

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG122118\  
 Data File : BG038811.D  
 Acq On : 22 Dec 2018 10:38  
 Operator : JU/SJ  
 Sample : J6386-18  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 P001-SS007-1824-01

Manual Integrations  
 APPROVED

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 12/26/2018 3:17:35 PM

Quant Time: Dec 24 04:34:49 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG121218.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 12 15:26:27 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.06  | 152  | 32691    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 10.88 | 136  | 138286   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 14.70 | 164  | 88677    | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 17.45 | 188  | 190486   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 21.73 | 240  | 187589   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 25.04 | 264  | 197449   | 20.00 | ng    | 0.02     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.61  | 112  | 140675   | 76.32 | ng    | 0.01     |
| 7) Phenol-d6                | 7.22  | 99   | 206397   | 81.57 | ng    | 0.01     |
| 23) Nitrobenzene-d5         | 9.24  | 82   | 129209   | 47.73 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 16.19 | 330  | 96630    | 79.07 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 13.32 | 172  | 306536   | 47.42 | ng    | 0.00     |
| 79) Terphenyl-d14           | 20.04 | 244  | 402523   | 46.70 | ng    | 0.00     |

| Target Compounds           | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|----------------------------|-------|------|----------|-------|-------|--------|
| 10) Phenol                 | 7.25  | 94   | 16308    | 6.067 | ng    | 92     |
| 20) 3+4-Methylphenols      | 8.83  | 107  | 5793     | 2.329 | ng    | 90     |
| 30) 1,2,4-Trichlorobenzene | 10.73 | 180  | 7558     | 2.800 | ng    | 96     |
| 50) Dimethylphthalate      | 14.14 | 163  | 19182    | 2.649 | ng    | 98     |
| 71) Phenanthrene           | 17.49 | 178  | 64286    | 6.508 | ng    | 98     |
| 75) Fluoranthene           | 19.49 | 202  | 50551    | 4.136 | ng    | 98     |
| 78) Pyrene                 | 19.86 | 202  | 85176    | 6.873 | ng    | 98     |
| 81) Benzo(a)anthracene     | 21.71 | 228  | 33757    | 2.953 | ng    | 96     |
| 83) Chrysene               | 21.77 | 228  | 34913    | 3.171 | ng    | 96     |
| 88) Benzo(b)fluoranthene   | 23.97 | 252  | 31739m   | 2.928 | ng    |        |
| 90) Benzo(a)pyrene         | 24.88 | 252  | 32430    | 3.101 | ng    | 99     |
| 92) Benzo(a,h,i)perylene   | 30.02 | 276  | 26608    | 2.593 | ng    | 96     |

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

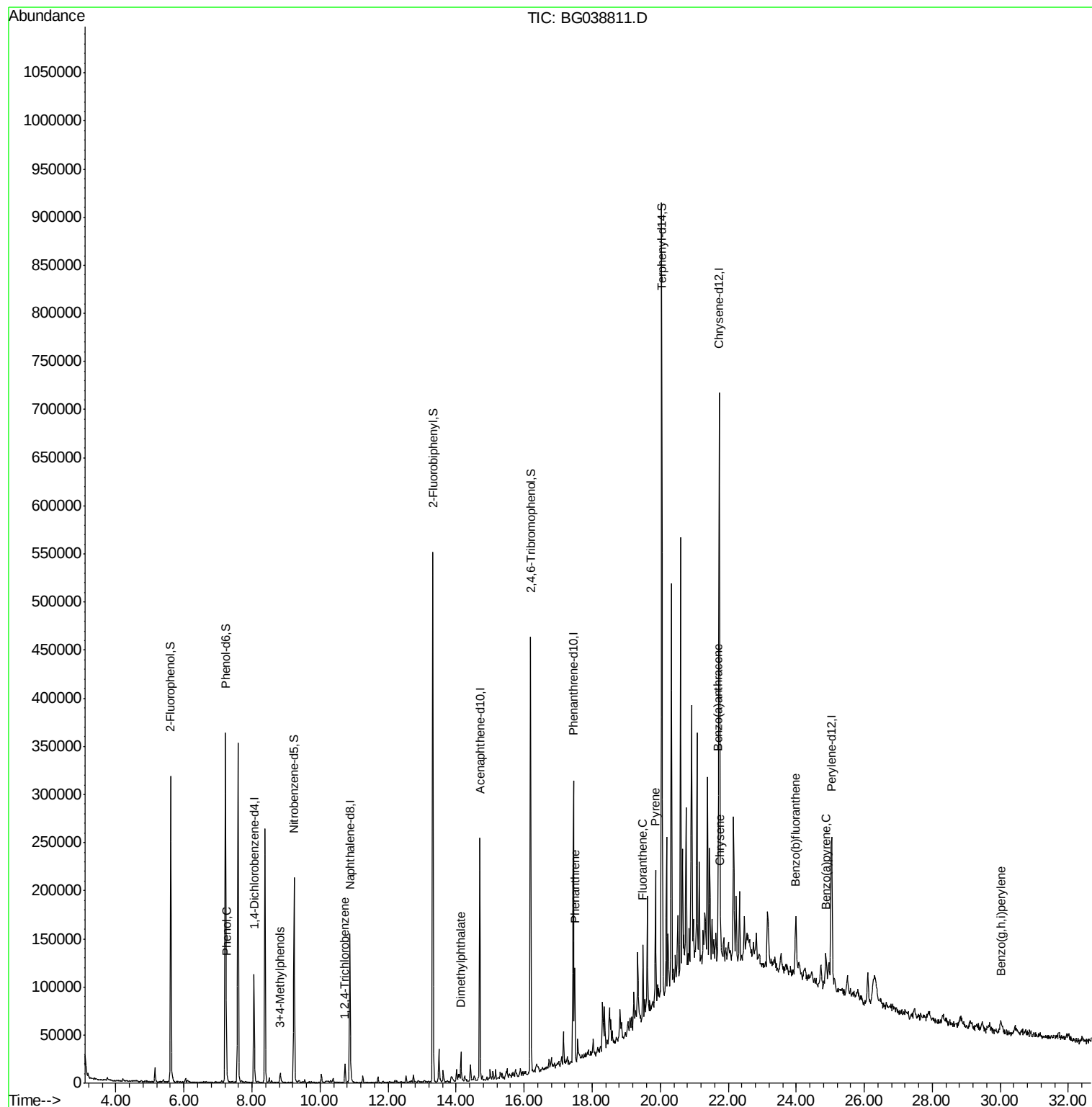
Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG122118\  
Data File : BG038811.D  
Acq On : 22 Dec 2018 10:38  
Operator : JU/SJ  
Sample : J6386-18  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

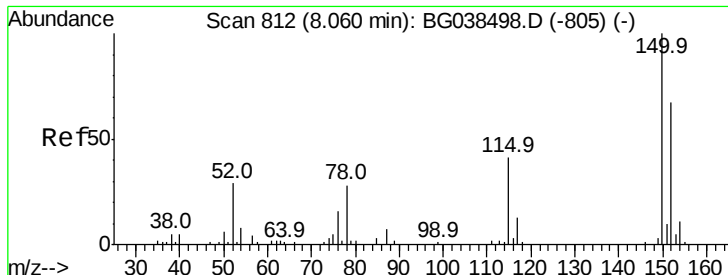
Instrument :  
BNA\_G  
ClientSampleId :  
P001-SS007-1824-01

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Quant Time: Dec 24 04:34:49 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG121218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Dec 12 15:26:27 2018  
Response via : Initial Calibration





#1

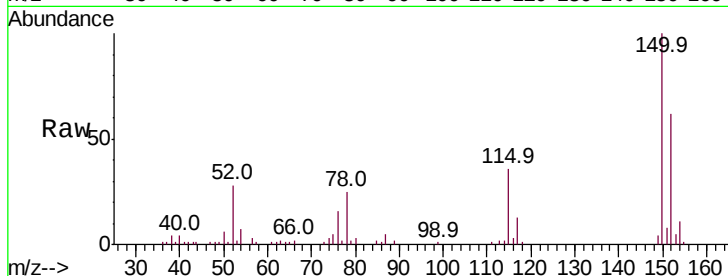
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 8.06 min Scan# 846  
Delta R.T. -0.00 min  
Lab File: BG038811.D  
Acq: 22 Dec 2018 10:38

Instrument :  
BNA\_G  
ClientSampleId :  
P001-SS007-1824-01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 161.4 | 119.5 | 179.3 |
| 115     | 57.4  | 49.6  | 74.4  |

Manual Integrations  
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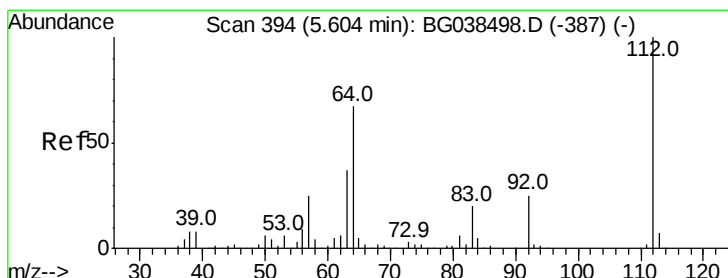
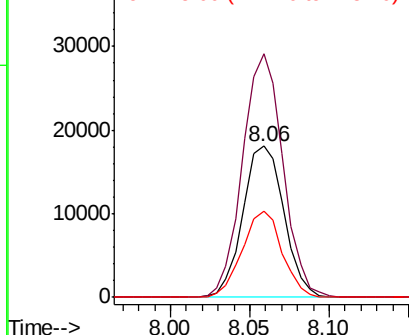
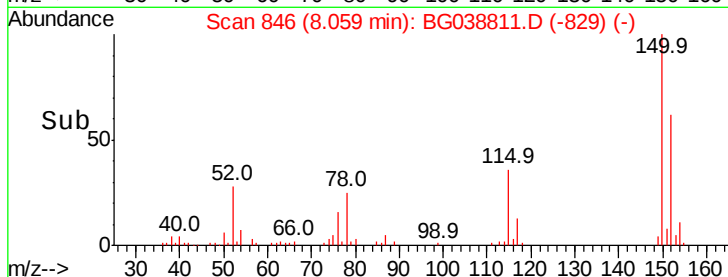


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

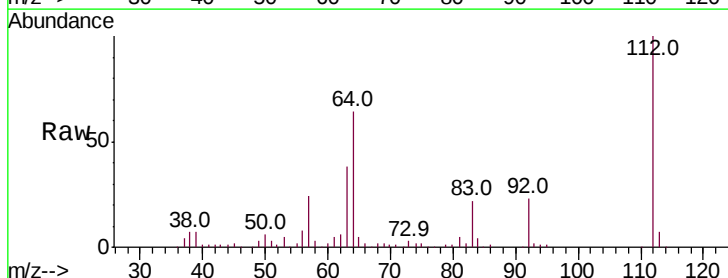
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 76.323 ng  
RT: 5.61 min Scan# 430  
Delta R.T. 0.01 min  
Lab File: BG038811.D  
Acq: 22 Dec 2018 10:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 63.6  | 53.4  | 80.2  |
| 63      | 37.7  | 29.3  | 43.9  |

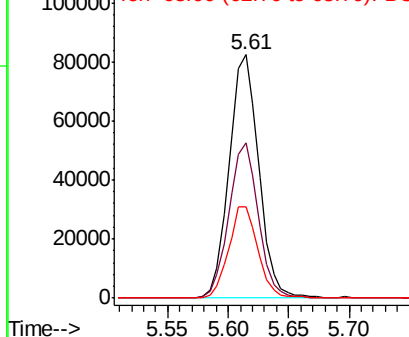
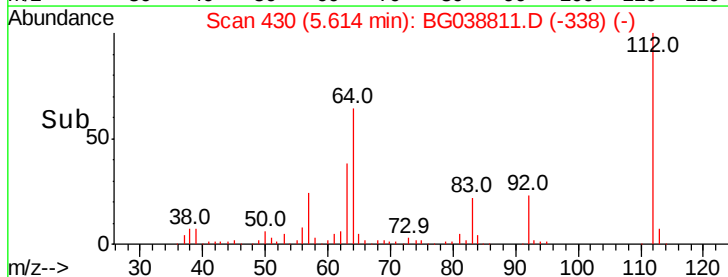


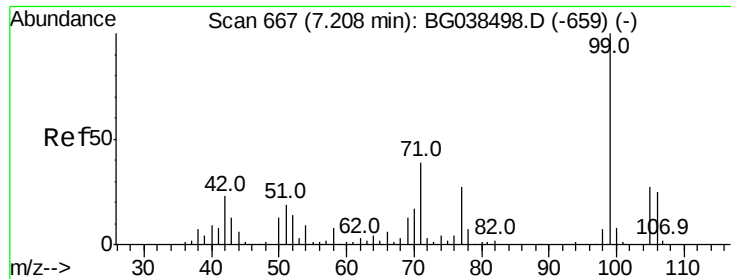
Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BG

Ion 63.00 (62.70 to 63.70): BG





#7

Phenol-d6

Concen: 81.571 ng

RT: 7.22 min Scan# 703

Delta R.T. 0.01 min

Lab File: BG038811.D

Acq: 22 Dec 2018 10:38

Instrument :

BNA\_G

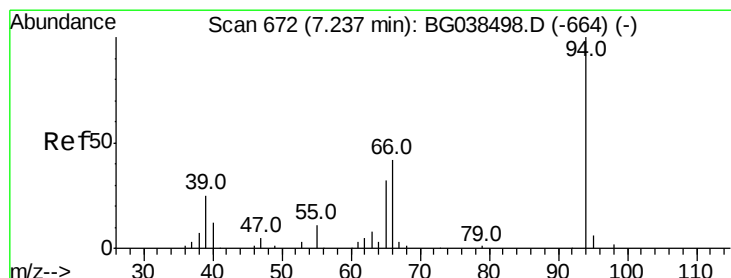
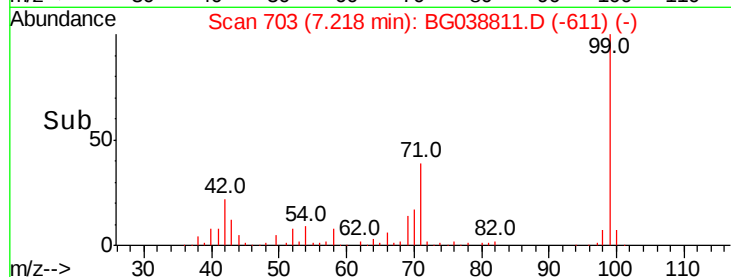
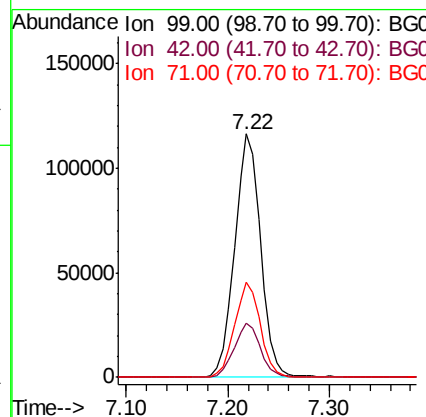
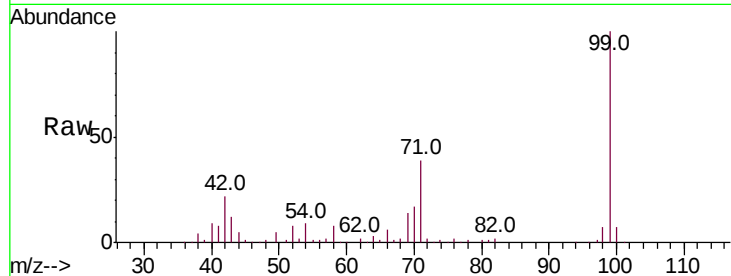
ClientSampleId :

P001-SS007-1824-01

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 99      | 100  |       | 206397 |       |       |
| 42      | 22.0 | 18.5  | 27.7   |       |       |
| 71      | 39.1 | 31.1  | 46.7   |       |       |

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#10

Phenol

Concen: 6.067 ng

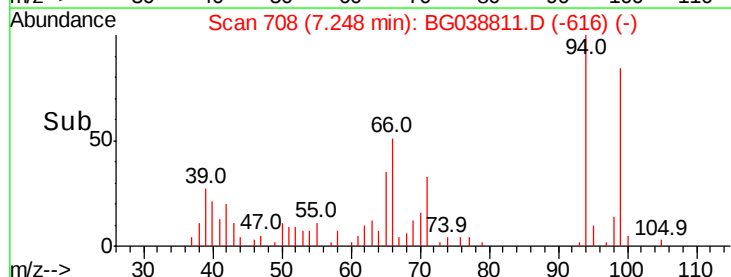
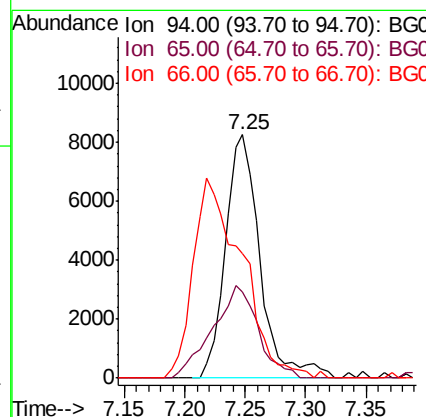
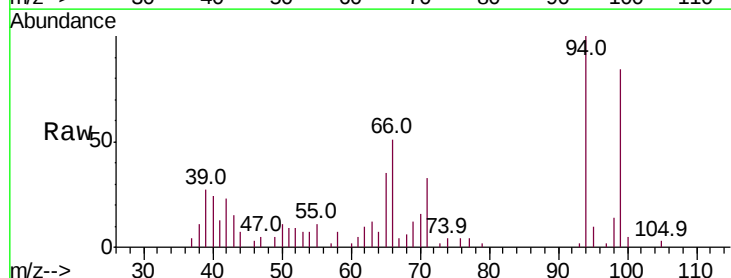
RT: 7.25 min Scan# 708

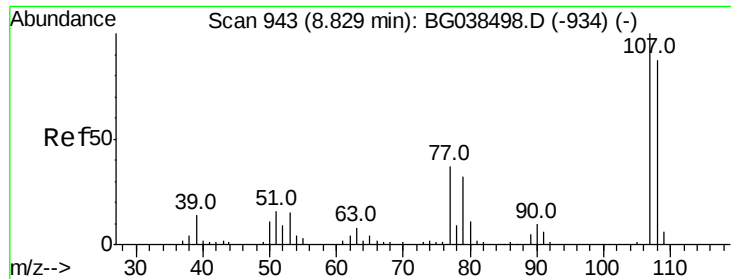
Delta R.T. 0.01 min

Lab File: BG038811.D

Acq: 22 Dec 2018 10:38

| Tgt Ion | Ion  | Ratio | Resp  | Lower | Upper |
|---------|------|-------|-------|-------|-------|
| 94      | 100  |       | 16308 |       |       |
| 65      | 35.2 | 12.6  | 52.6  |       |       |
| 66      | 51.0 | 24.1  | 64.1  |       |       |





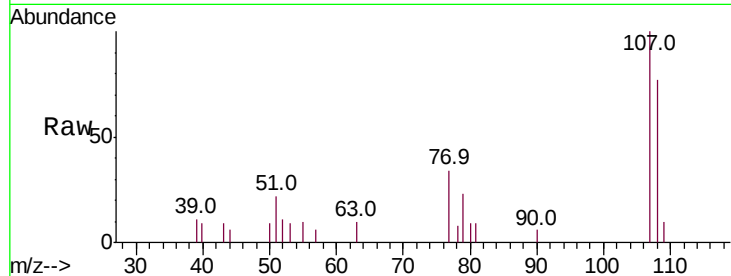
#20  
3+4-Methylphenols  
Concen: 2.329 ng  
RT: 8.83 min Scan# 978  
Delta R.T. 0.00 min  
Lab File: BG038811.D  
Acq: 22 Dec 2018 10:38

Instrument :  
BNA\_G  
ClientSampleId :  
P001-SS007-1824-01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 107     | 100   |       |       |
| 108     | 77.5  | 66.7  | 106.7 |
| 77      | 34.0  | 17.3  | 57.3  |
| 79      | 23.2  | 12.3  | 52.3  |

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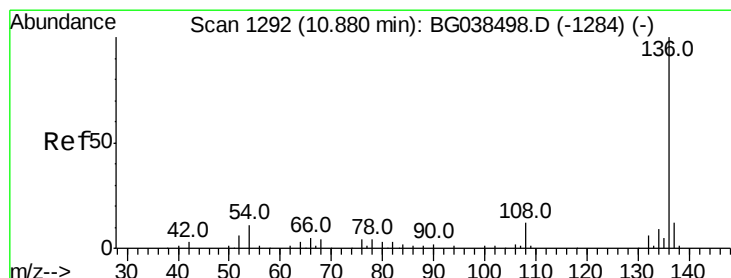
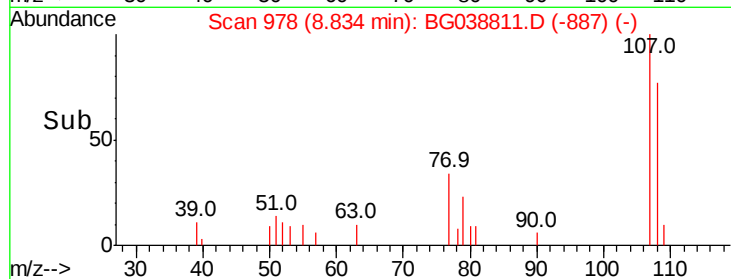
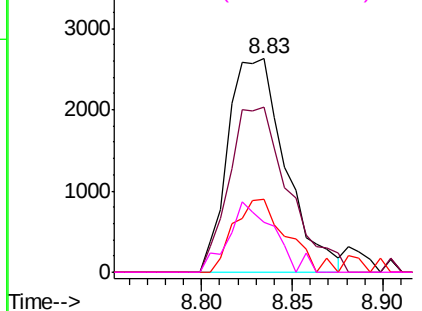
Abundance

Ion 107.00 (106.70 to 107.70): E

Ion 108.00 (107.70 to 108.70): E

Ion 77.00 (76.70 to 77.70): BGC

Ion 79.00 (78.70 to 79.70): BGC



#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.88 min Scan# 1326  
Delta R.T. -0.00 min  
Lab File: BG038811.D  
Acq: 22 Dec 2018 10:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 136     | 100   |       |       |
| 137     | 11.7  | 9.3   | 13.9  |
| 54      | 9.6   | 8.5   | 12.7  |
| 68      | 4.5   | 3.5   | 5.3   |

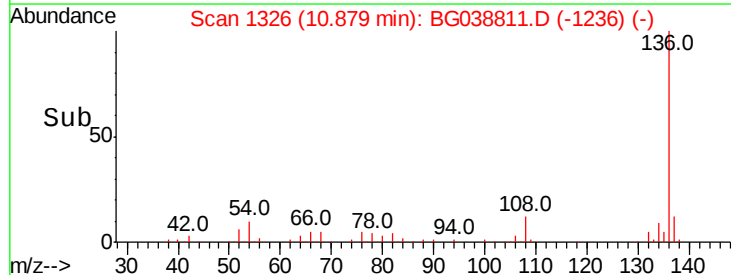
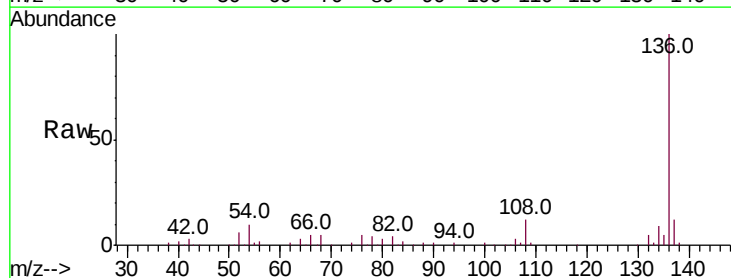
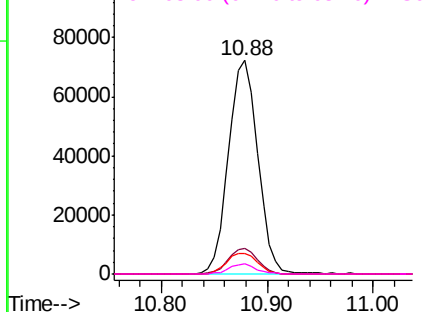
Abundance

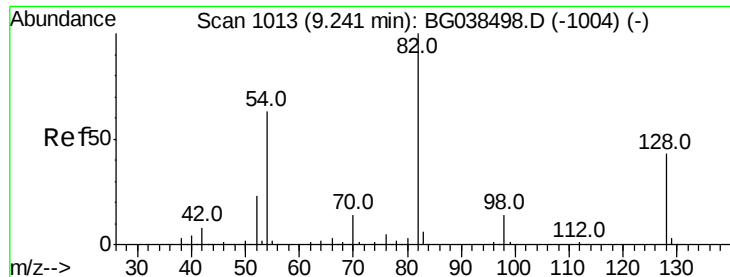
Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BGC

Ion 68.00 (67.70 to 68.70): BGC





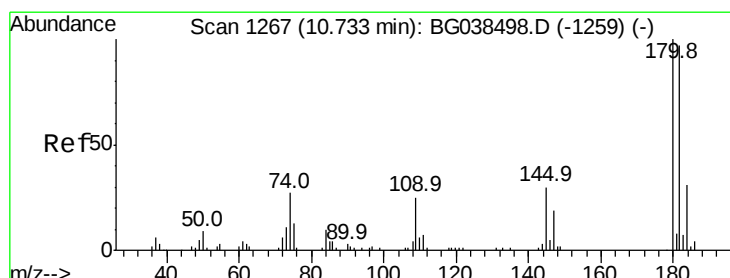
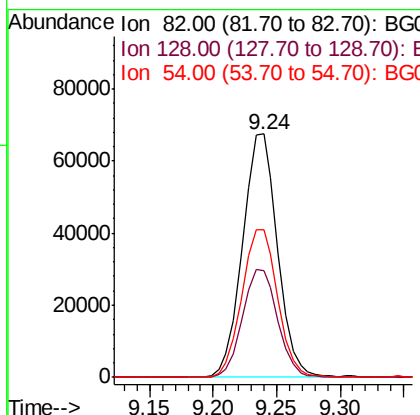
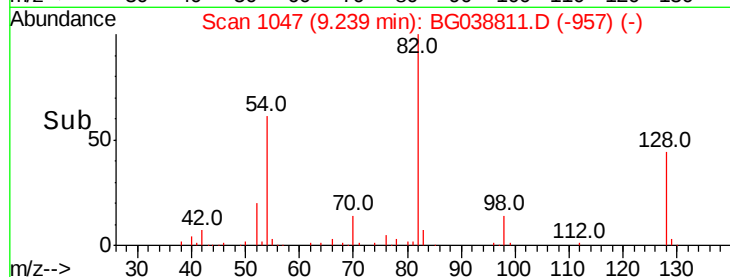
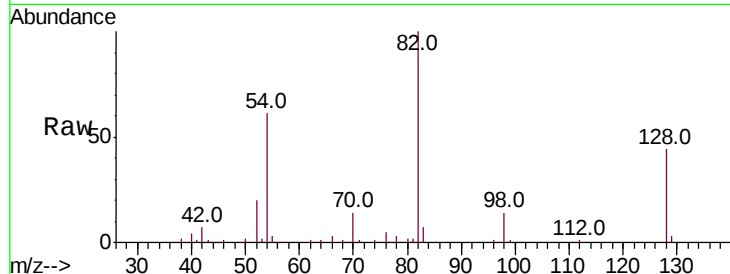
#23  
 Nitrobenzene-d5  
 Concen: 47.734 ng  
 RT: 9.24 min Scan# 1047  
 Delta R.T. -0.00 min  
 Lab File: BG038811.D  
 Acq: 22 Dec 2018 10:38

Instrument :  
 BNA\_G  
 ClientSampleId :  
 P001-SS007-1824-01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 43.9  | 34.6  | 52.0  |
| 54      | 60.6  | 50.6  | 76.0  |

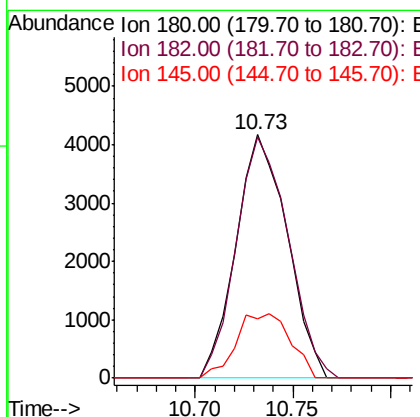
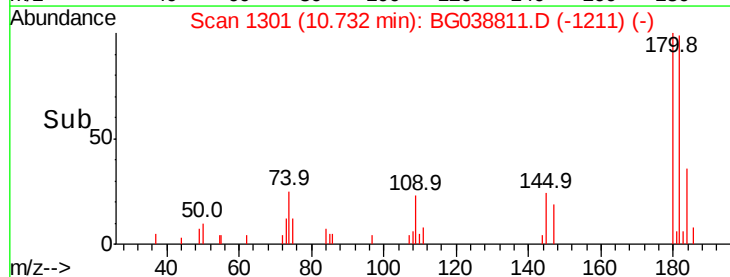
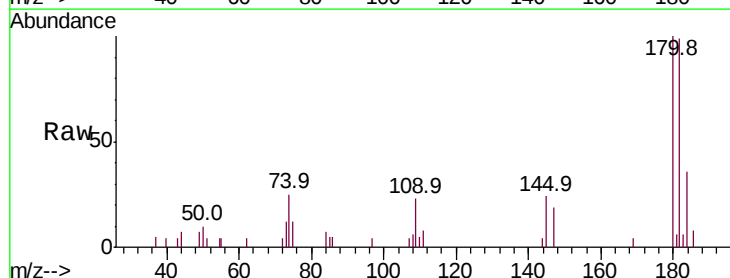
Manual Integrations  
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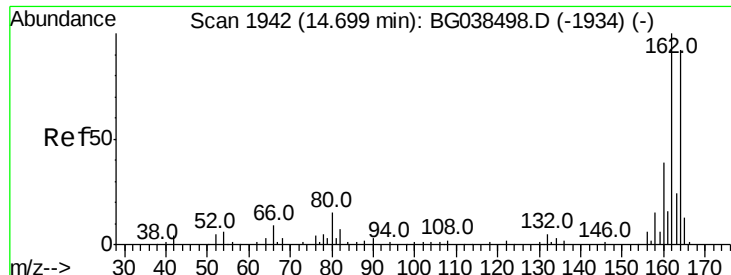
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#30  
 1,2,4-Trichlorobenzene  
 Concen: 2.800 ng  
 RT: 10.73 min Scan# 1301  
 Delta R.T. -0.00 min  
 Lab File: BG038811.D  
 Acq: 22 Dec 2018 10:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 99.1  | 77.4  | 116.0 |
| 145     | 24.3  | 24.1  | 36.1  |





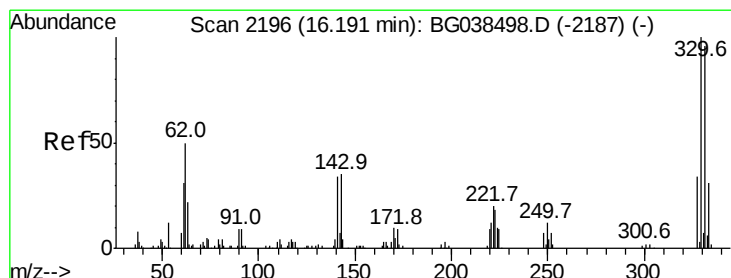
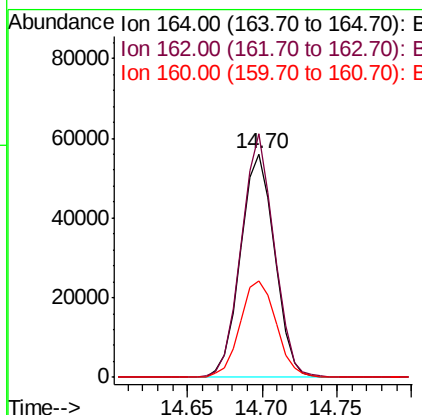
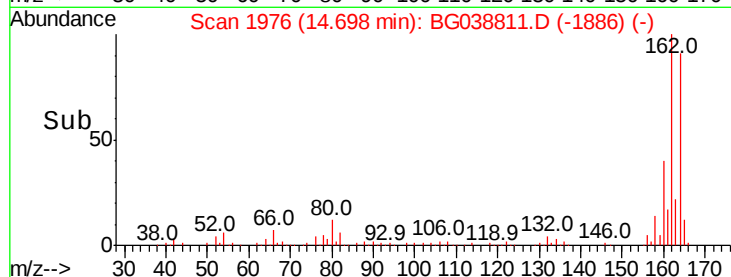
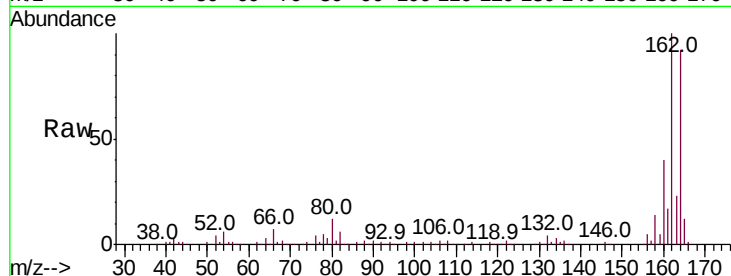
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.70 min Scan# 1976  
Delta R.T. -0.00 min  
Lab File: BG038811.D  
Acq: 22 Dec 2018 10:38

Instrument :  
BNA\_G  
ClientSampleId :  
P001-SS007-1824-01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 109.1 | 86.6  | 130.0 |
| 160     | 43.3  | 34.2  | 51.2  |

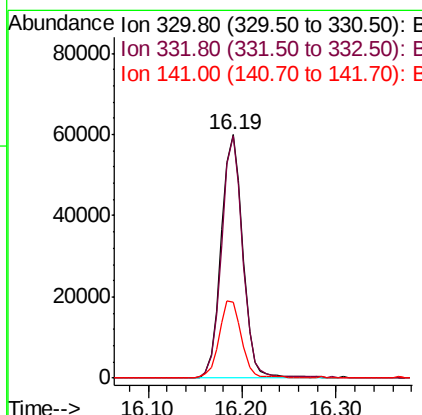
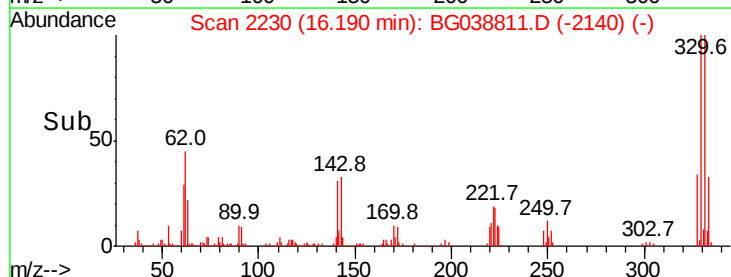
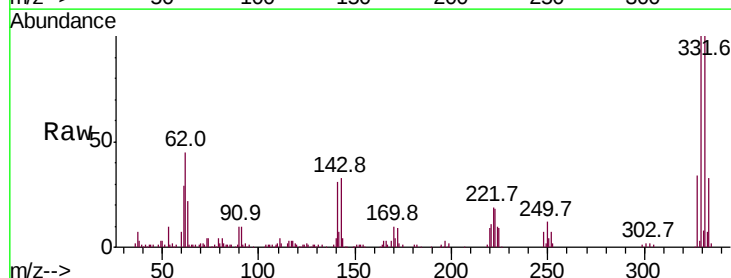
Manual Integrations  
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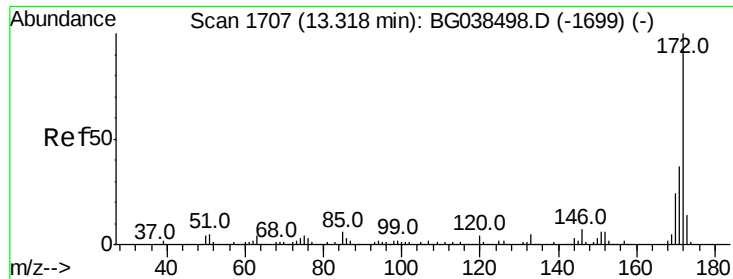
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#42  
2,4,6-Tribromophenol  
Concen: 79.067 ng  
RT: 16.19 min Scan# 2230  
Delta R.T. -0.00 min  
Lab File: BG038811.D  
Acq: 22 Dec 2018 10:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 96.5  | 76.9  | 115.3 |
| 141     | 32.9  | 28.8  | 43.2  |





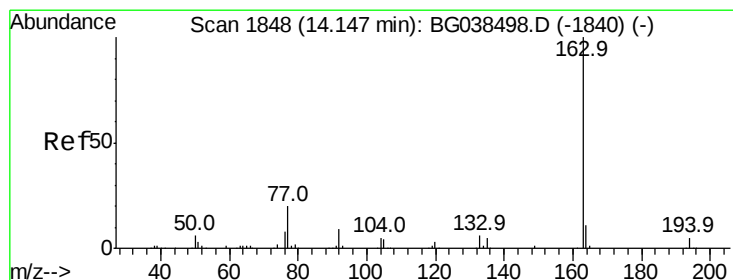
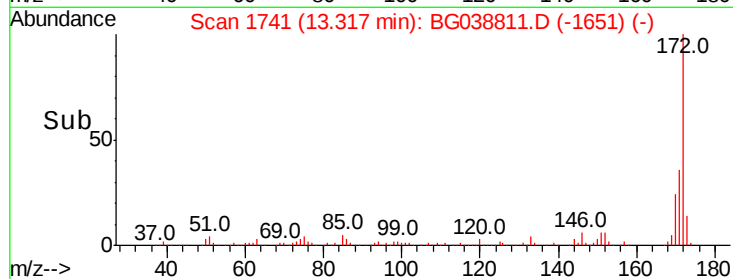
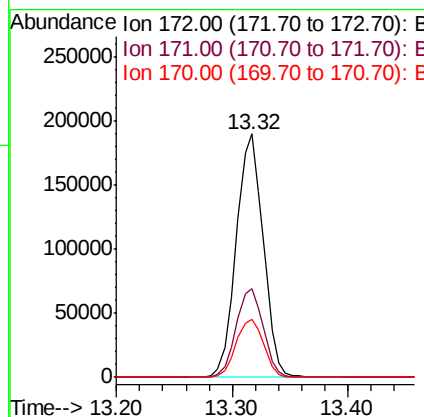
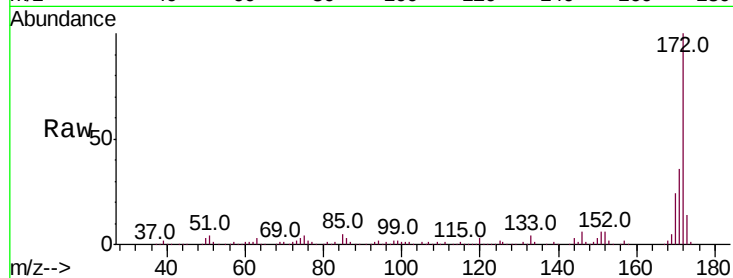
#45  
2-Fluorobiphenyl  
Concen: 47.422 ng  
RT: 13.32 min Scan# 1741  
Delta R.T. -0.00 min  
Lab File: BG038811.D  
Acq: 22 Dec 2018 10:38

Instrument :  
BNA\_G  
ClientSampleId :  
P001-SS007-1824-01

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 172     | 100   |            |       |
| 171     | 36.3  | 29.8       | 44.6  |
| 170     | 24.1  | 19.5       | 29.3  |

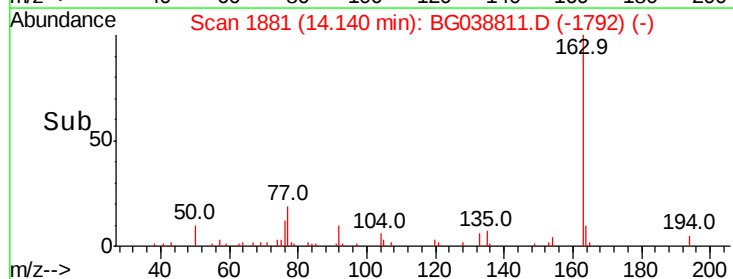
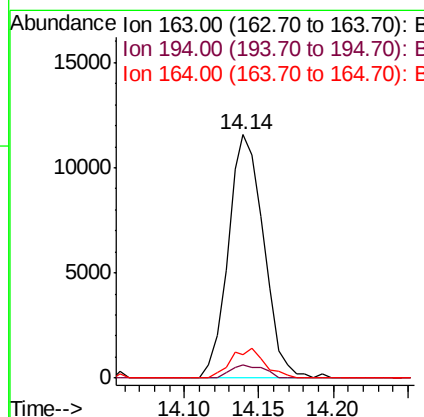
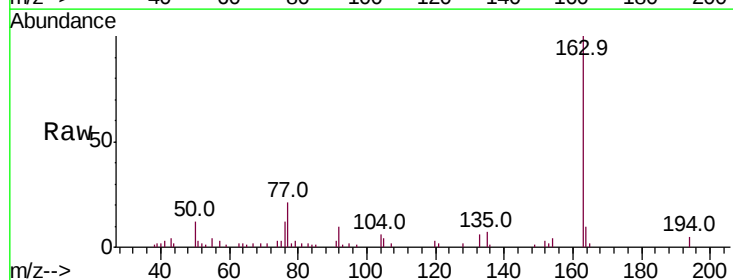
Manual Integrations  
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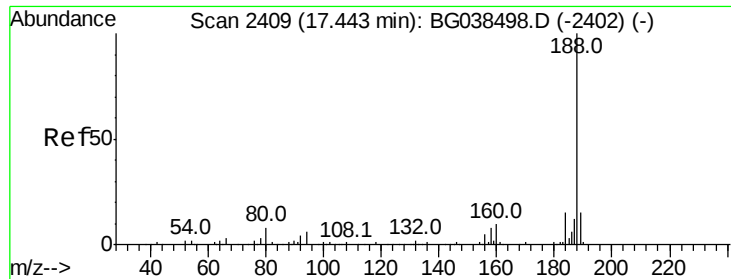
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#50  
Dimethylphthalate  
Concen: 2.649 ng  
RT: 14.14 min Scan# 1881  
Delta R.T. -0.01 min  
Lab File: BG038811.D  
Acq: 22 Dec 2018 10:38

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 163     | 100   |            |       |
| 194     | 5.2   | 3.7        | 5.5   |
| 164     | 9.7   | 8.6        | 12.8  |





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 17.45 min Scan# 2444

Delta R.T. 0.00 min

Lab File: BG038811.D

Acq: 22 Dec 2018 10:38

Instrument :

BNA\_G

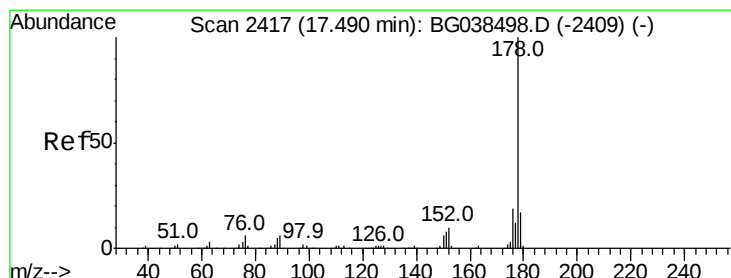
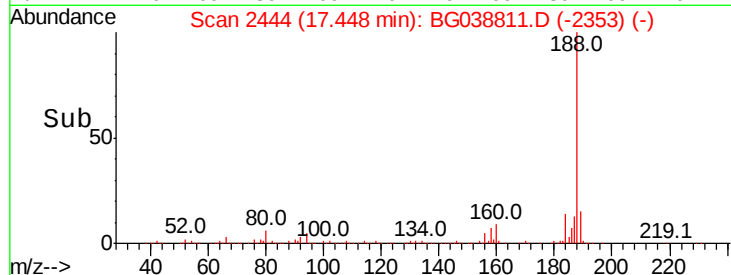
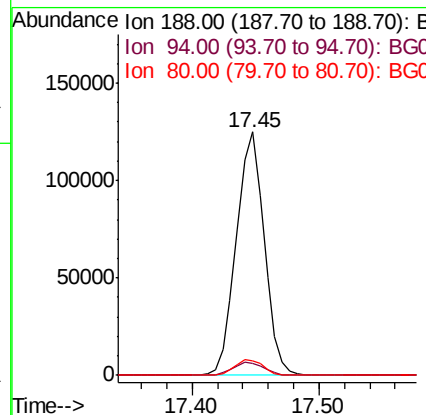
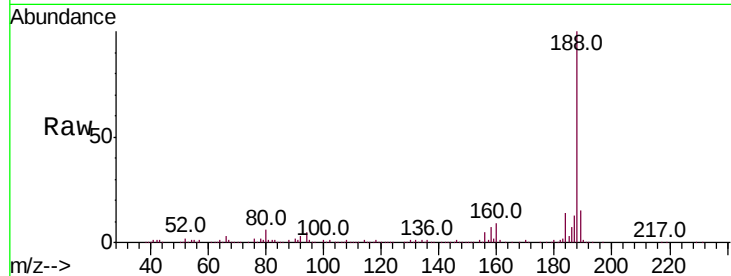
ClientSampleId :

P001-SS007-1824-01

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 188   | Resp: | 190486 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 5.1   | 5.1   | 7.7#   |
| 80        | 6.2   | 6.1   | 9.1    |

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#71

Phenanthrene

Concen: 6.508 ng

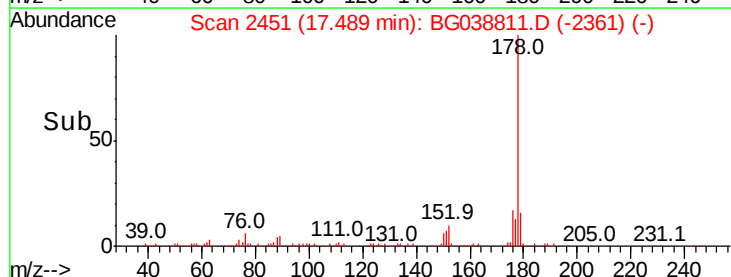
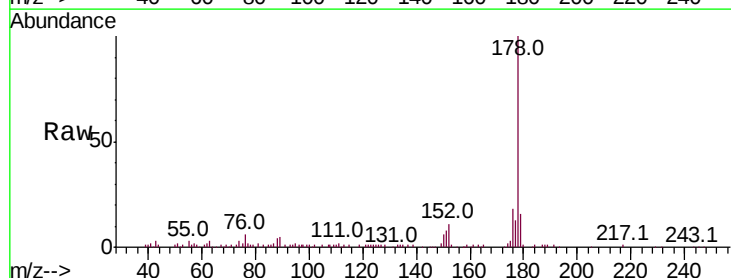
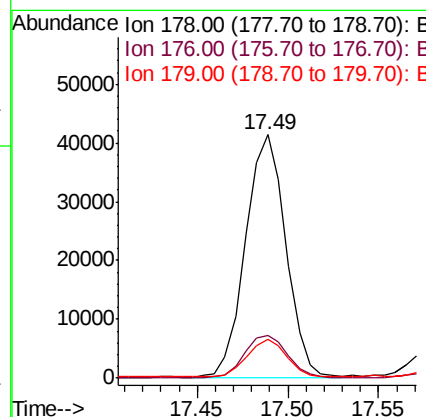
RT: 17.49 min Scan# 2451

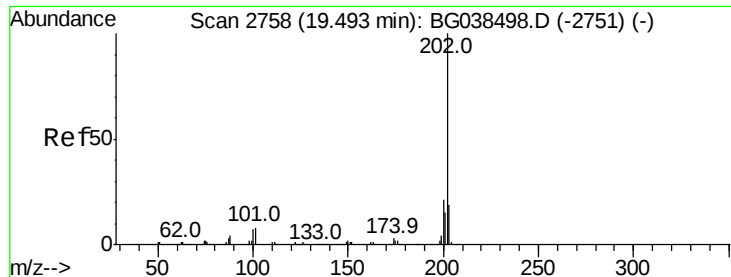
Delta R.T. -0.00 min

Lab File: BG038811.D

Acq: 22 Dec 2018 10:38

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 64286 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 176       | 17.7  | 15.1  | 22.7  |
| 179       | 16.0  | 13.2  | 19.8  |





#75

Fluoranthene

Concen: 4.136 ng

RT: 19.49 min Scan# 2792

Delta R.T. -0.00 min

Lab File: BG038811.D

Acq: 22 Dec 2018 10:38

Instrument :

BNA\_G

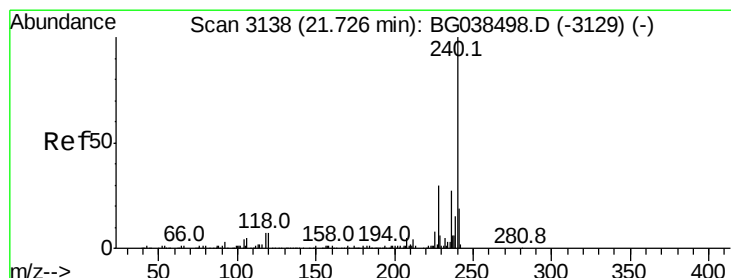
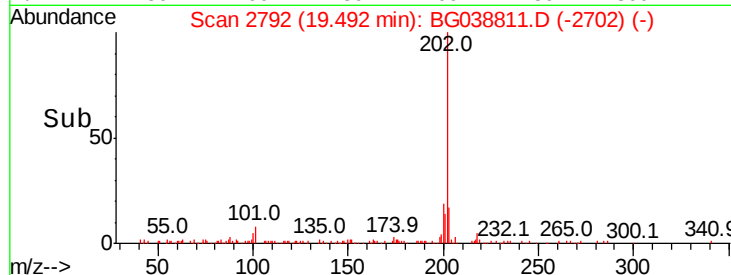
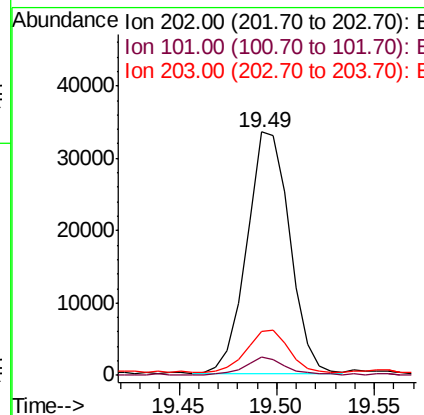
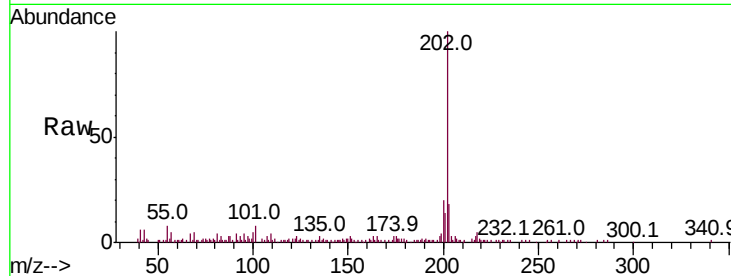
ClientSampleId :

P001-SS007-1824-01

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 7.7   | 0.0        | 28.1  |
| 203     | 17.8  | 0.0        | 39.0  |

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#76

Chrysene-d12

Concen: 20.000 ng

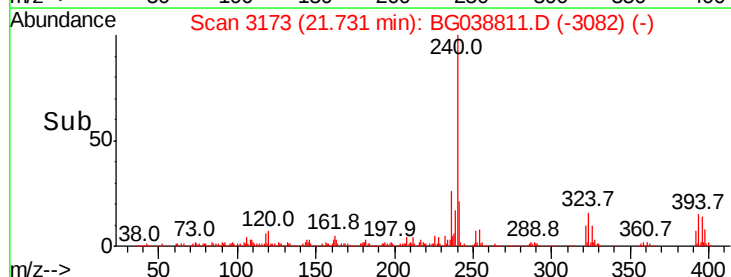
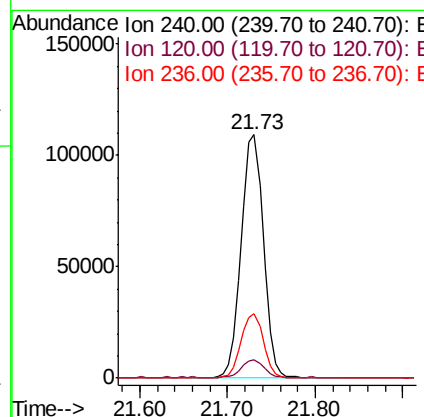
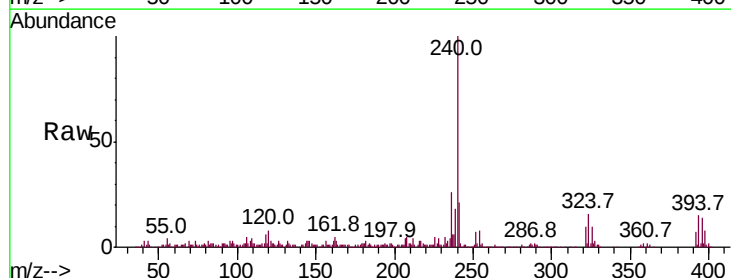
RT: 21.73 min Scan# 3173

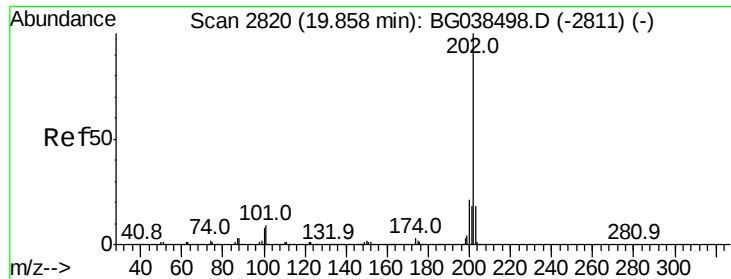
Delta R.T. 0.00 min

Lab File: BG038811.D

Acq: 22 Dec 2018 10:38

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 240     | 100   |            |       |
| 120     | 7.5   | 5.3        | 7.9   |
| 236     | 26.4  | 21.4       | 32.2  |





#78

Pvrene

Concen: 6.873 ng

RT: 19.86 min Scan# 2854

Delta R.T. -0.00 min

Lab File: BG038811.D

Acq: 22 Dec 2018 10:38

Instrument :

BNA\_G

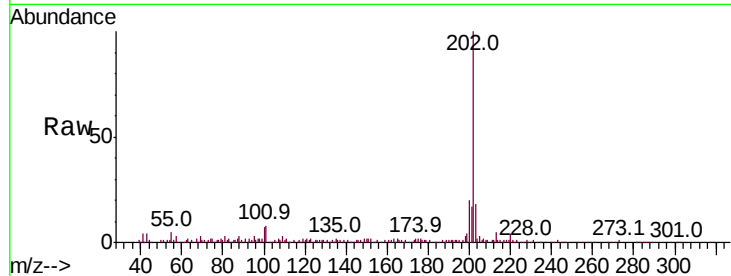
ClientSampleId :

P001-SS007-1824-01

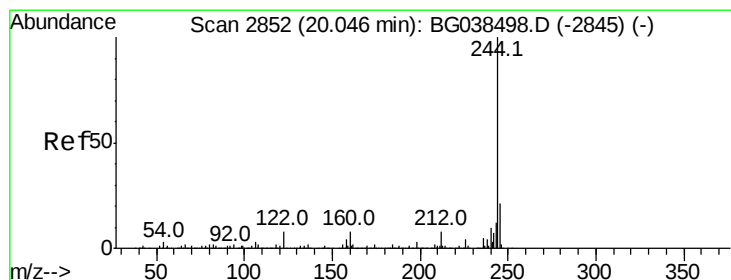
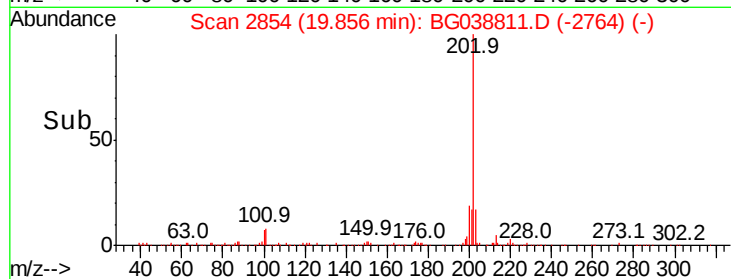
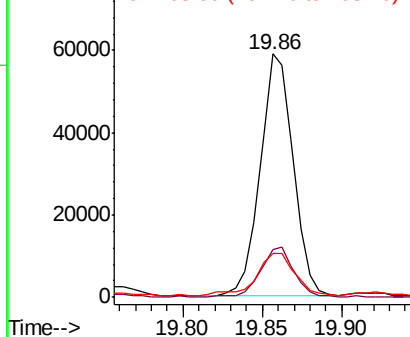
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 202   | Resp: | 85176 |
| Ion Ratio | Lower | Upper |       |
| 202       | 100   |       |       |
| 200       | 19.5  | 16.6  | 25.0  |
| 203       | 17.9  | 14.6  | 21.8  |

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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: 46.699 ng

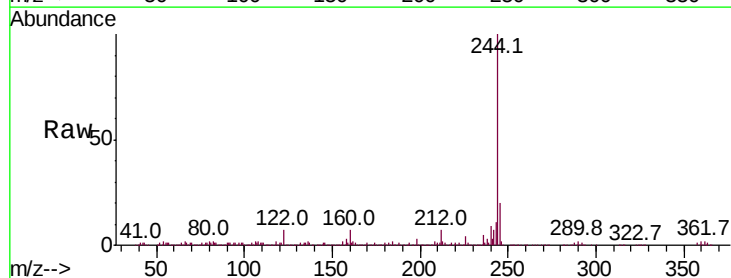
RT: 20.04 min Scan# 2886

Delta R.T. -0.00 min

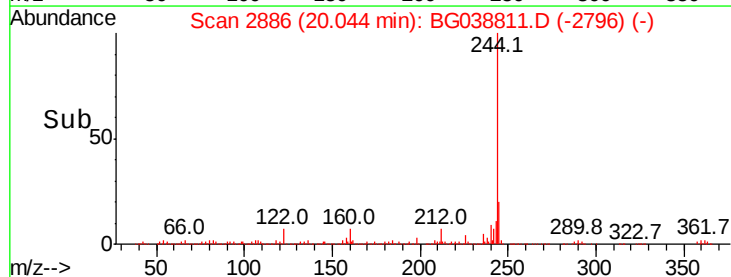
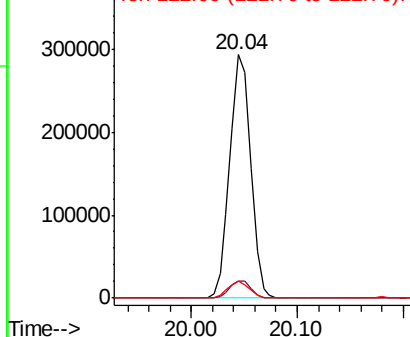
Lab File: BG038811.D

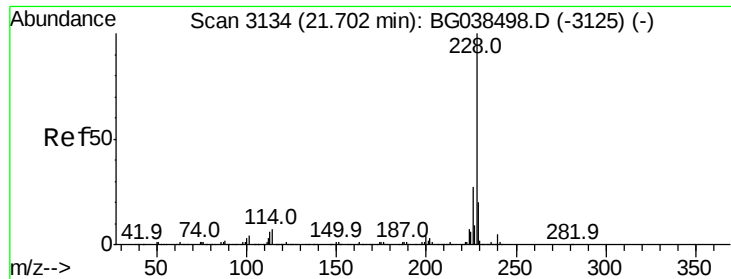
Acq: 22 Dec 2018 10:38

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 244   | Resp: | 402523 |
| Ion Ratio | Lower | Upper |        |
| 244       | 100   |       |        |
| 212       | 7.1   | 6.2   | 9.2    |
| 122       | 6.8   | 6.3   | 9.5    |



Abundance Ion 244.00 (243.70 to 244.70): E  
Ion 212.00 (211.70 to 212.70): E  
Ion 122.00 (121.70 to 122.70): E





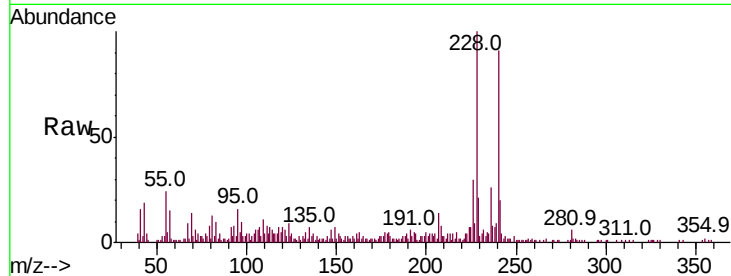
#81  
Benzo(a)anthracene  
Concen: 2.953 ng  
RT: 21.71 min Scan# 3169  
Delta R.T. 0.00 min  
Lab File: BG038811.D  
Acq: 22 Dec 2018 10:38

Instrument :  
BNA\_G  
ClientSampleId :  
P001-SS007-1824-01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.0  | 21.8  | 32.8  |
| 229     | 21.2  | 15.8  | 23.6  |

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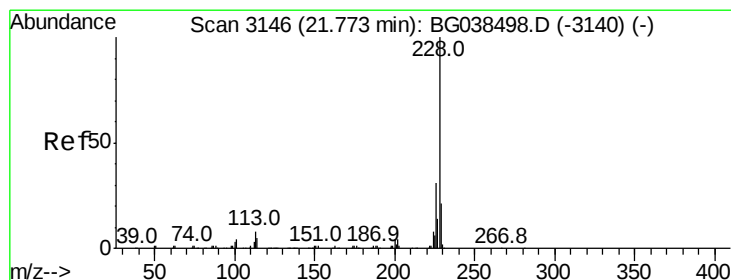
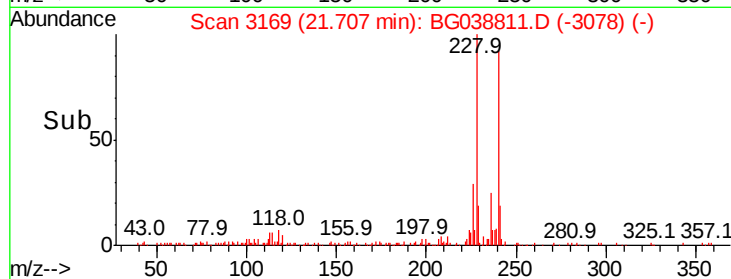
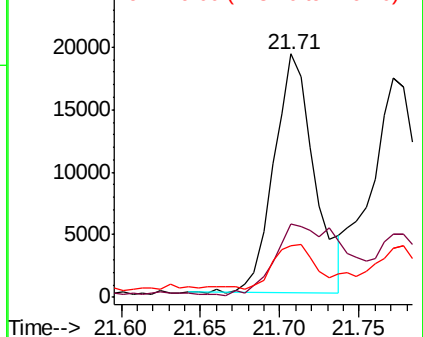


Abundance

Ion 228.00 (227.70 to 228.70): E

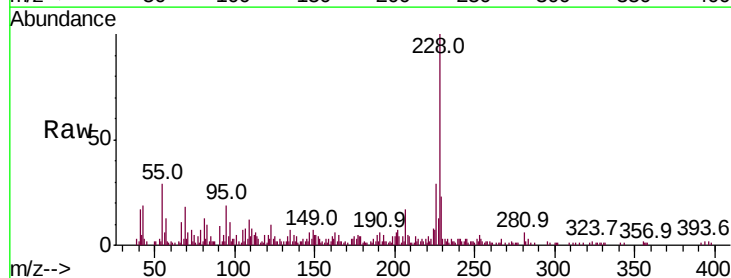
Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#83  
Chrysene  
Concen: 3.171 ng  
RT: 21.77 min Scan# 3180  
Delta R.T. -0.00 min  
Lab File: BG038811.D  
Acq: 22 Dec 2018 10:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.9  | 25.0  | 37.4  |
| 229     | 22.7  | 16.5  | 24.7  |

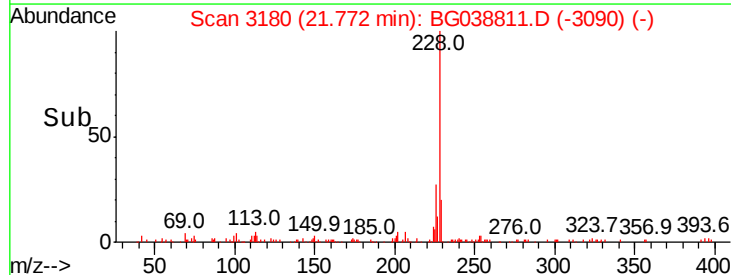
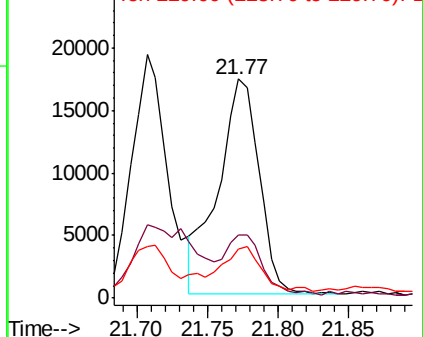


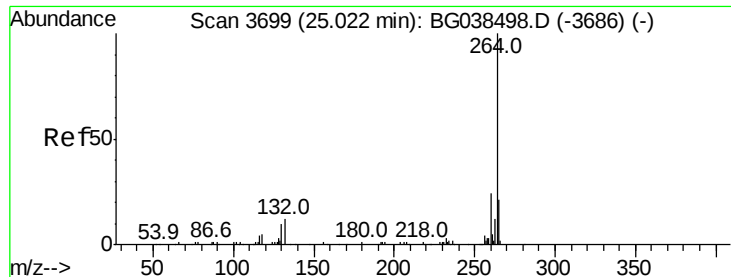
Abundance

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

Pervlene-d12

Concen: 20.000 ng

RT: 25.04 min Scan# 3736

Delta R.T. 0.02 min

Lab File: BG038811.D

Acq: 22 Dec 2018 10:38

Instrument :

BNA\_G

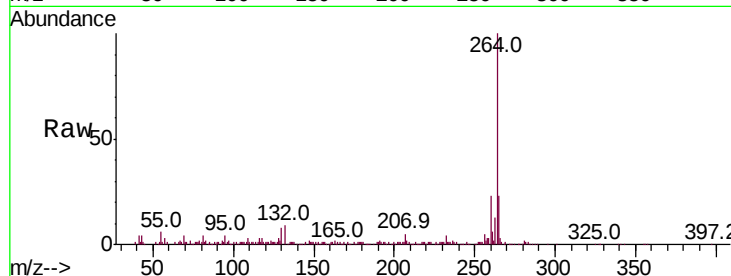
ClientSampleId :

P001-SS007-1824-01

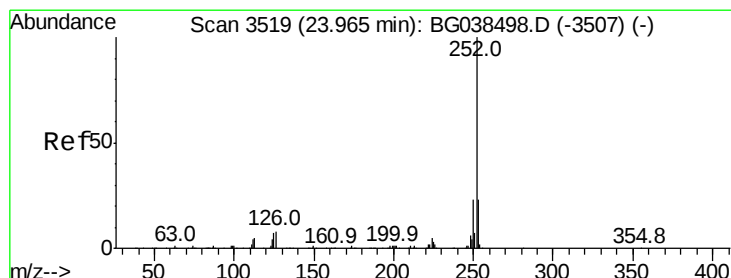
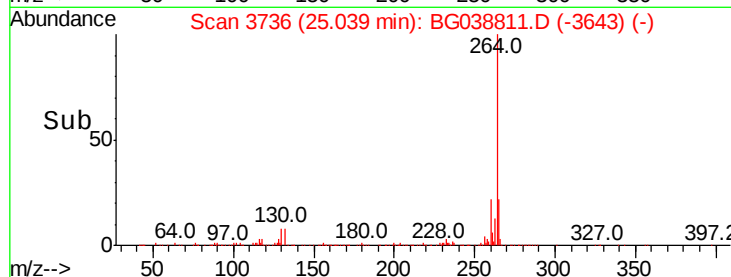
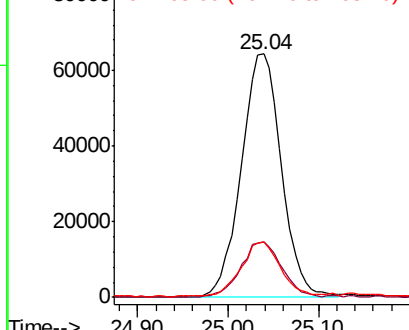
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 264   | Resp: | 197449 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 22.7  | 18.9  | 28.3   |
| 265       | 22.7  | 17.0  | 25.4   |

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Abundance Ion 264.00 (263.70 to 264.70): E  
Ion 260.00 (259.70 to 260.70): E  
Ion 265.00 (264.70 to 265.70): E



#88

Benzo(b)fluoranthene

Concen: 2.928 ng m

RT: 23.97 min Scan# 3554

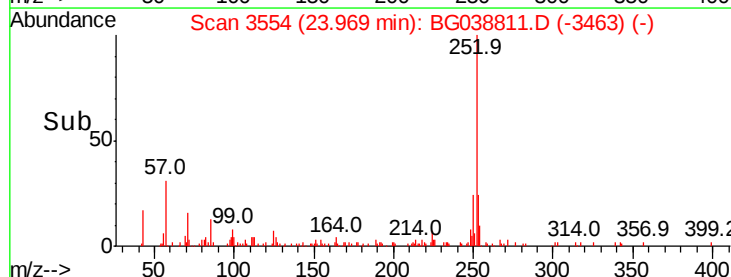
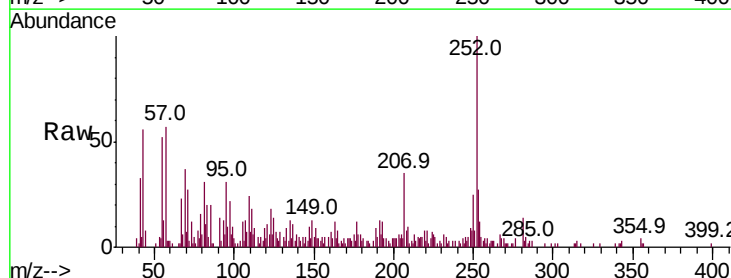
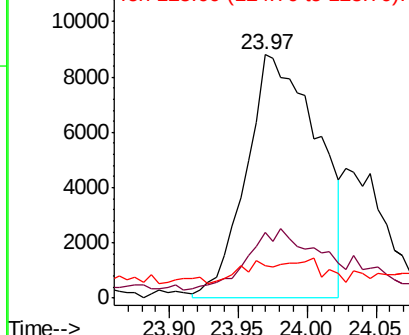
Delta R.T. 0.00 min

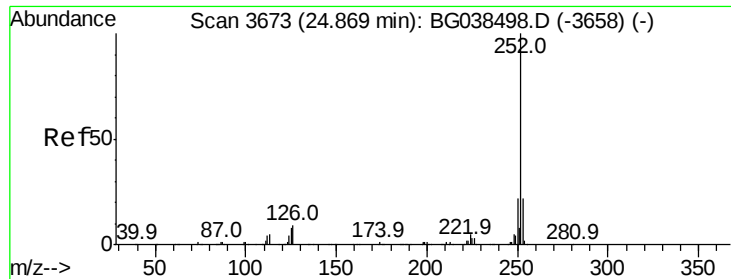
Lab File: BG038811.D

Acq: 22 Dec 2018 10:38

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 31739 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 27.2  | 18.1  | 27.1# |
| 125       | 13.5  | 5.5   | 8.3#  |

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





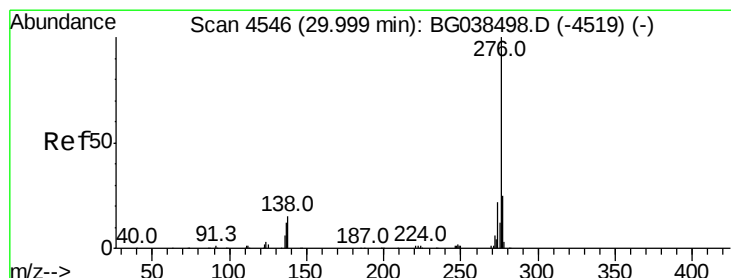
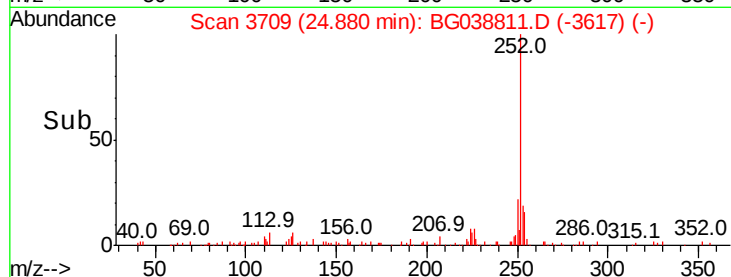
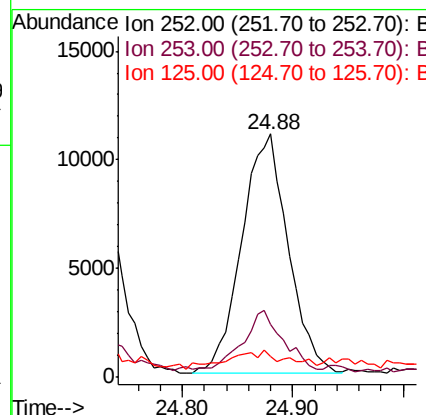
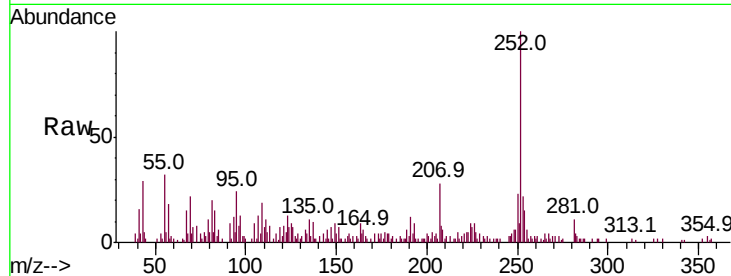
#90  
Benzo(a)pyrene  
Concen: 3.101 ng  
RT: 24.88 min Scan# 3709  
Delta R.T. 0.01 min  
Lab File: BG038811.D  
Acq: 22 Dec 2018 10:38

Instrument :  
BNA\_G  
ClientSampleId :  
P001-SS007-1824-01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.9  | 17.4  | 26.0  |
| 125     | 8.6   | 6.4   | 9.6   |

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#92  
Benzo(g,h,i)perylene  
Concen: 2.593 ng  
RT: 30.02 min Scan# 4583  
Delta R.T. 0.02 min  
Lab File: BG038811.D  
Acq: 22 Dec 2018 10:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 25.6  | 19.8  | 29.8  |
| 138     | 17.5  | 11.8  | 17.6  |

