

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN091819\  
 Data File : BN007736.D  
 Acq On : 19 Sep 2019 12:08  
 Operator : HP/JU  
 Sample : K4896-03MS  
 Misc :  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RE123D1-20190912MS

Manual Integrations  
 APPROVED

mohammad  
 9/19/2019 4:48:48 PM

Quant Time: Sep 19 15:23:52 2019

Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\8270-SIM-BN091819.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Wed Sep 18 18:24:40 2019

Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.70  | 152  | 5786     | 0.40 | ng    | 0.00     |
| 7) Naphthalene-d8         | 10.47 | 136  | 22046    | 0.40 | ng    | 0.00     |
| 13) Acenaphthene-d10      | 14.32 | 164  | 12887    | 0.40 | ng    | 0.00     |
| 19) Phenanthrene-d10      | 17.07 | 188  | 28402    | 0.40 | ng    | 0.00     |
| 27) Chrysene-d12          | 21.27 | 240  | 31253    | 0.40 | ng    | 0.00     |
| 34) Perylene-d12          | 23.49 | 264  | 33823    | 0.40 | ng    | 0.00     |

#### System Monitoring Compounds

|                             |       |     |        |      |    |      |
|-----------------------------|-------|-----|--------|------|----|------|
| 4) 2-Fluorophenol           | 5.32  | 112 | 2324   | 0.12 | ng | 0.00 |
| 5) Phenol-d6                | 6.87  | 99  | 1875   | 0.07 | ng | 0.00 |
| 8) Nitrobenzene-d5          | 8.83  | 82  | 6543   | 0.34 | ng | 0.00 |
| 11) 2-Methylnaphthalene-d10 | 12.06 | 152 | 14136m | 0.38 | ng | 0.00 |
| 14) 2,4,6-Tribromophenol    | 15.82 | 330 | 1791   | 0.26 | ng | 0.00 |
| 15) 2-Fluorobiphenyl        | 12.94 | 172 | 24121  | 0.45 | ng | 0.00 |
| 25) Fluoranthene-d10        | 19.10 | 212 | 35942  | 0.38 | ng | 0.00 |
| 29) Terphenyl-d14           | 19.71 | 244 | 36308  | 0.47 | ng | 0.00 |

#### Target Compounds

|                                |       |     |       |       |    | Qvalue |
|--------------------------------|-------|-----|-------|-------|----|--------|
| 2) 1,4-Dioxane                 | 3.30  | 88  | 13179 | 2.044 | ng | # 87   |
| 6) bis(2-Chloroethyl)ether     | 7.14  | 93  | 6109  | 0.373 | ng | 96     |
| 9) Naphthalene                 | 10.52 | 128 | 23001 | 0.372 | ng | 100    |
| 10) Hexachlorobutadiene        | 10.82 | 225 | 4284  | 0.329 | ng | # 99   |
| 12) 2-Methylnaphthalene        | 12.13 | 142 | 15313 | 0.366 | ng | 99     |
| 16) Acenaphthylene             | 14.03 | 152 | 21947 | 0.321 | ng | 100    |
| 17) Acenaphthene               | 14.38 | 154 | 14432 | 0.328 | ng | 95     |
| 18) Fluorene                   | 15.37 | 166 | 18898 | 0.335 | ng | 100    |
| 20) 4-Bromophenyl-phenylether  | 16.26 | 248 | 6665  | 0.387 | ng | # 77   |
| 21) Hexachlorobenzene          | 16.38 | 284 | 6785  | 0.360 | ng | 97     |
| 22) Pentachlorophenol          | 16.72 | 266 | 2247  | 0.323 | ng | 96     |
| 23) Phenanthrene               | 17.11 | 178 | 33944 | 0.384 | ng | 100    |
| 24) Anthracene                 | 17.20 | 178 | 28637 | 0.358 | ng | 100    |
| 26) Fluoranthene               | 19.13 | 202 | 39653 | 0.360 | ng | 99     |
| 28) Pyrene                     | 19.50 | 202 | 40020 | 0.375 | ng | 100    |
| 30) Benzo(a)anthracene         | 21.25 | 228 | 39174 | 0.340 | ng | 99     |
| 31) Chrysene                   | 21.30 | 228 | 41439 | 0.369 | ng | 99     |
| 32) Bis(2-ethylhexyl)phthalate | 21.20 | 149 | 14203 | 0.240 | ng | 100    |
| 33) Indeno(1,2,3-cd)pyrene     | 25.70 | 276 | 49084 | 0.350 | ng | 99     |
| 35) Benzo(b)fluoranthene       | 22.82 | 252 | 42877 | 0.365 | ng | 100    |
| 36) Benzo(k)fluoranthene       | 22.87 | 252 | 45077 | 0.388 | ng | 99     |
| 37) Benzo(a)pyrene             | 23.39 | 252 | 38621 | 0.350 | ng | 99     |
| 38) Dibenzo(a,h)anthracene     | 25.71 | 278 | 40614 | 0.360 | ng | 100    |
| 39) Benzo(g,h,i)perylene       | 26.37 | 276 | 41129 | 0.368 | ng | 98     |

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

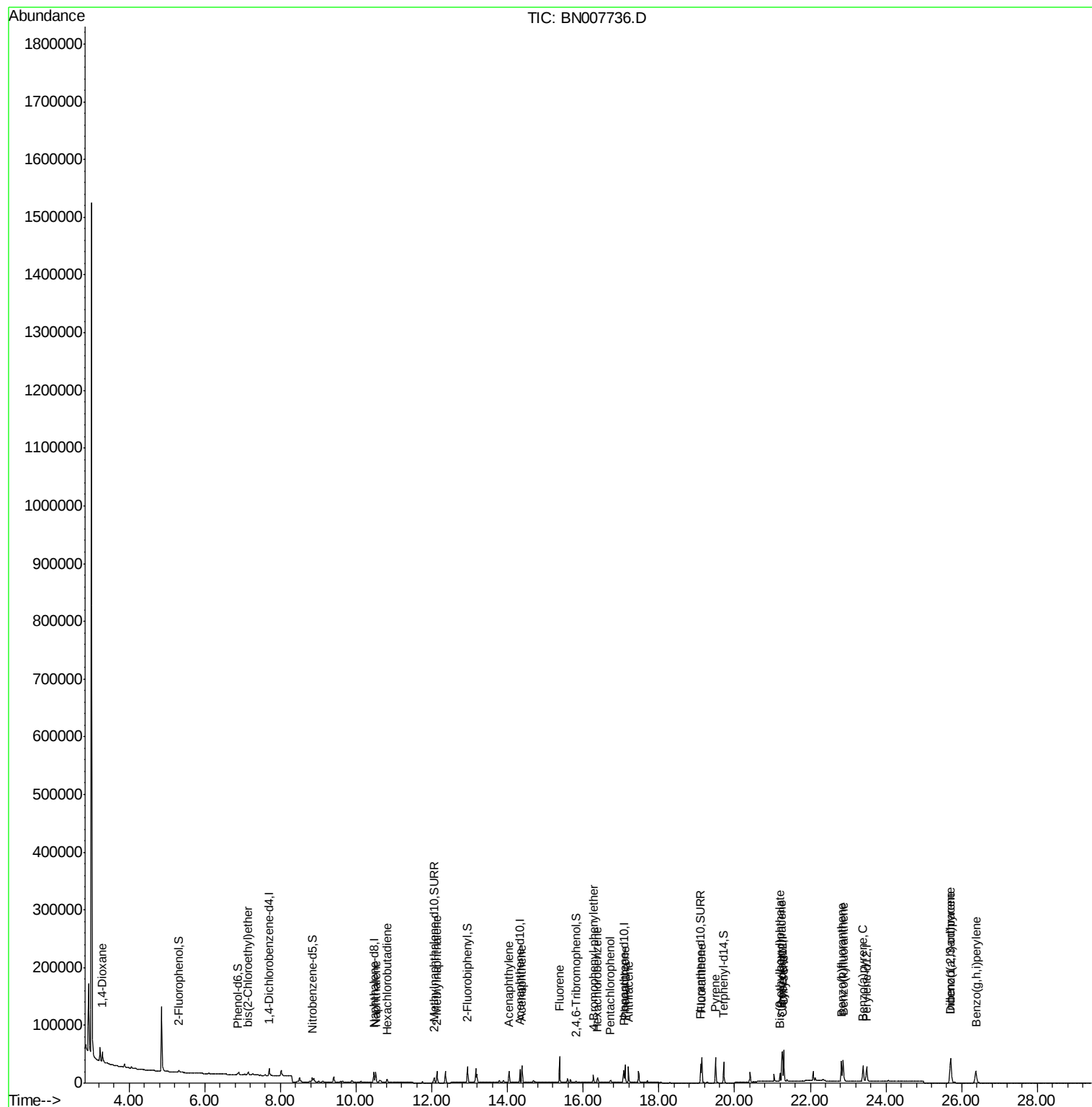
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN091819\  
Data File : BN007736.D  
Acq On : 19 Sep 2019 12:08  
Operator : HP/JU  
Sample : K4896-03MS  
Misc :  
ALS Vial : 23 Sample Multiplier: 1

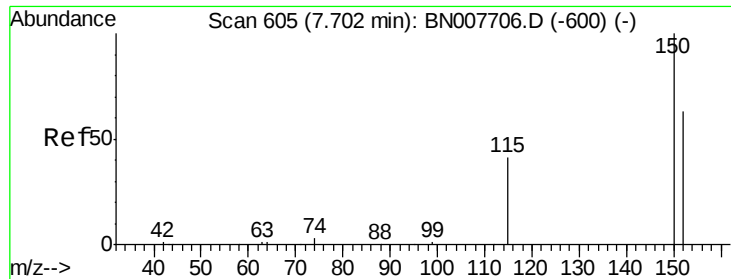
Instrument :  
BNA\_N  
ClientSampleId :  
RE123D1-20190912MS

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Quant Time: Sep 19 15:23:52 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\8270-SIM-BN091819.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Sep 18 18:24:40 2019  
Response via : Initial Calibration





#1

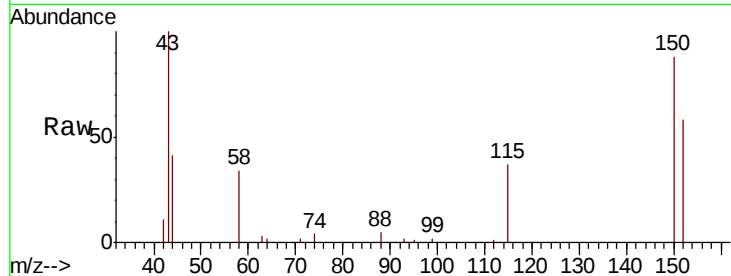
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.70 min Scan# 605  
Delta R.T. -0.00 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

Instrument :  
BNA\_N  
ClientSampleId :  
RE123D1-20190912MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 151.9 | 125.6 | 188.4 |
| 115     | 63.0  | 53.3  | 79.9  |

Manual Integrations  
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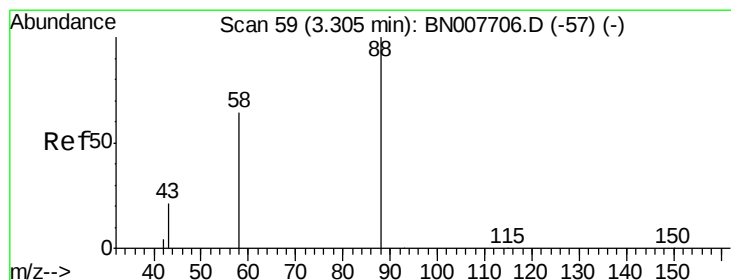
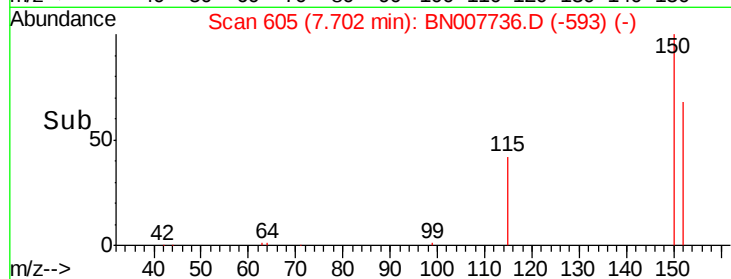
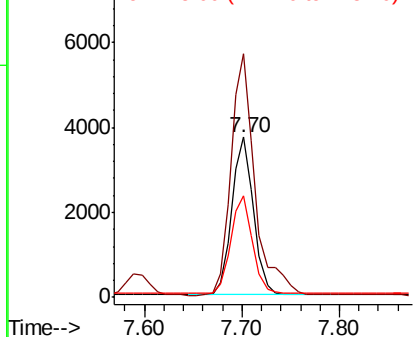


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

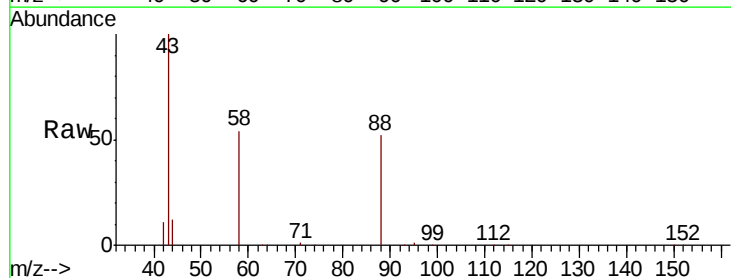
Ion 115.00 (114.70 to 115.70): E



#2

1,4-Dioxane  
Concen: 2.044 ng  
RT: 3.30 min Scan# 58  
Delta R.T. -0.01 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 88      | 100   |       |       |
| 58      | 59.6  | 44.6  | 66.8  |
| 43      | 34.8  | 14.4  | 21.6  |

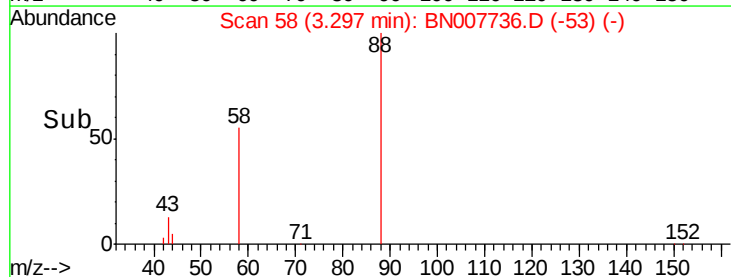
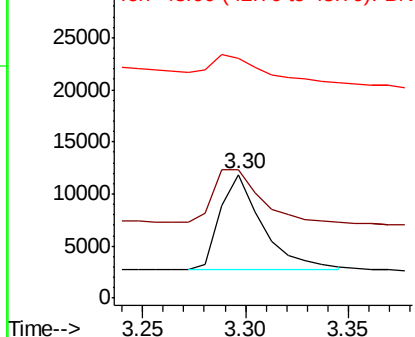


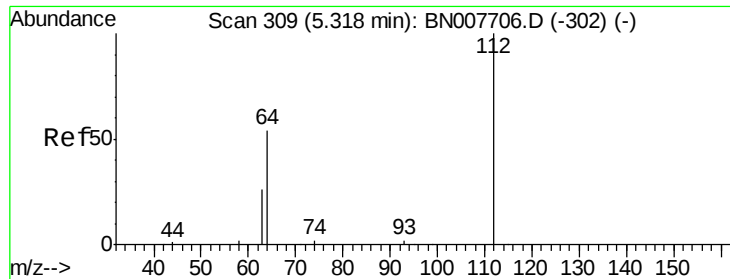
Abundance

Ion 88.00 (87.70 to 88.70): BNC

Ion 58.00 (57.70 to 58.70): BNC

Ion 43.00 (42.70 to 43.70): BNC





#4

2-Fluorophenol

Concen: 0.117 ng

RT: 5.32 min Scan# 309

Delta R.T. -0.00 min

Lab File: BN007736.D

Acq: 19 Sep 2019 12:08

Instrument :

BNA\_N

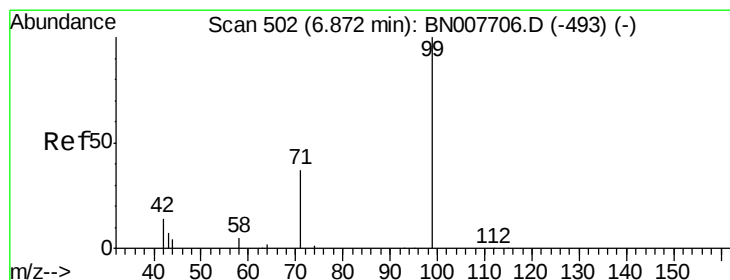
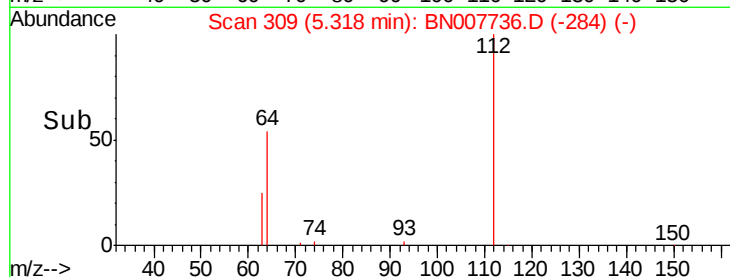
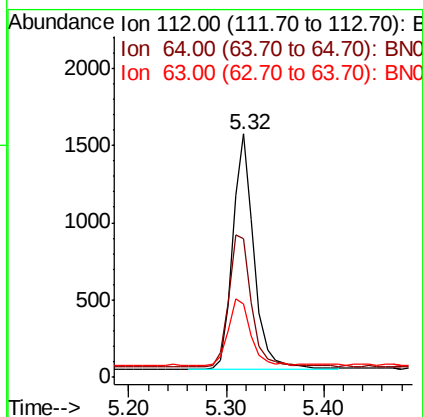
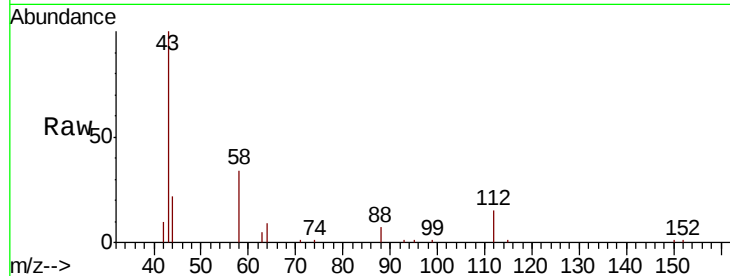
ClientSampleId :

RE123D1-20190912MS

|           |       |       |      |
|-----------|-------|-------|------|
| Tot Ion:  | 112   | Resp: | 2324 |
| Ion Ratio | Lower | Upper |      |
| 112       | 100   |       |      |
| 64        | 60.8  | 46.6  | 70.0 |
| 63        | 30.0  | 23.1  | 34.7 |

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#5

Phenol-d6

Concen: 0.070 ng

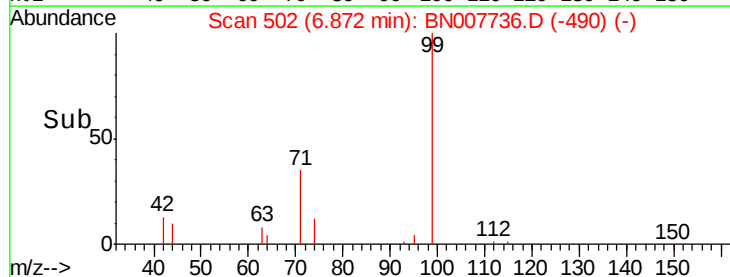
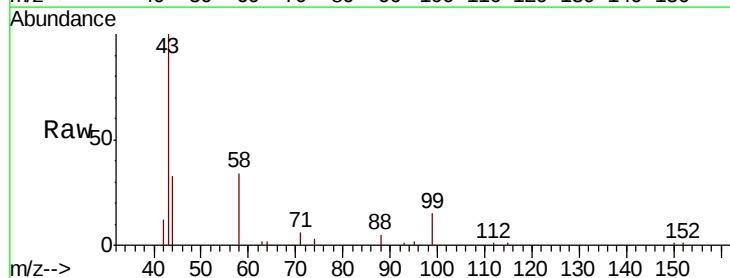
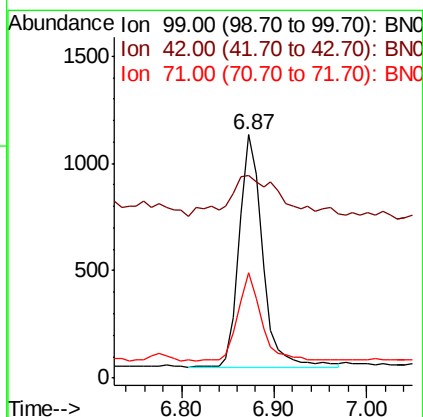
RT: 6.87 min Scan# 502

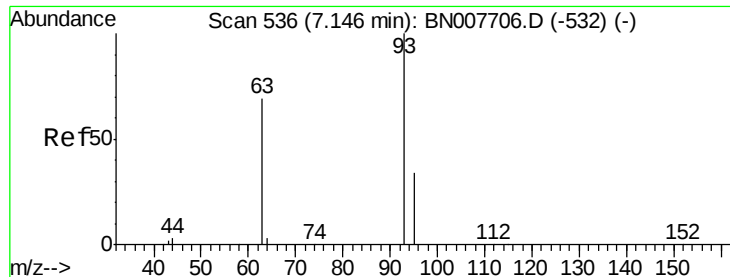
Delta R.T. 0.00 min

Lab File: BN007736.D

Acq: 19 Sep 2019 12:08

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 99    | Resp: | 1875  |
| Ion Ratio | Lower | Upper |       |
| 99        | 100   |       |       |
| 42        | 37.9  | 12.8  | 19.2# |
| 71        | 37.7  | 27.6  | 41.4  |





#6

bis(2-Chloroethyl)ether

Concen: 0.373 ng

RT: 7.14 min Scan# 535

Delta R.T. -0.01 min

Lab File: BN007736.D

Acq: 19 Sep 2019 12:08

Instrument :

BNA\_N

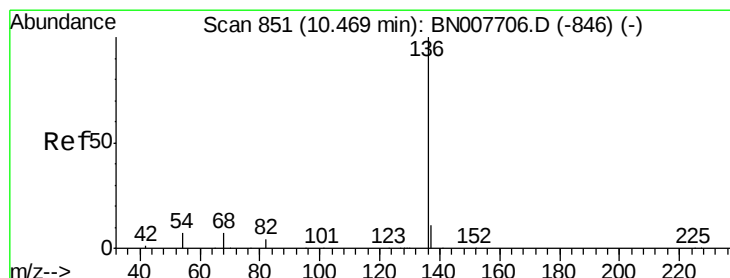
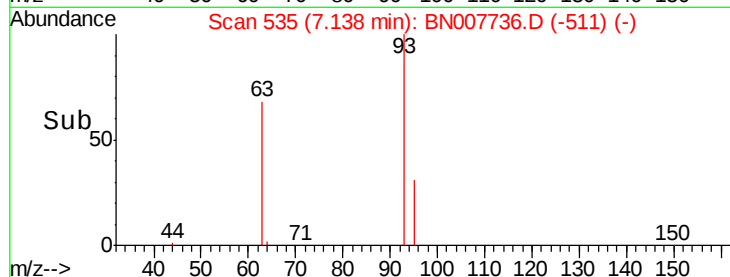
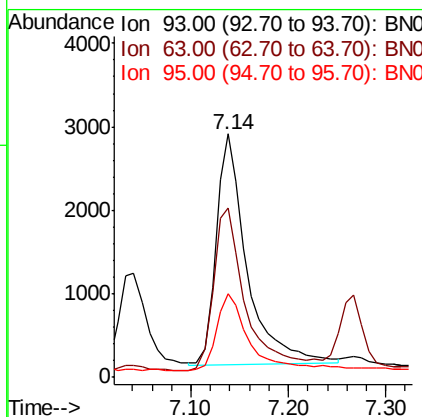
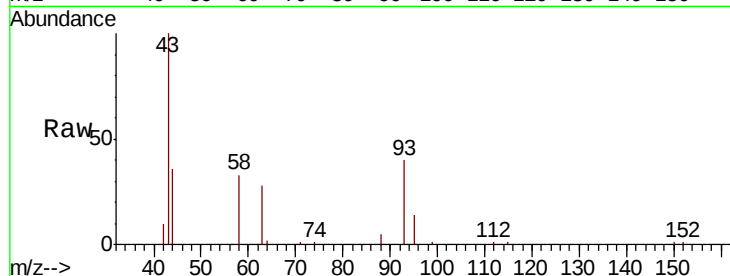
ClientSampleId :

RE123D1-20190912MS

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 93    | Resp: | 6109  |
| Ion      | Ratio | Lower | Upper |
| 93       | 100   |       |       |
| 63       | 73.0  | 59.3  | 88.9  |
| 95       | 34.4  | 31.4  | 47.0  |

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#7

Naphthalene-d8

Concen: 0.400 ng

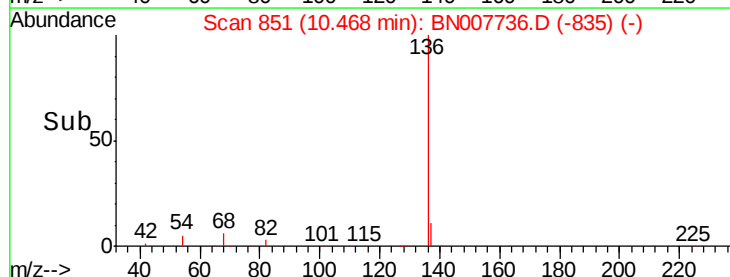
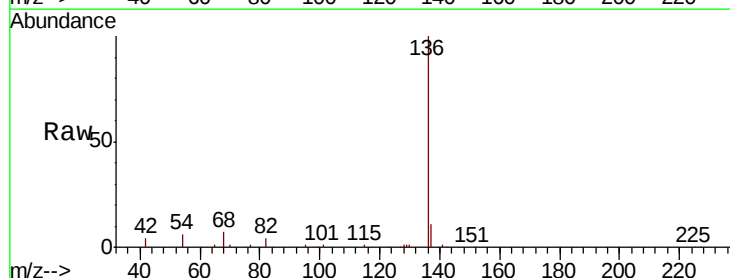
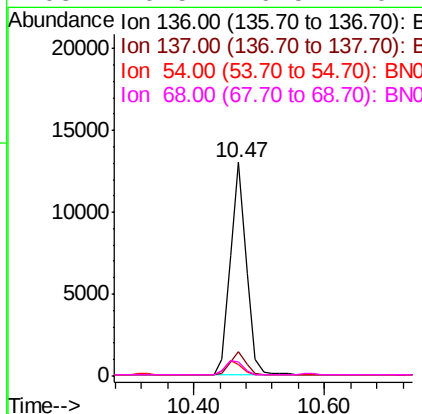
RT: 10.47 min Scan# 851

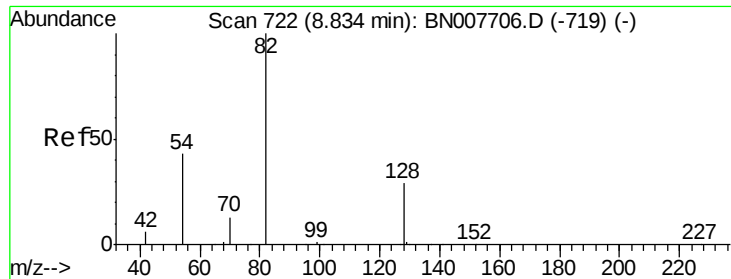
Delta R.T. -0.00 min

Lab File: BN007736.D

Acq: 19 Sep 2019 12:08

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 136   | Resp: | 22046 |
| Ion      | Ratio | Lower | Upper |
| 136      | 100   |       |       |
| 137      | 11.2  | 9.2   | 13.8  |
| 54       | 5.7   | 5.8   | 8.8#  |
| 68       | 6.5   | 6.5   | 9.7   |





#8

Nitrobenzene-d5

Concen: 0.339 ng

RT: 8.83 min Scan# 722

Delta R.T. -0.00 min

Lab File: BN007736.D

Acq: 19 Sep 2019 12:08

Instrument :

BNA\_N

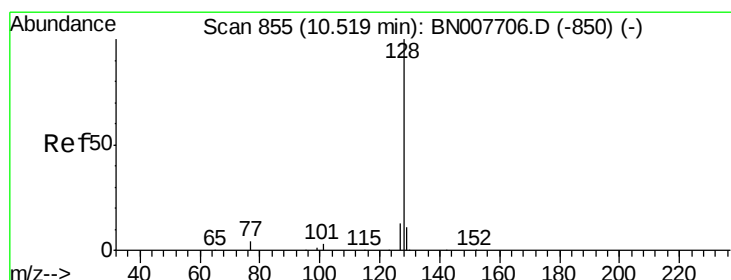
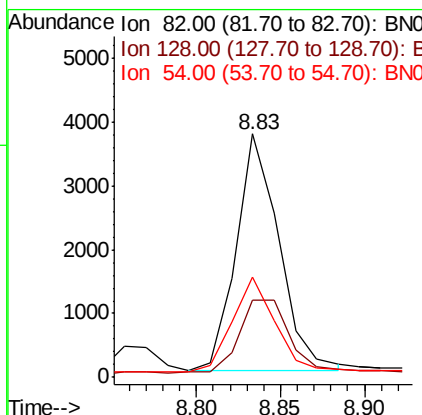
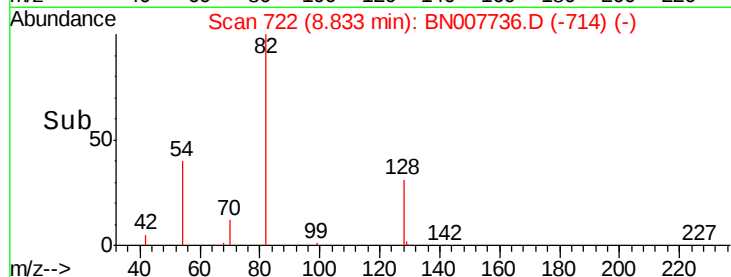
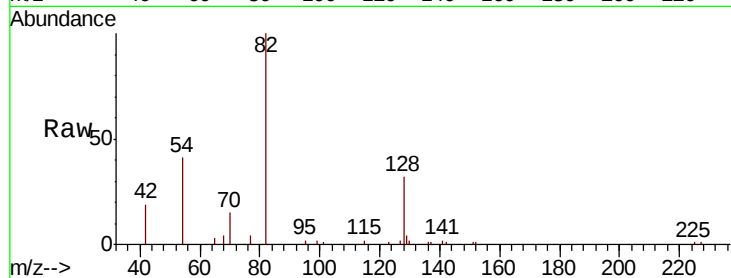
ClientSampleId :

RE123D1-20190912MS

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 82    | Resp: | 6543  |
| Ion      | Ratio | Lower | Upper |
| 82       | 100   |       |       |
| 128      | 32.0  | 24.5  | 36.7  |
| 54       | 41.4  | 35.2  | 52.8  |

Manual Integrations  
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#9

Naphthalene

Concen: 0.372 ng

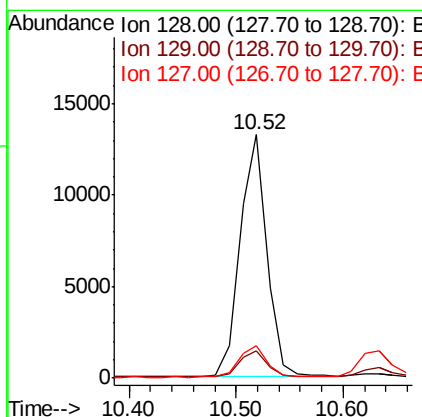
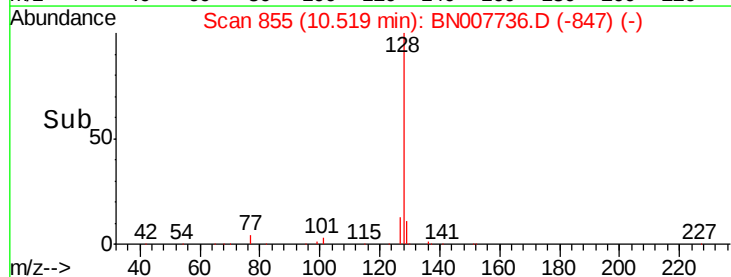
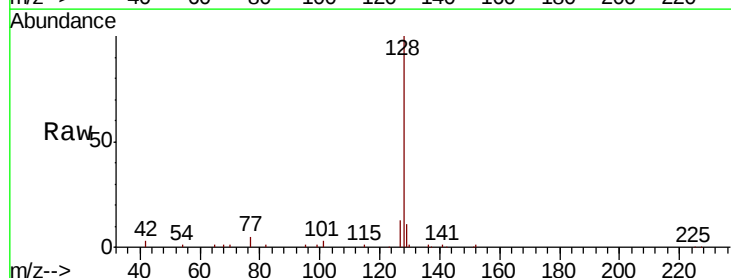
RT: 10.52 min Scan# 855

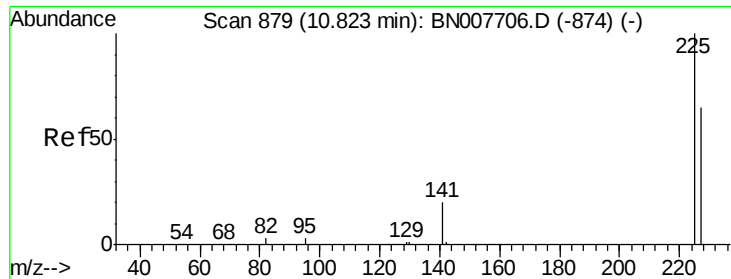
Delta R.T. -0.00 min

Lab File: BN007736.D

Acq: 19 Sep 2019 12:08

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 23001 |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 129      | 11.4  | 9.1   | 13.7  |
| 127      | 13.3  | 10.6  | 15.8  |





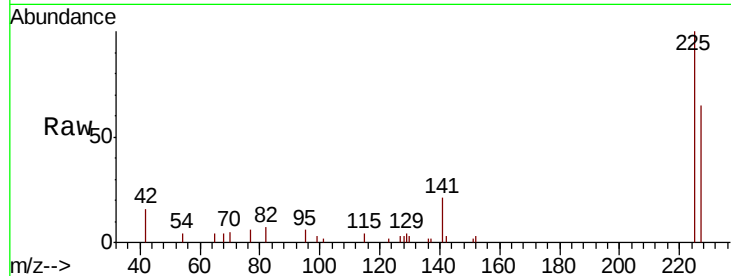
#10  
Hexachlorobutadiene  
Concen: 0.329 ng  
RT: 10.82 min Scan# 879  
Delta R.T. -0.00 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

Instrument :  
BNA\_N  
ClientSampleId :  
RE123D1-20190912MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 225     | 100   |       |       |
| 223     | 0.0   | 0.0   | 0.0   |
| 227     | 63.1  | 51.2  | 76.8  |

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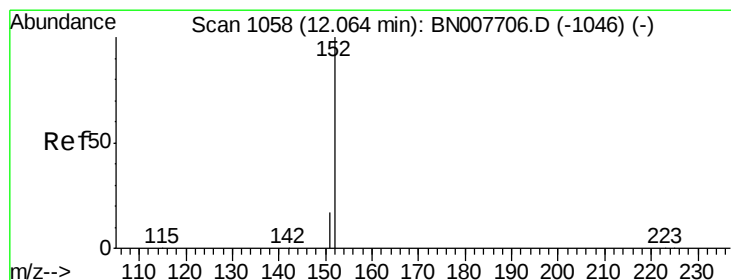
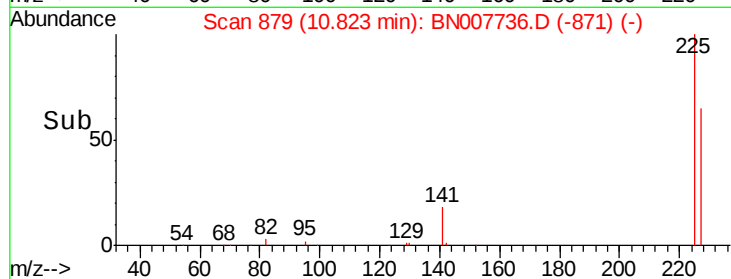
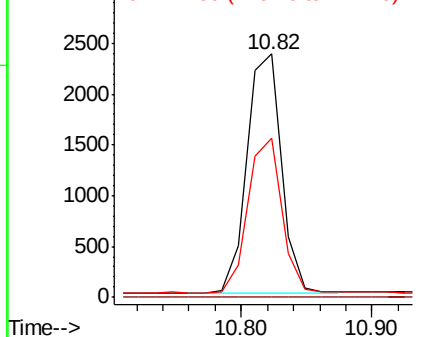


Abundance

Ion 225.00 (224.70 to 225.70): E

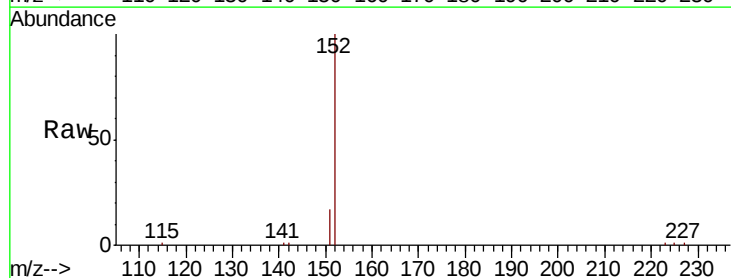
Ion 223.00 (222.70 to 223.70): E

Ion 227.00 (226.70 to 227.70): E



#11  
2-Methylnaphthalene-d10  
Concen: 0.381 ng m  
RT: 12.06 min Scan# 1057  
Delta R.T. -0.00 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

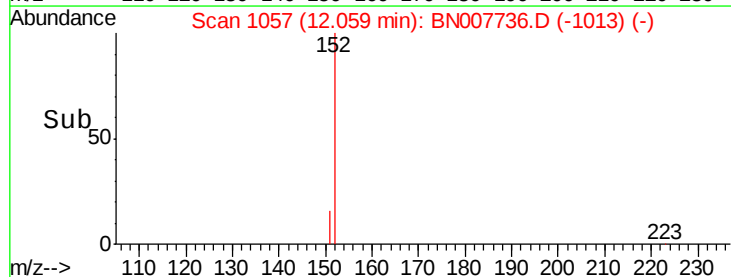
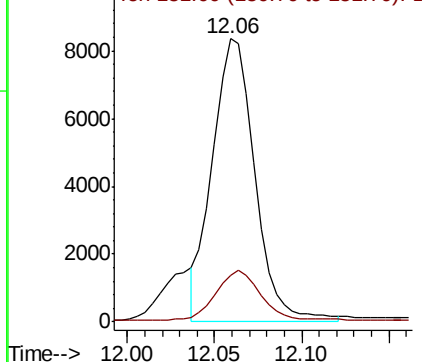
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 18.8  | 15.4  | 23.2  |

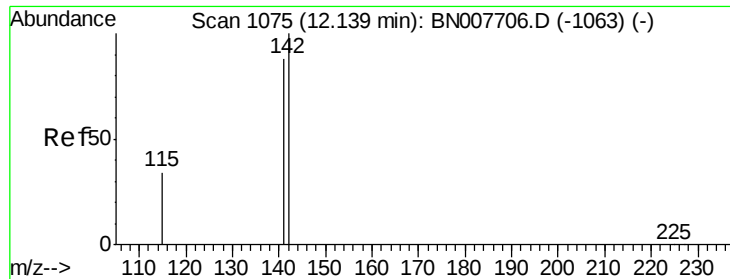


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E





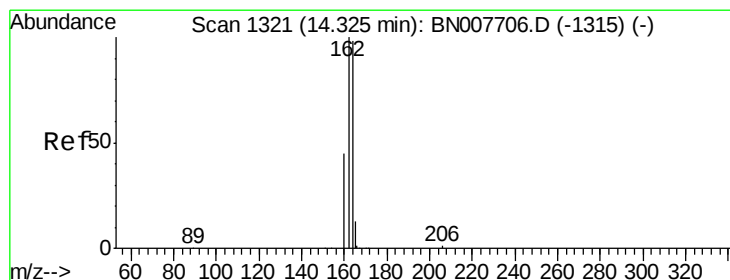
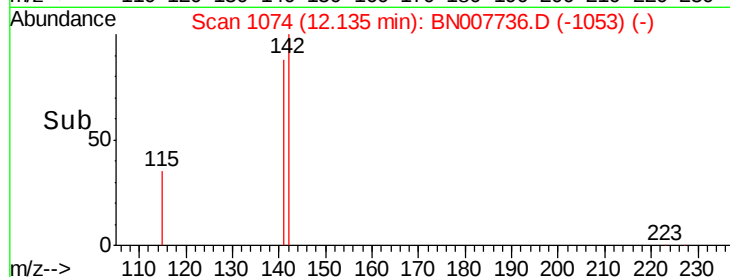
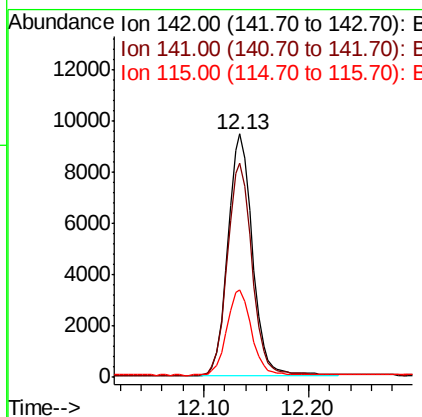
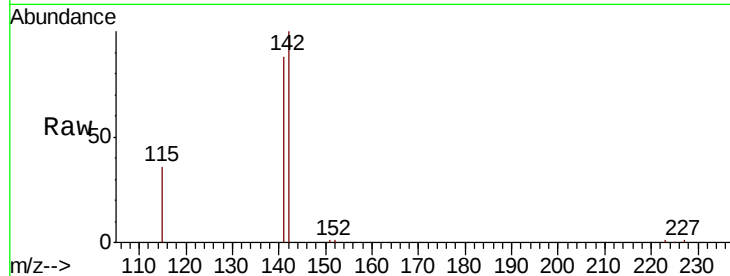
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2-Methylnaphthalene  
Concen: 0.366 ng  
RT: 12.13 min Scan# 1074  
Delta R.T. -0.00 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

Instrument :  
BNA\_N  
ClientSampleId :  
RE123D1-20190912MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 87.8  | 70.6  | 106.0 |
| 115     | 35.7  | 28.3  | 42.5  |

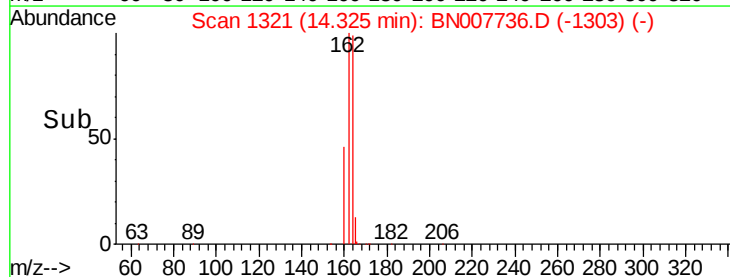
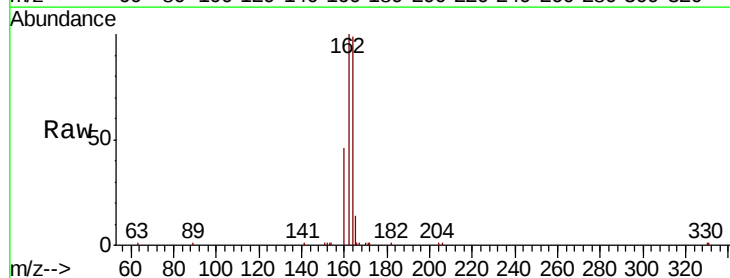
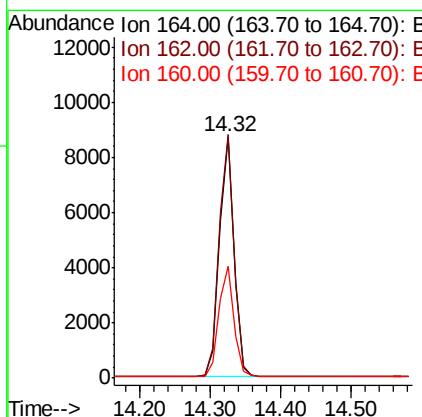
Manual Integrations  
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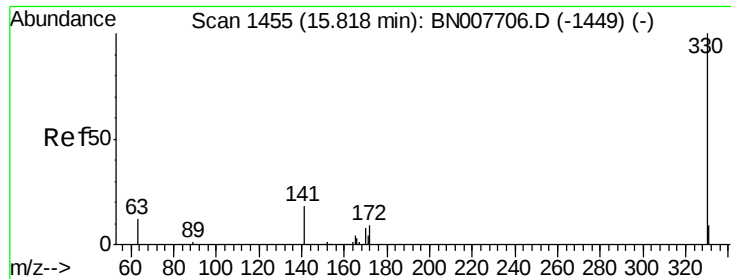
mohammad  
9/19/2019 4:48:48 PM



#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.32 min Scan# 1321  
Delta R.T. -0.00 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 100.8 | 81.7  | 122.5 |
| 160     | 46.2  | 37.0  | 55.4  |





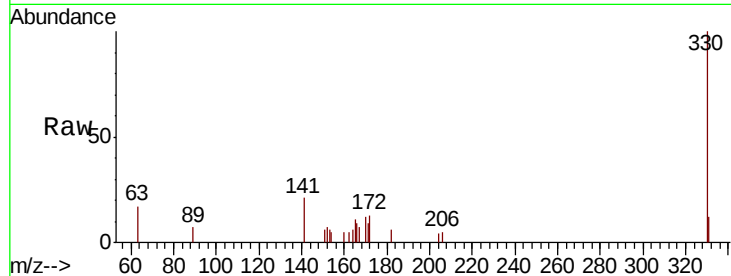
#14  
 2,4,6-Tribromophenol  
 Concen: 0.255 ng  
 RT: 15.82 min Scan# 1455  
 Delta R.T. -0.00 min  
 Lab File: BN007736.D  
 Acq: 19 Sep 2019 12:08

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RE123D1-20190912MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 0.0   | 0.0   | 0.0   |
| 141     | 34.6  | 28.7  | 43.1  |

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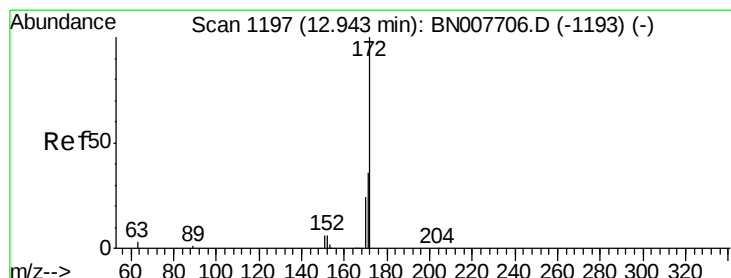
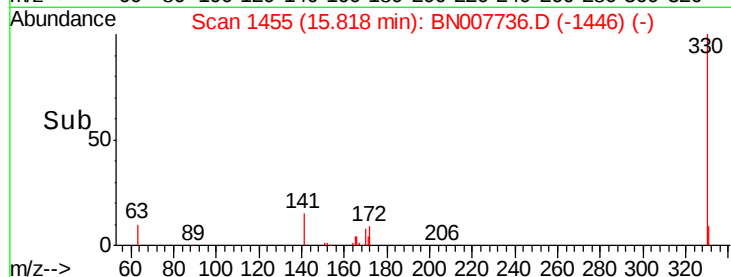
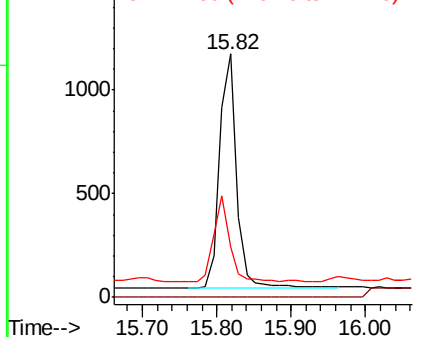


Abundance

Ion 330.00 (329.70 to 330.70): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



#15  
 2-Fluorobiphenyl  
 Concen: 0.454 ng  
 RT: 12.94 min Scan# 1197  
 Delta R.T. -0.00 min  
 Lab File: BN007736.D  
 Acq: 19 Sep 2019 12:08

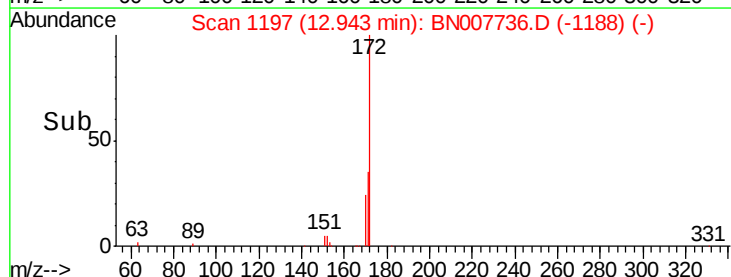
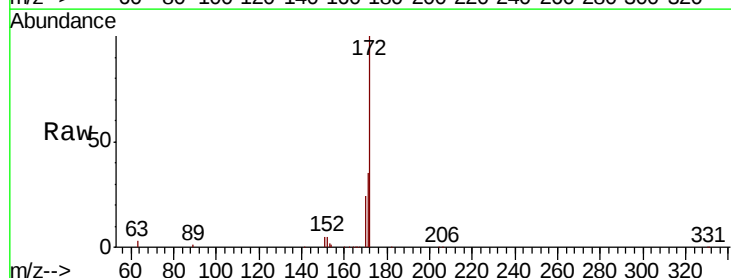
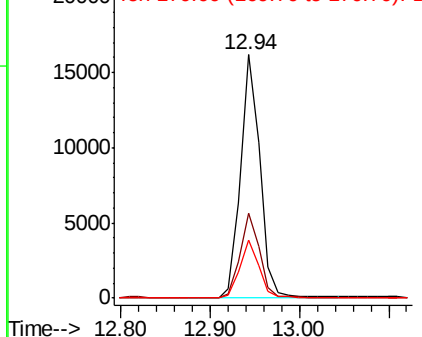
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 35.0  | 28.8  | 43.2  |
| 170     | 23.7  | 19.5  | 29.3  |

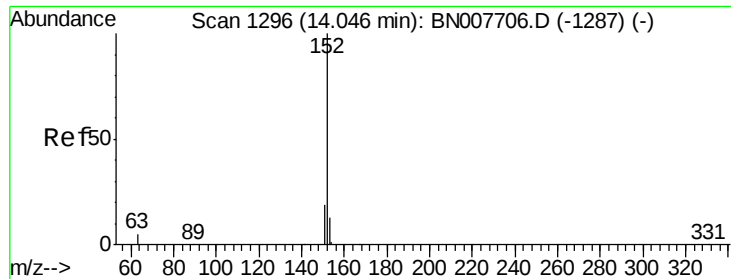
Abundance

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





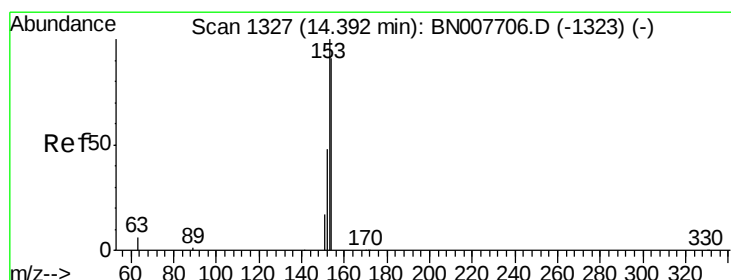
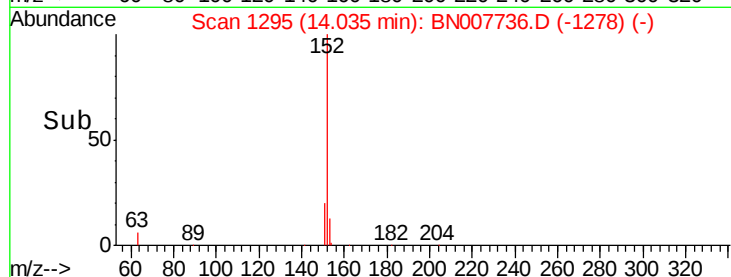
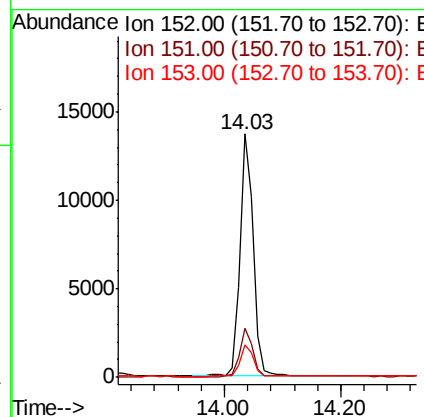
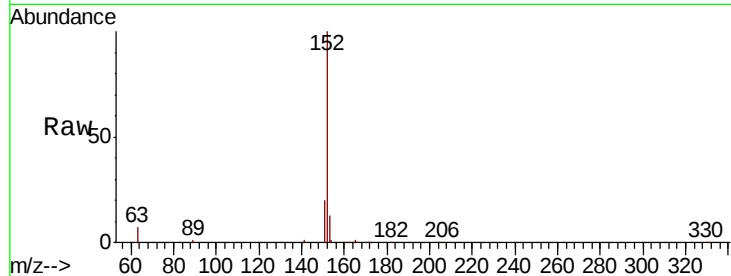
#16  
Acenaphthylene  
Concen: 0.321 ng  
RT: 14.03 min Scan# 1295  
Delta R.T. -0.01 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

Instrument :  
BNA\_N  
ClientSampleId :  
RE123D1-20190912MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 19.3  | 15.5  | 23.3  |
| 153     | 13.2  | 10.4  | 15.6  |

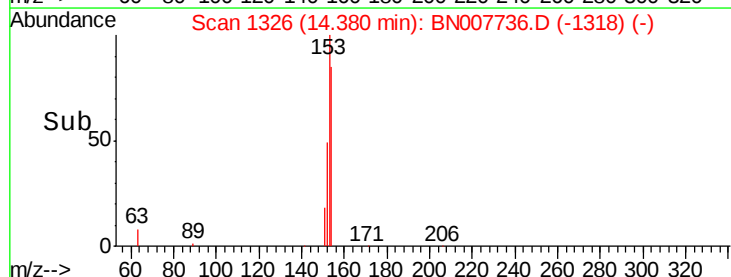
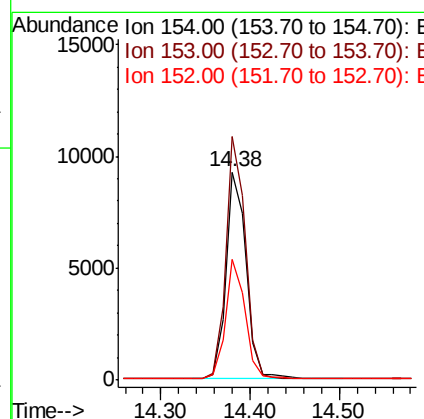
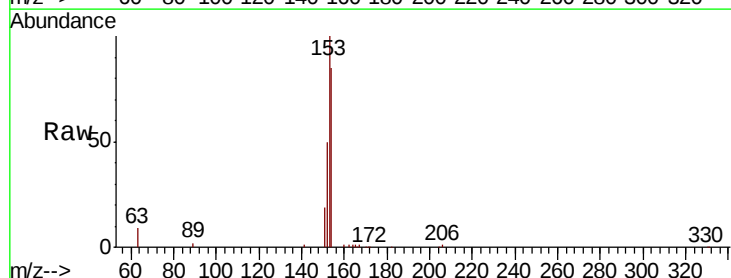
Manual Integrations  
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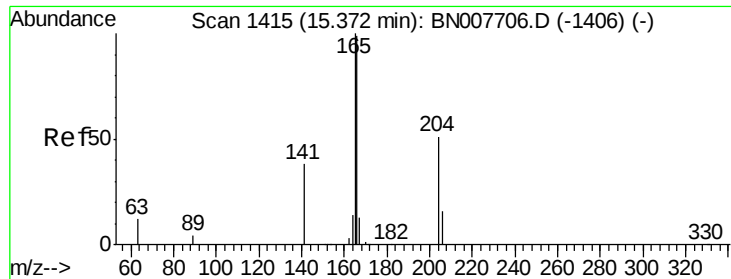
mohammad  
9/19/2019 4:48:48 PM



#17  
Acenaphthene  
Concen: 0.328 ng  
RT: 14.38 min Scan# 1326  
Delta R.T. -0.01 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 154     | 100   |       |       |
| 153     | 113.7 | 87.0  | 130.4 |
| 152     | 56.6  | 42.7  | 64.1  |





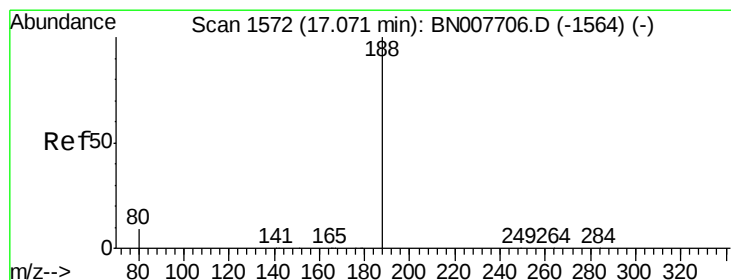
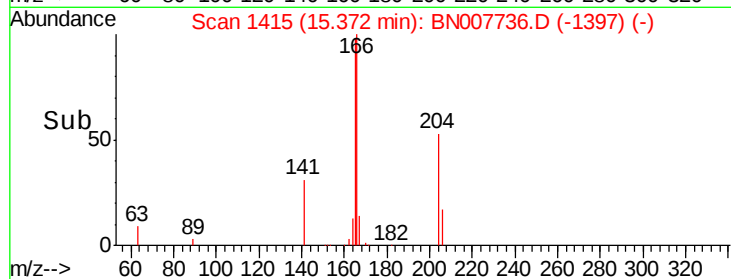
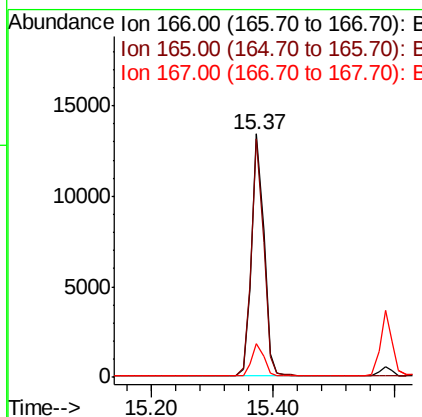
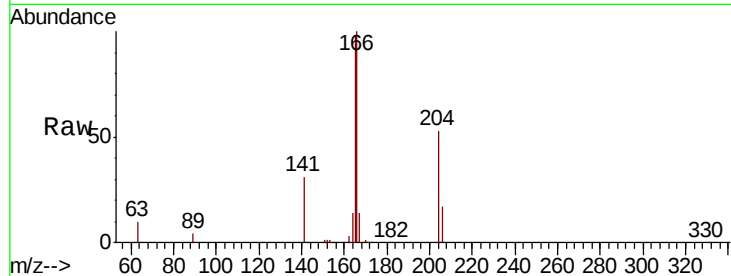
#18  
 Fluorene  
 Concen: 0.335 ng  
 RT: 15.37 min Scan# 1415  
 Delta R.T. -0.00 min  
 Lab File: BN007736.D  
 Acq: 19 Sep 2019 12:08

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RE123D1-20190912MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 97.6  | 78.0  | 117.0 |
| 167     | 13.6  | 10.9  | 16.3  |

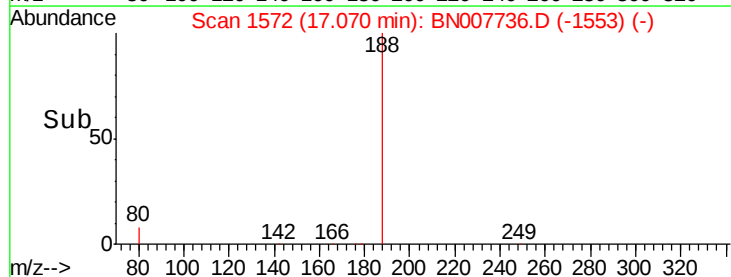
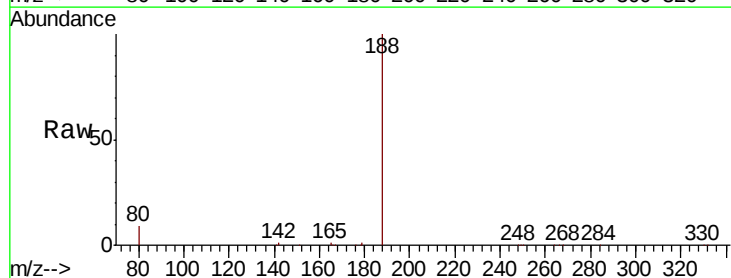
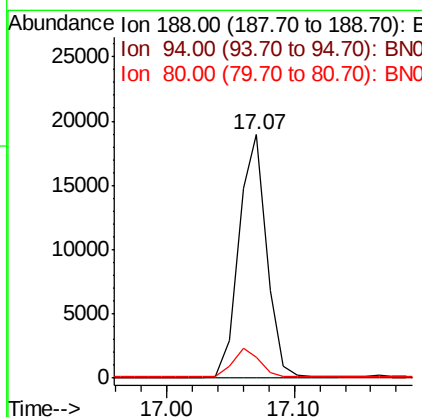
Manual Integrations  
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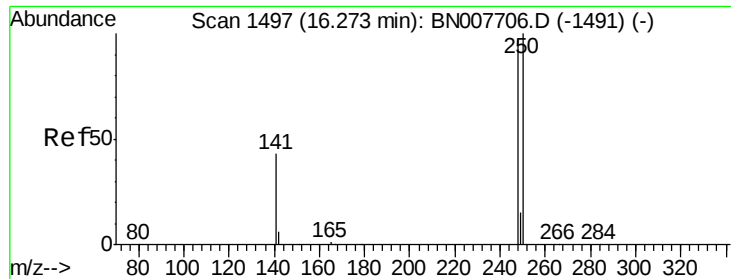
mohammad  
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#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.07 min Scan# 1572  
 Delta R.T. -0.00 min  
 Lab File: BN007736.D  
 Acq: 19 Sep 2019 12:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 0.0   | 0.0   | 0.0   |
| 80      | 8.6   | 7.4   | 11.2  |





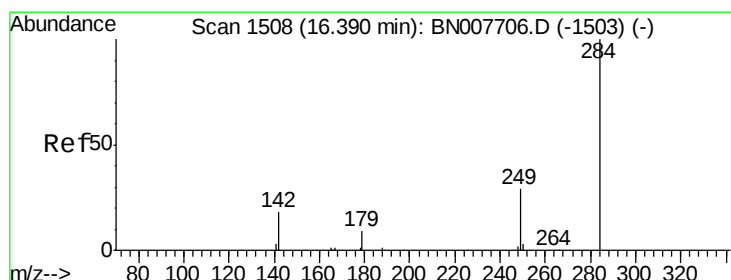
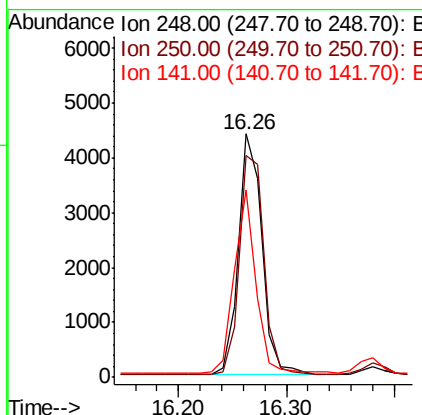
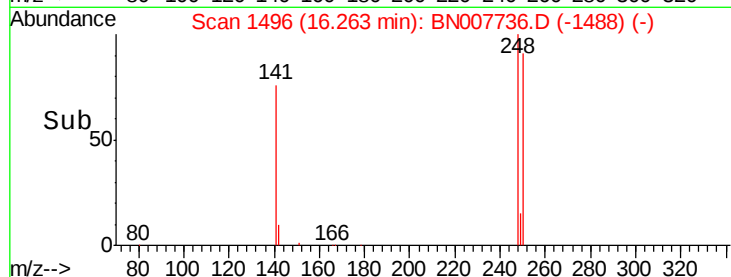
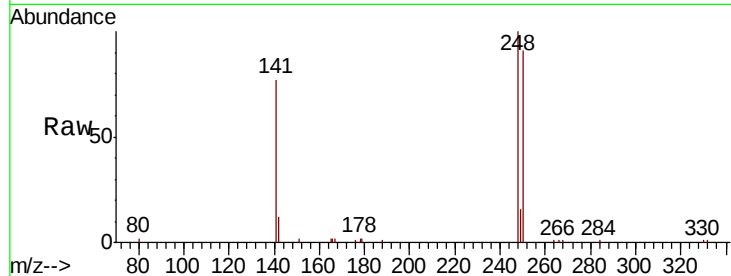
#20  
4-Bromophenyl-phenylether  
Concen: 0.387 ng  
RT: 16.26 min Scan# 1496  
Delta R.T. -0.01 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

Instrument :  
BNA\_N  
ClientSampleId :  
RE123D1-20190912MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 248     | 100   |       |       |
| 250     | 90.9  | 82.2  | 123.4 |
| 141     | 76.7  | 36.3  | 54.5  |

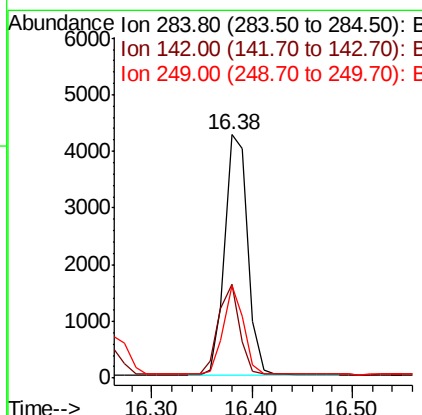
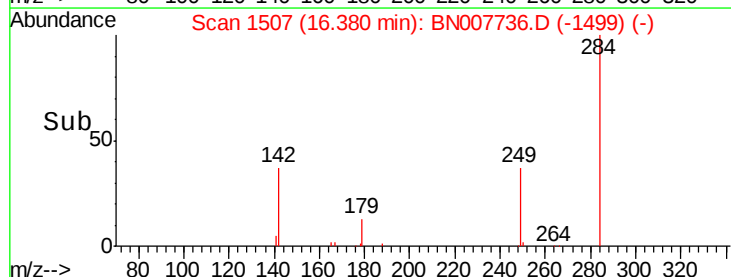
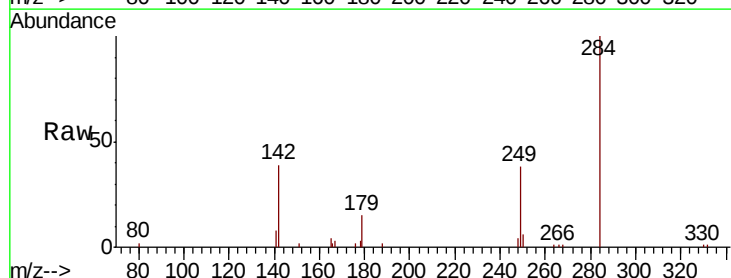
Manual Integrations  
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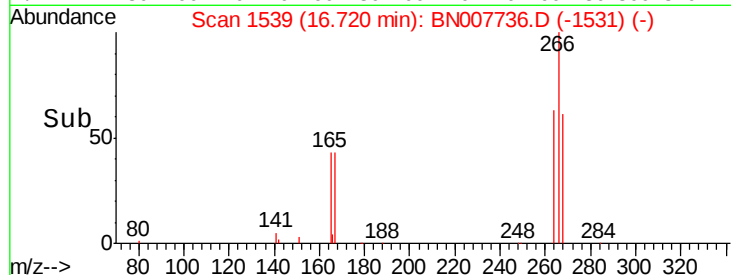
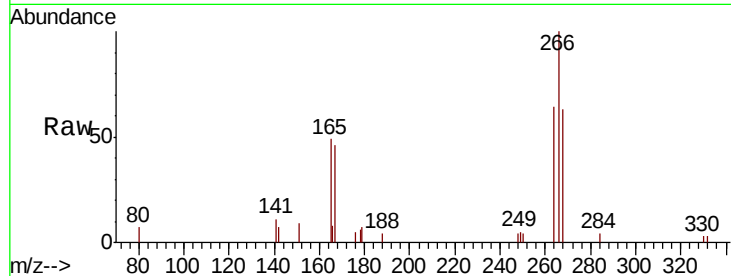
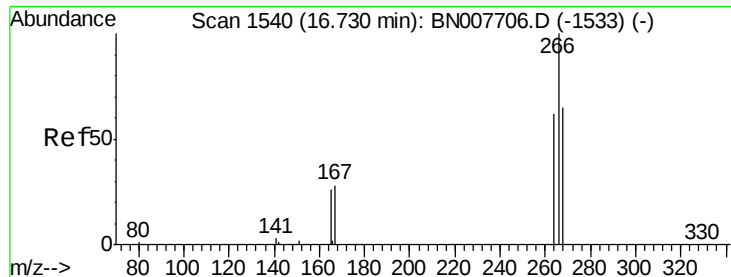
mohammad  
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#21  
Hexachlorobenzene  
Concen: 0.360 ng  
RT: 16.38 min Scan# 1507  
Delta R.T. -0.01 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 35.0  | 25.8  | 38.6  |
| 249     | 32.5  | 25.9  | 38.9  |





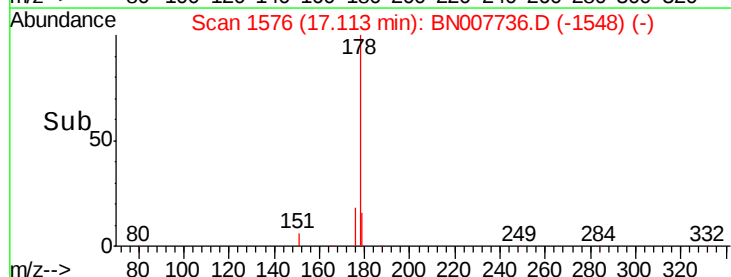
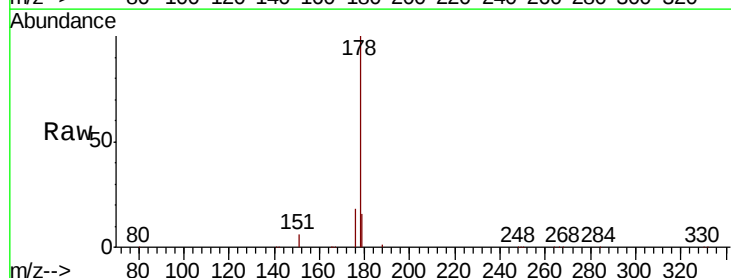
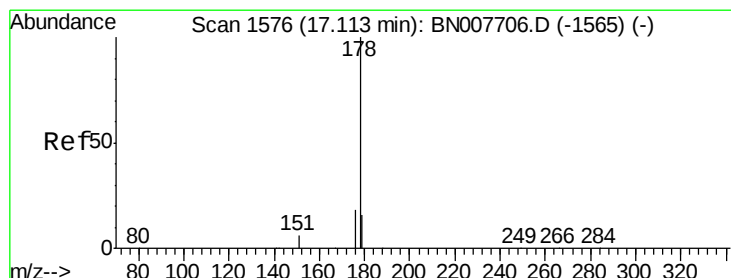
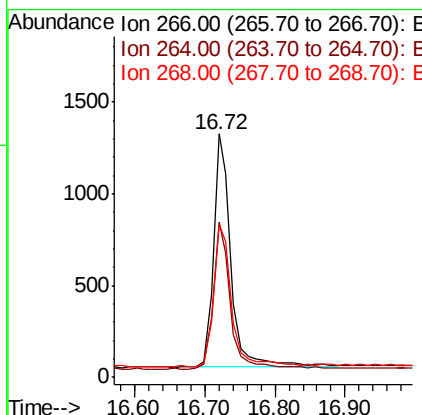
#22  
 Pentachlorophenol  
 Concen: 0.323 ng  
 RT: 16.72 min Scan# 1539  
 Delta R.T. -0.01 min  
 Lab File: BN007736.D  
 Acq: 19 Sep 2019 12:08

|           |       |       |      |
|-----------|-------|-------|------|
| Tot Ion:  | 266   | Resp: | 2247 |
| Ion Ratio | Lower | Upper |      |
| 266       | 100   |       |      |
| 264       | 63.6  | 50.0  | 75.0 |
| 268       | 62.7  | 54.2  | 81.4 |

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RE123D1-20190912MS

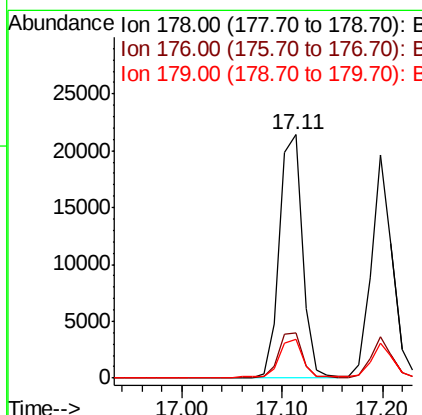
Manual Integrations  
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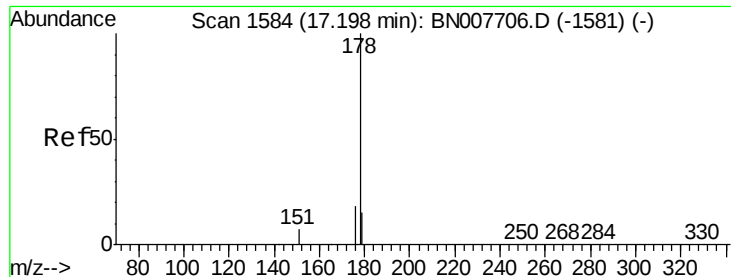
mohammad  
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#23  
 Phenanthrene  
 Concen: 0.384 ng  
 RT: 17.11 min Scan# 1576  
 Delta R.T. -0.00 min  
 Lab File: BN007736.D  
 Acq: 19 Sep 2019 12:08

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 33944 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 176       | 18.6  | 14.9  | 22.3  |
| 179       | 15.5  | 12.5  | 18.7  |





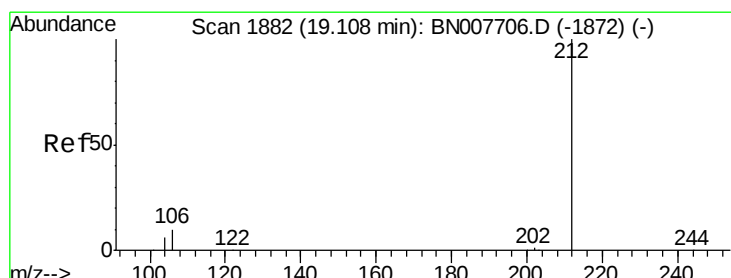
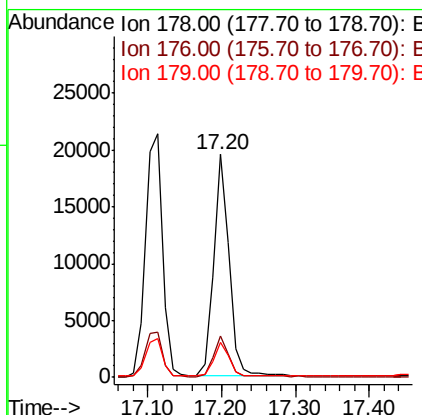
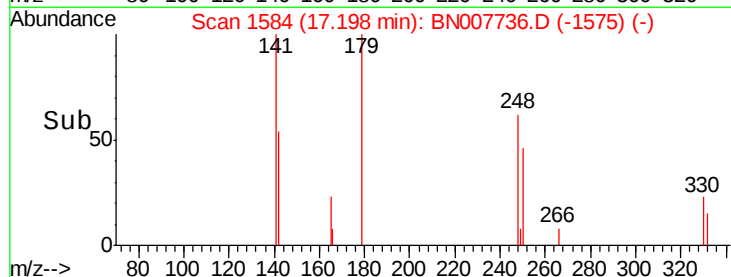
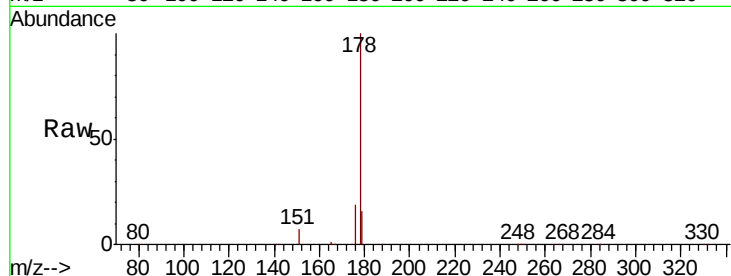
#24  
 Anthracene  
 Concen: 0.358 ng  
 RT: 17.20 min Scan# 1584  
 Delta R.T. -0.00 min  
 Lab File: BN007736.D  
 Acq: 19 Sep 2019 12:08

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RE123D1-20190912MS

|             |       |       |
|-------------|-------|-------|
| Tot Ion:178 | Resp: | 28637 |
| Ion Ratio   | Lower | Upper |
| 178 100     |       |       |
| 176 18.1    | 14.6  | 21.8  |
| 179 15.1    | 12.2  | 18.4  |

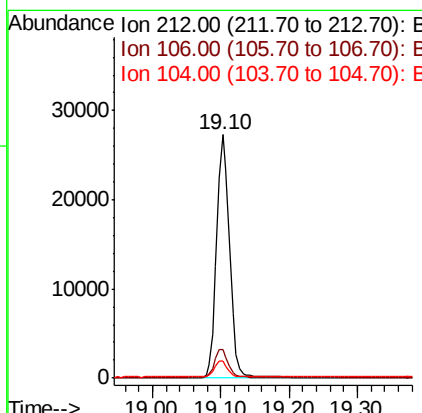
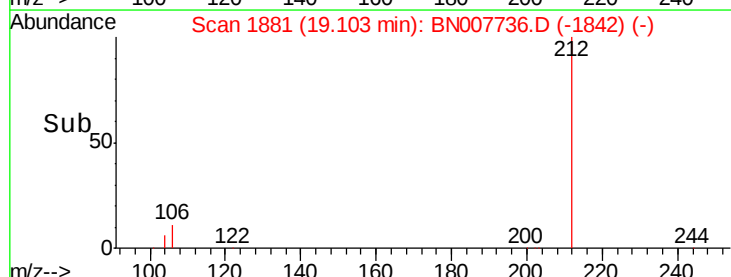
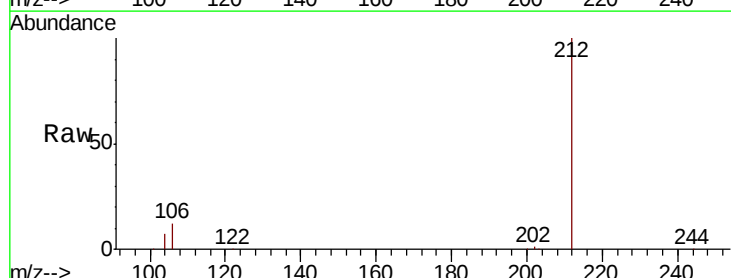
Manual Integrations  
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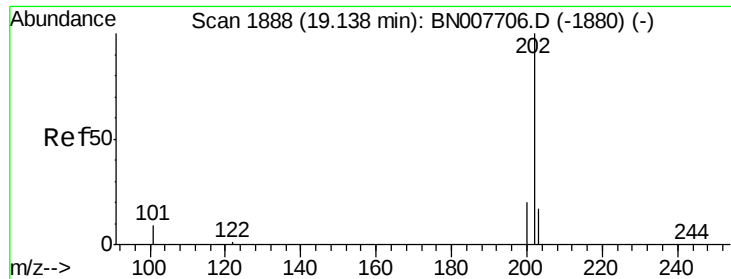
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#25  
 Fluoranthene-d10  
 Concen: 0.375 ng  
 RT: 19.10 min Scan# 1881  
 Delta R.T. -0.01 min  
 Lab File: BN007736.D  
 Acq: 19 Sep 2019 12:08

|             |       |       |
|-------------|-------|-------|
| Tgt Ion:212 | Resp: | 35942 |
| Ion Ratio   | Lower | Upper |
| 212 100     |       |       |
| 106 11.9    | 9.4   | 14.0  |
| 104 6.7     | 5.3   | 7.9   |





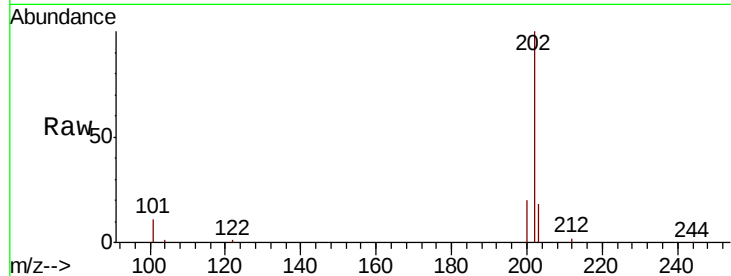
#26  
**Fluoranthene**  
 Concen: 0.360 ng  
 RT: 19.13 min Scan# 1887  
 Delta R.T. -0.01 min  
 Lab File: BN007736.D  
 Acq: 19 Sep 2019 12:08

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RE123D1-20190912MS

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 202     | 100   | 39653 |       |       |
| 101     | 10.8  |       | 8.4   | 12.6  |
| 203     | 17.1  |       | 13.8  | 20.8  |

Manual Integrations  
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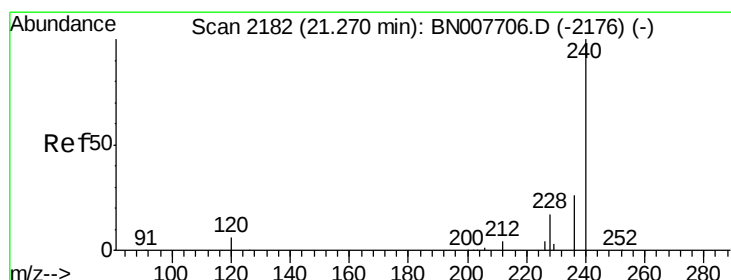
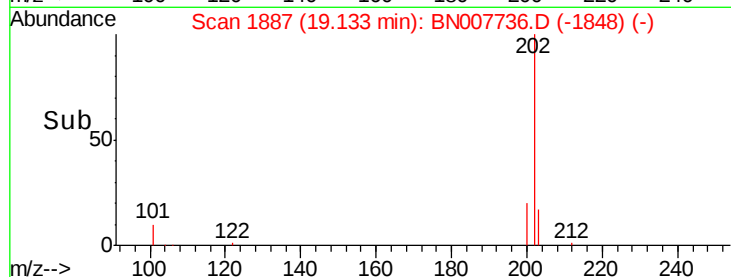
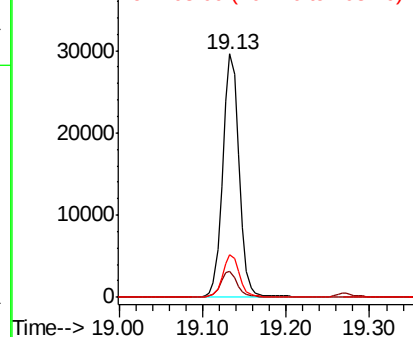


Abundance

Ion 202.00 (201.70 to 202.70): E

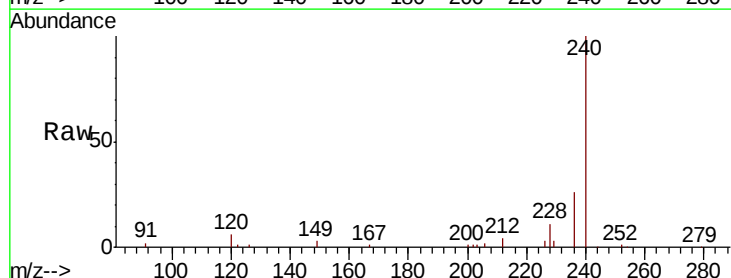
Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



#27  
**Chrysene-d12**  
 Concen: 0.400 ng  
 RT: 21.27 min Scan# 2182  
 Delta R.T. -0.00 min  
 Lab File: BN007736.D  
 Acq: 19 Sep 2019 12:08

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 240     | 100   | 31253 |       |       |
| 120     | 5.8   |       | 5.4   | 8.2   |
| 236     | 25.9  |       | 21.0  | 31.4  |

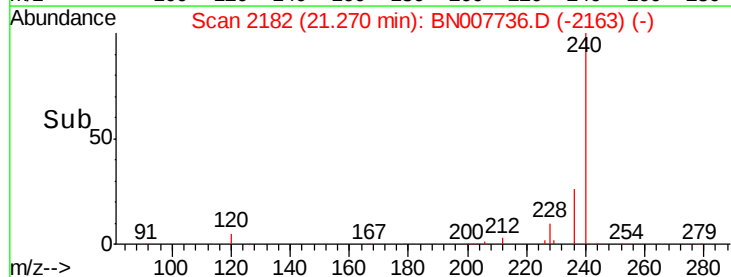
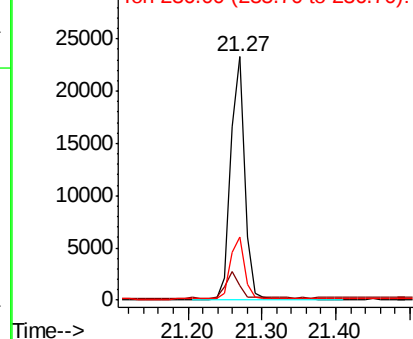


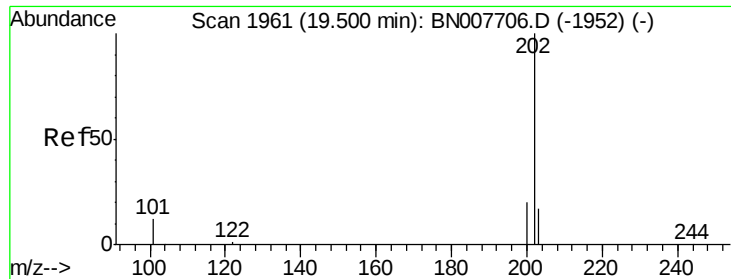
Abundance

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





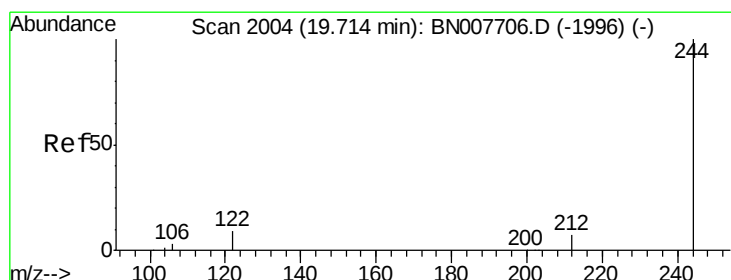
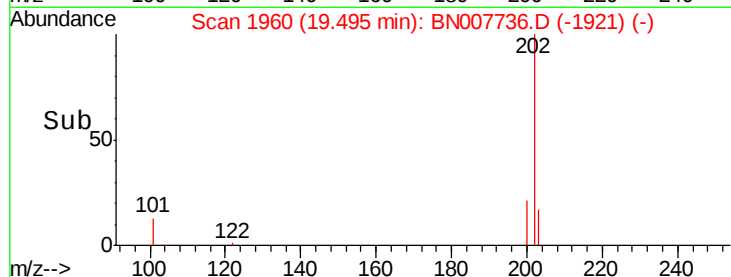
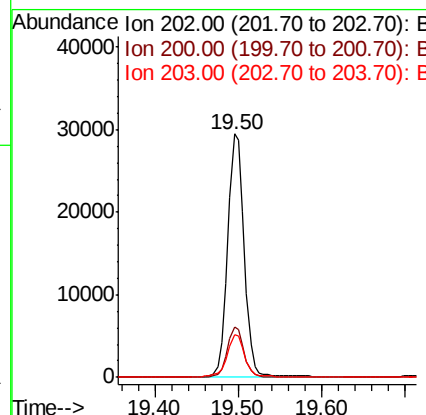
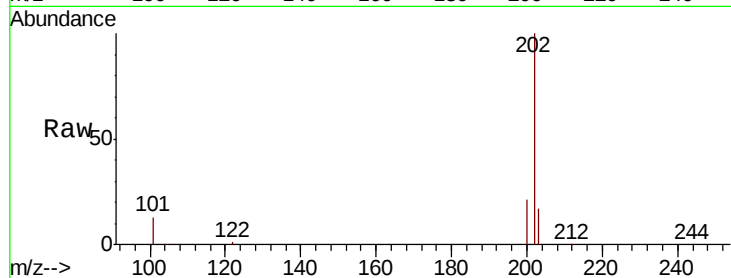
#28  
Pvrene  
Concen: 0.375 ng  
RT: 19.50 min Scan# 1960  
Delta R.T. -0.01 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

Instrument :  
BNA\_N  
ClientSampleId :  
RE123D1-20190912MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 20.4  | 16.4  | 24.6  |
| 203     | 17.9  | 14.1  | 21.1  |

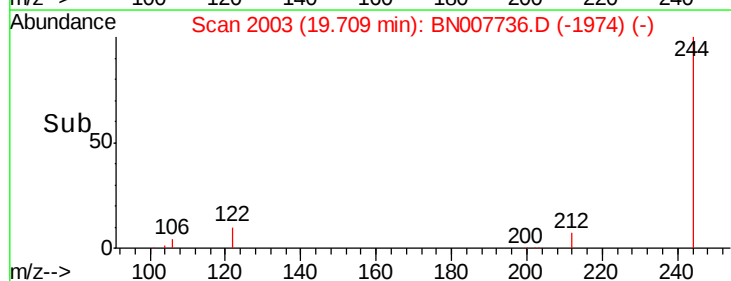
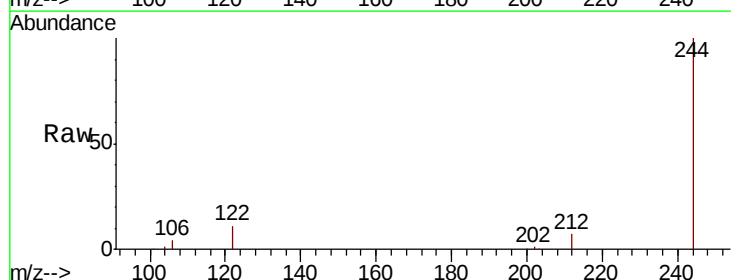
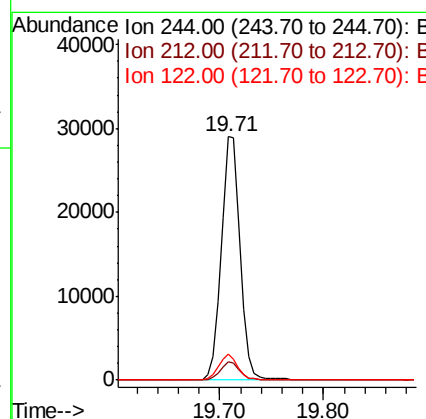
Manual Integrations  
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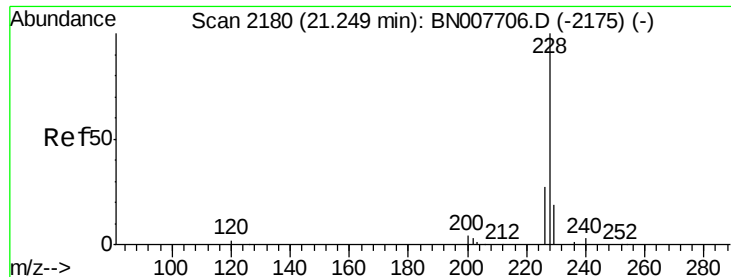
mohammad  
9/19/2019 4:48:48 PM



#29  
Terphenyl-d14  
Concen: 0.473 ng  
RT: 19.71 min Scan# 2003  
Delta R.T. -0.01 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 7.4   | 5.9   | 8.9   |
| 122     | 10.7  | 7.4   | 11.2  |





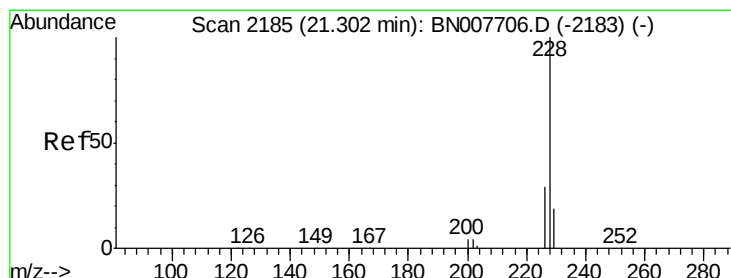
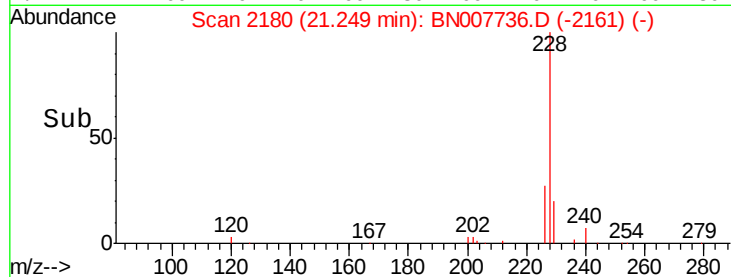
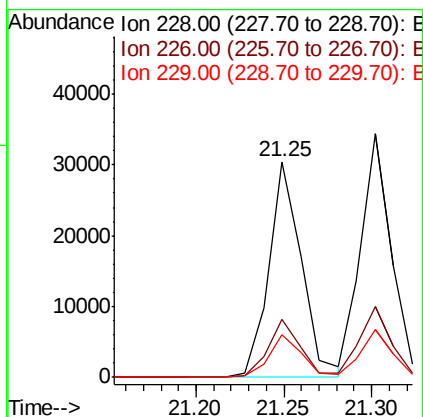
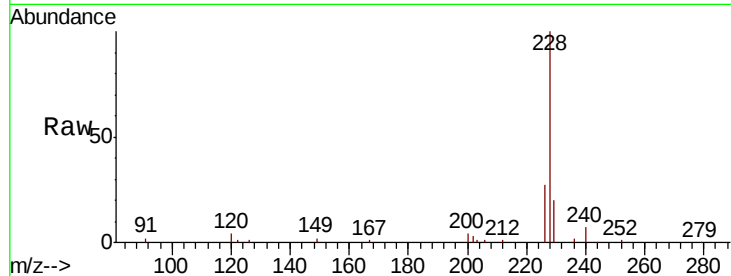
#30  
Benzo(a)anthracene  
Concen: 0.340 ng  
RT: 21.25 min Scan# 2180  
Delta R.T. -0.00 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

Instrument :  
BNA\_N  
ClientSampleId :  
RE123D1-20190912MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 27.0  | 22.1  | 33.1  |
| 229     | 19.7  | 15.8  | 23.6  |

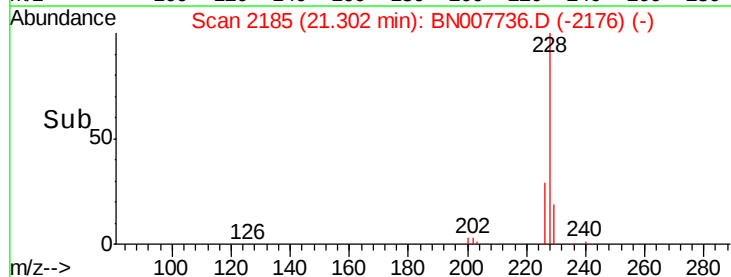
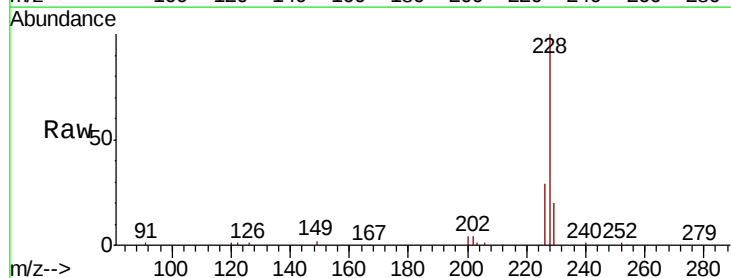
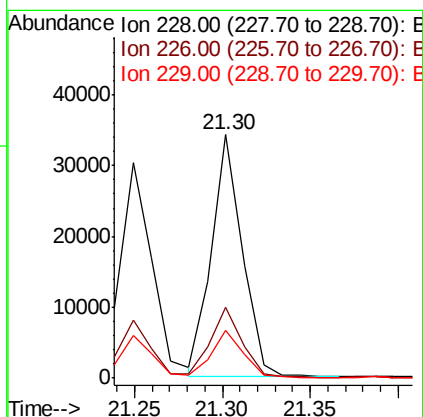
Manual Integrations  
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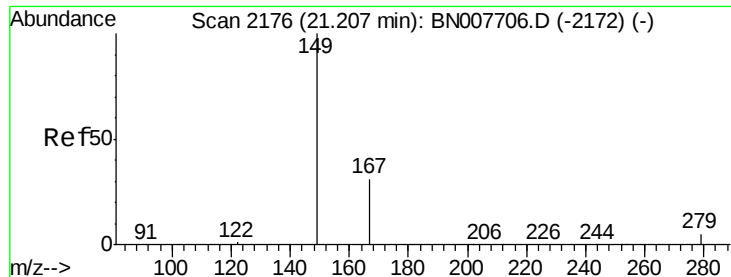
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#31  
Chrysene  
Concen: 0.369 ng  
RT: 21.30 min Scan# 2185  
Delta R.T. -0.00 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.1  | 23.9  | 35.9  |
| 229     | 19.7  | 15.8  | 23.6  |





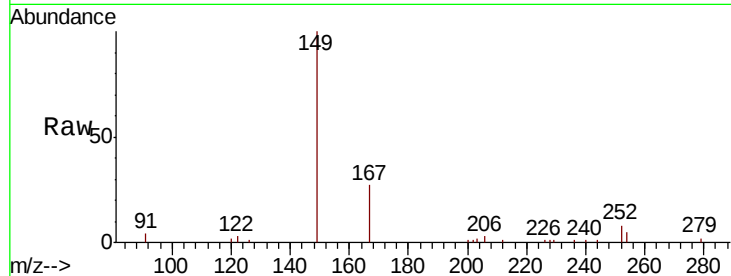
#32  
 Bis(2-ethylhexyl)phthalate  
 Concen: 0.240 ng  
 RT: 21.20 min Scan# 2175  
 Delta R.T. -0.01 min  
 Lab File: BN007736.D  
 Acq: 19 Sep 2019 12:08

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RE123D1-20190912MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 149     | 100   |       |       |
| 167     | 29.4  | 23.7  | 35.5  |
| 279     | 5.0   | 4.2   | 6.2   |

Manual Integrations  
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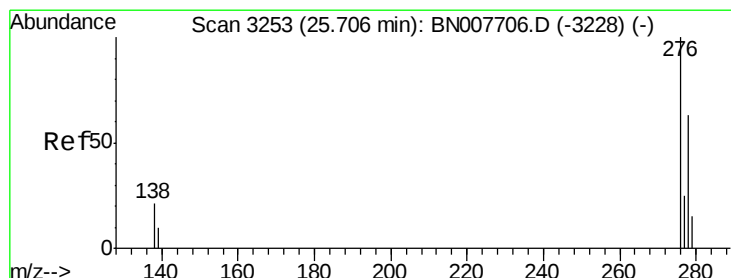
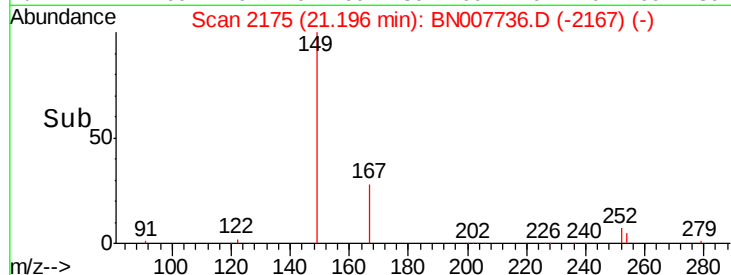
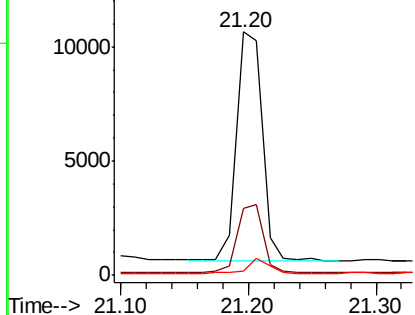


Abundance

Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E



#33  
 Indeno(1,2,3-cd)pyrene  
 Concen: 0.350 ng  
 RT: 25.70 min Scan# 3252  
 Delta R.T. -0.00 min  
 Lab File: BN007736.D  
 Acq: 19 Sep 2019 12:08

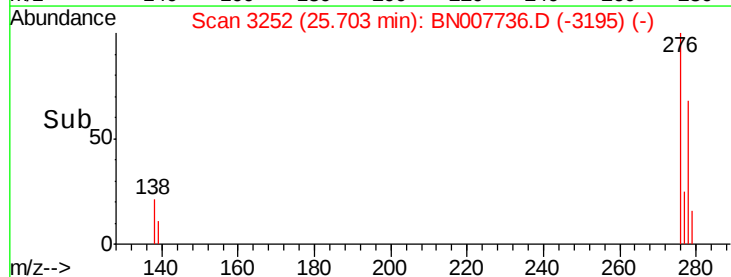
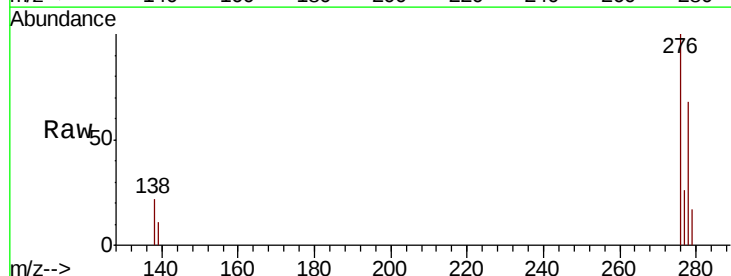
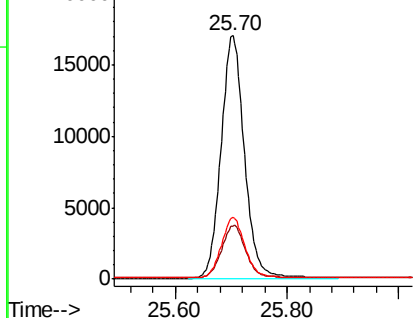
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 22.5  | 17.1  | 25.7  |
| 277     | 24.8  | 20.0  | 30.0  |

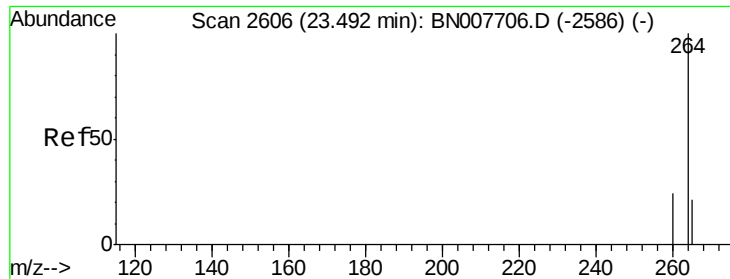
Abundance

Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E





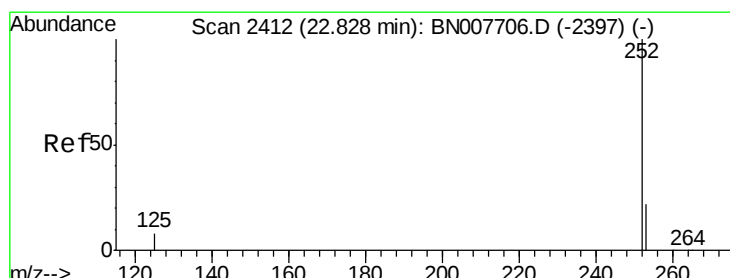
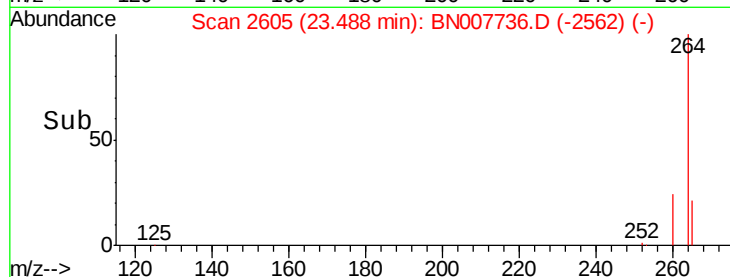
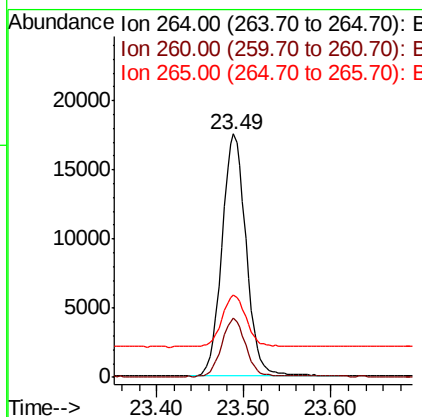
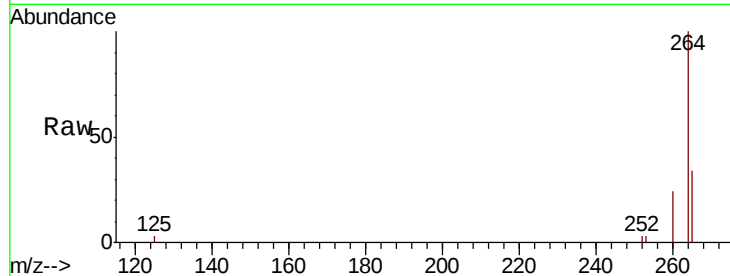
#34  
Pervlene-d12  
Concen: 0.400 ng  
RT: 23.49 min Scan# 2605  
Delta R.T. -0.00 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

Instrument :  
BNA\_N  
ClientSampleId :  
RE123D1-20190912MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.2  | 19.3  | 28.9  |
| 265     | 33.9  | 26.9  | 40.3  |

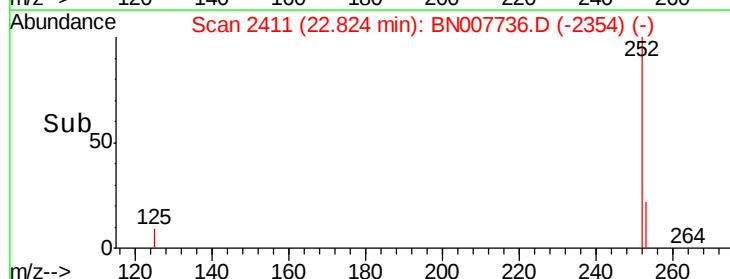
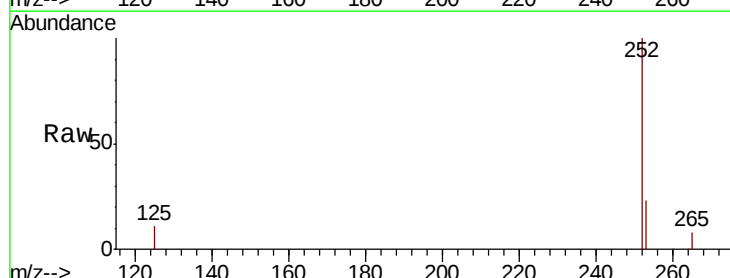
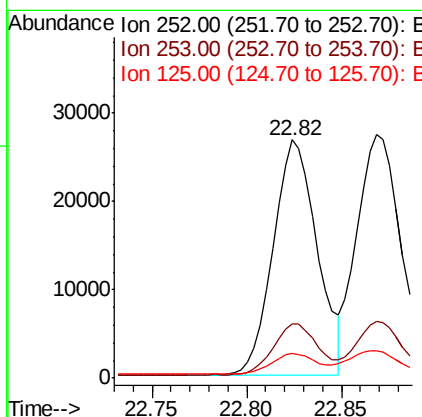
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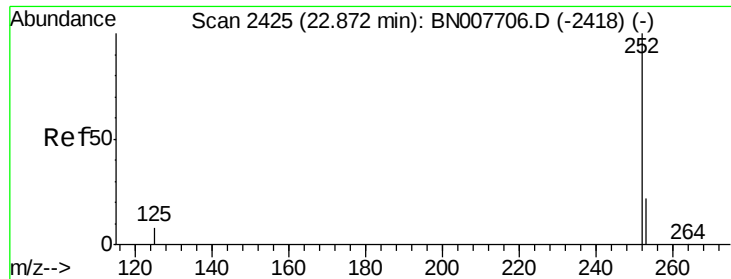
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#35  
Benzo(b)fluoranthene  
Concen: 0.365 ng  
RT: 22.82 min Scan# 2411  
Delta R.T. -0.00 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.7  | 18.3  | 27.5  |
| 125     | 10.5  | 8.2   | 12.4  |





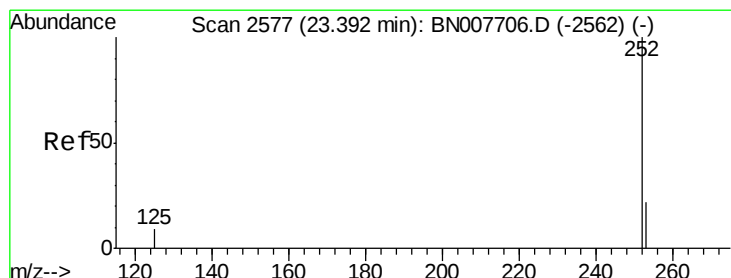
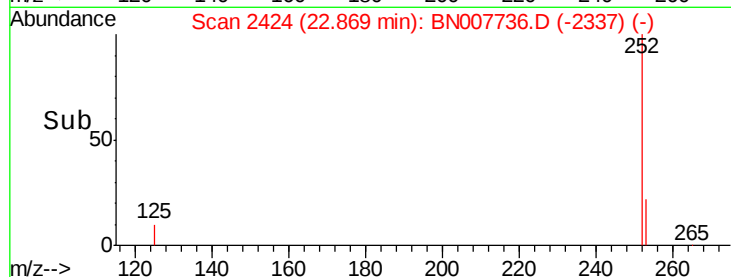
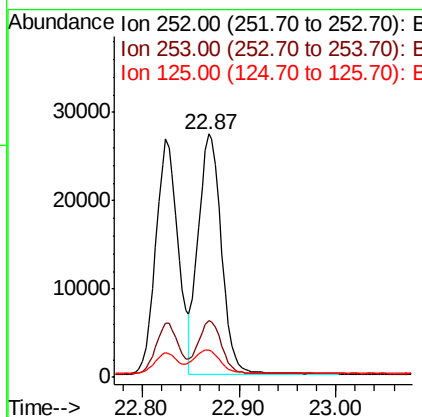
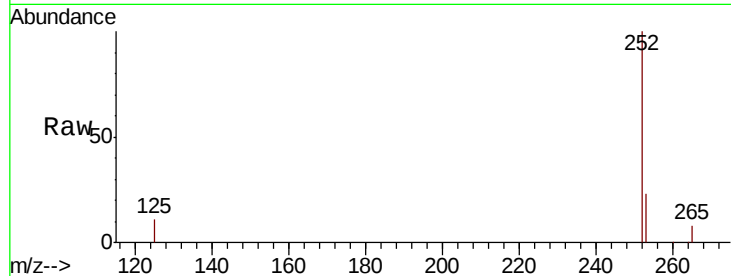
#36  
Benzo(k)fluoranthene  
Concen: 0.388 ng  
RT: 22.87 min Scan# 2424  
Delta R.T. -0.00 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

Instrument :  
BNA\_N  
ClientSampleId :  
RE123D1-20190912MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.2  | 18.5  | 27.7  |
| 125     | 11.2  | 8.4   | 12.6  |

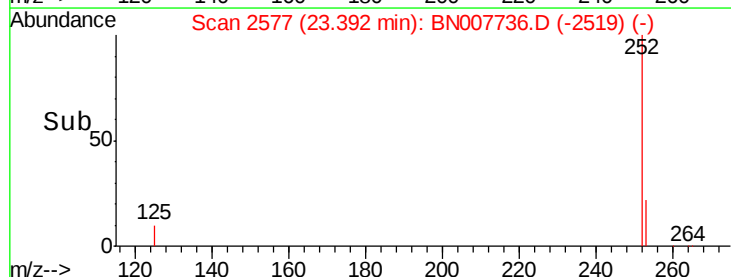
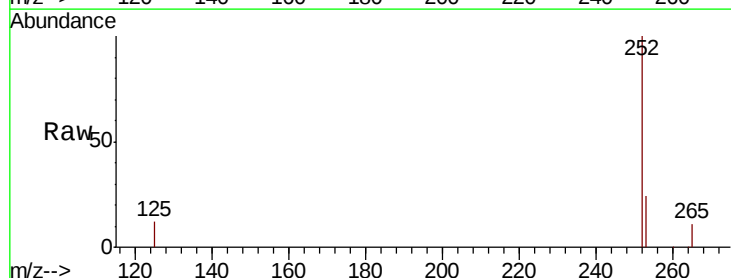
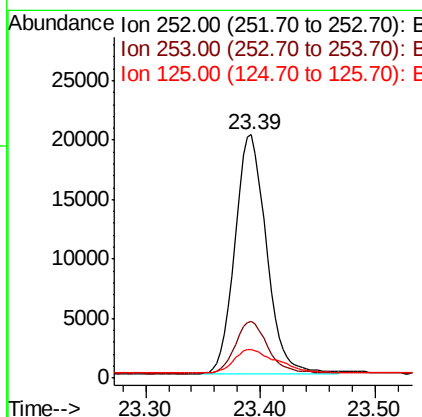
Manual Integrations  
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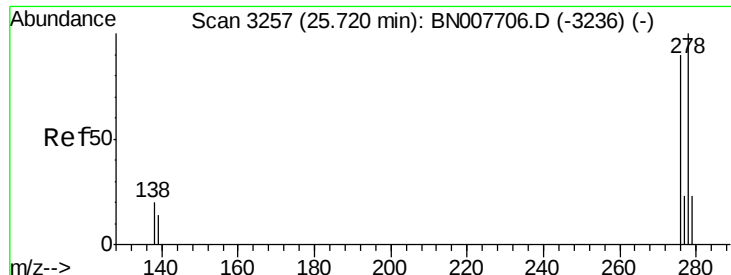
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#37  
Benzo(a)pyrene  
Concen: 0.350 ng  
RT: 23.39 min Scan# 2577  
Delta R.T. -0.00 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.6  | 18.6  | 27.8  |
| 125     | 11.9  | 9.4   | 14.0  |





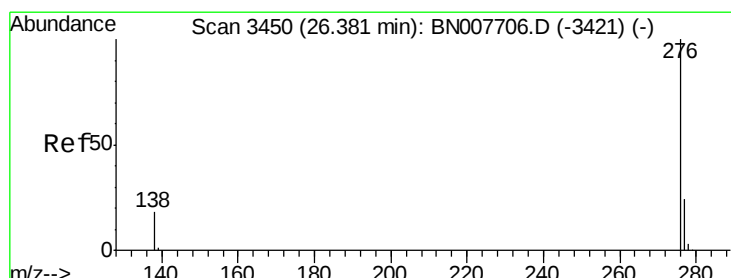
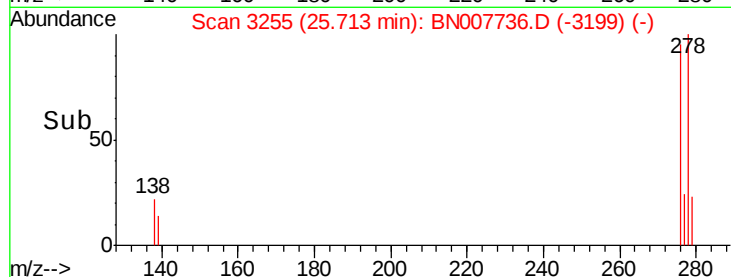
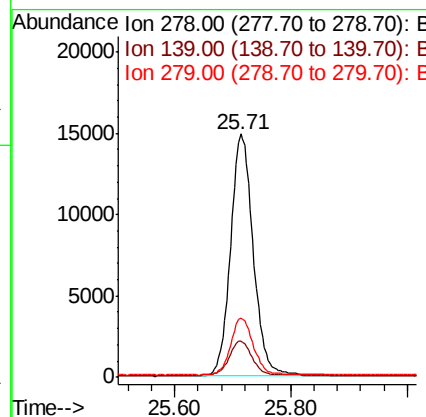
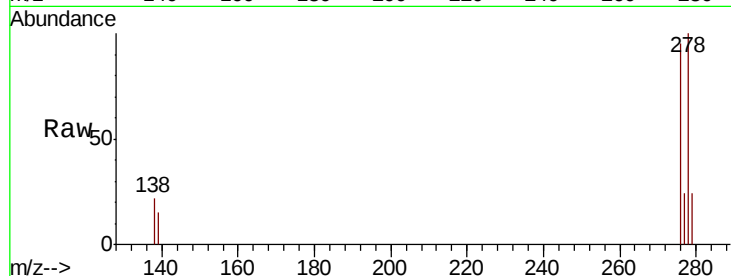
#38  
Dibenzo(a,h)anthracene  
Concen: 0.360 ng  
RT: 25.71 min Scan# 3255  
Delta R.T. -0.01 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

Instrument :  
BNA\_N  
ClientSampleId :  
RE123D1-20190912MS

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 14.9  | 11.8  | 17.6  |
| 279     | 24.2  | 19.4  | 29.2  |

Manual Integrations  
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#39  
Benzo(g,h,i)perylene  
Concen: 0.368 ng  
RT: 26.37 min Scan# 3448  
Delta R.T. -0.01 min  
Lab File: BN007736.D  
Acq: 19 Sep 2019 12:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.0  | 19.8  | 29.8  |
| 138     | 19.7  | 15.1  | 22.7  |

