

Data Path : Z:\HPCHEM1\BNA F\DATA\BF042817\  
 Data File : BF094691.D  
 Acq On : 28 Apr 2017 18:44  
 Operator : SJ/MA  
 Sample : I2870-01  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-CUTTINGS-DRUMS(COMP)

Manual Integrations  
 APPROVED

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 5/1/2017 6:35:52 PM

Quant Time: Apr 29 01:12:42 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF041717.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Apr 17 14:59:23 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 5.77  | 152  | 91311    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 7.26  | 136  | 345043   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.40  | 164  | 146425   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.24 | 188  | 221924   | 20.00 | ng    | 0.01     |
| 75) Chrysene-d12          | 14.48 | 240  | 184564   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 16.11 | 264  | 139467   | 20.00 | ng    | 0.02     |

|                             |       |     |        |        |    |      |
|-----------------------------|-------|-----|--------|--------|----|------|
| System Monitoring Compounds |       |     |        |        |    |      |
| 5) 2-Fluorophenol           | 4.34  | 112 | 801243 | 145.58 | ng | 0.04 |
| 7) Phenol-d6                | 5.41  | 99  | 955126 | 147.20 | ng | 0.01 |
| 23) Nitrobenzene-d5         | 6.42  | 82  | 537671 | 96.22  | ng | 0.00 |
| 41) 2,4,6-Tribromophenol    | 10.38 | 330 | 150348 | 131.27 | ng | 0.00 |
| 44) 2-Fluorobiphenyl        | 8.58  | 172 | 885106 | 88.94  | ng | 0.00 |
| 78) Terphenyl-d14           | 13.20 | 244 | 567618 | 82.20  | ng | 0.00 |

|                                |       |     |         |        |    |      |
|--------------------------------|-------|-----|---------|--------|----|------|
| Target Compounds               |       |     |         | Qvalue |    |      |
| 12) 1,3-Dichlorobenzene        | 5.70  | 146 | 40895   | 5.89   | ng | 97   |
| 13) 1,4-Dichlorobenzene        | 5.79  | 146 | 142784  | 20.45  | ng | 98   |
| 14) 1,2-Dichlorobenzene        | 5.96  | 146 | 43486   | 6.76   | ng | 97   |
| 30) 1,2,4-Trichlorobenzene     | 7.20  | 180 | 48797   | 9.88   | ng | 98   |
| 31) Naphthalene                | 7.28  | 128 | 56098   | 3.38   | ng | 98   |
| 48) Acenaphthylene             | 9.22  | 152 | 92749   | 6.25   | ng | 99   |
| 49) Dimethylphthalate          | 9.09  | 163 | 52522   | 4.81   | ng | # 99 |
| 51) Acenaphthene               | 9.44  | 154 | 31495   | 3.55   | ng | 92   |
| 54) Dibenzofuran               | 9.65  | 168 | 84591   | 6.55   | ng | 98   |
| 57) Fluorene                   | 10.07 | 166 | 131866  | 13.12  | ng | 96   |
| 70) Phenanthrene               | 11.27 | 178 | 936363  | 74.93  | ng | 98   |
| 71) Anthracene                 | 11.32 | 178 | 274146  | 21.21  | ng | 98   |
| 72) Carbazole                  | 11.53 | 167 | 63630   | 5.24   | ng | 98   |
| 74) Fluoranthene               | 12.72 | 202 | 955465  | 73.77  | ng | 99   |
| 77) Pyrene                     | 13.00 | 202 | 795130  | 61.66  | ng | 99   |
| 80) Benzo(a)anthracene         | 14.47 | 228 | 378809  | 35.31  | ng | 98   |
| 82) Chrysene                   | 14.51 | 228 | 328200  | 33.48  | ng | 96   |
| 83) Bis(2-ethylhexyl)phthalate | 14.52 | 149 | 34180   | 4.50   | ng | # 98 |
| 85) Indeno(1,2,3-cd)pyrene     | 17.39 | 276 | 118303  | 12.68  | ng | 95   |
| 87) Benzo(b)fluoranthene       | 15.71 | 252 | 320391m | 37.55  | ng |      |
| 88) Benzo(k)fluoranthene       | 15.73 | 252 | 127692m | 15.82  | ng |      |
| 89) Benzo(a)pyrene             | 16.05 | 252 | 225682  | 28.43  | ng | 99   |
| 90) Dibenzo(a,h)anthracene     | 17.40 | 278 | 33850   | 5.14   | ng | # 80 |
| 91) Benzo(g,h,i)perylene       | 17.77 | 276 | 111113  | 16.56  | ng | 96   |

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

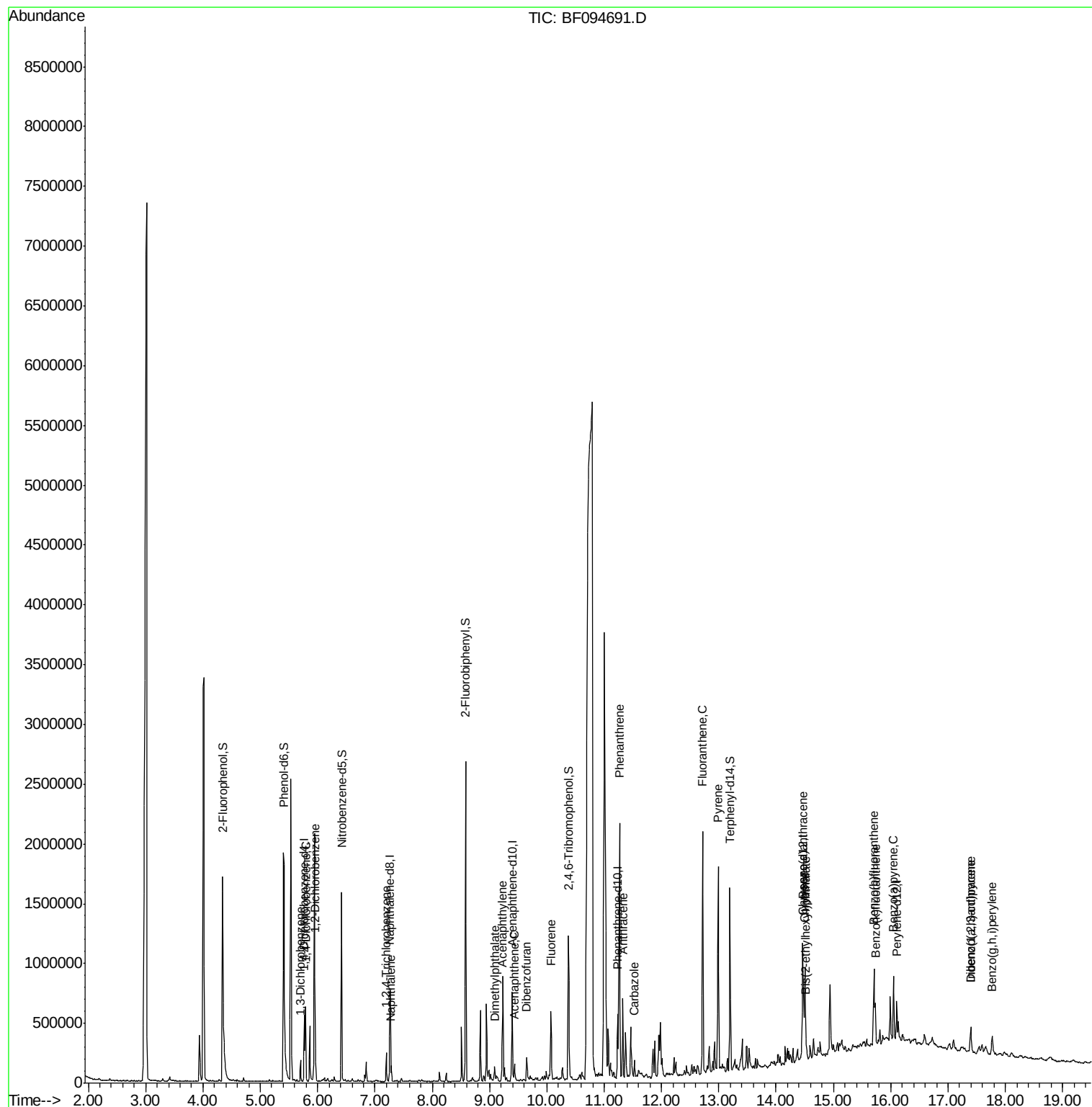
Data Path : Z:\HPCHEM1\BNA F\DATA\BF042817\  
Data File : BF094691.D  
Acq On : 28 Apr 2017 18:44  
Operator : SJ/MA  
Sample : I2870-01  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

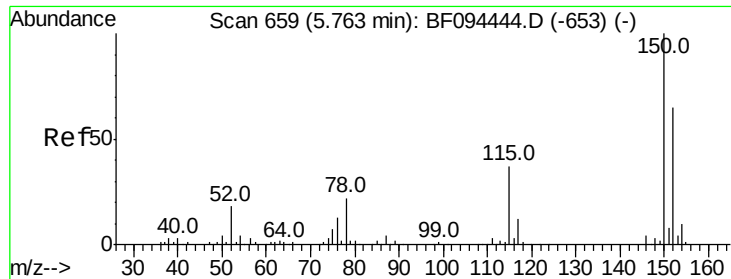
Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-CUTTINGS-DRUMS(COMP)

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Quant Time: Apr 29 01:12:42 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF041717.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Apr 17 14:59:23 2017  
Response via : Initial Calibration





#1

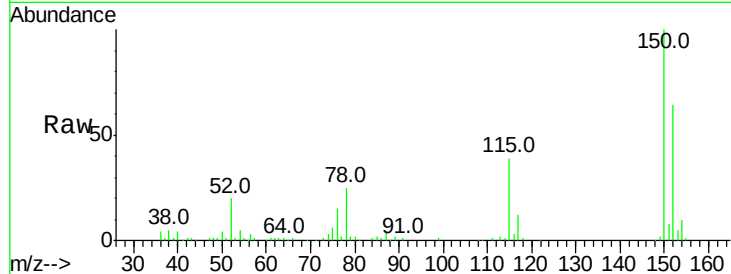
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 5.77 min Scan# 651  
Delta R.T. 0.00 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-CUTTINGS-DRUMS(COMP)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 155.2 | 126.2 | 189.2 |
| 115     | 60.4  | 52.2  | 78.2  |

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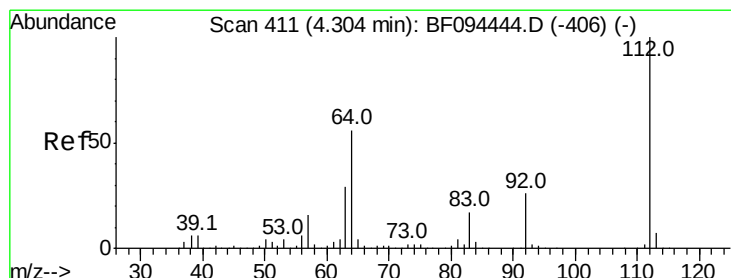
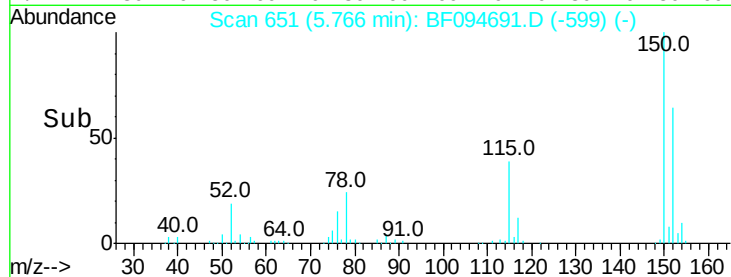
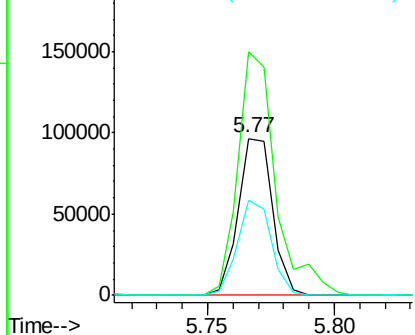


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

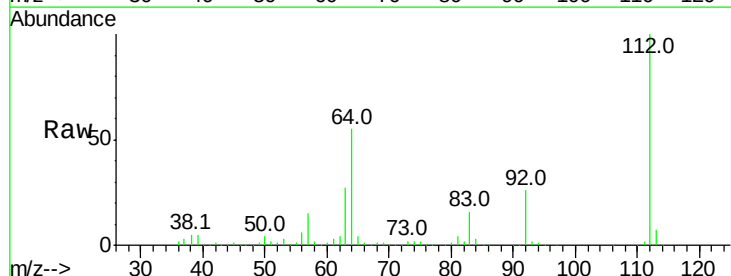
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 145.58 ng  
RT: 4.34 min Scan# 409  
Delta R.T. 0.04 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 54.6  | 46.0  | 69.0  |
| 63      | 26.7  | 23.4  | 35.0  |

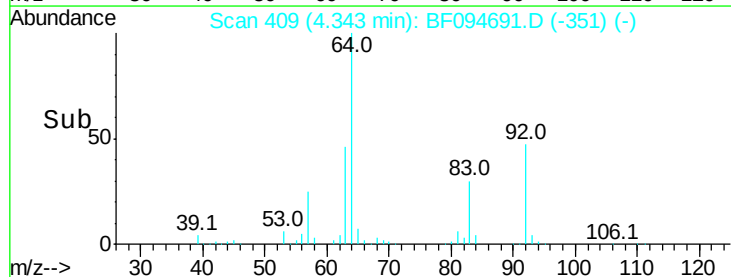
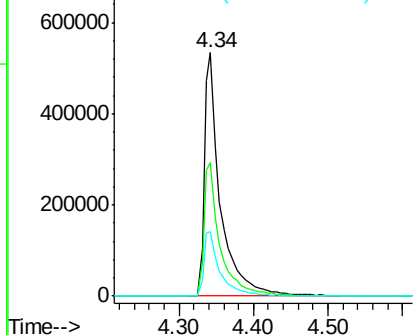


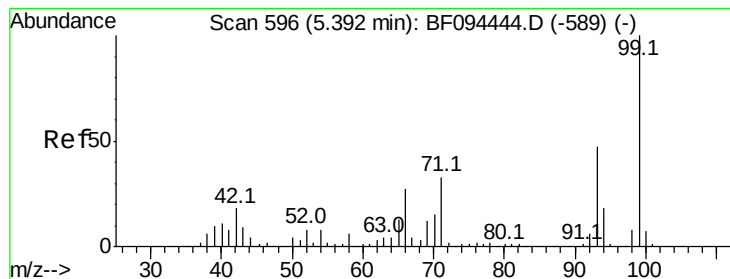
Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF0

Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 147.20 ng

RT: 5.41 min Scan# 590

Delta R.T. 0.01 min

Lab File: BF094691.D

Acq: 28 Apr 2017 18:44

Instrument :

BNA\_F

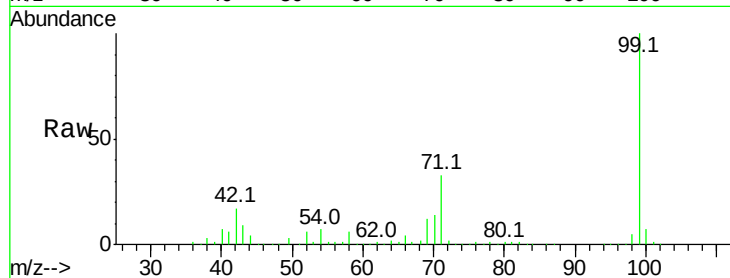
ClientSampleId :

SOIL-CUTTINGS-DRUMS(COMP)

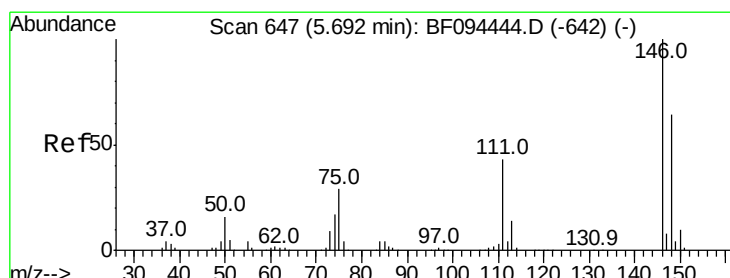
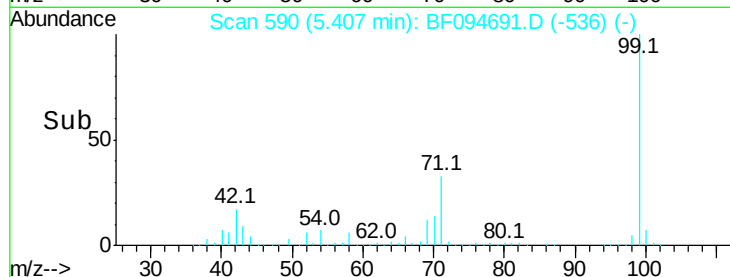
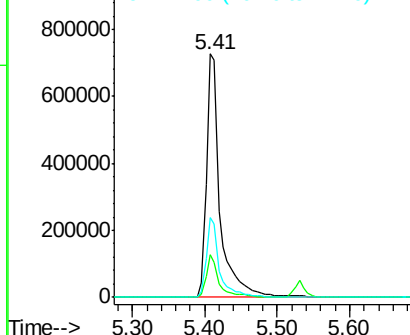
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 955126 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 17.3  | 13.5  | 20.3   |
| 71        | 32.7  | 24.5  | 36.7   |

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Abundance Ion 99.00 (98.70 to 99.70): BF0  
Ion 42.00 (41.70 to 42.70): BF0  
Ion 71.00 (70.70 to 71.70): BF0



#12

1,3-Dichlorobenzene

Concen: 5.89 ng

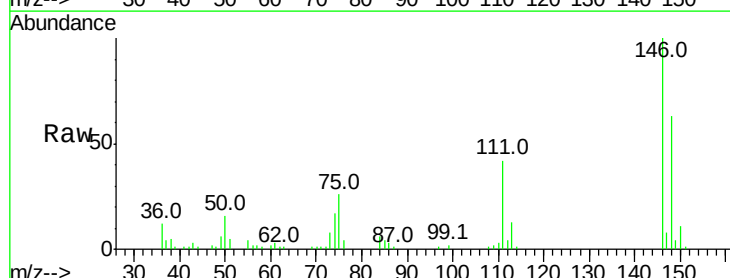
RT: 5.70 min Scan# 640

Delta R.T. 0.01 min

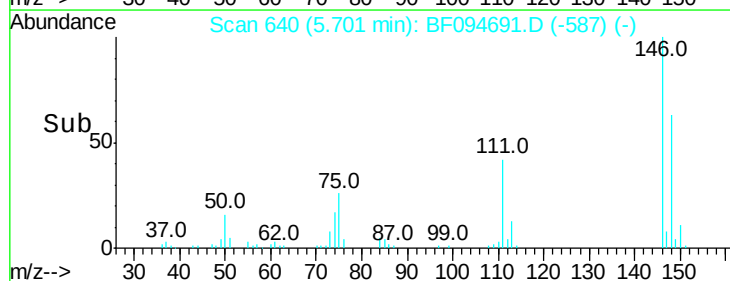
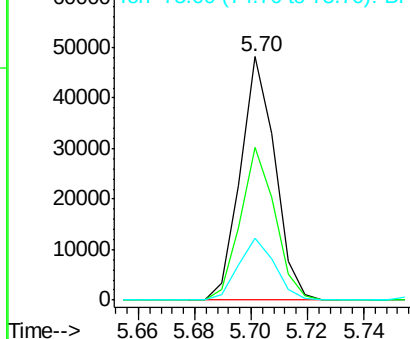
Lab File: BF094691.D

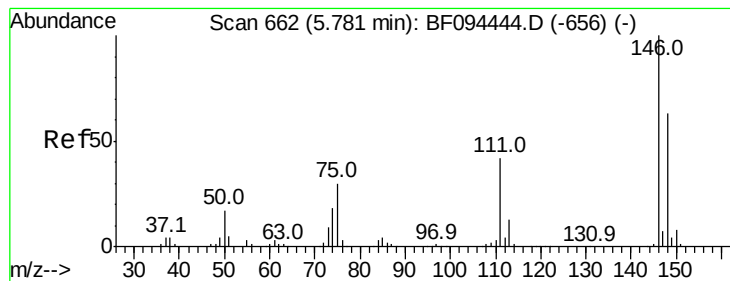
Acq: 28 Apr 2017 18:44

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 146   | Resp: | 40895 |
| Ion Ratio | Lower | Upper |       |
| 146       | 100   |       |       |
| 148       | 63.0  | 51.8  | 77.6  |
| 75        | 25.6  | 23.1  | 34.7  |



Abundance Ion 146.00 (145.70 to 146.70): E  
Ion 148.00 (147.70 to 148.70): E  
Ion 75.00 (74.70 to 75.70): BF0





#13

1,4-Dichlorobenzene

Concen: 20.45 ng

RT: 5.79 min Scan# 655

Delta R.T. 0.01 min

Lab File: BF094691.D

Acq: 28 Apr 2017 18:44

Instrument :

BNA\_F

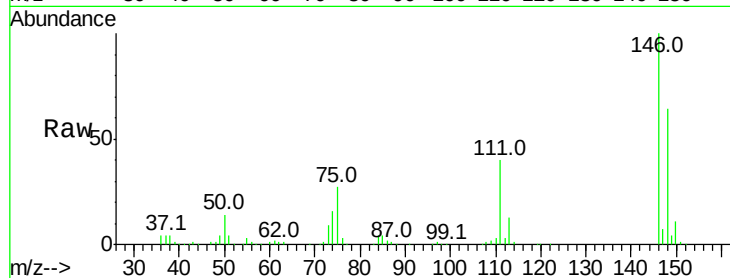
ClientSampleId :

SOIL-CUTTINGS-DRUMS(COMP)

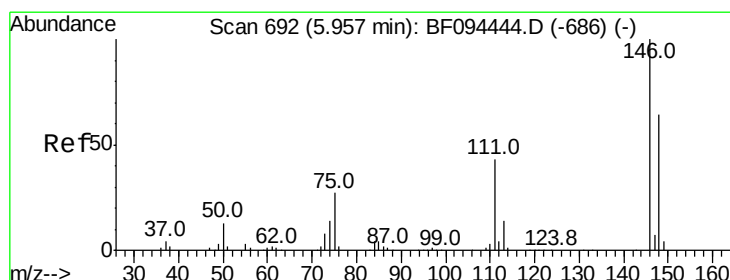
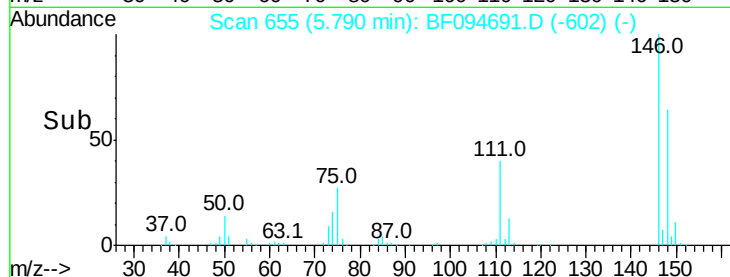
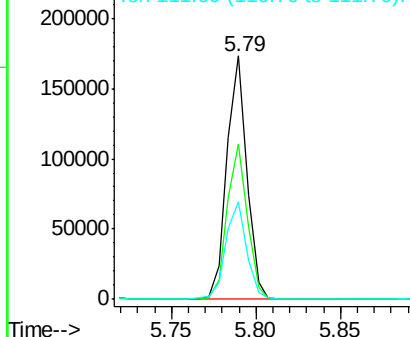
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 146   | Resp: | 142784 |
| Ion Ratio | Lower | Upper |        |
| 146       | 100   |       |        |
| 148       | 63.9  | 52.2  | 78.2   |
| 111       | 40.0  | 30.3  | 45.5   |

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Abundance Ion 146.00 (145.70 to 146.70): E  
Ion 148.00 (147.70 to 148.70): E  
Ion 111.00 (110.70 to 111.70): E



#14

1,2-Dichlorobenzene

Concen: 6.76 ng

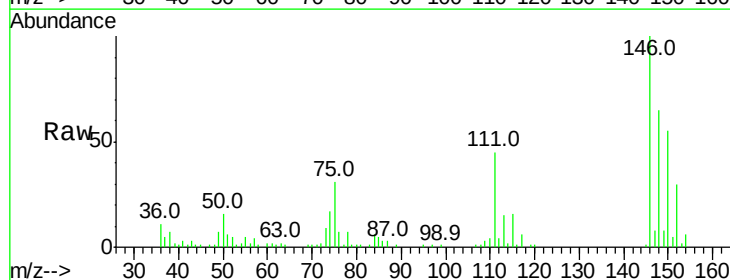
RT: 5.96 min Scan# 684

Delta R.T. 0.00 min

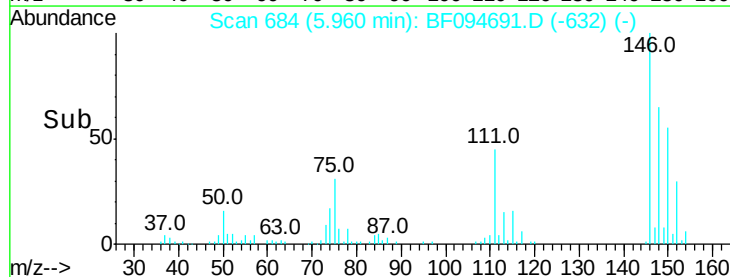
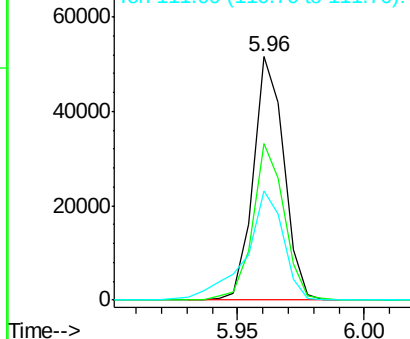
Lab File: BF094691.D

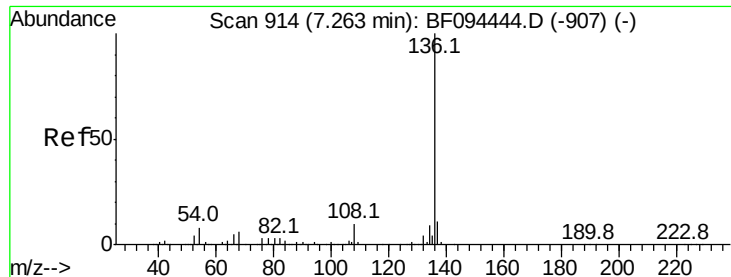
Acq: 28 Apr 2017 18:44

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 146   | Resp: | 43486 |
| Ion Ratio | Lower | Upper |       |
| 146       | 100   |       |       |
| 148       | 64.5  | 50.4  | 75.6  |
| 111       | 44.7  | 38.2  | 57.4  |



Abundance Ion 146.00 (145.70 to 146.70): E  
Ion 148.00 (147.70 to 148.70): E  
Ion 111.00 (110.70 to 111.70): E





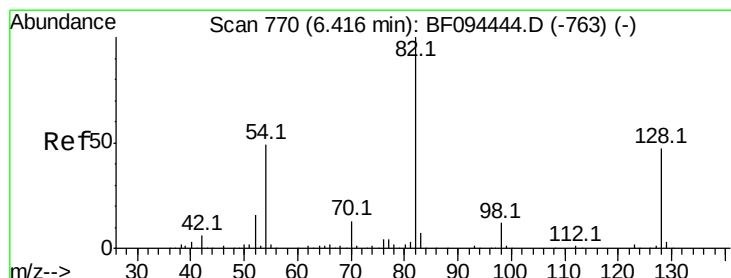
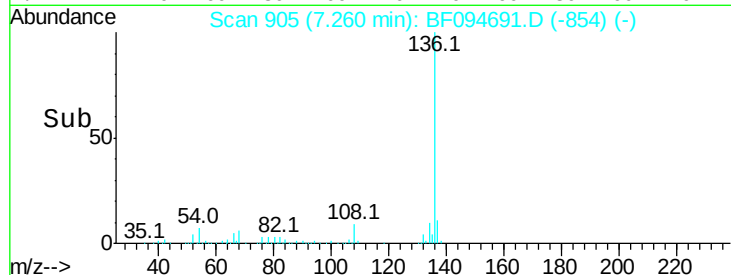
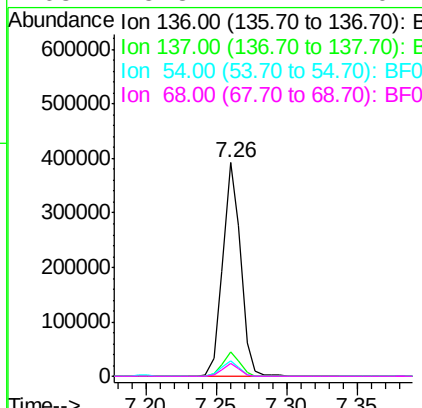
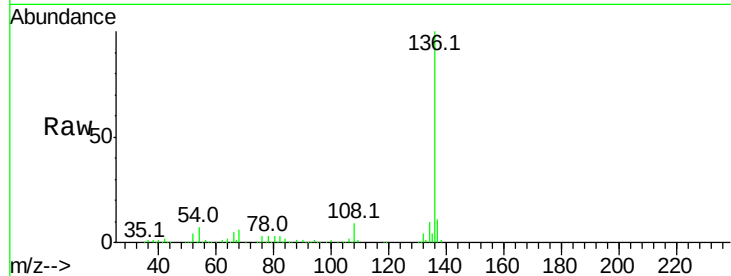
#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 7.26 min Scan# 905  
Delta R.T. -0.00 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-CUTTINGS-DRUMS(COMP)

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 136     | 100   |      |       |       |
| 137     | 11.1  | 8.5  | 12.7  |       |
| 54      | 7.4   | 4.9  | 7.3#  |       |
| 68      | 5.8   | 4.1  | 6.1   |       |

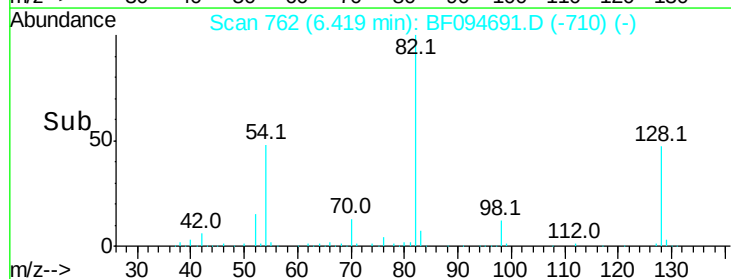
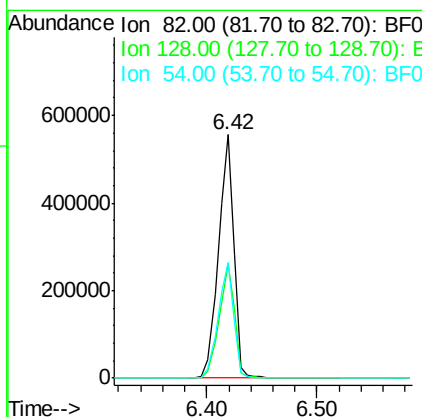
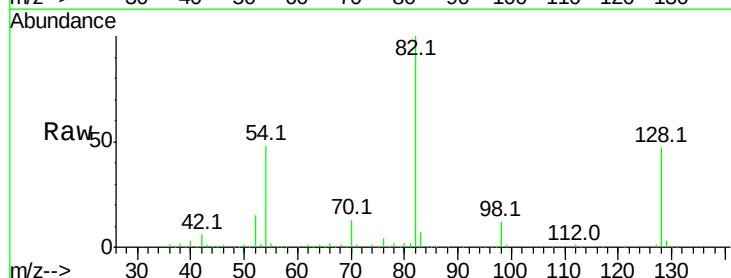
Manual Integrations  
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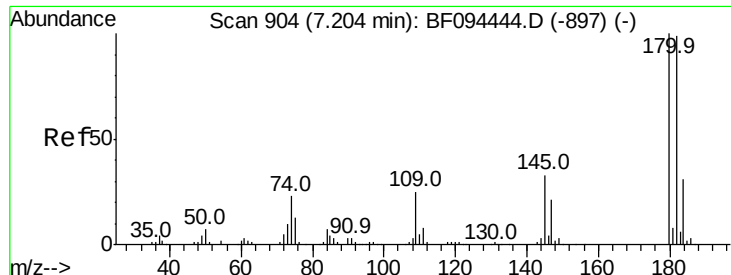
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#23  
Nitrobenzene-d5  
Concen: 96.22 ng  
RT: 6.42 min Scan# 762  
Delta R.T. 0.00 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 82      | 100   |      |       |       |
| 128     | 46.8  | 34.0 | 51.0  |       |
| 54      | 47.5  | 42.2 | 63.2  |       |





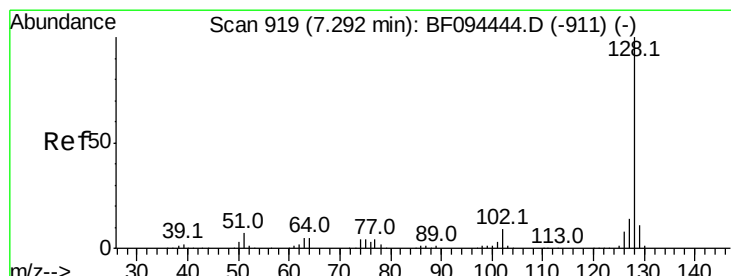
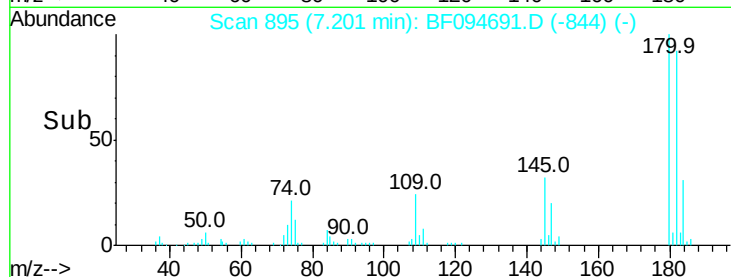
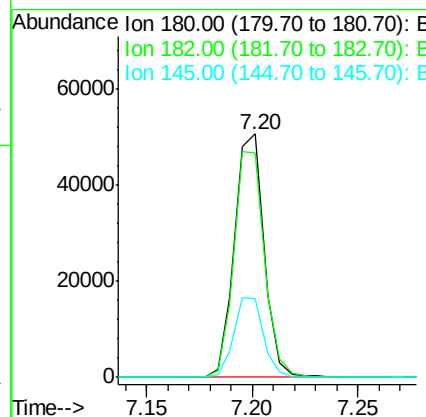
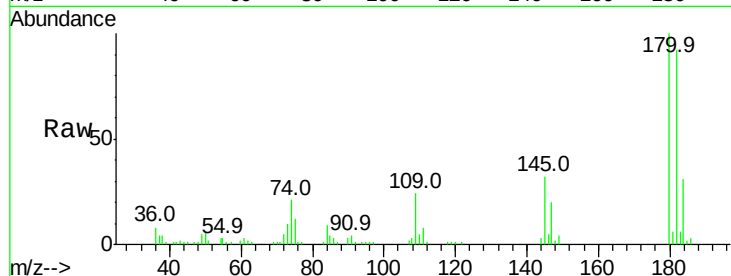
#30  
 1,2,4-Trichlorobenzene  
 Concen: 9.88 ng  
 RT: 7.20 min Scan# 895  
 Delta R.T. -0.00 min  
 Lab File: BF094691.D  
 Acq: 28 Apr 2017 18:44

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-CUTTINGS-DRUMS(COMP)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 92.1  | 75.8  | 113.6 |
| 145     | 32.0  | 25.3  | 37.9  |

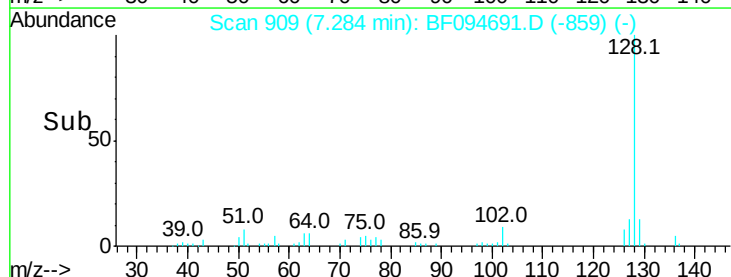
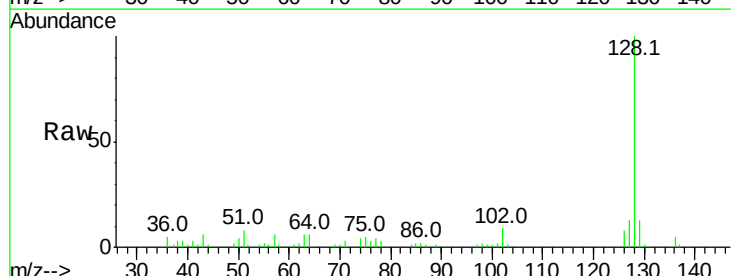
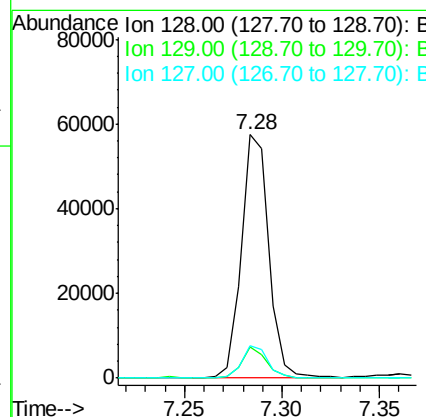
Manual Integrations  
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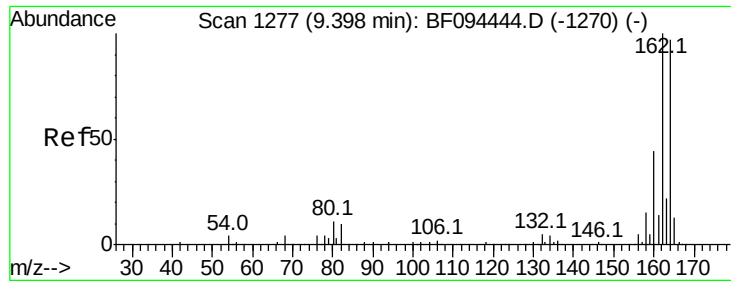
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#31  
 Naphthalene  
 Concen: 3.38 ng  
 RT: 7.28 min Scan# 909  
 Delta R.T. -0.01 min  
 Lab File: BF094691.D  
 Acq: 28 Apr 2017 18:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 12.8  | 9.0   | 13.6  |
| 127     | 13.1  | 10.8  | 16.2  |





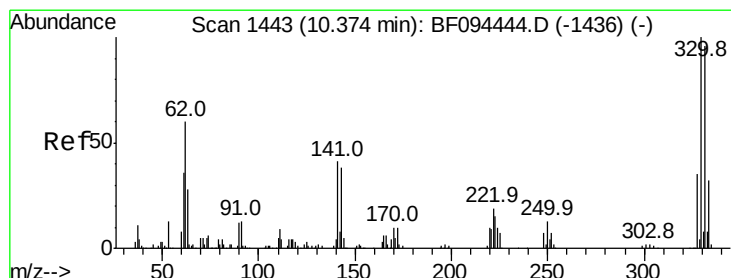
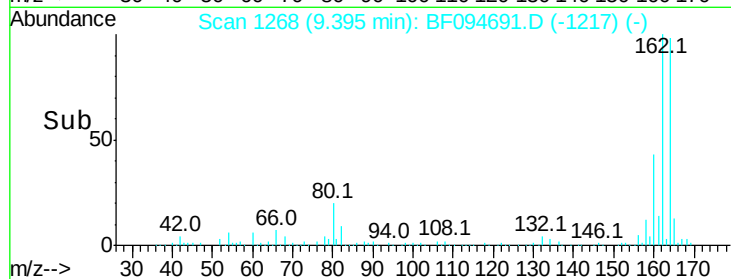
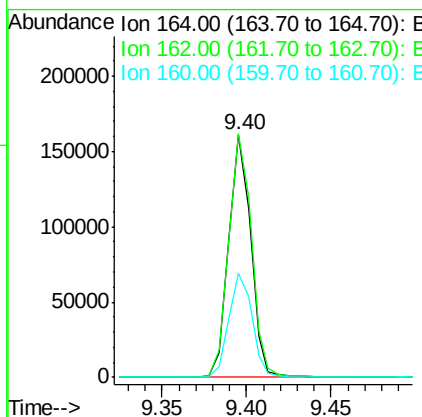
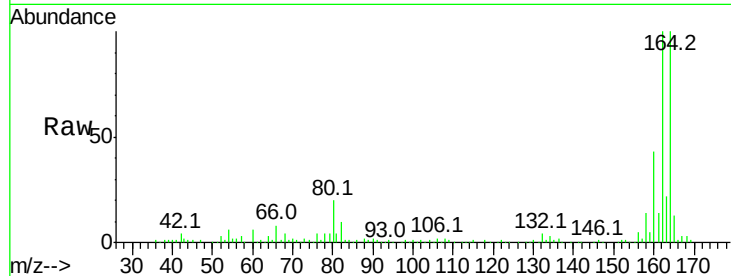
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 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 9.40 min Scan# 1268  
 Delta R.T. -0.00 min  
 Lab File: BF094691.D  
 Acq: 28 Apr 2017 18:44

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-CUTTINGS-DRUMS(COMP)

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 164     | 100   |      |       |       |
| 162     | 100.4 | 82.6 | 123.8 |       |
| 160     | 43.2  | 36.2 | 54.2  |       |

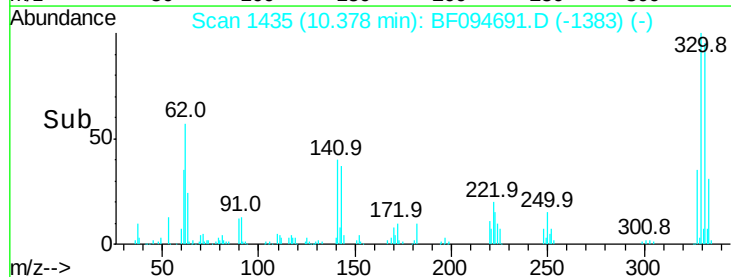
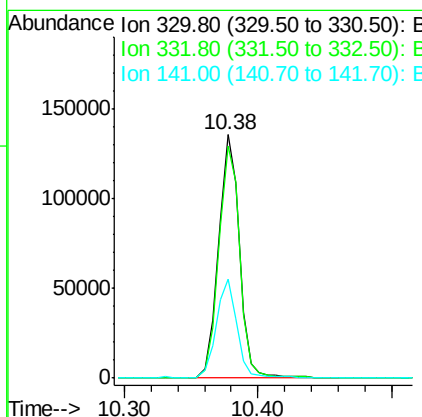
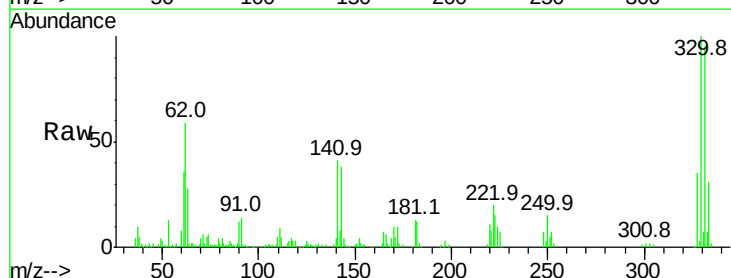
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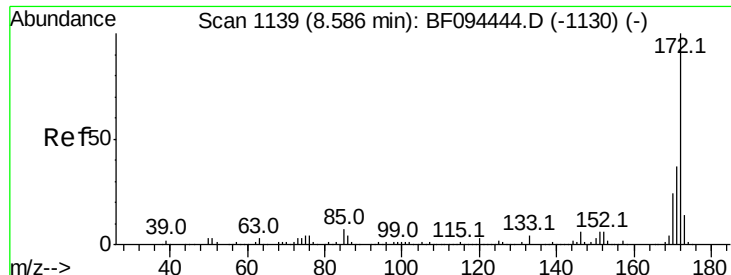


#41  
 2,4,6-Tribromophenol  
 Concen: 131.27 ng  
 RT: 10.38 min Scan# 1435  
 Delta R.T. 0.00 min  
 Lab File: BF094691.D  
 Acq: 28 Apr 2017 18:44

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 330     | 100   |      |       |       |
| 332     | 96.9  | 76.6 | 115.0 |       |
| 141     | 40.8  | 31.4 | 47.2  |       |







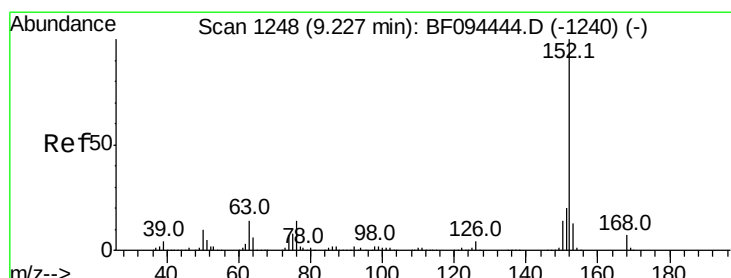
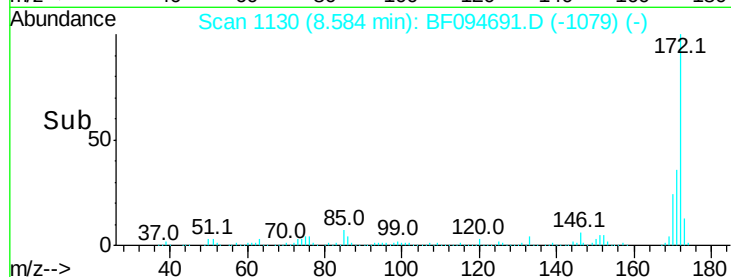
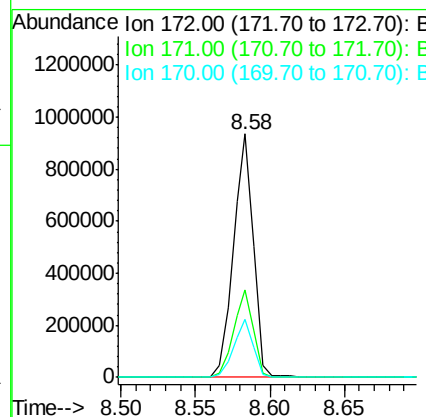
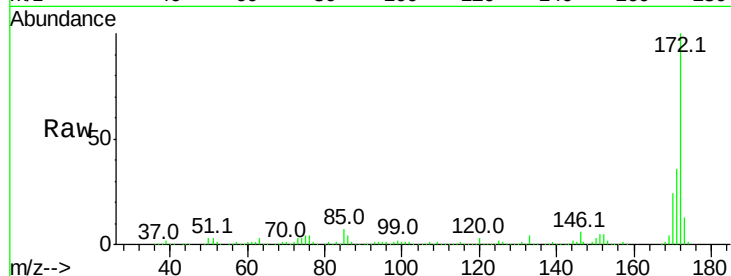
#44  
2-Fluorobiphenyl  
Concen: 88.94 ng  
RT: 8.58 min Scan# 1130  
Delta R.T. -0.00 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-CUTTINGS-DRUMS(COMP)

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 172     | 100   | 885106 |       |       |
| 171     | 36.0  |        | 29.6  | 44.4  |
| 170     | 23.9  |        | 19.8  | 29.8  |

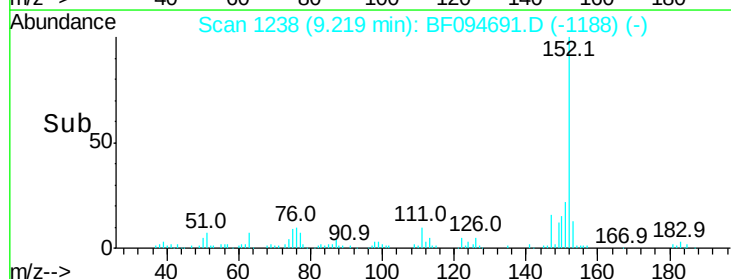
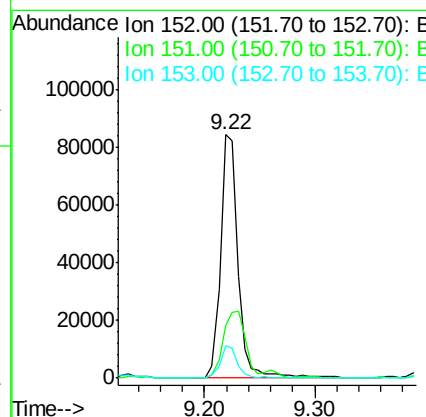
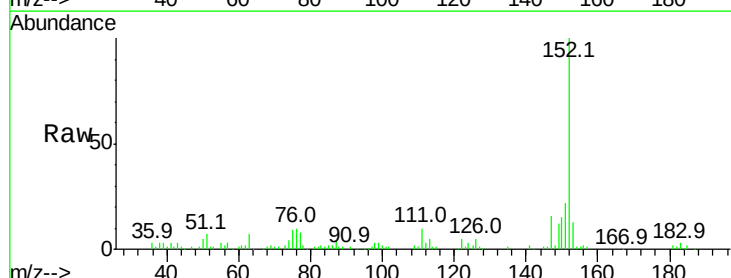
Manual Integrations  
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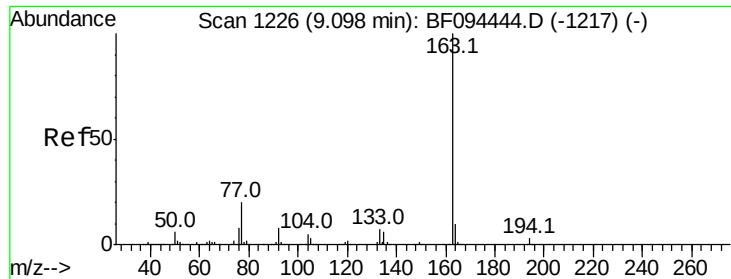
mohammad  
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#48  
Acenaphthylene  
Concen: 6.25 ng  
RT: 9.22 min Scan# 1238  
Delta R.T. -0.01 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 152     | 100   | 92749 |       |       |
| 151     | 21.8  |       | 16.8  | 25.2  |
| 153     | 13.4  |       | 10.8  | 16.2  |





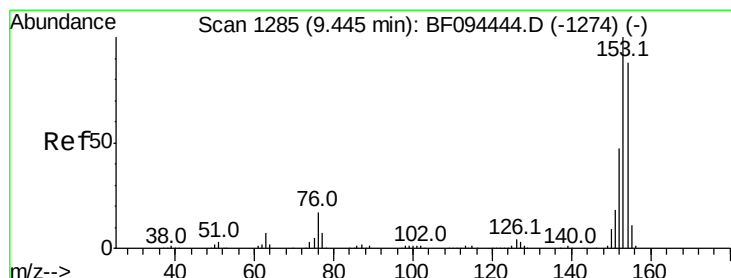
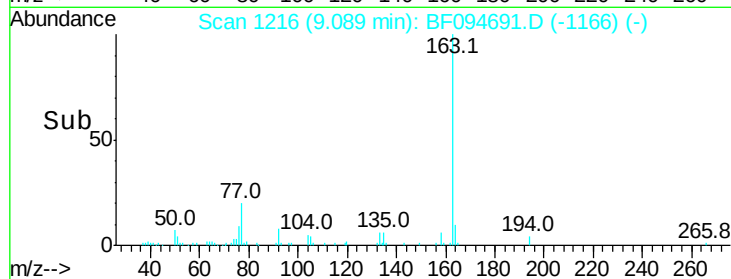
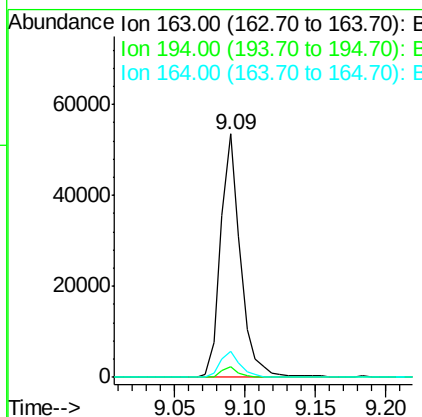
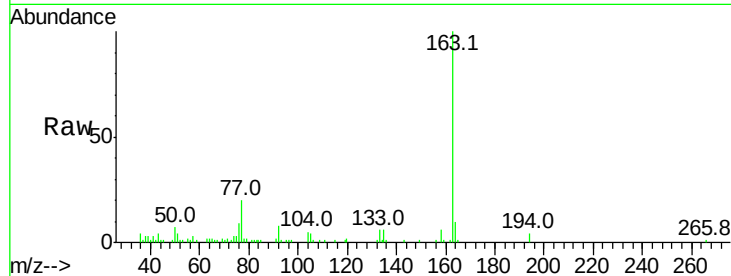
#49  
Dimethylphthalate  
Concen: 4.81 ng  
RT: 9.09 min Scan# 1216  
Delta R.T. -0.01 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-CUTTINGS-DRUMS(COMP)

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 163     | 100   | 52522 |       |       |
| 194     | 4.3   |       | 2.6   | 4.0#  |
| 164     | 10.4  |       | 8.4   | 12.6  |

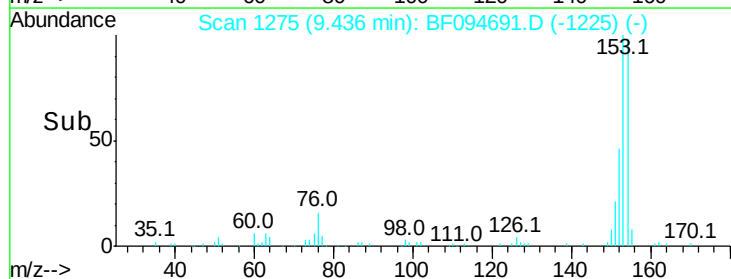
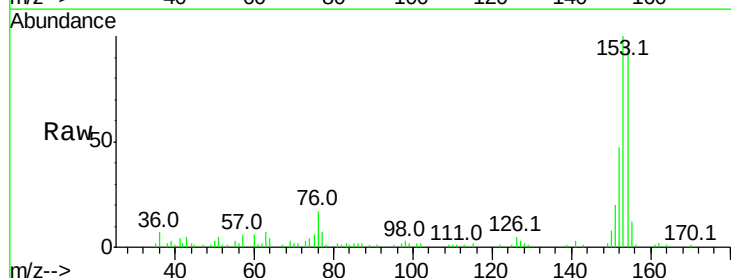
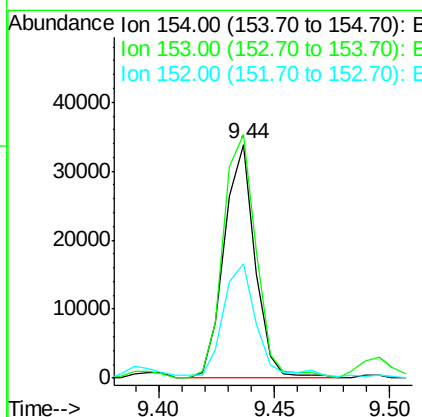
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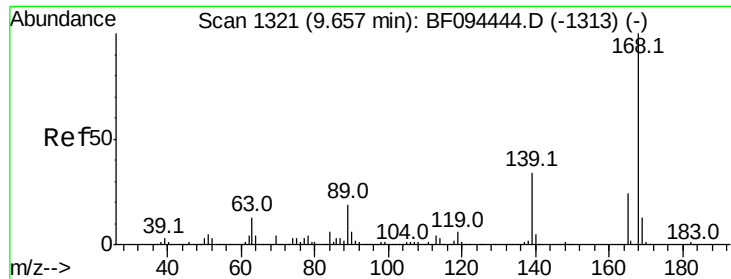
mohammad  
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#51  
Acenaphthene  
Concen: 3.55 ng  
RT: 9.44 min Scan# 1275  
Delta R.T. -0.01 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 154     | 100   | 31495 |       |       |
| 153     | 104.2 |       | 90.5  | 135.7 |
| 152     | 48.7  |       | 43.6  | 65.4  |





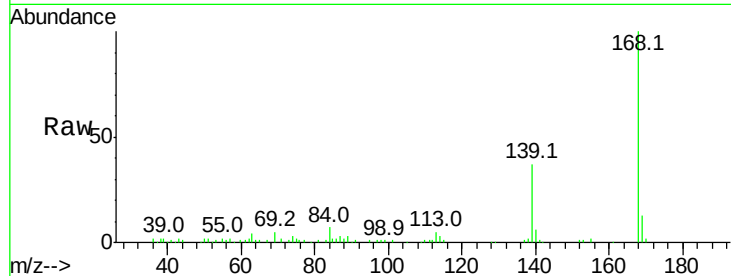
#54  
Dibenzenofuran  
Concen: 6.55 ng  
RT: 9.65 min Scan# 1311  
Delta R.T. -0.01 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-CUTTINGS-DRUMS(COMP)

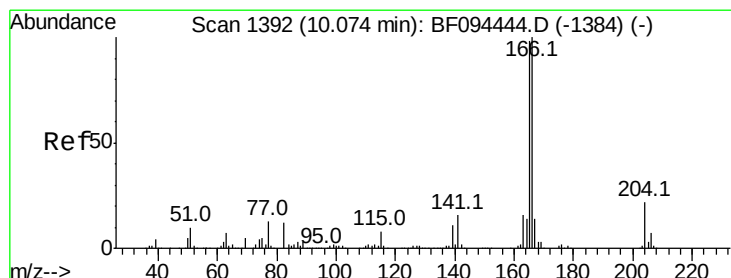
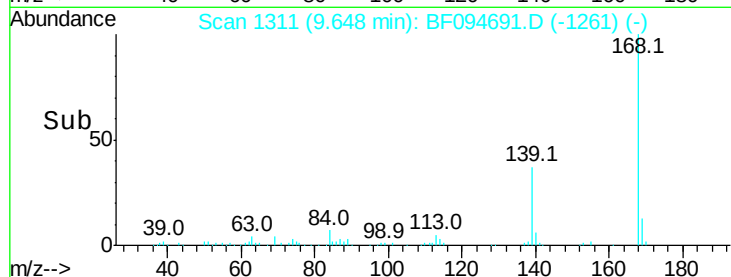
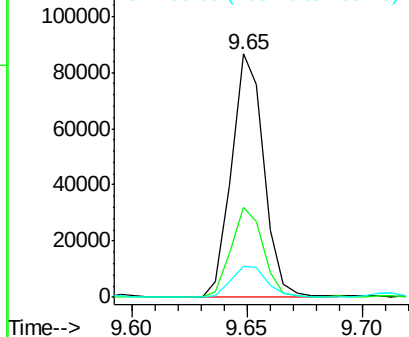
| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 168     | 100   |      |       |       |
| 139     | 37.0  |      | 30.6  | 45.8  |
| 169     | 12.6  |      | 10.8  | 16.2  |

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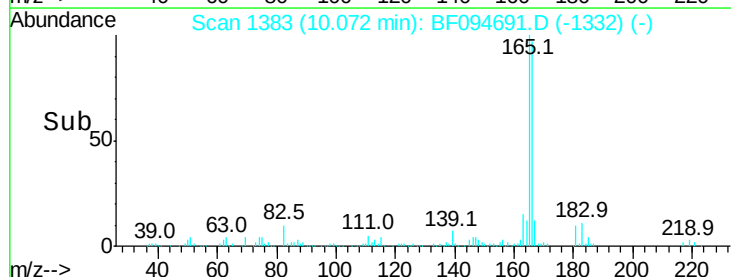
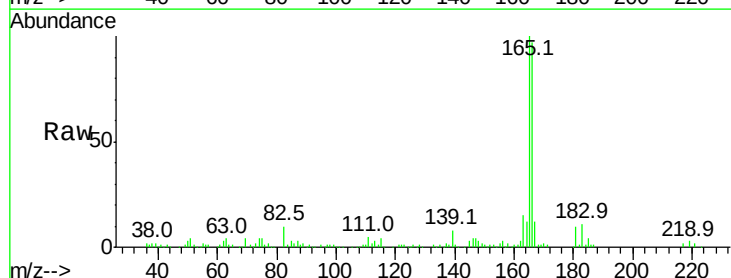
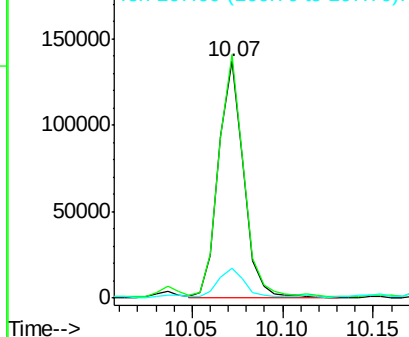
Abundance Ion 168.00 (167.70 to 168.70): E  
Ion 139.00 (138.70 to 139.70): E  
Ion 169.00 (168.70 to 169.70): E

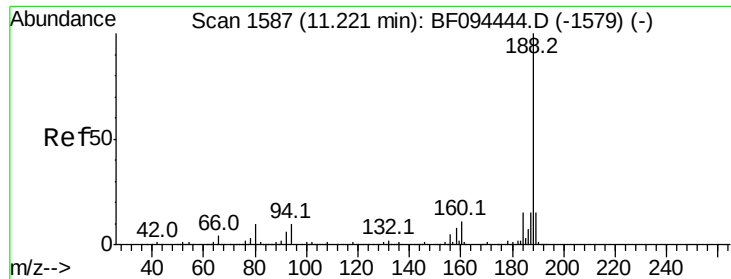


#57  
Fluorene  
Concen: 13.12 ng  
RT: 10.07 min Scan# 1383  
Delta R.T. -0.00 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 166     | 100   |      |       |       |
| 165     | 102.7 |      | 78.8  | 118.2 |
| 167     | 12.6  |      | 10.6  | 16.0  |

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





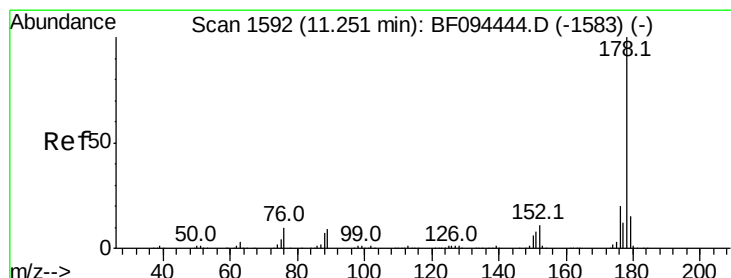
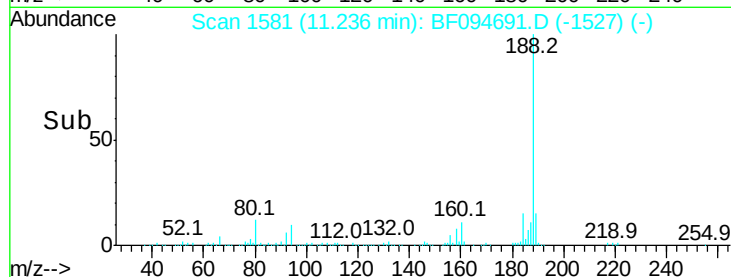
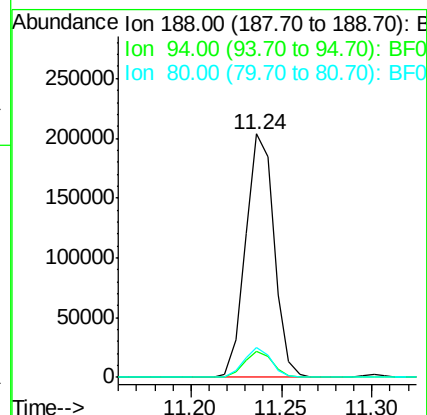
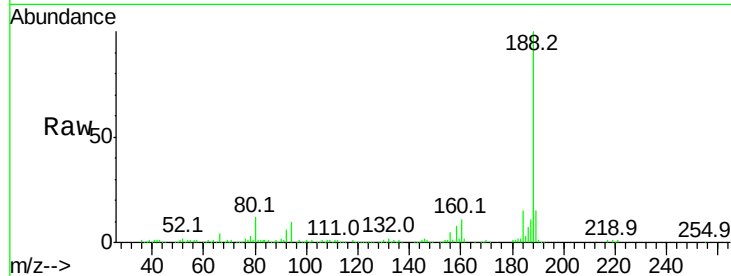
#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.24 min Scan# 1581  
Delta R.T. 0.01 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-CUTTINGS-DRUMS(COMP)

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 188     | 100   | 221924 |       |       |
| 94      | 10.5  |        | 9.4   | 14.2  |
| 80      | 12.2  |        | 10.2  | 15.2  |

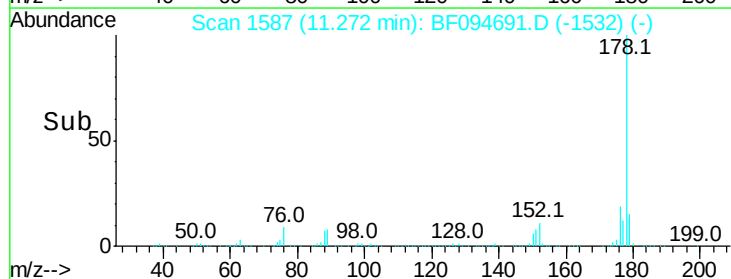
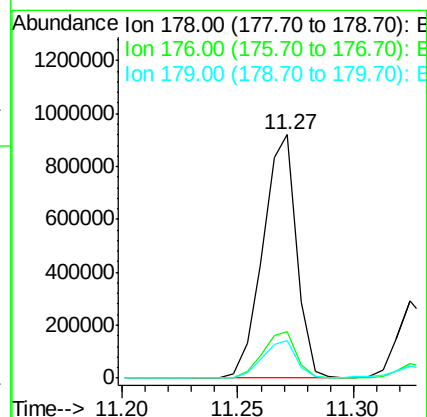
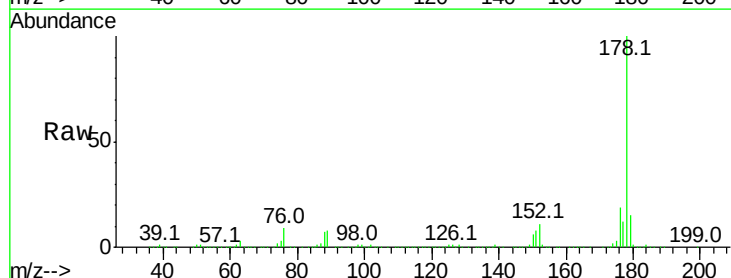
Manual Integrations  
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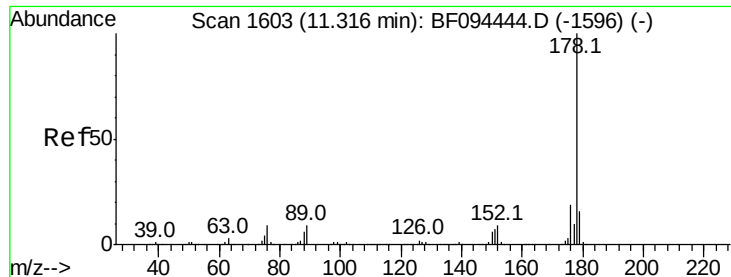
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#70  
Phenanthrene  
Concen: 74.93 ng  
RT: 11.27 min Scan# 1587  
Delta R.T. 0.02 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 178     | 100   | 936363 |       |       |
| 176     | 19.3  |        | 16.2  | 24.4  |
| 179     | 15.2  |        | 12.6  | 19.0  |





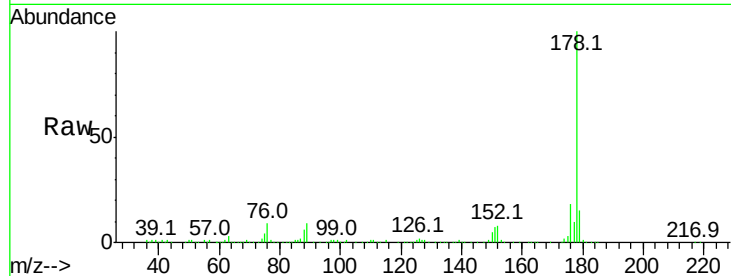
#71  
 Anthracene  
 Concen: 21.21 ng  
 RT: 11.32 min Scan# 1596  
 Delta R.T. 0.01 min  
 Lab File: BF094691.D  
 Acq: 28 Apr 2017 18:44

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-CUTTINGS-DRUMS(COMP)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.3  | 15.8  | 23.8  |
| 179     | 15.4  | 12.7  | 19.1  |

Manual Integrations  
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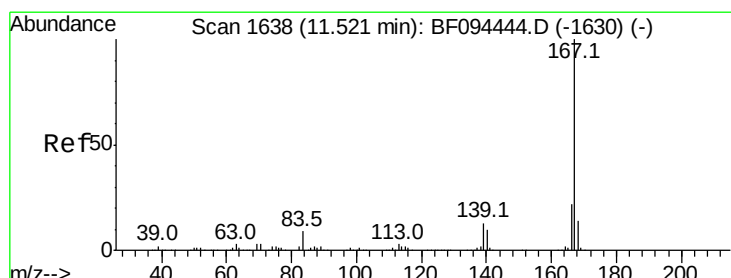
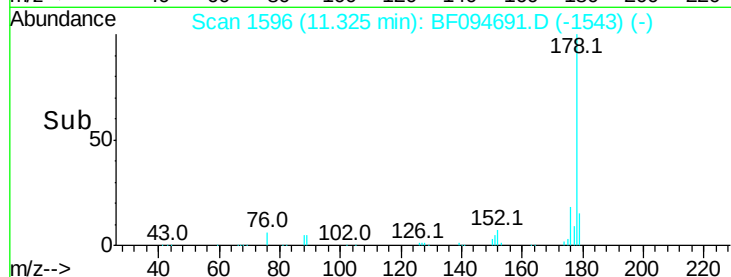
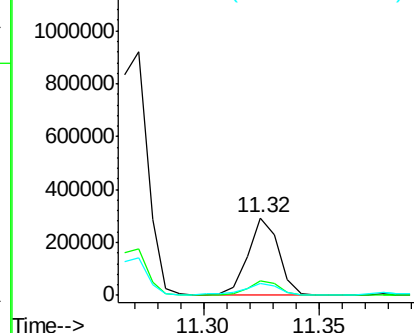


Abundance

Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#72  
 Carbazole  
 Concen: 5.24 ng  
 RT: 11.53 min Scan# 1631  
 Delta R.T. 0.01 min  
 Lab File: BF094691.D  
 Acq: 28 Apr 2017 18:44

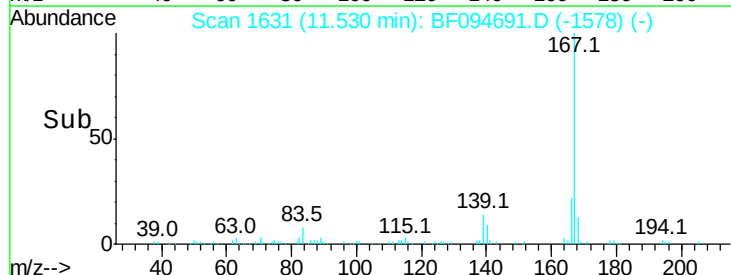
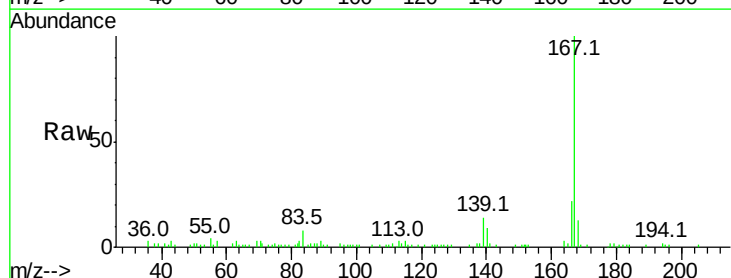
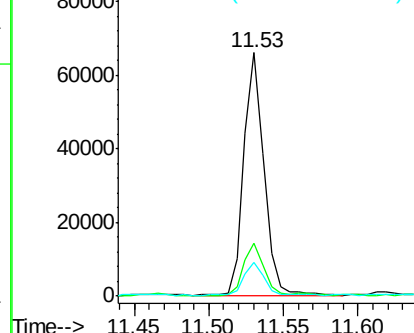
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 21.7  | 18.1  | 27.1  |
| 139     | 13.7  | 11.7  | 17.5  |

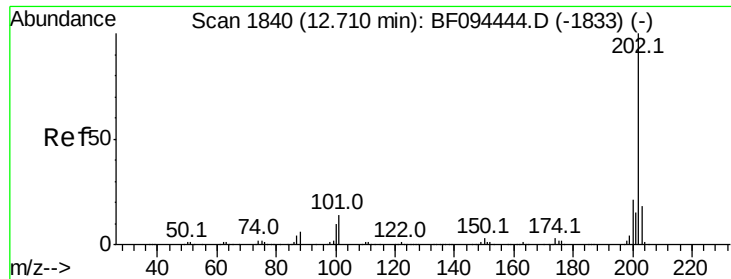
Abundance

Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E





#74

Fluoranthene

Concen: 73.77 ng

RT: 12.72 min Scan# 1833

Delta R.T. 0.01 min

Lab File: BF094691.D

Acq: 28 Apr 2017 18:44

Instrument :

BNA\_F

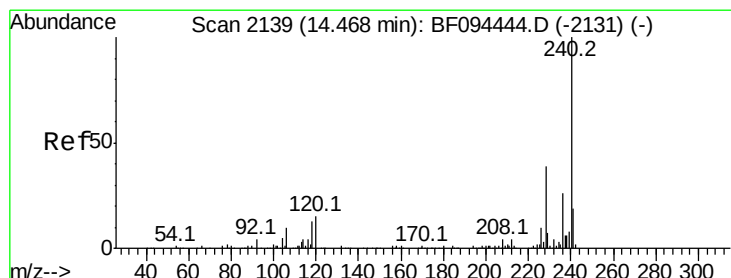
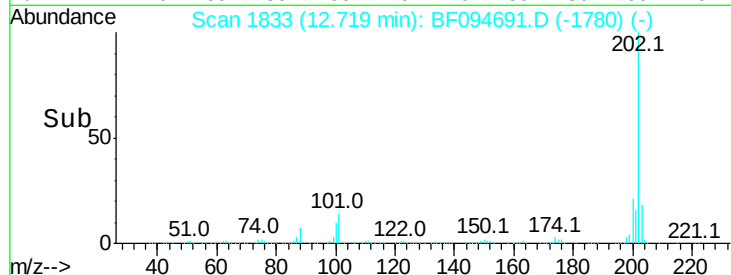
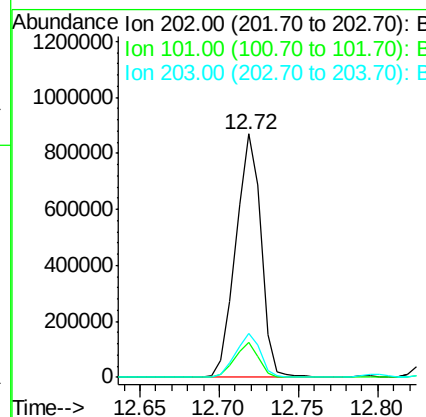
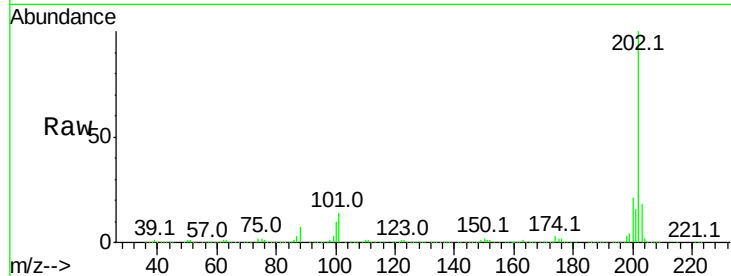
ClientSampleId :

SOIL-CUTTINGS-DRUMS(COMP)

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 202     | 100   | 955465 |       |       |
| 101     | 14.2  | 0.0    | 33.2  |       |
| 203     | 17.9  | 0.0    | 38.1  |       |

Manual Integrations  
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#75

Chrysene-d12

Concen: 20.00 ng

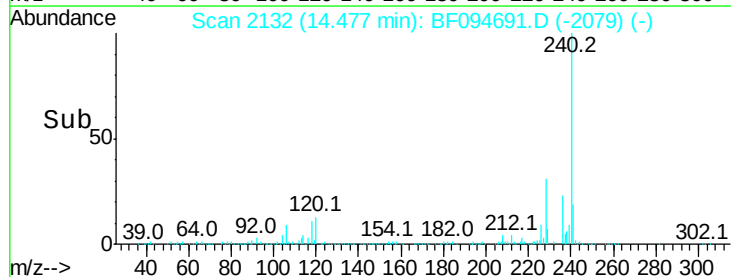
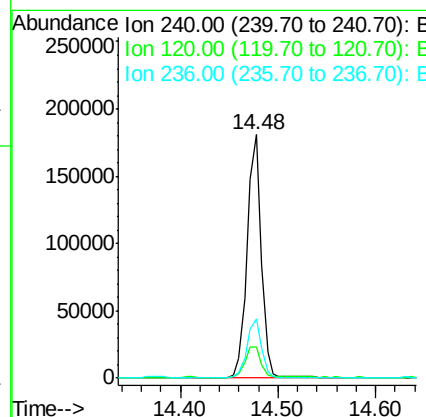
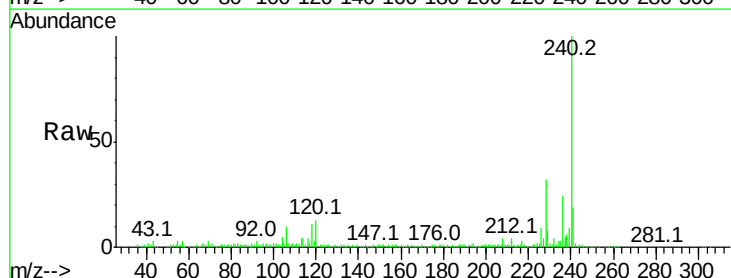
RT: 14.48 min Scan# 2132

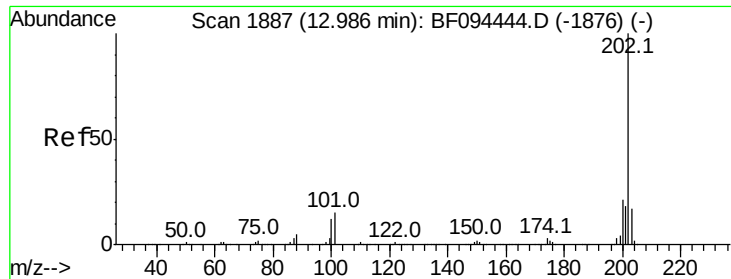
Delta R.T. 0.01 min

Lab File: BF094691.D

Acq: 28 Apr 2017 18:44

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 240     | 100   | 184564 |       |       |
| 120     | 12.8  | 5.8    | 8.8#  |       |
| 236     | 24.2  | 20.5   | 30.7  |       |





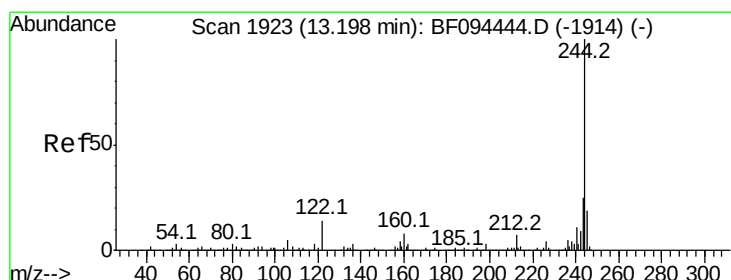
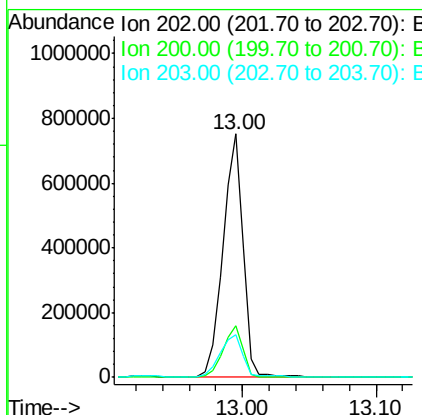
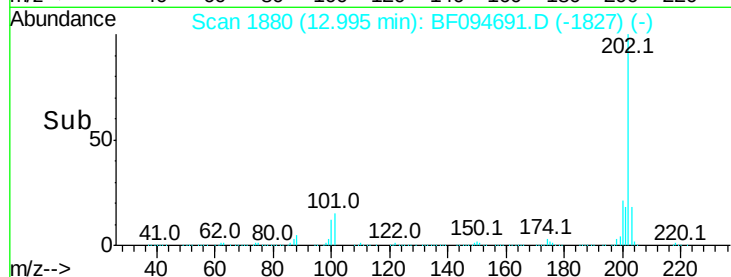
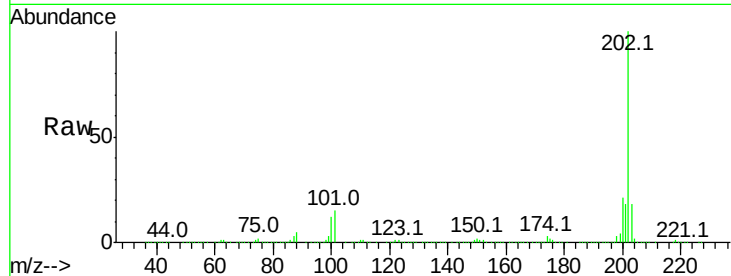
#77  
Pvrene  
Concen: 61.66 ng  
RT: 13.00 min Scan# 1880  
Delta R.T. 0.01 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-CUTTINGS-DRUMS(COMP)

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 200     | 21.4  | 17.6       | 26.4  |
| 203     | 17.7  | 14.4       | 21.6  |

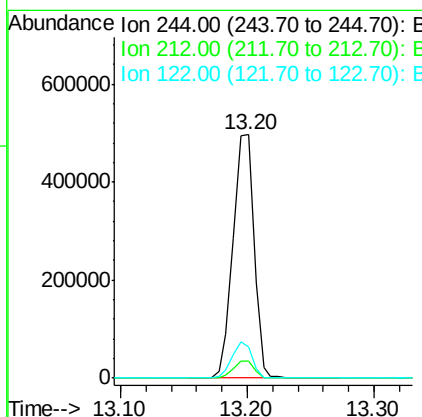
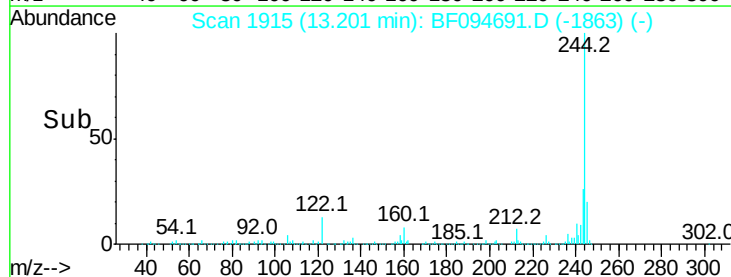
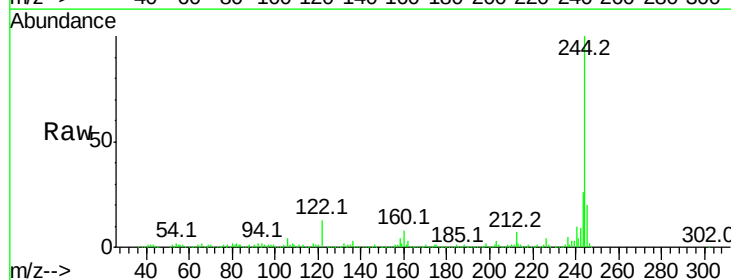
Manual Integrations  
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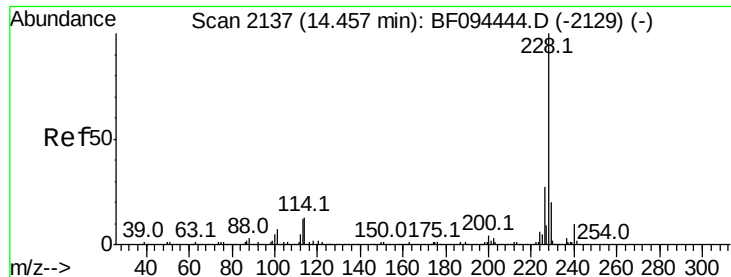
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#78  
Terphenyl-d14  
Concen: 82.20 ng  
RT: 13.20 min Scan# 1915  
Delta R.T. 0.00 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 244     | 100   |            |       |
| 212     | 6.8   | 6.0        | 9.0   |
| 122     | 12.9  | 10.3       | 15.5  |





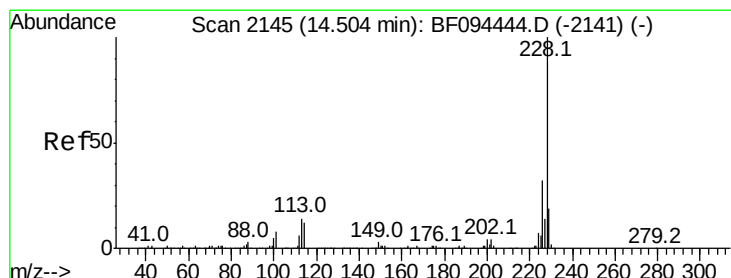
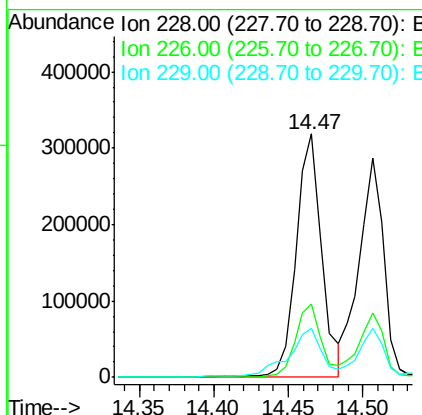
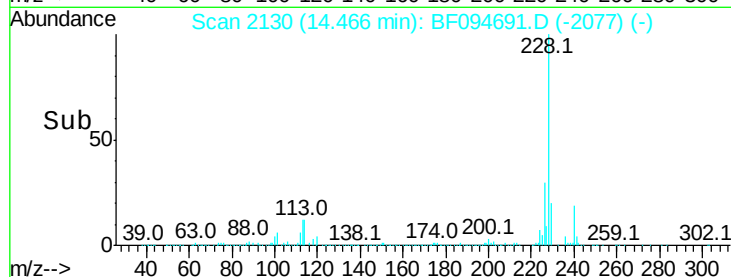
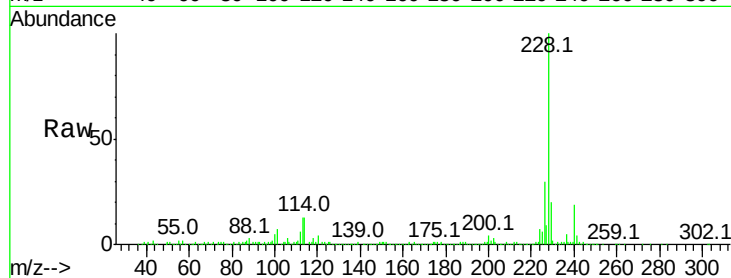
#80  
Benzo(a)anthracene  
Concen: 35.31 ng  
RT: 14.47 min Scan# 2130  
Delta R.T. 0.01 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-CUTTINGS-DRUMS(COMP)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.2  | 22.6  | 33.8  |
| 229     | 20.3  | 16.3  | 24.5  |

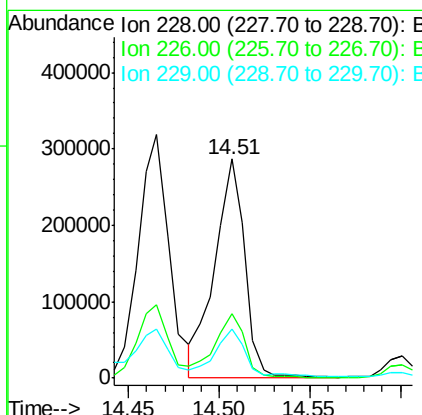
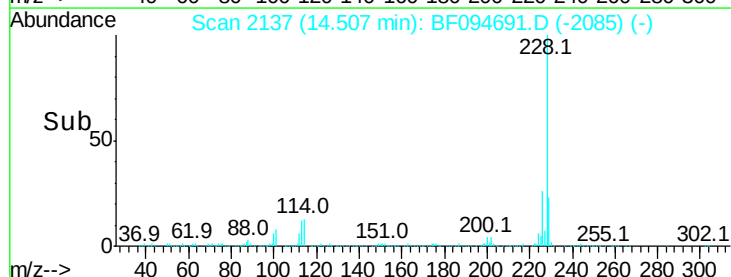
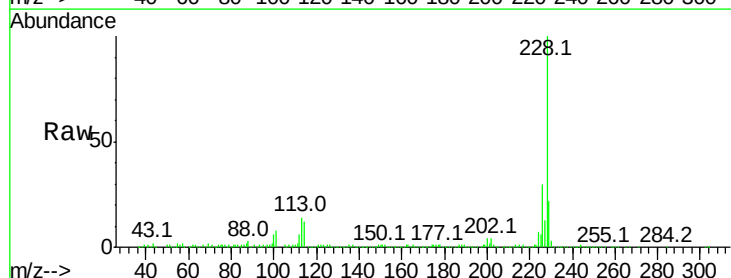
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5/1/2017 6:35:52 PM

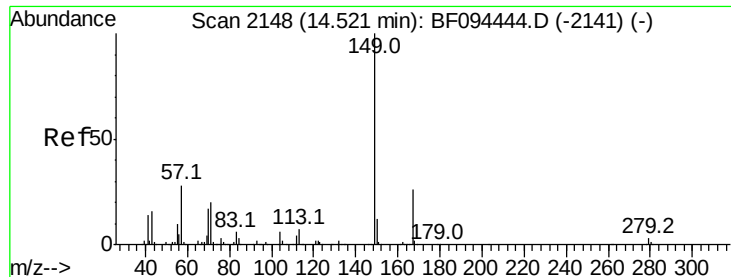


#82  
Chrysene  
Concen: 33.48 ng  
RT: 14.51 min Scan# 2137  
Delta R.T. 0.00 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.6  | 24.9  | 37.3  |
| 229     | 22.4  | 15.8  | 23.6  |







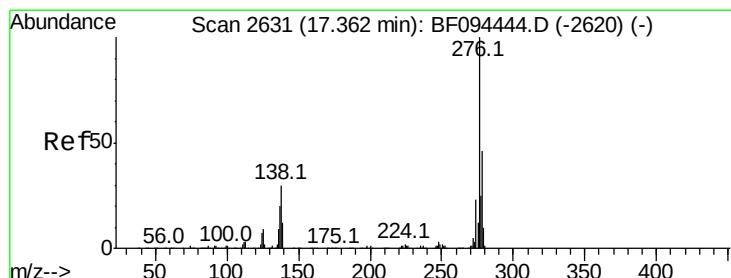
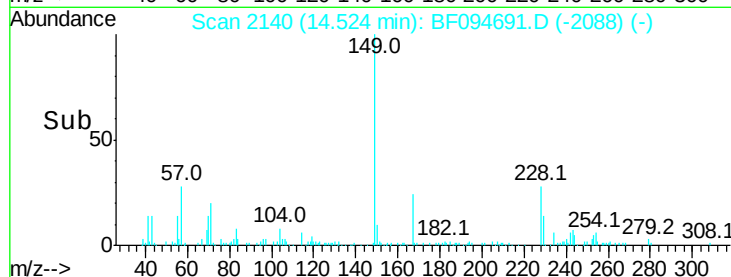
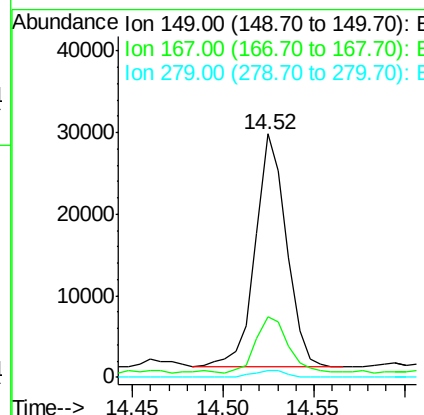
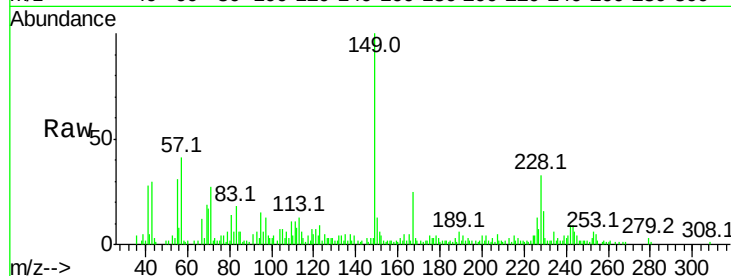
#83  
 Bis(2-ethylhexyl)phthalate  
 Concen: 4.50 ng  
 RT: 14.52 min Scan# 2140  
 Delta R.T. 0.00 min  
 Lab File: BF094691.D  
 Acq: 28 Apr 2017 18:44

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SOIL-CUTTINGS-DRUMS(COMP)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 149     | 100   |       |       |
| 167     | 25.0  | 21.0  | 31.4  |
| 279     | 3.0   | 1.9   | 2.9#  |

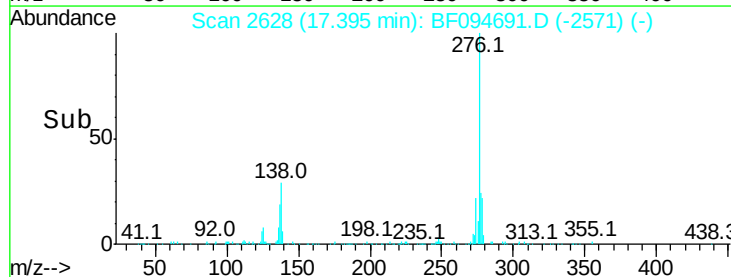
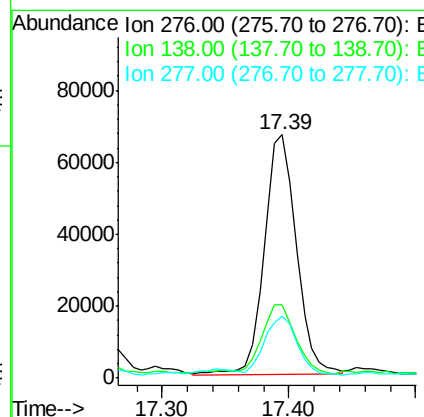
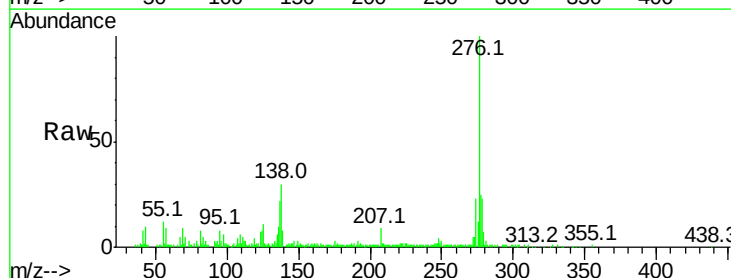
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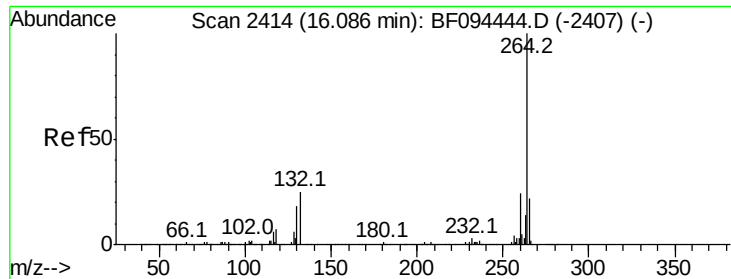
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#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 12.68 ng  
 RT: 17.39 min Scan# 2628  
 Delta R.T. 0.03 min  
 Lab File: BF094691.D  
 Acq: 28 Apr 2017 18:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 30.0  | 27.8  | 41.6  |
| 277     | 24.5  | 20.2  | 30.4  |





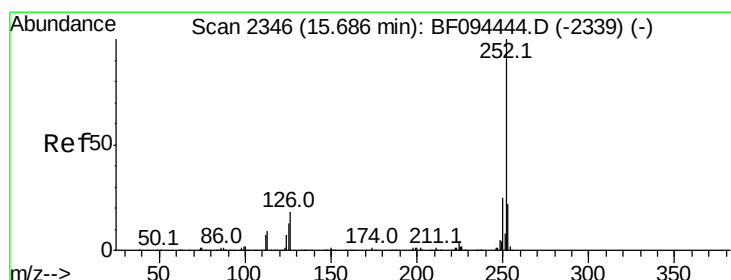
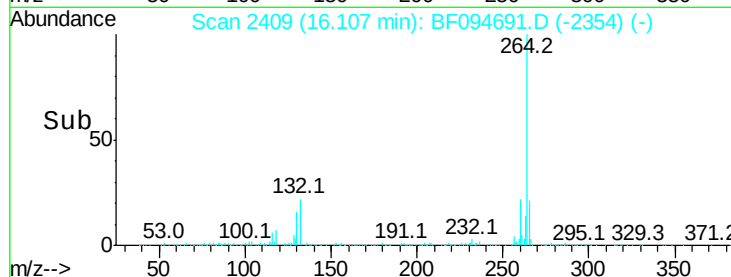
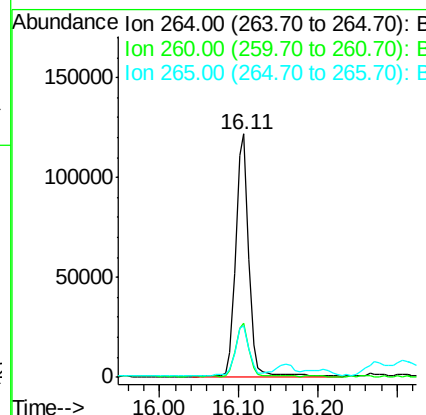
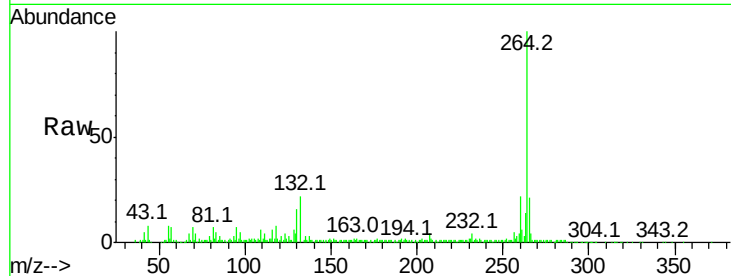
#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 16.11 min Scan# 2409  
Delta R.T. 0.02 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-CUTTINGS-DRUMS(COMP)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 22.3  | 19.5  | 29.3  |
| 265     | 21.2  | 17.2  | 25.8  |

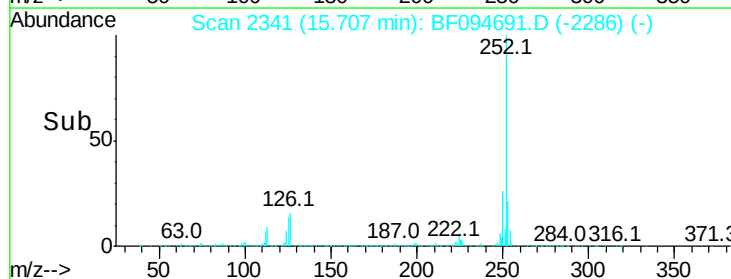
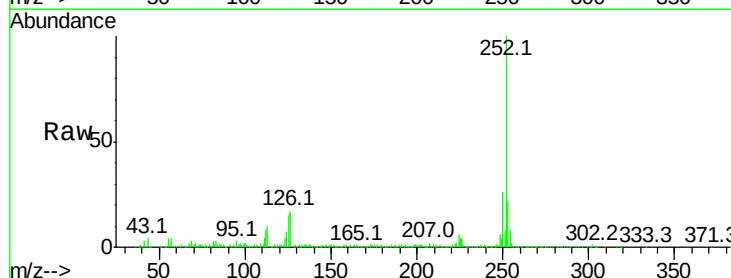
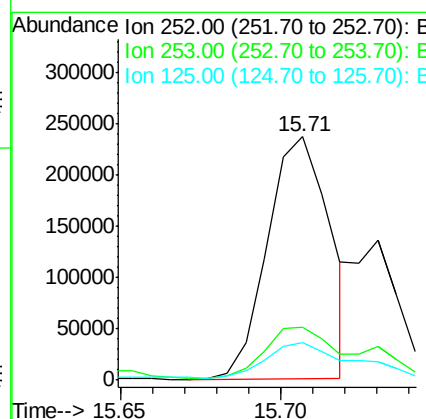
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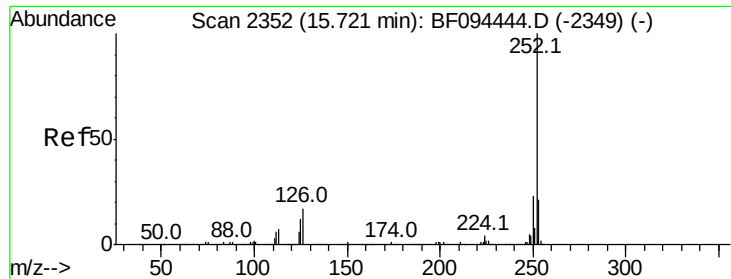
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5/1/2017 6:35:52 PM



#87  
Benzo(b)fluoranthene  
Concen: 37.55 ng m  
RT: 15.71 min Scan# 2341  
Delta R.T. 0.02 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.6  | 18.1  | 27.1  |
| 125     | 15.3  | 9.8   | 14.8  |





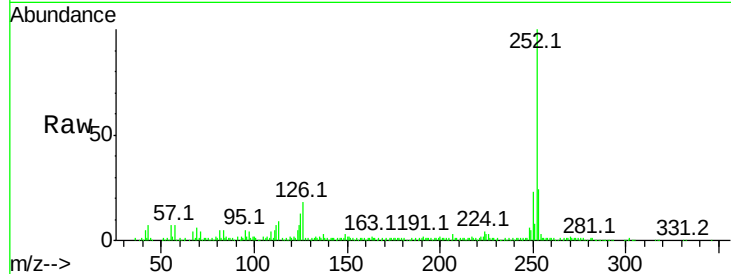
#88  
Benzo(k)fluoranthene  
Concen: 15.82 ng m  
RT: 15.73 min Scan# 2345  
Delta R.T. 0.01 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

Instrument :  
BNA\_F  
ClientSampleId :  
SOIL-CUTTINGS-DRUMS(COMP)

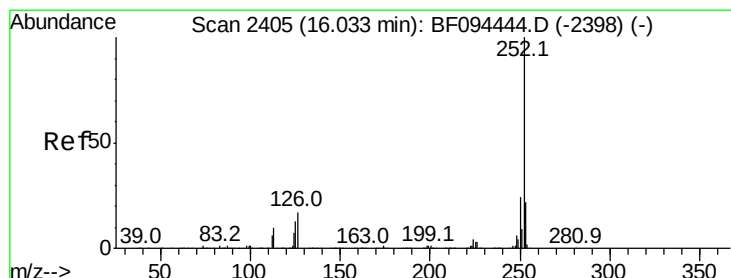
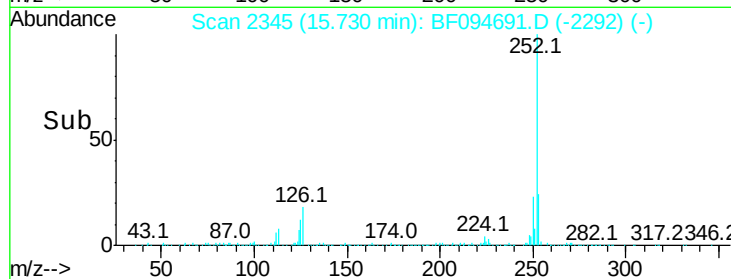
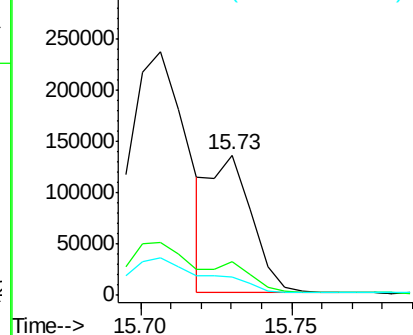
| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 252     | 100   | 127692 |       |       |
| 253     | 24.2  |        | 18.4  | 27.6  |
| 125     | 13.3  |        | 13.1  | 19.7  |

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5/1/2017 6:35:52 PM



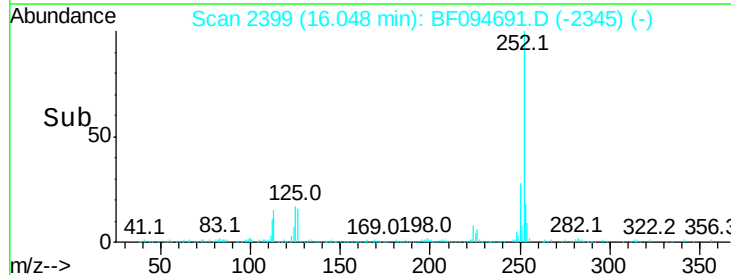
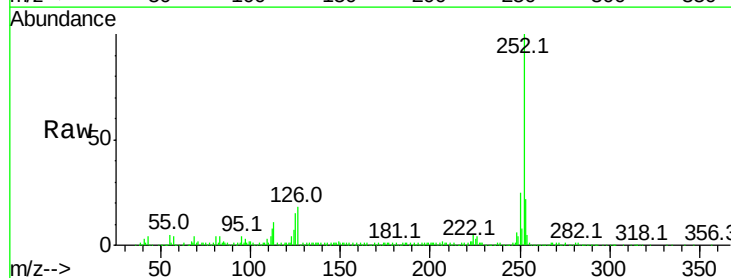
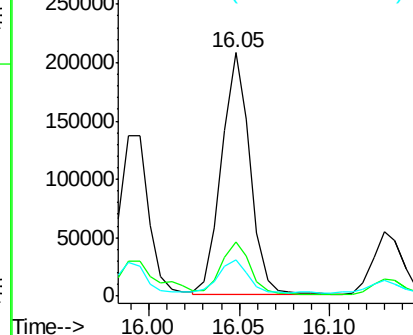
Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

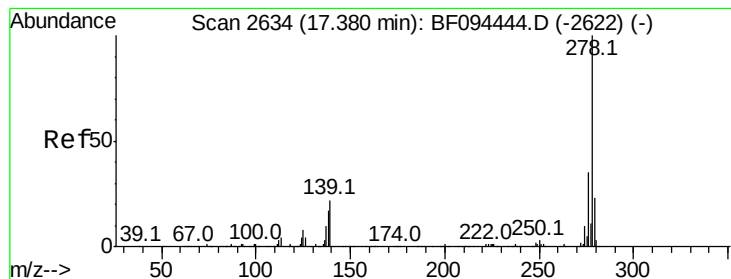


#89  
Benzo(a)pyrene  
Concen: 28.43 ng  
RT: 16.05 min Scan# 2399  
Delta R.T. 0.01 min  
Lab File: BF094691.D  
Acq: 28 Apr 2017 18:44

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 252     | 100   | 225682 |       |       |
| 253     | 22.2  |        | 17.5  | 26.3  |
| 125     | 14.7  |        | 11.0  | 16.4  |

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





#90

Dibenzo(a,h)anthracene

Concen: 5.14 ng

RT: 17.40 min Scan# 2629

Delta R.T. 0.02 min

Lab File: BF094691.D

Acq: 28 Apr 2017 18:44

Instrument :

BNA\_F

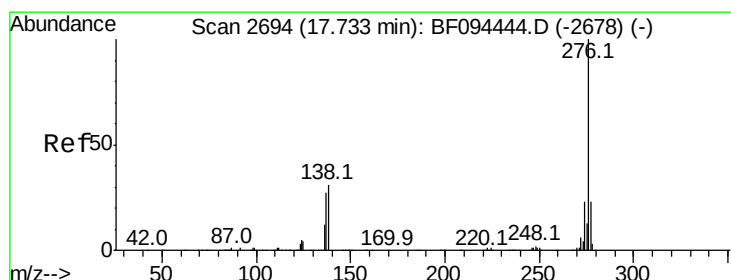
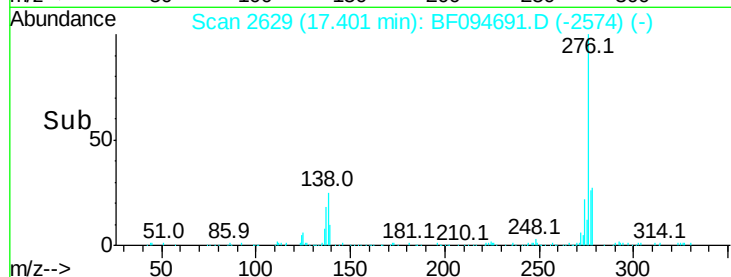
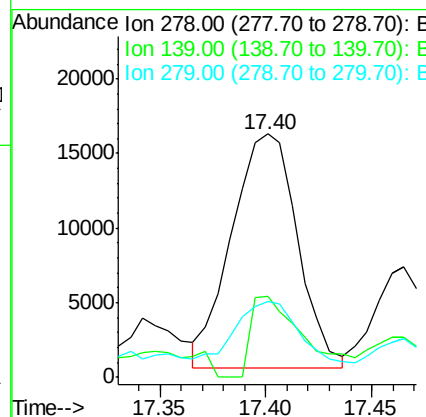
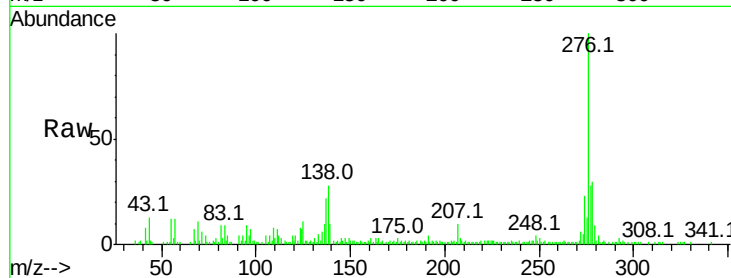
ClientSampleId :

SOIL-CUTTINGS-DRUMS(COMP)

|             |       |            |
|-------------|-------|------------|
| Tot Ion:278 | Resp: | 33850      |
| Ion Ratio   | Lower | Upper      |
| 278         | 100   |            |
| 139         | 33.1  | 16.6 24.8# |
| 279         | 31.4  | 19.3 28.9# |

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5/1/2017 6:35:52 PM



#91

Benzo(g,h,i)perylene

Concen: 16.56 ng

RT: 17.77 min Scan# 2692

Delta R.T. 0.04 min

Lab File: BF094691.D

Acq: 28 Apr 2017 18:44

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:276 | Resp: | 111113    |
| Ion Ratio   | Lower | Upper     |
| 276         | 100   |           |
| 277         | 24.8  | 18.6 28.0 |
| 138         | 28.7  | 25.4 38.0 |

