

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_E\DATA\BE032219\  
 Data File : BE099094.D  
 Acq On : 22 Mar 2019 23:55  
 Operator : JU/SJ  
 Sample : K1947-08  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PST-025-B128-031319

Manual Integrations  
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 3/25/2019 12:12:11 PM

Quant Time: Mar 23 01:44:25 2019

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_E\METHODS\8270-SIM-BE032219.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Sat Mar 23 00:46:37 2019

Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.84  | 152  | 3264     | 0.40 | ng    | 0.00     |
| 7) Naphthalene-d8         | 10.64 | 136  | 12645    | 0.40 | ng    | 0.00     |
| 13) Acenaphthene-d10      | 14.49 | 164  | 8144     | 0.40 | ng    | 0.00     |
| 19) Phenanthrene-d10      | 17.22 | 188  | 22001    | 0.40 | ng    | 0.00     |
| 27) Chrysene-d12          | 21.39 | 240  | 32929    | 0.40 | ng    | 0.00     |
| 34) Perylene-d12          | 23.90 | 264  | 38430    | 0.40 | ng    | 0.00     |

#### System Monitoring Compounds

|                             |       |     |       |      |    |       |
|-----------------------------|-------|-----|-------|------|----|-------|
| 4) 2-Fluorophenol           | 5.42  | 112 | 4373  | 0.45 | ng | 0.00  |
| 5) Phenol-d6                | 7.00  | 99  | 6146  | 0.44 | ng | 0.00  |
| 8) Nitrobenzene-d5          | 8.99  | 82  | 3704m | 0.67 | ng | 0.00  |
| 11) 2-Methylnaphthalene-d10 | 12.22 | 152 | 8041  | 0.35 | ng | -0.02 |
| 14) 2,4,6-Tribromophenol    | 15.96 | 330 | 1494  | 0.62 | ng | 0.00  |
| 15) 2-Fluorobiphenyl        | 13.12 | 172 | 12313 | 0.38 | ng | 0.00  |
| 25) Fluoranthene-d10        | 19.24 | 212 | 94709 | 0.32 | ng | 0.00  |
| 29) Terphenyl-d14           | 19.84 | 244 | 20900 | 0.30 | ng | 0.00  |

#### Target Compounds

|                                |       |     |       |       |    | Qvalue |
|--------------------------------|-------|-----|-------|-------|----|--------|
| 23) Phenanthrene               | 17.26 | 178 | 5155  | 0.079 | ng | # 96   |
| 26) Fluoranthene               | 19.27 | 202 | 7061  | 0.077 | ng | # 96   |
| 28) Pyrene                     | 19.63 | 202 | 8168  | 0.073 | ng | # 94   |
| 30) Benzo(a)anthracene         | 21.37 | 228 | 4023  | 0.035 | ng | 92     |
| 31) Chrysene                   | 21.43 | 228 | 4900  | 0.042 | ng | # 94   |
| 32) Bis(2-ethylhexyl)phthalate | 21.31 | 149 | 37869 | 0.252 | ng | # 99   |
| 33) Indeno(1,2,3-cd)pyrene     | 26.56 | 276 | 2629  | 0.021 | ng | # 89   |
| 35) Benzo(b)fluoranthene       | 23.12 | 252 | 6019  | 0.045 | ng | # 72   |
| 37) Benzo(a)pyrene             | 23.78 | 252 | 3765  | 0.031 | ng | # 79   |
| 39) Benzo(g,h,i)perylene       | 27.38 | 276 | 2939  | 0.024 | ng | # 87   |

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

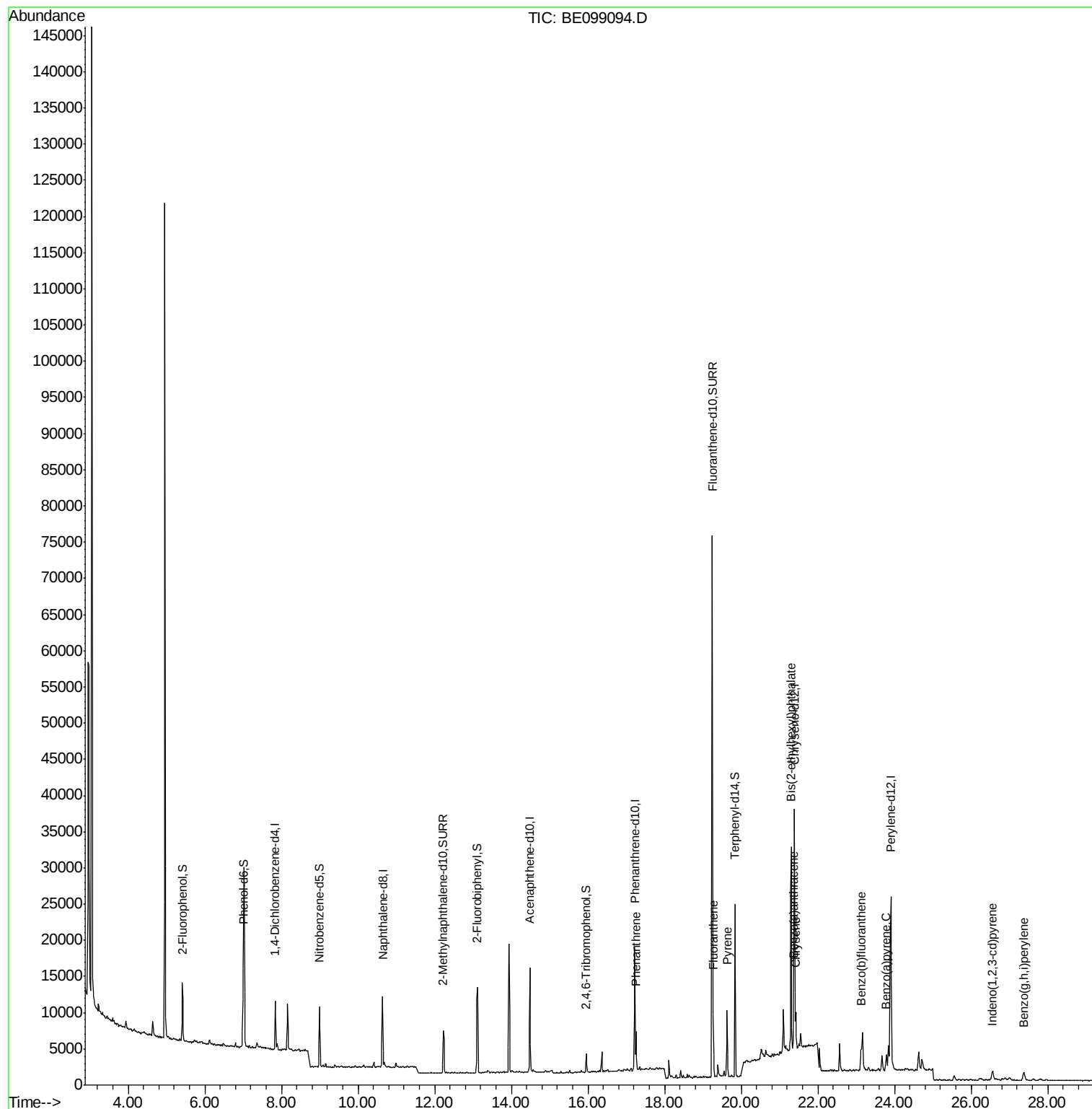
Data Path : Z:\SVOASRV\HPCHEM1\BNA\_E\DATA\BE032219\  
Data File : BE099094.D  
Acq On : 22 Mar 2019 23:55  
Operator : JU/SJ  
Sample : K1947-08  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

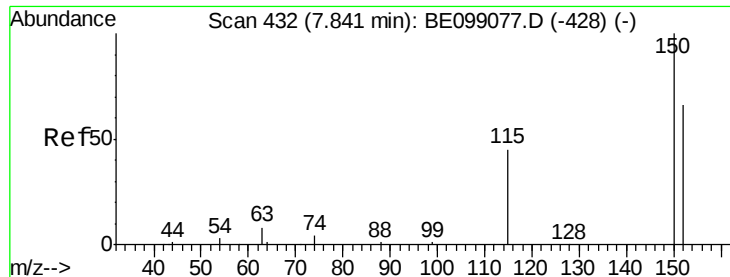
Instrument :  
BNA\_E  
ClientSampleId :  
PST-025-B128-031319

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Quant Time: Mar 23 01:44:25 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_E\METHODS\8270-SIM-BE032219.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Mar 23 00:46:37 2019  
Response via : Initial Calibration

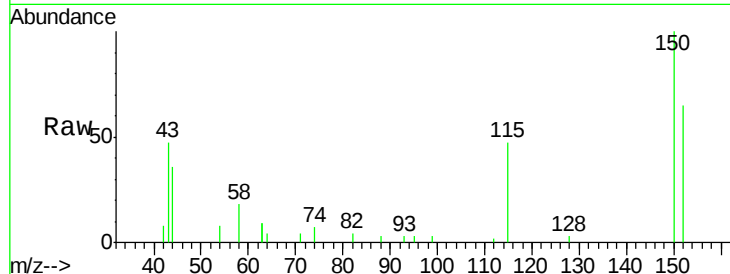




#1

1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.84 min Scan# 432  
Delta R.T. -0.00 min  
Lab File: BE099094.D  
Acq: 22 Mar 2019 23:55

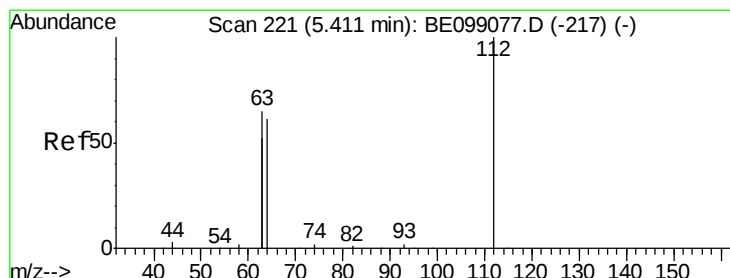
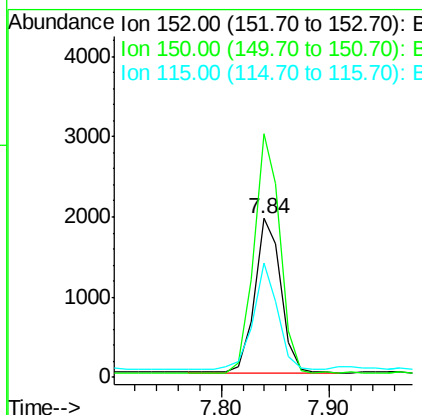
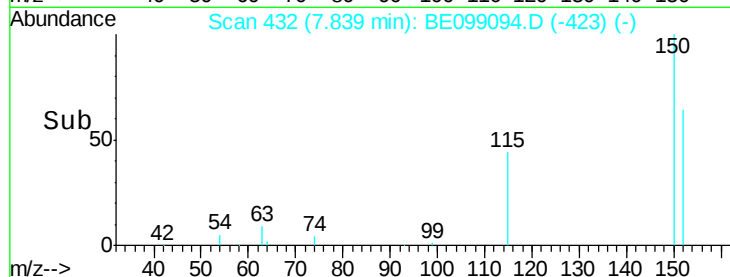
Instrument :  
BNA\_E  
ClientSampleId :  
PST-025-B128-031319



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 153.4 | 122.5 | 183.7 |
| 115     | 72.0  | 57.4  | 86.2  |

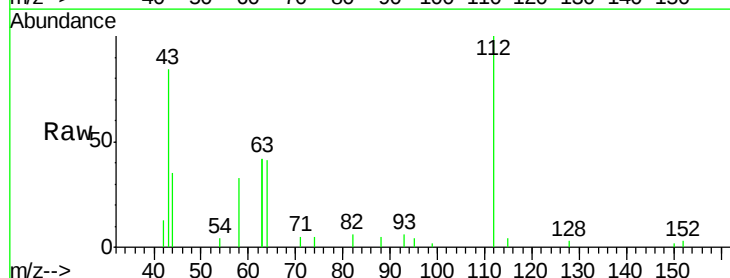
Manual Integrations  
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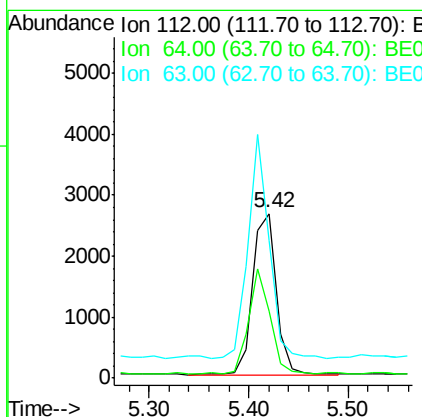
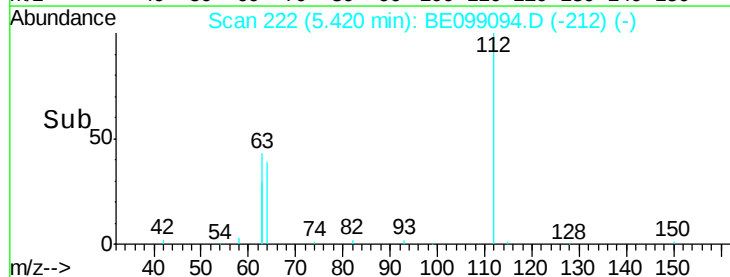


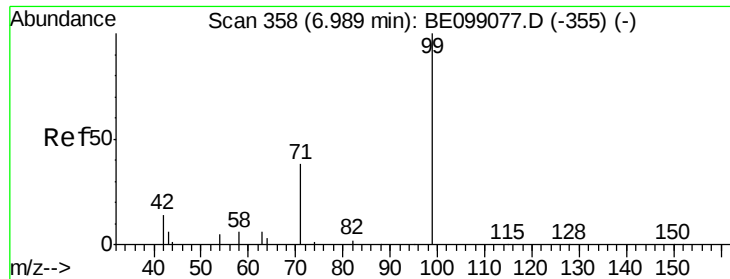
#4

2-Fluorophenol  
Concen: 0.450 ng  
RT: 5.42 min Scan# 222  
Delta R.T. 0.01 min  
Lab File: BE099094.D  
Acq: 22 Mar 2019 23:55



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 58.9  | 57.9  | 86.9  |
| 63      | 122.4 | 158.3 | 237.5 |





#5

Phenol-d6

Concen: 0.439 ng

RT: 7.00 min Scan# 359

Delta R.T. 0.01 min

Lab File: BE099094.D

Acq: 22 Mar 2019 23:55

Instrument :

BNA\_E

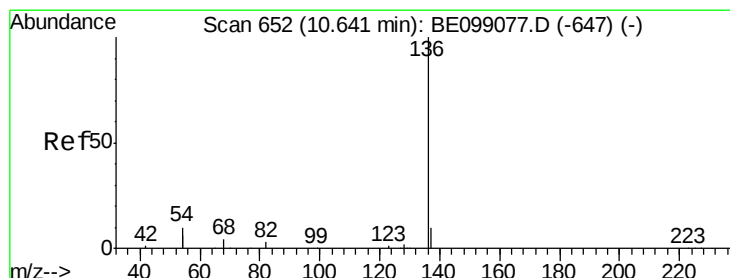
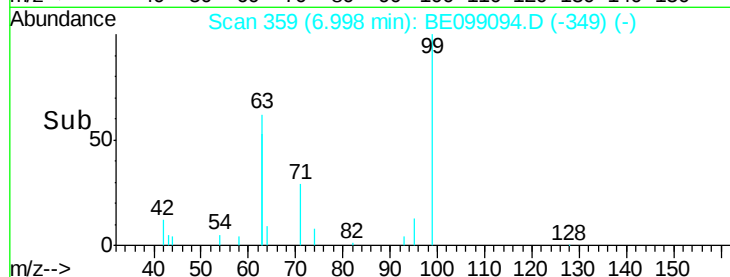
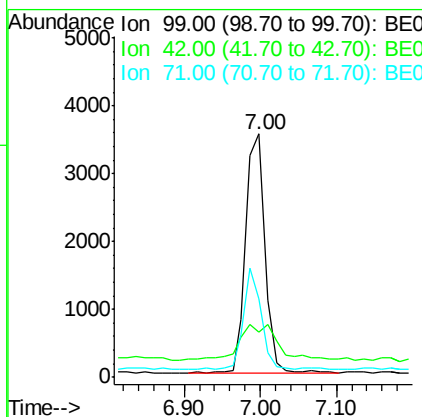
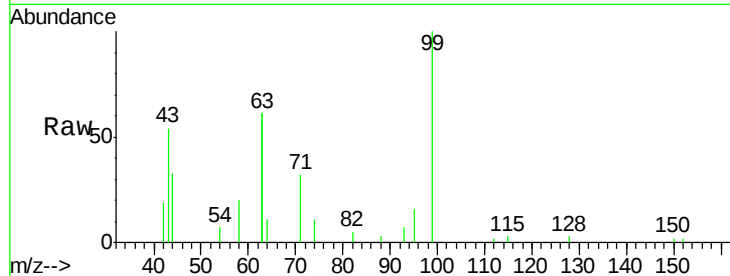
ClientSampleId :

PST-025-B128-031319

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 99    | Resp: | 6146  |
| Ion Ratio | Lower | Upper |       |
| 99        | 100   |       |       |
| 42        | 29.5  | 24.2  | 36.2  |
| 71        | 0.0   | 35.7  | 53.5# |

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#7

Naphthalene-d8

Concen: 0.400 ng

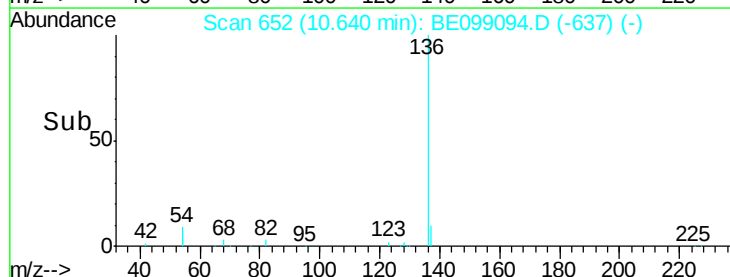
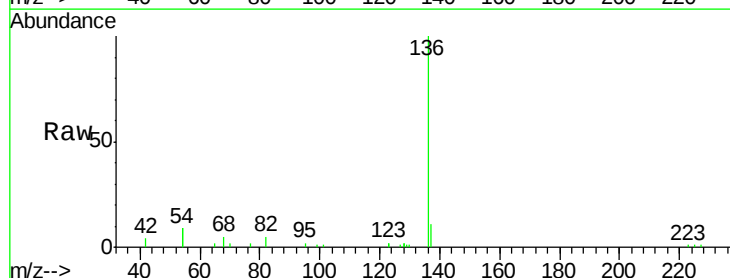
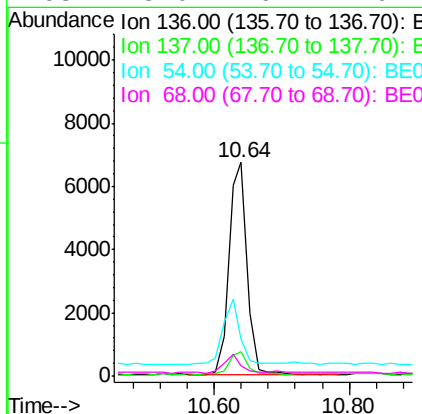
RT: 10.64 min Scan# 652

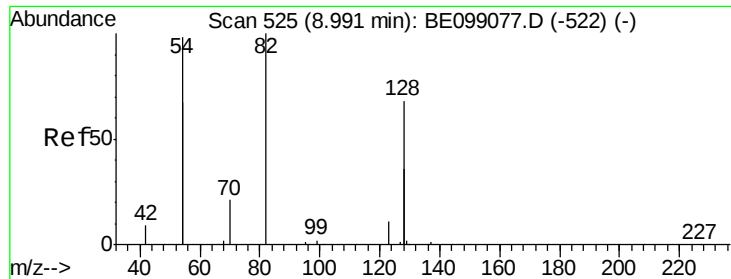
Delta R.T. -0.00 min

Lab File: BE099094.D

Acq: 22 Mar 2019 23:55

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 136   | Resp: | 12645 |
| Ion Ratio | Lower | Upper |       |
| 136       | 100   |       |       |
| 137       | 11.3  | 11.4  | 17.0# |
| 54        | 17.7  | 39.3  | 58.9# |
| 68        | 5.0   | 6.7   | 10.1# |





#8

Nitrobenzene-d5

Concen: 0.670 ng m

RT: 8.99 min Scan# 525

Delta R.T. -0.00 min

Lab File: BE099094.D

Acq: 22 Mar 2019 23:55

Instrument :

BNA\_E

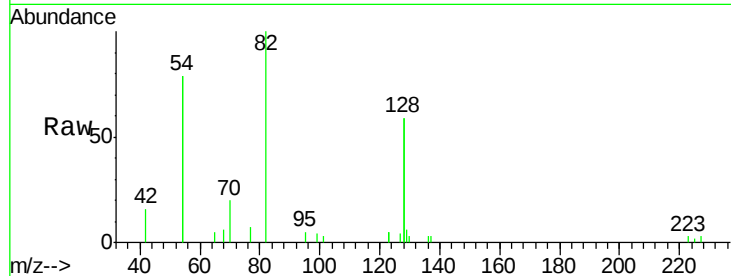
ClientSampleId :

PST-025-B128-031319

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 82    | Resp: | 3704   |
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 58.9  | 123.8 | 185.8# |
| 54        | 79.0  | 203.4 | 305.2# |

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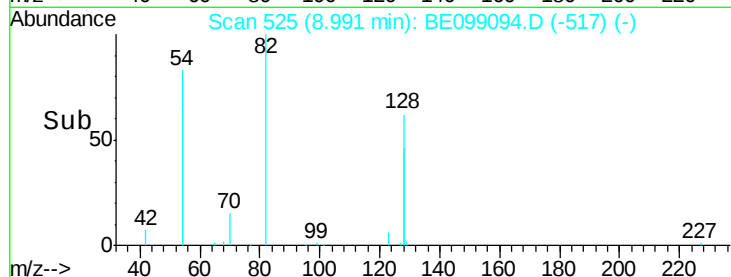


Abundance Ion 82.00 (81.70 to 82.70): BE099077.D (-522) (-)

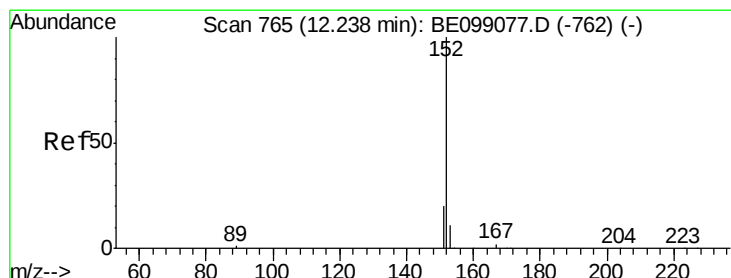
Ion 128.00 (127.70 to 128.70): BE099077.D (-522) (-)

Ion 54.00 (53.70 to 54.70): BE099077.D (-522) (-)

Time--> 8.90 8.95 9.00 9.05



Time--> 8.90 8.95 9.00 9.05



#11

2-Methylnaphthalene-d10

Concen: 0.353 ng

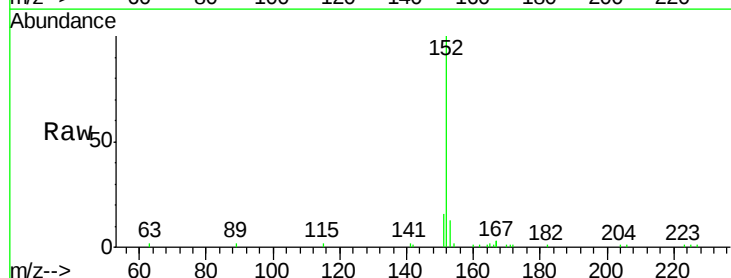
RT: 12.22 min Scan# 764

Delta R.T. -0.02 min

Lab File: BE099094.D

Acq: 22 Mar 2019 23:55

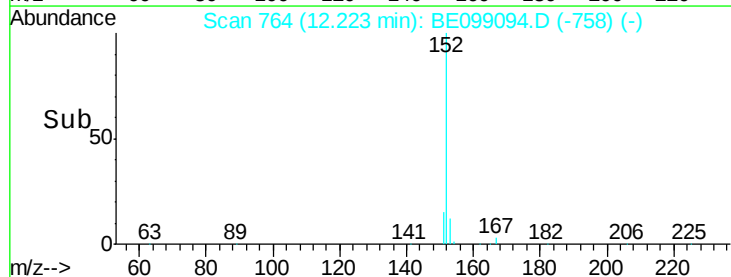
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 152   | Resp: | 8041 |
| Ion Ratio | Lower | Upper |      |
| 152       | 100   |       |      |
| 151       | 18.4  | 16.5  | 24.7 |



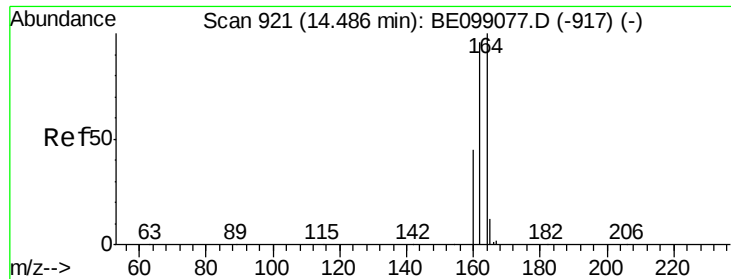
Abundance Ion 152.00 (151.70 to 152.70): BE099077.D (-762) (-)

Ion 151.00 (150.70 to 151.70): BE099077.D (-762) (-)

Time--> 12.20 12.22 12.24 12.26 12.28 12.30



Time--> 12.20 12.22 12.24 12.26 12.28 12.30



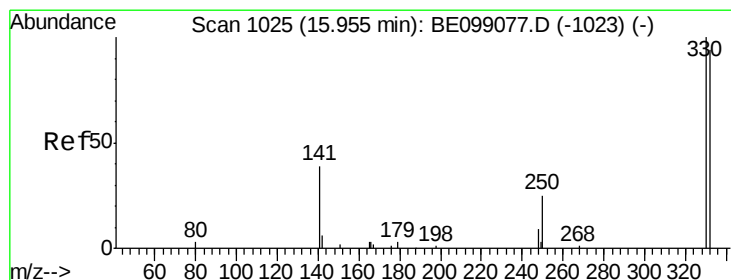
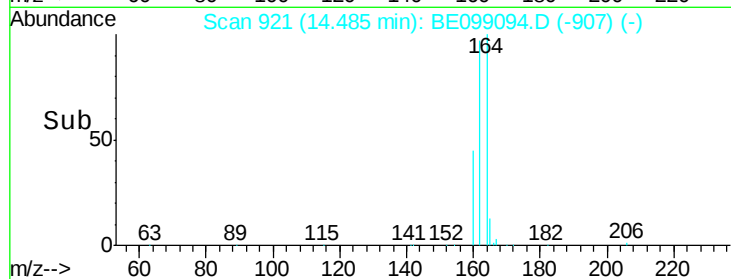
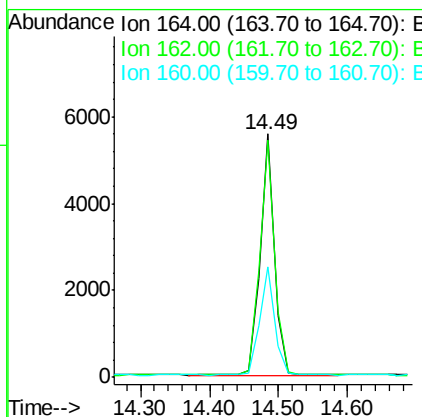
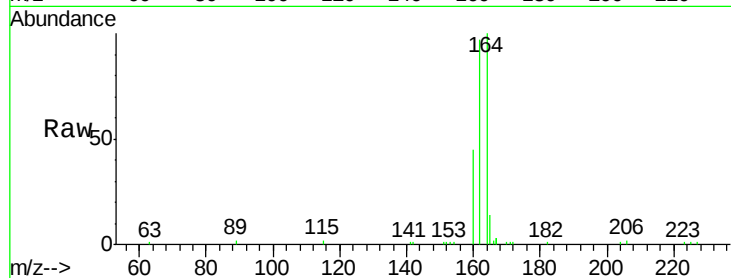
#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.49 min Scan# 921  
Delta R.T. -0.00 min  
Lab File: BE099094.D  
Acq: 22 Mar 2019 23:55

Instrument :  
BNA\_E  
ClientSampleId :  
PST-025-B128-031319

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 97.3  | 80.2  | 120.2 |
| 160     | 45.3  | 37.8  | 56.8  |

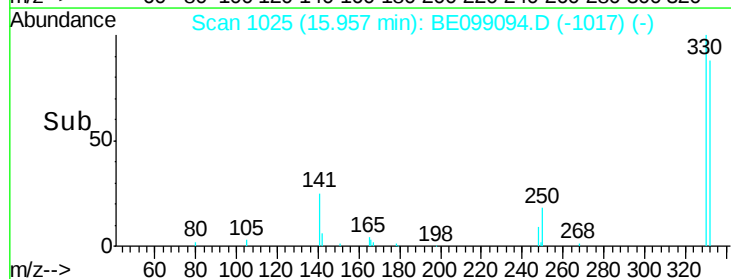
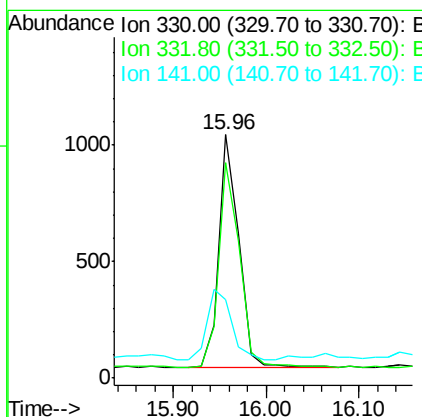
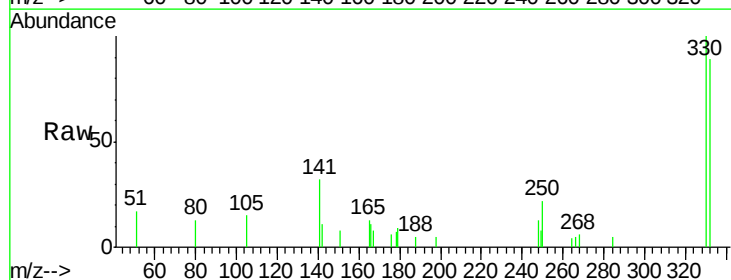
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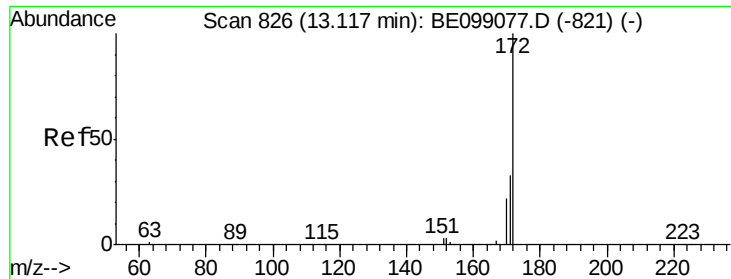
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#14  
2,4,6-Tribromophenol  
Concen: 0.624 ng  
RT: 15.96 min Scan# 1025  
Delta R.T. 0.00 min  
Lab File: BE099094.D  
Acq: 22 Mar 2019 23:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 92.6  | 77.6  | 116.4 |
| 141     | 36.9  | 31.0  | 46.4  |





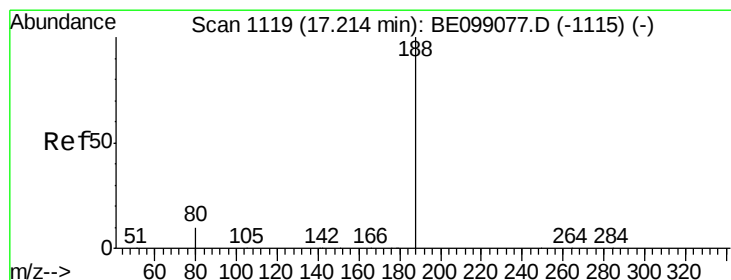
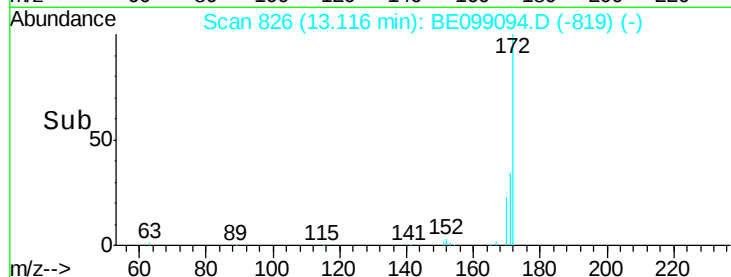
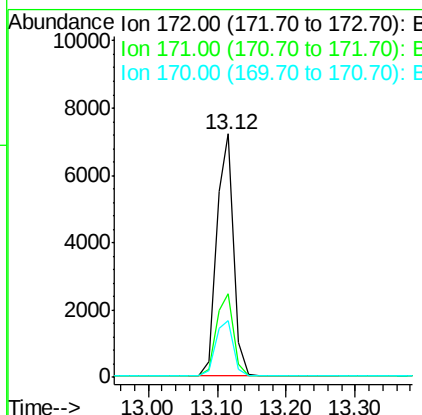
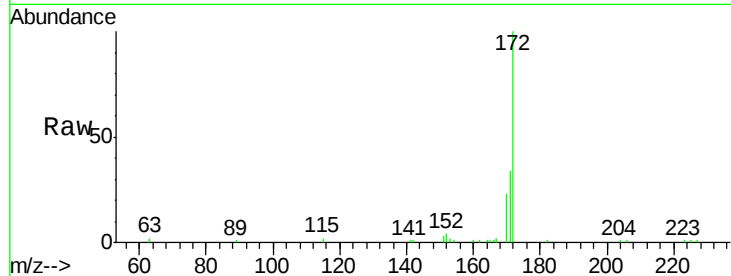
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 2-Fluorobiphenyl  
 Concen: 0.380 ng  
 RT: 13.12 min Scan# 826  
 Delta R.T. -0.00 min  
 Lab File: BE099094.D  
 Acq: 22 Mar 2019 23:55

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PST-025-B128-031319

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 34.2  | 28.0  | 42.0  |
| 170     | 23.3  | 17.7  | 26.5  |

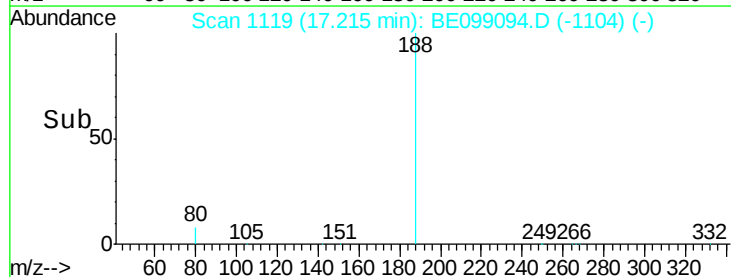
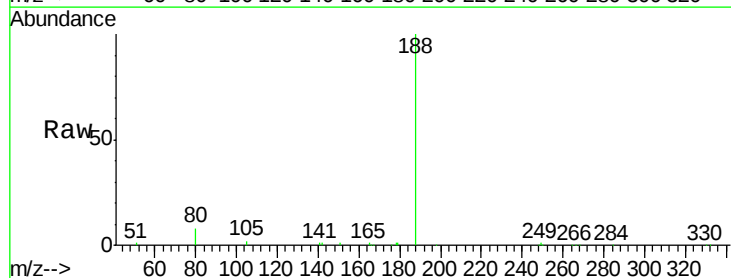
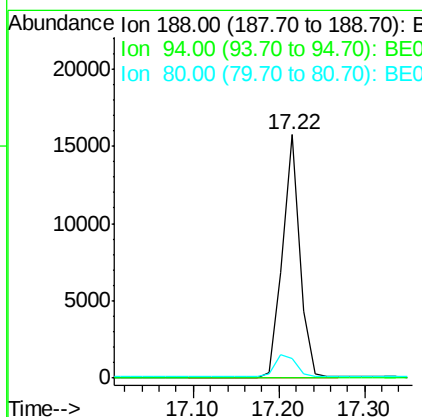
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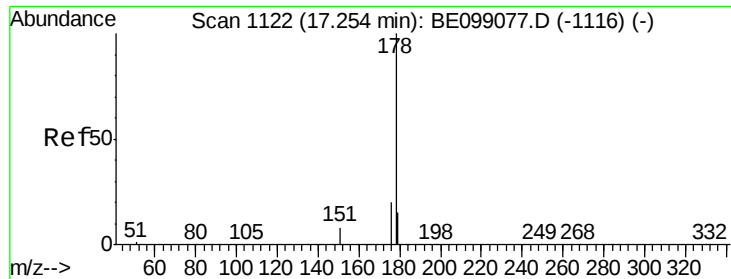
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#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.22 min Scan# 1119  
 Delta R.T. 0.00 min  
 Lab File: BE099094.D  
 Acq: 22 Mar 2019 23:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 0.0   | 0.0   | 0.0   |
| 80      | 8.2   | 6.3   | 9.5   |





#23

Phenanthrene

Concen: 0.079 ng

RT: 17.26 min Scan# 1122

Delta R.T. 0.00 min

Lab File: BE099094.D

Acq: 22 Mar 2019 23:55

Instrument :

BNA\_E

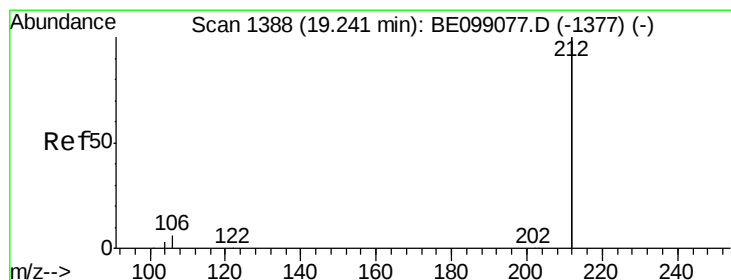
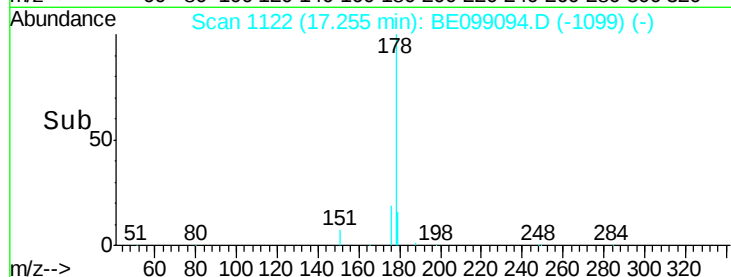
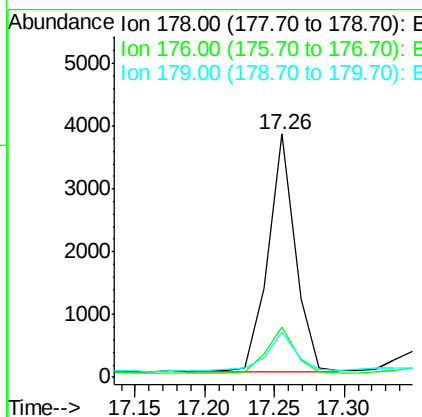
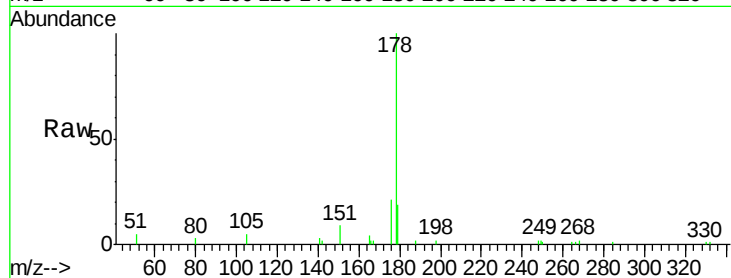
ClientSampleId :

PST-025-B128-031319

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 5155  |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 176       | 20.2  | 16.0  | 24.0  |
| 179       | 19.1  | 12.1  | 18.1# |

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#25

Fluoranthene-d10

Concen: 0.323 ng

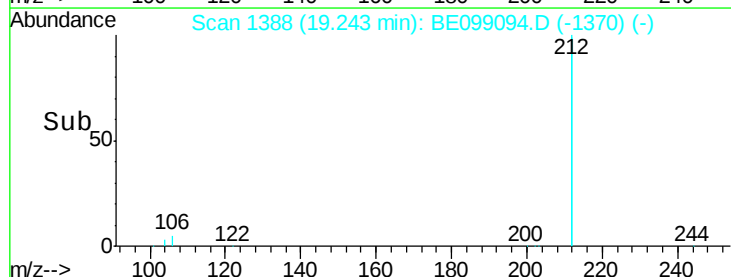
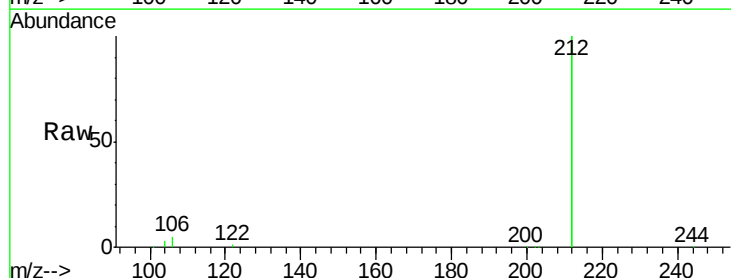
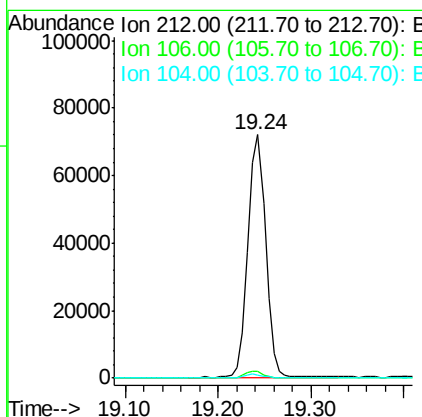
RT: 19.24 min Scan# 1388

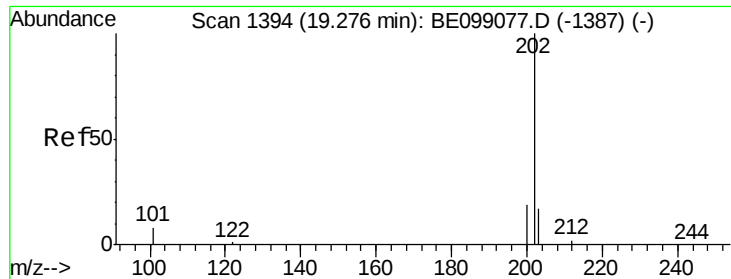
Delta R.T. 0.00 min

Lab File: BE099094.D

Acq: 22 Mar 2019 23:55

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 212   | Resp: | 94709 |
| Ion Ratio | Lower | Upper |       |
| 212       | 100   |       |       |
| 106       | 2.8   | 1.8   | 2.8#  |
| 104       | 1.6   | 1.0   | 1.6#  |





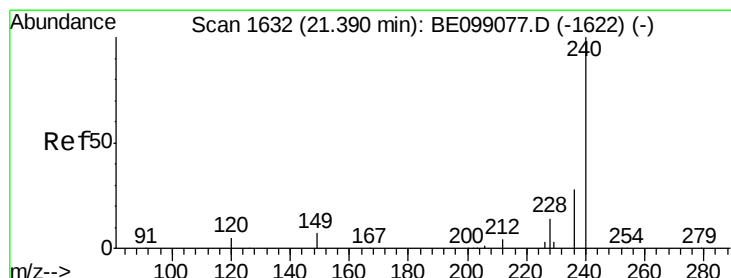
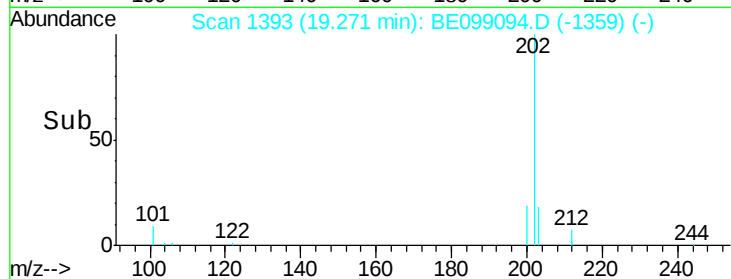
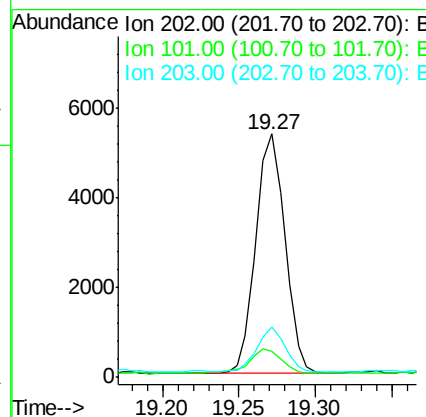
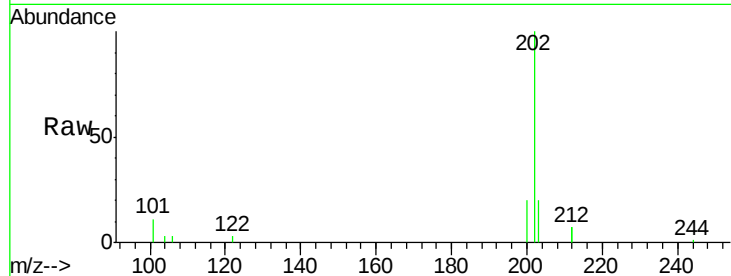
#26  
 Fluoranthene  
 Concen: 0.077 ng  
 RT: 19.27 min Scan# 1393  
 Delta R.T. -0.00 min  
 Lab File: BE099094.D  
 Acq: 22 Mar 2019 23:55

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PST-025-B128-031319

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 202     | 100   |            |            |
| 101     | 11.4  | 7.3        | 10.9#      |
| 203     | 18.2  | 13.4       | 20.2       |

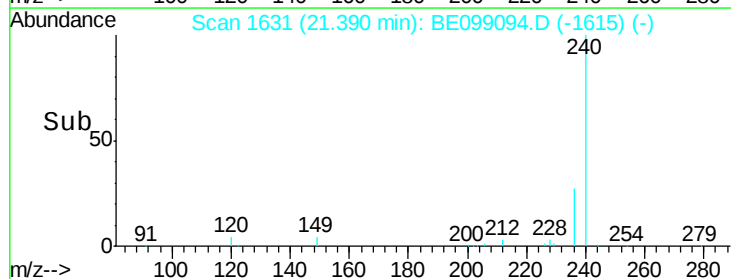
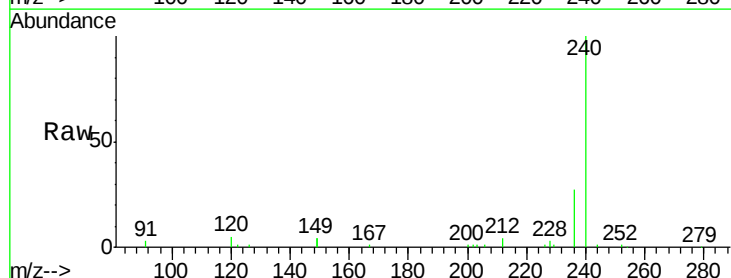
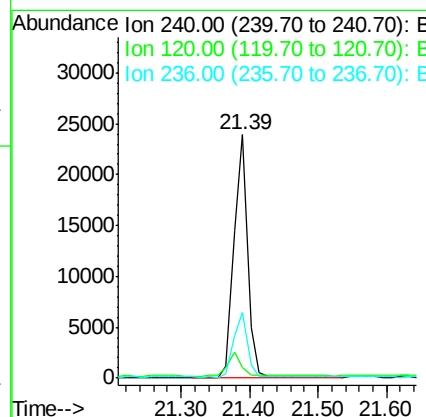
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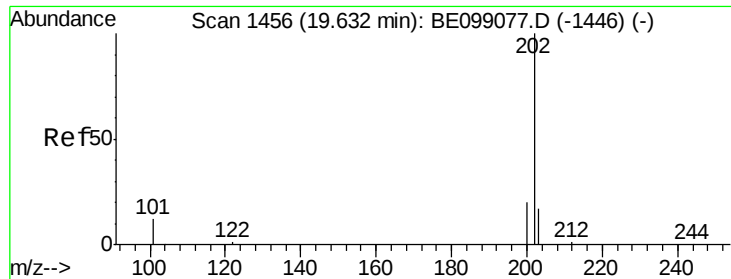
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#27  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.39 min Scan# 1631  
 Delta R.T. -0.00 min  
 Lab File: BE099094.D  
 Acq: 22 Mar 2019 23:55

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 240     | 100   |            |            |
| 120     | 4.6   | 5.0        | 7.4#       |
| 236     | 27.0  | 22.7       | 34.1       |





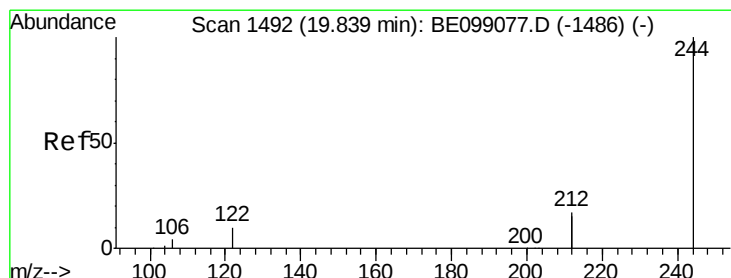
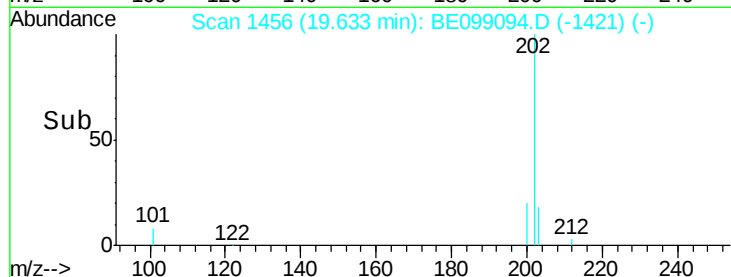
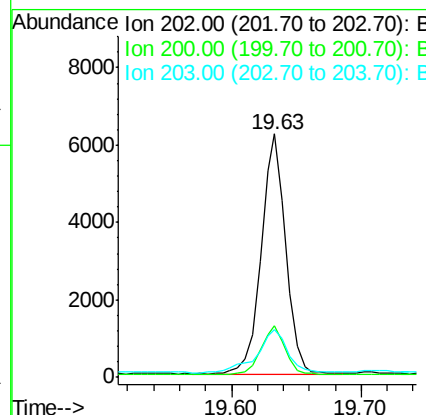
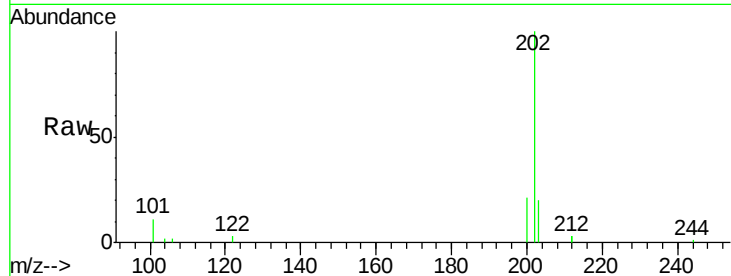
#28  
 Pyrene  
 Concen: 0.073 ng  
 RT: 19.63 min Scan# 1456  
 Delta R.T. 0.00 min  
 Lab File: BE099094.D  
 Acq: 22 Mar 2019 23:55

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PST-025-B128-031319

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 20.0  | 17.0  | 25.6  |
| 203     | 22.2  | 14.2  | 21.2  |

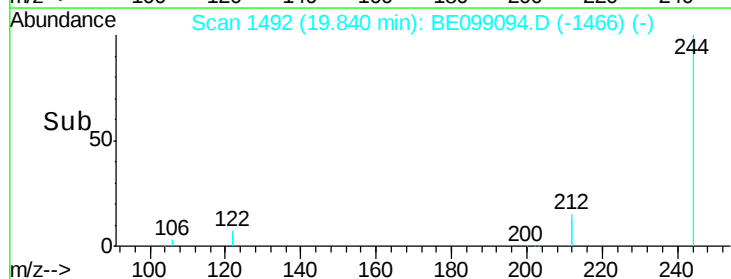
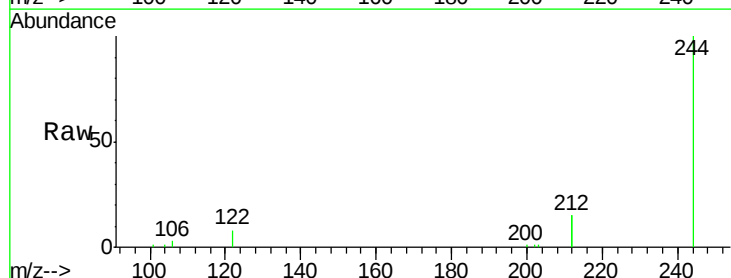
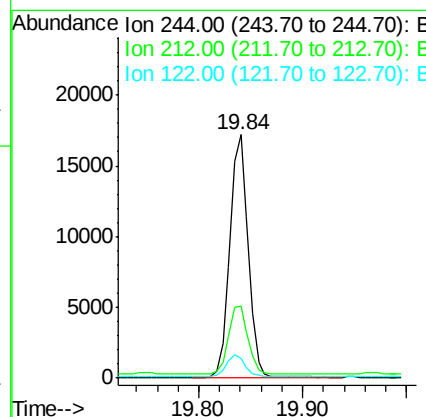
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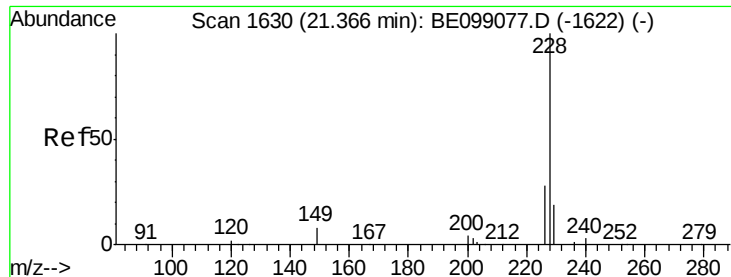
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#29  
 Terphenyl-d14  
 Concen: 0.300 ng  
 RT: 19.84 min Scan# 1492  
 Delta R.T. 0.00 min  
 Lab File: BE099094.D  
 Acq: 22 Mar 2019 23:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 29.4  | 29.4  | 44.2  |
| 122     | 8.1   | 7.1   | 10.7  |





#30

Benzo(a)anthracene

Concen: 0.035 ng

RT: 21.37 min Scan# 1629

Delta R.T. -0.00 min

Lab File: BE099094.D

Acq: 22 Mar 2019 23:55

Instrument :

BNA\_E

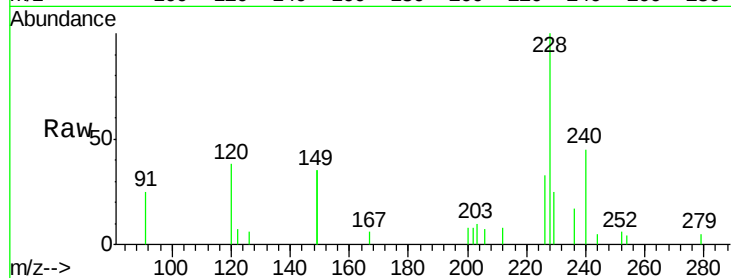
ClientSampleId :

PST-025-B128-031319

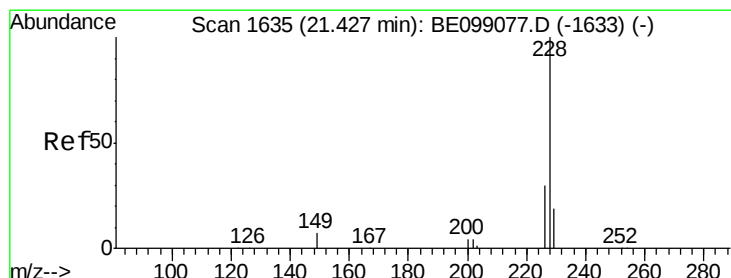
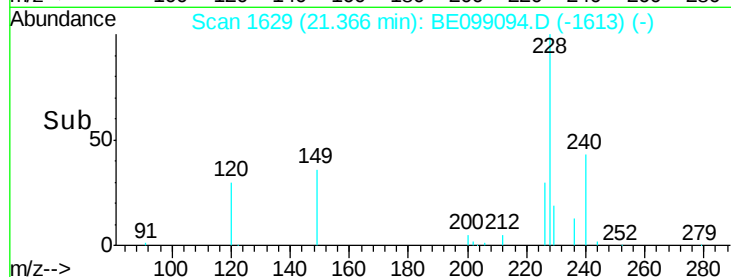
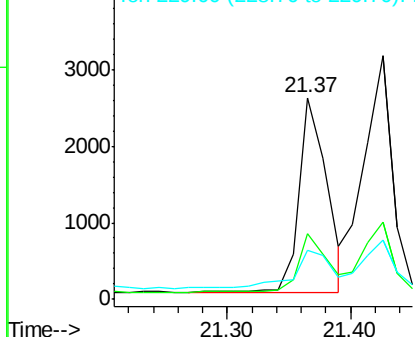
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 228   | Resp: | 4023 |
| Ion Ratio | Lower | Upper |      |
| 228       | 100   |       |      |
| 226       | 32.7  | 23.0  | 34.4 |
| 229       | 24.6  | 16.5  | 24.7 |

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Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E



#31

Chrysene

Concen: 0.042 ng

RT: 21.43 min Scan# 1634

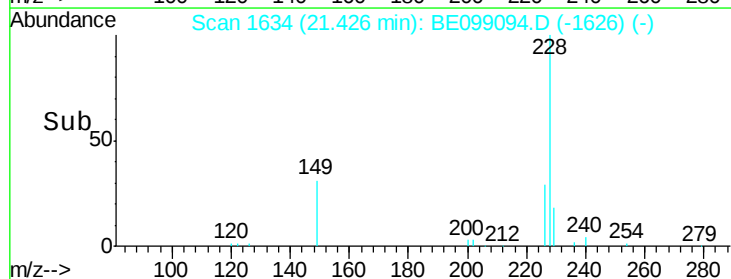
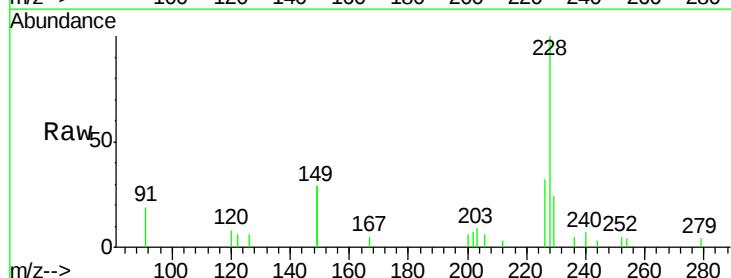
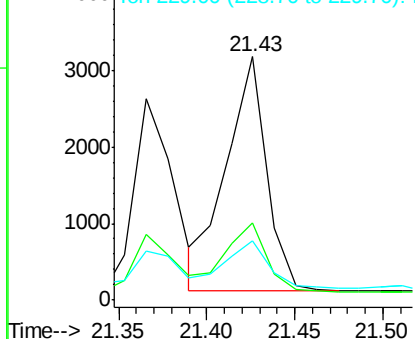
Delta R.T. -0.00 min

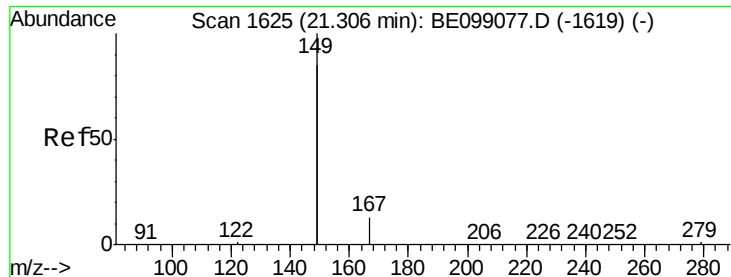
Lab File: BE099094.D

Acq: 22 Mar 2019 23:55

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 228   | Resp: | 4900  |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 31.5  | 23.7  | 35.5  |
| 229       | 24.1  | 16.1  | 24.1# |

Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E





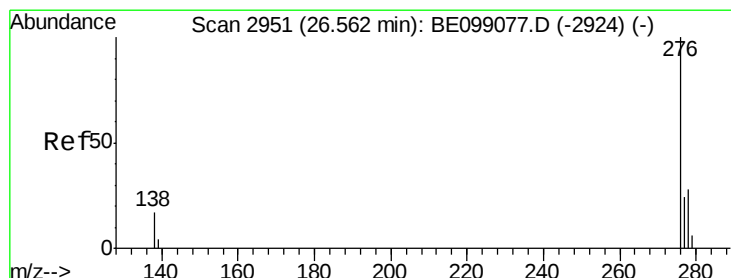
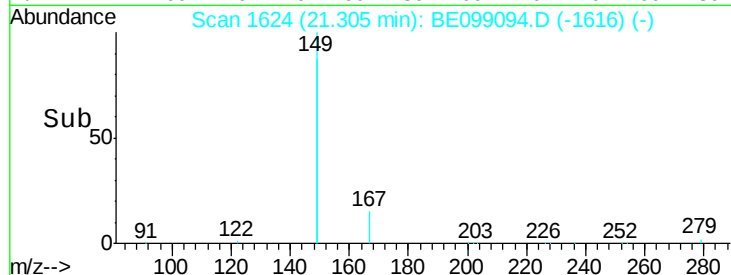
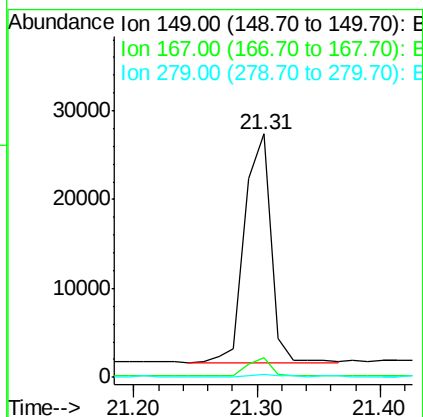
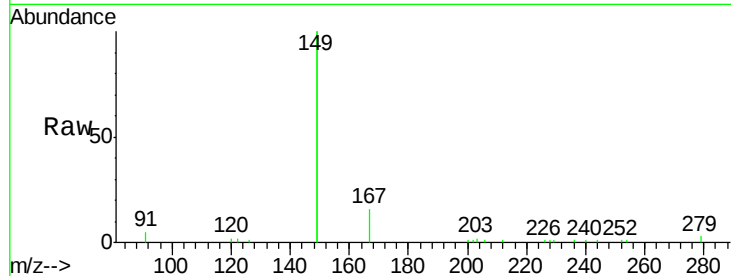
#32  
 Bis(2-ethylhexyl)phthalate  
 Concen: 0.252 ng  
 RT: 21.31 min Scan# 1624  
 Delta R.T. -0.00 min  
 Lab File: BE099094.D  
 Acq: 22 Mar 2019 23:55

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PST-025-B128-031319

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 149     | 100   |       |       |
| 167     | 7.0   | 5.4   | 8.0   |
| 279     | 1.0   | 1.0   | 1.4#  |

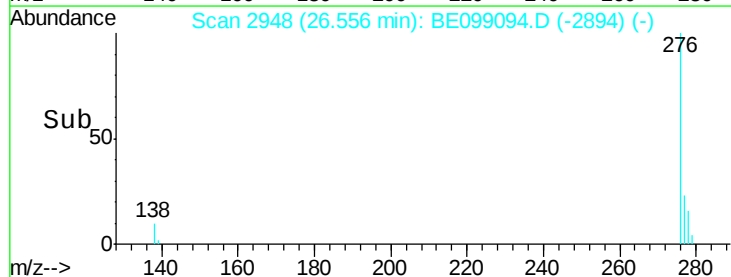
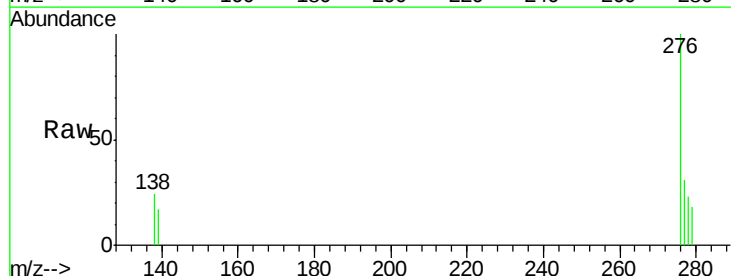
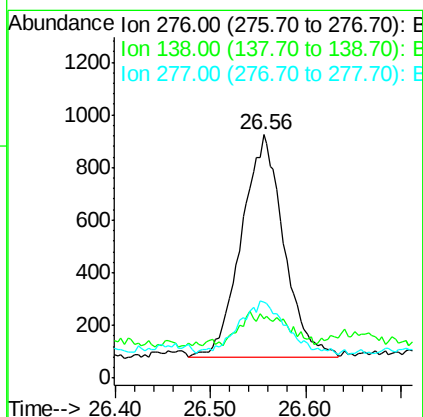
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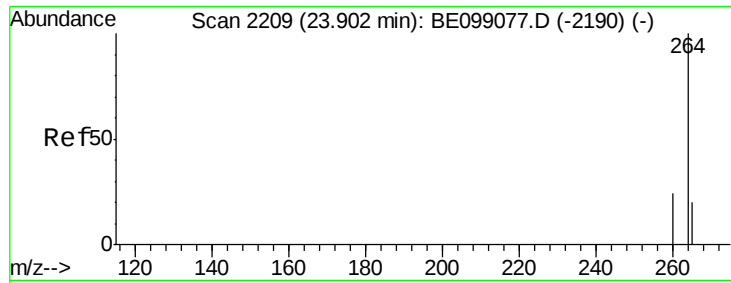
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#33  
 Indeno(1,2,3-cd)pyrene  
 Concen: 0.021 ng  
 RT: 26.56 min Scan# 2948  
 Delta R.T. -0.01 min  
 Lab File: BE099094.D  
 Acq: 22 Mar 2019 23:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 5.9   | 13.8  | 20.8# |
| 277     | 24.6  | 19.5  | 29.3  |





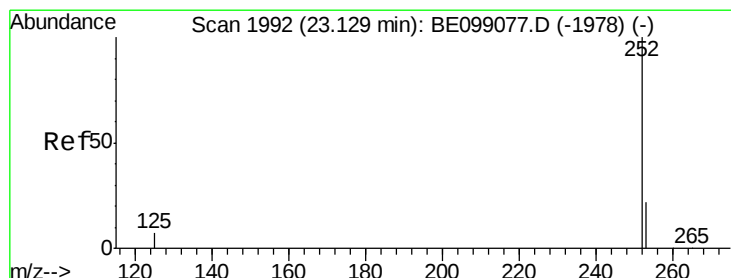
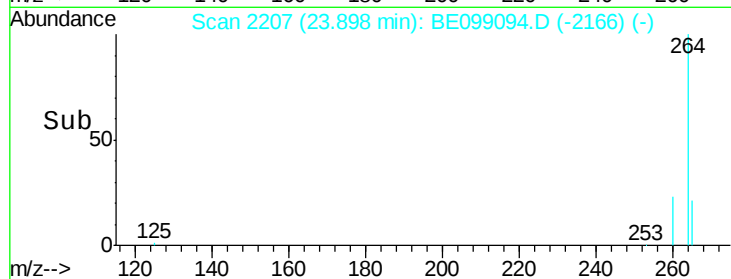
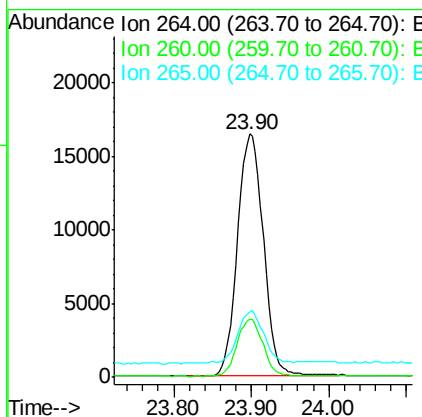
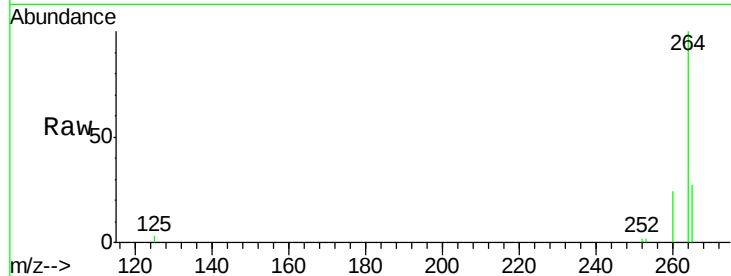
#34  
**Perylene-d12**  
 Concen: 0.400 ng  
 RT: 23.90 min Scan# 2207  
 Delta R.T. -0.00 min  
 Lab File: BE099094.D  
 Acq: 22 Mar 2019 23:55

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PST-025-B128-031319

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.6  | 21.2  | 31.8  |
| 265     | 27.0  | 24.6  | 36.8  |

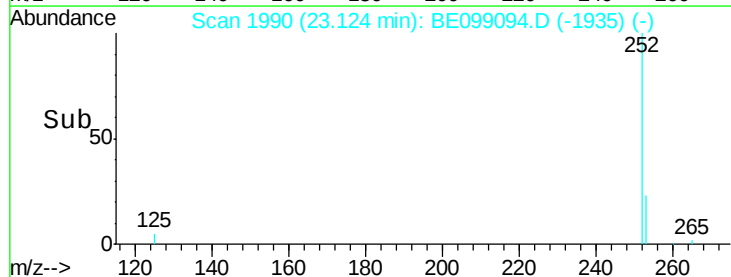
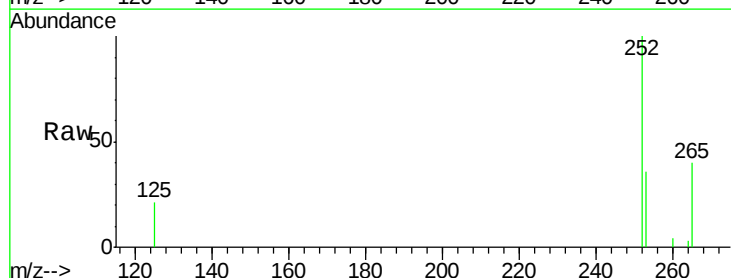
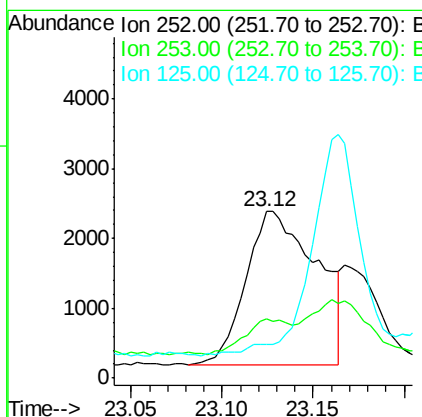
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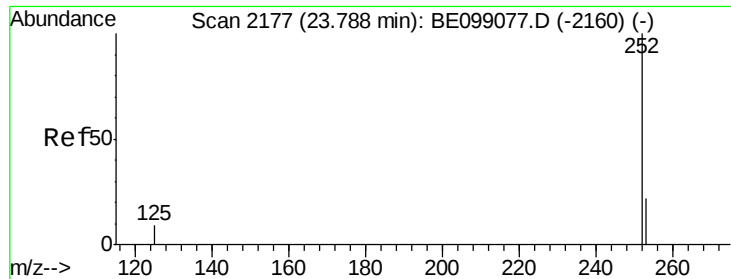
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#35  
**Benzo(b)fluoranthene**  
 Concen: 0.045 ng  
 RT: 23.12 min Scan# 1990  
 Delta R.T. -0.00 min  
 Lab File: BE099094.D  
 Acq: 22 Mar 2019 23:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 35.7  | 18.2  | 27.2# |
| 125     | 20.5  | 7.3   | 10.9# |





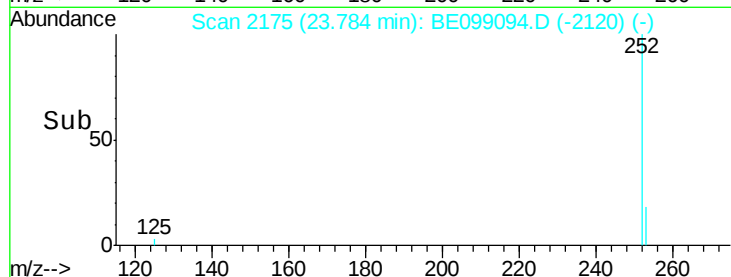
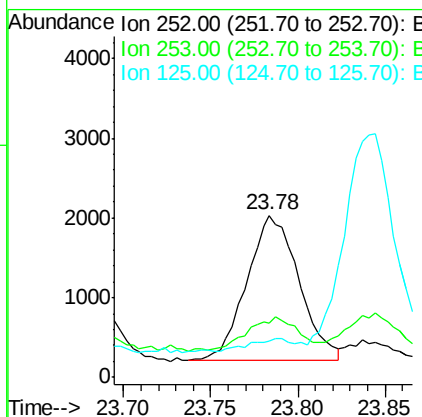
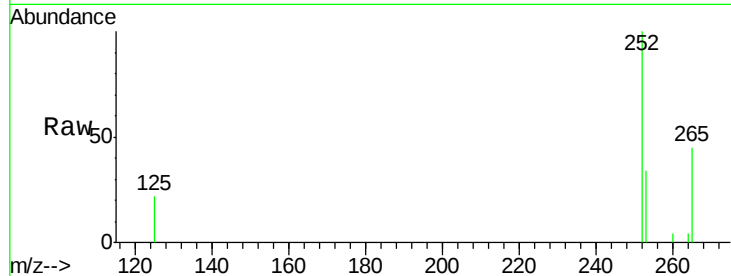
#37  
Benzo(a)pyrene  
Concen: 0.031 ng  
RT: 23.78 min Scan# 2175  
Delta R.T. -0.00 min  
Lab File: BE099094.D  
Acq: 22 Mar 2019 23:55

Instrument :  
BNA\_E  
ClientSampleId :  
PST-025-B128-031319

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 33.8  | 19.9  | 29.9# |
| 125     | 22.3  | 9.0   | 13.4# |

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#39  
Benzo(g,h,i)perylene  
Concen: 0.024 ng  
RT: 27.38 min Scan# 3178  
Delta R.T. -0.01 min  
Lab File: BE099094.D  
Acq: 22 Mar 2019 23:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 28.1  | 20.4  | 30.6  |
| 138     | 27.9  | 13.6  | 20.4# |

