

Data Path : Z:\HPCHEM1\BNA F\DATA\BF071917\  
 Data File : BF096890.D  
 Acq On : 20 Jul 2017 00:40  
 Operator : SJ/JU  
 Sample : I4258-07  
 Misc :  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 OK-02-071817-C

Manual Integrations  
 APPROVED

Sohil  
 7/20/2017 3:05:18 PM

Quant Time: Jul 20 06:05:44 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF071317.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 18 13:33:22 2017  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.59  | 152  | 111267   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8          | 7.87  | 136  | 424830   | 20.00 | ng    | -0.01    |
| 38) Acenaphthene-d10        | 9.62  | 164  | 159081   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10        | 11.10 | 188  | 237116   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12            | 13.73 | 240  | 197785   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12            | 15.10 | 264  | 131160   | 20.00 | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.19  | 112  | 570674   | 77.12 | ng    | 0.00     |
| 7) Phenol-d6                | 6.25  | 99   | 765512   | 86.20 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.15  | 82   | 418388   | 61.00 | ng    | -0.02    |
| 41) 2,4,6-Tribromophenol    | 10.41 | 330  | 108774   | 80.11 | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 8.95  | 172  | 671851   | 66.73 | ng    | -0.01    |
| 78) Terphenyl-d14           | 12.68 | 244  | 444142   | 38.94 | ng    | -0.01    |
| Target Compounds            |       |      |          |       |       |          |
| 10) Phenol                  | 6.25  | 94   | 31696    | 3.157 | ng    | 96       |
| 49) Dimethylphthalate       | 9.35  | 163  | 101169   | 8.446 | ng    | 100      |
| 70) Phenanthrene            | 11.12 | 178  | 90502    | 7.020 | ng    | 99       |
| 74) Fluoranthene            | 12.30 | 202  | 111838   | 9.063 | ng    | 97       |
| 77) Pyrene                  | 12.53 | 202  | 102646   | 5.718 | ng    | 99       |
| 80) Benzo(a)anthracene      | 13.72 | 228  | 47102    | 3.822 | ng    | 96       |
| 82) Chrysene                | 13.75 | 228  | 43917    | 3.620 | ng    | 95       |
| 85) Indeno(1,2,3-cd)pyrene  | 16.39 | 276  | 12926m   | 4.436 | ng    |          |
| 87) Benzo(b)fluoranthene    | 14.73 | 252  | 42891m   | 5.422 | ng    |          |
| 88) Benzo(k)fluoranthene    | 14.74 | 252  | 17397m   | 2.322 | ng    |          |
| 89) Benzo(a)pyrene          | 15.04 | 252  | 28649    | 3.949 | ng    | # 78     |
| 91) Benzo(a,h,i)perylene    | 16.78 | 276  | 14483    | 2.026 | ng    | # 87     |

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

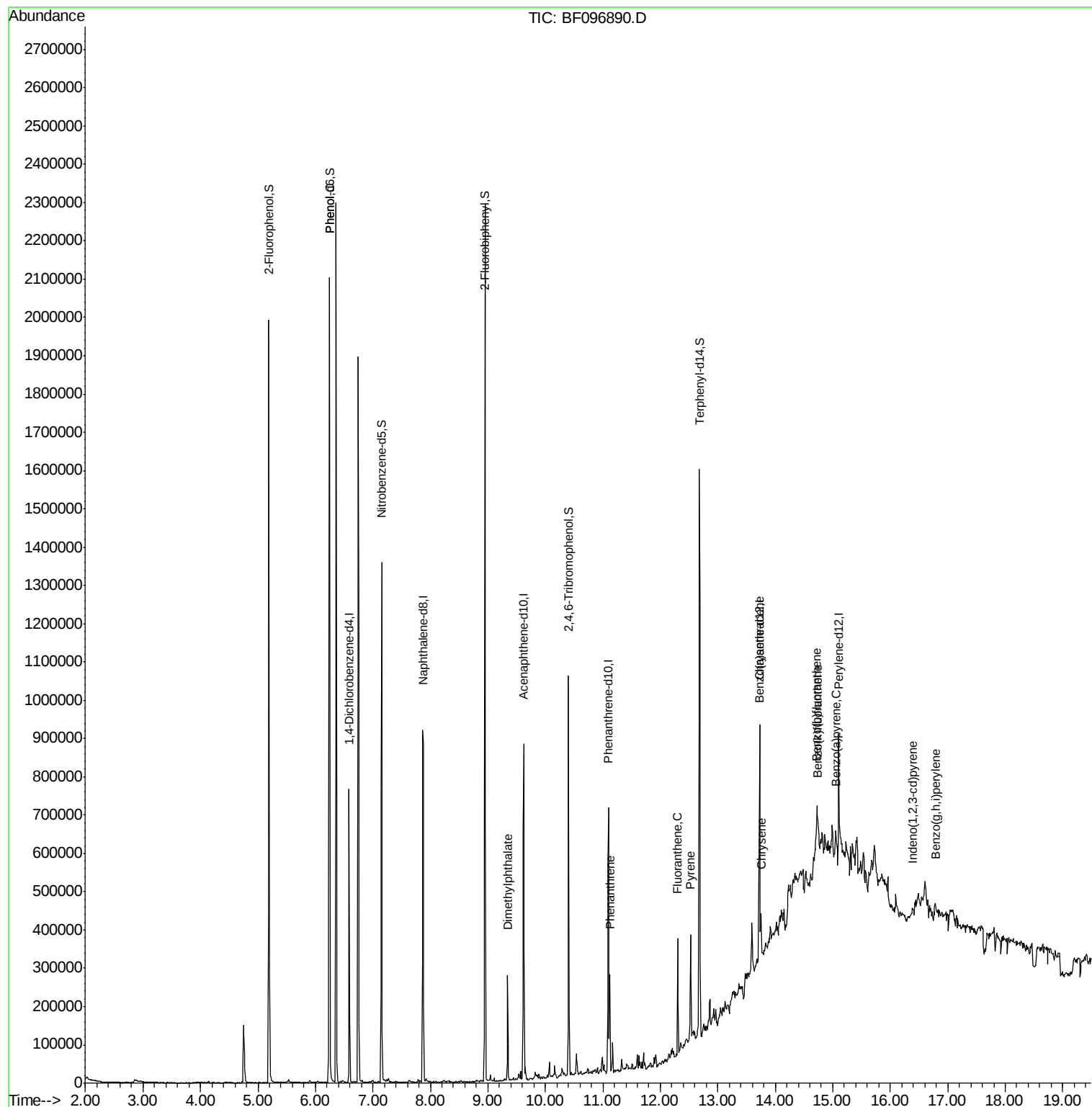
Data Path : Z:\HPCHEM1\BNA F\DATA\BF071917\  
Data File : BF096890.D  
Acq On : 20 Jul 2017 00:40  
Operator : SJ/JU  
Sample : I4258-07  
Misc :  
ALS Vial : 23 Sample Multiplier: 1

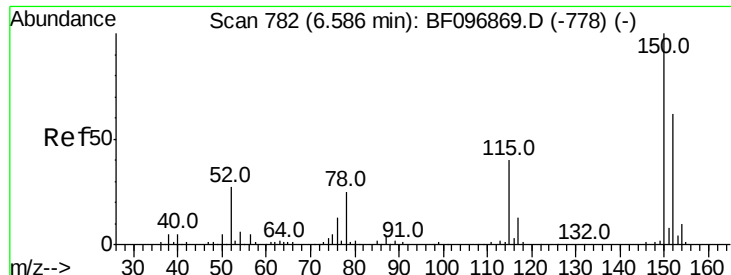
Instrument :  
BNA\_F  
ClientSampleId :  
OK-02-071817-C

Manual Integrations  
APPROVED

Sohil  
7/20/2017 3:05:18 PM

Quant Time: Jul 20 06:05:44 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF071317.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jul 18 13:33:22 2017  
Response via : Initial Calibration





#1

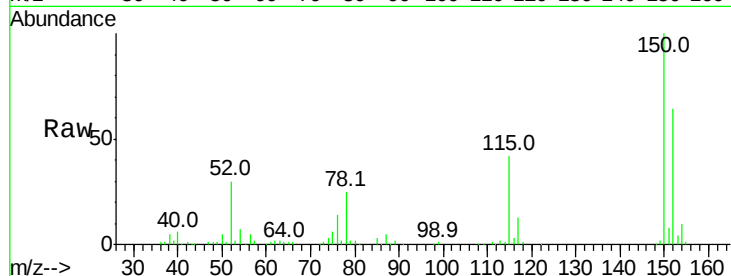
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.59 min Scan# 782  
Delta R.T. -0.01 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

Instrument :  
BNA\_F  
ClientSampleId :  
OK-02-071817-C

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 156.6 | 126.2 | 189.2 |
| 115     | 65.8  | 52.2  | 78.2  |

Manual Integrations  
APPROVED

Sohil  
7/20/2017 3:05:18 PM

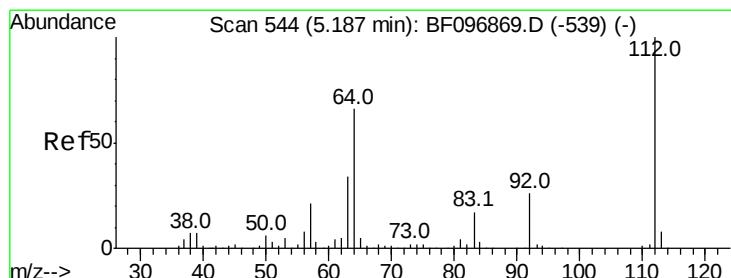
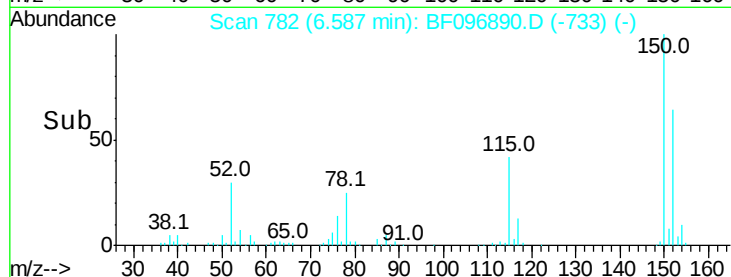
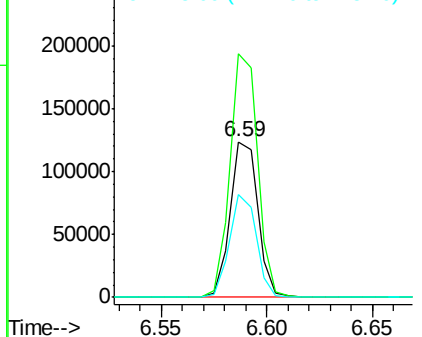


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

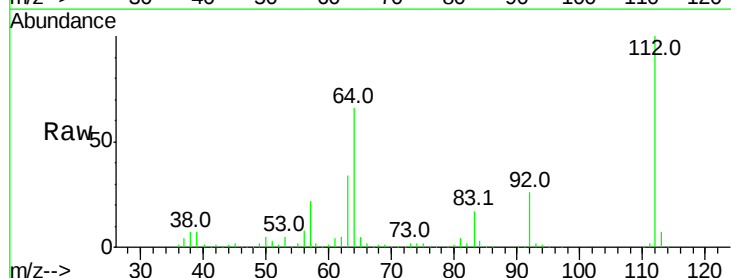
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 77.117 ng  
RT: 5.19 min Scan# 545  
Delta R.T. -0.01 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 66.3  | 46.0  | 69.0  |
| 63      | 33.6  | 23.4  | 35.0  |

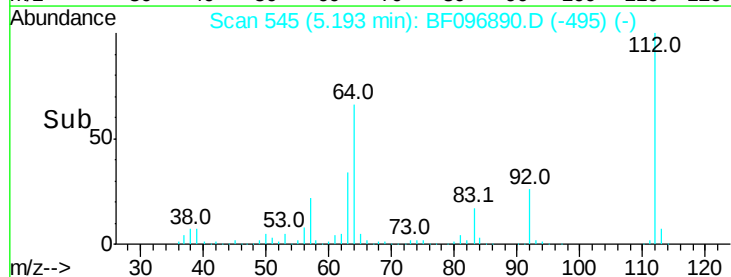
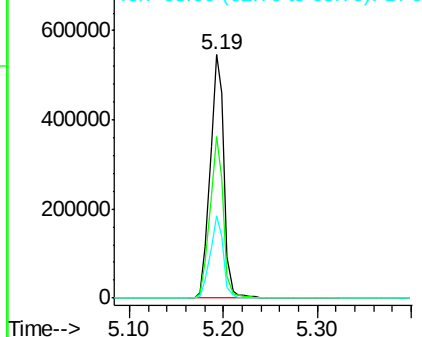


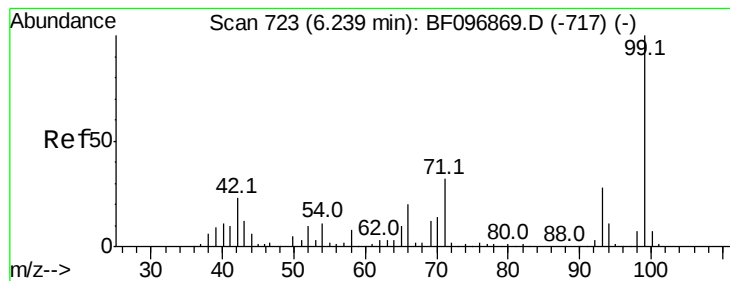
Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF0

Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 86.203 ng

RT: 6.25 min Scan# 724

Delta R.T. -0.01 min

Lab File: BF096890.D

Acq: 20 Jul 2017 00:40

Instrument :

BNA\_F

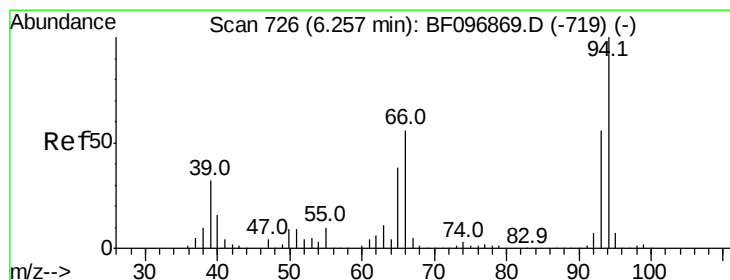
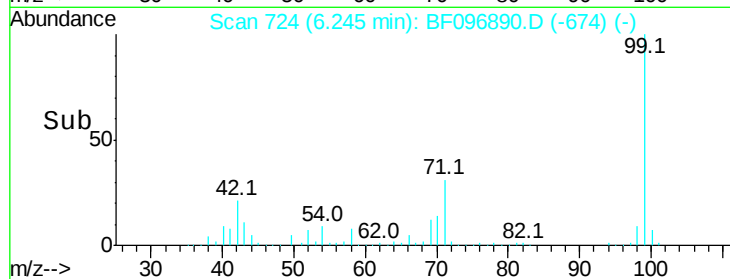
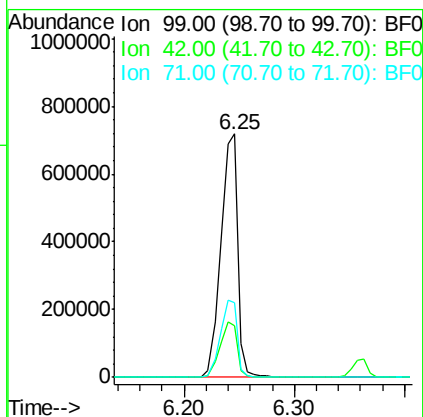
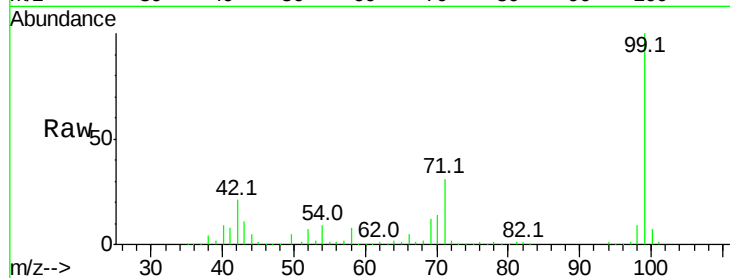
ClientSampleId :

OK-02-071817-C

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 765512 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 21.2  | 13.5  | 20.3#  |
| 71        | 30.7  | 24.5  | 36.7   |

Manual Integrations  
APPROVED

Sohil  
7/20/2017 3:05:18 PM



#10

Phenol

Concen: 3.157 ng

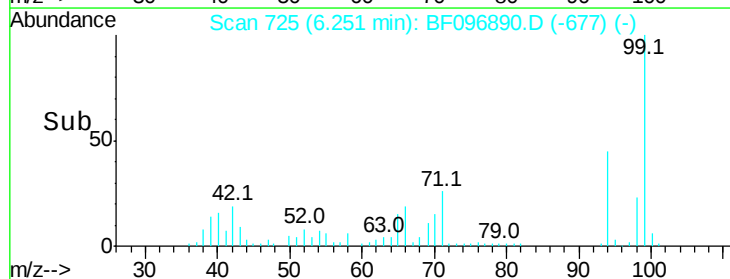
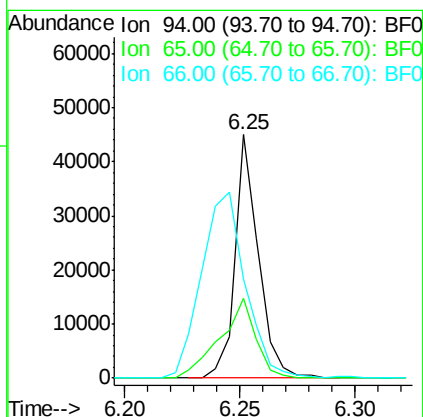
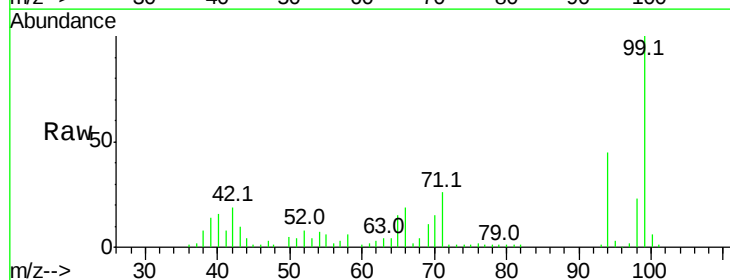
RT: 6.25 min Scan# 725

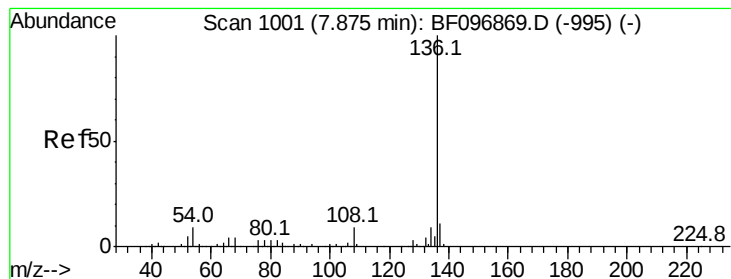
Delta R.T. -0.02 min

Lab File: BF096890.D

Acq: 20 Jul 2017 00:40

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 94    | Resp: | 31696 |
| Ion Ratio | Lower | Upper |       |
| 94        | 100   |       |       |
| 65        | 33.0  | 9.9   | 49.9  |
| 66        | 40.8  | 23.1  | 63.1  |





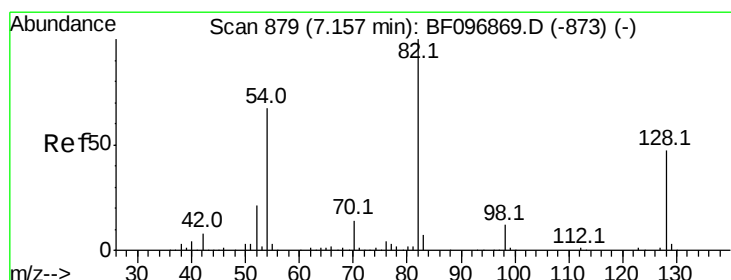
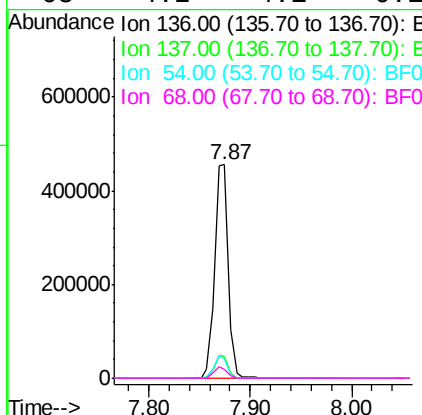
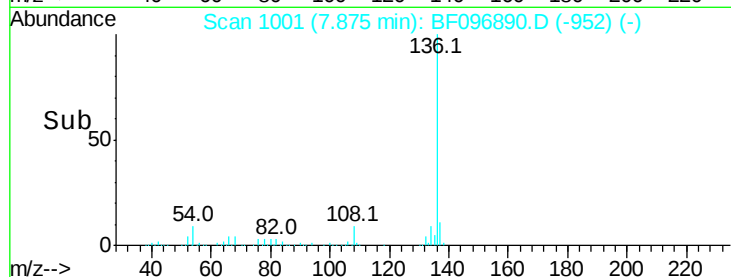
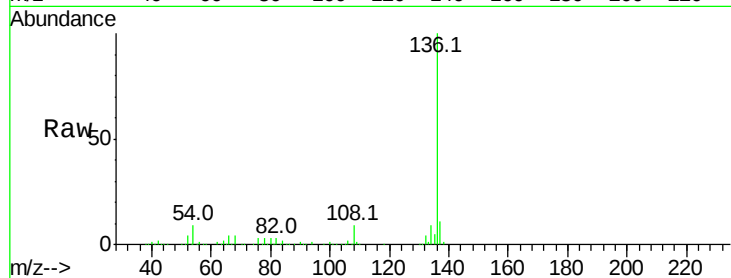
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 7.87 min Scan# 1001  
Delta R.T. -0.01 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

Instrument :  
BNA\_F  
ClientSampleId :  
OK-02-071817-C

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 136     | 100   |      |       |       |
| 137     | 10.5  | 8.5  | 12.7  |       |
| 54      | 9.2   | 4.9  | 7.3#  |       |
| 68      | 4.2   | 4.1  | 6.1   |       |

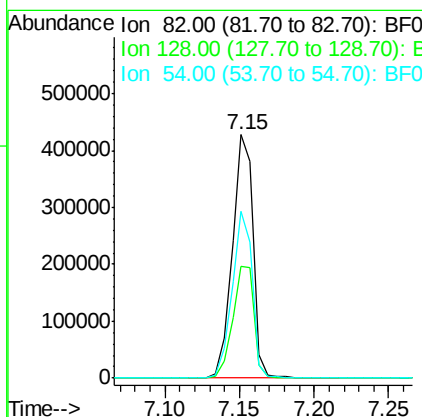
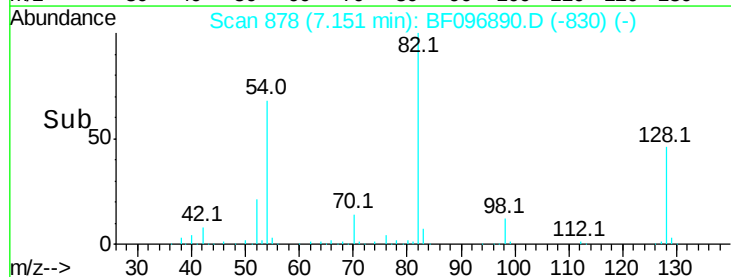
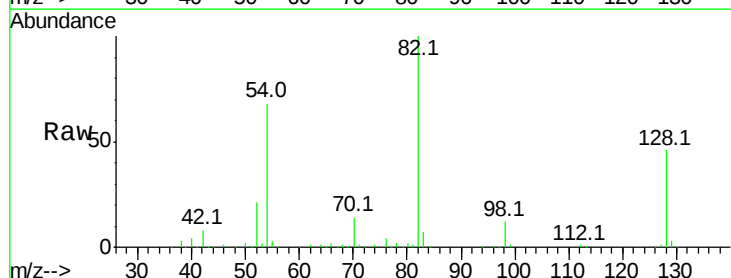
Manual Integrations  
APPROVED

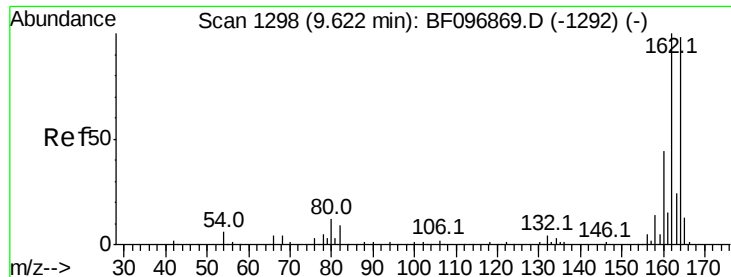
Sohil  
7/20/2017 3:05:18 PM



#23  
Nitrobenzene-d5  
Concen: 61.002 ng  
RT: 7.15 min Scan# 878  
Delta R.T. -0.02 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 82      | 100   |      |       |       |
| 128     | 46.1  | 34.0 | 51.0  |       |
| 54      | 68.4  | 42.2 | 63.2# |       |





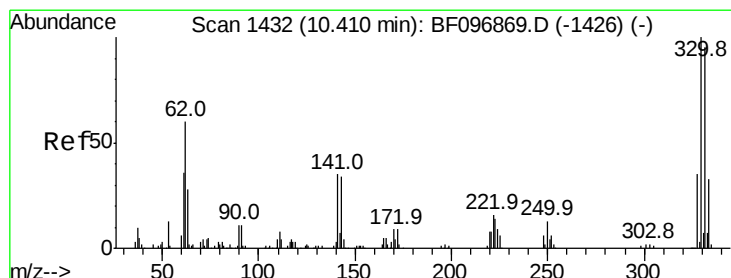
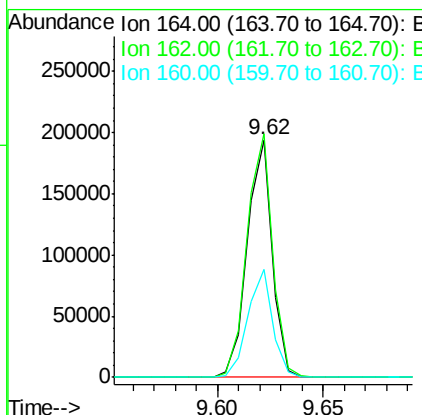
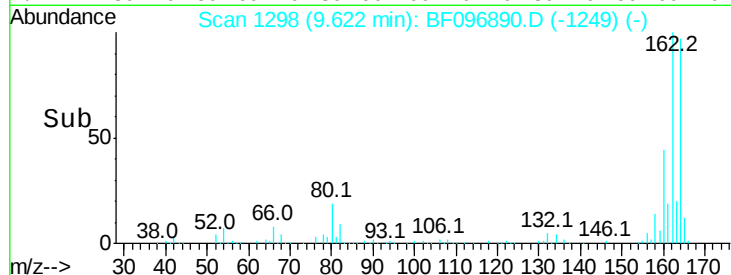
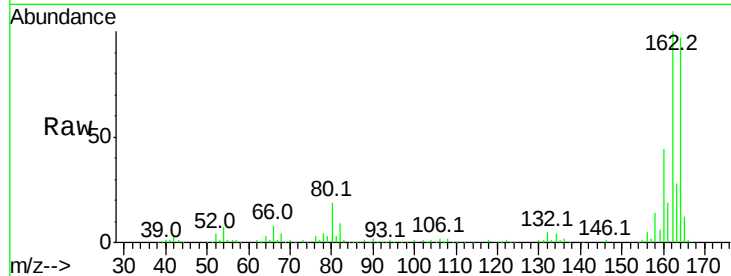
#38  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.62 min Scan# 1298  
Delta R.T. -0.01 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

Instrument :  
BNA\_F  
ClientSampleId :  
OK-02-071817-C

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 164     | 100   | 159081 |       |       |
| 162     | 102.6 | 82.6   | 123.8 |       |
| 160     | 45.6  | 36.2   | 54.2  |       |

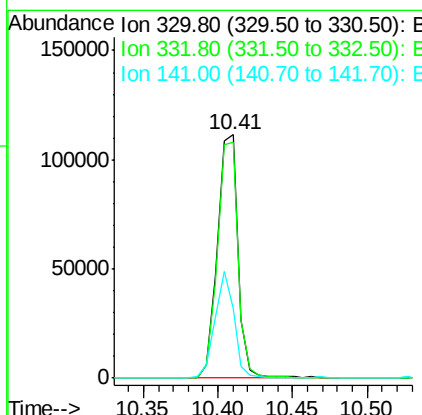
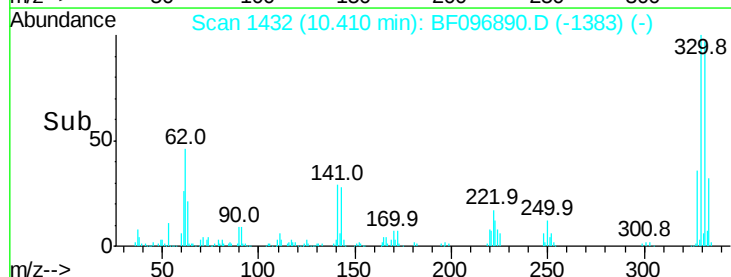
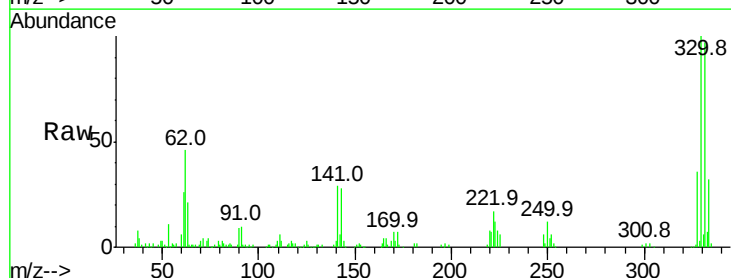
Manual Integrations  
APPROVED

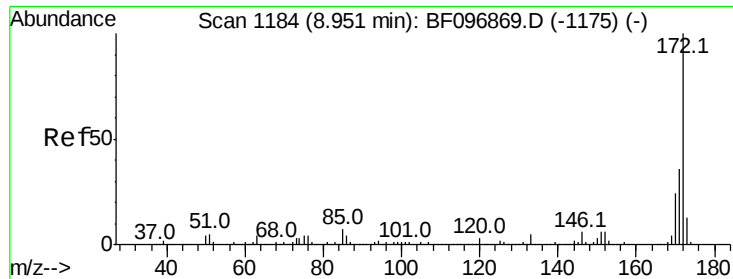
Sohil  
7/20/2017 3:05:18 PM



#41  
2,4,6-Tribromophenol  
Concen: 80.105 ng  
RT: 10.41 min Scan# 1432  
Delta R.T. -0.01 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 108774 |       |       |
| 332     | 97.2  | 76.6   | 115.0 |       |
| 141     | 40.2  | 31.4   | 47.2  |       |





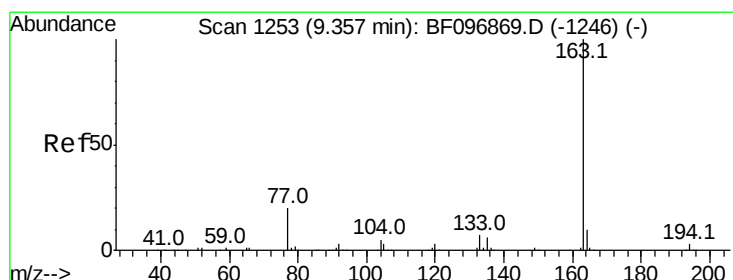
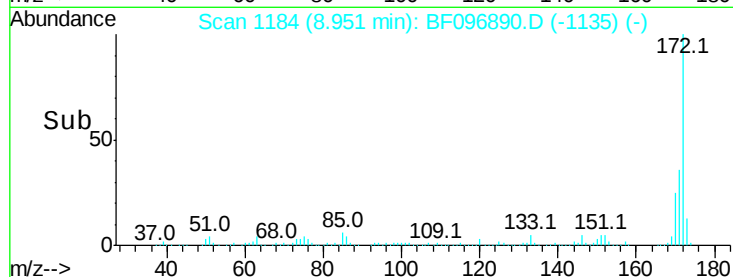
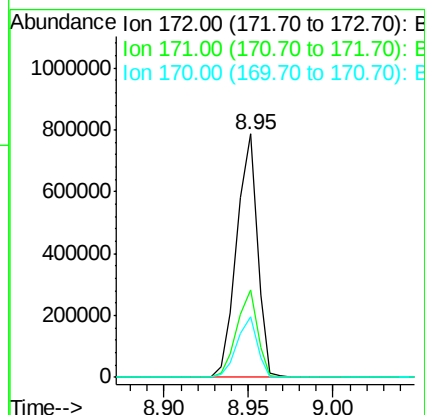
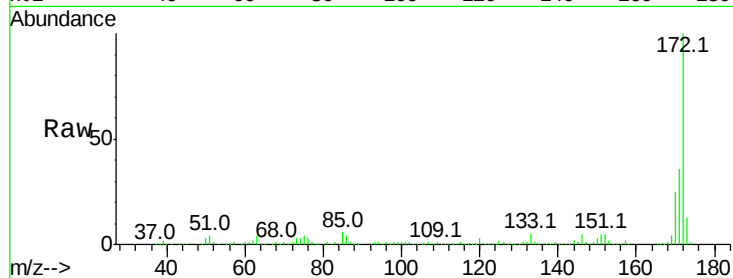
#44  
2-Fluorobiphenyl  
Concen: 66.725 ng  
RT: 8.95 min Scan# 1184  
Delta R.T. -0.01 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

Instrument :  
BNA\_F  
ClientSampleId :  
OK-02-071817-C

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 172     | 100   | 671851 |       |       |
| 171     | 35.9  |        | 29.6  | 44.4  |
| 170     | 24.6  |        | 19.8  | 29.8  |

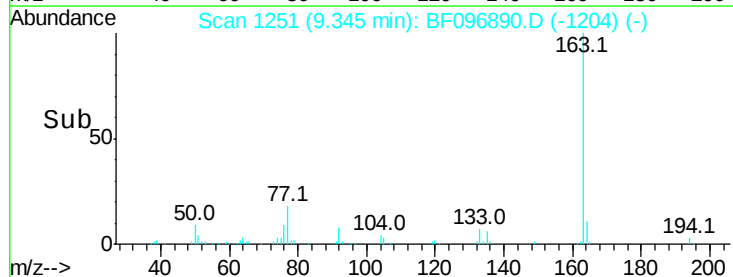
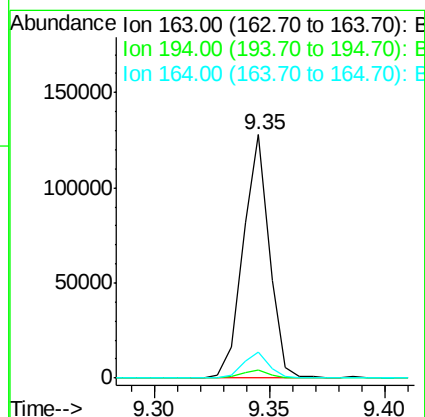
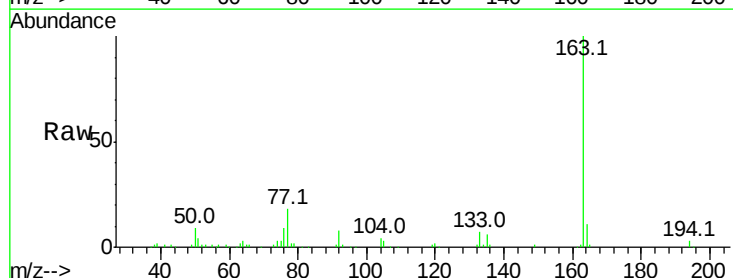
Manual Integrations  
APPROVED

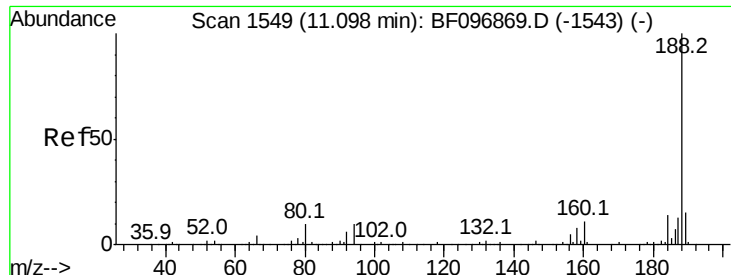
Sohil  
7/20/2017 3:05:18 PM



#49  
Dimethylphthalate  
Concen: 8.446 ng  
RT: 9.35 min Scan# 1251  
Delta R.T. -0.02 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 163     | 100   | 101169 |       |       |
| 194     | 3.2   |        | 2.6   | 4.0   |
| 164     | 10.7  |        | 8.4   | 12.6  |





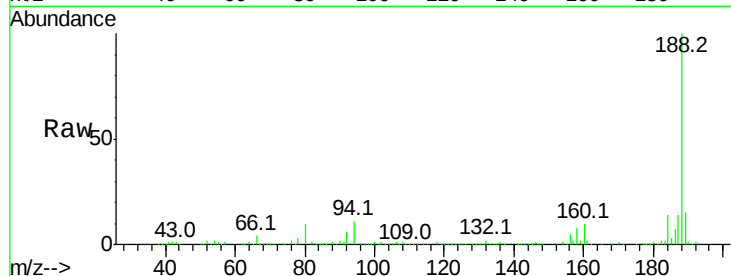
#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.10 min Scan# 1549  
Delta R.T. -0.01 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

Instrument :  
BNA\_F  
ClientSampleId :  
OK-02-071817-C

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 188     | 100   |            |       |
| 94      | 10.8  | 9.4        | 14.2  |
| 80      | 9.6   | 10.2       | 15.2# |

Manual Integrations  
APPROVED

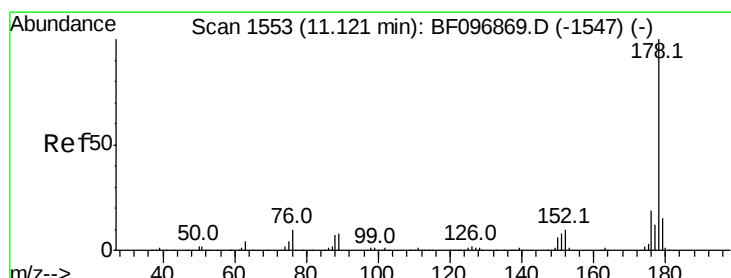
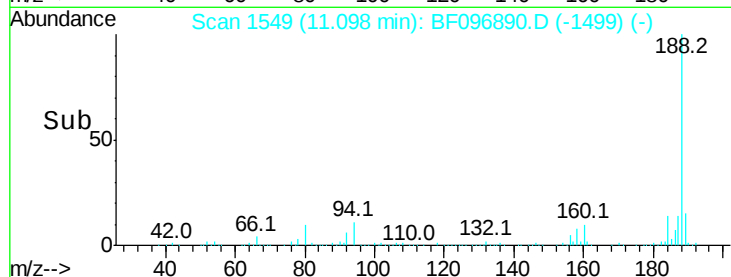
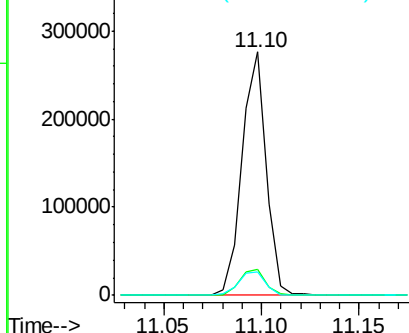
Sohil  
7/20/2017 3:05:18 PM



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0



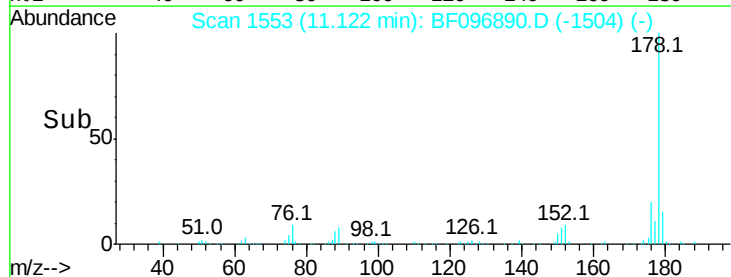
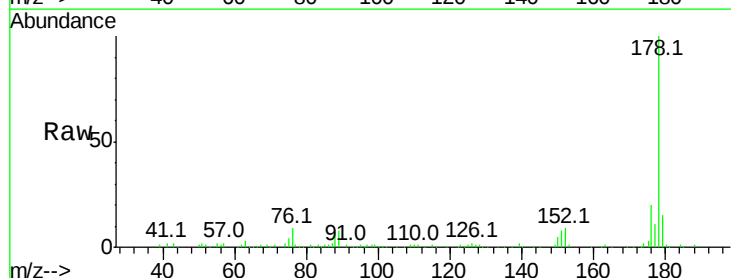
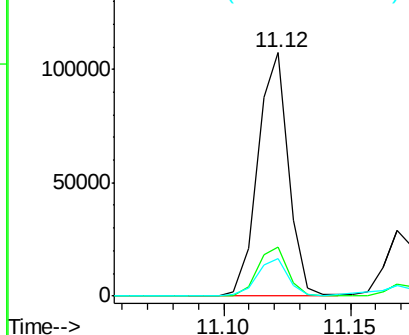
#70  
Phenanthrene  
Concen: 7.020 ng  
RT: 11.12 min Scan# 1553  
Delta R.T. -0.01 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

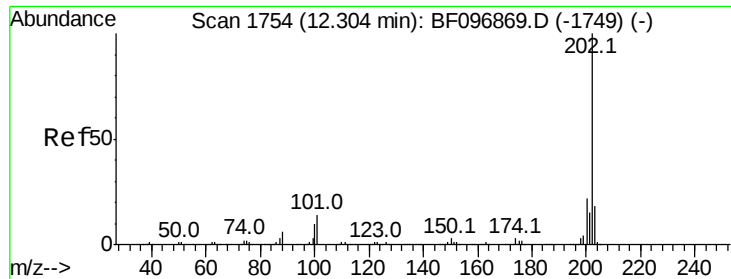
| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 178     | 100   |            |       |
| 176     | 20.0  | 16.2       | 24.4  |
| 179     | 15.2  | 12.6       | 19.0  |

Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#74

Fluoranthene

Concen: 9.063 ng

RT: 12.30 min Scan# 1754

Delta R.T. -0.01 min

Lab File: BF096890.D

Acq: 20 Jul 2017 00:40

Instrument :

BNA\_F

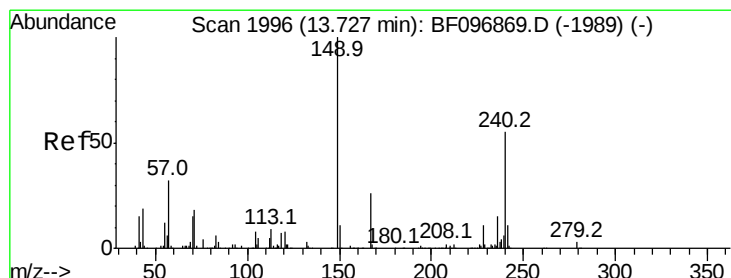
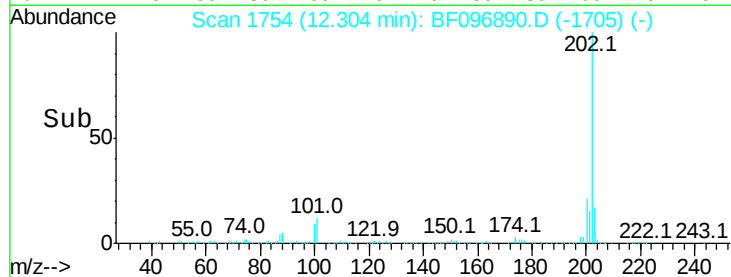
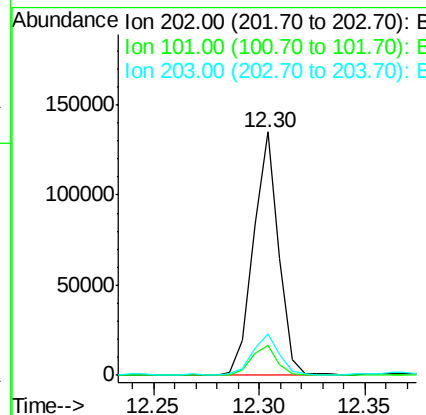
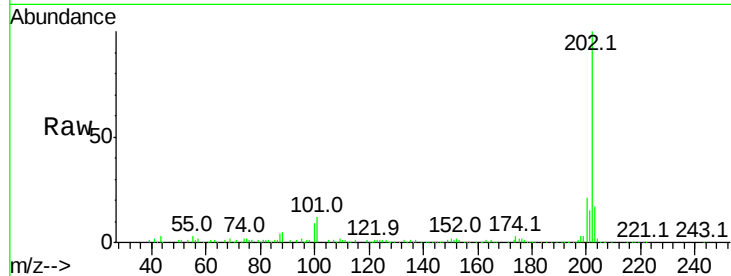
ClientSampleId :

OK-02-071817-C

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 12.1  | 0.0        | 33.2  |
| 203     | 16.9  | 0.0        | 38.1  |

Manual Integrations  
APPROVED

Sohil  
7/20/2017 3:05:18 PM



#75

Chrysene-d12

Concen: 20.000 ng

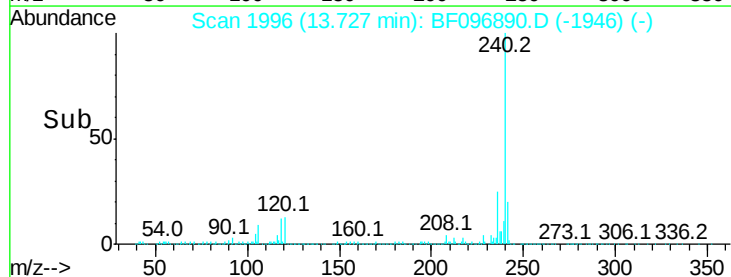
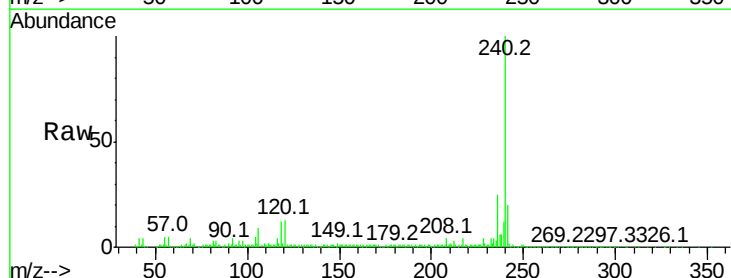
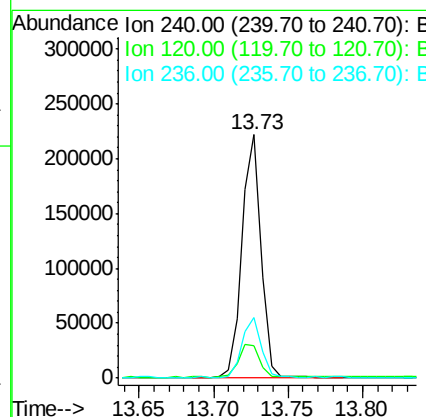
RT: 13.73 min Scan# 1996

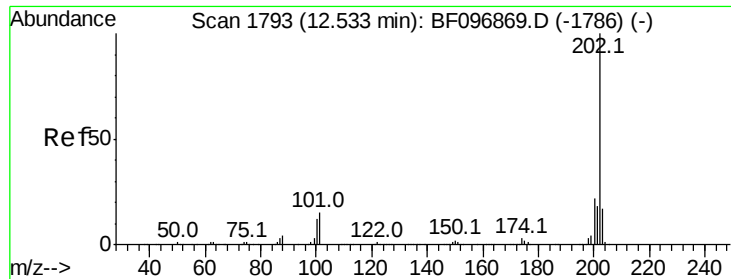
Delta R.T. -0.01 min

Lab File: BF096890.D

Acq: 20 Jul 2017 00:40

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 240     | 100   |            |       |
| 120     | 13.5  | 5.8        | 8.8#  |
| 236     | 25.0  | 20.5       | 30.7  |





#77

Pvrene

Concen: 5.718 ng

RT: 12.53 min Scan# 1792

Delta R.T. -0.01 min

Lab File: BF096890.D

Acq: 20 Jul 2017 00:40

Instrument :

BNA\_F

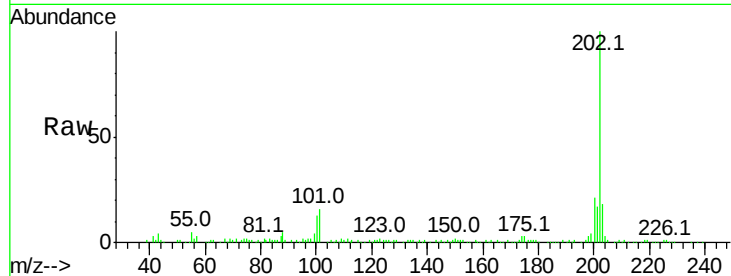
ClientSampleId :

OK-02-071817-C

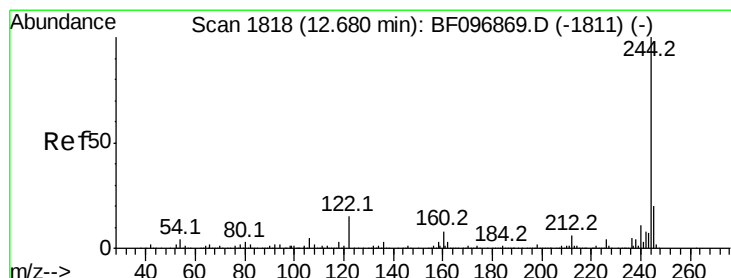
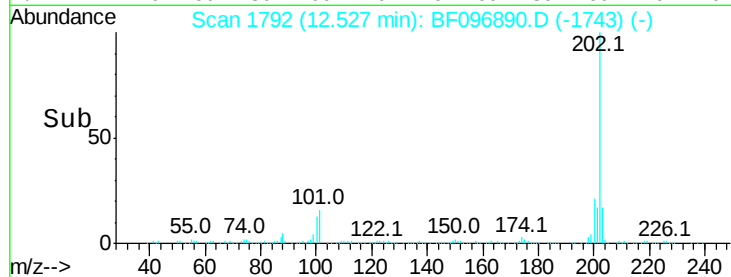
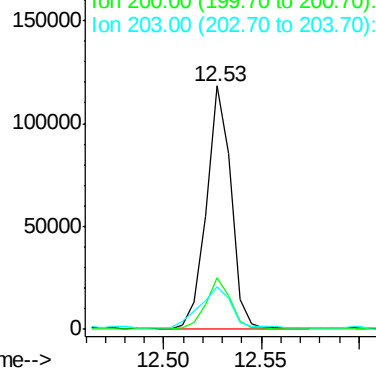
|           |      |       |        |
|-----------|------|-------|--------|
| Tot Ion:  | 202  | Resp: | 102646 |
| Ion Ratio |      | Lower | Upper  |
| 202       | 100  |       |        |
| 200       | 21.1 | 17.6  | 26.4   |
| 203       | 17.7 | 14.4  | 21.6   |

Manual Integrations  
APPROVED

Sohil  
7/20/2017 3:05:18 PM



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



#78

Terphenyl-d14

Concen: 38.944 ng

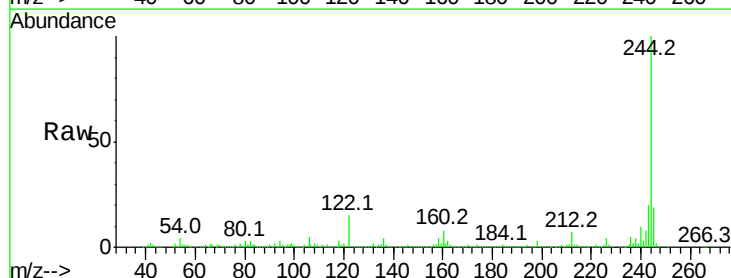
RT: 12.68 min Scan# 1818

Delta R.T. -0.01 min

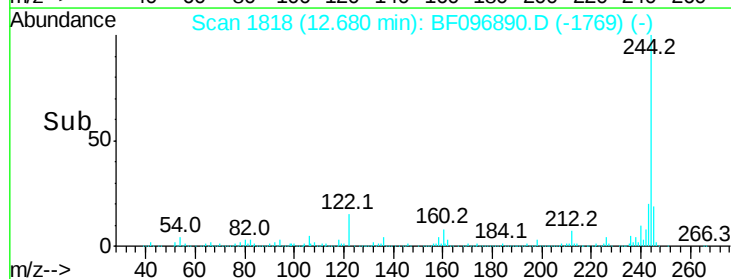
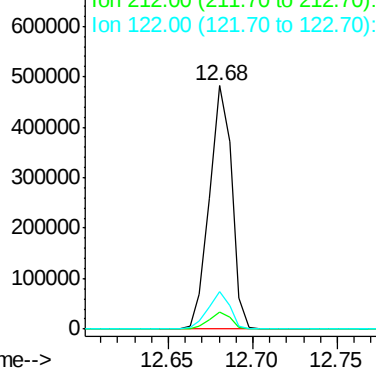
Lab File: BF096890.D

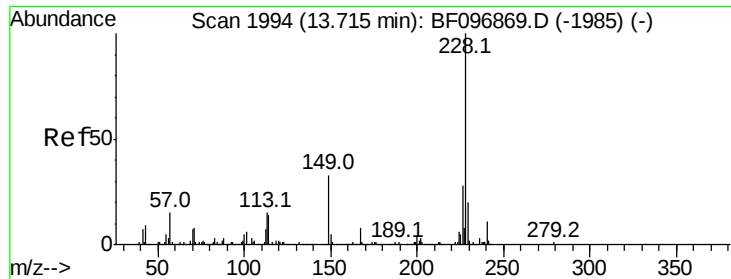
Acq: 20 Jul 2017 00:40

|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 244  | Resp: | 444142 |
| Ion Ratio |      | Lower | Upper  |
| 244       | 100  |       |        |
| 212       | 6.8  | 6.0   | 9.0    |
| 122       | 15.2 | 10.3  | 15.5   |



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





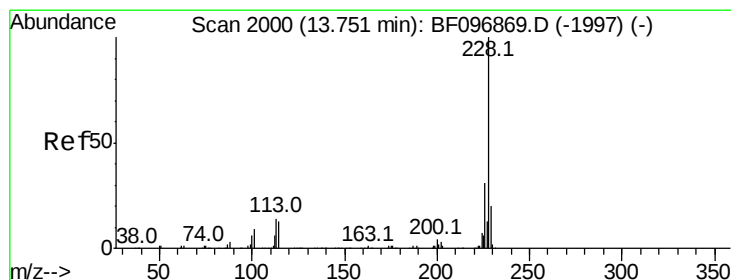
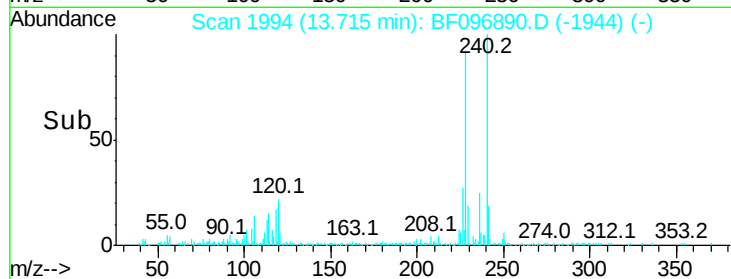
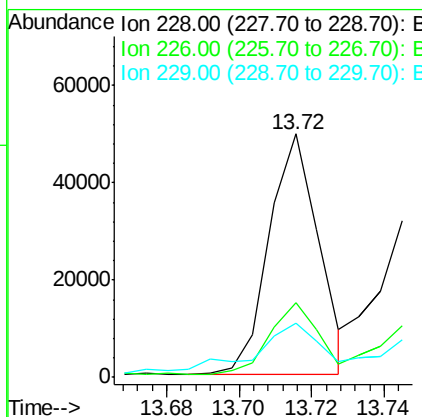
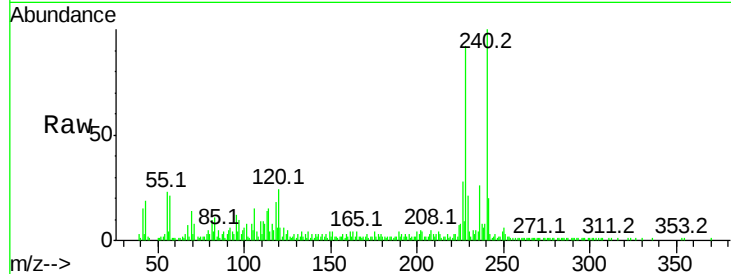
#80  
Benzo(a)anthracene  
Concen: 3.822 ng  
RT: 13.72 min Scan# 1994  
Delta R.T. -0.01 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

Instrument :  
BNA\_F  
ClientSampleId :  
OK-02-071817-C

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.5  | 22.6  | 33.8  |
| 229     | 22.4  | 16.3  | 24.5  |

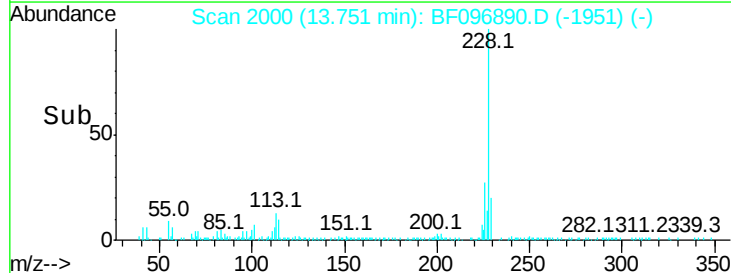
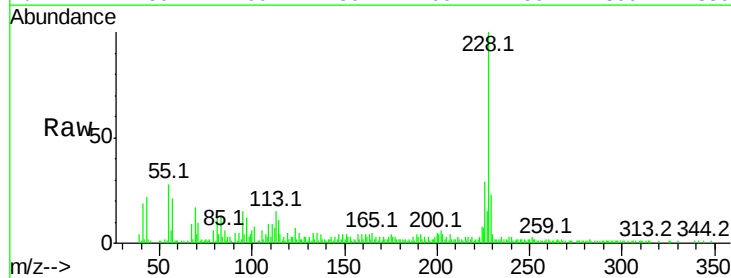
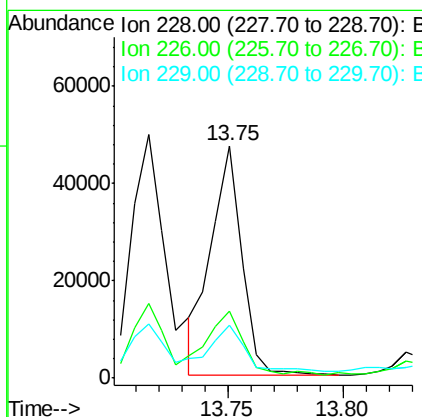
Manual Integrations  
APPROVED

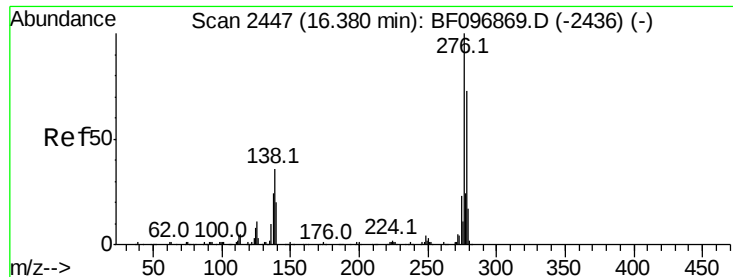
Sohil  
7/20/2017 3:05:18 PM



#82  
Chrysene  
Concen: 3.620 ng  
RT: 13.75 min Scan# 2000  
Delta R.T. -0.01 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.6  | 24.9  | 37.3  |
| 229     | 22.8  | 15.8  | 23.6  |





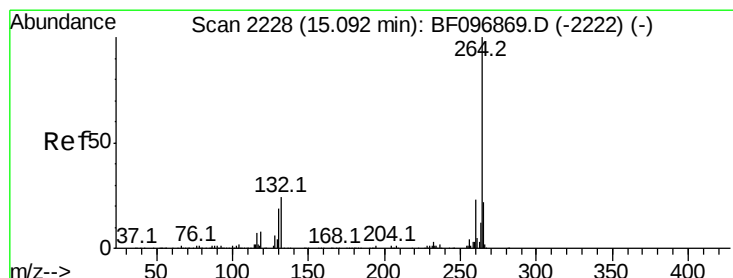
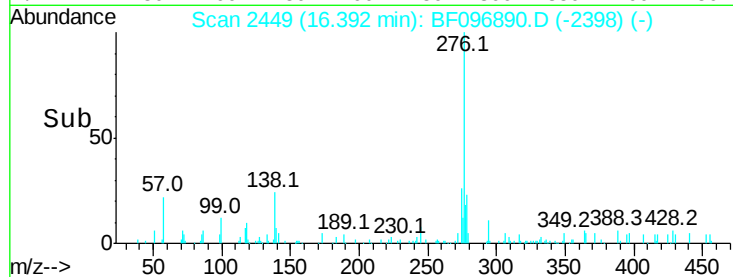
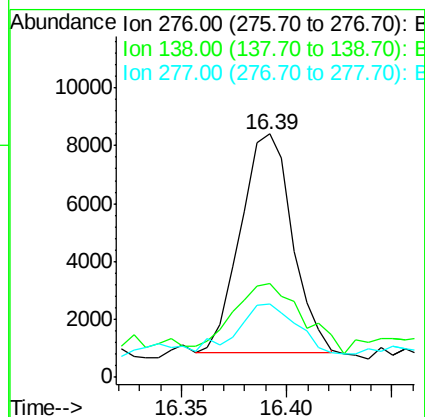
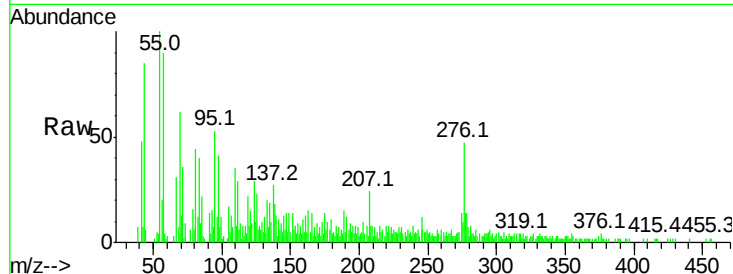
#85  
Indeno(1,2,3-cd)pyrene  
Concen: 4.436 ng/ml  
RT: 16.39 min Scan# 2449  
Delta R.T. 0.00 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

Instrument :  
BNA\_F  
ClientSampleId :  
OK-02-071817-C

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 43.3  | 27.8  | 41.6  |
| 277     | 25.8  | 20.2  | 30.4  |

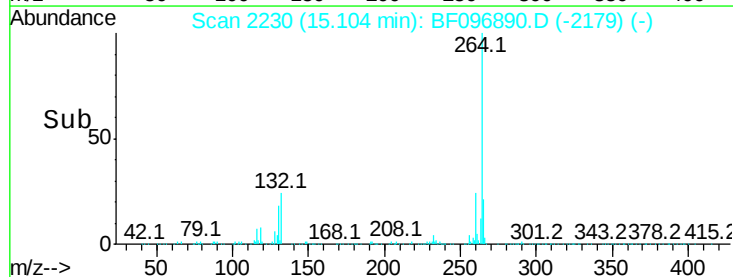
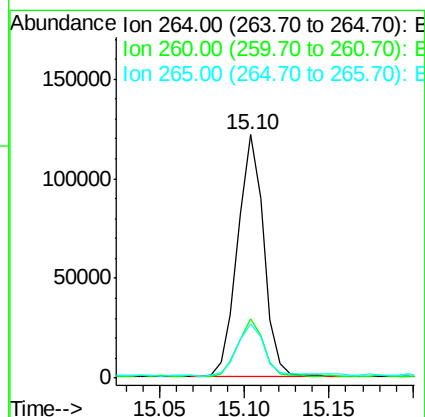
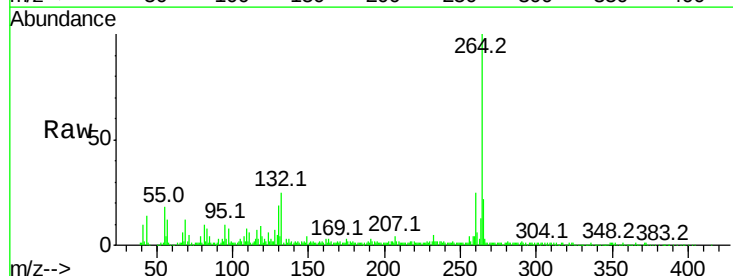
Manual Integrations  
APPROVED

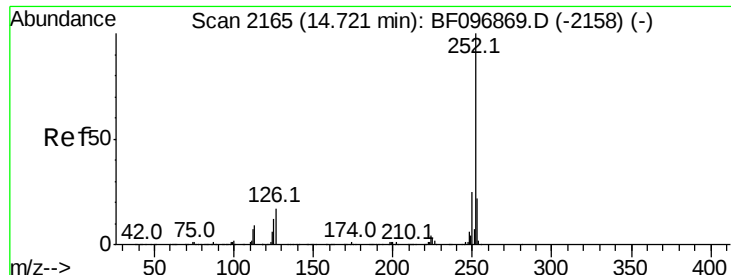
Sohil  
7/20/2017 3:05:18 PM



#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.10 min Scan# 2230  
Delta R.T. 0.00 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.6  | 19.5  | 29.3  |
| 265     | 22.2  | 17.2  | 25.8  |





#87

Benzo(b)fluoranthene

Concen: 5.422 ng m

RT: 14.73 min Scan# 2166

Delta R.T. 0.00 min

Lab File: BF096890.D

Acq: 20 Jul 2017 00:40

Instrument :

BNA\_F

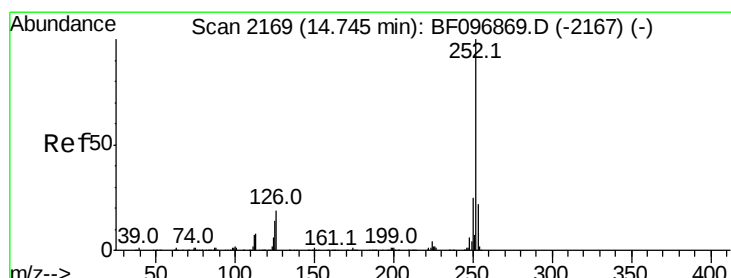
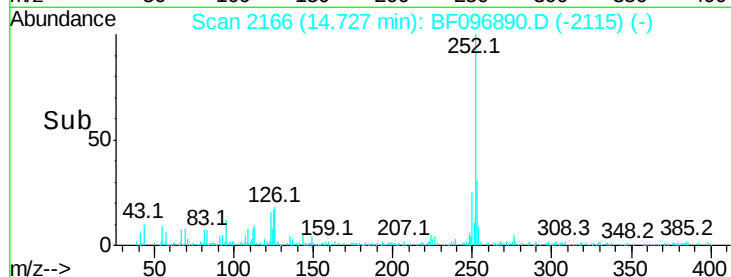
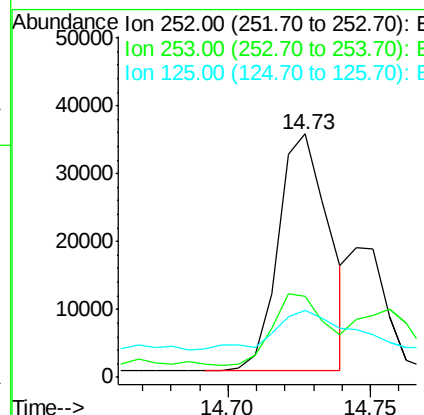
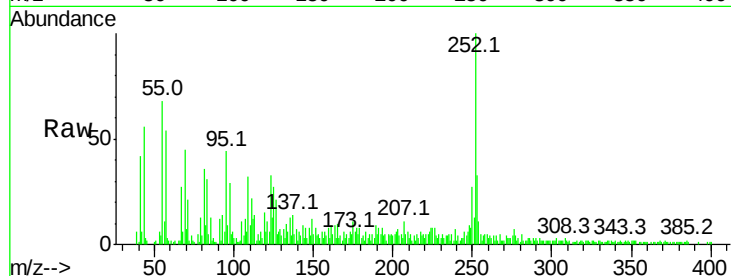
ClientSampleId :

OK-02-071817-C

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 252   | Resp: | 42891 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 33.5  | 18.1  | 27.1# |
| 125       | 27.5  | 9.8   | 14.8# |

Manual Integrations  
APPROVED

Sohil  
7/20/2017 3:05:18 PM



#88

Benzo(k)fluoranthene

Concen: 2.322 ng m

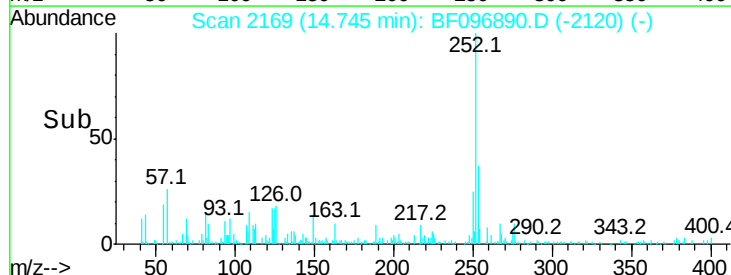
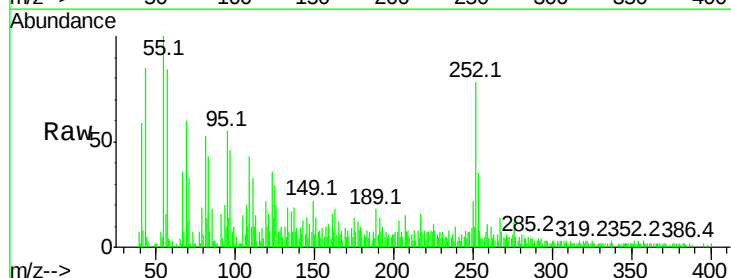
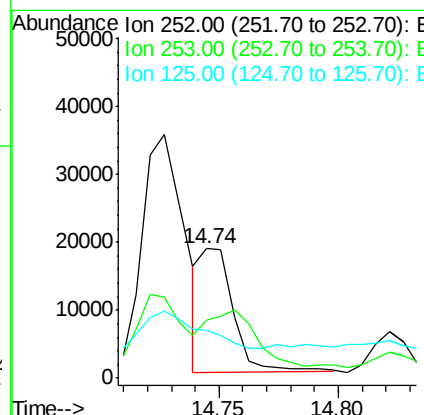
RT: 14.74 min Scan# 2169

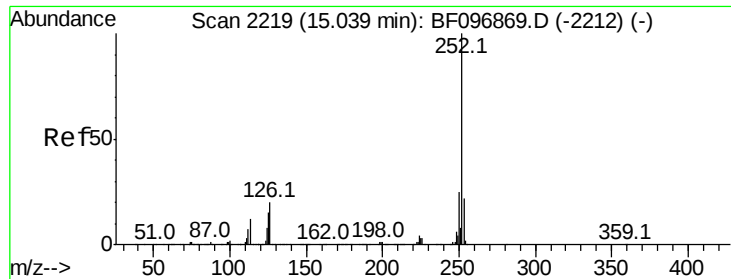
Delta R.T. -0.01 min

Lab File: BF096890.D

Acq: 20 Jul 2017 00:40

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 17397 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 45.0  | 18.4  | 27.6# |
| 125       | 36.7  | 13.1  | 19.7# |





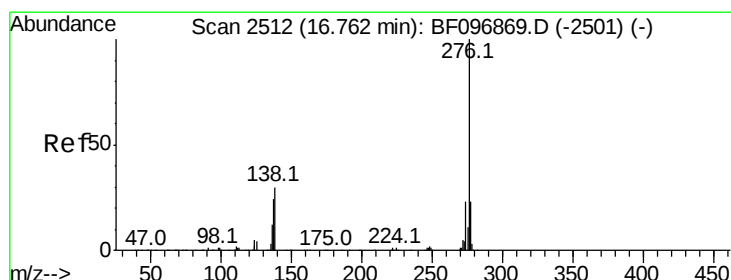
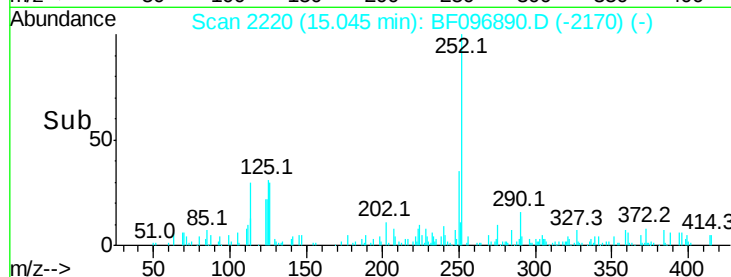
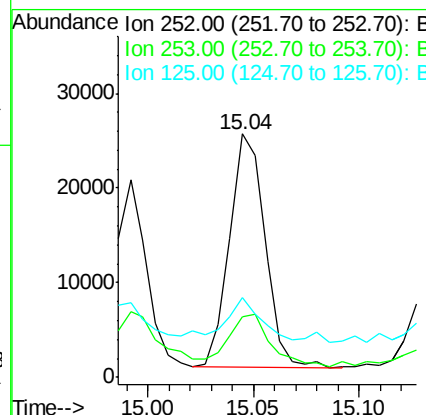
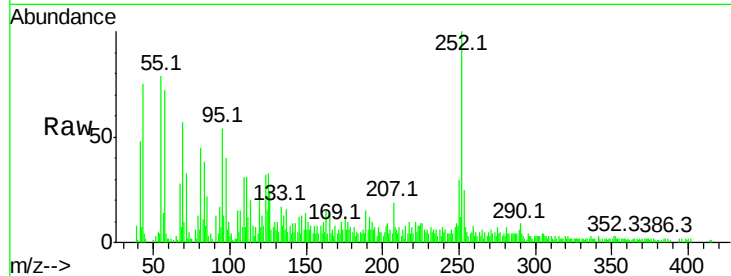
#89  
Benzo(a)pyrene  
Concen: 3.949 ng  
RT: 15.04 min Scan# 2220  
Delta R.T. -0.01 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

Instrument :  
BNA\_F  
ClientSampleId :  
OK-02-071817-C

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 25.0  | 17.5  | 26.3  |
| 125     | 32.7  | 11.0  | 16.4  |

Manual Integrations  
APPROVED

Sohil  
7/20/2017 3:05:18 PM



#91  
Benzo(g,h,i)perylene  
Concen: 2.026 ng  
RT: 16.78 min Scan# 2515  
Delta R.T. 0.00 min  
Lab File: BF096890.D  
Acq: 20 Jul 2017 00:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 33.6  | 18.6  | 28.0  |
| 138     | 35.5  | 25.4  | 38.0  |

