

Data Path : Z:\SVOASRV\HPCHEM1\BNA E\DATA\BE113018\  
 Data File : BE098287.D  
 Acq On : 30 Nov 2018 15:22  
 Operator : SJ/JU  
 Sample : PB115203BSD  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PB115203BSD

Manual Integrations  
 APPROVED

mohammad  
 12/3/2018 3:33:58 PM

Quant Time: Nov 30 16:04:47 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA E\METHODS\8270-SIM-BE112918.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 29 13:50:43 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.86  | 152  | 1401     | 0.40 | ng    | 0.00     |
| 7) Naphthalene-d8         | 10.67 | 136  | 5324     | 0.40 | ng    | 0.00     |
| 13) Acenaphthene-d10      | 14.53 | 164  | 3003     | 0.40 | ng    | 0.00     |
| 19) Phenanthrene-d10      | 17.28 | 188  | 7530     | 0.40 | ng    | 0.00     |
| 27) Chrysene-d12          | 21.46 | 240  | 10935    | 0.40 | ng    | 0.00     |
| 34) Perylene-d12          | 24.02 | 264  | 10780    | 0.40 | ng    | 0.00     |

|                             |       |     |       |      |    |      |
|-----------------------------|-------|-----|-------|------|----|------|
| System Monitoring Compounds |       |     |       |      |    |      |
| 4) 2-Fluorophenol           | 5.46  | 112 | 1397  | 0.37 | ng | 0.01 |
| 5) Phenol-d6                | 7.05  | 99  | 1673  | 0.32 | ng | 0.00 |
| 8) Nitrobenzene-d5          | 9.03  | 82  | 1965  | 0.36 | ng | 0.01 |
| 11) 2-Methylnaphthalene-d10 | 12.27 | 152 | 3255m | 0.38 | ng | 0.00 |
| 14) 2,4,6-Tribromophenol    | 16.03 | 330 | 408   | 0.29 | ng | 0.01 |
| 15) 2-Fluorobiphenyl        | 13.15 | 172 | 4631  | 0.37 | ng | 0.00 |
| 25) Fluoranthene-d10        | 19.31 | 212 | 40161 | 0.40 | ng | 0.00 |
| 29) Terphenyl-d14           | 19.91 | 244 | 7274  | 0.30 | ng | 0.00 |

|                                |       |     |       |        |    |       |
|--------------------------------|-------|-----|-------|--------|----|-------|
| Target Compounds               |       |     |       | Qvalue |    |       |
| 2) 1,4-Dioxane                 | 3.37  | 88  | 654   | 0.253  | ng | # 69  |
| 3) n-Nitrosodimethylamine      | 3.68  | 42  | 937   | 0.348  | ng | # 100 |
| 6) bis(2-Chloroethyl)ether     | 7.29  | 93  | 1554  | 0.320  | ng | 95    |
| 9) Naphthalene                 | 10.72 | 128 | 22189 | 0.415  | ng | 100   |
| 10) Hexachlorobutadiene        | 10.99 | 225 | 1262  | 0.368  | ng | 98    |
| 12) 2-Methylnaphthalene        | 12.34 | 142 | 3546  | 0.399  | ng | 99    |
| 16) Acenaphthylene             | 14.24 | 152 | 5757  | 0.411  | ng | 98    |
| 17) Acenaphthene               | 14.59 | 154 | 3298  | 0.395  | ng | 99    |
| 18) Fluorene                   | 15.57 | 166 | 4327  | 0.391  | ng | 99    |
| 20) 4-Bromophenyl-phenylether  | 16.46 | 248 | 1459  | 0.342  | ng | 95    |
| 21) Hexachlorobenzene          | 16.58 | 284 | 1566  | 0.355  | ng | 95    |
| 22) Pentachlorophenol          | 16.94 | 266 | 786   | 0.537  | ng | 88    |
| 23) Phenanthrene               | 17.31 | 178 | 7262  | 0.388  | ng | 99    |
| 24) Anthracene                 | 17.41 | 178 | 6825  | 0.392  | ng | 98    |
| 26) Fluoranthene               | 19.34 | 202 | 10452 | 0.409  | ng | 99    |
| 28) Pyrene                     | 19.70 | 202 | 10883 | 0.359  | ng | 100   |
| 30) Benzo(a)anthracene         | 21.45 | 228 | 13146 | 0.408  | ng | 99    |
| 31) Chrysene                   | 21.50 | 228 | 13513 | 0.413  | ng | 98    |
| 32) Bis(2-ethylhexyl)phthalate | 21.37 | 149 | 25306 | 0.328  | ng | 100   |
| 33) Indeno(1,2,3-cd)pyrene     | 26.70 | 276 | 14509 | 0.439  | ng | 98    |
| 35) Benzo(b)fluoranthene       | 23.23 | 252 | 12812 | 0.405  | ng | 97    |
| 36) Benzo(k)fluoranthene       | 23.28 | 252 | 13492 | 0.407  | ng | 99    |
| 37) Benzo(a)pyrene             | 23.90 | 252 | 12842 | 0.422  | ng | 98    |
| 38) Dibenzo(a,h)anthracene     | 26.73 | 278 | 11925 | 0.413  | ng | 97    |
| 39) Benzo(g,h,i)perylene       | 27.53 | 276 | 12349 | 0.427  | ng | 97    |

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

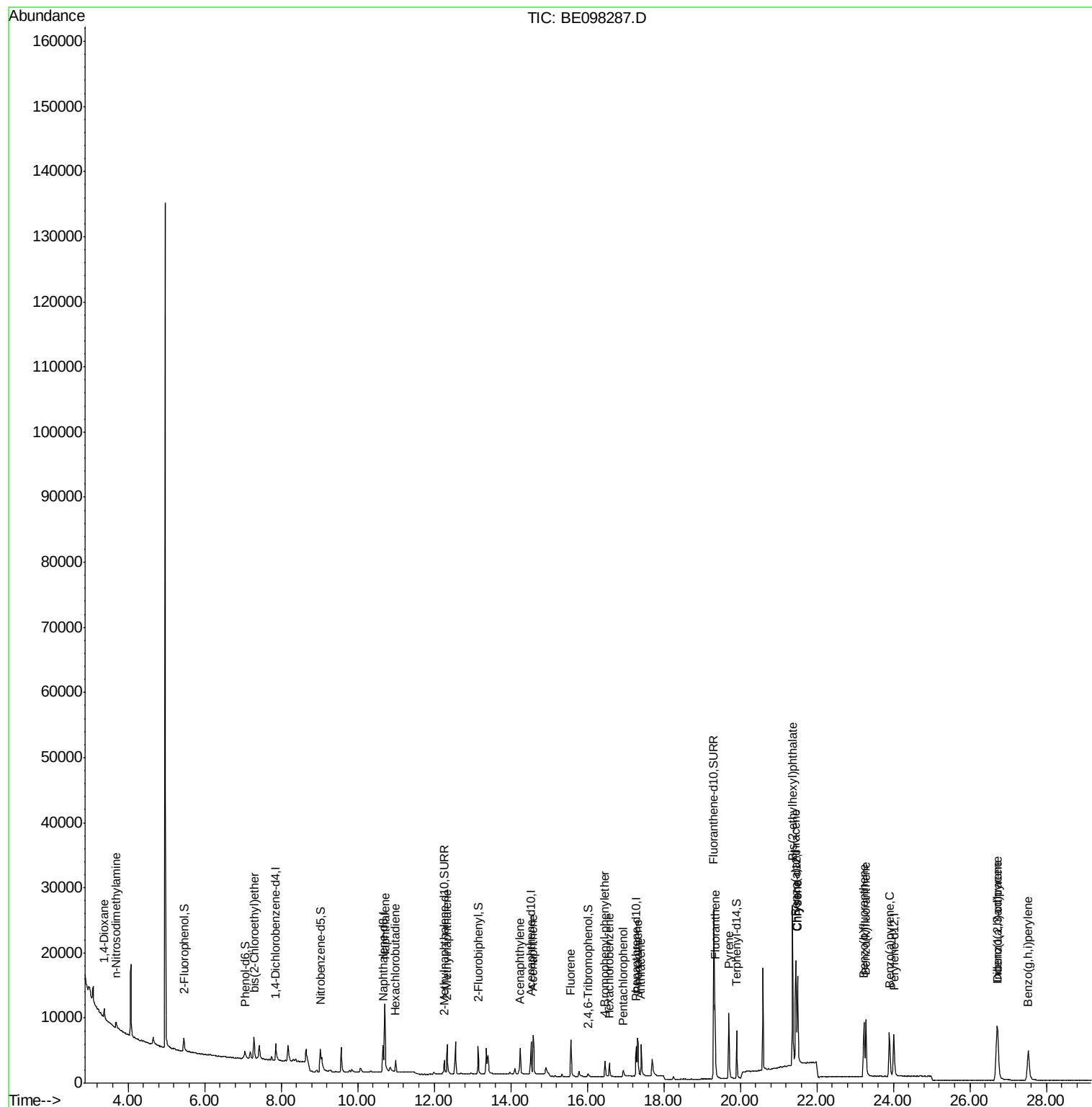
Data Path : Z:\SVOASRV\HPCHEM1\BNA E\DATA\BE113018\  
Data File : BE098287.D  
Acq On : 30 Nov 2018 15:22  
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Sample : PB115203BSD  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

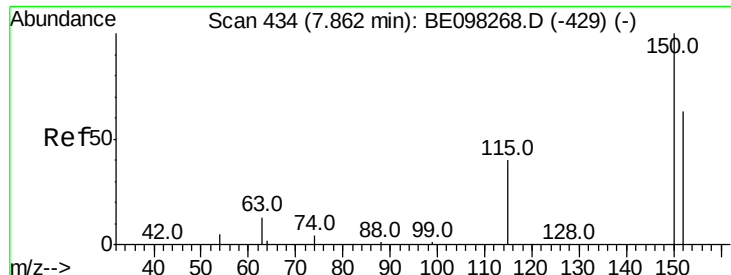
Instrument :  
BNA\_E  
ClientSampleId :  
PB115203BSD

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Quant Time: Nov 30 16:04:47 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA E\METHODS\8270-SIM-BE112918.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Nov 29 13:50:43 2018  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 0.400 ng

RT: 7.86 min Scan# 434

Delta R.T. 0.00 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

Instrument :

BNA\_E

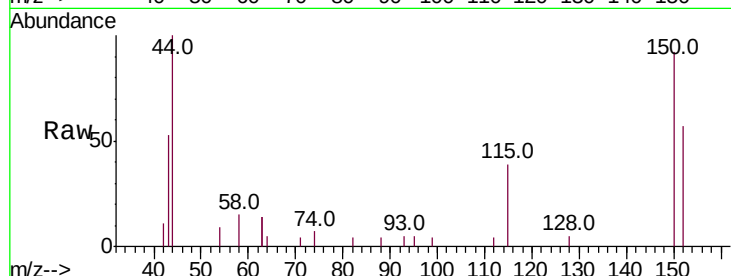
ClientSampleId :

PB115203BSD

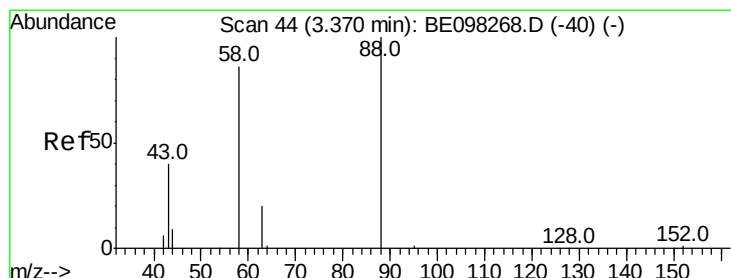
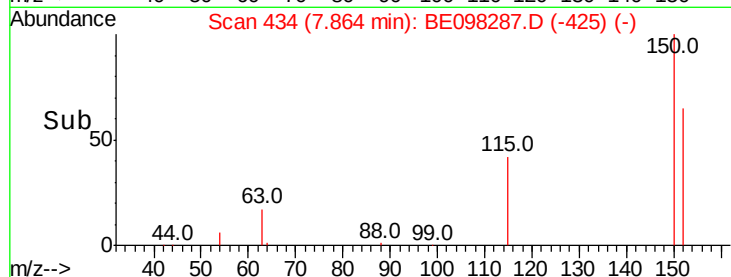
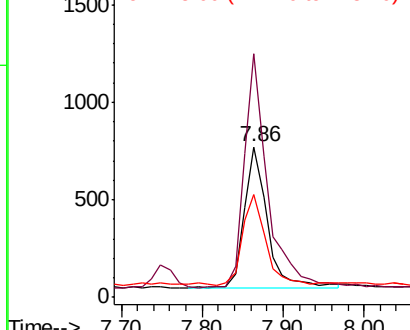
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 152   | Resp: | 1401  |
| Ion      | Ratio | Lower | Upper |
| 152      | 100   |       |       |
| 150      | 161.9 | 124.2 | 186.4 |
| 115      | 68.7  | 53.9  | 80.9  |

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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: 0.253 ng

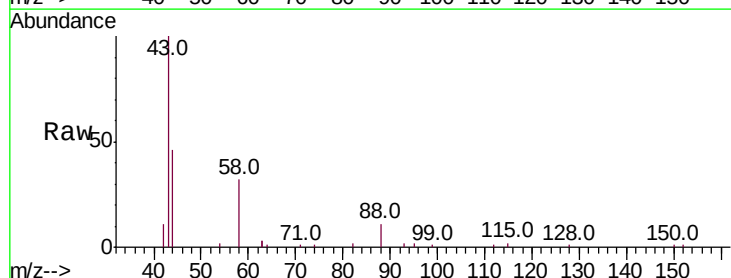
RT: 3.37 min Scan# 44

Delta R.T. 0.00 min

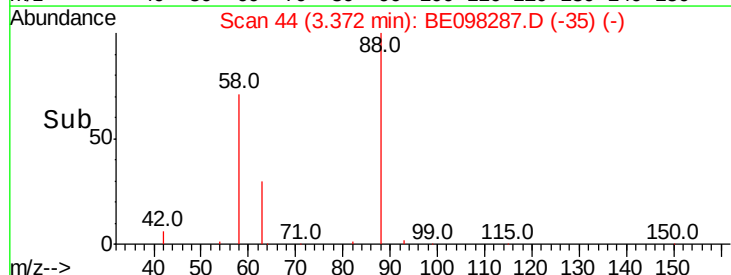
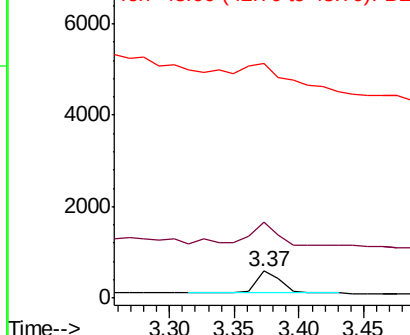
Lab File: BE098287.D

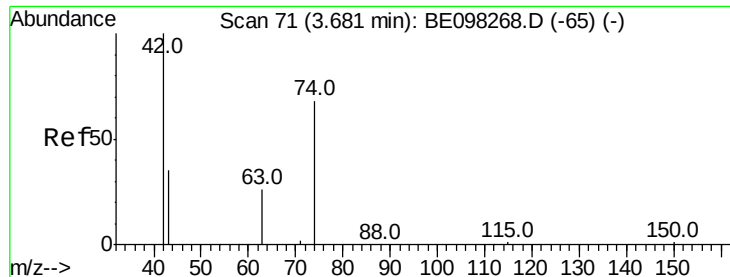
Acq: 30 Nov 2018 15:22

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 88    | Resp: | 654   |
| Ion      | Ratio | Lower | Upper |
| 88       | 100   |       |       |
| 58       | 103.8 | 75.0  | 112.6 |
| 43       | 0.0   | 38.3  | 57.5# |



Abundance Ion 88.00 (87.70 to 88.70): BE0  
Ion 58.00 (57.70 to 58.70): BE0  
Ion 43.00 (42.70 to 43.70): BE0





#3

n-Nitrosodimethylamine

Concen: 0.348 ng

RT: 3.68 min Scan# 71

Delta R.T. 0.00 min

Lab File: BE098287.D

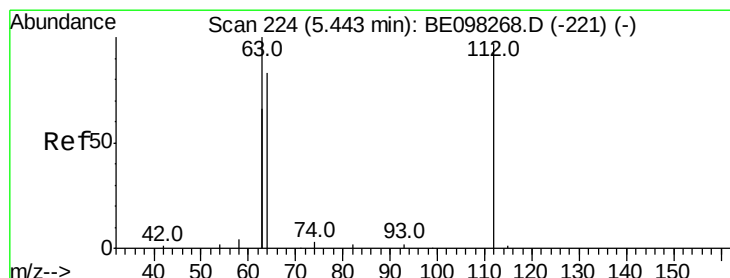
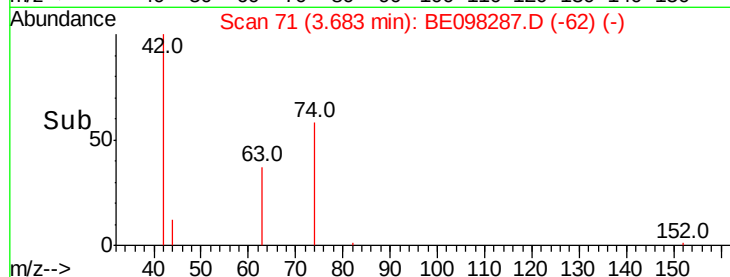
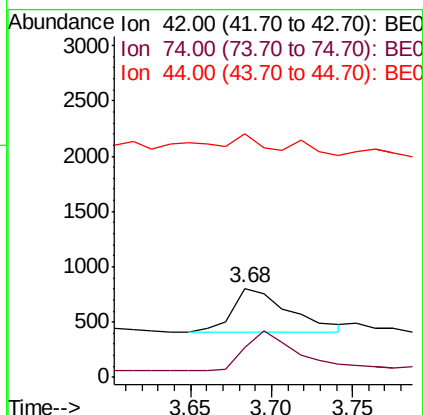
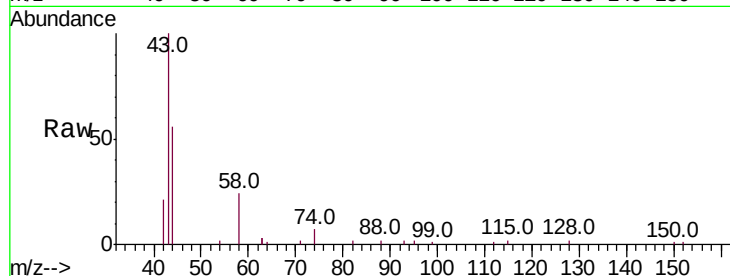
Acq: 30 Nov 2018 15:22

Instrument :  
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ClientSampleId :  
PB115203BSD

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 74      | 84.5  | 0.0   | 0.0#  |
| 44      | 0.0   | 0.0   | 0.0   |

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#4

2-Fluorophenol

Concen: 0.373 ng

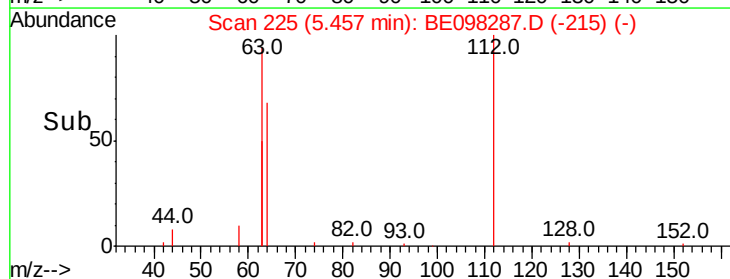
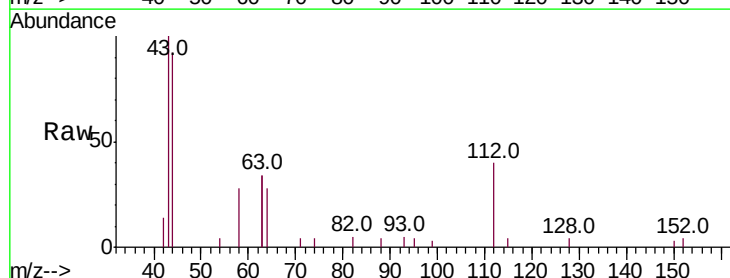
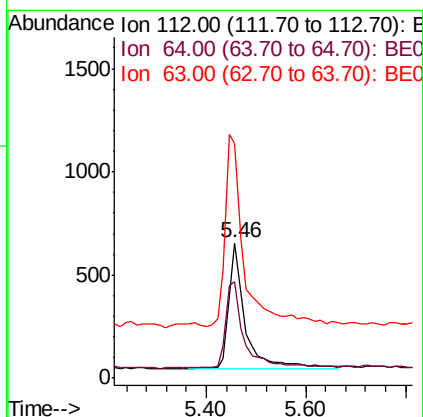
RT: 5.46 min Scan# 225

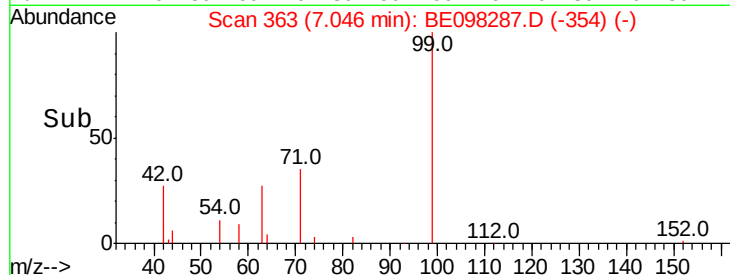
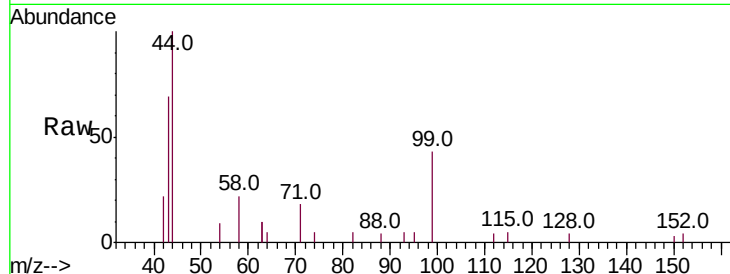
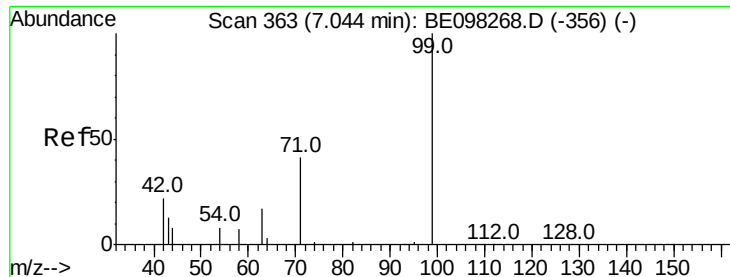
Delta R.T. 0.01 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 75.2  | 59.8  | 89.8  |
| 63      | 181.1 | 133.7 | 200.5 |





#5

Phenol-d6

Concen: 0.317 ng

RT: 7.05 min Scan# 363

Delta R.T. 0.00 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 99    | Resp: | 1673  |
| Ion      | Ratio | Lower | Upper |
| 99       | 100   |       |       |
| 42       | 30.1  | 26.3  | 39.5  |
| 71       | 41.8  | 33.6  | 50.4  |

Instrument :

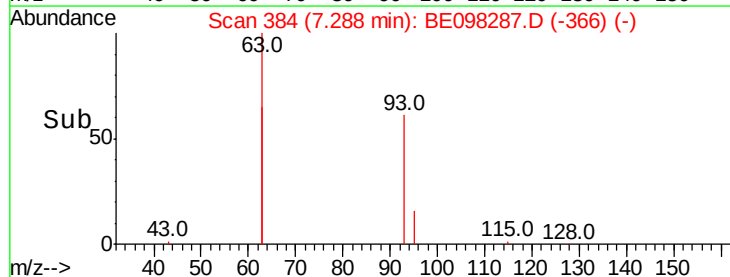
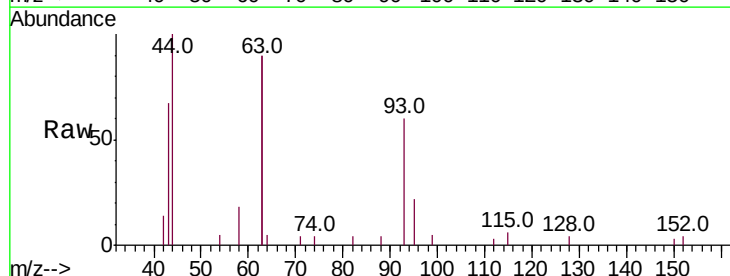
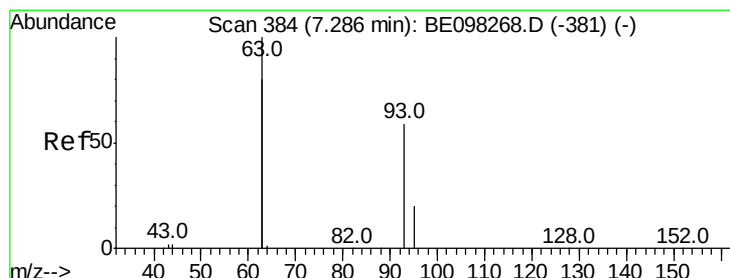
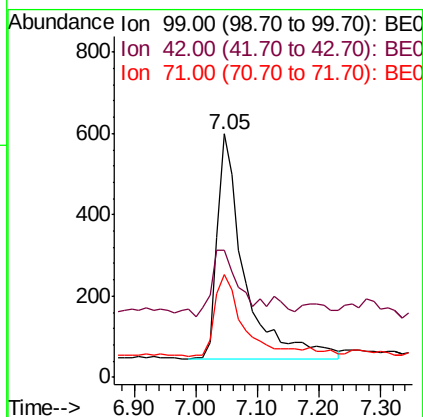
BNA\_E

ClientSampleId :

PB115203BSD

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#6

bis(2-Chloroethyl)ether

Concen: 0.320 ng

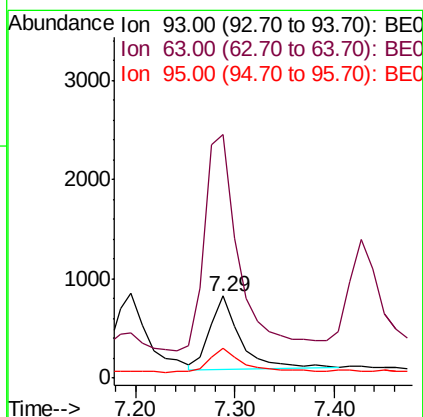
RT: 7.29 min Scan# 384

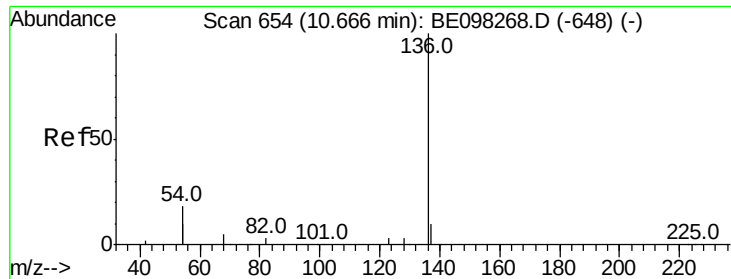
Delta R.T. 0.00 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 93    | Resp: | 1554  |
| Ion      | Ratio | Lower | Upper |
| 93       | 100   |       |       |
| 63       | 340.1 | 264.4 | 396.6 |
| 95       | 36.0  | 26.6  | 40.0  |





#7

Naphthalene-d8

Concen: 0.400 ng

RT: 10.67 min Scan# 654

Delta R.T. 0.00 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

Instrument :

BNA\_E

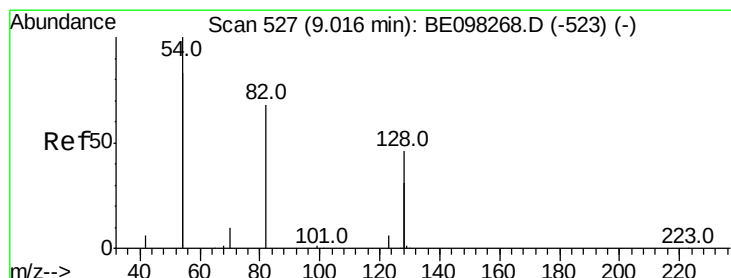
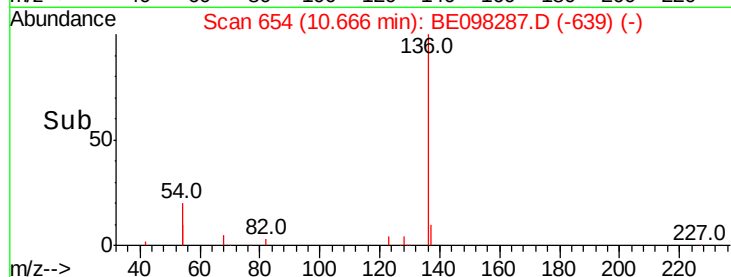
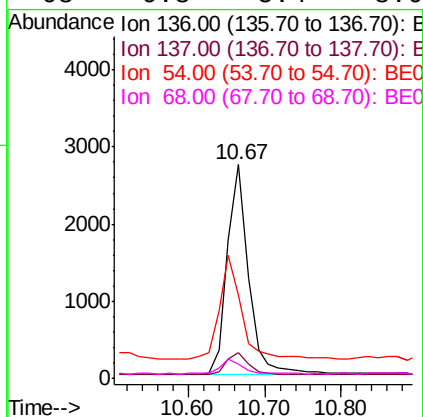
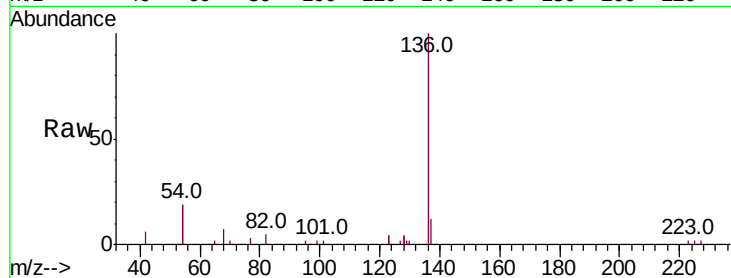
ClientSampleId :

PB115203BSD

|           |       |       |      |
|-----------|-------|-------|------|
| Tot Ion:  | 136   | Resp: | 5324 |
| Ion Ratio | Lower | Upper |      |
| 136       | 100   |       |      |
| 137       | 11.7  | 9.2   | 13.8 |
| 54        | 38.8  | 28.4  | 42.6 |
| 68        | 6.8   | 5.4   | 8.0  |

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#8

Nitrobenzene-d5

Concen: 0.364 ng

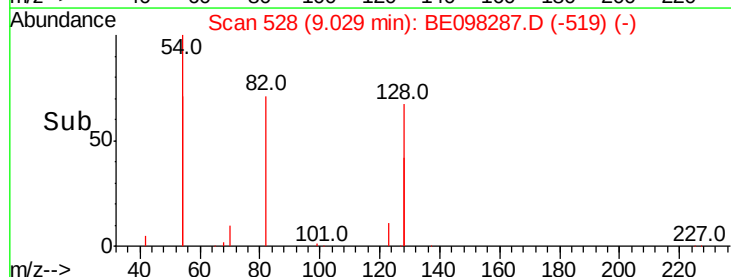
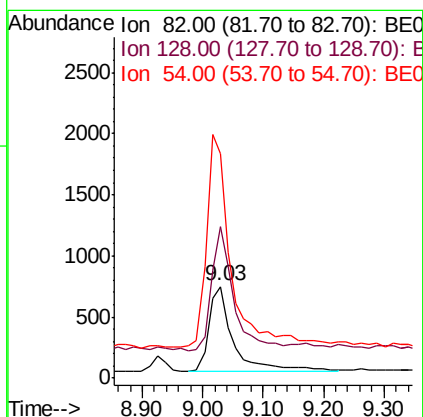
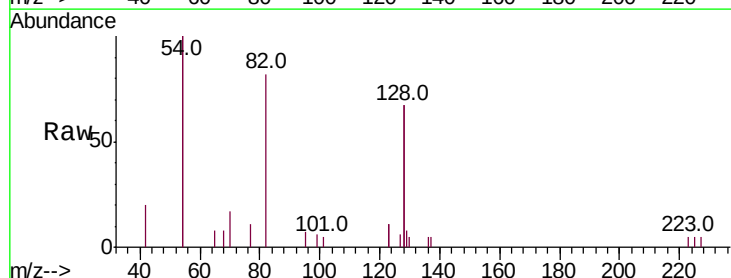
RT: 9.03 min Scan# 528

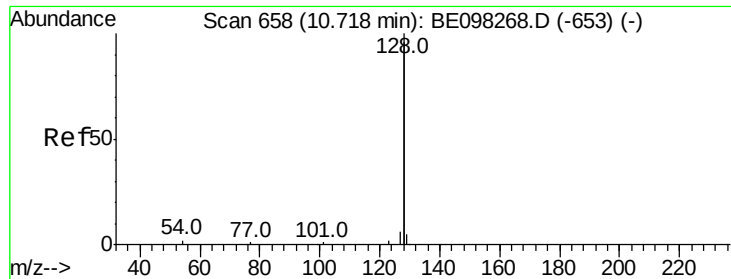
Delta R.T. 0.01 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 82    | Resp: | 1965   |
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 164.9 | 102.4 | 153.6# |
| 54        | 244.7 | 221.8 | 332.8  |





#9

Naphthalene

Concen: 0.415 ng

RT: 10.72 min Scan# 658

Delta R.T. 0.00 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

Instrument :

BNA\_E

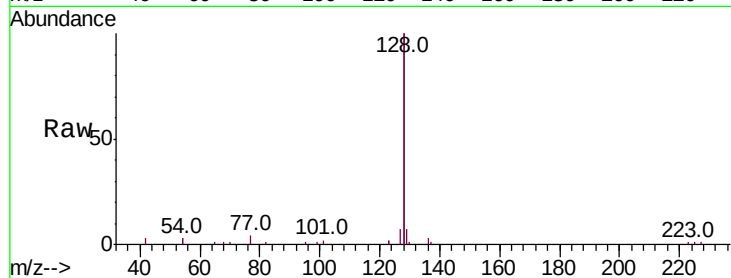
ClientSampleId :

PB115203BSD

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 128   | Resp: | 22189 |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 129       | 3.3   | 2.5   | 3.7   |
| 127       | 3.5   | 2.7   | 4.1   |

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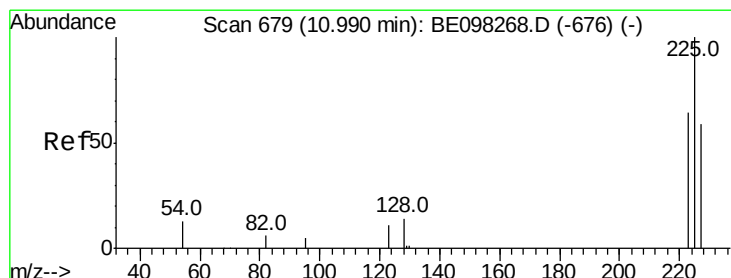
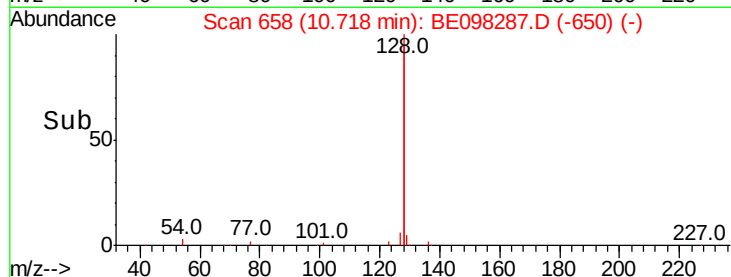
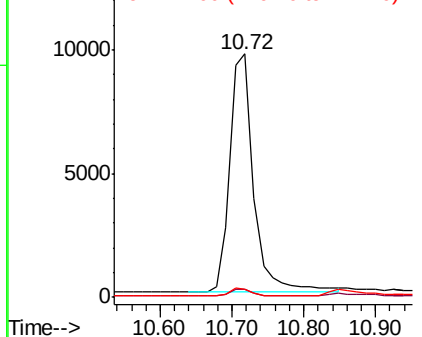
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Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E



#10

Hexachlorobutadiene

Concen: 0.368 ng

RT: 10.99 min Scan# 679

Delta R.T. 0.00 min

Lab File: BE098287.D

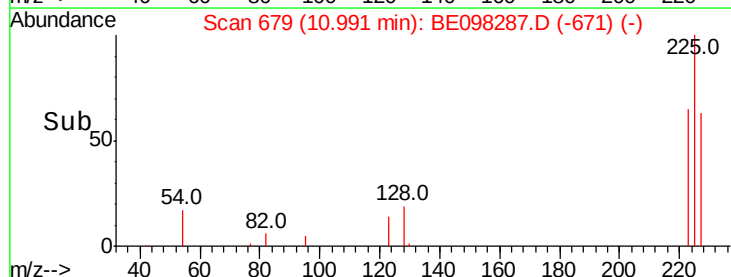
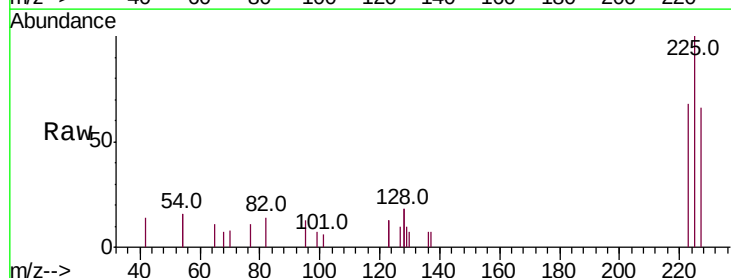
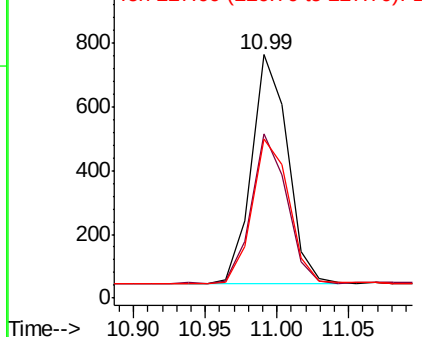
Acq: 30 Nov 2018 15:22

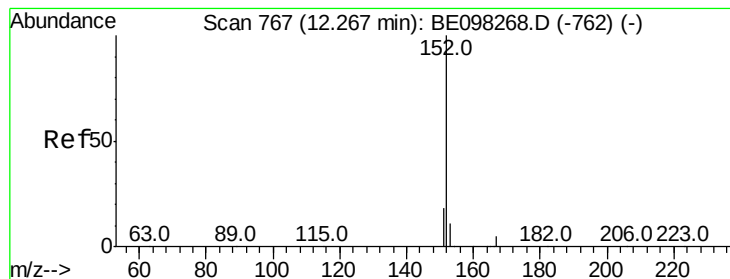
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 225   | Resp: | 1262 |
| Ion Ratio | Lower | Upper |      |
| 225       | 100   |       |      |
| 223       | 63.6  | 49.4  | 74.0 |
| 227       | 64.3  | 52.0  | 78.0 |

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





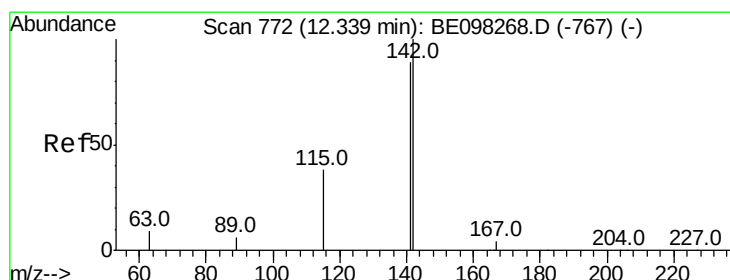
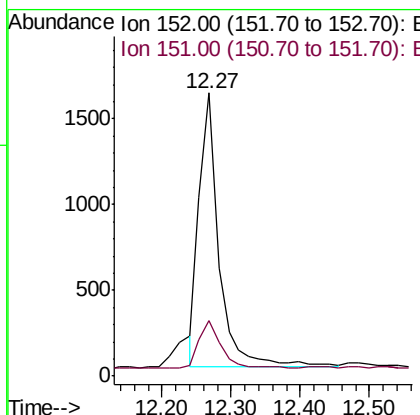
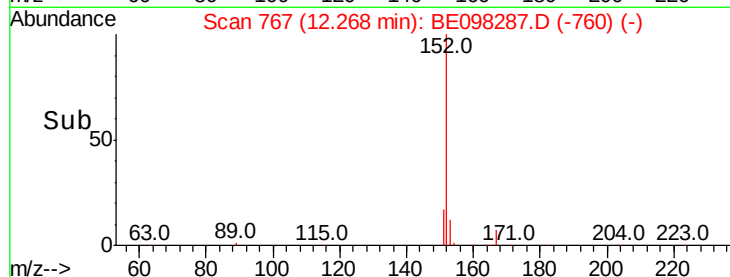
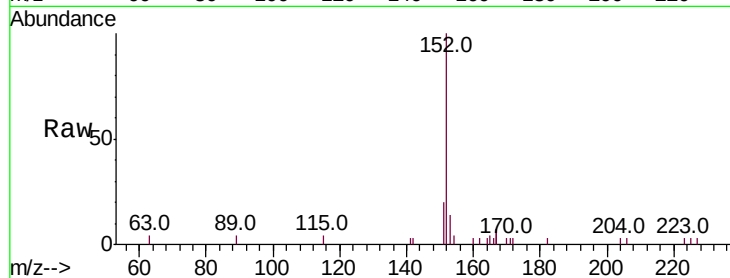
#11  
 2-Methylnaphthalene-d10  
 Concen: 0.377 ng m  
 RT: 12.27 min Scan# 767  
 Delta R.T. 0.00 min  
 Lab File: BE098287.D  
 Acq: 30 Nov 2018 15:22

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PB115203BSD

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 19.1  | 16.2  | 24.4  |

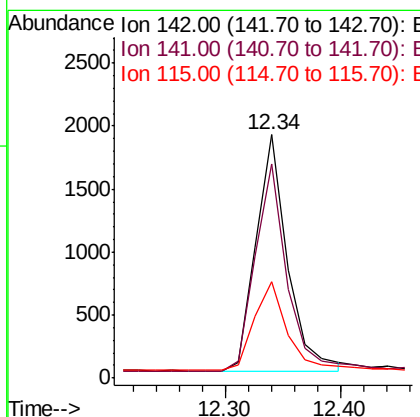
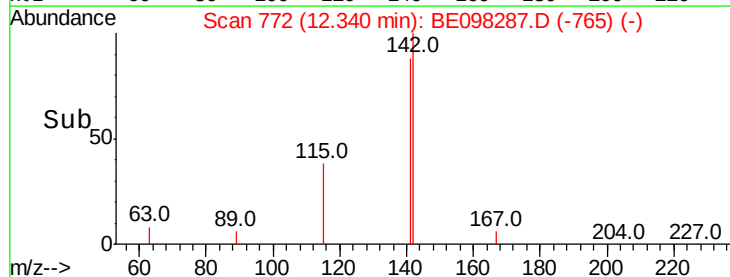
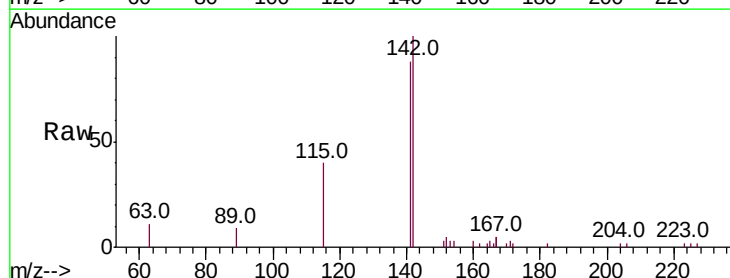
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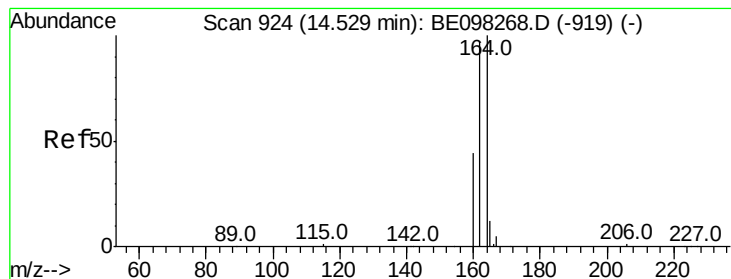


#12  
 2-Methylnaphthalene  
 Concen: 0.399 ng  
 RT: 12.34 min Scan# 772  
 Delta R.T. 0.00 min  
 Lab File: BE098287.D  
 Acq: 30 Nov 2018 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 87.9  | 71.0  | 106.6 |
| 115     | 39.8  | 32.2  | 48.2  |







#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.53 min Scan# 924

Delta R.T. 0.00 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

Instrument :

BNA\_E

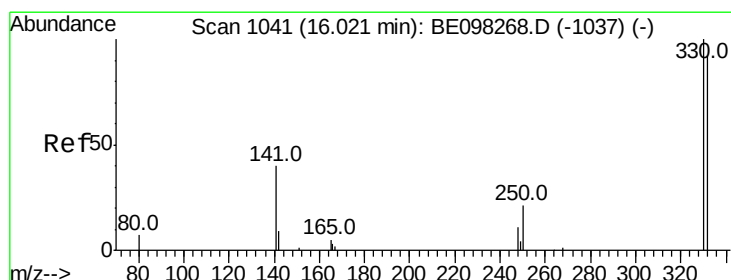
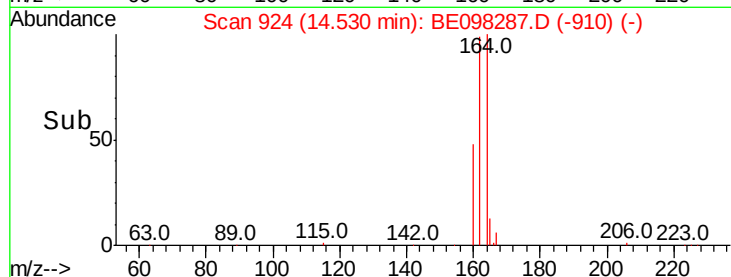
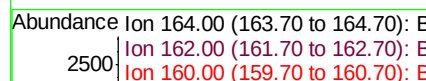
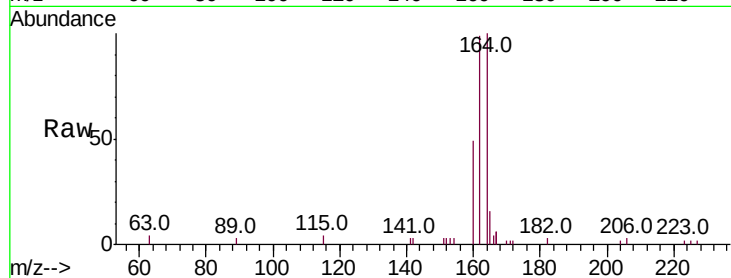
ClientSampleId :

PB115203BSD

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 164   | Resp: | 3003  |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 162      | 99.0  | 77.6  | 116.4 |
| 160      | 49.2  | 36.0  | 54.0  |

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#14

2,4,6-Tribromophenol

Concen: 0.287 ng

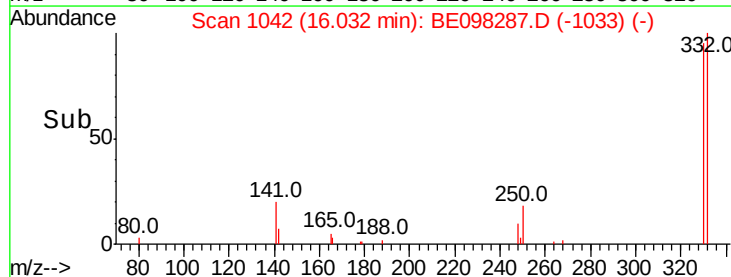
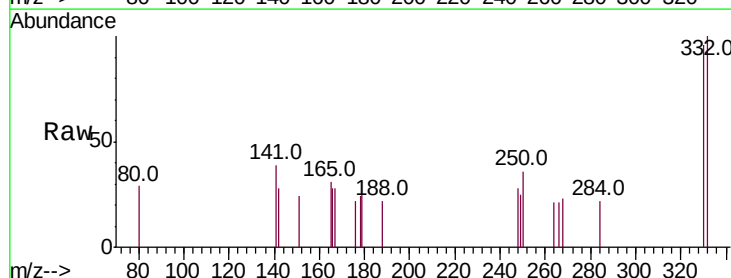
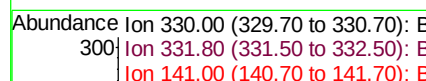
RT: 16.03 min Scan# 1042

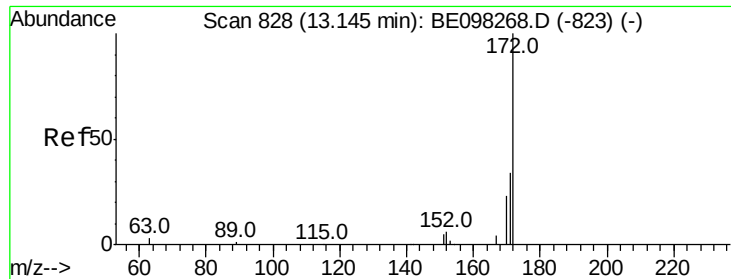
Delta R.T. 0.01 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 330   | Resp: | 408   |
| Ion      | Ratio | Lower | Upper |
| 330      | 100   |       |       |
| 332      | 93.9  | 76.2  | 114.4 |
| 141      | 39.0  | 39.0  | 58.4  |





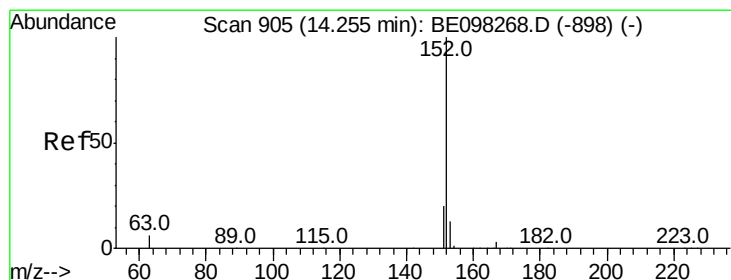
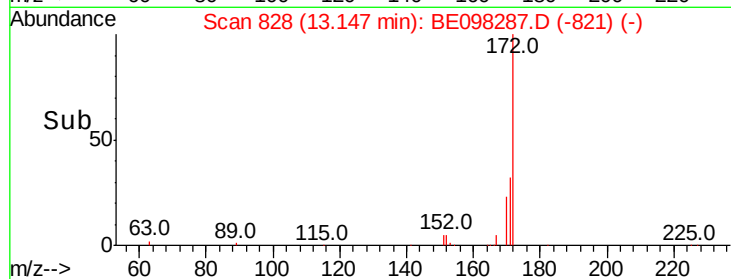
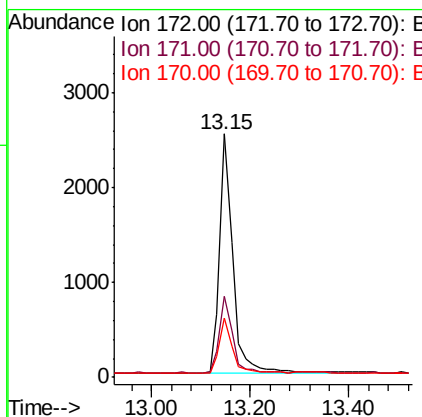
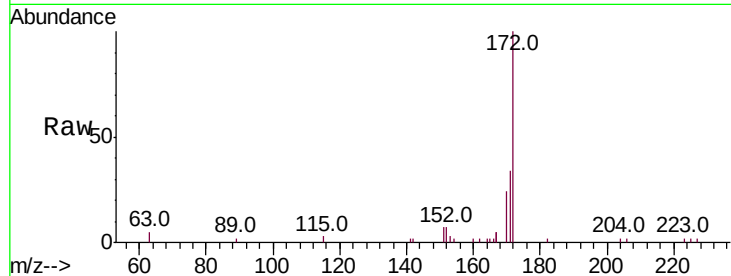
#15  
2-Fluorobiphenyl  
Concen: 0.372 ng  
RT: 13.15 min Scan# 828  
Delta R.T. 0.00 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

Instrument :  
BNA\_E  
ClientSampleId :  
PB115203BSD

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 33.5  | 27.5  | 41.3  |
| 170     | 24.5  | 19.6  | 29.4  |

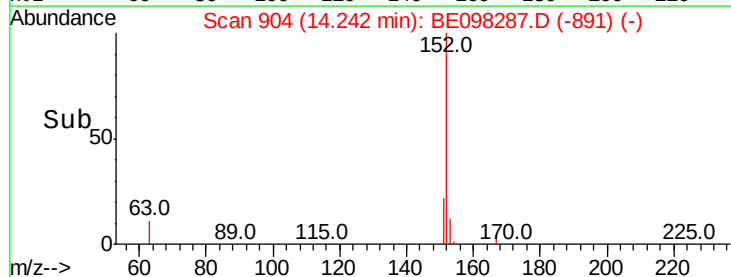
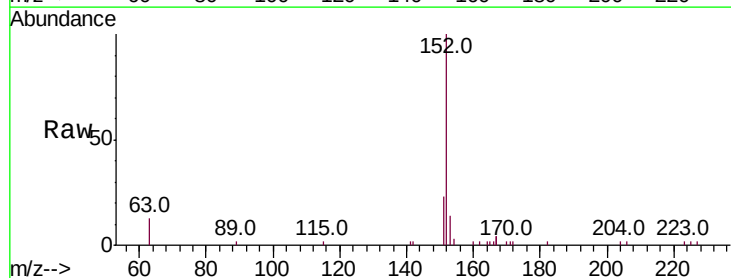
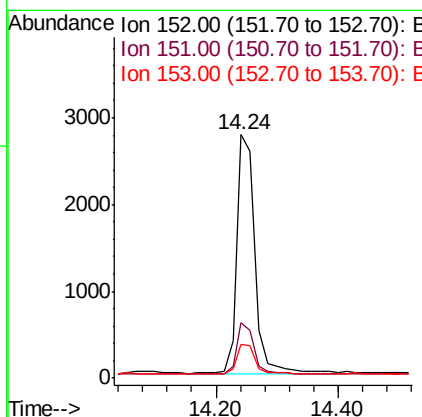
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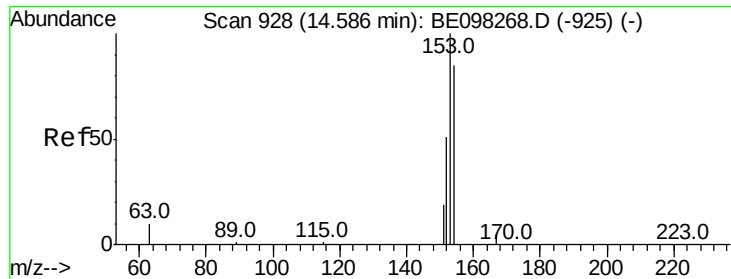
mohammad  
12/3/2018 3:33:58 PM



#16  
Acenaphthylene  
Concen: 0.411 ng  
RT: 14.24 min Scan# 904  
Delta R.T. -0.01 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 20.5  | 15.5  | 23.3  |
| 153     | 12.8  | 10.6  | 16.0  |





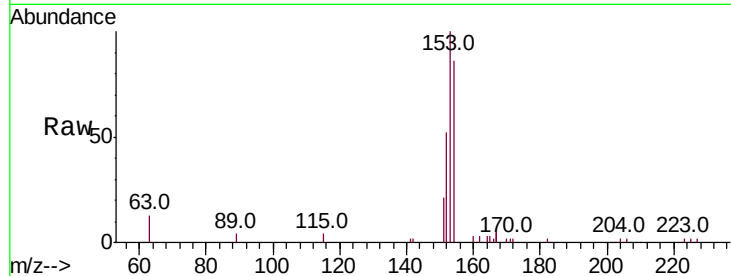
#17  
Acenaphthene  
Concen: 0.395 ng  
RT: 14.59 min Scan# 928  
Delta R.T. 0.00 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

Instrument :  
BNA\_E  
ClientSampleId :  
PB115203BSD

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 154     | 100   |       |       |
| 153     | 113.5 | 91.8  | 137.6 |
| 152     | 55.6  | 45.5  | 68.3  |

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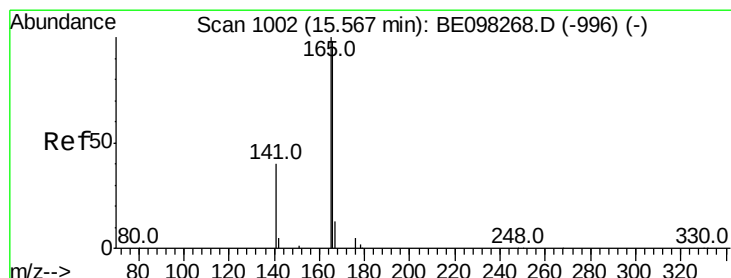
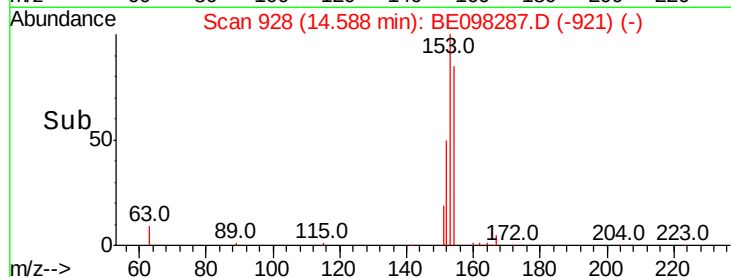
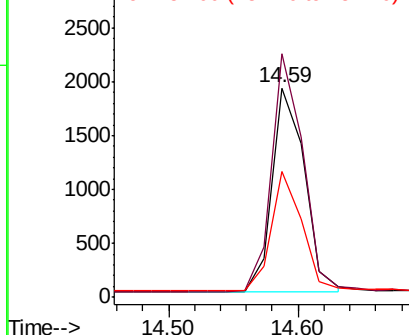


Abundance

Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E



#18  
Fluorene  
Concen: 0.391 ng  
RT: 15.57 min Scan# 1002  
Delta R.T. -0.00 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

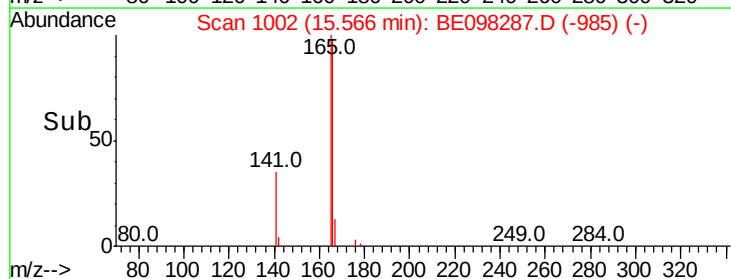
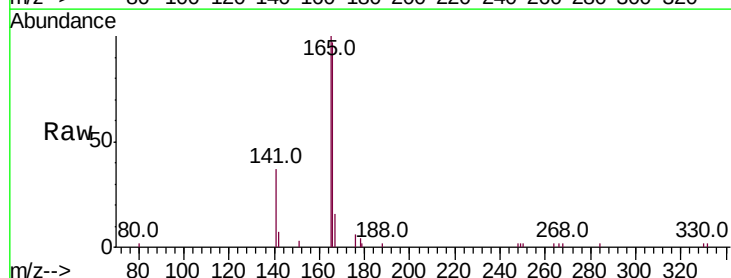
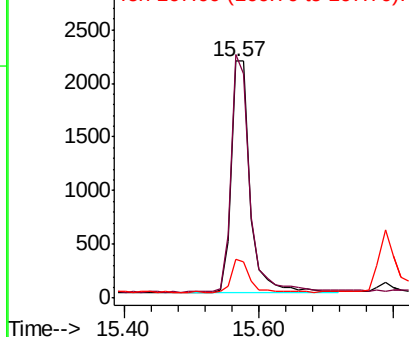
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 98.4  | 79.3  | 118.9 |
| 167     | 14.1  | 11.3  | 16.9  |

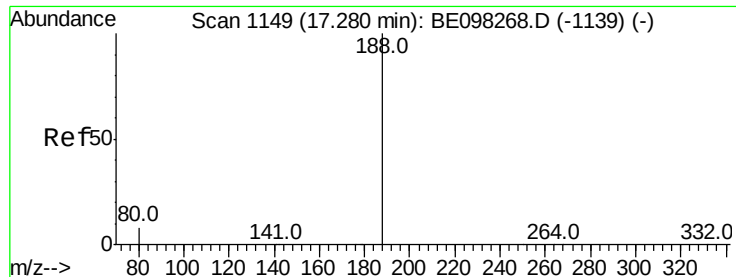
Abundance

Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





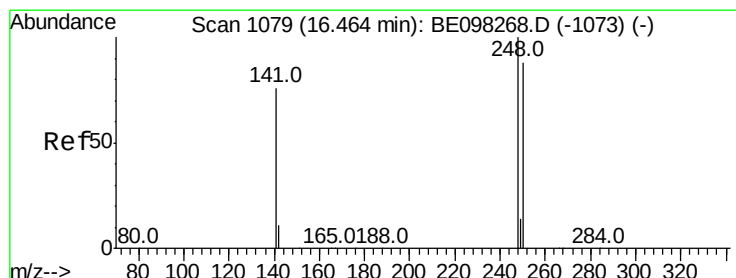
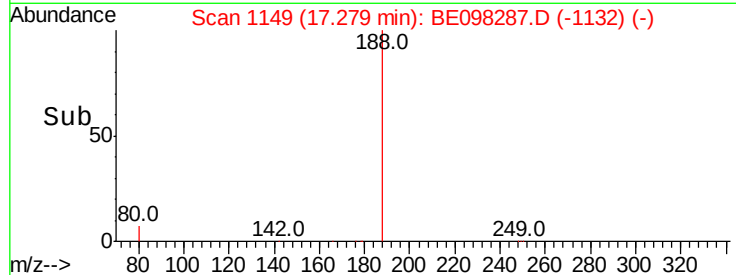
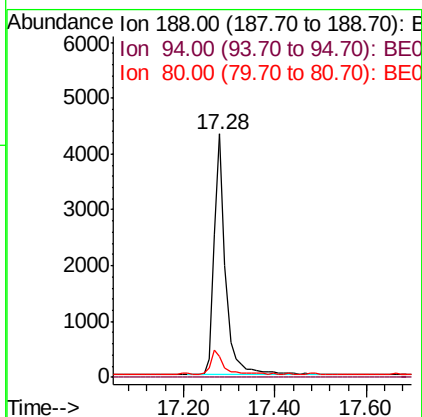
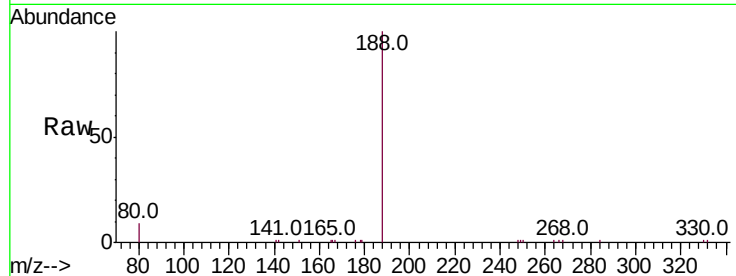
#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.28 min Scan# 1149  
Delta R.T. -0.00 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

Instrument :  
BNA\_E  
ClientSampleId :  
PB115203BSD

|           |       |       |      |
|-----------|-------|-------|------|
| Tot Ion:  | 188   | Resp: | 7530 |
| Ion Ratio | Lower | Upper |      |
| 188       | 100   |       |      |
| 94        | 0.0   | 0.0   | 0.0  |
| 80        | 8.6   | 7.2   | 10.8 |

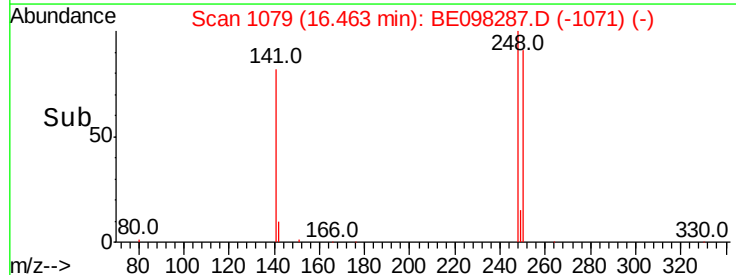
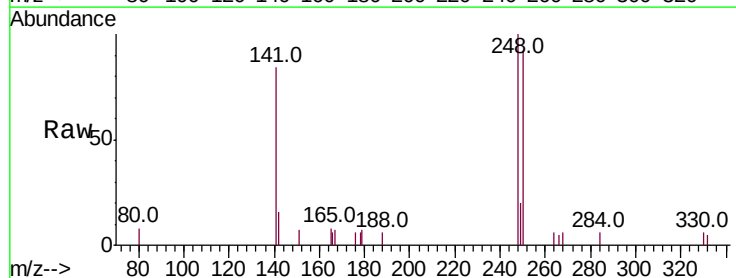
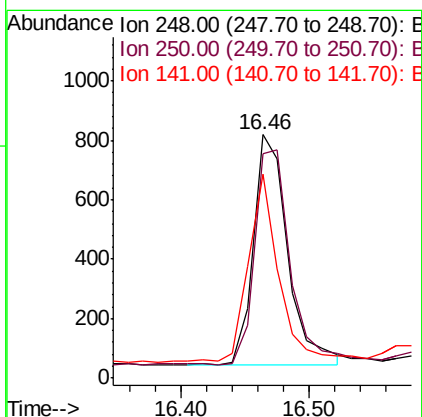
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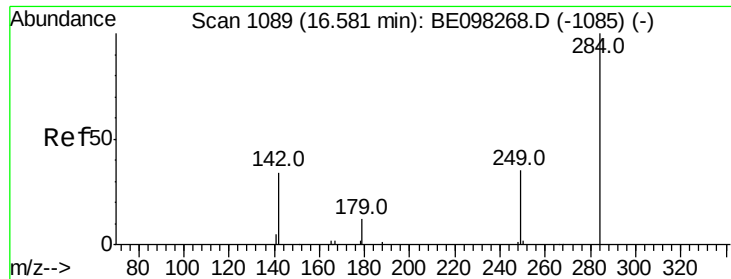
mohammad  
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#20  
4-Bromophenyl-phenylether  
Concen: 0.342 ng  
RT: 16.46 min Scan# 1079  
Delta R.T. -0.00 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 248   | Resp: | 1459  |
| Ion Ratio | Lower | Upper |       |
| 248       | 100   |       |       |
| 250       | 91.9  | 71.0  | 106.6 |
| 141       | 83.9  | 62.1  | 93.1  |





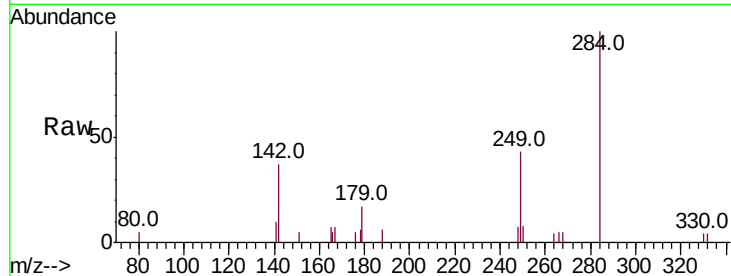
#21  
Hexachlorobenzene  
Concen: 0.355 ng  
RT: 16.58 min Scan# 1089  
Delta R.T. -0.00 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

Instrument :  
BNA\_E  
ClientSampled :  
PB115203BSD

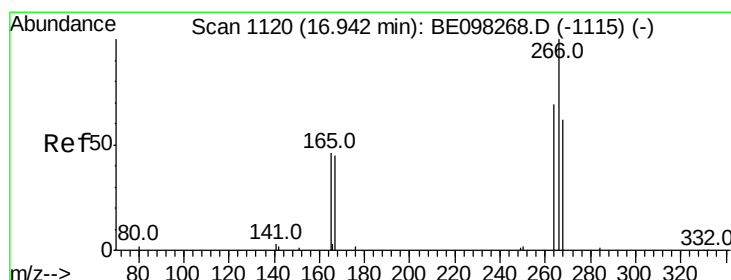
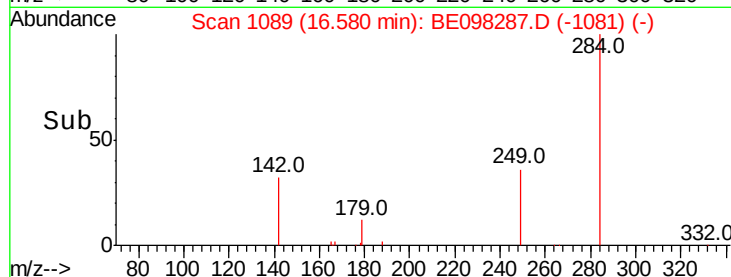
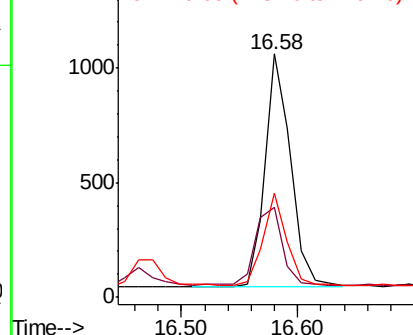
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 35.2  | 26.3  | 39.5  |
| 249     | 35.6  | 26.0  | 39.0  |

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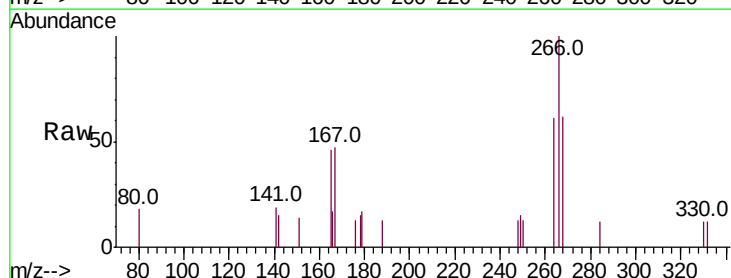


Abundance Ion 283.80 (283.50 to 284.50): E  
Ion 142.00 (141.70 to 142.70): E  
Ion 249.00 (248.70 to 249.70): E

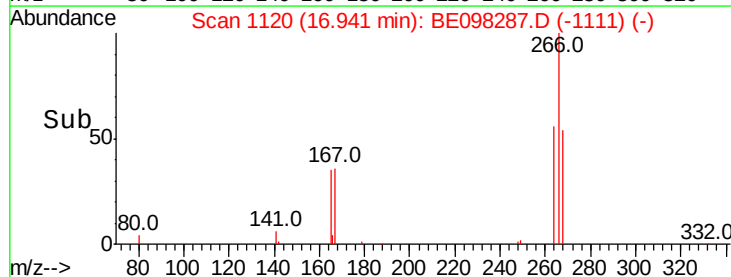
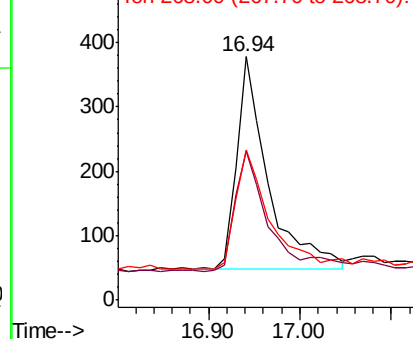


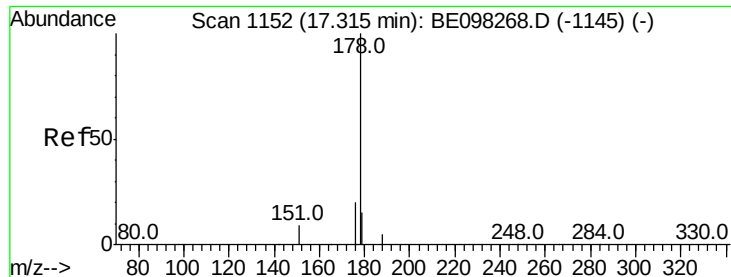
#22  
Pentachlorophenol  
Concen: 0.537 ng  
RT: 16.94 min Scan# 1120  
Delta R.T. 0.00 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 266     | 100   |       |       |
| 264     | 61.1  | 59.0  | 88.4  |
| 268     | 61.9  | 55.1  | 82.7  |



Abundance Ion 266.00 (265.70 to 266.70): E  
Ion 264.00 (263.70 to 264.70): E  
Ion 268.00 (267.70 to 268.70): E





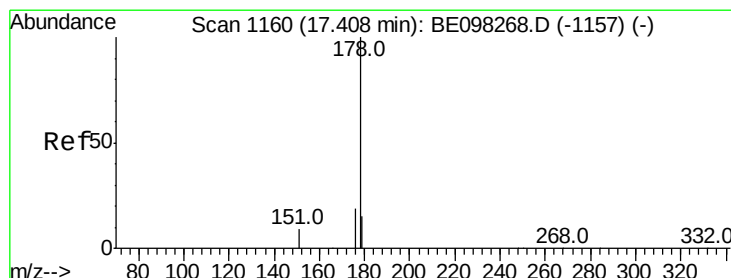
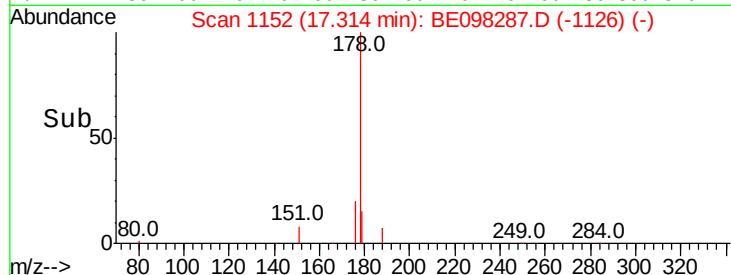
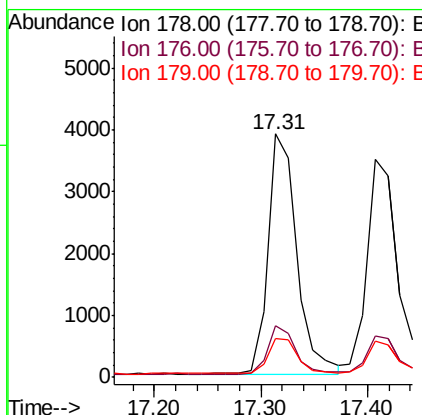
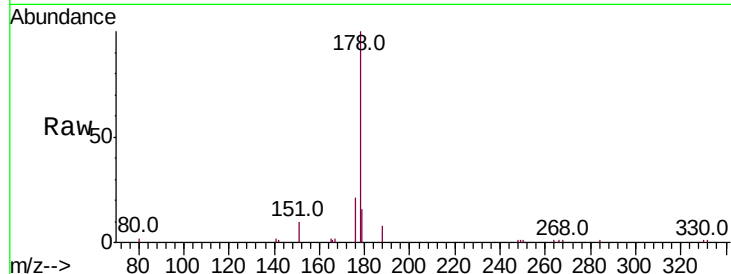
#23  
Phenanthrene  
Concen: 0.388 ng  
RT: 17.31 min Scan# 1152  
Delta R.T. -0.00 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

Instrument :  
BNA\_E  
ClientSampleId :  
PB115203BSD

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.6  | 15.9  | 23.9  |
| 179     | 15.1  | 12.3  | 18.5  |

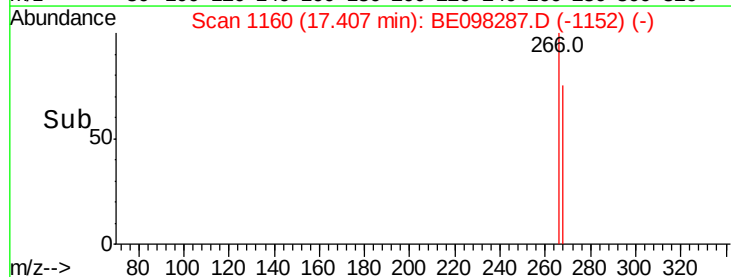
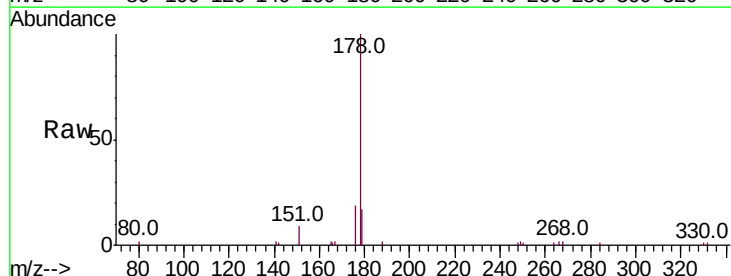
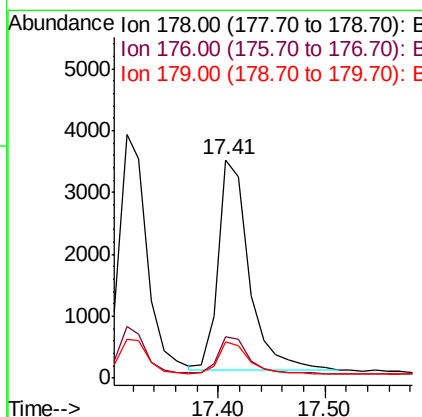
Manual Integrations  
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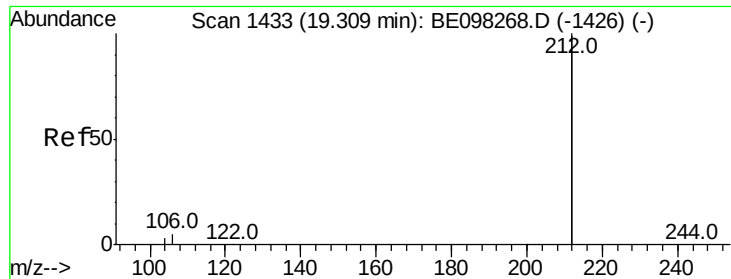
mohammad  
12/3/2018 3:33:58 PM



#24  
Anthracene  
Concen: 0.392 ng  
RT: 17.41 min Scan# 1160  
Delta R.T. -0.00 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 17.8  | 15.0  | 22.4  |
| 179     | 14.8  | 12.3  | 18.5  |





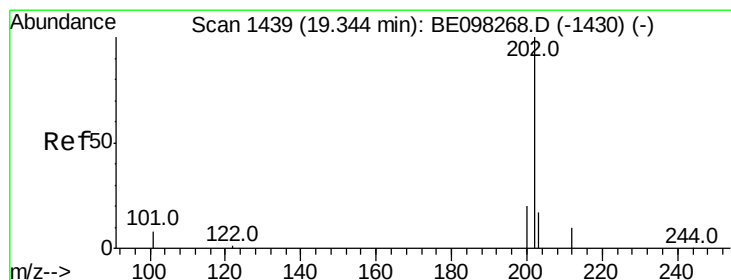
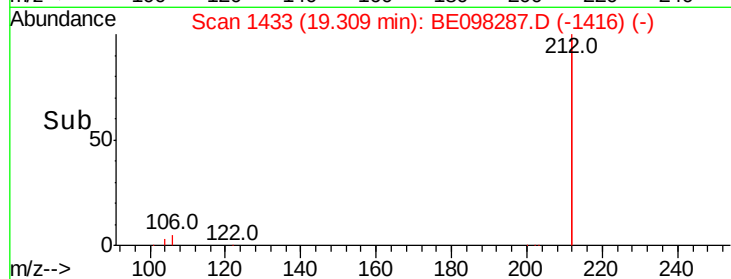
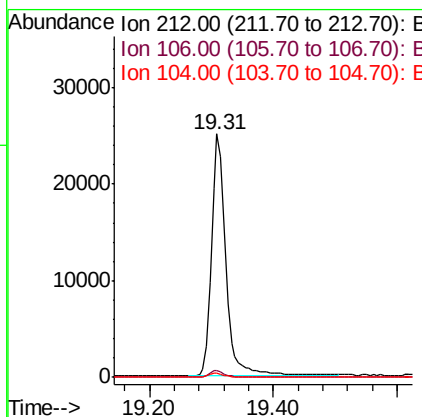
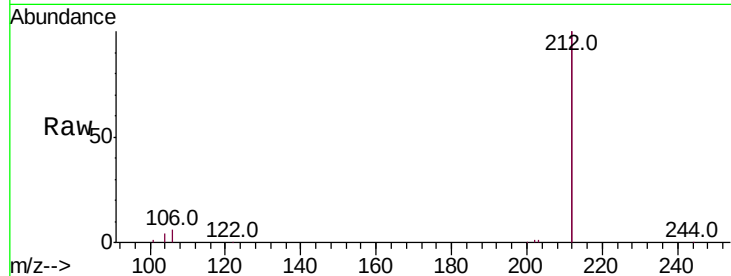
#25  
Fluoranthene-d10  
Concen: 0.395 ng  
RT: 19.31 min Scan# 1433  
Delta R.T. -0.00 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

Instrument :  
BNA\_E  
ClientSampleId :  
PB115203BSD

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 212     | 100   |       |       |
| 106     | 2.7   | 2.2   | 3.2   |
| 104     | 1.5   | 1.3   | 1.9   |

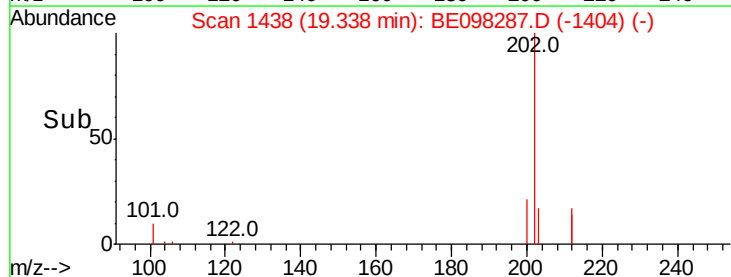
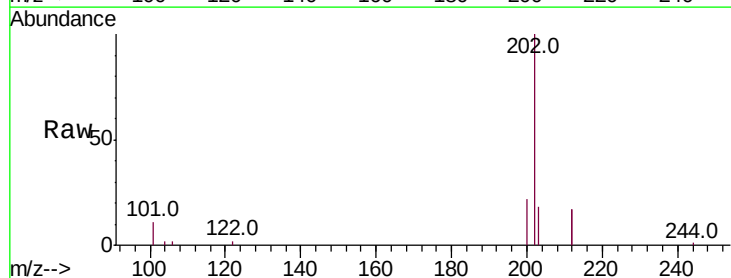
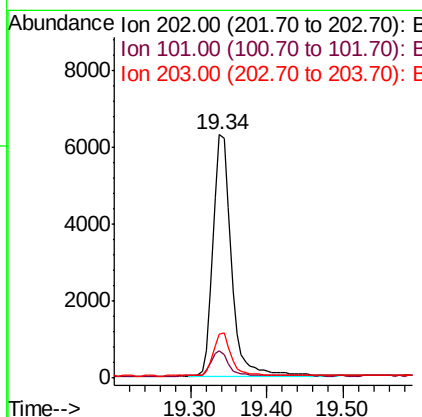
Manual Integrations  
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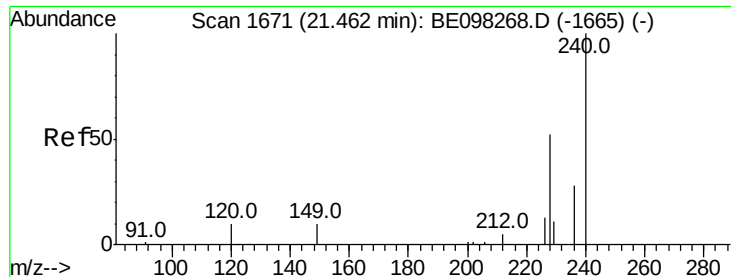
mohammad  
12/3/2018 3:33:58 PM



#26  
Fluoranthene  
Concen: 0.409 ng  
RT: 19.34 min Scan# 1438  
Delta R.T. -0.01 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 10.1  | 8.0   | 12.0  |
| 203     | 16.8  | 13.8  | 20.6  |





#27

Chrysene-d12

Concen: 0.400 ng

RT: 21.46 min Scan# 1671

Delta R.T. 0.00 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

Instrument :

BNA\_E

ClientSampleId :

PB115203BSD

Tot Ion:240 Resp: 10935

Ion Ratio Lower Upper

240 100

120 9.7 9.5 14.3

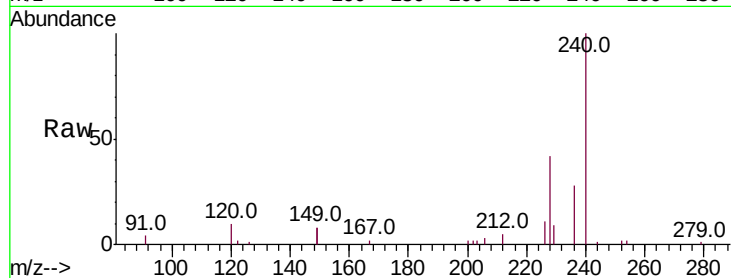
236 27.6 22.7 34.1

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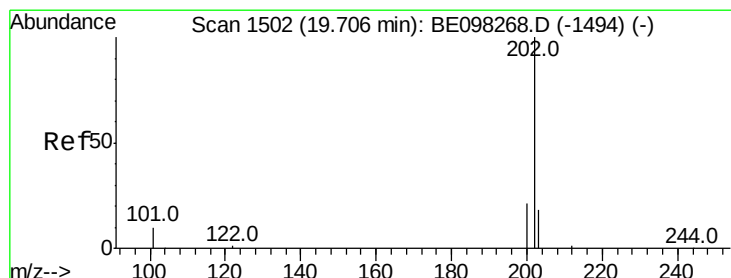
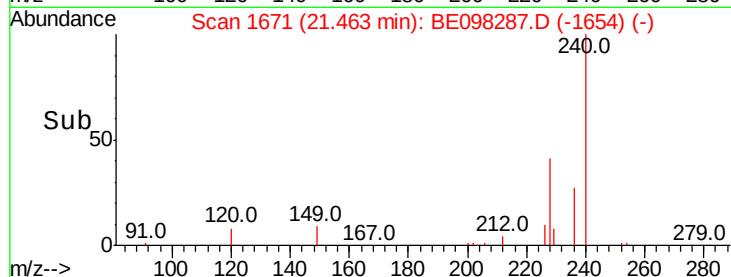
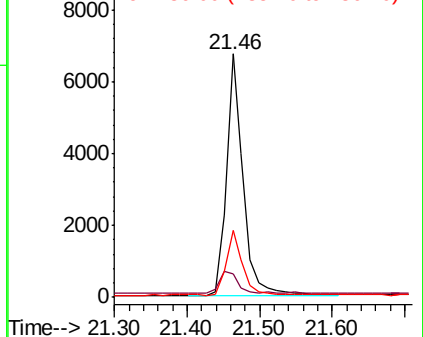
12/3/2018 3:33:58 PM



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

Pyrene

Concen: 0.359 ng

RT: 19.70 min Scan# 1501

Delta R.T. -0.01 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

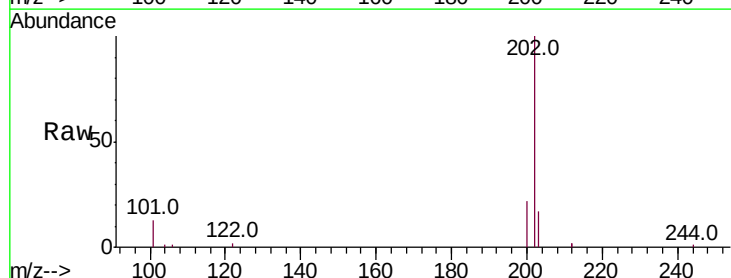
Tgt Ion:202 Resp: 10883

Ion Ratio Lower Upper

202 100

200 21.0 16.7 25.1

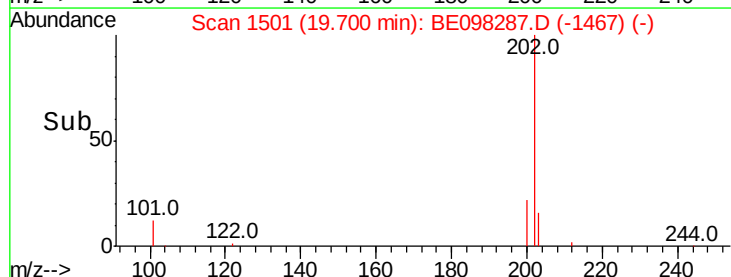
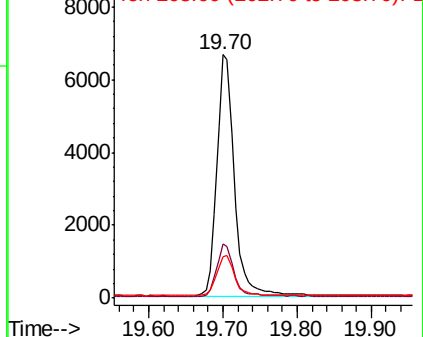
203 17.3 14.1 21.1



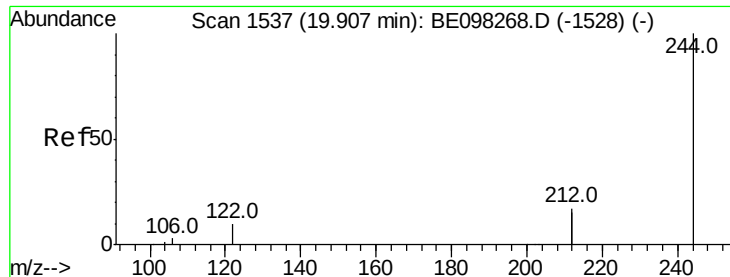
Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E







#29

Terphenyl-d14

Concen: 0.296 ng

RT: 19.91 min Scan# 1537

Delta R.T. -0.00 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

Instrument :

BNA\_E

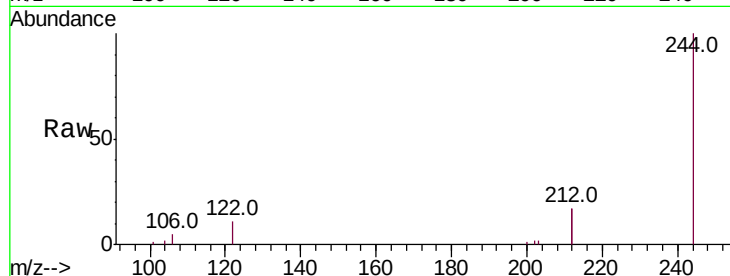
ClientSampleId :

PB115203BSD

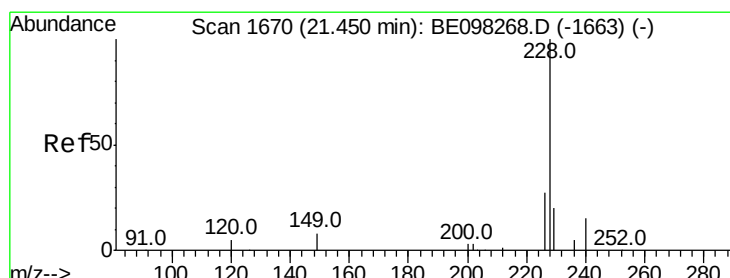
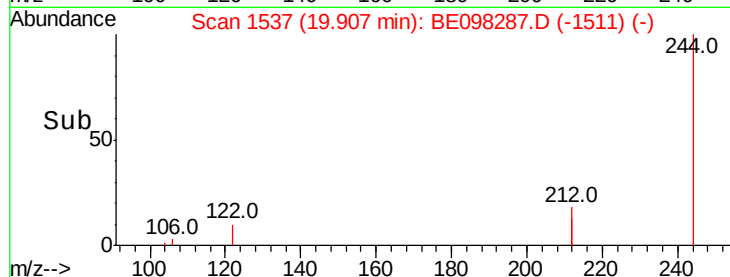
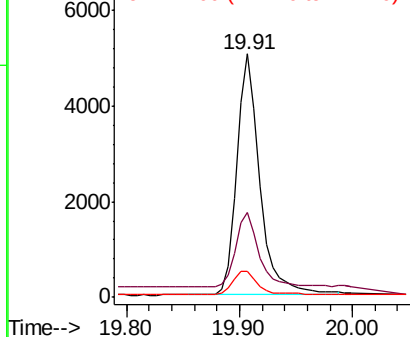
|           |       |       |      |
|-----------|-------|-------|------|
| Tot Ion:  | 244   | Resp: | 7274 |
| Ion Ratio | Lower | Upper |      |
| 244       | 100   |       |      |
| 212       | 34.8  | 27.4  | 41.0 |
| 122       | 10.7  | 8.3   | 12.5 |

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Abundance Ion 244.00 (243.70 to 244.70): E  
Ion 212.00 (211.70 to 212.70): E  
Ion 122.00 (121.70 to 122.70): E



#30

Benzo(a)anthracene

Concen: 0.408 ng

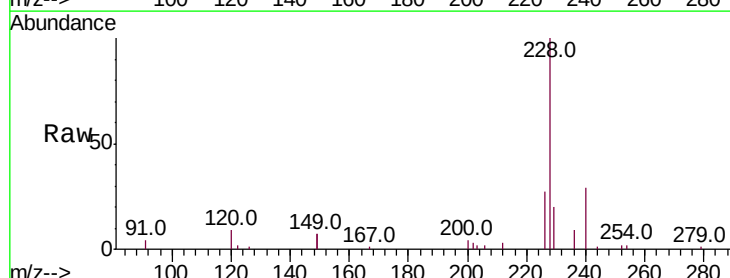
RT: 21.45 min Scan# 1670

Delta R.T. 0.00 min

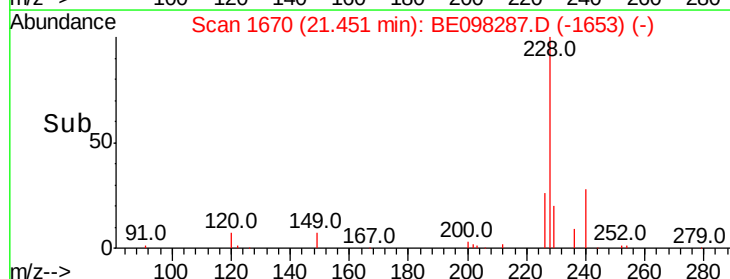
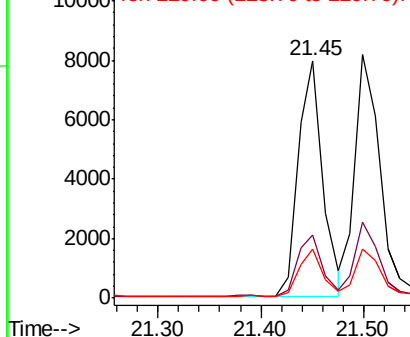
Lab File: BE098287.D

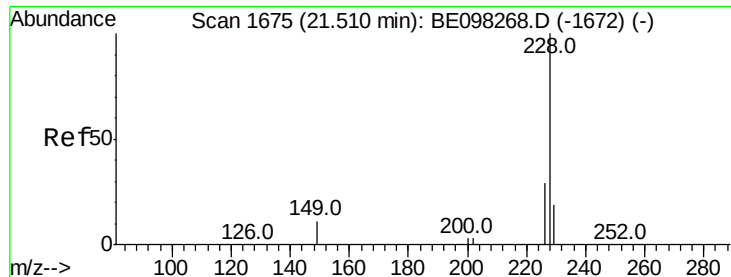
Acq: 30 Nov 2018 15:22

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 228   | Resp: | 13146 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 26.8  | 21.8  | 32.8  |
| 229       | 20.4  | 16.3  | 24.5  |



Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E





#31

Chrysene

Concen: 0.413 ng

RT: 21.50 min Scan# 1674

Delta R.T. -0.01 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

Instrument :

BNA\_E

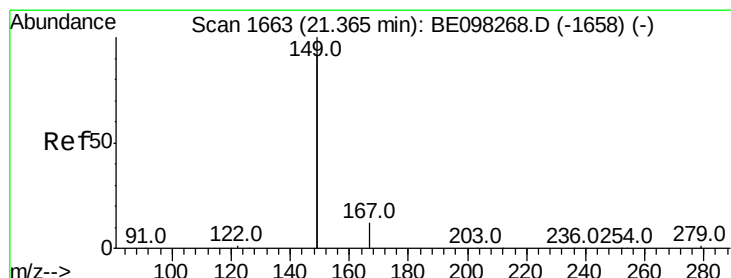
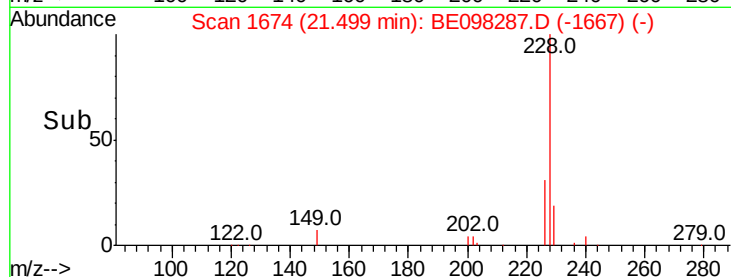
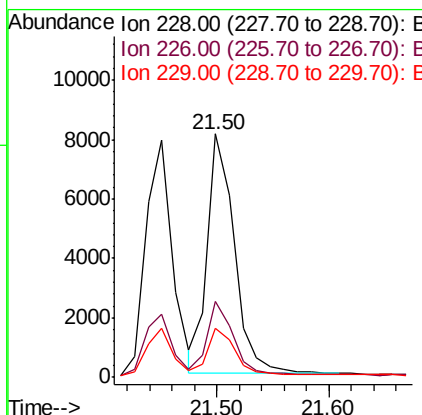
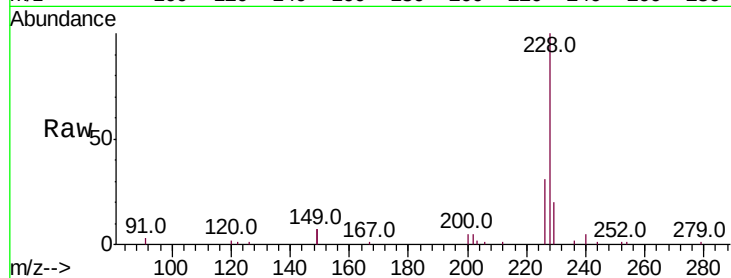
ClientSampleId :

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|             |       |       |
|-------------|-------|-------|
| Tot Ion:228 | Resp: | 13513 |
| Ion Ratio   | Lower | Upper |
| 228 100     |       |       |
| 226 31.1    | 23.4  | 35.0  |
| 229 20.0    | 16.2  | 24.4  |

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#32

Bis(2-ethylhexyl)phthalate

Concen: 0.328 ng

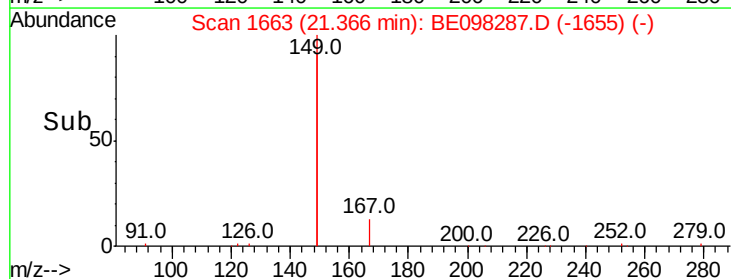
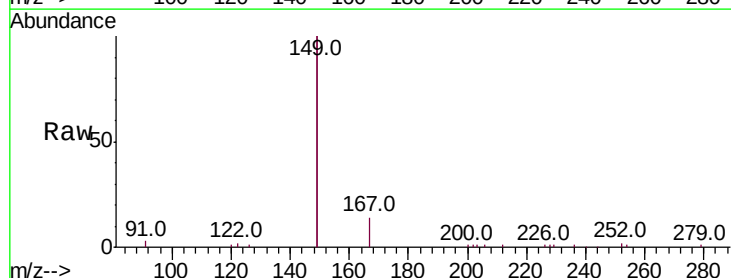
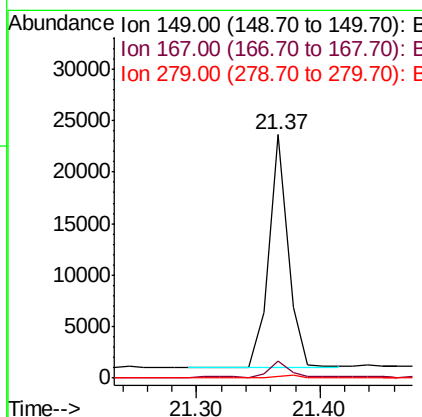
RT: 21.37 min Scan# 1663

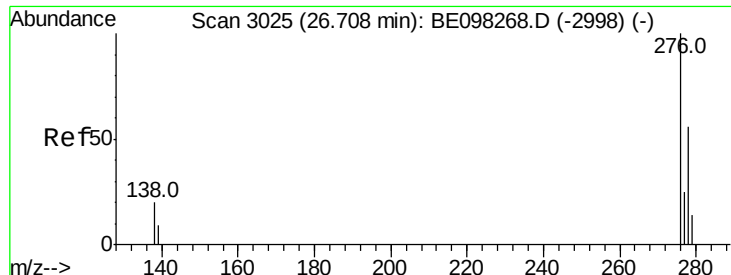
Delta R.T. 0.00 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

|             |       |       |
|-------------|-------|-------|
| Tgt Ion:149 | Resp: | 25306 |
| Ion Ratio   | Lower | Upper |
| 149 100     |       |       |
| 167 7.1     | 5.7   | 8.5   |
| 279 1.0     | 1.0   | 1.4   |





#33

Indeno(1,2,3-cd)pyrene

Concen: 0.439 ng

RT: 26.70 min Scan# 3024

Delta R.T. -0.00 min

Lab File: BE098287.D

Acq: 30 Nov 2018 15:22

Instrument :

BNA\_E

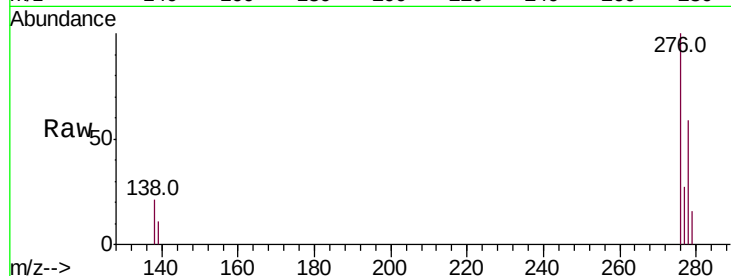
ClientSampleId :

PB115203BSD

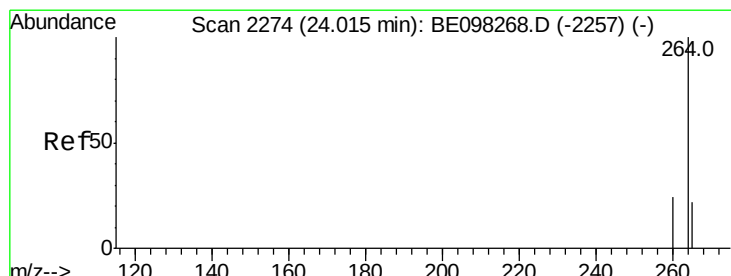
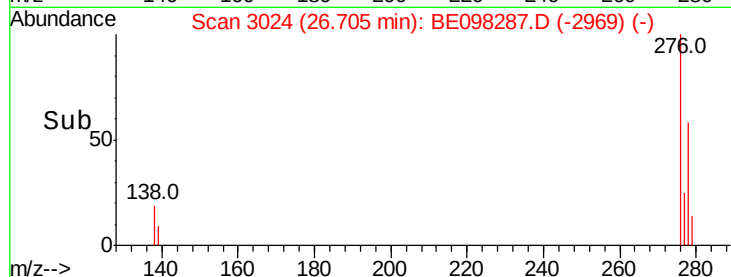
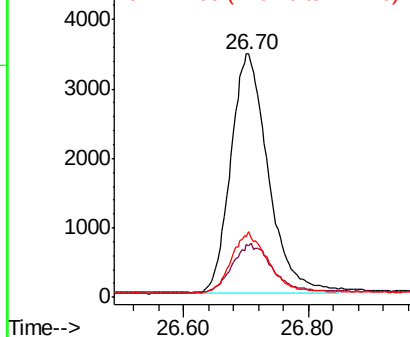
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 276   | Resp: | 14509 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 21.6  | 16.3  | 24.5  |
| 277       | 24.5  | 20.2  | 30.4  |

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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

Perylene-d12

Concen: 0.400 ng

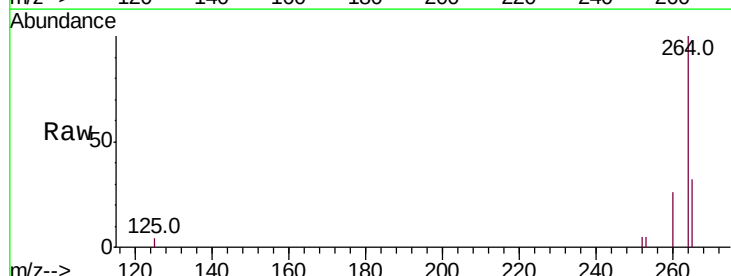
RT: 24.02 min Scan# 2274

Delta R.T. -0.00 min

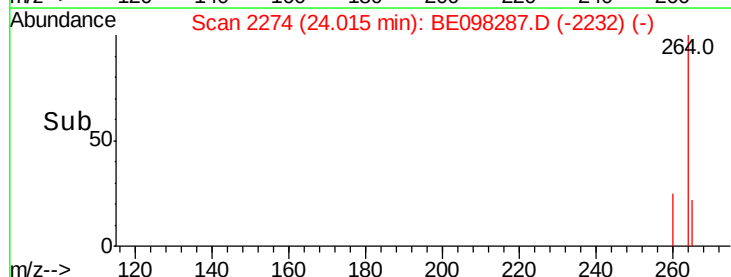
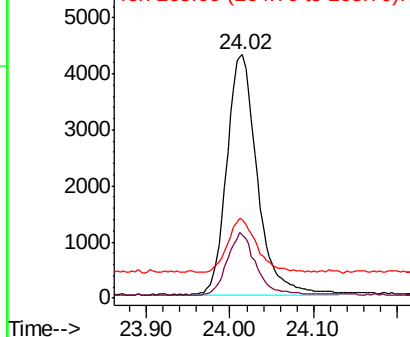
Lab File: BE098287.D

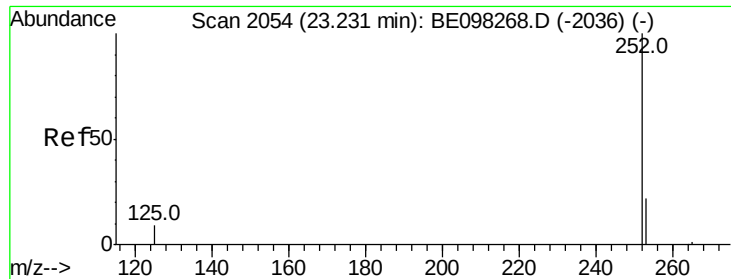
Acq: 30 Nov 2018 15:22

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 264   | Resp: | 10780 |
| Ion Ratio | Lower | Upper |       |
| 264       | 100   |       |       |
| 260       | 25.8  | 20.2  | 30.2  |
| 265       | 32.1  | 25.2  | 37.8  |



Abundance Ion 264.00 (263.70 to 264.70): E  
Ion 260.00 (259.70 to 260.70): E  
Ion 265.00 (264.70 to 265.70): E





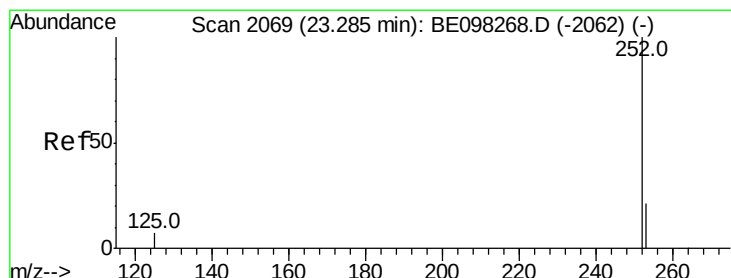
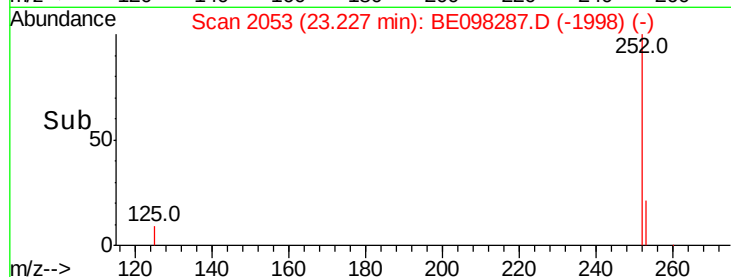
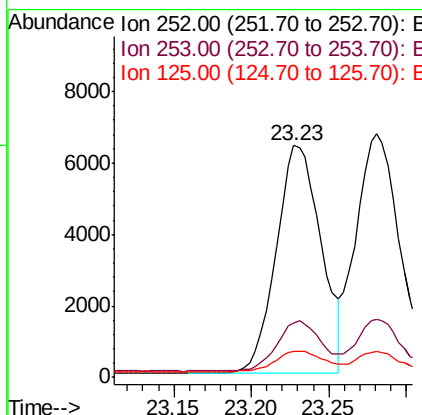
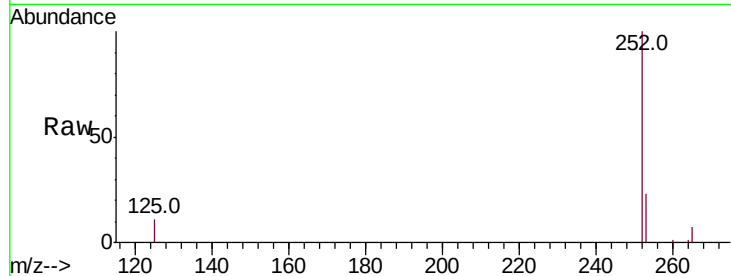
#35  
Benzo(b)fluoranthene  
Concen: 0.405 ng  
RT: 23.23 min Scan# 2053  
Delta R.T. -0.00 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

Instrument :  
BNA\_E  
ClientSampleId :  
PB115203BSD

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.5  | 20.0  | 30.0  |
| 125     | 11.3  | 9.6   | 14.4  |

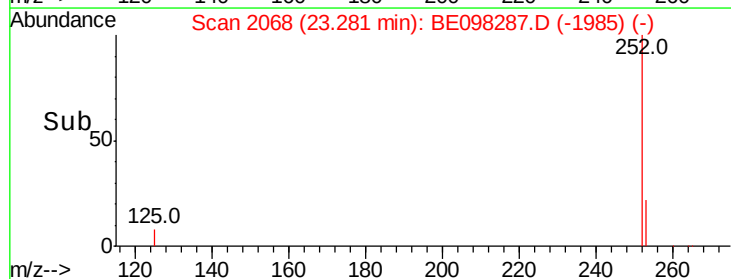
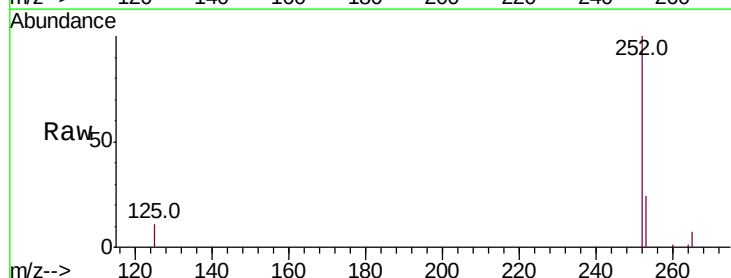
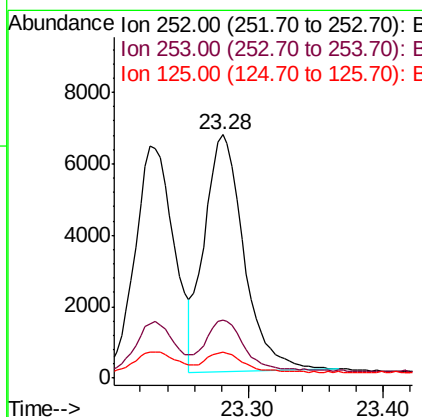
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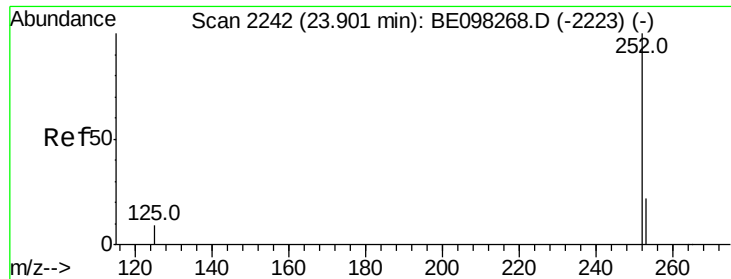
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#36  
Benzo(k)fluoranthene  
Concen: 0.407 ng  
RT: 23.28 min Scan# 2068  
Delta R.T. -0.00 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.9  | 19.0  | 28.6  |
| 125     | 10.7  | 9.1   | 13.7  |





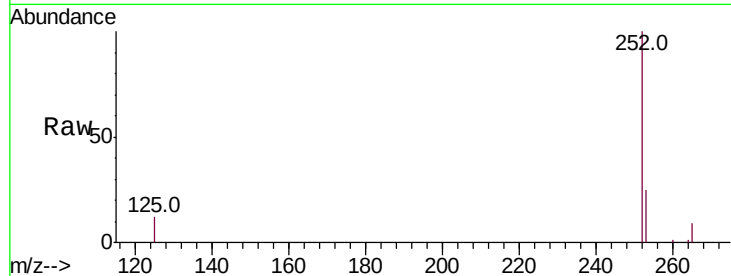
#37  
Benzo(a)pyrene  
Concen: 0.422 ng  
RT: 23.90 min Scan# 2241  
Delta R.T. -0.00 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

Instrument :  
BNA\_E  
ClientSampleId :  
PB115203BSD

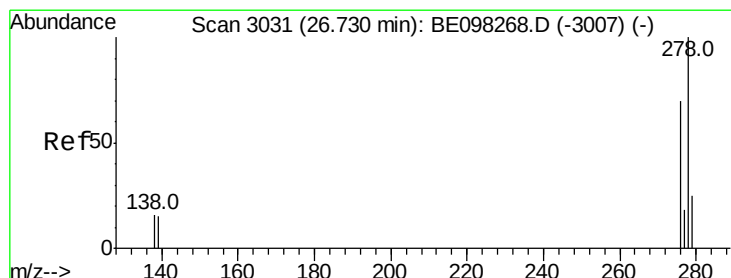
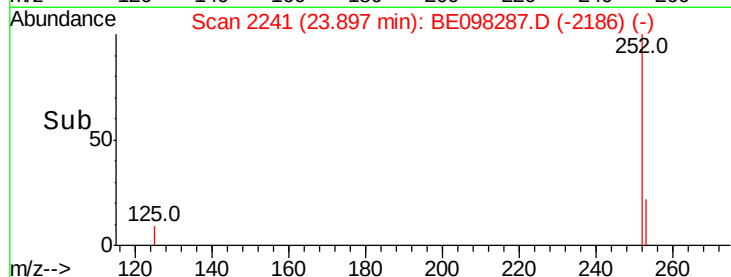
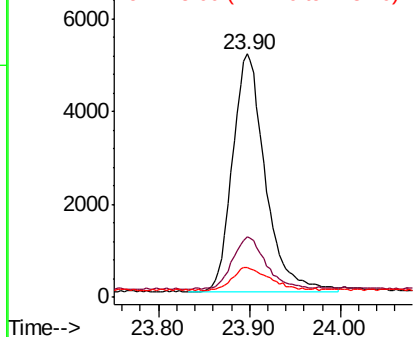
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 252   | Resp: | 12842 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 24.8  | 20.6  | 30.8  |
| 125       | 12.0  | 10.5  | 15.7  |

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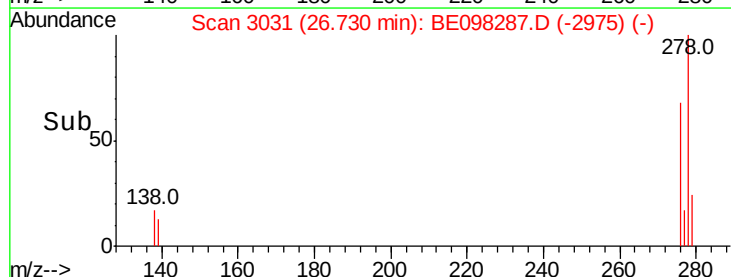
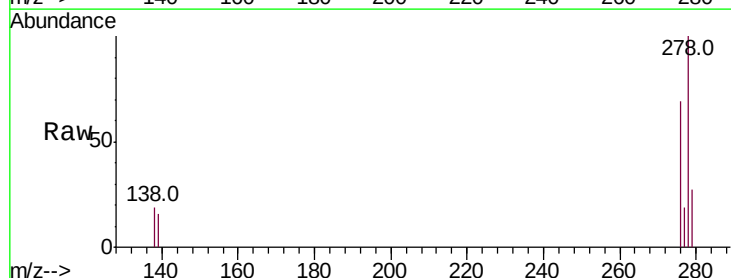
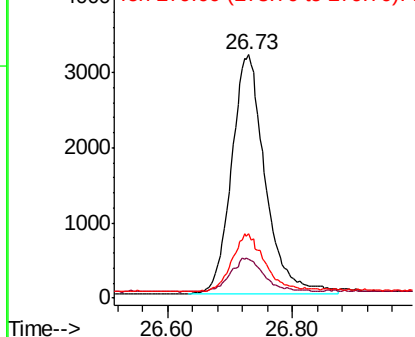
Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

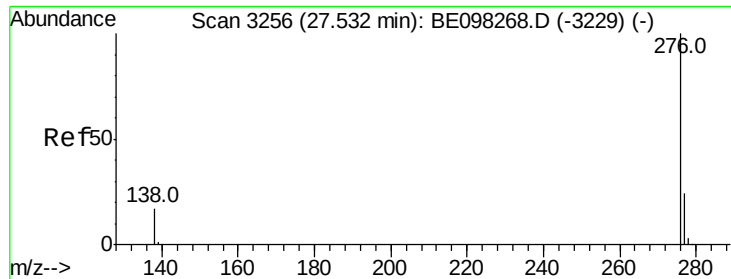


#38  
Dibenzo(a,h)anthracene  
Concen: 0.413 ng  
RT: 26.73 min Scan# 3031  
Delta R.T. 0.00 min  
Lab File: BE098287.D  
Acq: 30 Nov 2018 15:22

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 278   | Resp: | 11925 |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 16.2  | 14.5  | 21.7  |
| 279       | 26.6  | 21.8  | 32.8  |

Abundance Ion 278.00 (277.70 to 278.70): E  
Ion 139.00 (138.70 to 139.70): E  
Ion 279.00 (278.70 to 279.70): E





#39

Benzo(a,h,i)perylene

Concen: 0.427 ng

RT: 27.53 min Scan# 3254

Delta R.T. -0.01 min

Lab File: BE098287.D

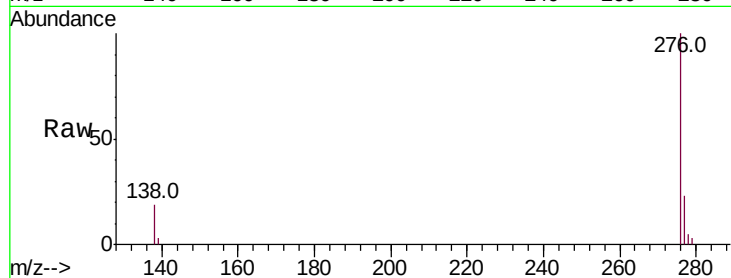
Acq: 30 Nov 2018 15:22

Instrument :

BNA\_E

ClientSampleId :

PB115203BSD



| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 23.5  | 20.8  | 31.2  |
| 138     | 19.0  | 15.8  | 23.6  |

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