

Data Path : Z:\HPCHEM1\BNA\_E\DATA\BE051916\  
 Data File : BE091821.D  
 Acq On : 19 May 2016 22:00  
 Operator : UM/SJ  
 Sample : H3084-01  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 KY032MW006-160512

Manual Integrations  
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Quant Time: May 20 14:45:15 2016  
 Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\8270-SIM-BE051916.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu May 19 15:36:49 2016  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min)  |
|--------------------------------|-------|------|----------|---------|-------|-----------|
| 1) 1,4-Dichlorobenzene-d4      | 7.80  | 152  | 23935    | 5.00    | ng    | 0.00      |
| 7) Naphthalene-d8              | 10.59 | 136  | 118786   | 5.00    | ng    | 0.02      |
| 13) Acenaphthene-d10           | 14.43 | 164  | 96741    | 5.00    | ng    | 0.01      |
| 19) Phenanthrene-d10           | 17.15 | 188  | 194937   | 5.00    | ng    | 0.00      |
| 26) Chrysene-d12               | 21.29 | 240  | 214269   | 5.00    | ng    | -0.02     |
| 35) Perylene-d12               | 23.74 | 264  | 221324   | 5.00    | ng    | -0.01     |
| System Monitoring Compounds    |       |      |          |         |       |           |
| 4) 2-Fluorophenol              | 5.41  | 112  | 31977    | 5.11    | ng    | 0.02      |
| 5) Phenol-d6                   | 7.01  | 99   | 31087    | 3.53    | ng    | 0.05      |
| 8) Nitrobenzene-d5             | 8.97  | 82   | 36828    | 4.68    | ng    | 0.02      |
| 14) 2,4,6-Tribromophenol       | 15.91 | 330  | 35978    | 9.58    | ng    | 0.01      |
| 15) 2-Fluorobiphenyl           | 13.06 | 172  | 169337   | 6.19    | ng    | 0.02      |
| 29) Terphenyl-d14              | 19.74 | 244  | 155354   | 5.12    | ng    | -0.02     |
| Target Compounds               |       |      |          |         |       |           |
| 2) 1,4-Dioxane                 | 3.35  | 88   | 6355737  | 2449.79 | ng    | Qvalue 89 |
| 6) bis(2-Chloroethyl)ether     | 7.23  | 93   | 2938706  | 415.65  | ng    | # 70      |
| 10) Naphthalene                | 10.65 | 128  | 595613   | 22.66   | ng    | # 88      |
| 12) 2-Methylnaphthalene        | 12.26 | 142  | 79990    | 4.52    | ng    | # 74      |
| 23) Phenanthrene               | 17.18 | 178  | 7394     | 0.09    | ng    | # 51      |
| 33) Bis(2-ethylhexyl)phthalate | 21.20 | 149  | 37388    | 1.45    | ng    | # 81      |

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

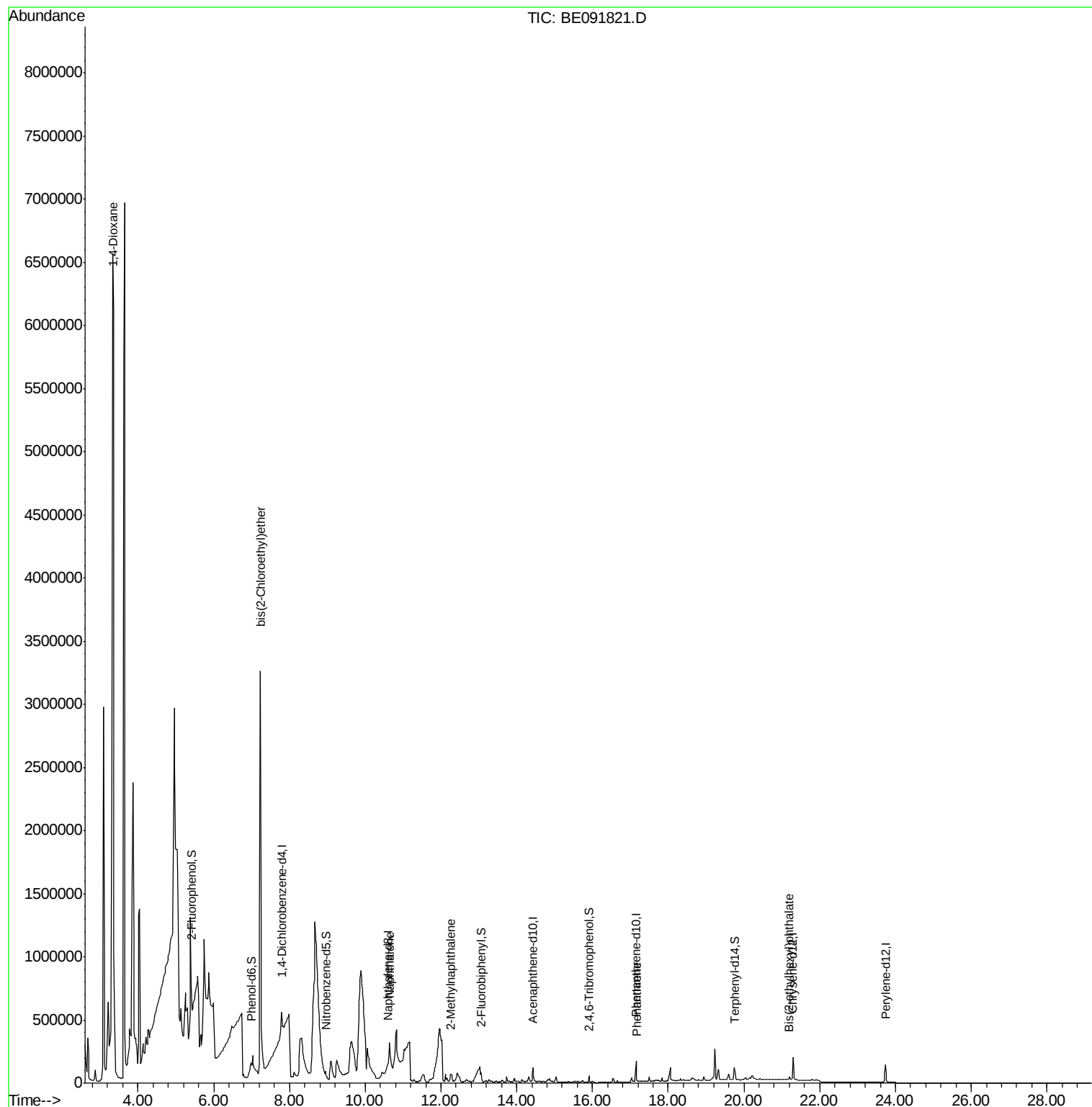
Data Path : Z:\HPCHEM1\BNA\_E\DATA\BE051916\  
Data File : BE091821.D  
Acq On : 19 May 2016 22:00  
Operator : UM/SJ  
Sample : H3084-01  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

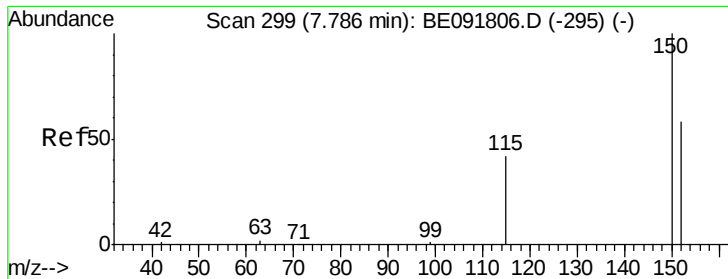
Instrument :  
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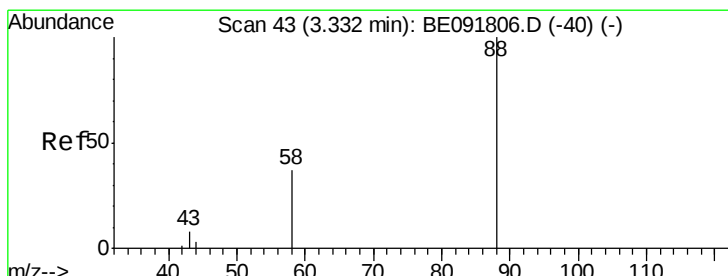
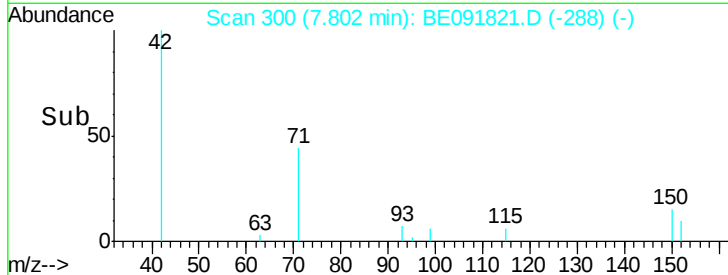
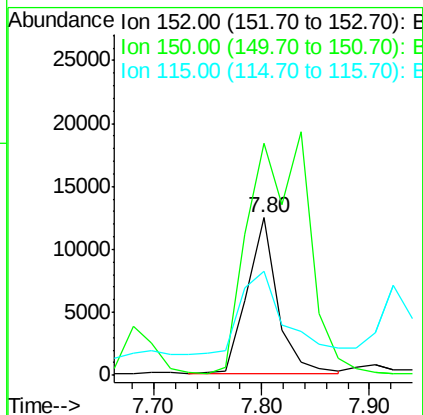
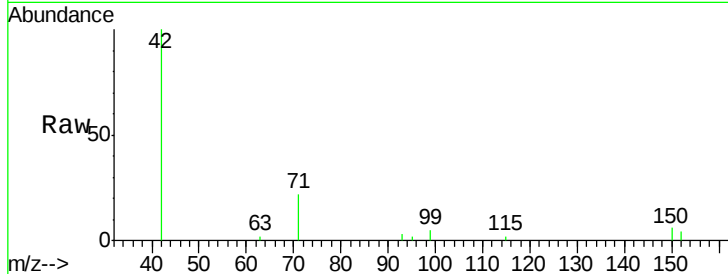
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 5.00 ng  
 RT: 7.80 min Scan# 300  
 Delta R.T. -0.00 min  
 Lab File: BE091821.D  
 Acq: 19 May 2016 22:00

Instrument :  
 BNA\_E  
 ClientSampleId :  
 KY032MW006-160512

Tgt Ion: 152 Resp: 23935  
 Ion Ratio Lower Upper  
 152 100  
 150 146.9 122.6 183.8  
 115 66.0 52.8 79.2

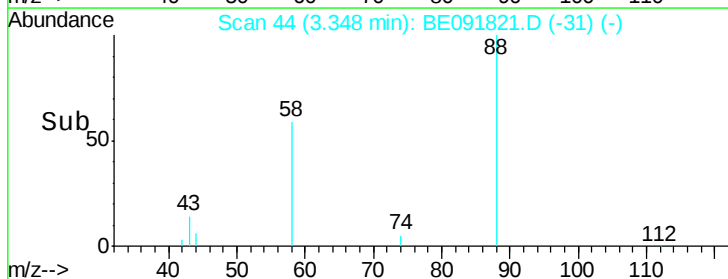
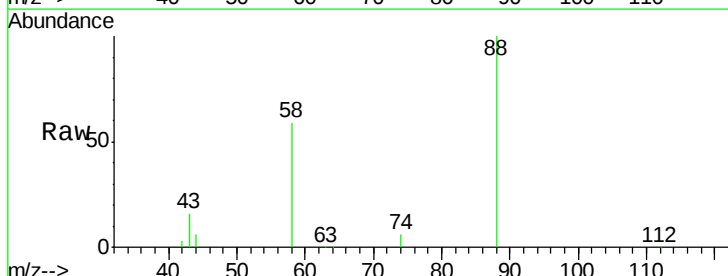
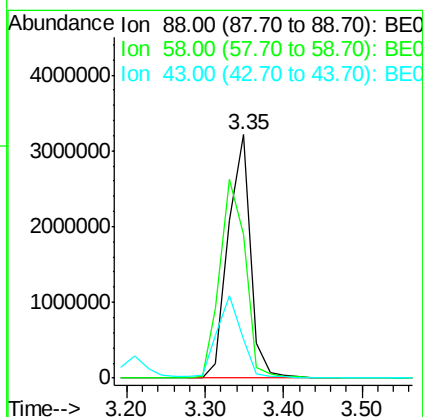
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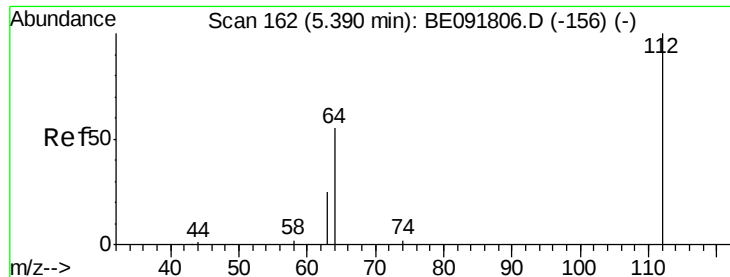
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#2  
 1,4-Dioxane  
 Concen: 2449.79 ng  
 RT: 3.35 min Scan# 44  
 Delta R.T. 0.02 min  
 Lab File: BE091821.D  
 Acq: 19 May 2016 22:00

Tgt Ion: 88 Resp: 6355737  
 Ion Ratio Lower Upper  
 88 100  
 58 92.6 65.8 98.6  
 43 37.5 25.3 37.9





#4

2-Fluorophenol

Concen: 5.11 ng

RT: 5.41 min Scan# 163

Delta R.T. 0.02 min

Lab File: BE091821.D

Acq: 19 May 2016 22:00

Instrument :

BNA\_E

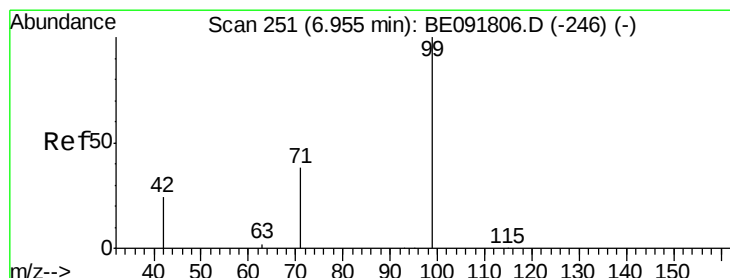
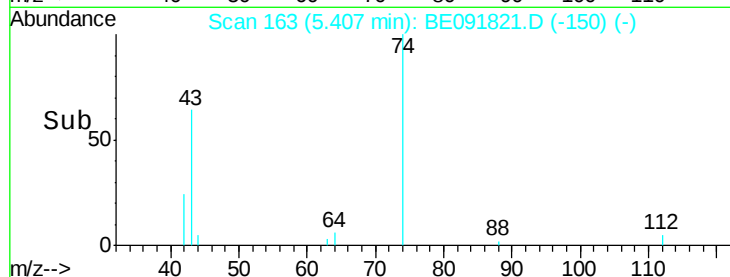
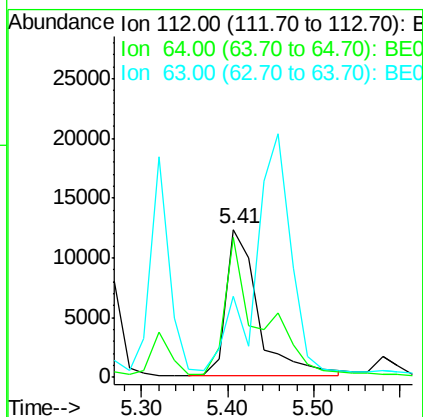
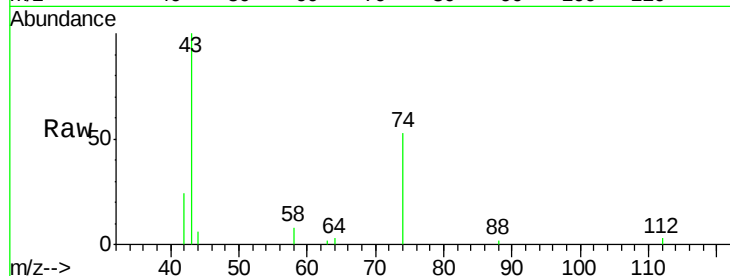
ClientSampleId :

KY032MW006-160512

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 112   | Resp: | 31977 |
| Ion Ratio | Lower | Upper |       |
| 112       | 100   |       |       |
| 64        | 100.0 | 30.9  | 46.3# |
| 63        | 0.0   | 16.7  | 25.1# |

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#5

Phenol-d6

Concen: 3.53 ng

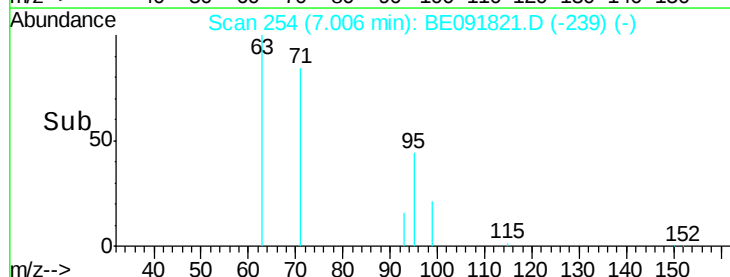
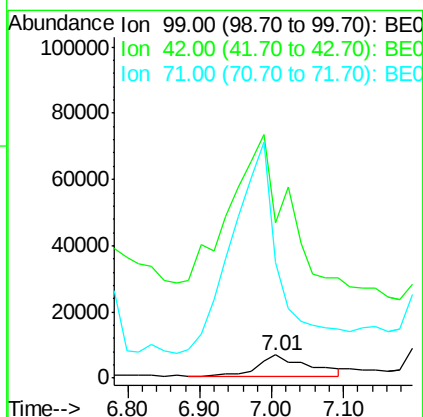
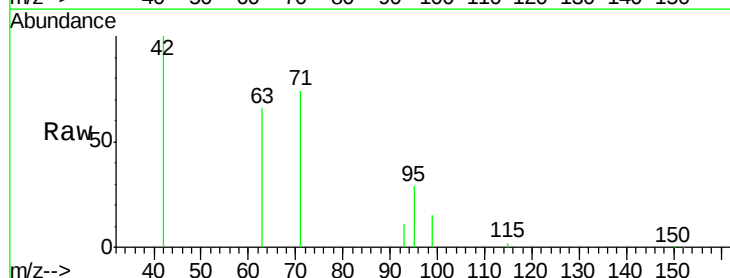
RT: 7.01 min Scan# 254

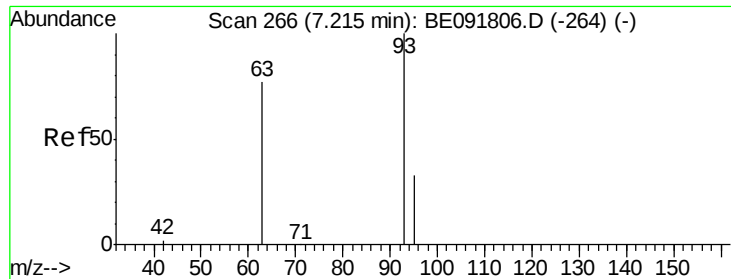
Delta R.T. 0.05 min

Lab File: BE091821.D

Acq: 19 May 2016 22:00

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 99    | Resp: | 31087 |
| Ion Ratio | Lower | Upper |       |
| 99        | 100   |       |       |
| 42        | 724.2 | 16.2  | 24.2# |
| 71        | 947.7 | 29.0  | 43.4# |





#6

bis(2-Chloroethyl)ether

Concen: 415.65 ng

RT: 7.23 min Scan# 267

Delta R.T. 0.02 min

Lab File: BE091821.D

Acq: 19 May 2016 22:00

Instrument :

BNA\_E

ClientSampleId :

KY032MW006-160512

Tgt Ion: 93 Resp: 2938706

Ion Ratio Lower Upper

93 100

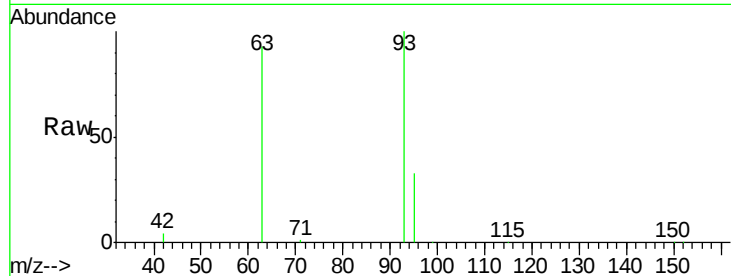
63 91.1 49.5 74.3#

95 33.9 22.2 33.4#

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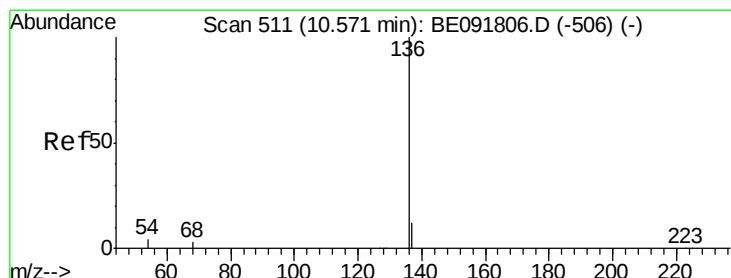
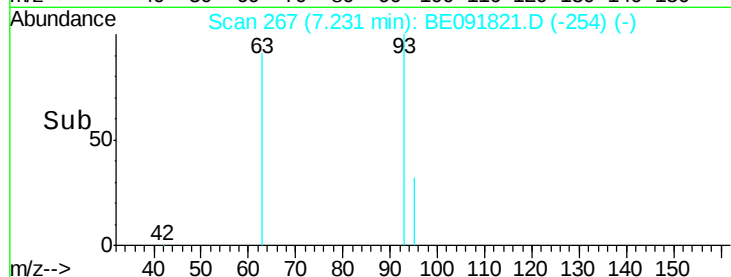
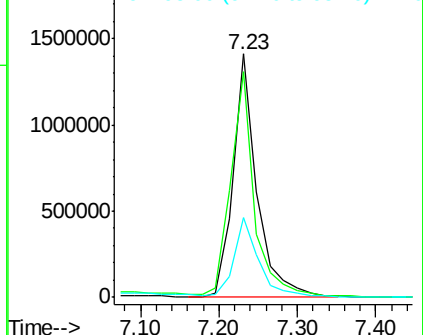
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Abundance Ion 93.00 (92.70 to 93.70): BE0

Ion 63.00 (62.70 to 63.70): BE0

Ion 95.00 (94.70 to 95.70): BE0



#7

Naphthalene-d8

Concen: 5.00 ng

RT: 10.59 min Scan# 512

Delta R.T. 0.02 min

Lab File: BE091821.D

Acq: 19 May 2016 22:00

Tgt Ion: 136 Resp: 118786

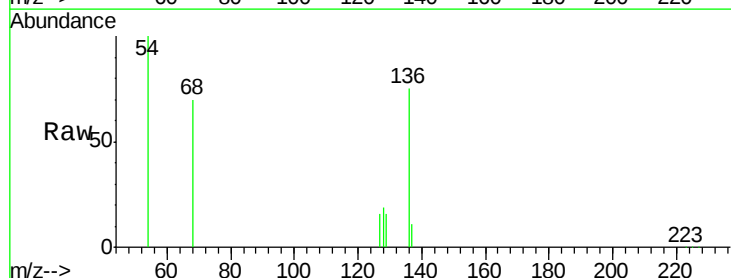
Ion Ratio Lower Upper

136 100

137 14.2 8.9 13.3#

54 132.6 8.2 12.4#

68 93.1 6.2 9.4#

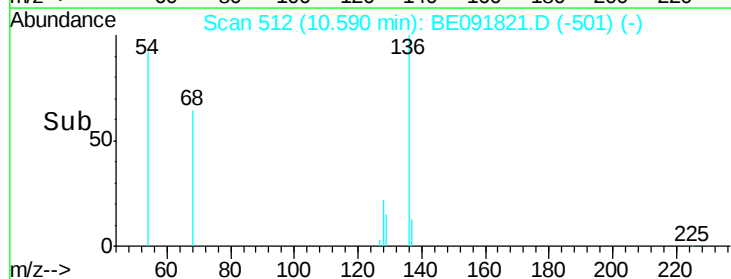
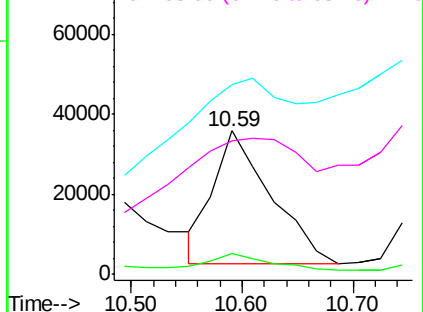


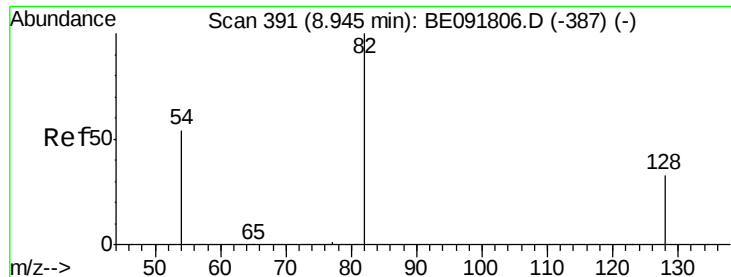
Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BE0

Ion 68.00 (67.70 to 68.70): BE0





#8

Nitrobenzene-d5

Concen: 4.68 ng

RT: 8.97 min Scan# 393

Delta R.T. 0.02 min

Lab File: BE091821.D

Acq: 19 May 2016 22:00

Instrument :

BNA\_E

ClientSampleId :

KY032MW006-160512

Tgt Ion: 82 Resp: 36828

Ion Ratio Lower Upper

82 100

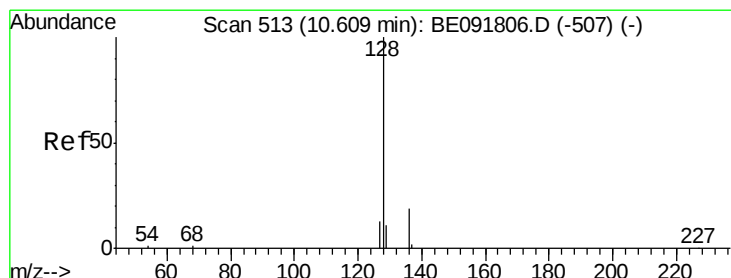
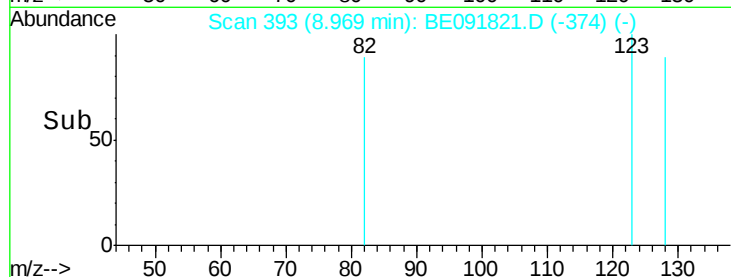
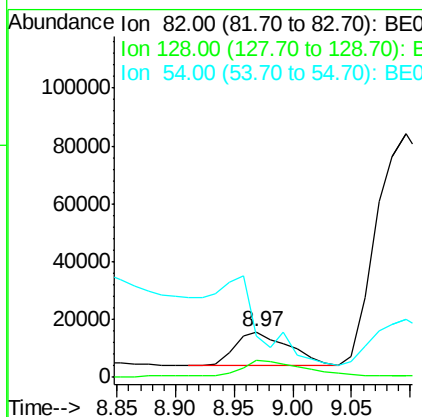
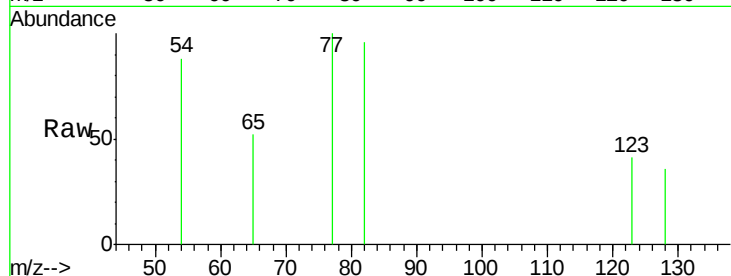
128 37.2 25.4 38.0

54 92.3 48.4 72.6#

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#10

Naphthalene

Concen: 22.66 ng

RT: 10.65 min Scan# 515

Delta R.T. 0.04 min

Lab File: BE091821.D

Acq: 19 May 2016 22:00

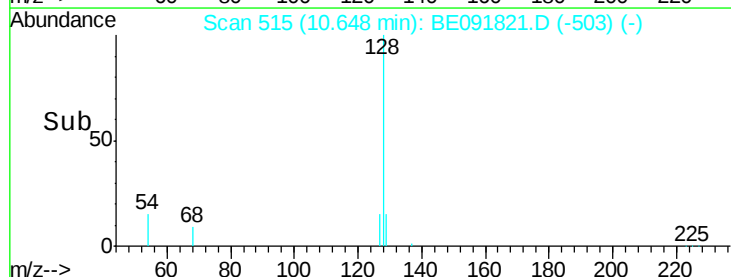
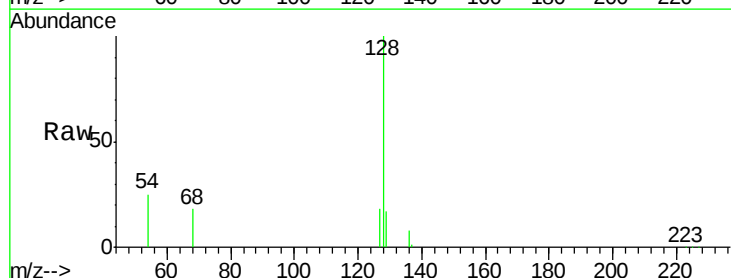
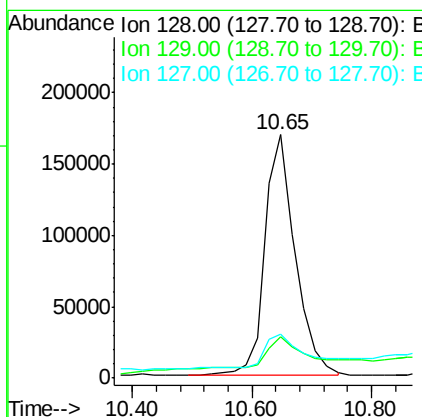
Tgt Ion: 128 Resp: 595613

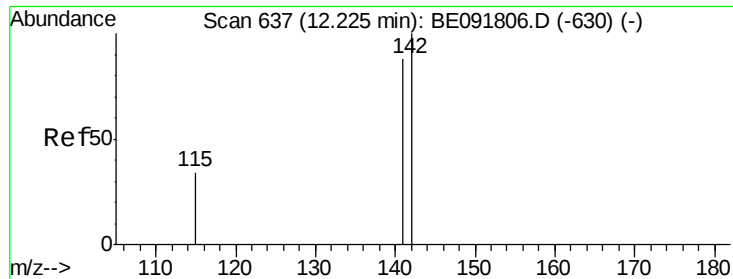
Ion Ratio Lower Upper

128 100

129 17.1 9.3 13.9#

127 17.8 10.7 16.1#





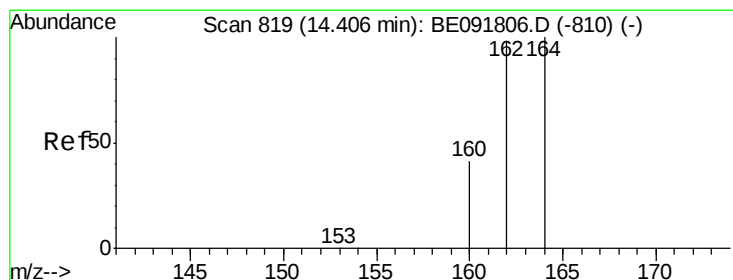
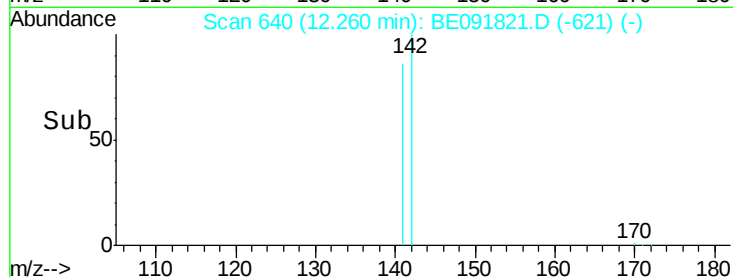
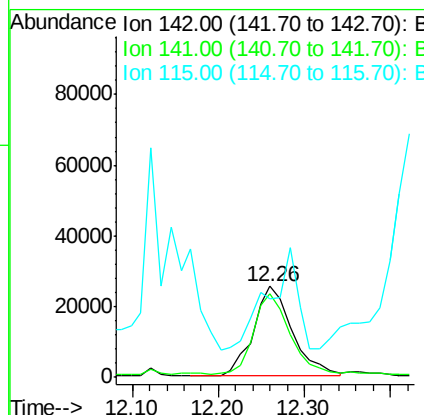
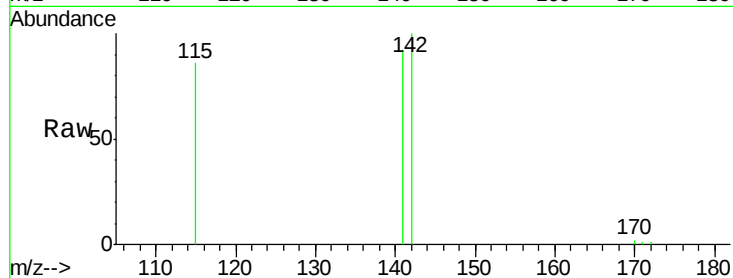
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2-Methylnaphthalene  
Concen: 4.52 ng  
RT: 12.26 min Scan# 640  
Delta R.T. 0.02 min  
Lab File: BE091821.D  
Acq: 19 May 2016 22:00

Instrument :  
BNA\_E  
ClientSampleId :  
KY032MW006-160512

Tgt Ion:142 Resp: 79990  
Ion Ratio Lower Upper  
142 100  
141 91.7 71.4 107.0  
115 86.5 30.3 45.5#

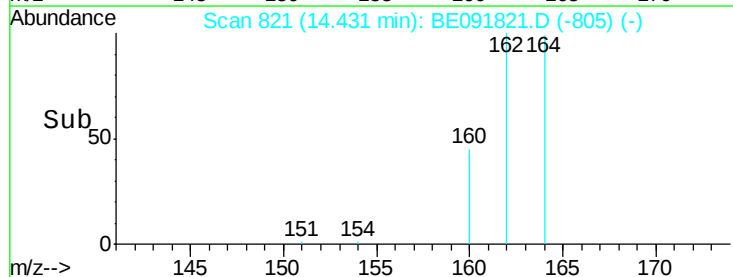
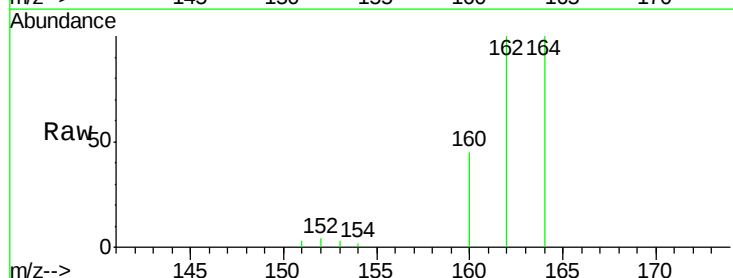
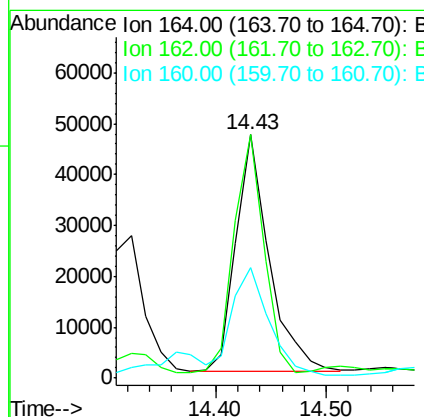
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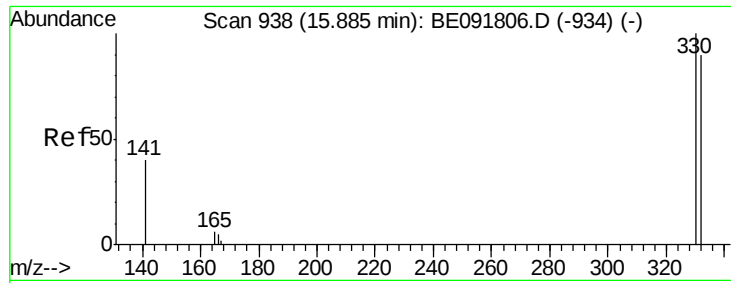
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#13  
Acenaphthene-d10  
Concen: 5.00 ng  
RT: 14.43 min Scan# 821  
Delta R.T. 0.01 min  
Lab File: BE091821.D  
Acq: 19 May 2016 22:00

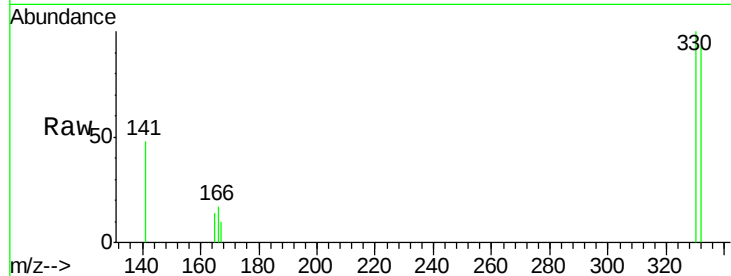
Tgt Ion:164 Resp: 96741  
Ion Ratio Lower Upper  
164 100  
162 99.8 85.3 127.9  
160 45.5 46.2 69.2#





#14  
 2,4,6-Tribromophenol  
 Concen: 9.58 ng  
 RT: 15.91 min Scan# 940  
 Delta R.T. 0.01 min  
 Lab File: BE091821.D  
 Acq: 19 May 2016 22:00

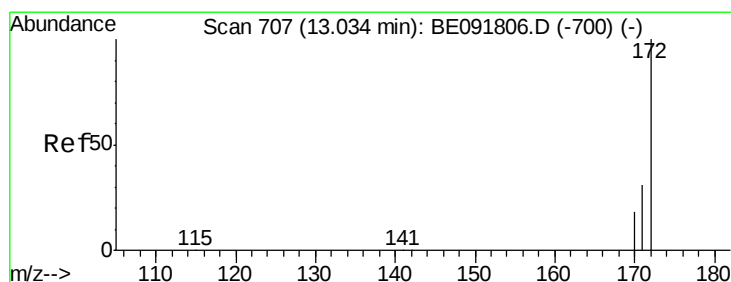
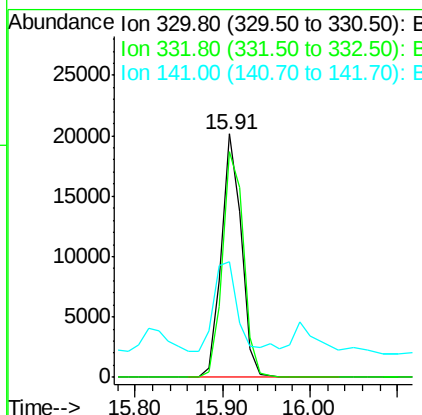
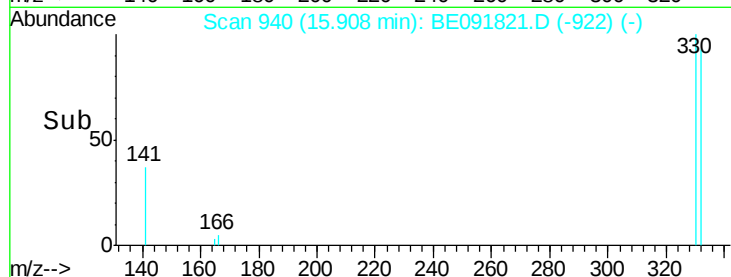
Instrument :  
 BNA\_E  
 ClientSampleId :  
 KY032MW006-160512



Tgt Ion: 330 Resp: 35978  
 Ion Ratio Lower Upper  
 330 100  
 332 97.8 79.1 118.7  
 141 37.7 125.4 188.0#

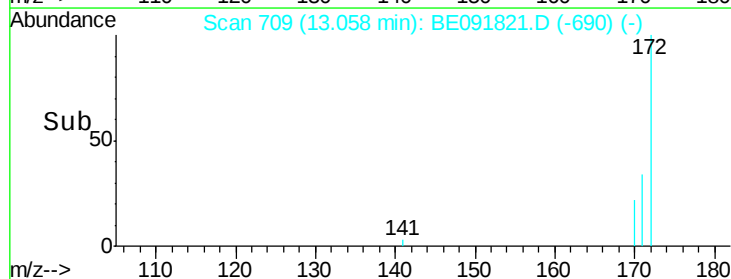
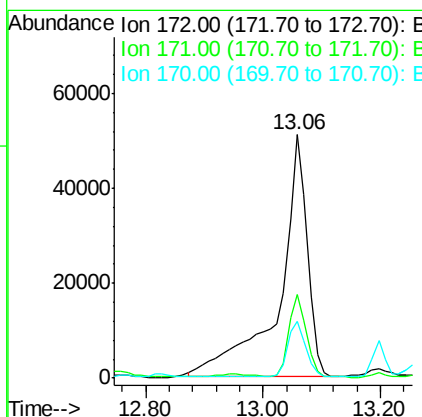
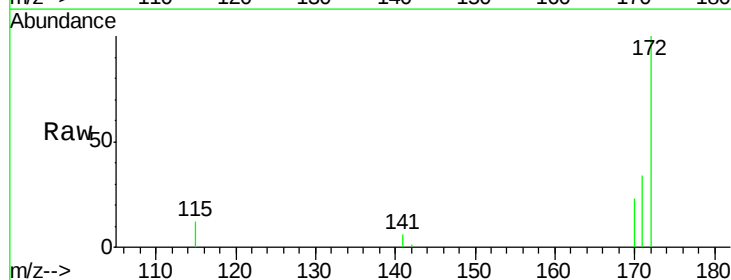
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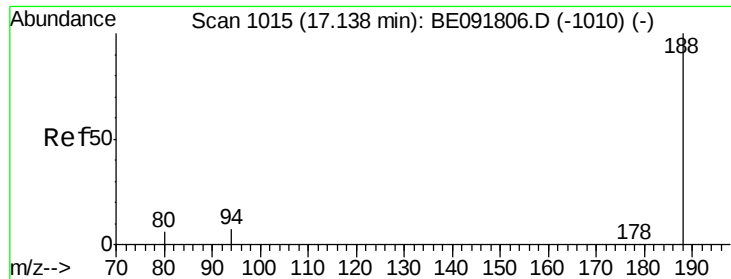
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#15  
 2-Fluorobiphenyl  
 Concen: 6.19 ng  
 RT: 13.06 min Scan# 709  
 Delta R.T. 0.02 min  
 Lab File: BE091821.D  
 Acq: 19 May 2016 22:00

Tgt Ion: 172 Resp: 169337  
 Ion Ratio Lower Upper  
 172 100  
 171 34.2 28.8 43.2  
 170 23.5 19.3 28.9





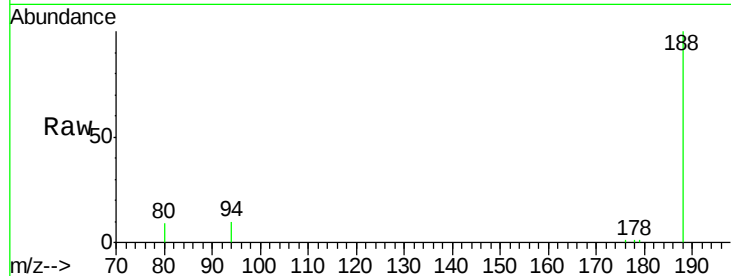
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Phenanthrene-d10  
Concen: 5.00 ng  
RT: 17.15 min Scan# 1016  
Delta R.T. -0.00 min  
Lab File: BE091821.D  
Acq: 19 May 2016 22:00

Instrument :  
BNA\_E  
ClientSampleId :  
KY032MW006-160512

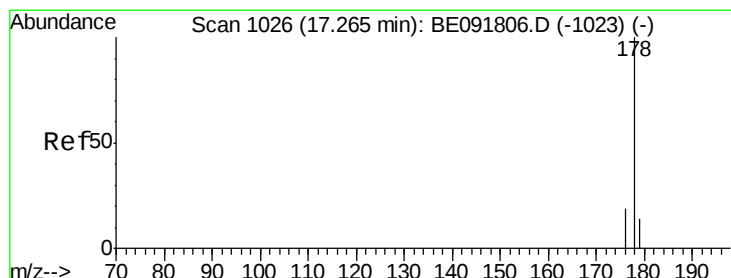
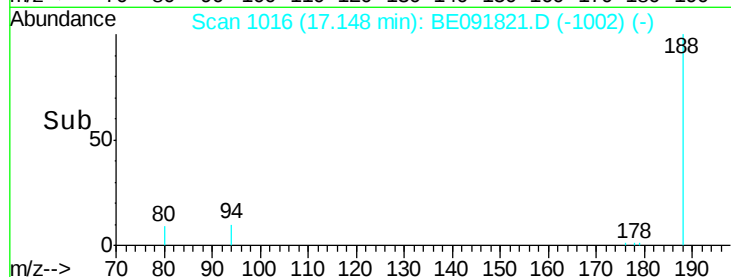
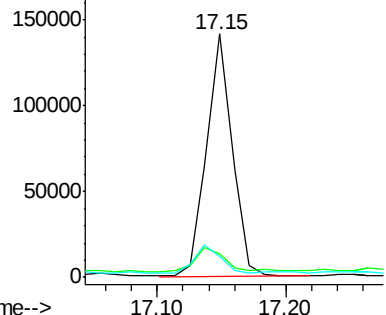
| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 188     | 100   |            |            |
| 94      | 9.9   | 8.7        | 13.1       |
| 80      | 8.8   | 9.4        | 14.0#      |

Manual Integrations  
APPROVED

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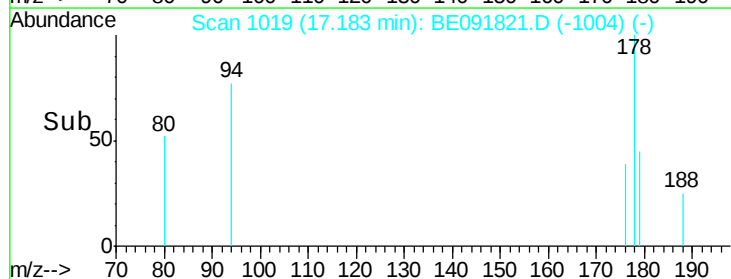
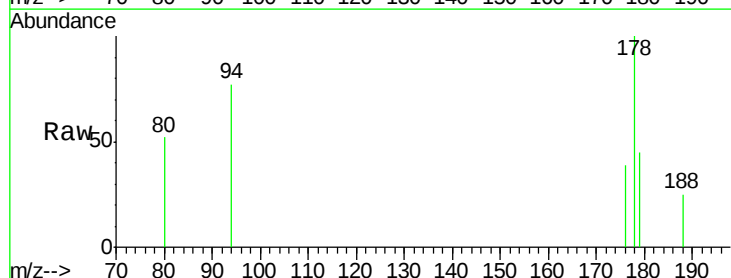
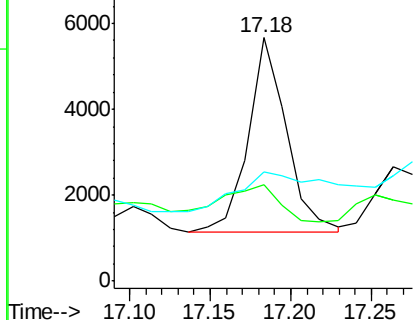
Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BE0  
Ion 80.00 (79.70 to 80.70): BE0

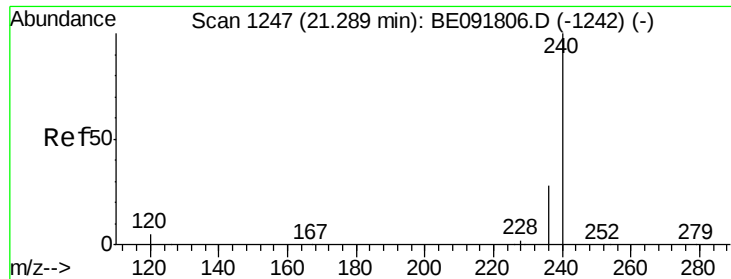


#23  
Phenanthrene  
Concen: 0.09 ng  
RT: 17.18 min Scan# 1019  
Delta R.T. -0.00 min  
Lab File: BE091821.D  
Acq: 19 May 2016 22:00

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 178     | 100   |            |            |
| 176     | 24.9  | 15.3       | 22.9#      |
| 179     | 55.0  | 12.6       | 18.8#      |

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





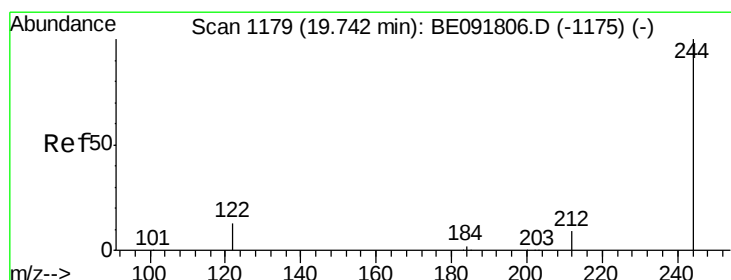
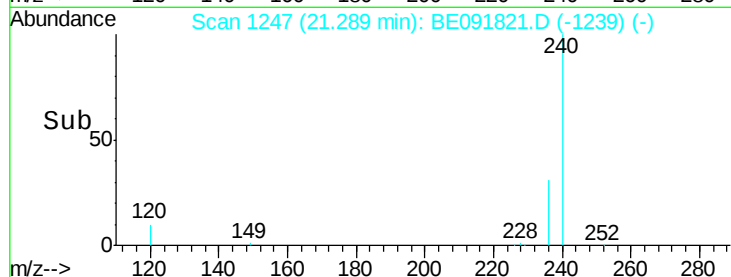
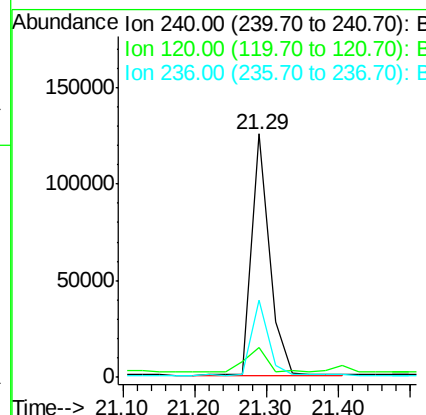
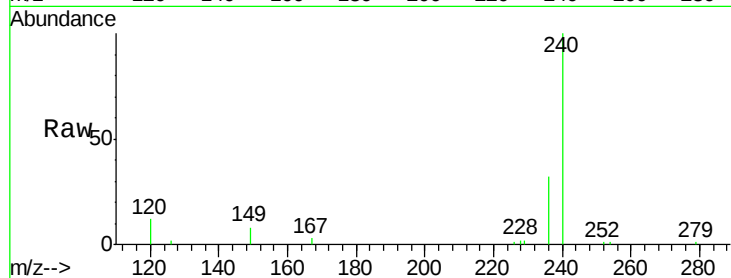
#26  
Chrysene-d12  
Concen: 5.00 ng  
RT: 21.29 min Scan# 1247  
Delta R.T. -0.02 min  
Lab File: BE091821.D  
Acq: 19 May 2016 22:00

Instrument :  
BNA\_E  
ClientSampleId :  
KY032MW006-160512

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 240     | 100   |            |            |
| 120     | 12.4  | 11.0       | 16.4       |
| 236     | 31.8  | 21.7       | 32.5       |

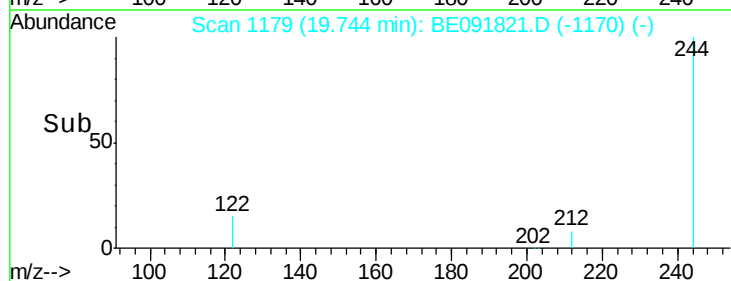
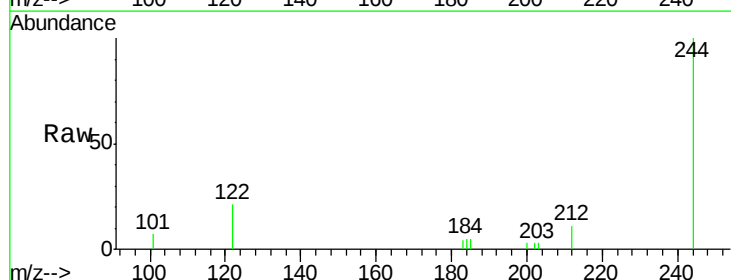
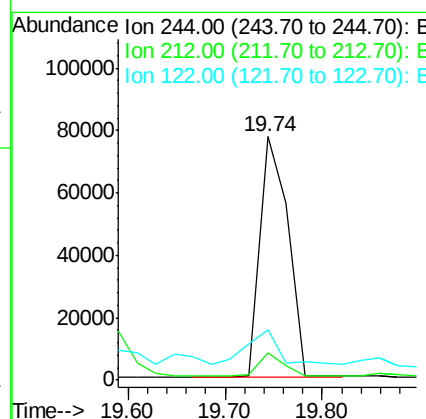
Manual Integrations  
APPROVED

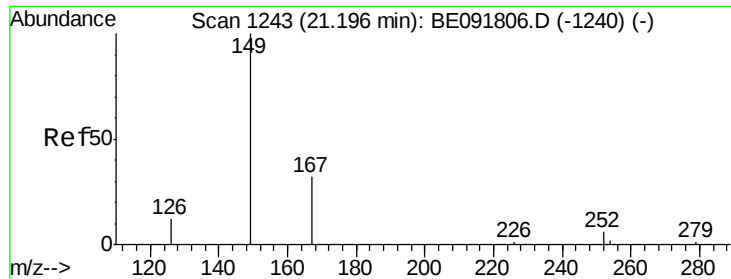
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#29  
Terphenyl-d14  
Concen: 5.12 ng  
RT: 19.74 min Scan# 1179  
Delta R.T. -0.02 min  
Lab File: BE091821.D  
Acq: 19 May 2016 22:00

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 244     | 100   |            |            |
| 212     | 11.2  | 6.9        | 10.3#      |
| 122     | 20.8  | 11.0       | 16.4#      |





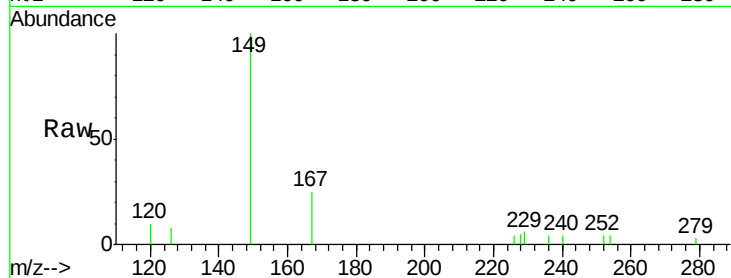
#33  
Bis(2-ethylhexyl)phthalate  
Concen: 1.45 ng  
RT: 21.20 min Scan# 1243  
Delta R.T. -0.02 min  
Lab File: BE091821.D  
Acq: 19 May 2016 22:00

Instrument :  
BNA\_E  
ClientSampleId :  
KY032MW006-160512

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 149     | 100   |            |            |
| 167     | 18.1  | 19.5       | 29.3#      |
| 279     | 0.0   | 10.0       | 15.0#      |

Manual Integrations  
APPROVED

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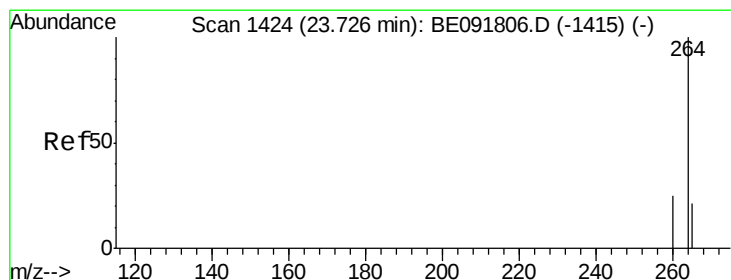
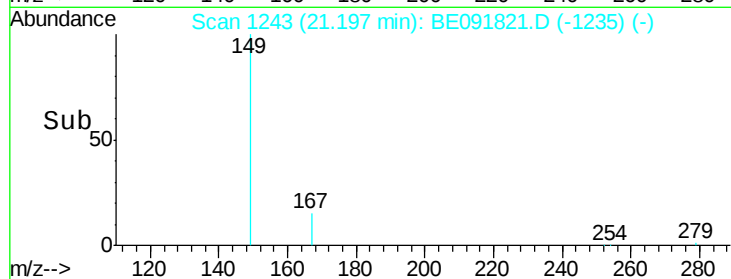
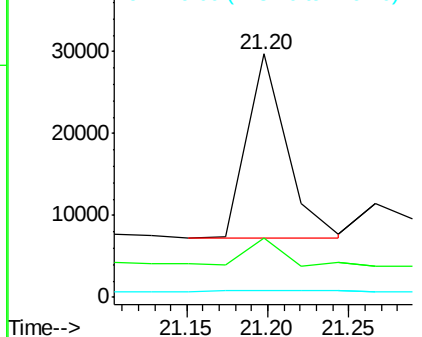


Abundance

Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E



#35  
Perylene-d12  
Concen: 5.00 ng  
RT: 23.74 min Scan# 1425  
Delta R.T. -0.01 min  
Lab File: BE091821.D  
Acq: 19 May 2016 22:00

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 264     | 100   |            |            |
| 260     | 24.0  | 20.0       | 30.0       |
| 265     | 23.4  | 17.5       | 26.3       |

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

