

Data Path : Z:\HPCHEM1\BNA F\DATA\BF101817\  
 Data File : BF099651.D  
 Acq On : 19 Oct 2017 7:49  
 Operator : SJ/JU  
 Sample : I5951-03  
 Misc :  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 294-COMP

Manual Integrations  
 APPROVED

Sohil  
 10/19/2017 6:15:52 PM

Quant Time: Oct 19 17:31:02 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092317.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Oct 18 22:24:53 2017  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.83  | 152  | 89127    | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.11  | 136  | 317294   | 20.00  | ng    | 0.00     |
| 38) Acenaphthene-d10        | 9.86  | 164  | 111492   | 20.00  | ng    | 0.00     |
| 63) Phenanthrene-d10        | 11.35 | 188  | 182471   | 20.00  | ng    | 0.00     |
| 75) Chrysene-d12            | 13.99 | 240  | 190294   | 20.00  | ng    | 0.00     |
| 86) Perylene-d12            | 15.46 | 264  | 147176   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.47  | 112  | 690490   | 123.33 | ng    | 0.02     |
| 7) Phenol-d6                | 6.47  | 99   | 715465   | 103.59 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.40  | 82   | 484687   | 97.96  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.66 | 330  | 133208   | 146.01 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.18  | 172  | 825280   | 123.57 | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.93 | 244  | 687556   | 82.17  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 31) Naphthalene             | 8.13  | 128  | 919052   | 61.673 | ng    | 100      |
| 37) 2-Methylnaphthalene     | 8.82  | 142  | 88064    | 9.090  | ng    | 95       |
| 51) Acenaphthene            | 9.89  | 154  | 44403    | 6.365  | ng    | 99       |
| 54) Dibenzofuran            | 10.07 | 168  | 54675    | 5.886  | ng    | 98       |
| 57) Fluorene                | 10.41 | 166  | 30660    | 4.107  | ng    | 98       |
| 70) Phenanthrene            | 11.37 | 178  | 55183    | 5.650  | ng    | 98       |

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

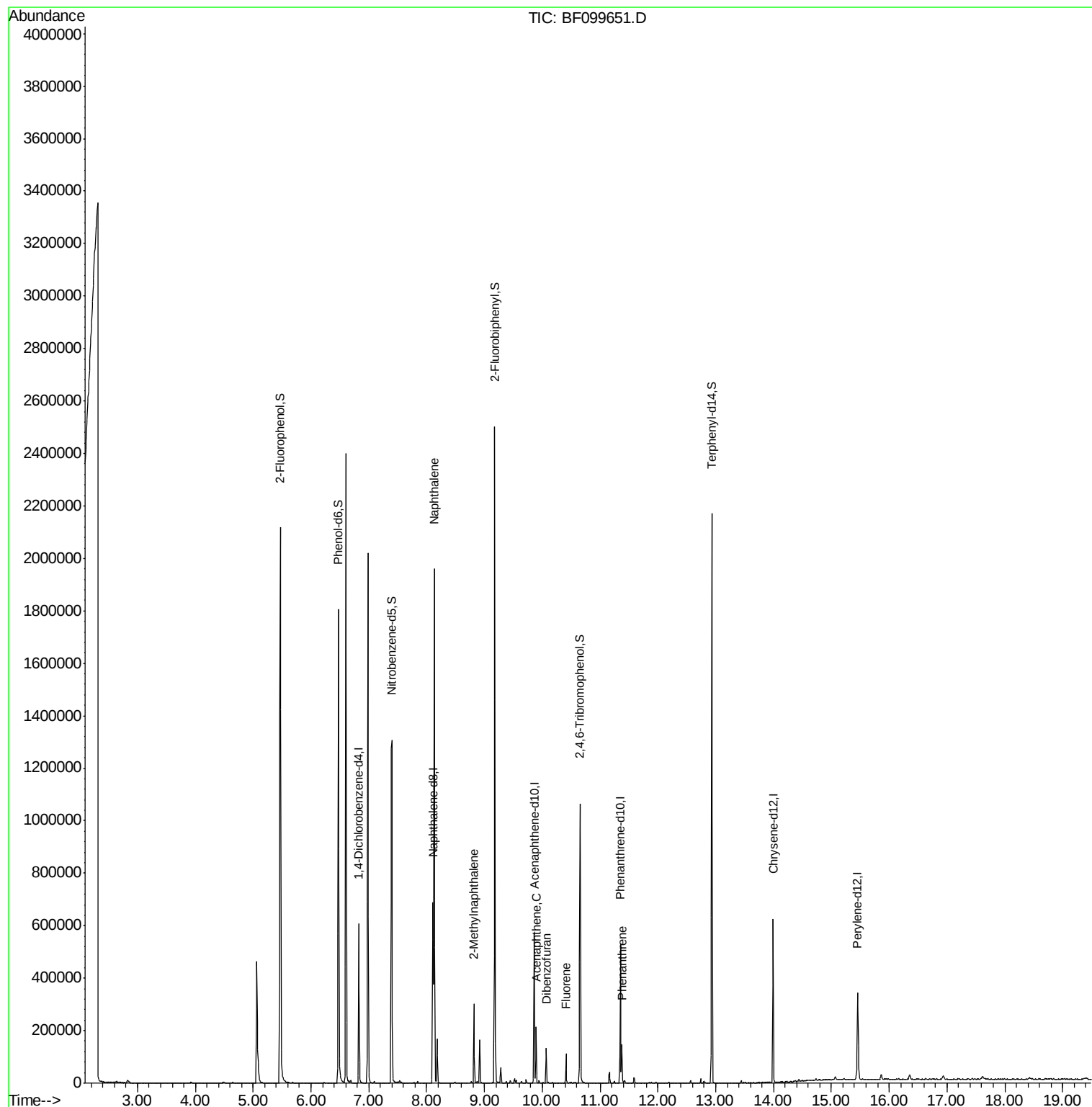
Data Path : Z:\HPCHEM1\BNA F\DATA\BF101817\  
Data File : BF099651.D  
Acq On : 19 Oct 2017 7:49  
Operator : SJ/JU  
Sample : I5951-03  
Misc :  
ALS Vial : 32 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
294-COMP

Manual Integrations  
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Quant Time: Oct 19 17:31:02 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092317.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Oct 18 22:24:53 2017  
Response via : Initial Calibration





#1

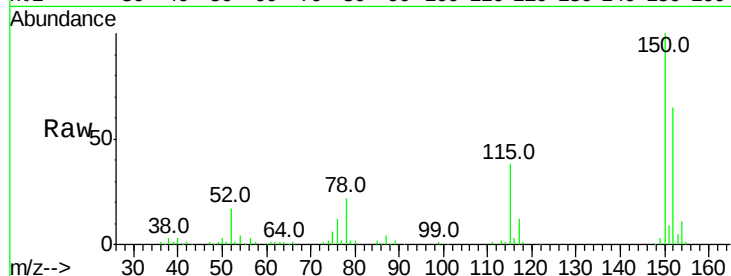
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.83 min Scan# 806  
Delta R.T. 0.00 min  
Lab File: BF099651.D  
Acq: 19 Oct 2017 7:49

Instrument :  
BNA\_F  
ClientSampleId :  
294-COMP

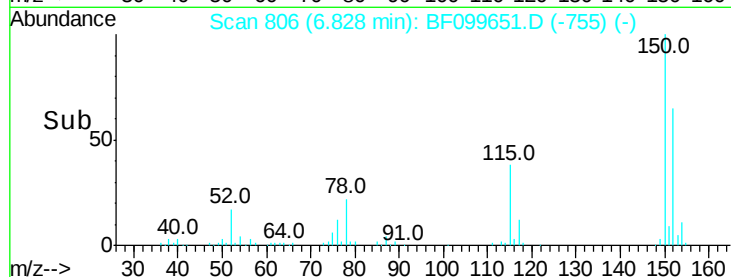
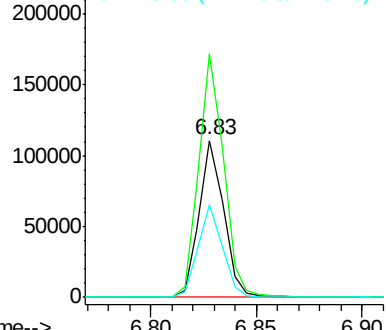
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 155.0 | 124.6 | 186.8 |
| 115     | 58.6  | 50.1  | 75.1  |

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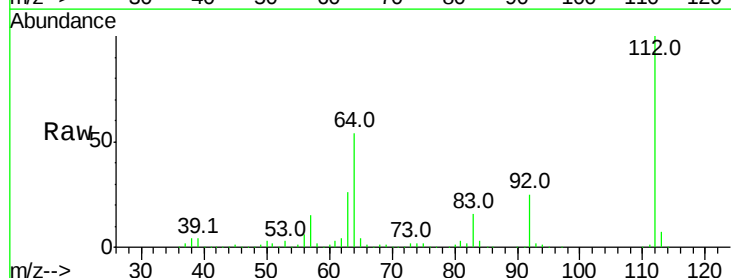
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



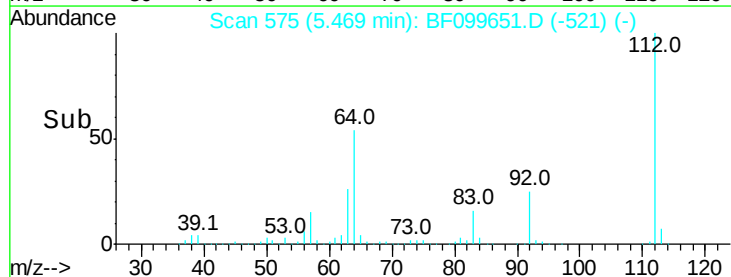
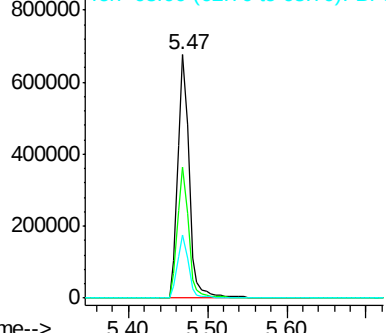
#5

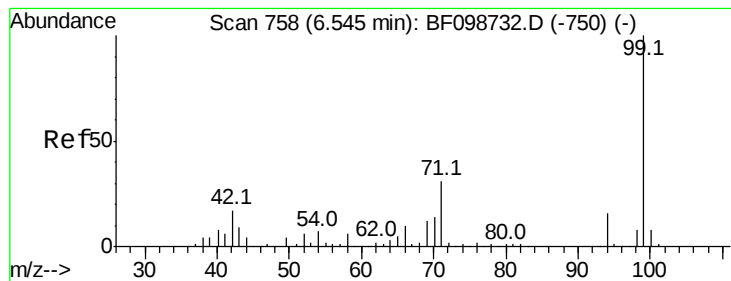
2-Fluorophenol  
Concen: 123.329 ng  
RT: 5.47 min Scan# 575  
Delta R.T. 0.02 min  
Lab File: BF099651.D  
Acq: 19 Oct 2017 7:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 53.6  | 47.9  | 71.9  |
| 63      | 26.0  | 23.7  | 35.5  |



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: 103.590 ng

RT: 6.47 min Scan# 746

Delta R.T. -0.01 min

Lab File: BF099651.D

Acq: 19 Oct 2017 7:49

Instrument :

BNA\_F

ClientSampleId :

294-COMP

Tot Ion: 99 Resp: 715465

Ion Ratio Lower Upper

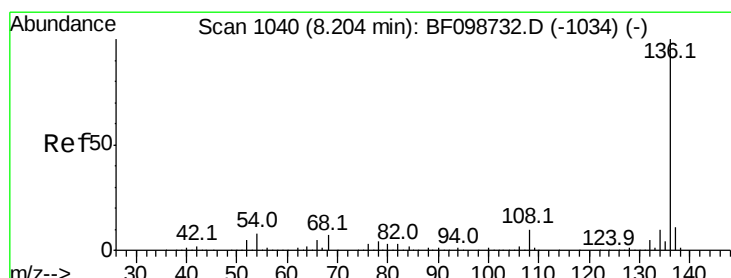
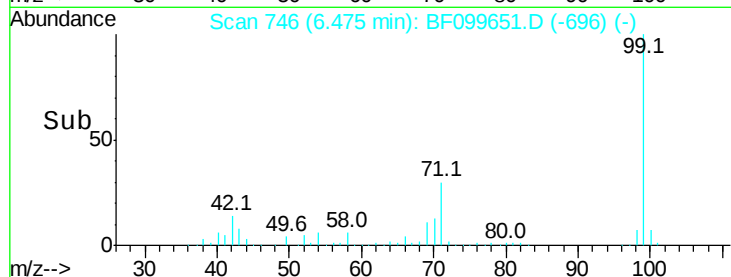
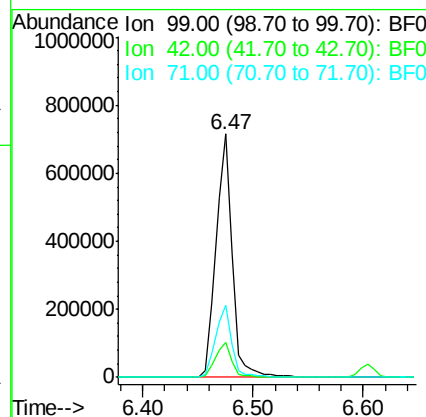
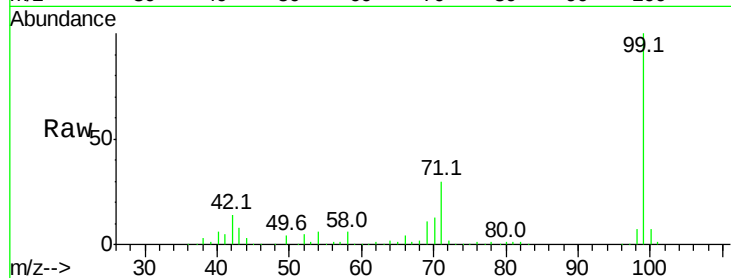
99 100

42 14.3 14.5 21.7#

71 29.8 25.4 38.0

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#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.11 min Scan# 1024

Delta R.T. 0.00 min

Lab File: BF099651.D

Acq: 19 Oct 2017 7:49

Tgt Ion: 136 Resp: 317294

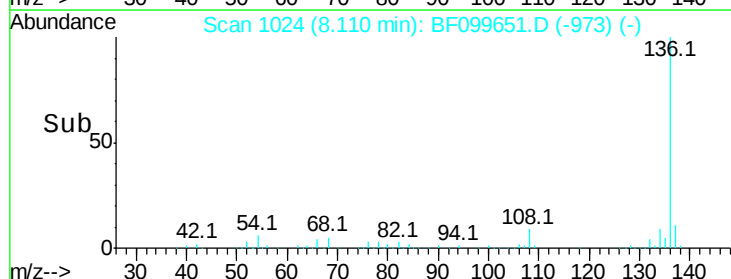
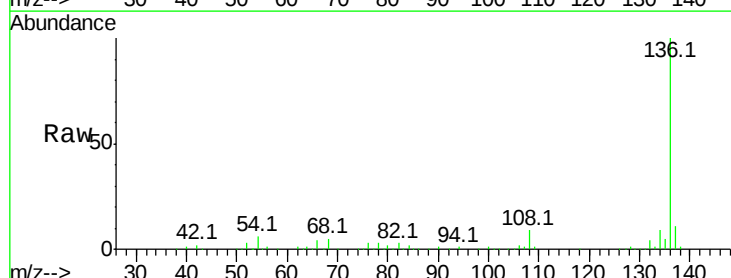
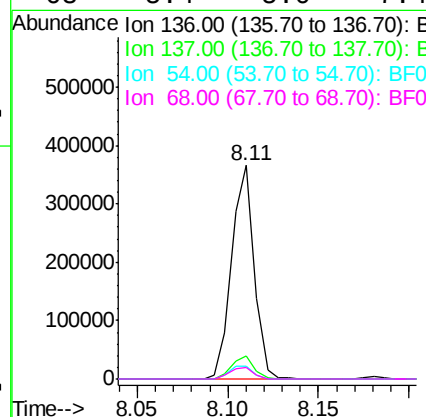
Ion Ratio Lower Upper

136 100

137 10.6 8.9 13.3

54 6.2 6.6 9.8#

68 5.4 5.0 7.4





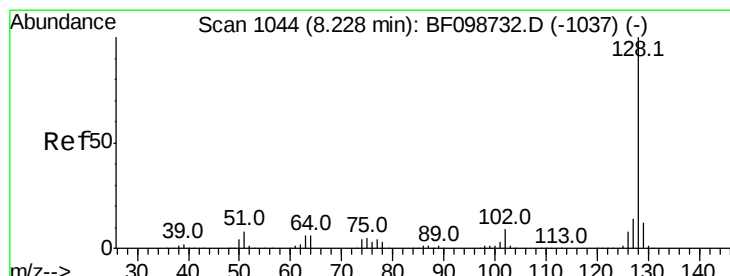
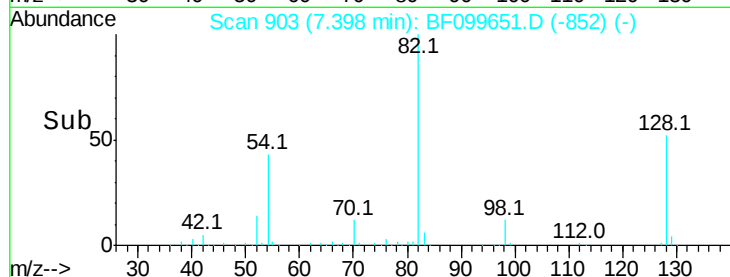
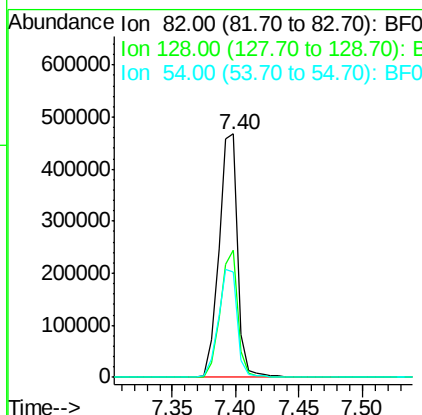
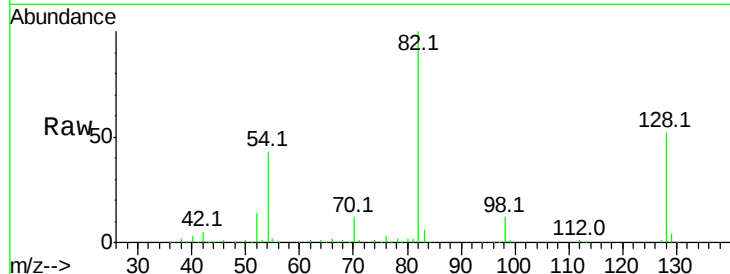
#23  
Nitrobenzene-d5  
Concen: 97.963 ng  
RT: 7.40 min Scan# 903  
Delta R.T. 0.00 min  
Lab File: BF099651.D  
Acq: 19 Oct 2017 7:49

Instrument :  
BNA\_F  
ClientSampleId :  
294-COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 52.2  | 36.1  | 54.1  |
| 54      | 43.2  | 41.4  | 62.2  |

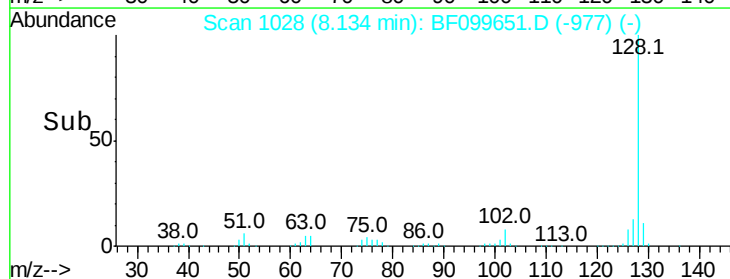
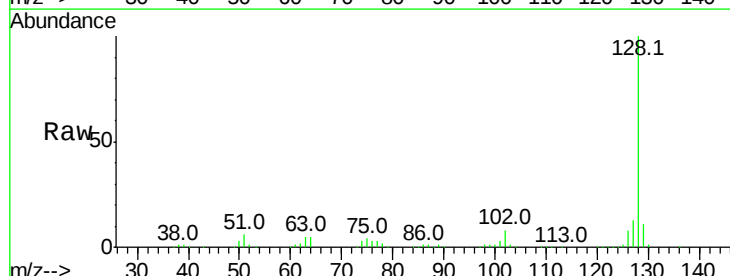
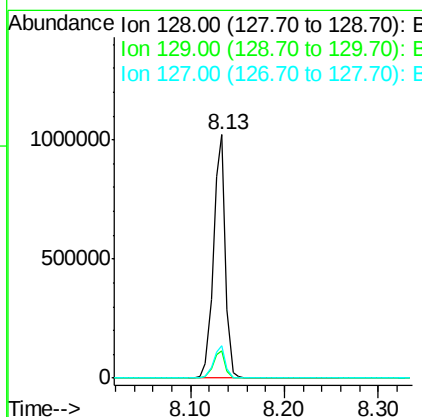
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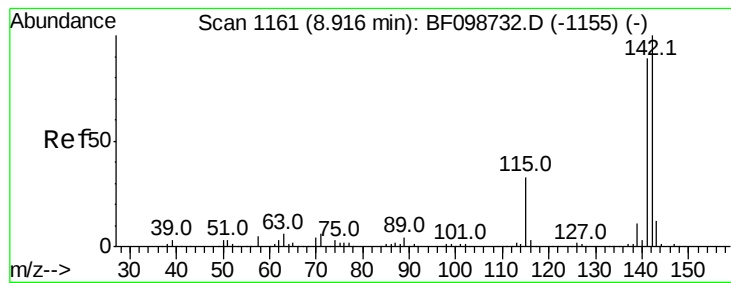
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#31  
Naphthalene  
Concen: 61.673 ng  
RT: 8.13 min Scan# 1028  
Delta R.T. 0.00 min  
Lab File: BF099651.D  
Acq: 19 Oct 2017 7:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 11.0  | 8.8   | 13.2  |
| 127     | 13.3  | 10.9  | 16.3  |





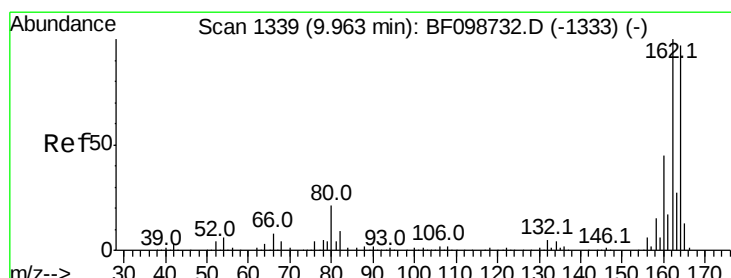
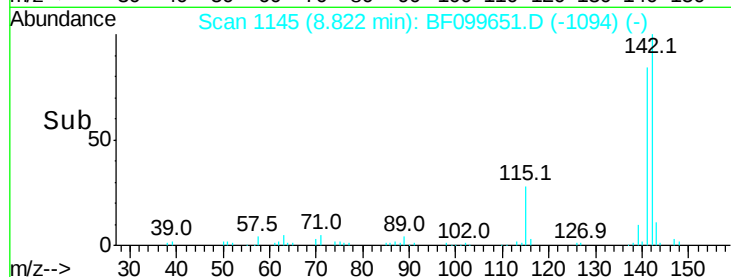
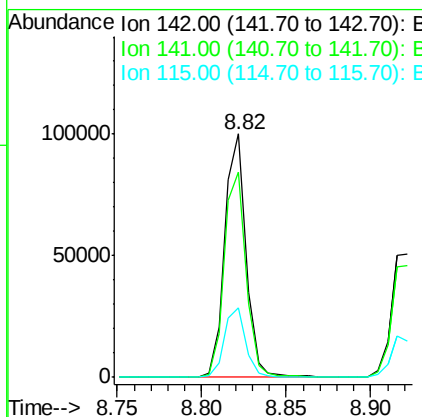
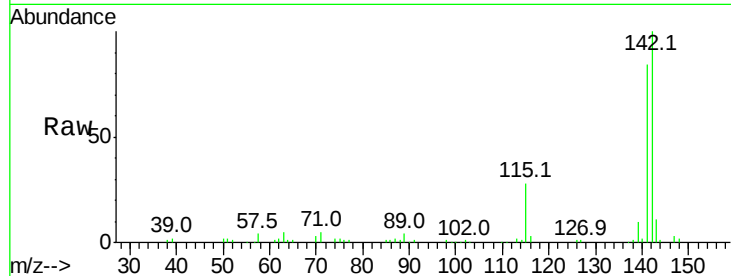
#37  
2-Methylnaphthalene  
Concen: 9.090 ng  
RT: 8.82 min Scan# 1145  
Delta R.T. 0.00 min  
Lab File: BF099651.D  
Acq: 19 Oct 2017 7:49

Instrument :  
BNA\_F  
ClientSampled :  
294-COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 84.4  | 70.8  | 106.2 |
| 115     | 28.4  | 26.1  | 39.1  |

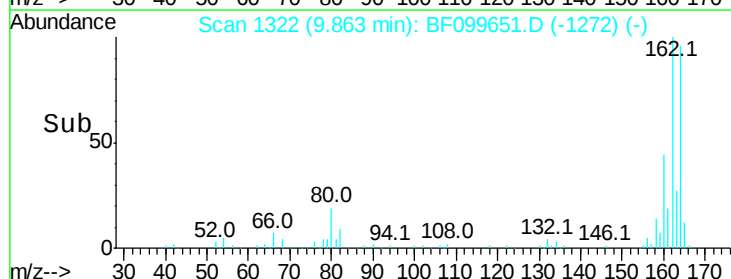
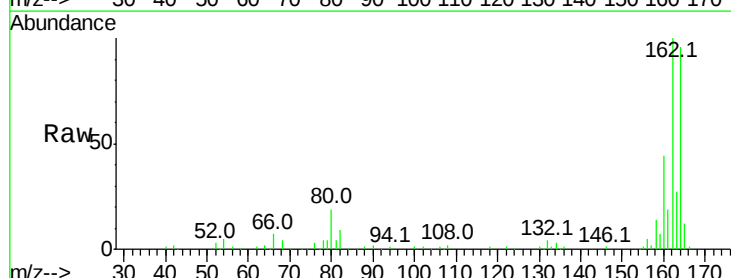
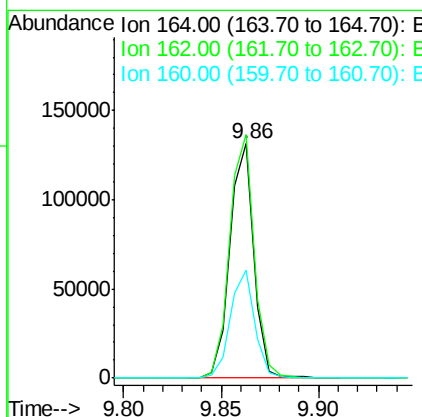
Manual Integrations  
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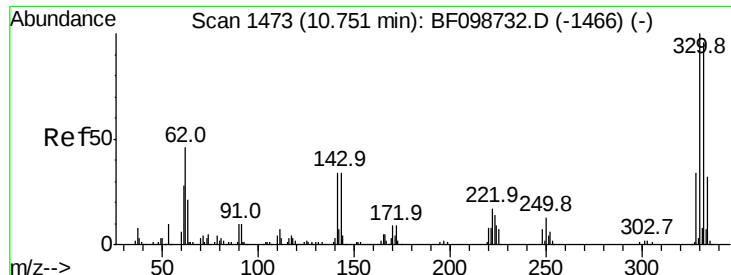
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#38  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.86 min Scan# 1322  
Delta R.T. -0.01 min  
Lab File: BF099651.D  
Acq: 19 Oct 2017 7:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 103.8 | 86.1  | 129.1 |
| 160     | 45.8  | 38.3  | 57.5  |





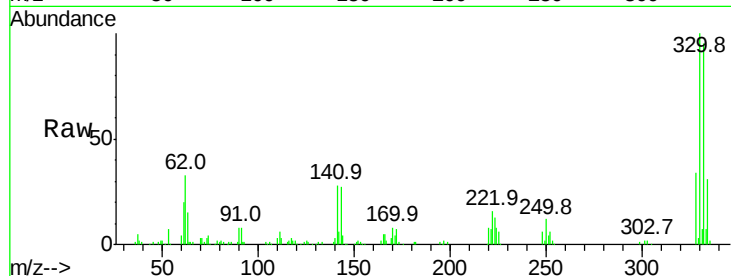
#41  
 2,4,6-Tribromophenol  
 Concen: 146.012 ng  
 RT: 10.66 min Scan# 1457  
 Delta R.T. 0.00 min  
 Lab File: BF099651.D  
 Acq: 19 Oct 2017 7:49

Instrument :  
 BNA\_F  
 ClientSampleId :  
 294-COMP

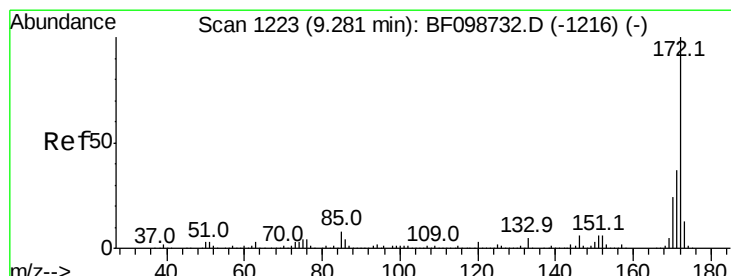
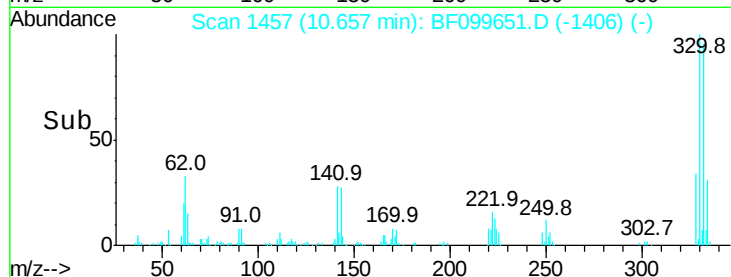
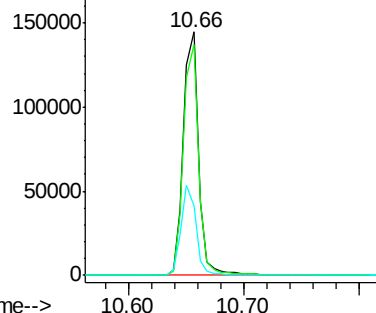
| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 330     | 100   |      |       |       |
| 332     | 95.4  | 77.0 | 115.6 |       |
| 141     | 36.3  | 29.9 | 44.9  |       |

Manual Integrations  
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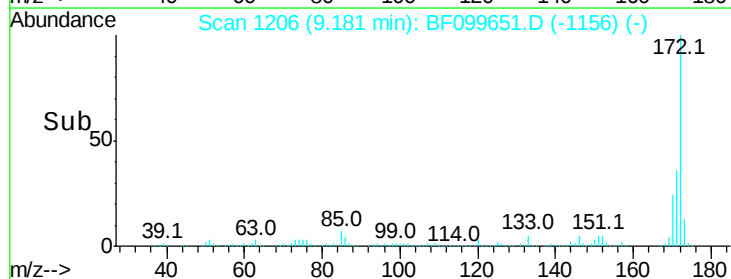
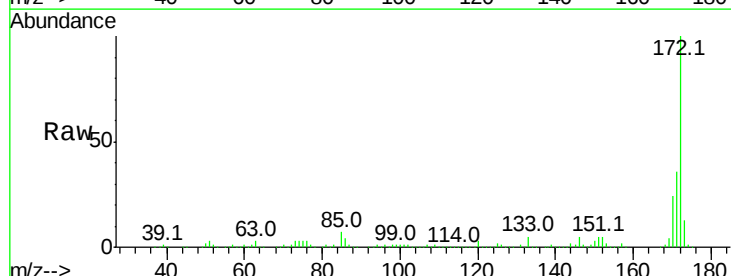
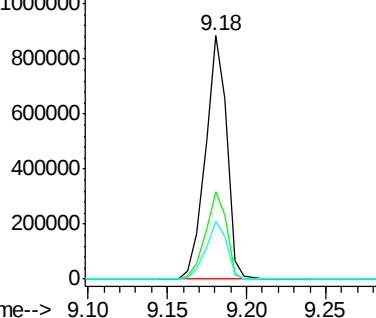
Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

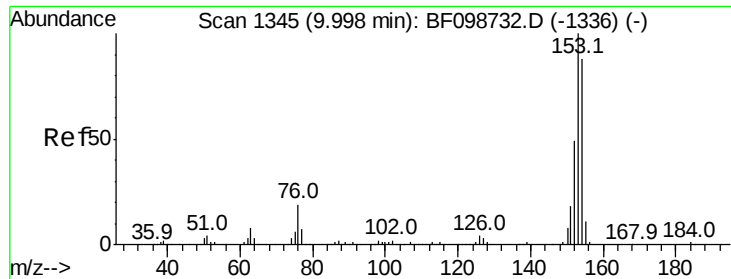


#44  
 2-Fluorobiphenyl  
 Concen: 123.573 ng  
 RT: 9.18 min Scan# 1206  
 Delta R.T. -0.01 min  
 Lab File: BF099651.D  
 Acq: 19 Oct 2017 7:49

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 172     | 100   |      |       |       |
| 171     | 36.2  | 29.7 | 44.5  |       |
| 170     | 23.9  | 19.6 | 29.4  |       |

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





#51

Acenaphthene

Concen: 6.365 ng

RT: 9.89 min Scan# 1327

Delta R.T. -0.01 min

Lab File: BF099651.D

Acq: 19 Oct 2017 7:49

Instrument :

BNA\_F

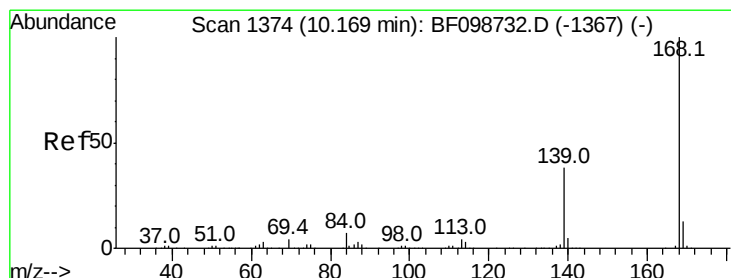
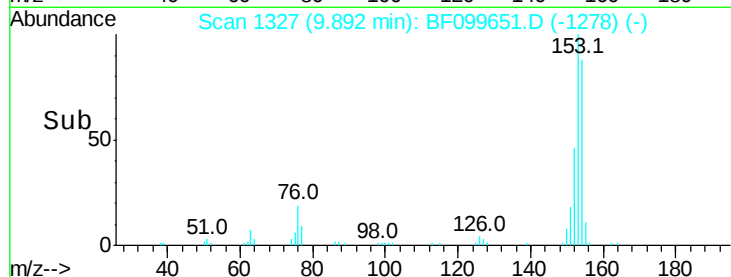
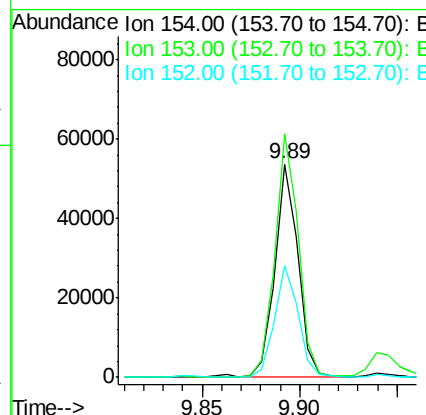
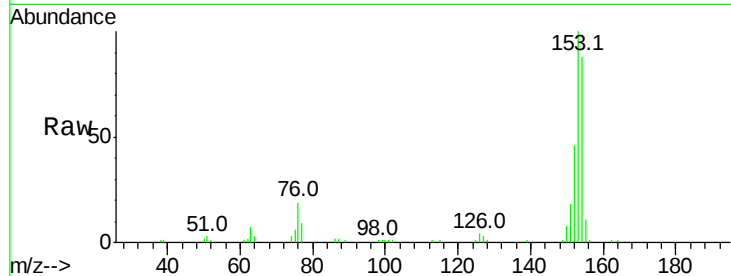
ClientSampleId :

294-COMP

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 154   | Resp: | 44403 |
| Ion      | Ratio | Lower | Upper |
| 154      | 100   |       |       |
| 153      | 114.2 | 91.2  | 136.8 |
| 152      | 52.2  | 43.8  | 65.8  |

Manual Integrations  
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#54

Dibenzofuran

Concen: 5.886 ng

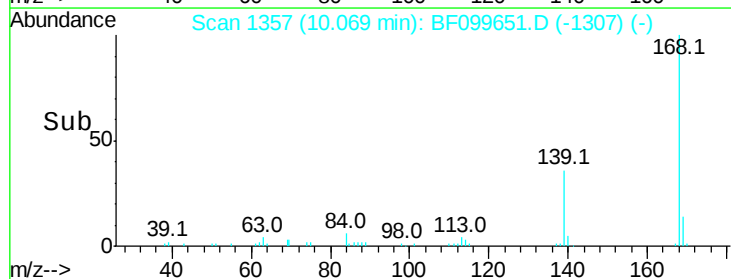
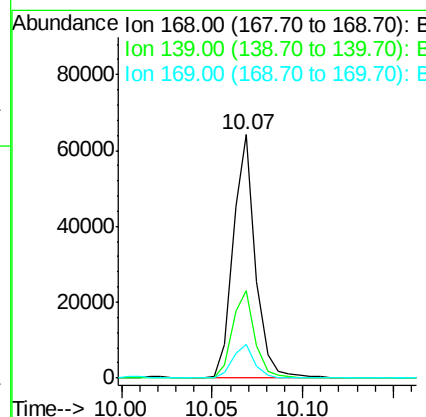
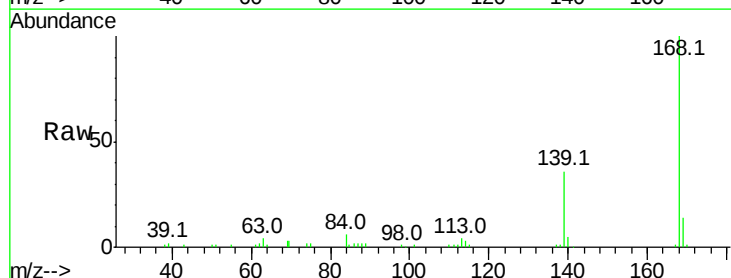
RT: 10.07 min Scan# 1357

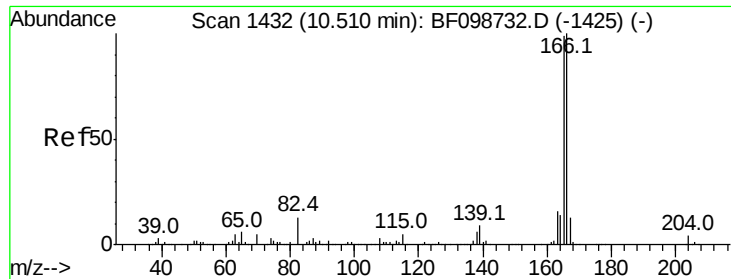
Delta R.T. -0.01 min

Lab File: BF099651.D

Acq: 19 Oct 2017 7:49

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 168   | Resp: | 54675 |
| Ion      | Ratio | Lower | Upper |
| 168      | 100   |       |       |
| 139      | 35.8  | 30.1  | 45.1  |
| 169      | 13.8  | 10.9  | 16.3  |





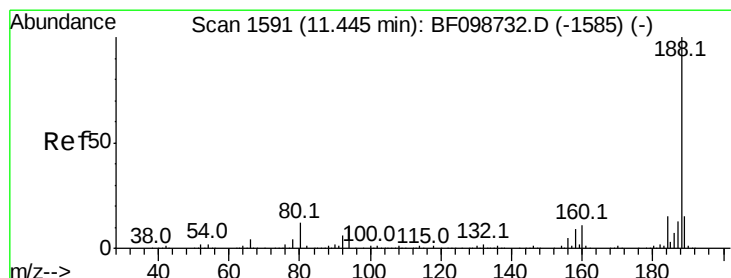
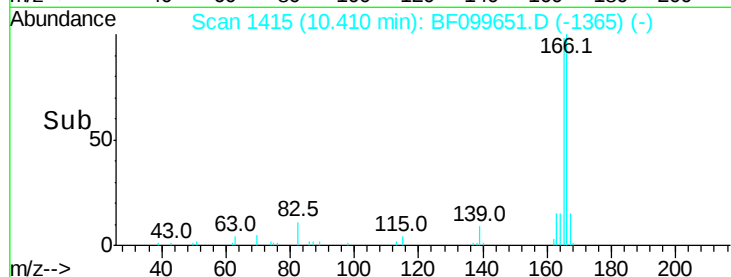
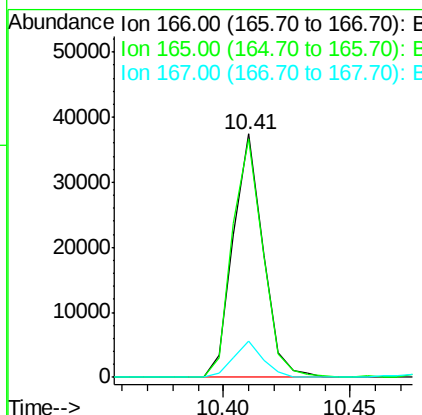
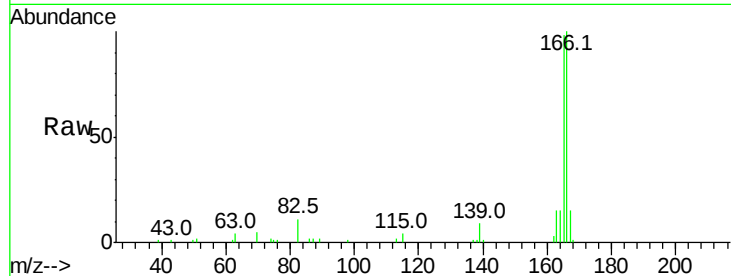
#57  
**Fluorene**  
 Concen: 4.107 ng  
 RT: 10.41 min Scan# 1415  
 Delta R.T. -0.01 min  
 Lab File: BF099651.D  
 Acq: 19 Oct 2017 7:49

Instrument :  
 BNA\_F  
 ClientSampleId :  
 294-COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 97.8  | 79.8  | 119.8 |
| 167     | 15.0  | 10.6  | 16.0  |

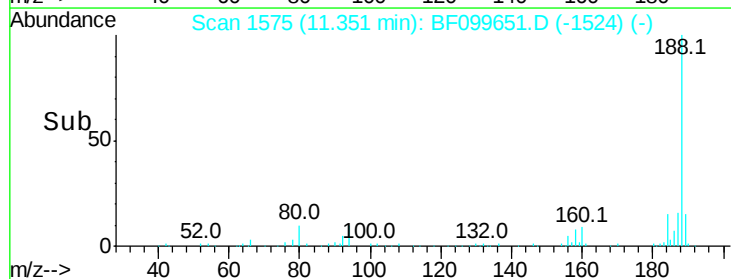
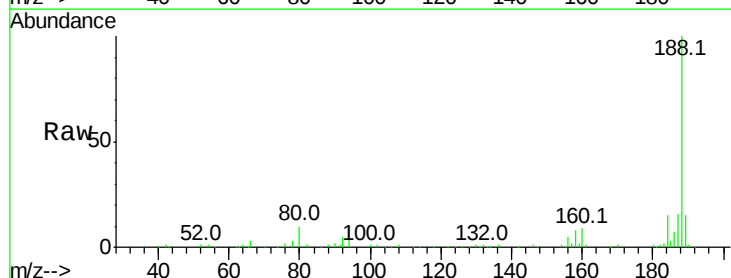
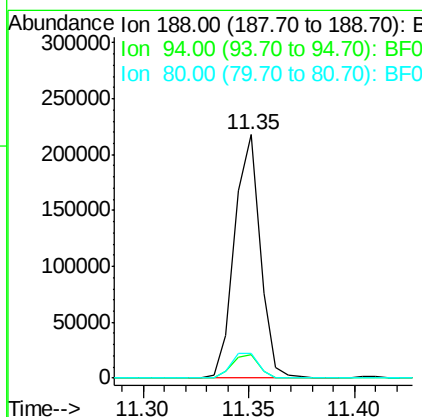
Manual Integrations  
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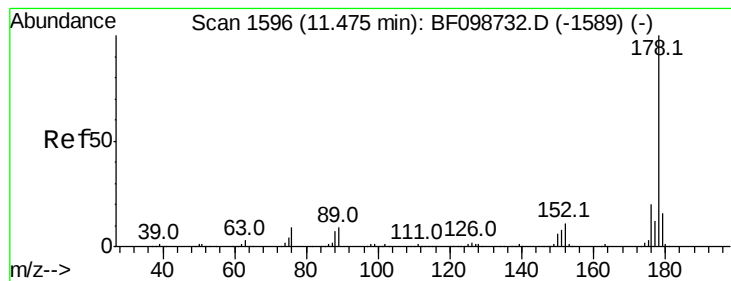
Sohil  
 10/19/2017 6:15:52 PM



#63  
**Phenanthrene-d10**  
 Concen: 20.000 ng  
 RT: 11.35 min Scan# 1575  
 Delta R.T. 0.00 min  
 Lab File: BF099651.D  
 Acq: 19 Oct 2017 7:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 9.8   | 8.5   | 12.7  |
| 80      | 10.3  | 9.2   | 13.8  |





#70

Phenanthrene

Concen: 5.650 ng

RT: 11.37 min Scan# 1579

Delta R.T. -0.01 min

Lab File: BF099651.D

Acq: 19 Oct 2017 7:49

Instrument :

BNA\_F

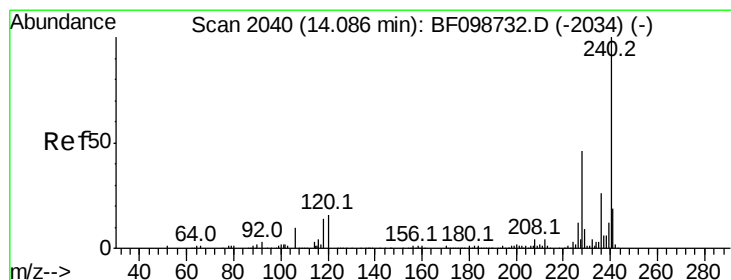
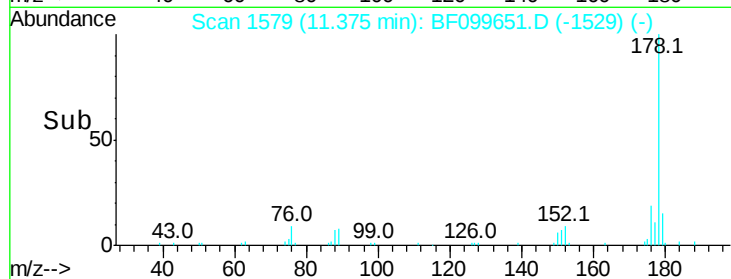
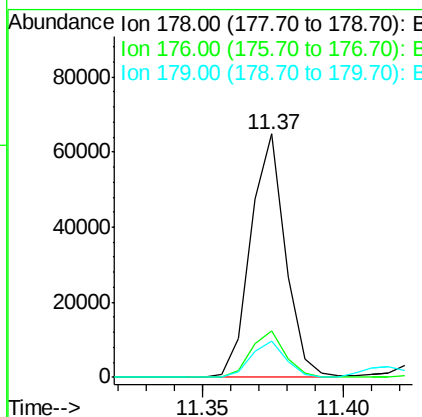
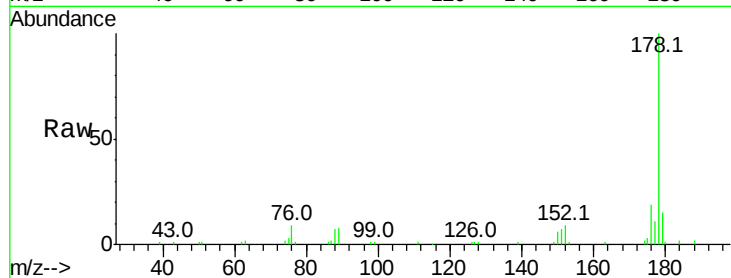
ClientSampleId :

294-COMP

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 178   | Resp: | 55183 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 176       | 19.3  | 15.8  | 23.8  |
| 179       | 15.0  | 13.0  | 19.6  |

Manual Integrations  
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#75

Chrysene-d12

Concen: 20.000 ng

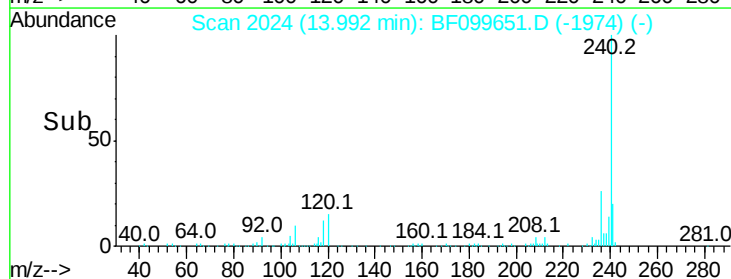
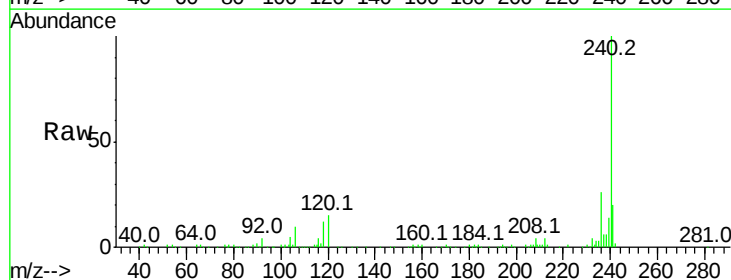
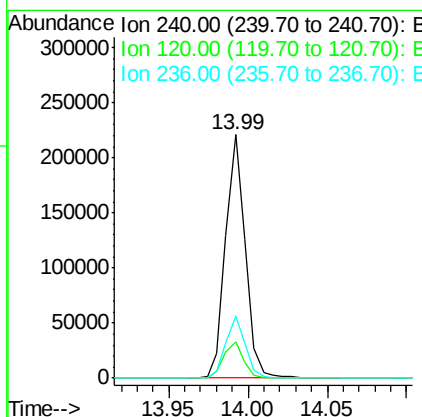
RT: 13.99 min Scan# 2024

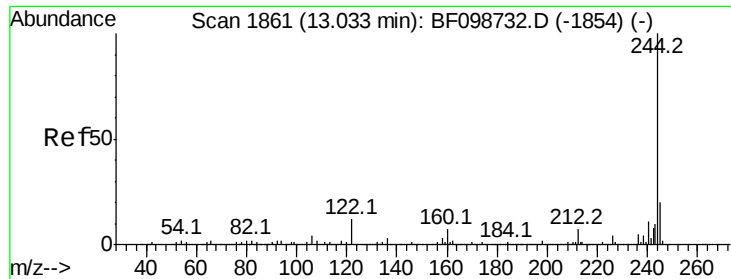
Delta R.T. -0.01 min

Lab File: BF099651.D

Acq: 19 Oct 2017 7:49

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 240   | Resp: | 190294 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 14.8  | 9.5   | 14.3#  |
| 236       | 25.5  | 20.7  | 31.1   |





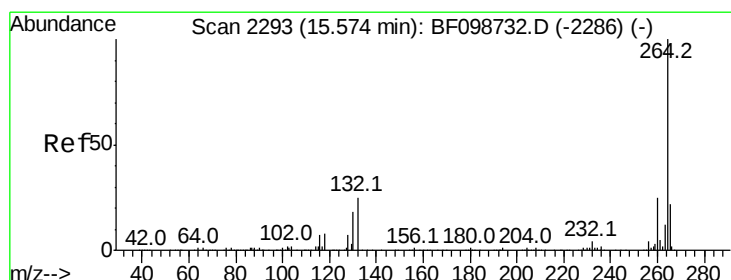
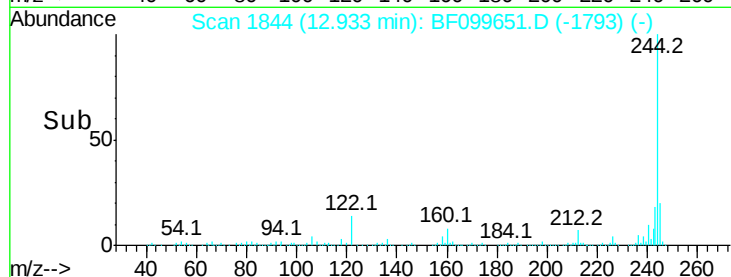
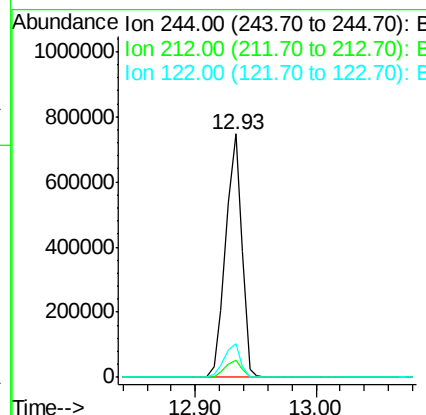
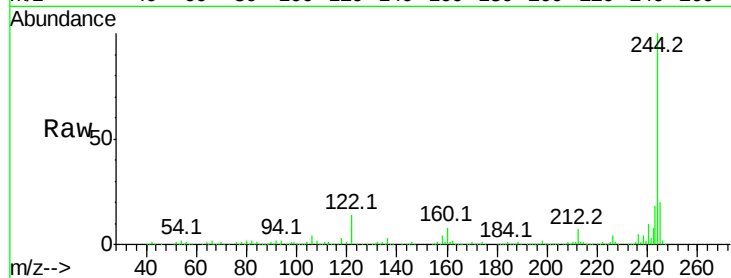
#78  
 Terphenyl-d14  
 Concen: 82.170 ng  
 RT: 12.93 min Scan# 1844  
 Delta R.T. 0.00 min  
 Lab File: BF099651.D  
 Acq: 19 Oct 2017 7:49

Instrument :  
 BNA\_F  
 ClientSampled :  
 294-COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 7.1   | 5.4   | 8.0   |
| 122     | 13.8  | 11.0  | 16.4  |

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#86  
 Perylene-d12  
 Concen: 20.000 ng  
 RT: 15.46 min Scan# 2273  
 Delta R.T. 0.00 min  
 Lab File: BF099651.D  
 Acq: 19 Oct 2017 7:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.1  | 19.2  | 28.8  |
| 265     | 21.4  | 17.5  | 26.3  |

