

Data Path : Z:\HPCHEM1\BNA F\DATA\BF112817\  
 Data File : BF100935.D  
 Acq On : 28 Nov 2017 15:48  
 Operator : SJ/JU  
 Sample : I6579-01  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 HAR-4-E(0-1)

Manual Integrations  
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Quant Time: Nov 29 06:41:06 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF110817.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Nov 28 15:21:02 2017  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min)    |
|-----------------------------|-------|------|----------|--------|-------|-------------|
| 1) 1,4-Dichlorobenzene-d4   | 6.86  | 152  | 66449    | 20.00  | ng    | 0.00        |
| 21) Naphthalene-d8          | 8.14  | 136  | 256499   | 20.00  | ng    | 0.00        |
| 38) Acenaphthene-d10        | 9.89  | 164  | 108860   | 20.00  | ng    | 0.00        |
| 63) Phenanthrene-d10        | 11.38 | 188  | 172684   | 20.00  | ng    | 0.00        |
| 75) Chrysene-d12            | 14.02 | 240  | 152225   | 20.00  | ng    | 0.00        |
| 86) Perylene-d12            | 15.49 | 264  | 158662   | 20.00  | ng    | 0.00        |
| System Monitoring Compounds |       |      |          |        |       |             |
| 5) 2-Fluorophenol           | 5.48  | 112  | 394599   | 95.19  | ng    | 0.00        |
| 7) Phenol-d6                | 6.49  | 99   | 479882   | 93.88  | ng    | 0.00        |
| 23) Nitrobenzene-d5         | 7.42  | 82   | 298276   | 76.88  | ng    | 0.00        |
| 41) 2,4,6-Tribromophenol    | 10.69 | 330  | 111774   | 100.76 | ng    | 0.00        |
| 44) 2-Fluorobiphenyl        | 9.22  | 172  | 554406   | 77.55  | ng    | 0.00        |
| 78) Terphenyl-d14           | 12.96 | 244  | 406034   | 61.29  | ng    | 0.00        |
| Target Compounds            |       |      |          |        |       |             |
| 10) Phenol                  | 6.50  | 94   | 11770    | 2.193  | ng    | Qvalue # 57 |
| 49) Dimethylphthalate       | 9.60  | 163  | 35168    | 4.231  | ng    | # 99        |
| 70) Phenanthrene            | 11.40 | 178  | 22703    | 2.497  | ng    | 95          |
| 74) Fluoranthene            | 12.59 | 202  | 71211    | 7.390  | ng    | 95          |
| 77) Pyrene                  | 12.82 | 202  | 73147    | 6.741  | ng    | 98          |
| 80) Benzo(a)anthracene      | 14.01 | 228  | 48317    | 5.271  | ng    | 97          |
| 82) Chrysene                | 14.04 | 228  | 40836    | 4.600  | ng    | 96          |
| 85) Indeno(1,2,3-cd)pyrene  | 16.96 | 276  | 26449    | 3.684  | ng    | # 91        |
| 87) Benzo(b)fluoranthene    | 15.06 | 252  | 63086m   | 6.711  | ng    |             |
| 88) Benzo(k)fluoranthene    | 15.09 | 252  | 18543m   | 2.088  | ng    |             |
| 89) Benzo(a)pyrene          | 15.43 | 252  | 46783    | 5.614  | ng    | 99          |
| 91) Benzo(a,h,i)perylene    | 17.41 | 276  | 25036    | 3.753  | ng    | # 90        |

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

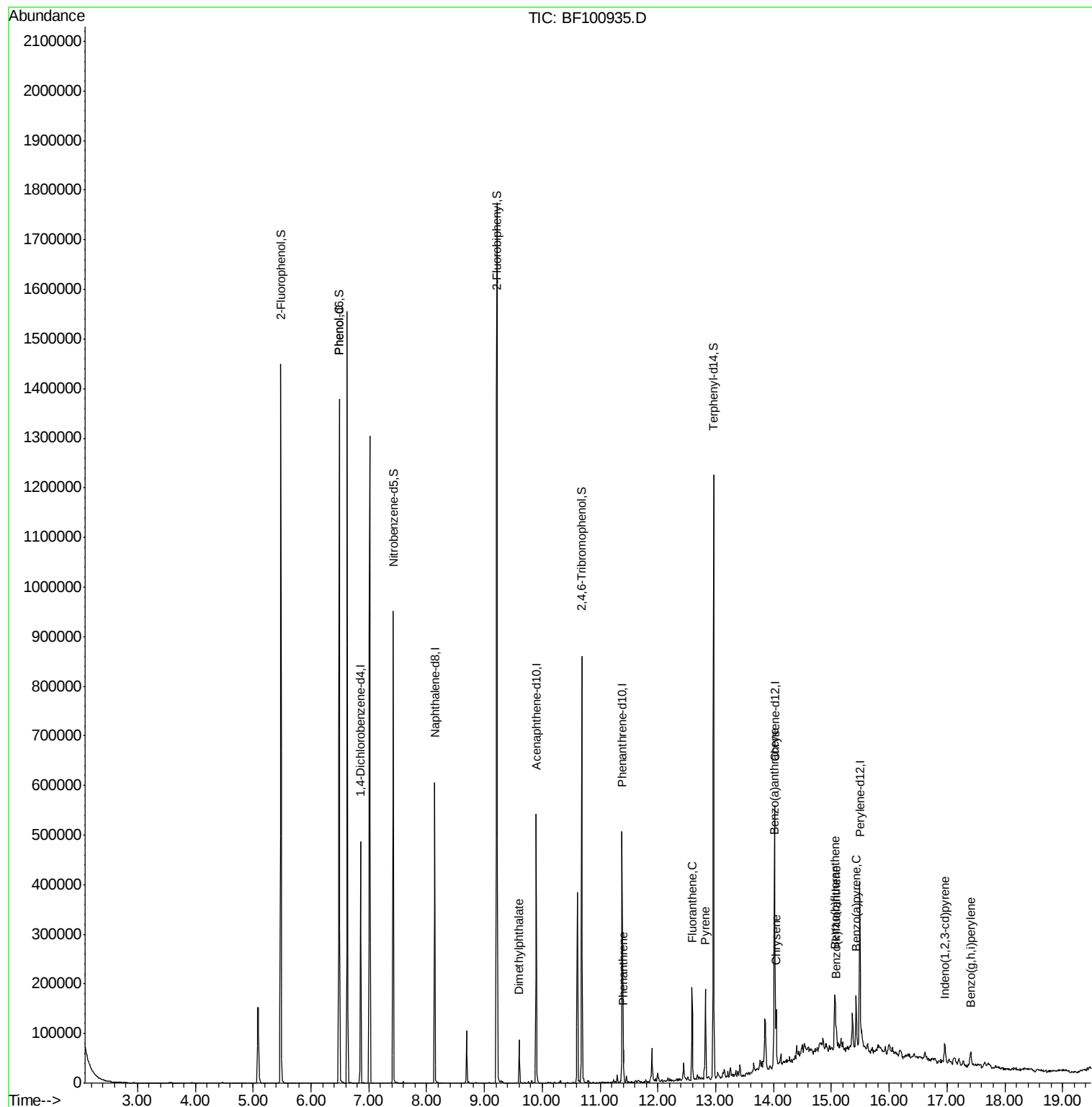
Data Path : Z:\HPCHEM1\BNA F\DATA\BF112817\  
Data File : BF100935.D  
Acq On : 28 Nov 2017 15:48  
Operator : SJ/JU  
Sample : I6579-01  
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Instrument :  
BNA\_F  
ClientSampleId :  
HAR-4-E(0-1)

Quant Time: Nov 29 06:41:06 2017  
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Response via : Initial Calibration

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#1

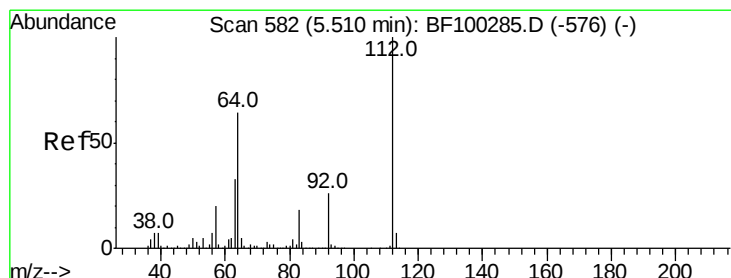
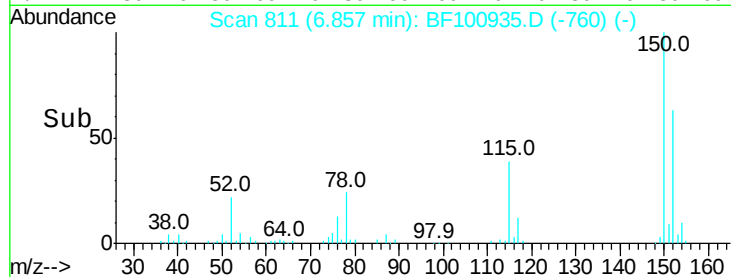
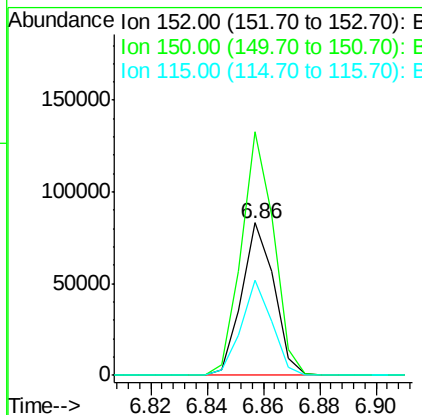
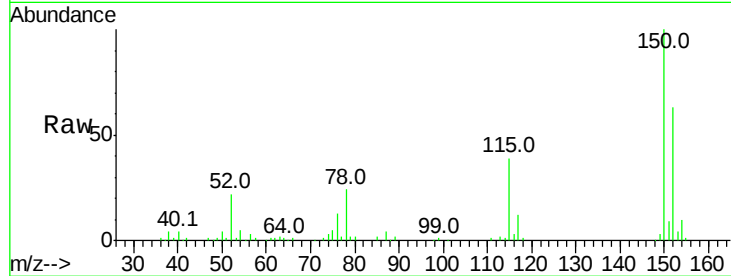
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.86 min Scan# 811  
Delta R.T. -0.00 min  
Lab File: BF100935.D  
Acq: 28 Nov 2017 15:48

Instrument :  
BNA\_F  
ClientSampleId :  
HAR-4-E(0-1)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 159.7 | 124.6 | 186.8 |
| 115     | 62.3  | 50.1  | 75.1  |

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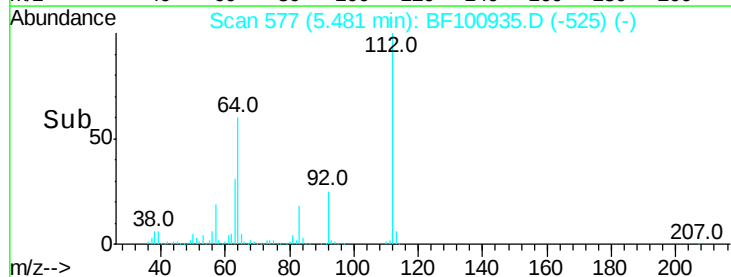
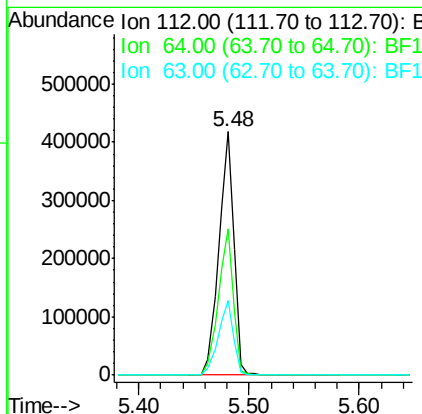
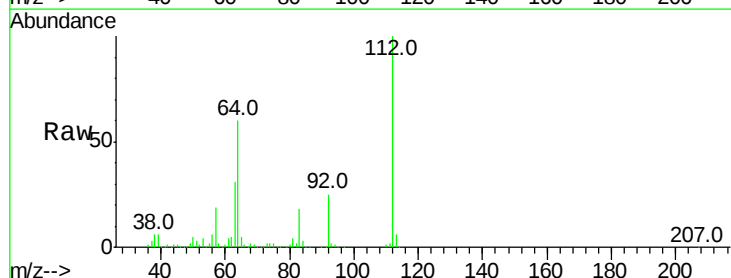
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#5

2-Fluorophenol  
Concen: 95.191 ng  
RT: 5.48 min Scan# 577  
Delta R.T. 0.01 min  
Lab File: BF100935.D  
Acq: 28 Nov 2017 15:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 60.3  | 47.9  | 71.9  |
| 63      | 30.7  | 23.7  | 35.5  |





#7

Phenol-d6

Concen: 93.879 ng

RT: 6.49 min Scan# 749

Delta R.T. -0.00 min

Lab File: BF100935.D

Acq: 28 Nov 2017 15:48

Instrument :

BNA\_F

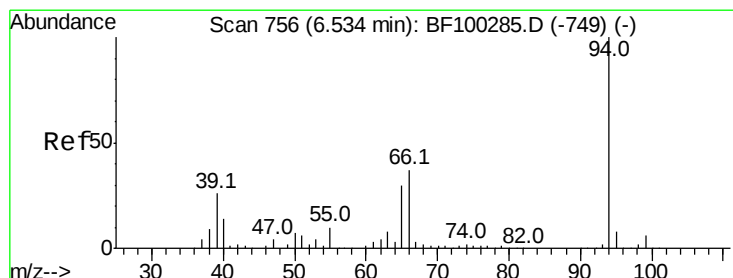
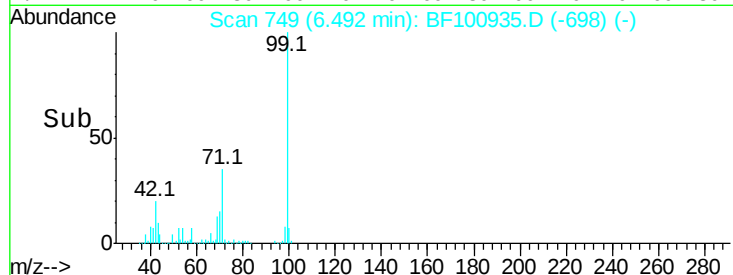
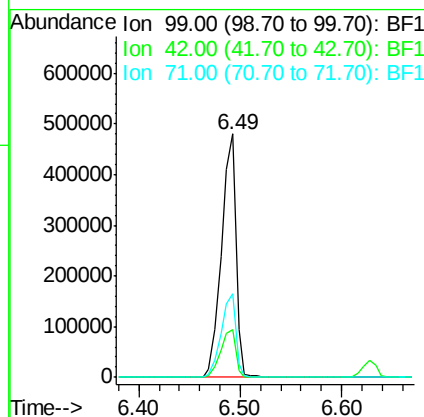
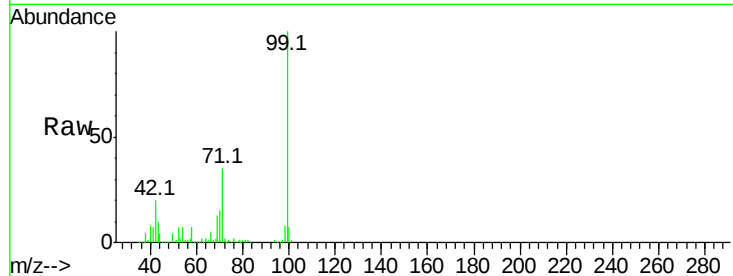
ClientSampleId :

HAR-4-E(0-1)

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 99    | Resp: | 479882 |
| Ion      | Ratio | Lower | Upper  |
| 99       | 100   |       |        |
| 42       | 19.8  | 14.5  | 21.7   |
| 71       | 34.5  | 25.4  | 38.0   |

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#10

Phenol

Concen: 2.193 ng

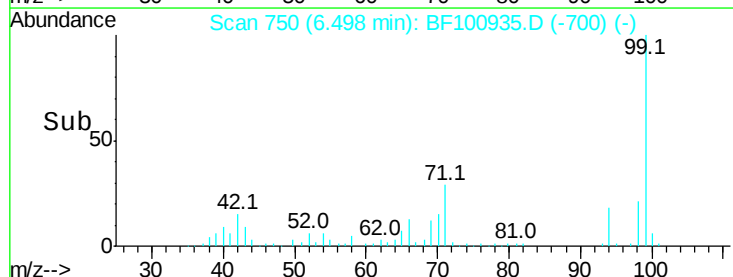
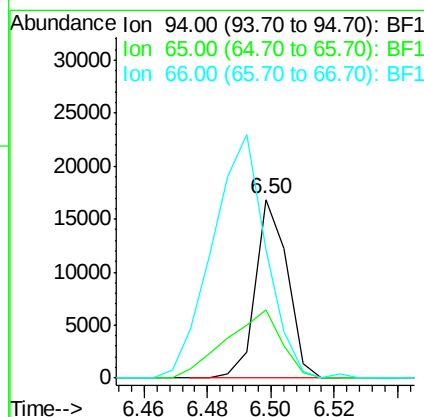
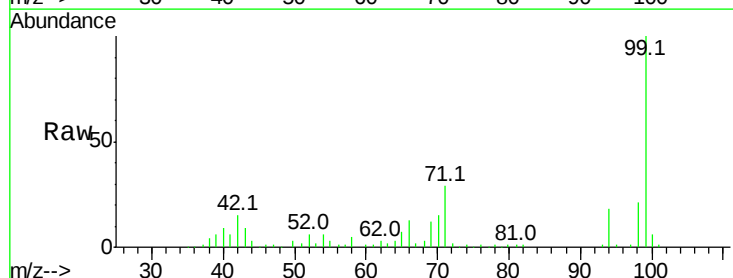
RT: 6.50 min Scan# 750

Delta R.T. -0.01 min

Lab File: BF100935.D

Acq: 28 Nov 2017 15:48

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 94    | Resp: | 11770 |
| Ion      | Ratio | Lower | Upper |
| 94       | 100   |       |       |
| 65       | 38.5  | 7.9   | 47.9  |
| 66       | 71.9  | 16.2  | 56.2# |





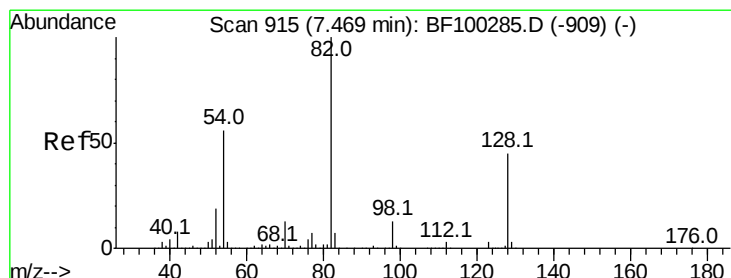
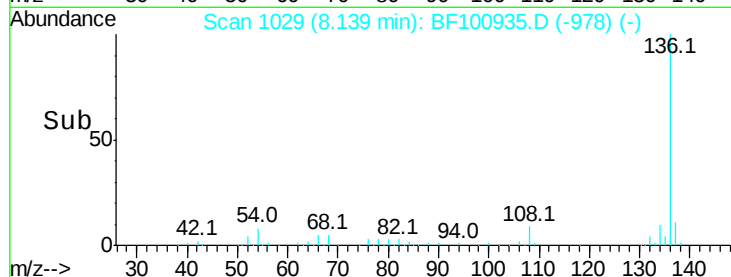
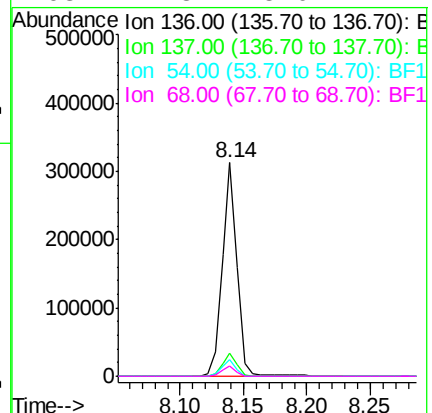
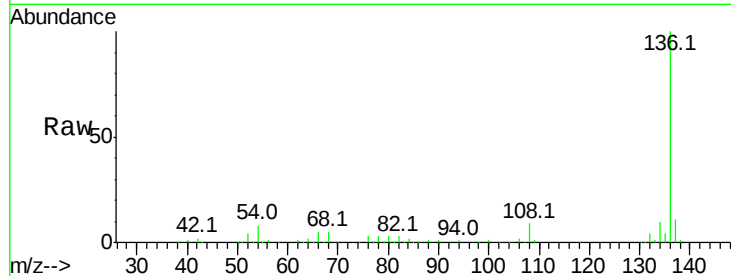
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.14 min Scan# 1029  
Delta R.T. -0.00 min  
Lab File: BF100935.D  
Acq: 28 Nov 2017 15:48

Instrument :  
BNA\_F  
ClientSampleId :  
HAR-4-E(0-1)

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 136     | 100   |      |       |       |
| 137     | 11.0  | 8.9  | 13.3  |       |
| 54      | 7.6   | 6.6  | 9.8   |       |
| 68      | 4.8   | 5.0  | 7.4   |       |

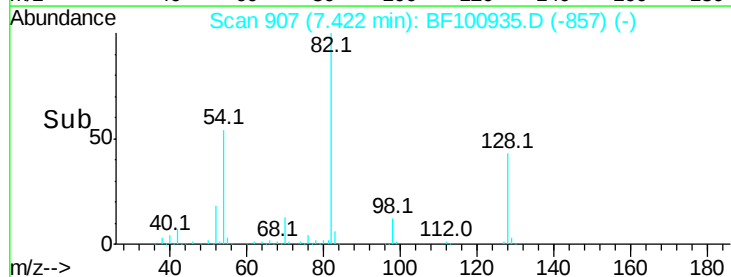
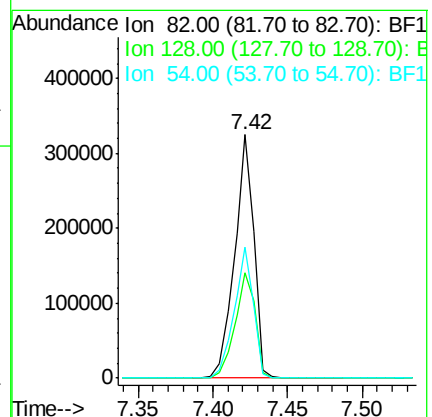
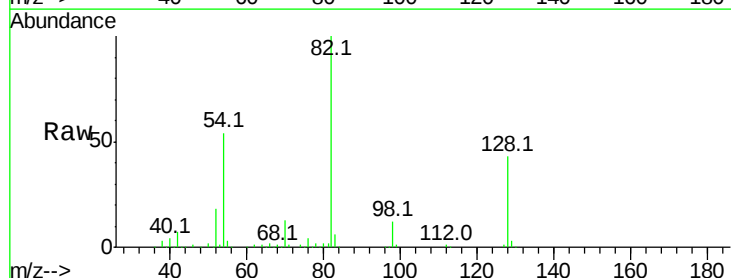
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#23  
Nitrobenzene-d5  
Concen: 76.882 ng  
RT: 7.42 min Scan# 907  
Delta R.T. -0.01 min  
Lab File: BF100935.D  
Acq: 28 Nov 2017 15:48

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 82      | 100   |      |       |       |
| 128     | 43.1  | 36.1 | 54.1  |       |
| 54      | 53.6  | 41.4 | 62.2  |       |





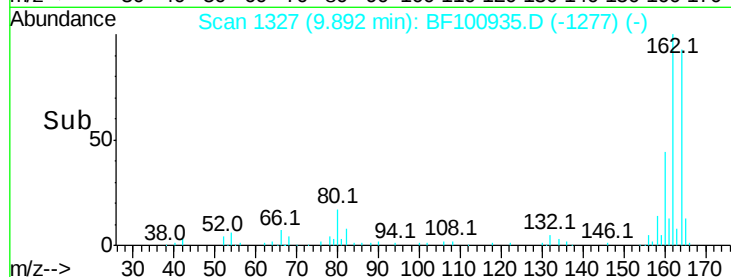
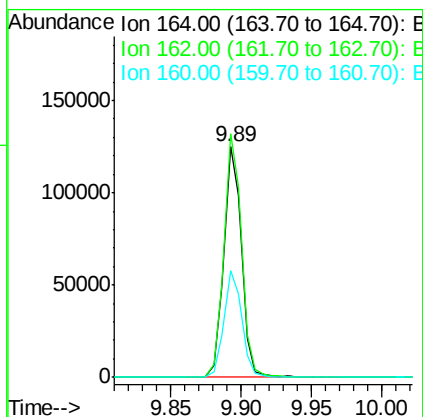
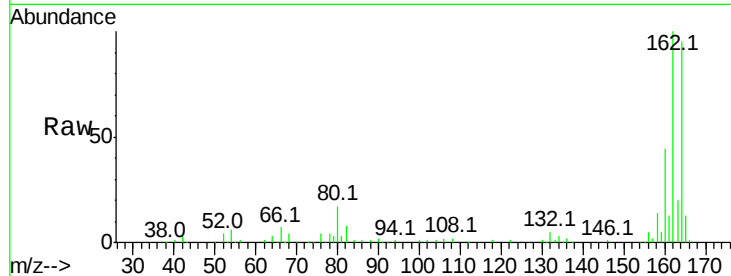
#38  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.89 min Scan# 1327  
Delta R.T. -0.01 min  
Lab File: BF100935.D  
Acq: 28 Nov 2017 15:48

Instrument :  
BNA\_F  
ClientSampleId :  
HAR-4-E(0-1)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 105.6 | 86.1  | 129.1 |
| 160     | 46.2  | 38.3  | 57.5  |

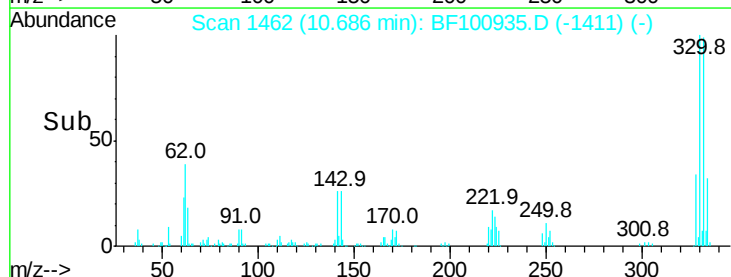
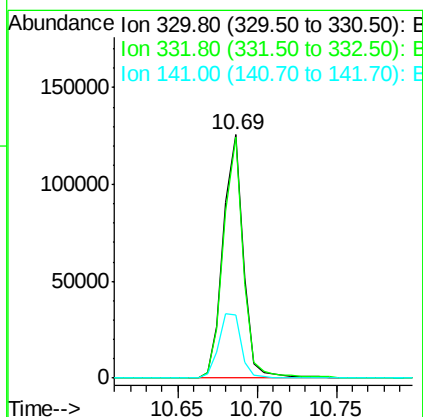
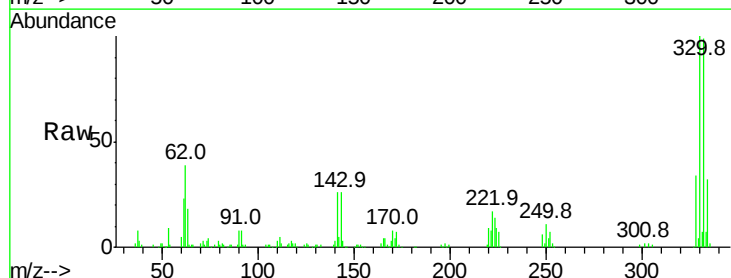
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#41  
2,4,6-Tribromophenol  
Concen: 100.762 ng  
RT: 10.69 min Scan# 1462  
Delta R.T. -0.00 min  
Lab File: BF100935.D  
Acq: 28 Nov 2017 15:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 97.2  | 77.0  | 115.6 |
| 141     | 29.4  | 29.9  | 44.9# |





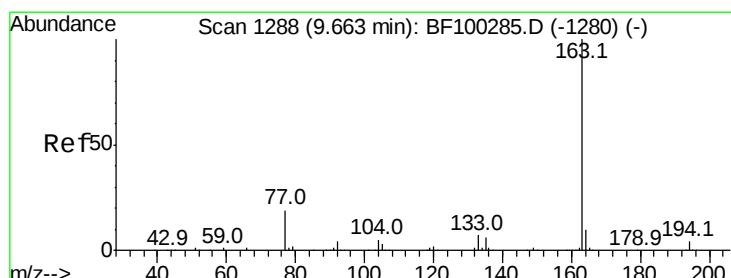
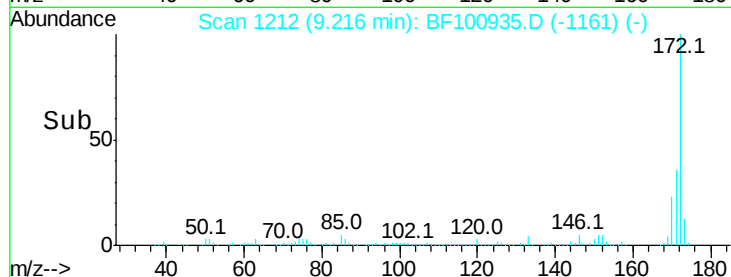
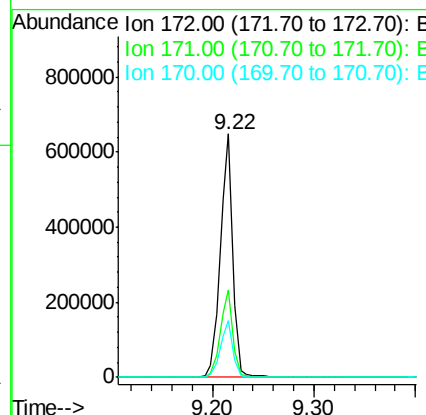
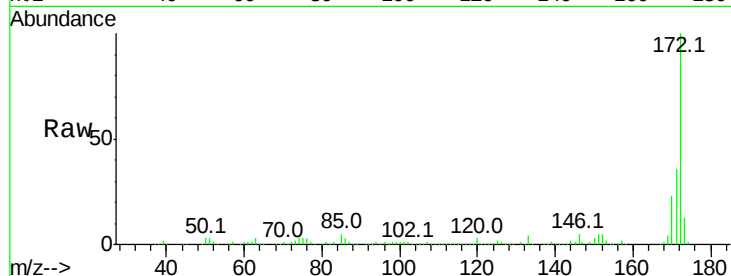
#44  
2-Fluorobiphenyl  
Concen: 77.549 ng  
RT: 9.22 min Scan# 1212  
Delta R.T. -0.00 min  
Lab File: BF100935.D  
Acq: 28 Nov 2017 15:48

Instrument :  
BNA\_F  
ClientSampleId :  
HAR-4-E(0-1)

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 172     | 100   |      |       |       |
| 171     | 35.8  | 29.7 | 44.5  |       |
| 170     | 23.3  | 19.6 | 29.4  |       |

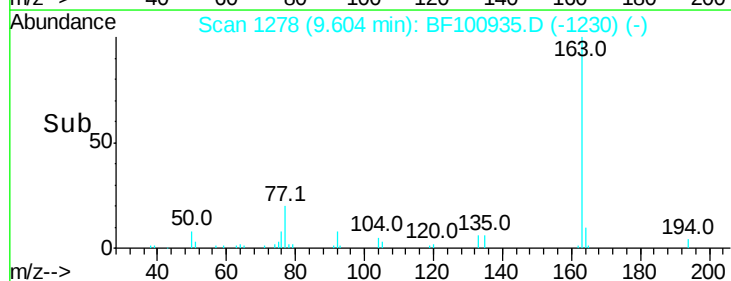
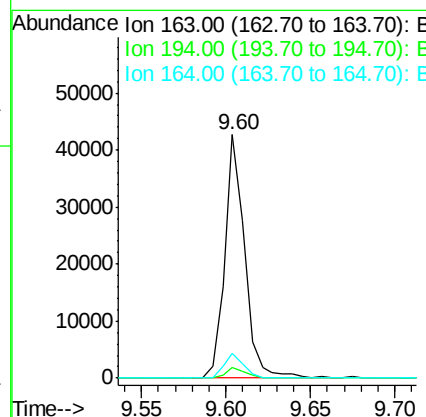
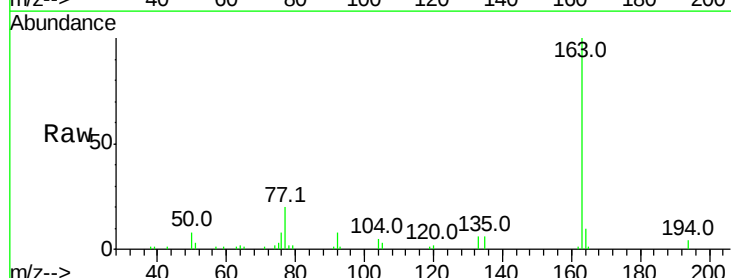
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#49  
Dimethylphthalate  
Concen: 4.231 ng  
RT: 9.60 min Scan# 1278  
Delta R.T. -0.02 min  
Lab File: BF100935.D  
Acq: 28 Nov 2017 15:48

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 163     | 100   |      |       |       |
| 194     | 4.3   | 2.7  | 4.1#  |       |
| 164     | 9.9   | 8.2  | 12.2  |       |





#63

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.38 min Scan# 1580

Delta R.T. -0.00 min

Lab File: BF100935.D

Acq: 28 Nov 2017 15:48

Instrument :

BNA\_F

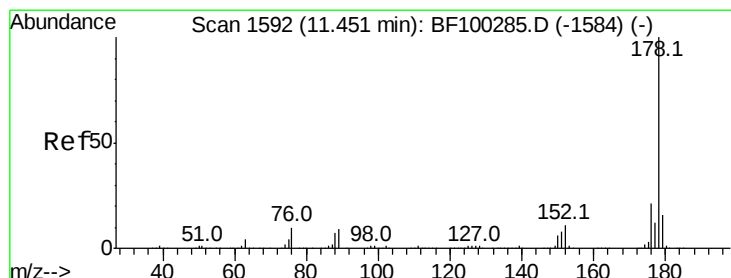
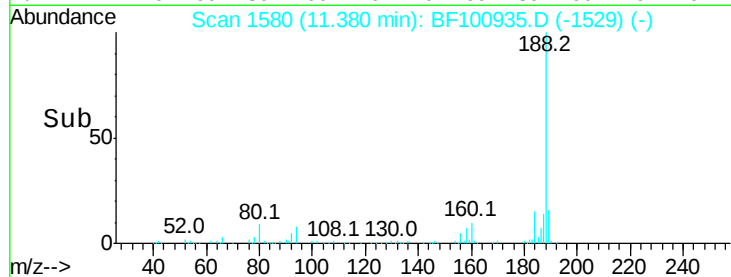
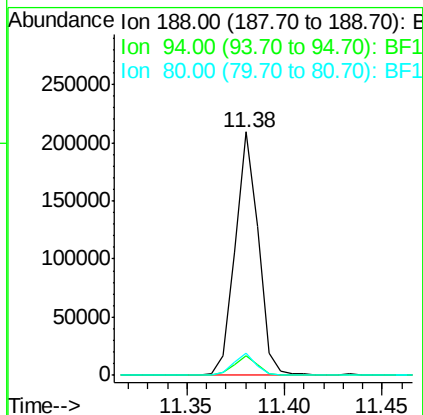
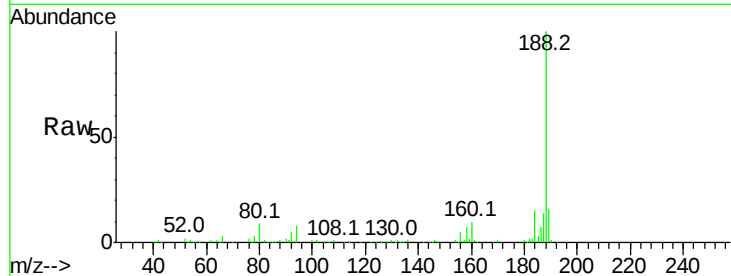
ClientSampleId :

HAR-4-E(0-1)

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 188   | Resp: | 172684 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 7.9   | 8.5   | 12.7#  |
| 80        | 9.3   | 9.2   | 13.8   |

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#70

Phenanthrene

Concen: 2.497 ng

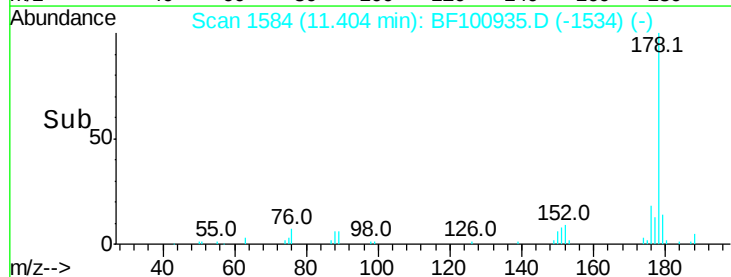
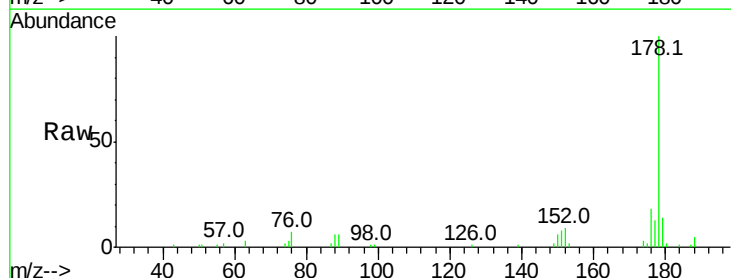
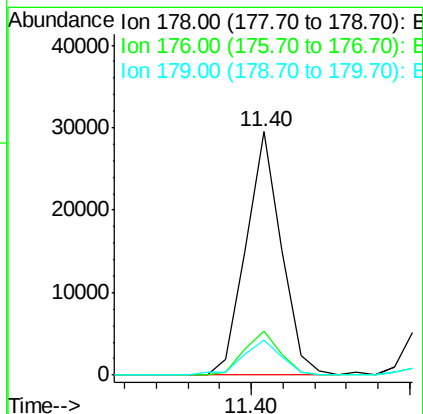
RT: 11.40 min Scan# 1584

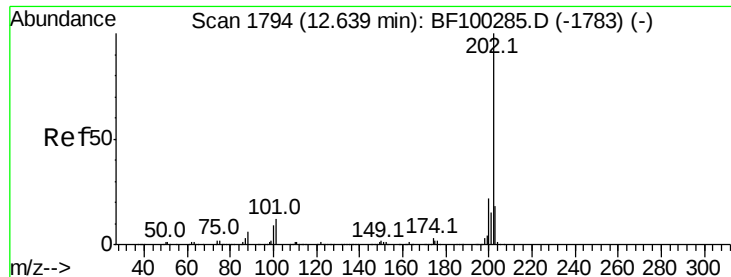
Delta R.T. -0.01 min

Lab File: BF100935.D

Acq: 28 Nov 2017 15:48

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 22703 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 176       | 17.8  | 15.8  | 23.8  |
| 179       | 14.2  | 13.0  | 19.6  |





#74

Fluoranthene

Concen: 7.390 ng

RT: 12.59 min Scan# 1786

Delta R.T. -0.01 min

Lab File: BF100935.D

Acq: 28 Nov 2017 15:48

Instrument :

BNA\_F

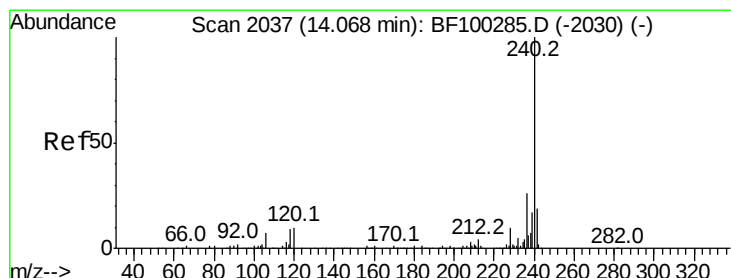
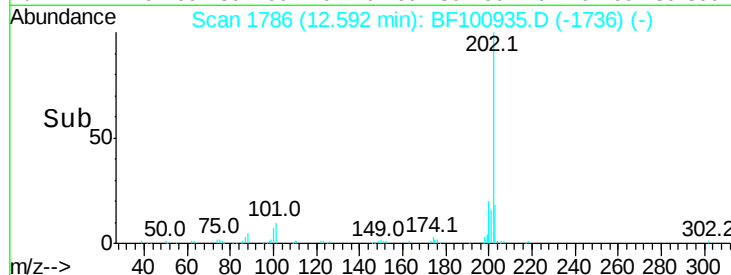
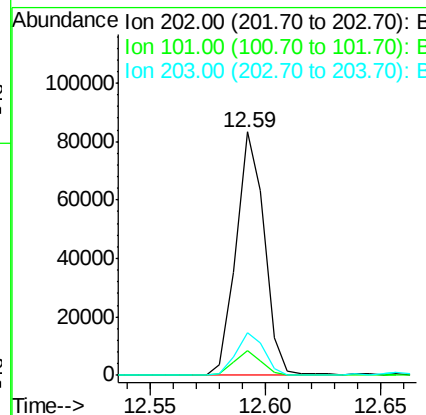
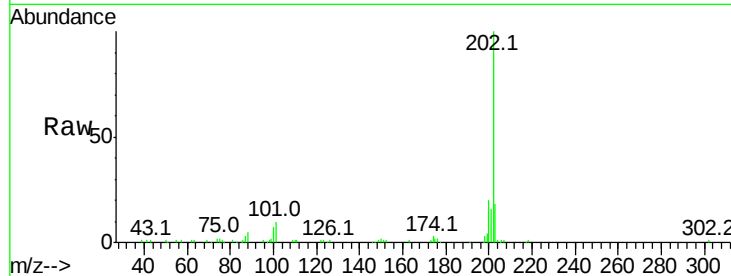
ClientSampleId :

HAR-4-E(0-1)

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 202   | Resp: | 71211 |
| Ion Ratio | Lower | Upper |       |
| 202       | 100   |       |       |
| 101       | 10.1  | 0.0   | 34.1  |
| 203       | 17.7  | 0.0   | 38.1  |

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#75

Chrysene-d12

Concen: 20.000 ng

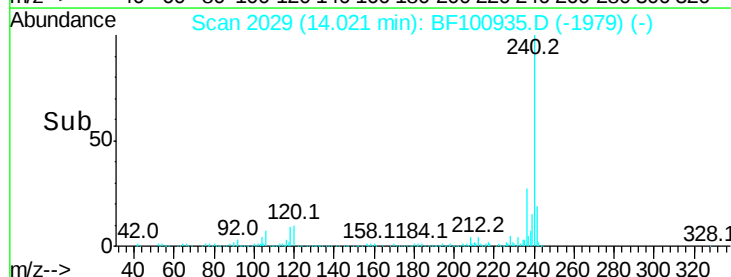
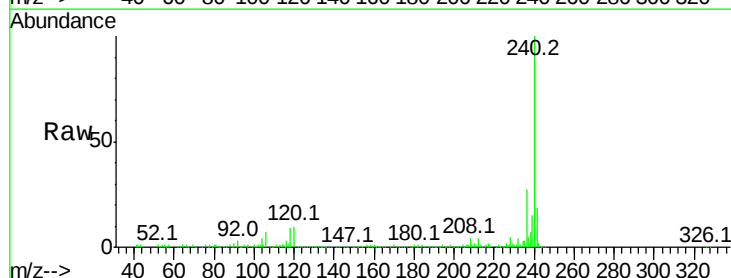
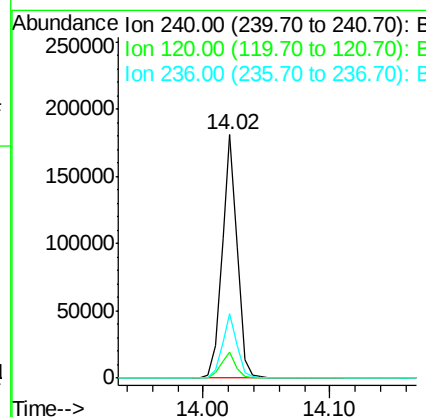
RT: 14.02 min Scan# 2029

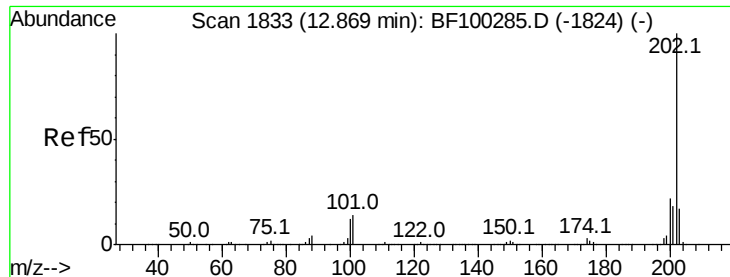
Delta R.T. -0.01 min

Lab File: BF100935.D

Acq: 28 Nov 2017 15:48

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 240   | Resp: | 152225 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 10.5  | 9.5   | 14.3   |
| 236       | 26.5  | 20.7  | 31.1   |





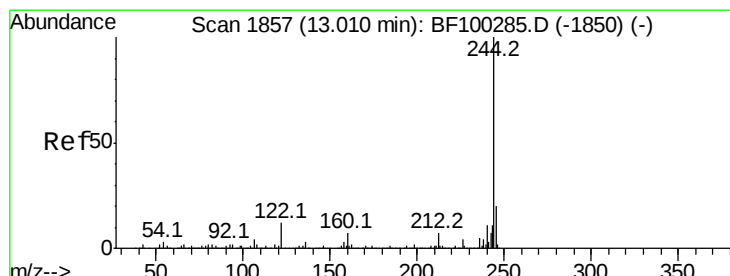
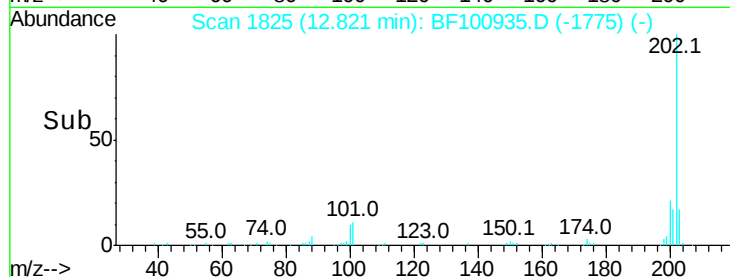
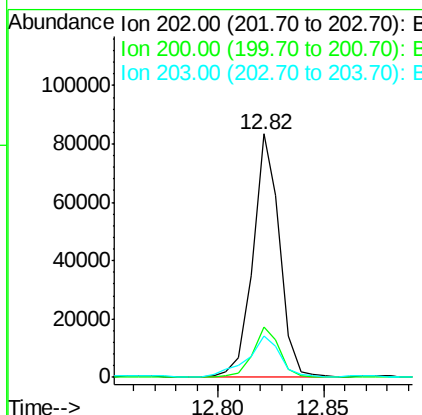
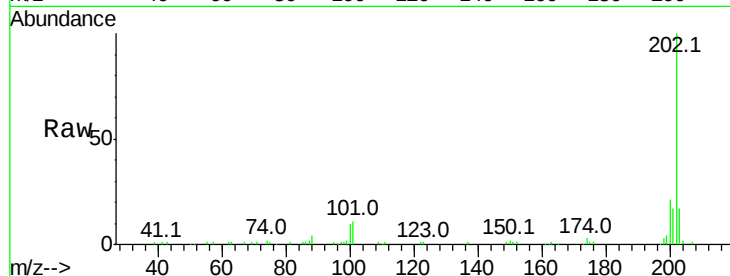
#77  
Pvrene  
Concen: 6.741 ng  
RT: 12.82 min Scan# 1825  
Delta R.T. -0.01 min  
Lab File: BF100935.D  
Acq: 28 Nov 2017 15:48

Instrument :  
BNA\_F  
ClientSampleId :  
HAR-4-E(0-1)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 20.6  | 17.4  | 26.2  |
| 203     | 17.0  | 14.3  | 21.5  |

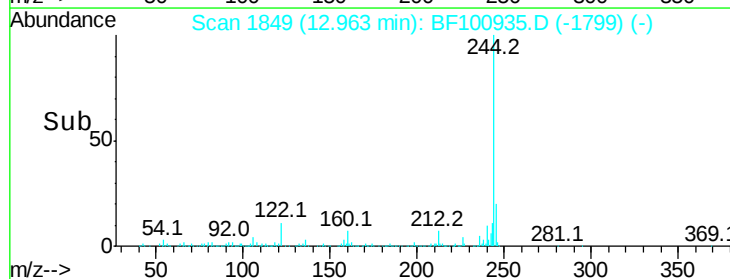
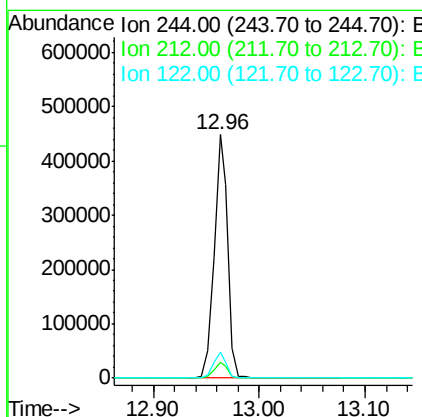
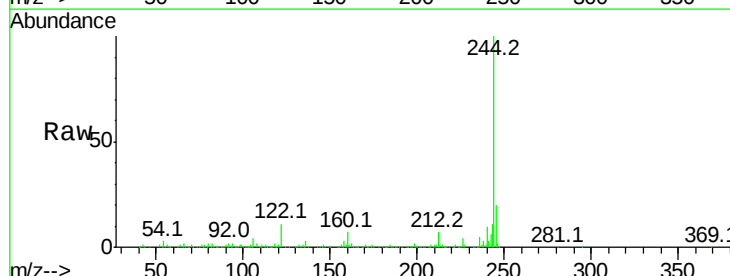
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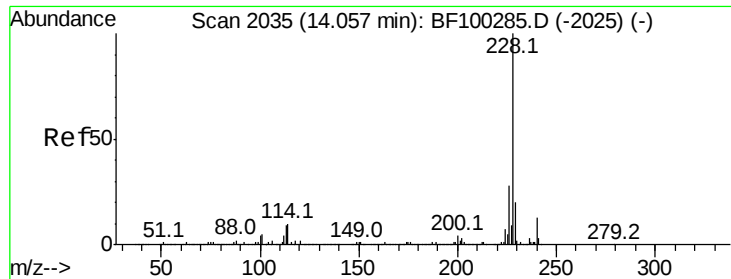
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11/29/2017 4:28:32 PM



#78  
Terphenyl-d14  
Concen: 61.287 ng  
RT: 12.96 min Scan# 1849  
Delta R.T. -0.01 min  
Lab File: BF100935.D  
Acq: 28 Nov 2017 15:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.6   | 5.4   | 8.0   |
| 122     | 10.7  | 11.0  | 16.4  |





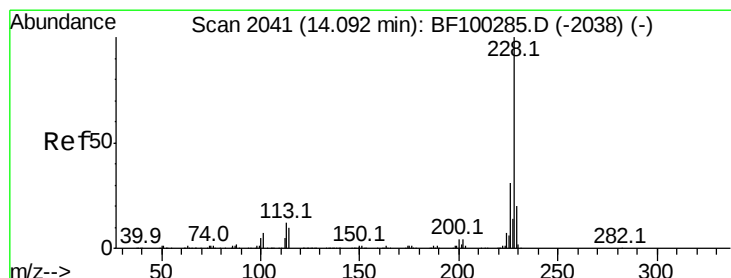
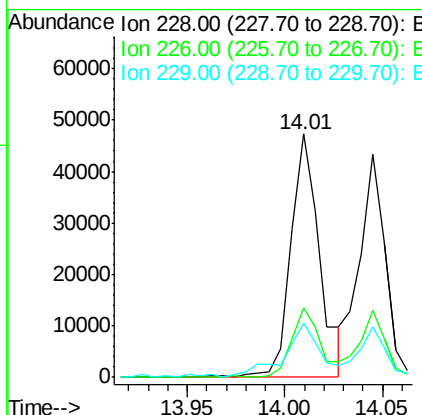
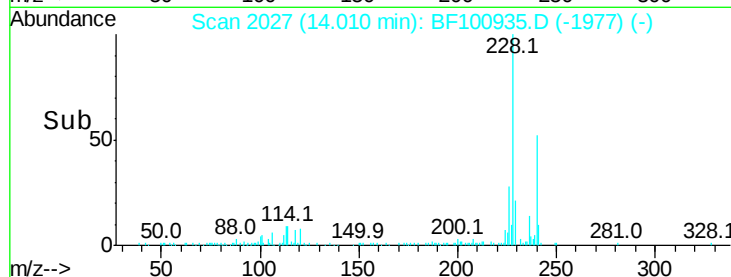
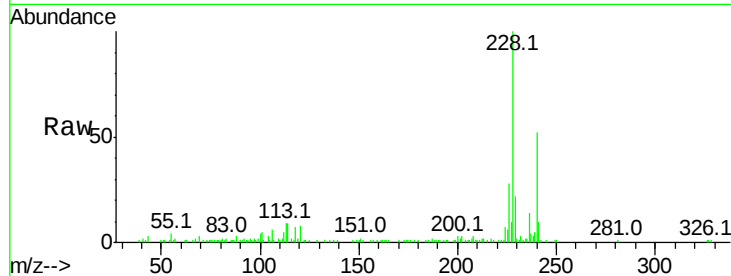
#80  
Benzo(a)anthracene  
Concen: 5.271 ng  
RT: 14.01 min Scan# 2027  
Delta R.T. -0.01 min  
Lab File: BF100935.D  
Acq: 28 Nov 2017 15:48

Instrument :  
BNA\_F  
ClientSampleId :  
HAR-4-E(0-1)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.5  | 22.6  | 33.8  |
| 229     | 22.1  | 15.8  | 23.6  |

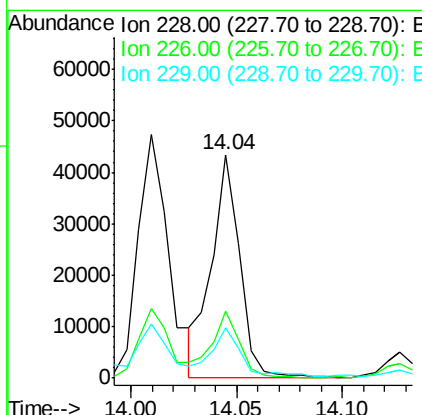
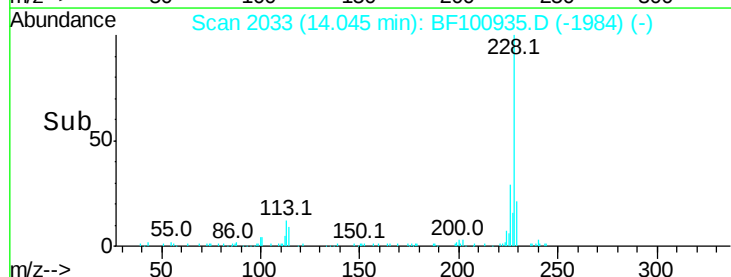
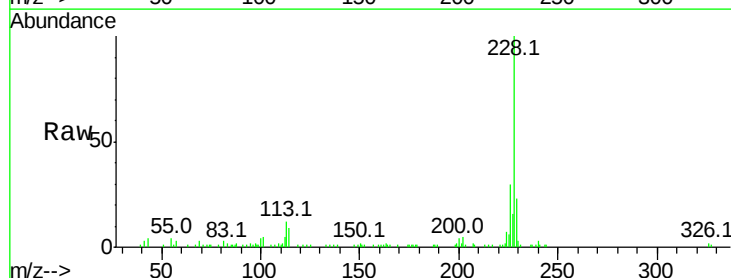
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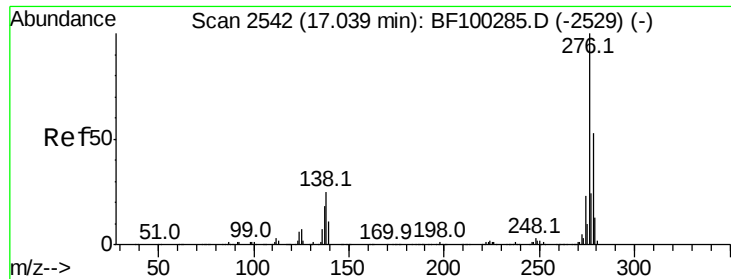
Sohil  
11/29/2017 4:28:32 PM



#82  
Chrysene  
Concen: 4.600 ng  
RT: 14.04 min Scan# 2033  
Delta R.T. -0.01 min  
Lab File: BF100935.D  
Acq: 28 Nov 2017 15:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.9  | 25.0  | 37.6  |
| 229     | 22.7  | 16.2  | 24.4  |





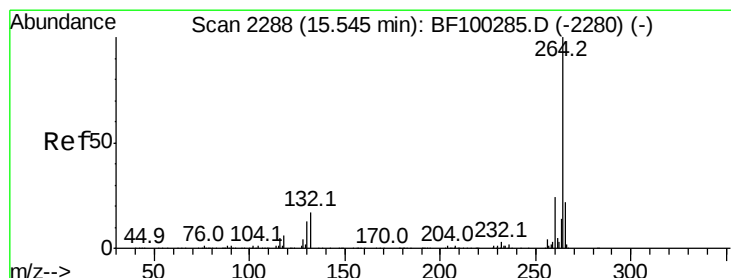
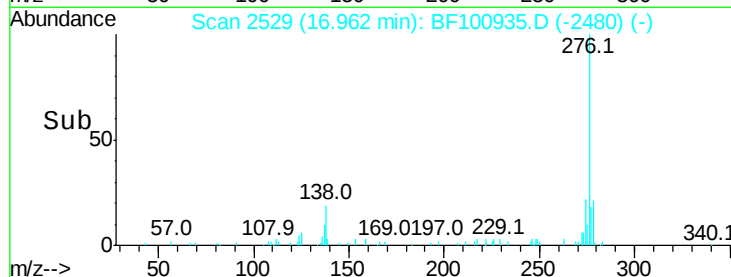
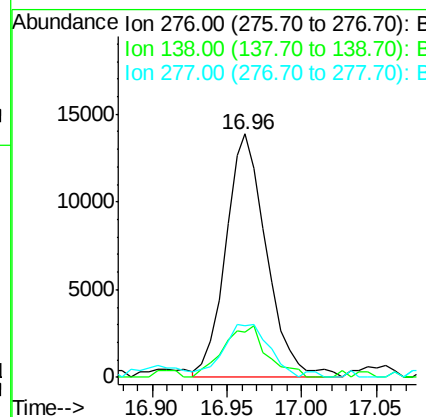
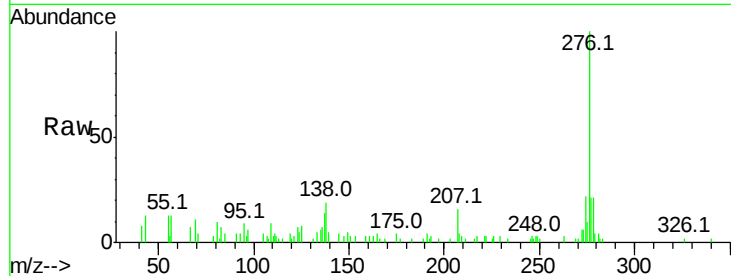
#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 3.684 ng  
 RT: 16.96 min Scan# 2529  
 Delta R.T. -0.01 min  
 Lab File: BF100935.D  
 Acq: 28 Nov 2017 15:48

Instrument :  
 BNA\_F  
 ClientSampleId :  
 HAR-4-E(0-1)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 22.5  | 25.0  | 37.6# |
| 277     | 24.4  | 20.1  | 30.1  |

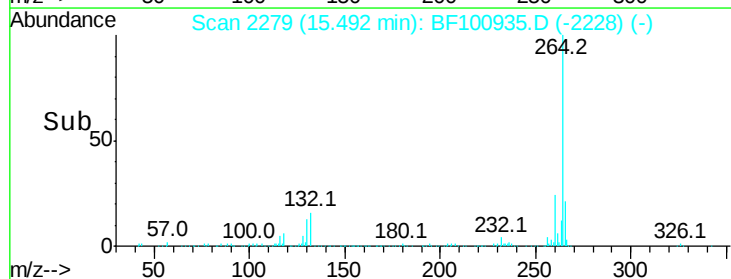
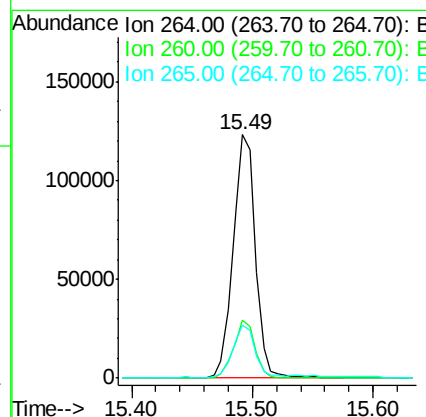
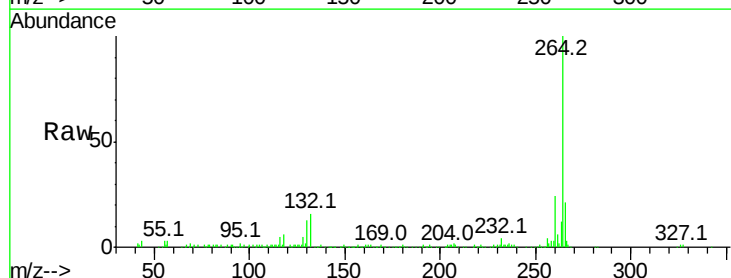
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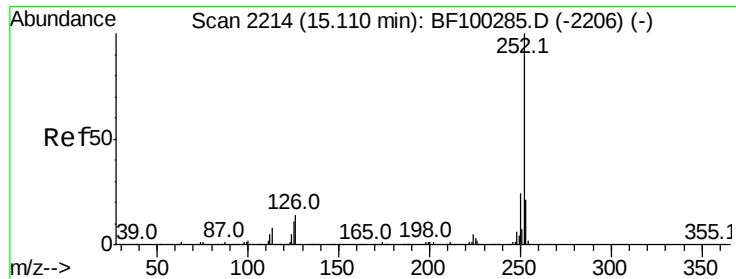
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#86  
 Perylene-d12  
 Concen: 20.000 ng  
 RT: 15.49 min Scan# 2279  
 Delta R.T. -0.00 min  
 Lab File: BF100935.D  
 Acq: 28 Nov 2017 15:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.7  | 19.2  | 28.8  |
| 265     | 21.5  | 17.5  | 26.3  |





#87

Benzo(b)fluoranthene

Concen: 6.711 ng m

RT: 15.06 min Scan# 2206

Delta R.T. -0.00 min

Lab File: BF100935.D

Acq: 28 Nov 2017 15:48

Instrument :

BNA\_F

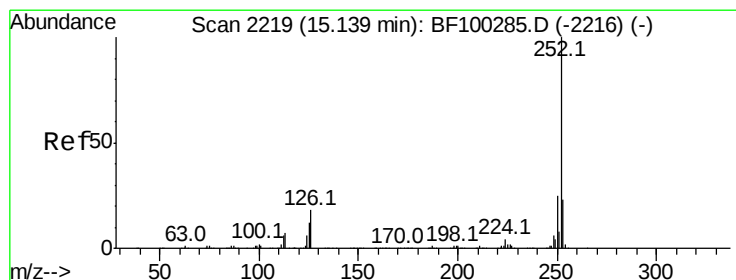
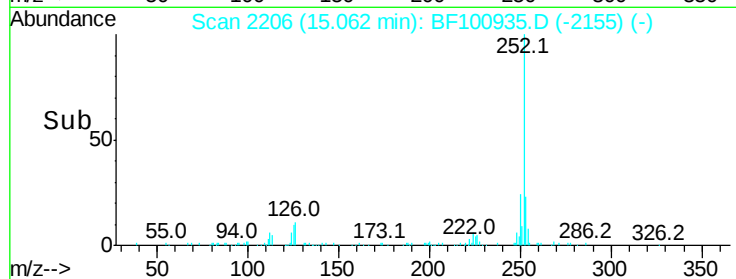
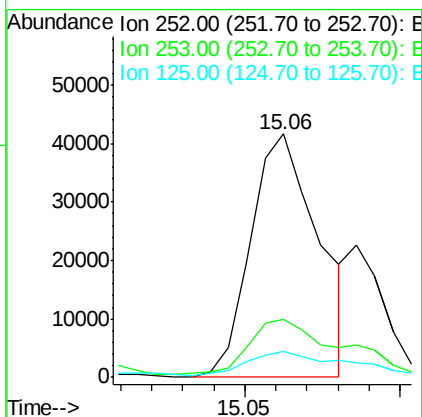
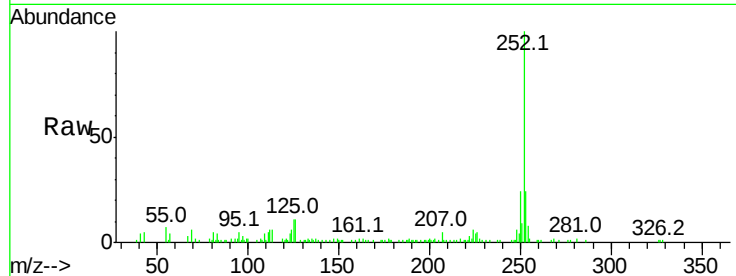
ClientSampleId :

HAR-4-E(0-1)

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:252 | Resp: | 63086     |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 23.6  | 17.0 25.6 |
| 125         | 10.7  | 9.0 13.6  |

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#88

Benzo(k)fluoranthene

Concen: 2.088 ng m

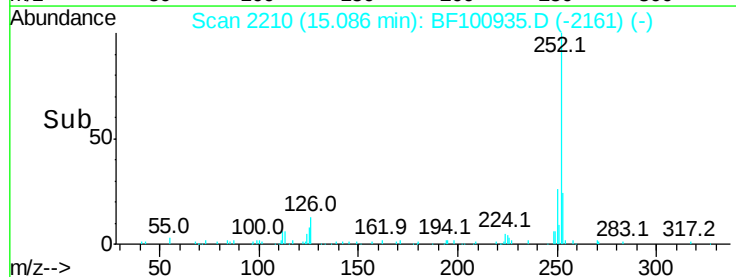
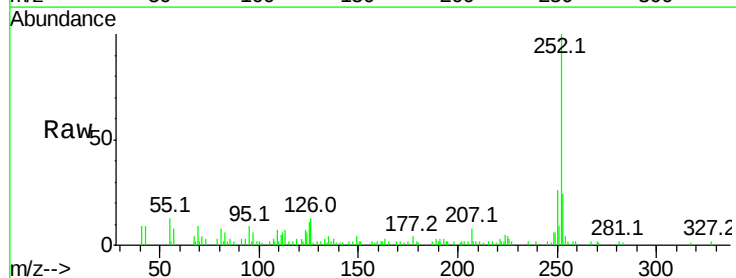
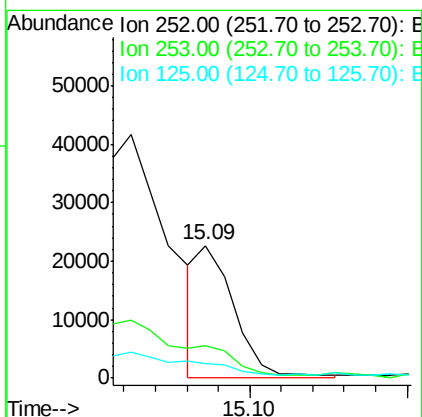
RT: 15.09 min Scan# 2210

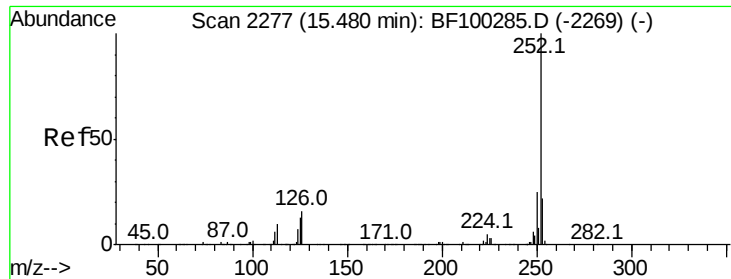
Delta R.T. -0.01 min

Lab File: BF100935.D

Acq: 28 Nov 2017 15:48

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:252 | Resp: | 18543     |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 24.1  | 17.9 26.9 |
| 125         | 11.4  | 10.2 15.2 |





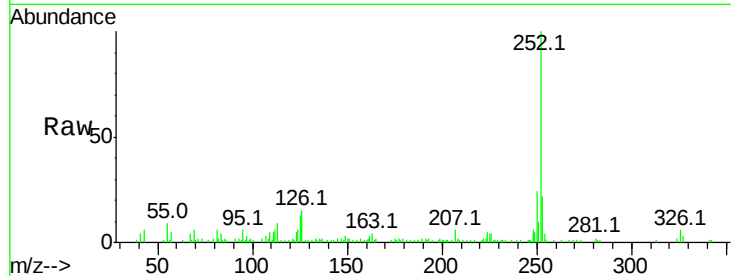
#89  
Benzo(a)pyrene  
Concen: 5.614 ng  
RT: 15.43 min Scan# 2268  
Delta R.T. -0.01 min  
Lab File: BF100935.D  
Acq: 28 Nov 2017 15:48

Instrument :  
BNA\_F  
ClientSampleId :  
HAR-4-E(0-1)

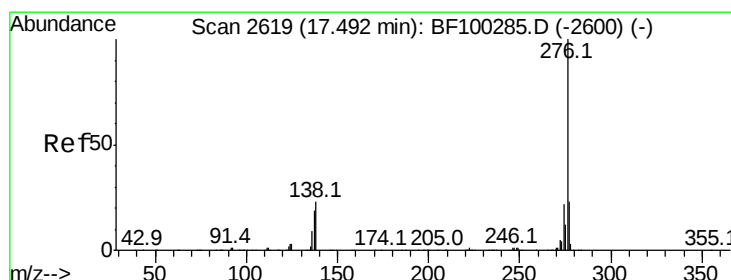
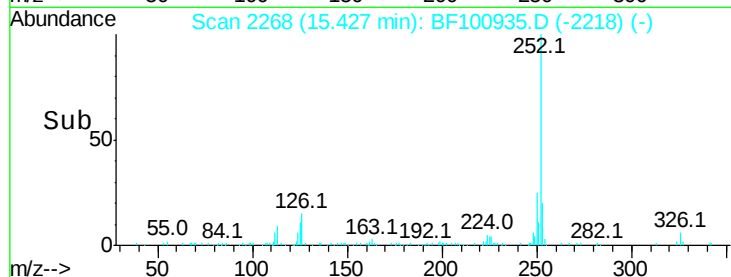
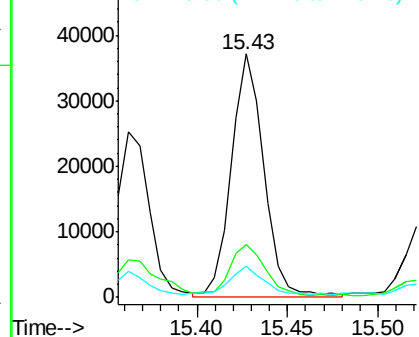
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.8  | 17.1  | 25.7  |
| 125     | 12.7  | 9.8   | 14.6  |

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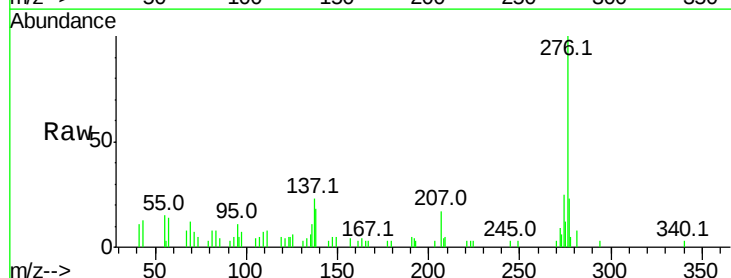


Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E



#91  
Benzo(g,h,i)perylene  
Concen: 3.753 ng  
RT: 17.41 min Scan# 2605  
Delta R.T. -0.01 min  
Lab File: BF100935.D  
Acq: 28 Nov 2017 15:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 23.5  | 17.9  | 26.9  |
| 138     | 18.3  | 21.8  | 32.8# |



Abundance Ion 276.00 (275.70 to 276.70): E  
Ion 277.00 (276.70 to 277.70): E  
Ion 138.00 (137.70 to 138.70): E

