

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN020620\  
 Data File : BN009619.D  
 Acq On : 06 Feb 2020 20:59  
 Operator : CG/JU  
 Sample : L1324-08  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleID :  
 GAT65

Manual Integrations  
 APPROVED

mohammad  
 2/10/2020 8:19:36 AM

Quant Time: Feb 07 10:26:04 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\SOM-EPA-BN020320MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Feb 03 16:39:56 2020  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.43  | 152  | 171356   | 20.00 | ng/ul | -0.01    |
| 18) Naphthalene-d8        | 10.19 | 136  | 698337   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.07 | 164  | 439009   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 16.83 | 188  | 881571   | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.05 | 240  | 871095   | 20.00 | ng/ul | 0.00     |
| 85) Perylene-d12          | 23.16 | 264  | 976895   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |       |       |       |
|--------------------------------|-------|-----|--------|-------|-------|-------|
| 3) 1,4-Dioxane-d8              | 3.08  | 96  | 9152   | 2.19  | ng/uL | 0.00  |
| 5) Phenol-d5                   | 6.63  | 99  | 170747 | 11.42 | ng/ul | 0.00  |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.79  | 67  | 131915 | 13.14 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 6.98  | 132 | 140361 | 12.76 | ng/ul | -0.01 |
| 13) 4-Methylphenol-d8          | 8.15  | 113 | 78424  | 6.59  | ng/ul | -0.01 |
| 19) Nitrobenzene-d5            | 8.58  | 128 | 75991  | 14.63 | ng/ul | -0.01 |
| 22) 2-Nitrophenol-d4           | 9.29  | 143 | 78261  | 13.50 | ng/ul | -0.01 |
| 26) 2,4-Dichlorophenol-d3      | 9.82  | 165 | 127175 | 11.71 | ng/ul | 0.00  |
| 29) 4-Chloroaniline-d4         | 0.00  | 131 | 0d     | 0.00  | ng/ul |       |
| 43) Dimethylphthalate-d6       | 13.50 | 166 | 434408 | 13.55 | ng/ul | 0.00  |
| 46) Acenaphthylene-d8          | 13.76 | 160 | 538641 | 13.91 | ng/ul | 0.00  |
| 51) 4-Nitrophenol-d4           | 14.31 | 143 | 55554  | 9.18  | ng/ul | 0.00  |
| 57) Fluorene-d10               | 15.08 | 176 | 400406 | 14.21 | ng/ul | 0.00  |
| 62) 4,6-Dinitro-2-methylphenol | 15.23 | 200 | 56594  | 10.28 | ng/ul | 0.00  |
| 70) Anthracene-d10             | 16.93 | 188 | 609660 | 15.22 | ng/ul | 0.00  |
| 78) Pyrene-d10                 | 19.23 | 212 | 691433 | 15.10 | ng/ul | 0.00  |
| 89) Benzo(a)pyrene-d12         | 23.03 | 264 | 731976 | 15.22 | ng/ul | 0.00  |

## Target Compounds

|                            |       |     |          |         | Ovalue |     |
|----------------------------|-------|-----|----------|---------|--------|-----|
| 28) Naphthalene            | 10.24 | 128 | 5132827  | 135.537 | ng/ul  | 99  |
| 34) 2-Methylnaphthalene    | 11.87 | 142 | 6556208  | 247.385 | ng/ul  | 98  |
| 40) 1,1'-Biphenyl          | 12.90 | 154 | 214800   | 6.284   | ng/ul  | 90  |
| 44) Dimethylphthalate      | 13.55 | 163 | 59597    | 1.752   | ng/ul# | 93  |
| 47) Acenaphthylene         | 13.79 | 152 | 473861   | 11.182  | ng/ul# | 90  |
| 49) Acenaphthene           | 14.15 | 153 | 2346100  | 81.439  | ng/ul  | 97  |
| 53) Dibenzofuran           | 14.48 | 168 | 292752m  | 7.298   | ng/ul  |     |
| 58) Fluorene               | 15.13 | 166 | 1339394  | 39.951  | ng/ul  | 99  |
| 69) Phenanthrene           | 16.88 | 178 | 5785814  | 115.083 | ng/ul  | 98  |
| 71) Anthracene             | 16.96 | 178 | 1447679  | 28.379  | ng/ul  | 99  |
| 74) Carbazole              | 17.24 | 167 | 60004    | 1.351   | ng/ul# | 69  |
| 76) Fluoranthene           | 18.90 | 202 | 1799964  | 31.369  | ng/ul  | 100 |
| 79) Pyrene                 | 19.27 | 202 | 3416164  | 53.722  | ng/ul  | 98  |
| 82) Benzo(a)anthracene     | 21.03 | 228 | 1072410m | 17.831  | ng/ul  |     |
| 84) Chrysene               | 21.08 | 228 | 921889   | 15.397  | ng/ul  | 97  |
| 87) Benzo(b)fluoranthene   | 22.54 | 252 | 607365m  | 9.937   | ng/ul  |     |
| 88) Benzo(k)fluoranthene   | 22.57 | 252 | 158020m  | 2.625   | ng/ul  |     |
| 90) Benzo(a)pyrene         | 23.07 | 252 | 690478   | 12.193  | ng/ul  | 97  |
| 91) Indeno(1,2,3-cd)pyrene | 25.22 | 276 | 224793   | 3.339   | ng/ul  | 97  |
| 92) Dibenz(a,h)anthracene  | 25.22 | 278 | 83679    | 1.477   | ng/ul# | 88  |
| 93) Benzo(a,h,i)perylene   | 25.84 | 276 | 202105   | 3.582   | ng/ul# | 95  |

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Sample : L1324-08  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
GAT65

Manual Integrations  
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Quant Title : SVOA CALIBRATION  
QLast Update : Mon Feb 03 16:39:56 2020  
Response via : Initial Calibration

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

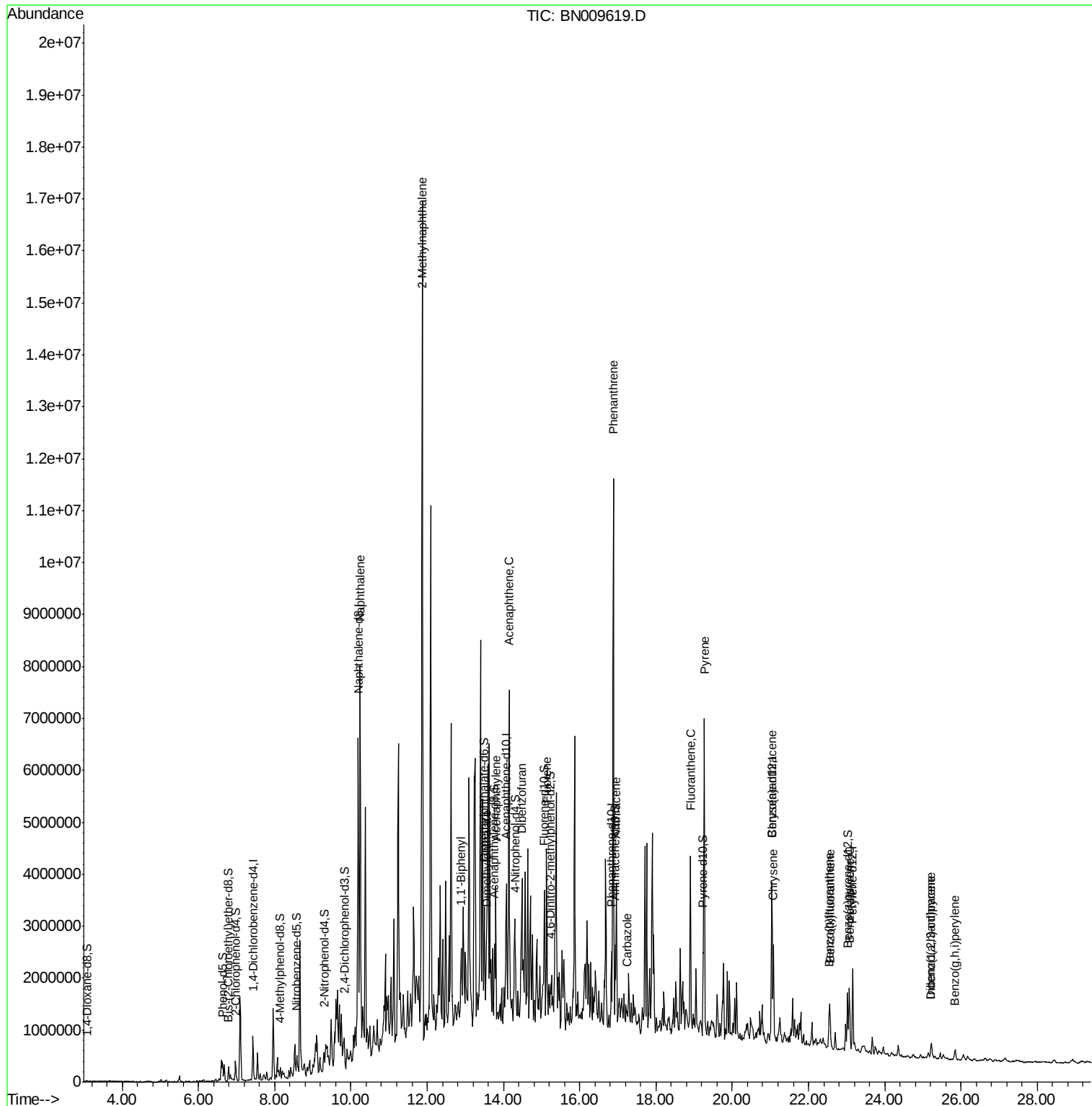
Data Path : Z:\SVOASRV\HPCHEM1\BNA\_N\DATA\BN020620\  
Data File : BN009619.D  
Acq On : 06 Feb 2020 20:59  
Operator : CG/JU  
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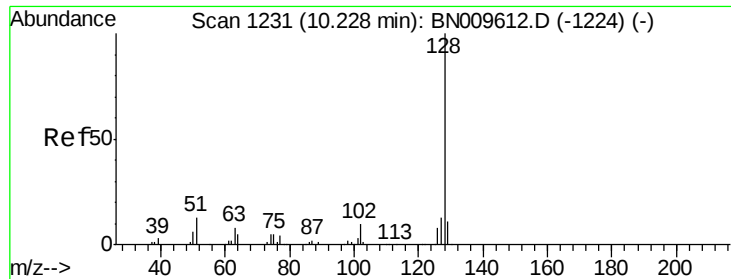
Instrument :  
BNA\_N  
ClientSampleId :  
GAT65

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Response via : Initial Calibration





#28

Naphthalene

Concen: 135.537 ng/ul

RT: 10.24 min Scan# 1233

Delta R.T. -0.01 min

Lab File: BN009619.D

Acq: 06 Feb 2020 20:59

Instrument :

BNA\_N

ClientSampleId :

GAT65

Tot Ion:128 Resp: 5132827

Ion Ratio Lower Upper

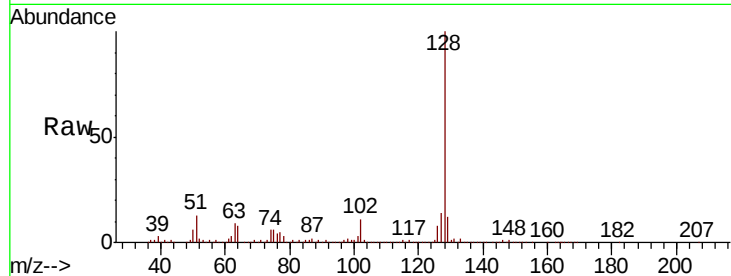
128 100

129 11.6 8.7 13.1

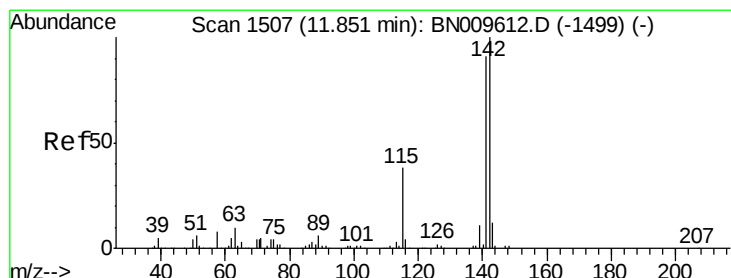
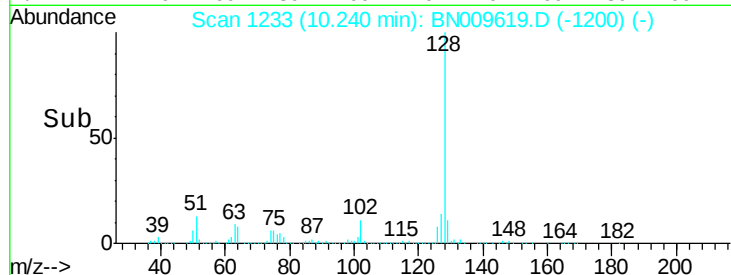
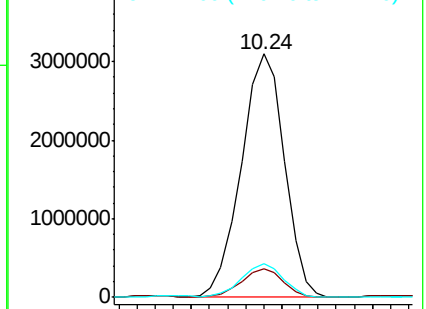
127 13.6 10.7 16.1

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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: 247.385 ng/ul

RT: 11.87 min Scan# 1510

Delta R.T. 0.01 min

Lab File: BN009619.D

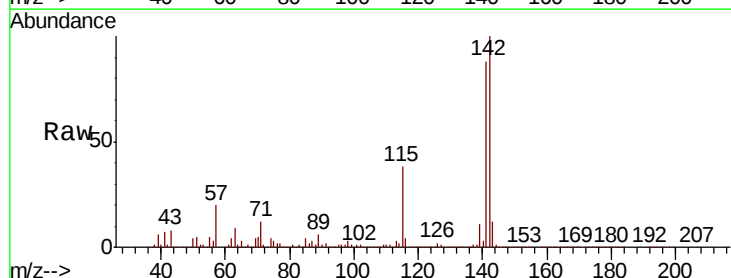
Acq: 06 Feb 2020 20:59

Tgt Ion:142 Resp: 6556208

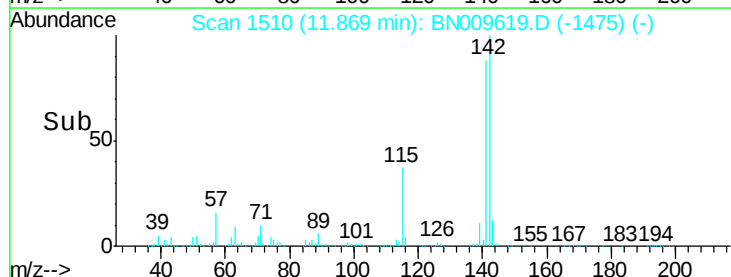
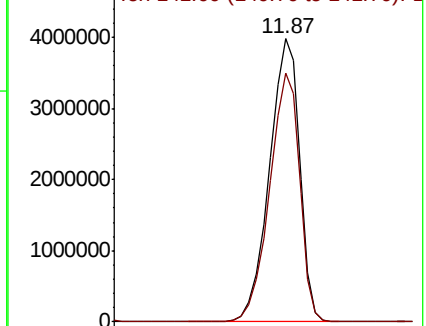
Ion Ratio Lower Upper

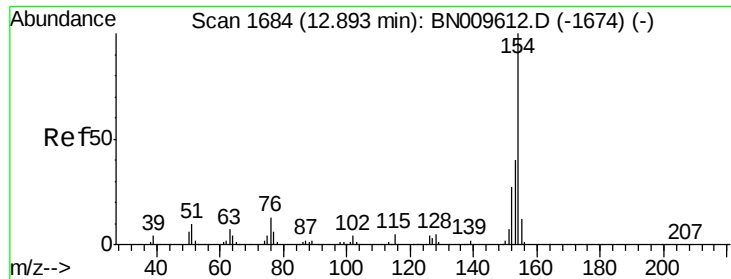
142 100

141 88.0 71.5 107.3



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





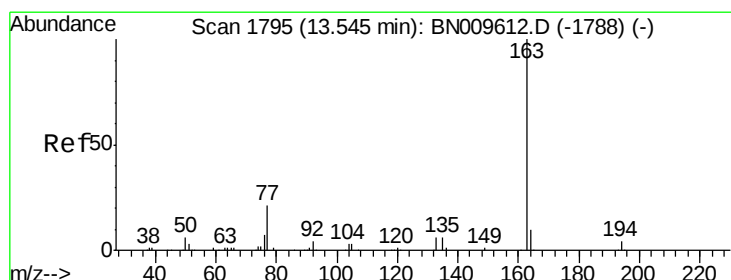
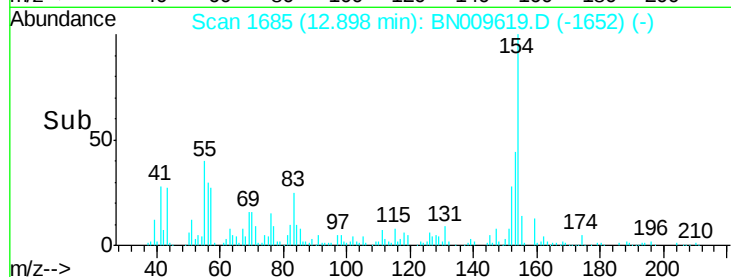
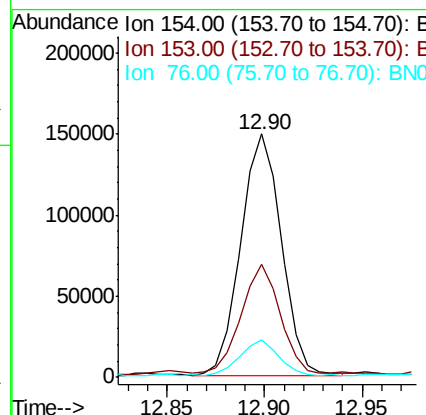
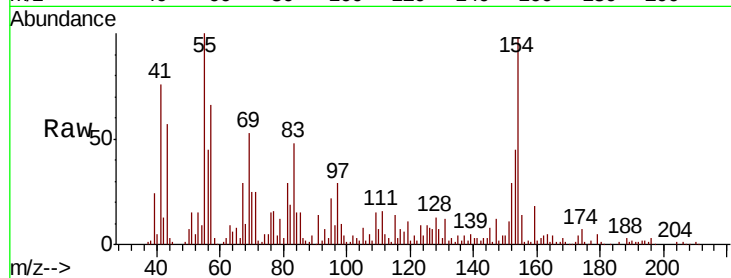
#40  
 1,1'-Biphenyl  
 Concen: 6.284 ng/ul  
 RT: 12.90 min Scan# 1685  
 Delta R.T. -0.01 min  
 Lab File: BN009619.D  
 Acq: 06 Feb 2020 20:59

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAT65

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 154   | Resp: | 214800 |
| Ion Ratio | Lower | Upper |        |
| 154       | 100   |       |        |
| 153       | 46.4  | 31.2  | 46.8   |
| 76        | 15.5  | 11.4  | 17.2   |

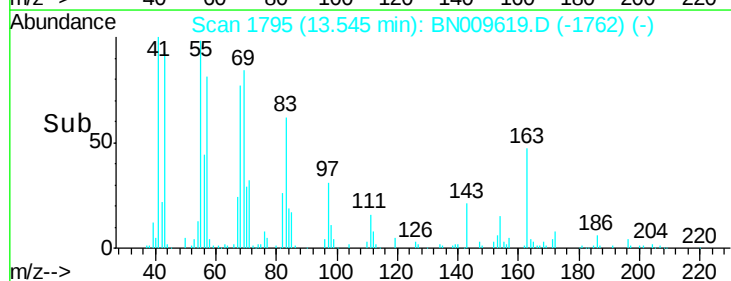
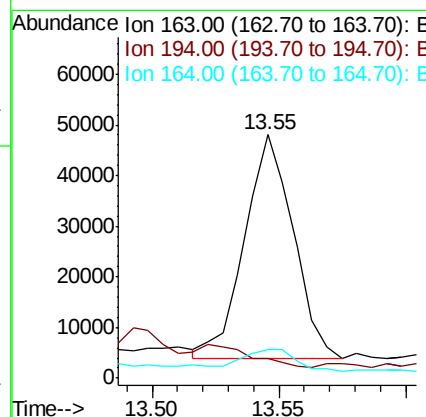
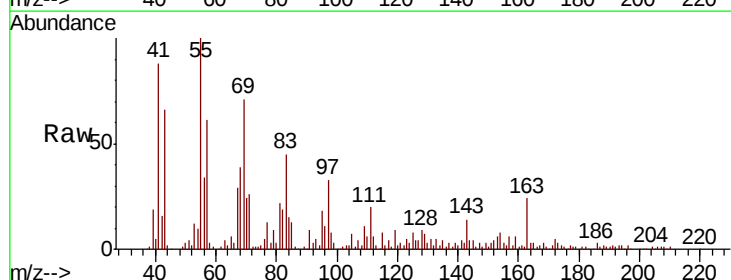
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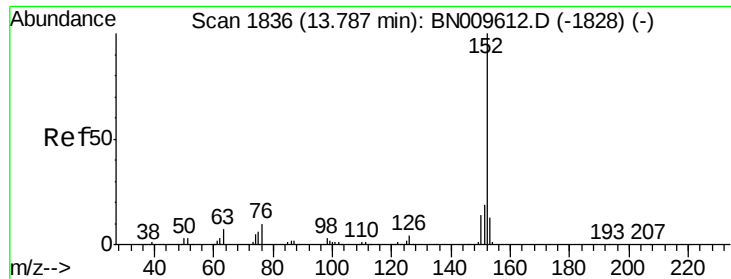
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#44  
 Dimethylphthalate  
 Concen: 1.752 ng/ul  
 RT: 13.55 min Scan# 1795  
 Delta R.T. -0.01 min  
 Lab File: BN009619.D  
 Acq: 06 Feb 2020 20:59

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 163   | Resp: | 59597 |
| Ion Ratio | Lower | Upper |       |
| 163       | 100   |       |       |
| 194       | 8.1   | 3.5   | 5.3#  |
| 164       | 12.0  | 8.0   | 12.0  |





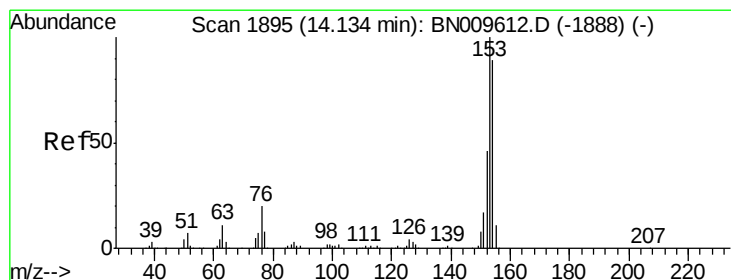
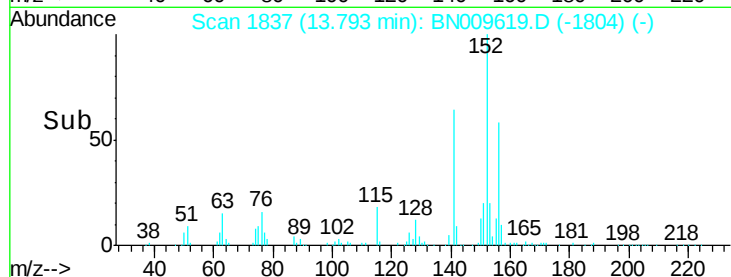
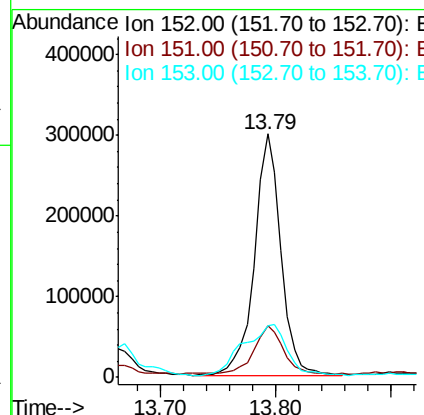
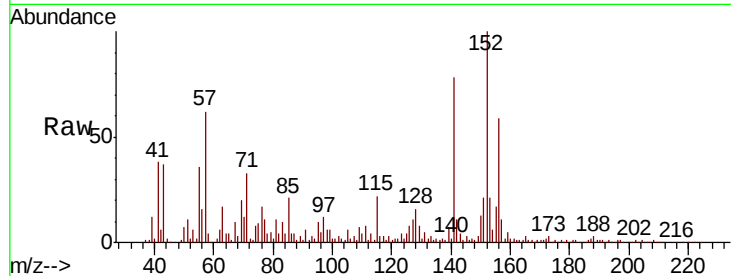
#47  
Acenaphthylene  
Concen: 11.182 ng/ul  
RT: 13.79 min Scan# 1837  
Delta R.T. -0.01 min  
Lab File: BN009619.D  
Acq: 06 Feb 2020 20:59

Instrument :  
BNA\_N  
ClientSampleId :  
GAT65

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 21.2  | 16.2  | 24.2  |
| 153     | 21.5  | 10.6  | 15.8  |

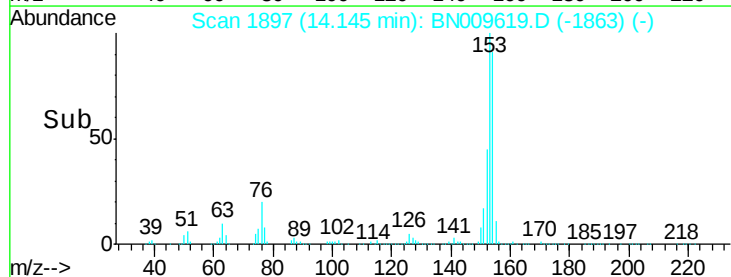
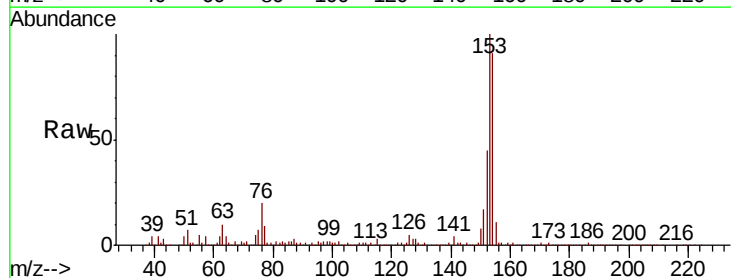
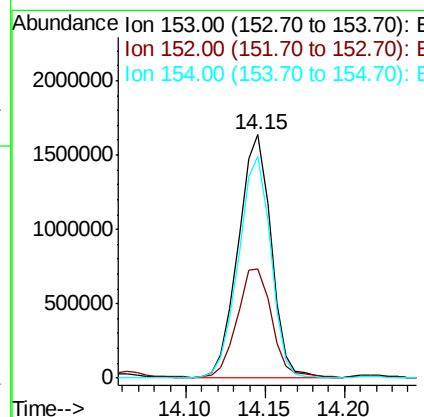
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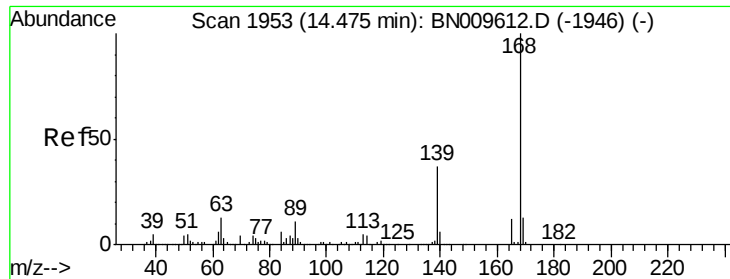
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#49  
Acenaphthene  
Concen: 81.439 ng/ul  
RT: 14.15 min Scan# 1897  
Delta R.T. 0.00 min  
Lab File: BN009619.D  
Acq: 06 Feb 2020 20:59

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 153     | 100   |       |       |
| 152     | 45.0  | 37.3  | 55.9  |
| 154     | 90.9  | 70.2  | 105.2 |





#53

Dibenzenofuran

Concen: 7.298 ng/ul m

RT: 14.48 min Scan# 1954

Delta R.T. -0.01 min

Lab File: BN009619.D

Acq: 06 Feb 2020 20:59

Instrument :

BNA\_N

ClientSampled :

GAT65

Tot Ion:168 Resp: 292752

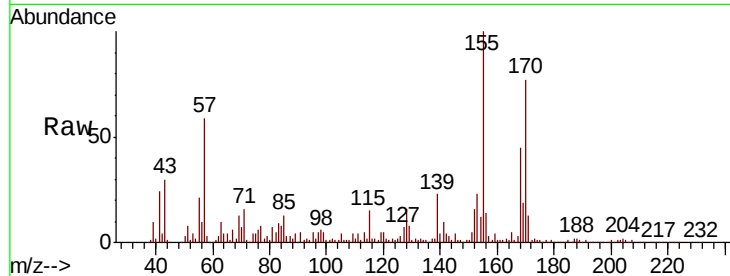
Ion Ratio Lower Upper

168 100

139 52.0 29.5 44.3#

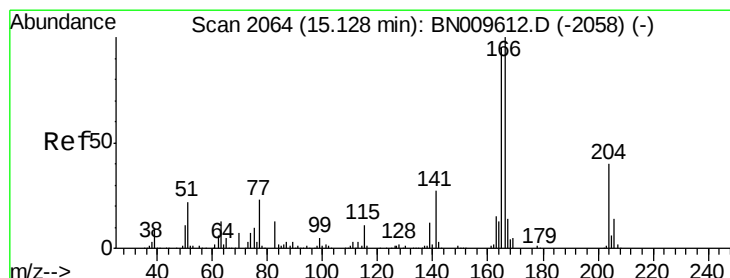
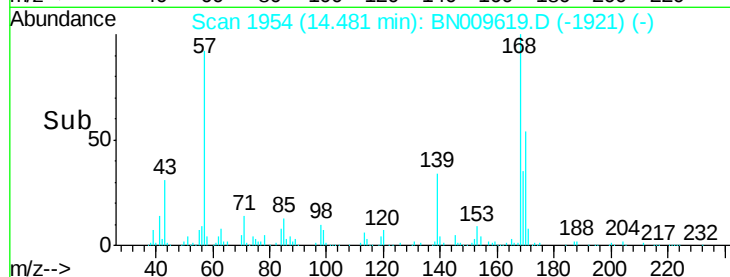
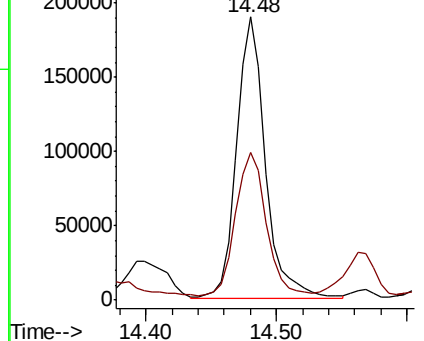
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Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E



#58

Fluorene

Concen: 39.951 ng/ul

RT: 15.13 min Scan# 2065

Delta R.T. -0.01 min

Lab File: BN009619.D

Acq: 06 Feb 2020 20:59

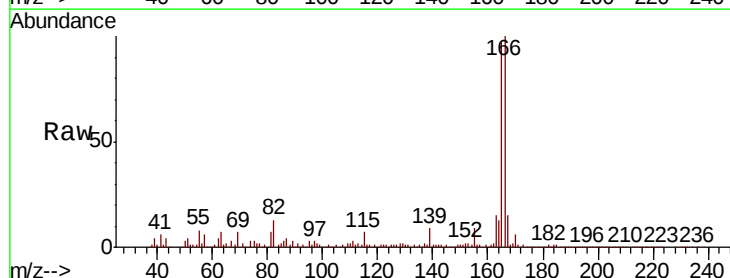
Tgt Ion:166 Resp: 1339394

Ion Ratio Lower Upper

166 100

165 96.8 76.7 115.1

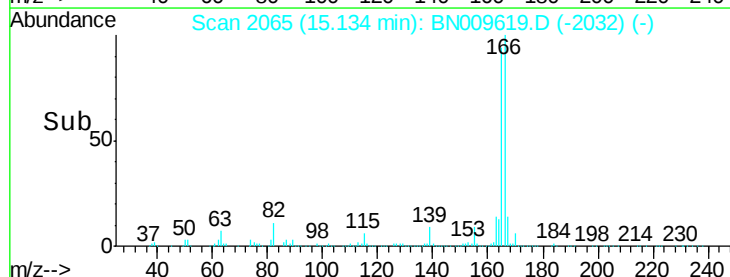
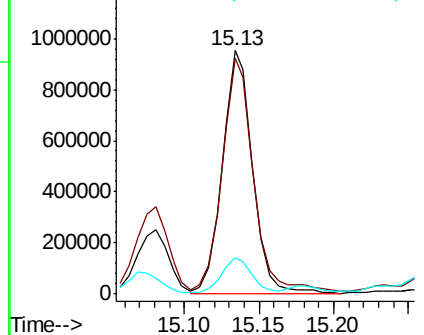
167 15.0 11.1 16.7

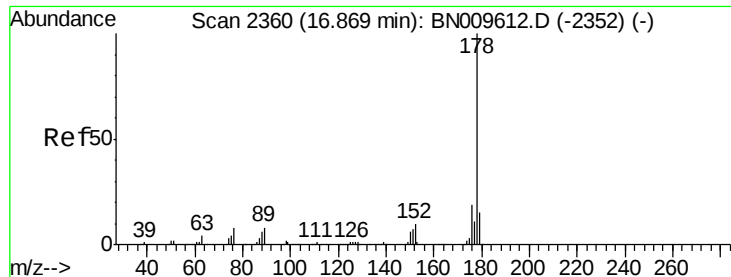


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





#69

Phenanthrene

Concen: 115.083 ng/ul

RT: 16.88 min Scan# 2362

Delta R.T. 0.01 min

Lab File: BN009619.D

Acq: 06 Feb 2020 20:59

Instrument :

BNA\_N

ClientSampled :

GAT65

Tot Ion:178 Resp: 5785814

Ion Ratio Lower Upper

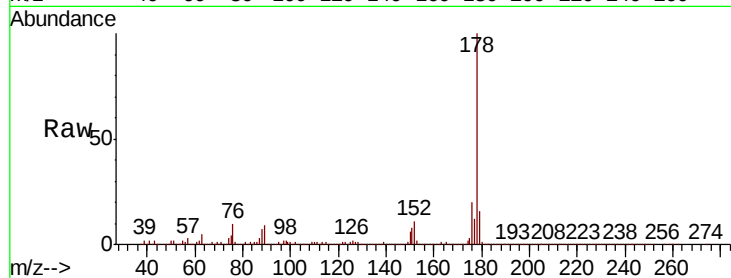
178 100

179 16.1 12.2 18.2

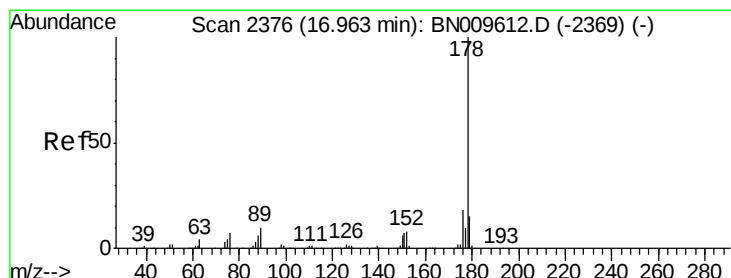
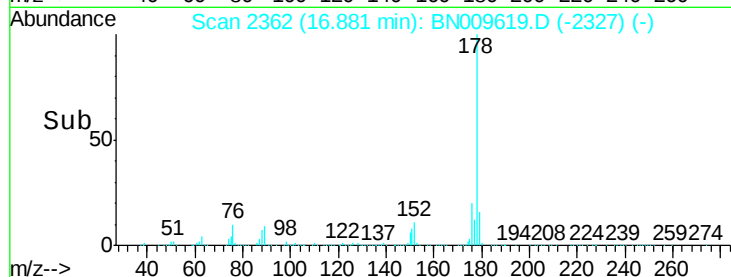
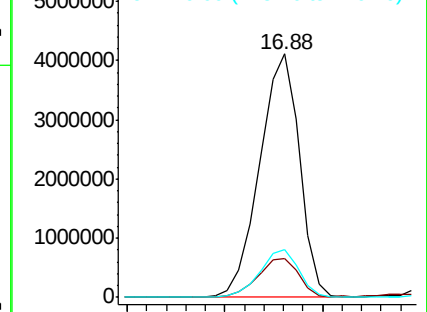
176 19.5 14.8 22.2

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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: 28.379 ng/ul

RT: 16.96 min Scan# 2376

Delta R.T. -0.01 min

Lab File: BN009619.D

Acq: 06 Feb 2020 20:59

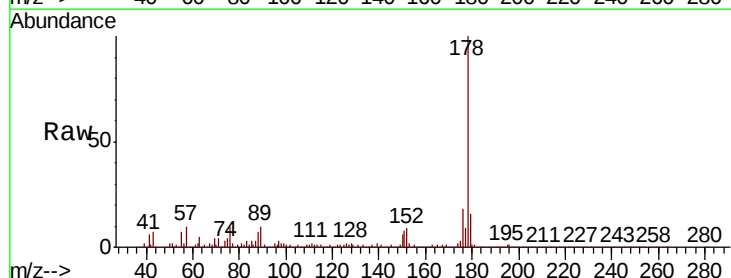
Tgt Ion:178 Resp: 1447679

Ion Ratio Lower Upper

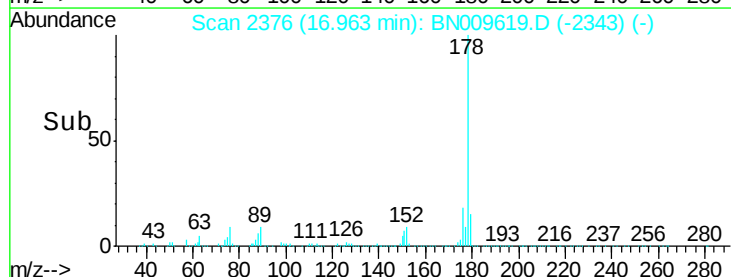
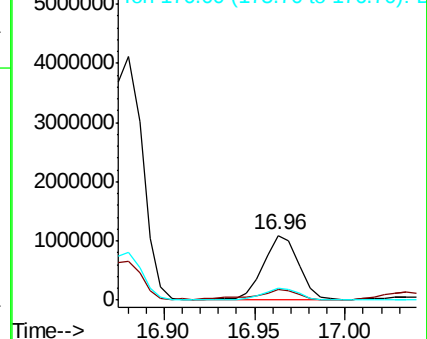
178 100

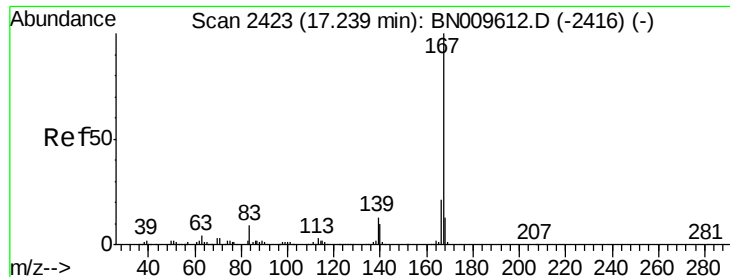
179 15.8 12.1 18.1

176 17.7 14.6 21.8



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: 1.351 ng/ul

RT: 17.24 min Scan# 2423

Delta R.T. -0.01 min

Lab File: BN009619.D

Acq: 06 Feb 2020 20:59

Instrument :

BNA\_N

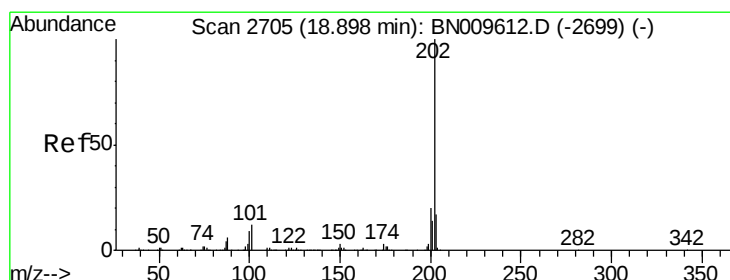
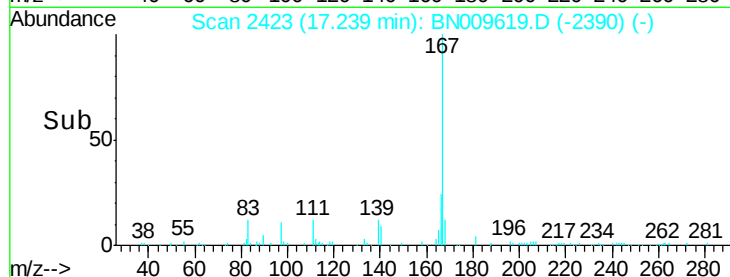
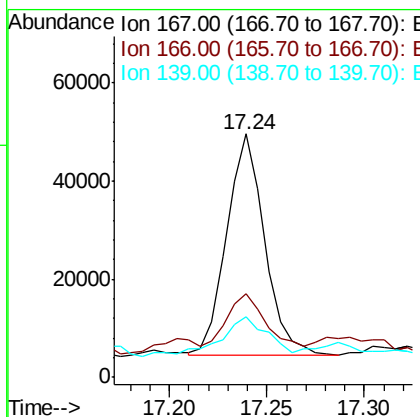
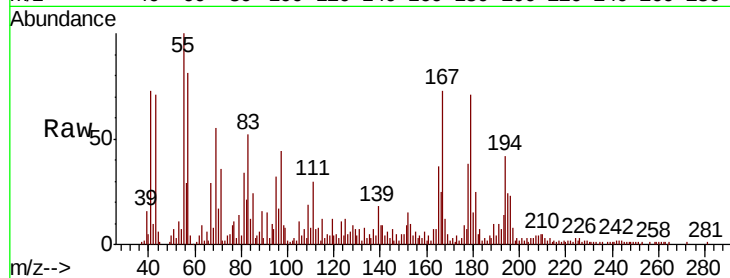
ClientSampleId :

GAT65

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 167   | Resp: | 60004 |
| Ion Ratio | Lower | Upper |       |
| 167       | 100   |       |       |
| 166       | 34.6  | 16.2  | 24.4# |
| 139       | 25.0  | 10.4  | 15.6# |

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#76

Fluoranthene

Concen: 31.369 ng/ul

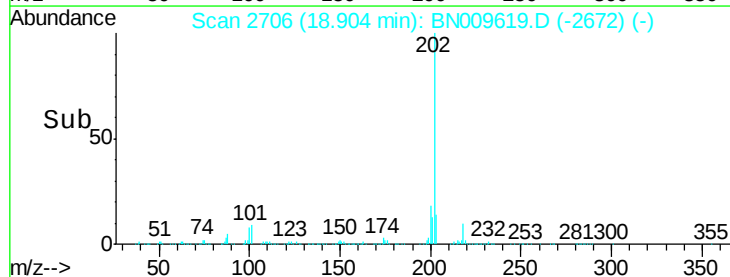
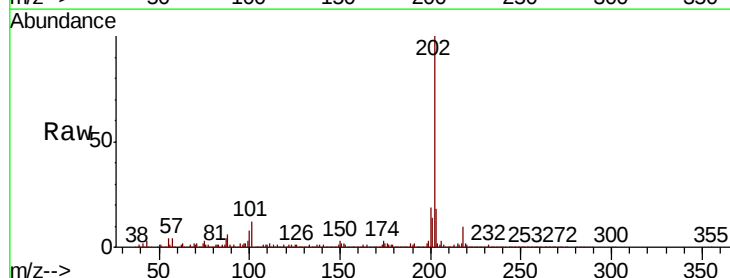
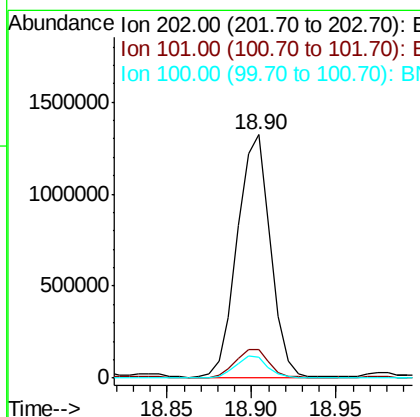
RT: 18.90 min Scan# 2706

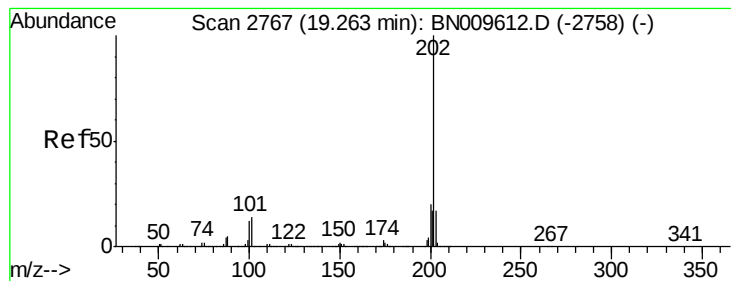
Delta R.T. 0.00 min

Lab File: BN009619.D

Acq: 06 Feb 2020 20:59

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 202   | Resp: | 1799964 |
| Ion Ratio | Lower | Upper |         |
| 202       | 100   |       |         |
| 101       | 11.6  | 9.2   | 13.8    |
| 100       | 8.4   | 6.9   | 10.3    |





#79

Pvrene

Concen: 53.722 ng/ul

RT: 19.27 min Scan# 2768

Delta R.T. 0.00 min

Lab File: BN009619.D

Acq: 06 Feb 2020 20:59

Instrument :

BNA\_N

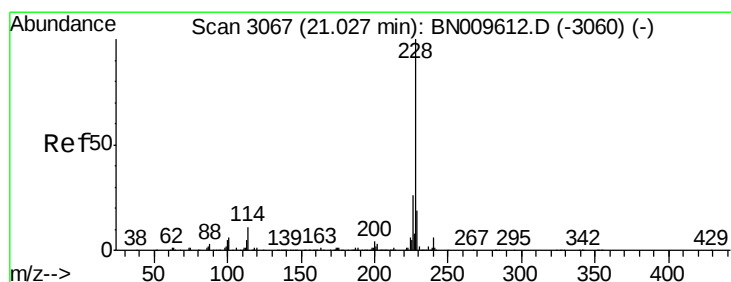
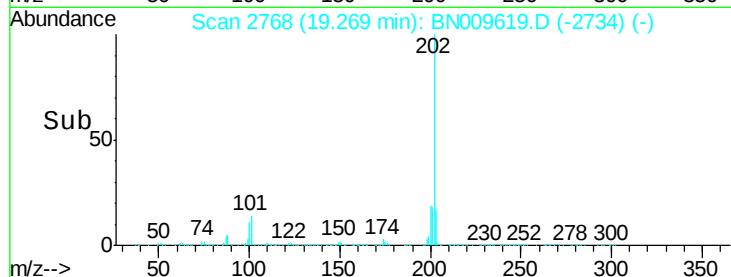
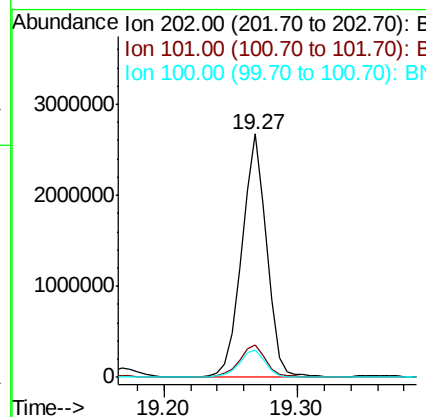
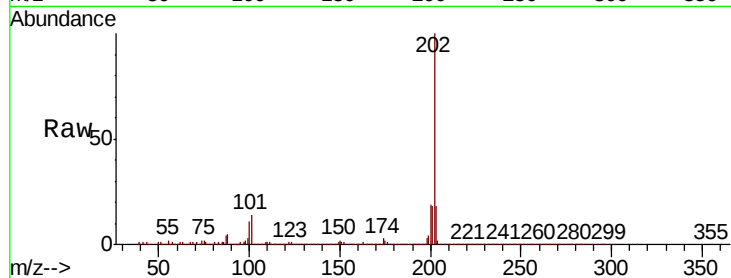
ClientSampleId :

GAT65

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 202   | Resp: | 3416164 |
| Ion      | Ratio | Lower | Upper   |
| 202      | 100   |       |         |
| 101      | 13.5  | 10.3  | 15.5    |
| 100      | 11.1  | 8.4   | 12.6    |

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#82

Benzo(a)anthracene

Concen: 17.831 ng/ul m

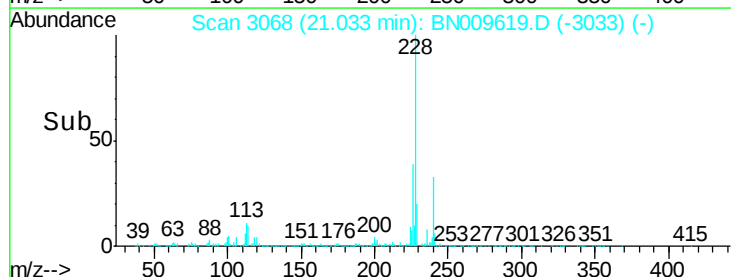
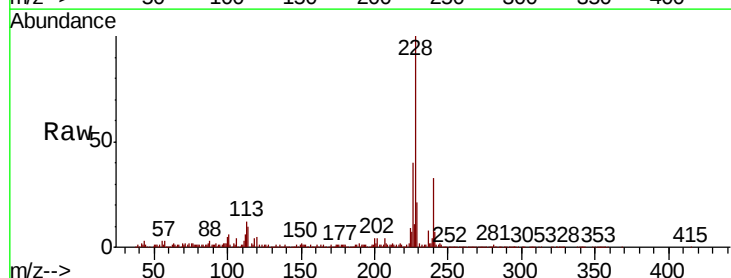
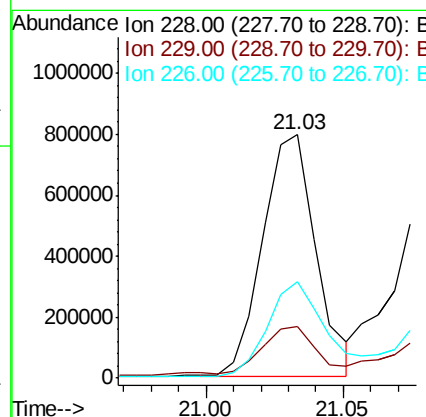
RT: 21.03 min Scan# 3068

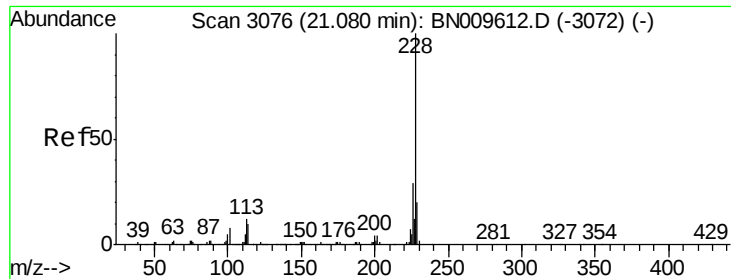
Delta R.T. 0.01 min

Lab File: BN009619.D

Acq: 06 Feb 2020 20:59

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 228   | Resp: | 1072410 |
| Ion      | Ratio | Lower | Upper   |
| 228      | 100   |       |         |
| 229      | 21.2  | 15.0  | 22.4    |
| 226      | 39.7  | 20.9  | 31.3#   |





#84

Chrysene

Concen: 15.397 ng/ul

RT: 21.08 min Scan# 3076

Delta R.T. 0.00 min

Lab File: BN009619.D

Acq: 06 Feb 2020 20:59

Instrument :

BNA\_N

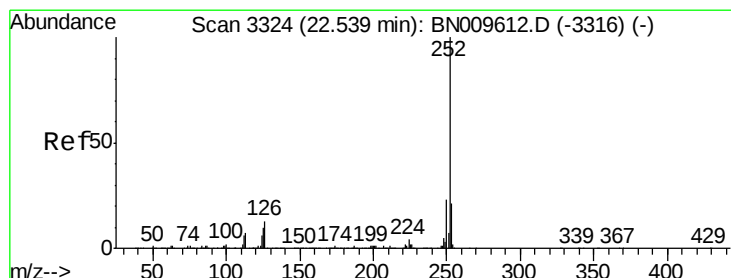
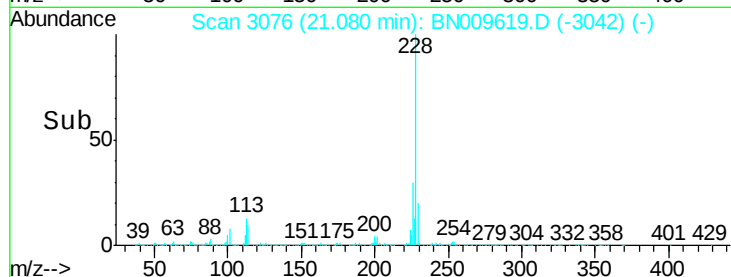
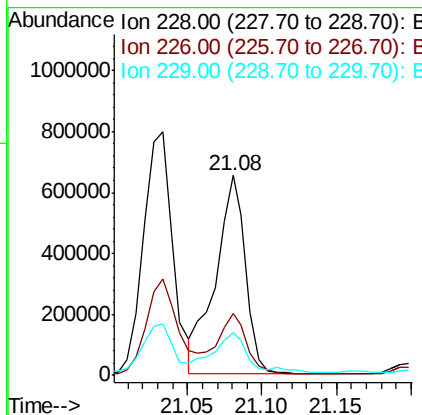
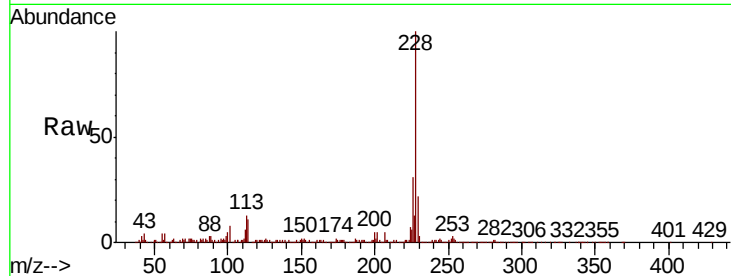
ClientSampled :

GAT65

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 228   | Resp: | 921889 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 30.8  | 23.5  | 35.3   |
| 229       | 21.6  | 15.8  | 23.8   |

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#87

Benzo(b)fluoranthene

Concen: 9.937 ng/ul m

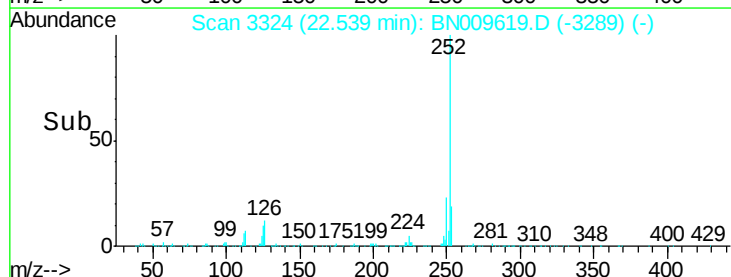
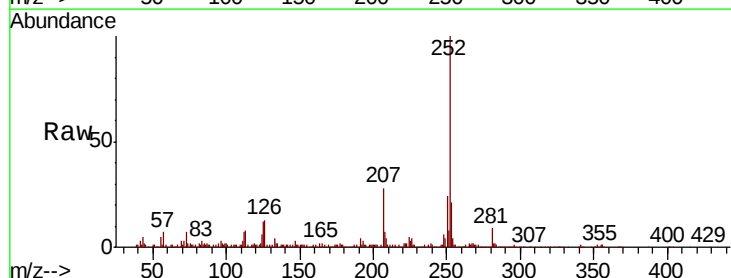
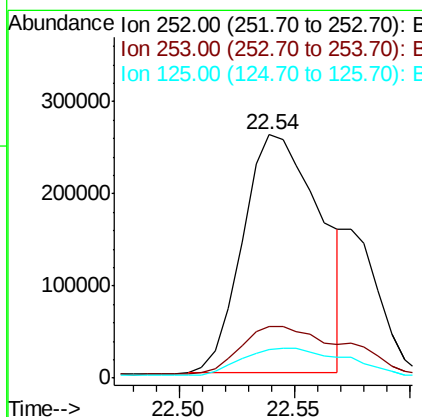
RT: 22.54 min Scan# 3324

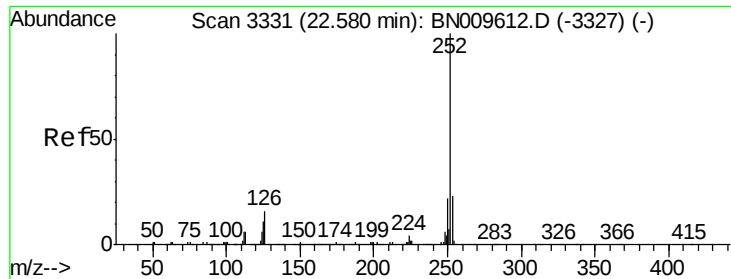
Delta R.T. 0.01 min

Lab File: BN009619.D

Acq: 06 Feb 2020 20:59

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 607365 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 21.4  | 17.0  | 25.6   |
| 125       | 11.8  | 8.2   | 12.2   |





#88

Benzo(k)fluoranthene

Concen: 2.625 ng/ul m

RT: 22.57 min Scan# 3329

Delta R.T. -0.01 min

Lab File: BN009619.D

Acq: 06 Feb 2020 20:59

Instrument :

BNA\_N

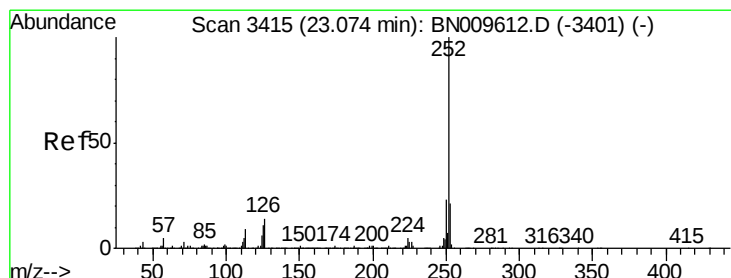
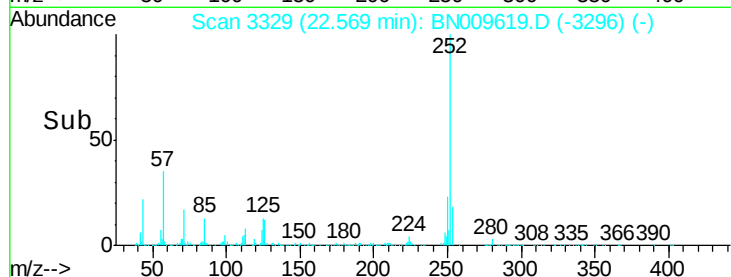
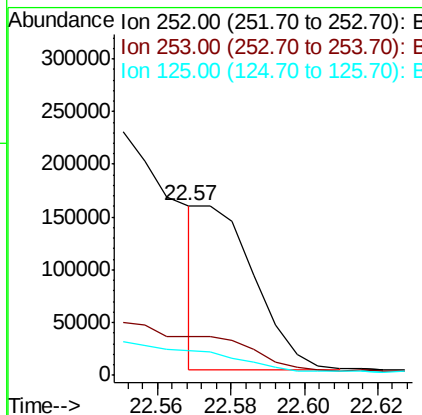
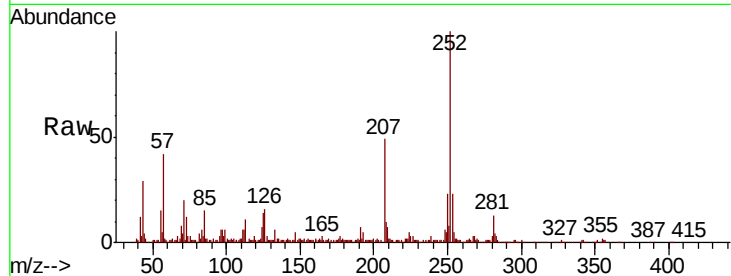
ClientSampleId :

GAT65

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 158020 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.9  | 17.0  | 25.4   |
| 125       | 14.3  | 8.0   | 12.0   |

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#90

Benzo(a)pyrene

Concen: 12.193 ng/ul

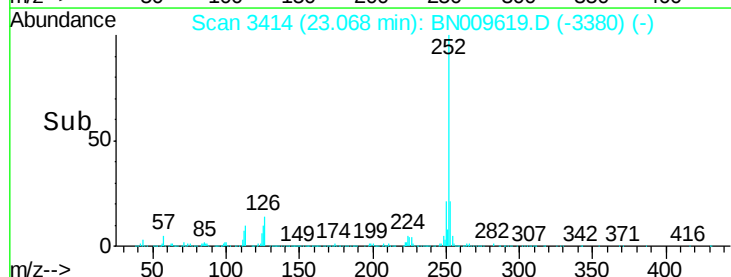
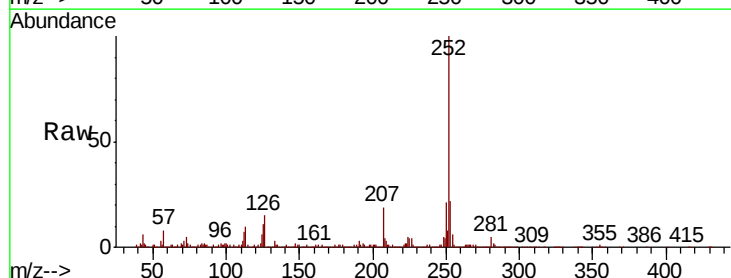
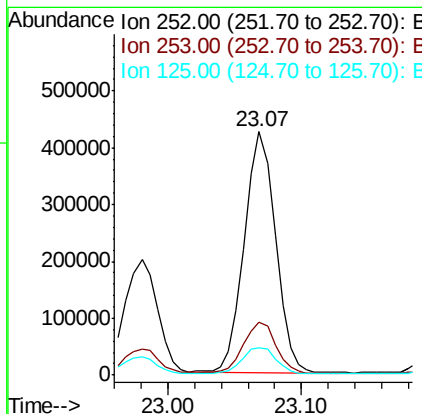
RT: 23.07 min Scan# 3414

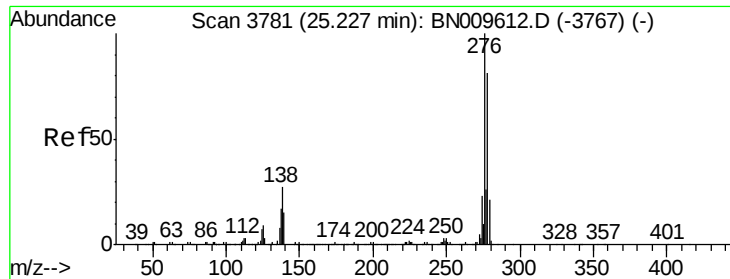
Delta R.T. 0.00 min

Lab File: BN009619.D

Acq: 06 Feb 2020 20:59

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 690478 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.0  | 15.8  | 23.8   |
| 125       | 11.0  | 8.7   | 13.1   |





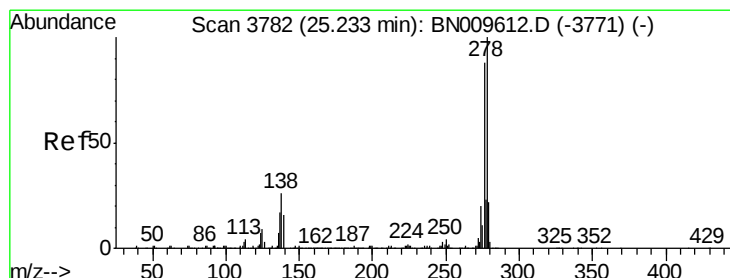
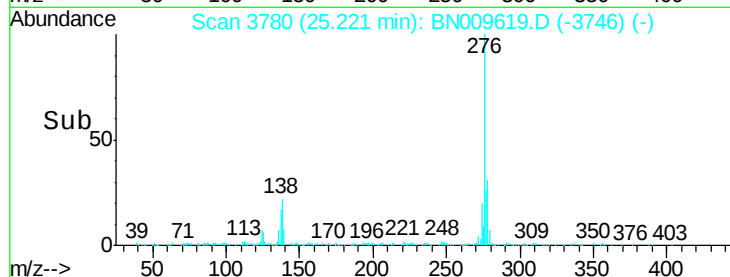
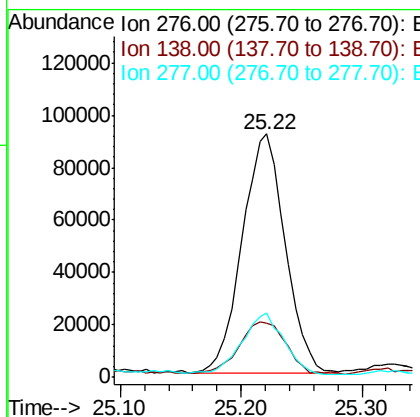
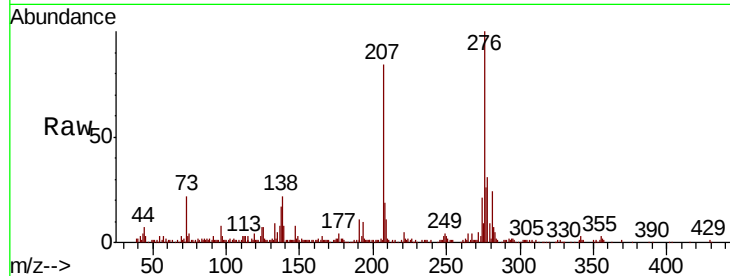
#91  
 Indeno(1,2,3-cd)pyrene  
 Concen: 3.339 ng/uL  
 RT: 25.22 min Scan# 3780  
 Delta R.T. 0.00 min  
 Lab File: BN009619.D  
 Acq: 06 Feb 2020 20:59

Instrument :  
 BNA\_N  
 ClientSampleId :  
 GAT65

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 22.2  | 20.3  | 30.5  |
| 277     | 26.5  | 21.2  | 31.8  |

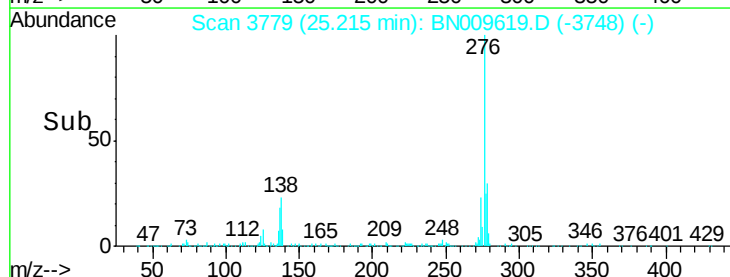
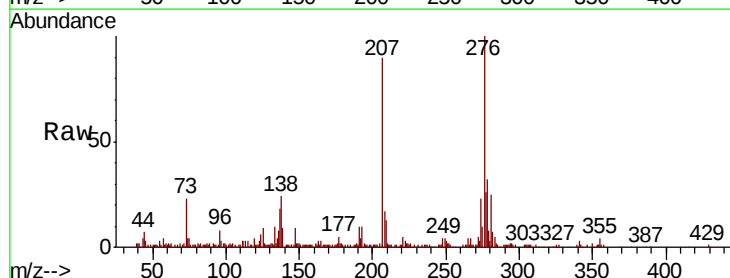
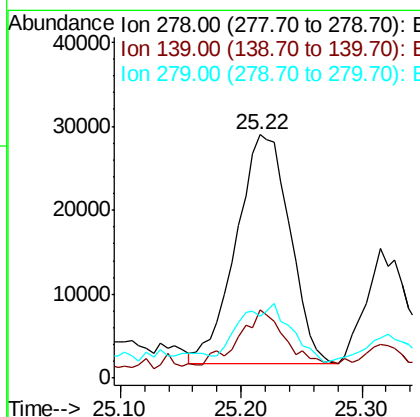
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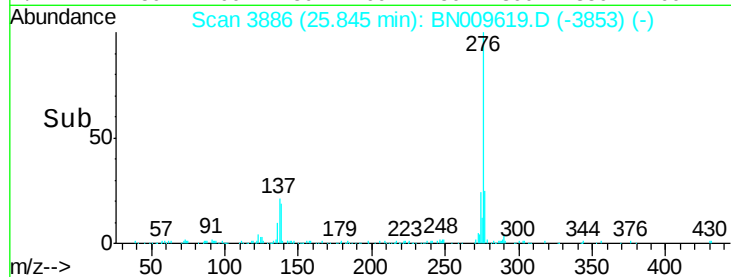
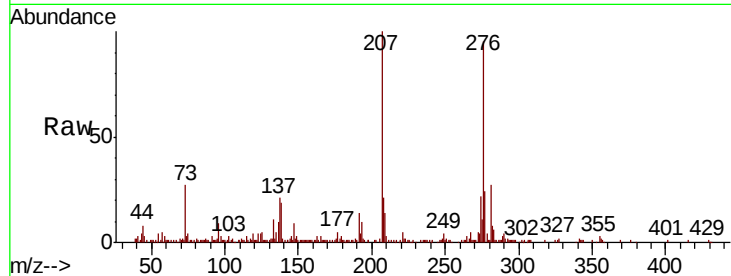
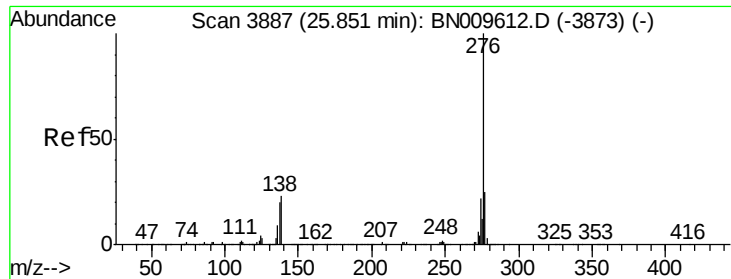
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#92  
 Dibenzo(a,h)anthracene  
 Concen: 1.477 ng/uL  
 RT: 25.22 min Scan# 3779  
 Delta R.T. -0.02 min  
 Lab File: BN009619.D  
 Acq: 06 Feb 2020 20:59

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 28.1  | 12.7  | 19.1# |
| 279     | 25.5  | 19.8  | 29.8  |





#93

Benzo(a,h,i)perylene

Concen: 3.582 ng/ul

RT: 25.84 min Scan# 3886

Delta R.T. -0.01 min

Lab File: BN009619.D

Acq: 06 Feb 2020 20:59

Instrument :

BNA\_N

ClientSampleId :

GAT65

| Tot Ion | Ion  | Ratio | Resp | Lower | Upper |
|---------|------|-------|------|-------|-------|
| 276     | 100  |       |      |       |       |
| 138     | 20.0 | 16.0  | 24.0 |       |       |
| 277     | 25.6 | 17.0  | 25.6 |       |       |

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