

Data Path : Z:\HPCHEM1\BNA M\DATA\BM111716\  
 Data File : BM007948.D  
 Acq On : 17 Nov 2016 20:17  
 Operator : UM/SJ  
 Sample : H5622-19 5X  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 A4WL6

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Quant Time: Nov 18 10:34:09 2016  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM102016.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Fri Nov 18 02:32:59 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.73  | 152  | 165596   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.50 | 136  | 619314   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.36 | 164  | 402701   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.11 | 188  | 760391   | 20.00 | ng/ul | 0.00     |
| 75) Chrysene-d12          | 21.30 | 240  | 942617   | 20.00 | ng/ul | 0.00     |
| 83) Perylene-d12          | 23.55 | 264  | 1002997  | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |      |       |      |
|--------------------------------|-------|-----|--------|------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.29  | 96  | 716    | 0.19 | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.92  | 99  | 13748  | 1.06 | ng/ul | 0.01 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.07  | 67  | 41133  | 5.39 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.27  | 132 | 40489  | 4.09 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.45  | 113 | 23501  | 2.34 | ng/ul | 0.01 |
| 19) Nitrobenzene-d5            | 8.89  | 128 | 26796  | 5.96 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.60  | 143 | 23807  | 4.94 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.15 | 165 | 42726  | 4.54 | ng/ul | 0.01 |
| 29) 4-Chloroaniline-d4         | 0.00  | 131 | 0d     | 0.00 | ng/ul |      |
| 43) Dimethylphthalate-d6       | 13.77 | 166 | 166160 | 6.01 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 14.05 | 160 | 195464 | 5.88 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.60 | 143 | 2049   | 0.46 | ng/ul | 0.01 |
| 57) Fluorene-d10               | 15.36 | 176 | 149645 | 6.19 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.51 | 200 | 19688  | 4.35 | ng/ul | 0.01 |
| 70) Anthracene-d10             | 17.21 | 188 | 224652 | 6.50 | ng/ul | 0.00 |
| 76) Pyrene-d10                 | 19.50 | 212 | 256972 | 6.60 | ng/ul | 0.00 |
| 87) Benzo(a)pyrene-d12         | 23.41 | 264 | 278849 | 6.30 | ng/ul | 0.01 |

## Target Compounds

|                                |       |     |         |       | Ovalue    |
|--------------------------------|-------|-----|---------|-------|-----------|
| 16) 4-Methylphenol             | 8.50  | 108 | 11946   | 1.15  | ng/ul 95  |
| 28) Naphthalene                | 10.55 | 128 | 831776  | 27.39 | ng/ul 98  |
| 34) 2-Methylnaphthalene        | 12.17 | 142 | 1648765 | 76.56 | ng/ul 99  |
| 49) Acenaphthene               | 14.42 | 153 | 109242  | 4.69  | ng/ul 96  |
| 53) Dibenzofuran               | 14.76 | 168 | 89699   | 2.69  | ng/ul# 61 |
| 58) Fluorene                   | 15.41 | 166 | 250567  | 9.39  | ng/ul# 89 |
| 69) Phenanthrene               | 17.15 | 178 | 1502855 | 36.92 | ng/ul 97  |
| 71) Anthracene                 | 17.24 | 178 | 319699m | 7.73  | ng/ul     |
| 74) Fluoranthene               | 19.17 | 202 | 231817  | 4.85  | ng/ul# 94 |
| 77) Pyrene                     | 19.54 | 202 | 1363160 | 27.90 | ng/ul 99  |
| 81) Bis(2-ethylhexyl)phthalate | 21.21 | 149 | 35958   | 1.38  | ng/ul# 71 |
| 82) Chrysene                   | 21.34 | 228 | 267817  | 5.50  | ng/ul# 62 |
| 88) Benzo(a)pyrene             | 23.45 | 252 | 159344  | 2.93  | ng/ul# 67 |
| 91) Benzo(g,h,i)perylene       | 26.51 | 276 | 145640  | 2.66  | ng/ul# 84 |

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

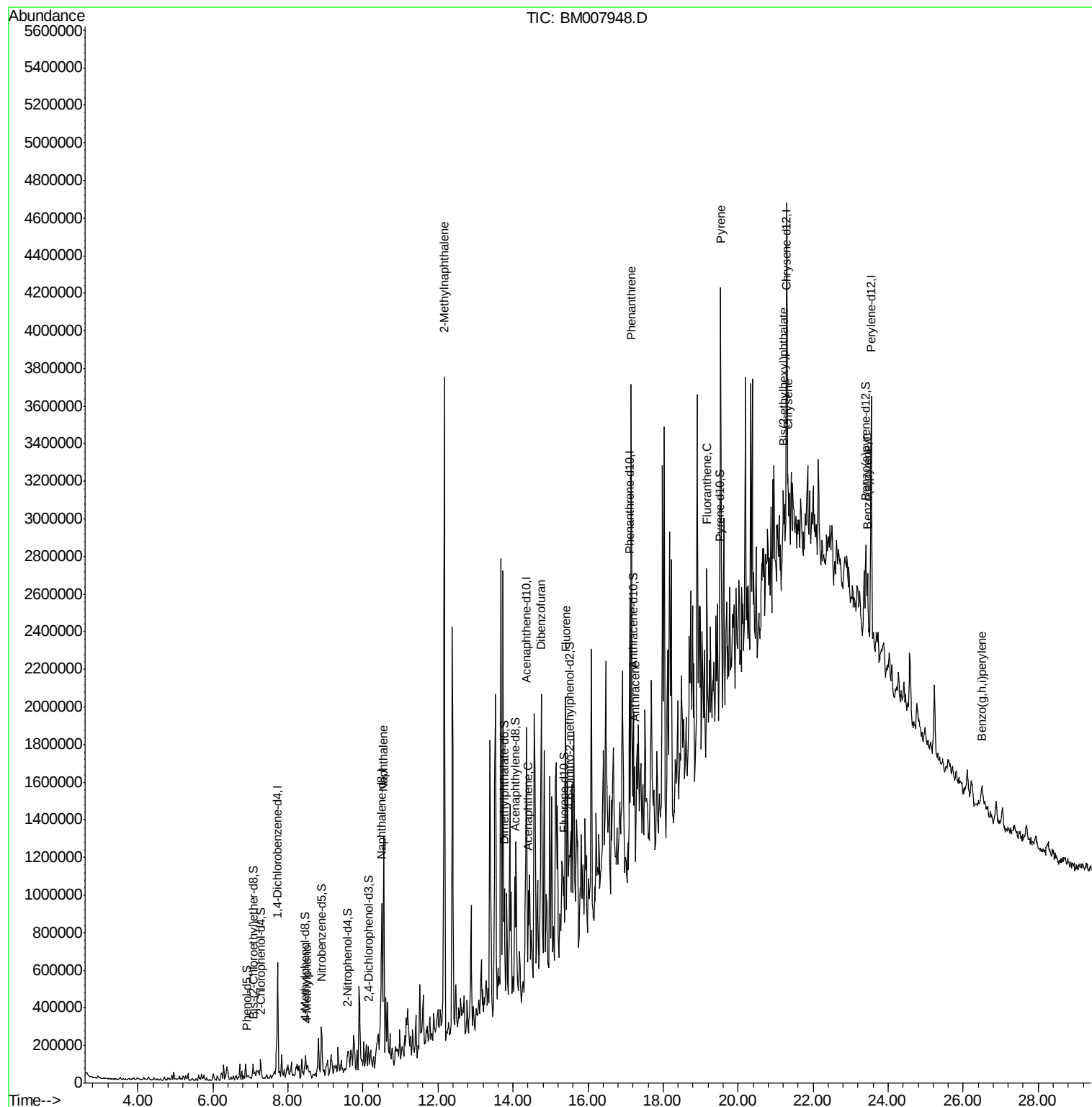
Data Path : Z:\HPCHEM1\BNA M\DATA\BM111716\  
Data File : BM007948.D  
Acq On : 17 Nov 2016 20:17  
Operator : UM/SJ  
Sample : H5622-19 5X  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

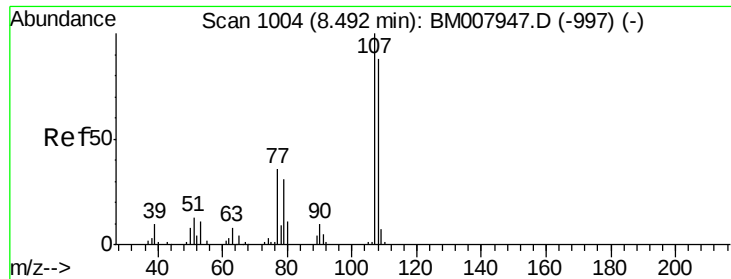
Instrument :  
BNA\_M  
ClientSampleId :  
A4WL6

Quant Time: Nov 18 10:34:09 2016  
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM102016.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Nov 18 02:32:59 2016  
Response via : Initial Calibration

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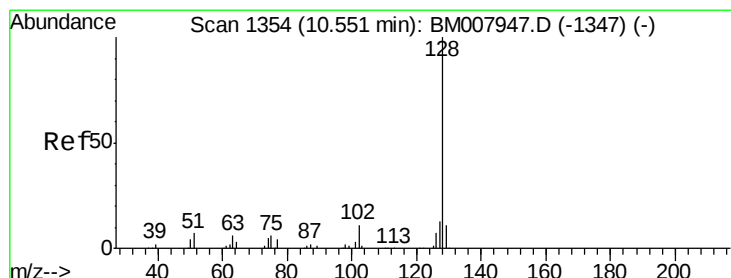
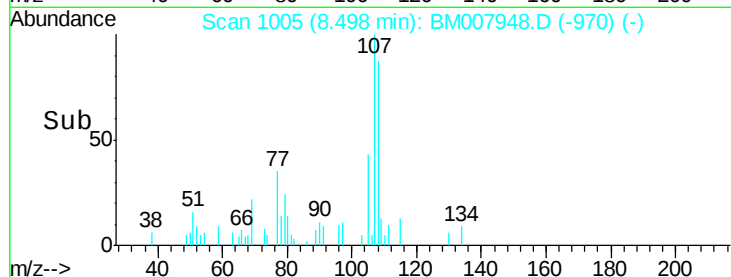
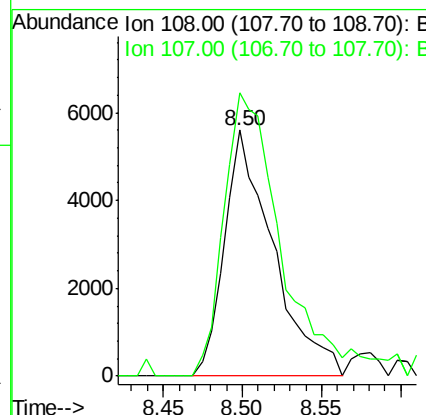
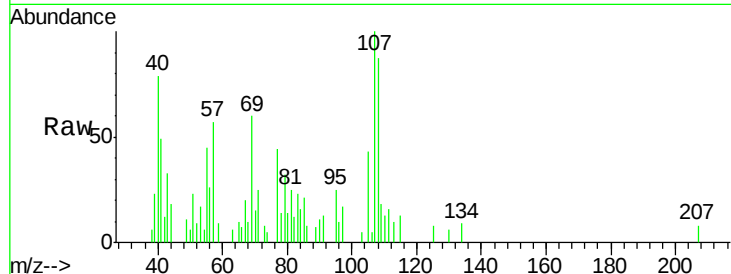
#16  
4-Methylphenol  
Concen: 1.15 ng/ul  
RT: 8.50 min Scan# 1005  
Delta R.T. 0.01 min  
Lab File: BM007948.D  
Acq: 17 Nov 2016 20:17

Instrument :  
BNA\_M  
ClientSampleId :  
A4WL6

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 108     | 100   |       |       |
| 107     | 115.1 | 87.8  | 131.8 |

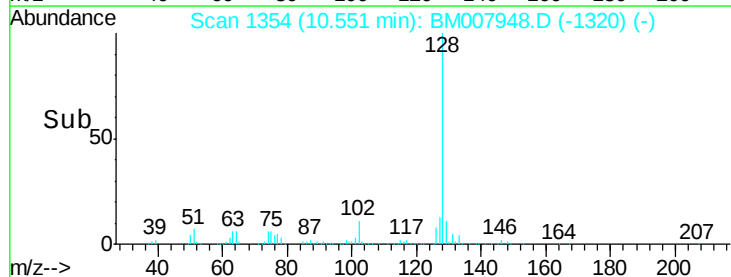
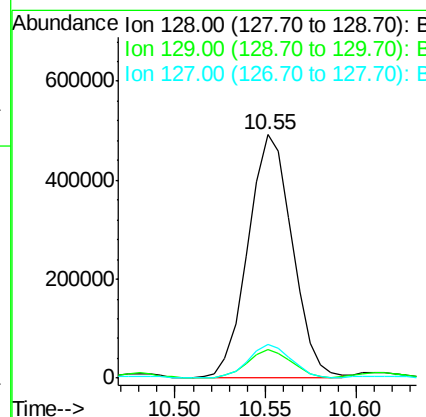
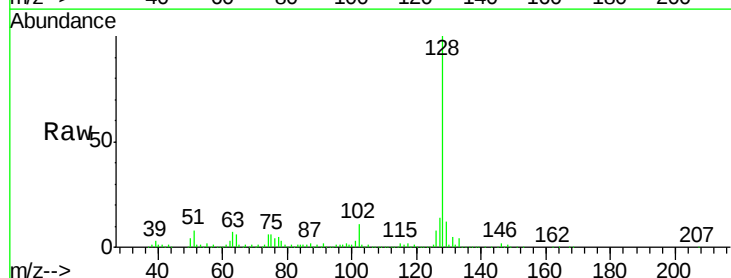
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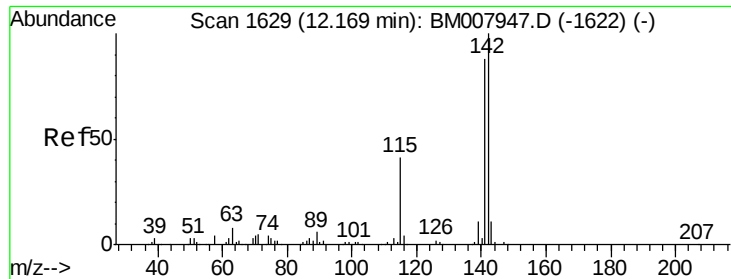
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#28  
Naphthalene  
Concen: 27.39 ng/ul  
RT: 10.55 min Scan# 1354  
Delta R.T. -0.00 min  
Lab File: BM007948.D  
Acq: 17 Nov 2016 20:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 11.8  | 8.6   | 12.8  |
| 127     | 13.7  | 10.6  | 15.8  |





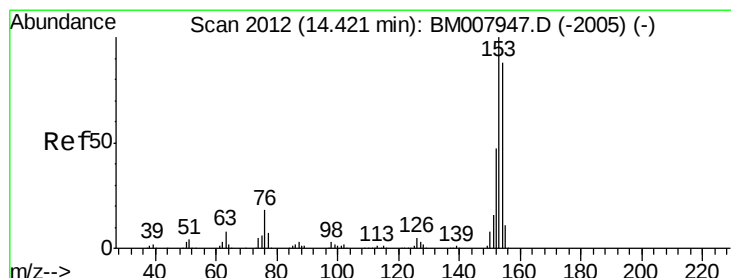
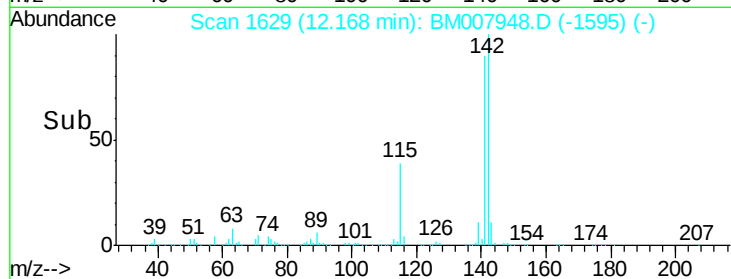
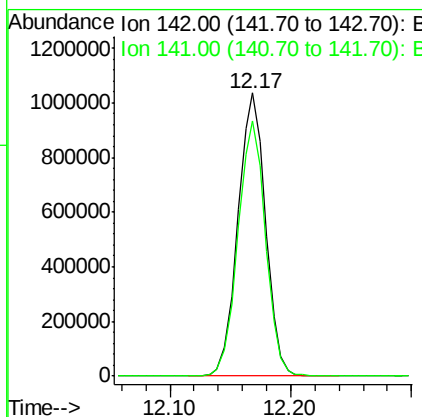
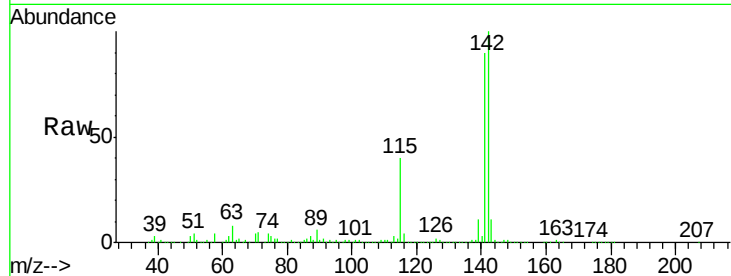
#34  
2-Methylnaphthalene  
Concen: 76.56 ng/ul  
RT: 12.17 min Scan# 1629  
Delta R.T. -0.00 min  
Lab File: BM007948.D  
Acq: 17 Nov 2016 20:17

Instrument :  
BNA\_M  
ClientSampled :  
A4WL6

Tot Ion:142 Resp: 1648765  
Ion Ratio Lower Upper  
142 100  
141 90.0 71.3 106.9

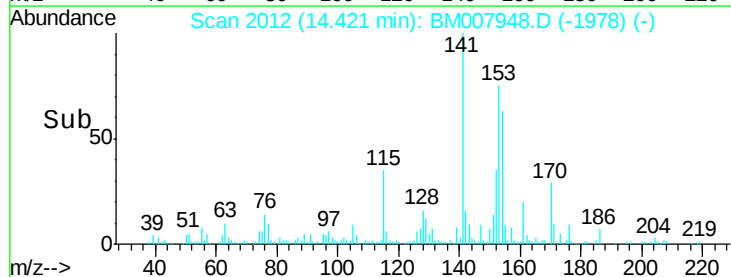
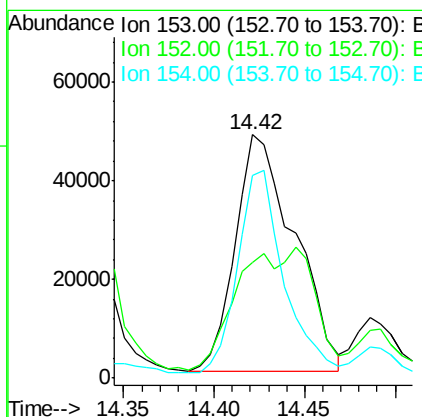
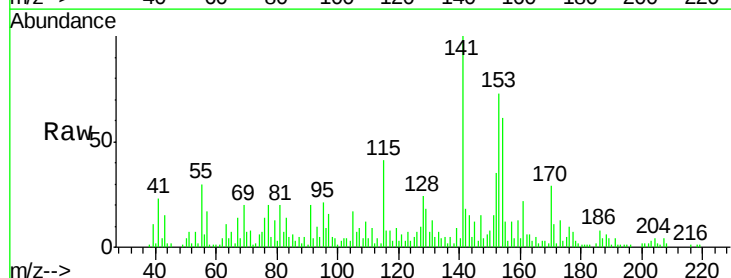
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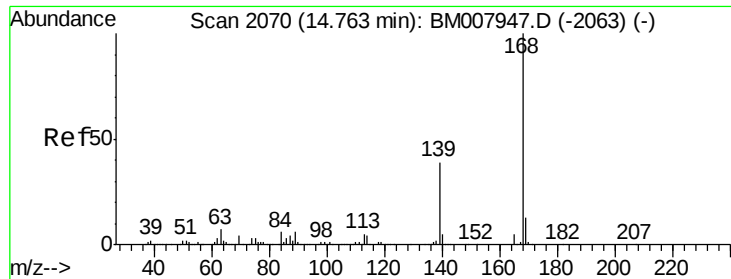
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#49  
Acenaphthene  
Concen: 4.69 ng/ul  
RT: 14.42 min Scan# 2012  
Delta R.T. -0.00 min  
Lab File: BM007948.D  
Acq: 17 Nov 2016 20:17

Tgt Ion:153 Resp: 109242  
Ion Ratio Lower Upper  
153 100  
152 47.6 37.8 56.6  
154 83.5 71.4 107.0





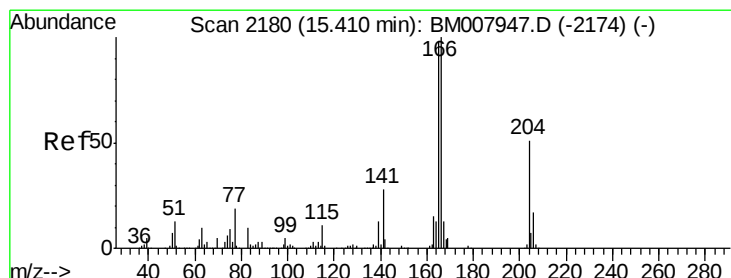
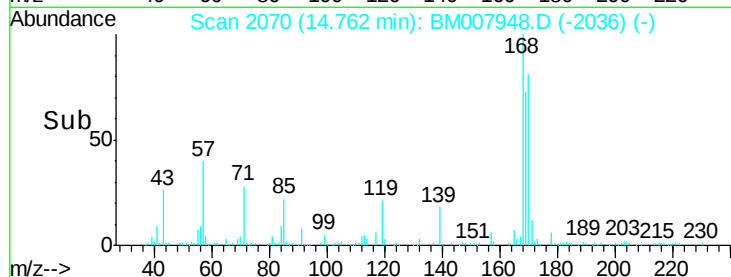
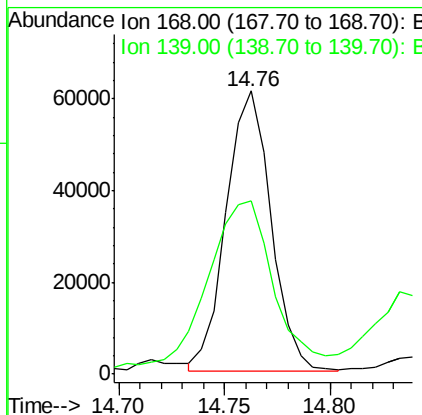
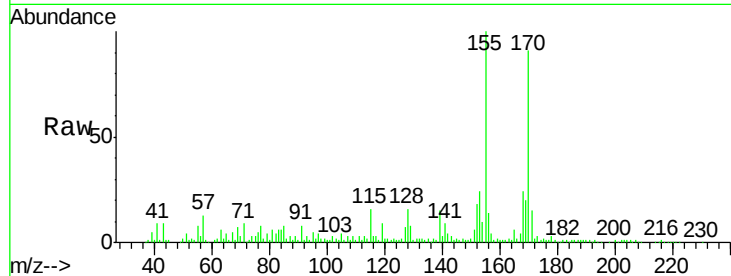
#53  
Dibenzenofuran  
Concen: 2.69 ng/ul  
RT: 14.76 min Scan# 2070  
Delta R.T. -0.00 min  
Lab File: BM007948.D  
Acq: 17 Nov 2016 20:17

Instrument :  
BNA\_M  
ClientSampleId :  
A4WL6

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 168     | 100   |       |       |
| 139     | 61.2  | 30.1  | 45.1# |

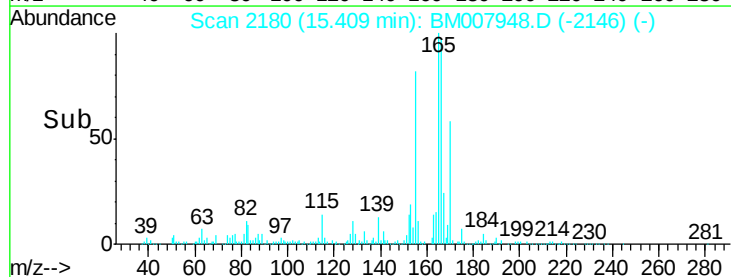
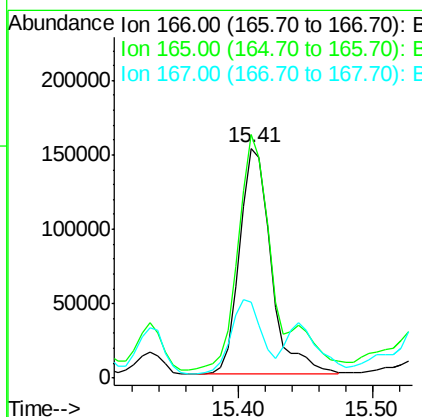
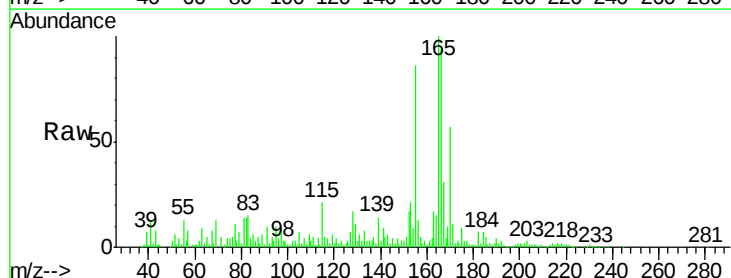
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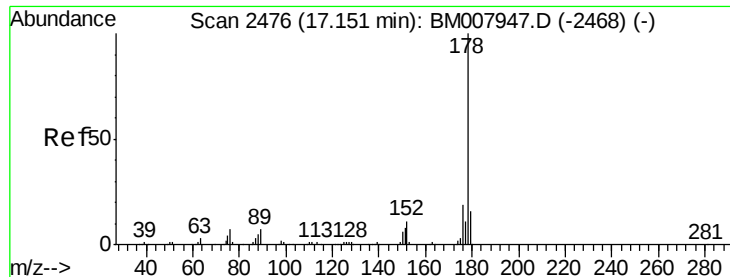
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#58  
Fluorene  
Concen: 9.39 ng/ul  
RT: 15.41 min Scan# 2180  
Delta R.T. -0.00 min  
Lab File: BM007948.D  
Acq: 17 Nov 2016 20:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 106.1 | 79.9  | 119.9 |
| 167     | 32.9  | 10.5  | 15.7# |





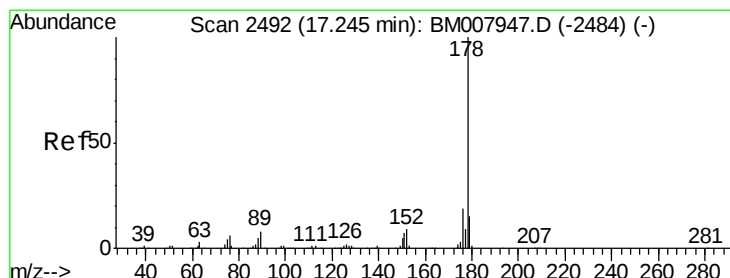
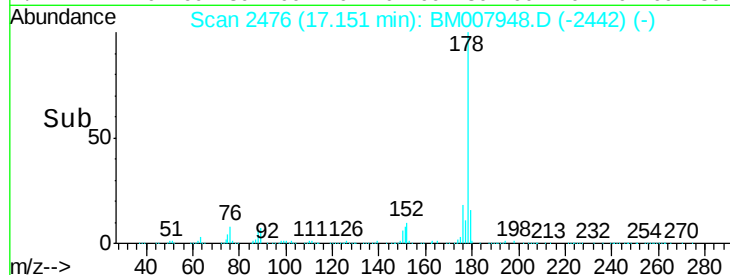
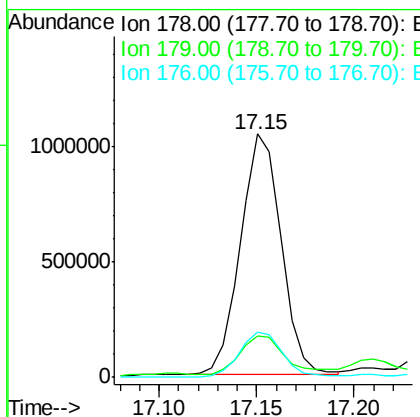
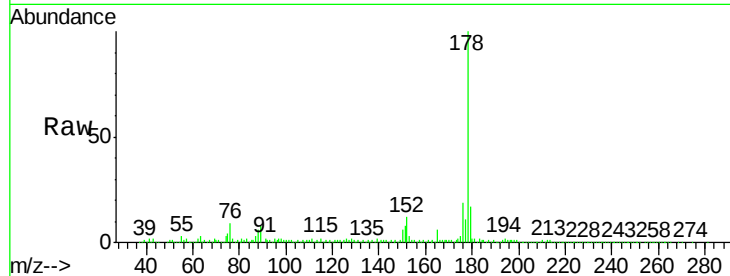
#69  
Phenanthrene  
Concen: 36.92 ng/ul  
RT: 17.15 min Scan# 2476  
Delta R.T. -0.00 min  
Lab File: BM007948.D  
Acq: 17 Nov 2016 20:17

Instrument :  
BNA\_M  
ClientSampleId :  
A4WL6

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 17.3  | 12.2  | 18.2  |
| 176     | 18.5  | 15.1  | 22.7  |

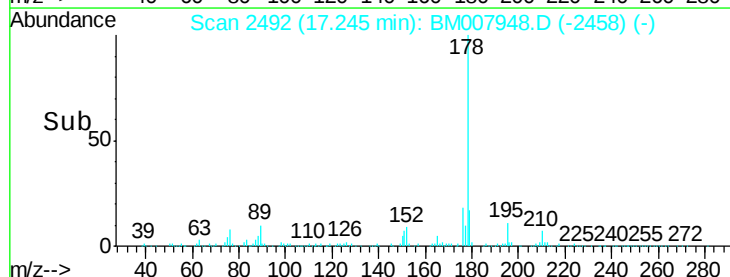
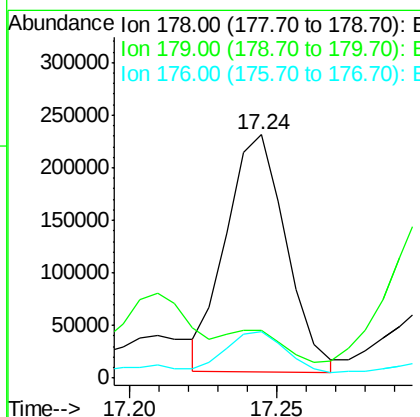
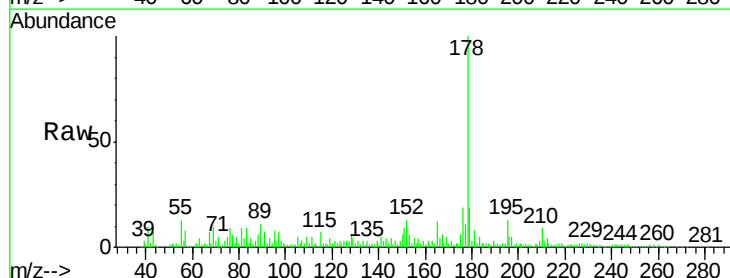
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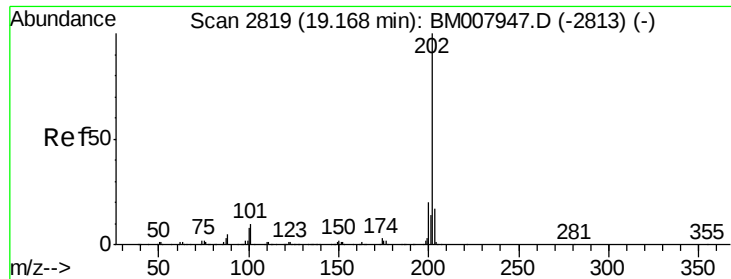
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#71  
Anthracene  
Concen: 7.73 ng/ul m  
RT: 17.24 min Scan# 2492  
Delta R.T. -0.00 min  
Lab File: BM007948.D  
Acq: 17 Nov 2016 20:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 19.4  | 12.1  | 18.1# |
| 176     | 19.0  | 14.5  | 21.7  |





#74

Fluoranthene

Concen: 4.85 ng/ul

RT: 19.17 min Scan# 2820

Delta R.T. 0.01 min

Lab File: BM007948.D

Acq: 17 Nov 2016 20:17

Instrument :

BNA\_M

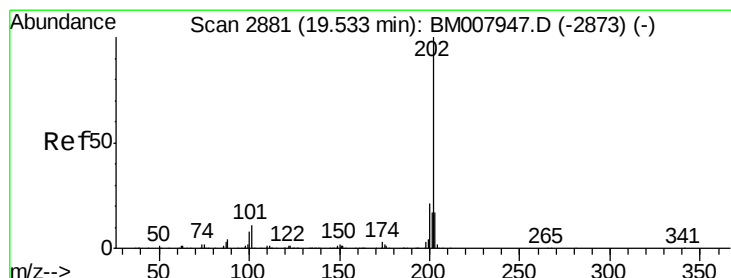
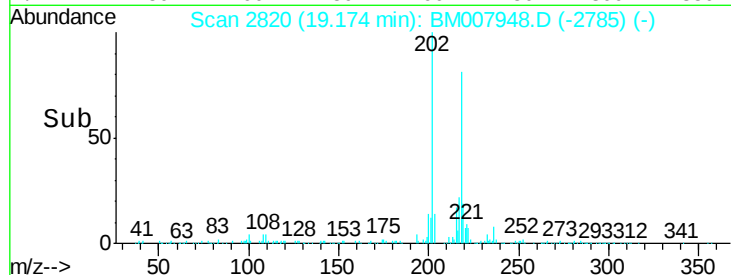
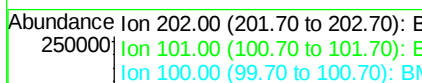
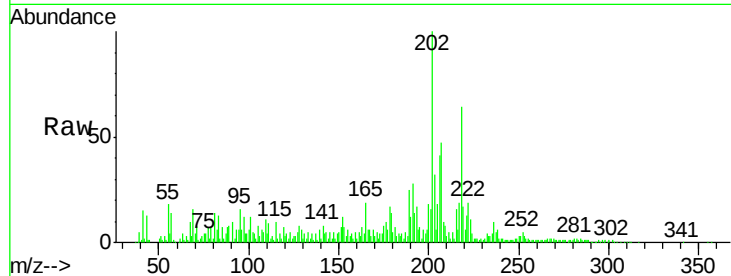
ClientSampleId :

A4WL6

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 202     | 100  |       | 231817 |       |       |
| 101     | 12.1 | 6.9   | 10.3#  |       |       |
| 100     | 6.4  | 5.4   | 8.0    |       |       |

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#77

Pyrene

Concen: 27.90 ng/ul

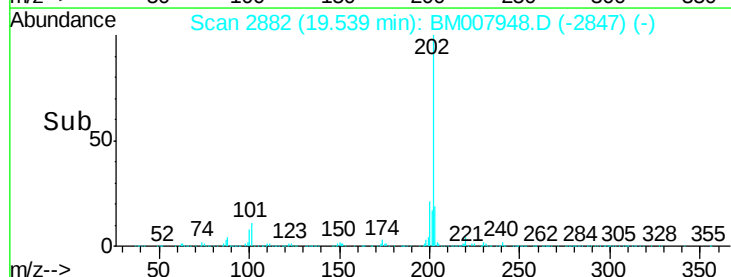
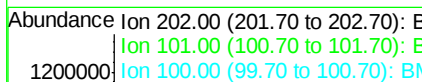
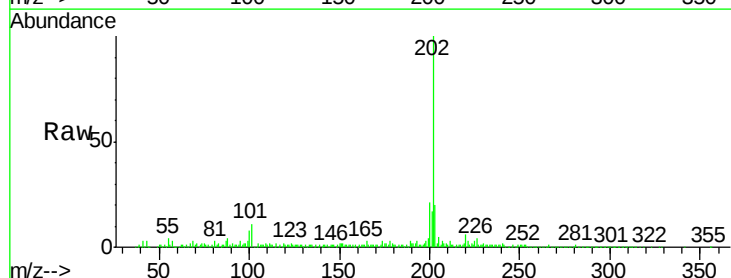
RT: 19.54 min Scan# 2882

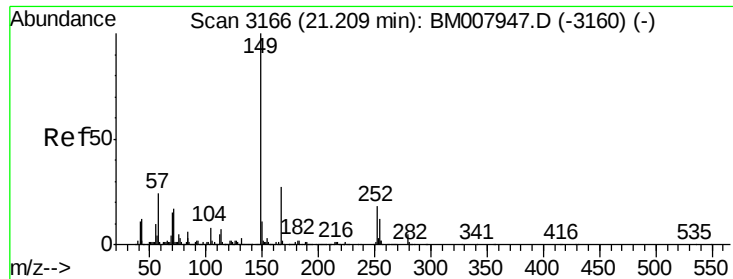
Delta R.T. 0.01 min

Lab File: BM007948.D

Acq: 17 Nov 2016 20:17

| Tgt Ion | Ion  | Ratio | Resp    | Lower | Upper |
|---------|------|-------|---------|-------|-------|
| 202     | 100  |       | 1363160 |       |       |
| 101     | 11.1 | 8.4   | 12.6    |       |       |
| 100     | 8.4  | 6.9   | 10.3    |       |       |





#81

Bis(2-ethylhexyl)phthalate

Concen: 1.38 ng/ul

RT: 21.21 min Scan# 3166

Delta R.T. -0.00 min

Lab File: BM007948.D

Acq: 17 Nov 2016 20:17

Instrument :

BNA\_M

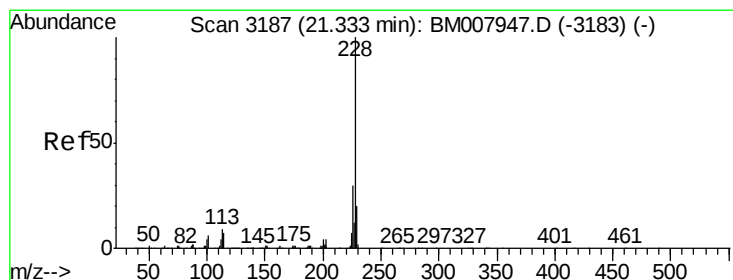
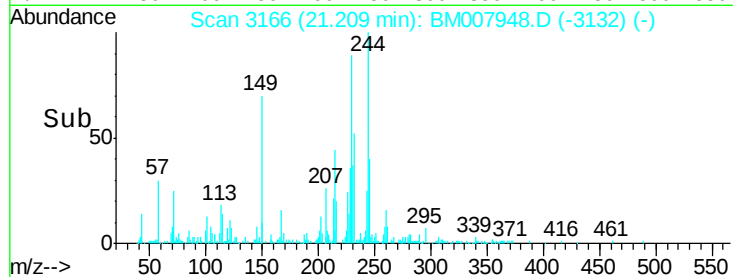
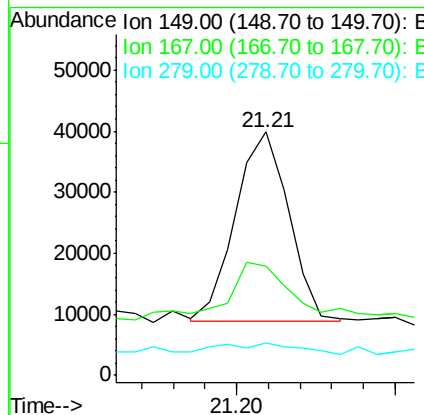
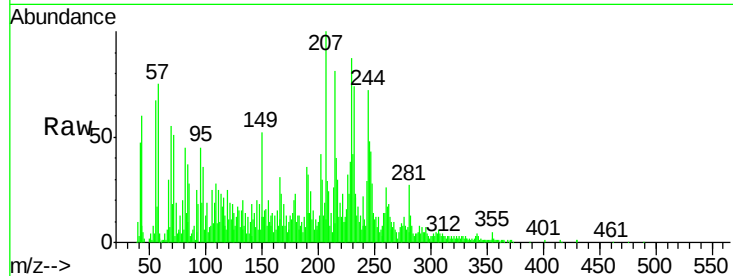
ClientSampleId :

A4WL6

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 149     | 100   |       |       |
| 167     | 44.7  | 23.2  | 34.8# |
| 279     | 13.3  | 4.1   | 6.1#  |

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#82

Chrysene

Concen: 5.50 ng/ul

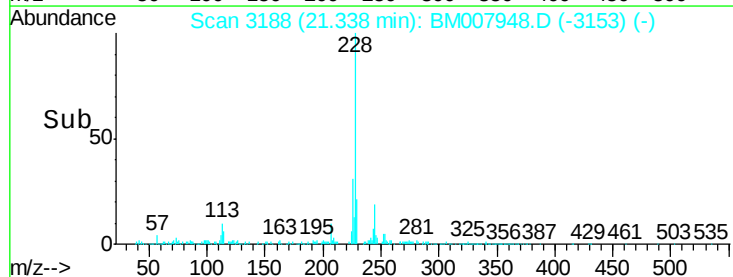
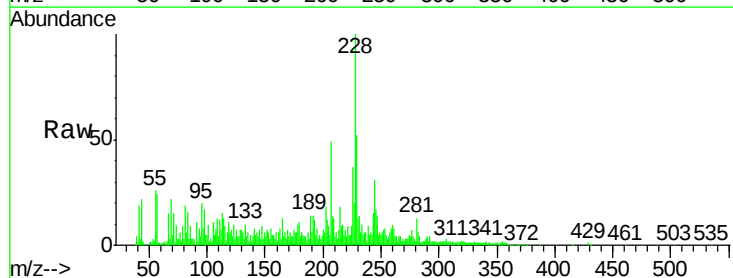
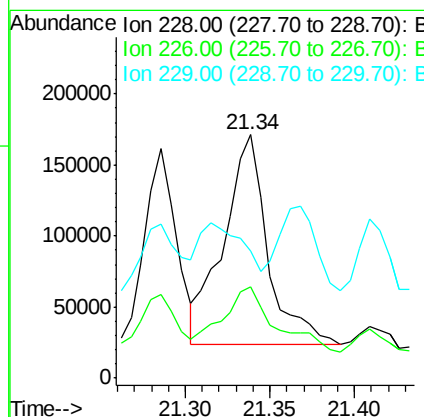
RT: 21.34 min Scan# 3188

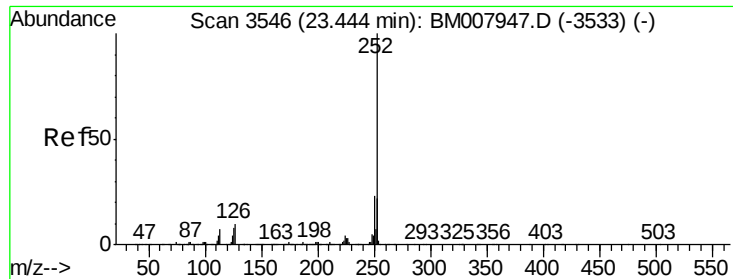
Delta R.T. 0.01 min

Lab File: BM007948.D

Acq: 17 Nov 2016 20:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 37.5  | 23.4  | 35.2# |
| 229     | 52.3  | 15.5  | 23.3# |





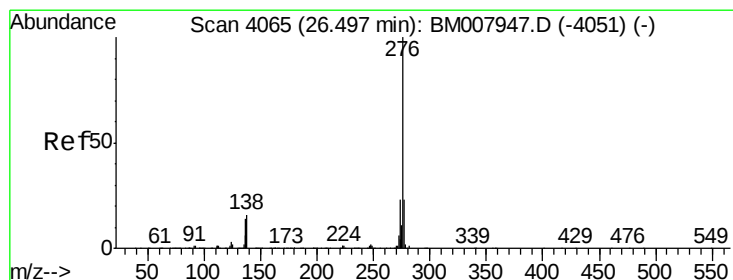
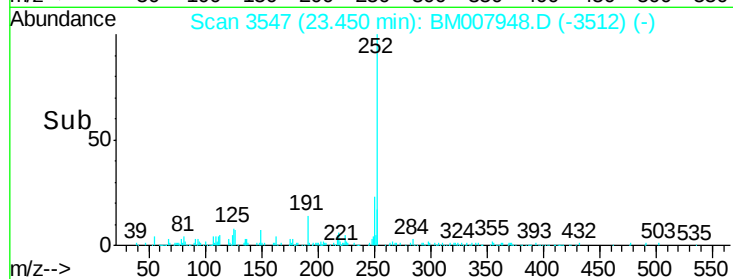
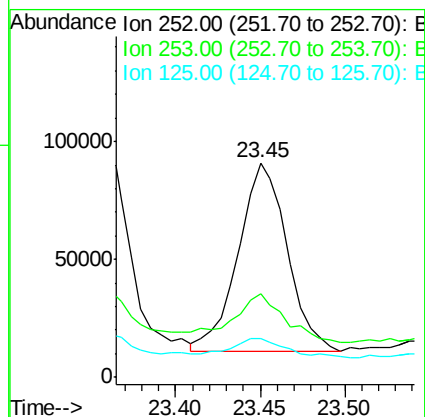
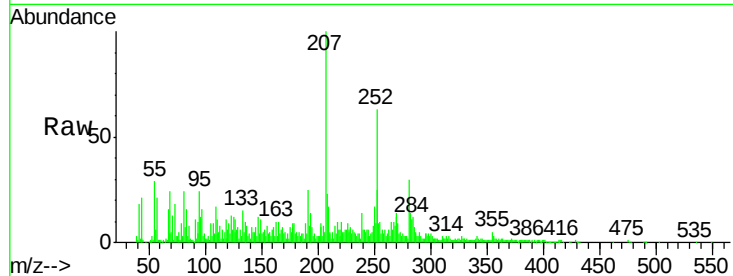
#88  
Benzo(a)pyrene  
Concen: 2.93 ng/ul  
RT: 23.45 min Scan# 3547  
Delta R.T. 0.01 min  
Lab File: BM007948.D  
Acq: 17 Nov 2016 20:17

Instrument :  
BNA\_M  
ClientSampleId :  
A4WL6

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 38.9  | 17.7  | 26.5# |
| 125     | 18.4  | 6.6   | 9.8#  |

Manual Integrations  
APPROVED

umangi  
11/18/2016 5:23:48 PM



#91  
Benzo(g,h,i)perylene  
Concen: 2.66 ng/ul  
RT: 26.51 min Scan# 4067  
Delta R.T. 0.01 min  
Lab File: BM007948.D  
Acq: 17 Nov 2016 20:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 21.9  | 13.5  | 20.3# |
| 277     | 33.8  | 19.3  | 28.9# |

