

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG012820\  
 Data File : BG044232.D  
 Acq On : 28 Jan 2020 16:07  
 Operator : CG/JU  
 Sample : L1242-13RX  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 20200066-AMENDED-COMP-4RX

Manual Integrations  
 APPROVED

mohammad  
 1/30/2020 10:17:46 AM

Quant Time: Jan 28 17:12:46 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG123019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jan 28 15:57:24 2020  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.93  | 152  | 86270    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 10.73 | 136  | 389774   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 14.56 | 164  | 270064   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 17.31 | 188  | 524928   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 21.55 | 240  | 452656   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 24.67 | 264  | 526341   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.51  | 112  | 4811     | 1.02  | ng    | 0.00     |
| 7) Phenol-d6                | 7.10  | 99   | 150017   | 22.84 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 9.08  | 82   | 396380   | 54.40 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 16.06 | 330  | 2055     | 0.73  | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 13.19 | 172  | 775629   | 52.03 | ng    | 0.00     |
| 79) Terphenyl-d14           | 19.92 | 244  | 1118449  | 53.11 | ng    | 0.00     |

| Target Compounds         | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|--------------------------|-------|------|----------|--------|-------|--------|
| 10) Phenol               | 7.12  | 94   | 22666    | 3.350  | ng    | 98     |
| 50) Dimethylphthalate    | 14.02 | 163  | 149676   | 7.806  | ng    | 98     |
| 52) Acenaphthene         | 14.63 | 154  | 47363    | 3.003  | ng    | 98     |
| 58) Fluorene             | 15.61 | 166  | 37433    | 2.175  | ng    | 98     |
| 71) Phenanthrene         | 17.35 | 178  | 206439   | 8.199  | ng    | 95     |
| 72) Anthracene           | 17.44 | 178  | 72923    | 2.931  | ng    | 96     |
| 75) Fluoranthene         | 19.36 | 202  | 343151   | 11.917 | ng    | 96     |
| 78) Pyrene               | 19.72 | 202  | 287002   | 9.714  | ng    | 94     |
| 81) Benzo(a)anthracene   | 21.54 | 228  | 155579   | 5.543  | ng    | 96     |
| 83) Chrysene             | 21.60 | 228  | 140312   | 5.261  | ng    | 96     |
| 88) Benzo(b)fluoranthene | 23.68 | 252  | 150055   | 4.822  | ng    | 96     |
| 89) Benzo(k)fluoranthene | 23.75 | 252  | 61539m   | 2.080  | ng    |        |
| 90) Benzo(a)pyrene       | 24.52 | 252  | 112358   | 3.826  | ng    | 97     |
| 92) Benzo(a,h,i)perylene | 29.28 | 276  | 62797    | 2.143  | ng    | 95     |

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

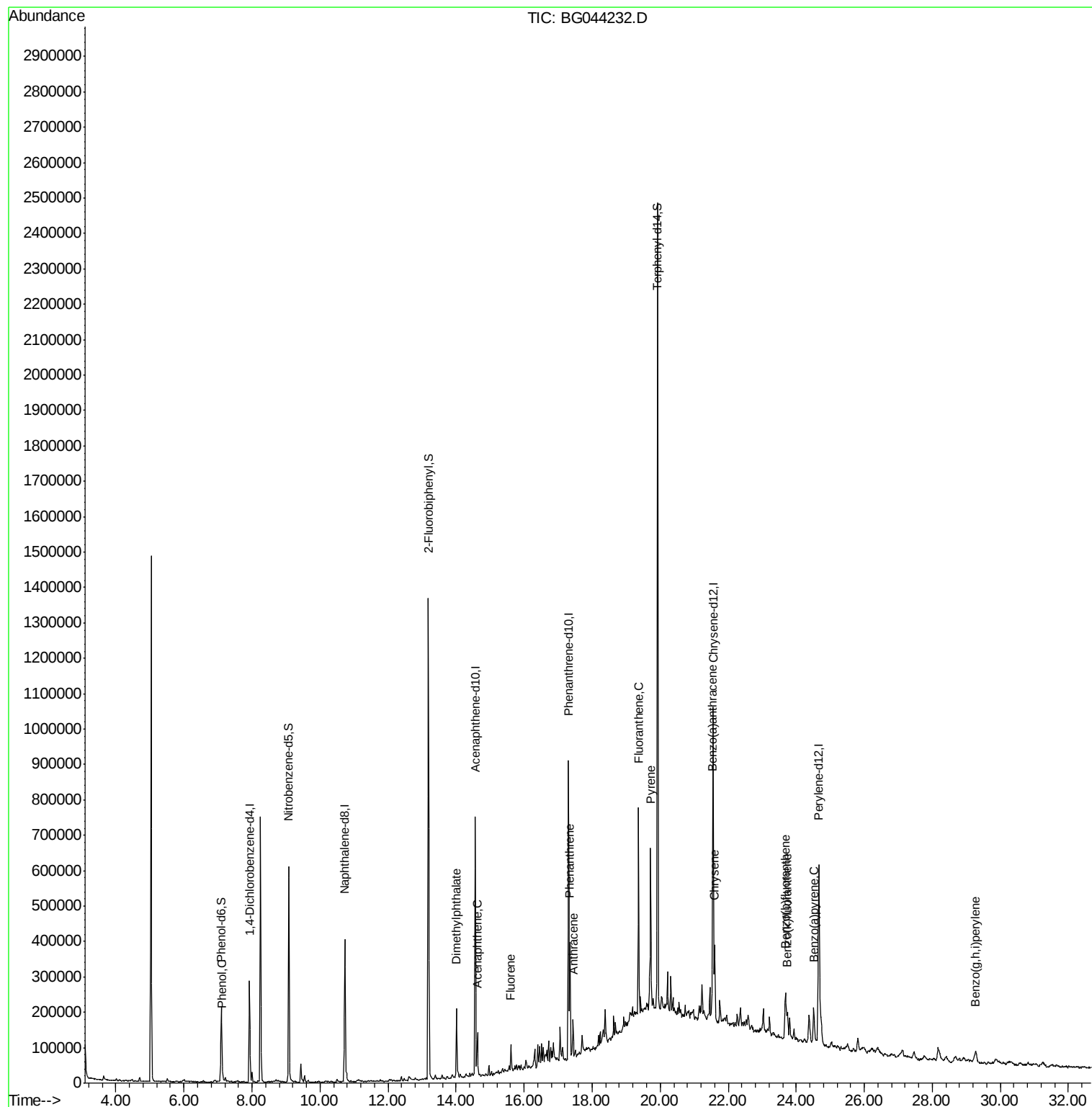
Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG012820\  
Data File : BG044232.D  
Acq On : 28 Jan 2020 16:07  
Operator : CG/JU  
Sample : L1242-13RX  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

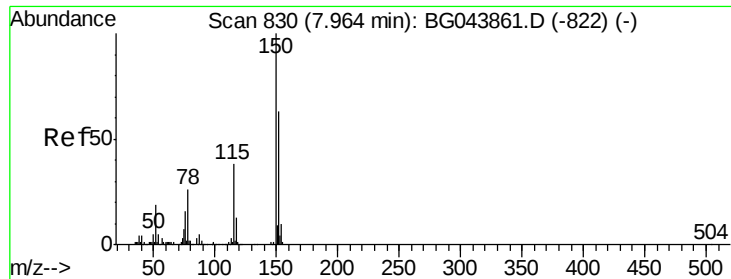
Instrument :  
BNA\_G  
ClientSampleId :  
20200066-AMENDED-COMP-4RX

Manual Integrations  
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Quant Time: Jan 28 17:12:46 2020  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG123019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jan 28 15:57:24 2020  
Response via : Initial Calibration





#1

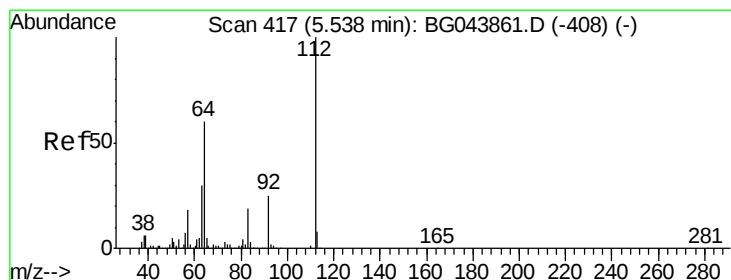
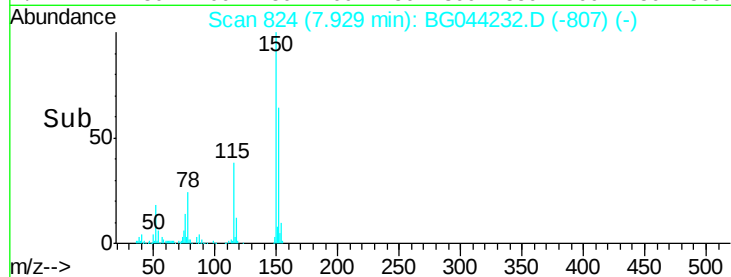
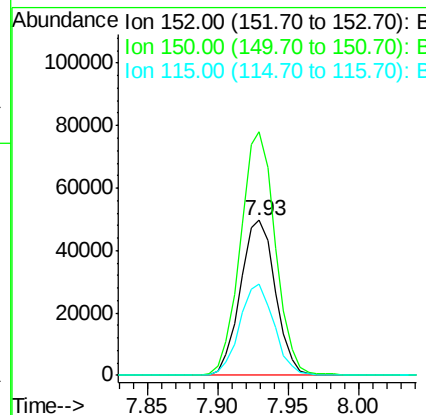
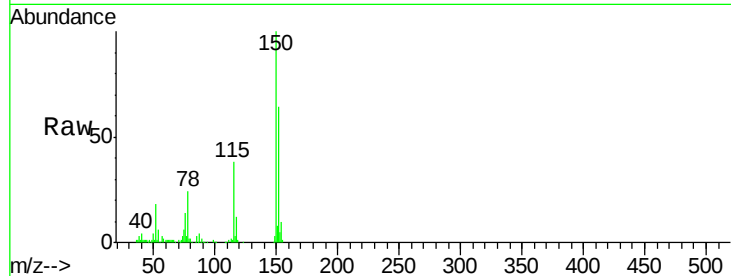
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 7.93 min Scan# 824  
Delta R.T. -0.00 min  
Lab File: BG044232.D  
Acq: 28 Jan 2020 16:07

Instrument :  
BNA\_G  
ClientSampleId :  
20200066-AMENDED-COMP-4RX

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 157.2 | 127.9 | 191.9 |
| 115     | 59.0  | 47.8  | 71.8  |

Manual Integrations  
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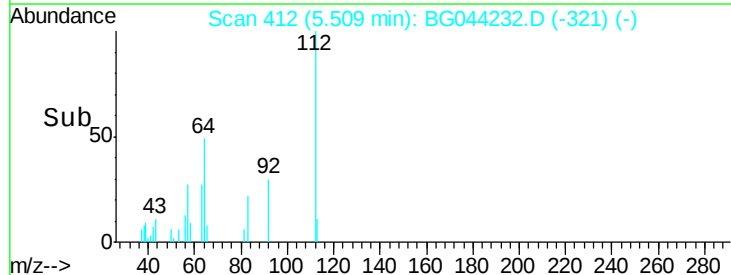
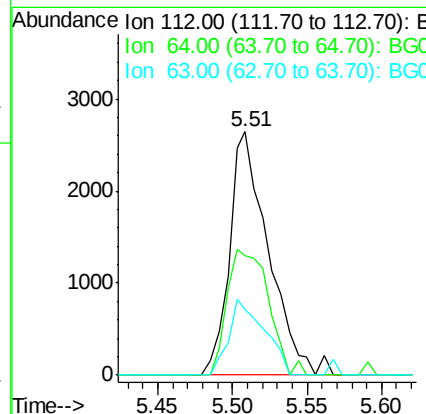
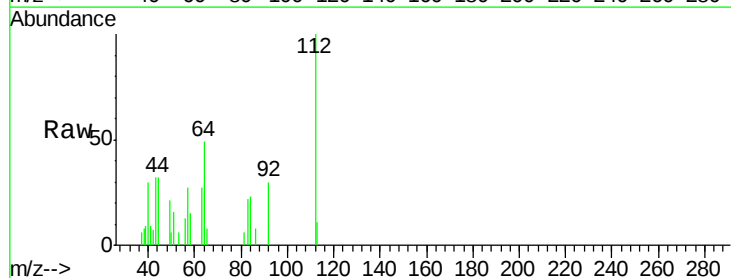
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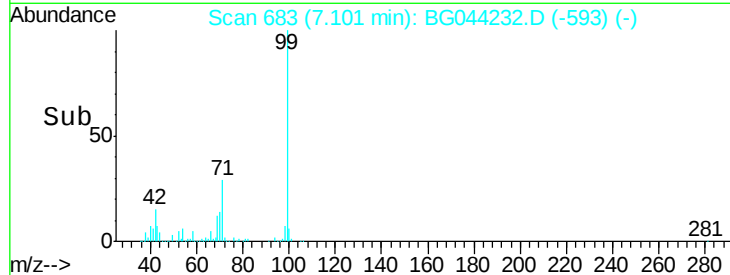
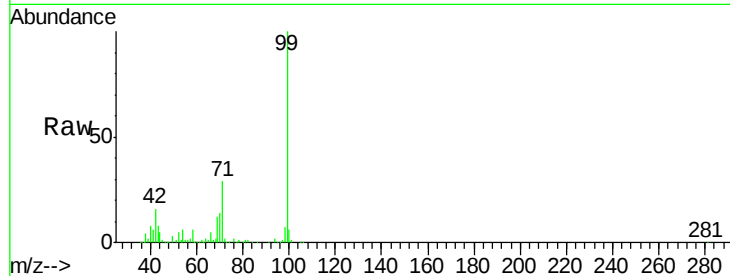


#5

2-Fluorophenol  
Concen: 1.024 ng  
RT: 5.51 min Scan# 412  
Delta R.T. 0.00 min  
Lab File: BG044232.D  
Acq: 28 Jan 2020 16:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 49.2  | 45.5  | 68.3  |
| 63      | 27.0  | 23.6  | 35.4  |





#7

Phenol-d6

Concen: 22.842 ng

RT: 7.10 min Scan# 683

Delta R.T. -0.00 min

Lab File: BG044232.D

Acq: 28 Jan 2020 16:07

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 150017 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 15.6  | 13.6  | 20.4   |
| 71        | 29.0  | 25.0  | 37.6   |

Instrument :

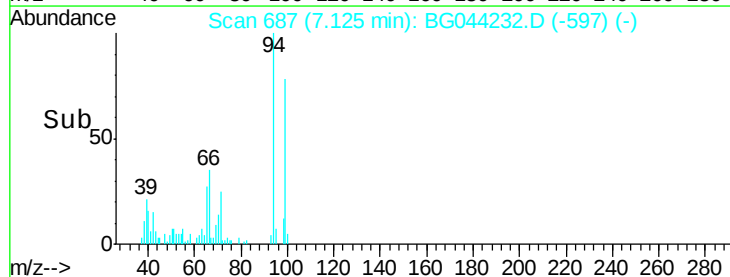
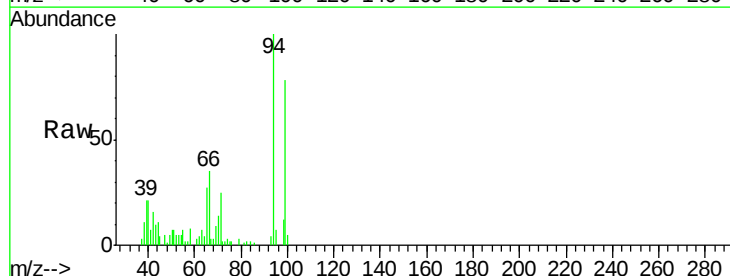
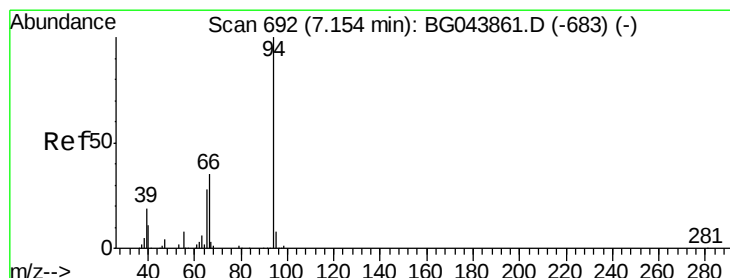
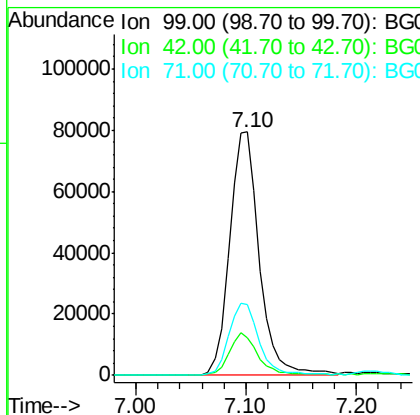
BNA\_G

ClientSampleId :

20200066-AMENDED-COMP-4RX

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#10

Phenol

Concen: 3.350 ng

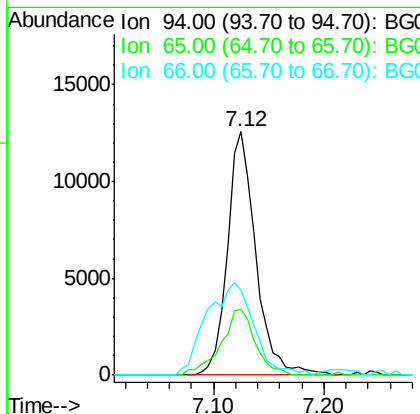
RT: 7.12 min Scan# 687

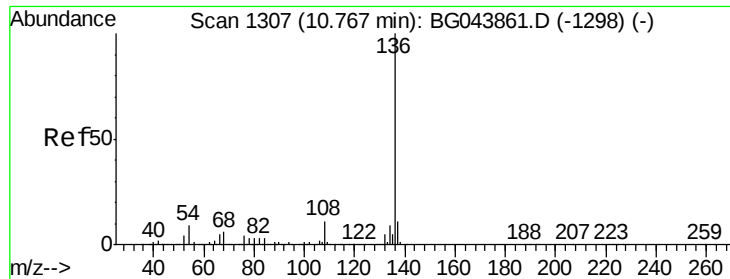
Delta R.T. -0.00 min

Lab File: BG044232.D

Acq: 28 Jan 2020 16:07

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 94    | Resp: | 22666 |
| Ion Ratio | Lower | Upper |       |
| 94        | 100   |       |       |
| 65        | 26.9  | 7.5   | 47.5  |
| 66        | 35.1  | 14.0  | 54.0  |





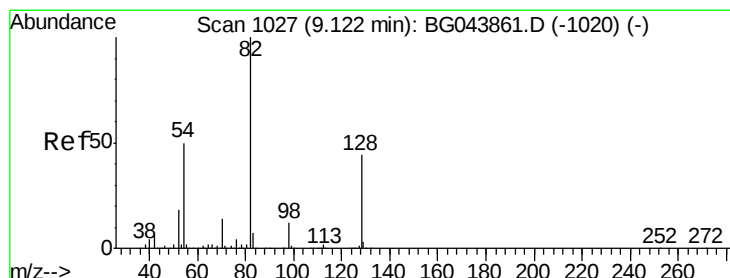
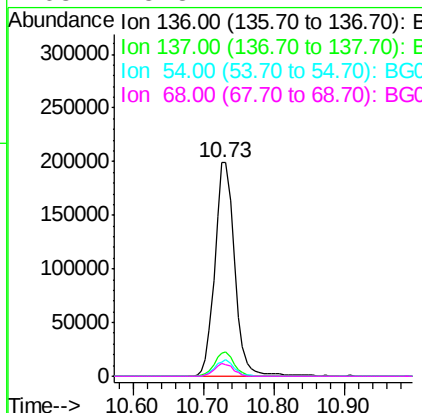
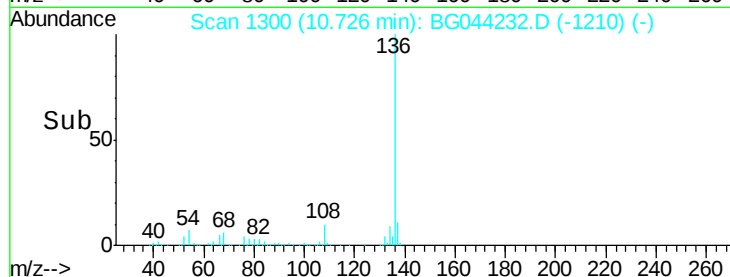
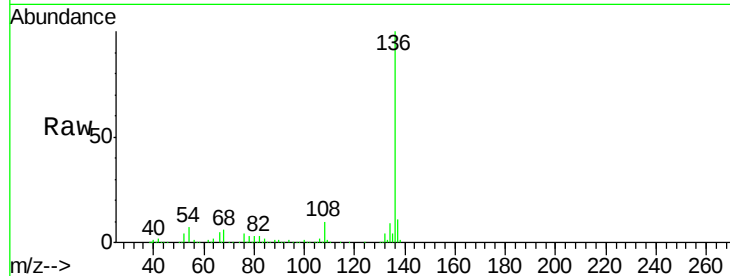
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.73 min Scan# 1300  
Delta R.T. -0.00 min  
Lab File: BG044232.D  
Acq: 28 Jan 2020 16:07

Instrument :  
BNA\_G  
ClientSampleId :  
20200066-AMENDED-COMP-4RX

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 136     | 100  |       | 389774 |       |       |
| 137     | 10.8 | 9.0   |        | 13.4  |       |
| 54      | 6.9  | 6.2   |        | 9.4   |       |
| 68      | 5.8  | 4.7   |        | 7.1   |       |

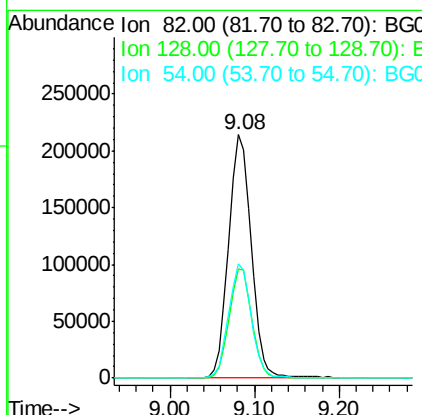
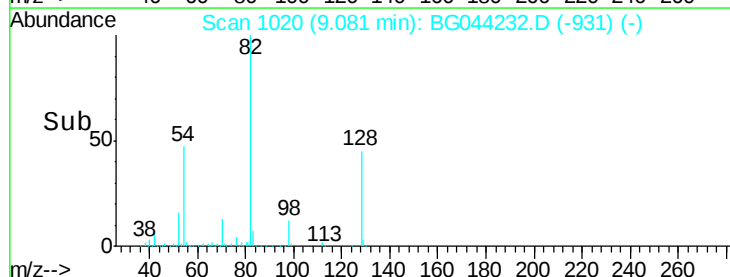
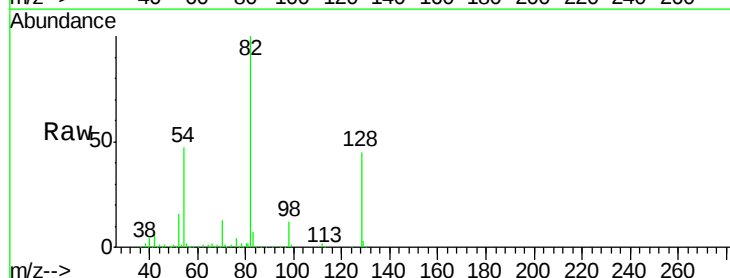
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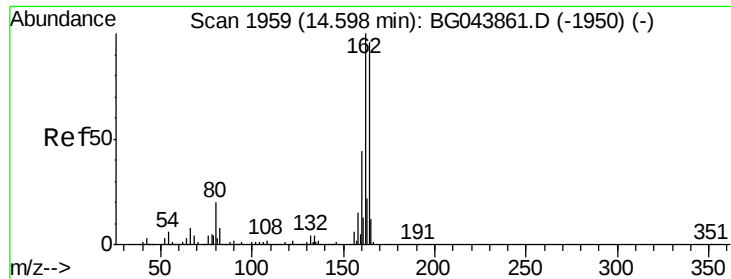
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#23  
Nitrobenzene-d5  
Concen: 54.403 ng  
RT: 9.08 min Scan# 1020  
Delta R.T. -0.01 min  
Lab File: BG044232.D  
Acq: 28 Jan 2020 16:07

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 82      | 100  |       | 396380 |       |       |
| 128     | 44.9 | 37.5  |        | 56.3  |       |
| 54      | 46.9 | 38.4  |        | 57.6  |       |





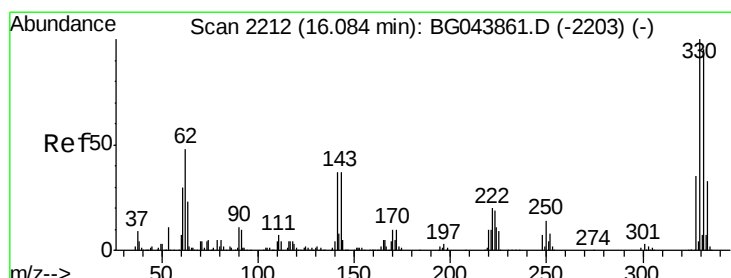
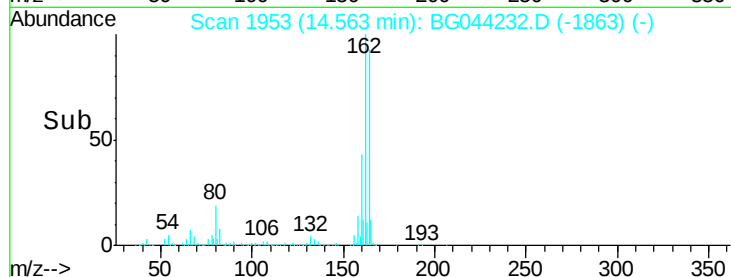
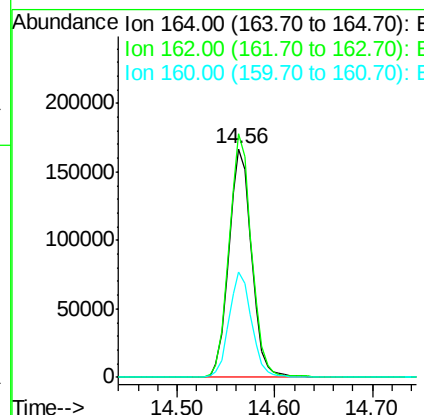
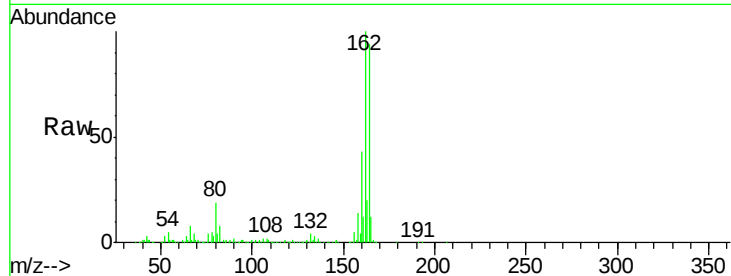
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.56 min Scan# 1953  
Delta R.T. -0.00 min  
Lab File: BG044232.D  
Acq: 28 Jan 2020 16:07

Instrument :  
BNA\_G  
ClientSampleId :  
20200066-AMENDED-COMP-4RX

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 164     | 100   |      |       |       |
| 162     | 106.6 | 80.1 | 120.1 |       |
| 160     | 46.1  | 35.5 | 53.3  |       |

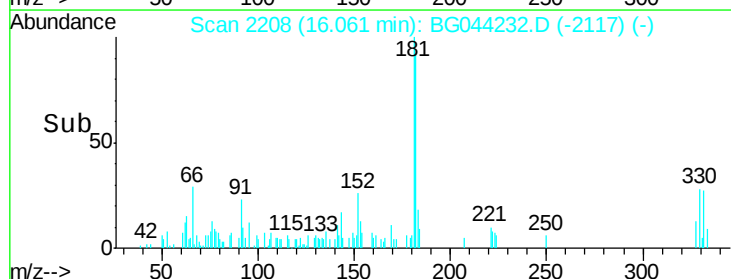
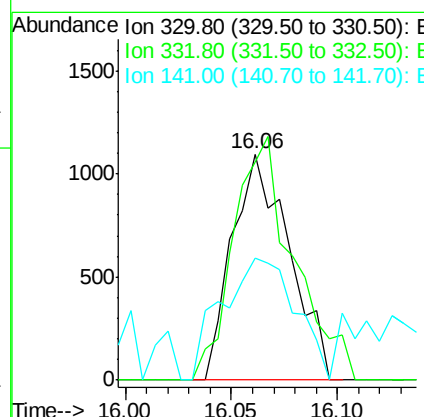
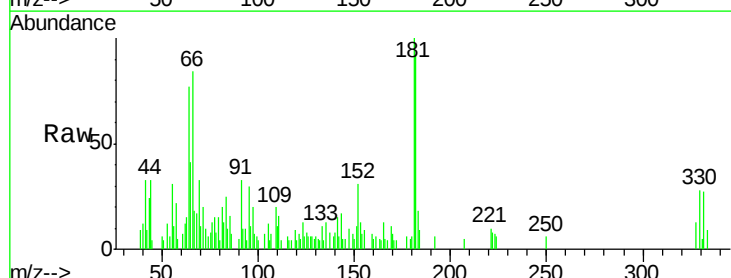
Manual Integrations  
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#42  
2,4,6-Tribromophenol  
Concen: 0.727 ng  
RT: 16.06 min Scan# 2208  
Delta R.T. 0.00 min  
Lab File: BG044232.D  
Acq: 28 Jan 2020 16:07

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 330     | 100   |      |       |       |
| 332     | 113.8 | 77.0 | 115.4 |       |
| 141     | 70.0  | 28.8 | 43.2  |       |





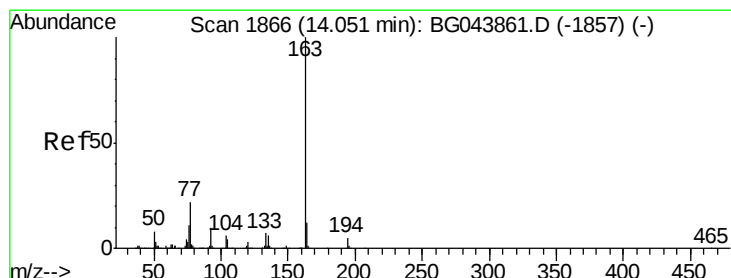
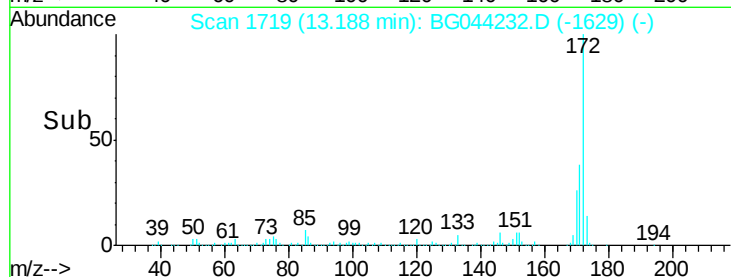
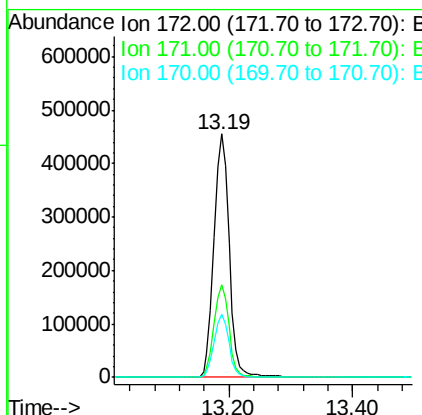
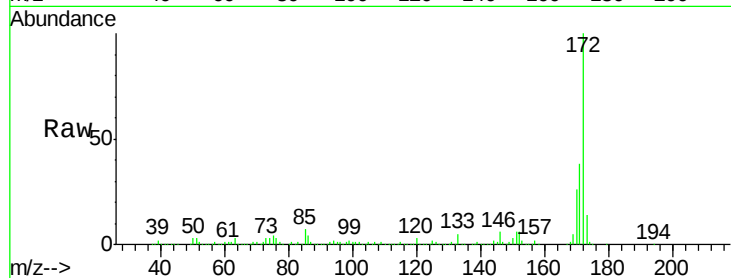
#45  
 2-Fluorobiphenyl  
 Concen: 52.034 ng  
 RT: 13.19 min Scan# 1719  
 Delta R.T. -0.00 min  
 Lab File: BG044232.D  
 Acq: 28 Jan 2020 16:07

Instrument :  
 BNA\_G  
 ClientSampleId :  
 20200066-AMENDED-COMP-4RX

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 38.2  | 32.6  | 48.8  |
| 170     | 26.2  | 22.3  | 33.5  |

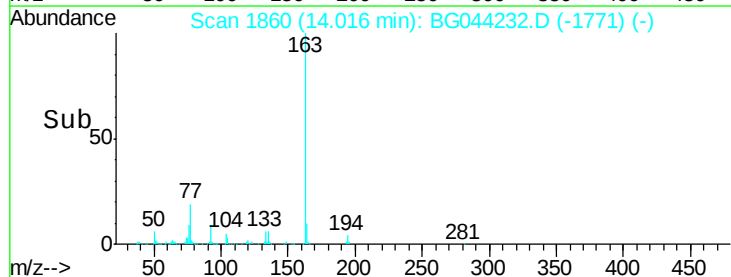
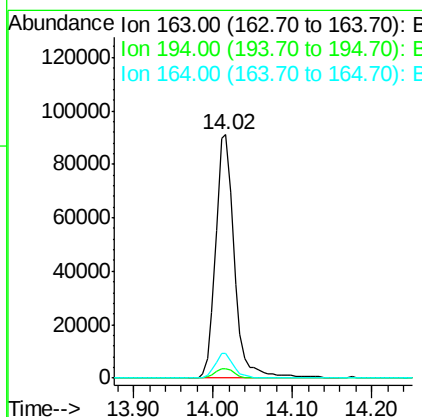
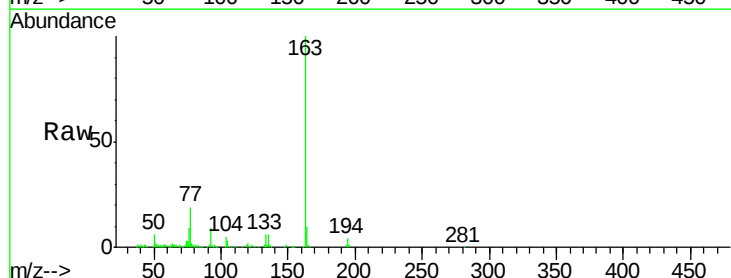
Manual Integrations  
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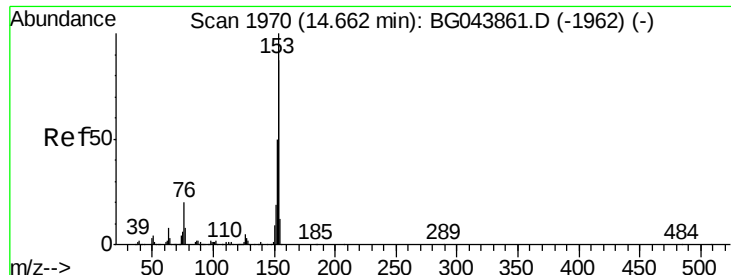
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 1/30/2020 10:17:46 AM



#50  
 Dimethylphthalate  
 Concen: 7.806 ng  
 RT: 14.02 min Scan# 1860  
 Delta R.T. -0.01 min  
 Lab File: BG044232.D  
 Acq: 28 Jan 2020 16:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 4.0   | 3.4   | 5.2   |
| 164     | 10.0  | 8.6   | 12.8  |





#52

Acenaphthene

Concen: 3.003 ng

RT: 14.63 min Scan# 1964

Delta R.T. -0.00 min

Lab File: BG044232.D

Acq: 28 Jan 2020 16:07

Instrument :

BNA\_G

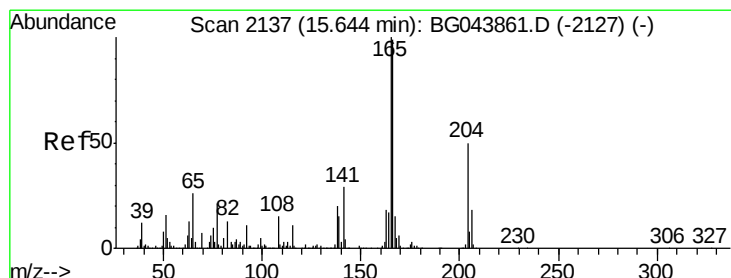
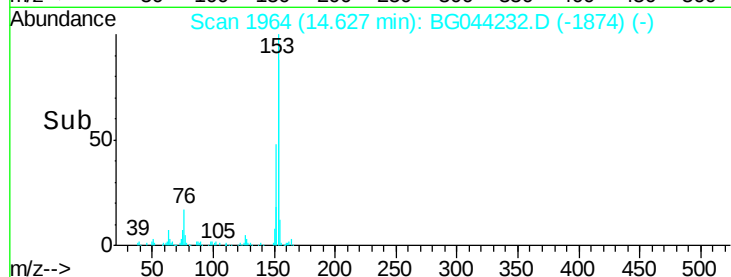
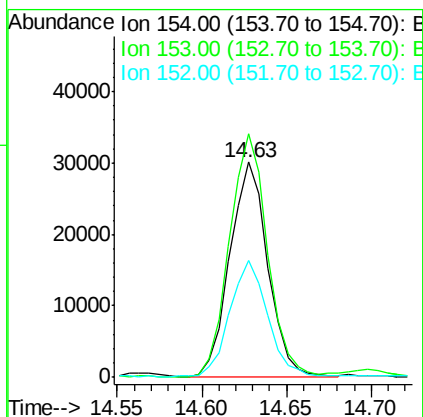
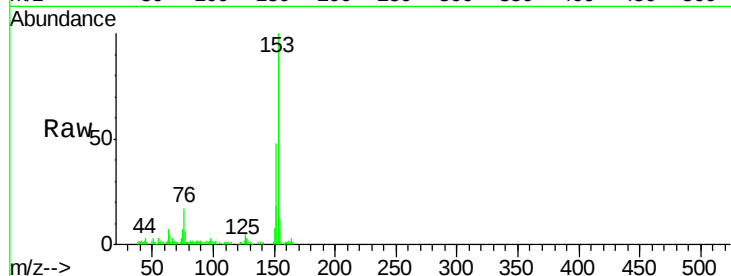
ClientSampleId :

20200066-AMENDED-COMP-4RX

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 154   | Resp: | 47363 |
| Ion      | Ratio | Lower | Upper |
| 154      | 100   |       |       |
| 153      | 113.3 | 87.8  | 131.8 |
| 152      | 54.2  | 43.3  | 64.9  |

Manual Integrations  
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#58

Fluorene

Concen: 2.175 ng

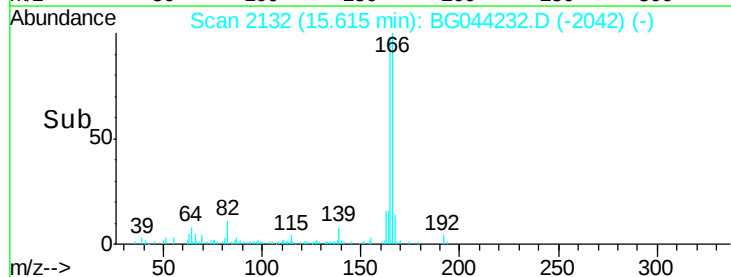
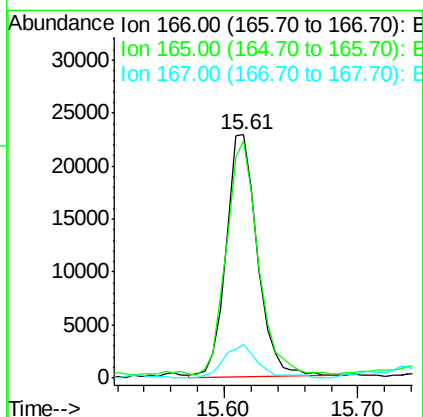
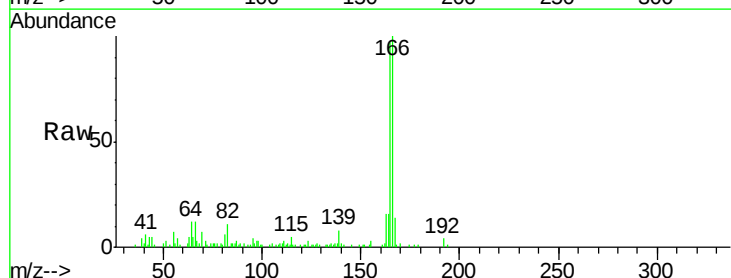
RT: 15.61 min Scan# 2132

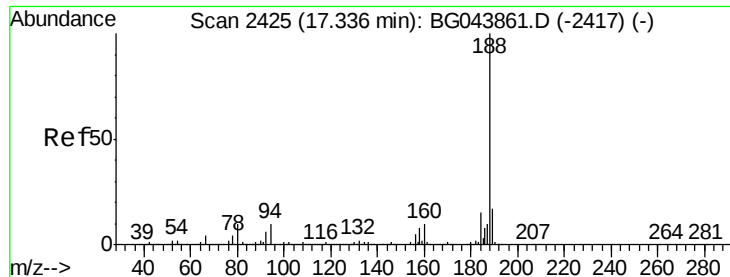
Delta R.T. -0.00 min

Lab File: BG044232.D

Acq: 28 Jan 2020 16:07

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 166   | Resp: | 37433 |
| Ion      | Ratio | Lower | Upper |
| 166      | 100   |       |       |
| 165      | 97.3  | 79.6  | 119.4 |
| 167      | 14.0  | 11.8  | 17.8  |





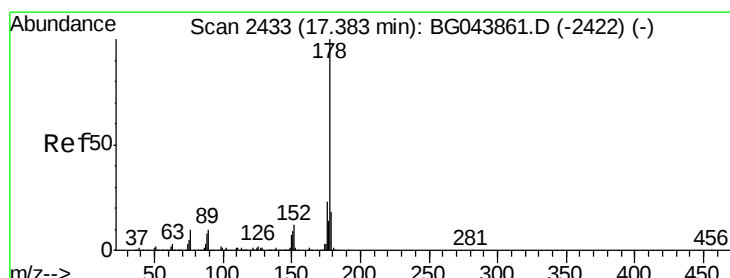
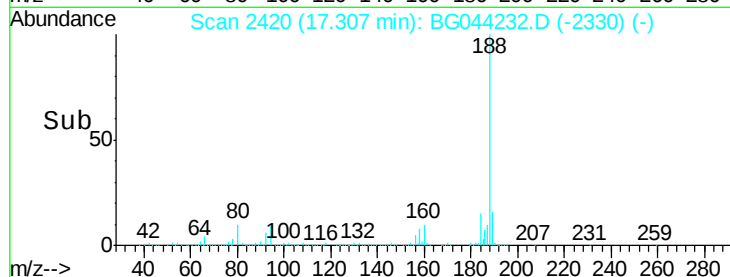
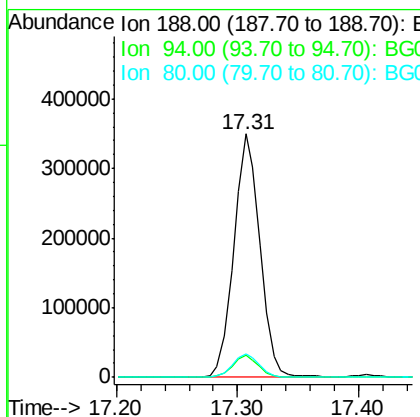
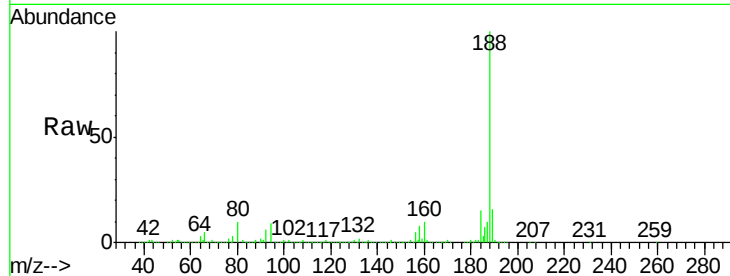
#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 17.31 min Scan# 2420  
Delta R.T. -0.00 min  
Lab File: BG044232.D  
Acq: 28 Jan 2020 16:07

Instrument :  
BNA\_G  
ClientSampleId :  
20200066-AMENDED-COMP-4RX

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 188     | 100   | 524928 |       |       |
| 94      | 8.9   |        | 7.4   | 11.2  |
| 80      | 9.9   |        | 8.1   | 12.1  |

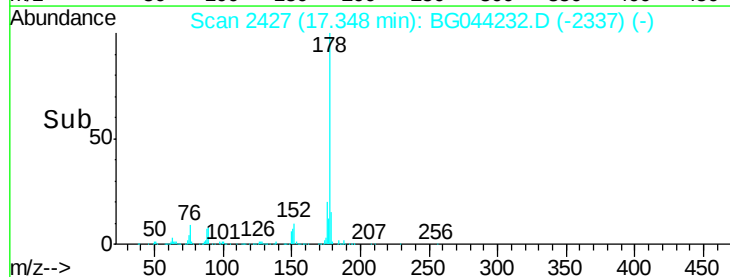
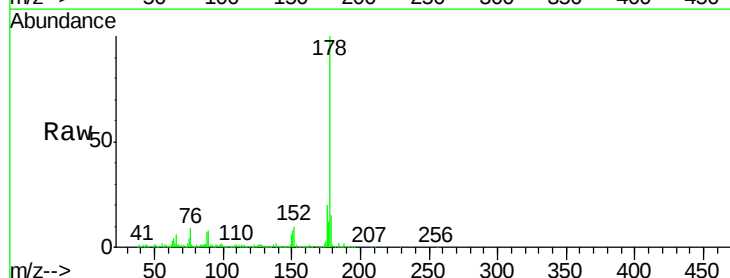
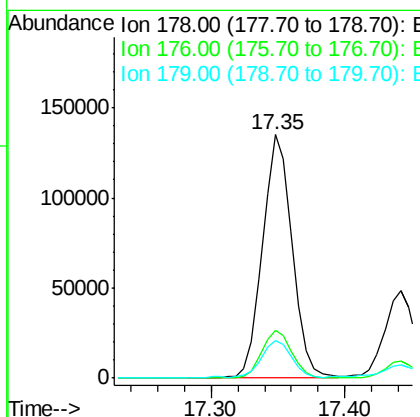
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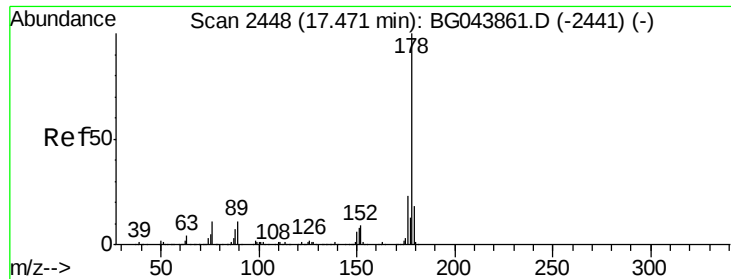
mohammad  
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#71  
Phenanthrene  
Concen: 8.199 ng  
RT: 17.35 min Scan# 2427  
Delta R.T. -0.00 min  
Lab File: BG044232.D  
Acq: 28 Jan 2020 16:07

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 178     | 100   | 206439 |       |       |
| 176     | 19.9  |        | 17.9  | 26.9  |
| 179     | 15.4  |        | 13.8  | 20.6  |





#72

Anthracene

Concen: 2.931 ng

RT: 17.44 min Scan# 2443

Delta R.T. -0.00 min

Lab File: BG044232.D

Acq: 28 Jan 2020 16:07

Instrument :

BNA\_G

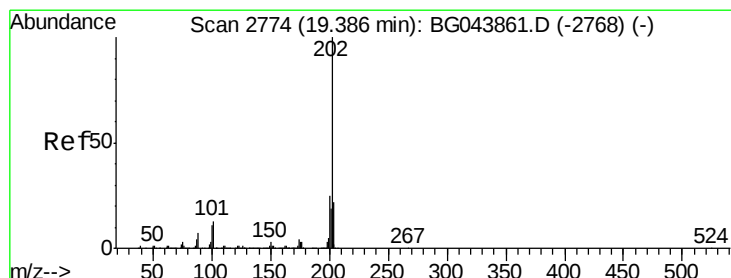
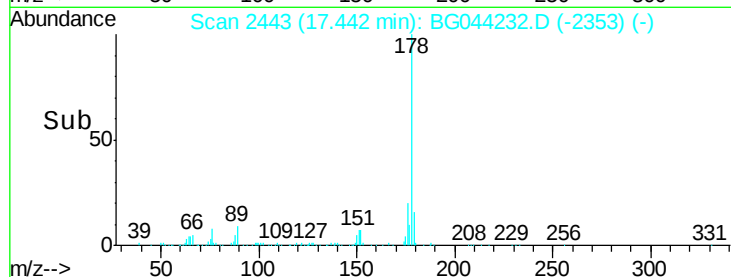
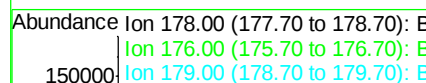
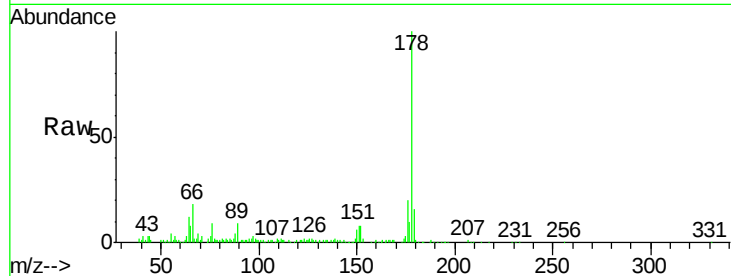
ClientSampleId :

20200066-AMENDED-COMP-4RX

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 178   | Resp: | 72923 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 176       | 19.6  | 17.2  | 25.8  |
| 179       | 15.7  | 14.1  | 21.1  |

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#75

Fluoranthene

Concen: 11.917 ng

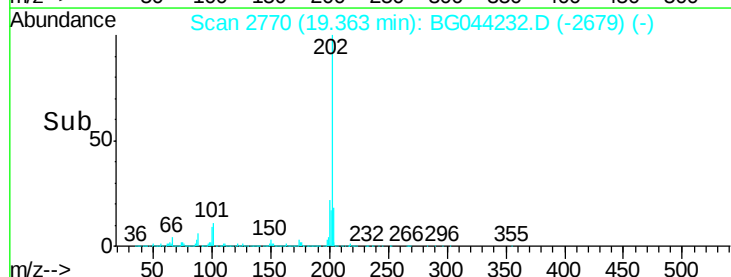
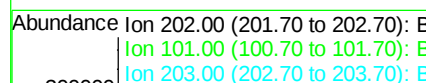
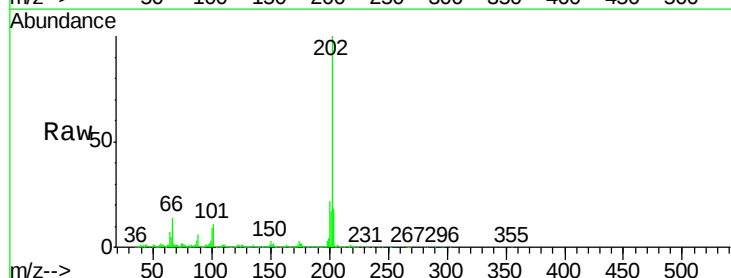
RT: 19.36 min Scan# 2770

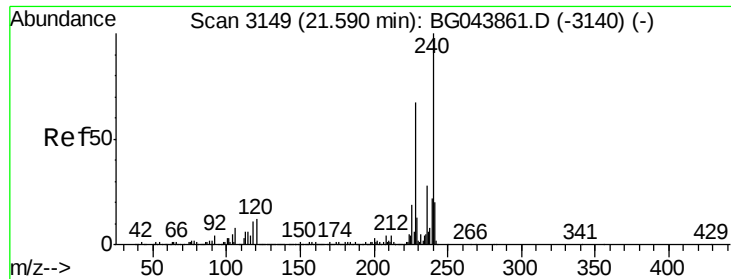
Delta R.T. 0.00 min

Lab File: BG044232.D

Acq: 28 Jan 2020 16:07

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 343151 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 11.1  | 0.0   | 31.9   |
| 203       | 18.1  | 0.2   | 40.2   |





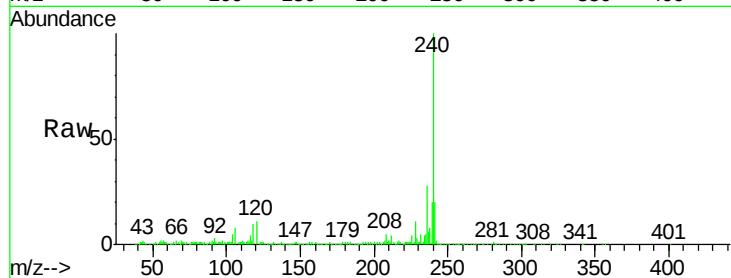
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 21.55 min Scan# 3143  
Delta R.T. -0.01 min  
Lab File: BG044232.D  
Acq: 28 Jan 2020 16:07

Instrument :  
BNA\_G  
ClientSampleId :  
20200066-AMENDED-COMP-4RX

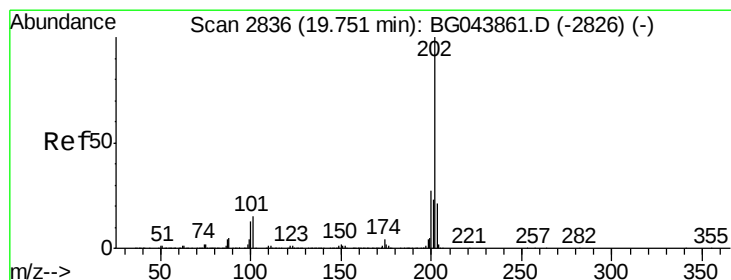
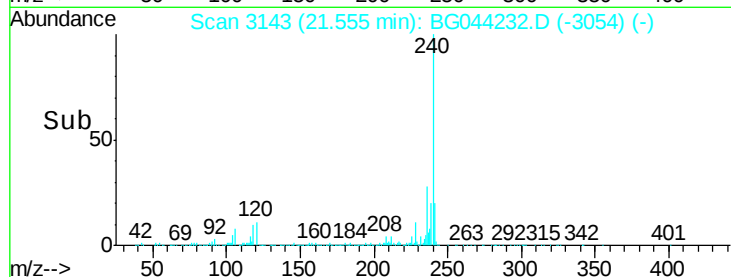
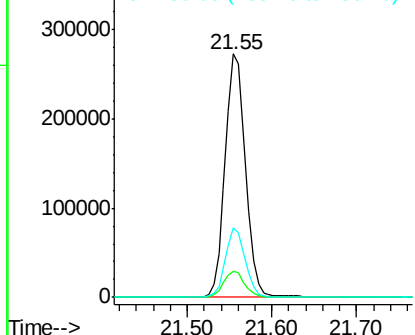
| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 240     | 100   |      |       |       |
| 120     | 10.9  | 8.1  | 12.1  |       |
| 236     | 28.4  | 22.5 | 33.7  |       |

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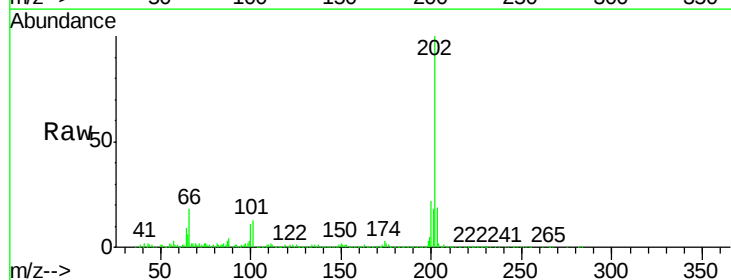


Abundance Ion 240.00 (239.70 to 240.70): E  
Ion 120.00 (119.70 to 120.70): E  
Ion 236.00 (235.70 to 236.70): E

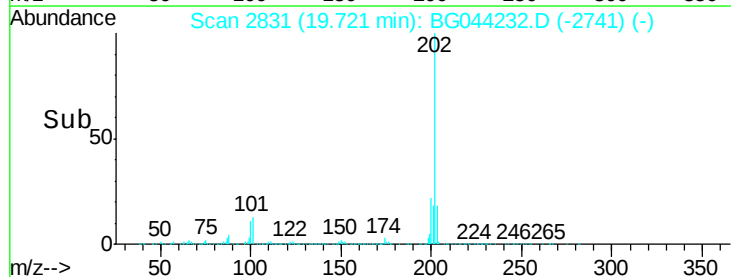
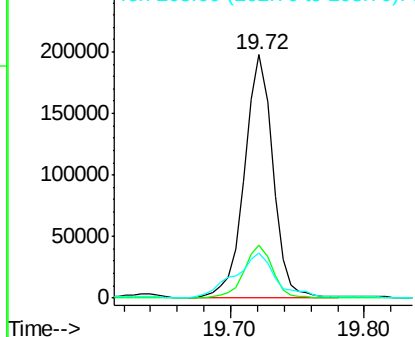


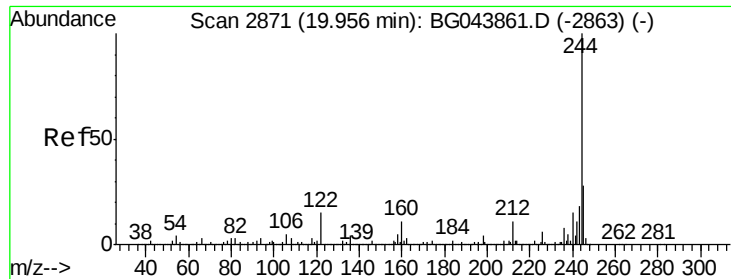
#78  
Pyrene  
Concen: 9.714 ng  
RT: 19.72 min Scan# 2831  
Delta R.T. -0.00 min  
Lab File: BG044232.D  
Acq: 28 Jan 2020 16:07

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 202     | 100   |      |       |       |
| 200     | 21.5  | 19.9 | 29.9  |       |
| 203     | 18.5  | 16.3 | 24.5  |       |



Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 200.00 (199.70 to 200.70): E  
Ion 203.00 (202.70 to 203.70): E





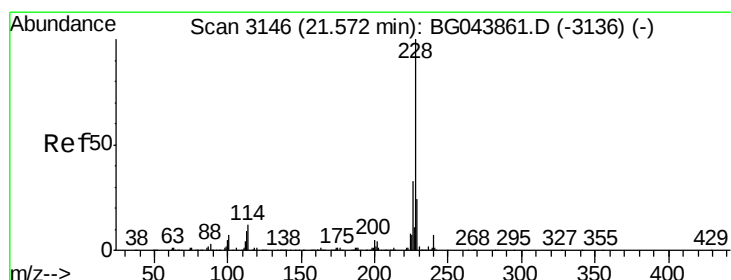
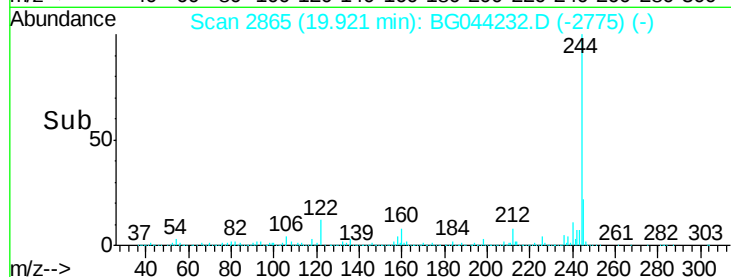
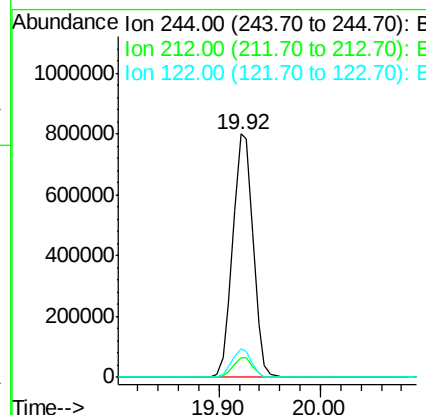
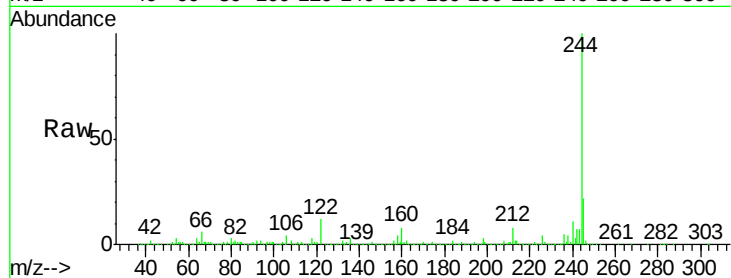
#79  
 Terphenyl-d14  
 Concen: 53.112 ng  
 RT: 19.92 min Scan# 2865  
 Delta R.T. -0.00 min  
 Lab File: BG044232.D  
 Acq: 28 Jan 2020 16:07

Instrument :  
 BNA\_G  
 ClientSampleId :  
 20200066-AMENDED-COMP-4RX

Tot Ion:244 Resp: 1118449  
 Ion Ratio Lower Upper  
 244 100  
 212 8.2 7.5 11.3  
 122 11.6 10.6 15.8

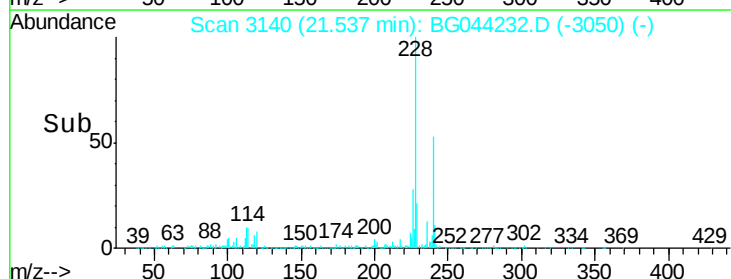
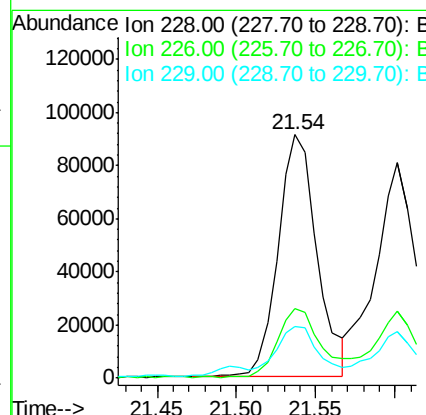
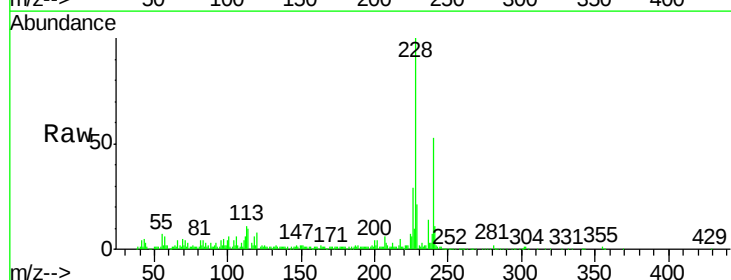
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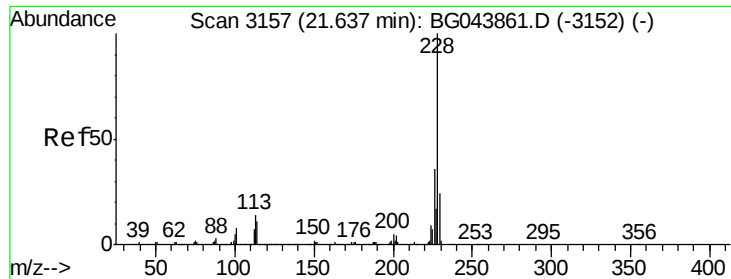
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#81  
 Benzo(a)anthracene  
 Concen: 5.543 ng  
 RT: 21.54 min Scan# 3140  
 Delta R.T. -0.00 min  
 Lab File: BG044232.D  
 Acq: 28 Jan 2020 16:07

Tgt Ion:228 Resp: 155579  
 Ion Ratio Lower Upper  
 228 100  
 226 28.7 24.7 37.1  
 229 21.4 18.3 27.5





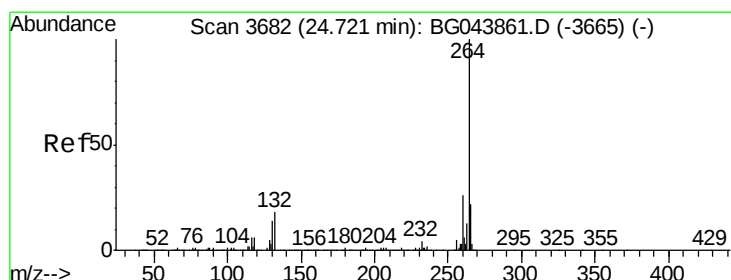
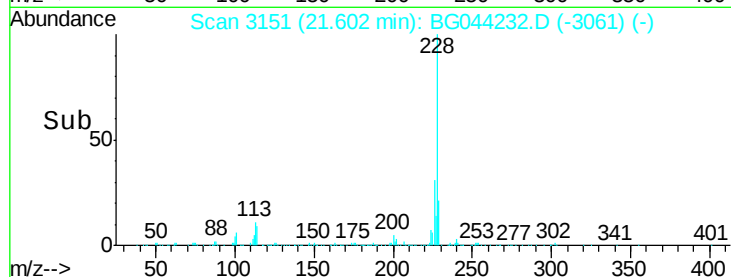
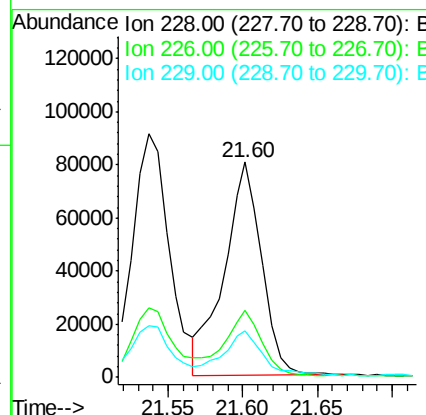
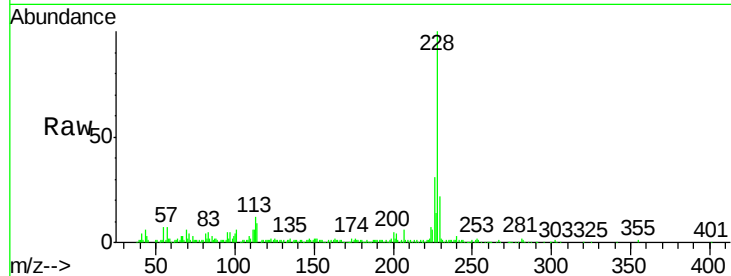
#83  
Chrysene  
Concen: 5.261 ng  
RT: 21.60 min Scan# 3151  
Delta R.T. -0.00 min  
Lab File: BG044232.D  
Acq: 28 Jan 2020 16:07

Instrument :  
BNA\_G  
ClientSampleId :  
20200066-AMENDED-COMP-4RX

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.2  | 27.6  | 41.4  |
| 229     | 21.8  | 17.8  | 26.8  |

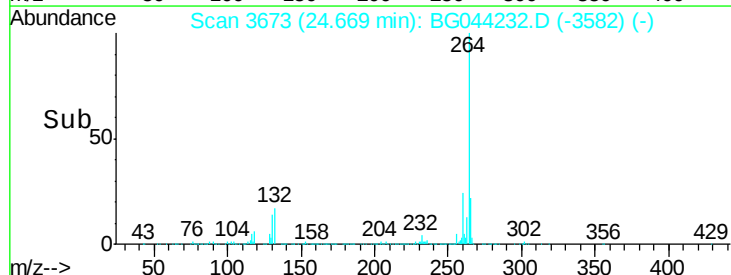
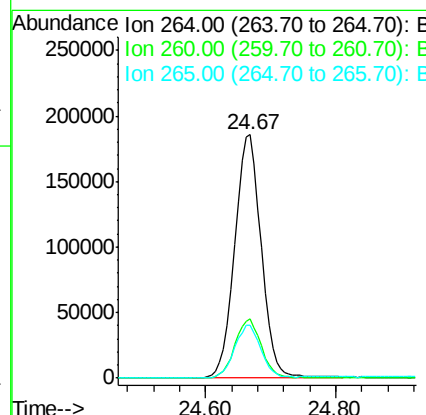
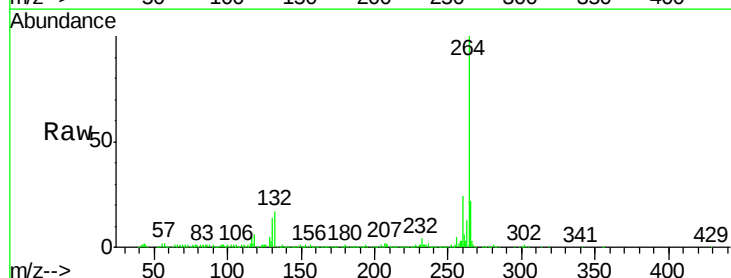
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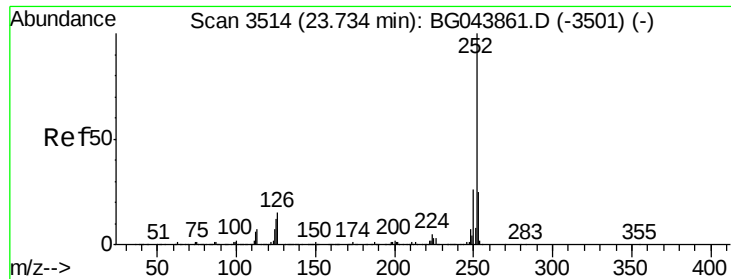
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#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 24.67 min Scan# 3673  
Delta R.T. 0.00 min  
Lab File: BG044232.D  
Acq: 28 Jan 2020 16:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.4  | 19.3  | 28.9  |
| 265     | 21.9  | 17.4  | 26.2  |





#88

Benzo(b)fluoranthene

Concen: 4.822 ng

RT: 23.68 min Scan# 3505

Delta R.T. -0.00 min

Lab File: BG044232.D

Acq: 28 Jan 2020 16:07

Instrument :

BNA\_G

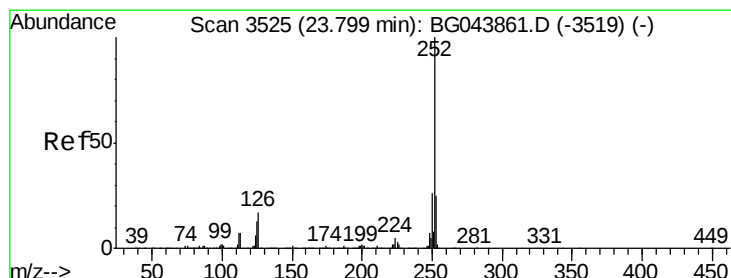
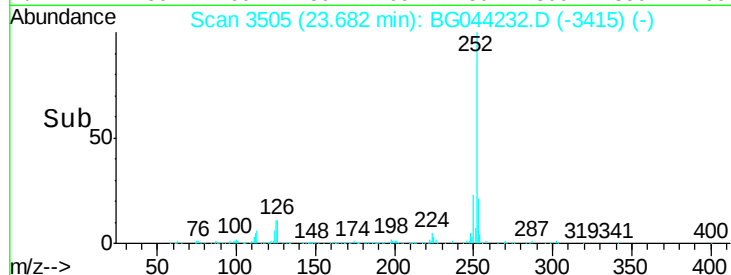
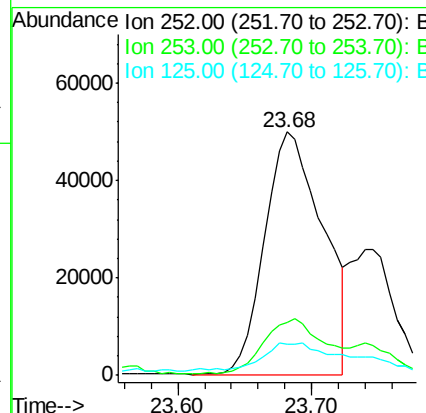
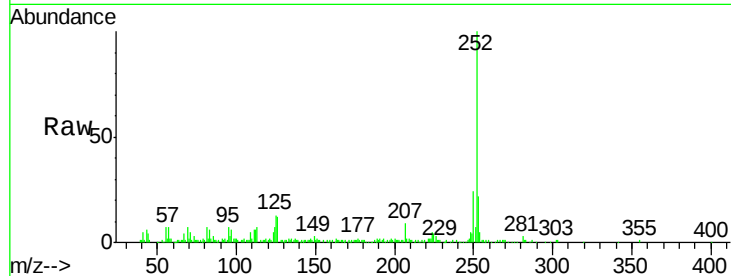
ClientSampleId :

20200066-AMENDED-COMP-4RX

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 150055 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 21.9  | 19.2  | 28.8   |
| 125       | 12.6  | 8.8   | 13.2   |

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#89

Benzo(k)fluoranthene

Concen: 2.080 ng m

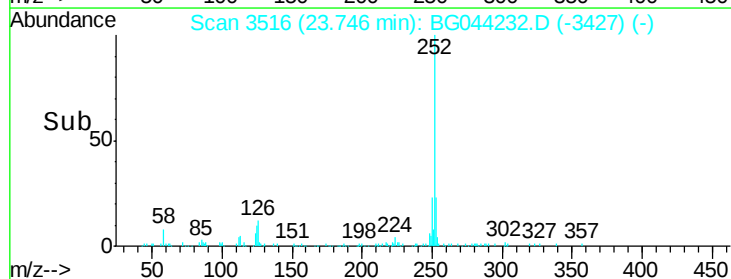
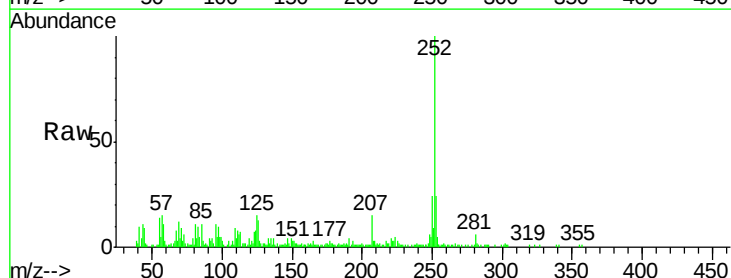
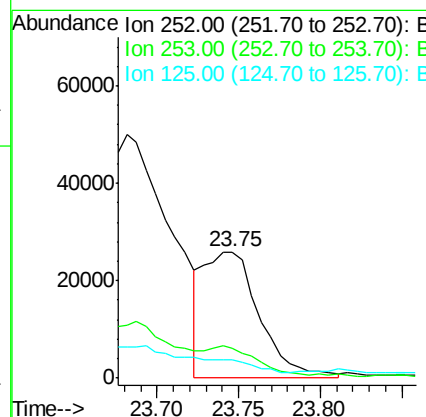
RT: 23.75 min Scan# 3516

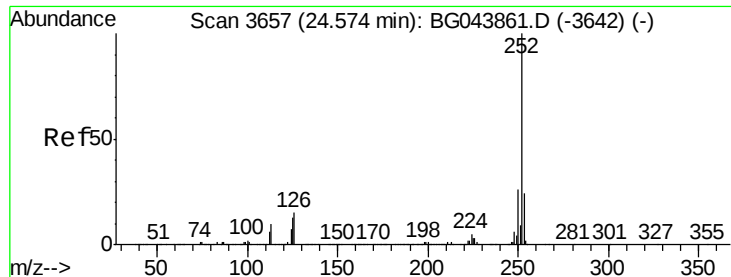
Delta R.T. -0.01 min

Lab File: BG044232.D

Acq: 28 Jan 2020 16:07

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 61539 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 23.9  | 19.6  | 29.4  |
| 125       | 14.5  | 8.6   | 12.8# |





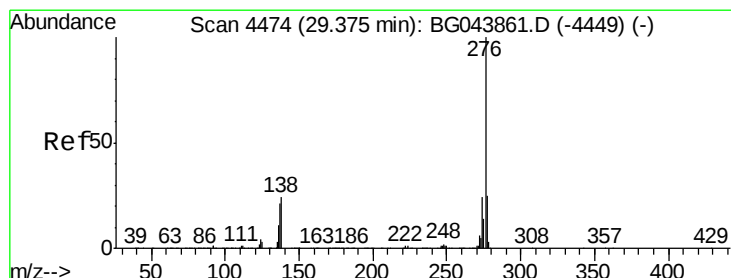
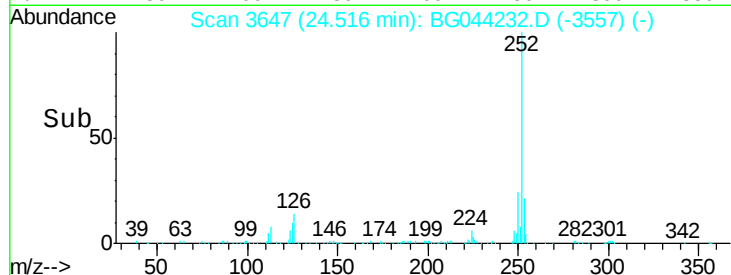
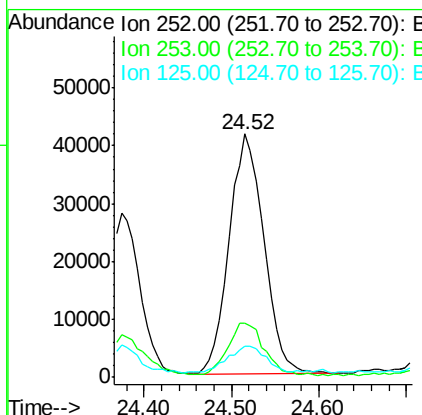
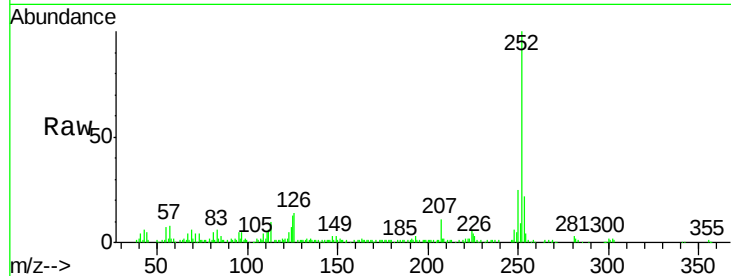
#90  
Benzo(a)pyrene  
Concen: 3.826 ng  
RT: 24.52 min Scan# 3647  
Delta R.T. -0.00 min  
Lab File: BG044232.D  
Acq: 28 Jan 2020 16:07

Instrument :  
BNA\_G  
ClientSampleId :  
20200066-AMENDED-COMP-4RX

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.1  | 18.5  | 27.7  |
| 125     | 12.6  | 8.9   | 13.3  |

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#92  
Benzo(g,h,i)perylene  
Concen: 2.143 ng  
RT: 29.28 min Scan# 4457  
Delta R.T. -0.01 min  
Lab File: BG044232.D  
Acq: 28 Jan 2020 16:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 22.3  | 19.6  | 29.4  |
| 138     | 23.3  | 16.7  | 25.1  |

