

Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA E\DATA\BE101417\  
 Data File : BE094373.D  
 Acq On : 15 Oct 2017 2:08  
 Operator : SJ/JU  
 Sample : I5548-03  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 C0AB4

Manual Integrations  
 APPROVED

Sohil  
 10/16/2017 8:25:34 PM

Quant Time: Oct 16 05:31:26 2017  
 Quant Method : Z:\HPCHEM1\BNA E\METHODS\SOM-EPA-SIM-BE092017.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Oct 16 05:09:03 2017  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.91  | 152  | 1616     | 0.40  | ng/ul  | 0.00     |
| 2) Naphthalene-d8           | 10.70 | 136  | 8847     | 0.40  | ng/ul  | 0.00     |
| 6) Acenaphthene-d10         | 14.52 | 164  | 5145     | 0.40  | ng/ul  | 0.00     |
| 10) Phenanthrene-d10        | 17.26 | 188  | 11122    | 0.40  | ng/ul  | 0.00     |
| 16) Chrysene-d12            | 21.43 | 240  | 10419    | 0.40  | ng/ul  | 0.00     |
| 20) Perylene-d12            | 23.95 | 264  | 9684m    | 0.40  | ng/ul  | 0.00     |
| System Monitoring Compounds |       |      |          |       |        |          |
| 4) 2-Methylnaphthalene-d10  | 12.28 | 152  | 2462     | 0.18  | ng/ul  | 0.00     |
| 14) Fluoranthene-d10        | 19.28 | 212  | 5745     | 0.15  | ng/ul  | 0.00     |
| Target Compounds            |       |      |          |       | Ovalue |          |
| 3) Naphthalene              | 10.75 | 128  | 1302     | 0.060 | ng/ul# | 80       |
| 5) 2-Methylnaphthalene      | 12.36 | 142  | 1047     | 0.074 | ng/ul  | 95       |
| 7) Acenaphthylene           | 14.24 | 152  | 2157     | 0.108 | ng/ul# | 91       |
| 8) Acenaphthene             | 14.59 | 153  | 1273     | 0.077 | ng/ul  | 96       |
| 9) Fluorene                 | 15.57 | 166  | 1798     | 0.093 | ng/ul  | 88       |
| 12) Phenanthrene            | 17.29 | 178  | 48898m   | 1.682 | ng/ul  |          |
| 13) Anthracene              | 17.40 | 178  | 11871    | 0.420 | ng/ul  | 96       |
| 15) Fluoranthene            | 19.31 | 202  | 132345   | 3.466 | ng/ul  | 84       |
| 17) Pyrene                  | 19.67 | 202  | 109841   | 3.789 | ng/ul# | 83       |
| 18) Benzo(a)anthracene      | 21.41 | 228  | 60159    | 2.176 | ng/ul# | 89       |
| 19) Chrysene                | 21.46 | 228  | 67418    | 2.112 | ng/ul  | 95       |
| 21) Benzo(b)fluoranthene    | 23.17 | 252  | 75503    | 2.870 | ng/ul  | 91       |
| 22) Benzo(k)fluoranthene    | 23.22 | 252  | 36203m   | 1.191 | ng/ul  |          |
| 23) Benzo(a)pyrene          | 23.84 | 252  | 52312m   | 1.914 | ng/ul  |          |
| 24) Indeno(1,2,3-cd)pyrene  | 26.63 | 276  | 40103m   | 1.434 | ng/ul  |          |
| 25) Dibenzo(a,h)anthracene  | 26.63 | 278  | 11042m   | 0.471 | ng/ul  |          |
| 26) Benzo(a,h,i)perylene    | 27.47 | 276  | 33188m   | 1.376 | ng/ul  |          |

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

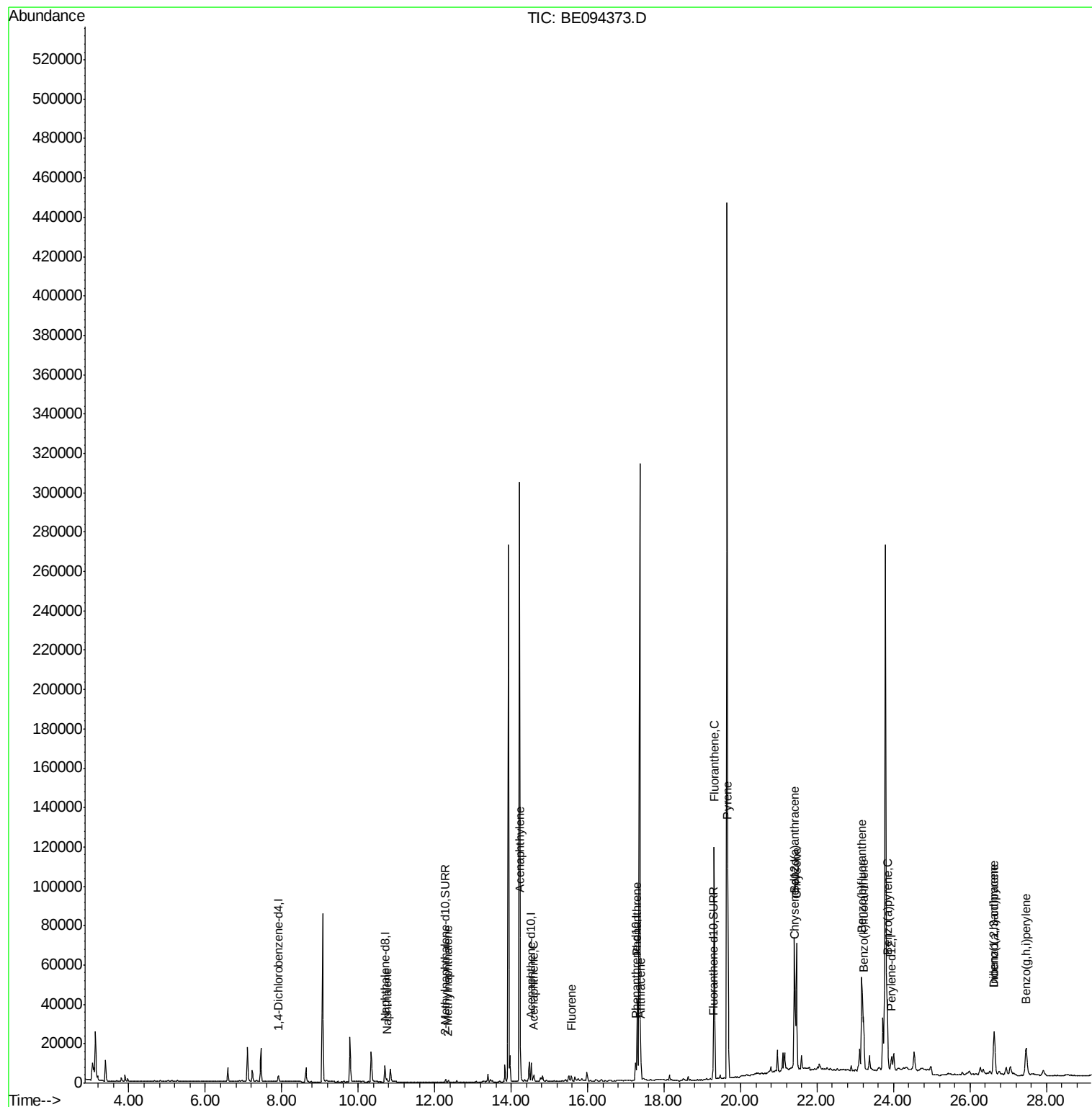
Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA E\DATA\BE101417\  
Data File : BE094373.D  
Acq On : 15 Oct 2017 2:08  
Operator : SJ/JU  
Sample : I5548-03  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

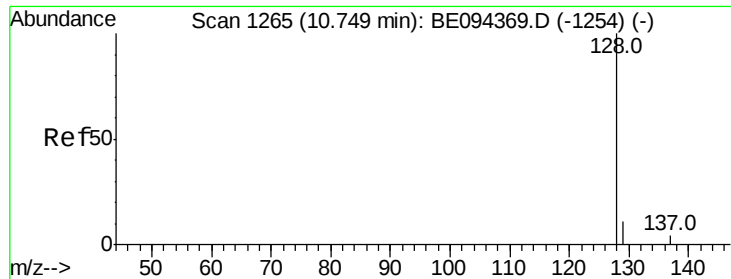
Instrument :  
BNA\_E  
ClientSampleId :  
C0AB4

Manual Integrations  
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Quant Time: Oct 16 05:31:26 2017  
Quant Method : Z:\HPCHEM1\BNA E\METHODS\SOM-EPA-SIM-BE092017.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Oct 16 05:09:03 2017  
Response via : Initial Calibration





#3

Naphthalene

Concen: 0.060 ng/ul

RT: 10.75 min Scan# 1265

Delta R.T. 0.00 min

Lab File: BE094373.D

Acq: 15 Oct 2017 2:08

Instrument :

BNA\_E

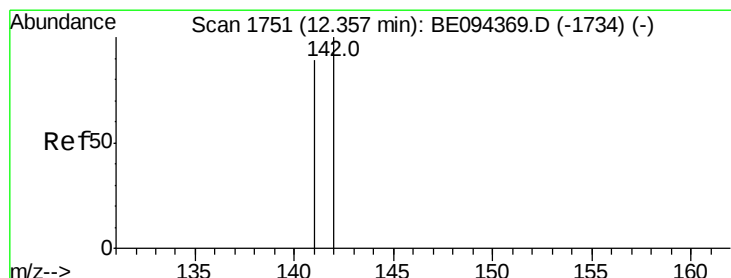
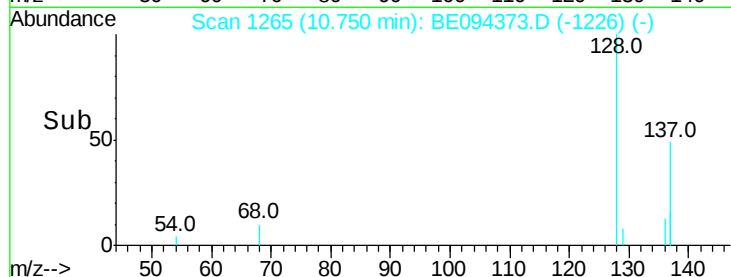
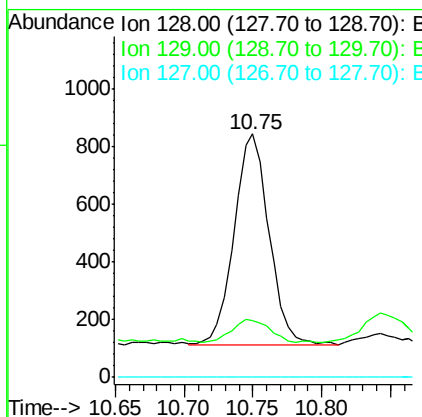
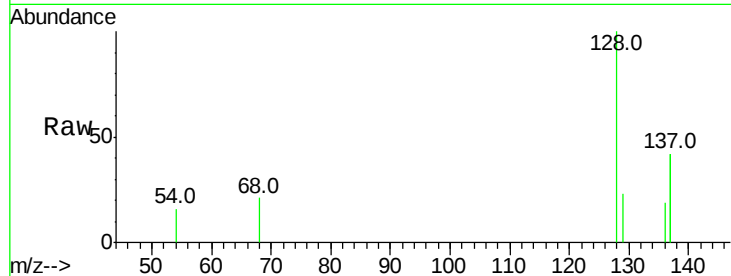
ClientSampleId :

C0AB4

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 128   | Resp: | 1302  |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 129       | 23.2  | 11.3  | 16.9# |
| 127       | 0.0   | 4.0   | 6.0#  |

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#5

2-Methylnaphthalene

Concen: 0.074 ng/ul

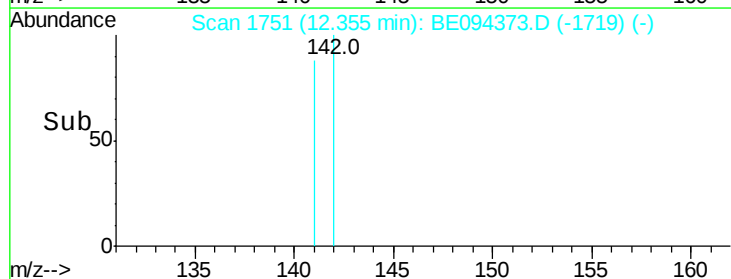
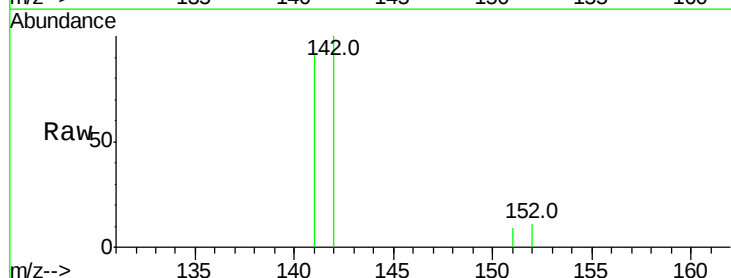
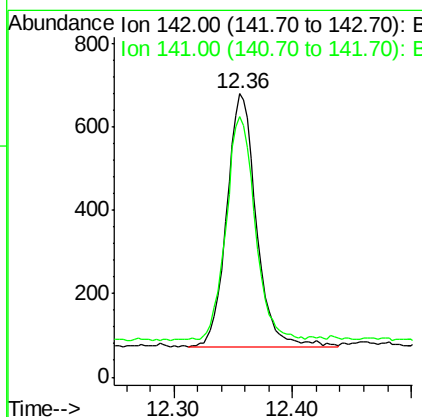
RT: 12.36 min Scan# 1751

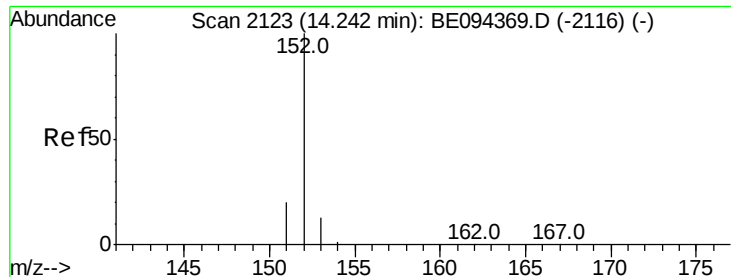
Delta R.T. -0.00 min

Lab File: BE094373.D

Acq: 15 Oct 2017 2:08

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 142   | Resp: | 1047  |
| Ion Ratio | Lower | Upper |       |
| 142       | 100   |       |       |
| 141       | 86.2  | 72.6  | 108.8 |





#7

Acenaphthylene

Concen: 0.108 ng/ul

RT: 14.24 min Scan# 2124

Delta R.T. 0.00 min

Lab File: BE094373.D

Acq: 15 Oct 2017 2:08

Instrument :

BNA\_E

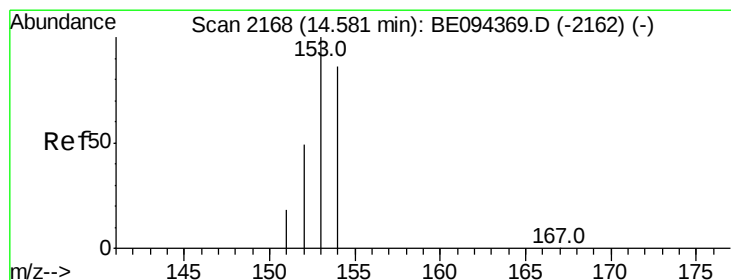
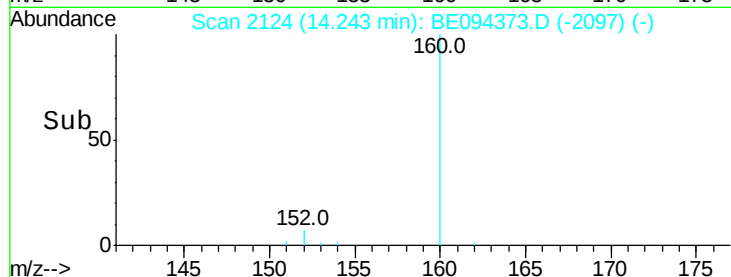
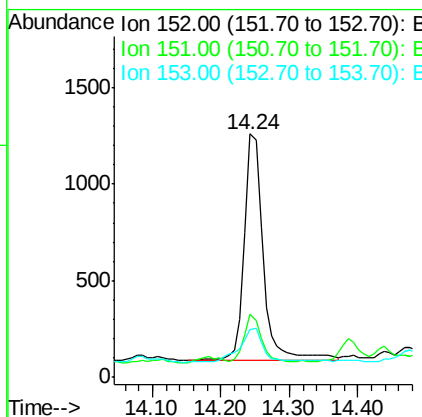
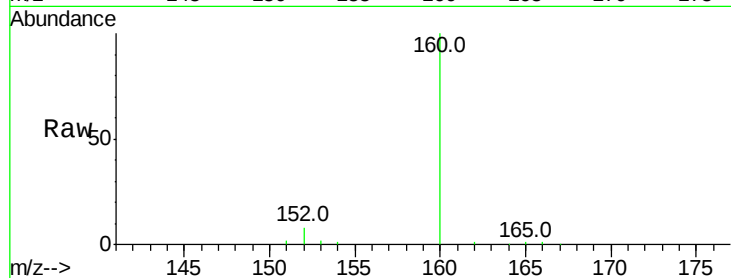
ClientSampleId :

C0AB4

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 152   | Resp: | 2157  |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 151       | 25.9  | 17.1  | 25.7# |
| 153       | 19.4  | 12.8  | 19.2# |

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#8

Acenaphthene

Concen: 0.077 ng/ul

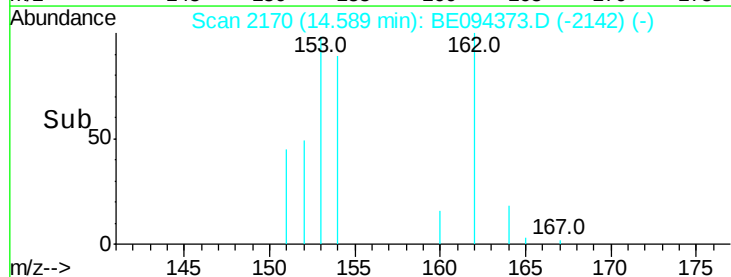
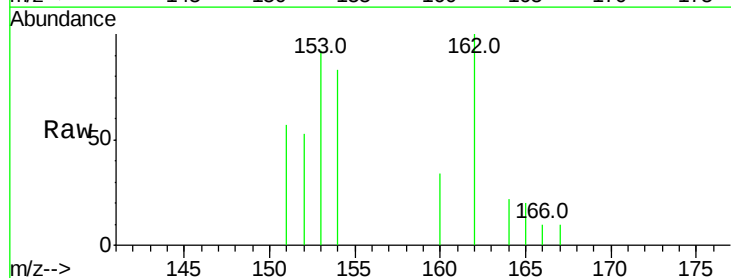
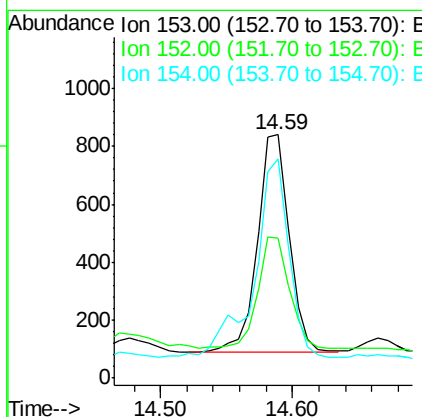
RT: 14.59 min Scan# 2170

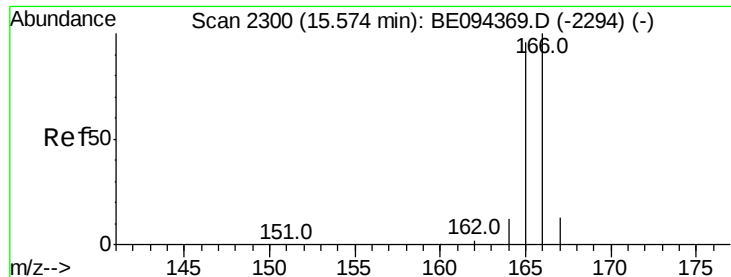
Delta R.T. 0.01 min

Lab File: BE094373.D

Acq: 15 Oct 2017 2:08

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 153   | Resp: | 1273  |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 57.6  | 40.3  | 60.5  |
| 154       | 90.1  | 71.4  | 107.2 |





#9

Fluorene

Concen: 0.093 ng/ul

RT: 15.57 min Scan# 2301

Delta R.T. 0.00 min

Lab File: BE094373.D

Acq: 15 Oct 2017 2:08

Instrument :

BNA\_E

ClientSampleId :

C0AB4

Tot Ion:166 Resp: 1798

Ion Ratio Lower Upper

166 100

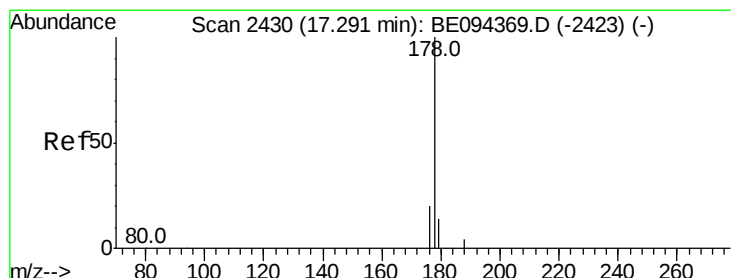
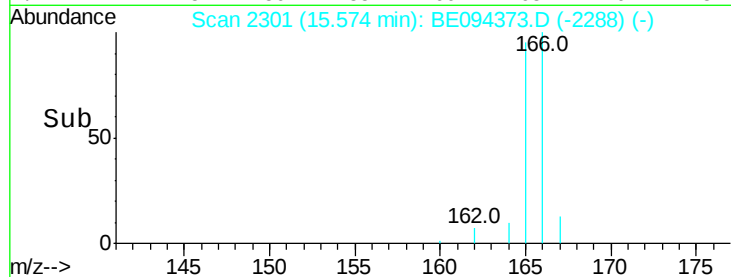
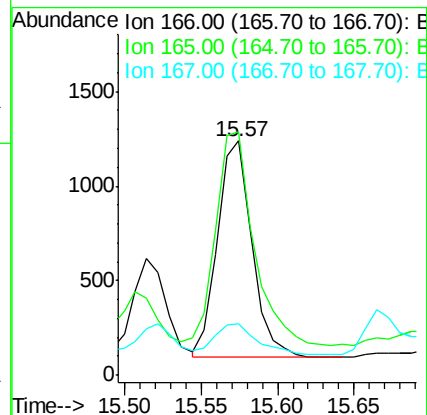
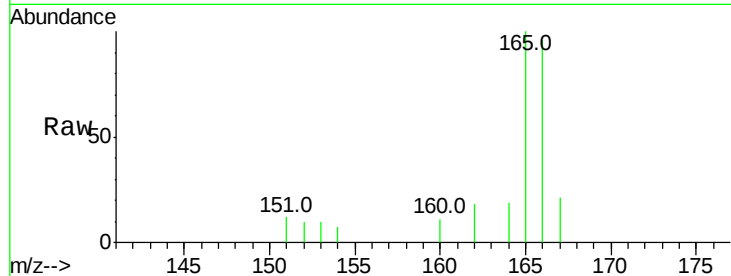
165 103.8 73.4 110.2

167 21.9 14.6 22.0

Manual Integrations  
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#12

Phenanthrene

Concen: 1.682 ng/ul m

RT: 17.29 min Scan# 2431

Delta R.T. 0.00 min

Lab File: BE094373.D

Acq: 15 Oct 2017 2:08

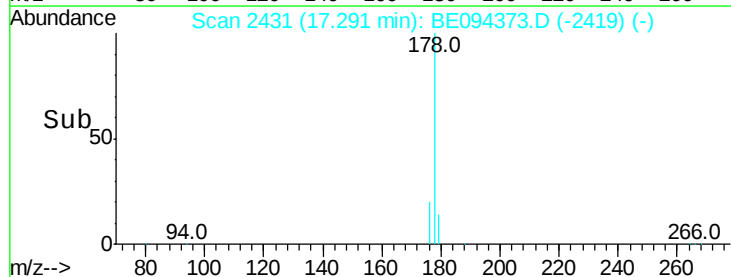
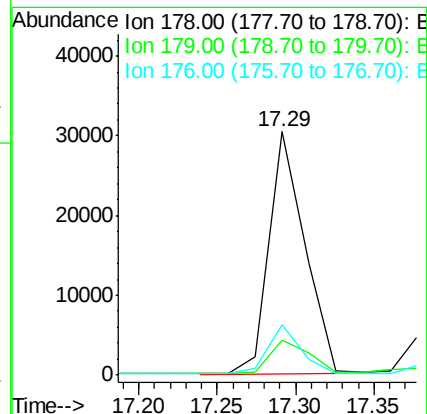
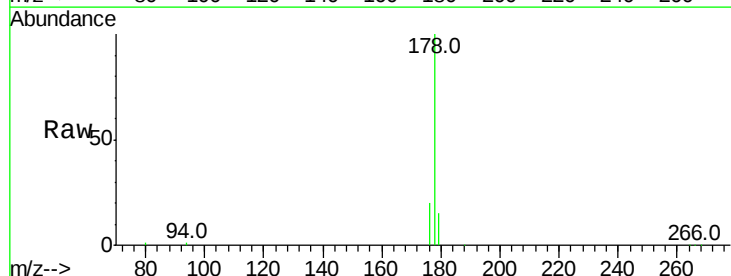
Tgt Ion:178 Resp: 48898

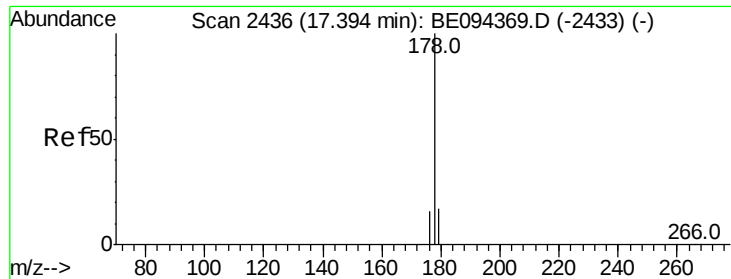
Ion Ratio Lower Upper

178 100

179 14.6 18.4 27.6#

176 20.5 13.6 20.4#





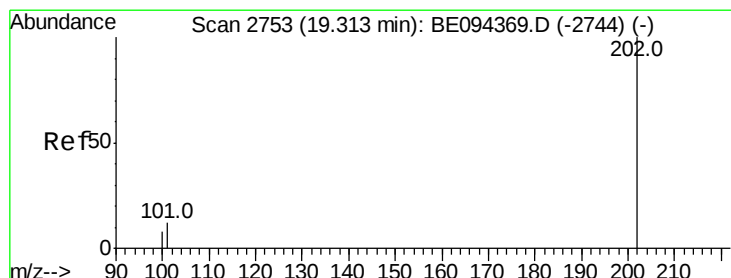
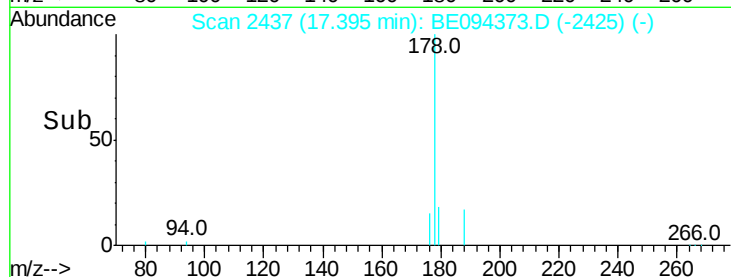
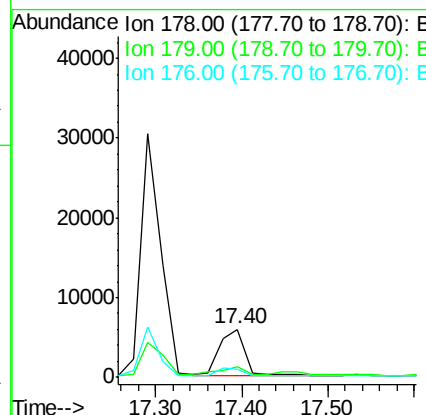
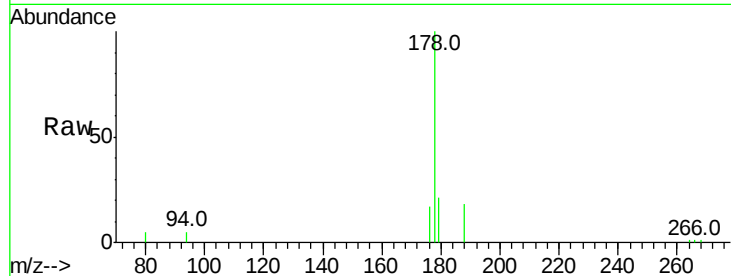
#13  
 Anthracene  
 Concen: 0.420 ng/ul  
 RT: 17.40 min Scan# 2437  
 Delta R.T. 0.00 min  
 Lab File: BE094373.D  
 Acq: 15 Oct 2017 2:08

Instrument :  
 BNA\_E  
 ClientSampled :  
 C0AB4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 20.8  | 18.1  | 27.1  |
| 176     | 16.9  | 14.7  | 22.1  |

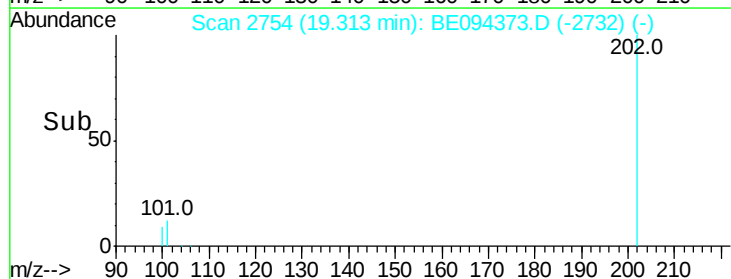
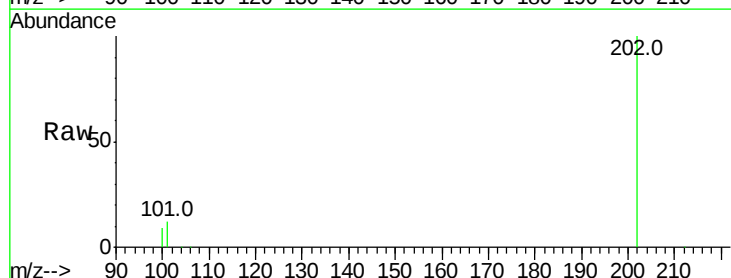
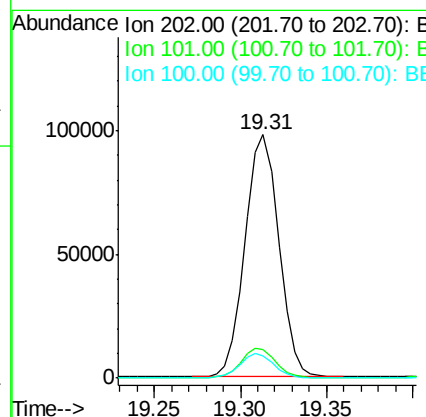
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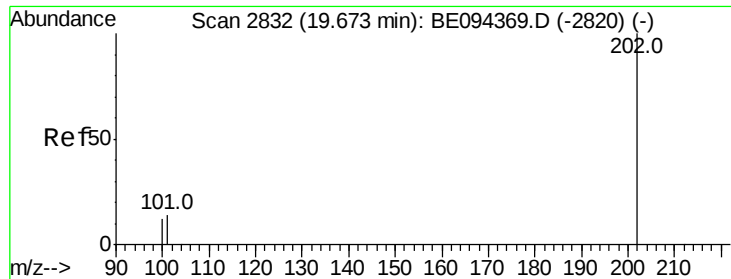
Sohil  
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#15  
 Fluoranthene  
 Concen: 3.466 ng/ul  
 RT: 19.31 min Scan# 2754  
 Delta R.T. 0.00 min  
 Lab File: BE094373.D  
 Acq: 15 Oct 2017 2:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 11.8  | 0.0   | 30.3  |
| 100     | 9.2   | 0.0   | 39.5  |





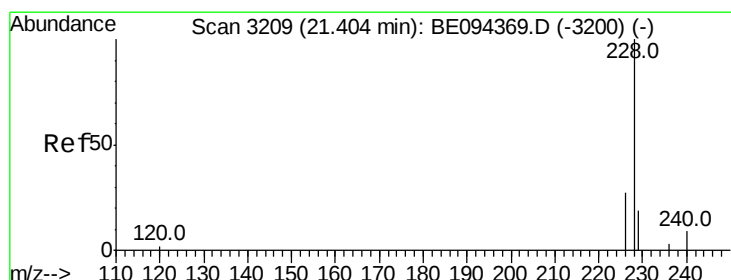
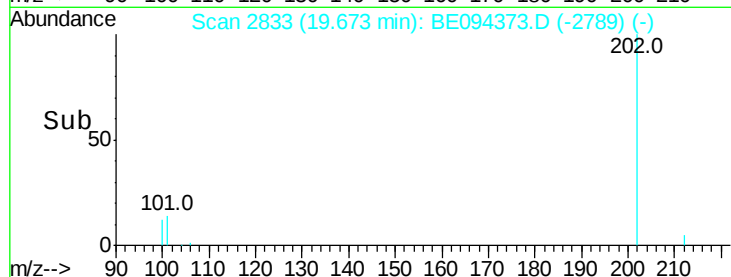
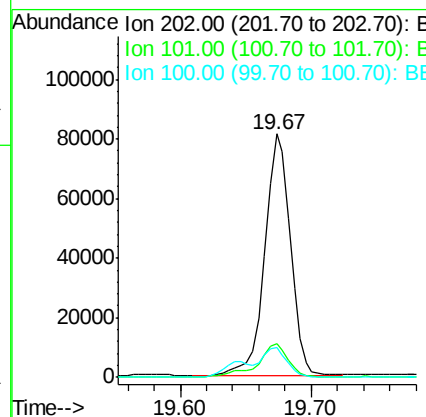
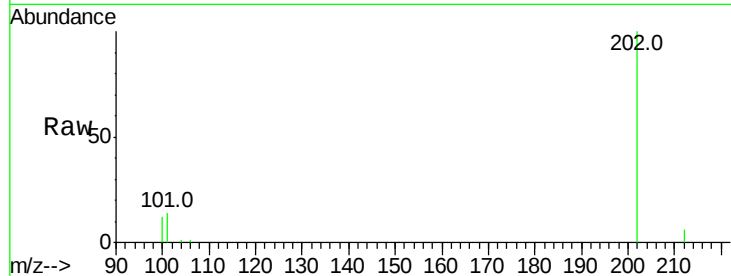
#17  
Pvrene  
Concen: 3.789 ng/ul  
RT: 19.67 min Scan# 2833  
Delta R.T. 0.00 min  
Lab File: BE094373.D  
Acq: 15 Oct 2017 2:08

Instrument :  
BNA\_E  
ClientSampled :  
C0AB4

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 202     | 100   | 109841 |       |       |
| 101     | 14.0  | 18.2   | 27.4# |       |
| 100     | 12.3  | 15.6   | 23.4# |       |

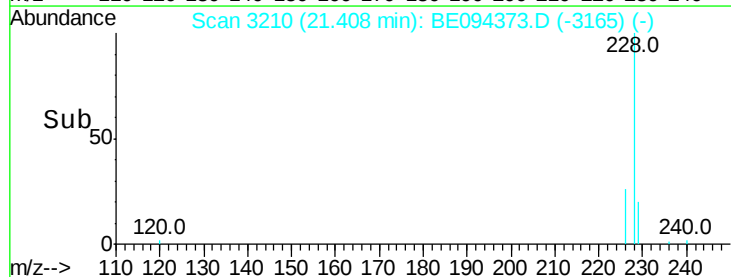
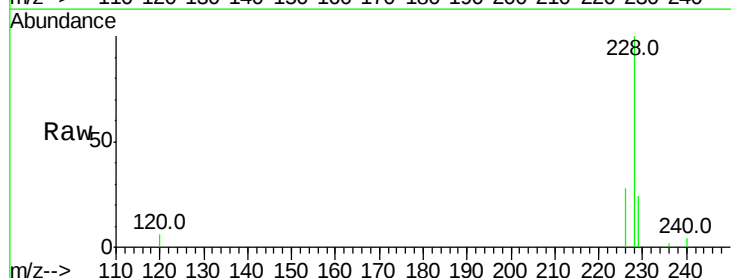
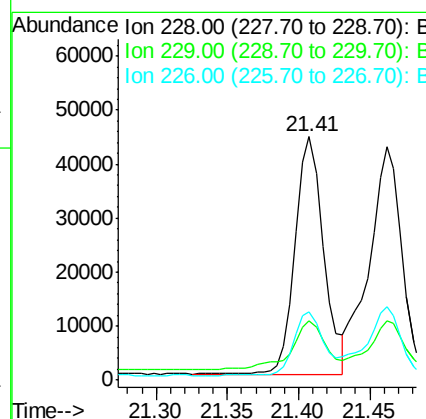
Manual Integrations  
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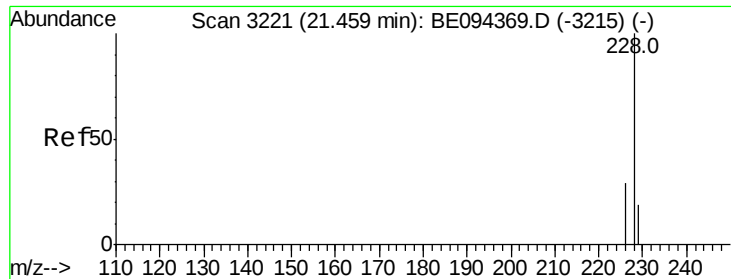
Sohil  
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#18  
Benzo(a)anthracene  
Concen: 2.176 ng/ul  
RT: 21.41 min Scan# 3210  
Delta R.T. 0.00 min  
Lab File: BE094373.D  
Acq: 15 Oct 2017 2:08

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 228     | 100   | 60159 |       |       |
| 229     | 24.3  | 22.8  | 34.2  |       |
| 226     | 27.9  | 17.0  | 25.6# |       |





#19

Chrysene

Concen: 2.112 ng/ul

RT: 21.46 min Scan# 3222

Delta R.T. 0.00 min

Lab File: BE094373.D

Acq: 15 Oct 2017 2:08

Instrument :

BNA\_E

ClientSampleId :

C0AB4

Tot Ion:228 Resp: 67418

Ion Ratio Lower Upper

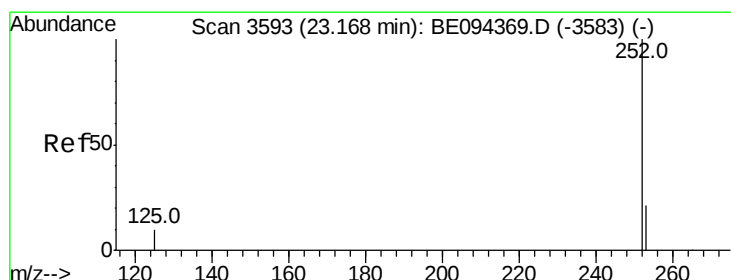
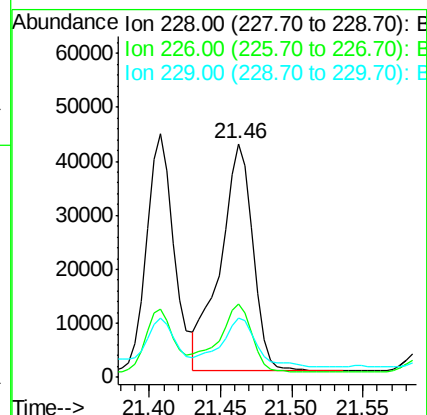
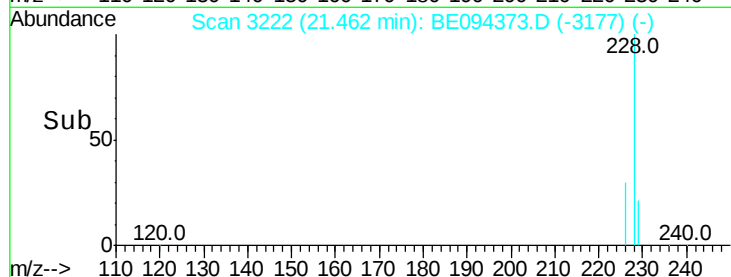
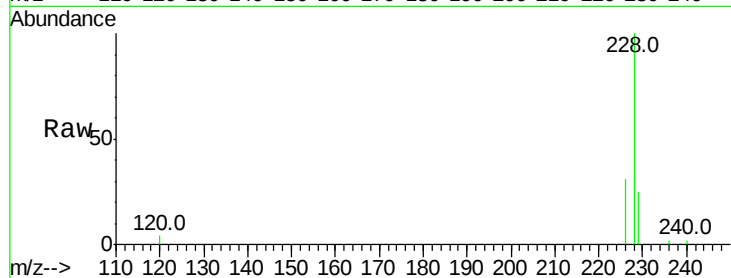
228 100

226 31.2 23.4 35.0

229 25.3 17.7 26.5

Manual Integrations  
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#21

Benzo(b)fluoranthene

Concen: 2.870 ng/ul

RT: 23.17 min Scan# 3594

Delta R.T. 0.00 min

Lab File: BE094373.D

Acq: 15 Oct 2017 2:08

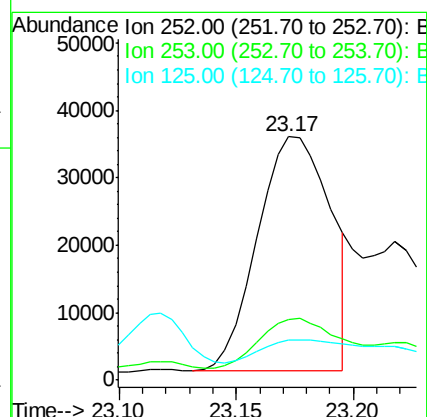
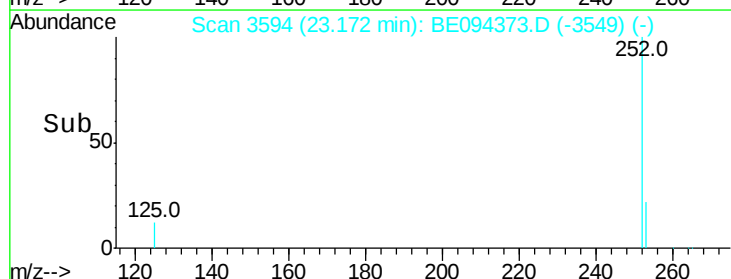
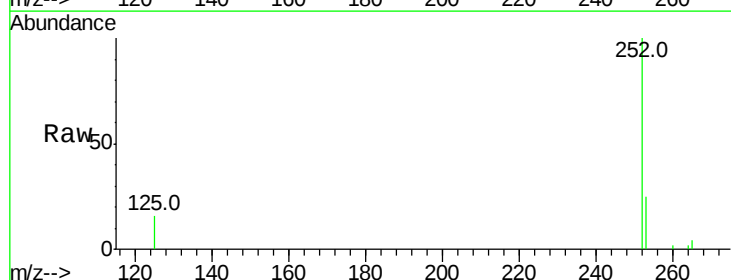
Tgt Ion:252 Resp: 75503

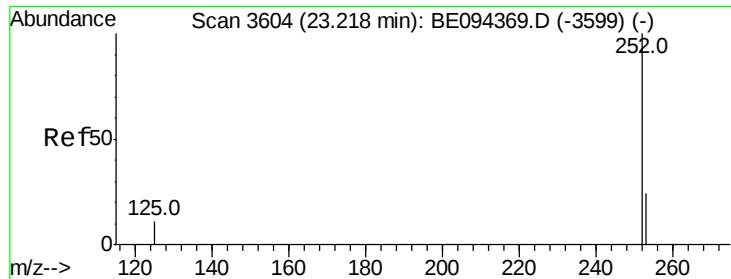
Ion Ratio Lower Upper

252 100

253 25.0 0.0 64.2

125 16.2 0.0 35.0





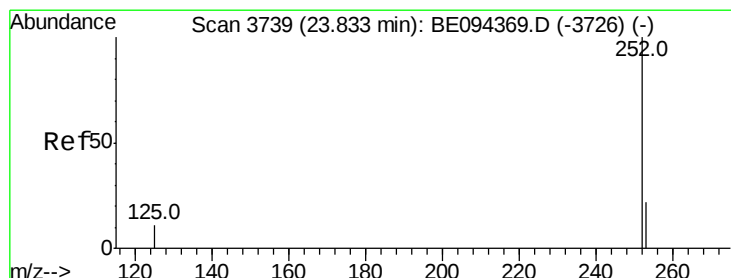
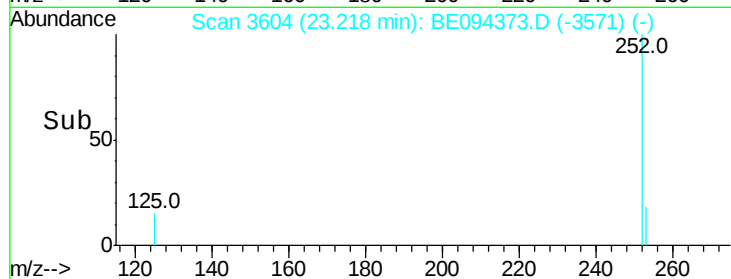
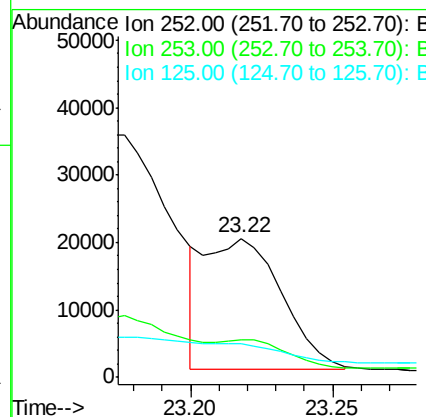
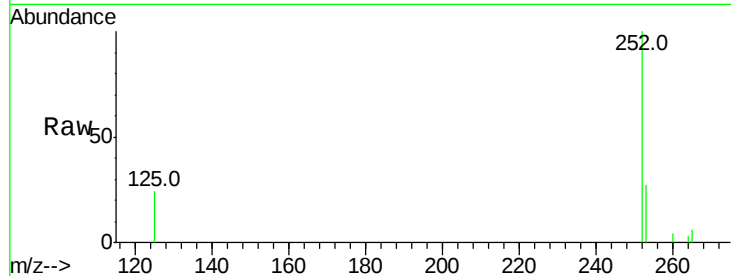
#22  
Benzo(k)fluoranthene  
Concen: 1.191 ng/ul m  
RT: 23.22 min Scan# 3604  
Delta R.T. 0.00 min  
Lab File: BE094373.D  
Acq: 15 Oct 2017 2:08

Instrument :  
BNA\_E  
ClientSampleId :  
C0AB4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 27.4  | 24.5  | 36.7  |
| 125     | 24.1  | 13.7  | 20.5  |

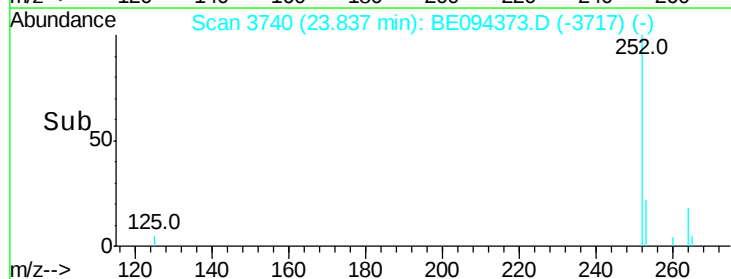
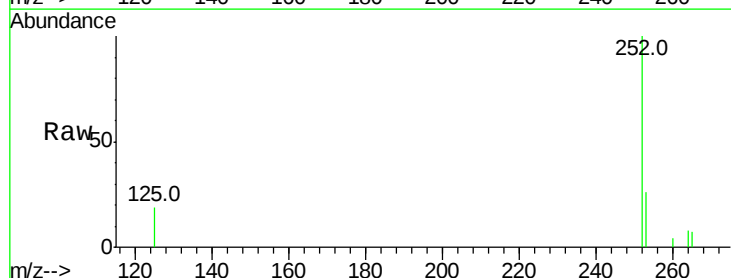
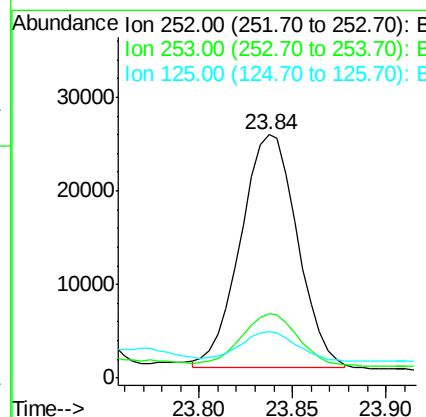
Manual Integrations  
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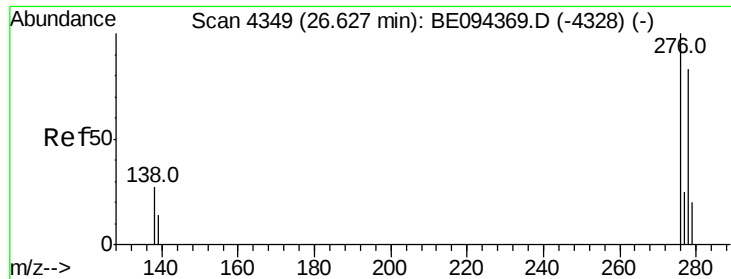
Sohil  
10/16/2017 8:25:34 PM



#23  
Benzo(a)pyrene  
Concen: 1.914 ng/ul m  
RT: 23.84 min Scan# 3740  
Delta R.T. 0.00 min  
Lab File: BE094373.D  
Acq: 15 Oct 2017 2:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 26.2  | 28.5  | 42.7  |
| 125     | 18.9  | 18.1  | 27.1  |





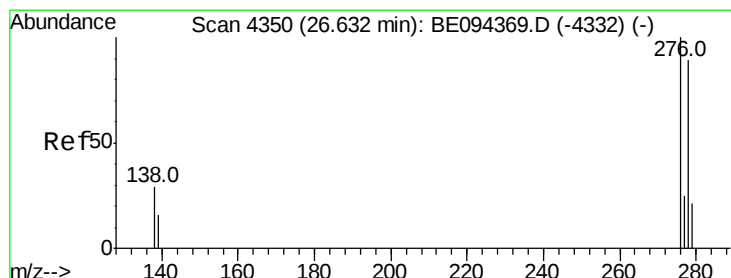
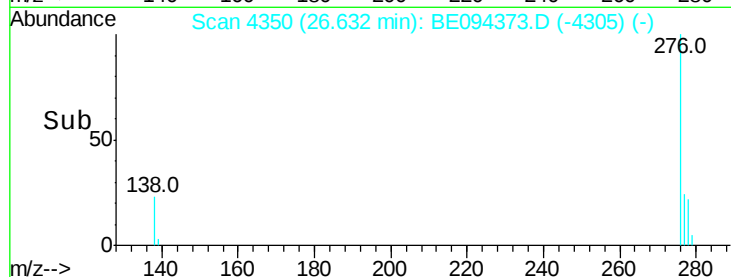
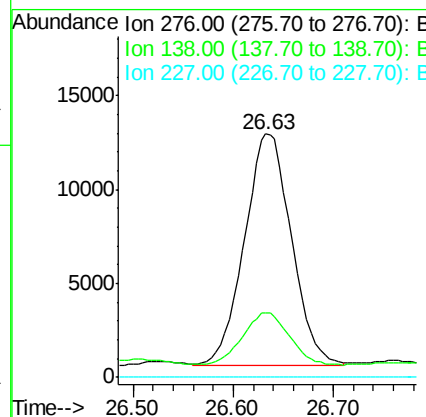
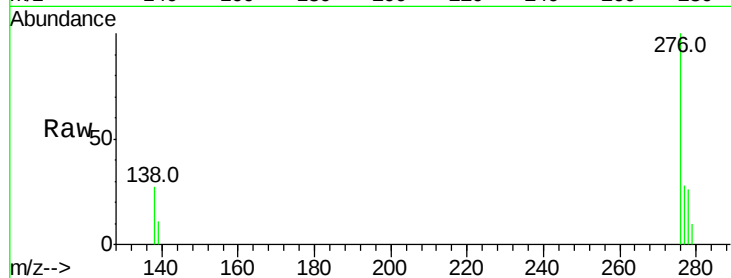
#24  
 Indeno(1,2,3-cd)pyrene  
 Concen: 1.434 ng/ul m  
 RT: 26.63 min Scan# 4350  
 Delta R.T. 0.01 min  
 Lab File: BE094373.D  
 Acq: 15 Oct 2017 2:08

Instrument :  
 BNA\_E  
 ClientSampleId :  
 C0AB4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 0.6   | 28.0  | 42.0# |
| 227     | 0.0   | 8.0   | 12.0# |

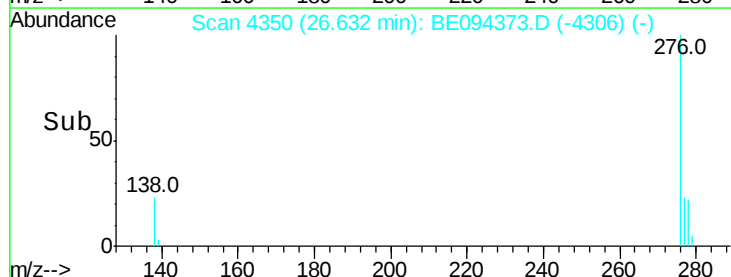
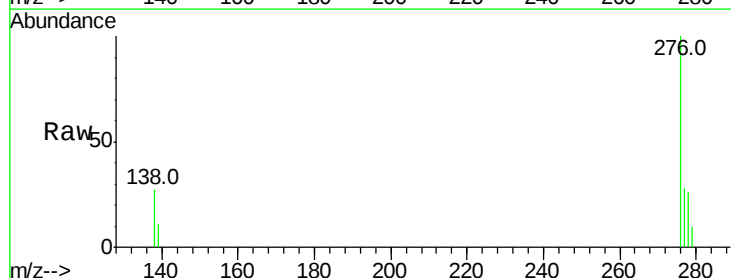
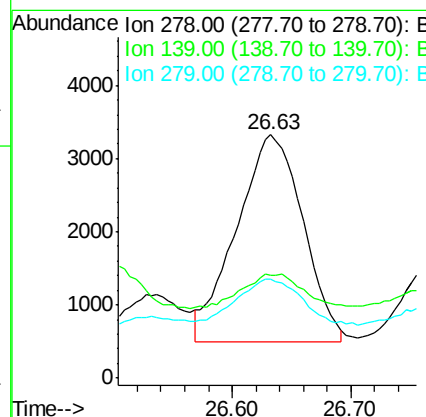
Manual Integrations  
 APPROVED

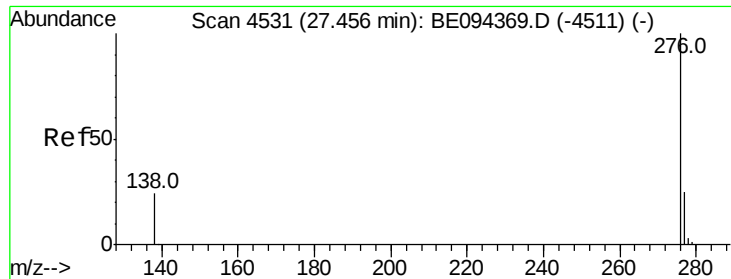
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 10/16/2017 8:25:34 PM



#25  
 Dibenzo(a,h)anthracene  
 Concen: 0.471 ng/ul m  
 RT: 26.63 min Scan# 4350  
 Delta R.T. 0.00 min  
 Lab File: BE094373.D  
 Acq: 15 Oct 2017 2:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 42.4  | 17.4  | 26.0# |
| 279     | 40.7  | 25.9  | 38.9# |





#26

Benzo(a,h,i)perylene

Concen: 1.376 ng/ul m

RT: 27.47 min Scan# 4533

Delta R.T. 0.01 min

Lab File: BE094373.D

Acq: 15 Oct 2017 2:08

Instrument :

BNA\_E

ClientSampleId :

C0AB4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 27.8  | 21.8  | 32.8  |
| 277     | 29.7  | 20.5  | 30.7  |

Manual Integrations  
APPROVED

Sohil  
10/16/2017 8:25:34 PM

