

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN050819\  
 Data File : BN005547.D  
 Acq On : 09 May 2019 00:02  
 Operator : JU/SJ  
 Sample : K2604-13 5X  
 Misc :  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAJ87

Manual Integrations  
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 5/9/2019 2:35:32 PM

Quant Time: May 09 15:26:55 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN041919MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue May 07 05:36:07 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.59  | 152  | 302681   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.36 | 136  | 1179682  | 20.00 | ng/ul | 0.01     |
| 35) Acenaphthene-d10      | 14.23 | 164  | 782277   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 16.98 | 188  | 1782306  | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.21 | 240  | 1371582  | 20.00 | ng/ul | 0.00     |
| 85) Perylene-d12          | 23.40 | 264  | 1331092  | 20.00 | ng/ul | -0.02    |

## System Monitoring Compounds

|                                |       |     |        |      |       |       |
|--------------------------------|-------|-----|--------|------|-------|-------|
| 3) 1,4-Dioxane-d8              | 3.21  | 96  | 3746   | 0.60 | ng/uL | 0.00  |
| 5) Phenol-d5                   | 6.78  | 99  | 83412  | 3.51 | ng/ul | 0.00  |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.93  | 67  | 56019  | 3.78 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 7.13  | 132 | 70551  | 3.88 | ng/ul | 0.00  |
| 13) 4-Methylphenol-d8          | 8.29  | 113 | 63275  | 3.41 | ng/ul | 0.00  |
| 19) Nitrobenzene-d5            | 8.73  | 128 | 49167  | 6.77 | ng/ul | 0.00  |
| 22) 2-Nitrophenol-d4           | 9.45  | 143 | 36495  | 4.96 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 9.99  | 165 | 73547  | 4.36 | ng/ul | 0.01  |
| 29) 4-Chloroaniline-d4         | 0.00  | 131 | 0d     | 0.00 | ng/ul |       |
| 43) Dimethylphthalate-d6       | 13.64 | 166 | 240513 | 4.24 | ng/ul | 0.00  |
| 46) Acenaphthylene-d8          | 13.92 | 160 | 305704 | 4.38 | ng/ul | 0.00  |
| 51) 4-Nitrophenol-d4           | 14.46 | 143 | 31110  | 3.47 | ng/ul | 0.02  |
| 57) Fluorene-d10               | 15.23 | 176 | 217354 | 4.56 | ng/ul | 0.00  |
| 62) 4,6-Dinitro-2-methylphenol | 15.39 | 200 | 8916m  | 1.11 | ng/ul | 0.03  |
| 70) Anthracene-d10             | 17.08 | 188 | 342337 | 4.58 | ng/ul | 0.00  |
| 78) Pyrene-d10                 | 19.39 | 212 | 359345 | 5.12 | ng/ul | 0.00  |
| 89) Benzo(a)pyrene-d12         | 23.26 | 264 | 258114 | 4.44 | ng/ul | -0.02 |

## Target Compounds

|                            |       |     |           |         | Ovalue |
|----------------------------|-------|-----|-----------|---------|--------|
| 28) Naphthalene            | 10.42 | 128 | 24866009m | 453.416 | ng/ul  |
| 34) 2-Methylnaphthalene    | 12.04 | 142 | 11327258  | 282.084 | ng/ul  |
| 40) 1,1'-Biphenyl          | 13.05 | 154 | 1885375   | 32.346  | ng/ul  |
| 44) Dimethylphthalate      | 13.69 | 163 | 79960     | 1.413   | ng/ul# |
| 47) Acenaphthylene         | 13.95 | 152 | 1407622   | 20.536  | ng/ul# |
| 49) Acenaphthene           | 14.30 | 153 | 5989593   | 128.000 | ng/ul  |
| 53) Dibenzofuran           | 14.63 | 168 | 697223    | 10.349  | ng/ul  |
| 58) Fluorene               | 15.29 | 166 | 3820230   | 72.667  | ng/ul  |
| 69) Phenanthrene           | 17.03 | 178 | 16407814  | 189.028 | ng/ul  |
| 71) Anthracene             | 17.12 | 178 | 5680080   | 64.237  | ng/ul  |
| 74) Carbazole              | 17.39 | 167 | 308532    | 4.062   | ng/ul  |
| 76) Fluoranthene           | 19.06 | 202 | 9340609   | 97.016  | ng/ul  |
| 79) Pyrene                 | 19.43 | 202 | 12443525  | 140.904 | ng/ul  |
| 82) Benzo(a)anthracene     | 21.19 | 228 | 4632219m  | 54.288  | ng/ul  |
| 84) Chrysene               | 21.25 | 228 | 3997732   | 50.482  | ng/ul  |
| 87) Benzo(b)fluoranthene   | 22.76 | 252 | 2949228   | 39.415  | ng/ul  |
| 88) Benzo(k)fluoranthene   | 22.79 | 252 | 799512m   | 11.188  | ng/ul  |
| 90) Benzo(a)pyrene         | 23.32 | 252 | 3277185m  | 46.596  | ng/ul  |
| 91) Indeno(1,2,3-cd)pyrene | 25.59 | 276 | 1307139   | 16.810  | ng/ul# |
| 92) Dibenzo(a,h)anthracene | 25.59 | 278 | 363999m   | 5.516   | ng/ul  |
| 93) Benzo(a,h,i)perylene   | 26.25 | 276 | 1390080   | 21.620  | ng/ul  |

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Sample : K2604-13 5X  
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ALS Vial : 19 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
GAJ87

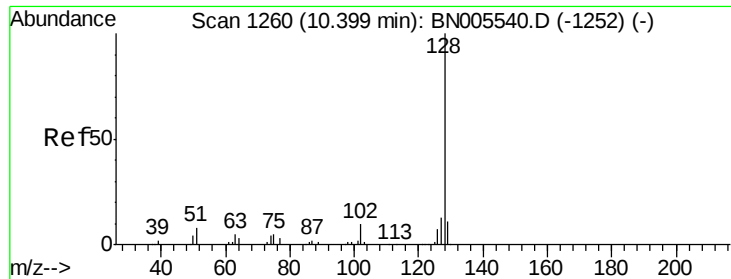
Manual Integrations  
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Quant Time: May 09 15:26:55 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN041919MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Tue May 07 05:36:07 2019  
Response via : Initial Calibration

| Internal Standards                                                         | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------------------------------------------------------|------|------|----------|------|-------|----------|
| -----                                                                      |      |      |          |      |       |          |
| (#) = qualifier out of range (m) = manual integration (+) = signals summed |      |      |          |      |       |          |





#28

Naphthalene

Concen: 453.416 ng/ul m

RT: 10.42 min Scan# 1263

Delta R.T. 0.02 min

Lab File: BN005547.D

Acq: 09 May 2019 00:02

Instrument :

BNA\_N

ClientSampled :

GAJ87

Tot Ion:128 Resp:24866009

Ion Ratio Lower Upper

128 100

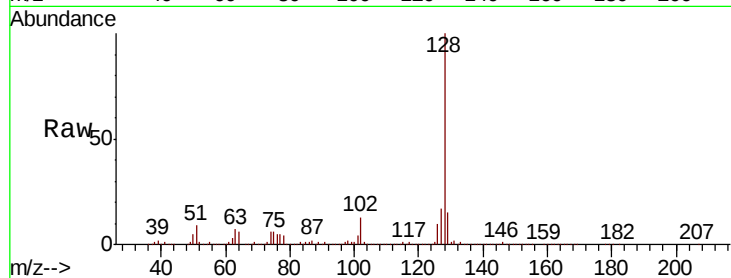
129 14.8 9.2 13.8#

127 17.5 10.7 16.1#

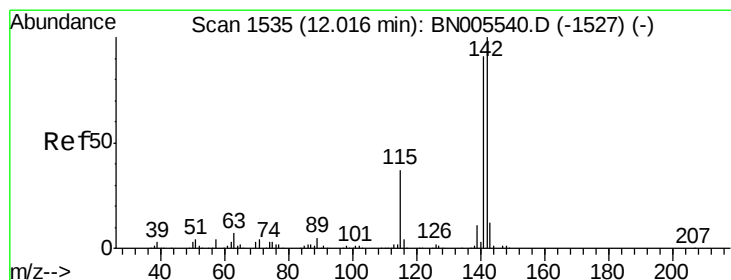
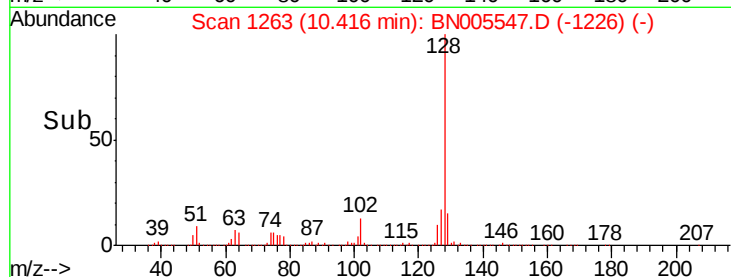
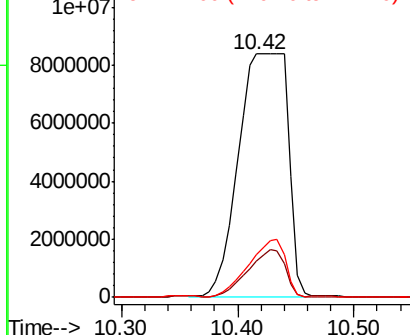
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Abundance Ion 128.00 (127.70 to 128.70): E  
Ion 129.00 (128.70 to 129.70): E  
Ion 127.00 (126.70 to 127.70): E



#34

2-Methylnaphthalene

Concen: 282.084 ng/ul

RT: 12.04 min Scan# 1539

Delta R.T. 0.02 min

Lab File: BN005547.D

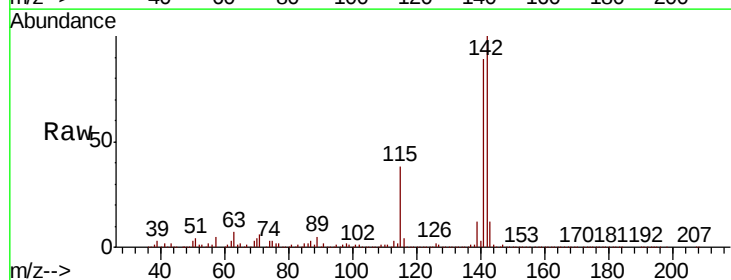
Acq: 09 May 2019 00:02

Tgt Ion:142 Resp:11327258

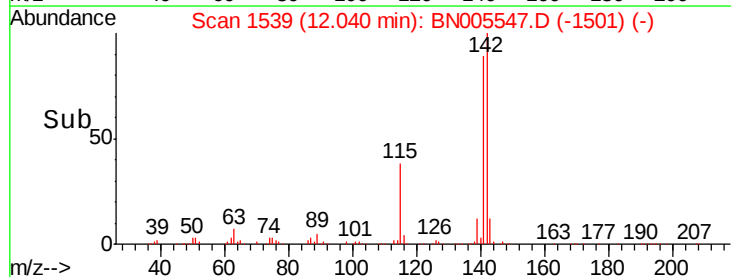
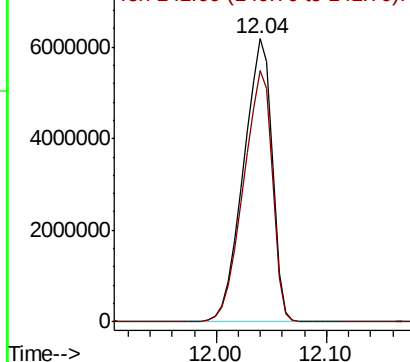
Ion Ratio Lower Upper

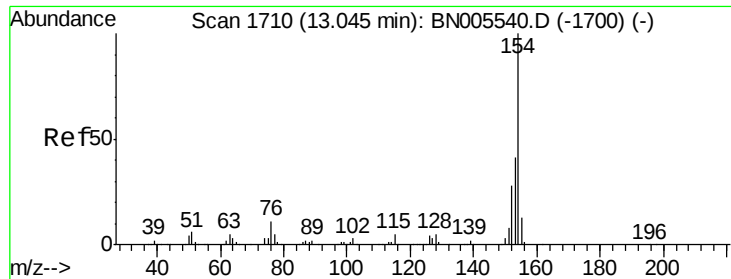
142 100

141 88.9 72.0 108.0



Abundance Ion 142.00 (141.70 to 142.70): E  
Ion 141.00 (140.70 to 141.70): E





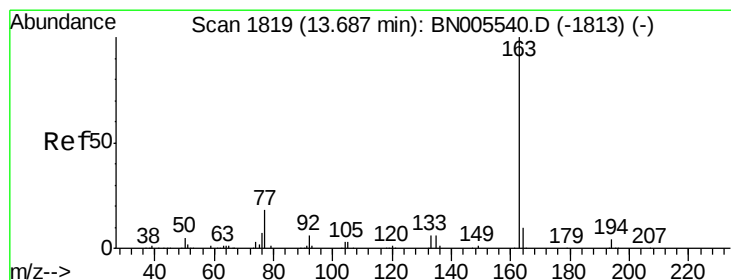
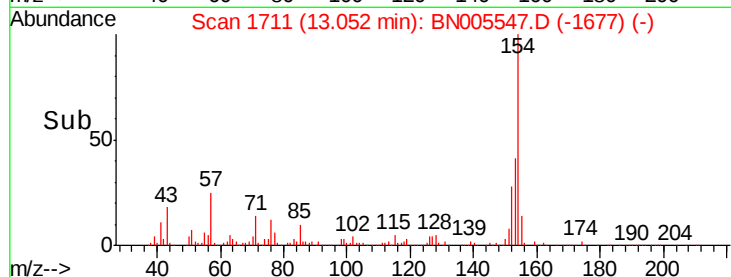
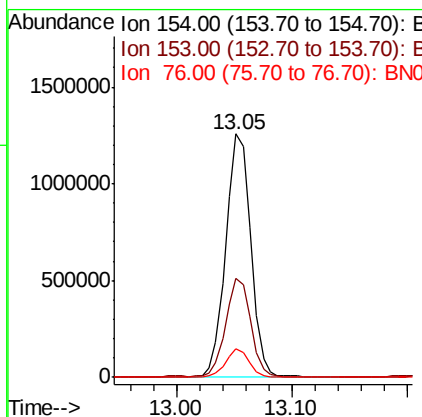
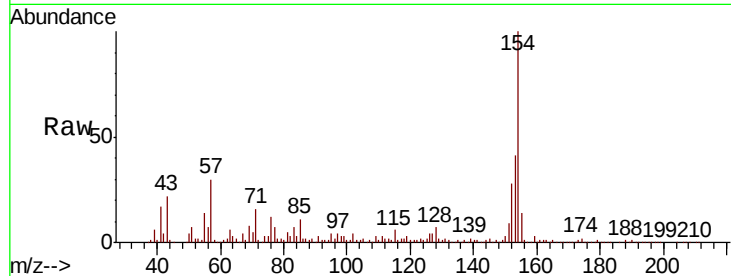
#40  
 1,1'-Biphenyl  
 Concen: 32.346 ng/ul  
 RT: 13.05 min Scan# 1711  
 Delta R.T. 0.00 min  
 Lab File: BN005547.D  
 Acq: 09 May 2019 00:02

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAJ87

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 154     | 100   |       |       |
| 153     | 40.8  | 32.6  | 49.0  |
| 76      | 11.6  | 10.4  | 15.6  |

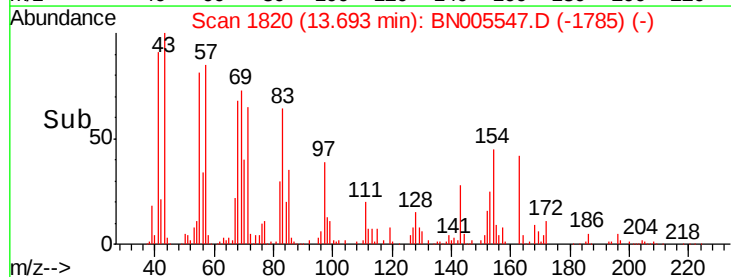
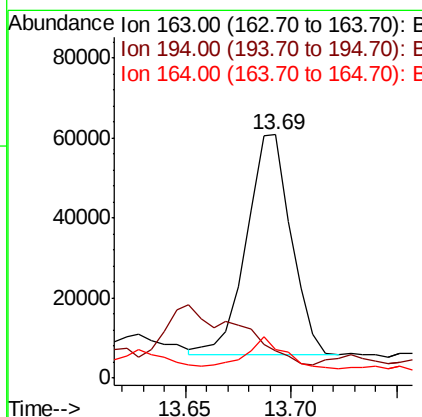
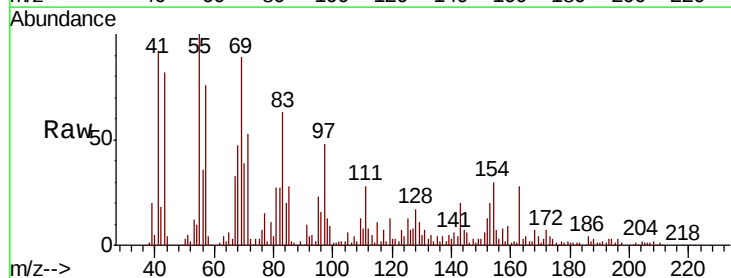
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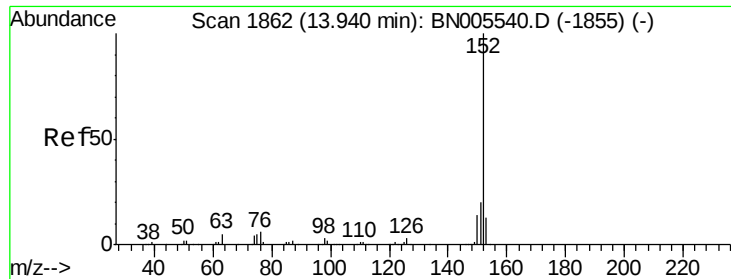
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#44  
 Dimethylphthalate  
 Concen: 1.413 ng/ul  
 RT: 13.69 min Scan# 1820  
 Delta R.T. 0.01 min  
 Lab File: BN005547.D  
 Acq: 09 May 2019 00:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 11.2  | 3.4   | 5.0#  |
| 164     | 12.0  | 8.1   | 12.1  |





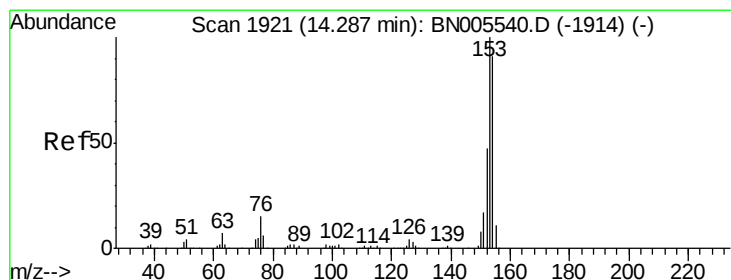
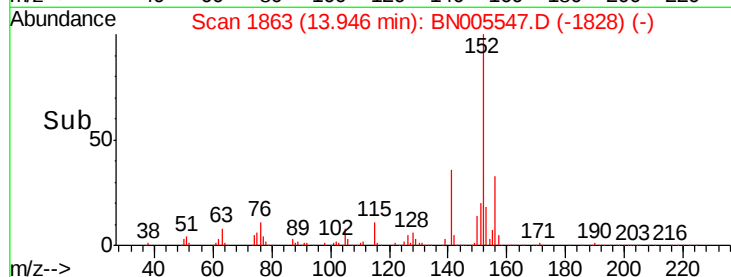
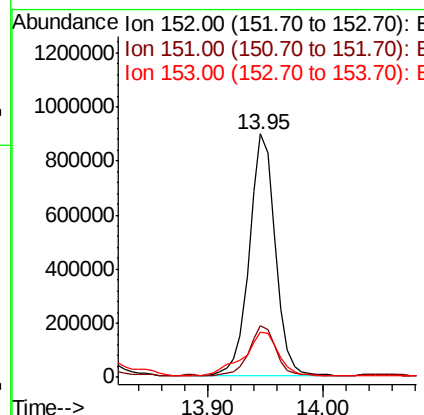
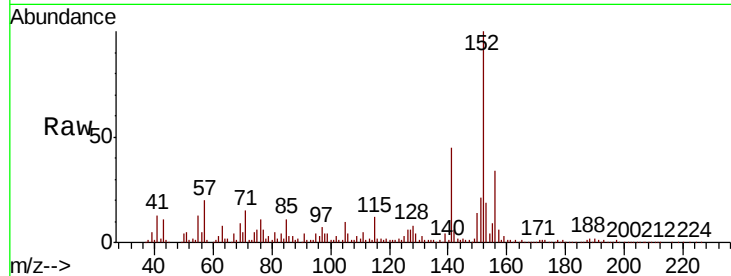
#47  
Acenaphthylene  
Concen: 20.536 ng/ul  
RT: 13.95 min Scan# 1863  
Delta R.T. 0.01 min  
Lab File: BN005547.D  
Acq: 09 May 2019 00:02

Instrument :  
BNA\_N  
ClientSampleId :  
GAJ87

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 21.0  | 15.8  | 23.8  |
| 153     | 18.5  | 9.8   | 14.8  |

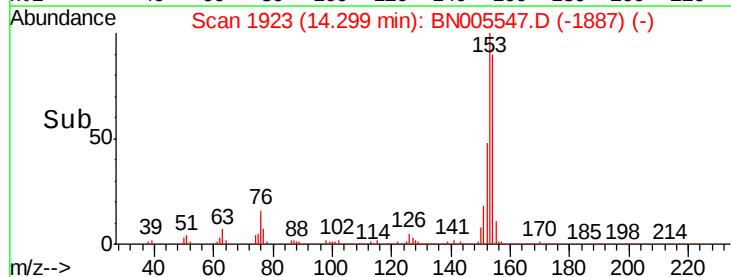
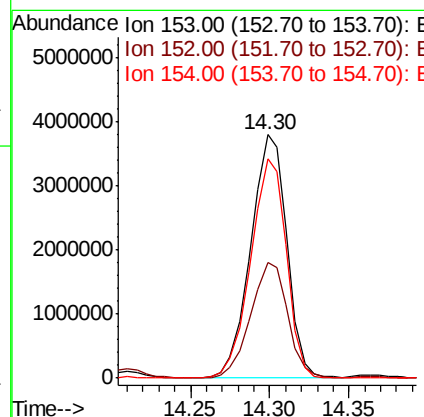
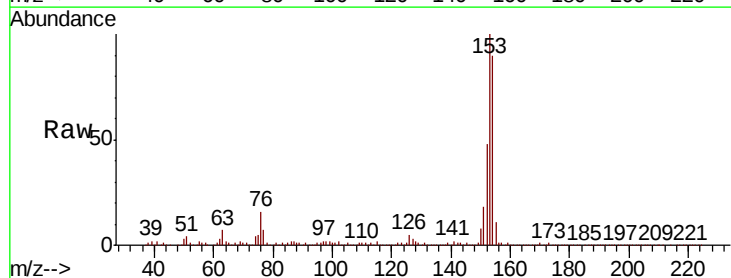
Manual Integrations  
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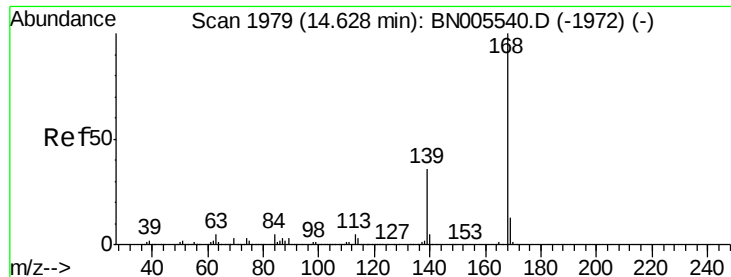
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#49  
Acenaphthene  
Concen: 128.000 ng/ul  
RT: 14.30 min Scan# 1923  
Delta R.T. 0.01 min  
Lab File: BN005547.D  
Acq: 09 May 2019 00:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 153     | 100   |       |       |
| 152     | 47.6  | 37.4  | 56.0  |
| 154     | 90.0  | 71.2  | 106.8 |





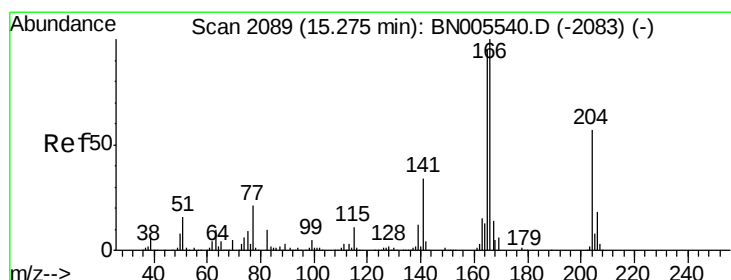
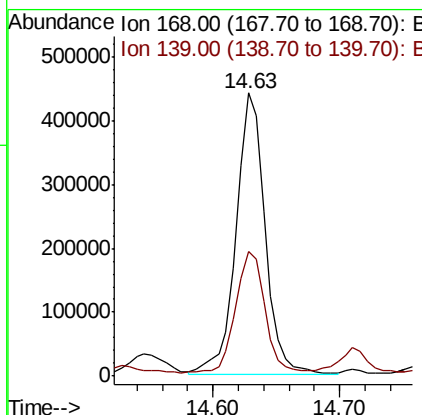
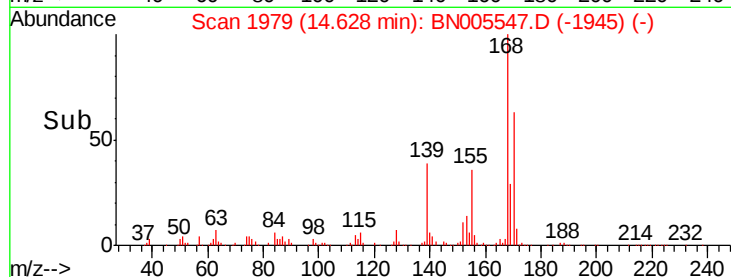
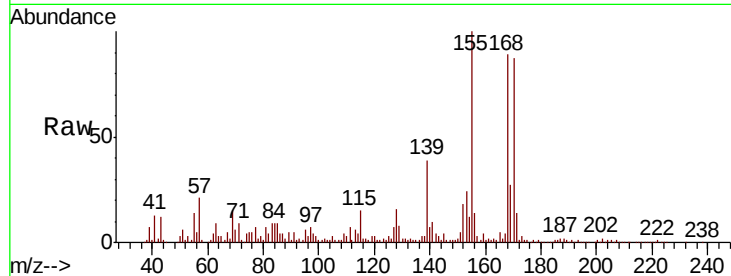
#53  
Dibenzofuran  
Concen: 10.349 ng/ul  
RT: 14.63 min Scan# 1979  
Delta R.T. 0.00 min  
Lab File: BN005547.D  
Acq: 09 May 2019 00:02

Instrument :  
BNA\_N  
ClientSampled :  
GAJ87

Tot Ion:168 Resp: 697223  
Ion Ratio Lower Upper  
168 100  
139 44.1 30.9 46.3

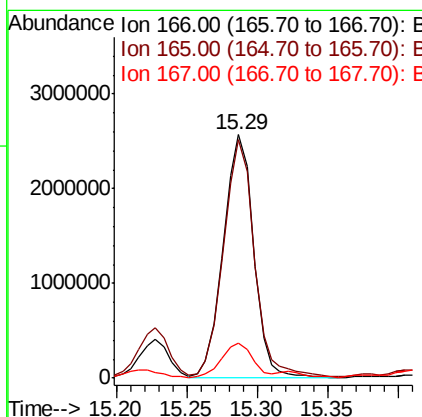
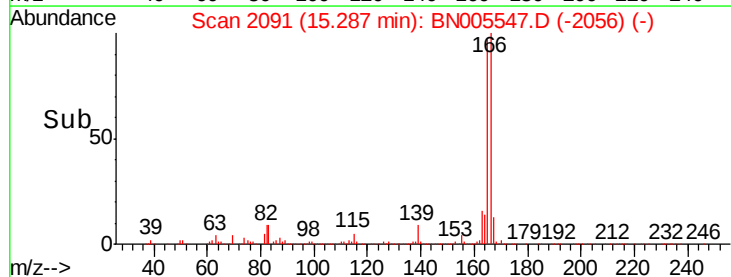
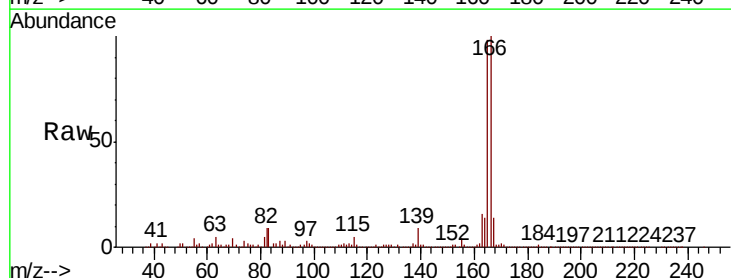
Manual Integrations  
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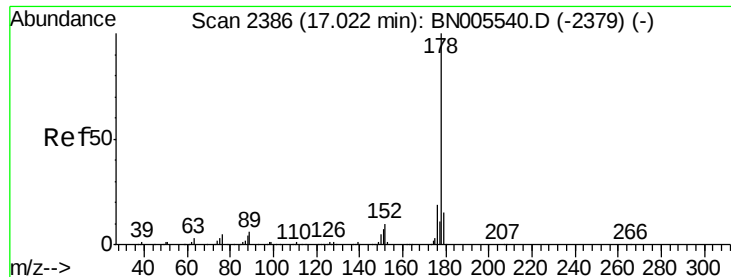
Sohil  
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#58  
Fluorene  
Concen: 72.667 ng/ul  
RT: 15.29 min Scan# 2091  
Delta R.T. 0.01 min  
Lab File: BN005547.D  
Acq: 09 May 2019 00:02

Tgt Ion:166 Resp: 3820230  
Ion Ratio Lower Upper  
166 100  
165 98.1 80.0 120.0  
167 14.5 10.7 16.1





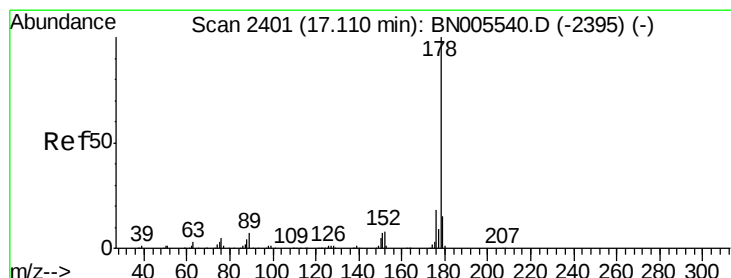
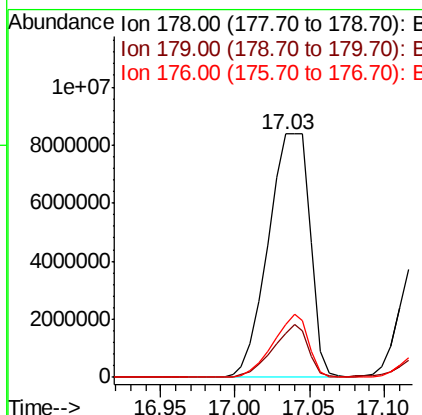
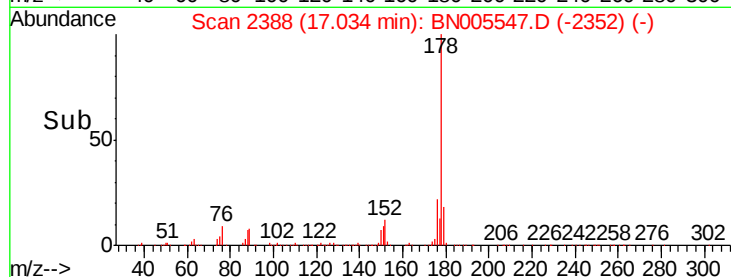
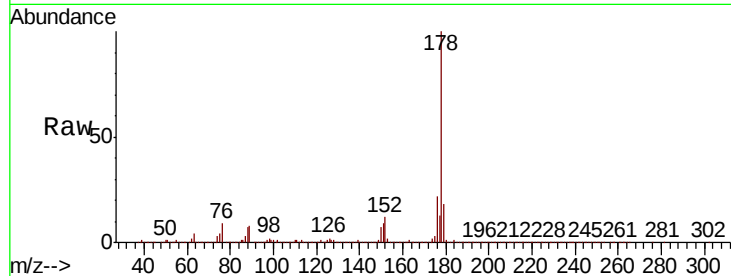
#69  
Phenanthrene  
Concen: 189.028 ng/ul  
RT: 17.03 min Scan# 2388  
Delta R.T. 0.01 min  
Lab File: BN005547.D  
Acq: 09 May 2019 00:02

Instrument :  
BNA\_N  
ClientSampleId :  
GAJ87

Tot Ion:178 Resp:16407814  
Ion Ratio Lower Upper  
178 100  
179 18.2 12.2 18.4  
176 21.6 15.1 22.7

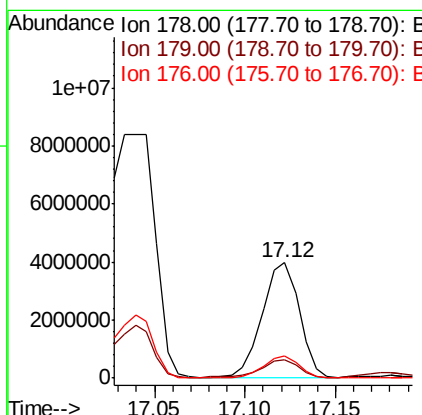
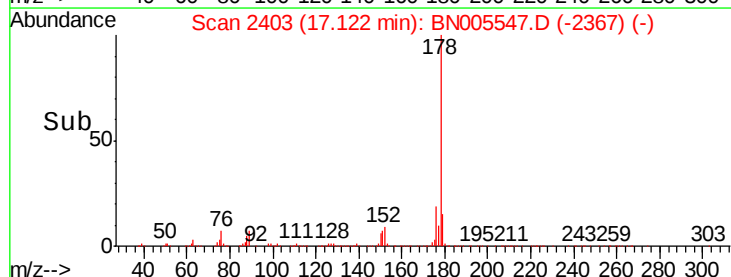
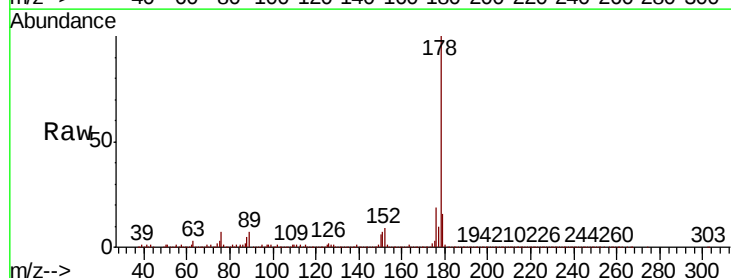
Manual Integrations  
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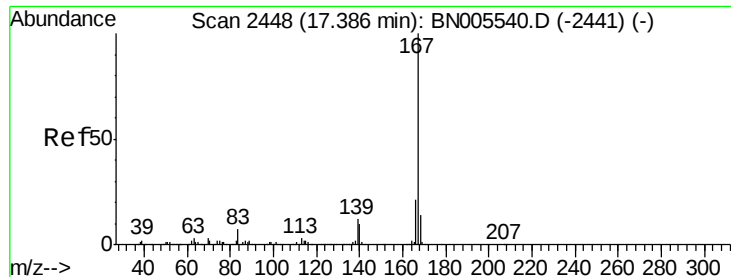
Sohil  
5/9/2019 2:35:32 PM



#71  
Anthracene  
Concen: 64.237 ng/ul  
RT: 17.12 min Scan# 2403  
Delta R.T. 0.01 min  
Lab File: BN005547.D  
Acq: 09 May 2019 00:02

Tgt Ion:178 Resp: 5680080  
Ion Ratio Lower Upper  
178 100  
179 15.6 12.3 18.5  
176 18.8 15.1 22.7





#74

Carbazole

Concen: 4.062 ng/ul

RT: 17.39 min Scan# 2448

Delta R.T. 0.00 min

Lab File: BN005547.D

Acq: 09 May 2019 00:02

Instrument :

BNA\_N

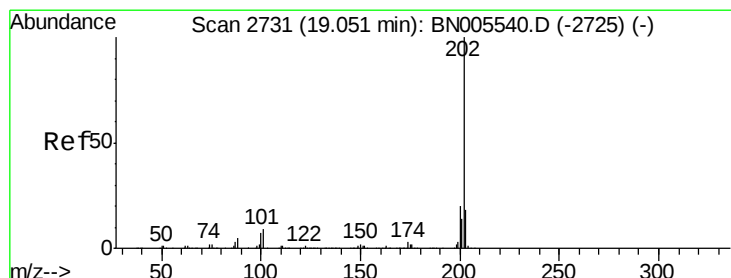
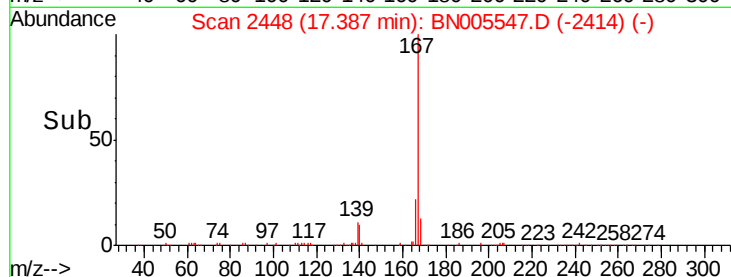
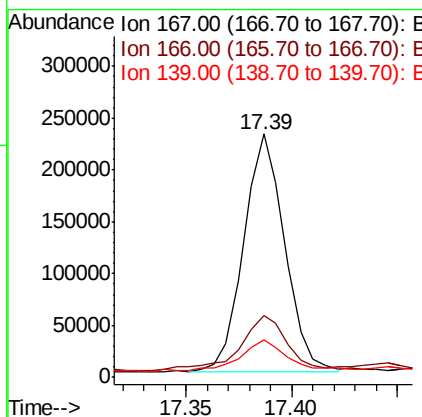
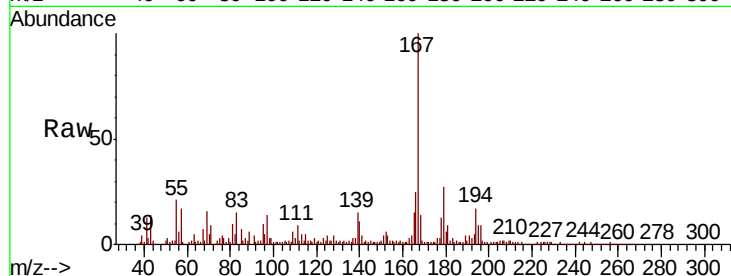
ClientSampleId :

GAJ87

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 167   | Resp: | 308532 |
| Ion Ratio | Lower | Upper |        |
| 167       | 100   |       |        |
| 166       | 25.2  | 17.2  | 25.8   |
| 139       | 15.2  | 10.6  | 16.0   |

Manual Integrations  
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#76

Fluoranthene

Concen: 97.016 ng/ul

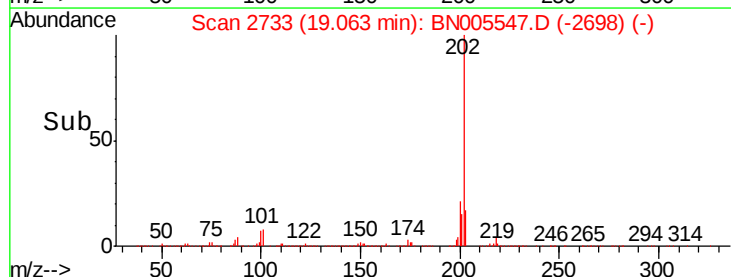
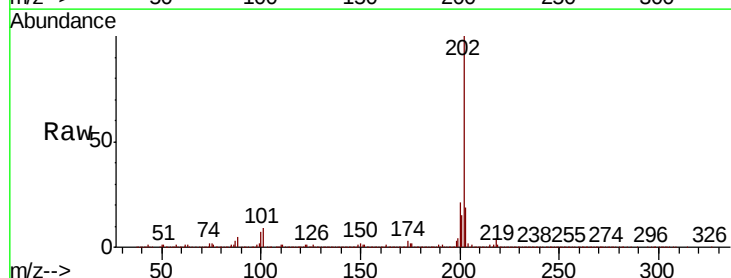
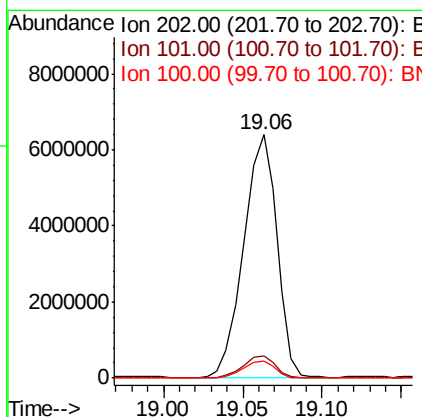
RT: 19.06 min Scan# 2733

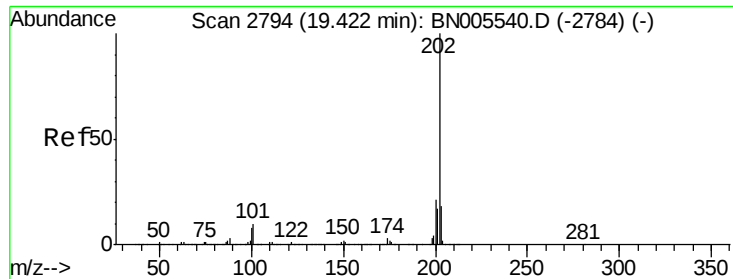
Delta R.T. 0.01 min

Lab File: BN005547.D

Acq: 09 May 2019 00:02

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 202   | Resp: | 9340609 |
| Ion Ratio | Lower | Upper |         |
| 202       | 100   |       |         |
| 101       | 9.0   | 8.6   | 12.8    |
| 100       | 6.9   | 6.3   | 9.5     |





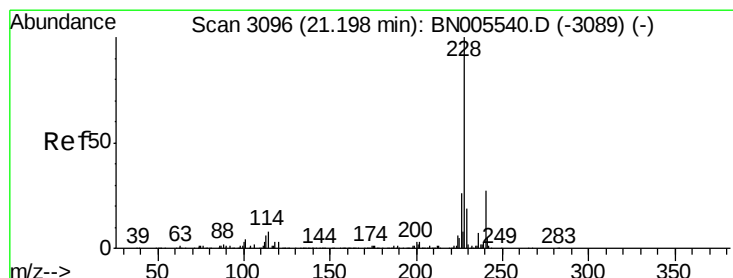
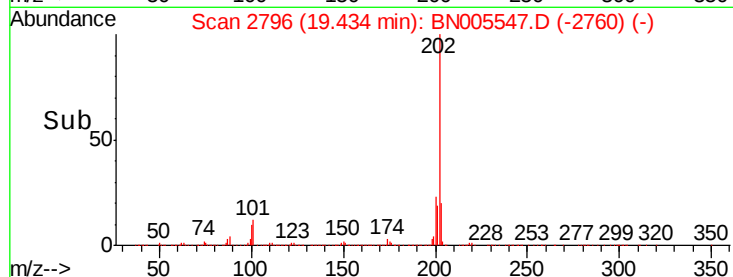
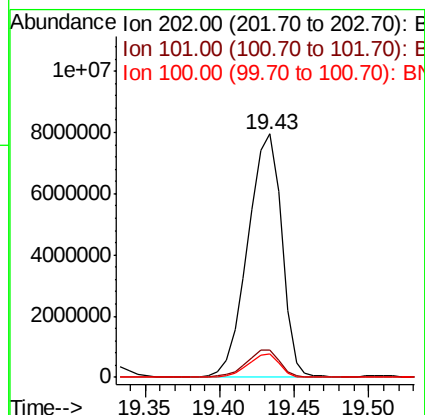
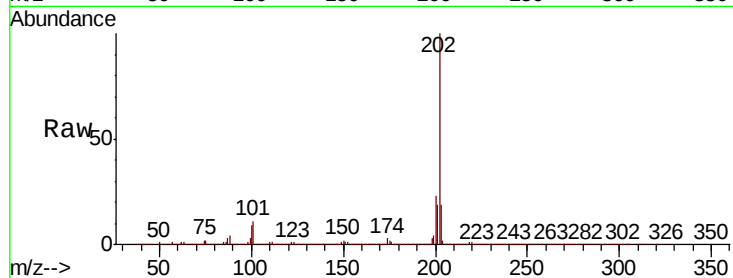
#79  
Pvrene  
Concen: 140.904 ng/ul  
RT: 19.43 min Scan# 2796  
Delta R.T. 0.01 min  
Lab File: BN005547.D  
Acq: 09 May 2019 00:02

Instrument :  
BNA\_N  
ClientSampleId :  
GAJ87

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 11.4  | 10.3  | 15.5  |
| 100     | 9.4   | 7.9   | 11.9  |

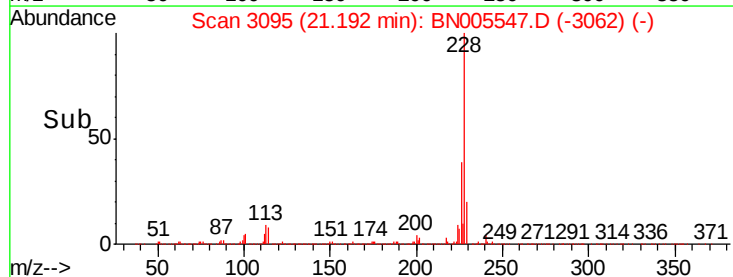
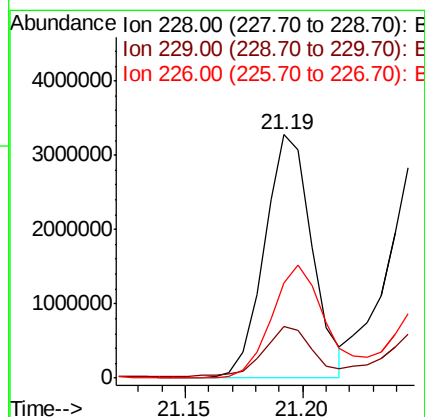
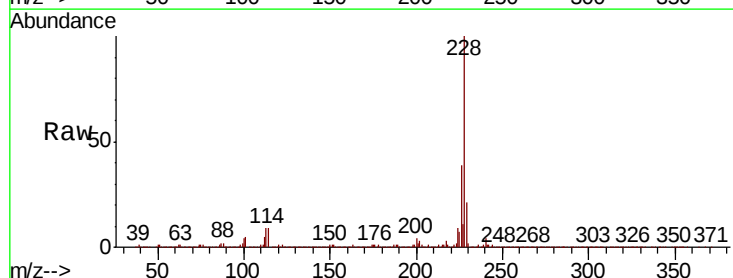
Manual Integrations  
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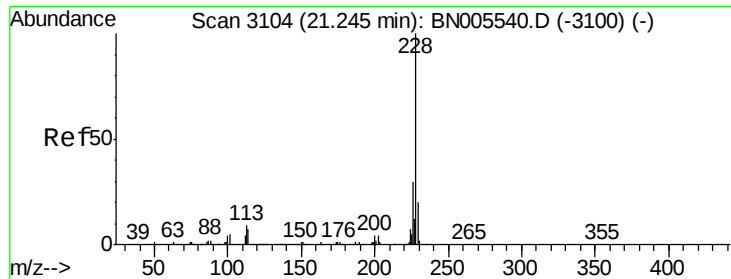
Sohil  
5/9/2019 2:35:32 PM



#82  
Benzo(a)anthracene  
Concen: 54.288 ng/ul m  
RT: 21.19 min Scan# 3095  
Delta R.T. -0.01 min  
Lab File: BN005547.D  
Acq: 09 May 2019 00:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 21.1  | 15.8  | 23.6  |
| 226     | 39.2  | 21.4  | 32.2  |





#84

Chrysene

Concen: 50.482 ng/ul

RT: 21.25 min Scan# 3104

Delta R.T. -0.01 min

Lab File: BN005547.D

Acq: 09 May 2019 00:02

Instrument :

BNA\_N

ClientSampleId :

GAJ87

Tot Ion:228 Resp: 3997732

Ion Ratio Lower Upper

228 100

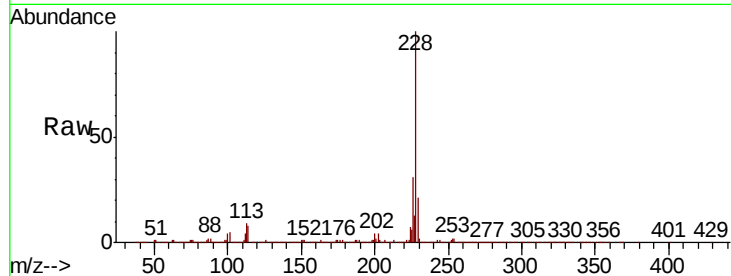
226 30.8 24.0 36.0

229 20.9 15.4 23.0

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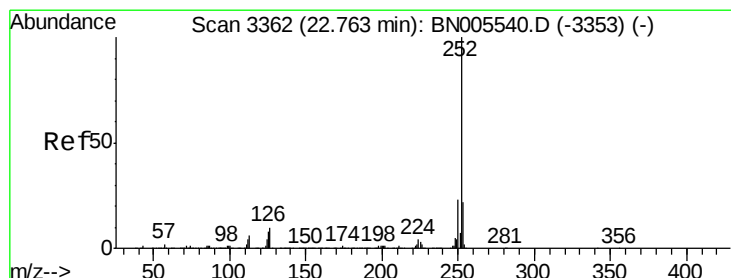
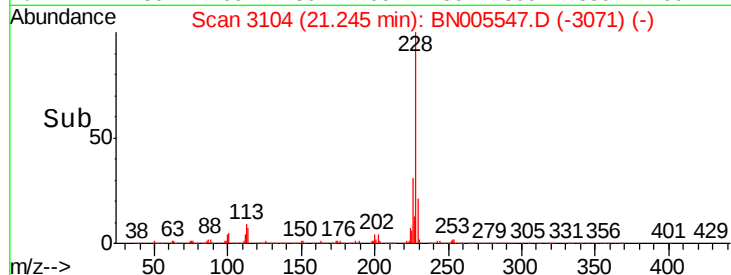
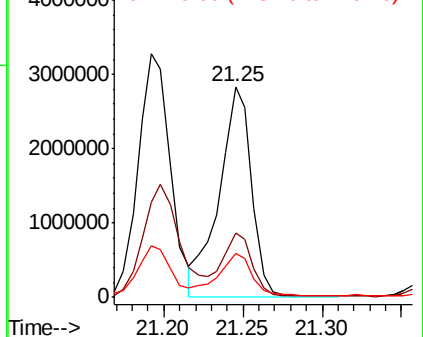


Abundance

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: 39.415 ng/ul

RT: 22.76 min Scan# 3361

Delta R.T. -0.01 min

Lab File: BN005547.D

Acq: 09 May 2019 00:02

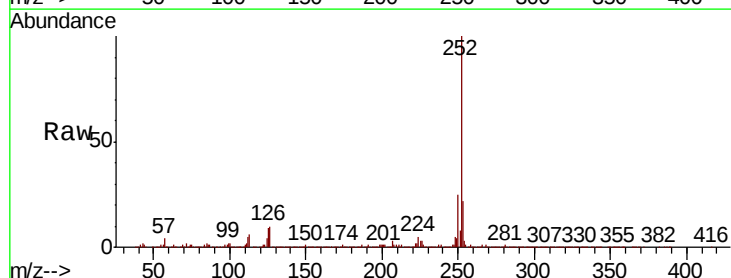
Tgt Ion:252 Resp: 2949228

Ion Ratio Lower Upper

252 100

253 22.5 17.7 26.5

125 8.6 8.4 12.6

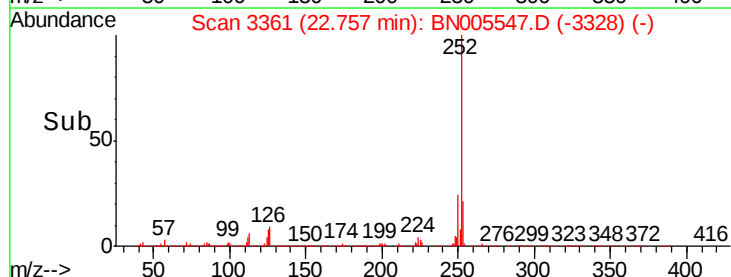
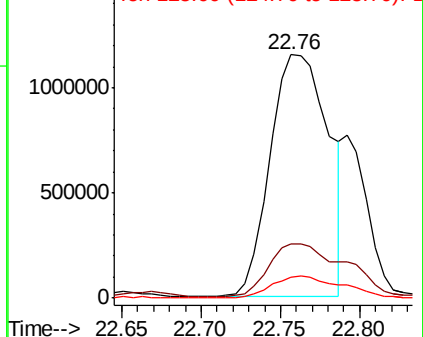


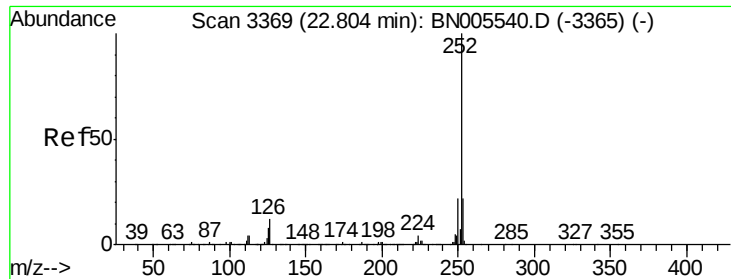
Abundance

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





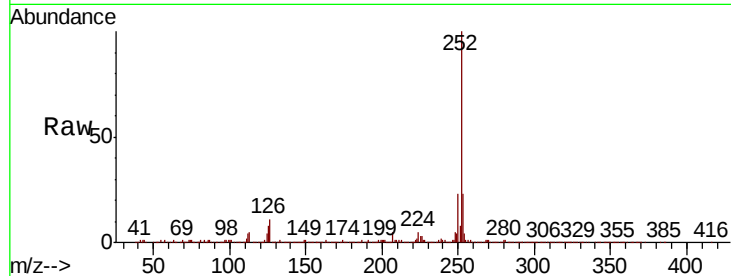
#88  
Benzo(k)fluoranthene  
Concen: 11.188 ng/ul m  
RT: 22.79 min Scan# 3367  
Delta R.T. -0.02 min  
Lab File: BN005547.D  
Acq: 09 May 2019 00:02

Instrument :  
BNA\_N  
ClientSampleId :  
GAJ87

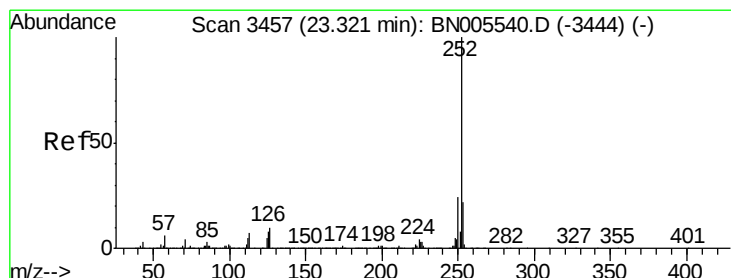
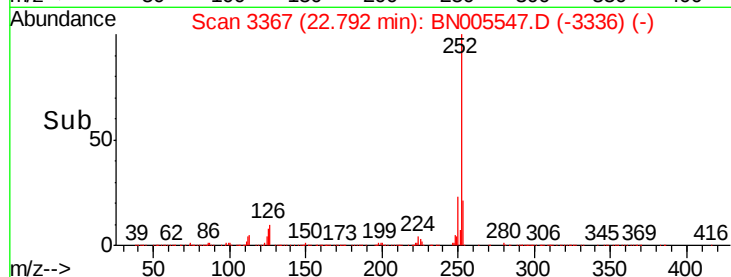
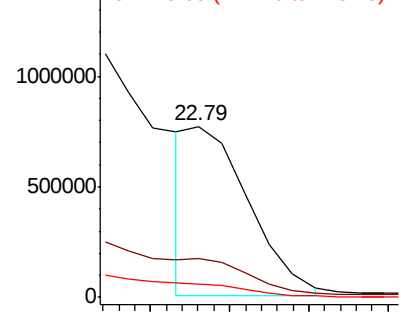
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.5  | 17.4  | 26.0  |
| 125     | 8.0   | 7.5   | 11.3  |

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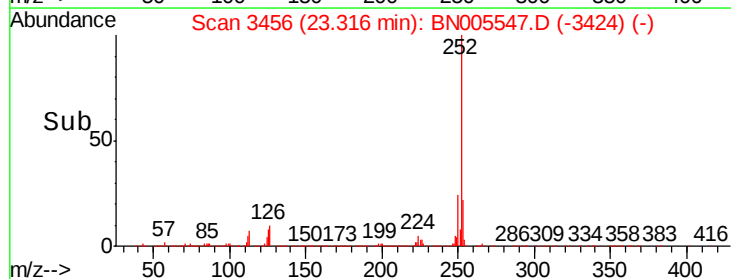
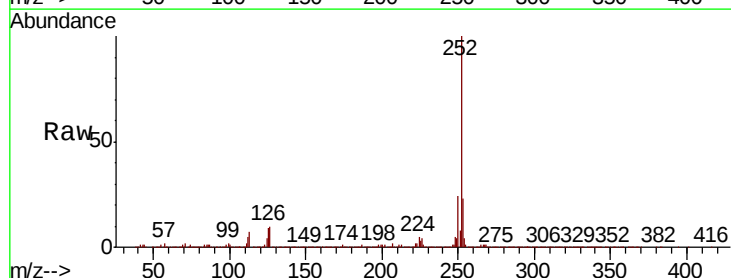
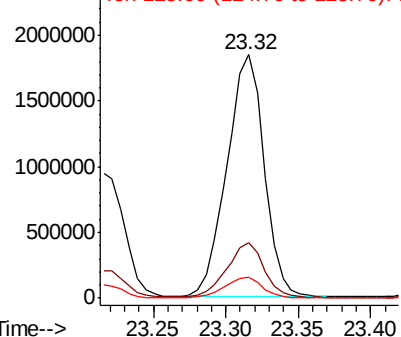
Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

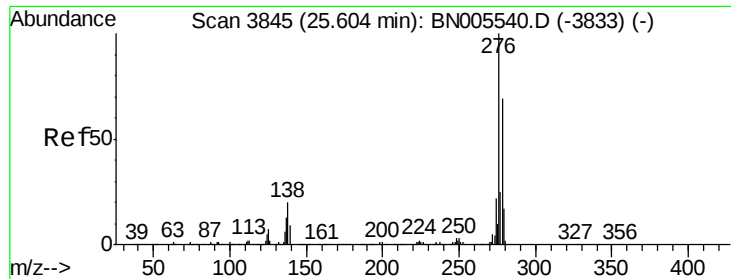


#90  
Benzo(a)pyrene  
Concen: 46.596 ng/ul m  
RT: 23.32 min Scan# 3456  
Delta R.T. -0.01 min  
Lab File: BN005547.D  
Acq: 09 May 2019 00:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.8  | 17.3  | 25.9  |
| 125     | 8.6   | 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

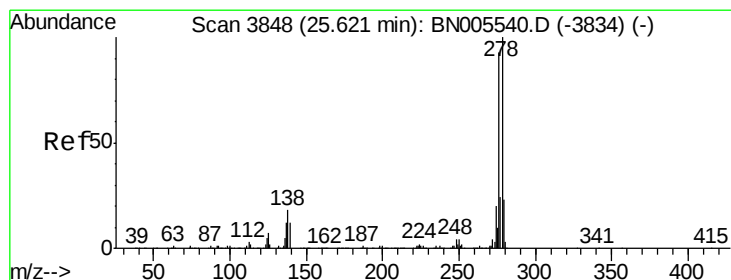
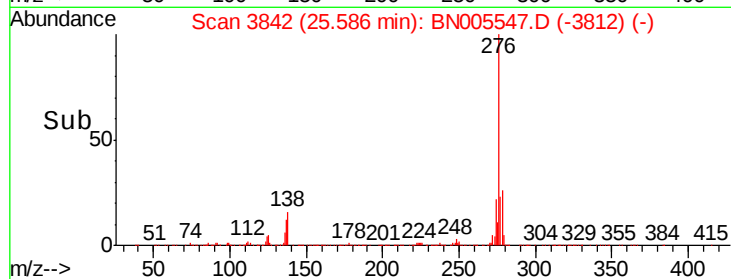
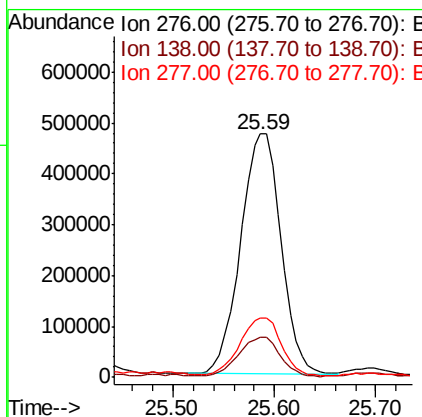
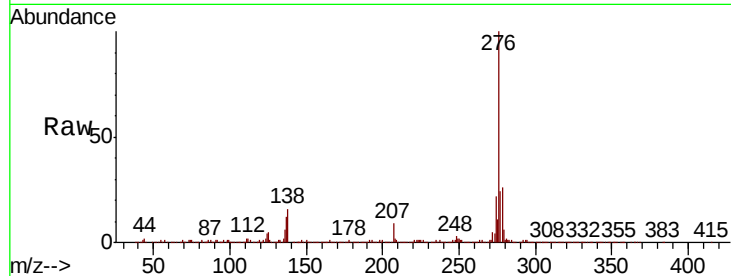
Indeno(1,2,3-cd)pyrene  
Concen: 16.810 ng/ul  
RT: 25.59 min Scan# 3842  
Delta R.T. -0.02 min  
Lab File: BN005547.D  
Acq: 09 May 2019 00:02

Instrument :  
BNA\_N  
ClientSampleId :  
GAJ87

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 16.3  | 17.9  | 26.9# |
| 277     | 24.2  | 19.7  | 29.5  |

Manual Integrations  
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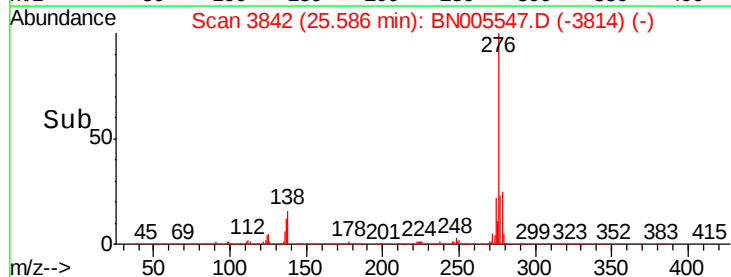
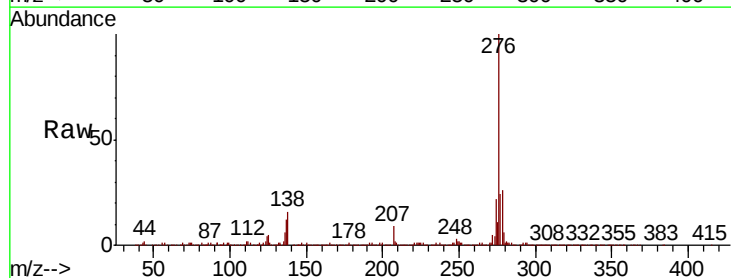
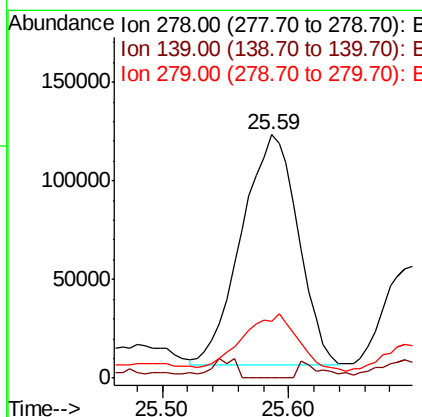
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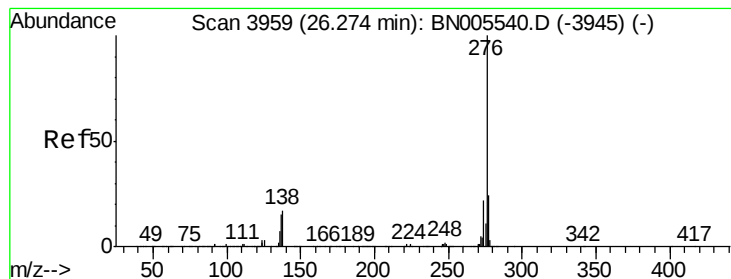


#92

Dibenzo(a,h)anthracene  
Concen: 5.516 ng/ul m  
RT: 25.59 min Scan# 3842  
Delta R.T. -0.04 min  
Lab File: BN005547.D  
Acq: 09 May 2019 00:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 0.0   | 13.1  | 19.7# |
| 279     | 23.3  | 19.4  | 29.0  |





#93

Benzo(a,h,i)perylene

Concen: 21.620 ng/ul

RT: 26.25 min Scan# 3955

Delta R.T. -0.02 min

Lab File: BN005547.D

Acq: 09 May 2019 00:02

Instrument :

BNA\_N

ClientSampleId :

GAJ87

Tot Ion: 276 Resp: 1390080

Ion Ratio Lower Upper

276 100

138 17.0 16.7 25.1

277 24.4 18.2 27.2

Manual Integrations  
APPROVED

Sohil

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