

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
 Data File : BF114216.D  
 Acq On : 13 May 2019 2:32  
 Operator : JU/SJ  
 Sample : K2765-15DL 2X  
 Misc :  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 P026-SS005-0612-01DL

Manual Integrations  
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Sohil  
 5/13/2019 8:37:50 PM

Quant Time: May 13 09:34:05 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri May 10 15:56:46 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.85  | 152  | 264834   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.13  | 136  | 1001228  | 20.00  | ng    | 0.00     |
| 39) Acenaphthene-d10        | 9.89  | 164  | 452546   | 20.00  | ng    | 0.00     |
| 64) Phenanthrene-d10        | 11.37 | 188  | 803750   | 20.00  | ng    | 0.00     |
| 76) Chrysene-d12            | 14.02 | 240  | 569660   | 20.00  | ng    | 0.00     |
| 87) Perylene-d12            | 15.49 | 264  | 597410   | 20.00  | ng    | -0.01    |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.48  | 112  | 957890   | 58.21  | ng    | 0.00     |
| 7) Phenol-d6                | 6.49  | 99   | 1262815  | 64.88  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.41  | 82   | 755677   | 42.36  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.67 | 330  | 268256   | 57.34  | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.20  | 172  | 1170672  | 39.13  | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.95 | 244  | 924154   | 33.44  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 49) Acenaphthylene          | 9.75  | 152  | 446641   | 9.981  | ng    | 99       |
| 50) Dimethylphthalate       | 9.60  | 163  | 195288   | 5.878  | ng    | 99       |
| 71) Phenanthrene            | 11.40 | 178  | 859209   | 21.973 | ng    | 97       |
| 72) Anthracene              | 11.44 | 178  | 216806   | 5.520  | ng    | 98       |
| 75) Fluoranthene            | 12.59 | 202  | 1603246  | 38.073 | ng    | 100      |
| 78) Pyrene                  | 12.82 | 202  | 2660312  | 58.052 | ng    | 99       |
| 81) Benzo(a)anthracene      | 14.00 | 228  | 1268451m | 34.426 | ng    |          |
| 83) Chrysene                | 14.04 | 228  | 1510496  | 41.820 | ng    | 99       |
| 86) Indeno(1,2,3-cd)pyrene  | 16.96 | 276  | 667693   | 20.917 | ng    | 97       |
| 88) Benzo(b)fluoranthene    | 15.07 | 252  | 1742227m | 45.520 | ng    |          |
| 89) Benzo(k)fluoranthene    | 15.09 | 252  | 331776m  | 9.437  | ng    |          |
| 90) Benzo(a)pyrene          | 15.43 | 252  | 1061163  | 31.504 | ng    | 100      |
| 91) Dibenzo(a,h)anthracene  | 16.96 | 278  | 169179m  | 6.044  | ng    |          |
| 92) Benzo(g,h,i)perylene    | 17.42 | 276  | 742819   | 26.482 | ng    | 98       |

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

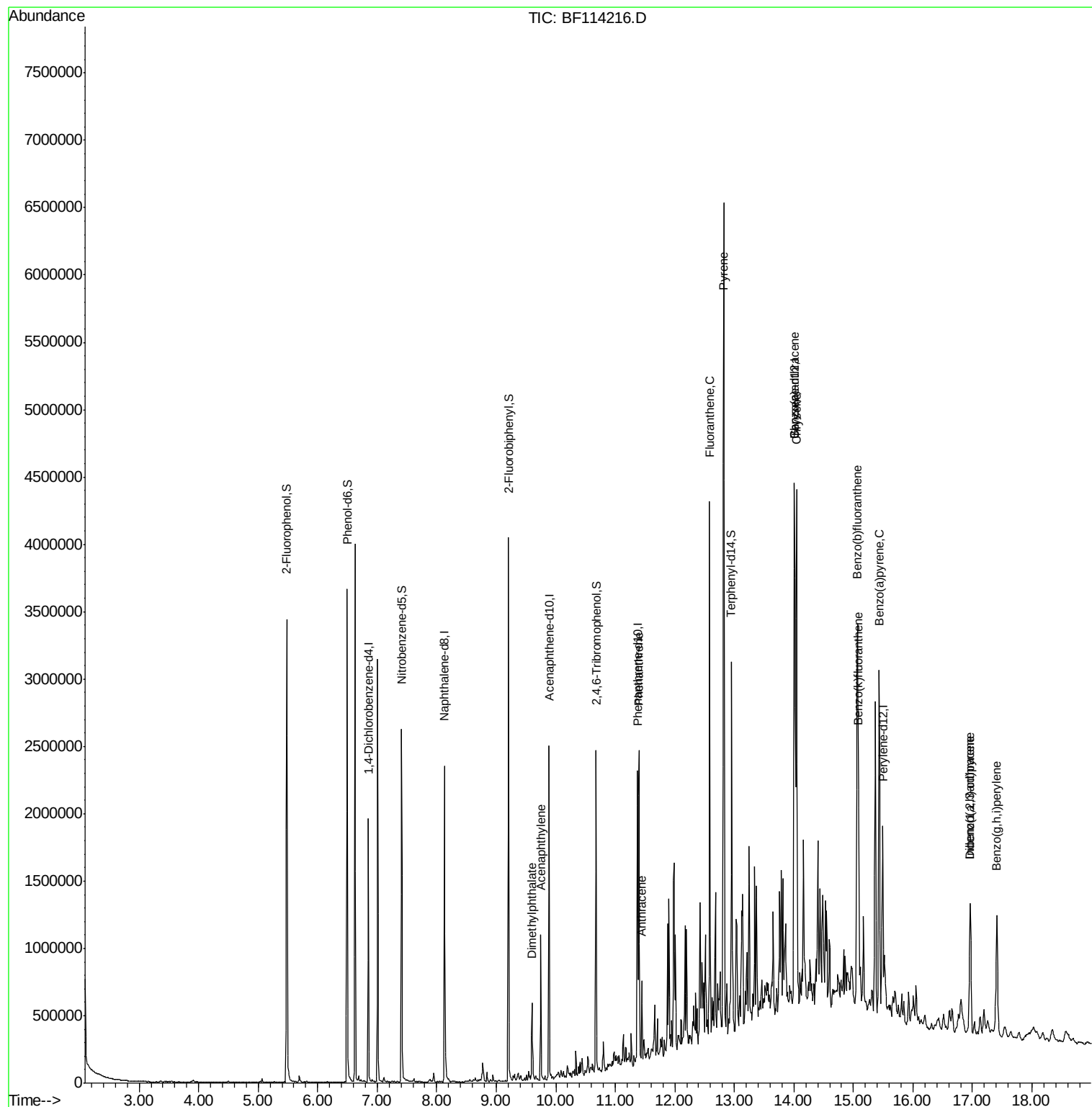
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114216.D  
Acq On : 13 May 2019 2:32  
Operator : JU/SJ  
Sample : K2765-15DL 2X  
Misc :  
ALS Vial : 29 Sample Multiplier: 1

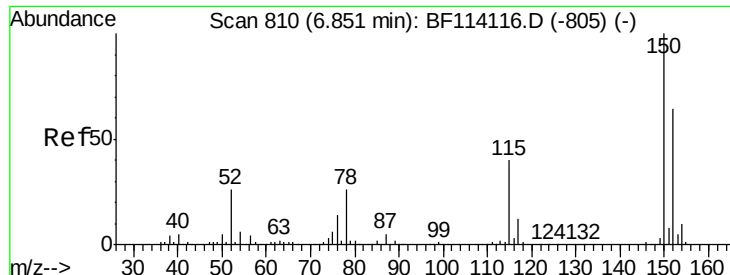
Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS005-0612-01DL

Manual Integrations  
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Quant Time: May 13 09:34:05 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri May 10 15:56:46 2019  
Response via : Initial Calibration





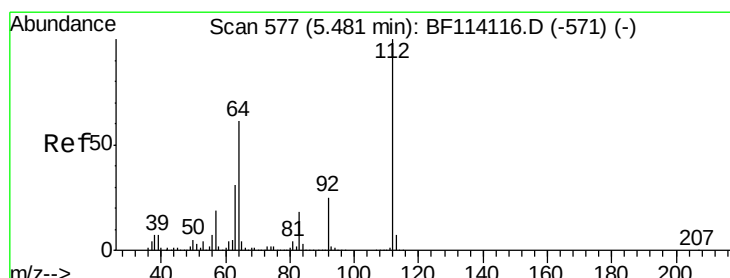
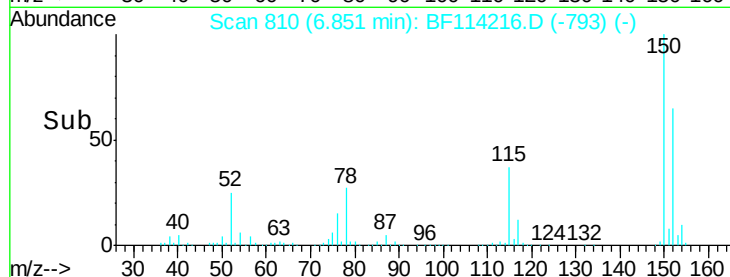
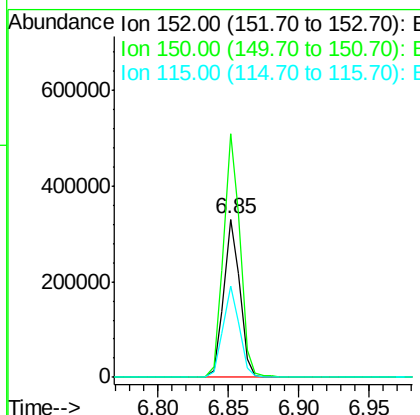
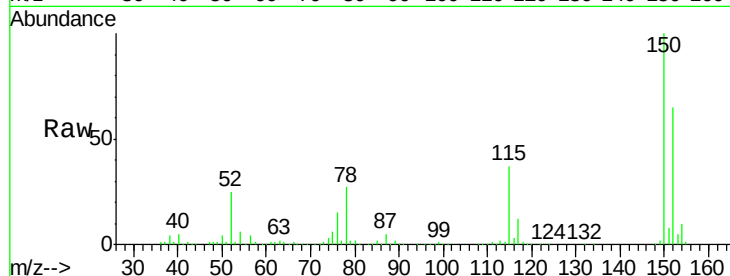
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.85 min Scan# 810  
 Delta R.T. -0.00 min  
 Lab File: BF114216.D  
 Acq: 13 May 2019 2:32

Instrument :  
 BNA\_F  
 ClientSampleId :  
 P026-SS005-0612-01DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 154.1 | 124.3 | 186.5 |
| 115     | 57.5  | 49.1  | 73.7  |

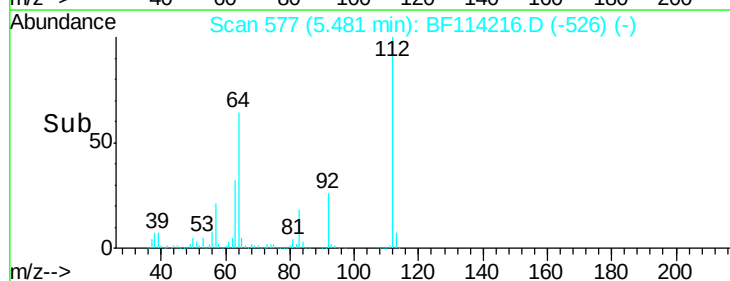
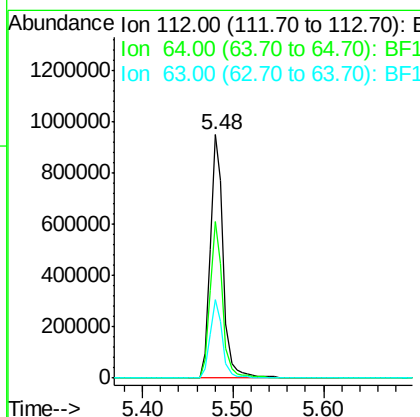
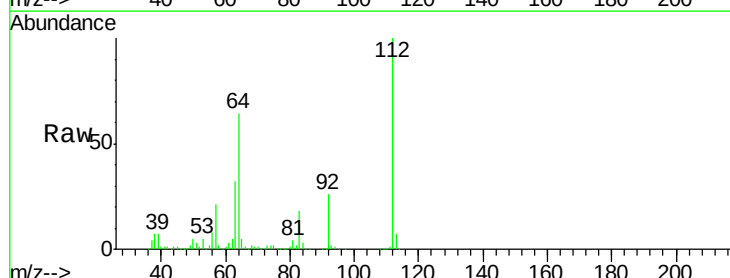
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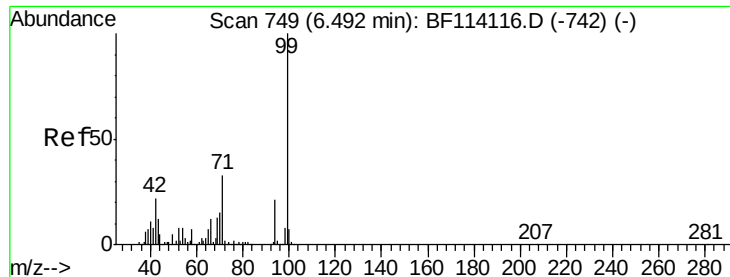
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#5  
 2-Fluorophenol  
 Concen: 58.206 ng  
 RT: 5.48 min Scan# 577  
 Delta R.T. 0.00 min  
 Lab File: BF114216.D  
 Acq: 13 May 2019 2:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 64.4  | 49.0  | 73.6  |
| 63      | 32.5  | 24.6  | 37.0  |





#7

Phenol-d6

Concen: 64.879 ng

RT: 6.49 min Scan# 749

Delta R.T. -0.00 min

Lab File: BF114216.D

Acq: 13 May 2019 2:32

Instrument :

BNA\_F

ClientSampleId :

P026-SS005-0612-01DL

Tot Ion: 99 Resp: 1262815

Ion Ratio Lower Upper

99 100

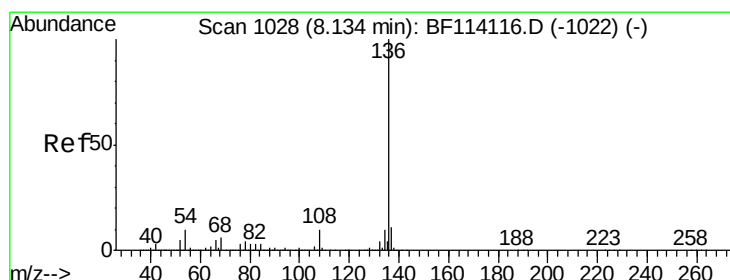
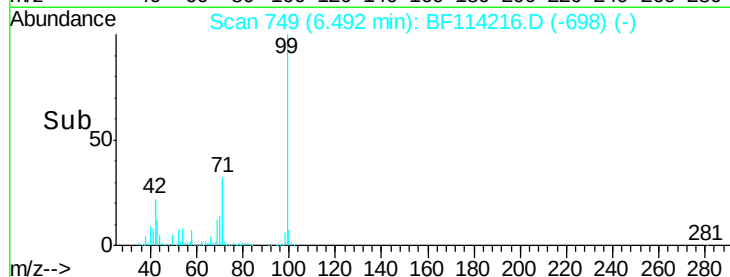
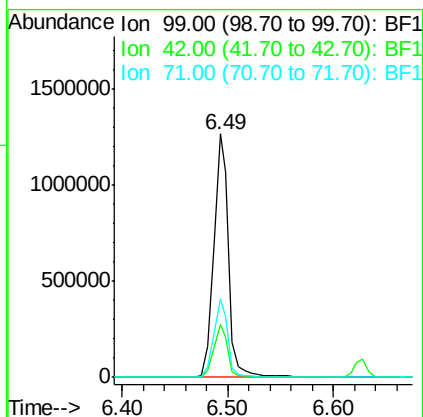
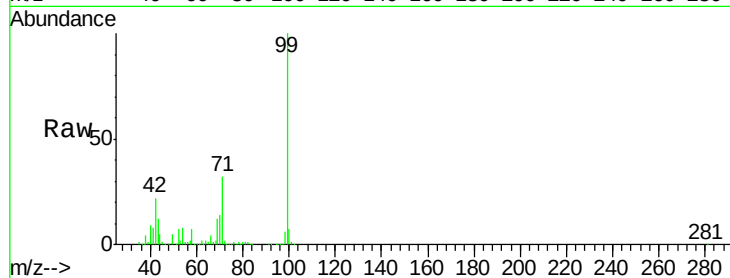
42 21.9 17.9 26.9

71 32.0 26.2 39.2

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#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.13 min Scan# 1028

Delta R.T. -0.00 min

Lab File: BF114216.D

Acq: 13 May 2019 2:32

Tgt Ion: 136 Resp: 1001228

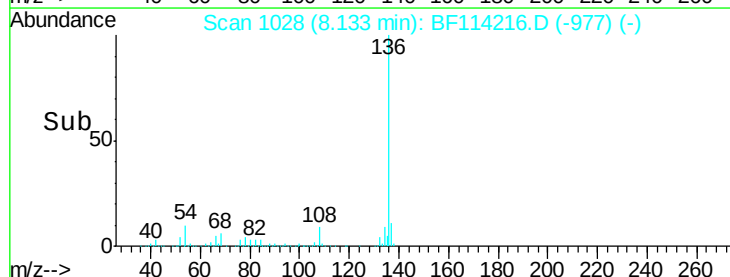
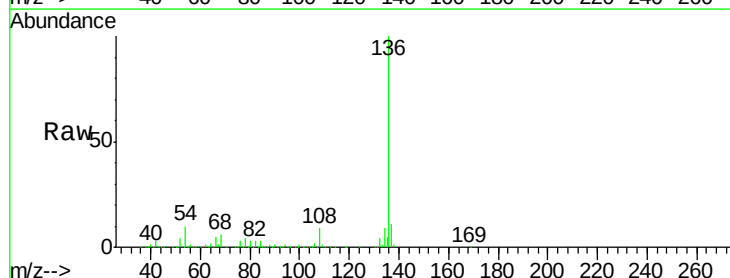
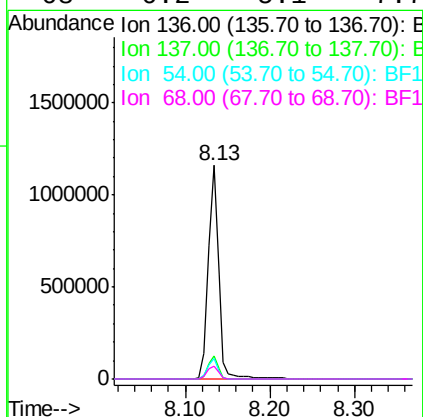
Ion Ratio Lower Upper

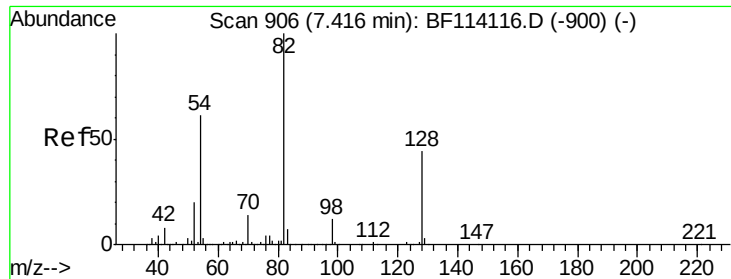
136 100

137 11.0 8.8 13.2

54 9.5 7.8 11.8

68 6.2 5.1 7.7





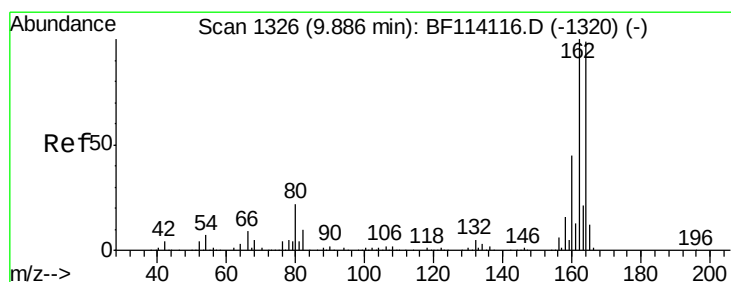
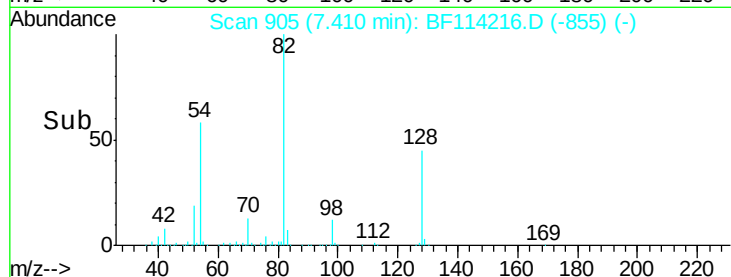
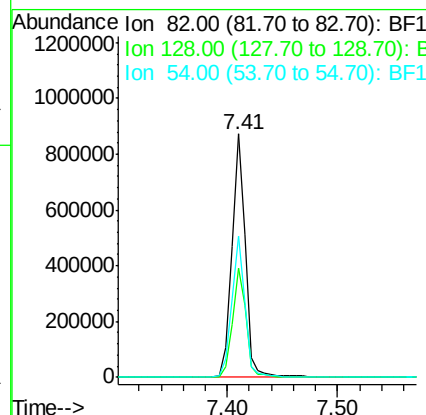
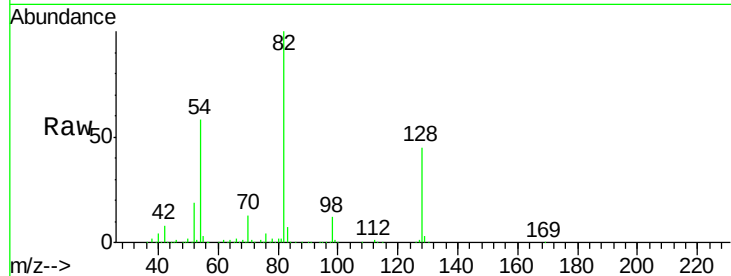
#23  
 Nitrobenzene-d5  
 Concen: 42.357 ng  
 RT: 7.41 min Scan# 905  
 Delta R.T. -0.01 min  
 Lab File: BF114216.D  
 Acq: 13 May 2019 2:32

Instrument :  
 BNA\_F  
 ClientSampleId :  
 P026-SS005-0612-01DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 44.7  | 35.5  | 53.3  |
| 54      | 58.1  | 48.5  | 72.7  |

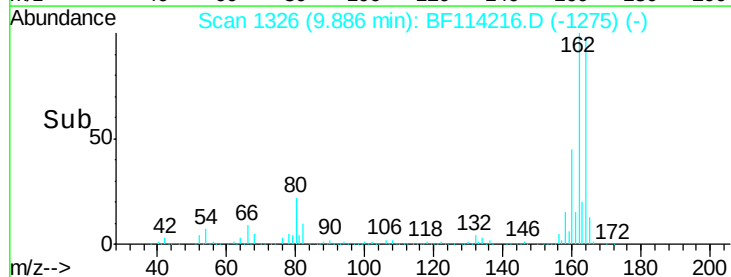
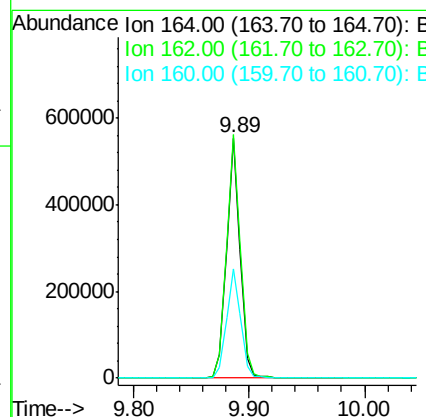
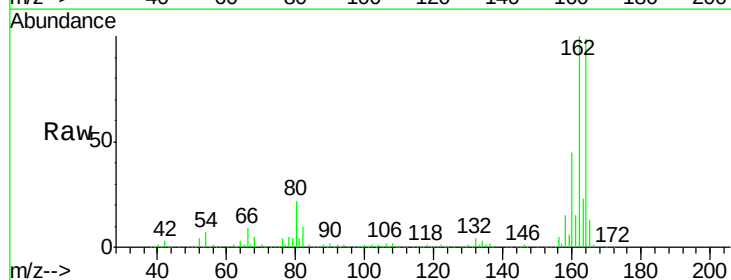
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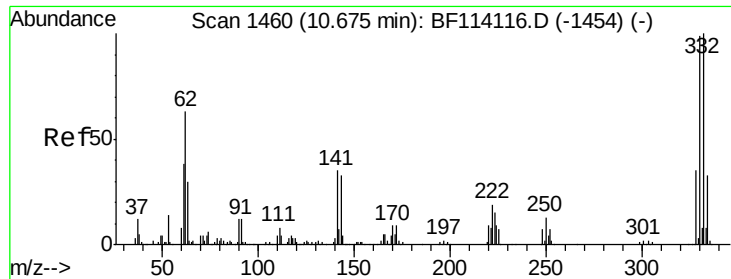
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#39  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 9.89 min Scan# 1326  
 Delta R.T. -0.00 min  
 Lab File: BF114216.D  
 Acq: 13 May 2019 2:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 101.3 | 80.6  | 120.8 |
| 160     | 45.2  | 36.5  | 54.7  |





#42

2,4,6-Tribromophenol

Concen: 57.337 ng

RT: 10.67 min Scan# 1460

Delta R.T. -0.00 min

Lab File: BF114216.D

Acq: 13 May 2019 2:32

Instrument :

BNA\_F

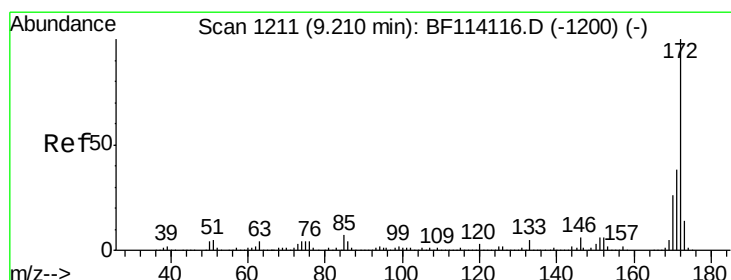
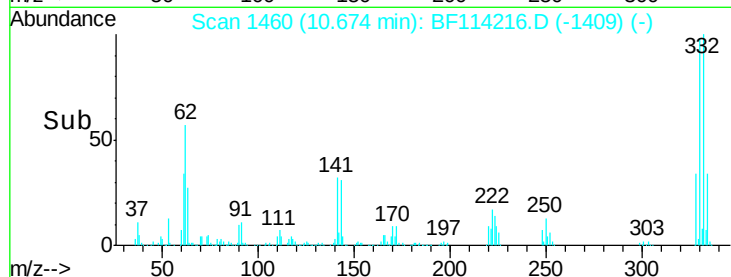
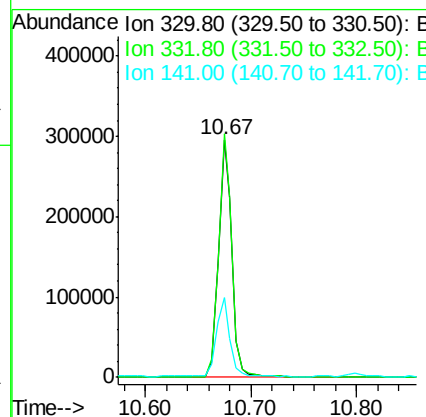
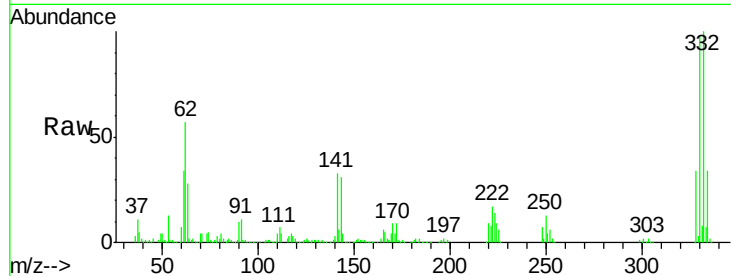
ClientSampleId :

P026-SS005-0612-01DL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 330   | Resp: | 268256 |
| Ion Ratio | Lower | Upper |        |
| 330       | 100   |       |        |
| 332       | 101.5 | 81.4  | 122.2  |
| 141       | 32.8  | 26.6  | 40.0   |

Manual Integrations  
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#45

2-Fluorobiphenyl

Concen: 39.131 ng

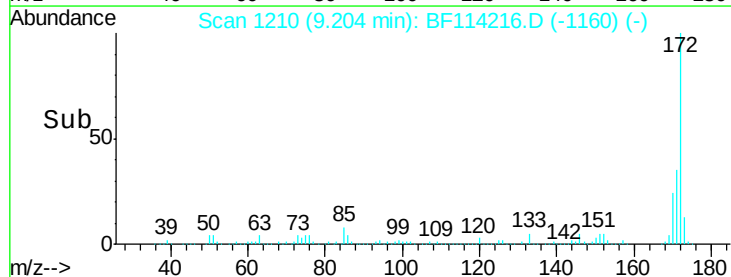
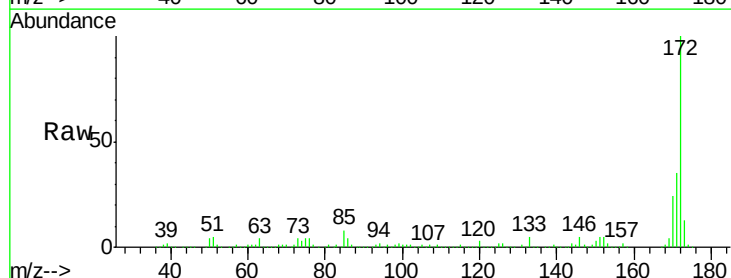
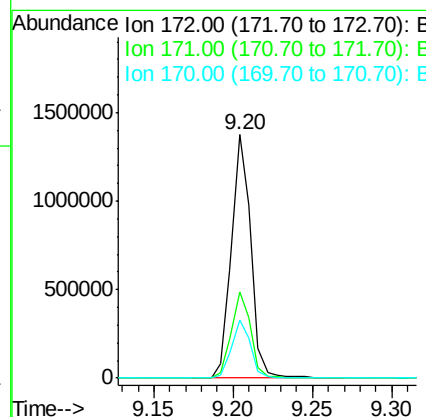
RT: 9.20 min Scan# 1210

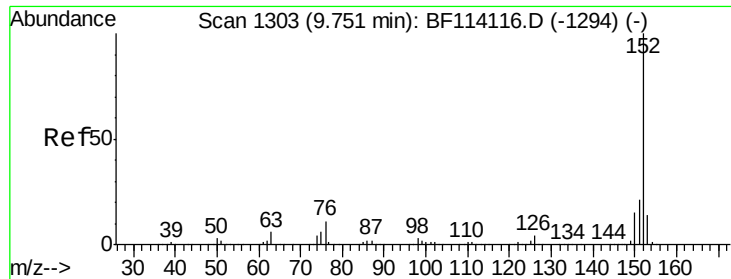
Delta R.T. -0.01 min

Lab File: BF114216.D

Acq: 13 May 2019 2:32

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 172   | Resp: | 1170672 |
| Ion Ratio | Lower | Upper |         |
| 172       | 100   |       |         |
| 171       | 35.3  | 30.7  | 46.1    |
| 170       | 23.7  | 20.5  | 30.7    |





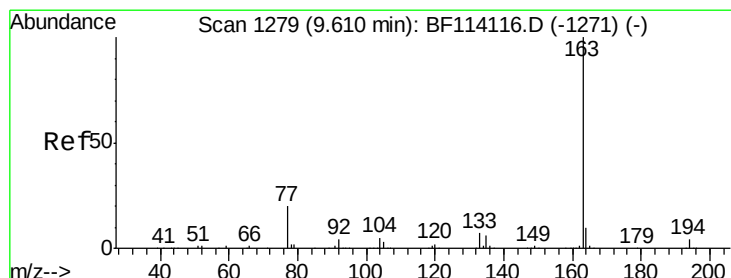
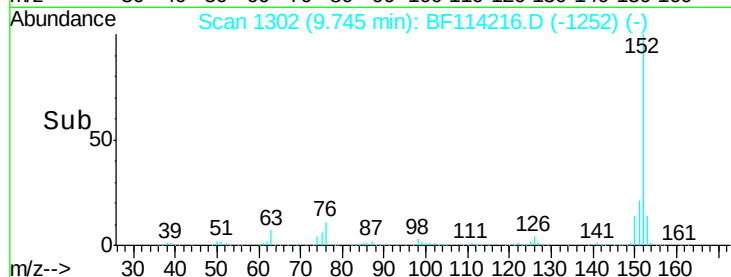
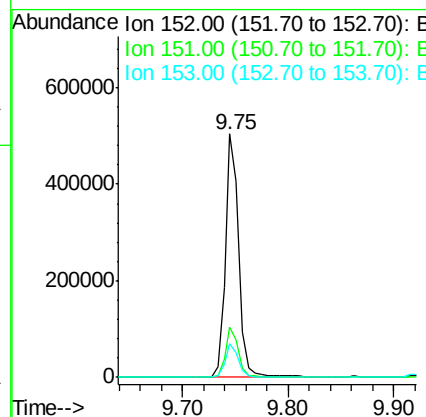
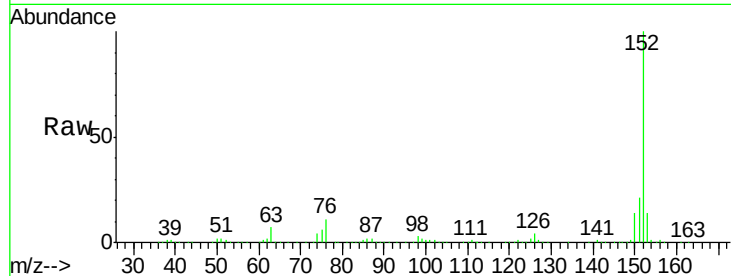
#49  
Acenaphthylene  
Concen: 9.981 ng  
RT: 9.75 min Scan# 1302  
Delta R.T. -0.01 min  
Lab File: BF114216.D  
Acq: 13 May 2019 2:32

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS005-0612-01DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 20.6  | 16.8  | 25.2  |
| 153     | 13.7  | 11.4  | 17.2  |

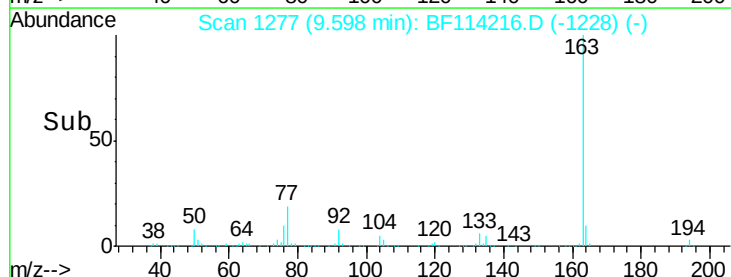
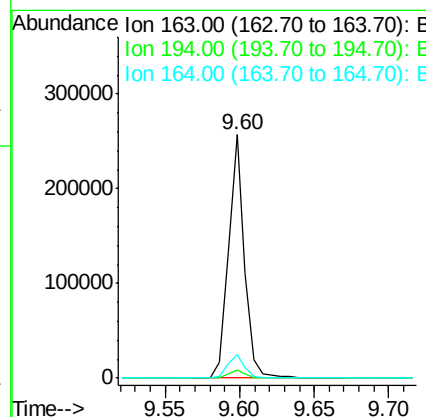
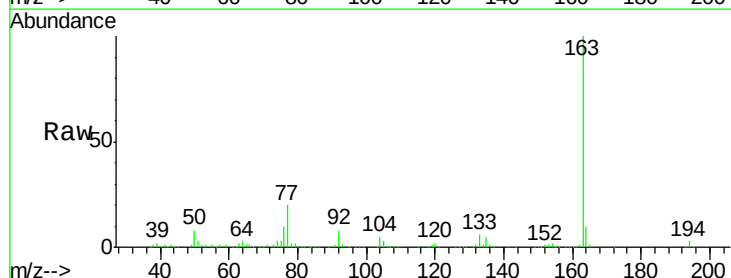
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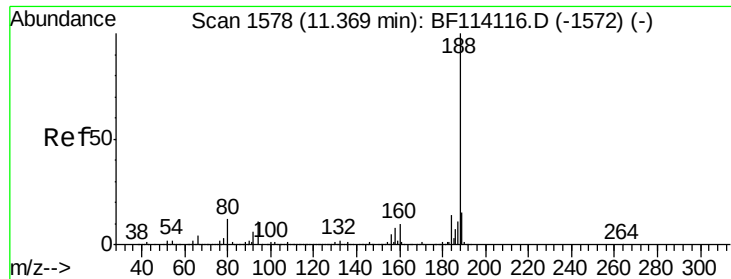
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#50  
Dimethylphthalate  
Concen: 5.878 ng  
RT: 9.60 min Scan# 1277  
Delta R.T. -0.01 min  
Lab File: BF114216.D  
Acq: 13 May 2019 2:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 3.5   | 3.4   | 5.0   |
| 164     | 9.8   | 8.2   | 12.2  |





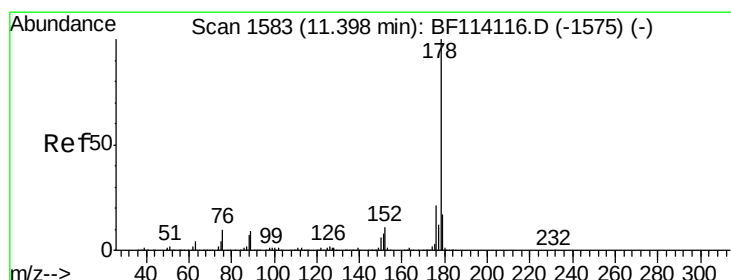
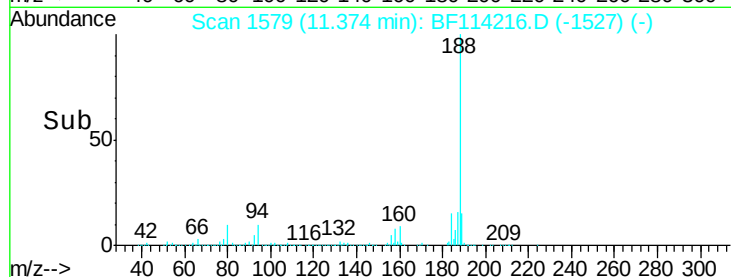
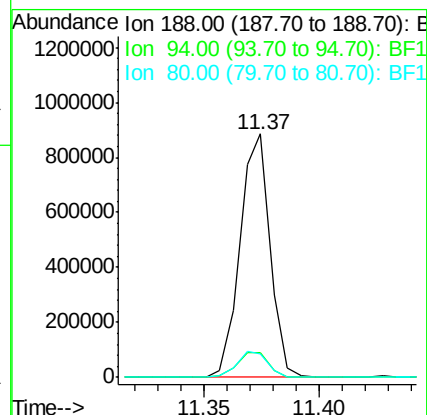
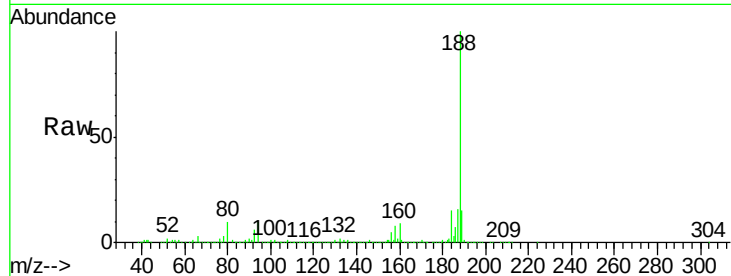
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Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.37 min Scan# 1579  
Delta R.T. 0.01 min  
Lab File: BF114216.D  
Acq: 13 May 2019 2:32

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS005-0612-01DL

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 188     | 100   |            |       |
| 94      | 10.0  | 8.4        | 12.6  |
| 80      | 9.9   | 9.2        | 13.8  |

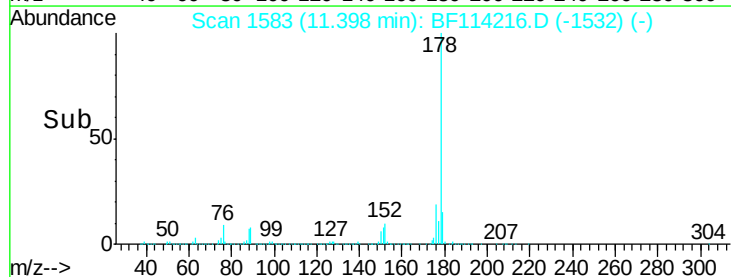
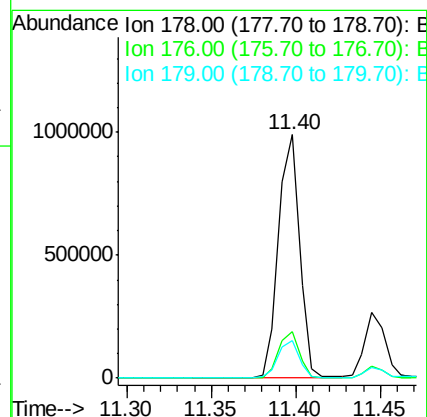
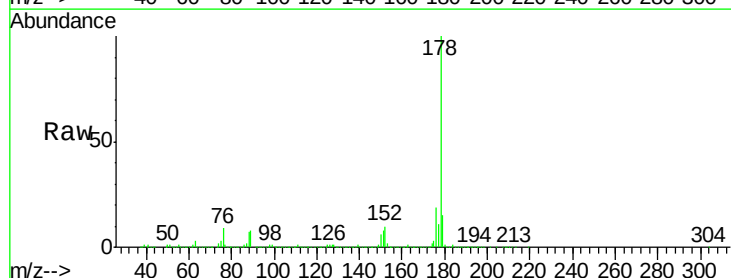
Manual Integrations  
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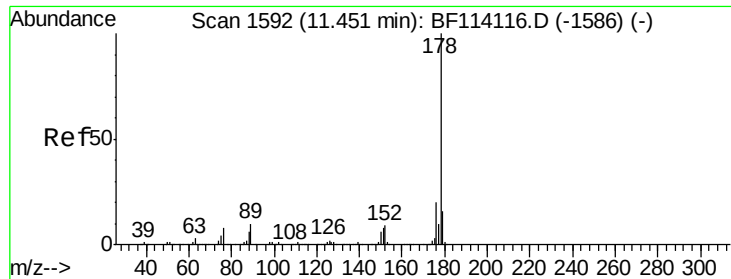


#71  
Phenanthrene  
Concen: 21.973 ng  
RT: 11.40 min Scan# 1583  
Delta R.T. -0.00 min  
Lab File: BF114216.D  
Acq: 13 May 2019 2:32

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 178     | 100   |            |       |
| 176     | 19.3  | 16.4       | 24.6  |
| 179     | 15.2  | 13.2       | 19.8  |







#72

Anthracene

Concen: 5.520 ng

RT: 11.44 min Scan# 1591

Delta R.T. -0.01 min

Lab File: BF114216.D

Acq: 13 May 2019 2:32

Instrument :

BNA\_F

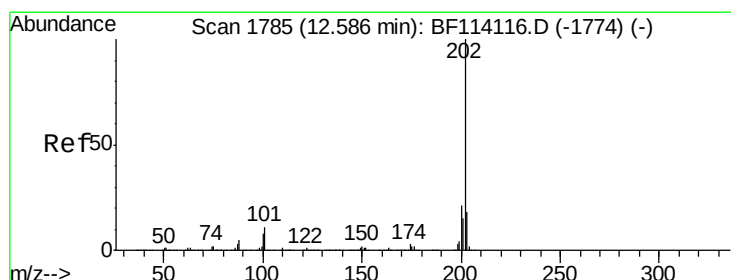
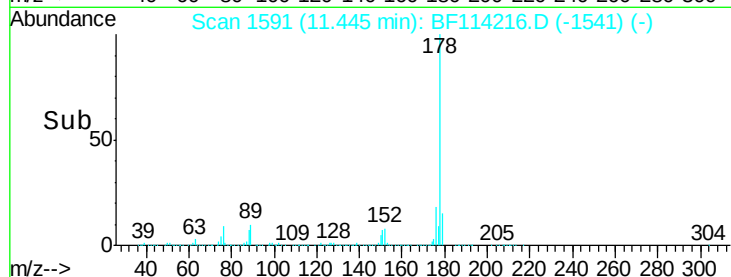
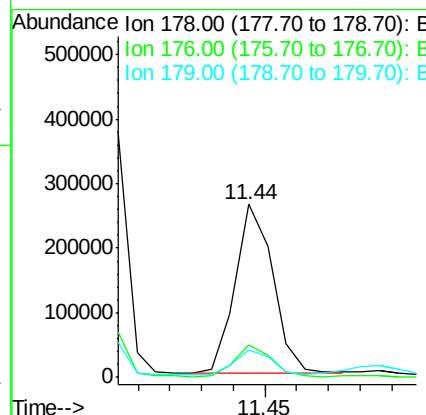
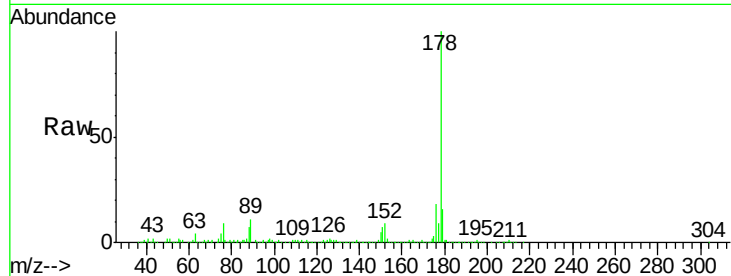
ClientSampleId :

P026-SS005-0612-01DL

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:178 | Resp: | 216806    |
| Ion Ratio   | Lower | Upper     |
| 178         | 100   |           |
| 176         | 18.4  | 15.8 23.8 |
| 179         | 15.9  | 13.0 19.4 |

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5/13/2019 8:37:50 PM



#75

Fluoranthene

Concen: 38.073 ng

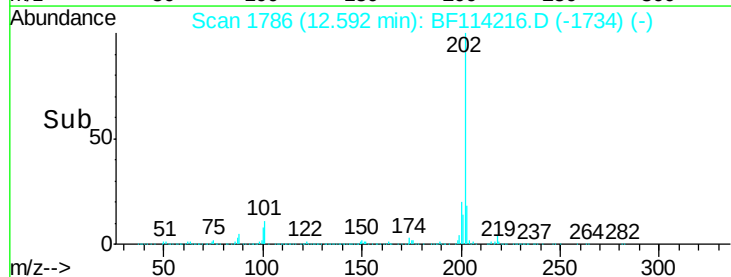
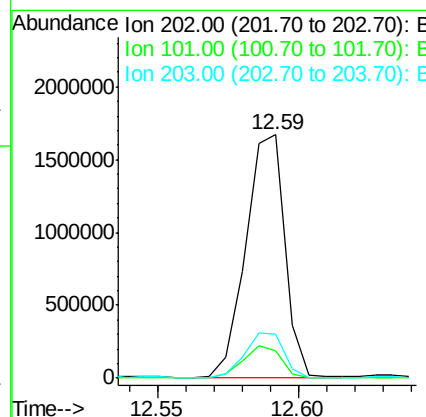
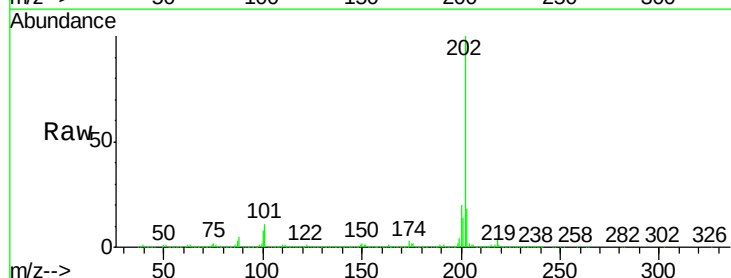
RT: 12.59 min Scan# 1786

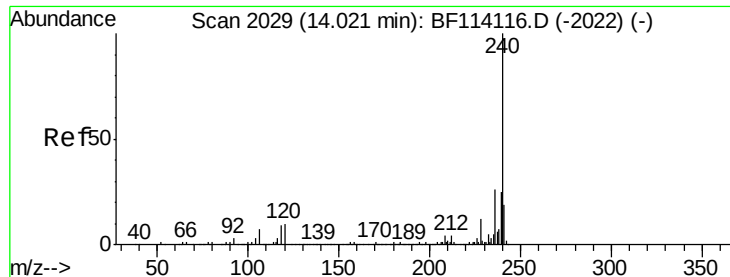
Delta R.T. 0.01 min

Lab File: BF114216.D

Acq: 13 May 2019 2:32

|             |       |          |
|-------------|-------|----------|
| Tgt Ion:202 | Resp: | 1603246  |
| Ion Ratio   | Lower | Upper    |
| 202         | 100   |          |
| 101         | 11.0  | 0.0 31.0 |
| 203         | 18.3  | 0.0 38.4 |





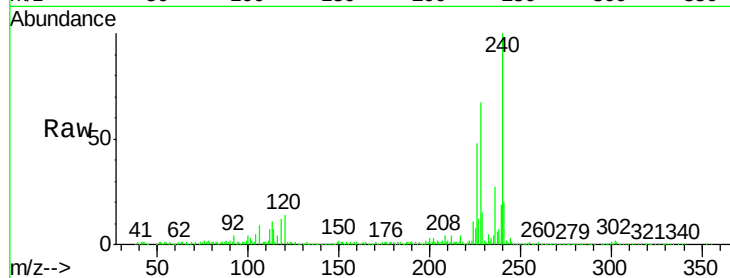
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.02 min Scan# 2028  
Delta R.T. -0.01 min  
Lab File: BF114216.D  
Acq: 13 May 2019 2:32

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS005-0612-01DL

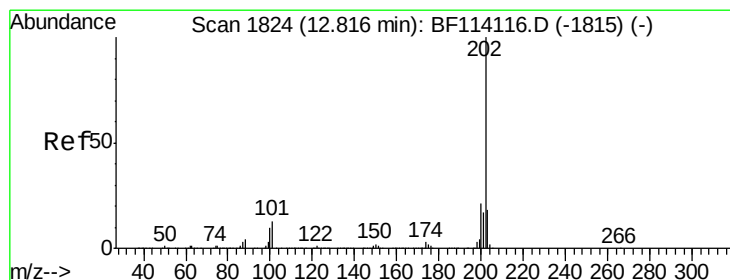
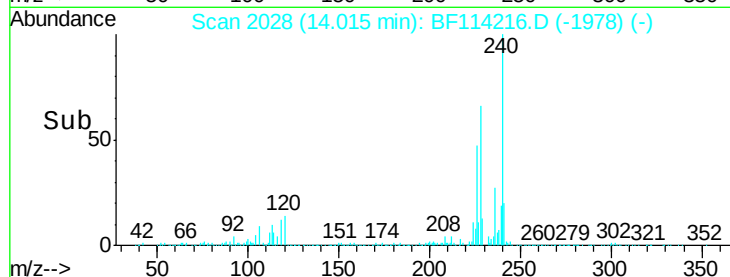
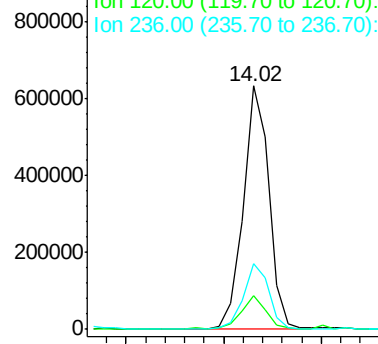
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 13.9  | 8.3   | 12.5# |
| 236     | 26.9  | 20.8  | 31.2  |

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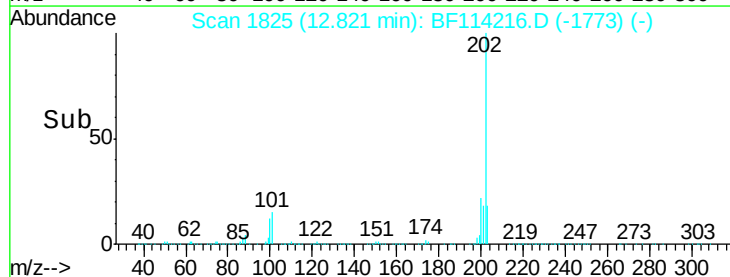
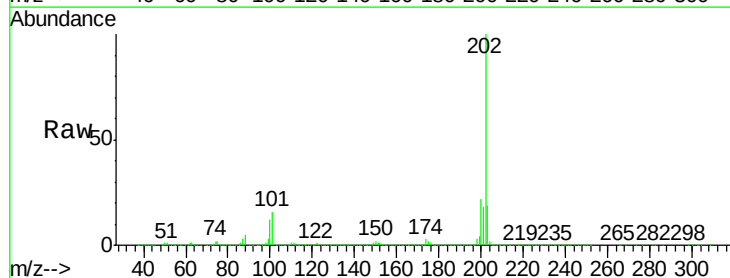
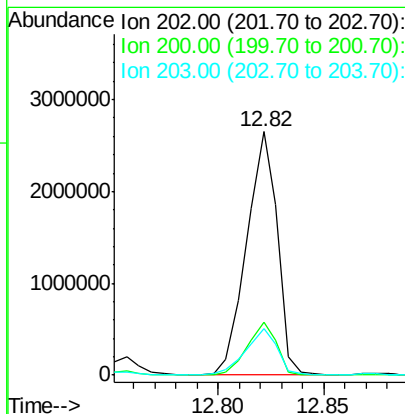
Abundance Ion 240.00 (239.70 to 240.70): E  
Ion 120.00 (119.70 to 120.70): E  
Ion 236.00 (235.70 to 236.70): E

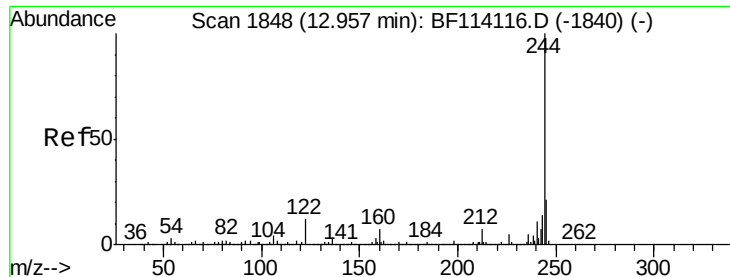


#78  
Pyrene  
Concen: 58.052 ng  
RT: 12.82 min Scan# 1825  
Delta R.T. 0.01 min  
Lab File: BF114216.D  
Acq: 13 May 2019 2:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.6  | 16.9  | 25.3  |
| 203     | 18.9  | 14.5  | 21.7  |

Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 200.00 (199.70 to 200.70): E  
Ion 203.00 (202.70 to 203.70): E





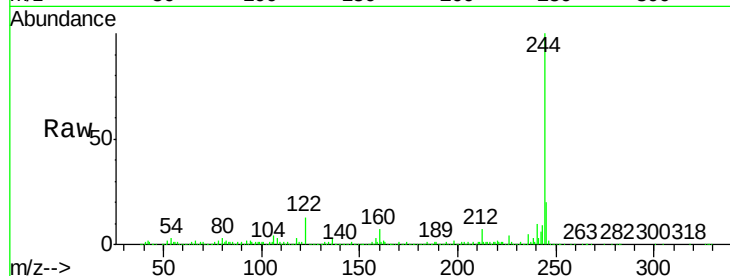
#79  
 Terphenyl-d14  
 Concen: 33.442 ng  
 RT: 12.95 min Scan# 1847  
 Delta R.T. -0.01 min  
 Lab File: BF114216.D  
 Acq: 13 May 2019 2:32

Instrument :  
 BNA\_F  
 ClientSampleId :  
 P026-SS005-0612-01DL

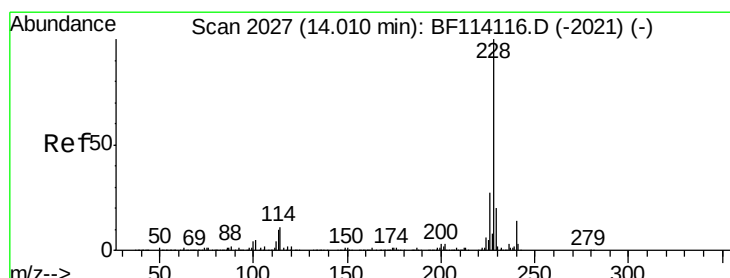
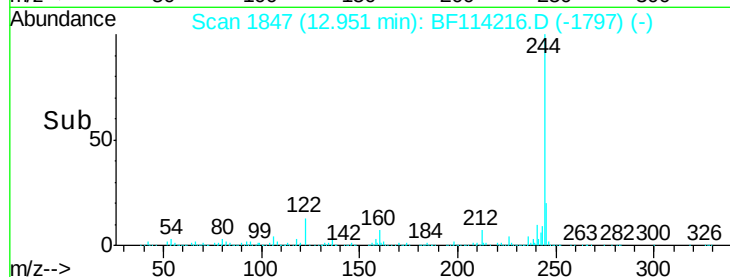
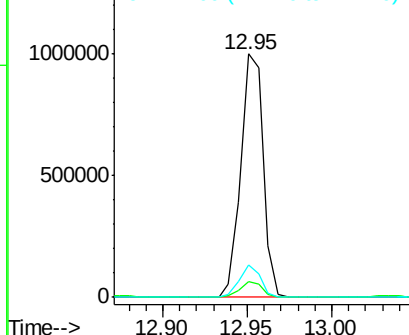
| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 244     | 100   |      |       |       |
| 212     | 6.6   |      | 5.8   | 8.6   |
| 122     | 13.4  |      | 9.4   | 14.2  |

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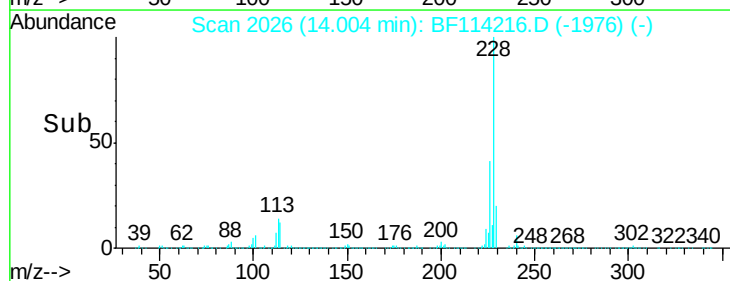
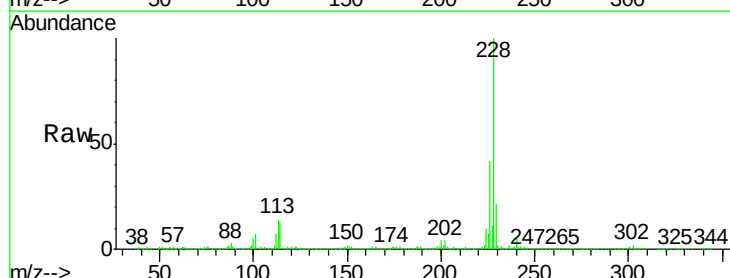
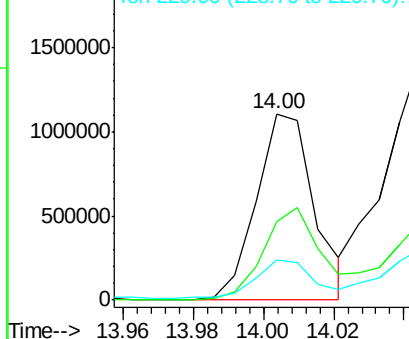
Abundance Ion 244.00 (243.70 to 244.70): E  
 Ion 212.00 (211.70 to 212.70): E  
 Ion 122.00 (121.70 to 122.70): E

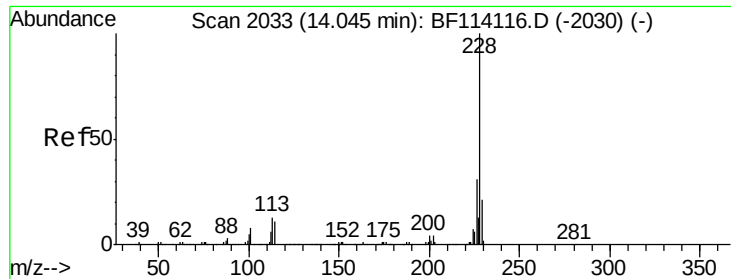


#81  
 Benzo(a)anthracene  
 Concen: 34.426 ng m  
 RT: 14.00 min Scan# 2026  
 Delta R.T. -0.01 min  
 Lab File: BF114216.D  
 Acq: 13 May 2019 2:32

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 228     | 100   |      |       |       |
| 226     | 42.1  |      | 22.2  | 33.2# |
| 229     | 21.3  |      | 16.4  | 24.6  |

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





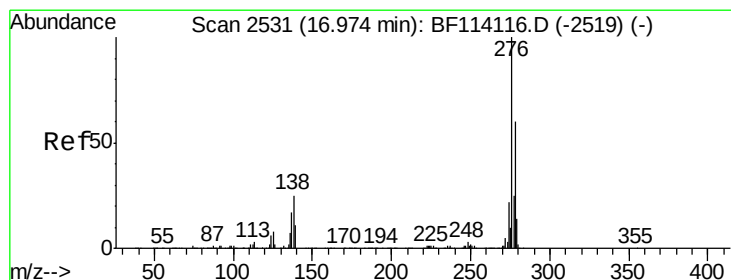
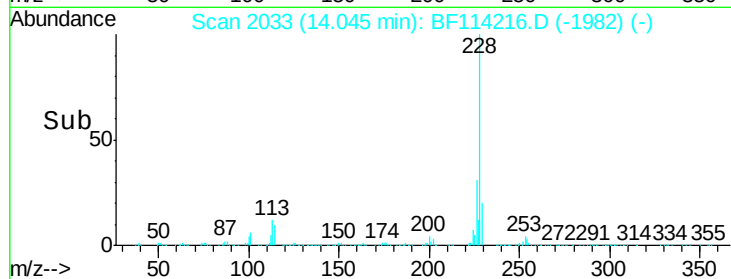
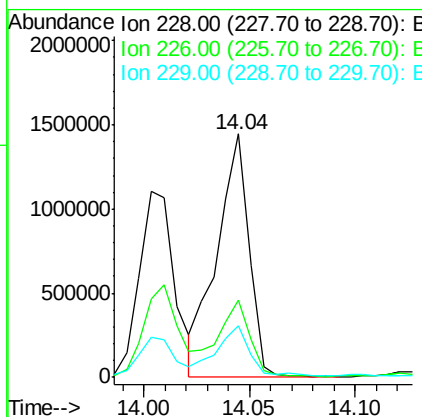
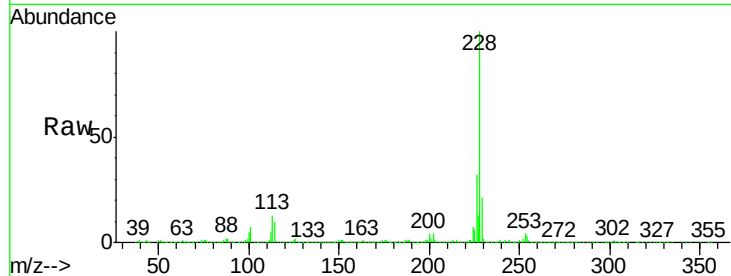
#83  
Chrysene  
Concen: 41.820 ng  
RT: 14.04 min Scan# 2033  
Delta R.T. -0.00 min  
Lab File: BF114216.D  
Acq: 13 May 2019 2:32

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS005-0612-01DL

Tot Ion:228 Resp: 1510496  
Ion Ratio Lower Upper  
228 100  
226 31.7 25.0 37.6  
229 21.0 17.0 25.6

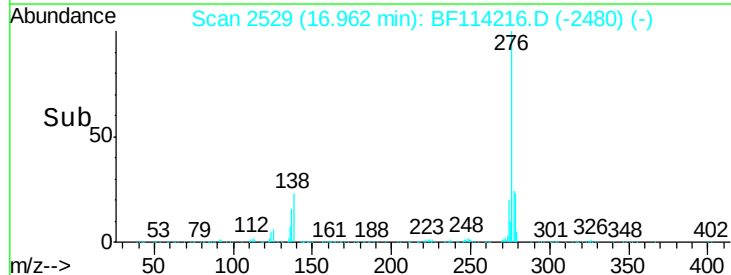
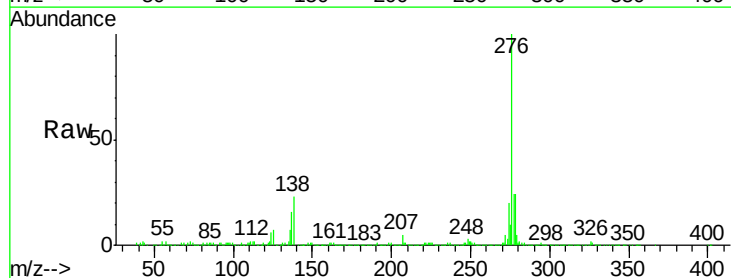
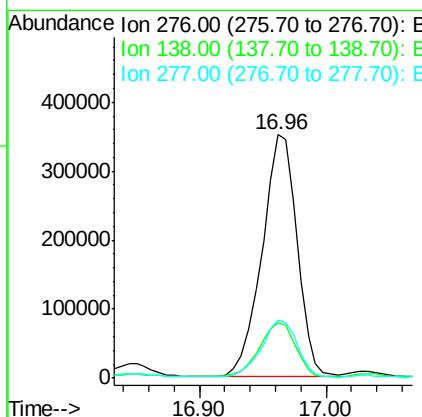
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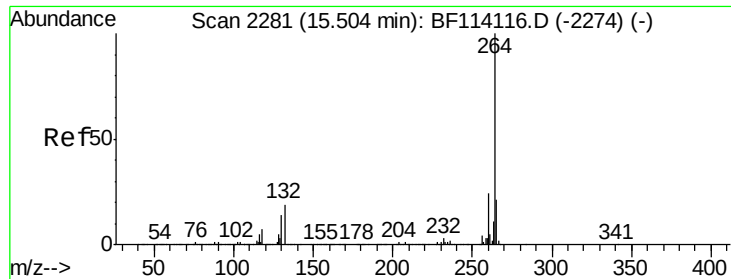
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5/13/2019 8:37:50 PM



#86  
Indeno(1,2,3-cd)pyrene  
Concen: 20.917 ng  
RT: 16.96 min Scan# 2529  
Delta R.T. -0.01 min  
Lab File: BF114216.D  
Acq: 13 May 2019 2:32

Tgt Ion:276 Resp: 667693  
Ion Ratio Lower Upper  
276 100  
138 23.1 20.2 30.2  
277 24.4 20.0 30.0





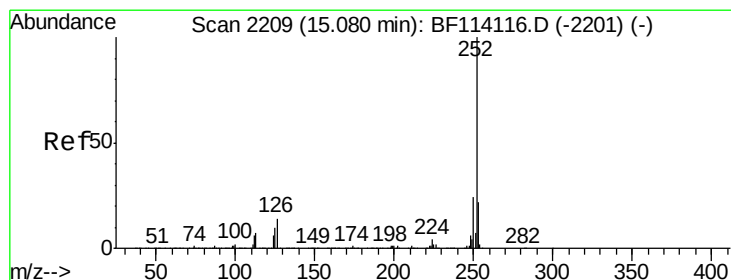
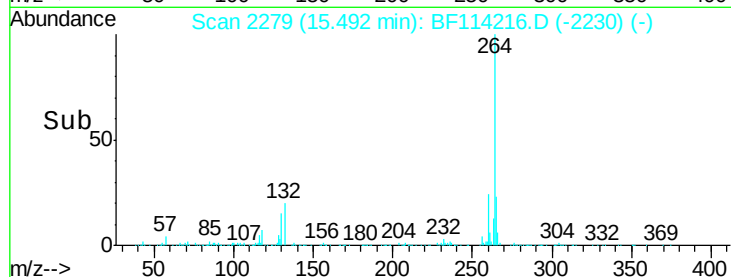
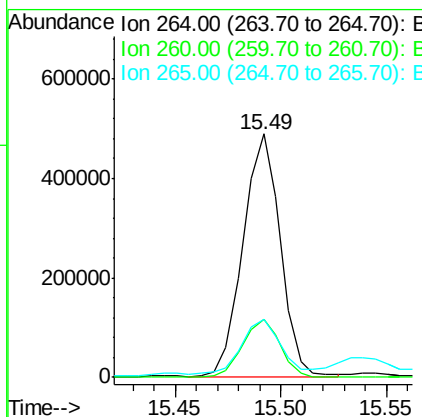
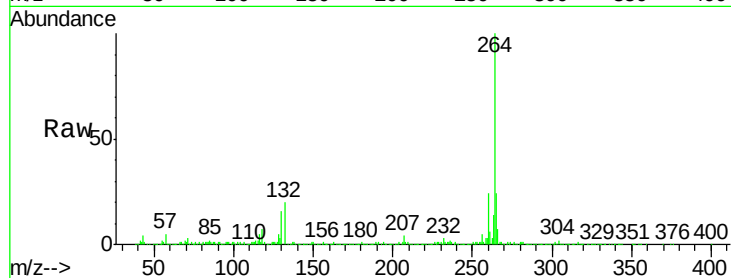
#87  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.49 min Scan# 2279  
Delta R.T. -0.01 min  
Lab File: BF114216.D  
Acq: 13 May 2019 2:32

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS005-0612-01DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.9  | 19.4  | 29.0  |
| 265     | 23.6  | 16.9  | 25.3  |

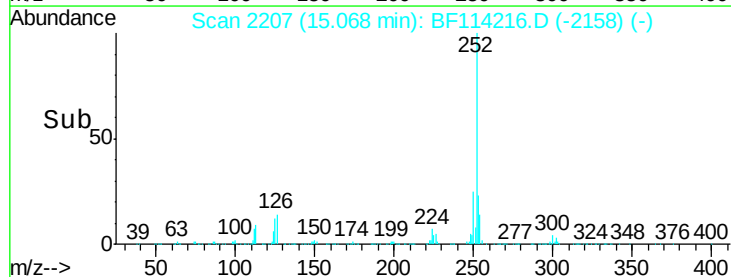
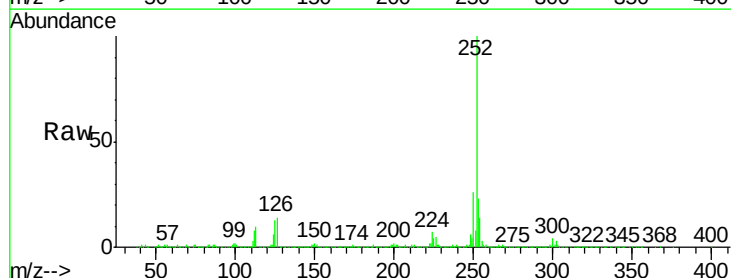
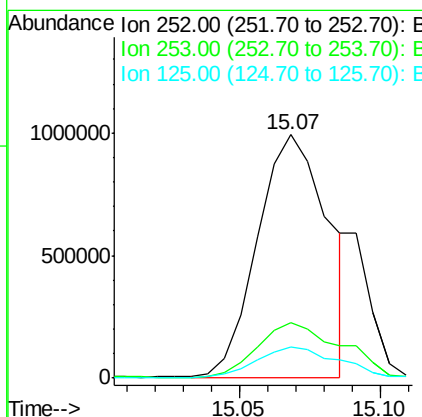
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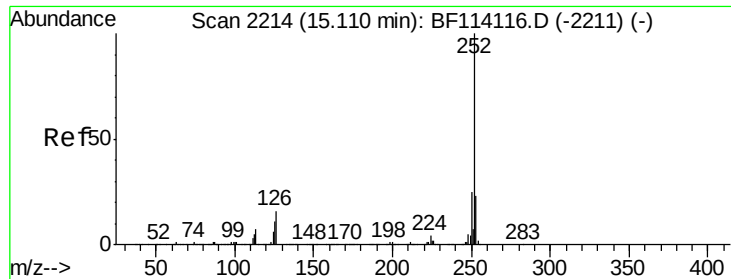
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#88  
Benzo(b)fluoranthene  
Concen: 45.520 ng m  
RT: 15.07 min Scan# 2207  
Delta R.T. -0.01 min  
Lab File: BF114216.D  
Acq: 13 May 2019 2:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.9  | 17.8  | 26.8  |
| 125     | 12.6  | 8.3   | 12.5# |





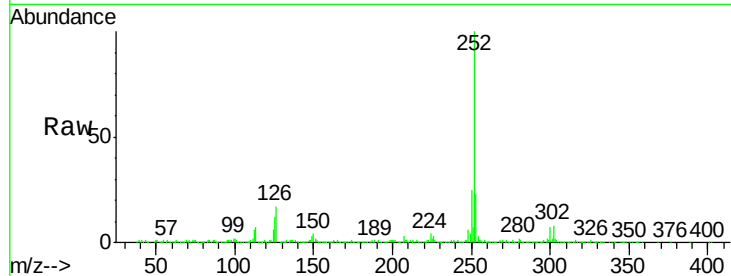
#89  
Benzo(k)fluoranthene  
Concen: 9.437 ng m  
RT: 15.09 min Scan# 2210  
Delta R.T. -0.02 min  
Lab File: BF114216.D  
Acq: 13 May 2019 2:32

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS005-0612-01DL

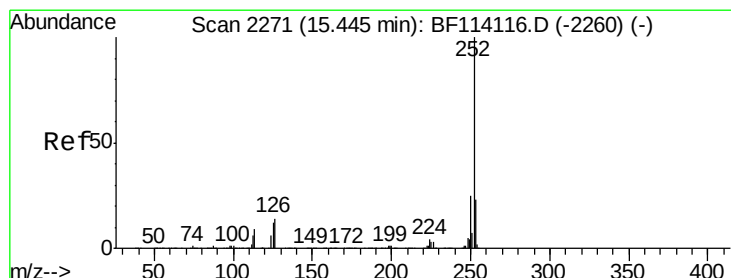
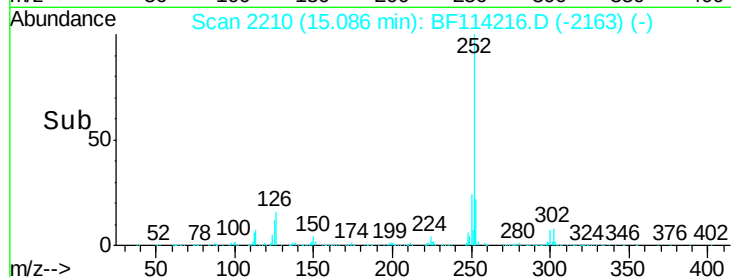
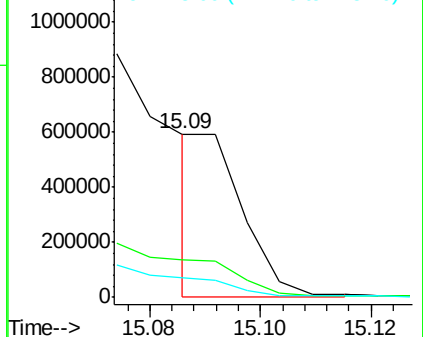
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.6  | 18.2  | 27.2  |
| 125     | 12.3  | 8.6   | 13.0  |

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5/13/2019 8:37:50 PM



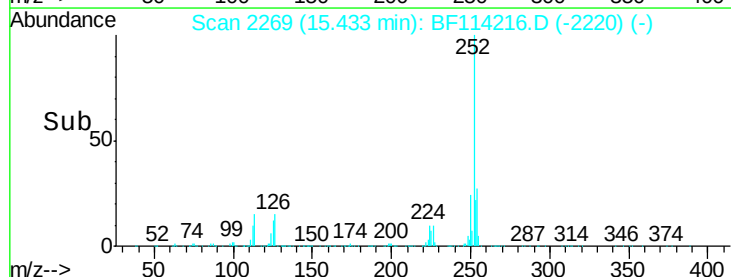
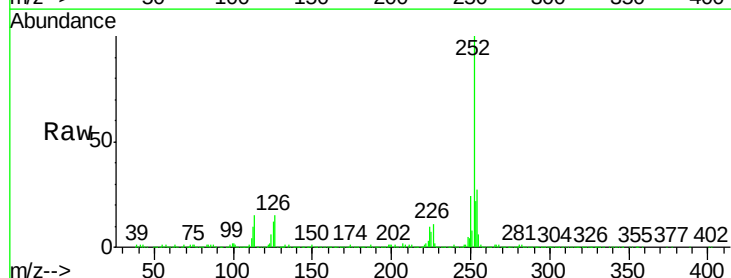
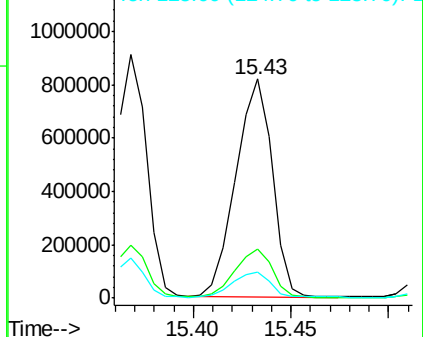
Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

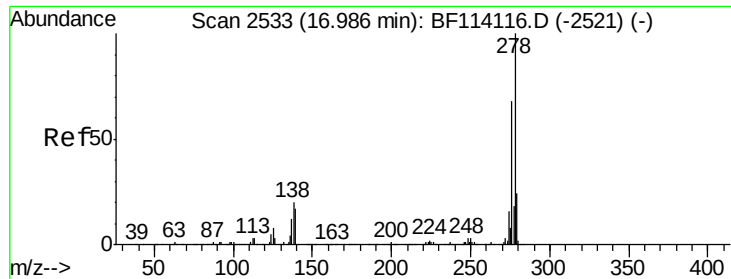


#90  
Benzo(a)pyrene  
Concen: 31.504 ng  
RT: 15.43 min Scan# 2269  
Delta R.T. -0.01 min  
Lab File: BF114216.D  
Acq: 13 May 2019 2:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.4  | 18.1  | 27.1  |
| 125     | 12.1  | 9.5   | 14.3  |

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





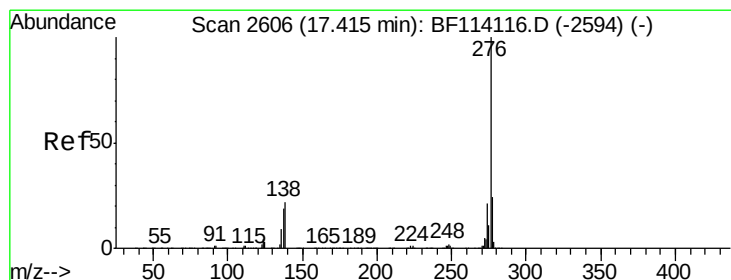
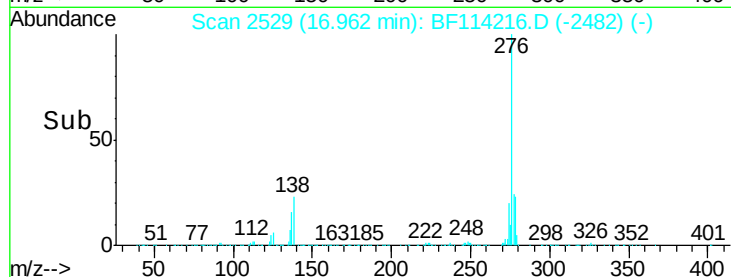
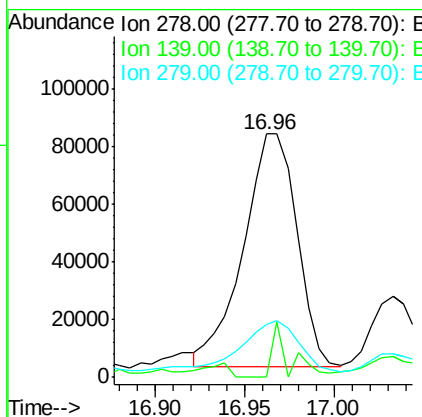
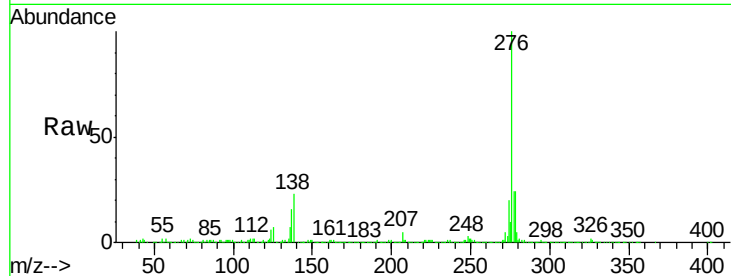
#91  
Dibenzo(a,h)anthracene  
Concen: 6.044 ng  
RT: 16.96 min Scan# 2529  
Delta R.T. -0.02 min  
Lab File: BF114216.D  
Acq: 13 May 2019 2:32

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS005-0612-01DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 0.0   | 13.5  | 20.3  |
| 279     | 21.8  | 19.0  | 28.6  |

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#92  
Benzo(g,h,i)perylene  
Concen: 26.482 ng  
RT: 17.42 min Scan# 2606  
Delta R.T. -0.00 min  
Lab File: BF114216.D  
Acq: 13 May 2019 2:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 23.3  | 19.0  | 28.4  |
| 138     | 23.8  | 17.8  | 26.6  |

