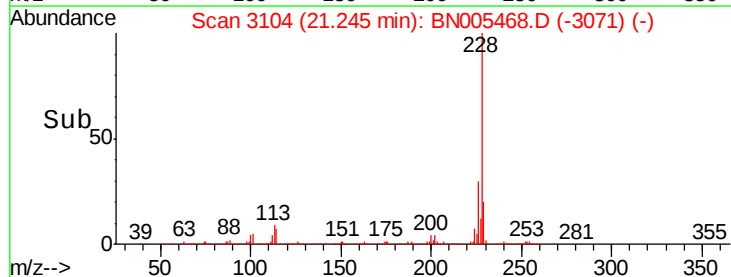
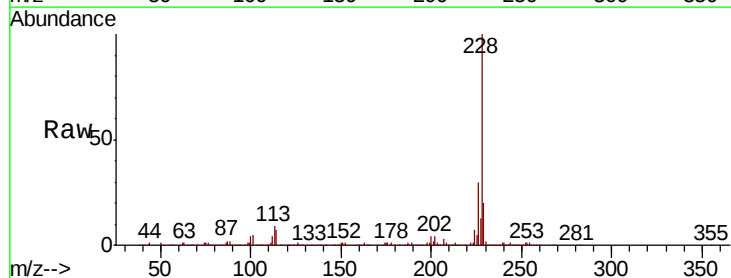
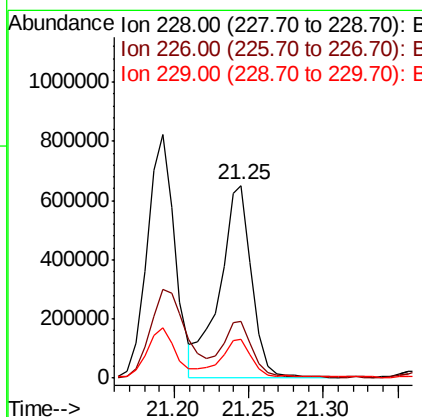
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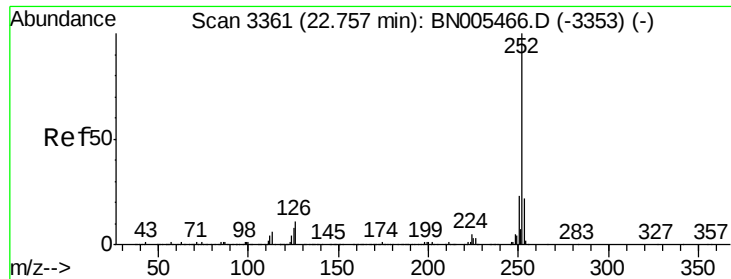
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#84  
Chrysene  
Concen: 11.128 ng/ul  
RT: 21.25 min Scan# 3104  
Delta R.T. -0.01 min  
Lab File: BN005468.D  
Acq: 04 May 2019 01:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.7  | 24.0  | 36.0  |
| 229     | 19.9  | 15.4  | 23.0  |





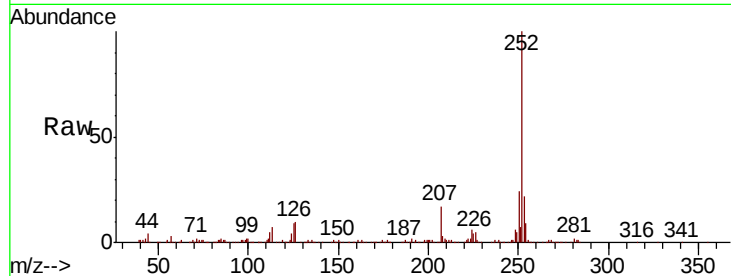
#87  
Benzo(b)fluoranthene  
Concen: 7.915 ng/ul  
RT: 22.76 min Scan# 3361  
Delta R.T. -0.01 min  
Lab File: BN005468.D  
Acq: 04 May 2019 01:17

Instrument :  
BNA\_N  
ClientSampleId :  
GAJ72DL

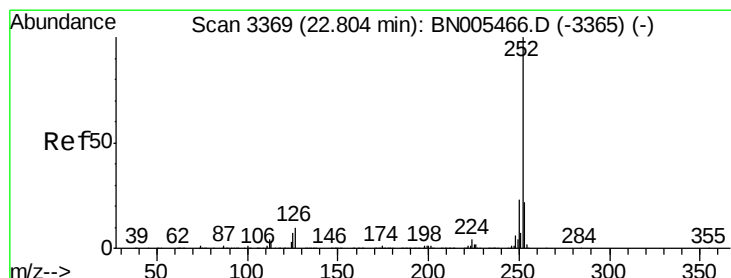
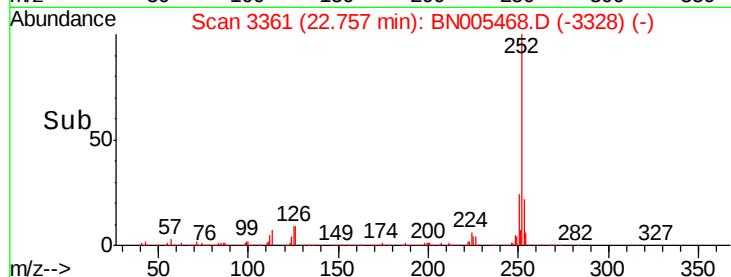
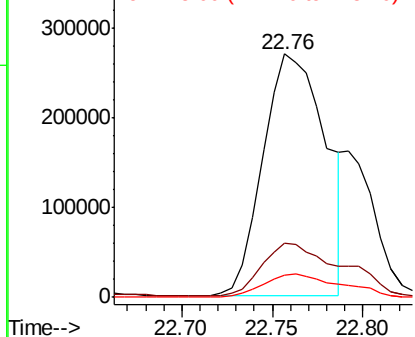
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.2  | 17.7  | 26.5  |
| 125     | 9.1   | 8.4   | 12.6  |

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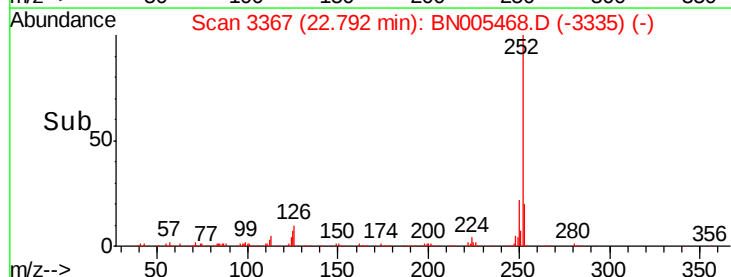
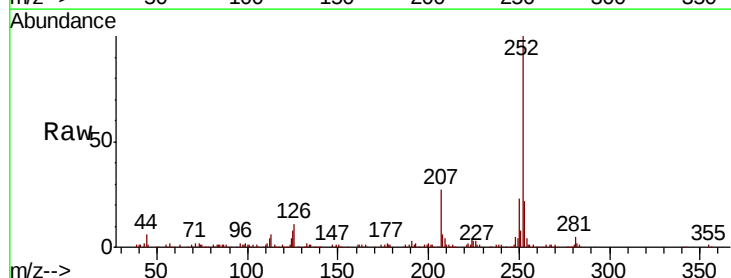
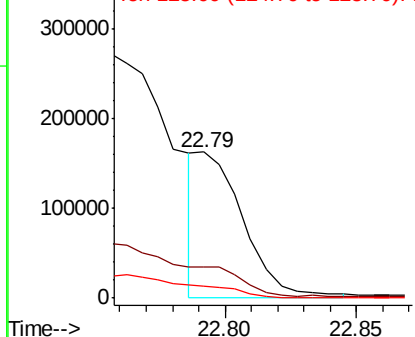
Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

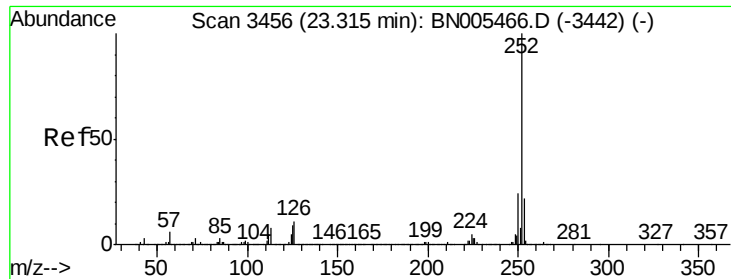


#88  
Benzo(k)fluoranthene  
Concen: 2.521 ng/ul m  
RT: 22.79 min Scan# 3367  
Delta R.T. -0.01 min  
Lab File: BN005468.D  
Acq: 04 May 2019 01:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.5  | 17.4  | 26.0  |
| 125     | 7.8   | 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: 7.630 ng/ul

RT: 23.31 min Scan# 3455

Delta R.T. -0.01 min

Lab File: BN005468.D

Acq: 04 May 2019 01:17

Instrument :

BNA\_N

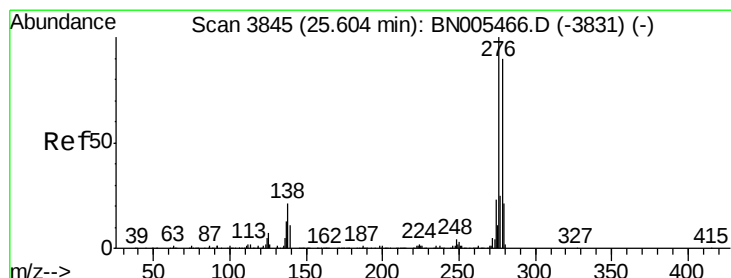
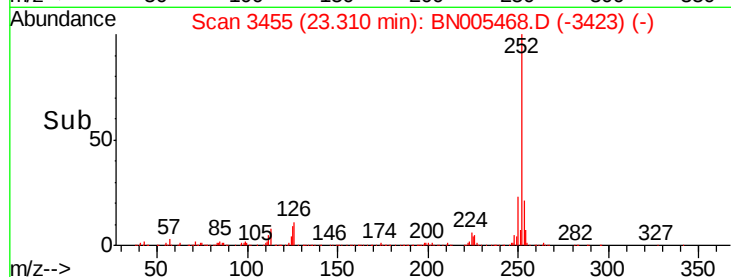
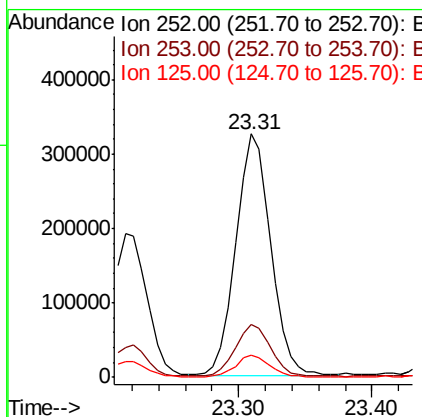
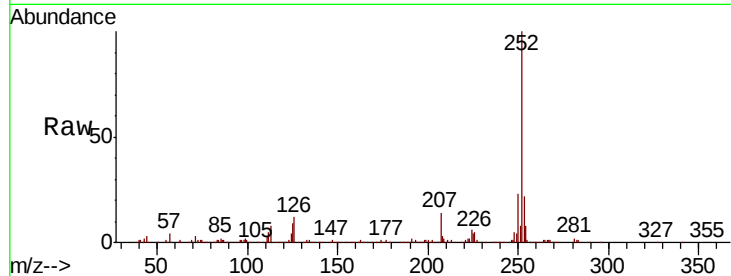
ClientSampled :

GAJ72DL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 588403 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.0  | 17.3  | 25.9   |
| 125       | 9.0   | 8.6   | 13.0   |

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#91

Indeno(1,2,3-cd)pyrene

Concen: 2.916 ng/ul

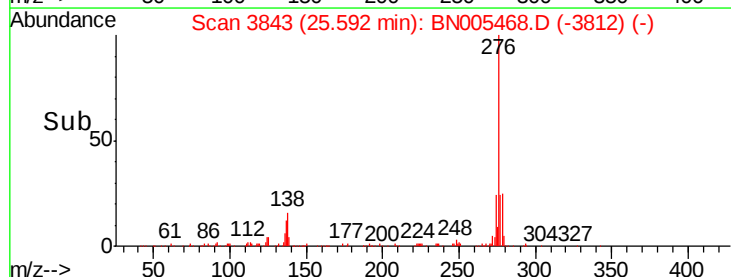
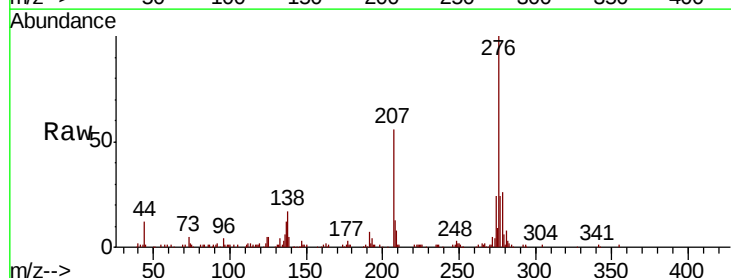
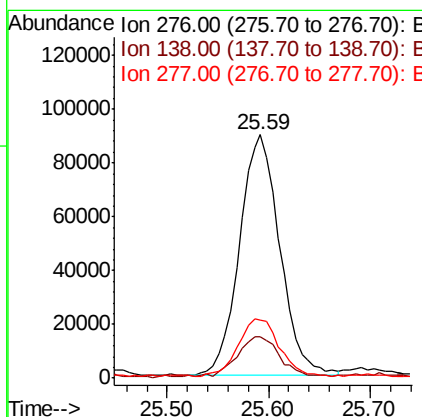
RT: 25.59 min Scan# 3843

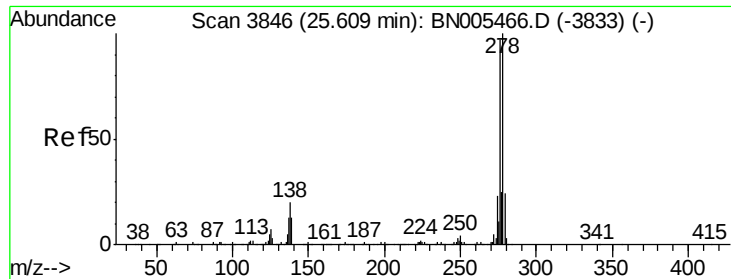
Delta R.T. -0.02 min

Lab File: BN005468.D

Acq: 04 May 2019 01:17

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 276   | Resp: | 248600 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 21.6  | 17.9  | 26.9   |
| 277       | 24.0  | 19.7  | 29.5   |





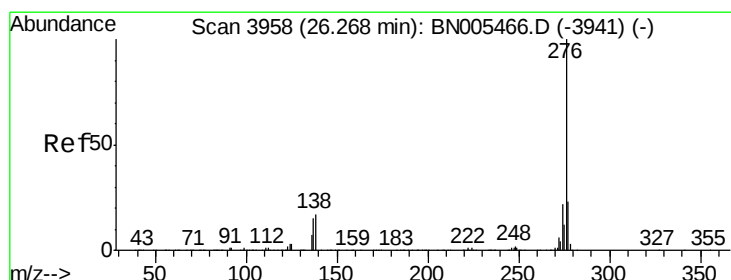
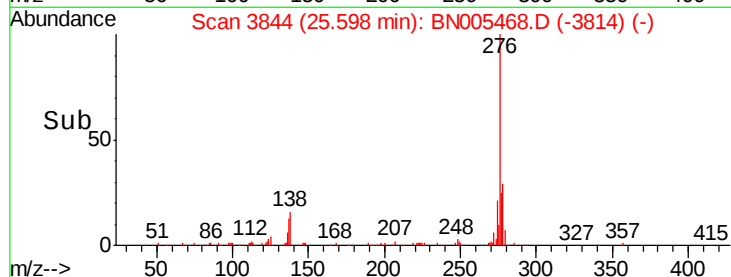
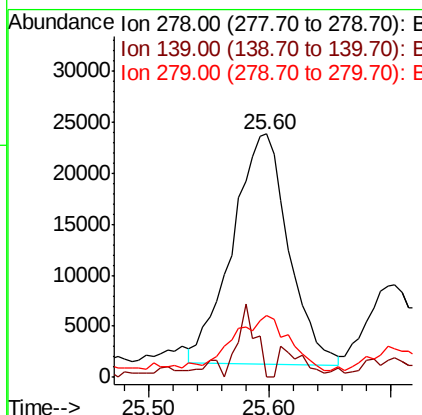
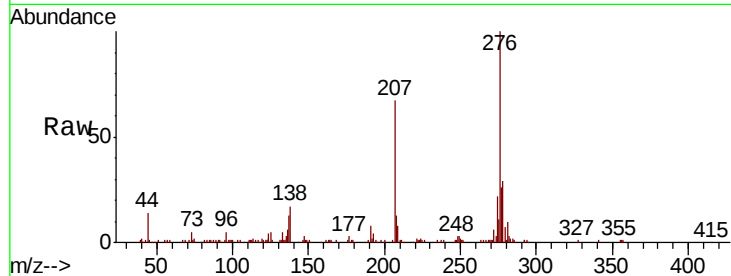
#92  
Dibenzo(a,h)anthracene  
Concen: 1.012 ng/ul  
RT: 25.60 min Scan# 3844  
Delta R.T. -0.02 min  
Lab File: BN005468.D  
Acq: 04 May 2019 01:17

Instrument :  
BNA\_N  
ClientSampleId :  
GAJ72DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 0.0   | 13.1  | 19.7# |
| 279     | 25.5  | 19.4  | 29.0  |

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#93  
Benzo(g,h,i)perylene  
Concen: 3.475 ng/ul m  
RT: 26.25 min Scan# 3955  
Delta R.T. -0.03 min  
Lab File: BN005468.D  
Acq: 04 May 2019 01:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 15.4  | 16.7  | 25.1# |
| 277     | 21.2  | 18.2  | 27.2  |

