

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_E\DATA\BE121818\  
 Data File : BE098512.D  
 Acq On : 18 Dec 2018 12:40  
 Operator : SJ/JU  
 Sample : J6405-07MSD  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 RE105D1-20181210MSD

Quant Time: Dec 19 00:01:44 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_E\METHODS\8270-SIM-BE121018.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Dec 10 14:59:55 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.85  | 152  | 721      | 0.40 | ng    | -0.01    |
| 7) Naphthalene-d8         | 10.65 | 136  | 3785     | 0.40 | ng    | -0.01    |
| 13) Acenaphthene-d10      | 14.51 | 164  | 2684     | 0.40 | ng    | -0.01    |
| 19) Phenanthrene-d10      | 17.27 | 188  | 6401     | 0.40 | ng    | -0.01    |
| 27) Chrysene-d12          | 21.45 | 240  | 7003     | 0.40 | ng    | -0.01    |
| 34) Perylene-d12          | 23.99 | 264  | 6861     | 0.40 | ng    | -0.02    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|-----------------------------|-------|------|----------|------|-------|----------|
| 4) 2-Fluorophenol           | 5.44  | 112  | 408      | 0.24 | ng    | 0.00     |
| 5) Phenol-d6                | 7.04  | 99   | 300      | 0.13 | ng    | 0.00     |
| 8) Nitrobenzene-d5          | 9.03  | 82   | 1090     | 0.32 | ng    | 0.01     |
| 11) 2-Methylnaphthalene-d10 | 12.25 | 152  | 2906     | 0.47 | ng    | -0.01    |
| 14) 2,4,6-Tribromophenol    | 16.01 | 330  | 359      | 0.36 | ng    | -0.01    |
| 15) 2-Fluorobiphenyl        | 13.13 | 172  | 5041     | 0.45 | ng    | -0.01    |
| 25) Fluoranthene-d10        | 19.30 | 212  | 36500    | 0.44 | ng    | -0.01    |
| 29) Terphenyl-d14           | 19.89 | 244  | 7795     | 0.46 | ng    | -0.01    |

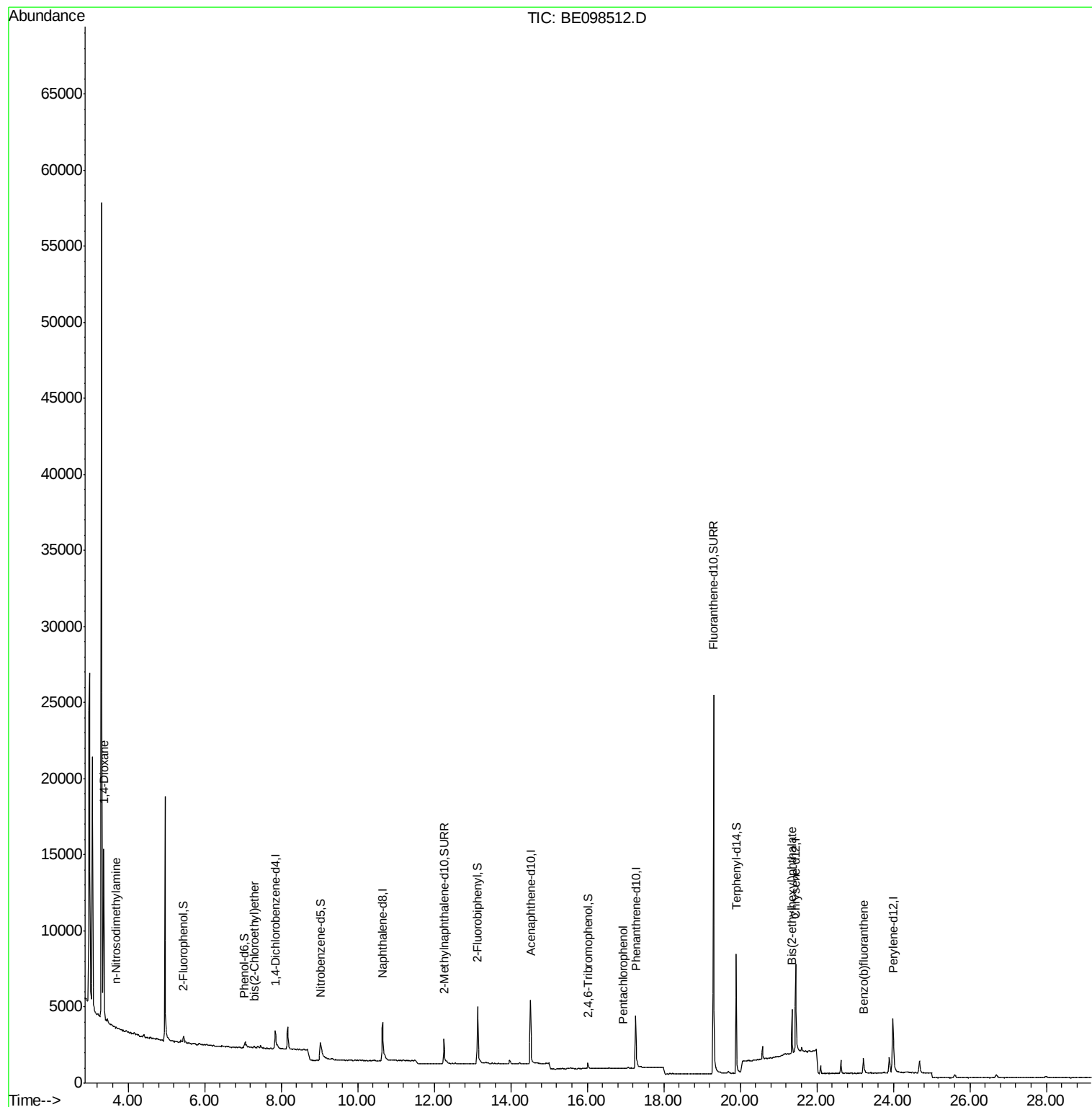
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|--------------------------------|-------|------|----------|-------|-------|--------|
| 2) 1,4-Dioxane                 | 3.36  | 88   | 6075     | 4.872 | ng    | 99     |
| 3) n-Nitrosodimethylamine      | 3.68  | 42   | 53       | 0.047 | ng    | # 100  |
| 6) bis(2-Chloroethyl)ether     | 7.29  | 93   | 64       | 0.028 | ng    | # 77   |
| 22) Pentachlorophenol          | 16.93 | 266  | 17       | 0.046 | ng    | # 70   |
| 32) Bis(2-ethylhexyl)phthalate | 21.35 | 149  | 3634     | 0.090 | ng    | # 98   |
| 35) Benzo(b)fluoranthene       | 23.22 | 252  | 380      | 0.020 | ng    | # 1    |

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

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Quant Time: Dec 19 00:01:44 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_E\METHODS\8270-SIM-BE121018.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Dec 10 14:59:55 2018  
Response via : Initial Calibration



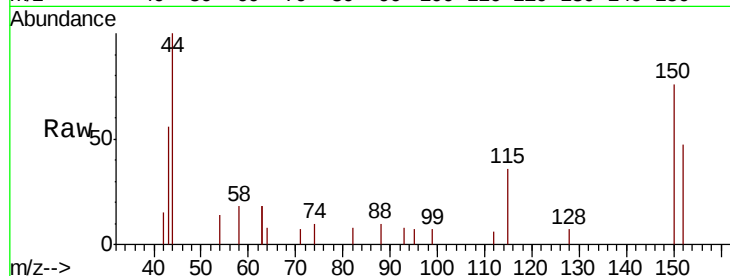


#1

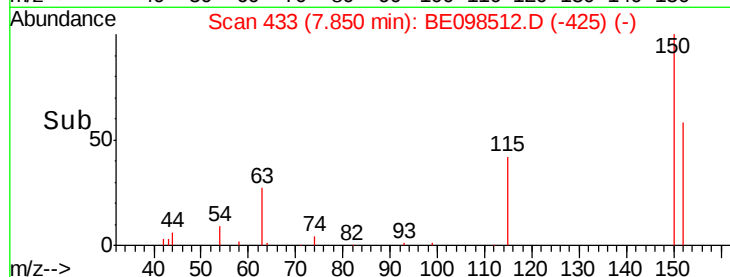
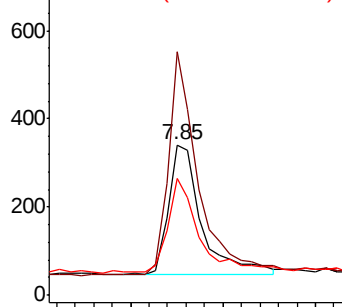
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.85 min Scan# 433  
Delta R.T. -0.01 min  
Lab File: BE098512.D  
Acq: 18 Dec 2018 12:40

Instrument :  
BNA\_E  
ClientSampleId :  
RE105D1-20181210MSD

Tgt Ion:152 Resp: 721  
Ion Ratio Lower Upper  
152 100  
150 161.9 124.2 186.4  
115 77.4 53.9 80.9



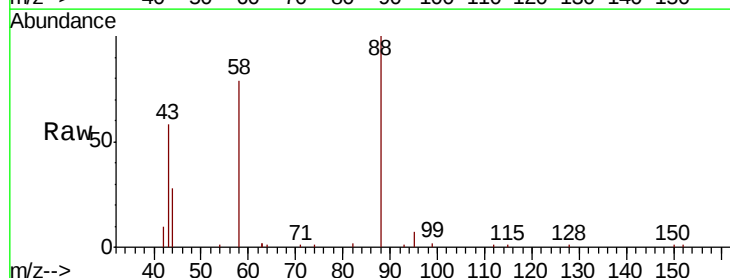
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



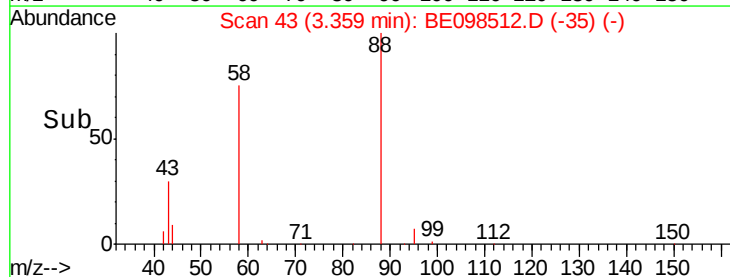
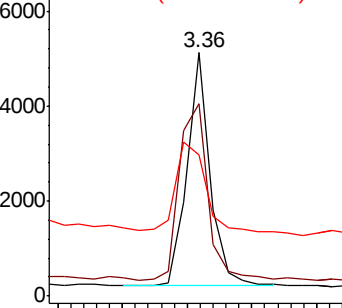
#2

1,4-Dioxane  
Concen: 4.872 ng  
RT: 3.36 min Scan# 43  
Delta R.T. -0.01 min  
Lab File: BE098512.D  
Acq: 18 Dec 2018 12:40

Tgt Ion: 88 Resp: 6075  
Ion Ratio Lower Upper  
88 100  
58 93.0 75.0 112.6  
43 49.2 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: 0.047 ng

RT: 3.68 min Scan# 71

Delta R.T. -0.01 min

Lab File: BE098512.D

Acq: 18 Dec 2018 12:40

Instrument :

BNA\_E

ClientSampleId :

RE105D1-20181210MSD

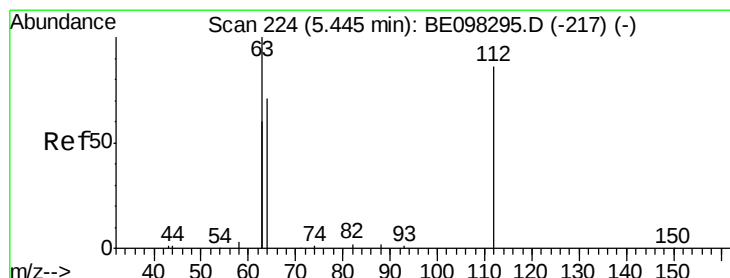
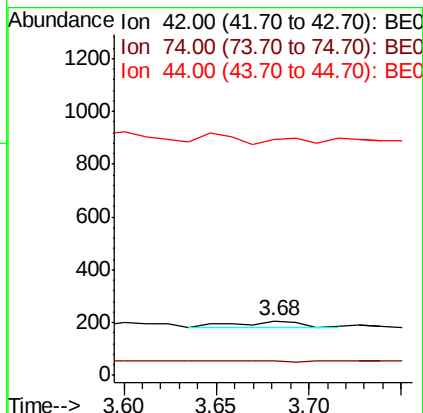
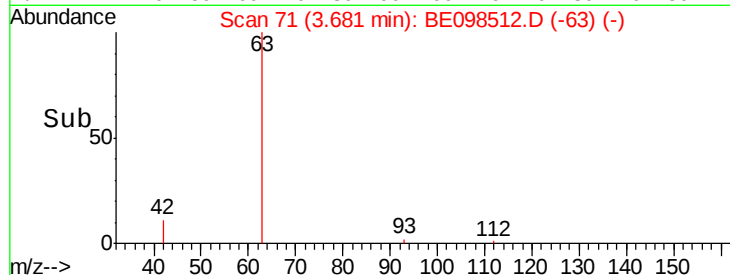
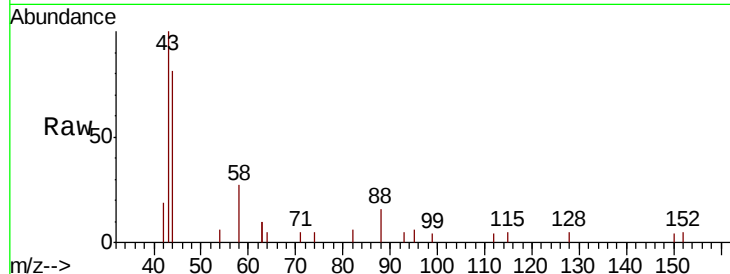
Tgt Ion: 42 Resp: 53

Ion Ratio Lower Upper

42 100

74 0.0 0.0 0.0

44 58.5 0.0 0.0#



#4

2-Fluorophenol

Concen: 0.242 ng

RT: 5.44 min Scan# 224

Delta R.T. -0.00 min

Lab File: BE098512.D

Acq: 18 Dec 2018 12:40

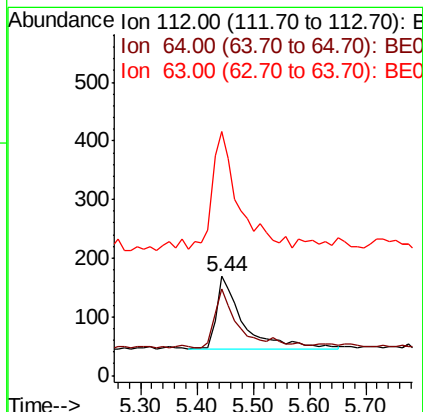
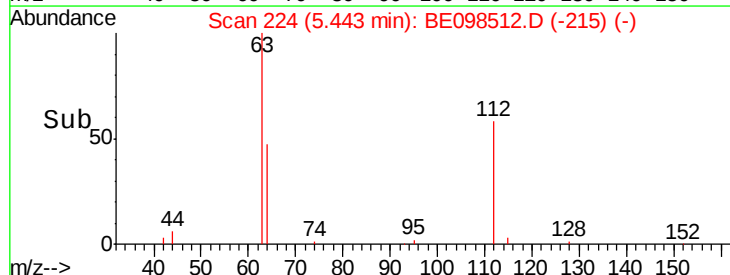
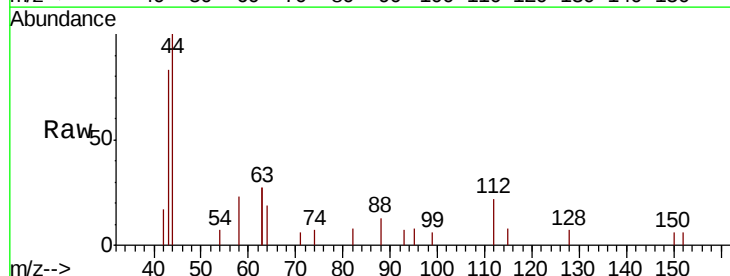
Tgt Ion: 112 Resp: 408

Ion Ratio Lower Upper

112 100

64 64.0 59.8 89.8

63 150.7 133.7 200.5





#5

Phenol-d6

Concen: 0.126 ng

RT: 7.04 min Scan# 363

Delta R.T. -0.00 min

Lab File: BE098512.D

Acq: 18 Dec 2018 12:40

Instrument :

BNA\_E

ClientSampleId :

RE105D1-20181210MSD

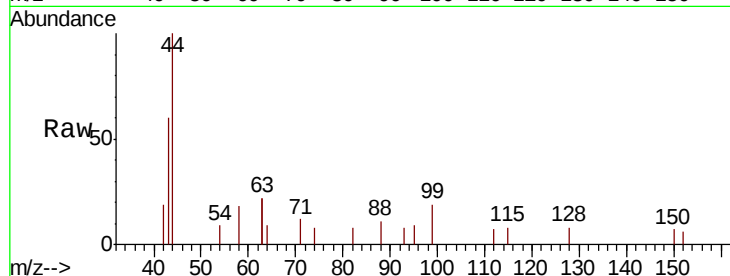
Tgt Ion: 99 Resp: 300

Ion Ratio Lower Upper

99 100

42 66.7 26.3 39.5#

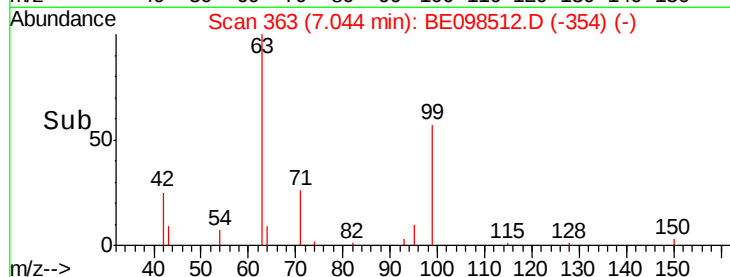
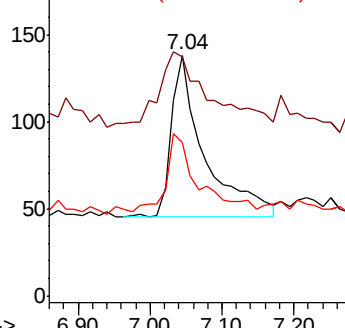
71 46.3 33.6 50.4



Abundance Ion 99.00 (98.70 to 99.70): BE0

Ion 42.00 (41.70 to 42.70): BE0

Ion 71.00 (70.70 to 71.70): BE0



#6

bis(2-Chloroethyl)ether

Concen: 0.028 ng

RT: 7.29 min Scan# 384

Delta R.T. -0.00 min

Lab File: BE098512.D

Acq: 18 Dec 2018 12:40

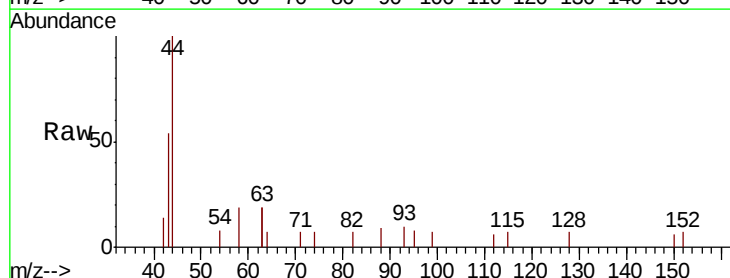
Tgt Ion: 93 Resp: 64

Ion Ratio Lower Upper

93 100

63 281.3 264.4 396.6

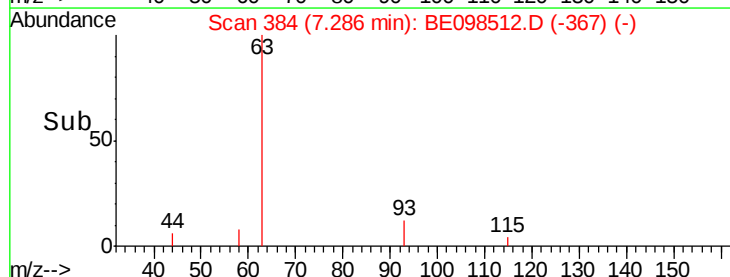
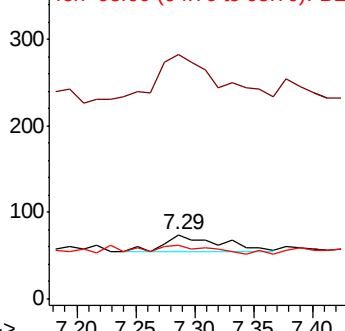
95 40.6 26.6 40.0#

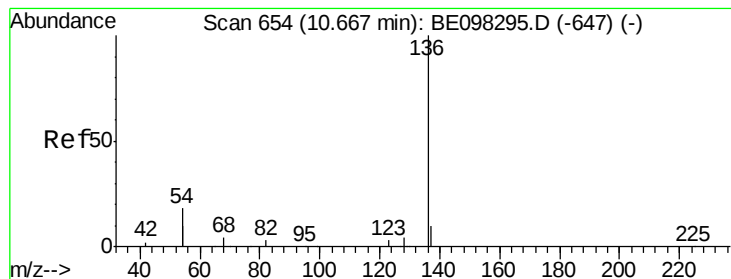


Abundance Ion 93.00 (92.70 to 93.70): BE0

Ion 63.00 (62.70 to 63.70): BE0

Ion 95.00 (94.70 to 95.70): BE0





#7

Naphthalene-d8

Concen: 0.400 ng

RT: 10.65 min Scan# 653

Delta R.T. -0.01 min

Lab File: BE098512.D

Acq: 18 Dec 2018 12:40

Instrument :

BNA\_E

ClientSampleId :

RE105D1-20181210MSD

Tgt Ion: 136 Resp: 3785

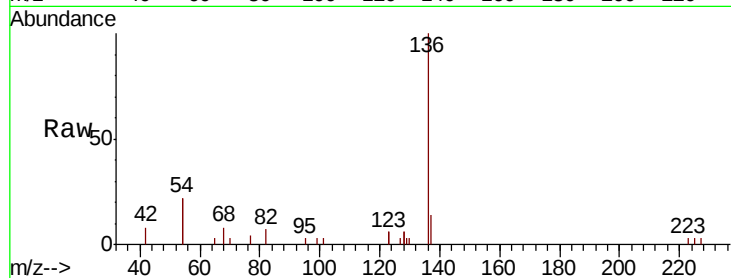
Ion Ratio Lower Upper

136 100

137 13.8 9.2 13.8#

54 44.2 28.4 42.6#

68 7.9 5.4 8.0

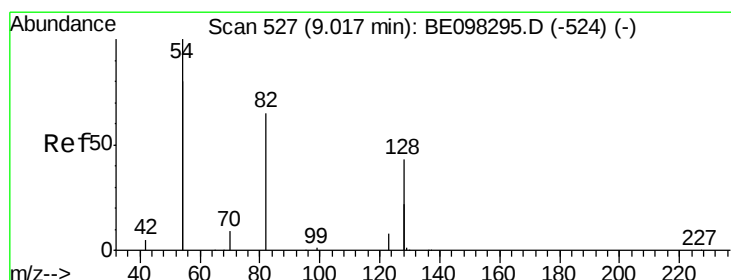
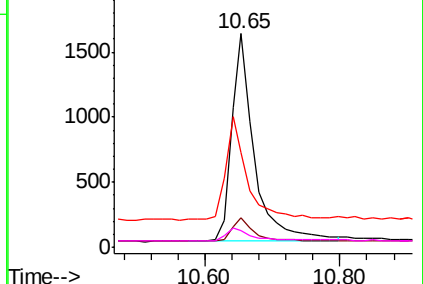
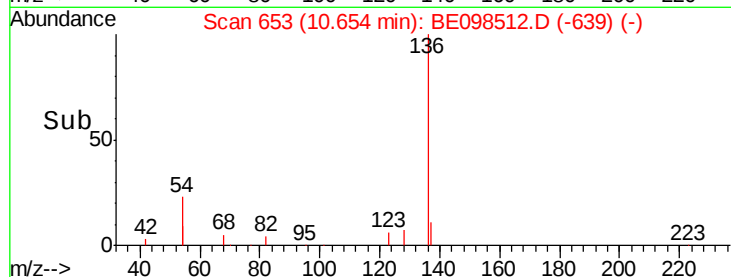


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BE0

Ion 68.00 (67.70 to 68.70): BE0



#8

Nitrobenzene-d5

Concen: 0.316 ng

RT: 9.03 min Scan# 528

Delta R.T. 0.01 min

Lab File: BE098512.D

Acq: 18 Dec 2018 12:40

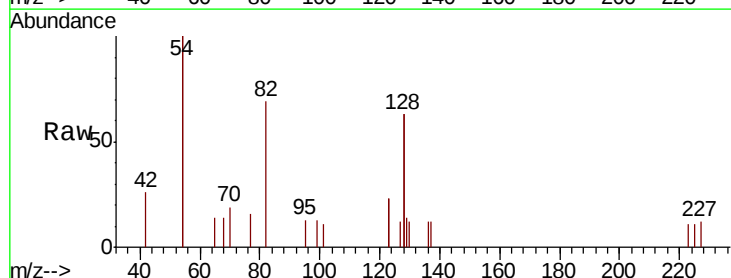
Tgt Ion: 82 Resp: 1090

Ion Ratio Lower Upper

82 100

128 182.9 102.4 153.6#

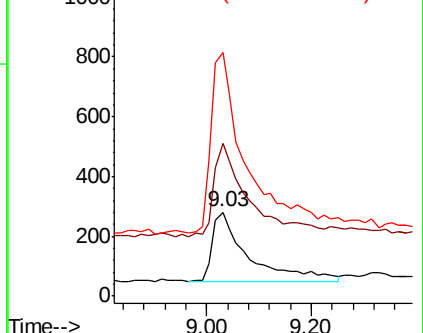
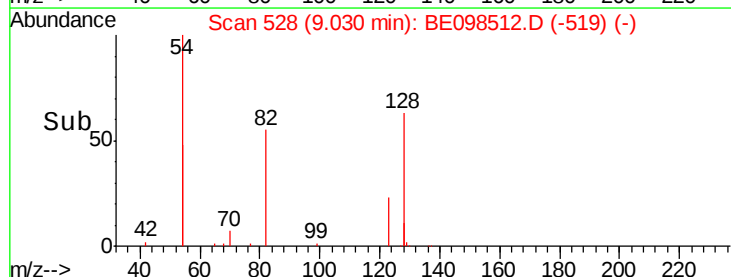
54 290.7 221.8 332.8

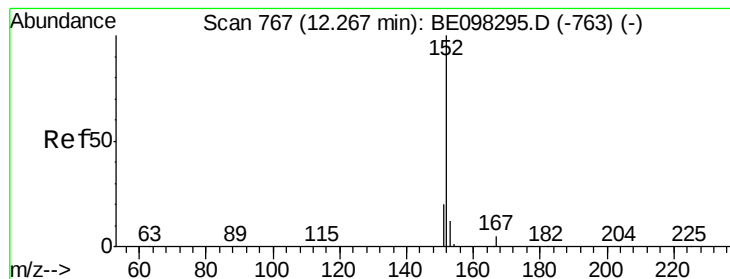


Abundance Ion 82.00 (81.70 to 82.70): BE0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BE0





#11

2-Methylnaphthalene-d10

Concen: 0.472 ng

RT: 12.25 min Scan# 766

Delta R.T. -0.01 min

Lab File: BE098512.D

Acq: 18 Dec 2018 12:40

Instrument :

BNA\_E

ClientSampleId :

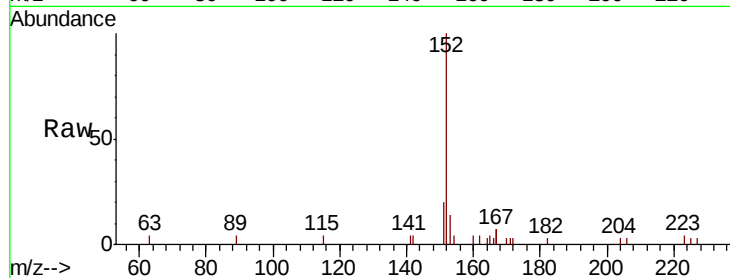
RE105D1-20181210MSD

Tgt Ion:152 Resp: 2906

Ion Ratio Lower Upper

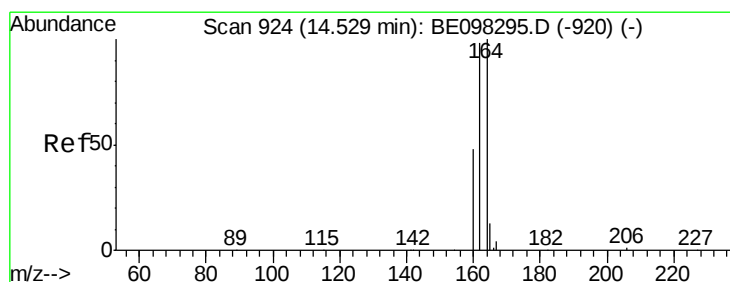
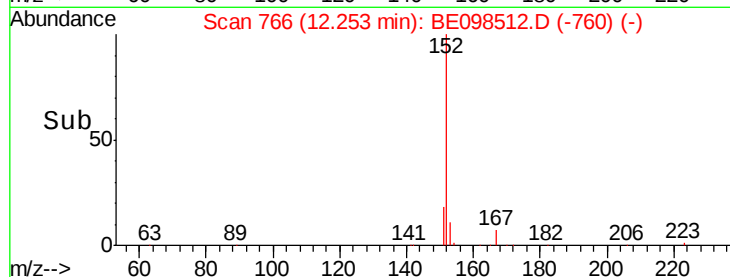
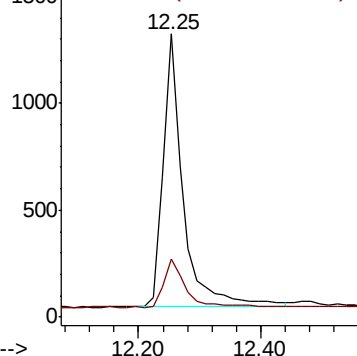
152 100

151 19.1 16.2 24.4



Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.51 min Scan# 923

Delta R.T. -0.01 min

Lab File: BE098512.D

Acq: 18 Dec 2018 12:40

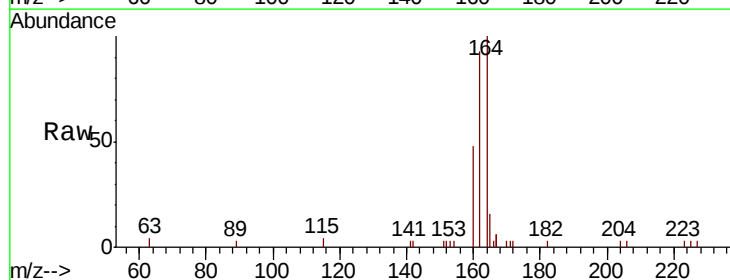
Tgt Ion:164 Resp: 2684

Ion Ratio Lower Upper

164 100

162 92.8 77.6 116.4

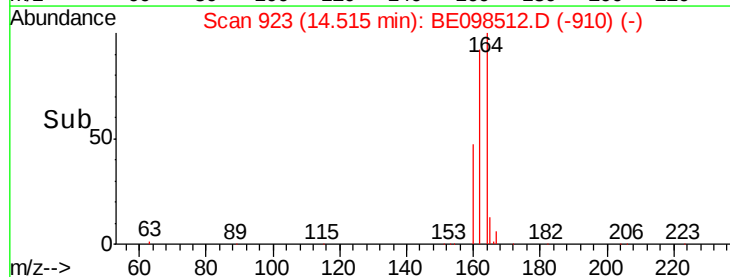
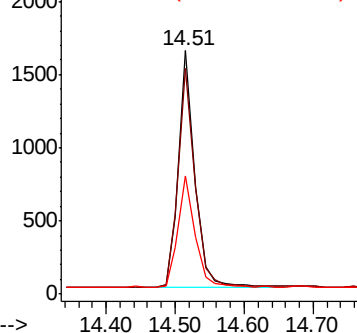
160 48.4 36.0 54.0

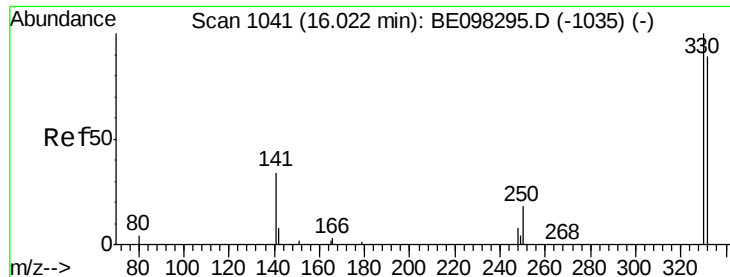


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E

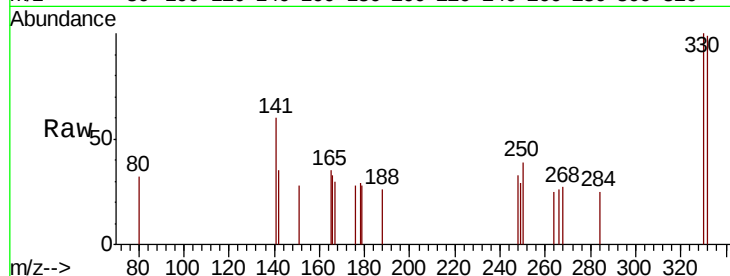




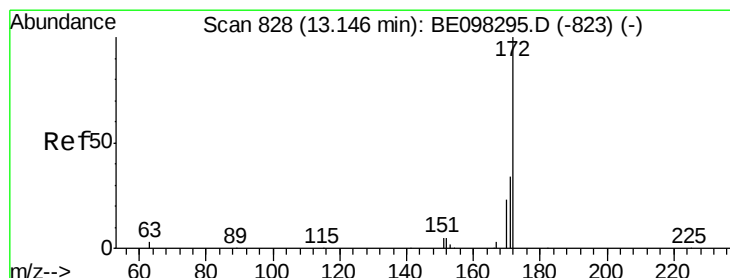
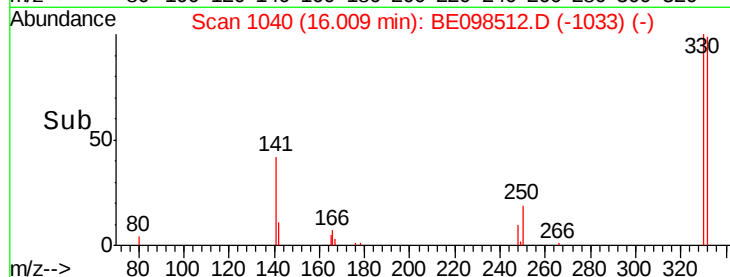
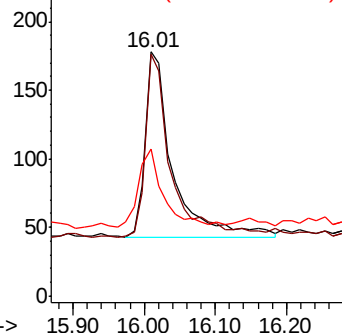
#14  
 2,4,6-Tribromophenol  
 Concen: 0.364 ng  
 RT: 16.01 min Scan# 1040  
 Delta R.T. -0.01 min  
 Lab File: BE098512.D  
 Acq: 18 Dec 2018 12:40

Instrument :  
 BNA\_E  
 ClientSampleId :  
 RE105D1-20181210MSD

Tgt Ion: 330 Resp: 359  
 Ion Ratio Lower Upper  
 330 100  
 332 93.3 76.2 114.4  
 141 38.4 39.0 58.4#

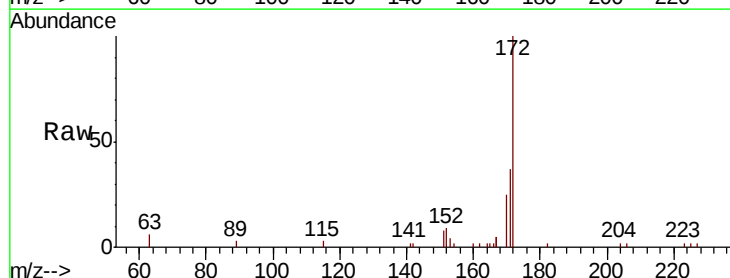


Abundance Ion 330.00 (329.70 to 330.70): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

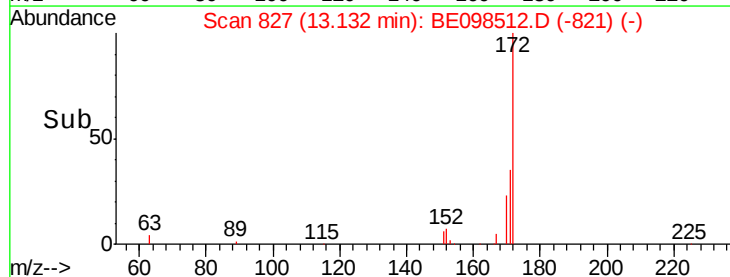
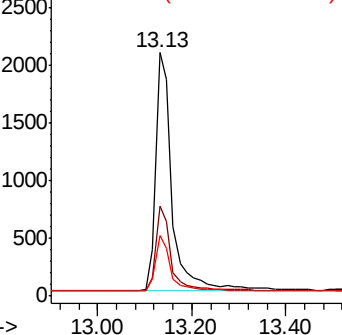


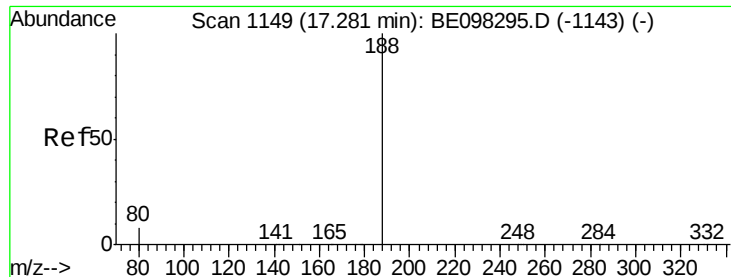
#15  
 2-Fluorobiphenyl  
 Concen: 0.445 ng  
 RT: 13.13 min Scan# 827  
 Delta R.T. -0.01 min  
 Lab File: BE098512.D  
 Acq: 18 Dec 2018 12:40

Tgt Ion: 172 Resp: 5041  
 Ion Ratio Lower Upper  
 172 100  
 171 36.8 27.5 41.3  
 170 25.0 19.6 29.4



Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.27 min Scan# 1148

Delta R.T. -0.01 min

Lab File: BE098512.D

Acq: 18 Dec 2018 12:40

Instrument :

BNA\_E

ClientSampleId :

RE105D1-20181210MSD

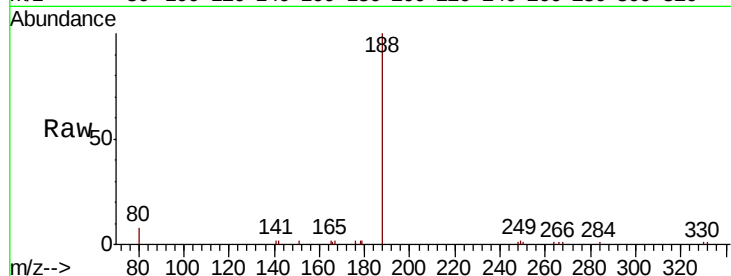
Tgt Ion:188 Resp: 6401

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

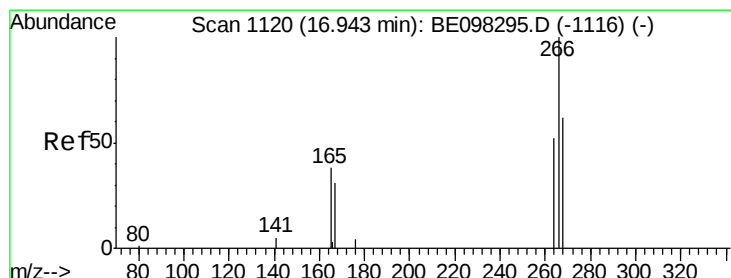
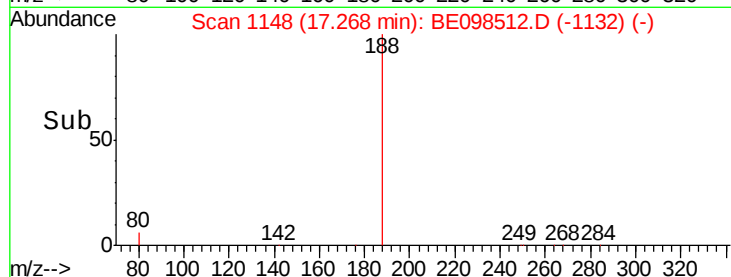
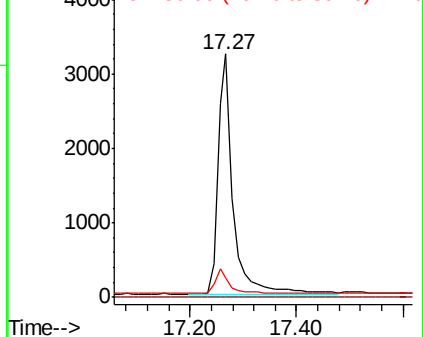
80 8.1 7.2 10.8



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BE0

Ion 80.00 (79.70 to 80.70): BE0



#22

Pentachlorophenol

Concen: 0.046 ng

RT: 16.93 min Scan# 1119

Delta R.T. -0.01 min

Lab File: BE098512.D

Acq: 18 Dec 2018 12:40

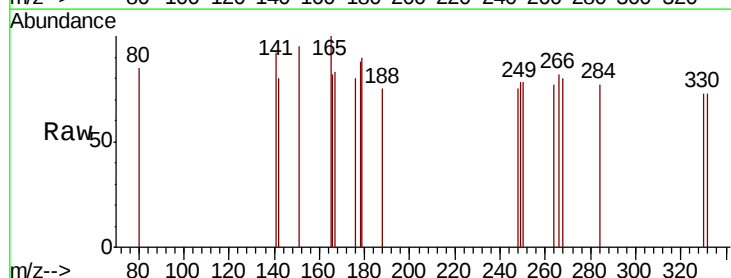
Tgt Ion:266 Resp: 17

Ion Ratio Lower Upper

266 100

264 93.9 59.0 88.4#

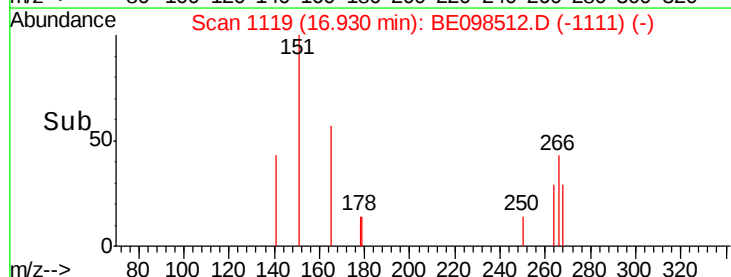
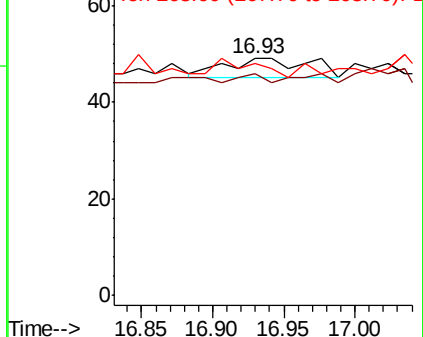
268 98.0 55.1 82.7#

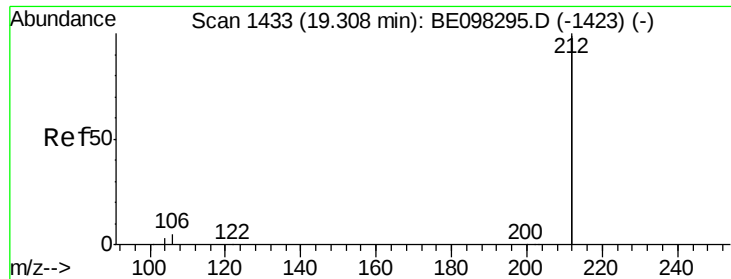


Abundance Ion 266.00 (265.70 to 266.70): E

Ion 264.00 (263.70 to 264.70): E

Ion 268.00 (267.70 to 268.70): E





#25

Fluoranthene-d10

Concen: 0.444 ng

RT: 19.30 min Scan# 1431

Delta R.T. -0.01 min

Lab File: BE098512.D

Acq: 18 Dec 2018 12:40

Instrument :

BNA\_E

ClientSampleId :

RE105D1-20181210MSD

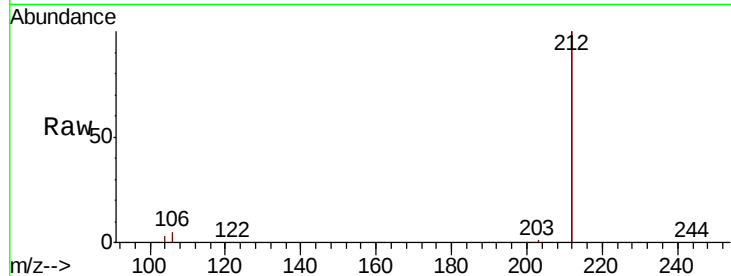
Tgt Ion:212 Resp: 36500

Ion Ratio Lower Upper

212 100

106 2.4 2.2 3.2

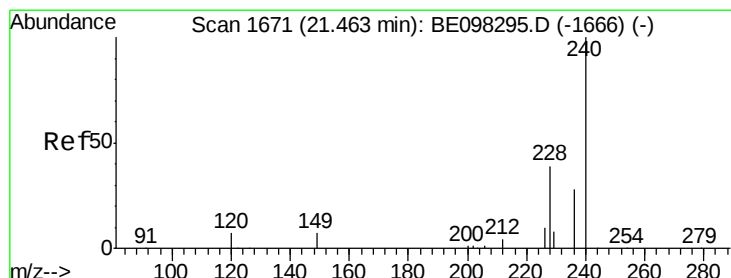
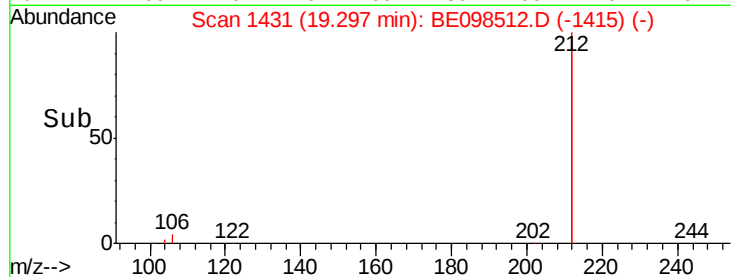
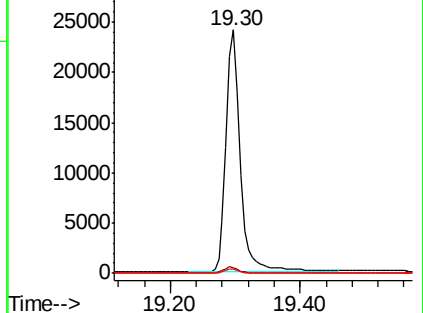
104 1.4 1.3 1.9



Abundance Ion 212.00 (211.70 to 212.70): E

Ion 106.00 (105.70 to 106.70): E

Ion 104.00 (103.70 to 104.70): E



#27

Chrysene-d12

Concen: 0.400 ng

RT: 21.45 min Scan# 1670

Delta R.T. -0.01 min

Lab File: BE098512.D

Acq: 18 Dec 2018 12:40

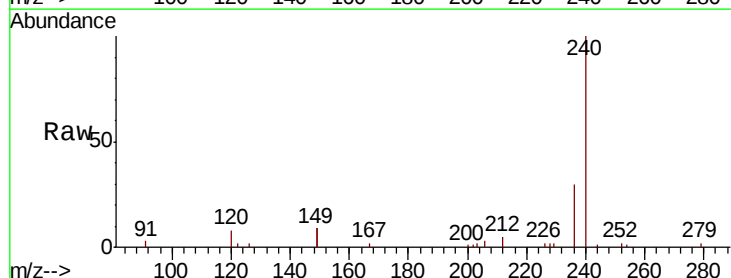
Tgt Ion:240 Resp: 7003

Ion Ratio Lower Upper

240 100

120 8.0 9.5 14.3#

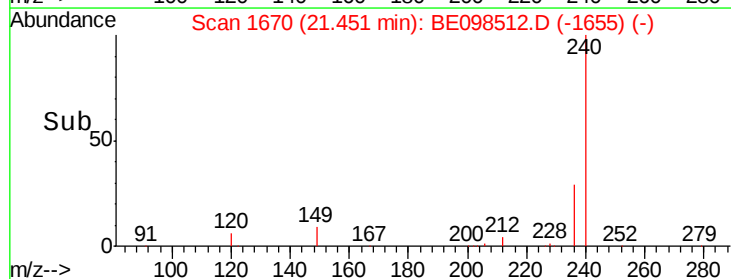
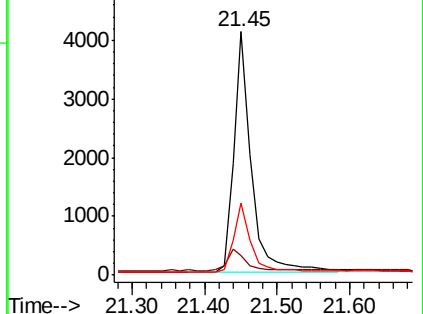
236 29.8 22.7 34.1

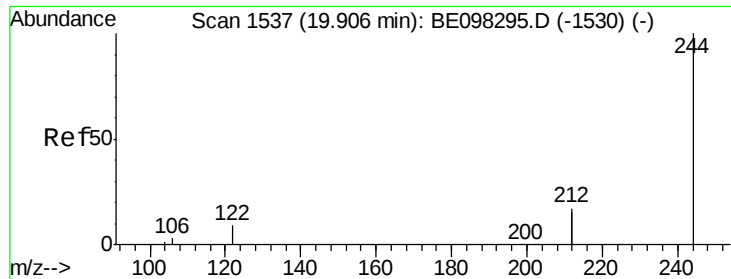


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#29

Terphenyl-d14

Concen: 0.458 ng

RT: 19.89 min Scan# 1535

Delta R.T. -0.01 min

Lab File: BE098512.D

Acq: 18 Dec 2018 12:40

Instrument :

BNA\_E

ClientSampleId :

RE105D1-20181210MSD

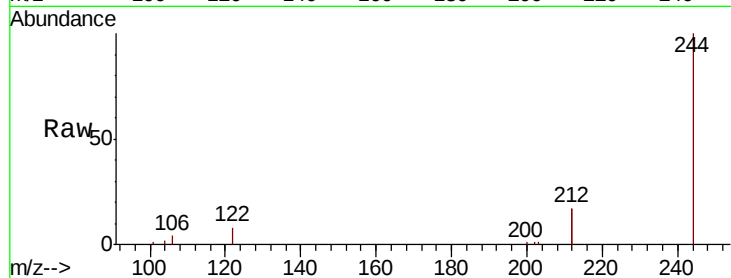
Tgt Ion:244 Resp: 7795

Ion Ratio Lower Upper

244 100

212 34.0 27.4 41.0

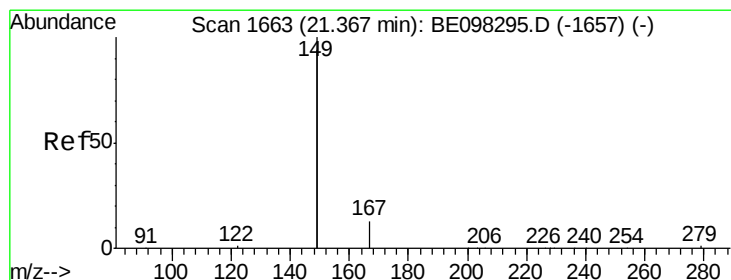
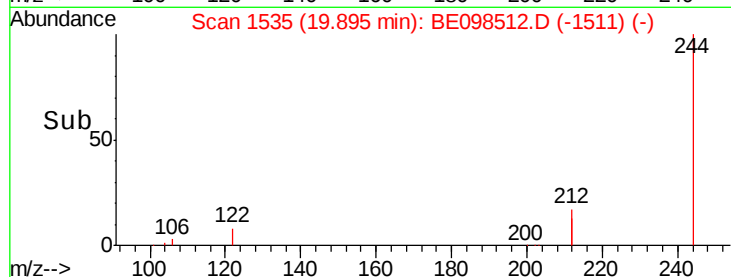
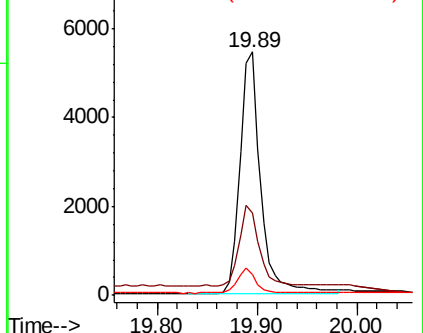
122 8.5 8.3 12.5



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



#32

Bis(2-ethylhexyl)phthalate

Concen: 0.090 ng

RT: 21.35 min Scan# 1662

Delta R.T. -0.01 min

Lab File: BE098512.D

Acq: 18 Dec 2018 12:40

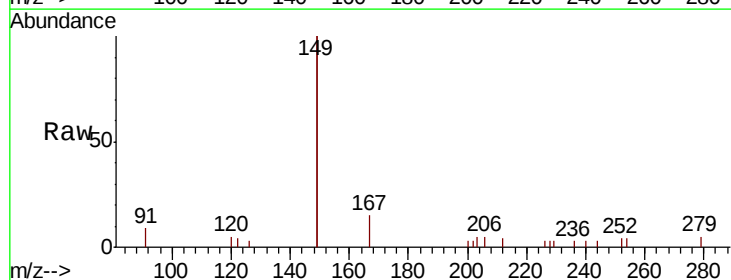
Tgt Ion:149 Resp: 3634

Ion Ratio Lower Upper

149 100

167 6.3 5.7 8.5

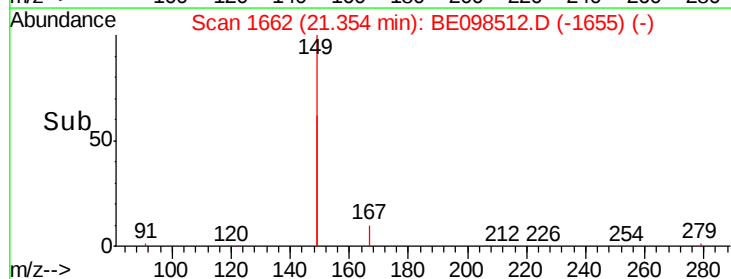
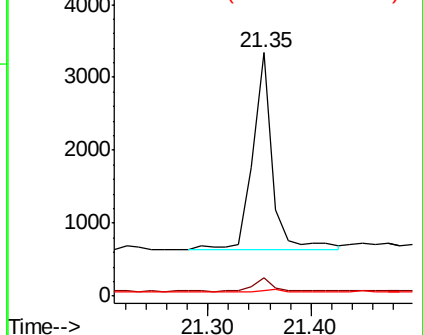
279 1.8 1.0 1.4#

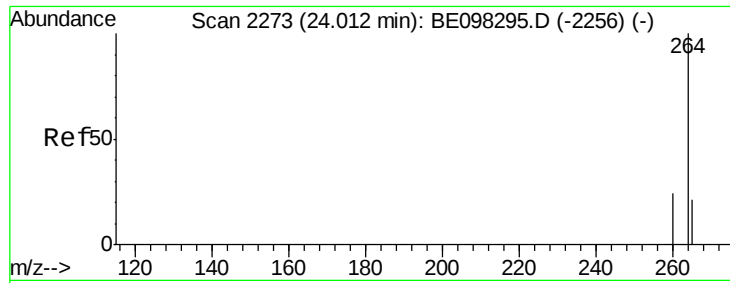


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E

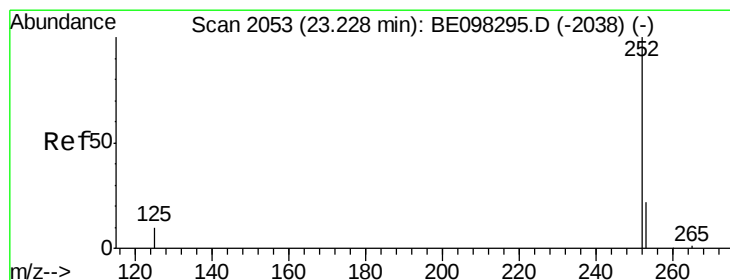
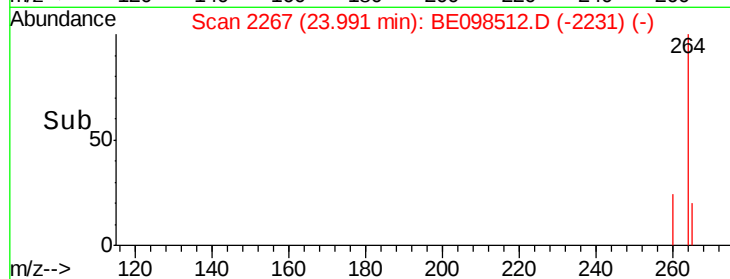
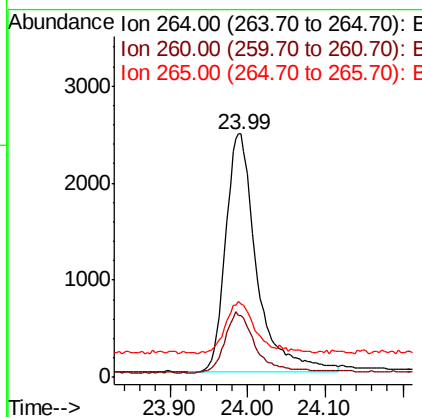
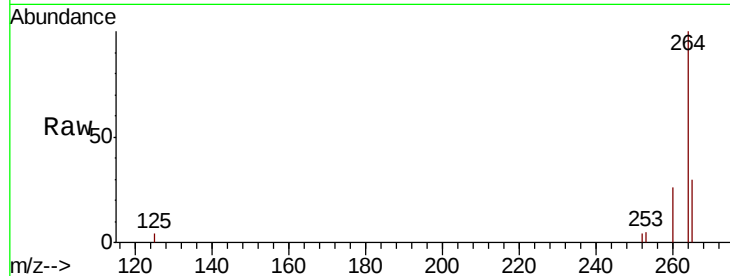




#34  
 Perylene-d12  
 Concen: 0.400 ng  
 RT: 23.99 min Scan# 2267  
 Delta R.T. -0.02 min  
 Lab File: BE098512.D  
 Acq: 18 Dec 2018 12:40

Instrument :  
 BNA\_E  
 ClientSampleId :  
 RE105D1-20181210MSD

Tgt Ion: 264 Resp: 6861  
 Ion Ratio Lower Upper  
 264 100  
 260 25.6 20.2 30.2  
 265 30.1 25.2 37.8



#35  
 Benzo(b)fluoranthene  
 Concen: 0.020 ng  
 RT: 23.22 min Scan# 2051  
 Delta R.T. -0.01 min  
 Lab File: BE098512.D  
 Acq: 18 Dec 2018 12:40

Tgt Ion: 252 Resp: 380  
 Ion Ratio Lower Upper  
 252 100  
 253 100.0 20.0 30.0#  
 125 302.7 9.6 14.4#

