

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072219\  
 Data File : BF115716.D  
 Acq On : 22 Jul 2019 18:20  
 Operator : HP/JU  
 Sample : K3622-11 5X  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 OR-02-071919-B

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Quant Time: Jul 23 04:36:44 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF071219.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Jul 12 14:03:52 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.88  | 152  | 148229   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.16  | 136  | 571561   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10        | 9.92  | 164  | 279237   | 20.00 | ng    | -0.01    |
| 64) Phenanthrene-d10        | 11.40 | 188  | 431799   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12            | 14.04 | 240  | 361727   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12            | 15.52 | 264  | 336070   | 20.00 | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.49  | 112  | 193485   | 21.35 | ng    | -0.01    |
| 7) Phenol-d6                | 6.50  | 99   | 259106   | 22.53 | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 7.43  | 82   | 149800   | 15.24 | ng    | -0.02    |
| 42) 2,4,6-Tribromophenol    | 10.70 | 330  | 55971    | 17.17 | ng    | -0.01    |
| 45) 2-Fluorobiphenyl        | 9.23  | 172  | 285811   | 17.91 | ng    | -0.02    |
| 79) Terphenyl-d14           | 12.99 | 244  | 253753   | 12.94 | ng    | -0.01    |
| Target Compounds            |       |      |          |       |       |          |
| 71) Phenanthrene            | 11.43 | 178  | 71052    | 3.210 | ng    | 97       |
| 75) Fluoranthene            | 12.62 | 202  | 111133   | 4.751 | ng    | 99       |
| 78) Pyrene                  | 12.84 | 202  | 115394   | 3.765 | ng    | 96       |
| 81) Benzo(a)anthracene      | 14.03 | 228  | 50458    | 2.117 | ng    | 97       |
| 88) Benzo(b)fluoranthene    | 15.09 | 252  | 45037m   | 2.081 | ng    |          |

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

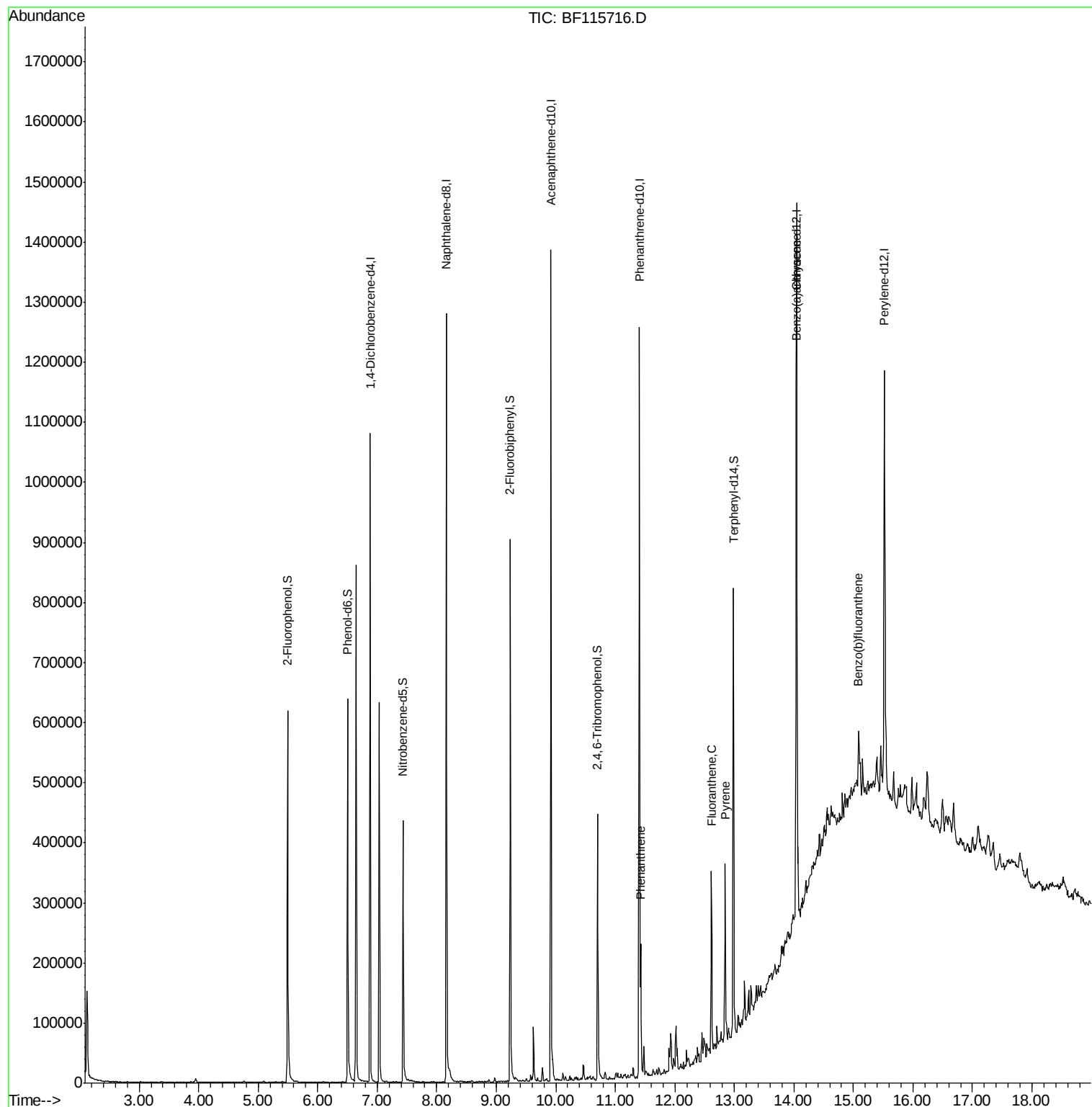
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072219\  
Data File : BF115716.D  
Acq On : 22 Jul 2019 18:20  
Operator : HP/JU  
Sample : K3622-11 5X  
Misc :  
ALS Vial : 18 Sample Multiplier: 1

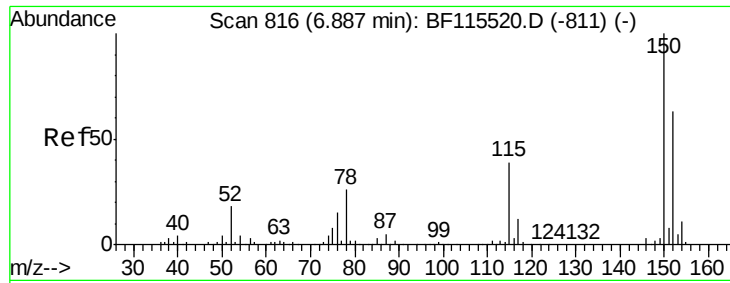
Instrument :  
BNA\_F  
ClientSampleId :  
OR-02-071919-B

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Quant Time: Jul 23 04:36:44 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF071219.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Jul 12 14:03:52 2019  
Response via : Initial Calibration





#1

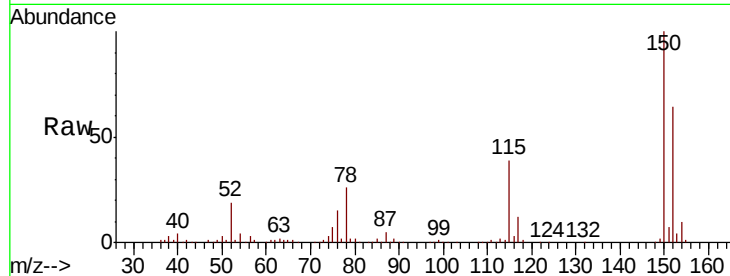
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.88 min Scan# 815  
Delta R.T. -0.01 min  
Lab File: BF115716.D  
Acq: 22 Jul 2019 18:20

Instrument :  
BNA\_F  
ClientSampleId :  
OR-02-071919-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 155.5 | 129.7 | 194.5 |
| 115     | 60.5  | 48.2  | 72.4  |

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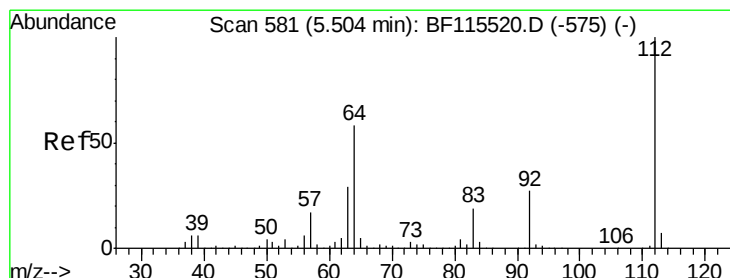
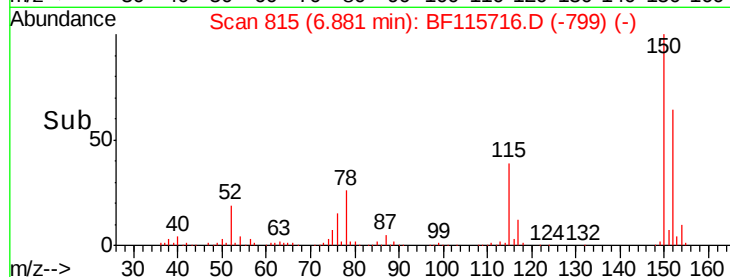
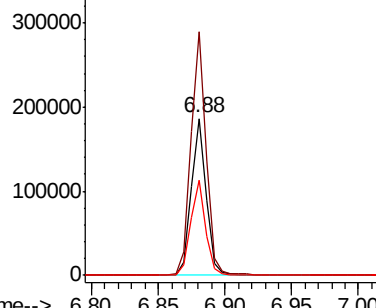


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

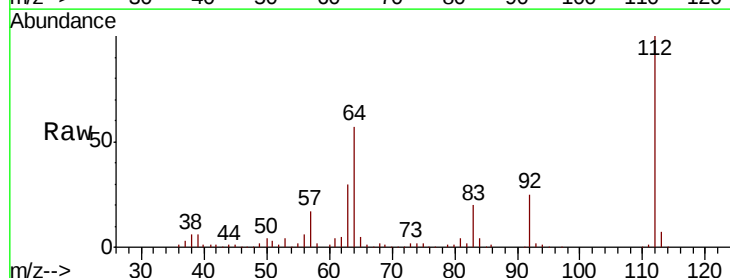
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 21.351 ng  
RT: 5.49 min Scan# 579  
Delta R.T. -0.01 min  
Lab File: BF115716.D  
Acq: 22 Jul 2019 18:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 56.7  | 46.8  | 70.2  |
| 63      | 29.6  | 24.1  | 36.1  |

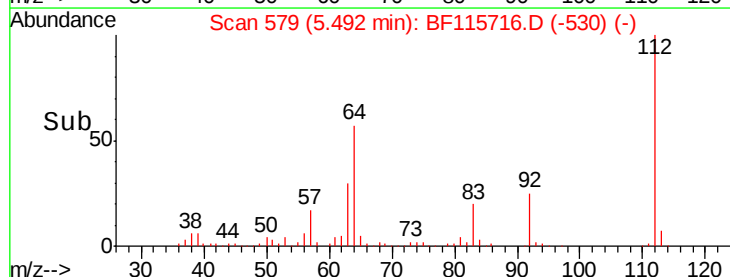
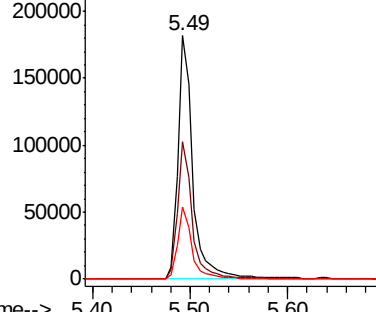


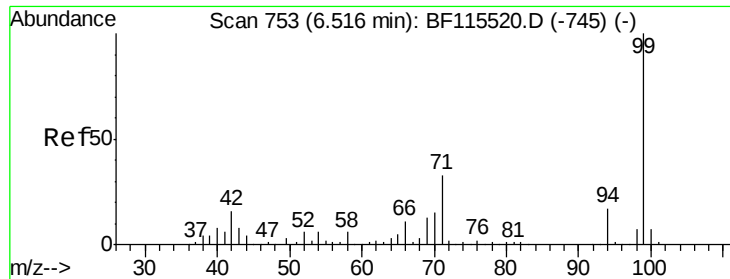
Abundance

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: 22.533 ng

RT: 6.50 min Scan# 751

Delta R.T. -0.01 min

Lab File: BF115716.D

Acq: 22 Jul 2019 18:20

Instrument :

BNA\_F

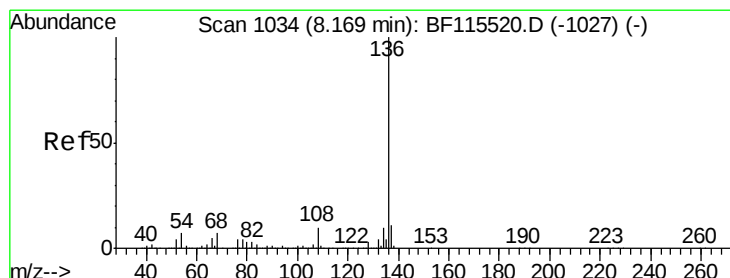
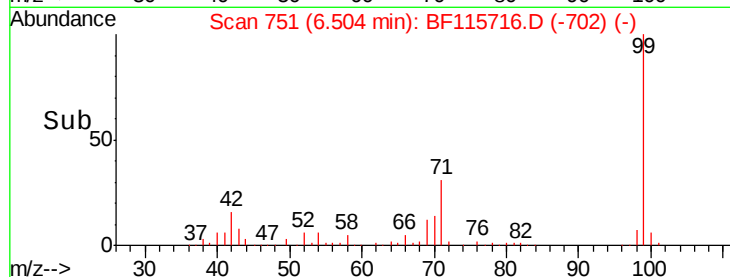
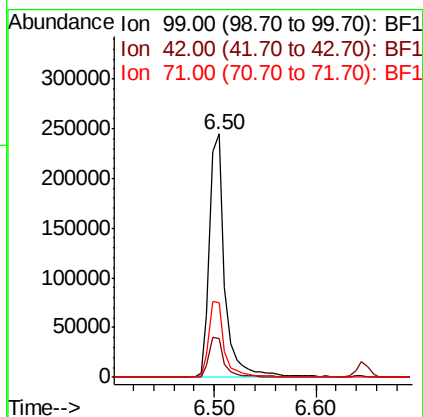
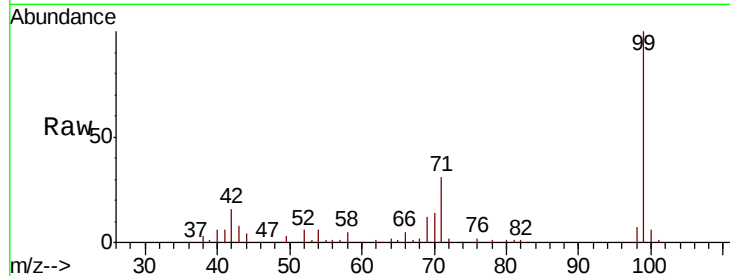
ClientSampleId :

OR-02-071919-B

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 259106 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 16.0  | 13.6  | 20.4   |
| 71        | 30.7  | 28.5  | 42.7   |

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#21

Naphthalene-d8

Concen: 20.000 ng

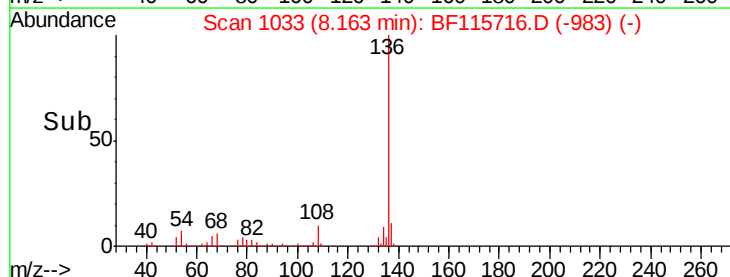
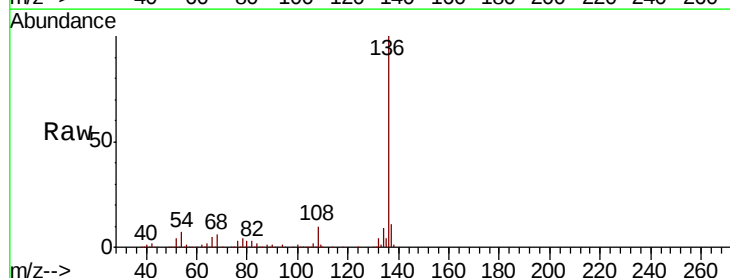
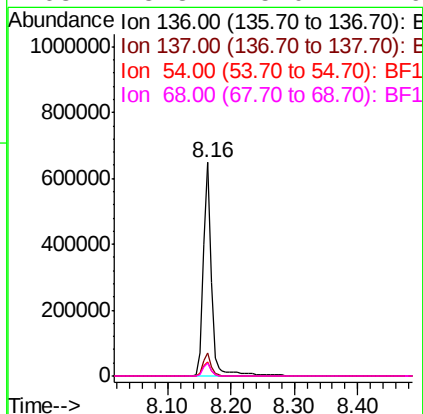
RT: 8.16 min Scan# 1033

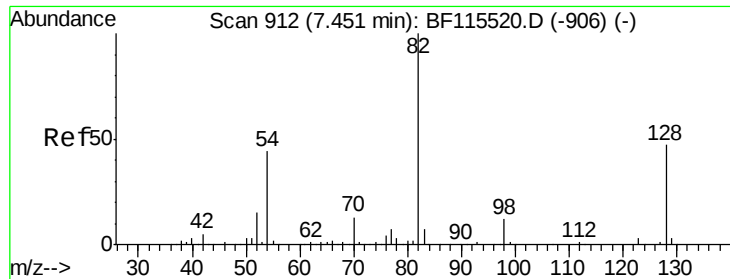
Delta R.T. -0.01 min

Lab File: BF115716.D

Acq: 22 Jul 2019 18:20

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 571561 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 10.7  | 9.0   | 13.4   |
| 54        | 6.8   | 5.6   | 8.4    |
| 68        | 5.8   | 5.0   | 7.6    |





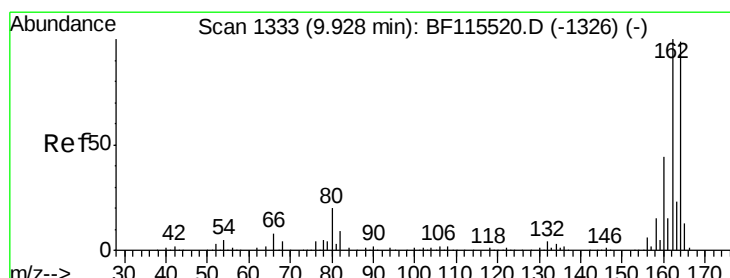
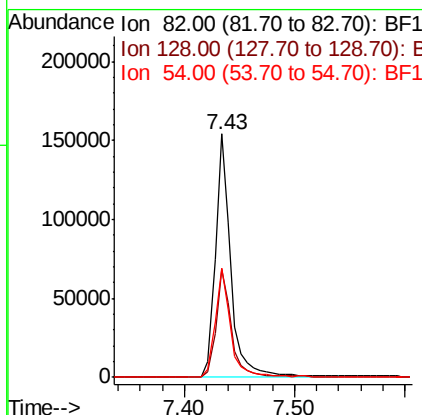
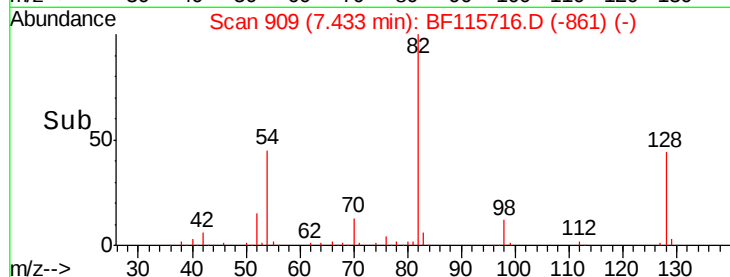
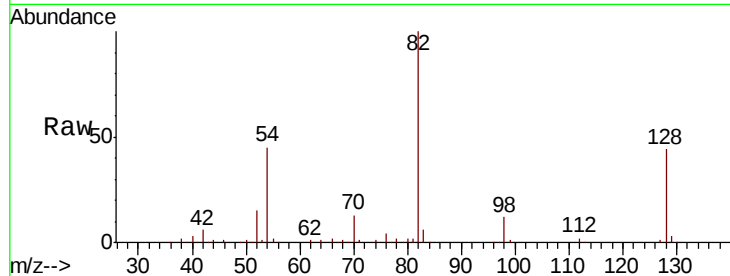
#23  
Nitrobenzene-d5  
Concen: 15.240 ng  
RT: 7.43 min Scan# 909  
Delta R.T. -0.02 min  
Lab File: BF115716.D  
Acq: 22 Jul 2019 18:20

Instrument :  
BNA\_F  
ClientSampleId :  
OR-02-071919-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 44.1  | 38.6  | 57.8  |
| 54      | 45.0  | 35.6  | 53.4  |

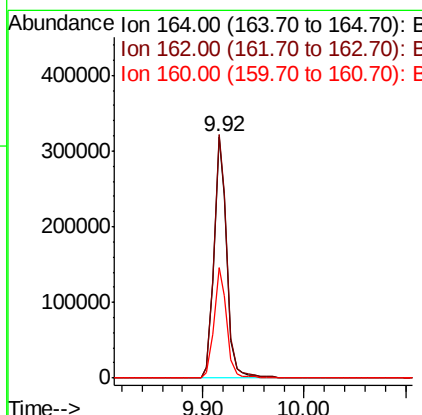
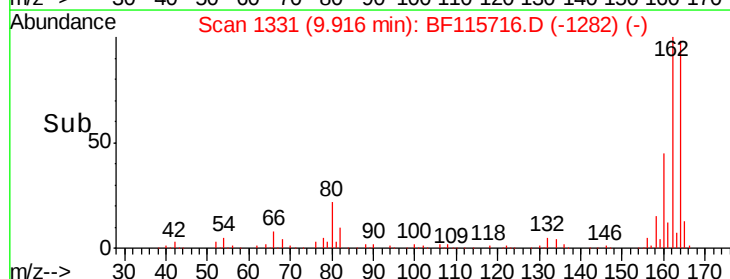
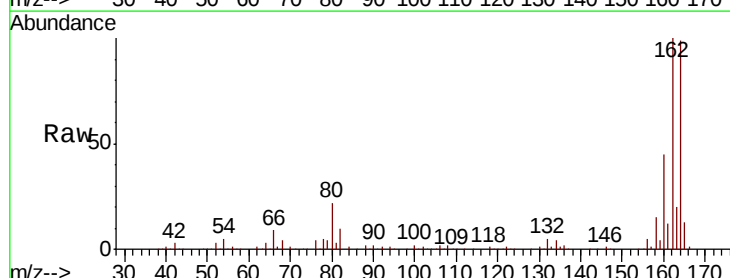
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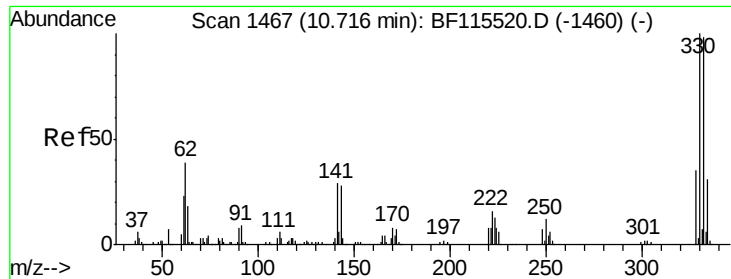
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#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.92 min Scan# 1331  
Delta R.T. -0.01 min  
Lab File: BF115716.D  
Acq: 22 Jul 2019 18:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 100.9 | 82.9  | 124.3 |
| 160     | 45.9  | 36.8  | 55.2  |





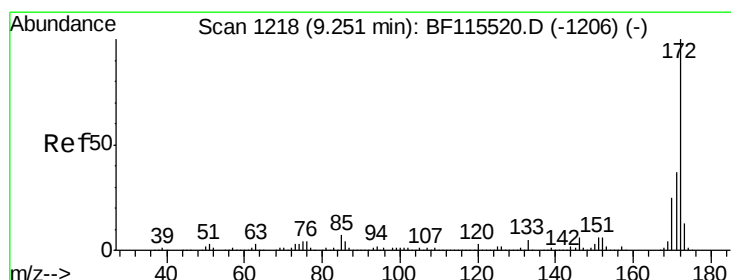
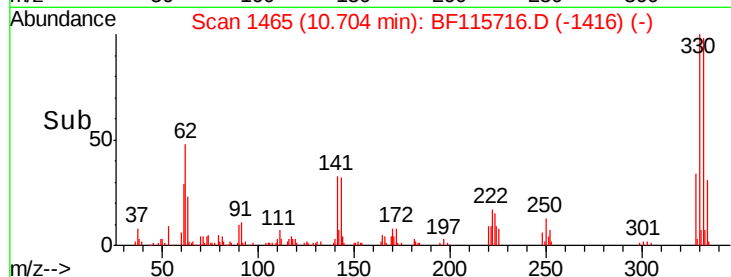
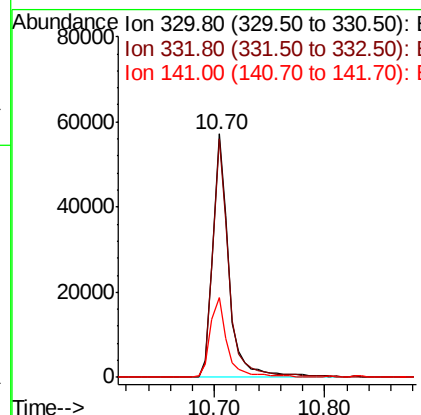
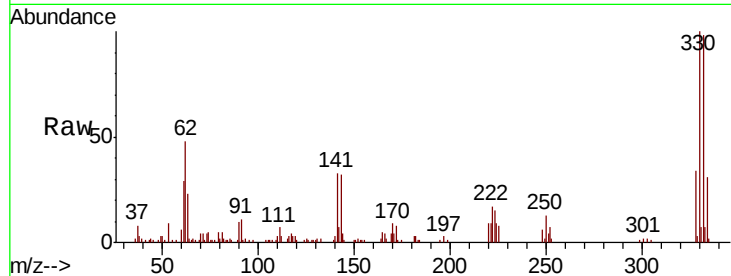
#42  
 2,4,6-Tribromophenol  
 Concen: 17.172 ng  
 RT: 10.70 min Scan# 1465  
 Delta R.T. -0.01 min  
 Lab File: BF115716.D  
 Acq: 22 Jul 2019 18:20

Instrument :  
 BNA\_F  
 ClientSampleId :  
 OR-02-071919-B

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 330     | 100   | 55971 |       |       |
| 332     | 97.9  |       | 77.4  | 116.2 |
| 141     | 34.8  |       | 22.4  | 33.6  |

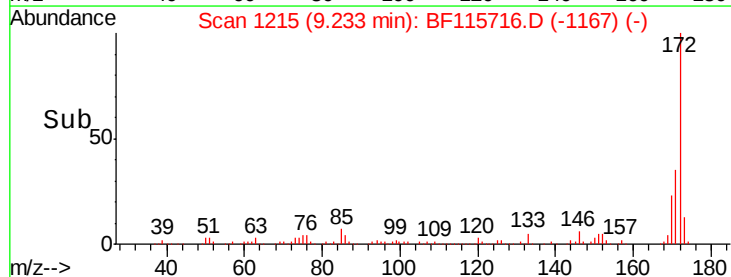
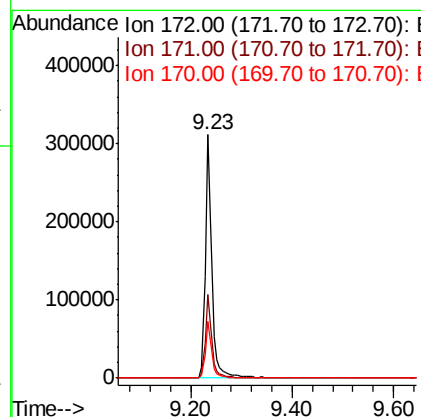
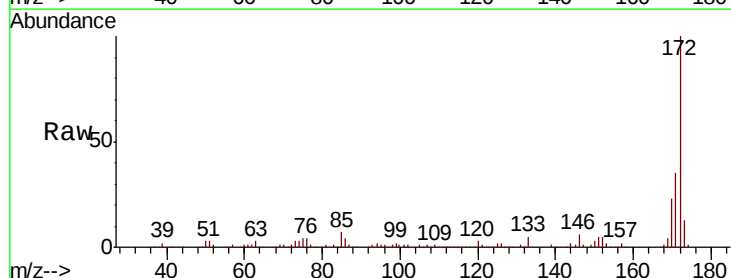
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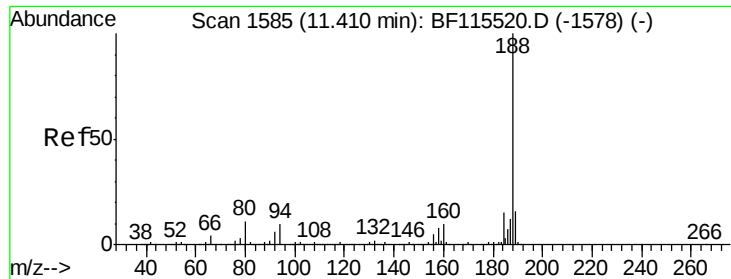
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#45  
 2-Fluorobiphenyl  
 Concen: 17.915 ng  
 RT: 9.23 min Scan# 1215  
 Delta R.T. -0.02 min  
 Lab File: BF115716.D  
 Acq: 22 Jul 2019 18:20

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 172     | 100   | 285811 |       |       |
| 171     | 34.6  |        | 30.6  | 46.0  |
| 170     | 23.4  |        | 20.5  | 30.7  |





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.40 min Scan# 1584

Delta R.T. -0.01 min

Lab File: BF115716.D

Acq: 22 Jul 2019 18:20

Instrument :

BNA\_F

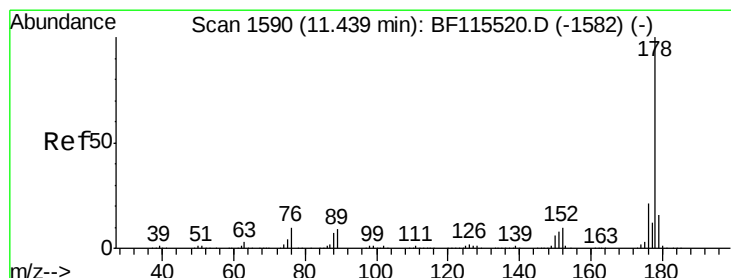
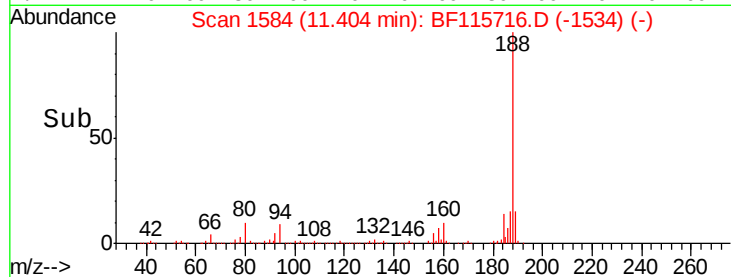
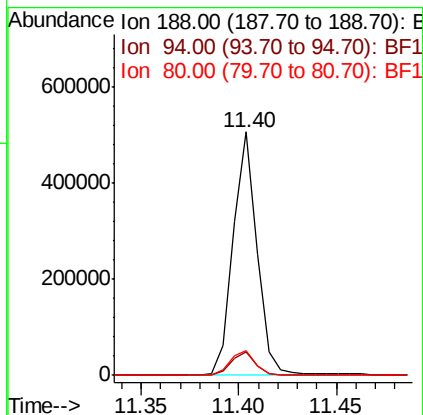
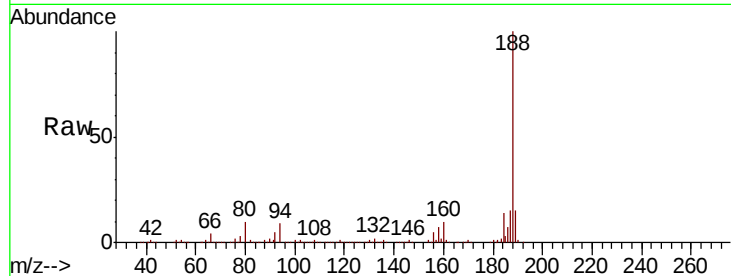
ClientSampleId :

OR-02-071919-B

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 188   | Resp: | 431799 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 9.5   | 7.8   | 11.6   |
| 80        | 10.3  | 8.6   | 13.0   |

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#71

Phenanthrene

Concen: 3.210 ng

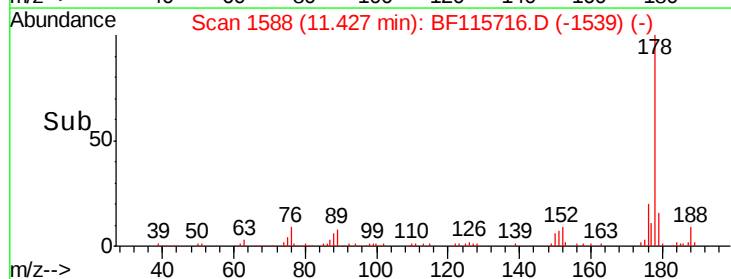
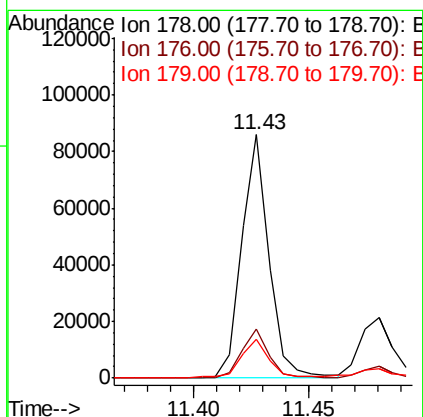
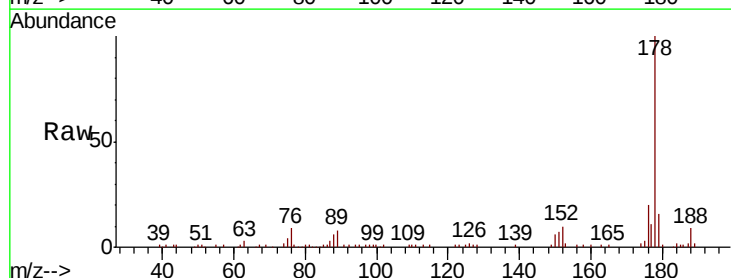
RT: 11.43 min Scan# 1588

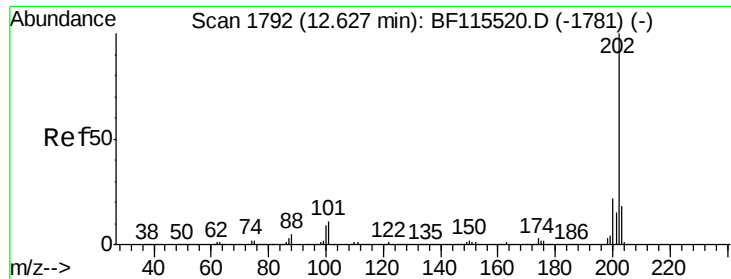
Delta R.T. -0.01 min

Lab File: BF115716.D

Acq: 22 Jul 2019 18:20

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 71052 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 176       | 20.0  | 17.2  | 25.8  |
| 179       | 15.7  | 13.5  | 20.3  |





#75

Fluoranthene

Concen: 4.751 ng

RT: 12.62 min Scan# 1790

Delta R.T. -0.01 min

Lab File: BF115716.D

Acq: 22 Jul 2019 18:20

Instrument :

BNA\_F

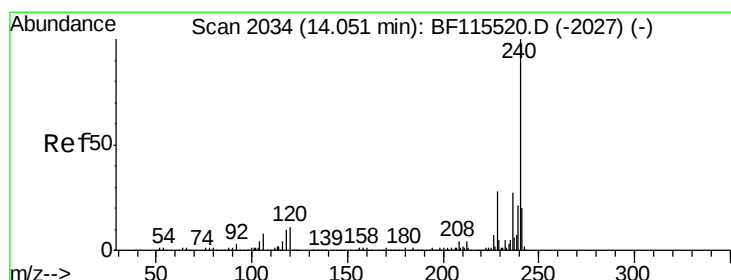
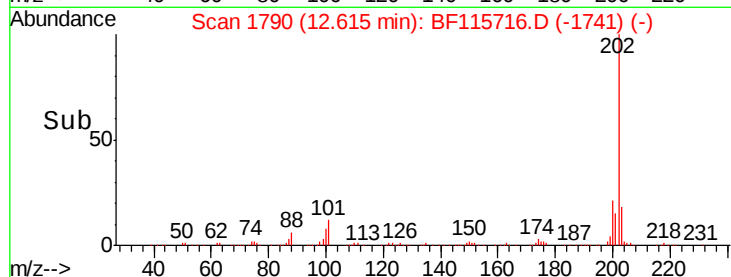
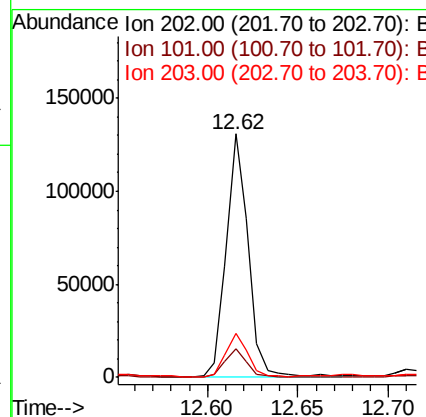
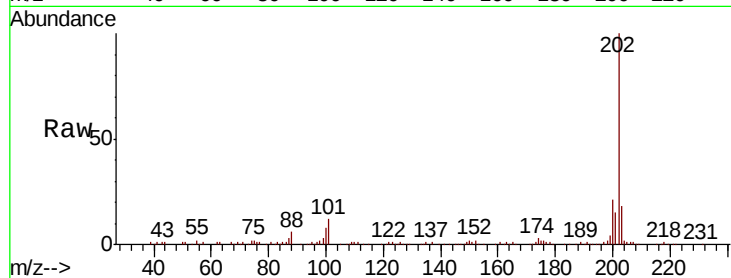
ClientSampleId :

OR-02-071919-B

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 11.8  | 0.0        | 31.4  |
| 203     | 18.2  | 0.0        | 38.1  |

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#76

Chrysene-d12

Concen: 20.000 ng

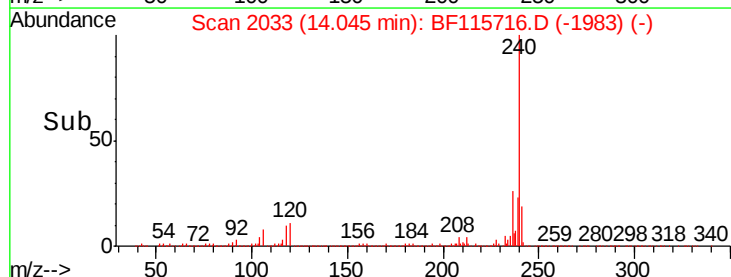
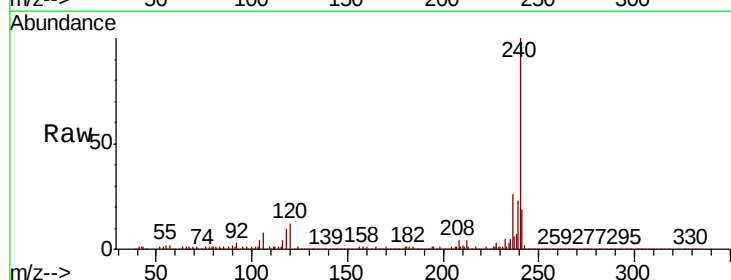
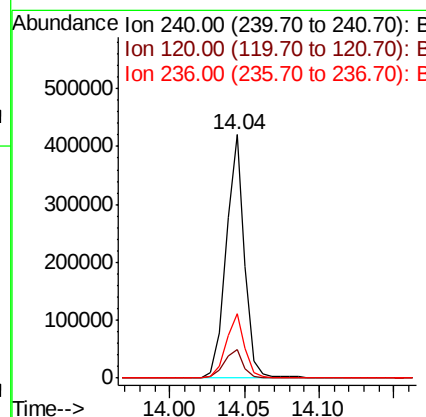
RT: 14.04 min Scan# 2033

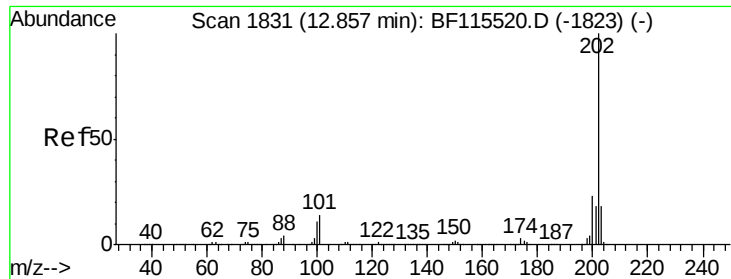
Delta R.T. -0.01 min

Lab File: BF115716.D

Acq: 22 Jul 2019 18:20

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 240     | 100   |            |       |
| 120     | 11.5  | 8.6        | 13.0  |
| 236     | 26.2  | 21.3       | 31.9  |





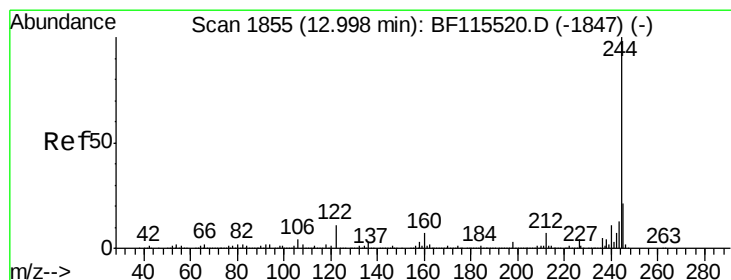
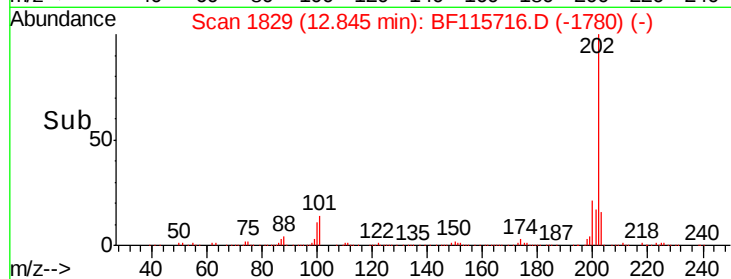
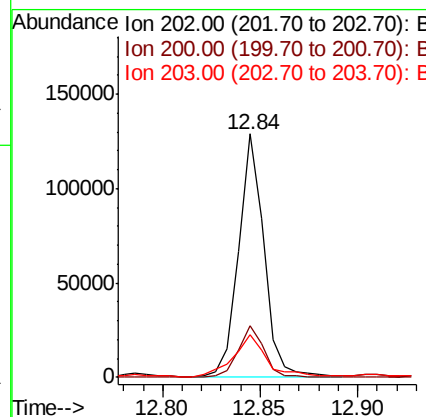
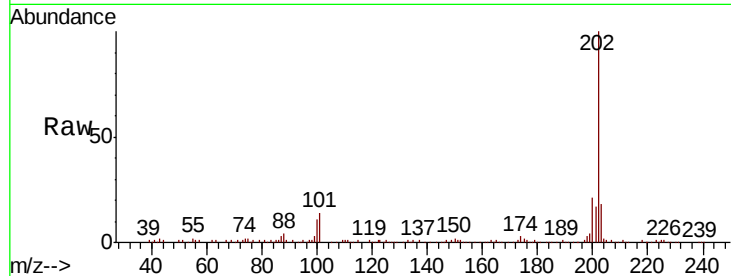
#78  
Pvrene  
Concen: 3.765 ng  
RT: 12.84 min Scan# 1829  
Delta R.T. -0.01 min  
Lab File: BF115716.D  
Acq: 22 Jul 2019 18:20

Instrument :  
BNA\_F  
ClientSampled :  
OR-02-071919-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.0  | 18.7  | 28.1  |
| 203     | 17.5  | 15.2  | 22.8  |

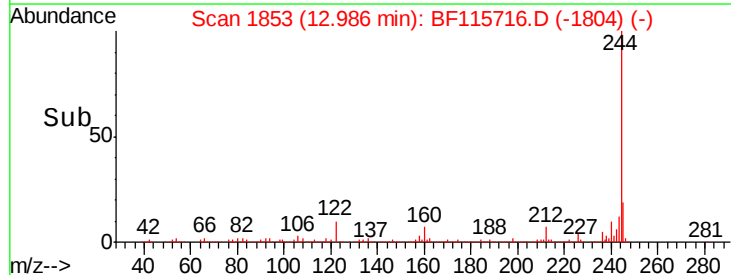
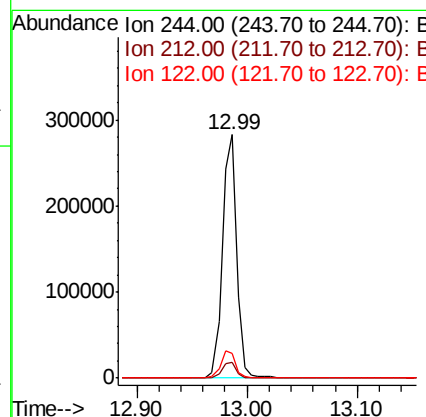
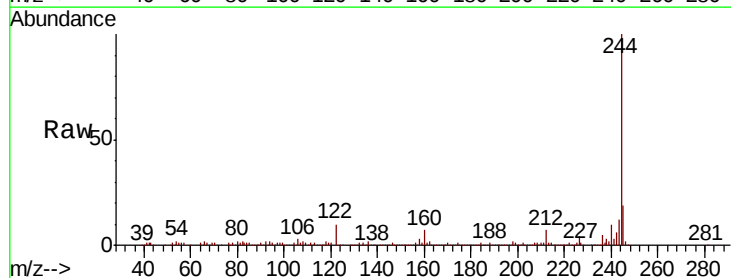
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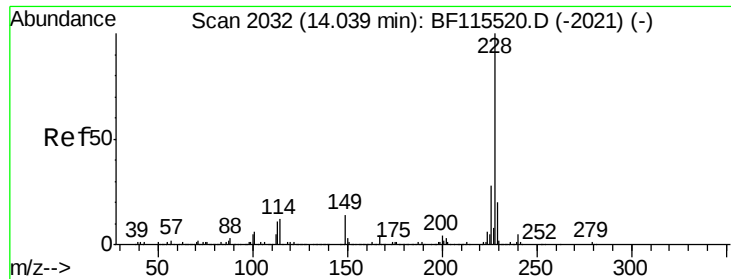
mohammad  
7/23/2019 4:24:45 PM



#79  
Terphenyl-d14  
Concen: 12.944 ng  
RT: 12.99 min Scan# 1853  
Delta R.T. -0.01 min  
Lab File: BF115716.D  
Acq: 22 Jul 2019 18:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.7   | 6.0   | 9.0   |
| 122     | 10.1  | 8.6   | 12.8  |





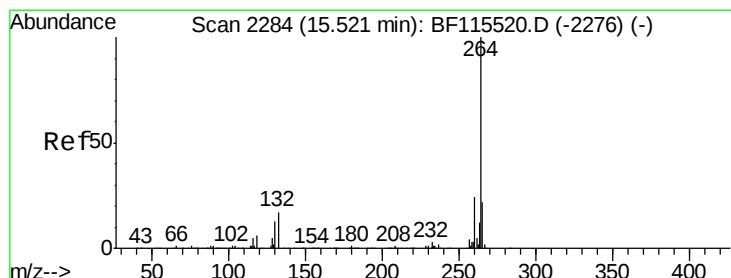
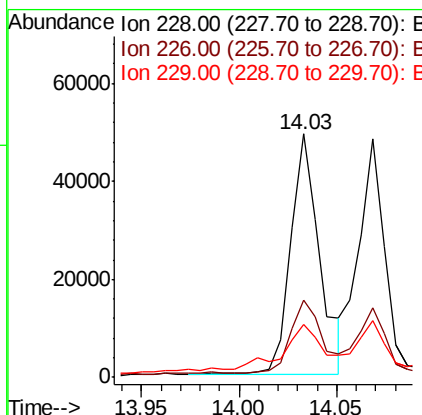
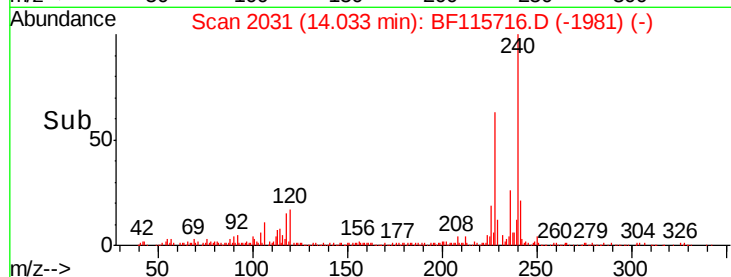
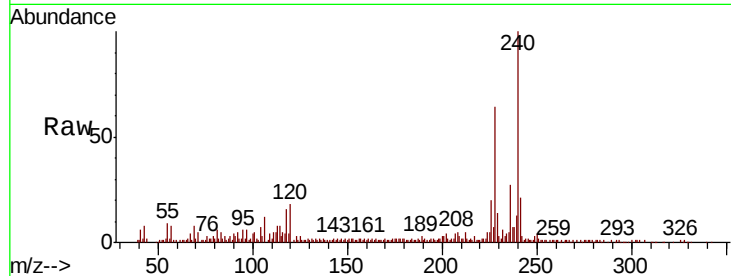
#81  
Benzo(a)anthracene  
Concen: 2.117 ng  
RT: 14.03 min Scan# 2031  
Delta R.T. -0.01 min  
Lab File: BF115716.D  
Acq: 22 Jul 2019 18:20

Instrument :  
BNA\_F  
ClientSampleId :  
OR-02-071919-B

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.9  | 23.4  | 35.0  |
| 229     | 21.5  | 17.2  | 25.8  |

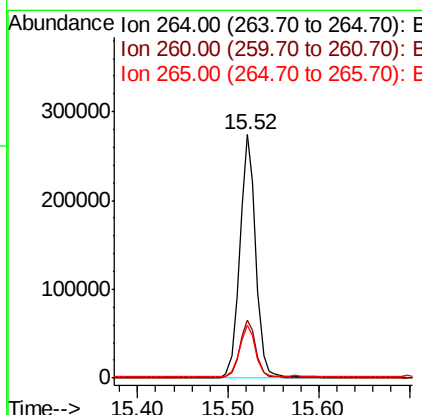
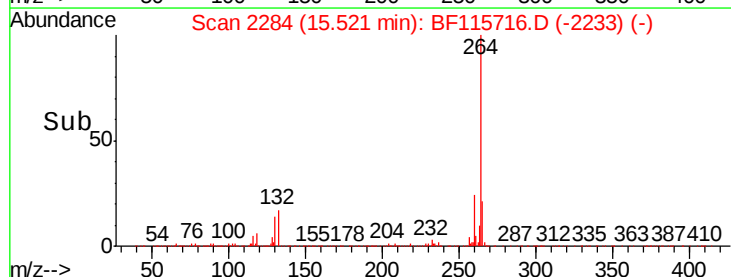
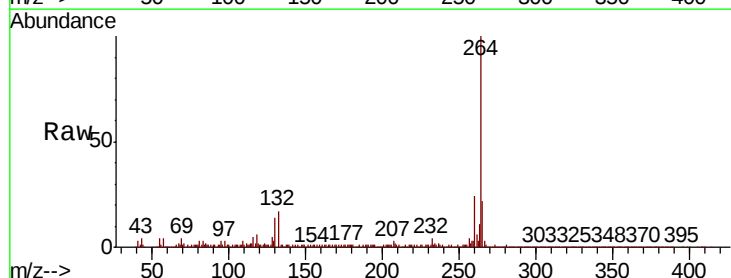
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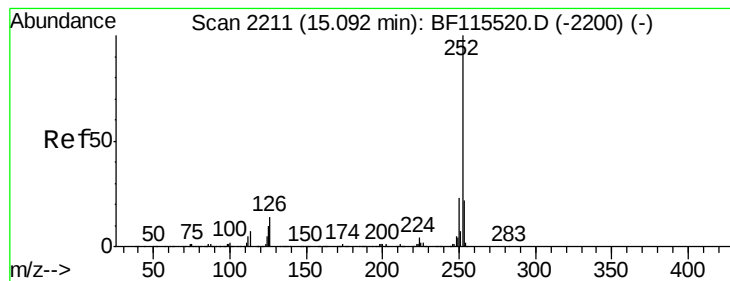
mohammad  
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#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.52 min Scan# 2284  
Delta R.T. -0.00 min  
Lab File: BF115716.D  
Acq: 22 Jul 2019 18:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.0  | 19.8  | 29.8  |
| 265     | 21.8  | 17.7  | 26.5  |





#88

Benzo(b)fluoranthene

Concen: 2.081 ng/mL

RT: 15.09 min Scan# 2210

Delta R.T. -0.01 min

Lab File: BF115716.D

Acq: 22 Jul 2019 18:20

Instrument :

BNA\_F

ClientSampleId :

OR-02-071919-B

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 252   | Resp: | 45037 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 30.6  | 18.1  | 27.1# |
| 125       | 20.8  | 9.0   | 13.4# |

Manual Integrations  
APPROVED

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