

Data Path : Z:\HPCHEM1\BNA F\DATA\BF030217\  
 Data File : BF093360.D  
 Acq On : 3 Mar 2017 13:50  
 Operator : SJ/MA  
 Sample : I2003-01 10X  
 Misc :  
 ALS Vial : 42 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 HY-SB421ADL

Manual Integrations  
 APPROVED

mohammad  
 3/3/2017 5:17:29 PM

Quant Time: Mar 03 15:08:55 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF013017.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Feb 17 17:31:55 2017  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.80  | 152  | 144347   | 20.00 | ng    | -0.06    |
| 21) Naphthalene-d8          | 8.10  | 136  | 501702   | 20.00 | ng    | -0.05    |
| 38) Acenaphthene-d10        | 9.86  | 164  | 198303   | 20.00 | ng    | -0.03    |
| 63) Phenanthrene-d10        | 11.36 | 188  | 338819   | 20.00 | ng    | -0.02    |
| 75) Chrysene-d12            | 13.99 | 240  | 299372   | 20.00 | ng    | -0.03    |
| 86) Perylene-d12            | 15.41 | 264  | 267928   | 20.00 | ng    | -0.03    |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.39  | 112  | 60667    | 7.21  | ng    | -0.06    |
| 7) Phenol-d6                | 6.45  | 99   | 78874    | 7.29  | ng    | -0.03    |
| 23) Nitrobenzene-d5         | 7.37  | 82   | 57144    | 6.34  | ng    | -0.06    |
| 41) 2,4,6-Tribromophenol    | 10.67 | 330  | 10239    | 7.14  | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 9.17  | 172  | 90095    | 8.23  | ng    | -0.05    |
| 78) Terphenyl-d14           | 12.93 | 244  | 56131    | 4.41  | ng    | -0.03    |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 31) Naphthalene             | 8.11  | 128  | 109156   | 4.29  | ng    | # 76     |
| 37) 2-Methylnaphthalene     | 8.82  | 142  | 136391   | 8.35  | ng    | 96       |
| 47) 2-Nitroaniline          | 9.46  | 65   | 9265     | 2.45  | ng    | # 59     |
| 51) Acenaphthene            | 9.89  | 154  | 173207   | 14.93 | ng    | 93       |
| 54) Dibenzofuran            | 10.08 | 168  | 70701    | 4.56  | ng    | # 17     |
| 57) Fluorene                | 10.42 | 166  | 154020   | 12.90 | ng    | # 91     |
| 70) Phenanthrene            | 11.38 | 178  | 345700   | 17.81 | ng    | # 94     |
| 71) Anthracene              | 11.44 | 178  | 89500    | 4.59  | ng    | # 84     |
| 74) Fluoranthene            | 12.57 | 202  | 684154   | 34.17 | ng    | 98       |
| 77) Pyrene                  | 12.80 | 202  | 687338   | 30.68 | ng    | 99       |
| 80) Benzo(a)anthracene      | 13.97 | 228  | 145032m  | 7.92  | ng    |          |
| 82) Chrysene                | 14.01 | 228  | 120644m  | 7.04  | ng    |          |
| 87) Benzo(b)fluoranthene    | 15.00 | 252  | 99813m   | 5.66  | ng    |          |
| 88) Benzo(k)fluoranthene    | 15.01 | 252  | 41130m   | 2.70  | ng    |          |
| 89) Benzo(a)pyrene          | 15.36 | 252  | 58312    | 3.82  | ng    | # 71     |

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

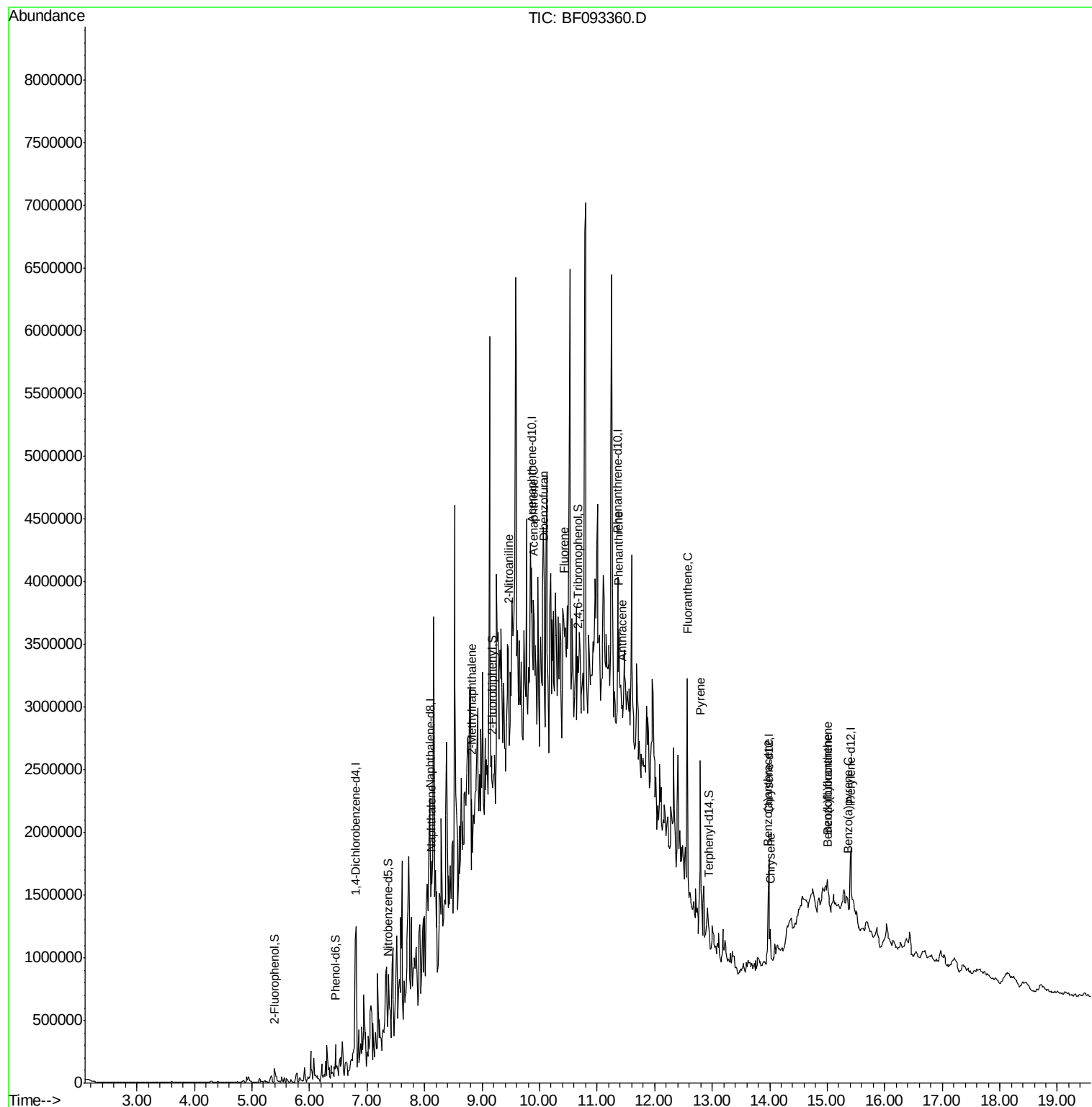
Data Path : Z:\HPCHEM1\BNA F\DATA\BF030217\  
Data File : BF093360.D  
Acq On : 3 Mar 2017 13:50  
Operator : SJ/MA  
Sample : I2003-01 10X  
Misc :  
ALS Vial : 42 Sample Multiplier: 1

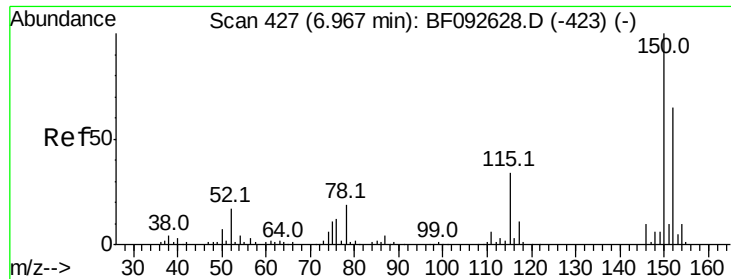
Instrument :  
BNA\_F  
ClientSampleId :  
HY-SB421ADL

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Quant Time: Mar 03 15:08:55 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF013017.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Feb 17 17:31:55 2017  
Response via : Initial Calibration





#1

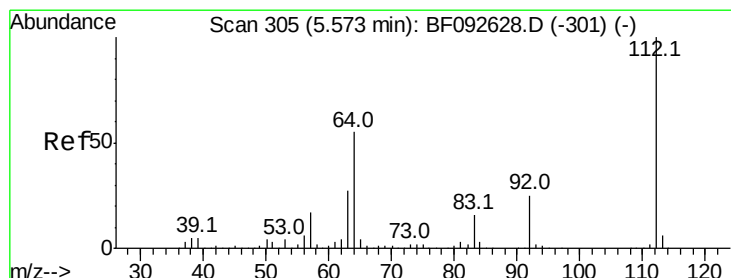
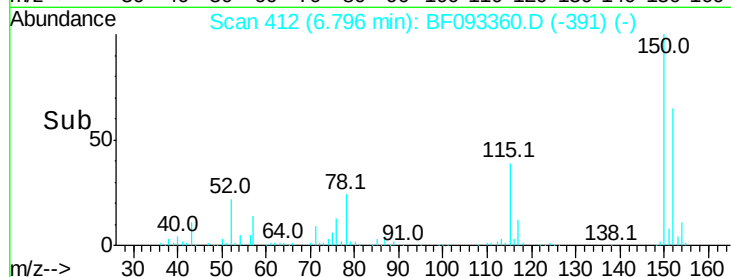
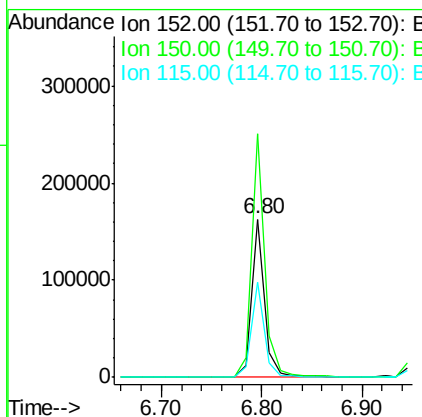
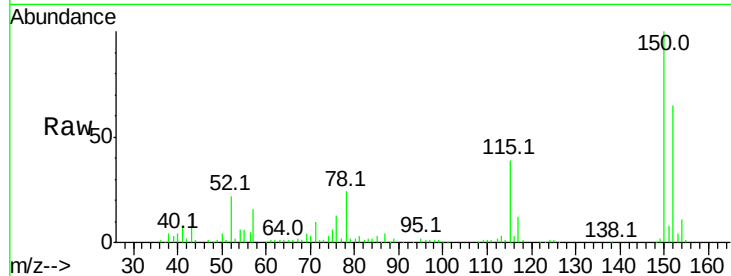
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 6.80 min Scan# 412  
Delta R.T. -0.06 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

Instrument :  
BNA\_F  
ClientSampleId :  
HY-SB421ADL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 154.2 | 124.9 | 187.3 |
| 115     | 60.0  | 46.0  | 69.0  |

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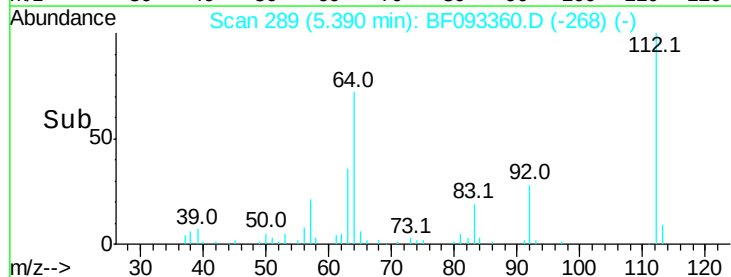
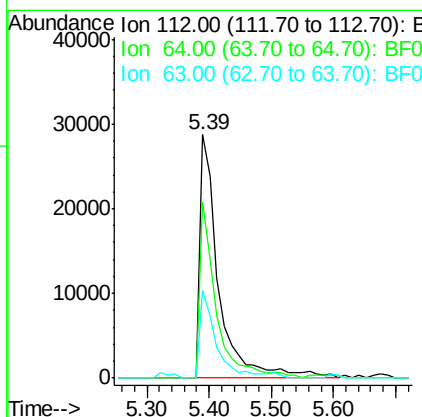
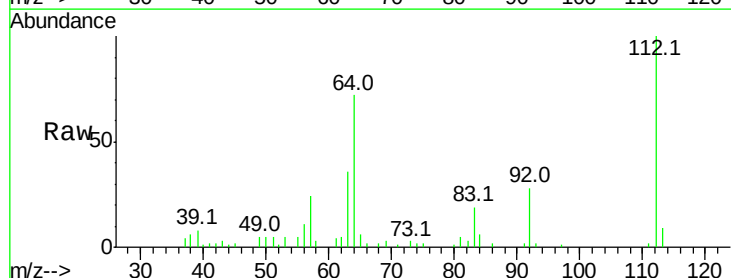
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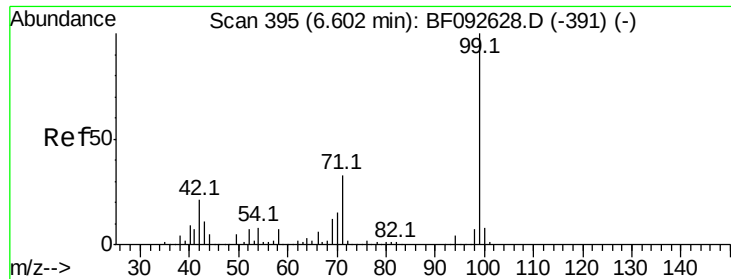


#5

2-Fluorophenol  
Concen: 7.21 ng  
RT: 5.39 min Scan# 289  
Delta R.T. -0.06 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 72.0  | 46.1  | 69.1# |
| 63      | 36.0  | 23.8  | 35.6# |





#7

Phenol-d6

Concen: 7.29 ng

RT: 6.45 min Scan# 382

Delta R.T. -0.03 min

Lab File: BF093360.D

Acq: 3 Mar 2017 13:50

Instrument :

BNA\_F

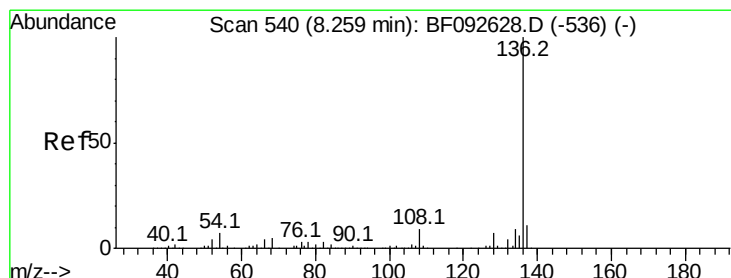
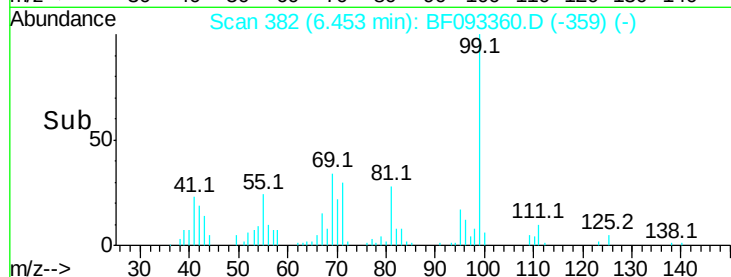
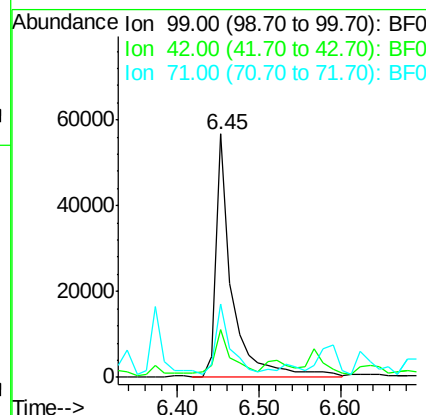
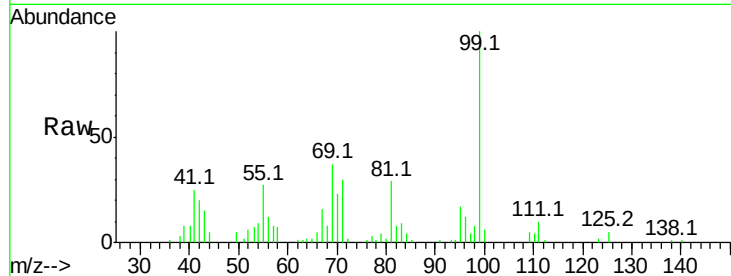
ClientSampleId :

HY-SB421ADL

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 99    | Resp: | 78874 |
| Ion      | Ratio | Lower | Upper |
| 99       | 100   |       |       |
| 42       | 19.8  | 15.6  | 23.4  |
| 71       | 30.3  | 27.5  | 41.3  |

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#21

Naphthalene-d8

Concen: 20.00 ng

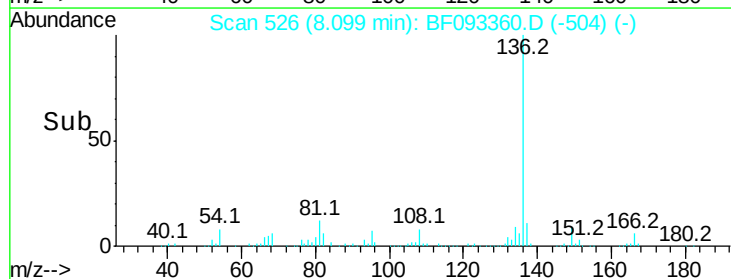
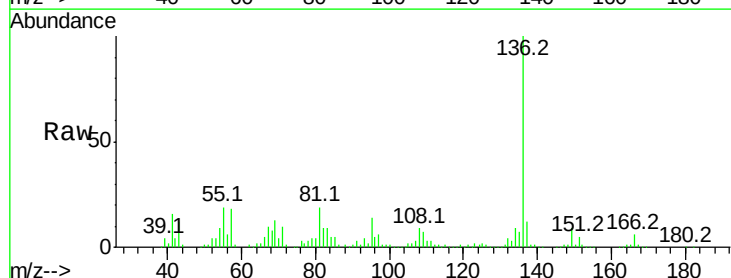
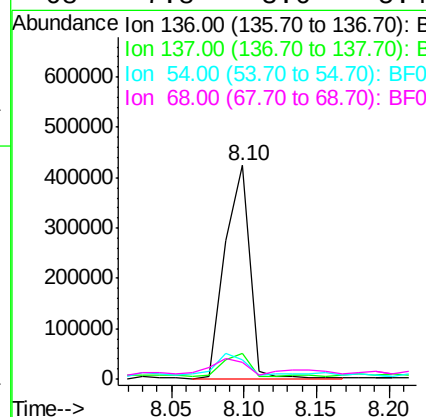
RT: 8.10 min Scan# 526

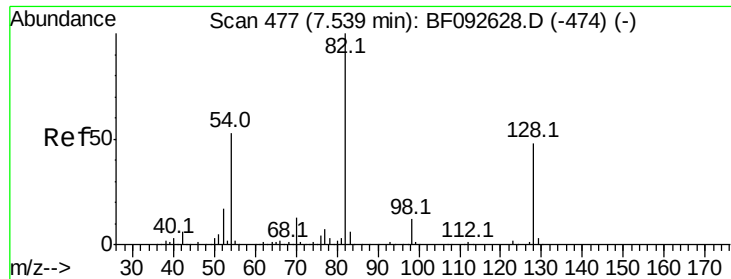
Delta R.T. -0.05 min

Lab File: BF093360.D

Acq: 3 Mar 2017 13:50

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 136   | Resp: | 501702 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 12.3  | 8.4   | 12.6   |
| 54       | 9.0   | 4.5   | 6.7#   |
| 68       | 7.8   | 3.6   | 5.4#   |





#23

Nitrobenzene-d5

Concen: 6.34 ng

RT: 7.37 min Scan# 462

Delta R.T. -0.06 min

Lab File: BF093360.D

Acq: 3 Mar 2017 13:50

Instrument :

BNA\_F

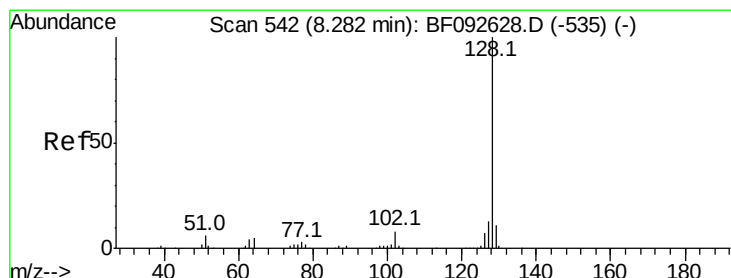
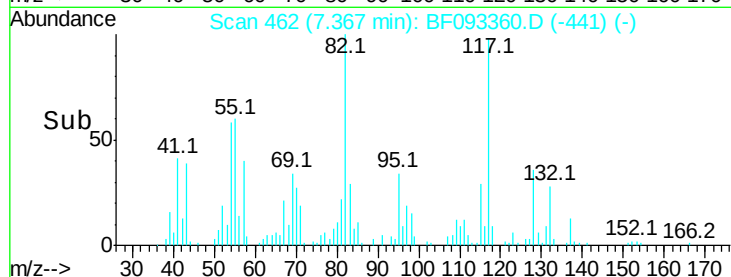
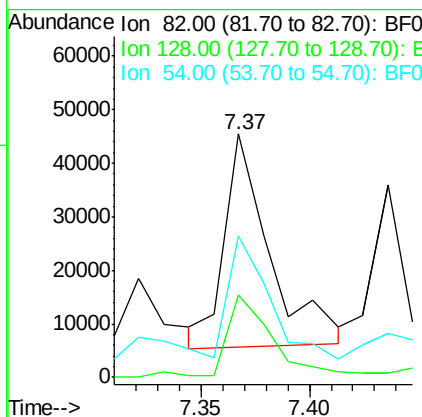
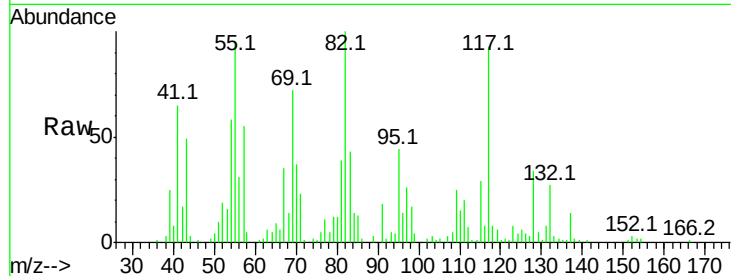
ClientSampleId :

HY-SB421ADL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 82    | Resp: | 57144 |
| Ion Ratio | Lower | Upper |       |
| 82        | 100   |       |       |
| 128       | 33.8  | 34.6  | 52.0# |
| 54        | 58.1  | 39.5  | 59.3  |

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#31

Naphthalene

Concen: 4.29 ng

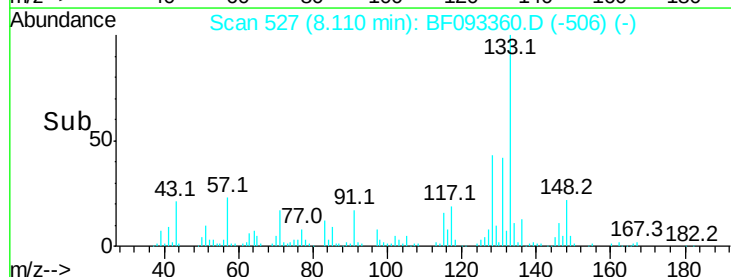
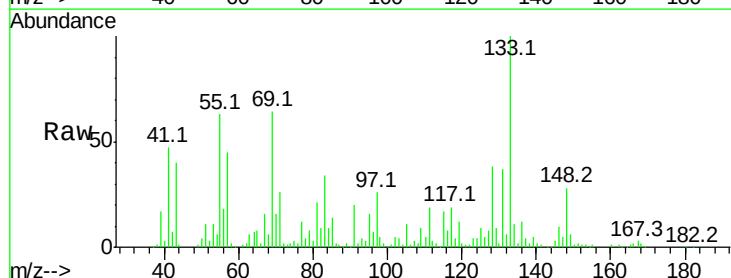
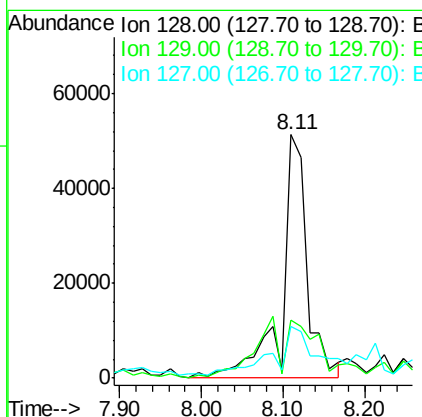
RT: 8.11 min Scan# 527

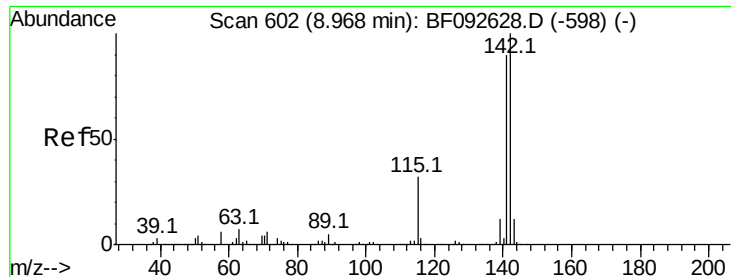
Delta R.T. -0.06 min

Lab File: BF093360.D

Acq: 3 Mar 2017 13:50

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 128   | Resp: | 109156 |
| Ion Ratio | Lower | Upper |        |
| 128       | 100   |       |        |
| 129       | 23.8  | 9.5   | 14.3#  |
| 127       | 21.1  | 10.8  | 16.2#  |





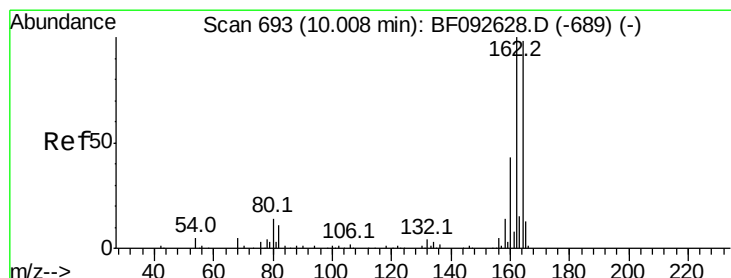
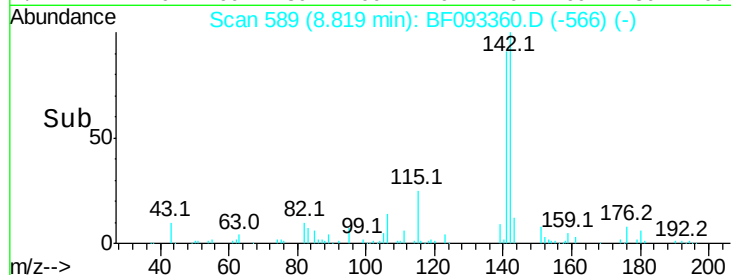
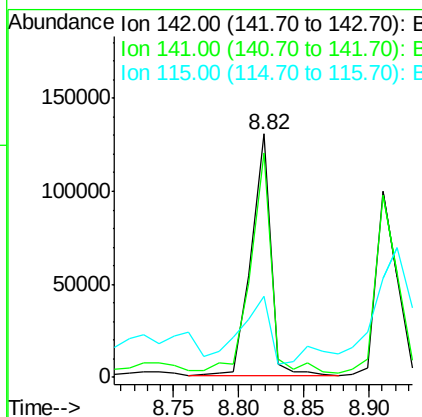
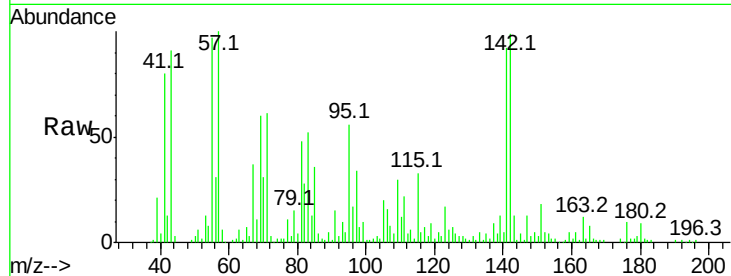
#37  
2-Methylnaphthalene  
Concen: 8.35 ng  
RT: 8.82 min Scan# 589  
Delta R.T. -0.03 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

Instrument :  
BNA\_F  
ClientSampleId :  
HY-SB421ADL

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 142     | 100   | 136391 |       |       |
| 141     | 92.2  | 71.0   | 106.6 |       |
| 115     | 33.5  | 28.3   | 42.5  |       |

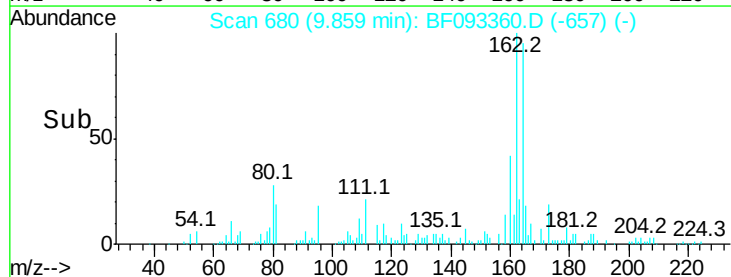
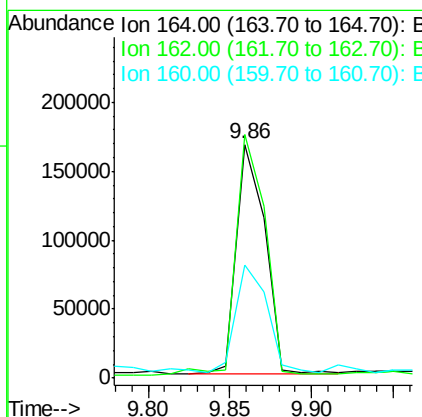
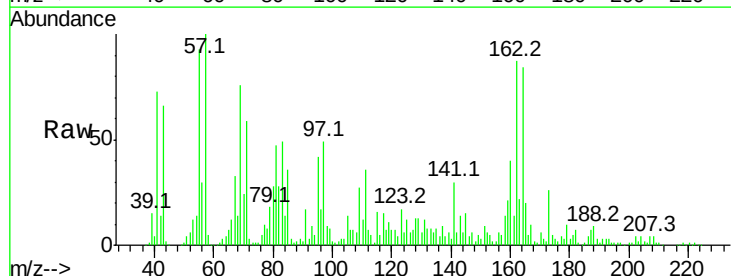
Manual Integrations  
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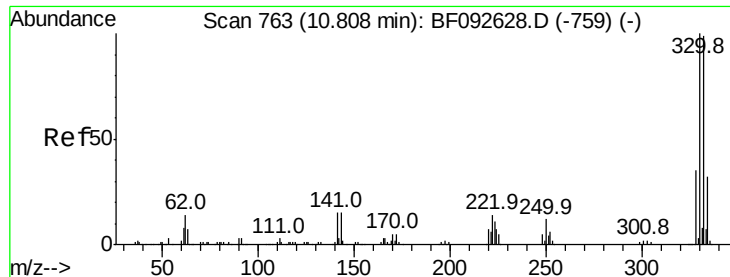
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#38  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 9.86 min Scan# 680  
Delta R.T. -0.03 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 164     | 100   | 198303 |       |       |
| 162     | 104.3 | 80.2   | 120.2 |       |
| 160     | 48.2  | 36.9   | 55.3  |       |





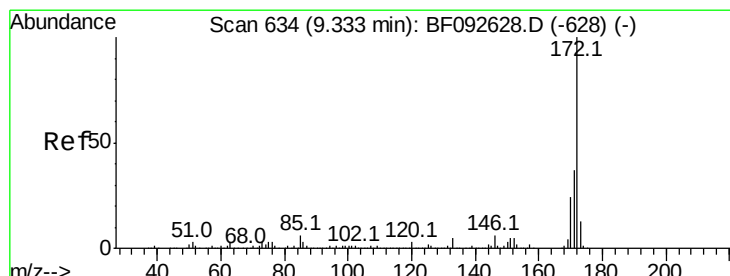
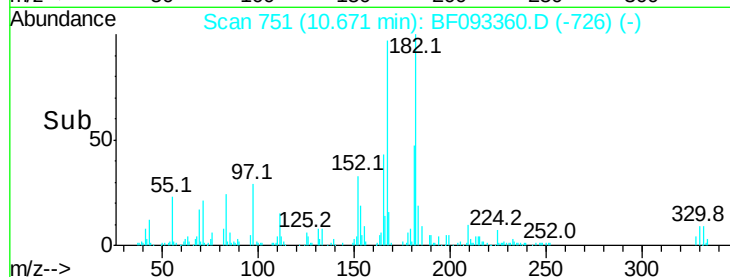
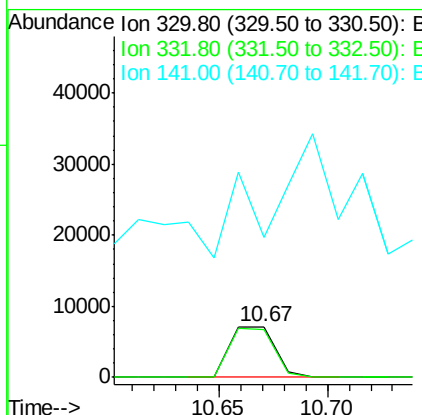
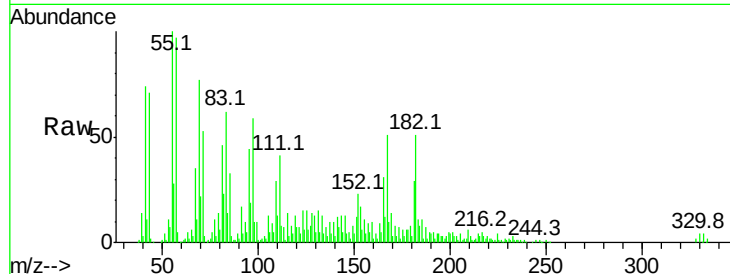
#41  
 2,4,6-Tribromophenol  
 Concen: 7.14 ng  
 RT: 10.67 min Scan# 751  
 Delta R.T. -0.01 min  
 Lab File: BF093360.D  
 Acq: 3 Mar 2017 13:50

Instrument :  
 BNA\_F  
 ClientSampleId :  
 HY-SB421ADL

Tot Ion:330 Resp: 10239  
 Ion Ratio Lower Upper  
 330 100  
 332 96.2 77.4 116.2  
 141 0.0 34.1 51.1#

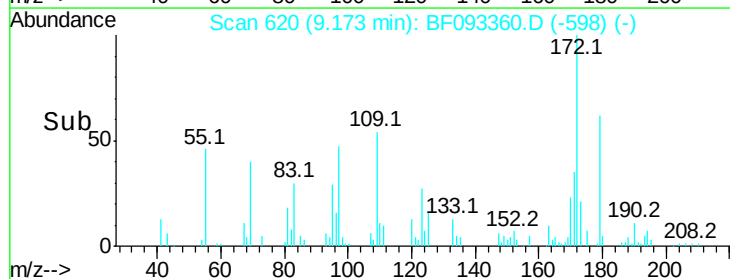
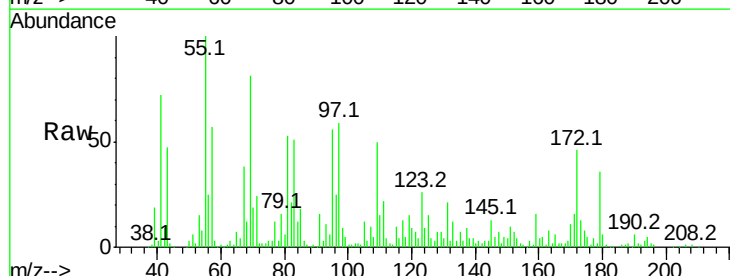
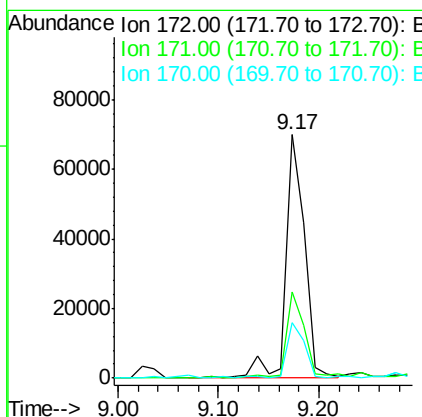
Manual Integrations  
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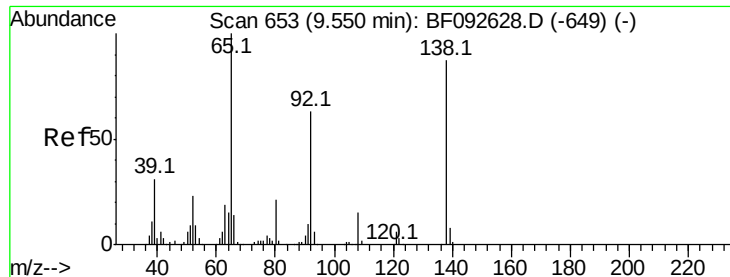
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#44  
 2-Fluorobiphenyl  
 Concen: 8.23 ng  
 RT: 9.17 min Scan# 620  
 Delta R.T. -0.05 min  
 Lab File: BF093360.D  
 Acq: 3 Mar 2017 13:50

Tgt Ion:172 Resp: 90095  
 Ion Ratio Lower Upper  
 172 100  
 171 35.4 29.4 44.0  
 170 22.8 20.2 30.4





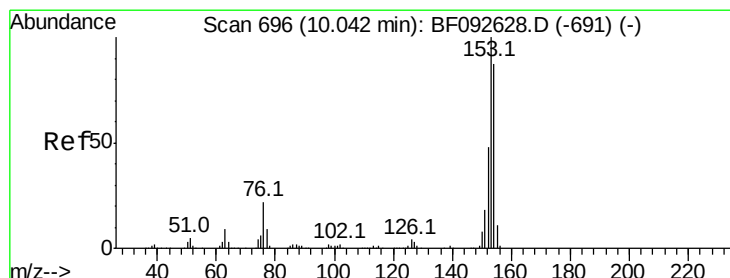
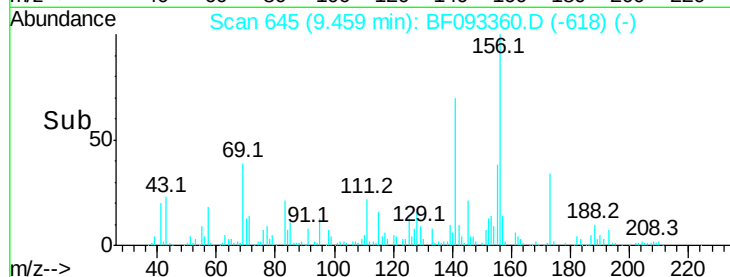
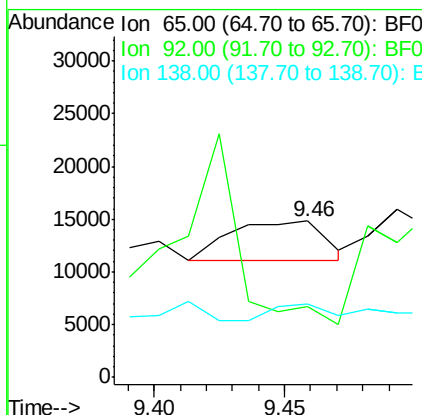
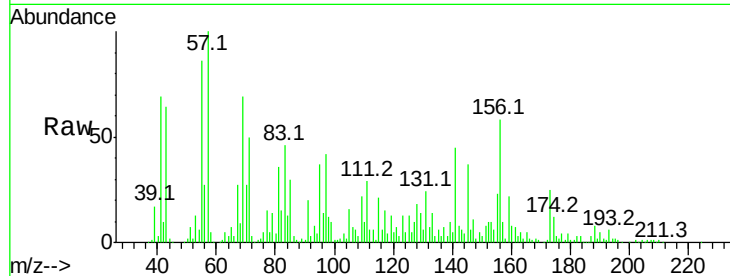
#47  
2-Nitroaniline  
Concen: 2.45 ng  
RT: 9.46 min Scan# 645  
Delta R.T. 0.01 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

Instrument :  
BNA\_F  
ClientSampleId :  
HY-SB421ADL

Tot Ion: 65 Resp: 9265  
Ion Ratio Lower Upper  
65 100  
92 45.6 53.9 80.9#  
138 47.0 76.8 115.2#

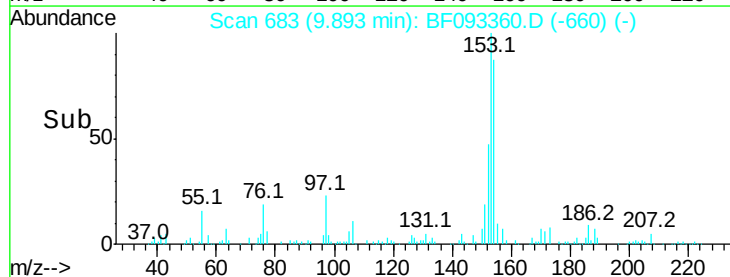
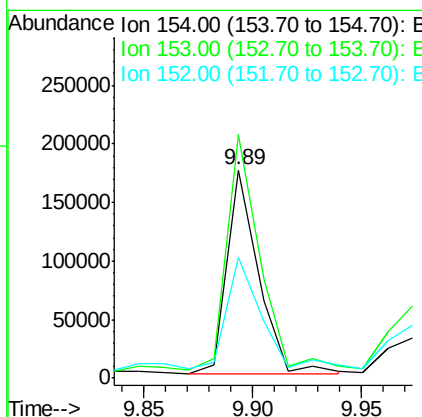
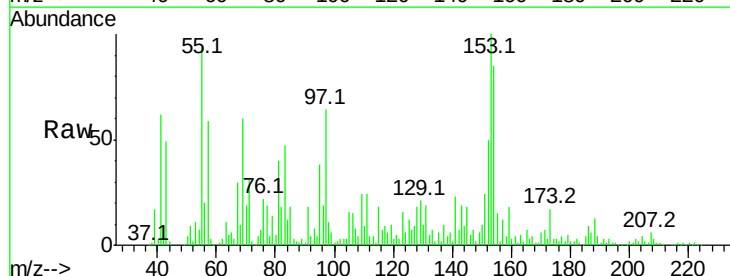
Manual Integrations  
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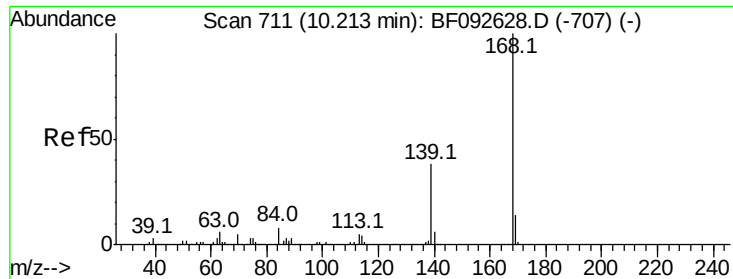


#51  
Acenaphthene  
Concen: 14.93 ng  
RT: 9.89 min Scan# 683  
Delta R.T. -0.03 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

Tgt Ion: 154 Resp: 173207  
Ion Ratio Lower Upper  
154 100  
153 117.0 88.6 133.0  
152 58.2 41.6 62.4







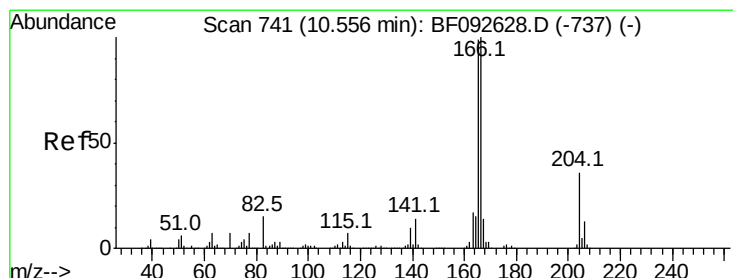
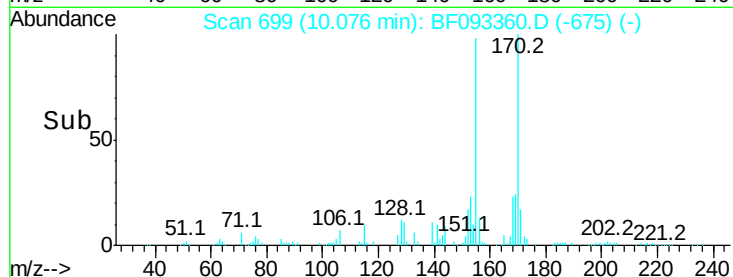
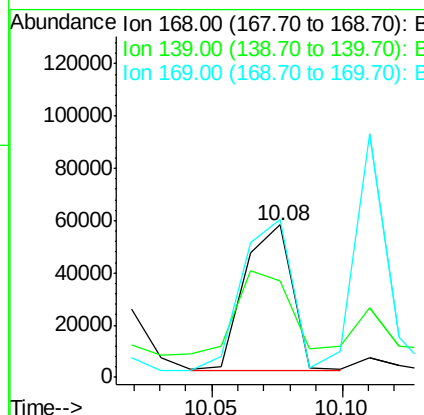
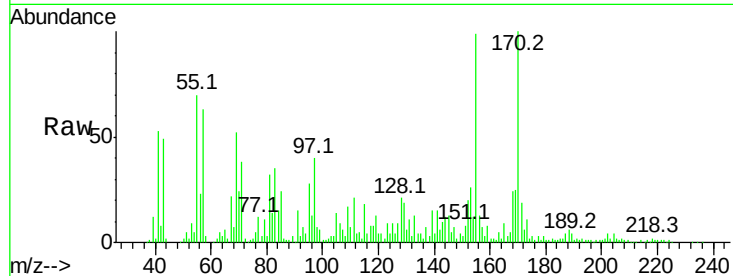
#54  
Dibenzofuran  
Concen: 4.56 ng  
RT: 10.08 min Scan# 699  
Delta R.T. -0.02 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

Instrument :  
BNA\_F  
ClientSampleId :  
HY-SB421ADL

Tot Ion:168 Resp: 70701  
Ion Ratio Lower Upper  
168 100  
139 63.2 32.6 49.0#  
169 103.3 11.3 16.9#

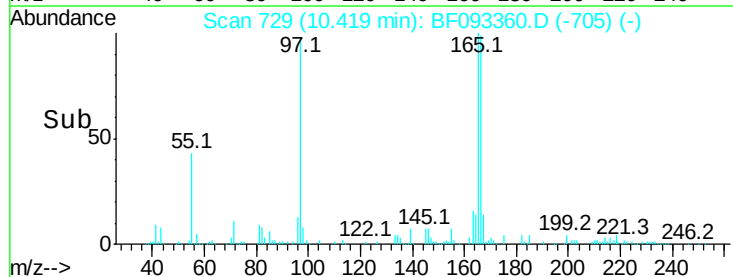
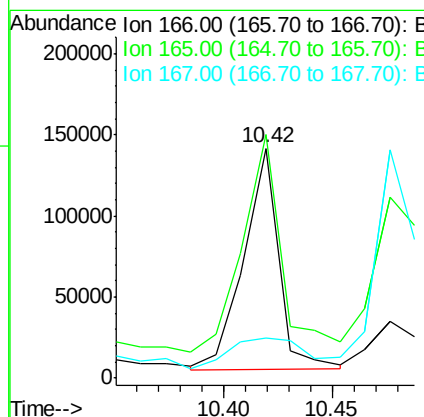
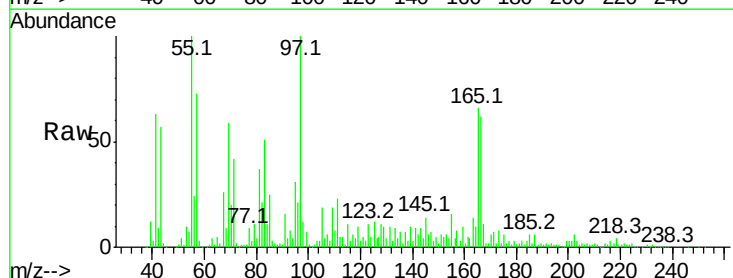
Manual Integrations  
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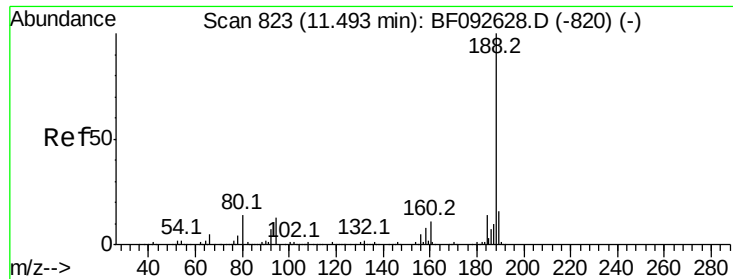
mohammad  
3/3/2017 5:17:29 PM



#57  
Fluorene  
Concen: 12.90 ng  
RT: 10.42 min Scan# 729  
Delta R.T. -0.02 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

Tgt Ion:166 Resp: 154020  
Ion Ratio Lower Upper  
166 100  
165 106.0 77.8 116.8  
167 17.2 10.8 16.2#





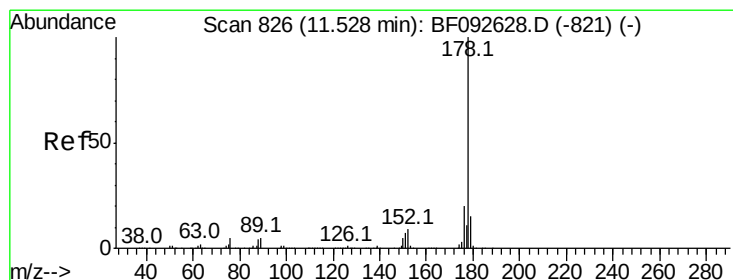
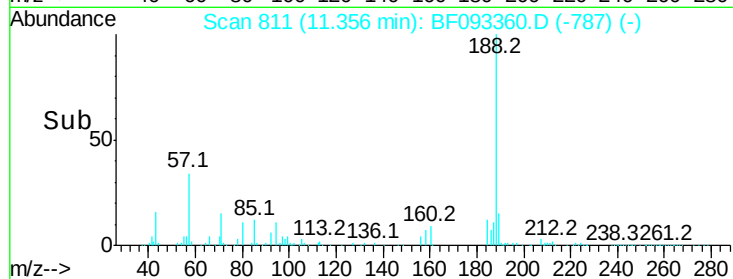
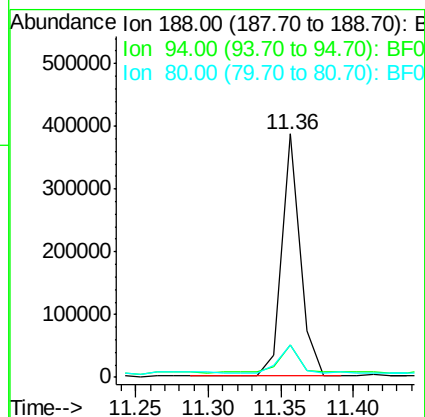
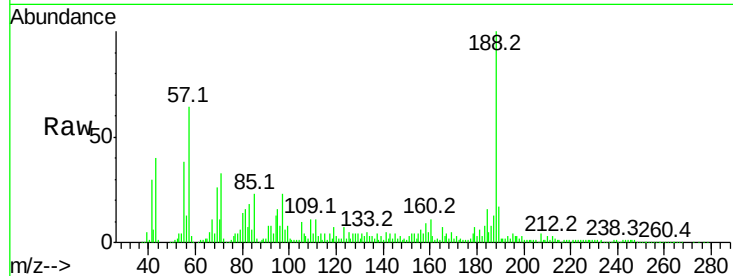
#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.36 min Scan# 811  
Delta R.T. -0.02 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

Instrument :  
BNA\_F  
ClientSampleId :  
HY-SB421ADL

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 188     | 100   |      |       |       |
| 94      | 13.2  | 10.0 | 15.0  |       |
| 80      | 13.6  | 11.2 | 16.8  |       |

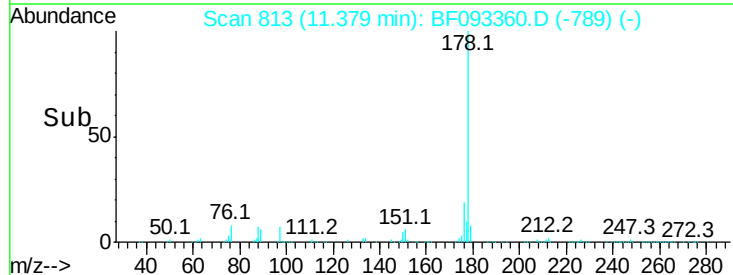
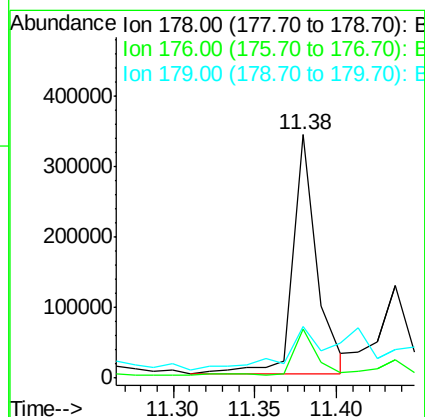
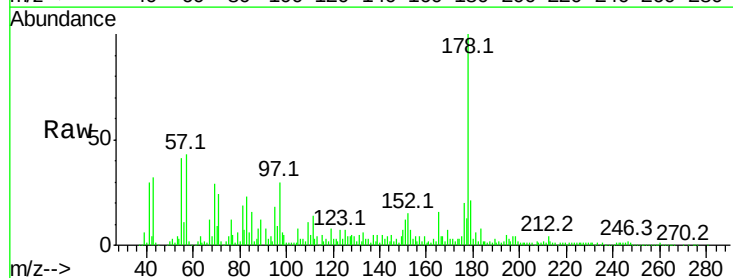
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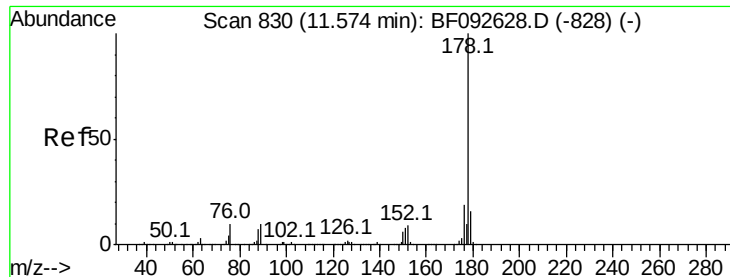
mohammad  
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#70  
Phenanthrene  
Concen: 17.81 ng  
RT: 11.38 min Scan# 813  
Delta R.T. -0.02 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 178     | 100   |      |       |       |
| 176     | 20.2  | 16.6 | 25.0  |       |
| 179     | 21.4  | 12.8 | 19.2  |       |





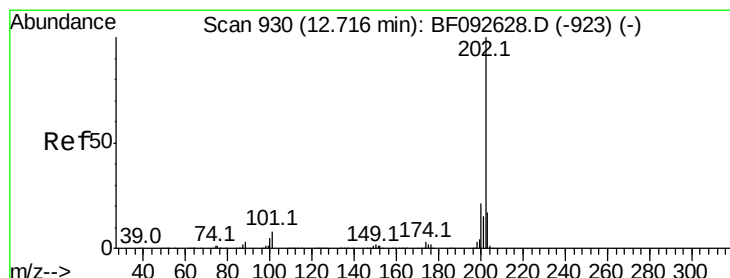
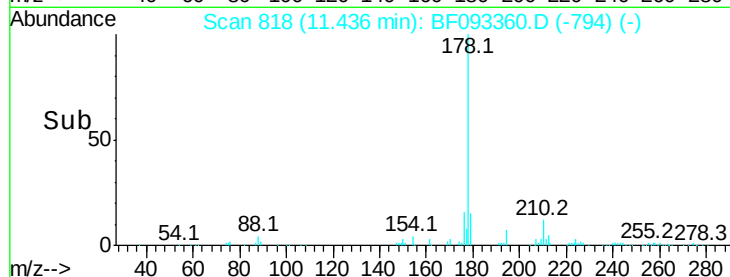
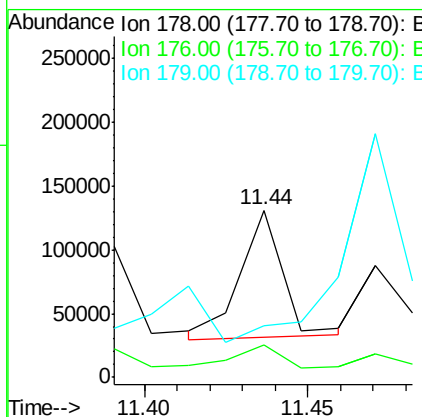
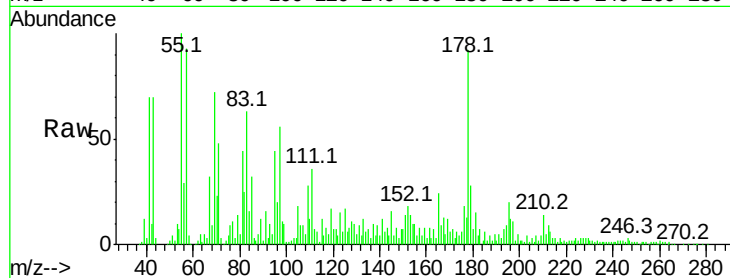
#71  
 Anthracene  
 Concen: 4.59 ng  
 RT: 11.44 min Scan# 818  
 Delta R.T. -0.02 min  
 Lab File: BF093360.D  
 Acq: 3 Mar 2017 13:50

Instrument :  
 BNA\_F  
 ClientSampleID :  
 HY-SB421ADL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.6  | 15.9  | 23.9  |
| 179     | 31.0  | 13.2  | 19.8  |

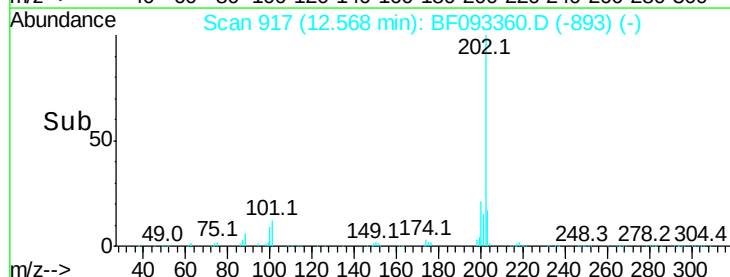
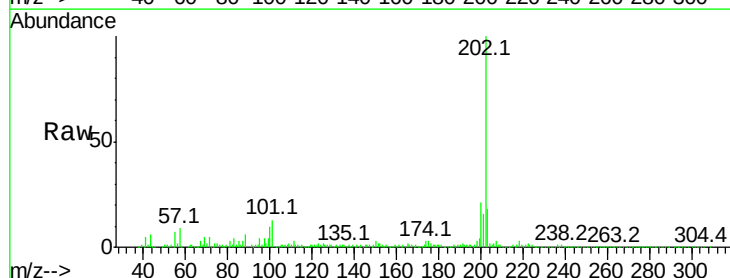
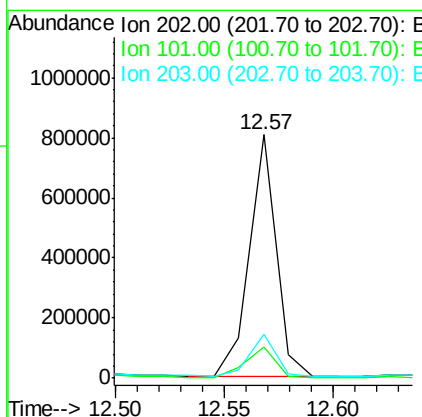
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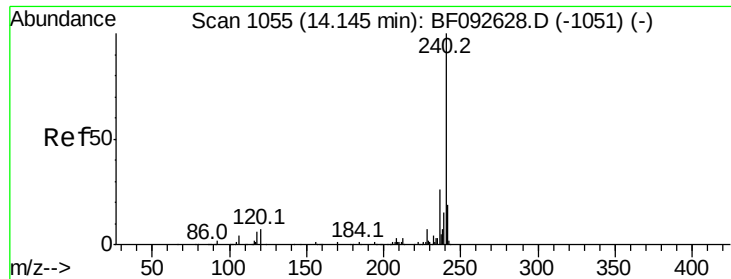
mohammad  
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#74  
 Fluoranthene  
 Concen: 34.17 ng  
 RT: 12.57 min Scan# 917  
 Delta R.T. -0.02 min  
 Lab File: BF093360.D  
 Acq: 3 Mar 2017 13:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 13.0  | 0.0   | 34.6  |
| 203     | 18.2  | 0.0   | 38.7  |





#75

Chrysene-d12

Concen: 20.00 ng

RT: 13.99 min Scan# 1041

Delta R.T. -0.03 min

Lab File: BF093360.D

Acq: 3 Mar 2017 13:50

Instrument :

BNA\_F

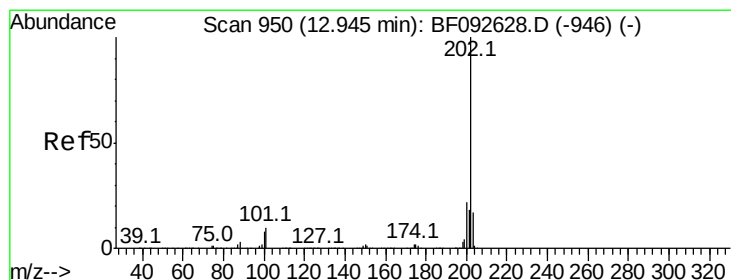
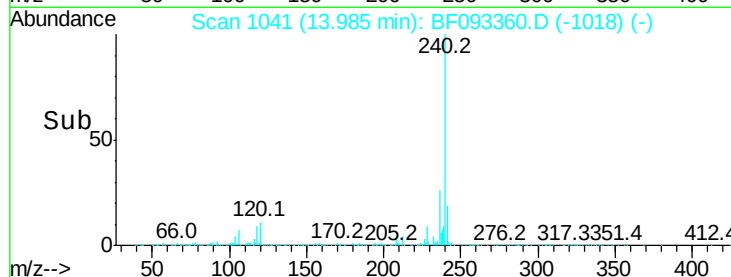
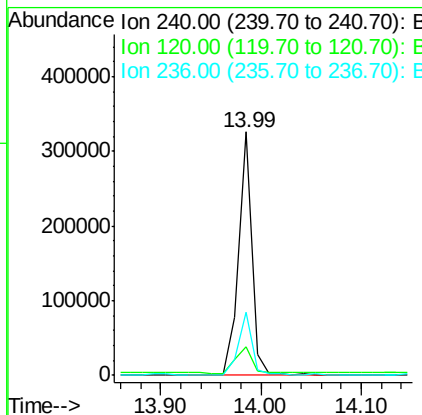
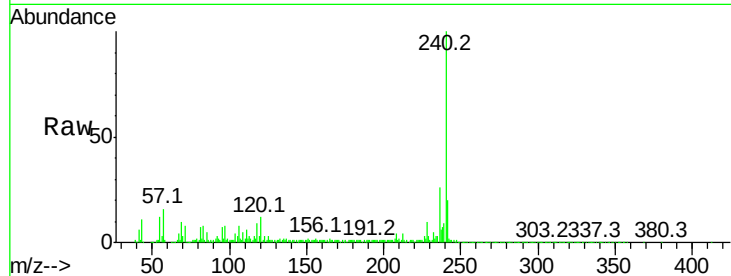
ClientSampleId :

HY-SB421ADL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 240   | Resp: | 299372 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 11.5  | 12.9  | 19.3#  |
| 236       | 26.2  | 20.9  | 31.3   |

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#77

Pyrene

Concen: 30.68 ng

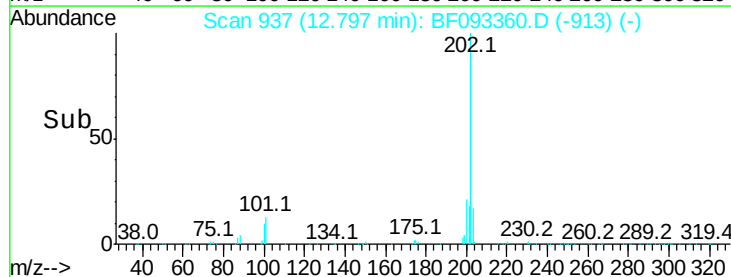
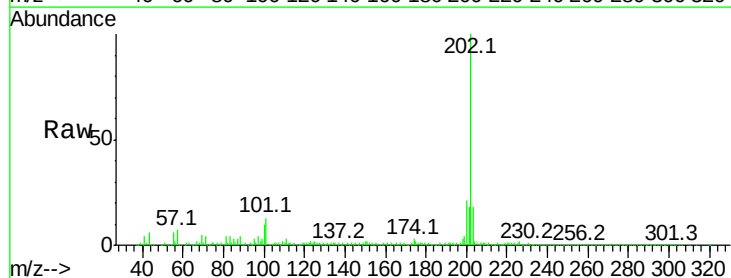
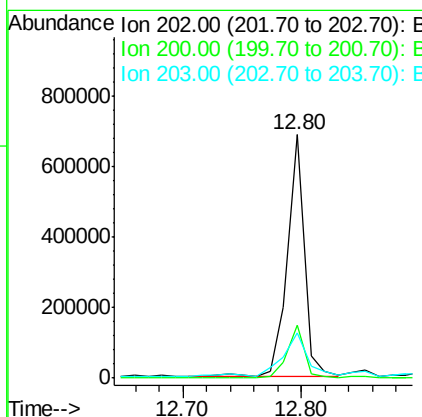
RT: 12.80 min Scan# 937

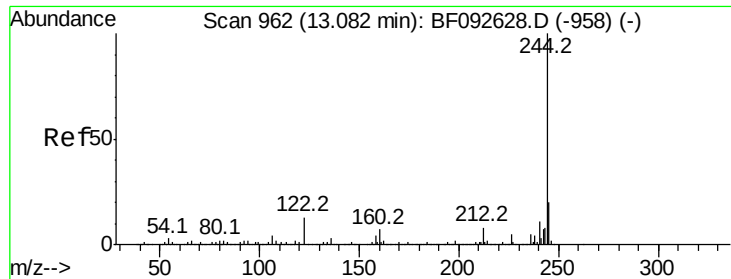
Delta R.T. -0.02 min

Lab File: BF093360.D

Acq: 3 Mar 2017 13:50

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 687338 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 200       | 21.5  | 17.7  | 26.5   |
| 203       | 18.4  | 14.7  | 22.1   |





#78

Terphenyl-d14

Concen: 4.41 ng

RT: 12.93 min Scan# 949

Delta R.T. -0.03 min

Lab File: BF093360.D

Acq: 3 Mar 2017 13:50

Instrument :

BNA\_F

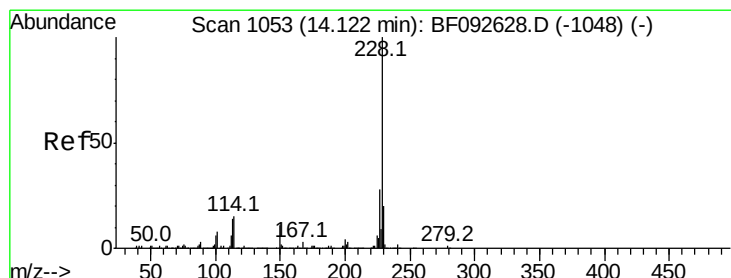
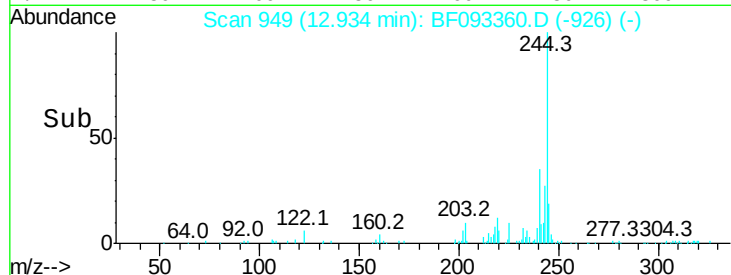
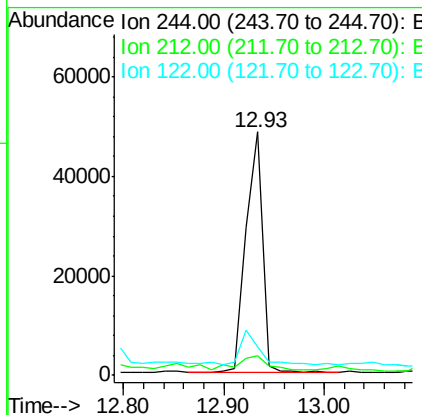
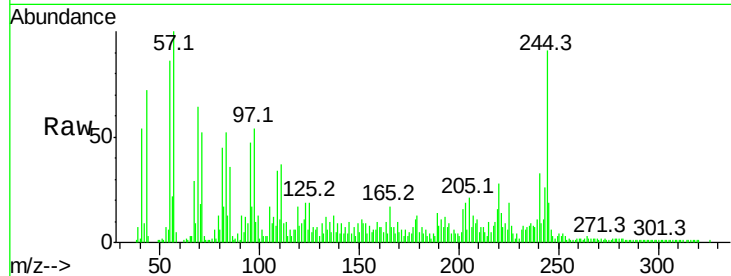
ClientSampleId :

HY-SB421ADL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 8.0   | 6.2   | 9.2   |
| 122     | 11.7  | 11.4  | 17.2  |

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#80

Benzo(a)anthracene

Concen: 7.92 ng m

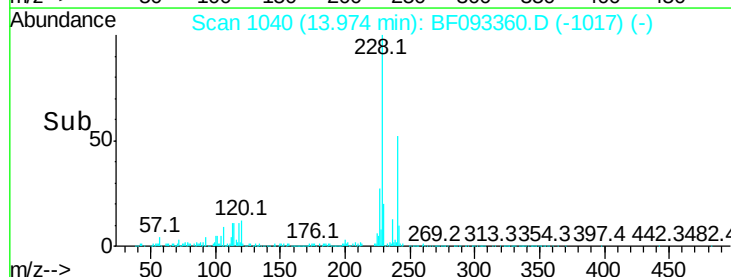
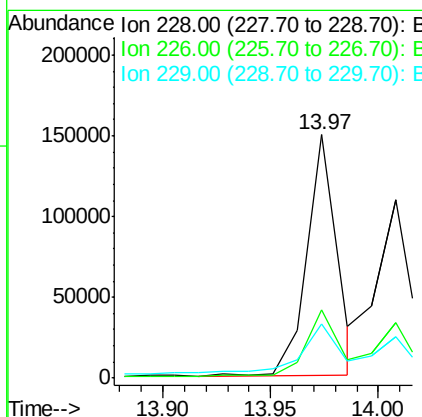
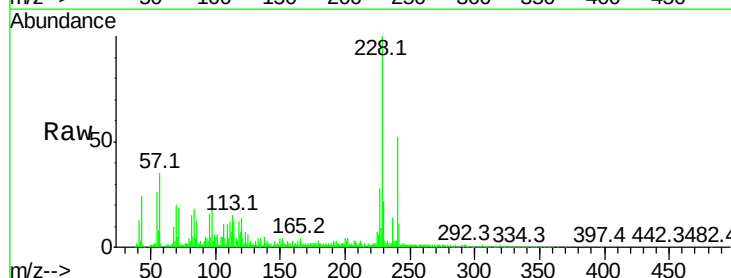
RT: 13.97 min Scan# 1040

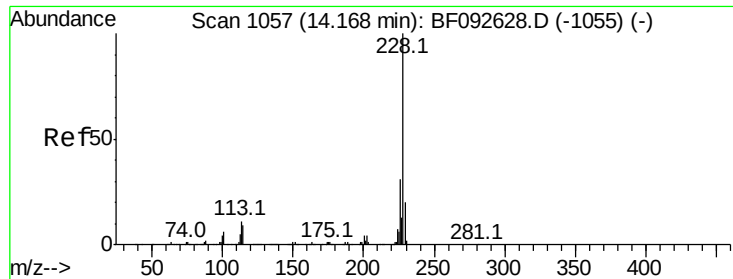
Delta R.T. -0.03 min

Lab File: BF093360.D

Acq: 3 Mar 2017 13:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.0  | 22.4  | 33.6  |
| 229     | 22.0  | 16.2  | 24.4  |





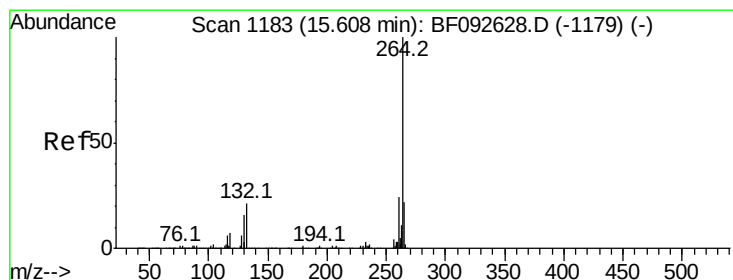
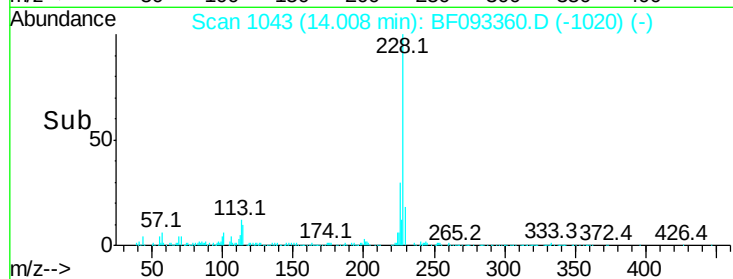
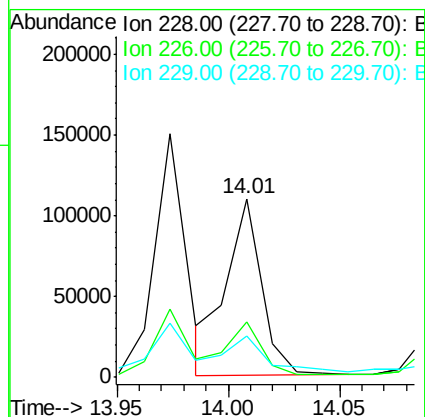
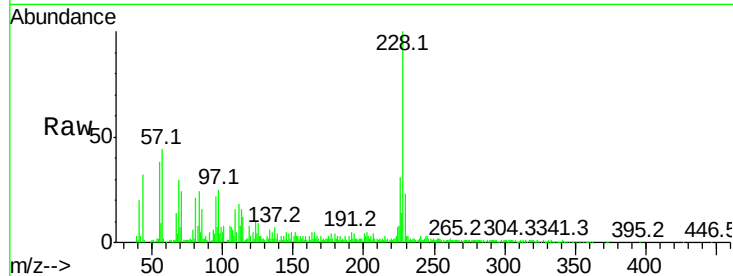
#82  
Chrysene  
Concen: 7.04 ng m  
RT: 14.01 min Scan# 1043  
Delta R.T. -0.03 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

Instrument :  
BNA\_F  
ClientSampleId :  
HY-SB421ADL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 228   | Resp: | 120644 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 31.1  | 25.4  | 38.0   |
| 229       | 23.3  | 16.2  | 24.2   |

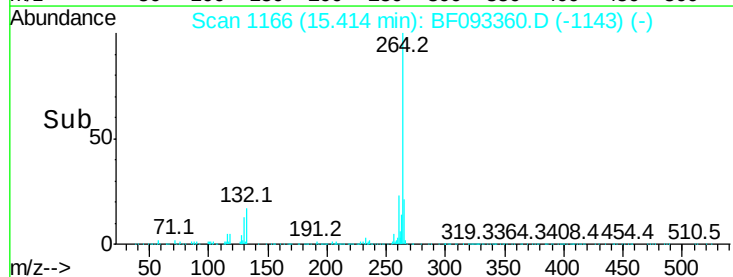
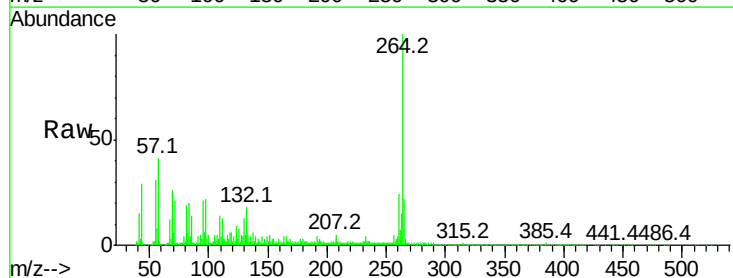
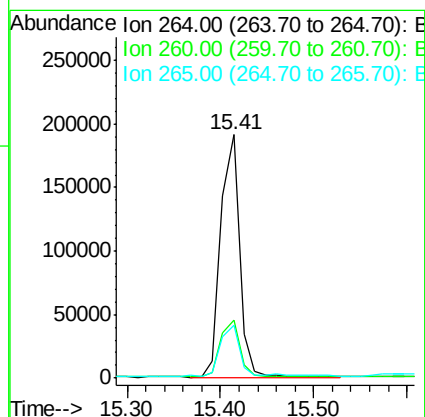
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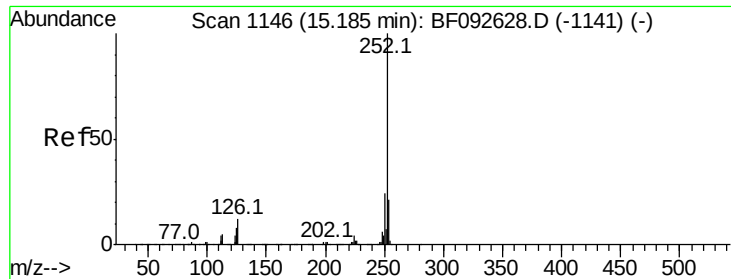
mohammad  
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#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 15.41 min Scan# 1166  
Delta R.T. -0.03 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 264   | Resp: | 267928 |
| Ion Ratio | Lower | Upper |        |
| 264       | 100   |       |        |
| 260       | 23.8  | 19.2  | 28.8   |
| 265       | 21.9  | 17.4  | 26.0   |





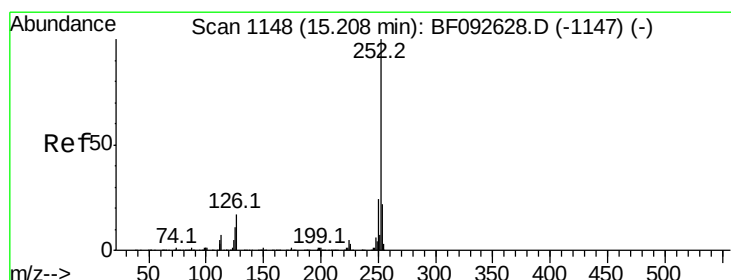
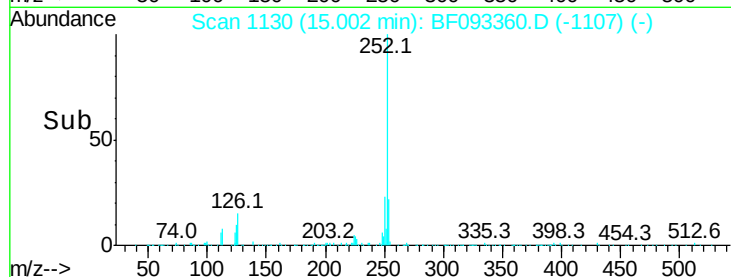
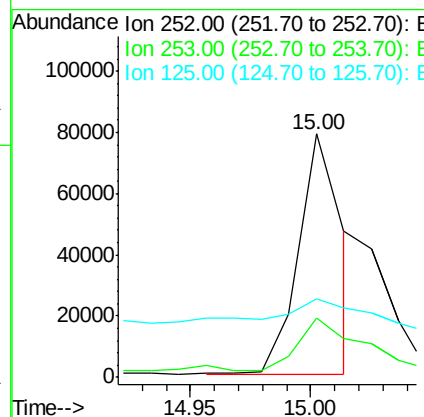
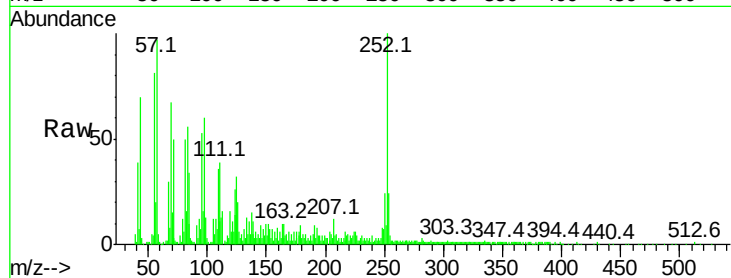
#87  
Benzo(b)fluoranthene  
Concen: 5.66 ng m  
RT: 15.00 min Scan# 1130  
Delta R.T. -0.03 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

Instrument :  
BNA\_F  
ClientSampleId :  
HY-SB421ADL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.4  | 18.2  | 27.4  |
| 125     | 32.0  | 9.8   | 14.6  |

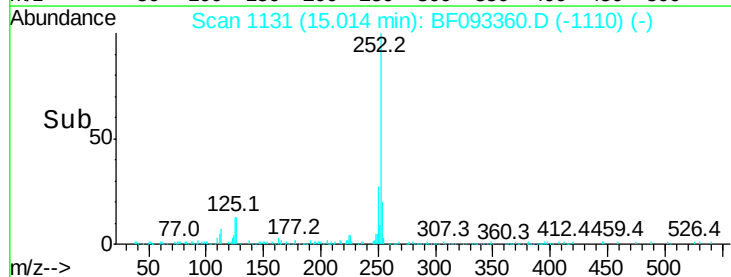
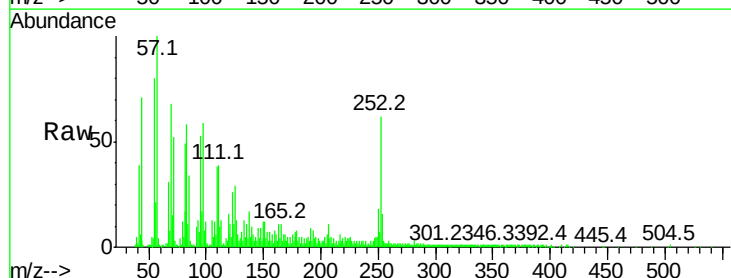
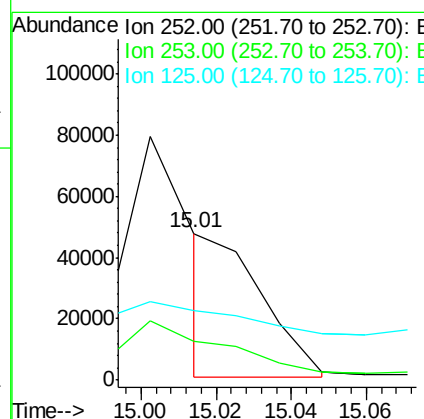
Manual Integrations  
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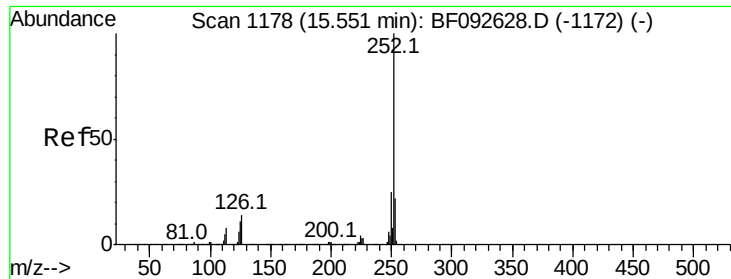
mohammad  
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#88  
Benzo(k)fluoranthene  
Concen: 2.70 ng m  
RT: 15.01 min Scan# 1131  
Delta R.T. -0.06 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 26.0  | 18.5  | 27.7  |
| 125     | 47.1  | 8.9   | 13.3  |





#89  
Benzo(a)pyrene  
Concen: 3.82 ng  
RT: 15.36 min Scan# 1161  
Delta R.T. -0.03 min  
Lab File: BF093360.D  
Acq: 3 Mar 2017 13:50

Instrument :  
BNA\_F  
ClientSampleId :  
HY-SB421ADL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.8  | 18.2  | 27.2  |
| 125     | 43.2  | 10.0  | 15.0  |

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