

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF110218\  
 Data File : BF110429.D  
 Acq On : 2 Nov 2018 23:15  
 Operator : JU/SJ  
 Sample : J5769-03 2X  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleID :  
 WAGARAW-RD-2

Manual Integrations  
 APPROVED

Sohil  
 11/5/2018 10:32:51 AM

Quant Time: Nov 03 01:01:33 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF102318.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 01 16:06:12 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.96  | 152  | 82958    | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.24  | 136  | 314686   | 20.00  | ng    | 0.00     |
| 39) Acenaphthene-d10        | 10.00 | 164  | 124849   | 20.00  | ng    | 0.00     |
| 64) Phenanthrene-d10        | 11.49 | 188  | 201631   | 20.00  | ng    | 0.00     |
| 76) Chrysene-d12            | 14.13 | 240  | 151985   | 20.00  | ng    | 0.00     |
| 87) Perylene-d12            | 15.66 | 264  | 114425   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.57  | 112  | 193156   | 37.92  | ng    | 0.00     |
| 7) Phenol-d6                | 6.57  | 99   | 241752   | 37.10  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.52  | 82   | 141667   | 26.70  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.79 | 330  | 40313    | 32.60  | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.31  | 172  | 247615   | 31.14  | ng    | 0.00     |
| 79) Terphenyl-d14           | 13.07 | 244  | 193037   | 26.41  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 10) Phenol                  | 6.59  | 94   | 14854    | 2.133  | ng    | # 77     |
| 50) Dimethylphthalate       | 9.70  | 163  | 35803    | 3.885  | ng    | # 98     |
| 71) Phenanthrene            | 11.51 | 178  | 70085    | 6.643  | ng    | 98       |
| 75) Fluoranthene            | 12.70 | 202  | 214227   | 20.008 | ng    | 99       |
| 78) Pyrene                  | 12.93 | 202  | 192566   | 17.673 | ng    | 98       |
| 81) Benzo(a)anthracene      | 14.12 | 228  | 92262    | 10.237 | ng    | 97       |
| 83) Chrysene                | 14.16 | 228  | 92077    | 10.756 | ng    | 99       |
| 86) Indeno(1,2,3-cd)pyrene  | 17.22 | 276  | 41022    | 5.776  | ng    | # 94     |
| 88) Benzo(b)fluoranthene    | 15.20 | 252  | 100013m  | 15.136 | ng    |          |
| 89) Benzo(k)fluoranthene    | 15.23 | 252  | 39078m   | 6.016  | ng    |          |
| 90) Benzo(a)pyrene          | 15.59 | 252  | 65394    | 10.755 | ng    | 97       |
| 92) Benzo(a,h,i)perylene    | 17.70 | 276  | 45989    | 8.896  | ng    | # 91     |

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

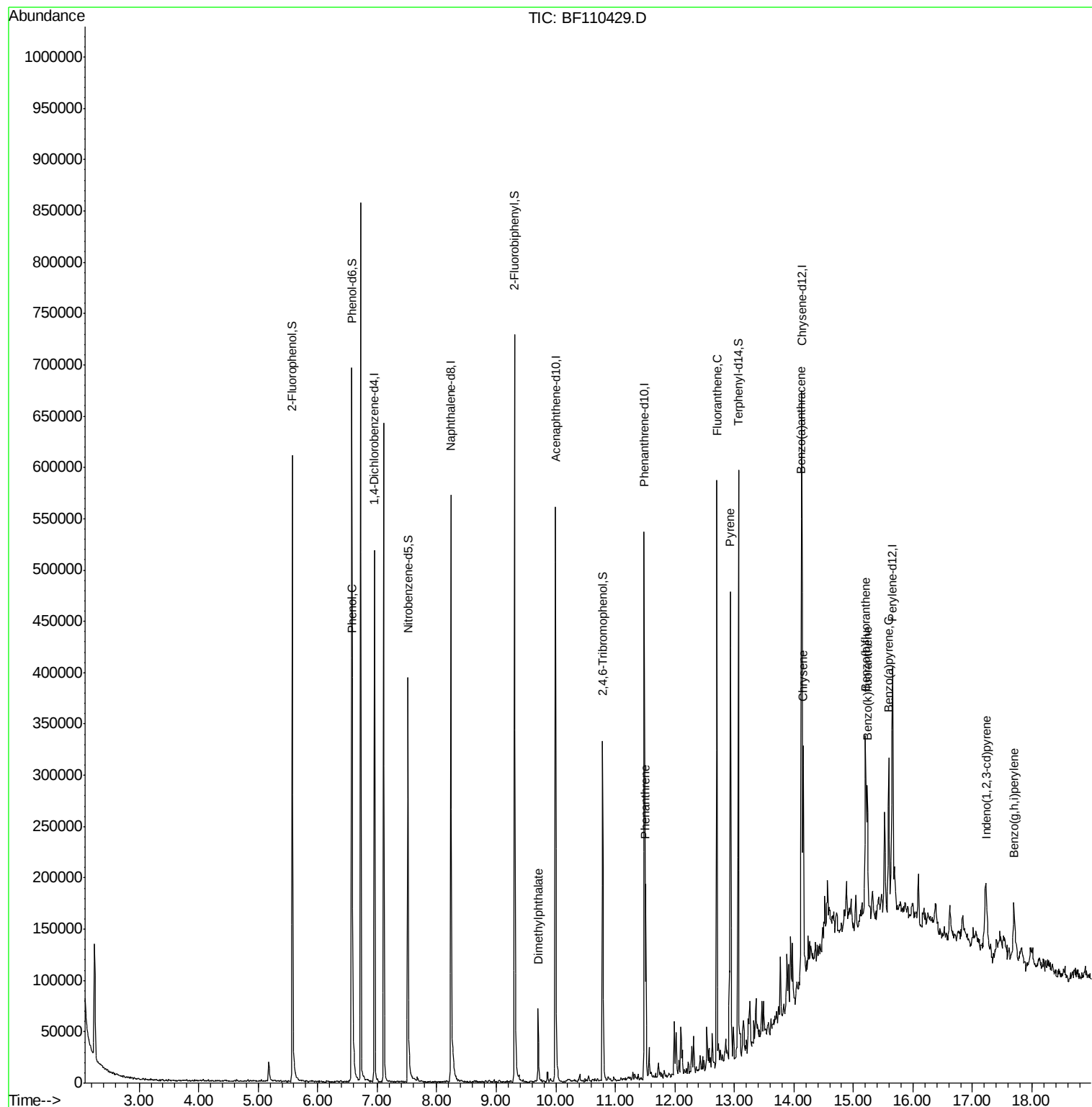
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF110218\  
Data File : BF110429.D  
Acq On : 2 Nov 2018 23:15  
Operator : JU/SJ  
Sample : J5769-03 2X  
Misc :  
ALS Vial : 18 Sample Multiplier: 1

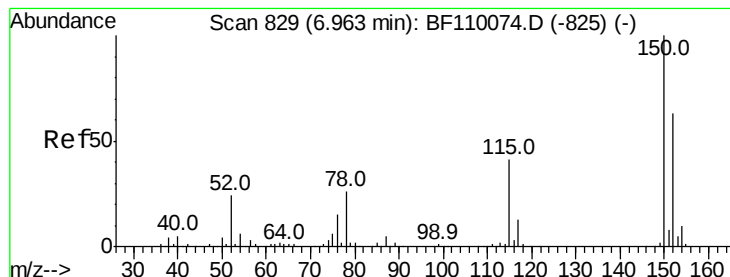
Instrument :  
BNA\_F  
ClientSampleId :  
WAGARAW-RD-2

Manual Integrations  
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11/5/2018 10:32:51 AM

Quant Time: Nov 03 01:01:33 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF102318.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Nov 01 16:06:12 2018  
Response via : Initial Calibration





#1

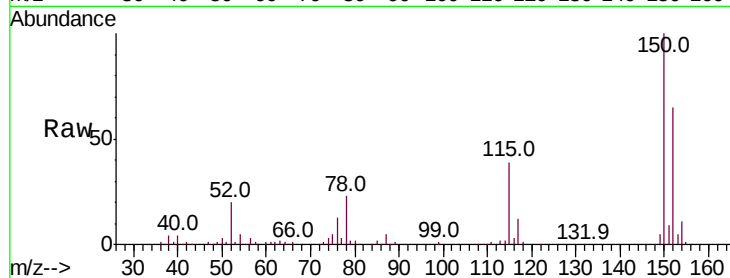
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.96 min Scan# 828  
Delta R.T. 0.00 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

Instrument :  
BNA\_F  
ClientSampleId :  
WAGARAW-RD-2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 154.4 | 122.7 | 184.1 |
| 115     | 59.6  | 49.1  | 73.7  |

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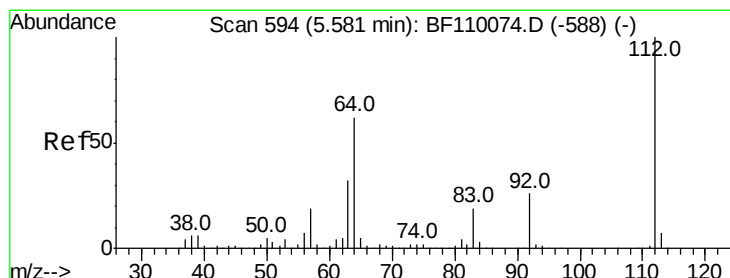
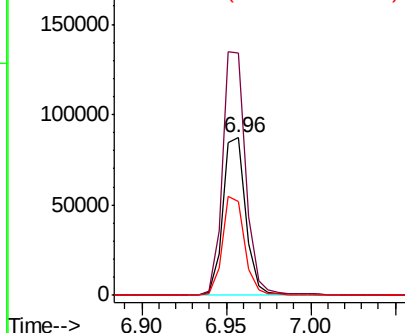
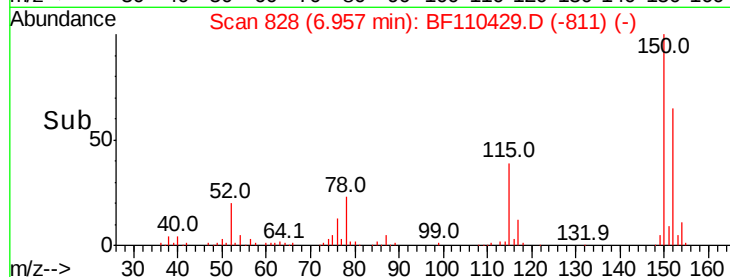


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

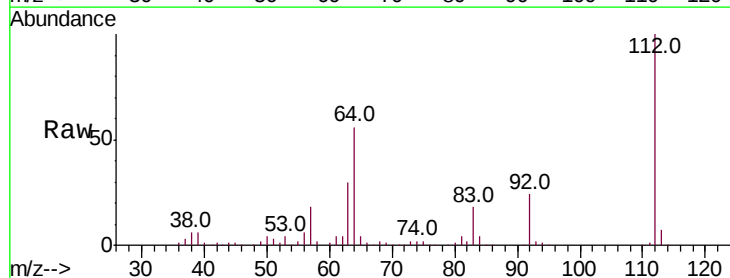
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 37.916 ng  
RT: 5.57 min Scan# 593  
Delta R.T. 0.00 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 56.2  | 44.1  | 66.1  |
| 63      | 30.1  | 23.7  | 35.5  |

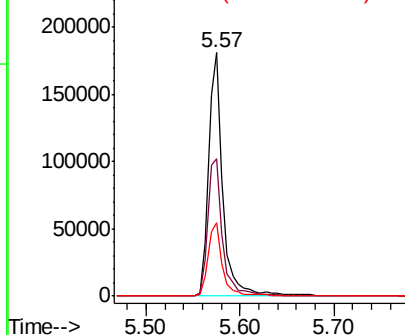
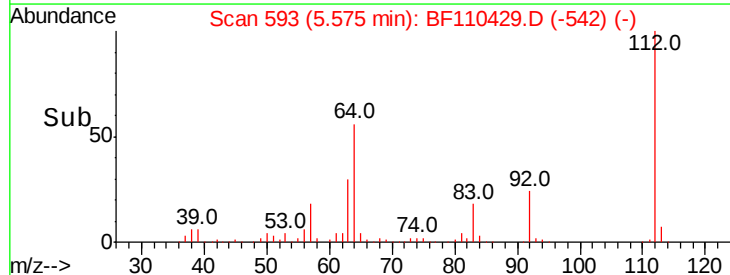


Abundance

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: 37.101 ng

RT: 6.57 min Scan# 763

Delta R.T. -0.01 min

Lab File: BF110429.D

Acq: 2 Nov 2018 23:15

Instrument :

BNA\_F

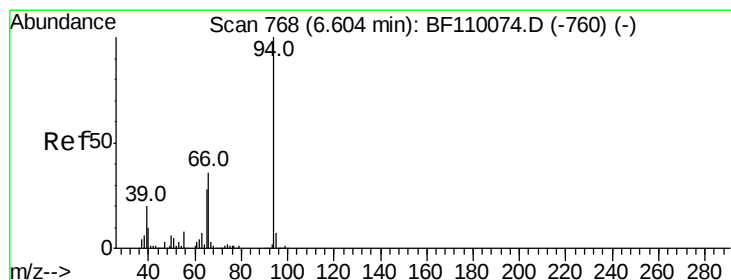
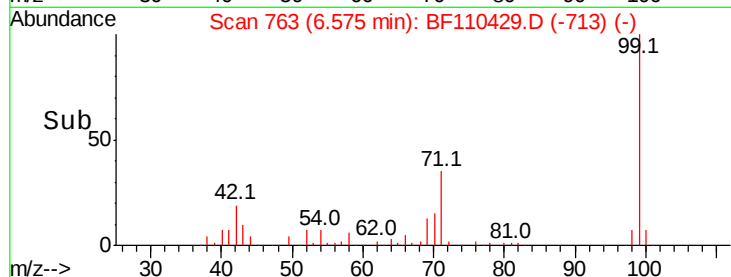
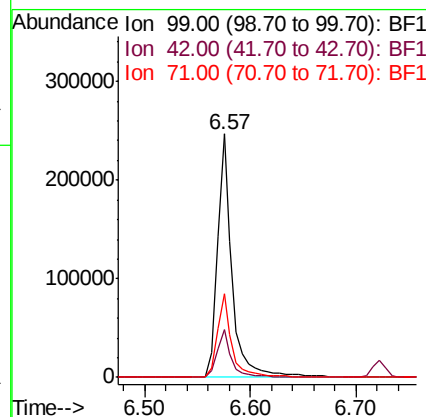
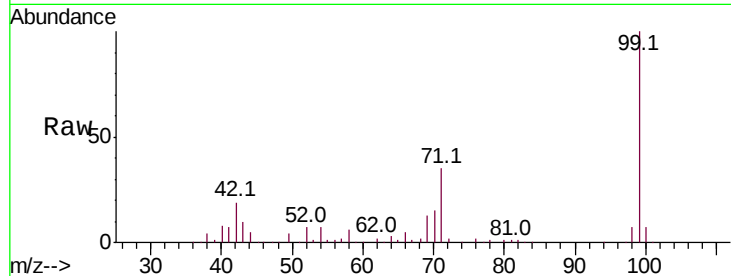
ClientSampleId :

WAGARAW-RD-2

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 241752 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 19.5  | 15.8  | 23.6   |
| 71        | 34.6  | 28.0  | 42.0   |

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#10

Phenol

Concen: 2.133 ng

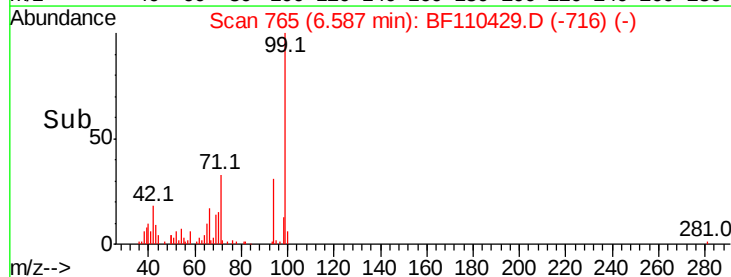
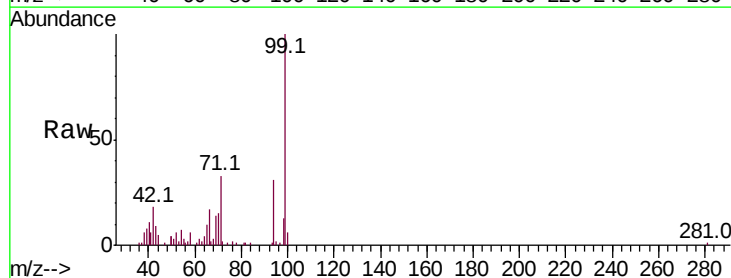
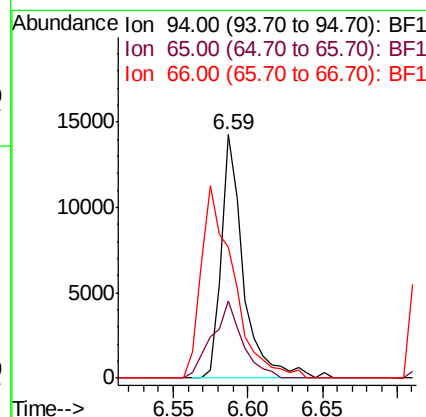
RT: 6.59 min Scan# 765

Delta R.T. -0.01 min

Lab File: BF110429.D

Acq: 2 Nov 2018 23:15

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 94    | Resp: | 14854 |
| Ion Ratio | Lower | Upper |       |
| 94        | 100   |       |       |
| 65        | 31.6  | 25.3  | 65.3  |
| 66        | 53.8  | 54.5  | 94.5# |





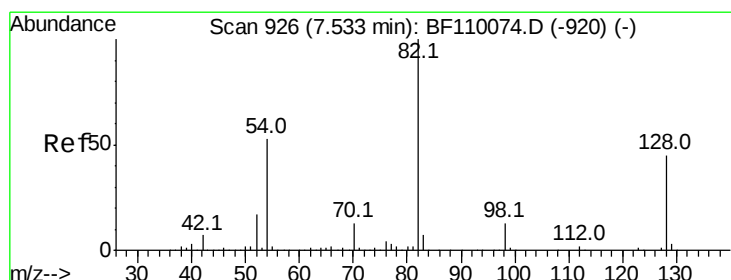
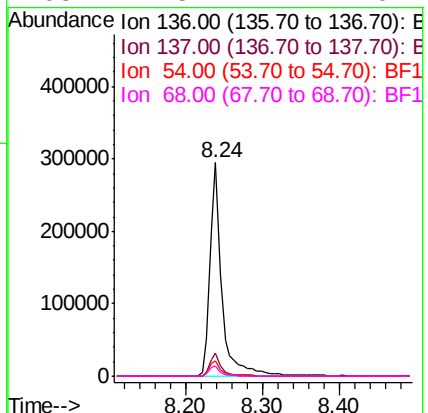
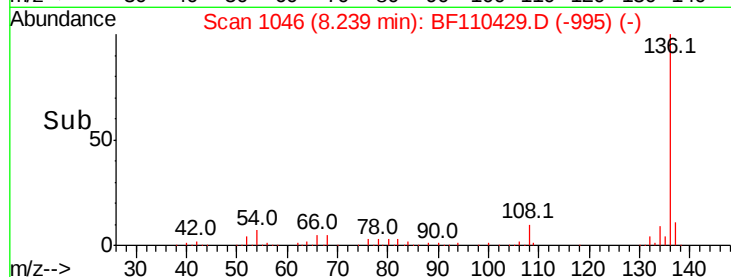
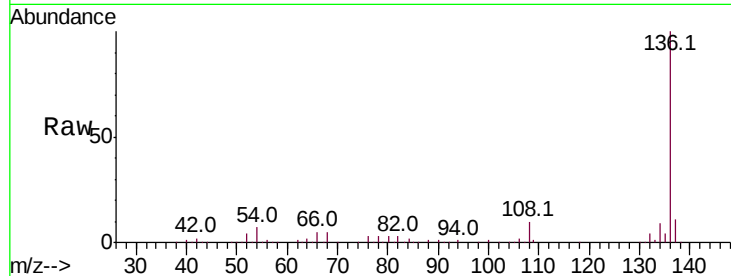
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.24 min Scan# 1046  
Delta R.T. 0.00 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

Instrument :  
BNA\_F  
ClientSampleId :  
WAGARAW-RD-2

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 136     | 100   |      |       |       |
| 137     | 10.6  | 8.8  | 13.2  |       |
| 54      | 7.4   | 5.4  | 8.2   |       |
| 68      | 4.8   | 4.2  | 6.2   |       |

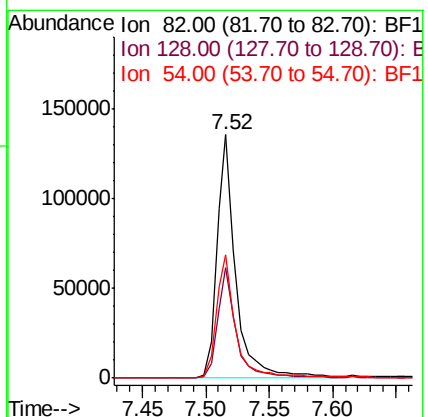
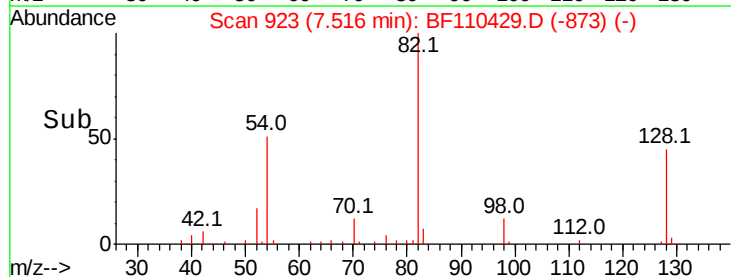
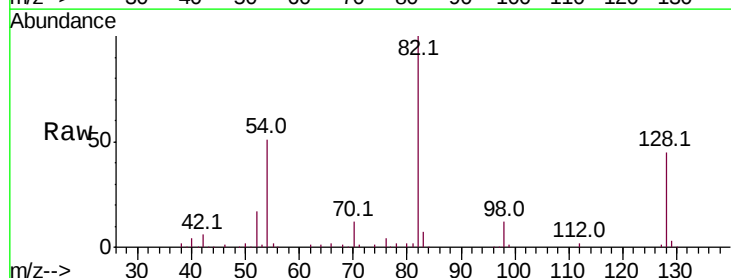
Manual Integrations  
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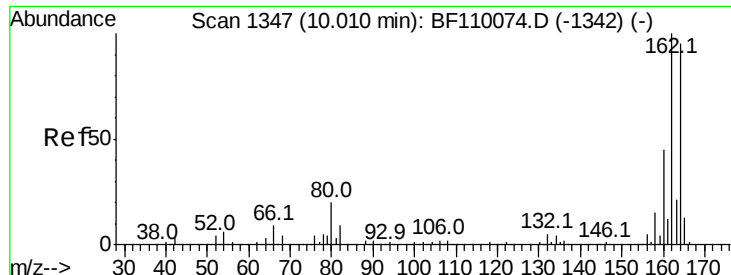
Sohil  
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#23  
Nitrobenzene-d5  
Concen: 26.702 ng  
RT: 7.52 min Scan# 923  
Delta R.T. -0.01 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 82      | 100   |      |       |       |
| 128     | 45.3  | 34.2 | 51.2  |       |
| 54      | 50.9  | 38.6 | 58.0  |       |





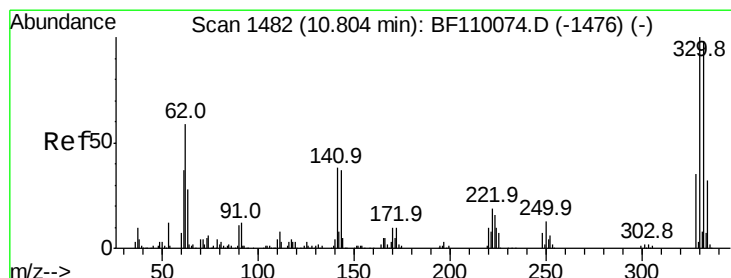
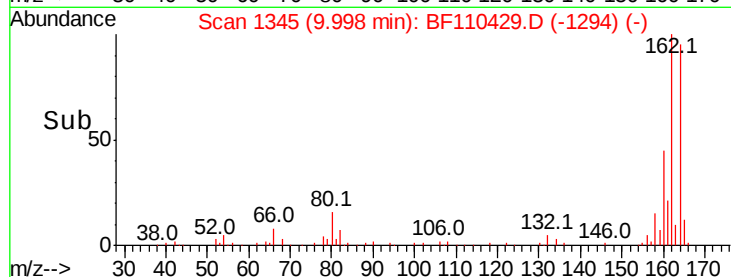
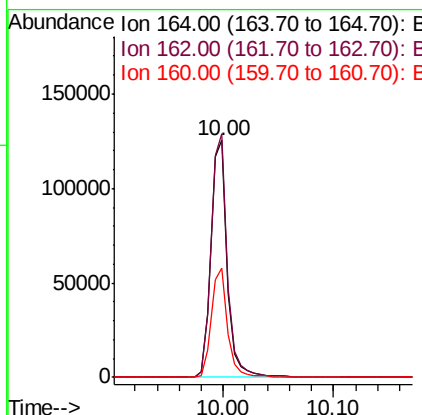
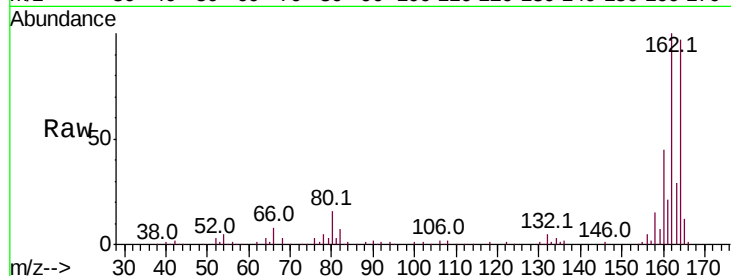
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 10.00 min Scan# 1345  
Delta R.T. 0.00 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

Instrument :  
BNA\_F  
ClientSampleId :  
WAGARAW-RD-2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 102.8 | 83.0  | 124.6 |
| 160     | 46.1  | 37.0  | 55.6  |

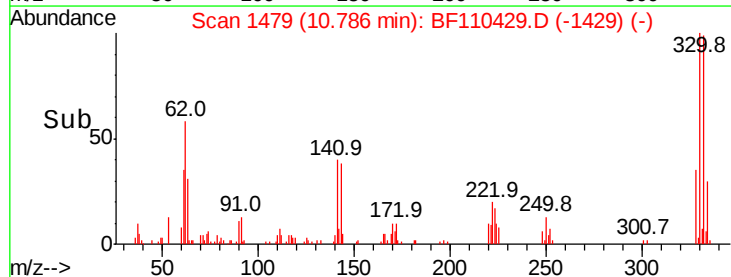
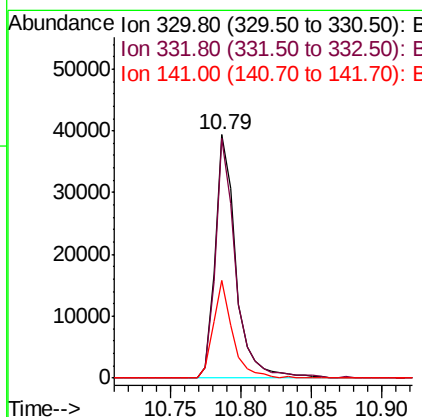
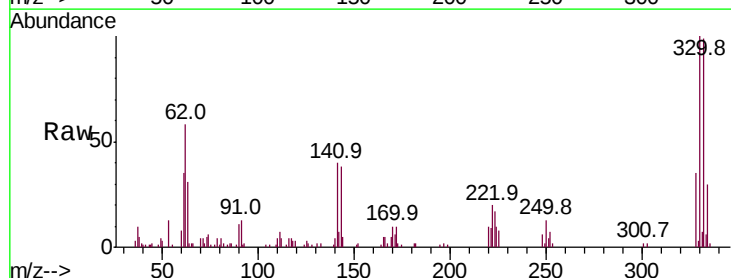
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#42  
2,4,6-Tribromophenol  
Concen: 32.597 ng  
RT: 10.79 min Scan# 1479  
Delta R.T. -0.01 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 96.2  | 77.1  | 115.7 |
| 141     | 37.3  | 27.0  | 40.4  |





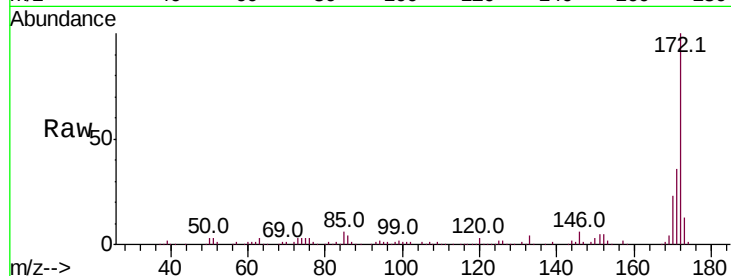
#45  
2-Fluorobiphenyl  
Concen: 31.143 ng  
RT: 9.31 min Scan# 1228  
Delta R.T. -0.01 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

Instrument :  
BNA\_F  
ClientSampleId :  
WAGARAW-RD-2

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 172     | 100   | 247615 |       |       |
| 171     | 35.7  |        | 28.6  | 43.0  |
| 170     | 22.9  |        | 19.7  | 29.5  |

Manual Integrations  
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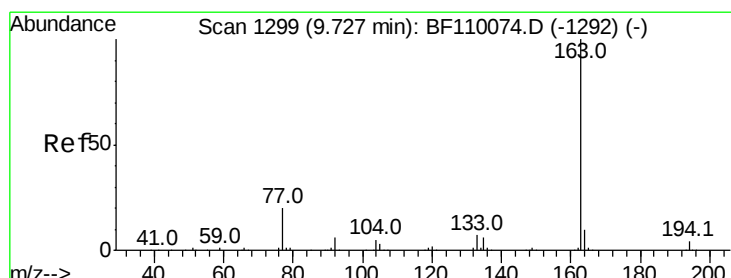
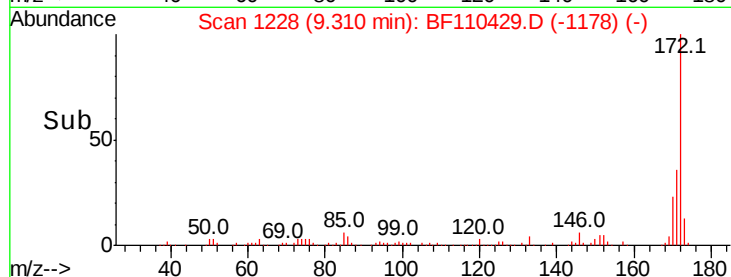
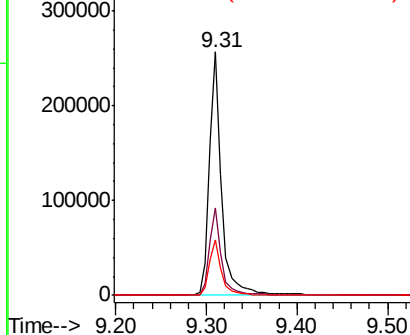


Abundance

Ion 172.00 (171.70 to 172.70): E

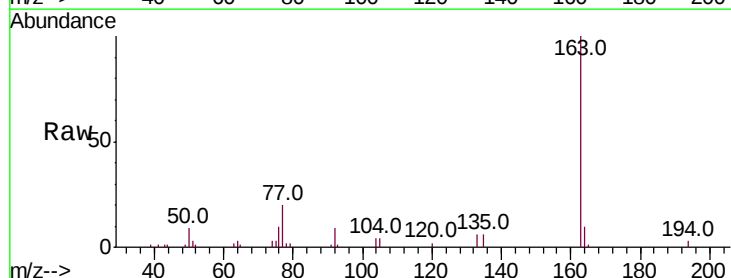
Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E



#50  
Dimethylphthalate  
Concen: 3.885 ng  
RT: 9.70 min Scan# 1295  
Delta R.T. -0.01 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 163     | 100   | 35803 |       |       |
| 194     | 3.1   |       | 3.2   | 4.8#  |
| 164     | 9.6   |       | 8.1   | 12.1  |

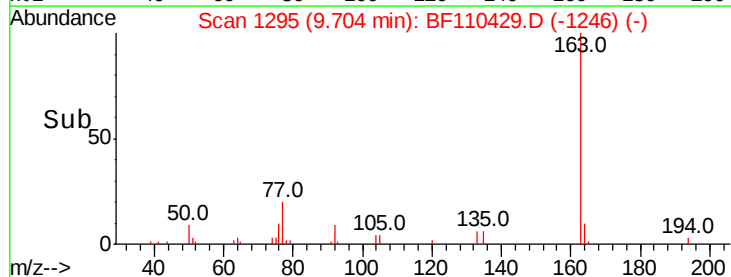
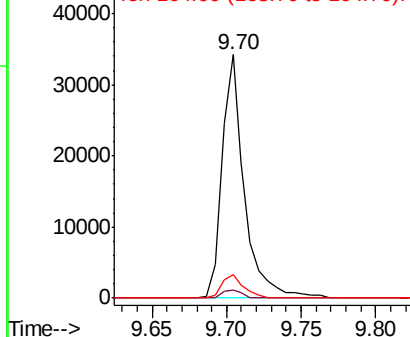


Abundance

Ion 163.00 (162.70 to 163.70): E

Ion 194.00 (193.70 to 194.70): E

Ion 164.00 (163.70 to 164.70): E





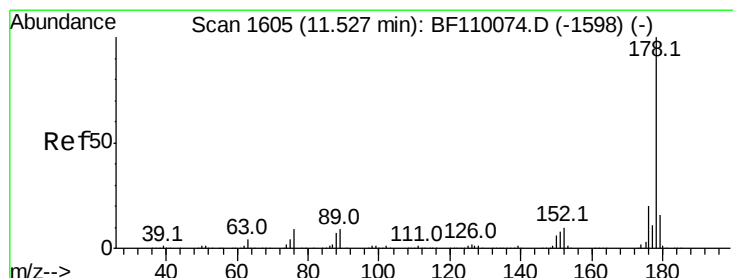
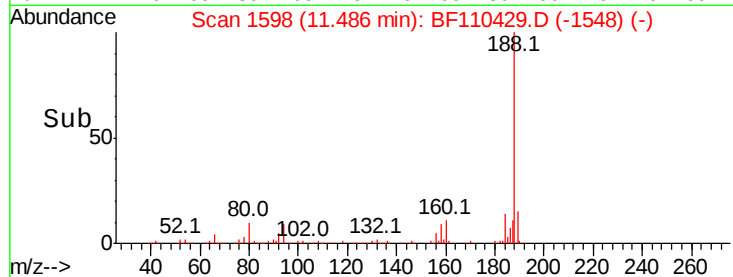
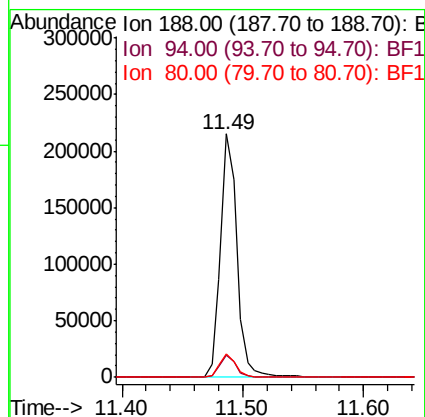
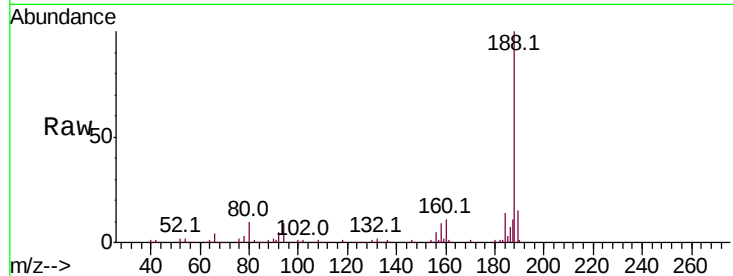
#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.49 min Scan# 1598  
Delta R.T. -0.01 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

Instrument :  
BNA\_F  
ClientSampleId :  
WAGARAW-RD-2

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 188     | 100   | 201631 |       |       |
| 94      | 9.2   |        | 7.2   | 10.8  |
| 80      | 9.7   |        | 7.9   | 11.9  |

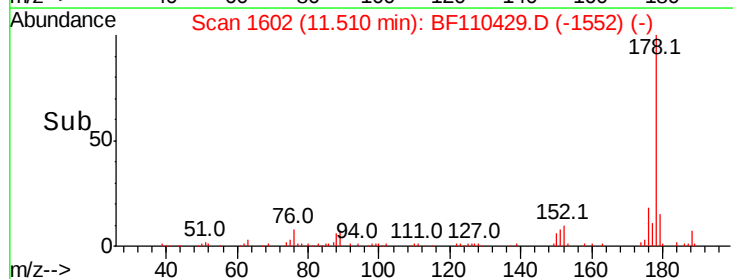
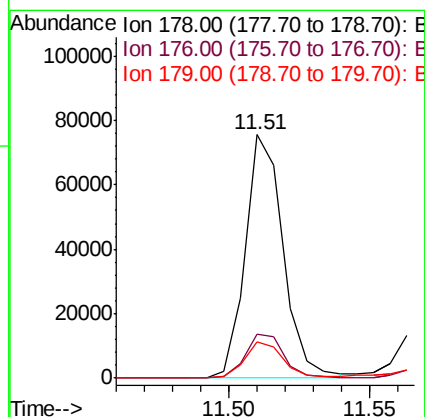
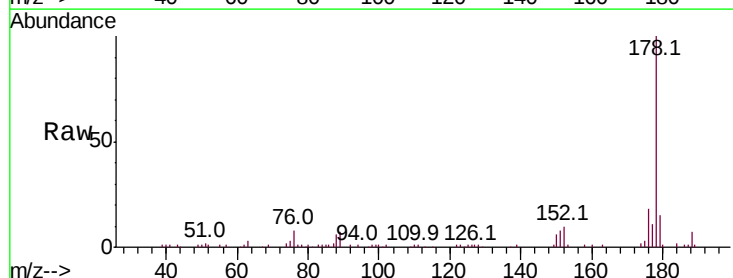
Manual Integrations  
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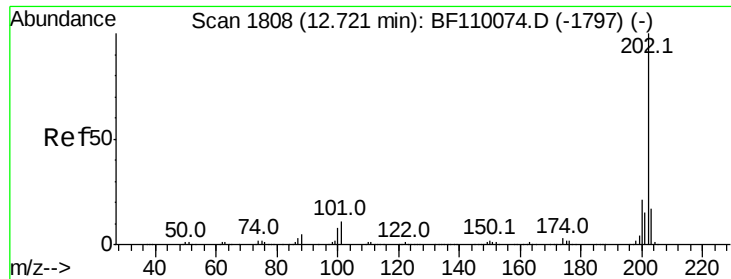
Sohil  
11/5/2018 10:32:51 AM



#71  
Phenanthrene  
Concen: 6.643 ng  
RT: 11.51 min Scan# 1602  
Delta R.T. -0.01 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 178     | 100   | 70085 |       |       |
| 176     | 18.2  |       | 15.5  | 23.3  |
| 179     | 14.7  |       | 12.5  | 18.7  |





#75

Fluoranthene

Concen: 20.008 ng

RT: 12.70 min Scan# 1805

Delta R.T. -0.01 min

Lab File: BF110429.D

Acq: 2 Nov 2018 23:15

Instrument :

BNA\_F

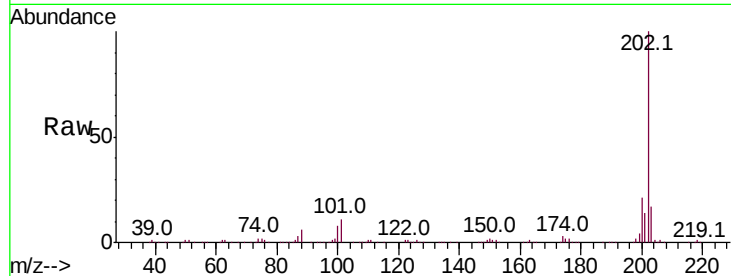
ClientSampleId :

WAGARAW-RD-2

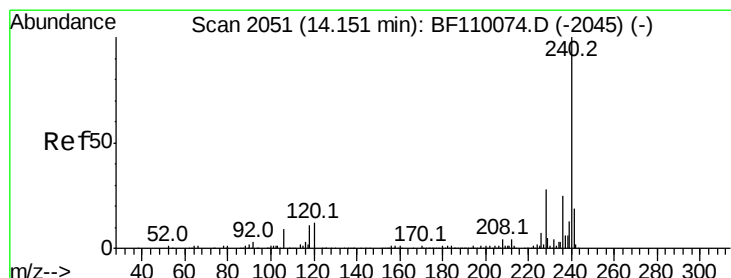
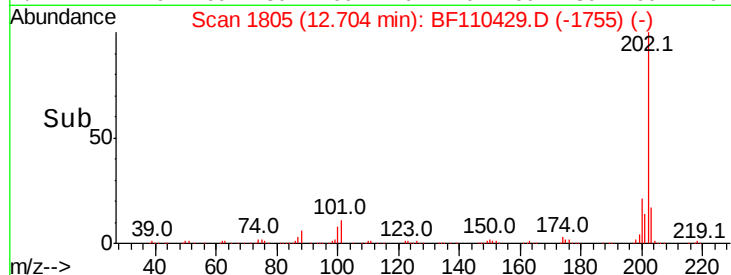
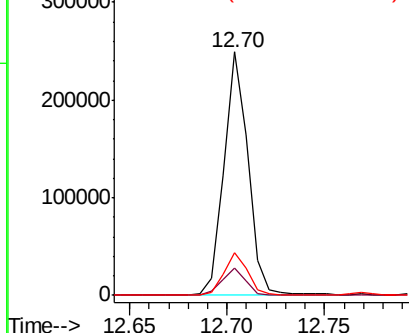
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 202   | Resp: | 214227 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 11.0  | 0.0   | 31.4   |
| 203       | 17.4  | 0.0   | 37.7   |

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Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 203.00 (202.70 to 203.70): E



#76

Chrysene-d12

Concen: 20.000 ng

RT: 14.13 min Scan# 2048

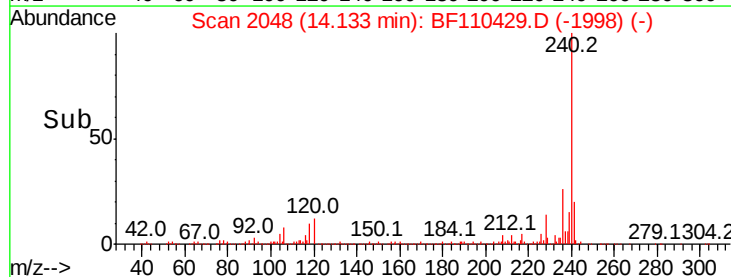
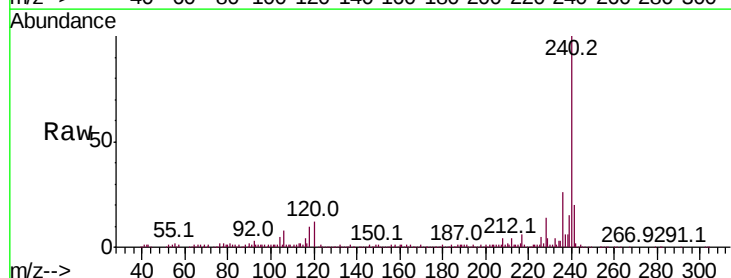
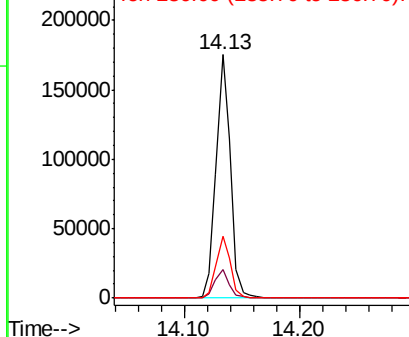
Delta R.T. -0.01 min

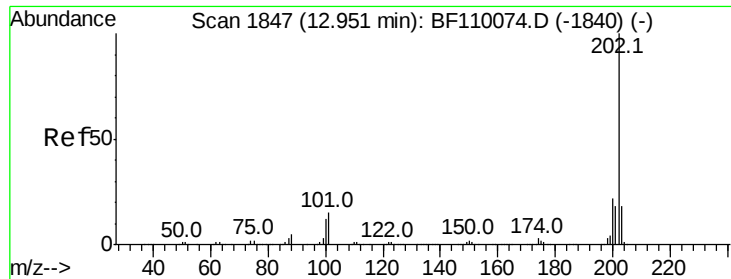
Lab File: BF110429.D

Acq: 2 Nov 2018 23:15

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 240   | Resp: | 151985 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 11.5  | 8.3   | 12.5   |
| 236       | 25.5  | 21.2  | 31.8   |

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





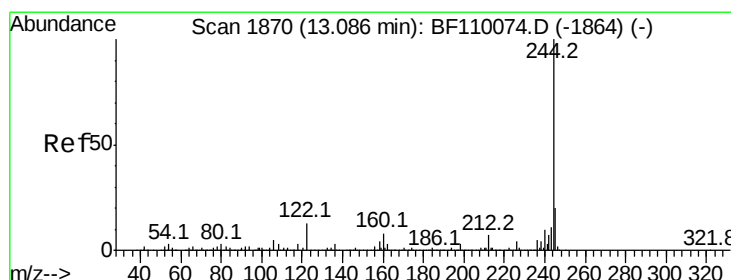
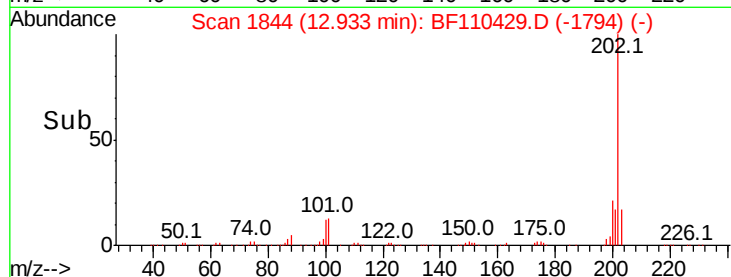
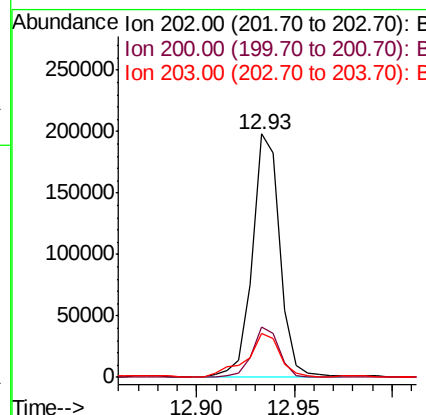
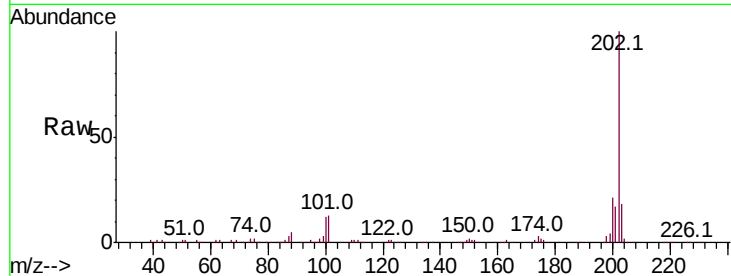
#78  
Pvrene  
Concen: 17.673 ng  
RT: 12.93 min Scan# 1844  
Delta R.T. -0.01 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

Instrument :  
BNA\_F  
ClientSampleId :  
WAGARAW-RD-2

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 200     | 20.5  | 17.8       | 26.6  |
| 203     | 17.8  | 14.2       | 21.4  |

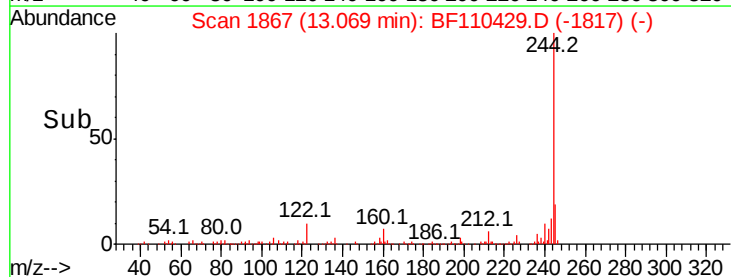
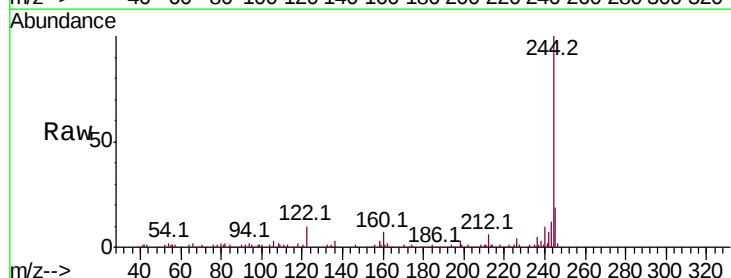
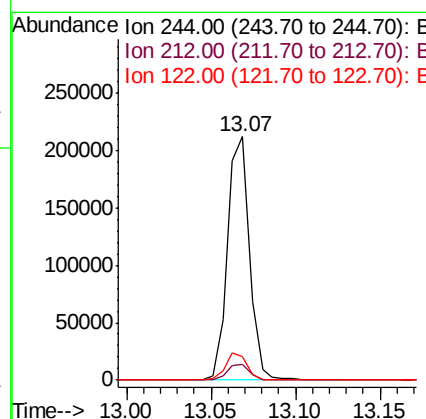
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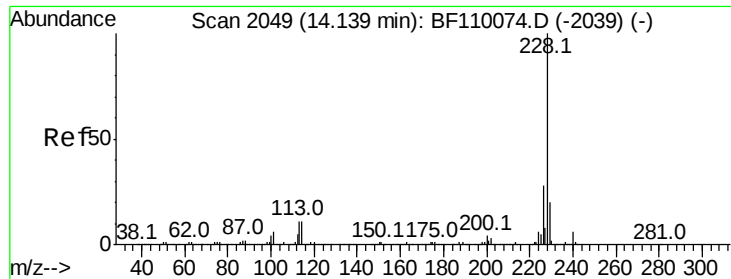
Sohil  
11/5/2018 10:32:51 AM



#79  
Terphenyl-d14  
Concen: 26.415 ng  
RT: 13.07 min Scan# 1867  
Delta R.T. -0.01 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 244     | 100   |            |       |
| 212     | 6.4   | 5.8        | 8.8   |
| 122     | 9.8   | 8.7        | 13.1  |





#81

Benzo(a)anthracene

Concen: 10.237 ng

RT: 14.12 min Scan# 2046

Delta R.T. -0.01 min

Lab File: BF110429.D

Acq: 2 Nov 2018 23:15

Instrument :

BNA\_F

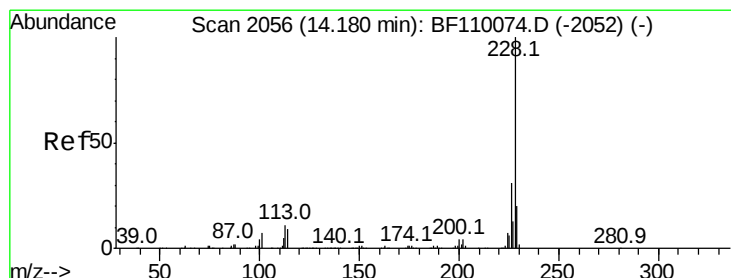
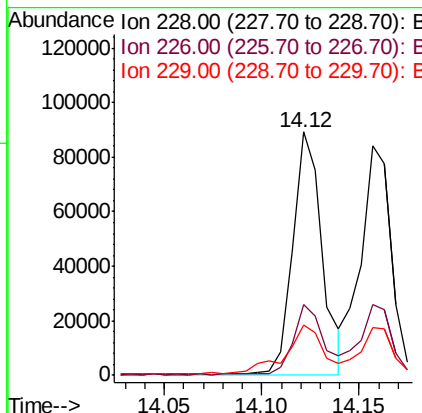
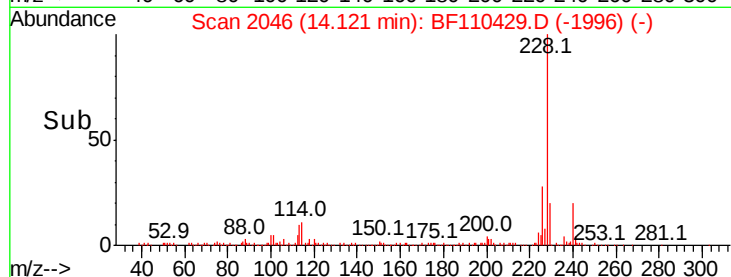
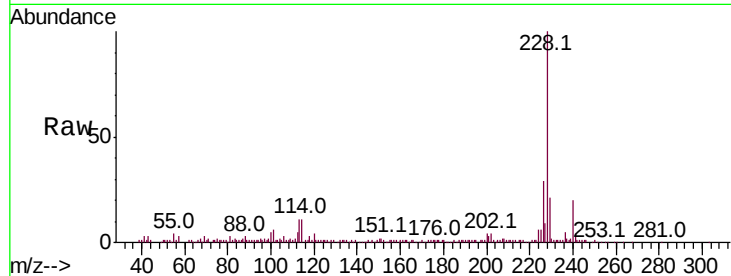
ClientSampleId :

WAGARAW-RD-2

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 228   | Resp: | 92262 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 28.9  | 22.1  | 33.1  |
| 229       | 20.8  | 15.6  | 23.4  |

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#83

Chrysene

Concen: 10.756 ng

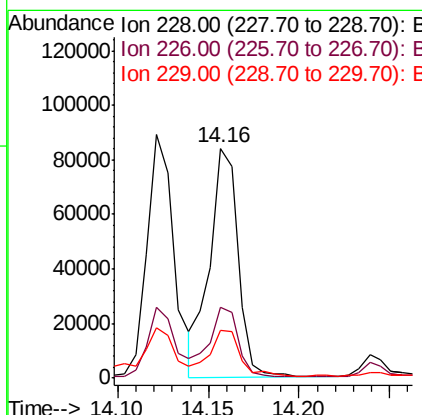
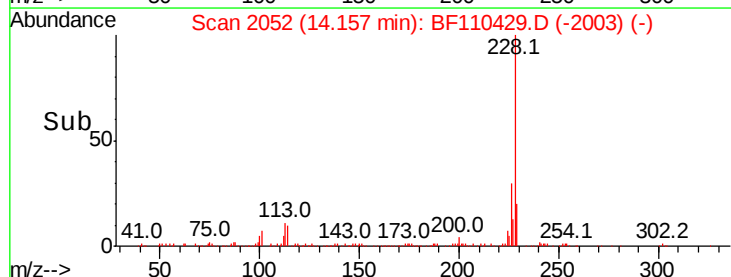
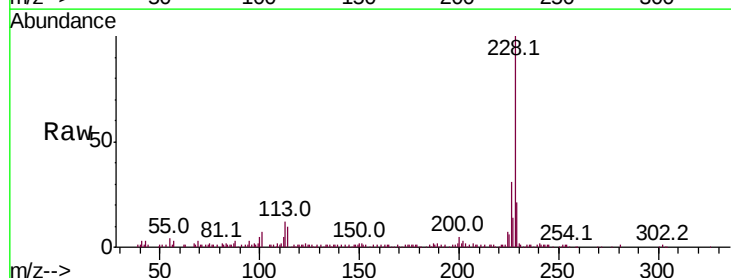
RT: 14.16 min Scan# 2052

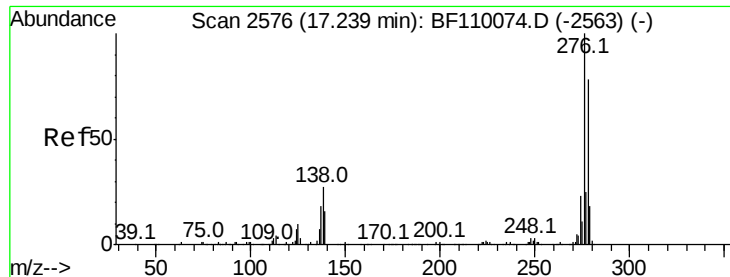
Delta R.T. -0.01 min

Lab File: BF110429.D

Acq: 2 Nov 2018 23:15

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 228   | Resp: | 92077 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 30.7  | 24.7  | 37.1  |
| 229       | 20.8  | 15.9  | 23.9  |





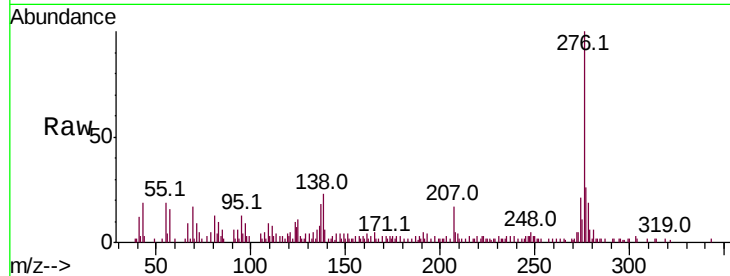
#86  
Indeno(1,2,3-cd)pyrene  
Concen: 5.776 ng  
RT: 17.22 min Scan# 2573  
Delta R.T. -0.01 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

Instrument :  
BNA\_F  
ClientSampleId :  
WAGARAW-RD-2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 22.9  | 18.5  | 27.7  |
| 277     | 30.3  | 20.0  | 30.0# |

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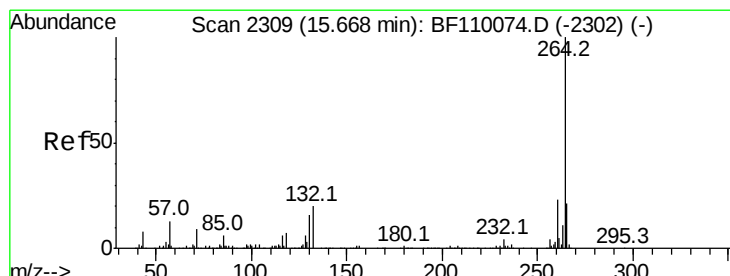
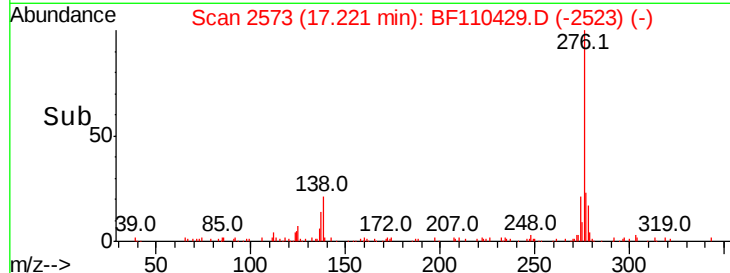
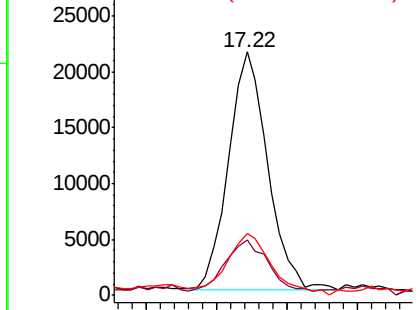


Abundance

Ion 276.00 (275.70 to 276.70): E

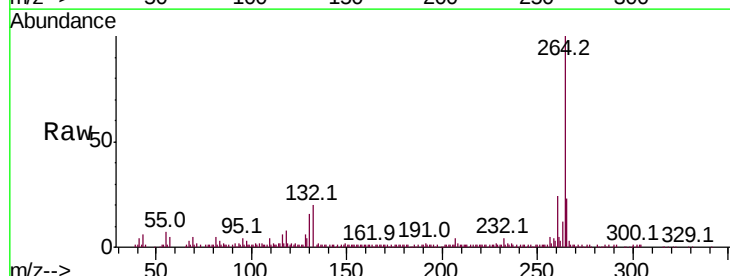
Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.66 min Scan# 2307  
Delta R.T. 0.00 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.4  | 18.7  | 28.1  |
| 265     | 22.6  | 16.7  | 25.1  |

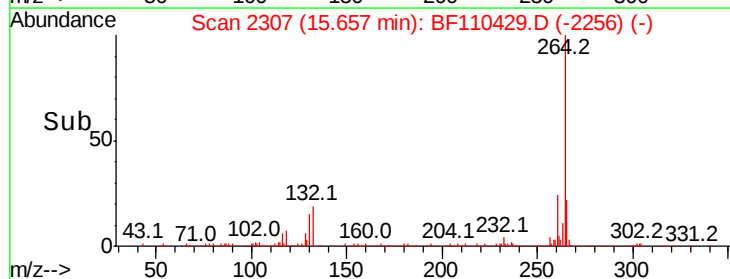
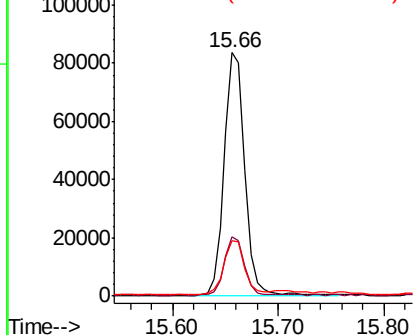


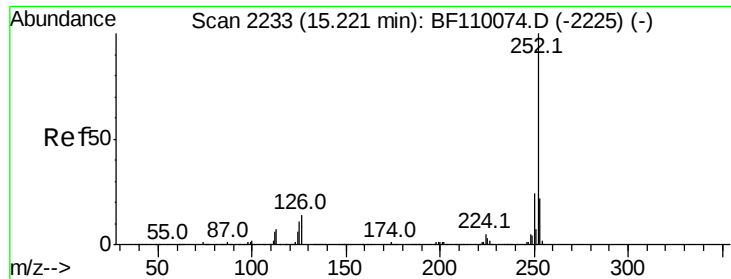
Abundance

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





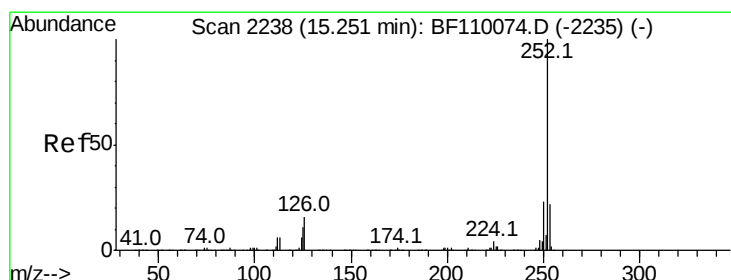
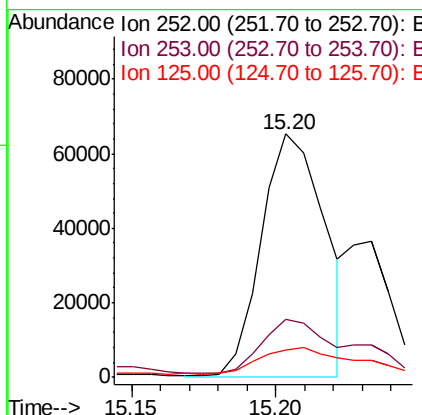
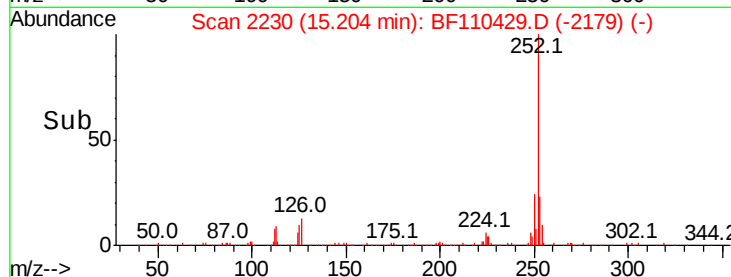
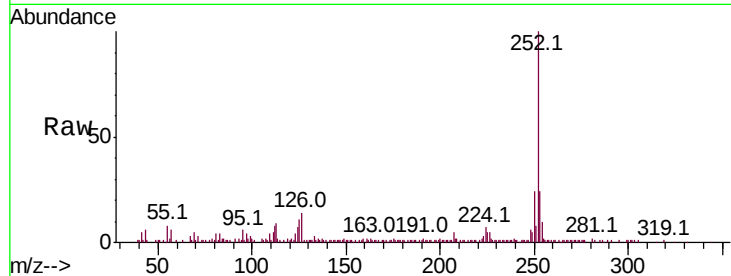
#88  
Benzo(b)fluoranthene  
Concen: 15.136 ng m  
RT: 15.20 min Scan# 2230  
Delta R.T. 0.00 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

Instrument :  
BNA\_F  
ClientSampleId :  
WAGARAW-RD-2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.0  | 17.2  | 25.8  |
| 125     | 11.4  | 8.2   | 12.4  |

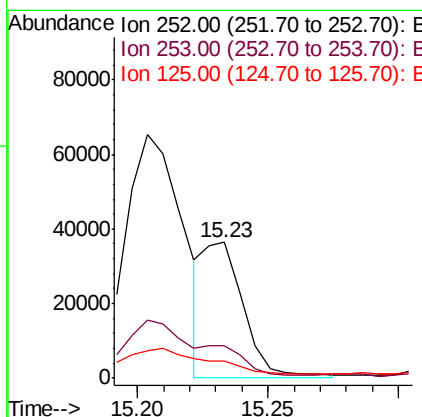
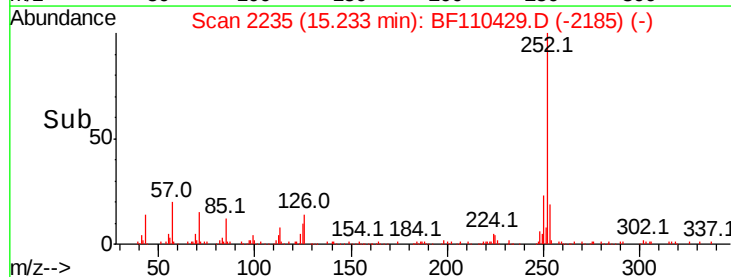
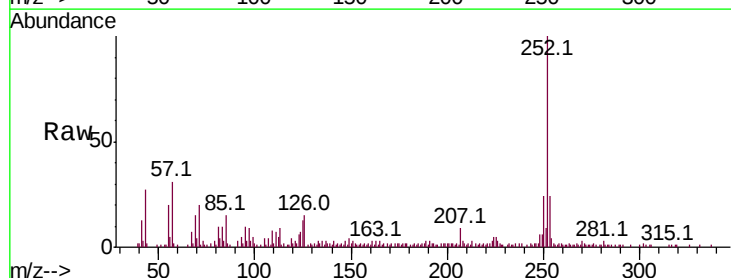
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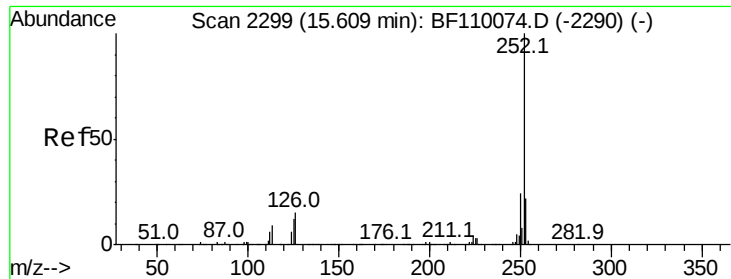
Sohil  
11/5/2018 10:32:51 AM



#89  
Benzo(k)fluoranthene  
Concen: 6.016 ng m  
RT: 15.23 min Scan# 2235  
Delta R.T. -0.01 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.3  | 17.2  | 25.8  |
| 125     | 12.8  | 7.4   | 11.0  |





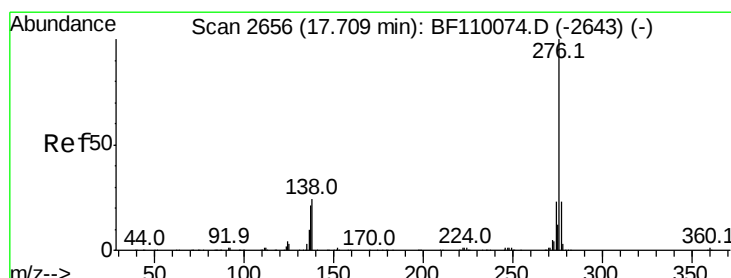
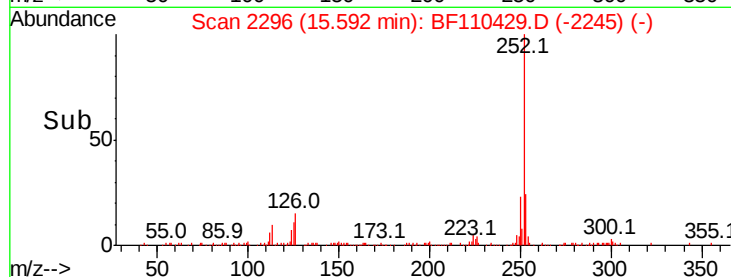
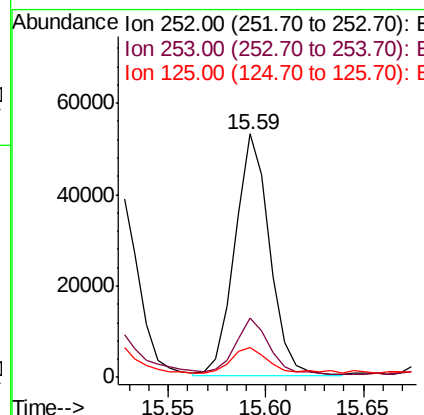
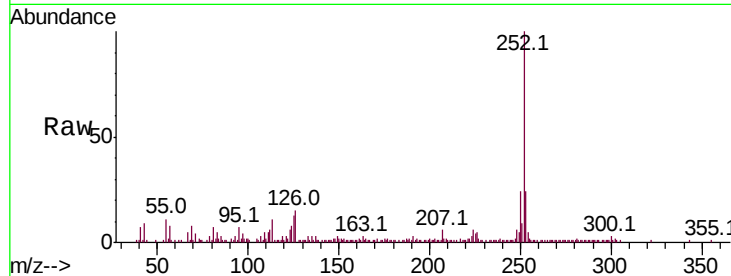
#90  
Benzo(a)pyrene  
Concen: 10.755 ng  
RT: 15.59 min Scan# 2296  
Delta R.T. 0.00 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

Instrument :  
BNA\_F  
ClientSampleId :  
WAGARAW-RD-2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.4  | 18.2  | 27.4  |
| 125     | 12.5  | 9.0   | 13.6  |

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#92  
Benzo(g,h,i)perylene  
Concen: 8.896 ng  
RT: 17.70 min Scan# 2654  
Delta R.T. -0.01 min  
Lab File: BF110429.D  
Acq: 2 Nov 2018 23:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 25.4  | 18.8  | 28.2  |
| 138     | 27.1  | 16.0  | 24.0# |

