

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF122018\  
 Data File : BF111643.D  
 Acq On : 20 Dec 2018 17:19  
 Operator : JU/SJ  
 Sample : J6445-06  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 EB05\_1.5-3.5

Manual Integrations  
 APPROVED

Sohil  
 12/21/2018 2:46:43 PM

Quant Time: Dec 21 06:42:10 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121918.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 19 17:39:39 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.90  | 152  | 210235   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.17  | 136  | 794690   | 20.00  | ng    | 0.00     |
| 39) Acenaphthene-d10        | 9.93  | 164  | 405168   | 20.00  | ng    | 0.00     |
| 64) Phenanthrene-d10        | 11.42 | 188  | 729587   | 20.00  | ng    | 0.00     |
| 76) Chrysene-d12            | 14.05 | 240  | 460849   | 20.00  | ng    | 0.00     |
| 87) Perylene-d12            | 15.53 | 264  | 489433   | 20.00  | ng    | 0.01     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.52  | 112  | 907297   | 73.56  | ng    | 0.00     |
| 7) Phenol-d6                | 6.52  | 99   | 1187832  | 75.67  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.45  | 82   | 732260   | 53.63  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.72 | 330  | 295255   | 61.67  | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.25  | 172  | 1479498  | 53.22  | ng    | 0.00     |
| 79) Terphenyl-d14           | 13.00 | 244  | 1283282  | 52.81  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 10) Phenol                  | 6.53  | 94   | 74631    | 4.214  | ng    | 91       |
| 50) Dimethylphthalate       | 9.64  | 163  | 107225   | 3.619  | ng    | 98       |
| 71) Phenanthrene            | 11.44 | 178  | 688057   | 17.783 | ng    | 94       |
| 72) Anthracene              | 11.49 | 178  | 123669   | 3.184  | ng    | 93       |
| 75) Fluoranthene            | 12.63 | 202  | 1011629  | 25.819 | ng    | 95       |
| 78) Pyrene                  | 12.85 | 202  | 885414   | 27.207 | ng    | 96       |
| 81) Benzo(a)anthracene      | 14.04 | 228  | 428133   | 16.279 | ng    | 99       |
| 83) Chrysene                | 14.07 | 228  | 397692   | 15.385 | ng    | 98       |
| 86) Indeno(1,2,3-cd)pyrene  | 17.00 | 276  | 254925   | 11.601 | ng    | # 82     |
| 88) Benzo(b)fluoranthene    | 15.10 | 252  | 599960m  | 20.974 | ng    |          |
| 89) Benzo(k)fluoranthene    | 15.12 | 252  | 150318m  | 5.520  | ng    |          |
| 90) Benzo(a)pyrene          | 15.46 | 252  | 396884m  | 15.272 | ng    |          |
| 91) Dibenzo(a,h)anthracene  | 17.02 | 278  | 64075    | 2.816  | ng    | # 91     |
| 92) Benzo(a,h,i)perylene    | 17.45 | 276  | 219222   | 9.866  | ng    | # 88     |

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

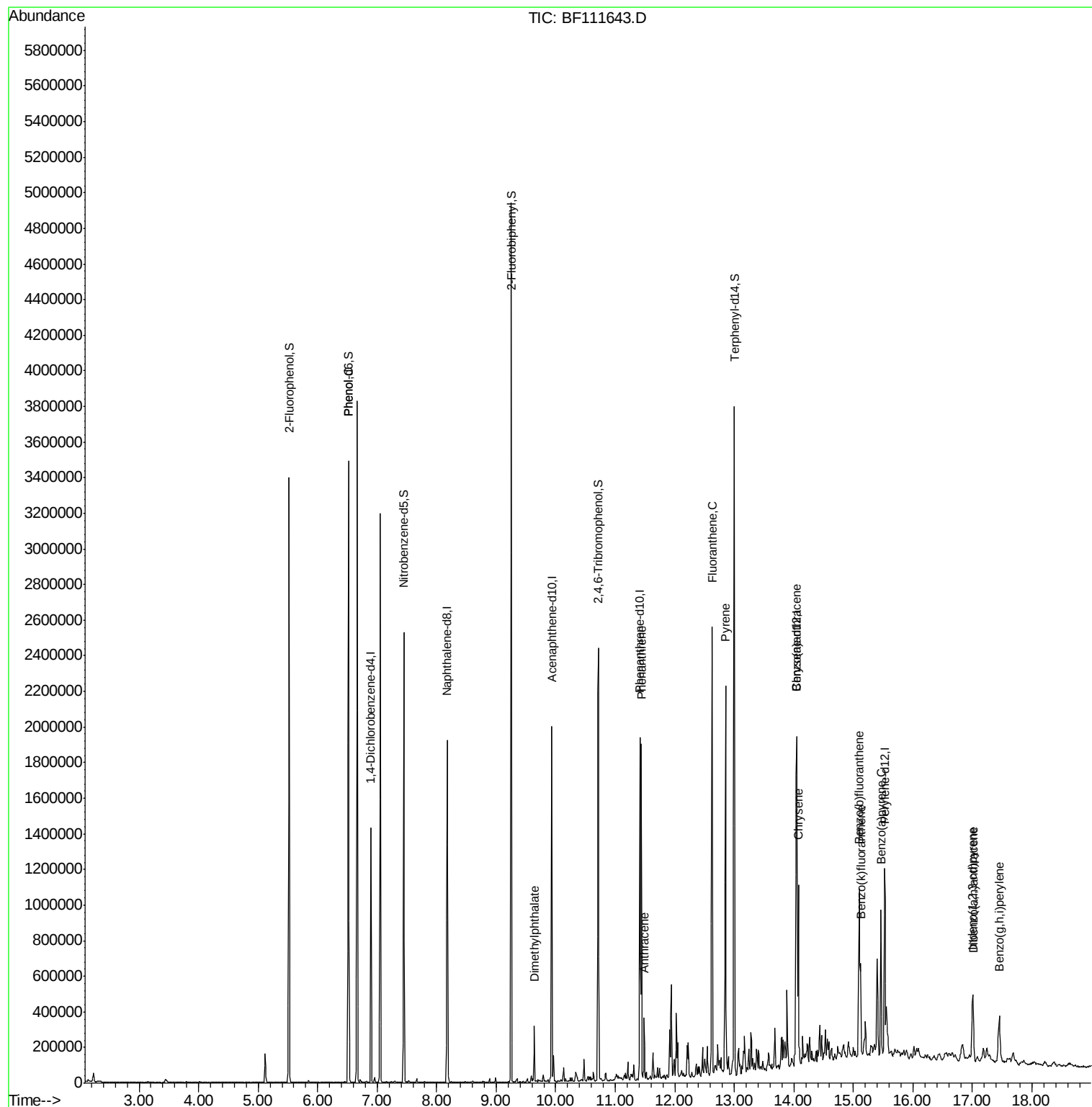
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF122018\  
Data File : BF111643.D  
Acq On : 20 Dec 2018 17:19  
Operator : JU/SJ  
Sample : J6445-06  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

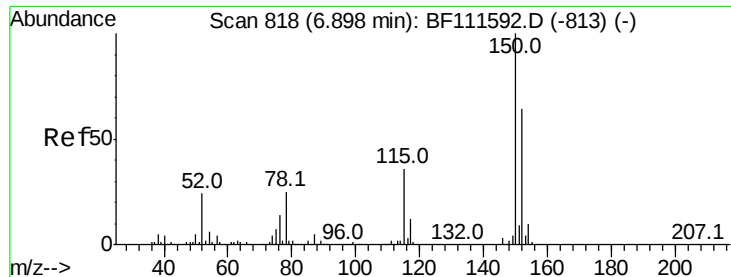
Instrument :  
BNA\_F  
ClientSampleId :  
EB05\_1.5-3.5

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Quant Time: Dec 21 06:42:10 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121918.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Dec 19 17:39:39 2018  
Response via : Initial Calibration





#1

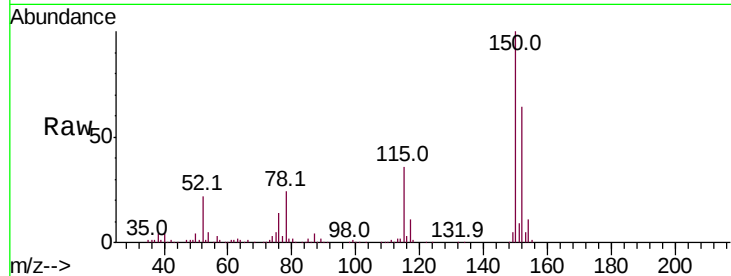
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.90 min Scan# 818  
Delta R.T. -0.00 min  
Lab File: BF111643.D  
Acq: 20 Dec 2018 17:19

Instrument :  
BNA\_F  
ClientSampleId :  
EB05\_1.5-3.5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 156.5 | 126.6 | 189.8 |
| 115     | 57.1  | 50.7  | 76.1  |

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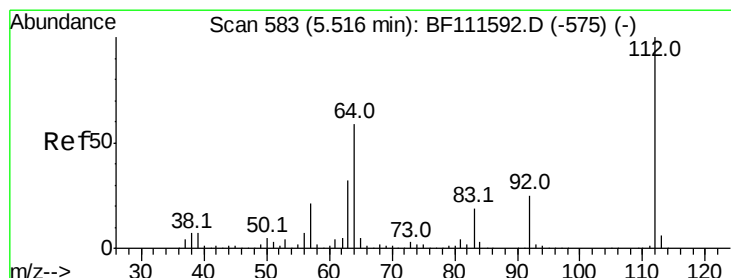
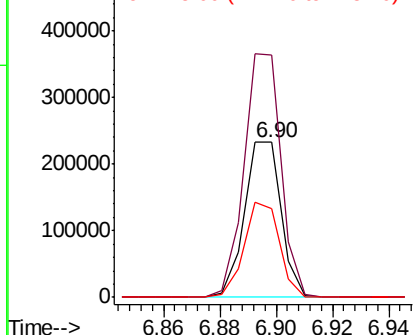
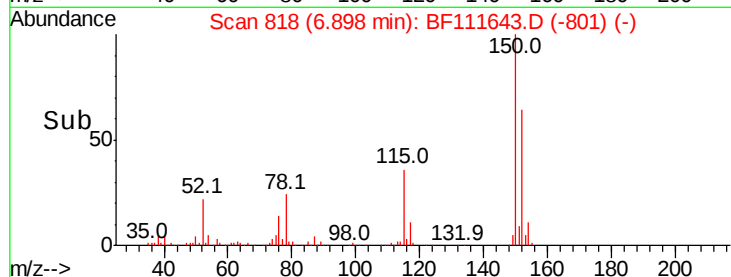


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

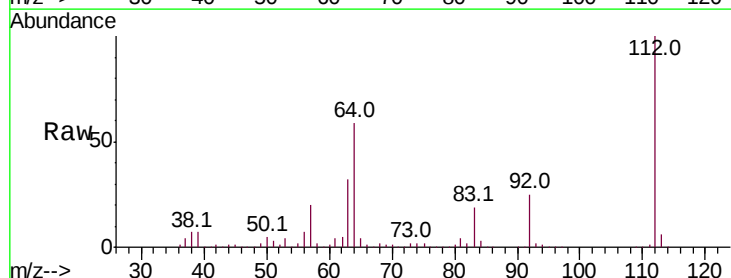
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 73.561 ng  
RT: 5.52 min Scan# 584  
Delta R.T. 0.01 min  
Lab File: BF111643.D  
Acq: 20 Dec 2018 17:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 59.4  | 51.8  | 77.6  |
| 63      | 32.2  | 26.8  | 40.2  |

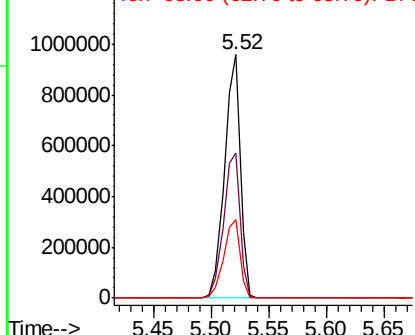
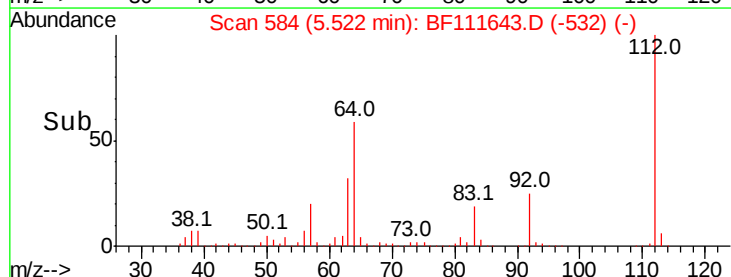


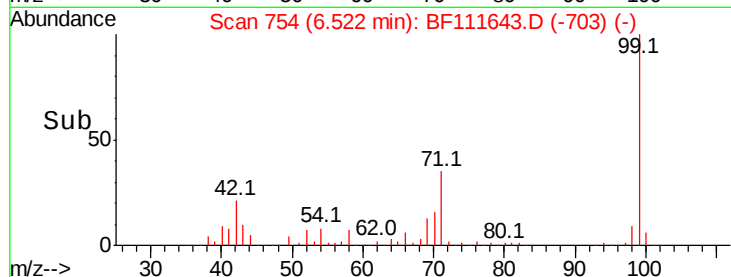
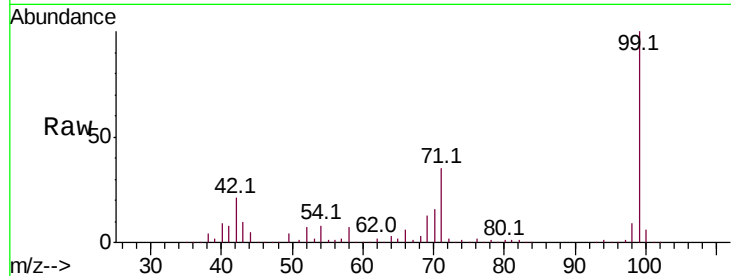
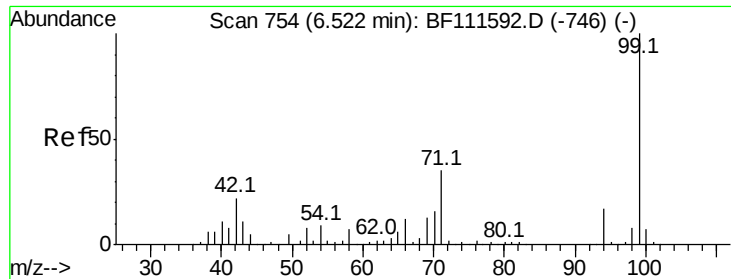
Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF1

Ion 63.00 (62.70 to 63.70): BF1





#7

Phenol-d6

Concen: 75.674 ng

RT: 6.52 min Scan# 754

Delta R.T. -0.00 min

Lab File: BF111643.D

Acq: 20 Dec 2018 17:19

Tot Ion: 99 Resp: 1187832

Ion Ratio Lower Upper

99 100

42 21.3 17.4 26.0

71 34.7 26.1 39.1

Instrument :

BNA\_F

ClientSampleId :

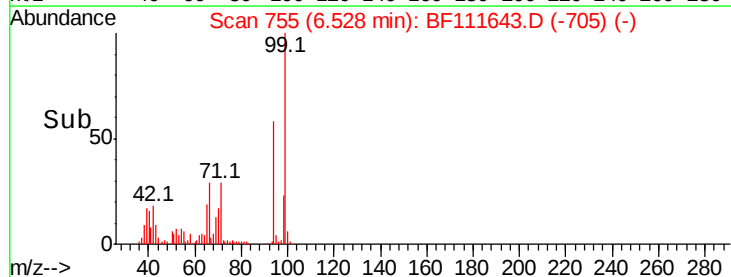
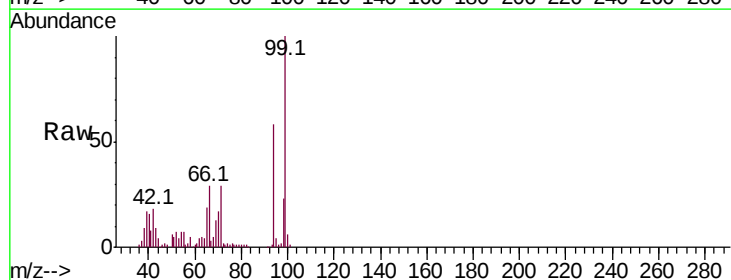
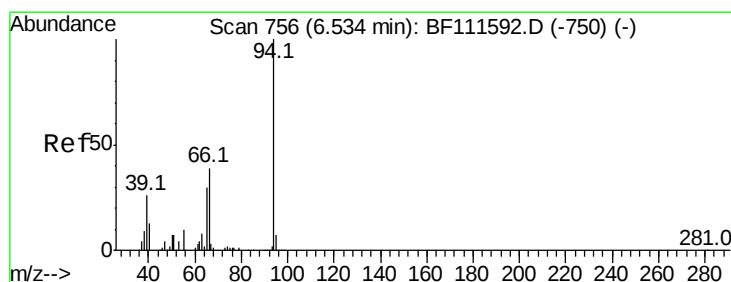
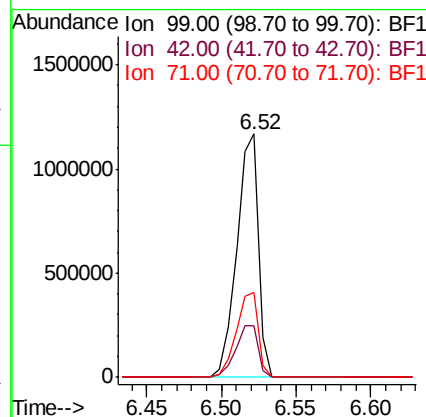
EB05\_1.5-3.5

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#10

Phenol

Concen: 4.214 ng

RT: 6.53 min Scan# 755

Delta R.T. -0.01 min

Lab File: BF111643.D

Acq: 20 Dec 2018 17:19

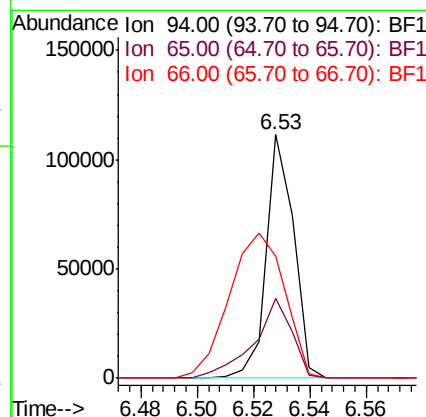
Tgt Ion: 94 Resp: 74631

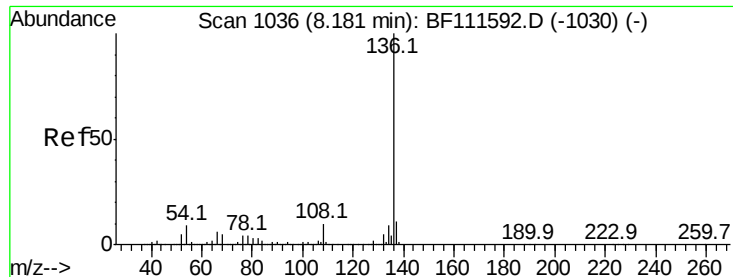
Ion Ratio Lower Upper

94 100

65 32.5 11.7 51.7

66 50.1 21.0 61.0





#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.17 min Scan# 1035

Delta R.T. -0.01 min

Lab File: BF111643.D

Acq: 20 Dec 2018 17:19

Instrument :

BNA\_F

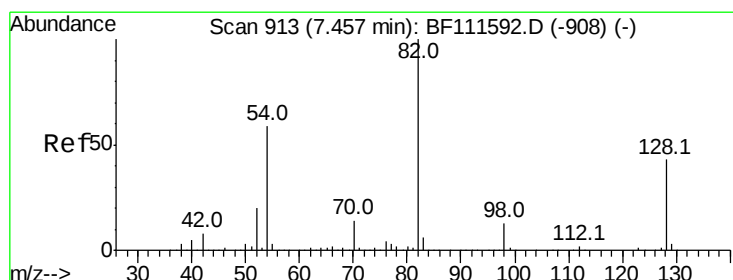
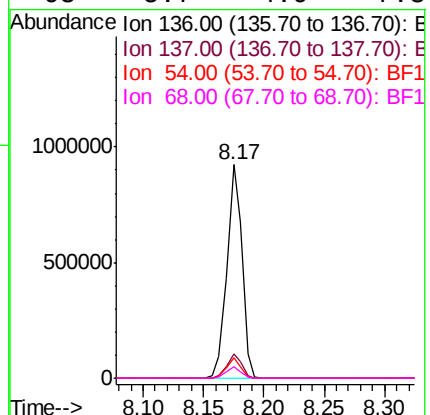
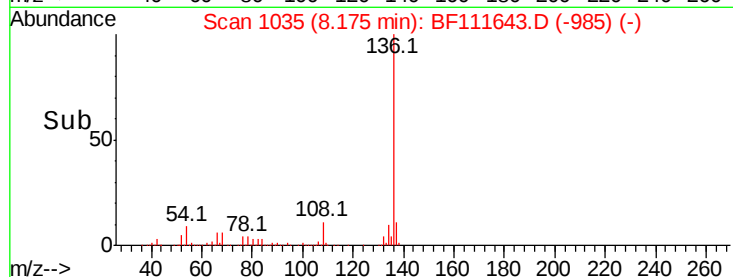
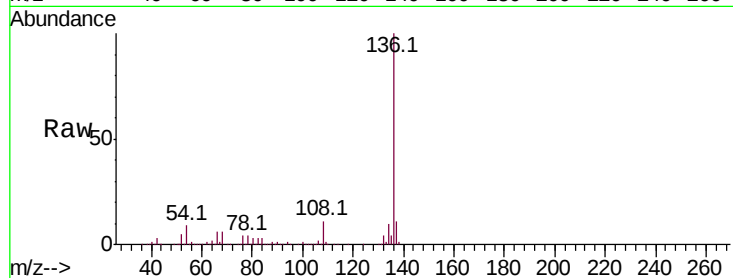
ClientSampleId :

EB05\_1.5-3.5

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 136     | 100   |      |       |       |
| 137     | 11.4  | 9.1  | 13.7  |       |
| 54      | 9.5   | 7.7  | 11.5  |       |
| 68      | 5.7   | 4.9  | 7.3   |       |

Manual Integrations  
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#23

Nitrobenzene-d5

Concen: 53.635 ng

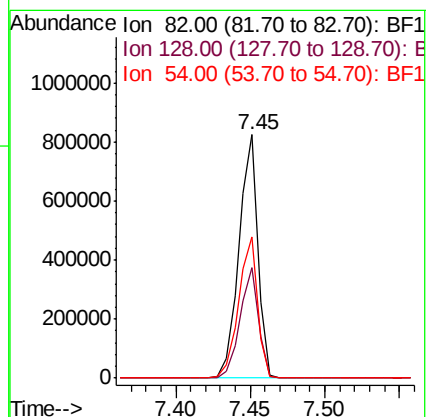
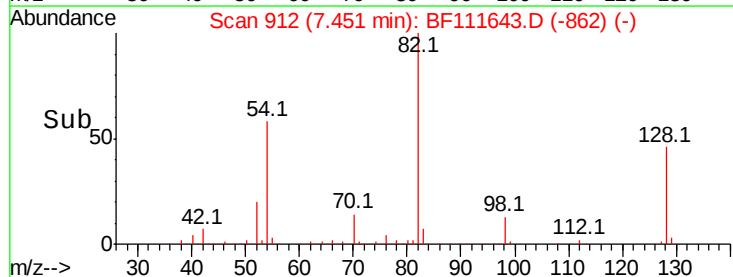
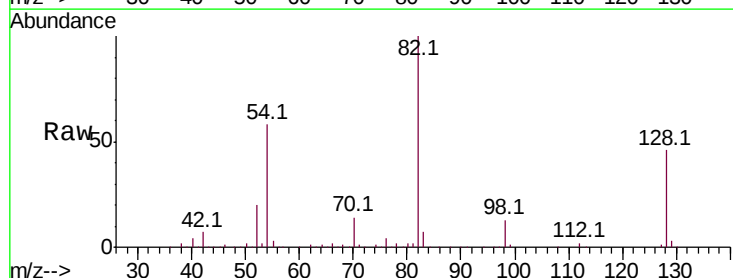
RT: 7.45 min Scan# 912

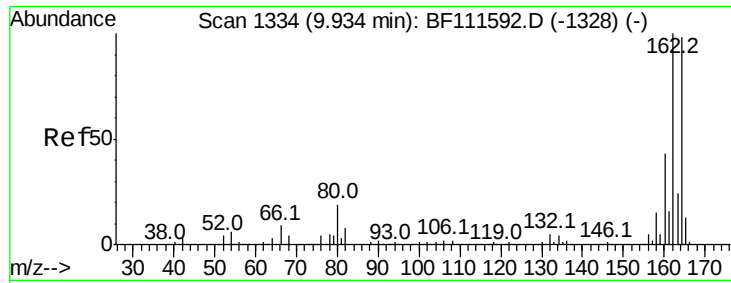
Delta R.T. -0.01 min

Lab File: BF111643.D

Acq: 20 Dec 2018 17:19

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 82      | 100   |      |       |       |
| 128     | 45.6  | 37.4 | 56.2  |       |
| 54      | 58.2  | 47.6 | 71.4  |       |





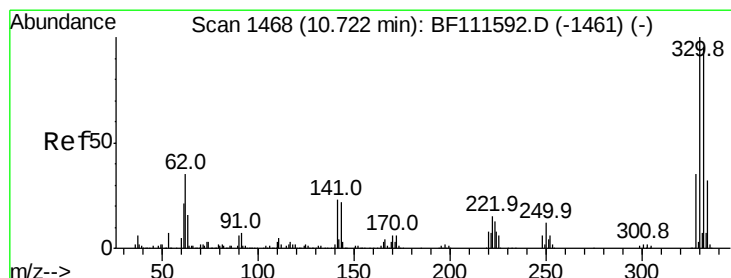
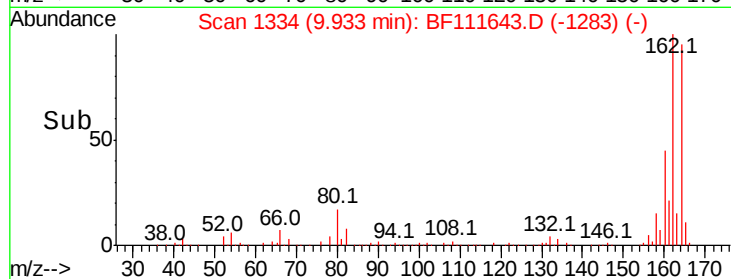
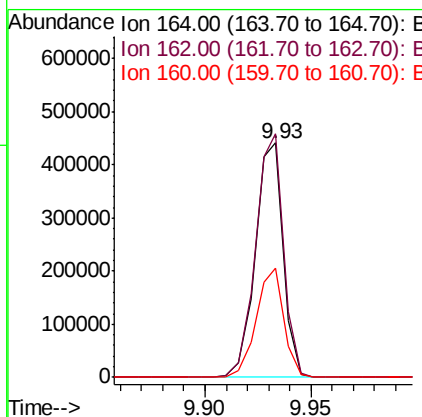
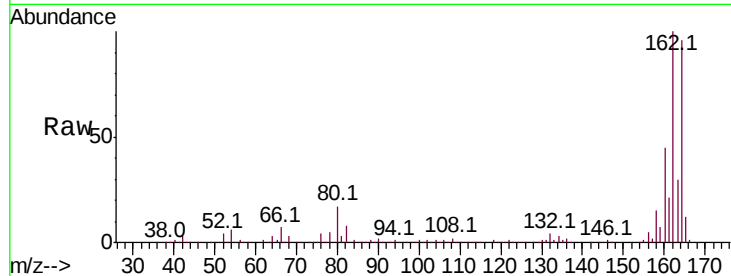
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.93 min Scan# 1334  
Delta R.T. -0.00 min  
Lab File: BF111643.D  
Acq: 20 Dec 2018 17:19

Instrument :  
BNA\_F  
ClientSampleId :  
EB05\_1.5-3.5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 104.0 | 81.4  | 122.0 |
| 160     | 46.4  | 35.7  | 53.5  |

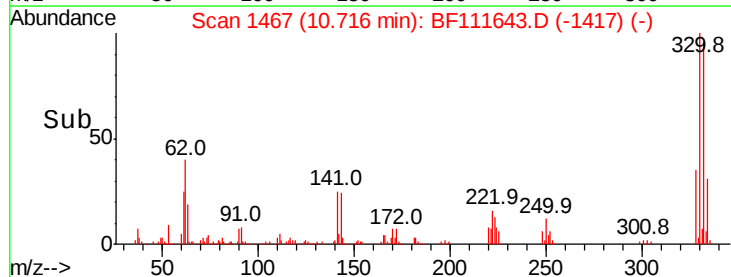
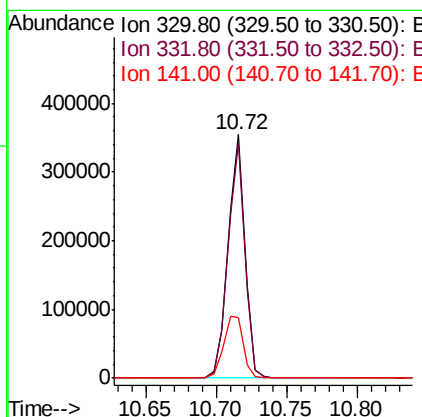
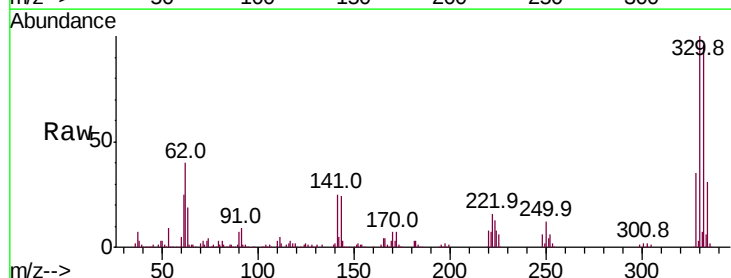
Manual Integrations  
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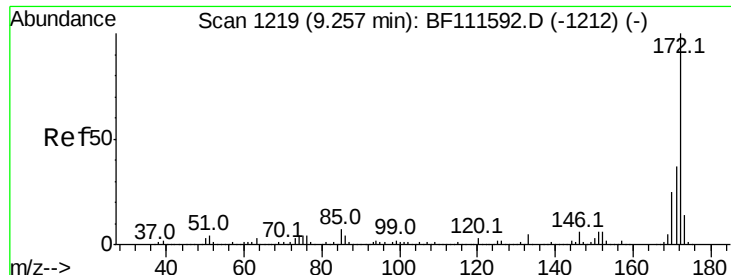
Sohil  
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#42  
2,4,6-Tribromophenol  
Concen: 61.674 ng  
RT: 10.72 min Scan# 1467  
Delta R.T. -0.01 min  
Lab File: BF111643.D  
Acq: 20 Dec 2018 17:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 96.4  | 76.0  | 114.0 |
| 141     | 29.7  | 31.0  | 46.6# |





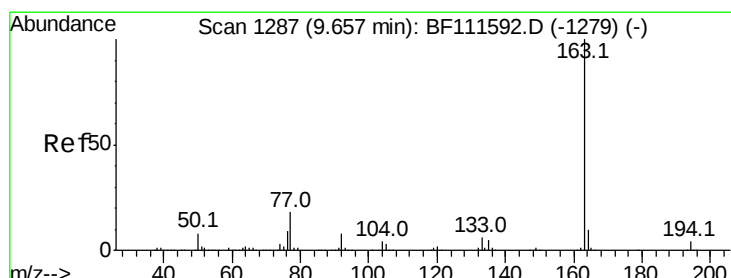
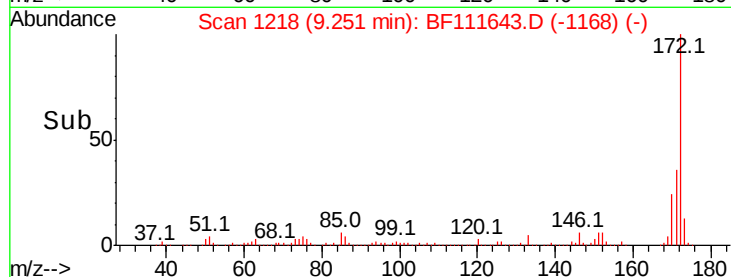
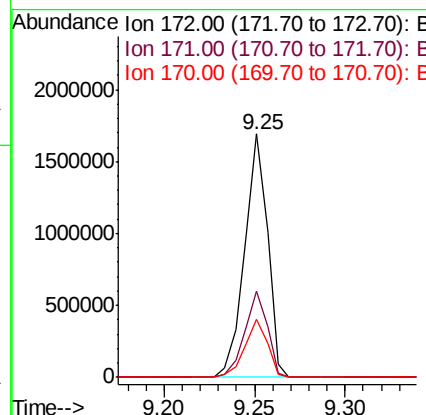
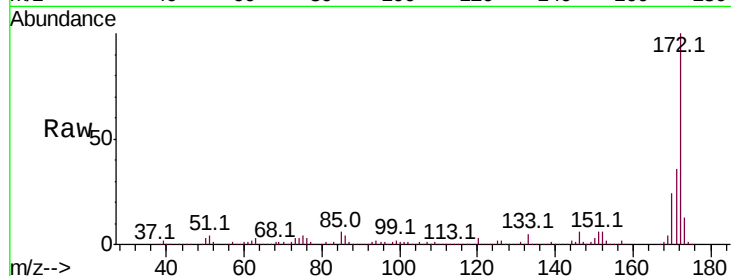
#45  
2-Fluorobiphenyl  
Concen: 53.224 ng  
RT: 9.25 min Scan# 1218  
Delta R.T. -0.01 min  
Lab File: BF111643.D  
Acq: 20 Dec 2018 17:19

Instrument :  
BNA\_F  
ClientSampleId :  
EB05\_1.5-3.5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 35.6  | 33.0  | 49.4  |
| 170     | 23.8  | 22.3  | 33.5  |

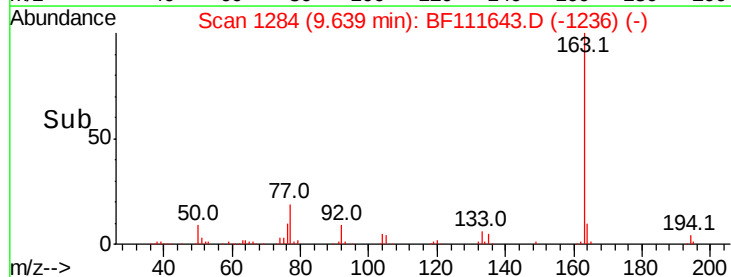
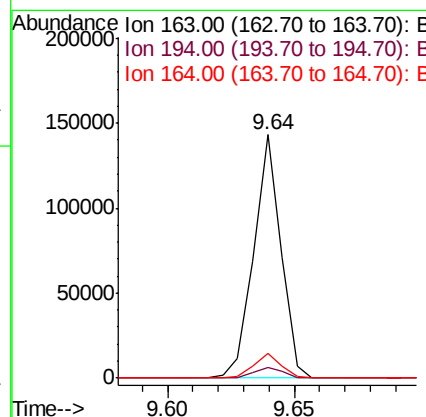
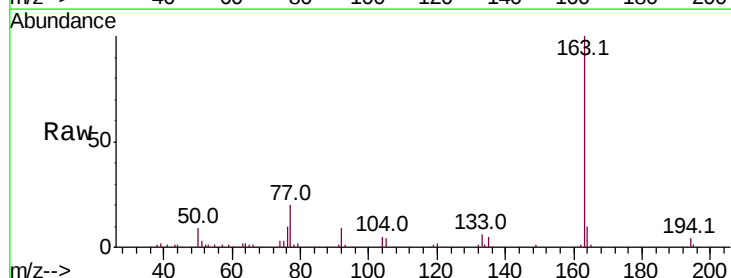
Manual Integrations  
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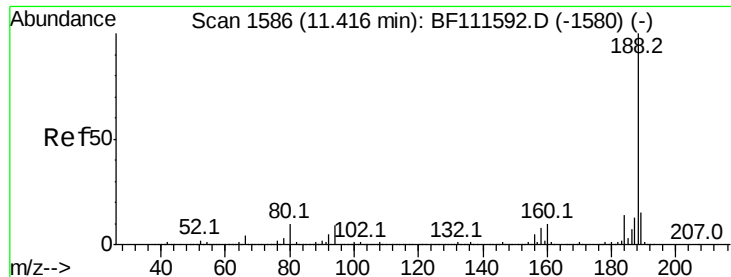
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#50  
Dimethylphthalate  
Concen: 3.619 ng  
RT: 9.64 min Scan# 1284  
Delta R.T. -0.02 min  
Lab File: BF111643.D  
Acq: 20 Dec 2018 17:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 4.1   | 3.0   | 4.6   |
| 164     | 10.1  | 8.9   | 13.3  |





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.42 min Scan# 1586

Delta R.T. -0.00 min

Lab File: BF111643.D

Acq: 20 Dec 2018 17:19

Instrument :

BNA\_F

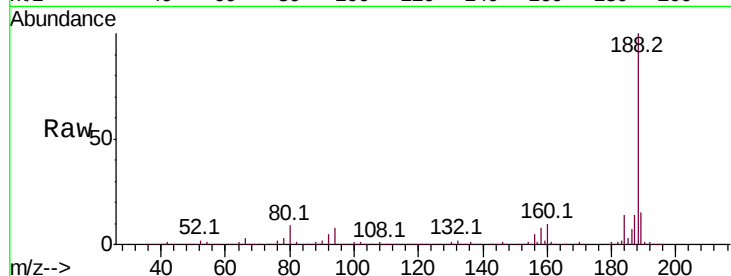
ClientSampleId :

EB05\_1.5-3.5

|             |       |        |
|-------------|-------|--------|
| Tot Ion:188 | Resp: | 729587 |
| Ion Ratio   | Lower | Upper  |
| 188 100     |       |        |
| 94 7.9      | 9.6   | 14.4#  |
| 80 9.0      | 9.8   | 14.6#  |

Manual Integrations  
APPROVED

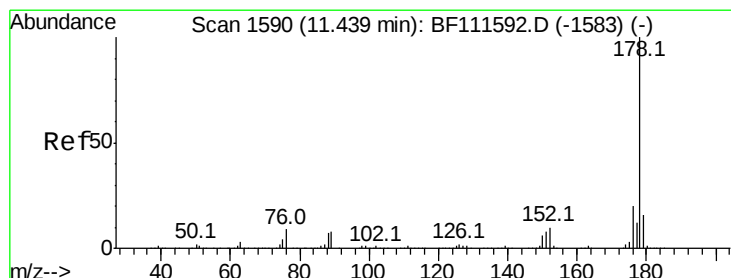
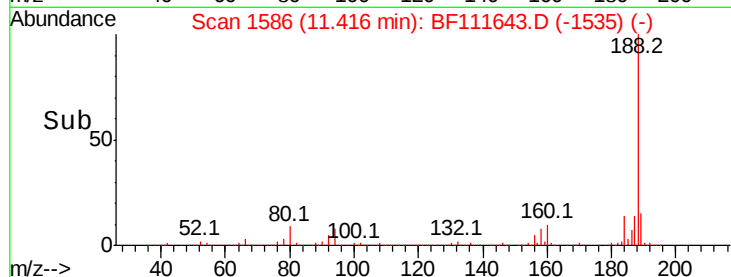
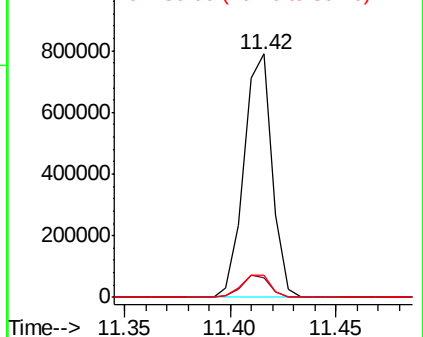
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Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF1

Ion 80.00 (79.70 to 80.70): BF1



#71

Phenanthrene

Concen: 17.783 ng

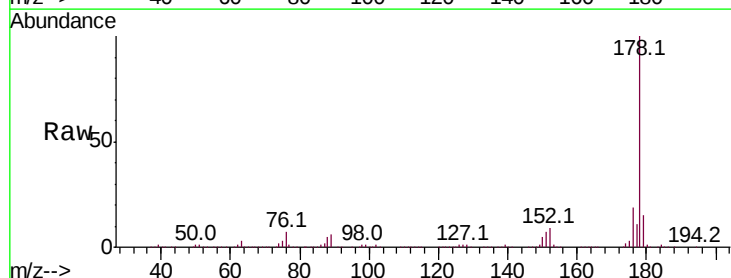
RT: 11.44 min Scan# 1590

Delta R.T. -0.00 min

Lab File: BF111643.D

Acq: 20 Dec 2018 17:19

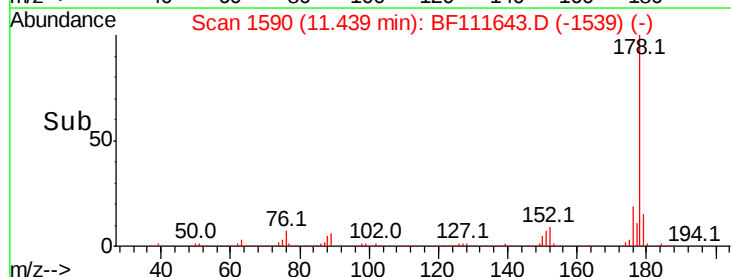
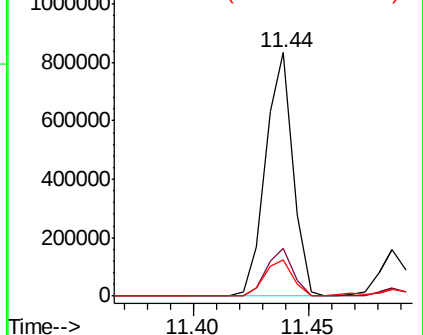
|             |       |        |
|-------------|-------|--------|
| Tgt Ion:178 | Resp: | 688057 |
| Ion Ratio   | Lower | Upper  |
| 178 100     |       |        |
| 176 19.4    | 18.1  | 27.1   |
| 179 15.1    | 14.0  | 21.0   |

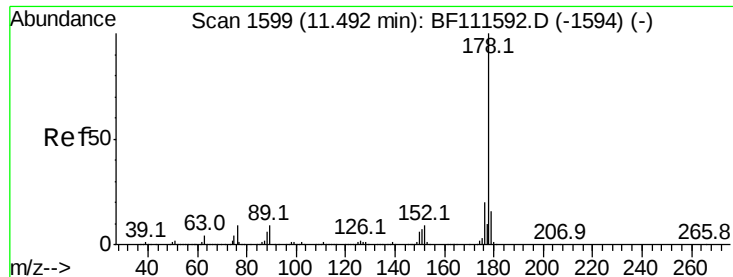


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#72

Anthracene

Concen: 3.184 ng

RT: 11.49 min Scan# 1598

Delta R.T. -0.01 min

Lab File: BF111643.D

Acq: 20 Dec 2018 17:19

Instrument :

BNA\_F

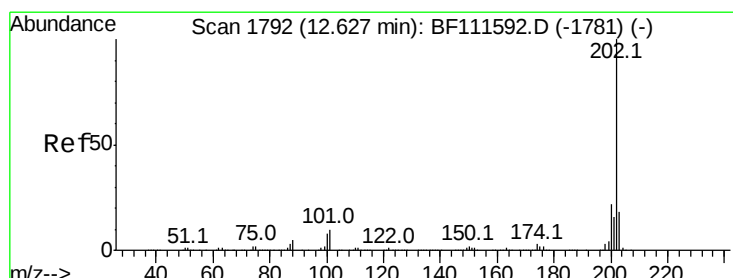
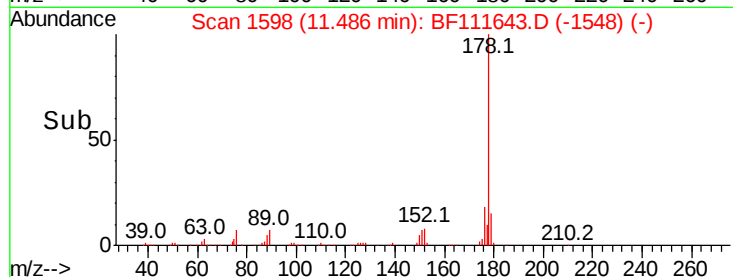
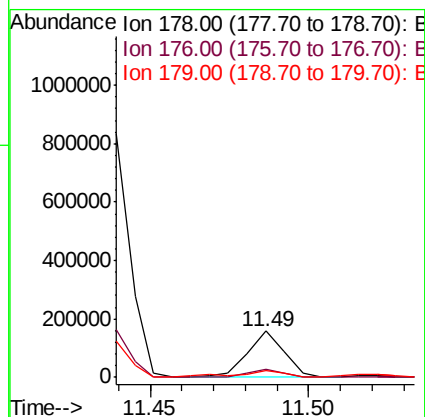
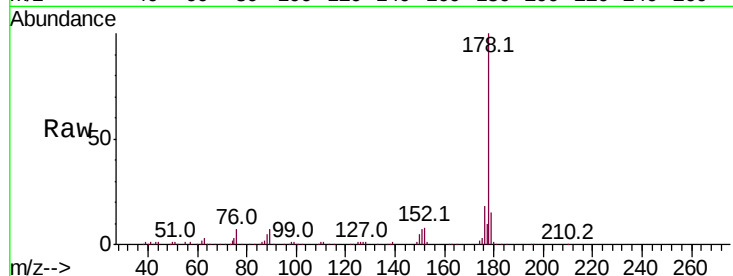
ClientSampled :

EB05\_1.5-3.5

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 178   | Resp: | 123669 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 176       | 17.8  | 17.2  | 25.8   |
| 179       | 14.6  | 13.8  | 20.8   |

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#75

Fluoranthene

Concen: 25.819 ng

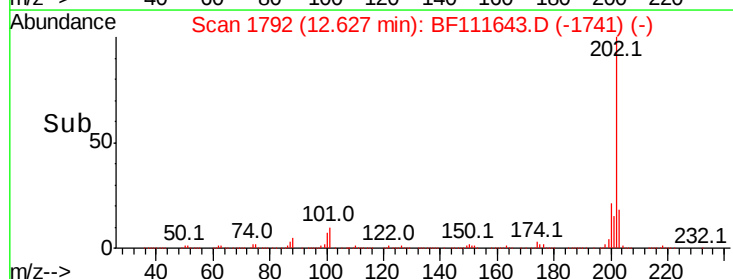
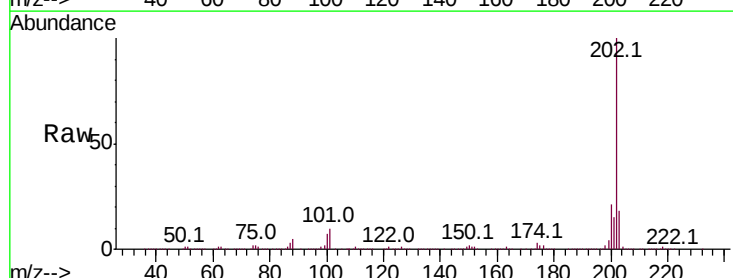
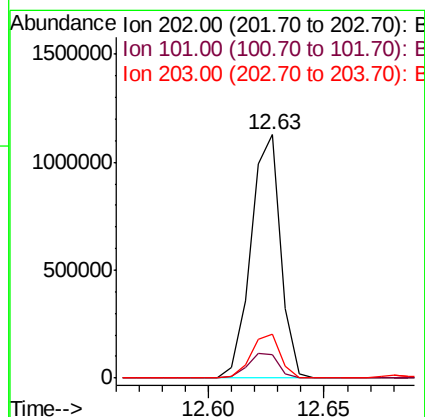
RT: 12.63 min Scan# 1792

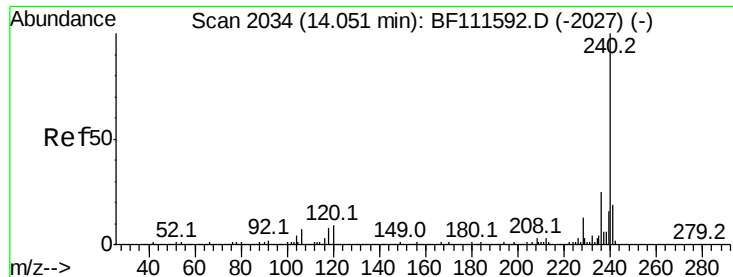
Delta R.T. -0.00 min

Lab File: BF111643.D

Acq: 20 Dec 2018 17:19

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 202   | Resp: | 1011629 |
| Ion Ratio | Lower | Upper |         |
| 202       | 100   |       |         |
| 101       | 9.6   | 0.0   | 33.8    |
| 203       | 17.8  | 0.0   | 38.6    |





#76

Chrysene-d12

Concen: 20.000 ng

RT: 14.05 min Scan# 2034

Delta R.T. -0.00 min

Lab File: BF111643.D

Acq: 20 Dec 2018 17:19

Instrument :

BNA\_F

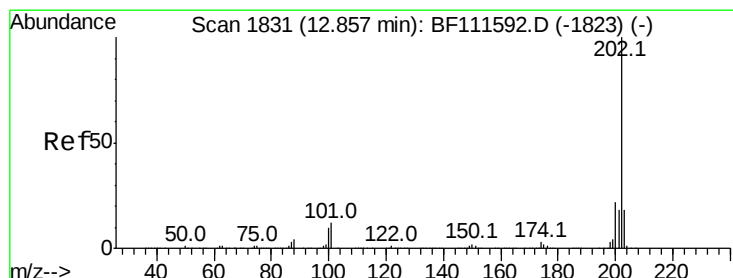
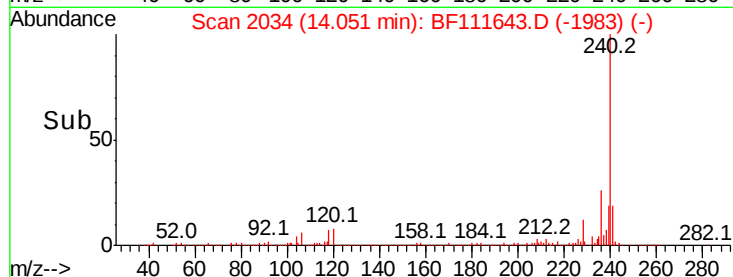
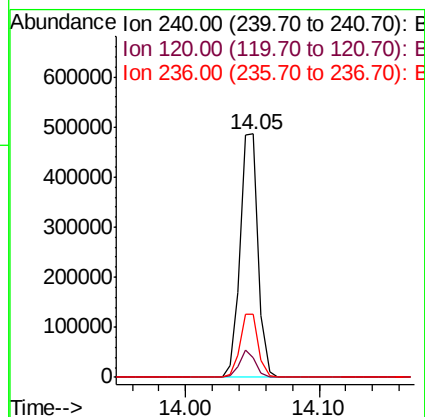
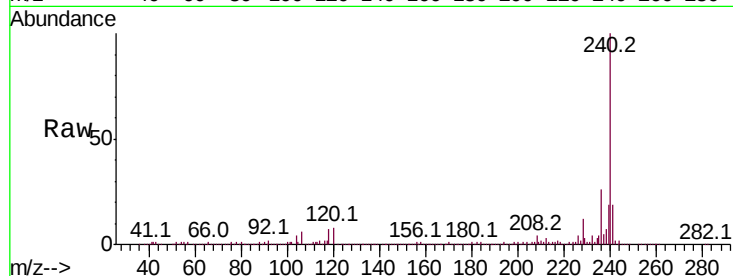
ClientSampleId :

EB05\_1.5-3.5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 8.0   | 12.2  | 18.2# |
| 236     | 26.1  | 20.2  | 30.2  |

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#78

Pyrene

Concen: 27.207 ng

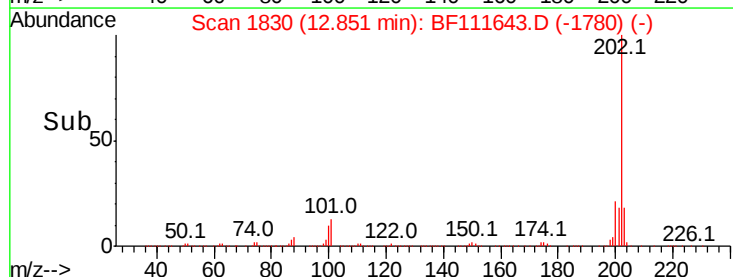
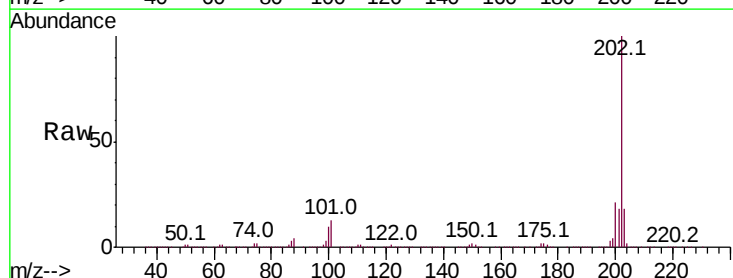
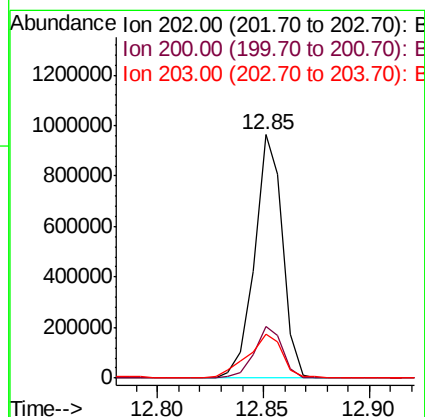
RT: 12.85 min Scan# 1830

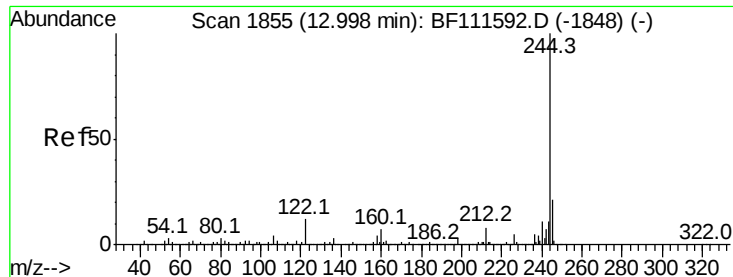
Delta R.T. -0.01 min

Lab File: BF111643.D

Acq: 20 Dec 2018 17:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.2  | 19.0  | 28.4  |
| 203     | 18.0  | 15.2  | 22.8  |





#79

Terphenyl-d14

Concen: 52.808 ng

RT: 13.00 min Scan# 1855

Delta R.T. -0.00 min

Lab File: BF111643.D

Acq: 20 Dec 2018 17:19

Instrument :

BNA\_F

ClientSampleId :

EB05\_1.5-3.5

Tot Ion:244 Resp: 1283282

Ion Ratio Lower Upper

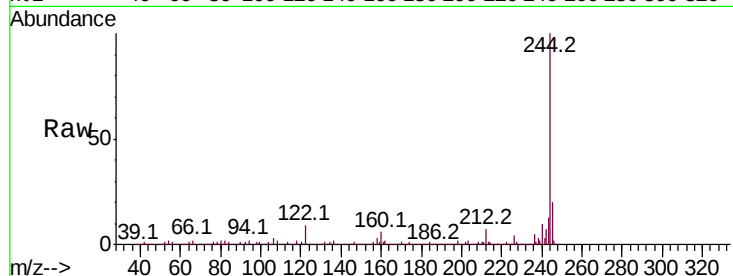
244 100

212 6.6 5.7 8.5

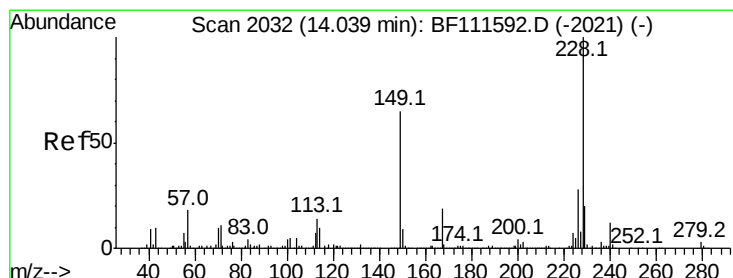
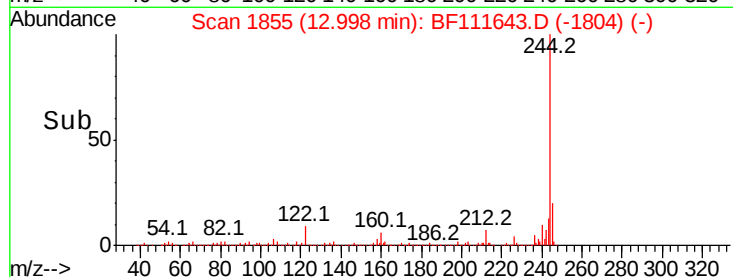
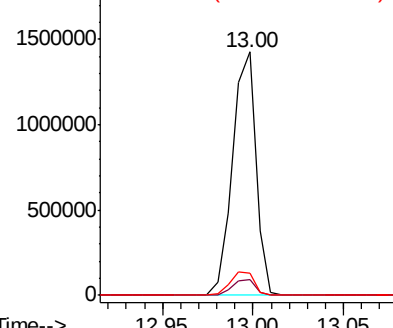
122 9.1 13.1 19.7#

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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: 16.279 ng

RT: 14.04 min Scan# 2032

Delta R.T. -0.00 min

Lab File: BF111643.D

Acq: 20 Dec 2018 17:19

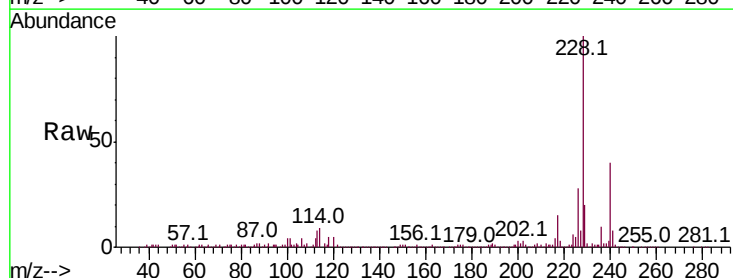
Tgt Ion:228 Resp: 428133

Ion Ratio Lower Upper

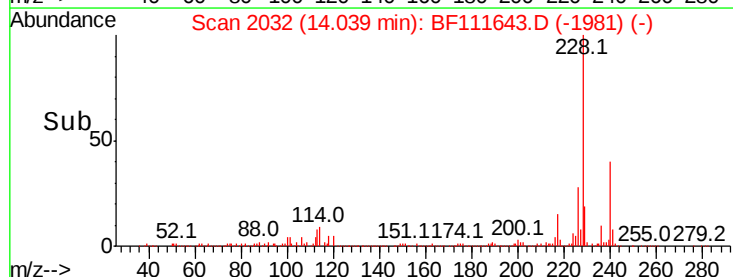
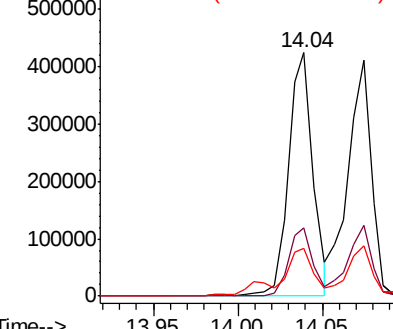
228 100

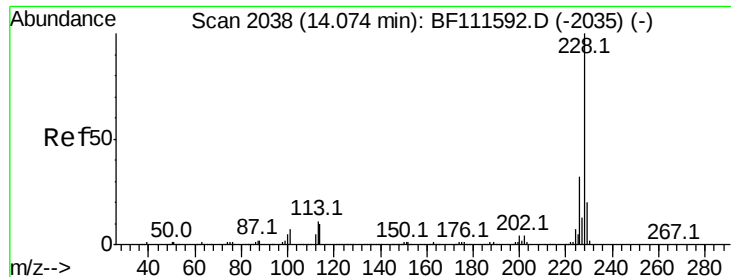
226 28.2 22.6 34.0

229 19.7 16.3 24.5



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





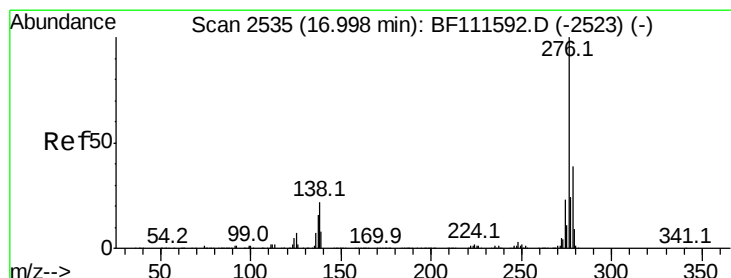
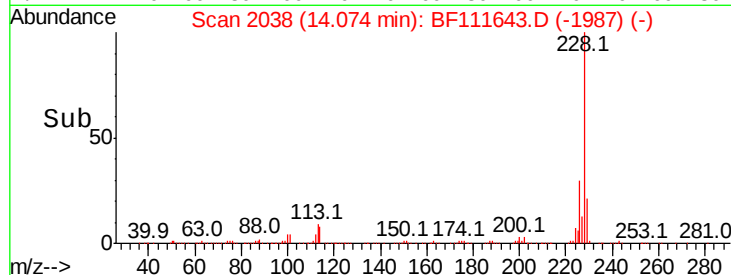
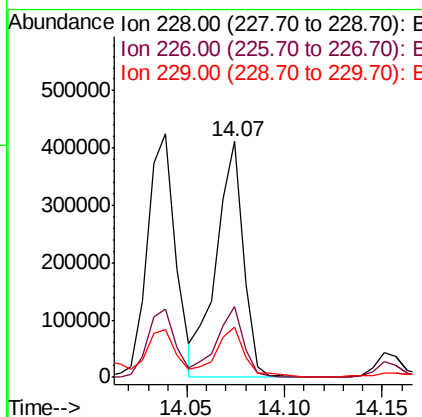
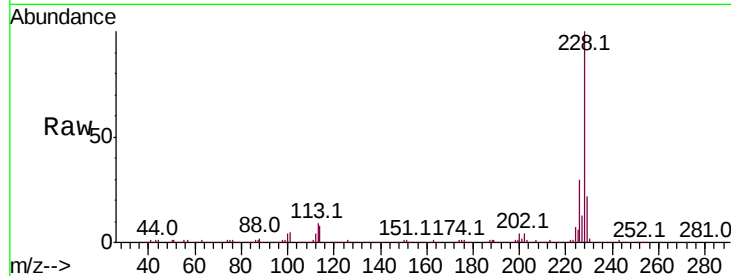
#83  
Chrysene  
Concen: 15.385 ng  
RT: 14.07 min Scan# 2038  
Delta R.T. -0.00 min  
Lab File: BF111643.D  
Acq: 20 Dec 2018 17:19

Instrument :  
BNA\_F  
ClientSampleId :  
EB05\_1.5-3.5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.9  | 25.3  | 37.9  |
| 229     | 21.5  | 17.2  | 25.8  |

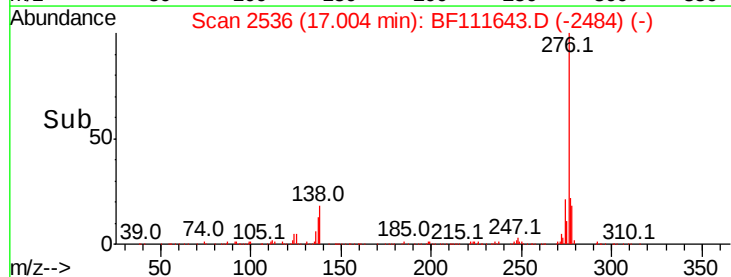
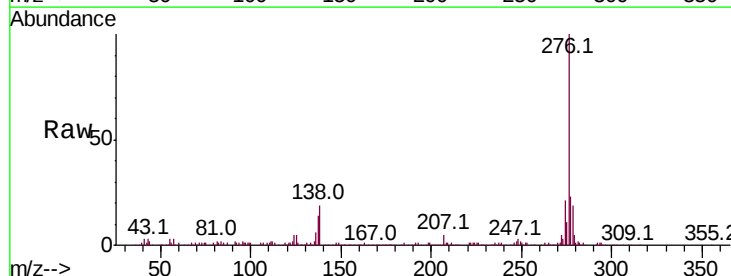
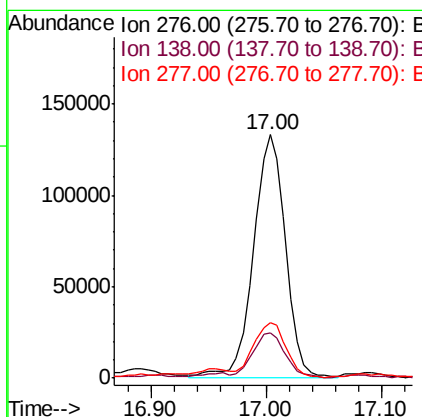
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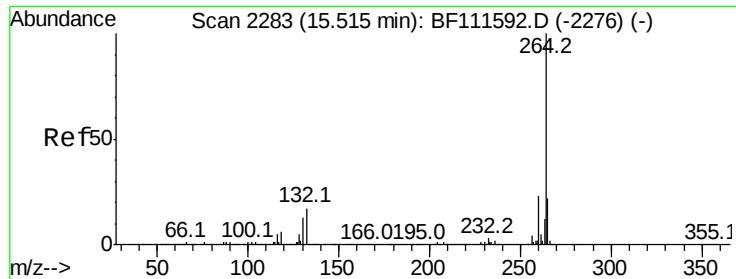
Sohil  
12/21/2018 2:46:43 PM



#86  
Indeno(1,2,3-cd)pyrene  
Concen: 11.601 ng  
RT: 17.00 min Scan# 2536  
Delta R.T. 0.01 min  
Lab File: BF111643.D  
Acq: 20 Dec 2018 17:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 18.6  | 27.8  | 41.6# |
| 277     | 23.0  | 20.1  | 30.1  |





#87

Pervlene-d12

Concen: 20.000 ng

RT: 15.53 min Scan# 2285

Delta R.T. 0.01 min

Lab File: BF111643.D

Acq: 20 Dec 2018 17:19

Instrument :

BNA\_F

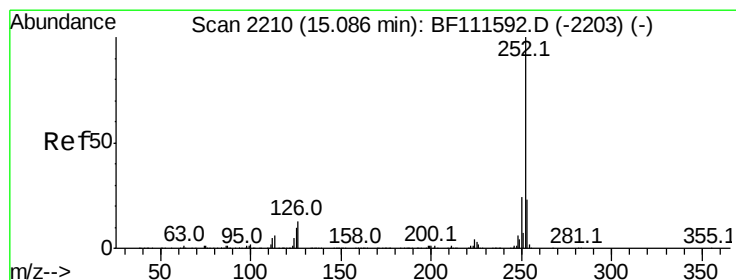
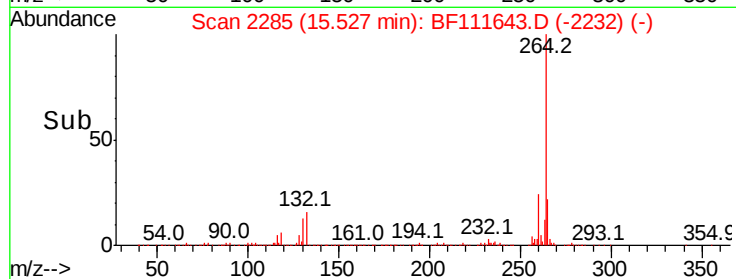
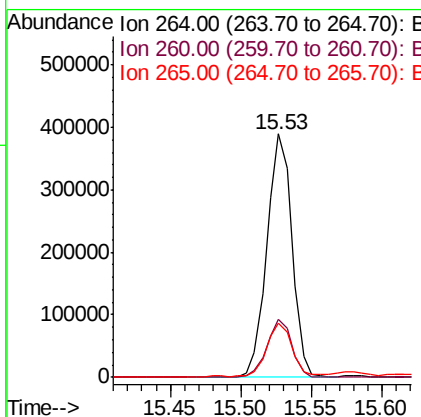
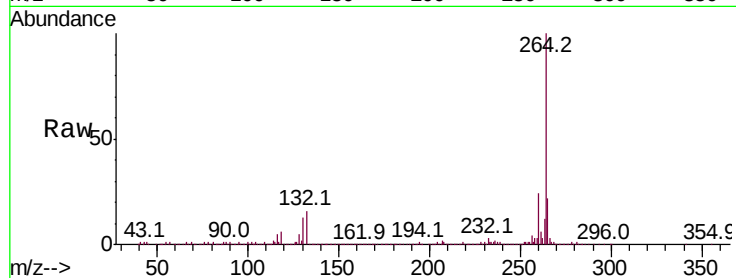
ClientSampleId :

EB05\_1.5-3.5

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 264   | Resp: | 489433 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 23.8  | 18.3  | 27.5   |
| 265       | 22.4  | 17.7  | 26.5   |

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#88

Benzo(b)fluoranthene

Concen: 20.974 ng m

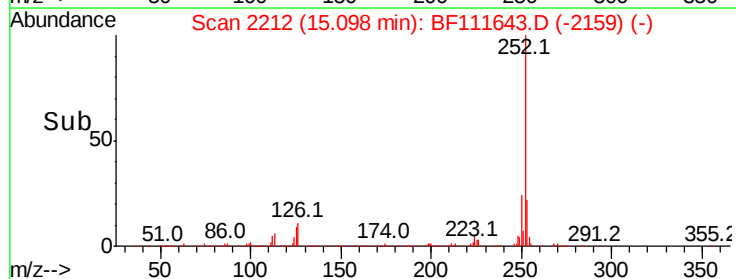
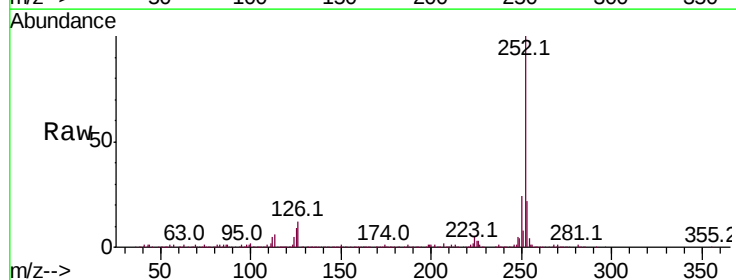
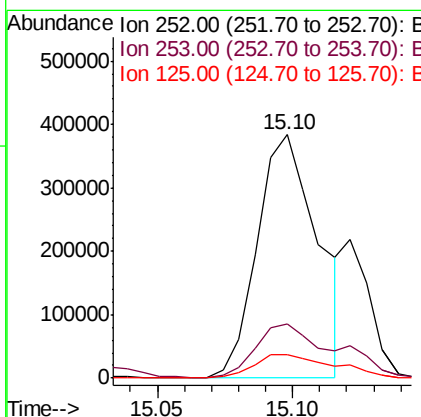
RT: 15.10 min Scan# 2212

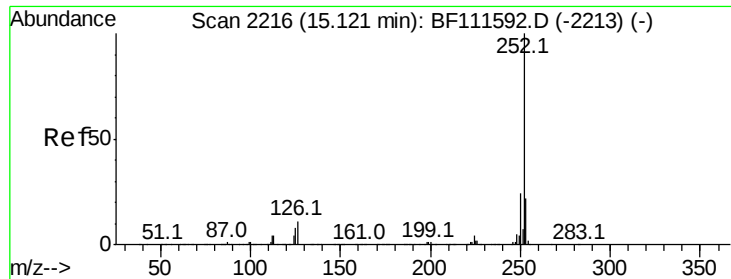
Delta R.T. 0.01 min

Lab File: BF111643.D

Acq: 20 Dec 2018 17:19

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 599960 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.3  | 18.2  | 27.2   |
| 125       | 9.4   | 10.4  | 15.6#  |





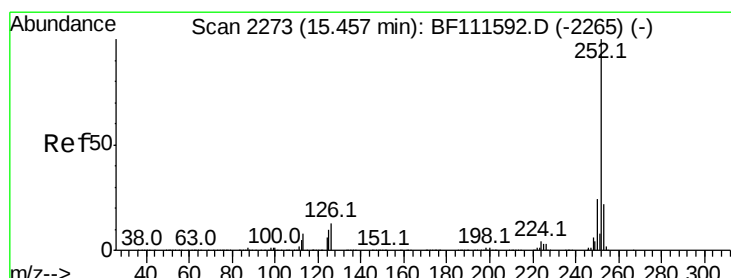
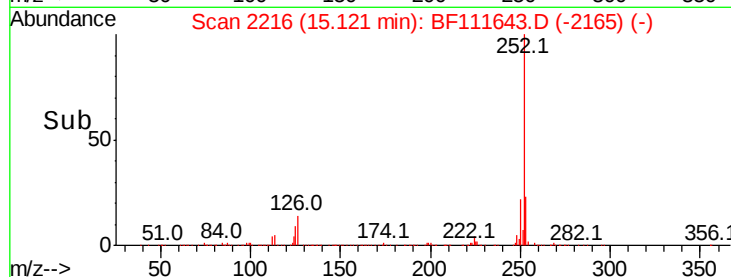
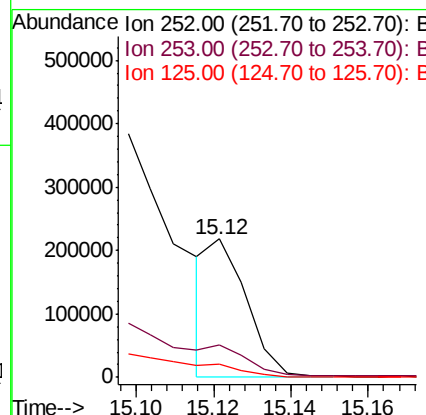
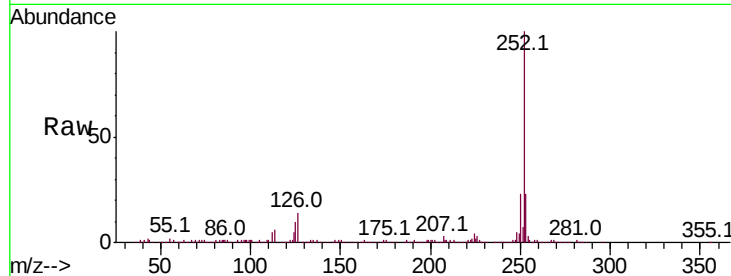
#89  
Benzo(k)fluoranthene  
Concen: 5.520 ng m  
RT: 15.12 min Scan# 2216  
Delta R.T. -0.00 min  
Lab File: BF111643.D  
Acq: 20 Dec 2018 17:19

Instrument :  
BNA\_F  
ClientSampleId :  
EB05\_1.5-3.5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.5  | 18.1  | 27.1  |
| 125     | 9.6   | 9.8   | 14.8  |

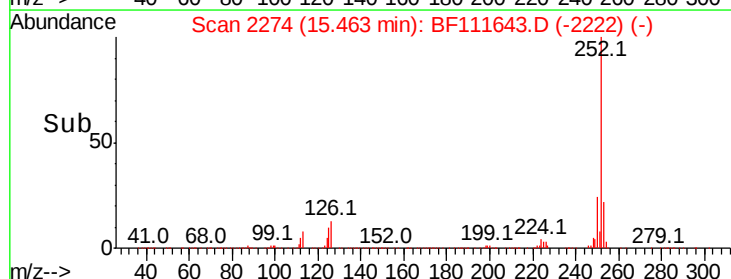
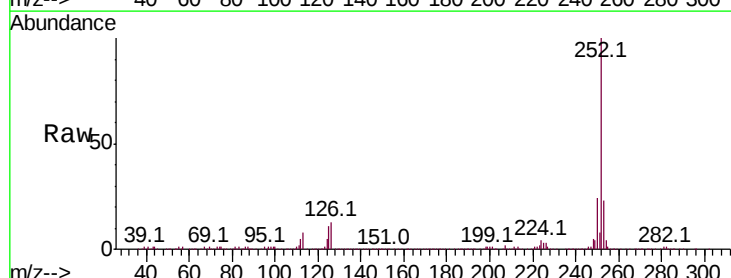
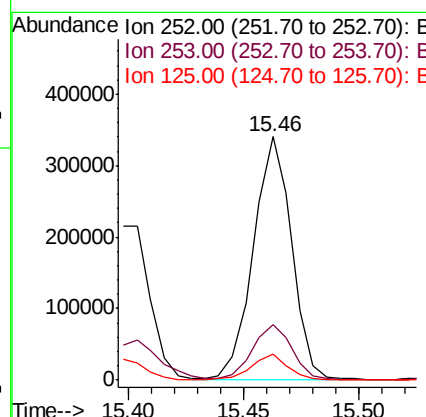
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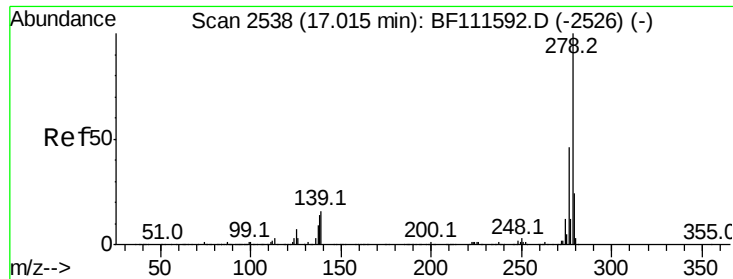
Sohil  
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#90  
Benzo(a)pyrene  
Concen: 15.272 ng m  
RT: 15.46 min Scan# 2274  
Delta R.T. 0.01 min  
Lab File: BF111643.D  
Acq: 20 Dec 2018 17:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.5  | 17.8  | 26.8  |
| 125     | 10.7  | 12.3  | 18.5  |





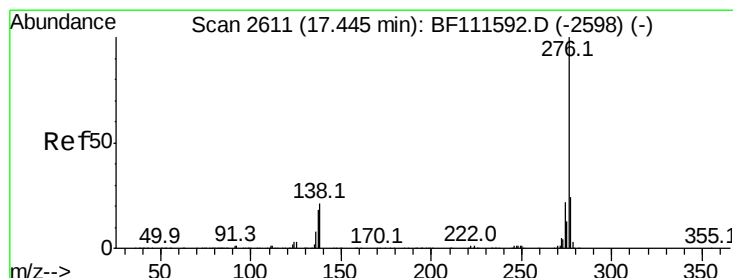
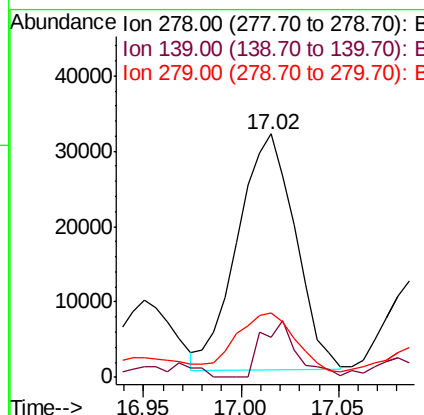
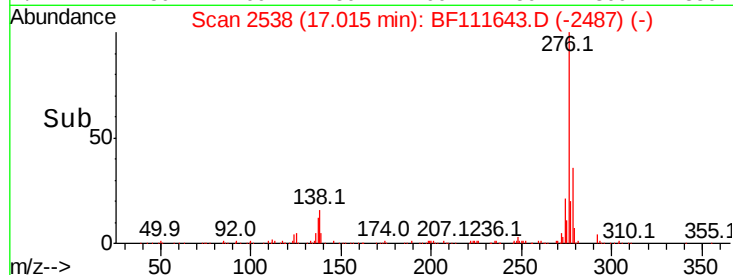
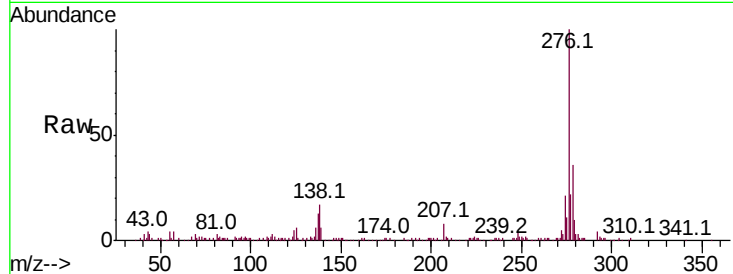
#91  
Dibenzo(a,h)anthracene  
Concen: 2.816 ng  
RT: 17.02 min Scan# 2538  
Delta R.T. -0.00 min  
Lab File: BF111643.D  
Acq: 20 Dec 2018 17:19

Instrument :  
BNA\_F  
ClientSampleId :  
EB05\_1.5-3.5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 16.4  | 18.2  | 27.4# |
| 279     | 26.6  | 19.0  | 28.6  |

Manual Integrations  
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#92  
Benzo(g,h,i)perylene  
Concen: 9.866 ng  
RT: 17.45 min Scan# 2612  
Delta R.T. 0.01 min  
Lab File: BF111643.D  
Acq: 20 Dec 2018 17:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.7  | 19.2  | 28.8  |
| 138     | 20.5  | 24.9  | 37.3# |

