

Data Path : Z:\HPCHEM1\BNA F\DATA\BF052516\  
 Data File : BF087379.D  
 Acq On : 25 May 2016 19:01  
 Operator : UM/SJ  
 Sample : H3211-07  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TA-1315-(0-4)

Manual Integrations  
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 5/26/2016 6:39:37 PM

Quant Time: May 25 23:43:00 2016  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF052316.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed May 25 22:35:30 2016  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.52  | 152  | 99647    | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 9.54  | 136  | 394849   | 20.00  | ng    | -0.01    |
| 38) Acenaphthene-d10        | 12.38 | 164  | 164160   | 20.00  | ng    | -0.01    |
| 63) Phenanthrene-d10        | 14.77 | 188  | 255462   | 20.00  | ng    | -0.01    |
| 75) Chrysene-d12            | 18.47 | 240  | 221017   | 20.00  | ng    | -0.01    |
| 86) Perylene-d12            | 20.14 | 264  | 173134   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.42  | 112  | 694829   | 122.52 | ng    | 0.00     |
| 7) Phenol-d6                | 7.06  | 99   | 914767   | 119.38 | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 8.43  | 82   | 643316   | 82.11  | ng    | -0.01    |
| 41) 2,4,6-Tribromophenol    | 13.67 | 330  | 152668   | 96.78  | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 11.33 | 172  | 800381   | 68.74  | ng    | -0.01    |
| 78) Terphenyl-d14           | 17.12 | 244  | 478140   | 45.99  | ng    | -0.01    |
| Target Compounds            |       |      |          |        |       | Qvalue   |
| 48) Acenaphthylene          | 12.15 | 152  | 75106    | 4.49   | ng    | 99       |
| 49) Dimethylphthalate       | 12.02 | 163  | 139750   | 10.63  | ng    | 99       |
| 70) Phenanthrene            | 14.81 | 178  | 60705    | 4.29   | ng    | 98       |
| 71) Anthracene              | 14.89 | 178  | 68701    | 4.81   | ng    | 98       |
| 74) Fluoranthene            | 16.57 | 202  | 343216   | 24.19  | ng    | 93       |
| 77) Pyrene                  | 16.87 | 202  | 317109   | 19.93  | ng    | 97       |
| 80) Benzo(a)anthracene      | 18.46 | 228  | 225054m  | 17.90  | ng    |          |
| 82) Chrysene                | 18.50 | 228  | 169218   | 13.56  | ng    | 97       |
| 85) Indeno(1,2,3-cd)pyrene  | 21.36 | 276  | 81189    | 8.12   | ng    | # 87     |
| 87) Benzo(b)fluoranthene    | 19.73 | 252  | 287677m  | 26.08  | ng    |          |
| 88) Benzo(k)fluoranthene    | 19.76 | 252  | 66792m   | 7.04   | ng    |          |
| 89) Benzo(a)pyrene          | 20.08 | 252  | 124647   | 13.07  | ng    | 98       |
| 90) Dibenzo(a,h)anthracene  | 21.36 | 278  | 21697m   | 2.67   | ng    |          |
| 91) Benzo(g,h,i)perylene    | 21.71 | 276  | 65965    | 8.22   | ng    | # 93     |

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

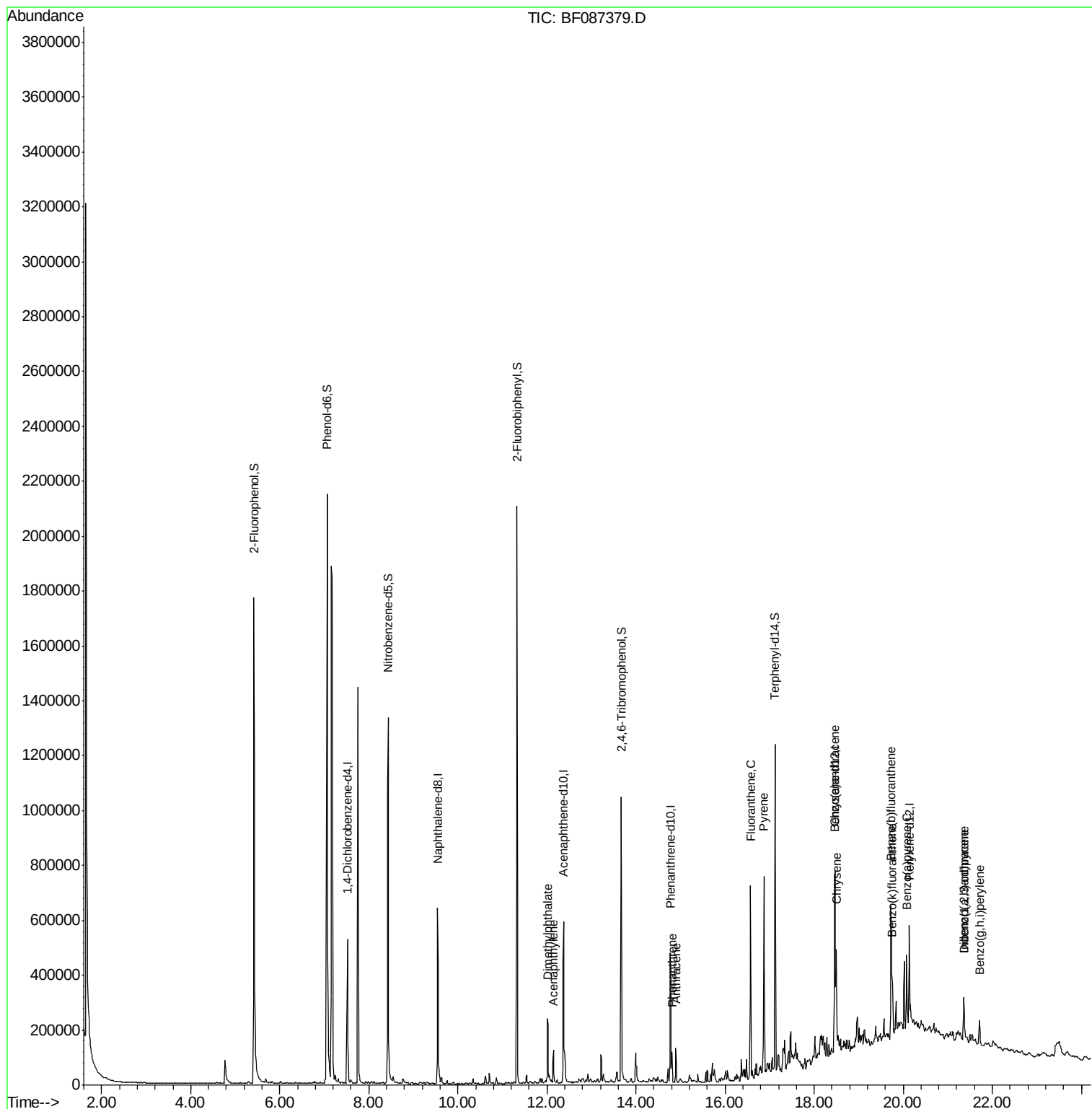
Data Path : Z:\HPCHEM1\BNA F\DATA\BF052516\  
Data File : BF087379.D  
Acq On : 25 May 2016 19:01  
Operator : UM/SJ  
Sample : H3211-07  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

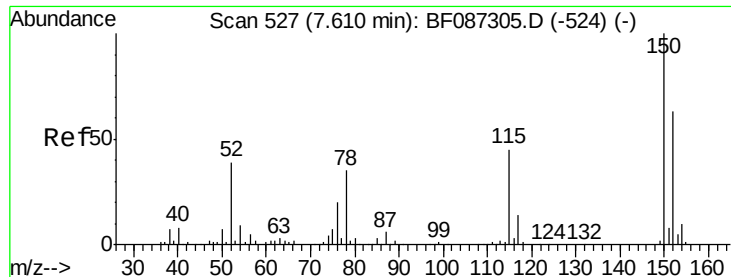
Instrument :  
BNA\_F  
ClientSampleId :  
TA-1315-(0-4)

Manual Integrations  
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Quant Time: May 25 23:43:00 2016  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF052316.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed May 25 22:35:30 2016  
Response via : Initial Calibration





#1

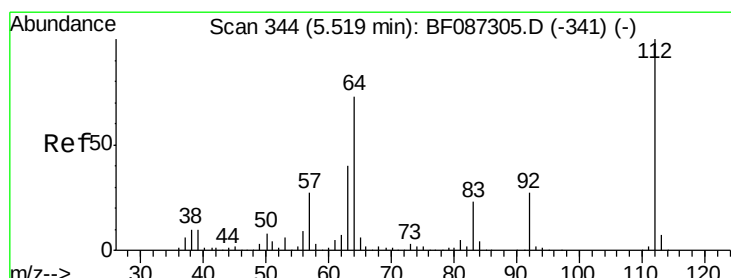
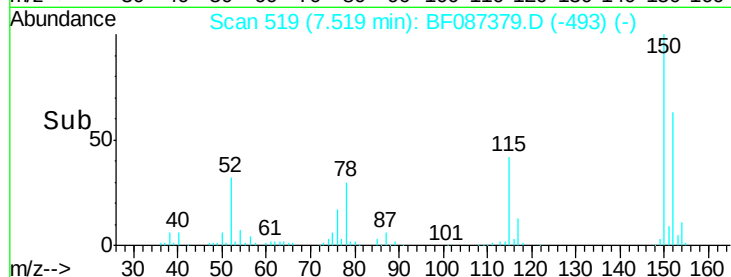
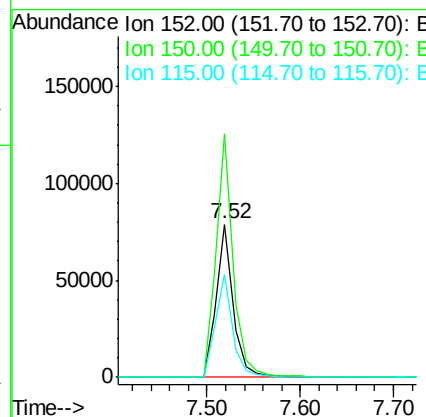
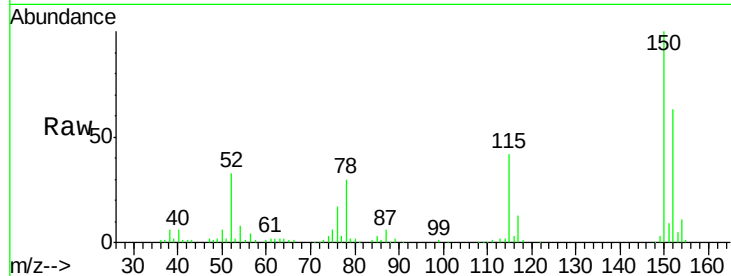
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 7.52 min Scan# 519  
Delta R.T. 0.00 min  
Lab File: BF087379.D  
Acq: 25 May 2016 19:01

Instrument :  
BNA\_F  
ClientSampleId :  
TA-1315-(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 159.0 | 125.8 | 188.6 |
| 115     | 66.9  | 51.5  | 77.3  |

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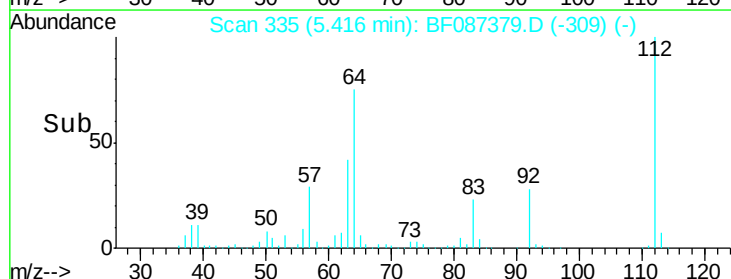
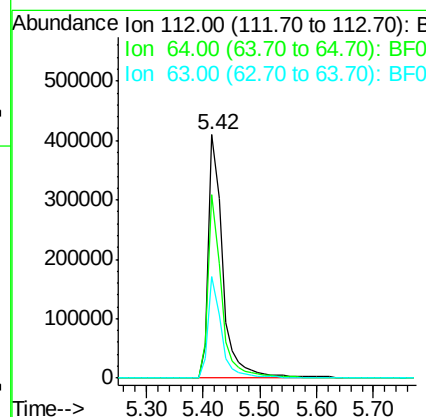
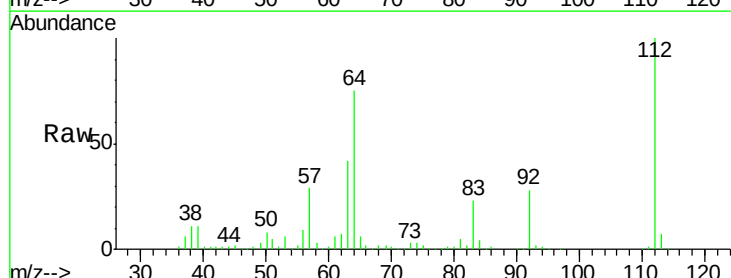
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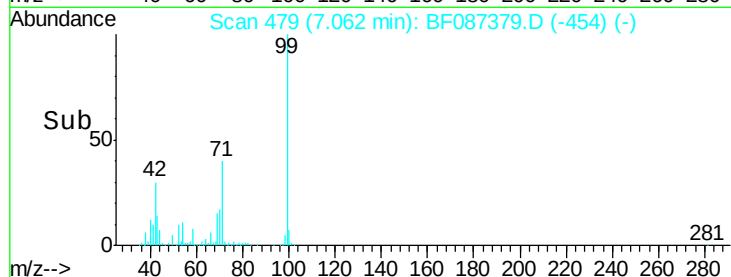
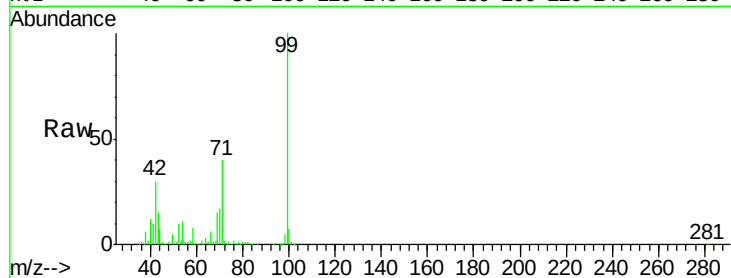
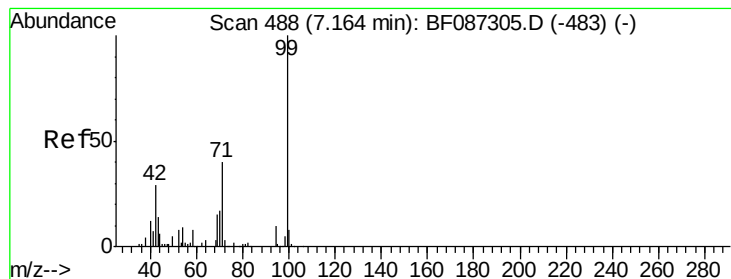


#5

2-Fluorophenol  
Concen: 122.52 ng  
RT: 5.42 min Scan# 335  
Delta R.T. 0.00 min  
Lab File: BF087379.D  
Acq: 25 May 2016 19:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 75.4  | 52.1  | 78.1  |
| 63      | 41.7  | 25.7  | 38.5  |





#7

Phenol-d6

Concen: 119.38 ng

RT: 7.06 min Scan# 479

Delta R.T. -0.01 min

Lab File: BF087379.D

Acq: 25 May 2016 19:01

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 914767 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 29.8  | 13.6  | 20.4#  |
| 71        | 40.4  | 24.6  | 36.8#  |

Instrument :

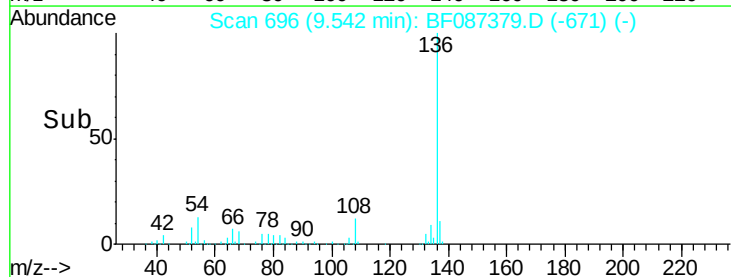
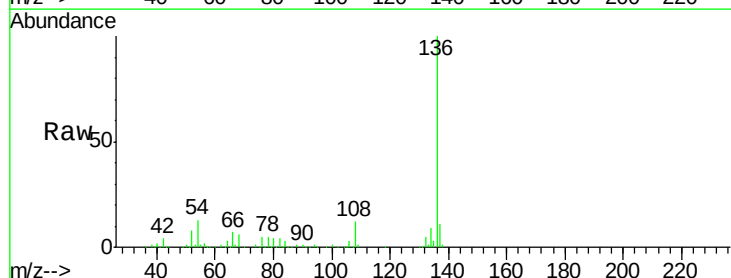
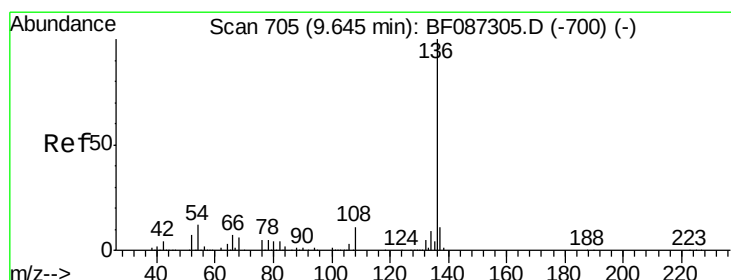
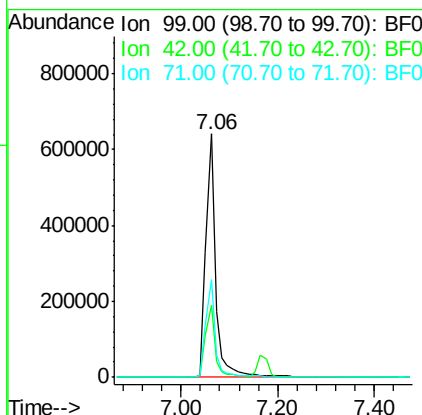
BNA\_F

ClientSampleId :

TA-1315-(0-4)

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#21

Naphthalene-d8

Concen: 20.00 ng

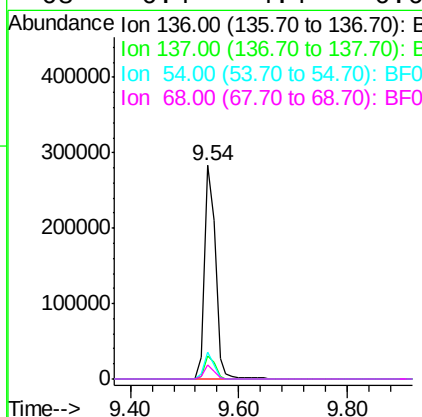
RT: 9.54 min Scan# 696

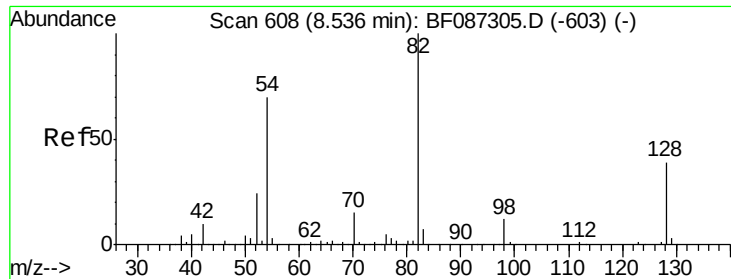
Delta R.T. -0.01 min

Lab File: BF087379.D

Acq: 25 May 2016 19:01

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 394849 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 11.1  | 8.8   | 13.2   |
| 54        | 12.6  | 5.0   | 7.4#   |
| 68        | 6.4   | 4.4   | 6.6    |





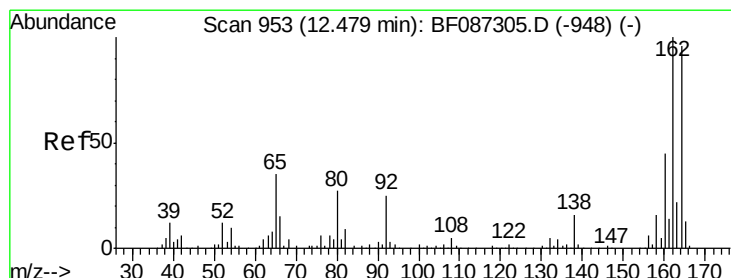
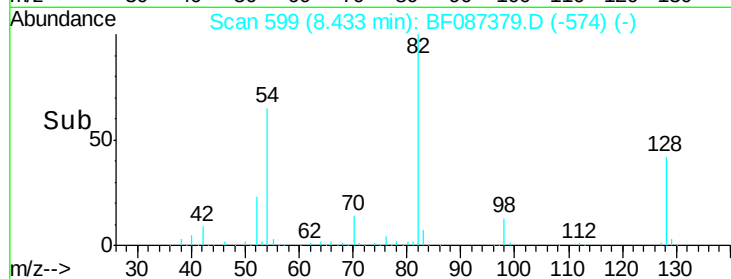
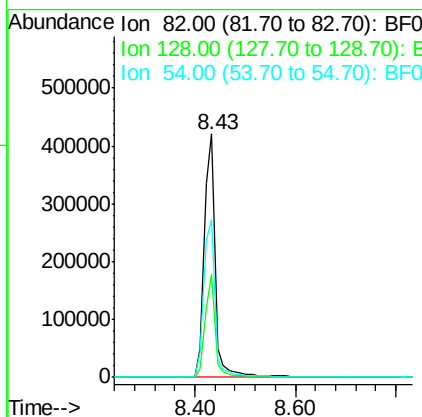
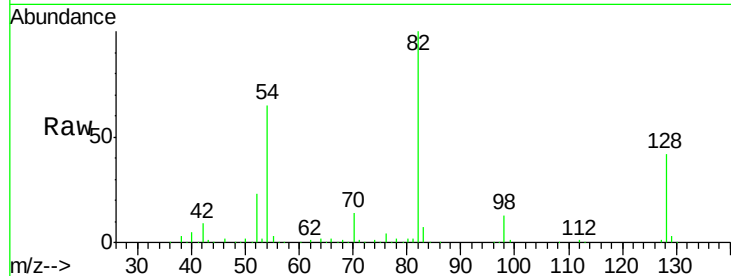
#23  
 Nitrobenzene-d5  
 Concen: 82.11 ng  
 RT: 8.43 min Scan# 599  
 Delta R.T. -0.01 min  
 Lab File: BF087379.D  
 Acq: 25 May 2016 19:01

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TA-1315-(0-4)

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 82      | 100   | 643316 |       |       |
| 128     | 42.4  |        | 40.6  | 61.0  |
| 54      | 65.0  |        | 38.1  | 57.1# |

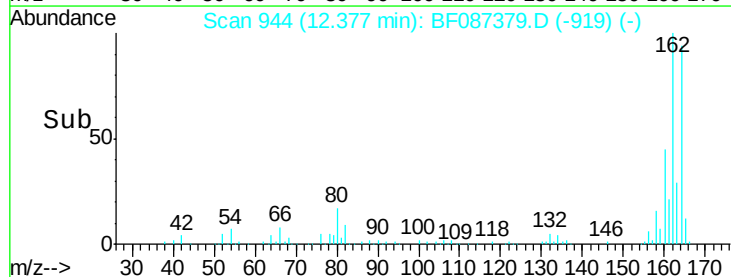
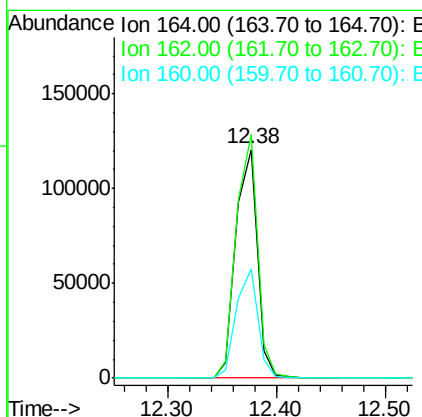
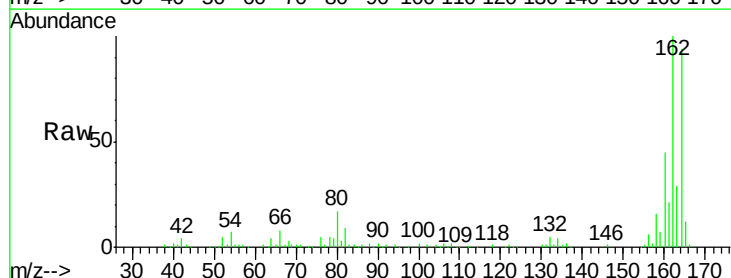
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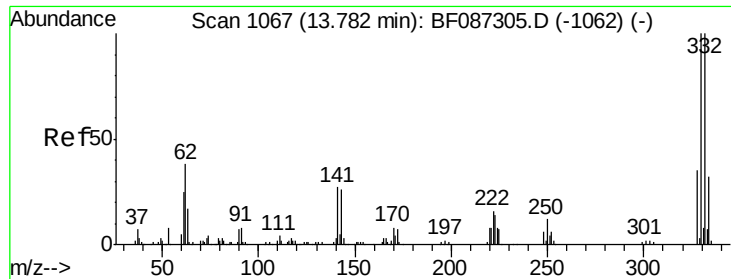
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#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 12.38 min Scan# 944  
 Delta R.T. -0.01 min  
 Lab File: BF087379.D  
 Acq: 25 May 2016 19:01

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 164     | 100   | 164160 |       |       |
| 162     | 106.4 |        | 82.8  | 124.2 |
| 160     | 47.9  |        | 36.9  | 55.3  |





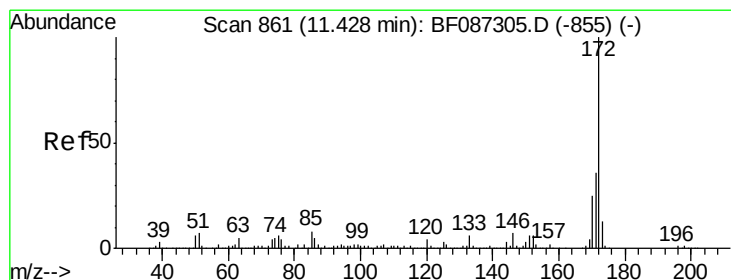
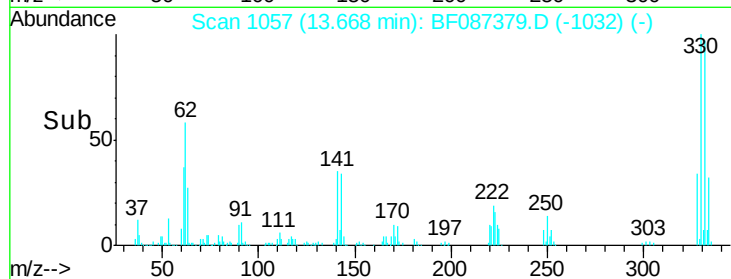
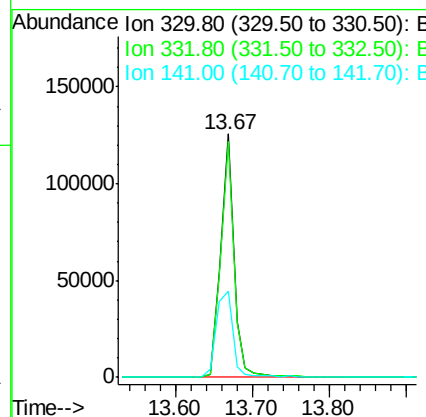
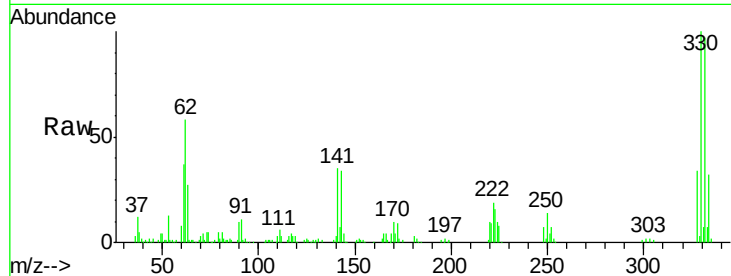
#41  
 2,4,6-Tribromophenol  
 Concen: 96.78 ng  
 RT: 13.67 min Scan# 1057  
 Delta R.T. -0.01 min  
 Lab File: BF087379.D  
 Acq: 25 May 2016 19:01

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TA-1315-(0-4)

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 330   | Resp: | 152668 |
| Ion Ratio | Lower | Upper |        |
| 330       | 100   |       |        |
| 332       | 97.1  | 79.0  | 118.4  |
| 141       | 45.3  | 31.2  | 46.8   |

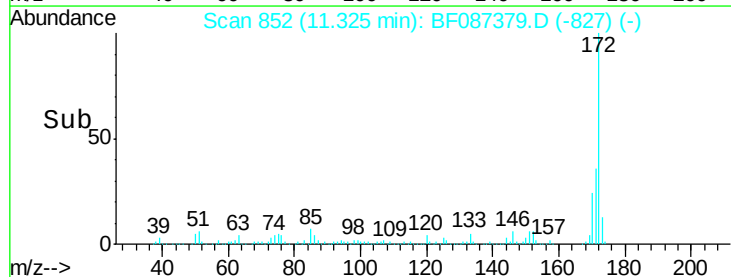
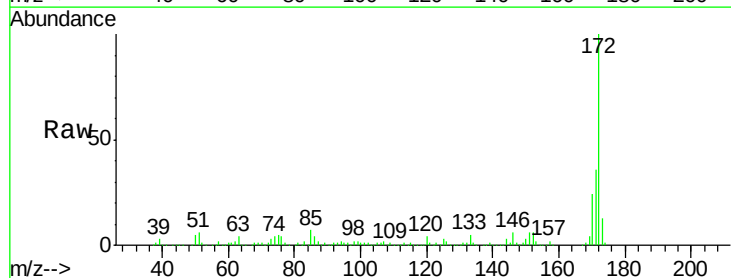
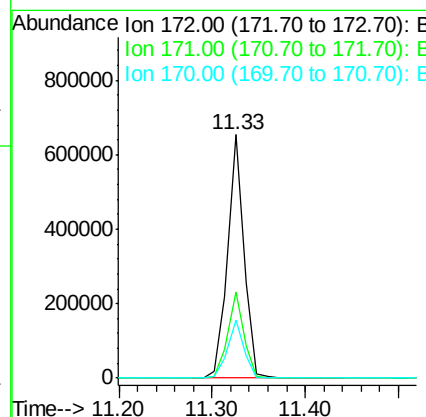
Manual Integrations  
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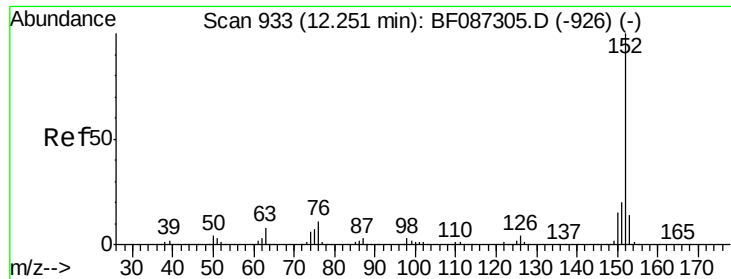
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#44  
 2-Fluorobiphenyl  
 Concen: 68.74 ng  
 RT: 11.33 min Scan# 852  
 Delta R.T. -0.01 min  
 Lab File: BF087379.D  
 Acq: 25 May 2016 19:01

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 172   | Resp: | 800381 |
| Ion Ratio | Lower | Upper |        |
| 172       | 100   |       |        |
| 171       | 35.7  | 29.0  | 43.6   |
| 170       | 23.8  | 19.8  | 29.8   |





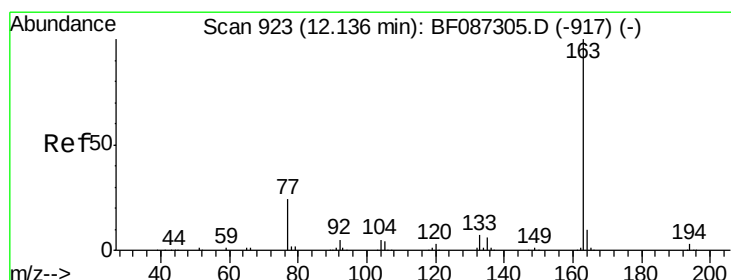
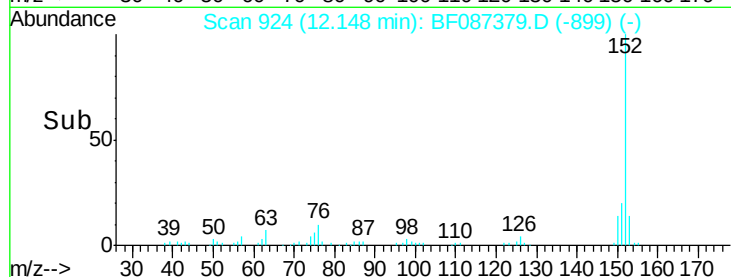
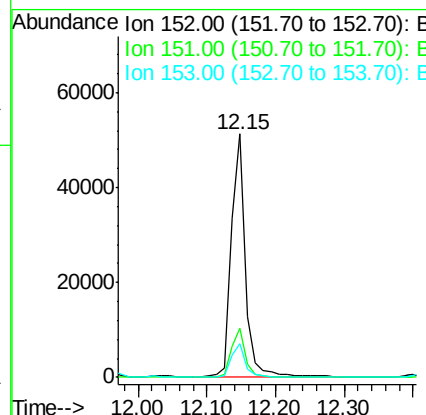
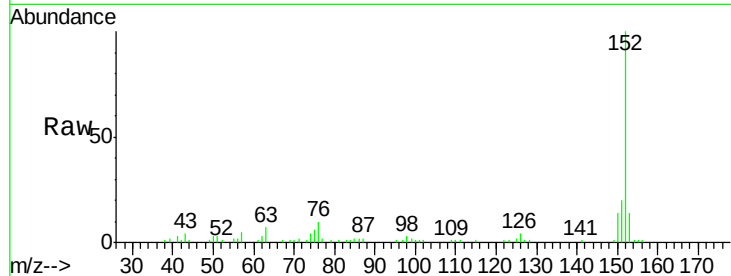
#48  
Acenaphthylene  
Concen: 4.49 ng  
RT: 12.15 min Scan# 924  
Delta R.T. -0.01 min  
Lab File: BF087379.D  
Acq: 25 May 2016 19:01

Instrument :  
BNA\_F  
ClientSampleId :  
TA-1315-(0-4)

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 152   | Resp: | 75106 |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 151       | 20.4  | 16.8  | 25.2  |
| 153       | 13.9  | 10.9  | 16.3  |

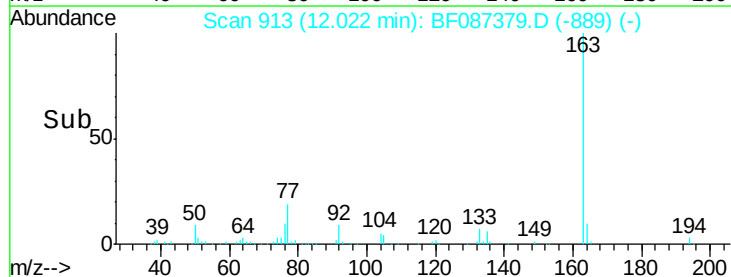
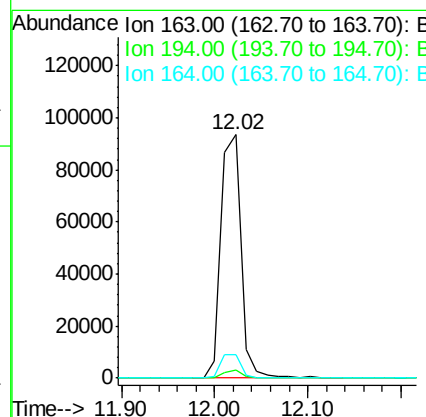
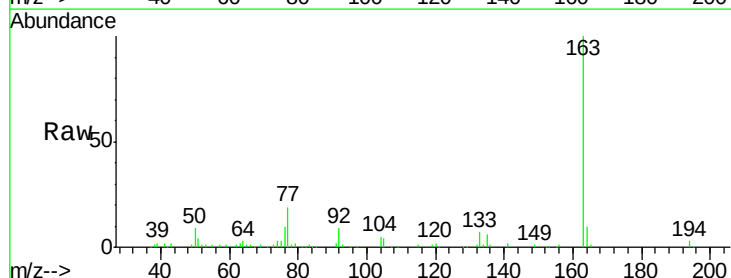
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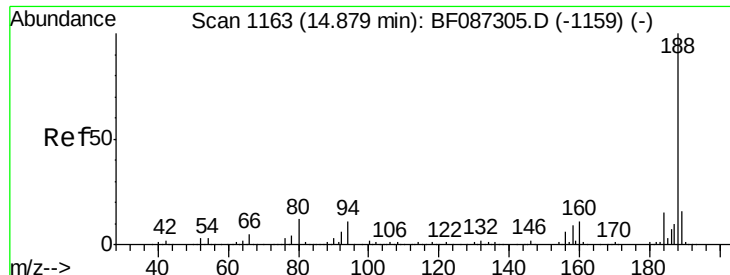
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#49  
Dimethylphthalate  
Concen: 10.63 ng  
RT: 12.02 min Scan# 913  
Delta R.T. -0.02 min  
Lab File: BF087379.D  
Acq: 25 May 2016 19:01

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 163   | Resp: | 139750 |
| Ion Ratio | Lower | Upper |        |
| 163       | 100   |       |        |
| 194       | 3.4   | 2.6   | 4.0    |
| 164       | 9.6   | 8.2   | 12.4   |





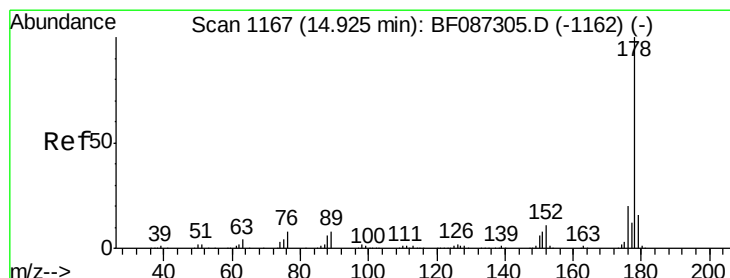
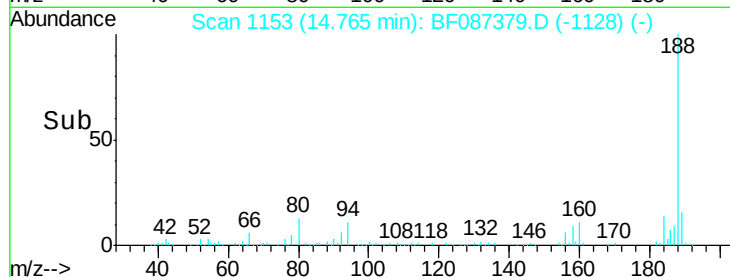
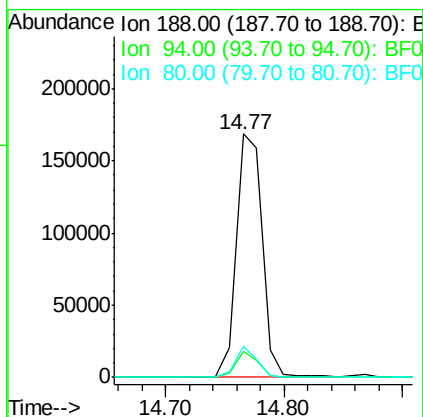
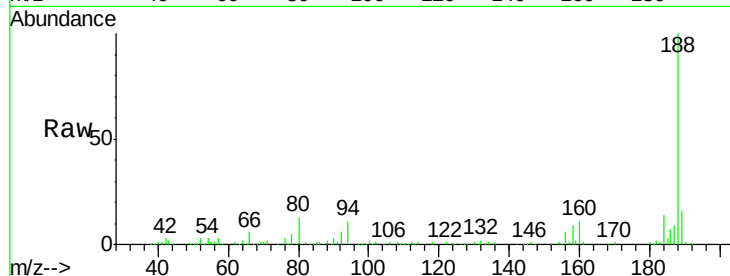
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Phenanthrene-d10  
Concen: 20.00 ng  
RT: 14.77 min Scan# 1153  
Delta R.T. -0.01 min  
Lab File: BF087379.D  
Acq: 25 May 2016 19:01

Instrument :  
BNA\_F  
ClientSampleId :  
TA-1315-(0-4)

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 188     | 100   | 255462 |       |       |
| 94      | 10.9  | 6.8    | 10.2# |       |
| 80      | 12.8  | 7.1    | 10.7# |       |

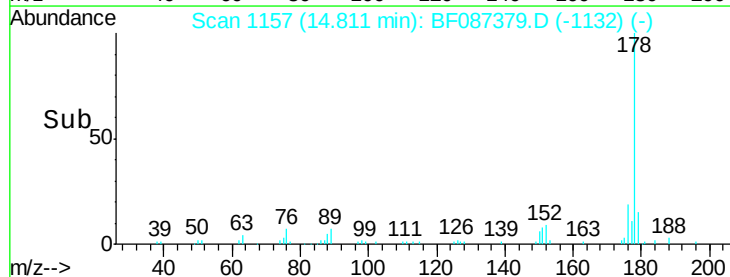
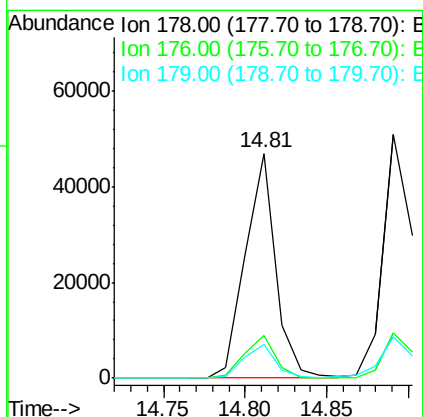
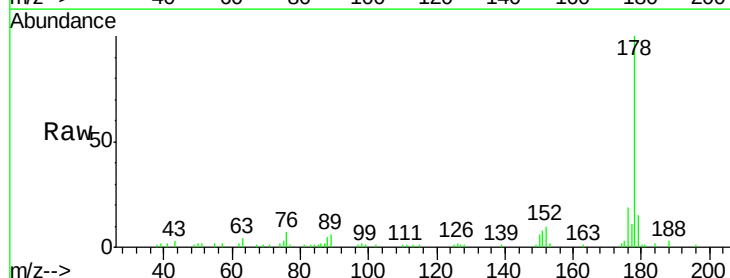
Manual Integrations  
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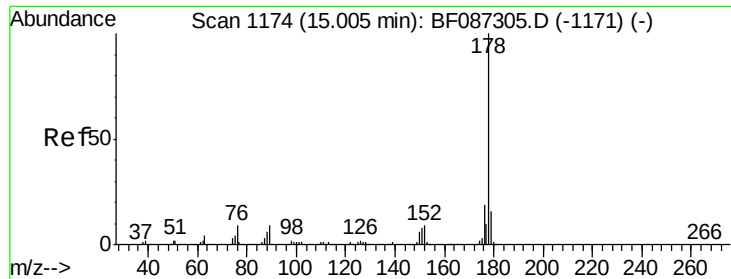


#70  
Phenanthrene  
Concen: 4.29 ng  
RT: 14.81 min Scan# 1157  
Delta R.T. -0.01 min  
Lab File: BF087379.D  
Acq: 25 May 2016 19:01

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 178     | 100   | 60705 |       |       |
| 176     | 18.9  | 16.0  | 24.0  |       |
| 179     | 14.8  | 12.6  | 18.8  |       |







#71

Anthracene

Concen: 4.81 ng

RT: 14.89 min Scan# 1164

Delta R.T. -0.01 min

Lab File: BF087379.D

Acq: 25 May 2016 19:01

Instrument :

BNA\_F

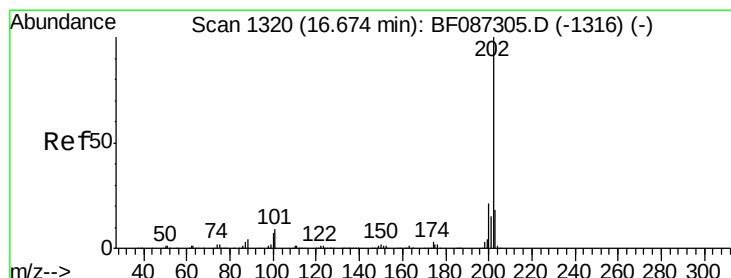
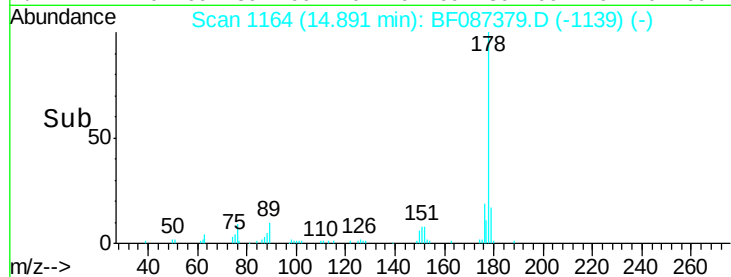
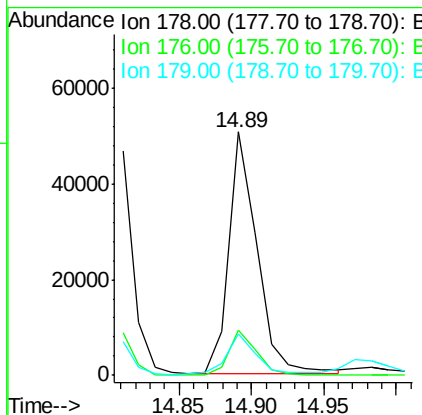
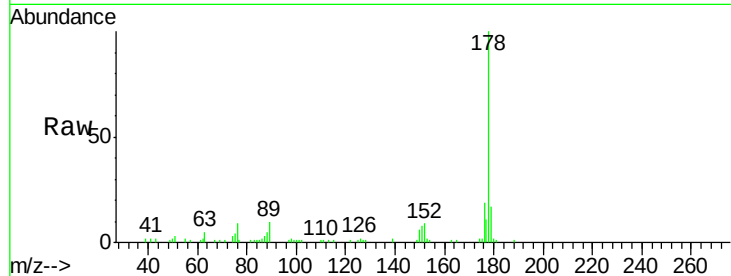
ClientSampleId :

TA-1315-(0-4)

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 178   | Resp: | 68701 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 176       | 18.6  | 15.6  | 23.4  |
| 179       | 16.8  | 12.7  | 19.1  |

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#74

Fluoranthene

Concen: 24.19 ng

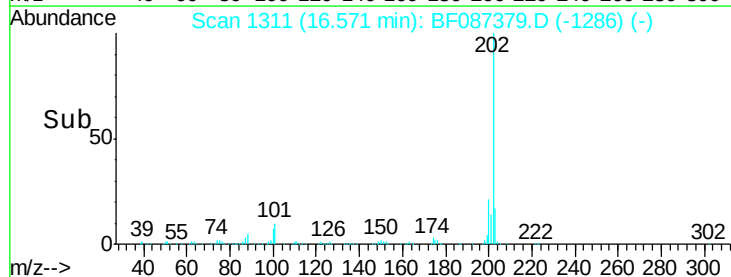
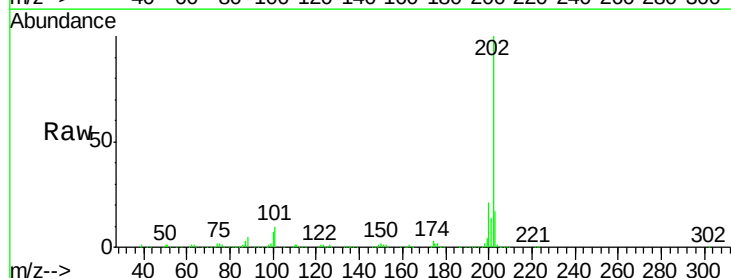
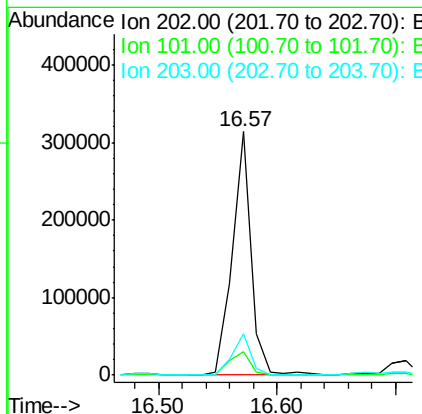
RT: 16.57 min Scan# 1311

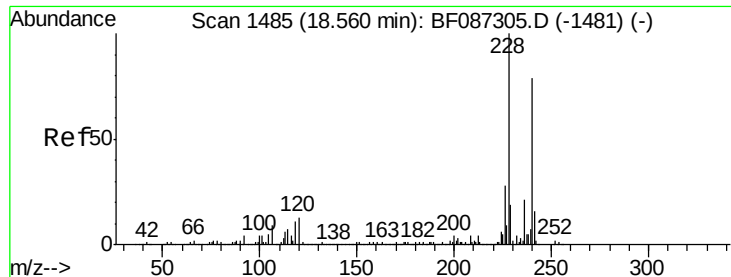
Delta R.T. -0.01 min

Lab File: BF087379.D

Acq: 25 May 2016 19:01

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 343216 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 9.7   | 0.0   | 35.4   |
| 203       | 17.2  | 0.0   | 38.1   |





#75

Chrysene-d12

Concen: 20.00 ng

RT: 18.47 min Scan# 1477

Delta R.T. -0.01 min

Lab File: BF087379.D

Acq: 25 May 2016 19:01

Instrument :

BNA\_F

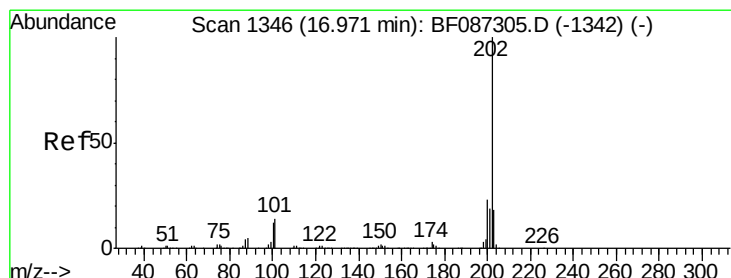
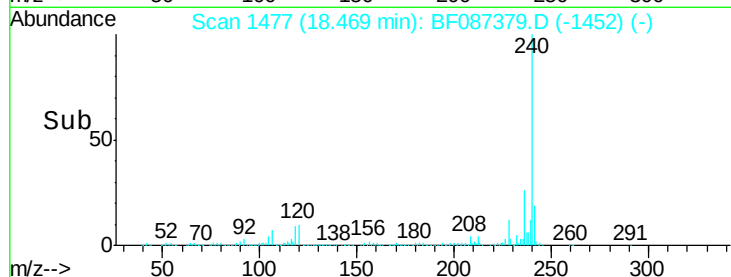
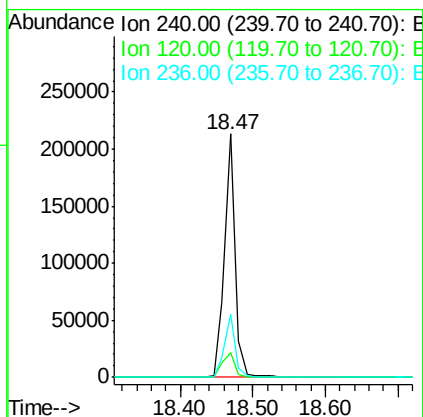
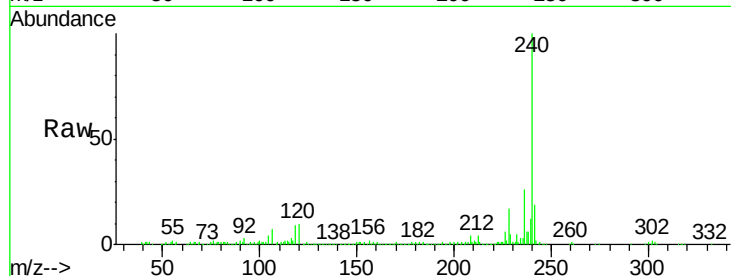
ClientSampleId :

TA-1315-(0-4)

|           |      |       |        |
|-----------|------|-------|--------|
| Tot Ion:  | 240  | Resp: | 221017 |
| Ion Ratio |      | Lower | Upper  |
| 240       | 100  |       |        |
| 120       | 10.1 | 11.2  | 16.8#  |
| 236       | 26.0 | 21.2  | 31.8   |

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#77

Pyrene

Concen: 19.93 ng

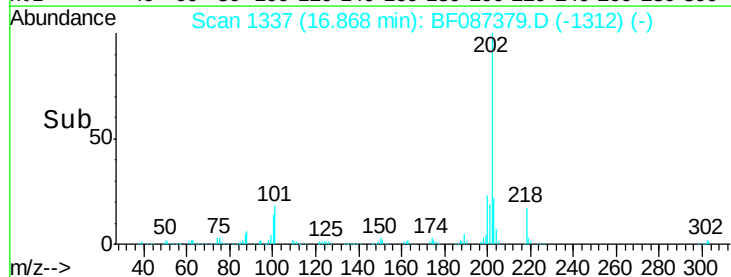
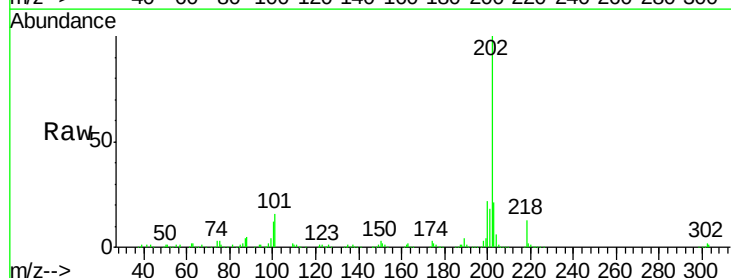
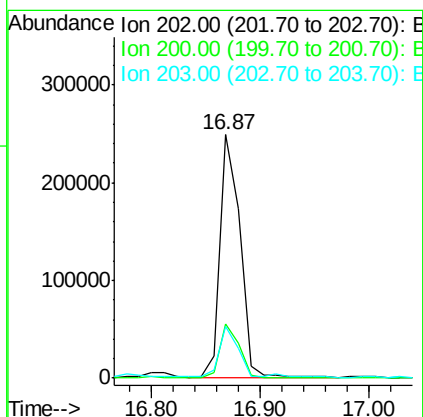
RT: 16.87 min Scan# 1337

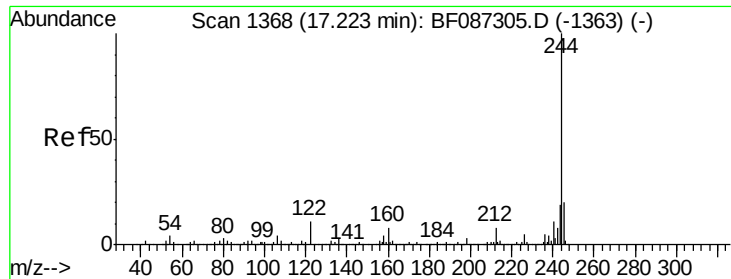
Delta R.T. -0.01 min

Lab File: BF087379.D

Acq: 25 May 2016 19:01

|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 202  | Resp: | 317109 |
| Ion Ratio |      | Lower | Upper  |
| 202       | 100  |       |        |
| 200       | 22.1 | 17.7  | 26.5   |
| 203       | 20.9 | 14.2  | 21.4   |





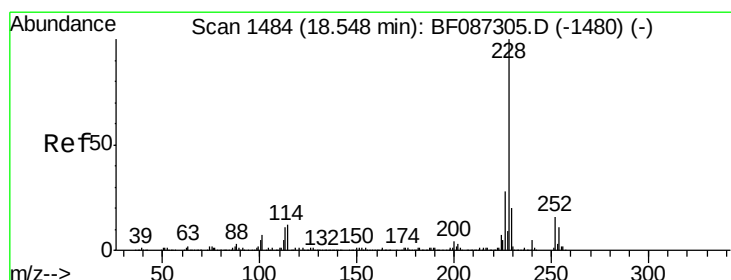
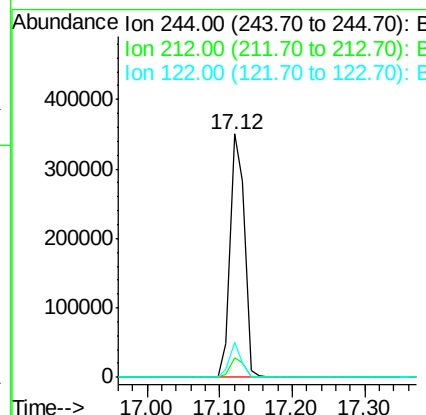
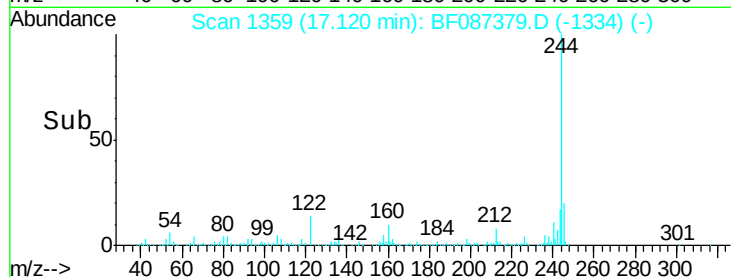
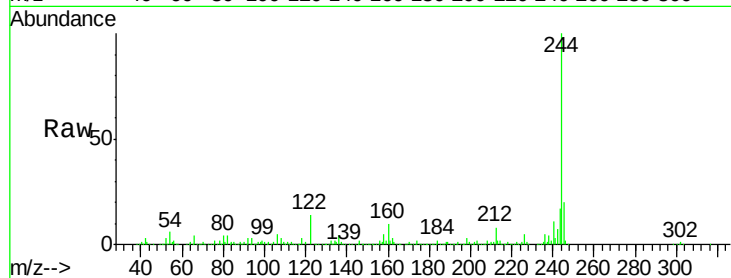
#78  
 Terphenyl-d14  
 Concen: 45.99 ng  
 RT: 17.12 min Scan# 1359  
 Delta R.T. -0.01 min  
 Lab File: BF087379.D  
 Acq: 25 May 2016 19:01

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TA-1315-(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 8.0   | 6.2   | 9.2   |
| 122     | 14.5  | 12.0  | 18.0  |

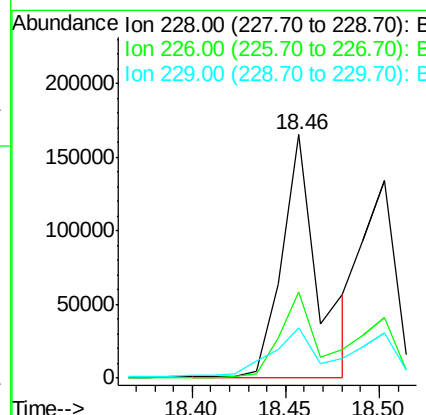
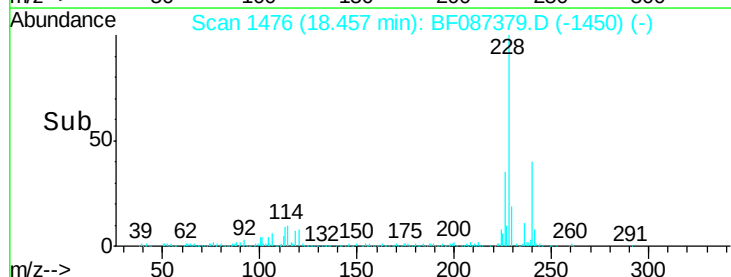
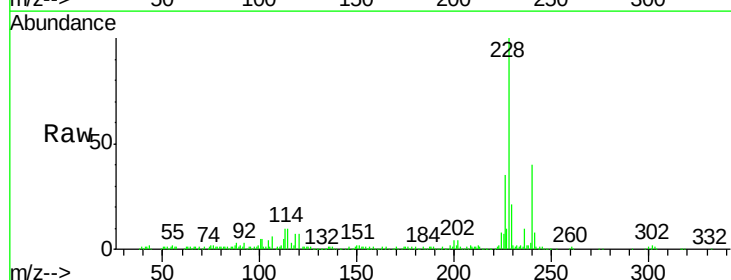
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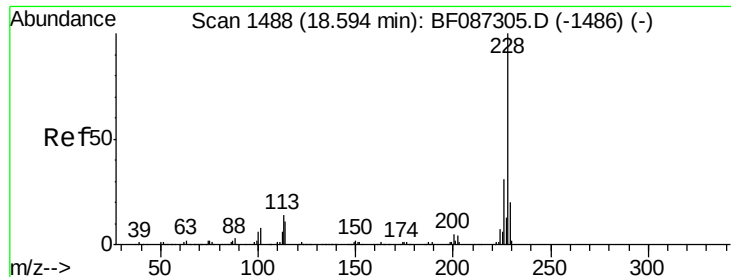
sohil  
 5/26/2016 6:39:37 PM



#80  
 Benzo(a)anthracene  
 Concen: 17.90 ng m  
 RT: 18.46 min Scan# 1476  
 Delta R.T. 0.00 min  
 Lab File: BF087379.D  
 Acq: 25 May 2016 19:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 35.3  | 22.5  | 33.7# |
| 229     | 20.7  | 16.6  | 25.0  |





#82

Chrysene

Concen: 13.56 ng

RT: 18.50 min Scan# 1480

Delta R.T. -0.01 min

Lab File: BF087379.D

Acq: 25 May 2016 19:01

Instrument :

BNA\_F

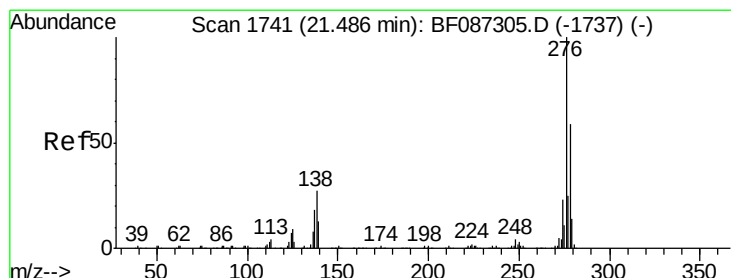
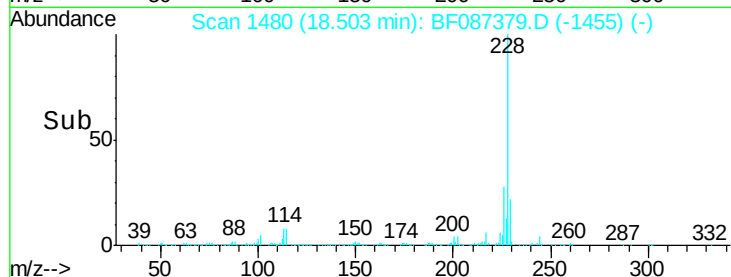
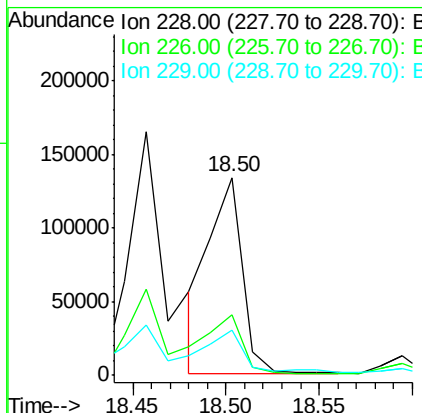
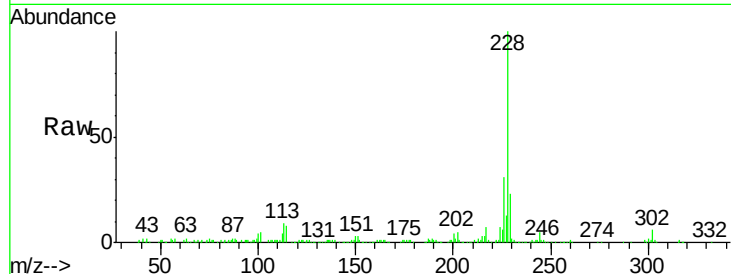
ClientSampleId :

TA-1315-(0-4)

|           |      |       |        |
|-----------|------|-------|--------|
| Tot Ion:  | 228  | Resp: | 169218 |
| Ion Ratio |      | Lower | Upper  |
| 228       | 100  |       |        |
| 226       | 30.6 | 24.4  | 36.6   |
| 229       | 22.6 | 15.8  | 23.8   |

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#85

Indeno(1,2,3-cd)pyrene

Concen: 8.12 ng

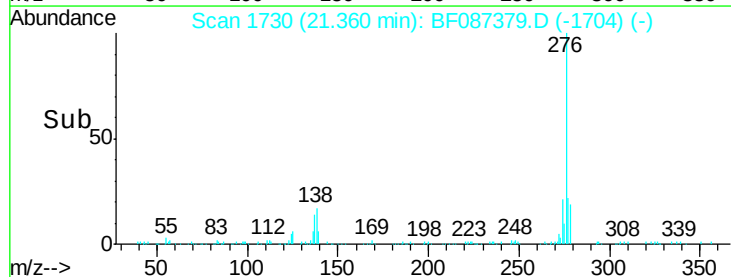
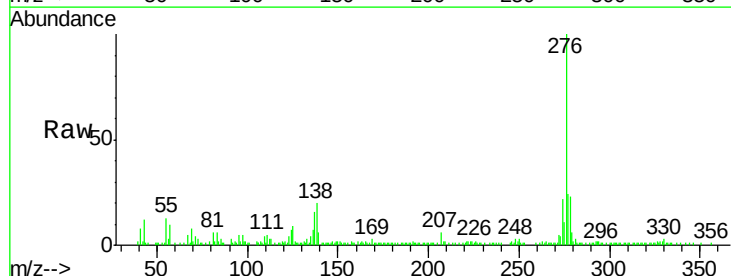
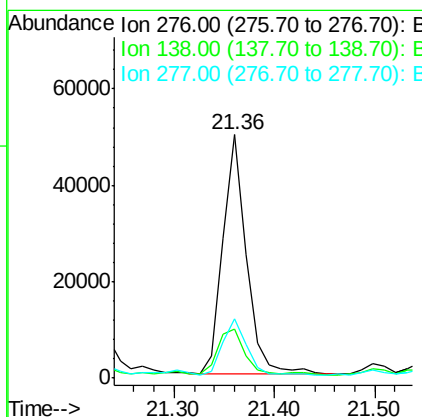
RT: 21.36 min Scan# 1730

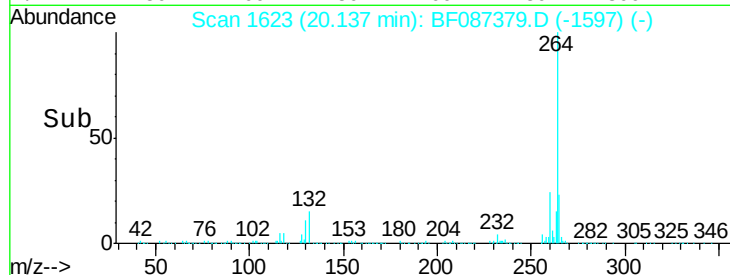
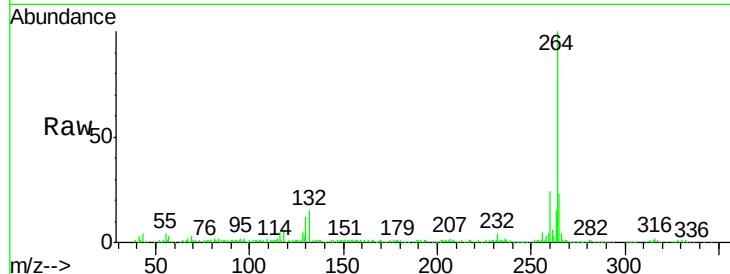
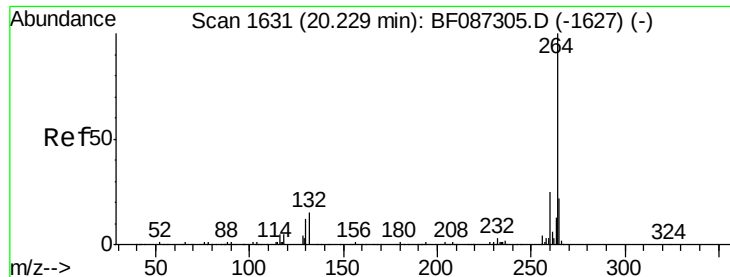
Delta R.T. 0.00 min

Lab File: BF087379.D

Acq: 25 May 2016 19:01

|           |      |       |       |
|-----------|------|-------|-------|
| Tgt Ion:  | 276  | Resp: | 81189 |
| Ion Ratio |      | Lower | Upper |
| 276       | 100  |       |       |
| 138       | 20.8 | 25.6  | 38.4# |
| 277       | 23.8 | 20.5  | 30.7  |





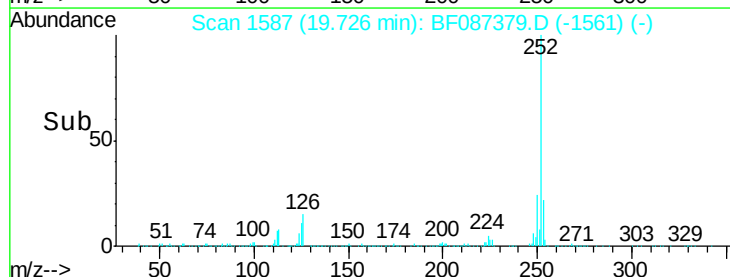
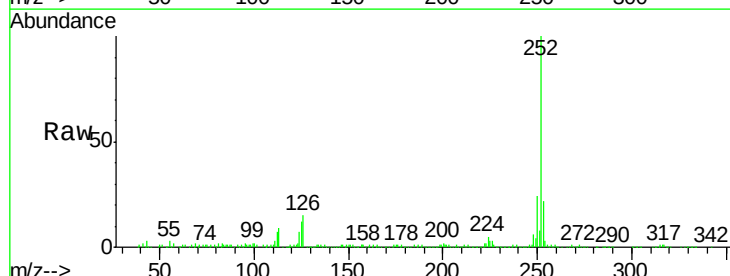
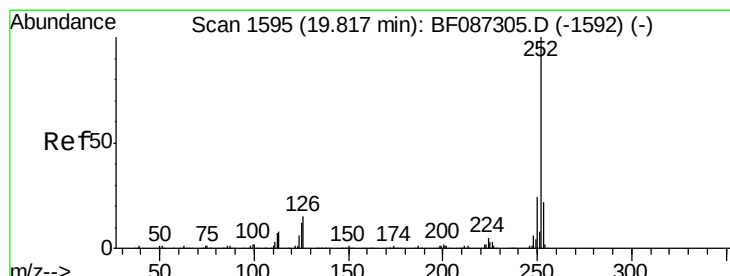
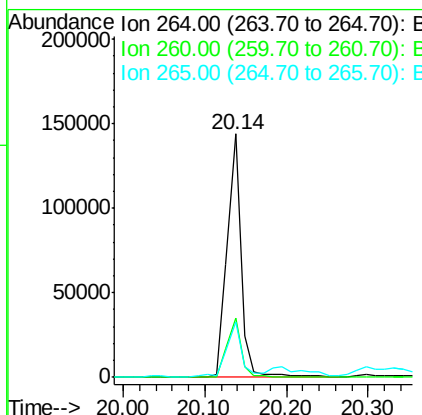
#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 20.14 min Scan# 1623  
Delta R.T. 0.00 min  
Lab File: BF087379.D  
Acq: 25 May 2016 19:01

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 264     | 100   | 173134 |       |       |
| 260     | 24.2  | 19.5   | 29.3  |       |
| 265     | 22.9  | 17.3   | 25.9  |       |

Instrument :  
BNA\_F  
ClientSampleId :  
TA-1315-(0-4)

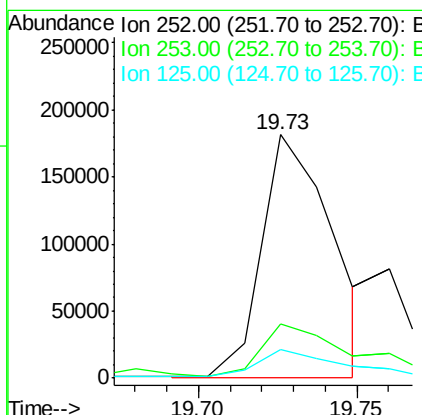
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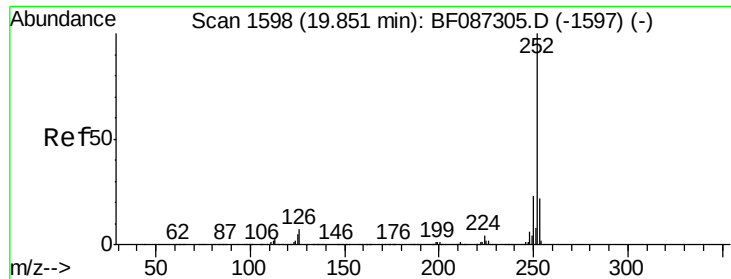
sohil  
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#87  
Benzo(b)fluoranthene  
Concen: 26.08 ng m  
RT: 19.73 min Scan# 1587  
Delta R.T. 0.00 min  
Lab File: BF087379.D  
Acq: 25 May 2016 19:01

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 252     | 100   | 287677 |       |       |
| 253     | 22.0  | 17.8   | 26.6  |       |
| 125     | 11.8  | 11.4   | 17.0  |       |





#88

Benzo(k)fluoranthene

Concen: 7.04 ng

RT: 19.76 min Scan# 1590

Delta R.T. 0.00 min

Lab File: BF087379.D

Acq: 25 May 2016 19:01

Instrument :

BNA\_F

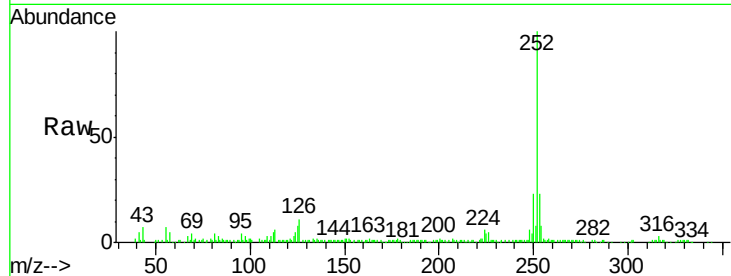
ClientSampleId :

TA-1315-(0-4)

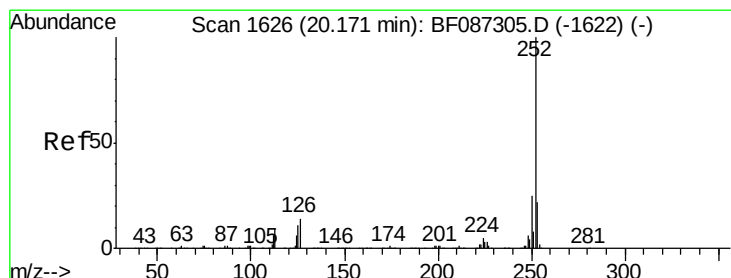
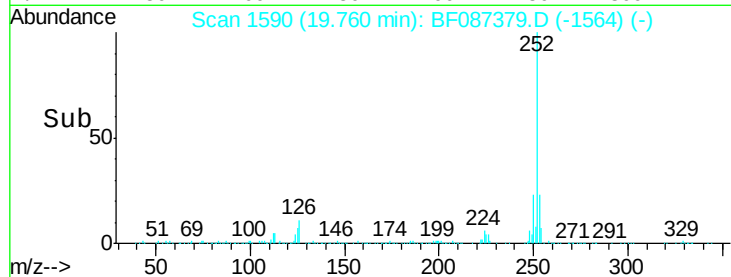
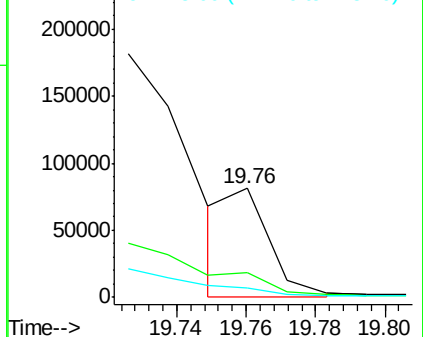
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 252   | Resp: | 66792 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 23.2  | 17.8  | 26.6  |
| 125       | 8.3   | 9.1   | 13.7# |

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



#89

Benzo(a)pyrene

Concen: 13.07 ng

RT: 20.08 min Scan# 1618

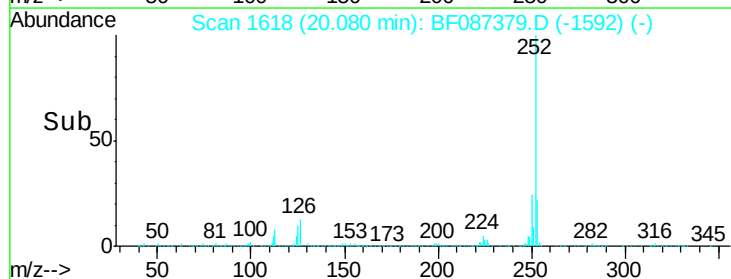
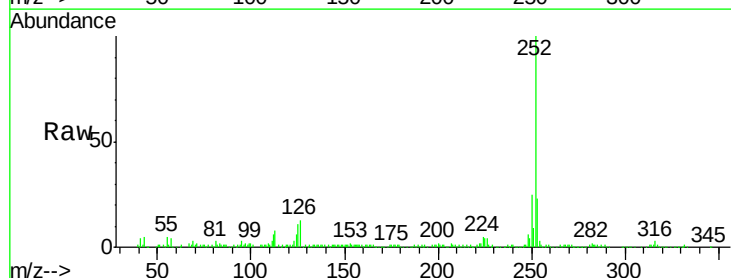
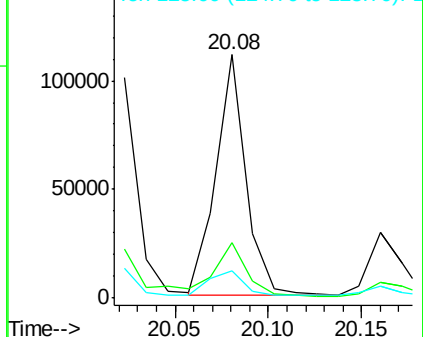
Delta R.T. 0.00 min

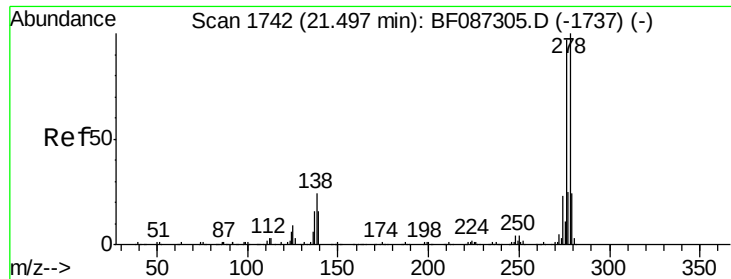
Lab File: BF087379.D

Acq: 25 May 2016 19:01

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 124647 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.0  | 17.2  | 25.8   |
| 125       | 11.0  | 9.0   | 13.6   |

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





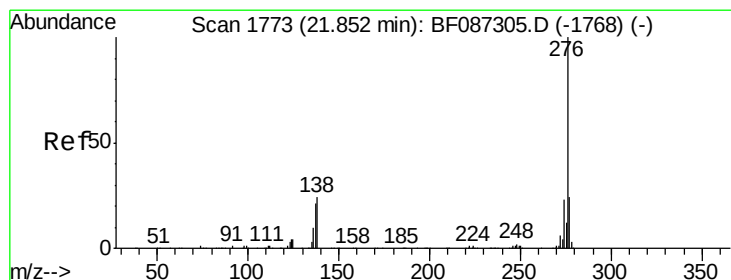
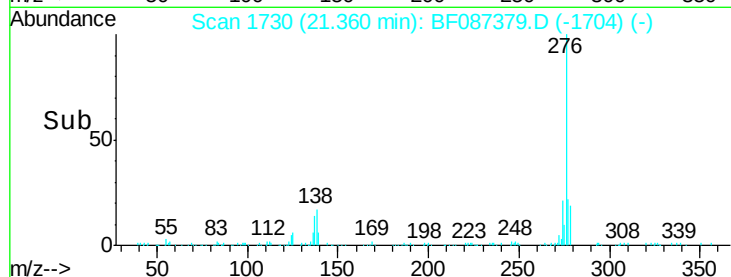
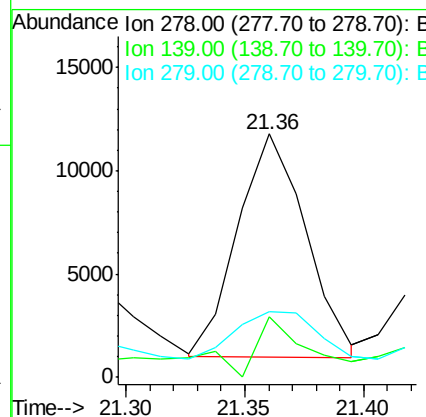
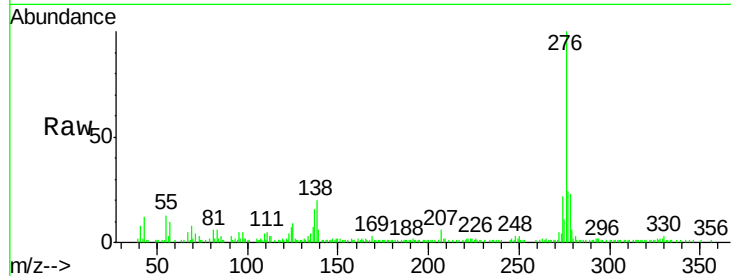
#90  
Dibenzo(a,h)anthracene  
Concen: 2.67 ng/mL  
RT: 21.36 min Scan# 1730  
Delta R.T. 0.00 min  
Lab File: BF087379.D  
Acq: 25 May 2016 19:01

Instrument :  
BNA\_F  
ClientSampleId :  
TA-1315-(0-4)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 25.0  | 16.6  | 24.8# |
| 279     | 27.2  | 19.6  | 29.4  |

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#91  
Benzo(g,h,i)perylene  
Concen: 8.22 ng/mL  
RT: 21.71 min Scan# 1761  
Delta R.T. 0.00 min  
Lab File: BF087379.D  
Acq: 25 May 2016 19:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 25.5  | 19.6  | 29.4  |
| 138     | 23.3  | 23.6  | 35.4# |

