

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_N\DATA\BN042619\  
 Data File : BN005335.D  
 Acq On : 27 Apr 2019 02:15  
 Operator : JU/SJ  
 Sample : K2481-07 20X  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleID :  
 GAHW2

Manual Integrations  
 APPROVED

Sohil  
 4/29/2019 1:43:40 PM

Quant Time: Apr 27 03:56:28 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN041919MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Fri Apr 26 23:54:49 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.59  | 152  | 355083   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.35 | 136  | 1585435  | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.23 | 164  | 975304   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 16.99 | 188  | 2233570  | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.22 | 240  | 2177114  | 20.00 | ng/ul | 0.00     |
| 85) Perylene-d12          | 23.41 | 264  | 2200622  | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |      |       |       |
|--------------------------------|-------|-----|--------|------|-------|-------|
| 3) 1,4-Dioxane-d8              | 3.22  | 96  | 1612   | 0.22 | ng/uL | 0.00  |
| 5) Phenol-d5                   | 6.78  | 99  | 33238  | 1.19 | ng/ul | 0.00  |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.94  | 67  | 21197  | 1.22 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 7.13  | 132 | 26658  | 1.25 | ng/ul | 0.00  |
| 13) 4-Methylphenol-d8          | 8.29  | 113 | 28583  | 1.31 | ng/ul | 0.00  |
| 19) Nitrobenzene-d5            | 8.73  | 128 | 14465  | 1.48 | ng/ul | 0.00  |
| 22) 2-Nitrophenol-d4           | 9.45  | 143 | 14726  | 1.49 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 9.98  | 165 | 30946  | 1.36 | ng/ul | 0.00  |
| 29) 4-Chloroaniline-d4         | 10.47 | 131 | 10325  | 0.44 | ng/ul | -0.02 |
| 43) Dimethylphthalate-d6       | 13.65 | 166 | 126564 | 1.79 | ng/ul | 0.00  |
| 46) Acenaphthylene-d8          | 13.92 | 160 | 144663 | 1.66 | ng/ul | 0.00  |
| 51) 4-Nitrophenol-d4           | 14.44 | 143 | 23930  | 2.14 | ng/ul | 0.00  |
| 57) Fluorene-d10               | 15.23 | 176 | 114866 | 1.93 | ng/ul | 0.00  |
| 62) 4,6-Dinitro-2-methylphenol | 15.37 | 200 | 6448   | 0.64 | ng/ul | 0.01  |
| 70) Anthracene-d10             | 17.09 | 188 | 170586 | 1.82 | ng/ul | 0.00  |
| 78) Pyrene-d10                 | 19.40 | 212 | 195805 | 1.76 | ng/ul | 0.00  |
| 89) Benzo(a)pyrene-d12         | 23.27 | 264 | 171466 | 1.78 | ng/ul | 0.00  |

## Target Compounds

|                            |       |     |           |         | Qvalue |     |
|----------------------------|-------|-----|-----------|---------|--------|-----|
| 28) Naphthalene            | 10.40 | 128 | 1290718   | 17.512  | ng/ul  | 99  |
| 34) 2-Methylnaphthalene    | 12.03 | 142 | 11656769  | 215.998 | ng/ul  | 99  |
| 40) 1,1'-Biphenyl          | 13.05 | 154 | 1370444   | 18.859  | ng/ul  | 98  |
| 47) Acenaphthylene         | 13.95 | 152 | 8326709   | 97.438  | ng/ul# | 96  |
| 49) Acenaphthene           | 14.29 | 153 | 986236    | 16.905  | ng/ul  | 98  |
| 53) Dibenzofuran           | 14.63 | 168 | 1096934   | 13.059  | ng/ul  | 95  |
| 58) Fluorene               | 15.29 | 166 | 5743679   | 87.632  | ng/ul  | 98  |
| 69) Phenanthrene           | 17.03 | 178 | 20242051m | 186.085 | ng/ul  |     |
| 71) Anthracene             | 17.12 | 178 | 3376624   | 30.472  | ng/ul  | 99  |
| 76) Fluoranthene           | 19.06 | 202 | 8216831   | 68.101  | ng/ul  | 98  |
| 79) Pyrene                 | 19.43 | 202 | 12981729  | 92.609  | ng/ul  | 99  |
| 82) Benzo(a)anthracene     | 21.20 | 228 | 5399672m  | 39.868  | ng/ul  |     |
| 84) Chrysene               | 21.25 | 228 | 4850903   | 38.591  | ng/ul  | 98  |
| 87) Benzo(b)fluoranthene   | 22.77 | 252 | 2676145   | 21.634  | ng/ul  | 100 |
| 88) Benzo(k)fluoranthene   | 22.80 | 252 | 716272m   | 6.063   | ng/ul  |     |
| 90) Benzo(a)pyrene         | 23.32 | 252 | 1756652   | 15.108  | ng/ul  | 98  |
| 91) Indeno(1,2,3-cd)pyrene | 25.59 | 276 | 855098    | 6.652   | ng/ul  | 97  |
| 92) Dibenzo(a,h)anthracene | 25.59 | 278 | 327008    | 2.997   | ng/ul  | 95  |
| 93) Benzo(g,h,i)perylene   | 26.24 | 276 | 682105    | 6.417   | ng/ul  | 97  |

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

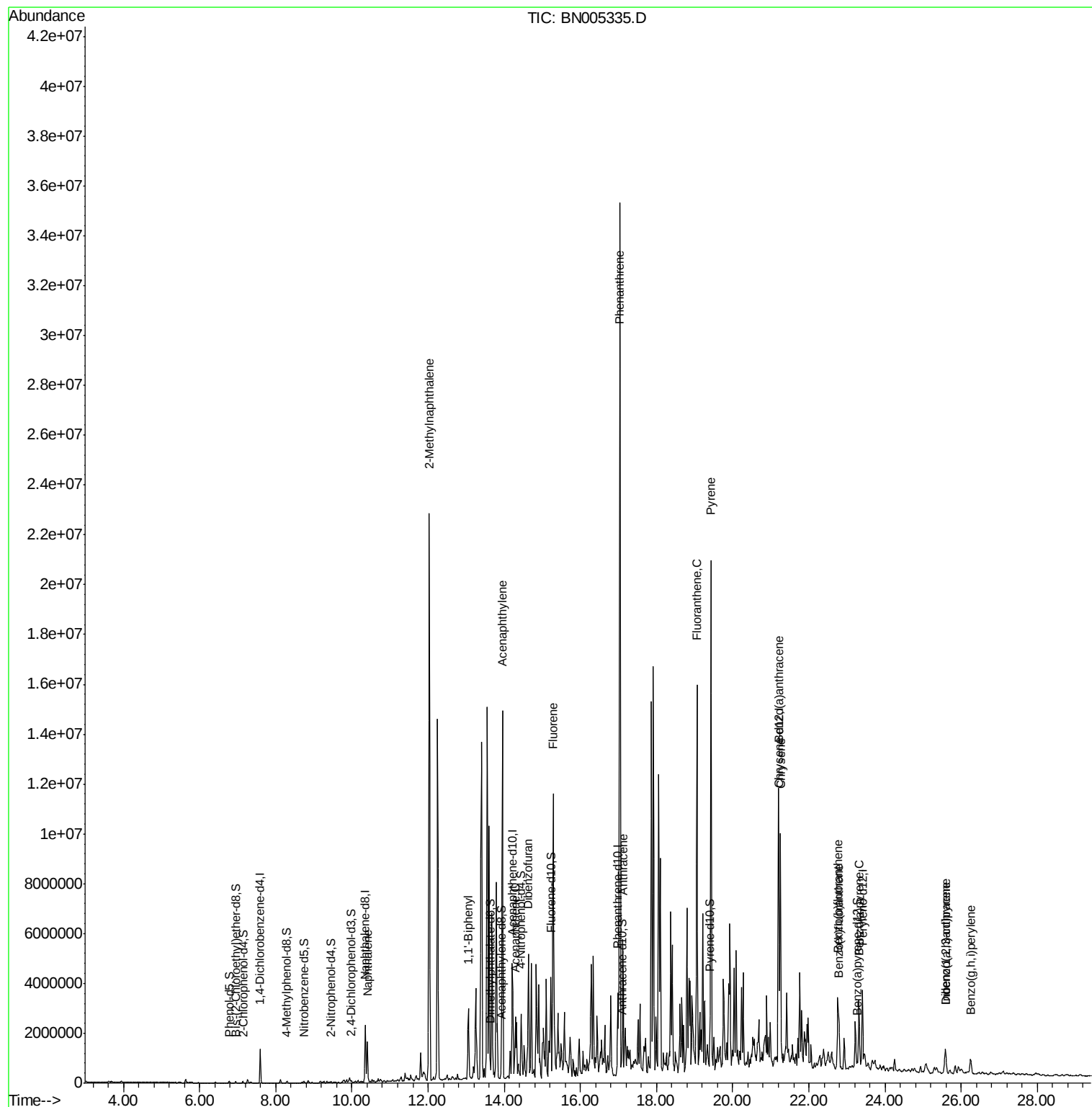
Data Path : Z:\SVOASRV\HPCHEM1\BNA\_N\DATA\BN042619\  
Data File : BN005335.D  
Acq On : 27 Apr 2019 02:15  
Operator : JU/SJ  
Sample : K2481-07 20X  
Misc :  
ALS Vial : 18 Sample Multiplier: 1

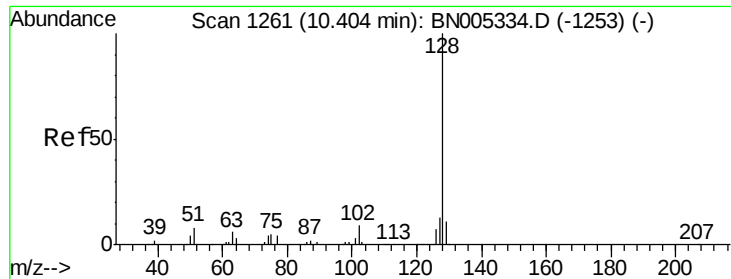
Instrument :  
BNA\_N  
ClientSampleId :  
GAHW2

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Quant Time: Apr 27 03:56:28 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN041919MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Apr 26 23:54:49 2019  
Response via : Initial Calibration





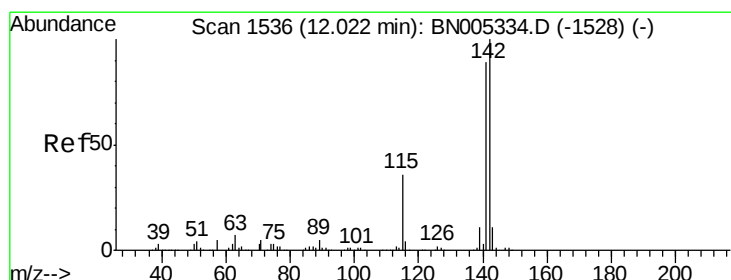
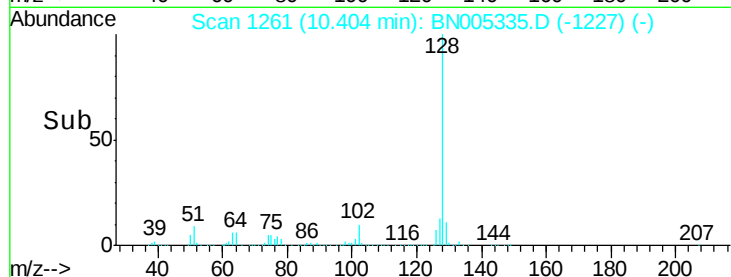
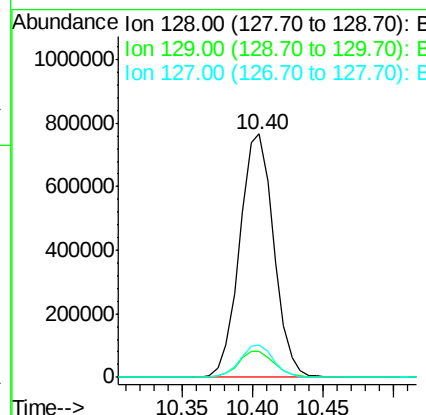
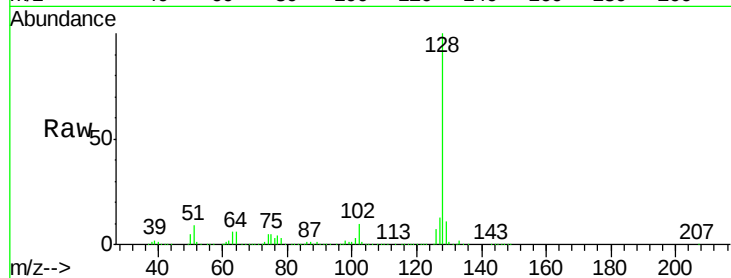
#28  
Naphthalene  
Concen: 17.512 ng/ul  
RT: 10.40 min Scan# 1261  
Delta R.T. 0.00 min  
Lab File: BN005335.D  
Acq: 27 Apr 2019 02:15

Instrument :  
BNA\_N  
ClientSampled :  
GAHW2

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 10.7  | 9.2   | 13.8  |
| 127     | 13.3  | 10.7  | 16.1  |

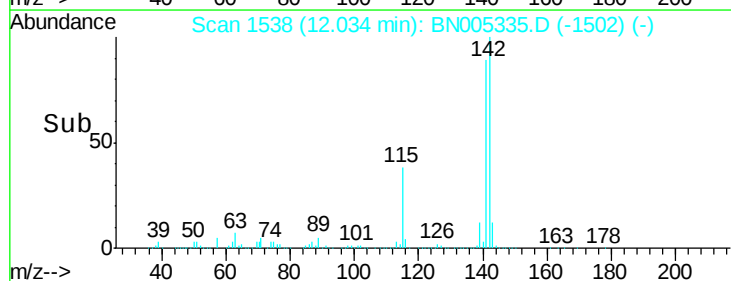
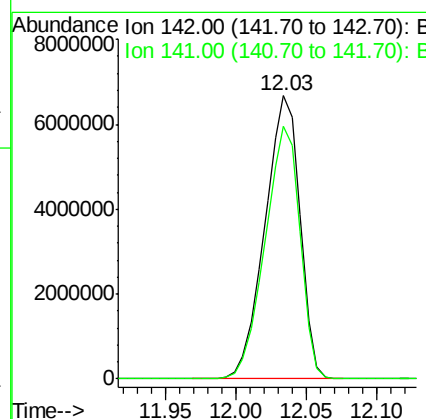
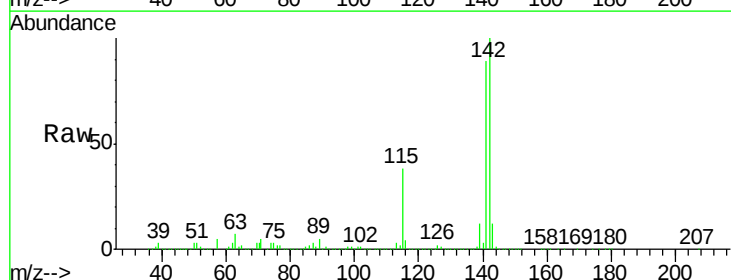
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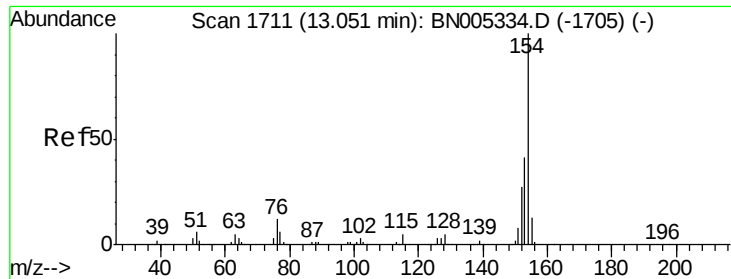
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#34  
2-Methylnaphthalene  
Concen: 215.998 ng/ul  
RT: 12.03 min Scan# 1538  
Delta R.T. 0.01 min  
Lab File: BN005335.D  
Acq: 27 Apr 2019 02:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 89.2  | 72.0  | 108.0 |





#40

1,1'-Biphenyl

Concen: 18.859 ng/ul

RT: 13.05 min Scan# 1711

Delta R.T. -0.01 min

Lab File: BN005335.D

Acq: 27 Apr 2019 02:15

Instrument :

BNA\_N

ClientSampleId :

GAHW2

Tgt Ion:154 Resp: 1370444

Ion Ratio Lower Upper

154 100

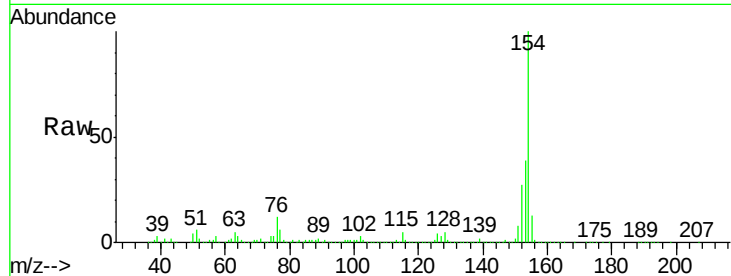
153 39.5 32.6 49.0

76 11.6 10.4 15.6

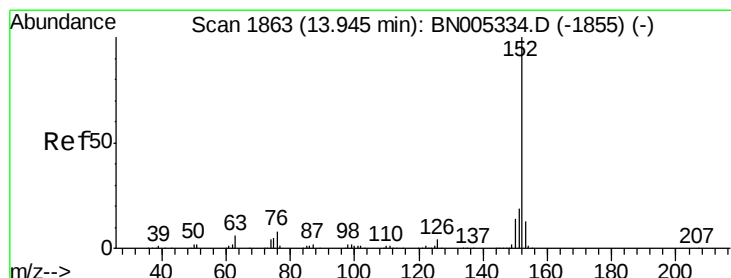
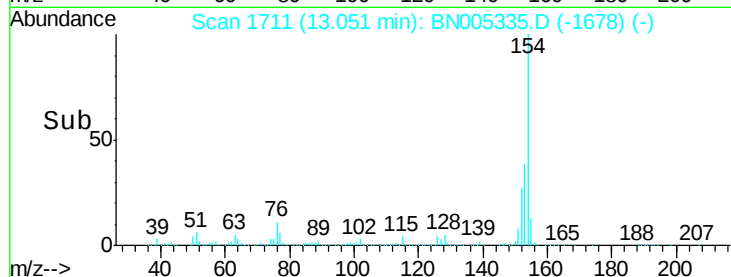
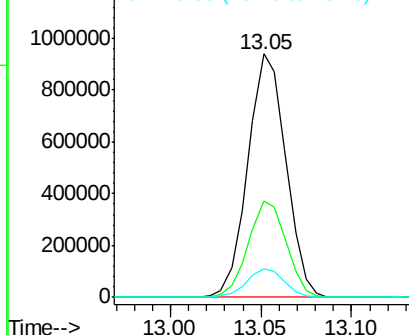
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Abundance Ion 154.00 (153.70 to 154.70): E  
Ion 153.00 (152.70 to 153.70): E  
Ion 76.00 (75.70 to 76.70): BNC



#47

Acenaphthylene

Concen: 97.438 ng/ul

RT: 13.95 min Scan# 1864

Delta R.T. 0.01 min

Lab File: BN005335.D

Acq: 27 Apr 2019 02:15

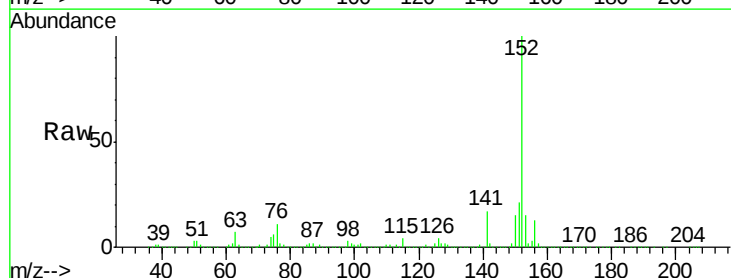
Tgt Ion:152 Resp: 8326709

Ion Ratio Lower Upper

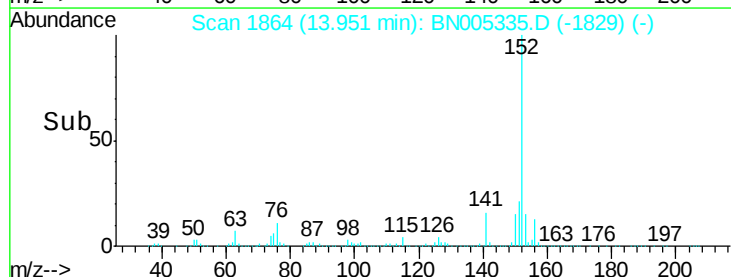
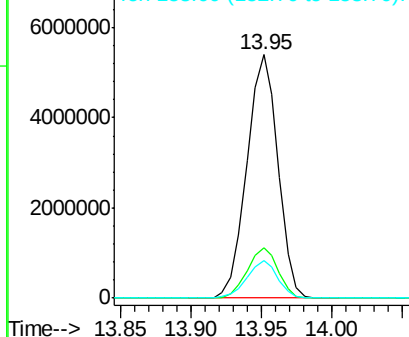
152 100

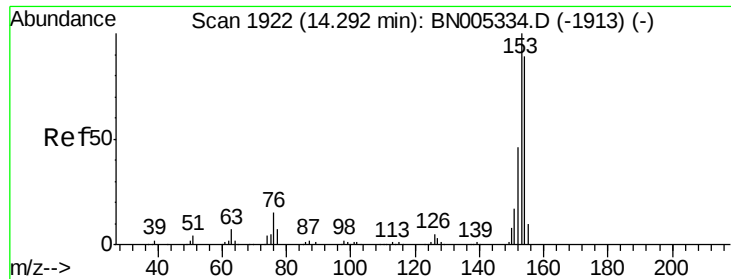
151 20.8 15.8 23.8

153 15.3 9.8 14.8#



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





#49

Acenaphthene

Concen: 16.905 ng/ul

RT: 14.29 min Scan# 1922

Delta R.T. 0.00 min

Lab File: BN005335.D

Acq: 27 Apr 2019 02:15

Instrument :

BNA\_N

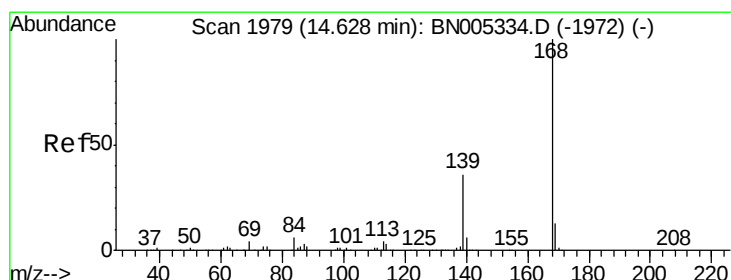
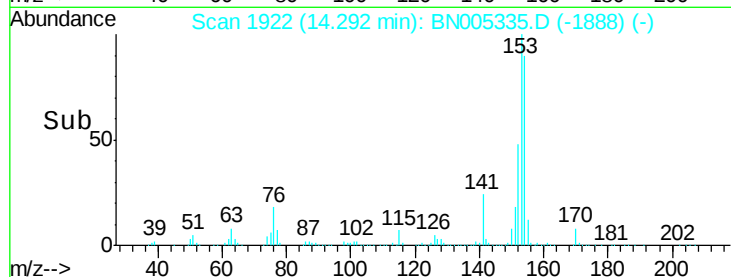
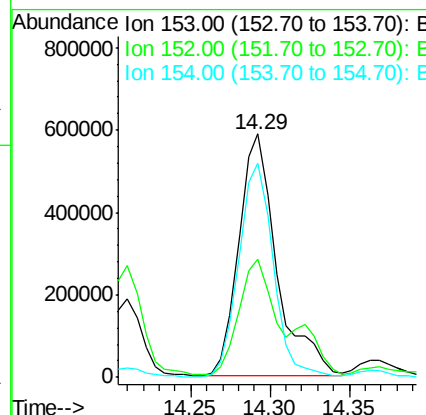
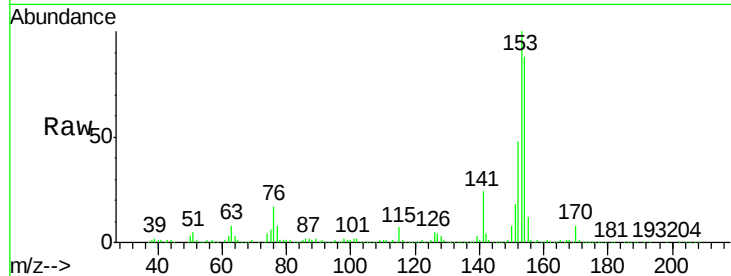
ClientSampled :

GAHW2

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 153   | Resp: | 986236 |
| Ion Ratio | Lower | Upper |        |
| 153       | 100   |       |        |
| 152       | 48.5  | 37.4  | 56.0   |
| 154       | 88.1  | 71.2  | 106.8  |

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#53

Dibenzofuran

Concen: 13.059 ng/ul

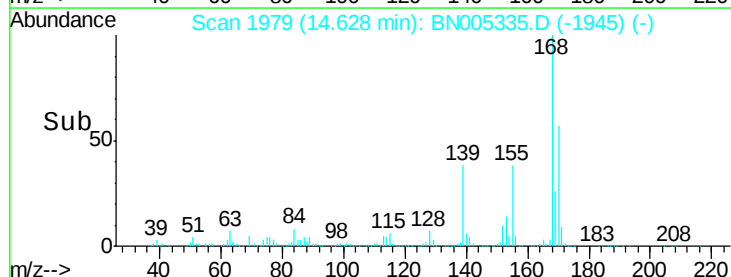
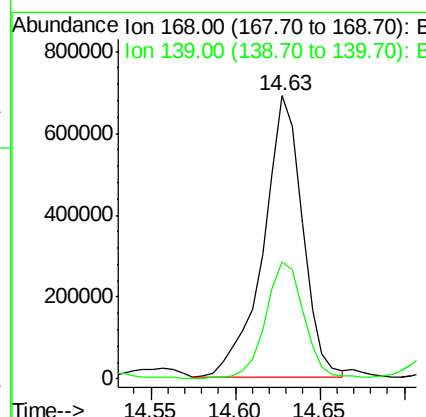
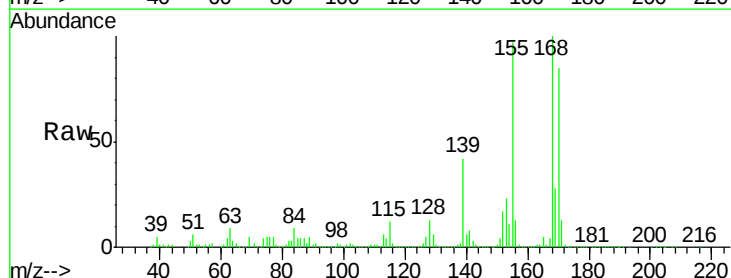
RT: 14.63 min Scan# 1979

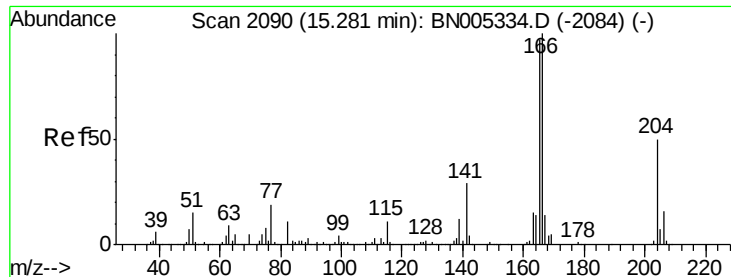
Delta R.T. 0.00 min

Lab File: BN005335.D

Acq: 27 Apr 2019 02:15

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 168   | Resp: | 1096934 |
| Ion Ratio | Lower | Upper |         |
| 168       | 100   |       |         |
| 139       | 41.6  | 30.9  | 46.3    |





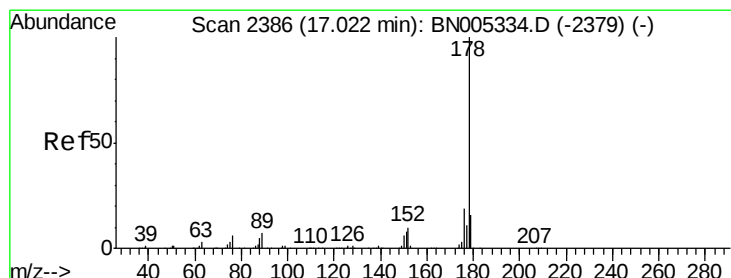
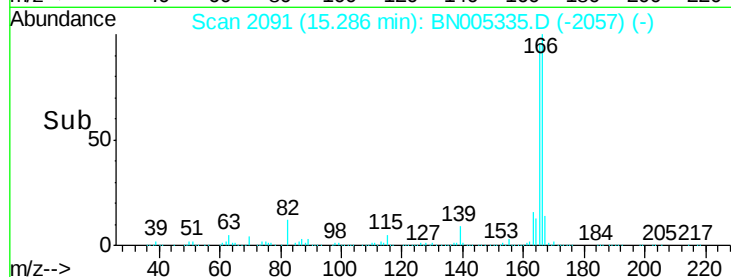
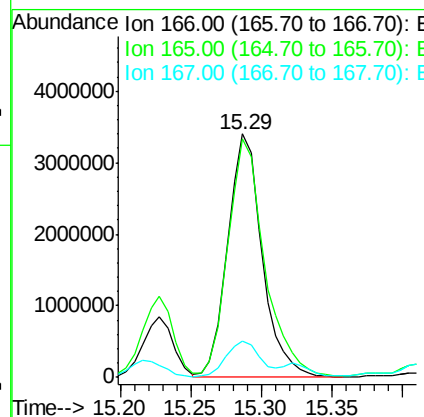
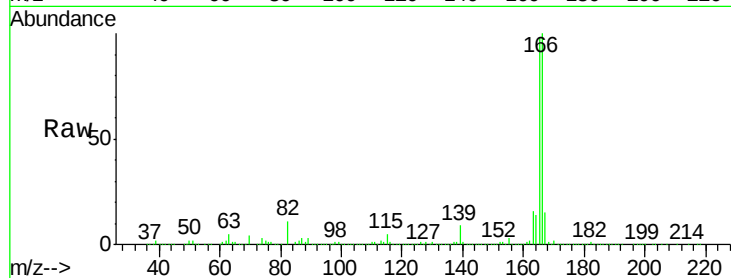
#58  
 Fluorene  
 Concen: 87.632 ng/ul  
 RT: 15.29 min Scan# 2091  
 Delta R.T. 0.00 min  
 Lab File: BN005335.D  
 Acq: 27 Apr 2019 02:15

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAHW2

Tgt Ion:166 Resp: 5743679  
 Ion Ratio Lower Upper  
 166 100  
 165 98.2 80.0 120.0  
 167 15.1 10.7 16.1

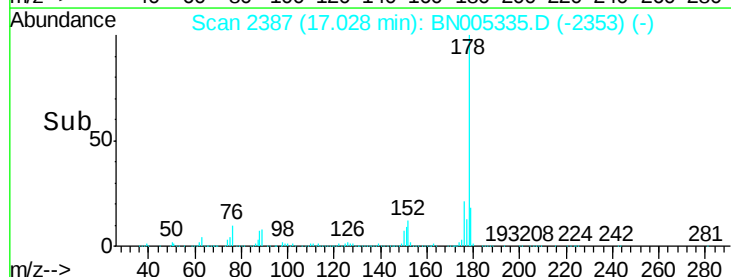
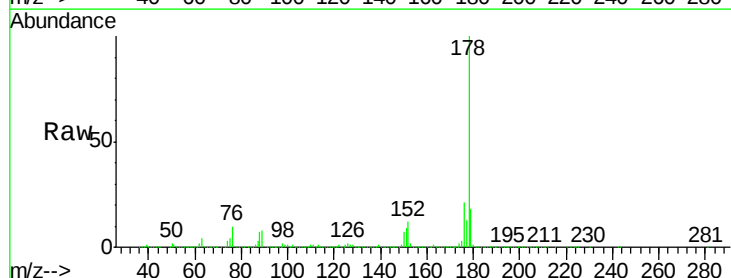
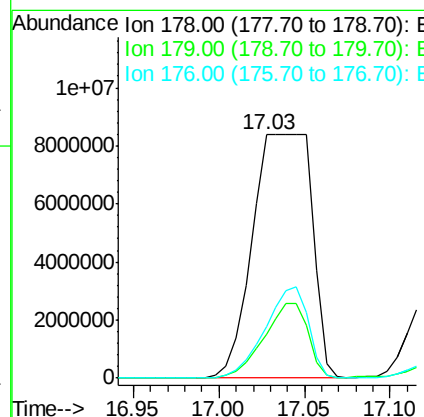
Manual Integrations  
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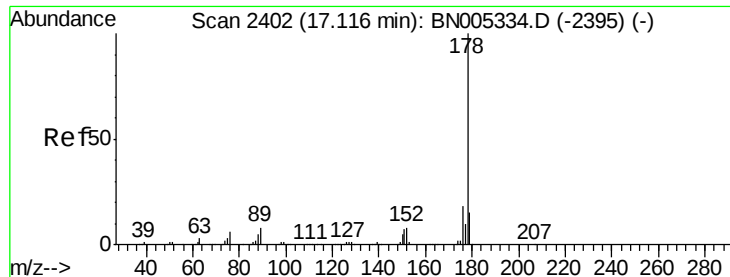
Sohil  
 4/29/2019 1:43:40 PM



#69  
 Phenanthrene  
 Concen: 186.085 ng/ul m  
 RT: 17.03 min Scan# 2387  
 Delta R.T. 0.00 min  
 Lab File: BN005335.D  
 Acq: 27 Apr 2019 02:15

Tgt Ion:178 Resp:20242051  
 Ion Ratio Lower Upper  
 178 100  
 179 18.2 12.2 18.4  
 176 21.4 15.1 22.7





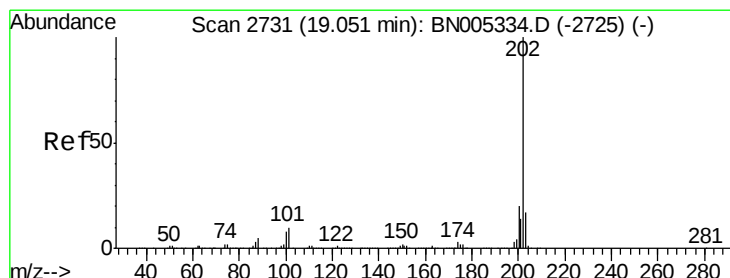
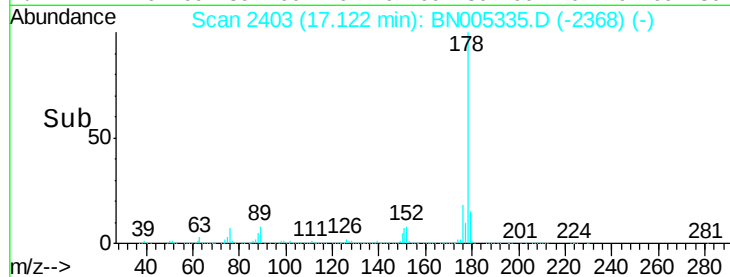
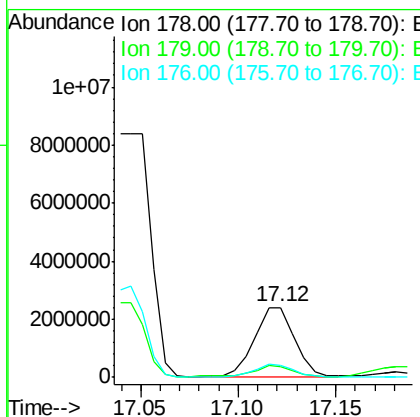
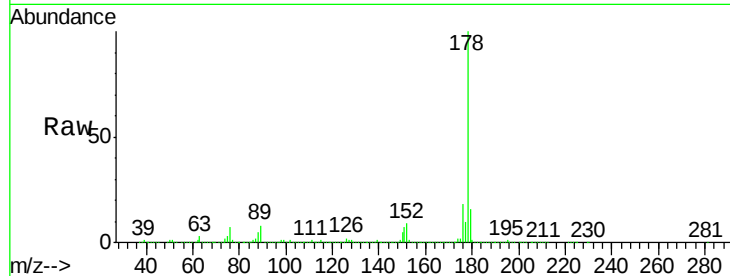
#71  
 Anthracene  
 Concen: 30.472 ng/ul  
 RT: 17.12 min Scan# 2403  
 Delta R.T. 0.01 min  
 Lab File: BN005335.D  
 Acq: 27 Apr 2019 02:15

Instrument :  
 BNA\_N  
 ClientSampled :  
 GAHW2

Tgt Ion:178 Resp: 3376624  
 Ion Ratio Lower Upper  
 178 100  
 179 15.5 12.3 18.5  
 176 18.0 15.1 22.7

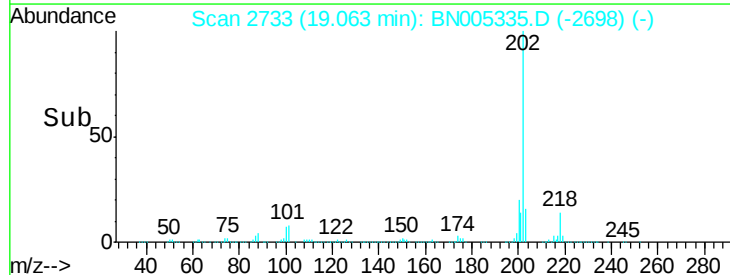
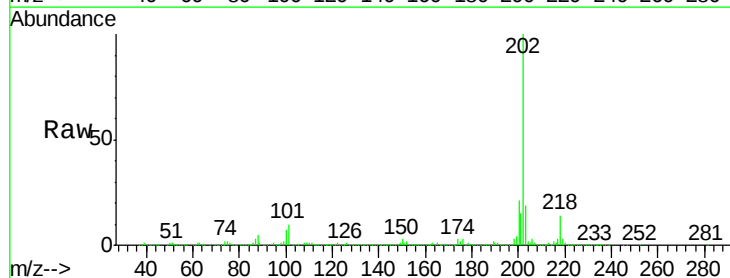
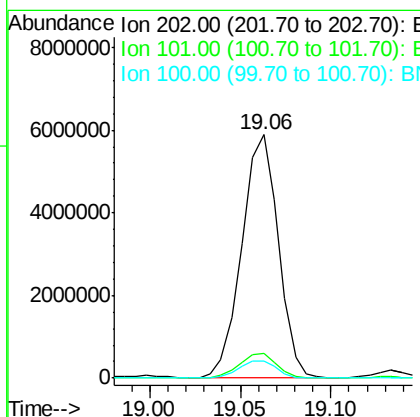
Manual Integrations  
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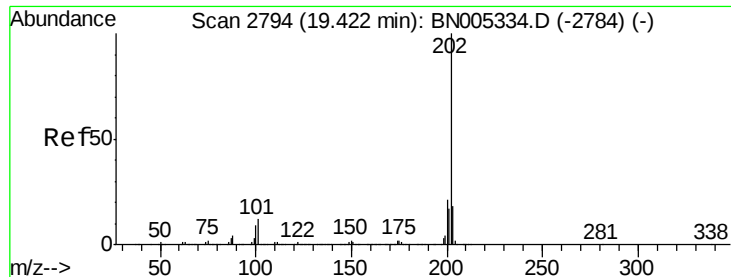
Sohil  
 4/29/2019 1:43:40 PM



#76  
 Fluoranthene  
 Concen: 68.101 ng/ul  
 RT: 19.06 min Scan# 2733  
 Delta R.T. 0.01 min  
 Lab File: BN005335.D  
 Acq: 27 Apr 2019 02:15

Tgt Ion:202 Resp: 8216831  
 Ion Ratio Lower Upper  
 202 100  
 101 9.9 8.6 12.8  
 100 7.3 6.3 9.5





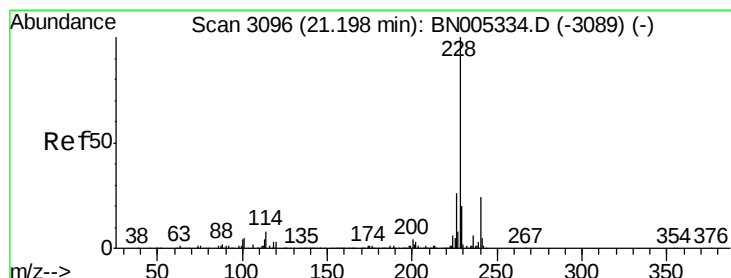
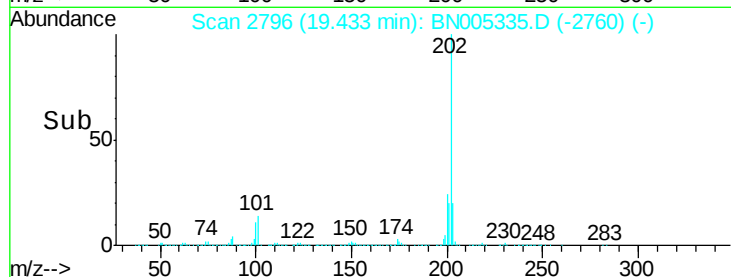
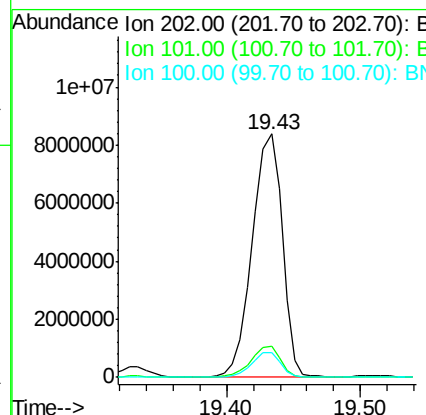
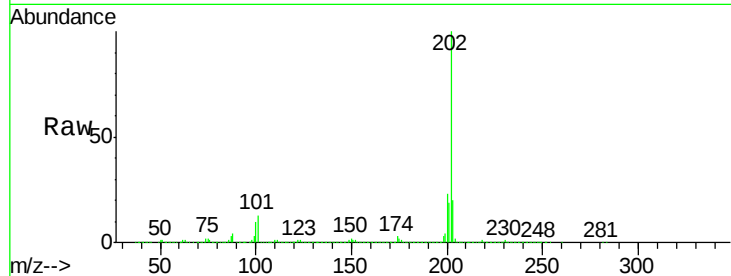
#79  
 Pyrene  
 Concen: 92.609 ng/ul  
 RT: 19.43 min Scan# 2796  
 Delta R.T. 0.01 min  
 Lab File: BN005335.D  
 Acq: 27 Apr 2019 02:15

Instrument :  
 BNA\_N  
 ClientSampled :  
 GAHW2

Tgt Ion:202 Resp:12981729  
 Ion Ratio Lower Upper  
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 101 12.8 10.3 15.5  
 100 10.3 7.9 11.9

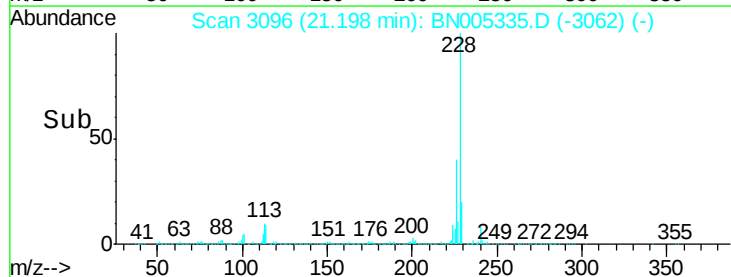
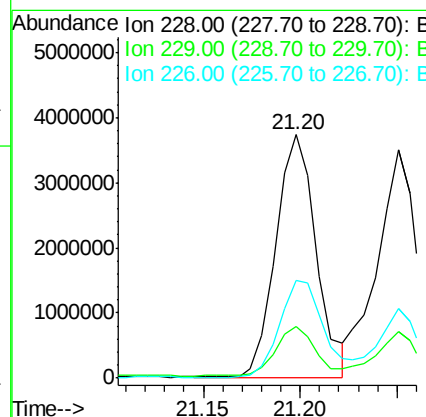
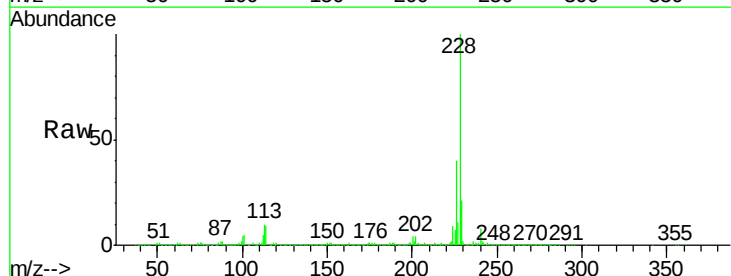
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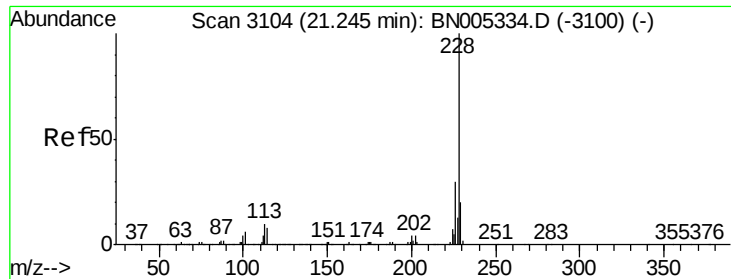
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#82  
 Benzo(a)anthracene  
 Concen: 39.868 ng/ul m  
 RT: 21.20 min Scan# 3096  
 Delta R.T. 0.00 min  
 Lab File: BN005335.D  
 Acq: 27 Apr 2019 02:15

Tgt Ion:228 Resp: 5399672  
 Ion Ratio Lower Upper  
 228 100  
 229 21.3 15.8 23.6  
 226 40.0 21.4 32.2#





#84

Chrysene

Concen: 38.591 ng/ul

RT: 21.25 min Scan# 3105

Delta R.T. 0.00 min

Lab File: BN005335.D

Acq: 27 Apr 2019 02:15

Instrument :

BNA\_N

ClientSampled :

GAHW2

Tgt Ion:228 Resp: 4850903

Ion Ratio Lower Upper

228 100

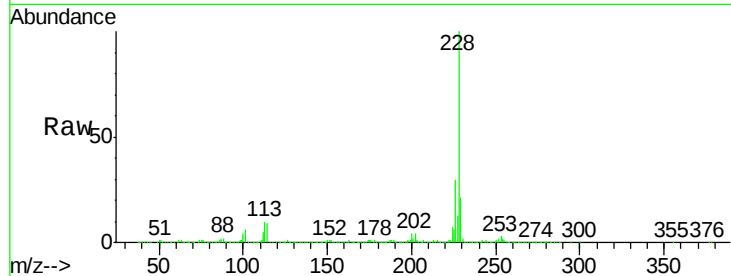
226 30.5 24.0 36.0

229 20.6 15.4 23.0

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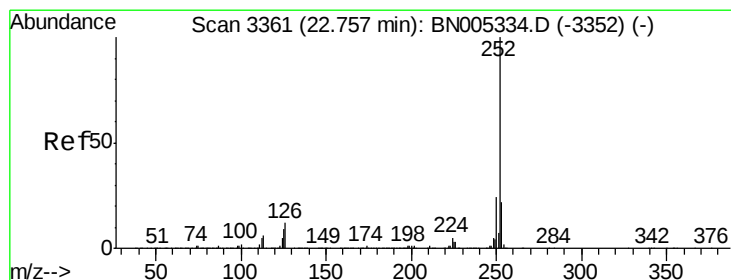
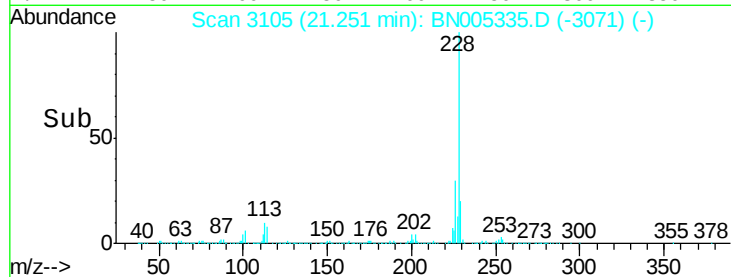
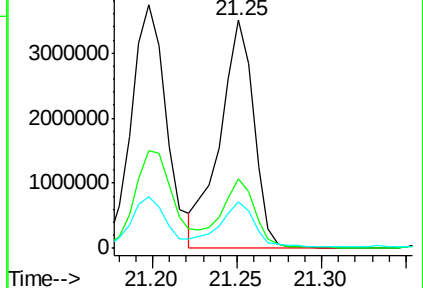
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Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#87

Benzo(b)fluoranthene

Concen: 21.634 ng/ul

RT: 22.77 min Scan# 3363

Delta R.T. 0.01 min

Lab File: BN005335.D

Acq: 27 Apr 2019 02:15

Tgt Ion:252 Resp: 2676145

Ion Ratio Lower Upper

252 100

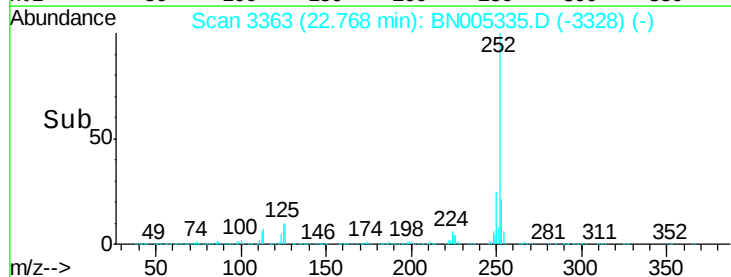
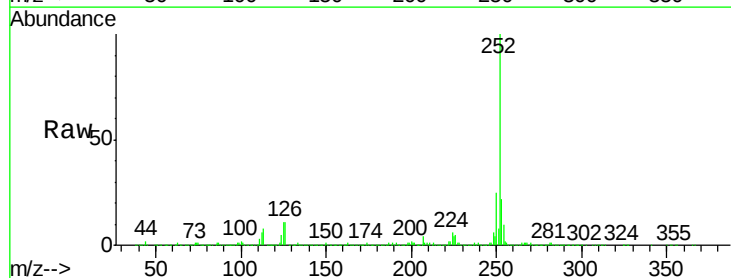
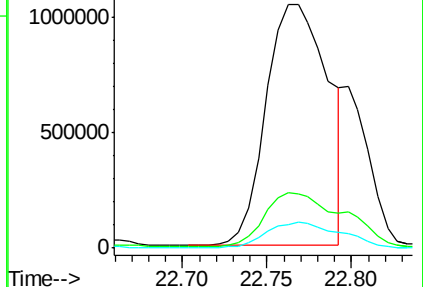
253 22.2 17.7 26.5

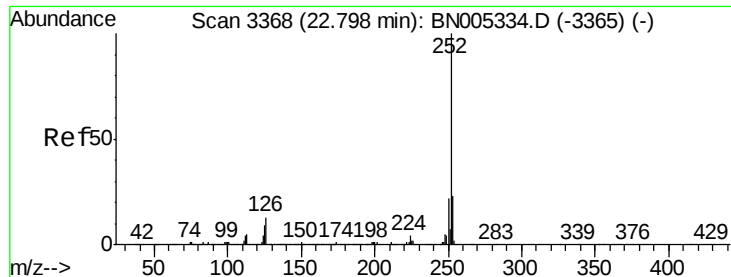
125 10.5 8.4 12.6

Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





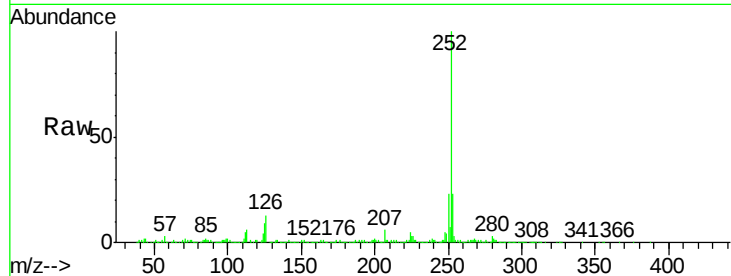
#88  
Benzo(k)fluoranthene  
Concen: 6.063 ng/ul m  
RT: 22.80 min Scan# 3368  
Delta R.T. -0.01 min  
Lab File: BN005335.D  
Acq: 27 Apr 2019 02:15

Instrument :  
BNA\_N  
ClientSampleId :  
GAHW2

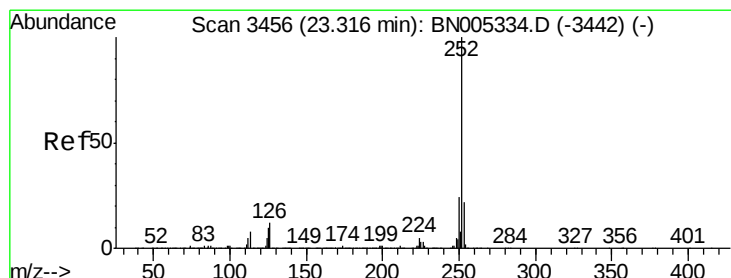
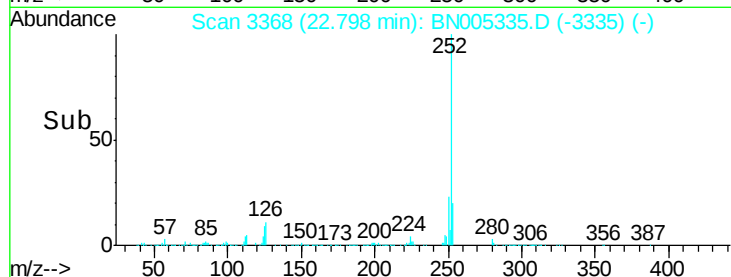
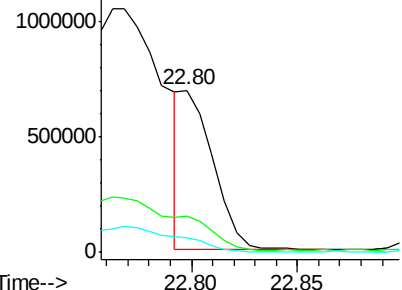
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.5  | 17.4  | 26.0  |
| 125     | 9.2   | 7.5   | 11.3  |

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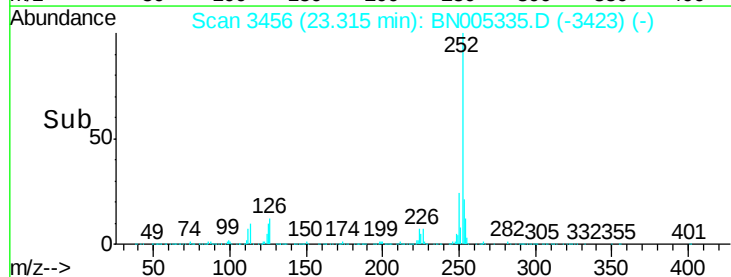
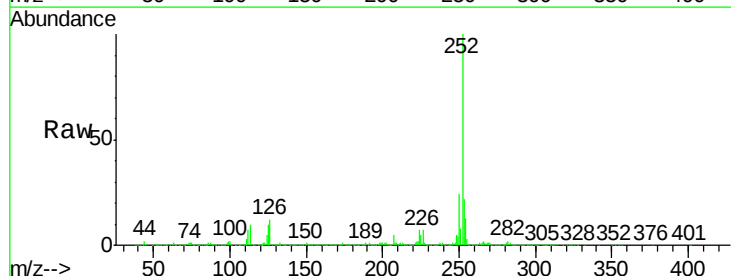
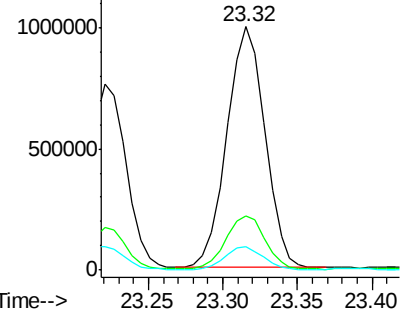
Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

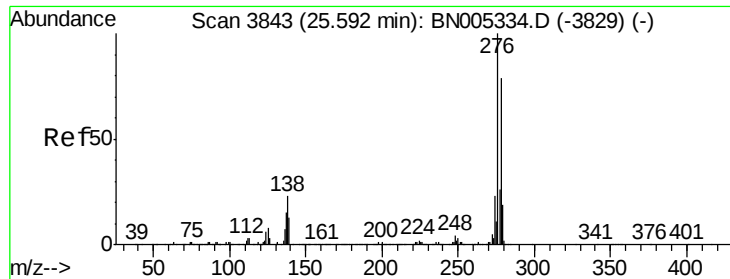


#90  
Benzo(a)pyrene  
Concen: 15.108 ng/ul  
RT: 23.32 min Scan# 3456  
Delta R.T. -0.01 min  
Lab File: BN005335.D  
Acq: 27 Apr 2019 02:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.1  | 17.3  | 25.9  |
| 125     | 9.7   | 8.6   | 13.0  |

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





#91

Indeno(1,2,3-cd)pyrene

Concen: 6.652 ng/ul

RT: 25.59 min Scan# 3842

Delta R.T. -0.01 min

Lab File: BN005335.D

Acq: 27 Apr 2019 02:15

Instrument :

BNA\_N

ClientSampleId :

GAHW2

Tgt Ion:276 Resp: 855098

Ion Ratio Lower Upper

276 100

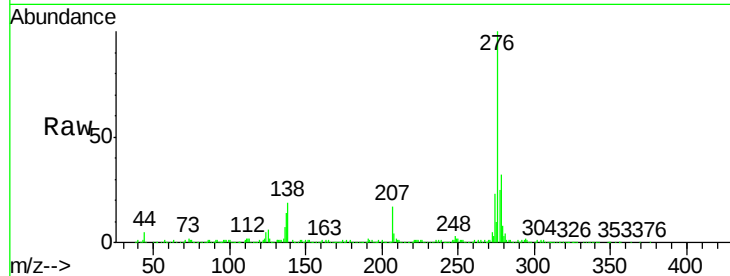
138 19.1 17.9 26.9

277 24.7 19.7 29.5

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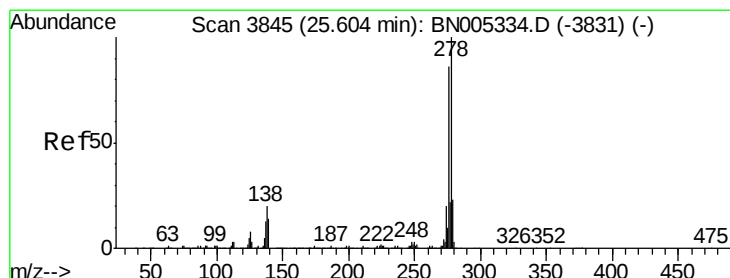
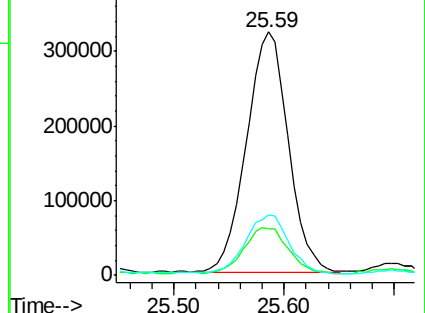
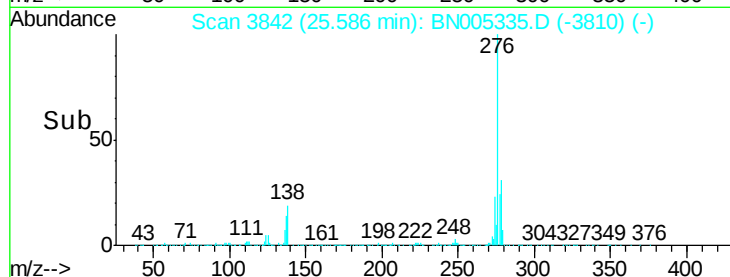
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Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



#92

Dibenzo(a,h)anthracene

Concen: 2.997 ng/ul

RT: 25.59 min Scan# 3843

Delta R.T. -0.02 min

Lab File: BN005335.D

Acq: 27 Apr 2019 02:15

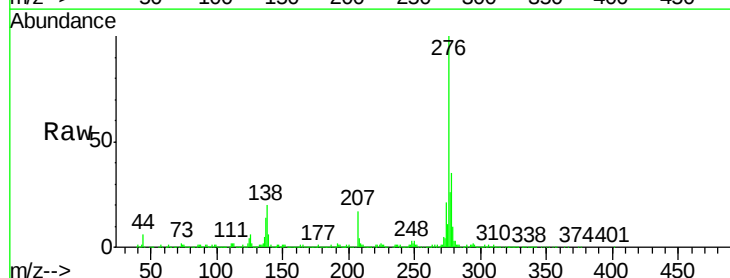
Tgt Ion:278 Resp: 327008

Ion Ratio Lower Upper

278 100

139 16.8 13.1 19.7

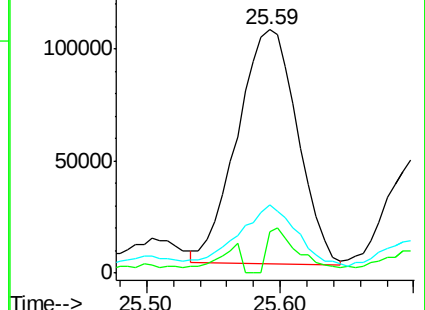
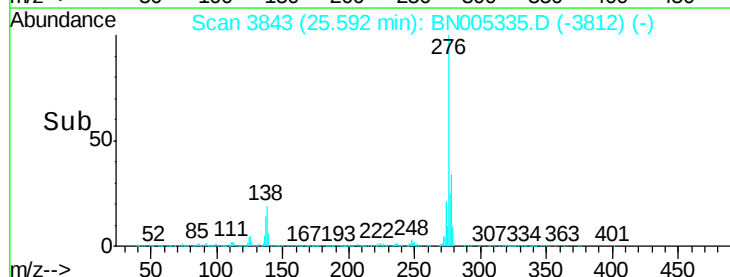
279 27.8 19.4 29.0

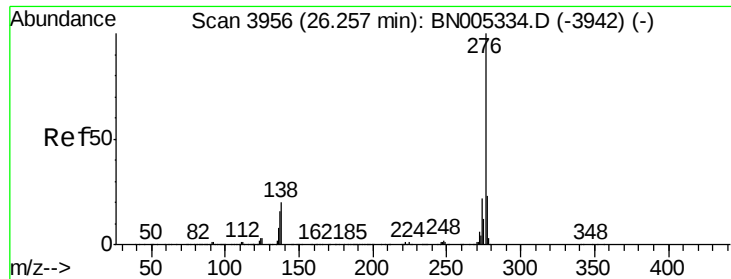


Abundance Ion 278.00 (277.70 to 278.70): E

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: 6.417 ng/ul

RT: 26.24 min Scan# 3954

Delta R.T. -0.01 min

Lab File: BN005335.D

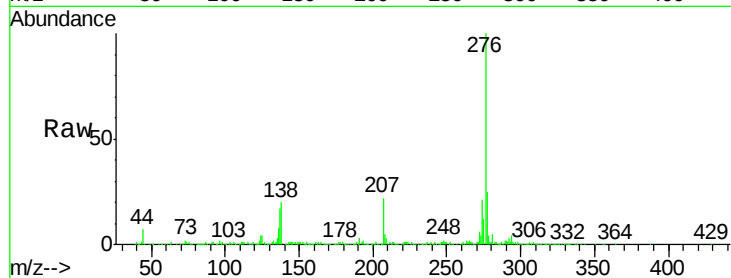
Acq: 27 Apr 2019 02:15

Instrument :

BNA\_N

ClientSampleId :

GAHW2



|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 276   | Resp: | 682105 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 20.2  | 16.7  | 25.1   |
| 277       | 25.1  | 18.2  | 27.2   |

Manual Integrations  
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