

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF032919\  
 Data File : BF113425.D  
 Acq On : 29 Mar 2019 20:51  
 Operator : JU/SJ  
 Sample : K2153-21 2X  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SP-1

Manual Integrations  
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Sohil  
 4/1/2019 5:46:35 PM

Quant Time: Mar 30 02:22:10 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF032519.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Mar 26 03:32:08 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.70  | 152  | 143349   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 7.98  | 136  | 569255   | 20.00  | ng    | 0.00     |
| 39) Acenaphthene-d10        | 9.73  | 164  | 281172   | 20.00  | ng    | 0.00     |
| 64) Phenanthrene-d10        | 11.21 | 188  | 588982   | 20.00  | ng    | 0.00     |
| 76) Chrysene-d12            | 13.84 | 240  | 497860   | 20.00  | ng    | 0.00     |
| 87) Perylene-d12            | 15.24 | 264  | 488229   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.31  | 112  | 407640   | 46.50  | ng    | 0.00     |
| 7) Phenol-d6                | 6.35  | 99   | 550863   | 49.67  | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 7.26  | 82   | 321799   | 33.55  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.52 | 330  | 163203   | 46.99  | ng    | -0.01    |
| 45) 2-Fluorobiphenyl        | 9.06  | 172  | 624358   | 21.66  | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.79 | 244  | 686984   | 30.41  | ng    | -0.01    |
| Target Compounds            |       |      |          |        |       | Qvalue   |
| 71) Phenanthrene            | 11.23 | 178  | 257089   | 8.790  | ng    | 98       |
| 72) Anthracene              | 11.29 | 178  | 67191    | 2.262  | ng    | 99       |
| 75) Fluoranthene            | 12.42 | 202  | 462842   | 13.998 | ng    | 99       |
| 78) Pyrene                  | 12.64 | 202  | 424821   | 12.314 | ng    | 98       |
| 81) Benzo(a)anthracene      | 13.83 | 228  | 227297   | 7.976  | ng    | 98       |
| 83) Chrysene                | 13.86 | 228  | 195135   | 6.741  | ng    | 97       |
| 86) Indeno(1,2,3-cd)pyrene  | 16.59 | 276  | 114234   | 4.598  | ng    | 97       |
| 88) Benzo(b)fluoranthene    | 14.84 | 252  | 285230m  | 9.405  | ng    |          |
| 89) Benzo(k)fluoranthene    | 14.87 | 252  | 83271m   | 3.126  | ng    |          |
| 90) Benzo(a)pyrene          | 15.18 | 252  | 198512   | 7.383  | ng    | 98       |
| 92) Benzo(g,h,i)perylene    | 17.00 | 276  | 109262   | 4.661  | ng    | 98       |

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

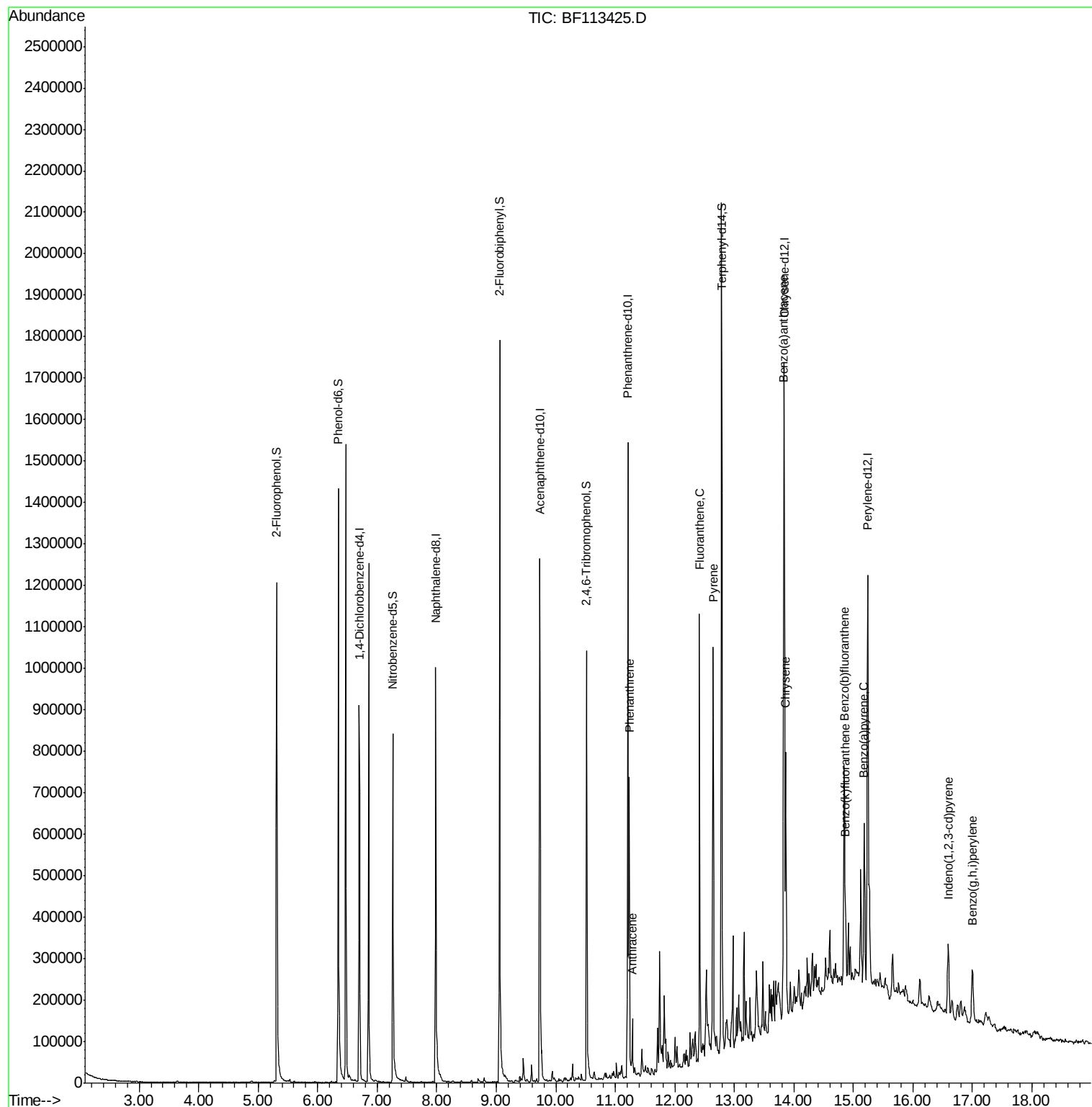
Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF032919\  
Data File : BF113425.D  
Acq On : 29 Mar 2019 20:51  
Operator : JU/SJ  
Sample : K2153-21 2X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SP-1

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Quant Time: Mar 30 02:22:10 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF032519.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Mar 26 03:32:08 2019  
Response via : Initial Calibration





#1

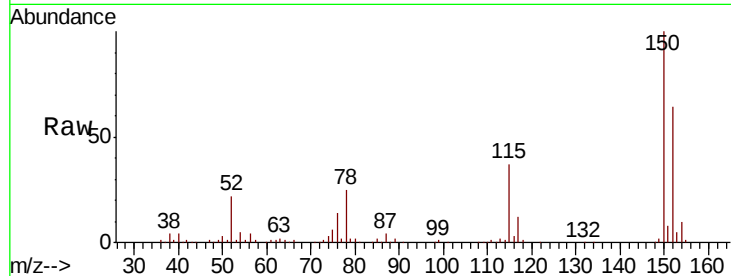
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.70 min Scan# 784  
Delta R.T. -0.01 min  
Lab File: BF113425.D  
Acq: 29 Mar 2019 20:51

Instrument :  
BNA\_F  
ClientSampleId :  
SP-1

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 156.0 | 124.7 | 187.1 |
| 115     | 58.3  | 46.0  | 69.0  |

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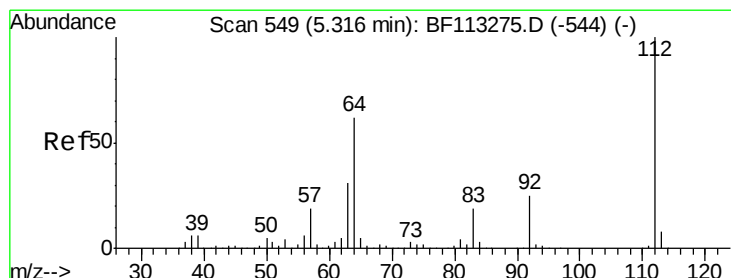
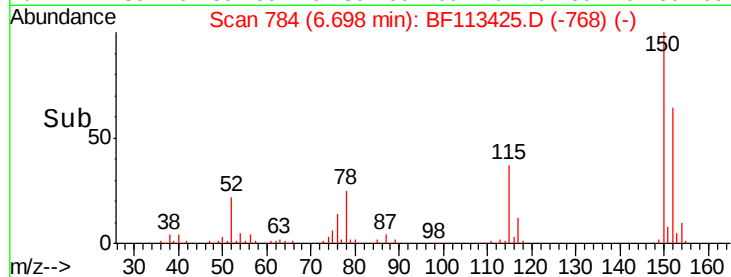
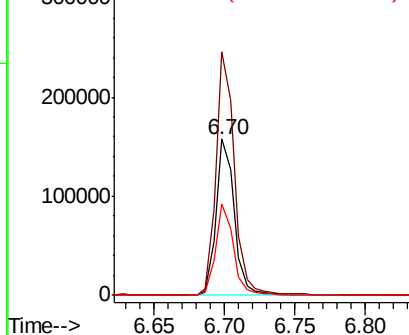


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

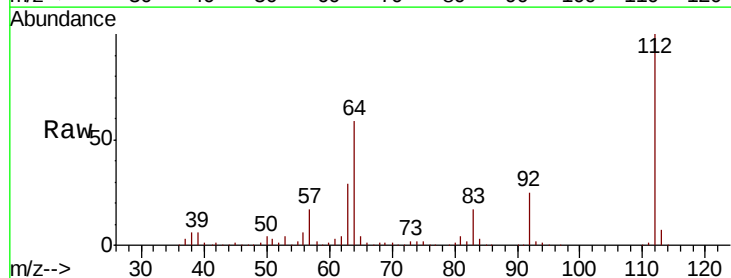
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 46.498 ng  
RT: 5.31 min Scan# 548  
Delta R.T. -0.01 min  
Lab File: BF113425.D  
Acq: 29 Mar 2019 20:51

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 58.9  | 49.2  | 73.8  |
| 63      | 29.5  | 24.9  | 37.3  |

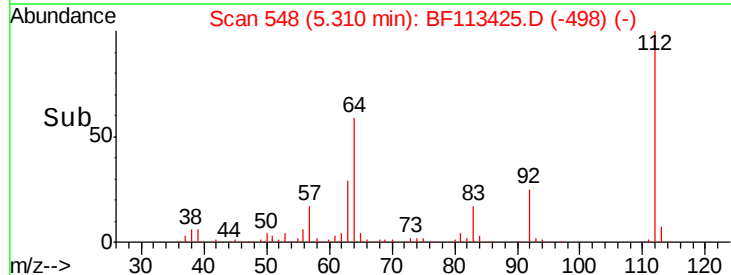
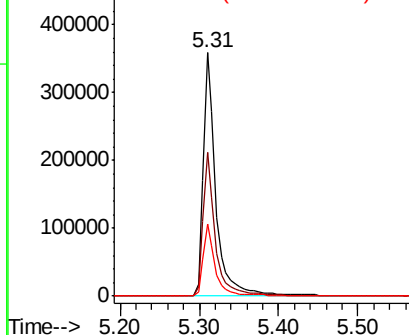


Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF1

Ion 63.00 (62.70 to 63.70): BF1





#7

Phenol-d6

Concen: 49.669 ng

RT: 6.35 min Scan# 724

Delta R.T. -0.01 min

Lab File: BF113425.D

Acq: 29 Mar 2019 20:51

Instrument :

BNA\_F

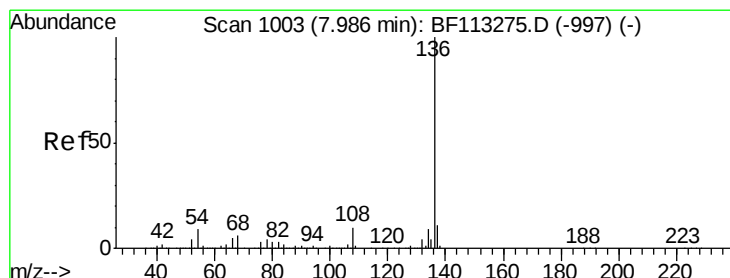
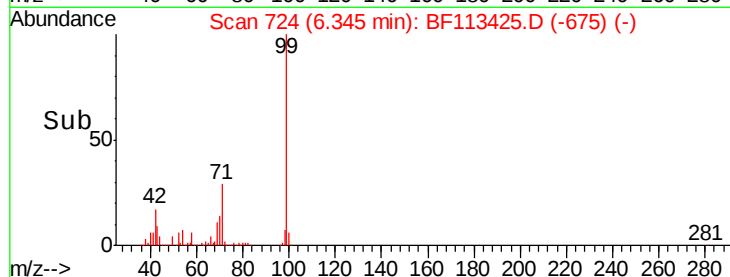
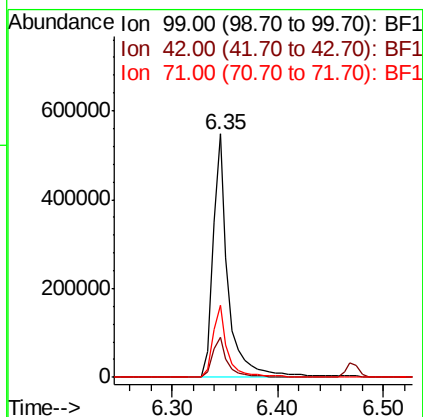
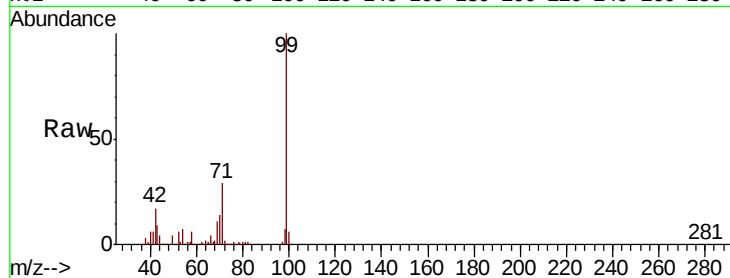
ClientSampleId :

SP-1

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 99    | Resp: | 550863 |
| Ion      | Ratio | Lower | Upper  |
| 99       | 100   |       |        |
| 42       | 16.7  | 14.8  | 22.2   |
| 71       | 29.4  | 24.9  | 37.3   |

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#21

Naphthalene-d8

Concen: 20.000 ng

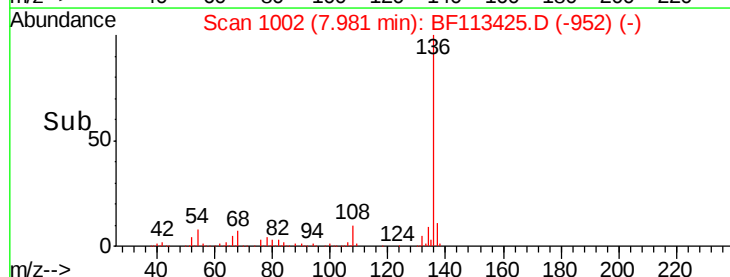
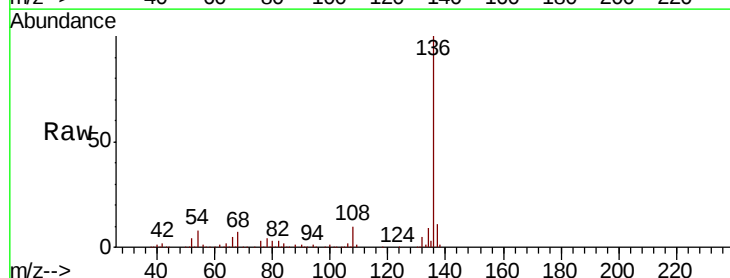
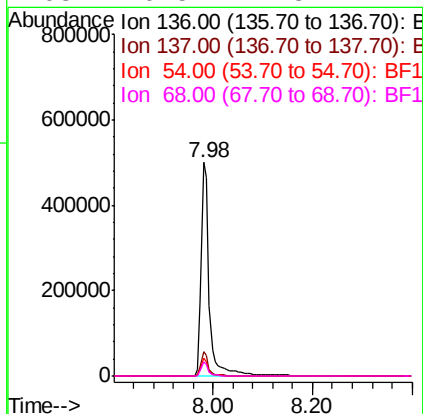
RT: 7.98 min Scan# 1002

Delta R.T. -0.01 min

Lab File: BF113425.D

Acq: 29 Mar 2019 20:51

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 136   | Resp: | 569255 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 11.3  | 8.9   | 13.3   |
| 54       | 8.5   | 7.0   | 10.6   |
| 68       | 6.5   | 4.8   | 7.2    |





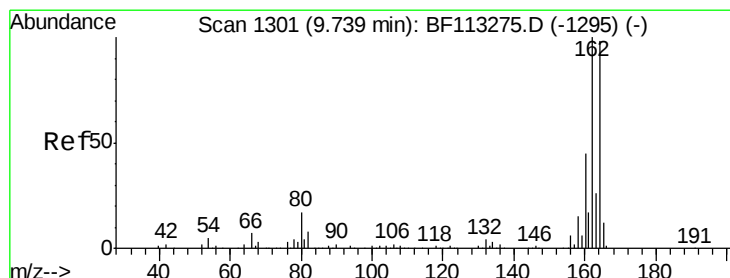
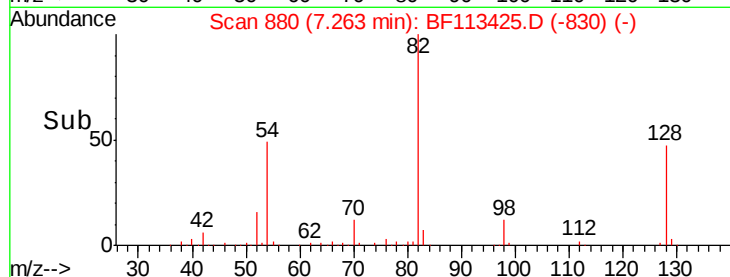
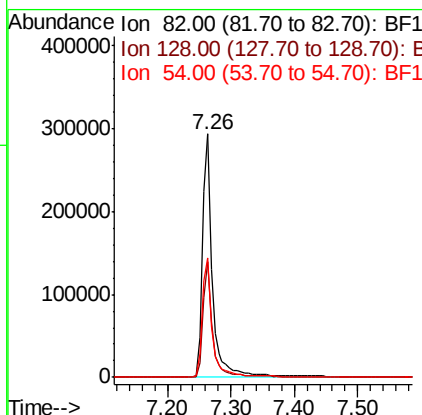
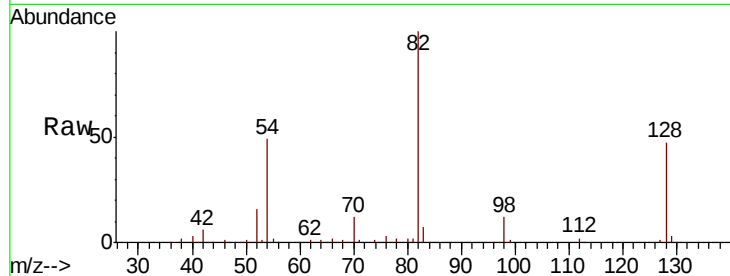
#23  
 Nitrobenzene-d5  
 Concen: 33.553 ng  
 RT: 7.26 min Scan# 880  
 Delta R.T. -0.01 min  
 Lab File: BF113425.D  
 Acq: 29 Mar 2019 20:51

Instrument :  
 BNA\_F  
 ClientSampled :  
 SP-1

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 82      | 100   | 321799 |       |       |
| 128     | 47.5  | 36.5   | 54.7  |       |
| 54      | 49.2  | 42.2   | 63.2  |       |

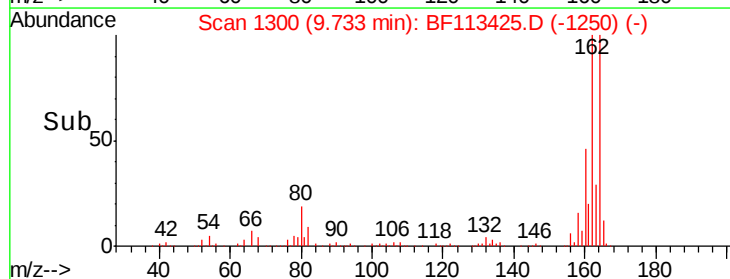
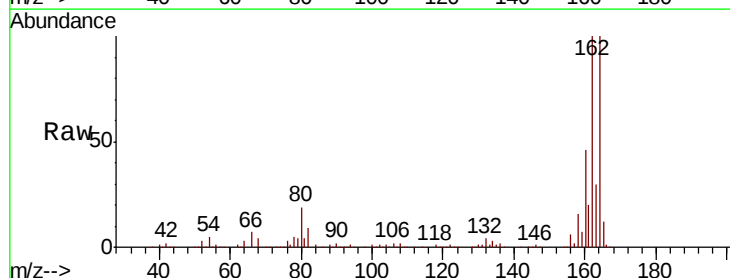
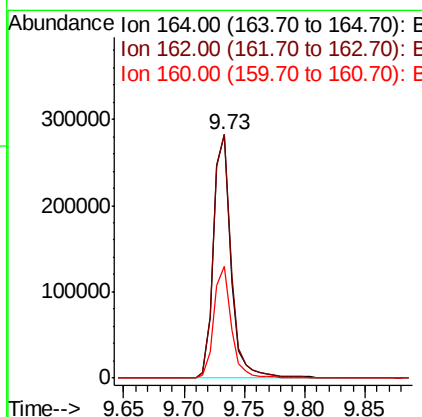
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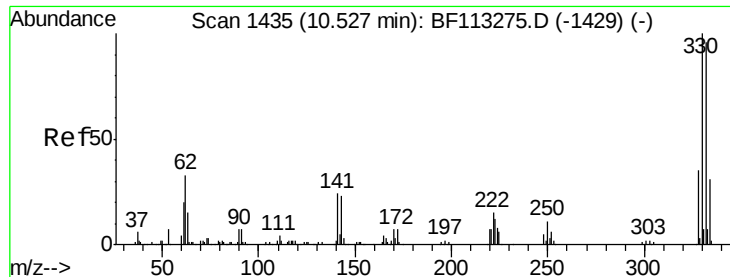
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#39  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 9.73 min Scan# 1300  
 Delta R.T. -0.01 min  
 Lab File: BF113425.D  
 Acq: 29 Mar 2019 20:51

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 164     | 100   | 281172 |       |       |
| 162     | 100.1 | 81.8   | 122.6 |       |
| 160     | 46.2  | 36.4   | 54.6  |       |





#42

2,4,6-Tribromophenol

Concen: 46.990 ng

RT: 10.52 min Scan# 1433

Delta R.T. -0.01 min

Lab File: BF113425.D

Acq: 29 Mar 2019 20:51

Instrument :

BNA\_F

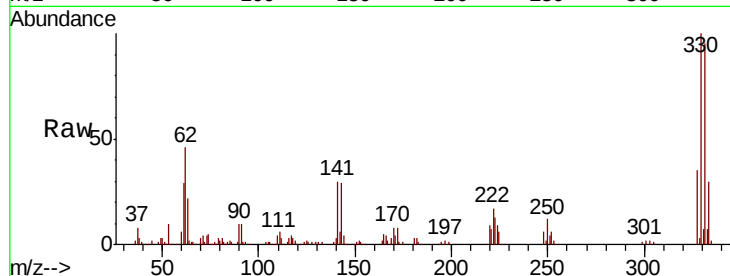
ClientSampled :

SP-1

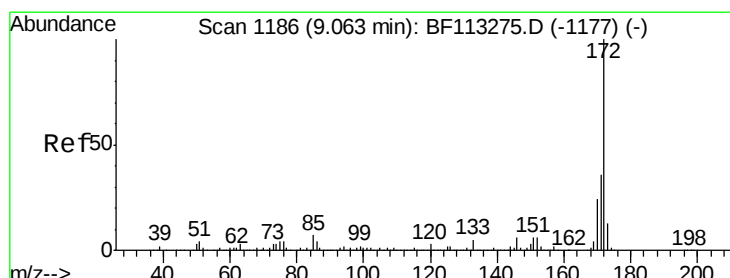
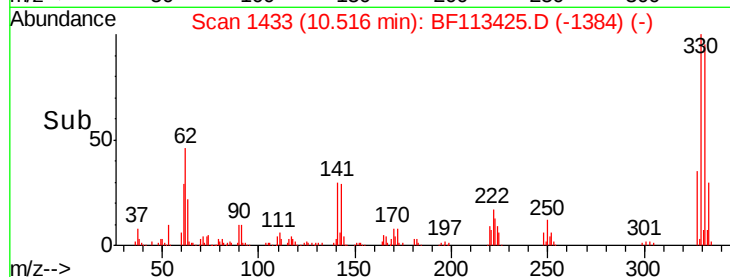
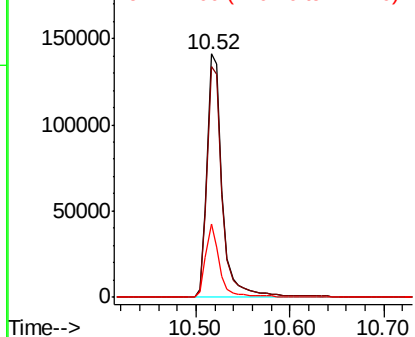
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 330   | Resp: | 163203 |
| Ion Ratio | Lower | Upper |        |
| 330       | 100   |       |        |
| 332       | 95.9  | 77.8  | 116.6  |
| 141       | 27.6  | 22.7  | 34.1   |

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Abundance Ion 329.80 (329.50 to 330.50): E  
Ion 331.80 (331.50 to 332.50): E  
Ion 141.00 (140.70 to 141.70): E



#45

2-Fluorobiphenyl

Concen: 21.662 ng

RT: 9.06 min Scan# 1185

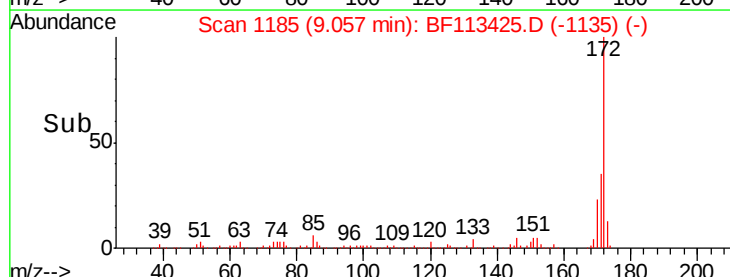
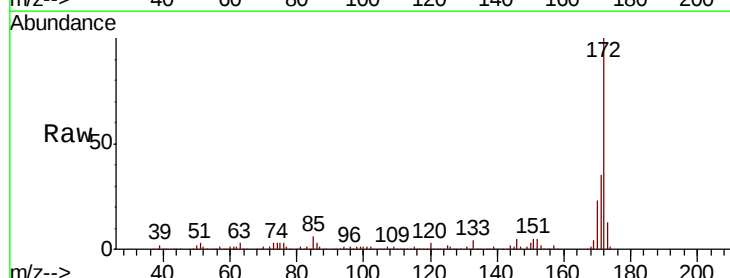
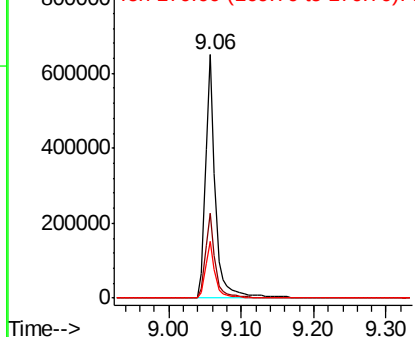
Delta R.T. -0.01 min

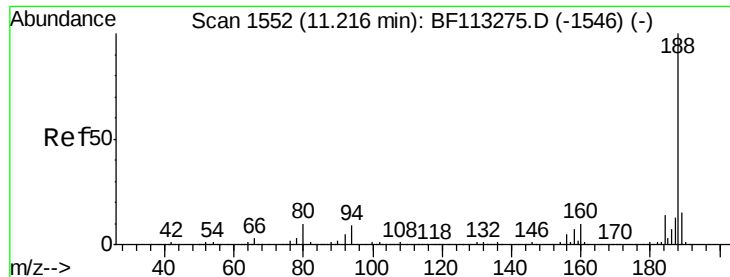
Lab File: BF113425.D

Acq: 29 Mar 2019 20:51

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 172   | Resp: | 624358 |
| Ion Ratio | Lower | Upper |        |
| 172       | 100   |       |        |
| 171       | 34.7  | 29.0  | 43.6   |
| 170       | 23.3  | 19.5  | 29.3   |

Abundance Ion 172.00 (171.70 to 172.70): E  
Ion 171.00 (170.70 to 171.70): E  
Ion 170.00 (169.70 to 170.70): E





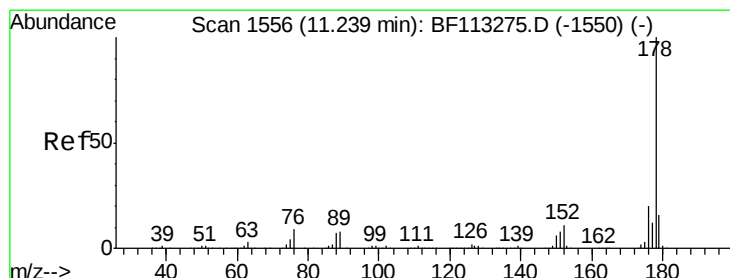
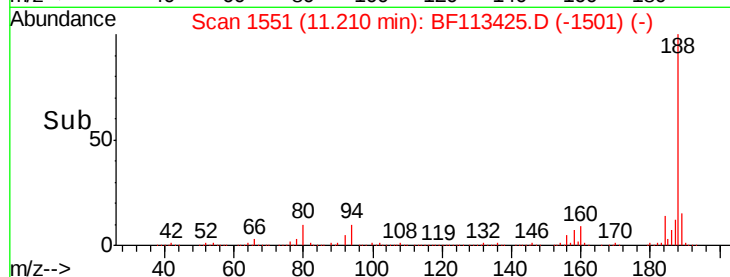
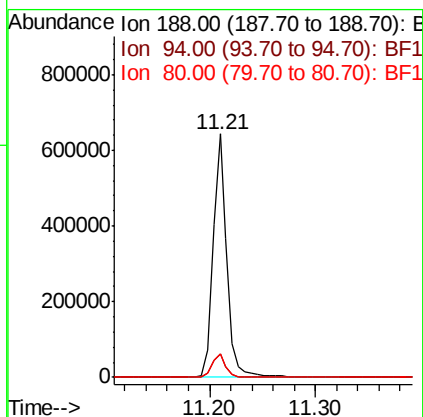
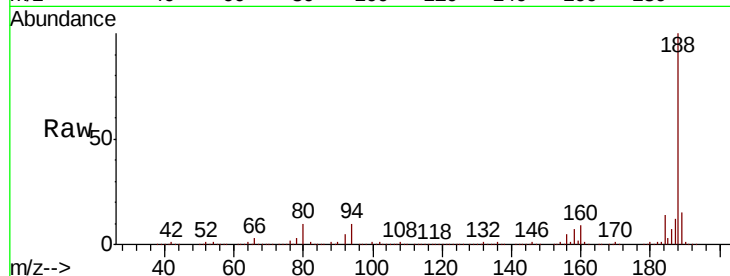
#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.21 min Scan# 1551  
Delta R.T. -0.01 min  
Lab File: BF113425.D  
Acq: 29 Mar 2019 20:51

Instrument :  
BNA\_F  
ClientSampleId :  
SP-1

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 188     | 100   | 588982 |       |       |
| 94      | 9.6   | 7.0    | 10.6  |       |
| 80      | 9.8   | 7.7    | 11.5  |       |

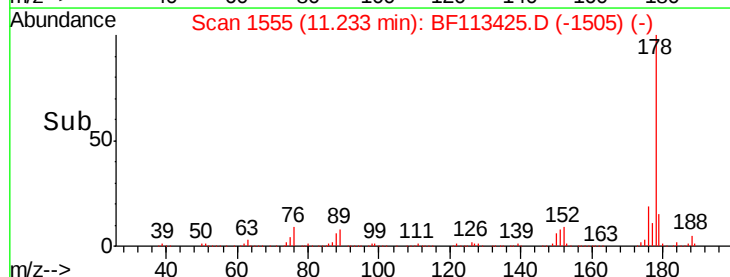
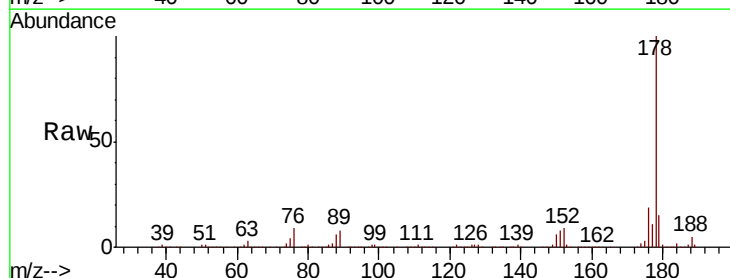
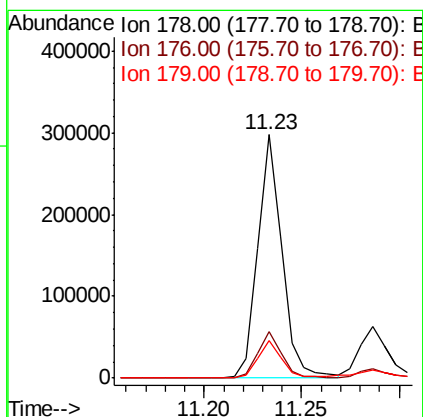
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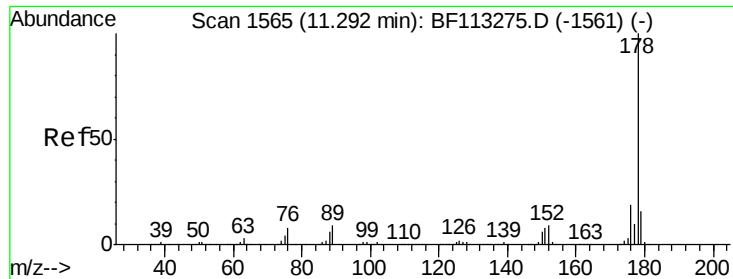
Sohil  
4/1/2019 5:46:35 PM



#71  
Phenanthrene  
Concen: 8.790 ng  
RT: 11.23 min Scan# 1555  
Delta R.T. -0.01 min  
Lab File: BF113425.D  
Acq: 29 Mar 2019 20:51

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 178     | 100   | 257089 |       |       |
| 176     | 19.2  | 16.2   | 24.2  |       |
| 179     | 15.4  | 12.7   | 19.1  |       |





#72

Anthracene

Concen: 2.262 ng

RT: 11.29 min Scan# 1564

Delta R.T. -0.01 min

Lab File: BF113425.D

Acq: 29 Mar 2019 20:51

Instrument :

BNA\_F

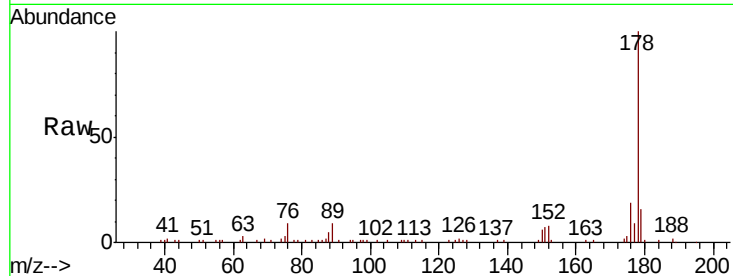
ClientSampleId :

SP-1

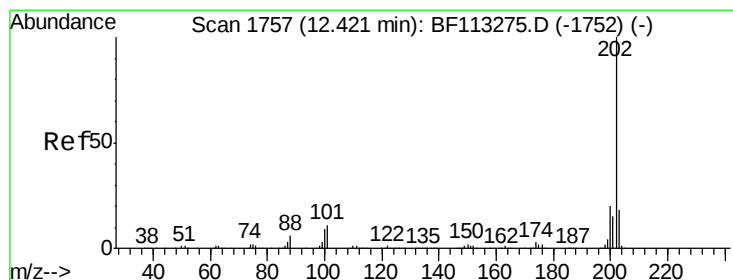
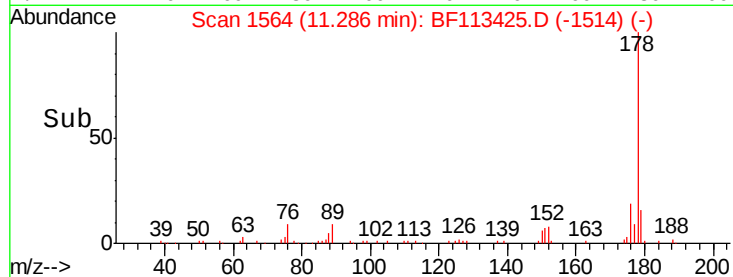
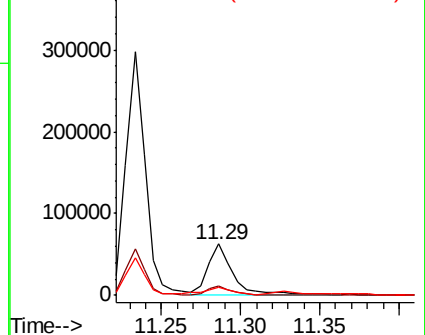
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 67191 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 176       | 19.0  | 15.4  | 23.2  |
| 179       | 16.3  | 12.8  | 19.2  |

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Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 176.00 (175.70 to 176.70): E  
Ion 179.00 (178.70 to 179.70): E



#75

Fluoranthene

Concen: 13.998 ng

RT: 12.42 min Scan# 1756

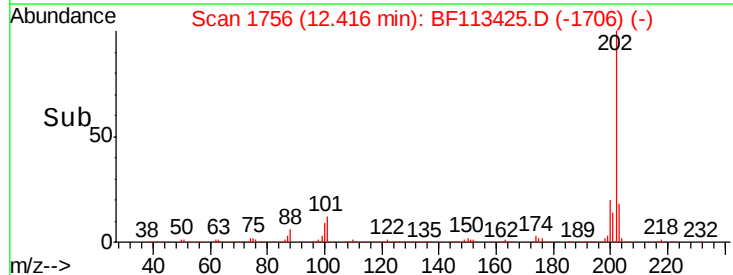
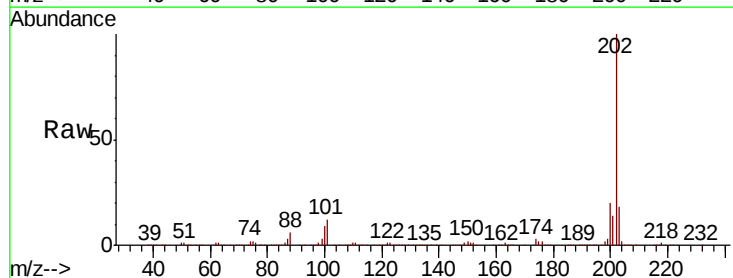
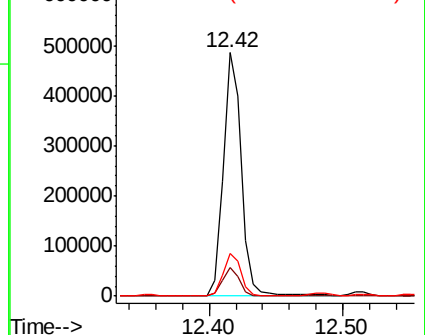
Delta R.T. -0.01 min

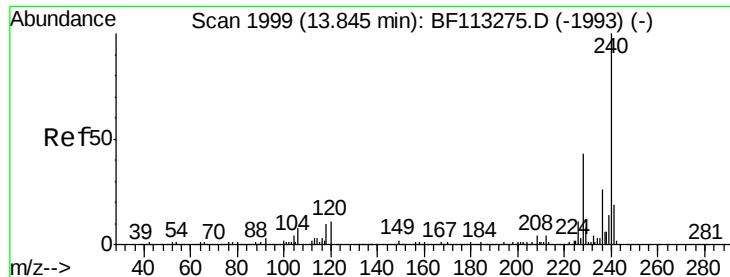
Lab File: BF113425.D

Acq: 29 Mar 2019 20:51

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 462842 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 11.8  | 0.0   | 31.4   |
| 203       | 17.8  | 0.0   | 38.0   |

Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 203.00 (202.70 to 203.70): E





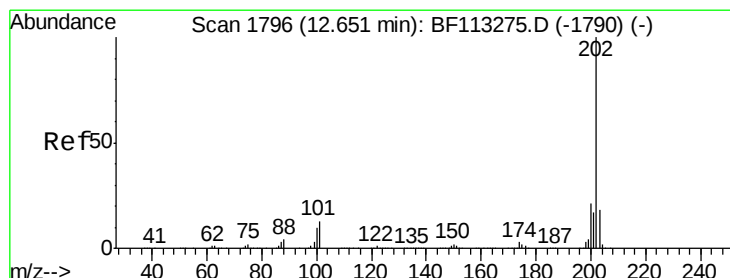
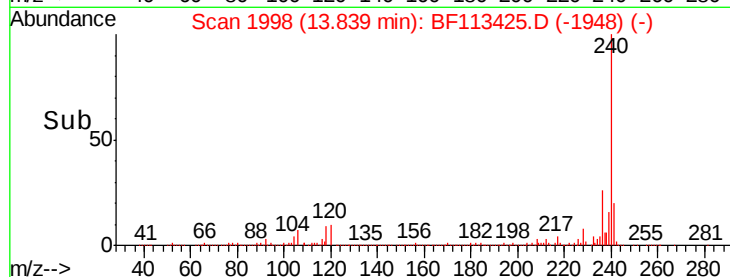
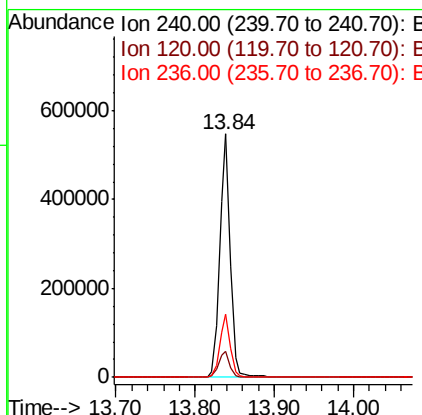
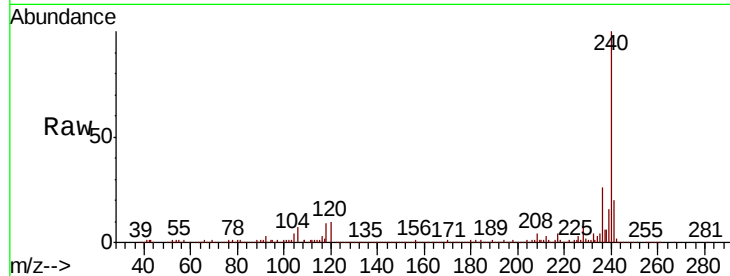
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 13.84 min Scan# 1998  
Delta R.T. -0.01 min  
Lab File: BF113425.D  
Acq: 29 Mar 2019 20:51

Instrument :  
BNA\_F  
ClientSampled :  
SP-1

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 240     | 100   | 497860 |       |       |
| 120     | 10.5  | 8.8    | 13.2  |       |
| 236     | 26.1  | 20.9   | 31.3  |       |

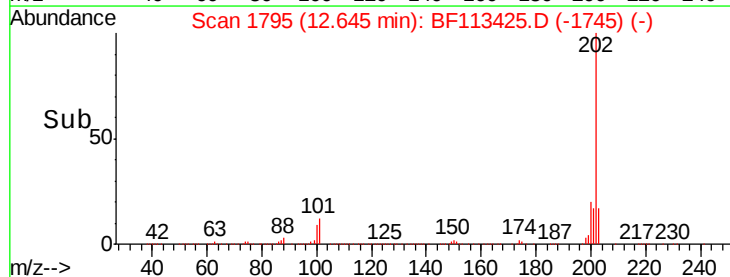
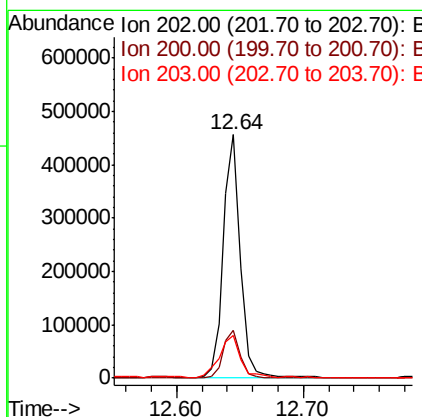
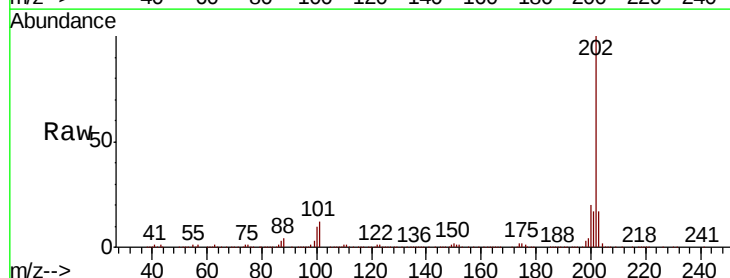
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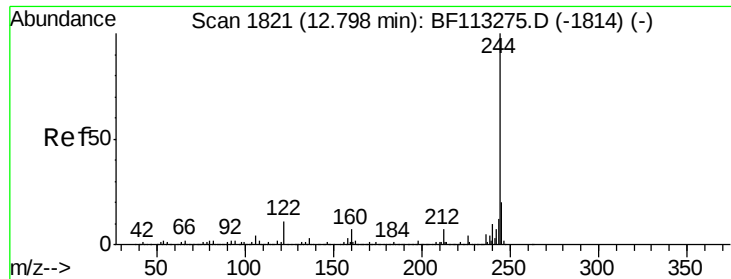
Sohil  
4/1/2019 5:46:35 PM



#78  
Pyrene  
Concen: 12.314 ng  
RT: 12.64 min Scan# 1795  
Delta R.T. -0.01 min  
Lab File: BF113425.D  
Acq: 29 Mar 2019 20:51

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 202     | 100   | 424821 |       |       |
| 200     | 19.9  | 16.8   | 25.2  |       |
| 203     | 17.4  | 14.4   | 21.6  |       |





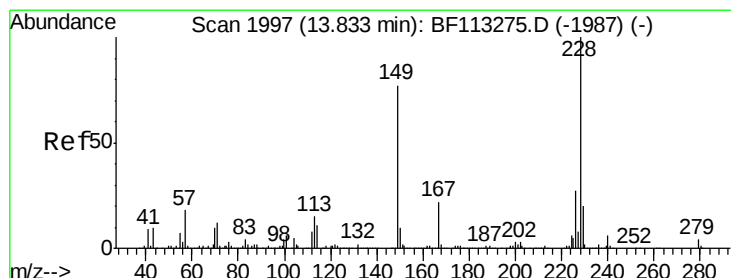
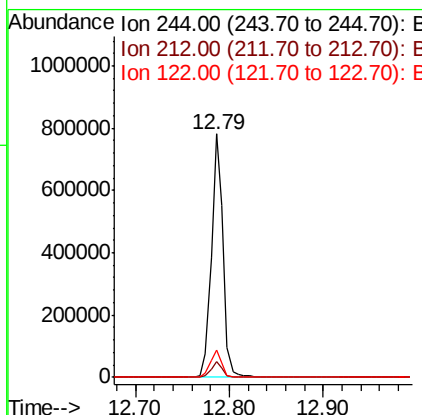
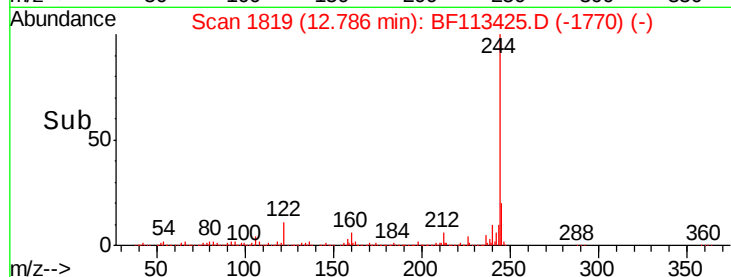
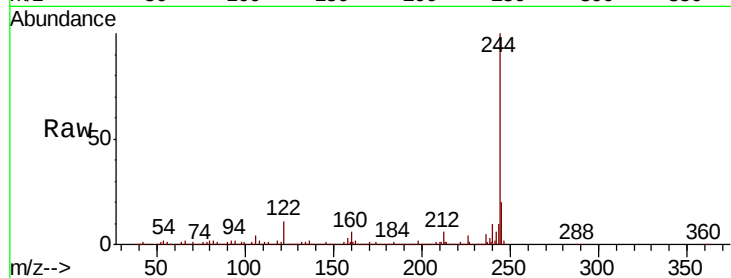
#79  
 Terphenyl-d14  
 Concen: 30.415 ng  
 RT: 12.79 min Scan# 1819  
 Delta R.T. -0.01 min  
 Lab File: BF113425.D  
 Acq: 29 Mar 2019 20:51

Instrument :  
 BNA\_F  
 ClientSampled :  
 SP-1

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.4   | 5.5   | 8.3   |
| 122     | 11.3  | 8.6   | 13.0  |

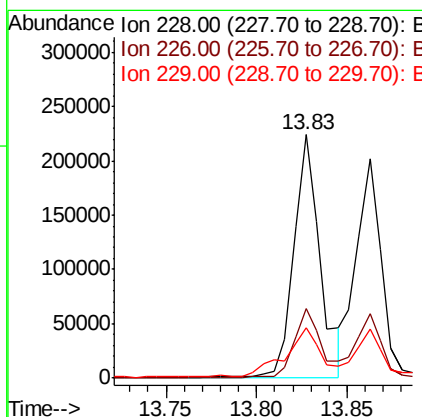
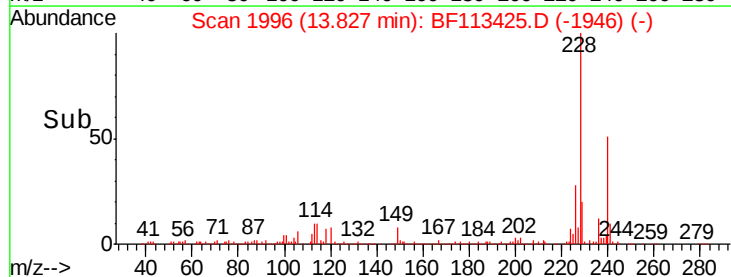
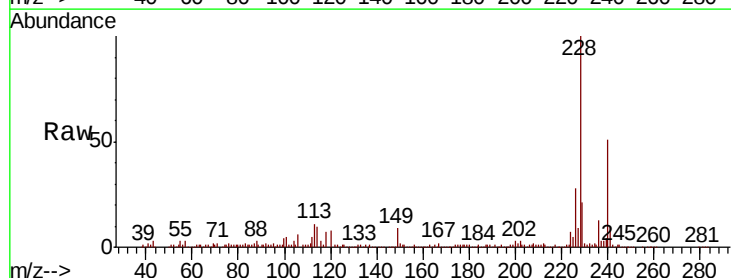
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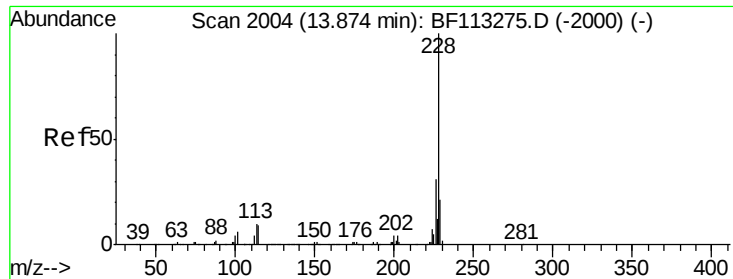
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#81  
 Benzo(a)anthracene  
 Concen: 7.976 ng  
 RT: 13.83 min Scan# 1996  
 Delta R.T. -0.01 min  
 Lab File: BF113425.D  
 Acq: 29 Mar 2019 20:51

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.4  | 21.8  | 32.8  |
| 229     | 20.7  | 16.2  | 24.4  |





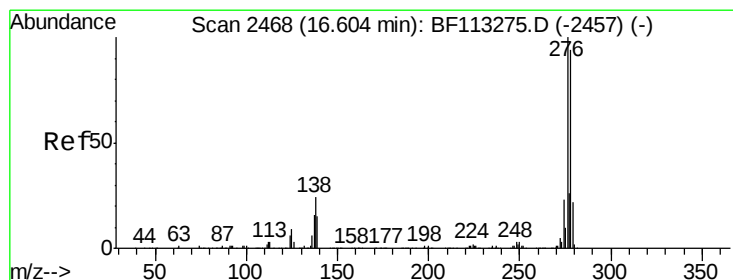
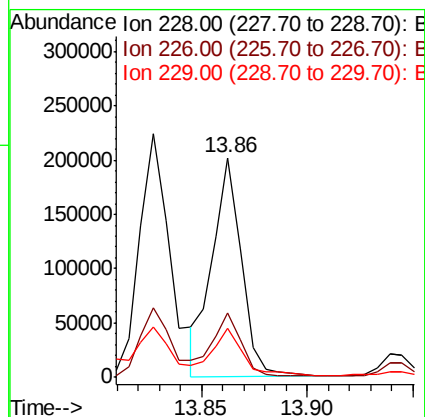
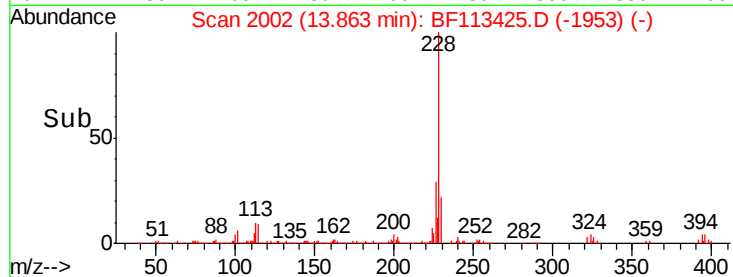
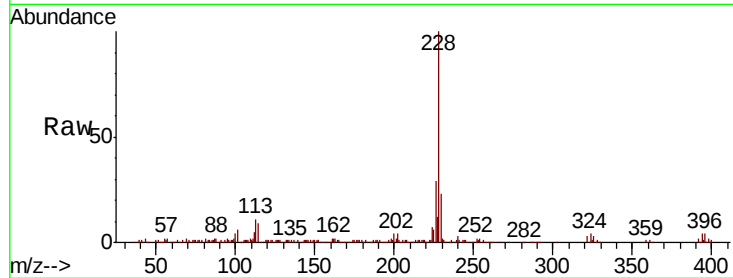
#83  
Chrysene  
Concen: 6.741 ng  
RT: 13.86 min Scan# 2002  
Delta R.T. -0.01 min  
Lab File: BF113425.D  
Acq: 29 Mar 2019 20:51

Instrument :  
BNA\_F  
ClientSampled :  
SP-1

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 228     | 100   | 195135 |       |       |
| 226     | 29.2  | 24.3   | 36.5  |       |
| 229     | 22.5  | 16.3   | 24.5  |       |

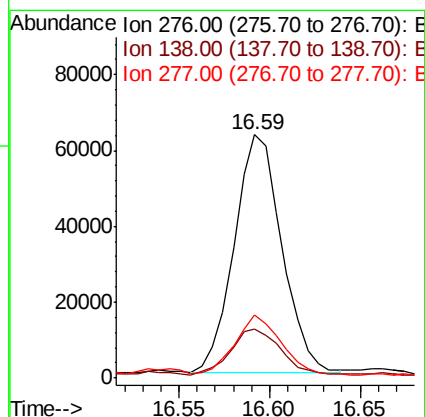
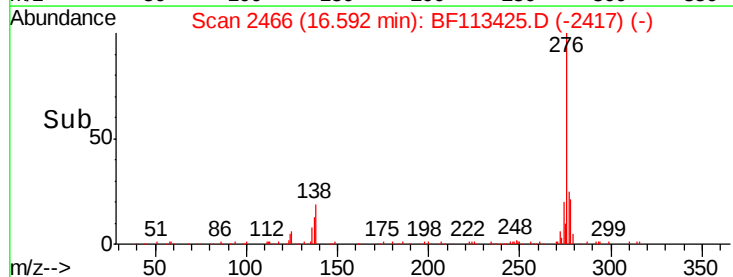
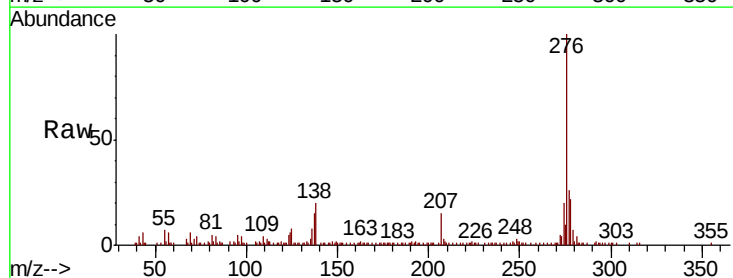
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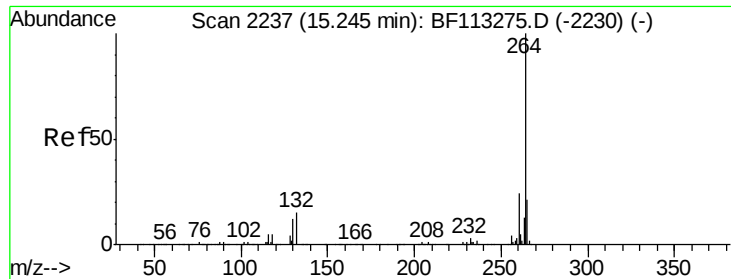
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#86  
Indeno(1,2,3-cd)pyrene  
Concen: 4.598 ng  
RT: 16.59 min Scan# 2466  
Delta R.T. -0.01 min  
Lab File: BF113425.D  
Acq: 29 Mar 2019 20:51

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 276     | 100   | 114234 |       |       |
| 138     | 20.4  | 18.1   | 27.1  |       |
| 277     | 24.5  | 20.2   | 30.4  |       |





#87

Perylene-d12

Concen: 20.000 ng

RT: 15.24 min Scan# 2236

Delta R.T. -0.01 min

Lab File: BF113425.D

Acq: 29 Mar 2019 20:51

Instrument :

BNA\_F

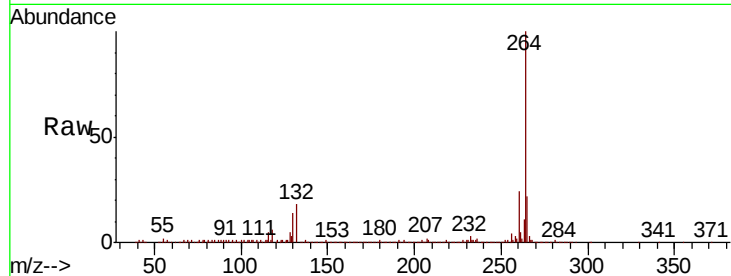
ClientSampled :

SP-1

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 264   | Resp: | 488229 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 23.6  | 19.1  | 28.7   |
| 265       | 22.1  | 17.1  | 25.7   |

Manual Integrations  
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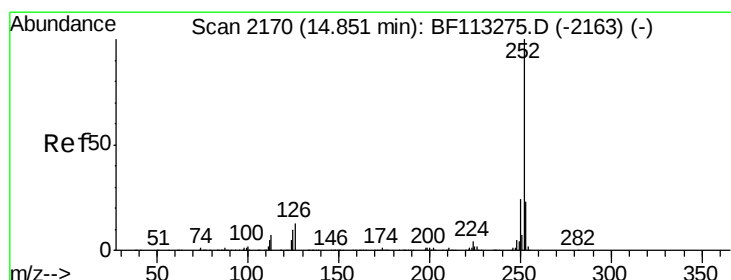
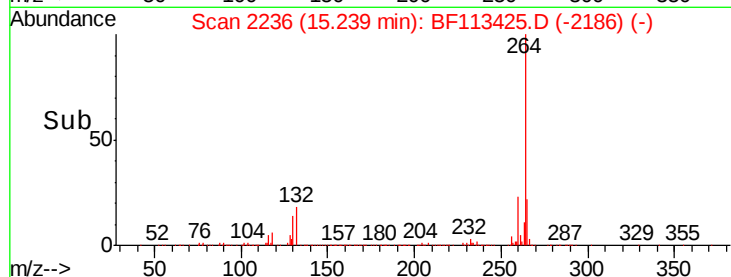
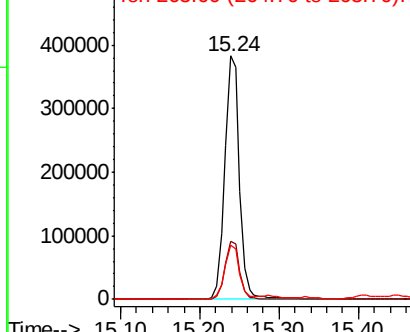


Abundance

Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E



#88

Benzo(b)fluoranthene

Concen: 9.405 ng m

RT: 14.84 min Scan# 2169

Delta R.T. -0.01 min

Lab File: BF113425.D

Acq: 29 Mar 2019 20:51

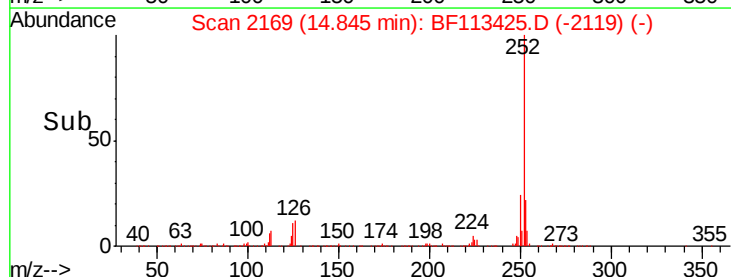
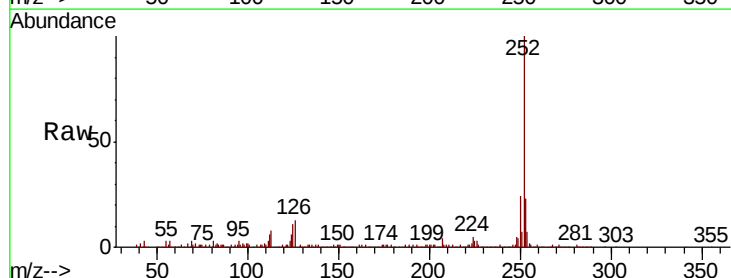
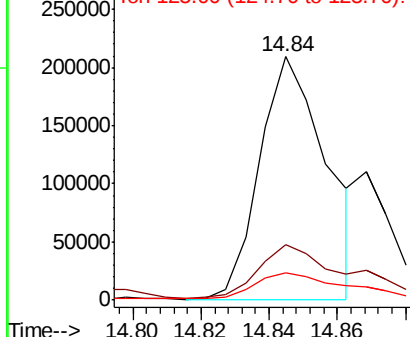
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 285230 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.6  | 18.0  | 27.0   |
| 125       | 11.3  | 7.6   | 11.4   |

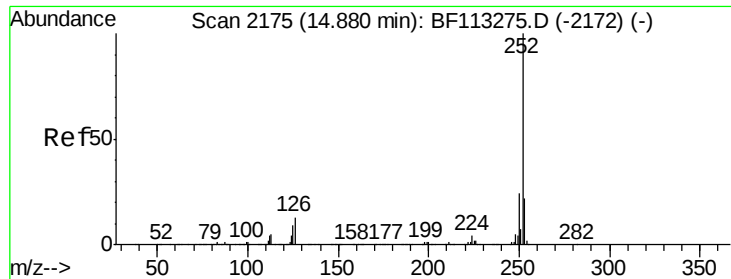
Abundance

Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#89

Benzo(k)fluoranthene

Concen: 3.126 ng m

RT: 14.87 min Scan# 2173

Delta R.T. -0.01 min

Lab File: BF113425.D

Acq: 29 Mar 2019 20:51

Instrument :

BNA\_F

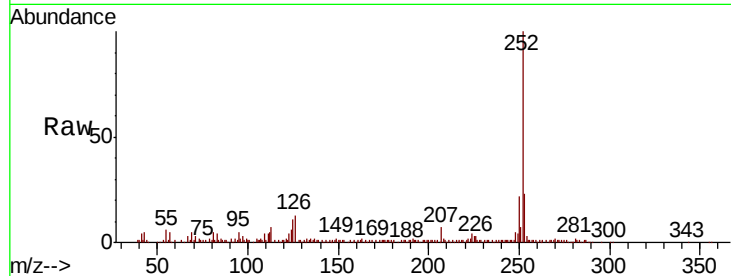
ClientSampled :

SP-1

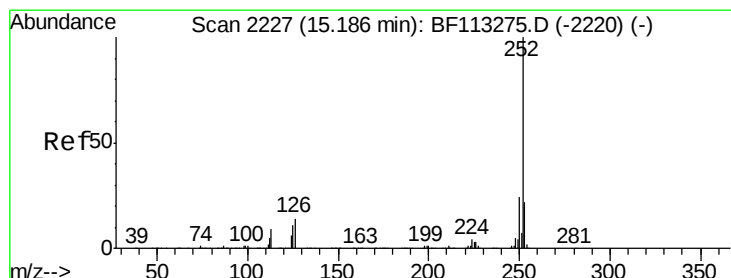
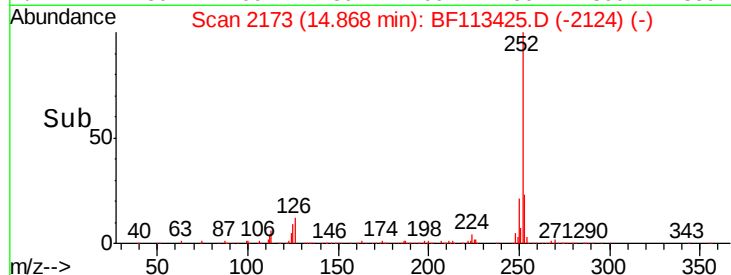
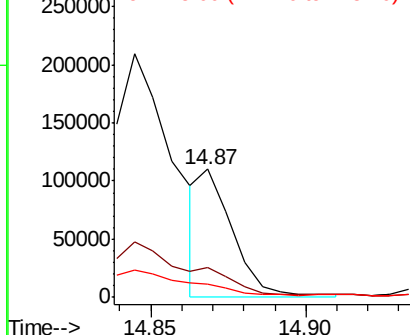
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 83271 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 23.2  | 17.7  | 26.5  |
| 125       | 10.7  | 7.3   | 10.9  |

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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



#90

Benzo(a)pyrene

Concen: 7.383 ng

RT: 15.18 min Scan# 2226

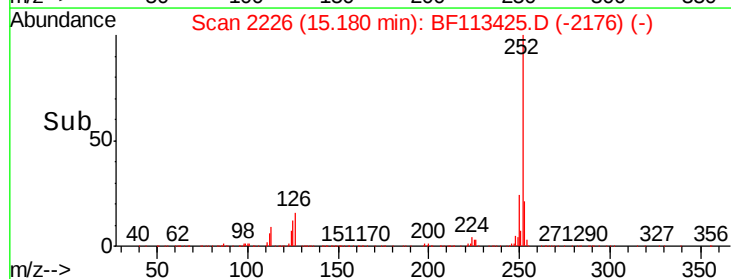
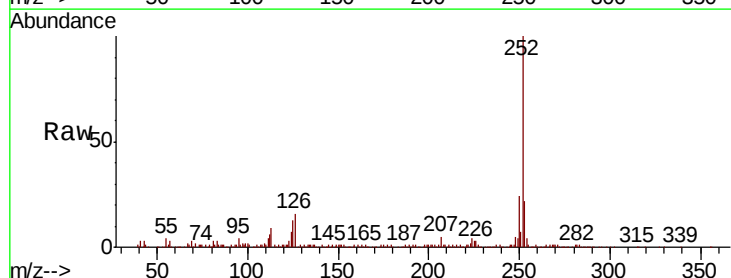
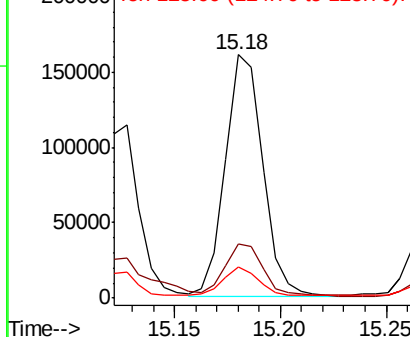
Delta R.T. -0.01 min

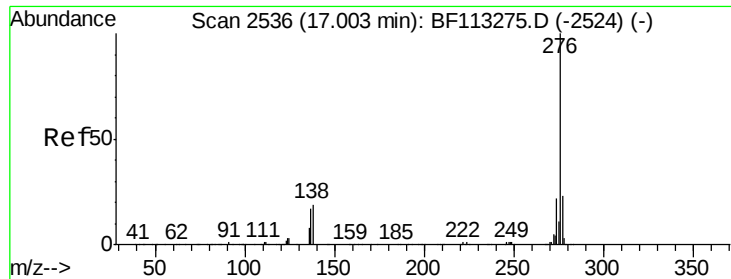
Lab File: BF113425.D

Acq: 29 Mar 2019 20:51

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 198512 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.2  | 17.9  | 26.9   |
| 125       | 12.6  | 8.8   | 13.2   |

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





#92  
 Benzo(g,h,i)perylene  
 Concen: 4.661 ng  
 RT: 17.00 min Scan# 2535  
 Delta R.T. -0.01 min  
 Lab File: BF113425.D  
 Acq: 29 Mar 2019 20:51

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SP-1

|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 276  | Resp: | 109262 |
| Ion Ratio |      | Lower | Upper  |
| 276       | 100  |       |        |
| 277       | 23.9 | 18.8  | 28.2   |
| 138       | 20.6 | 15.6  | 23.4   |

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