

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM072315\  
Data File : BM002023.D  
Acq On : 23 Jul 2015 19:12  
Operator : TP/UM  
Sample : G3000-18RE

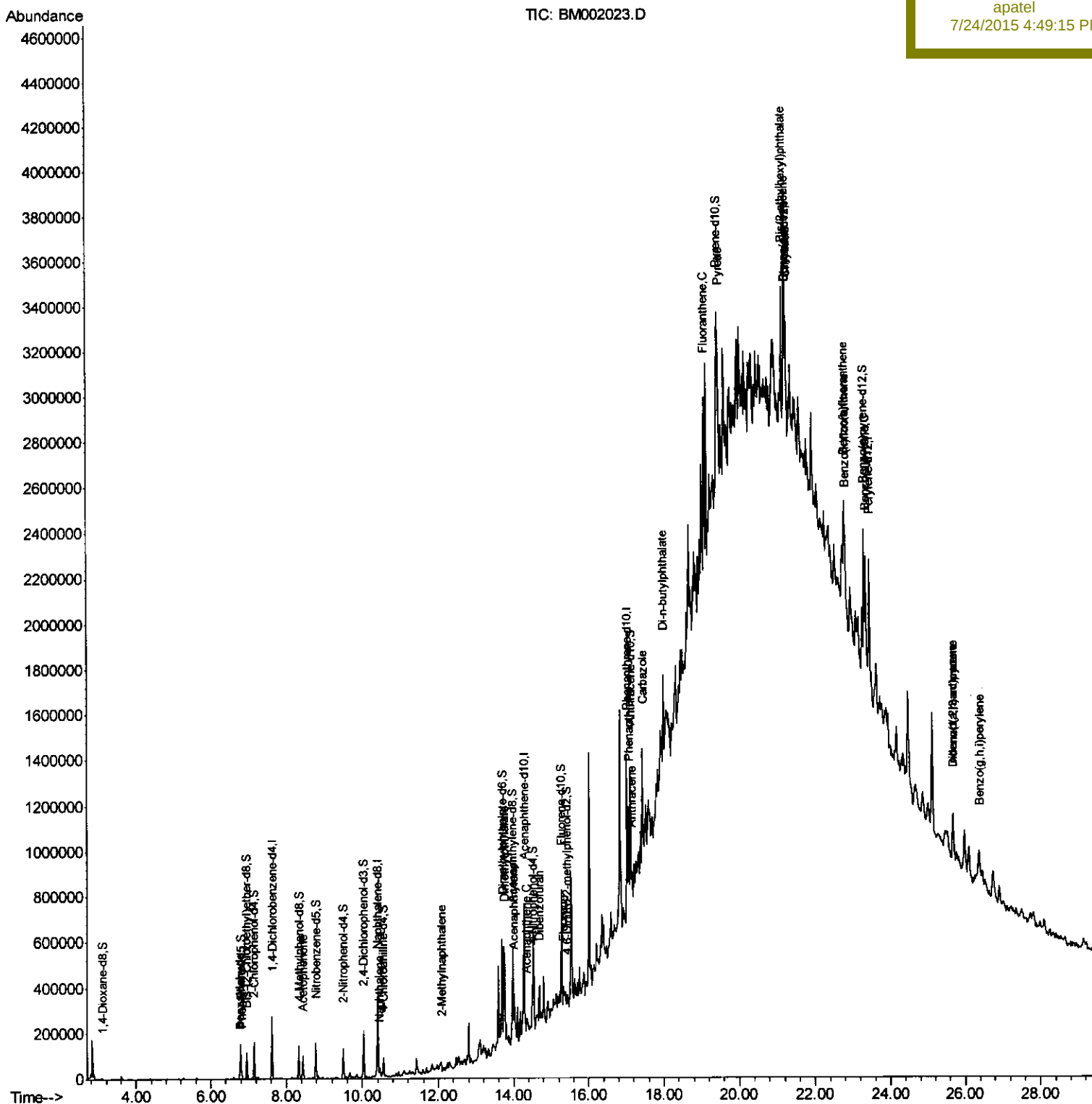
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 24 03:26:06 2015  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM071315.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Jul 24 01:29:30 2015  
Response via : Initial Calibration

Instrument :  
BNA\_M  
ClientSampled :  
C02J2RE

Manual Integrations  
APPROVED

apatel  
7/24/2015 4:49:15 PM



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM072315\  
Data File : BM002023.D  
Acq On : 23 Jul 2015 19:12  
Operator : TP/UM  
Sample : G3000-18RE

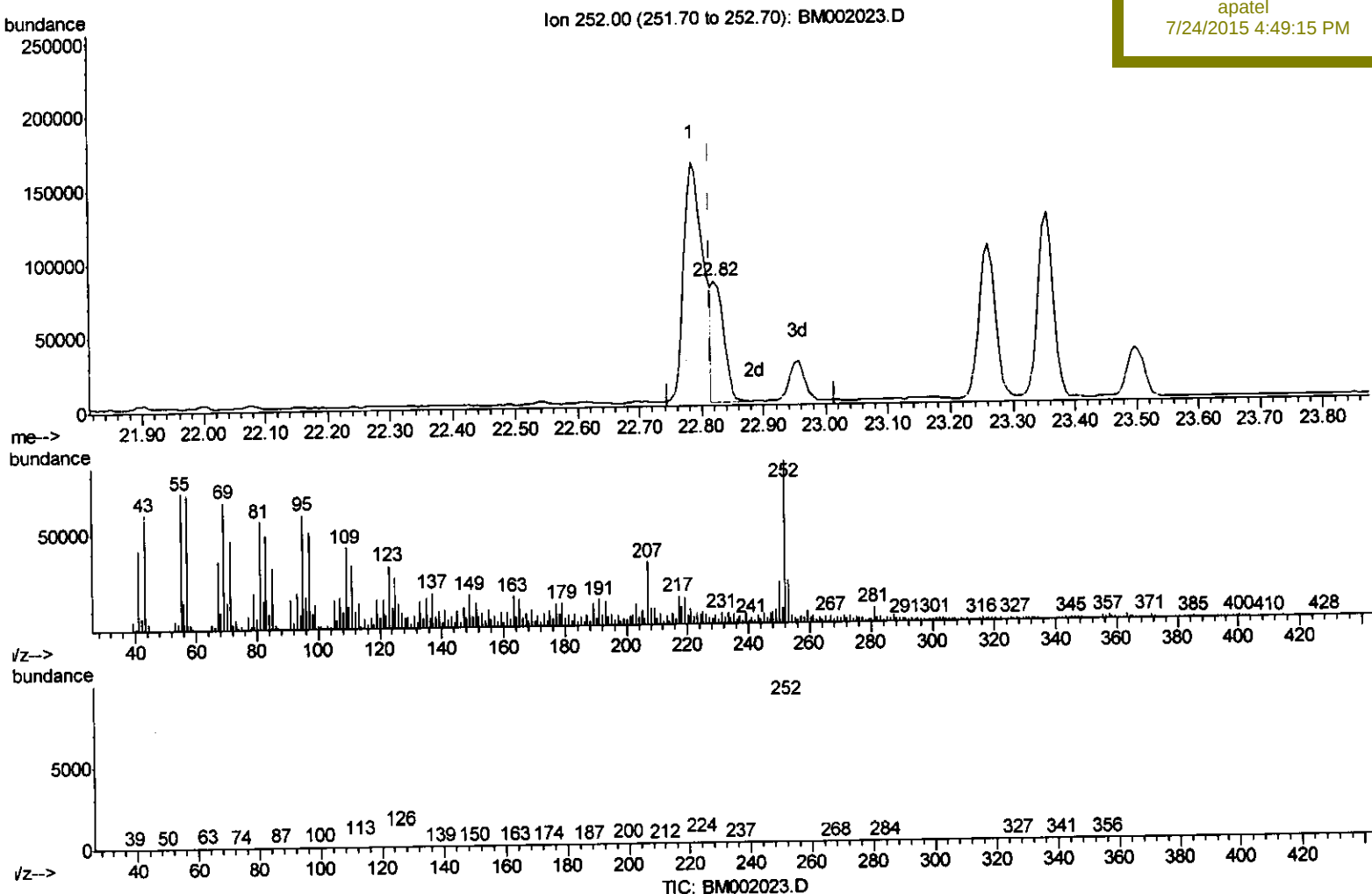
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 24 03:23:49 2015  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM071315.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Jul 24 01:29:30 2015  
Response via : Initial Calibration

Instrument :  
BNA\_M  
ClientSampleId :  
C02J2RE

Manual Integrations  
APPROVED

apatel  
7/24/2015 4:49:15 PM



(88) Benzo(k)fluoranthene

22.821min (+0.006) 4.42ng/ul m

response 104789

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 252.00 | 100   | 100    |
| 253.00 | 21.80 | 27.00# |
| 125.00 | 6.40  | 31.52# |
| 0.00   | 0.00  | 0.00   |

T. P  
07/31/2015

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM072315\  
Data File : BM002023.D  
Acq On : 23 Jul 2015 19:12  
Operator : TP/UM  
Sample : G3000-18RE

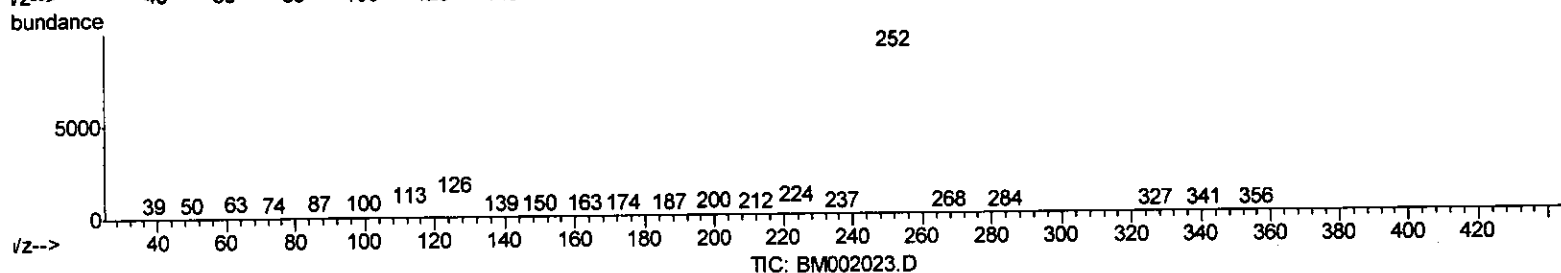
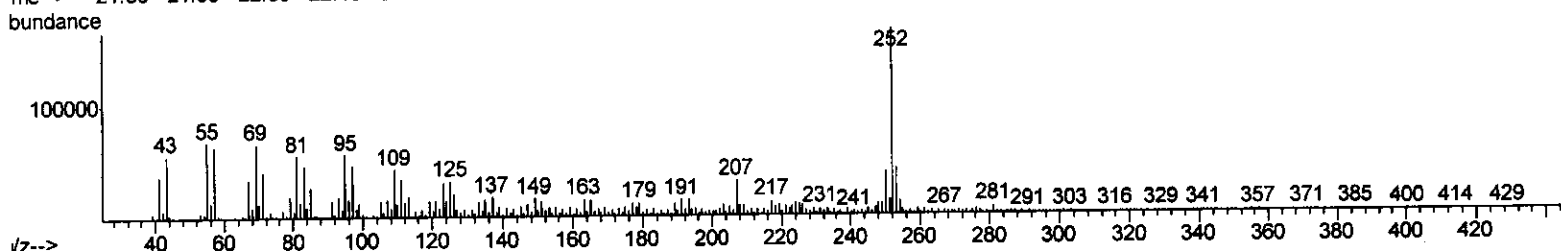
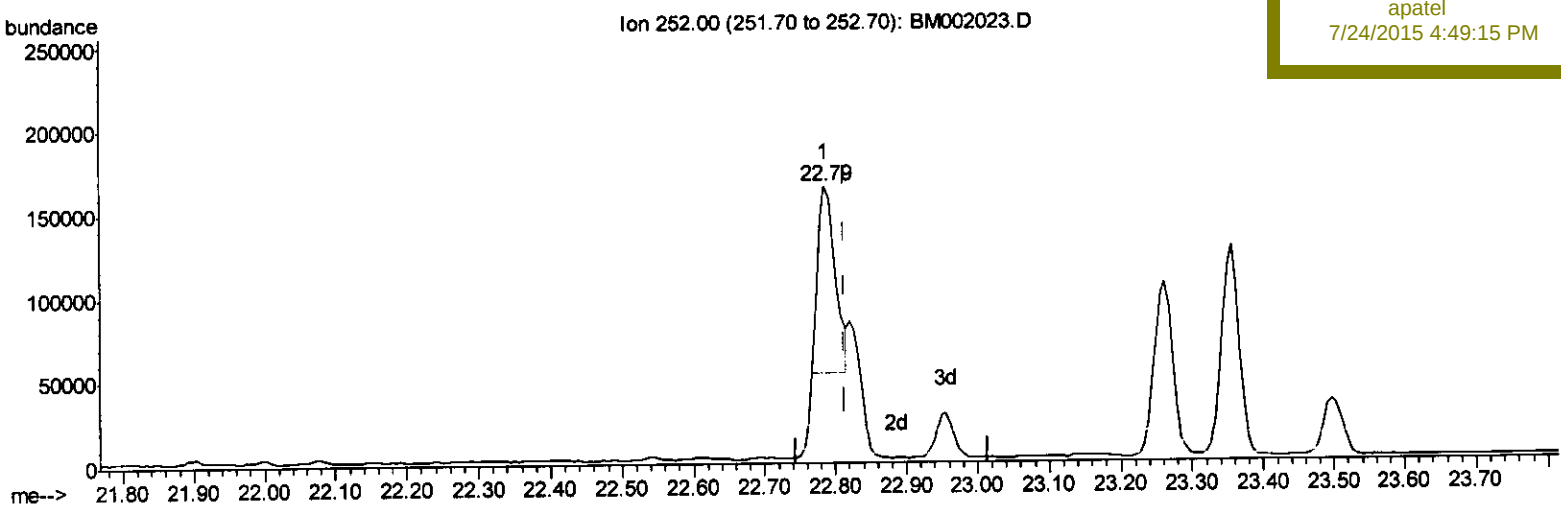
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 24 03:23:49 2015  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM071315.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Jul 24 01:29:30 2015  
Response via : Initial Calibration

Instrument :  
BNA\_M  
ClientSampleId :  
C02J2RE

Manual Integrations  
APPROVED

apatel  
7/24/2015 4:49:15 PM



(88) Benzo(k)fluoranthene

22.786min (-0.030) 8.12ng/ul

response 192303

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 252.00 | 100   | 100    |
| 253.00 | 21.80 | 25.26  |
| 125.00 | 6.40  | 19.57# |
| 0.00   | 0.00  | 0.00   |

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM072315\  
Data File : BM002023.D  
Acq On : 23 Jul 2015 19:12  
Operator : TP/UM  
Sample : G3000-18RE

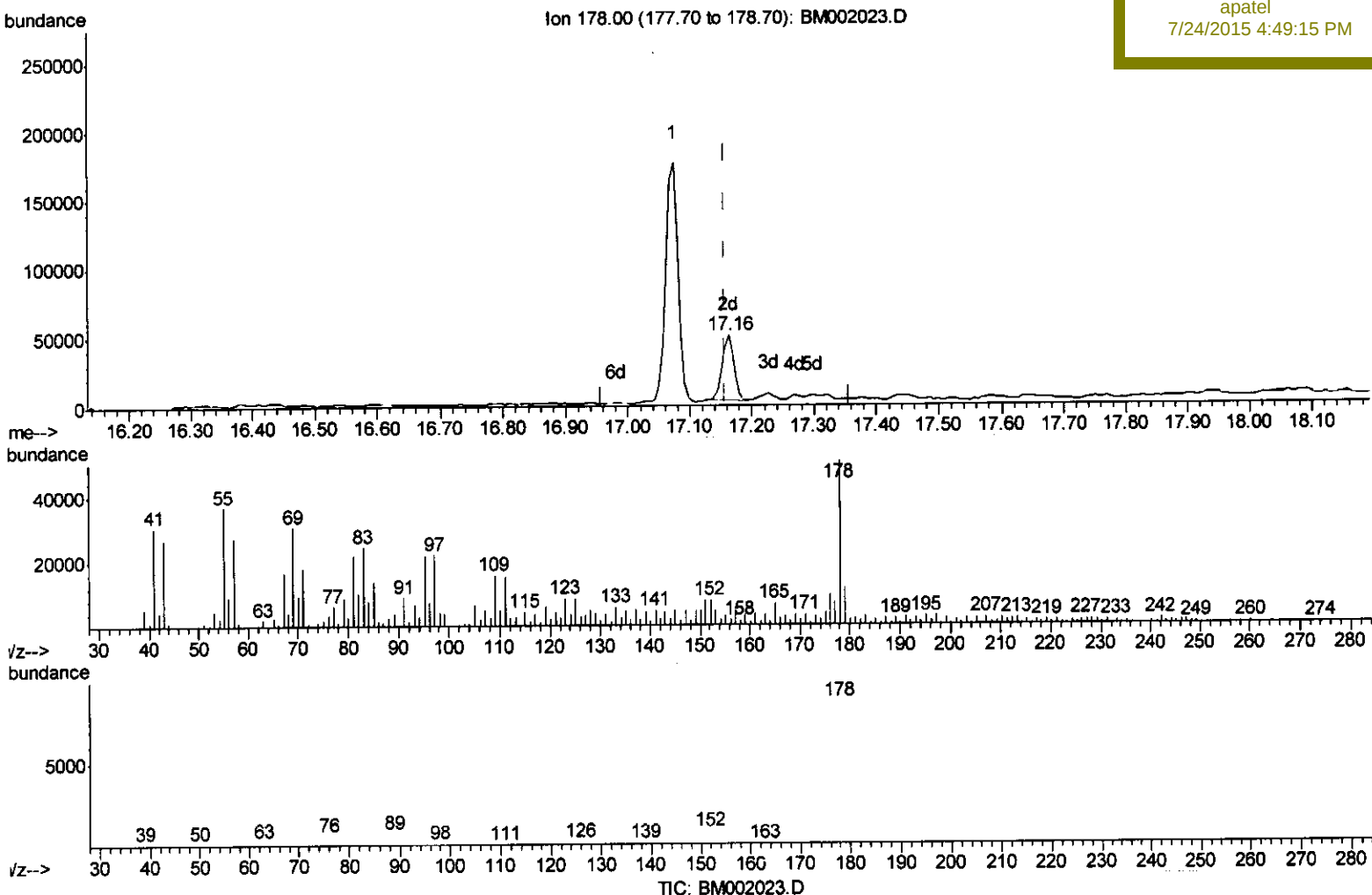
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 24 03:23:49 2015  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM071315.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Jul 24 01:29:30 2015  
Response via : Initial Calibration

Instrument :  
BNA\_M  
ClientSampleId :  
C02J2RE

Manual Integrations  
APPROVED

apatel  
7/24/2015 4:49:15 PM



(71) Anthracene

17.162min (+0.006) 3.24ng/ul m

response 59528

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 178.00 | 100   | 100    |
| 179.00 | 15.50 | 23.08# |
| 176.00 | 17.90 | 19.11  |
| 0.00   | 0.00  | 0.00   |

T.P  
07/31/2015

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM072315\  
Data File : BM002023.D  
Acq On : 23 Jul 2015 19:12  
Operator : TP/UM  
Sample : G3000-18RE

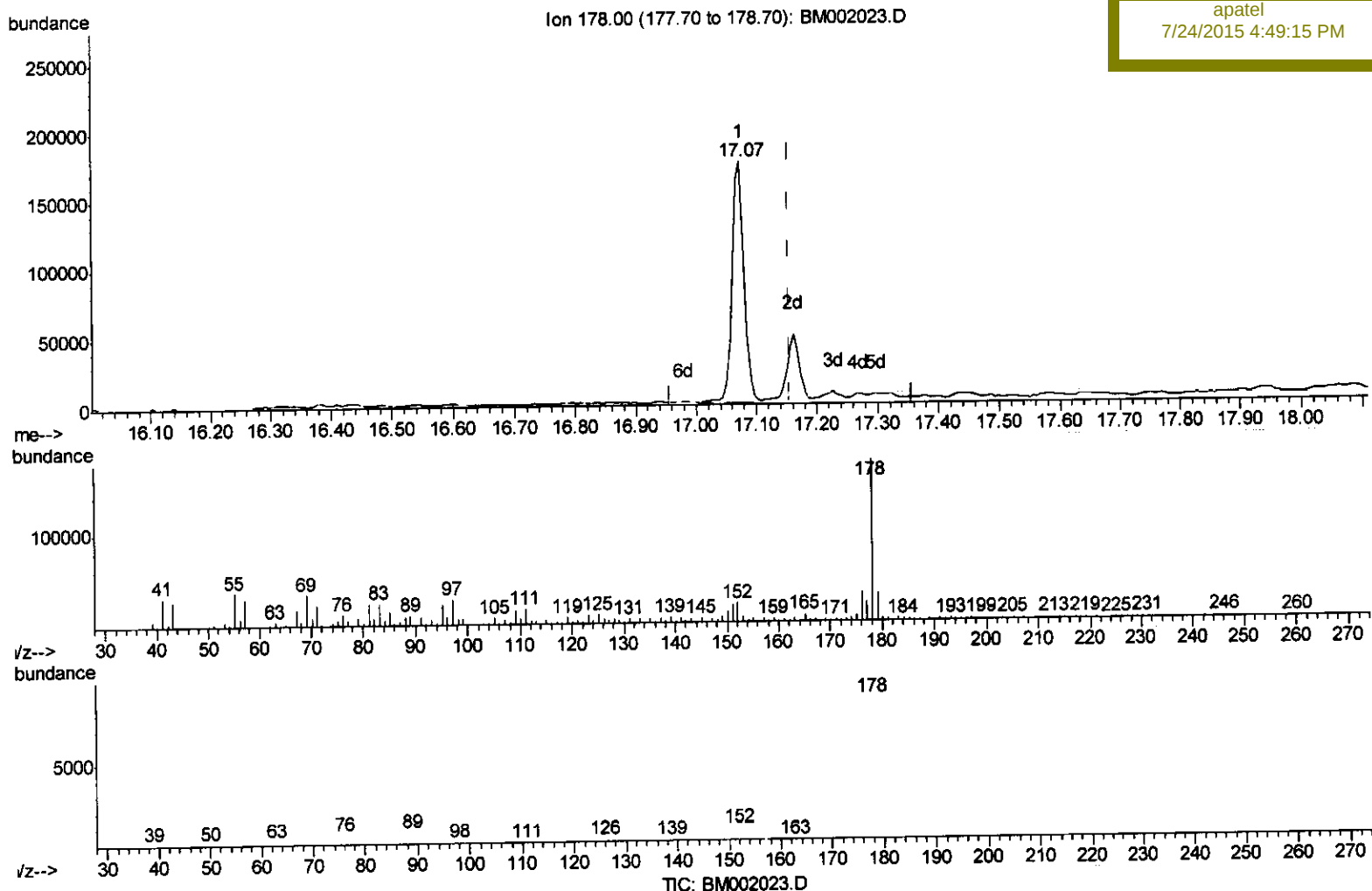
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 24 03:23:49 2015  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM071315.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Jul 24 01:29:30 2015  
Response via : Initial Calibration

Instrument :  
BNA\_M  
ClientSampleId :  
C02J2RE

Manual Integrations  
APPROVED

apatel  
7/24/2015 4:49:15 PM



(71) Anthracene

17.074min (-0.082) 13.25ng/ul

response 243303

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 178.00 | 100   | 100   |
| 179.00 | 15.50 | 17.58 |
| 176.00 | 17.90 | 18.05 |
| 0.00   | 0.00  | 0.00  |

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM072315\  
Data File : BM002023.D  
Acq On : 23 Jul 2015 19:12  
Operator : TP/UM  
Sample : G3000-18RE  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 24 03:26:06 2015  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM071315.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Jul 24 01:29:30 2015  
Response via : Initial Calibration

Instrument :  
BNA\_M  
ClientSampleId :  
C02J2RE

Manual Integrations  
APPROVED  
apatel  
7/24/2015 4:49:15 PM

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.62  | 152  | 75408    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.40 | 136  | 283001   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.28 | 164  | 154029   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.03 | 188  | 328537   | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.23 | 240  | 402448   | 20.00 | ng/ul | 0.00     |
| 85) Perylene-d12          | 23.45 | 264  | 401966   | 20.00 | ng/ul | 0.01     |

| System Monitoring Compounds    | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-------|-------|----------|
| 3) 1,4-Dioxane-d8              | 3.09  | 96   | 3239     | 2.10  | ng/uL | 0.00     |
| 5) Phenol-d5                   | 6.79  | 99   | 86256    | 14.01 | ng/ul | 0.00     |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.95  | 67   | 48687    | 14.51 | ng/ul | 0.00     |
| 9) 2-Chlorophenol-d4           | 7.15  | 132  | 73737    | 15.08 | ng/ul | 0.00     |
| 13) 4-Methylphenol-d8          | 8.33  | 113  | 52988    | 10.48 | ng/ul | 0.00     |
| 19) Nitrobenzene-d5            | 8.77  | 128  | 37913    | 17.94 | ng/ul | 0.00     |
| 22) 2-Nitrophenol-d4           | 9.49  | 143  | 42921    | 18.32 | ng/ul | 0.00     |
| 26) 2,4-Dichlorophenol-d3      | 10.03 | 165  | 79710    | 16.84 | ng/ul | 0.00     |
| 29) 4-Chloroaniline-d4         | 10.55 | 131  | 37723    | 7.74  | ng/ul | 0.00     |
| 43) Dimethylphthalate-d6       | 13.69 | 166  | 226750   | 18.25 | ng/ul | 0.00     |
| 46) Acenaphthylene-d8          | 13.97 | 160  | 281965   | 18.87 | ng/ul | 0.00     |
| 51) 4-Nitrophenol-d4           | 14.50 | 143  | 34945    | 16.61 | ng/ul | 0.00     |
| 57) Fluorene-d10               | 15.27 | 176  | 196619   | 18.52 | ng/ul | 0.00     |
| 62) 4,6-Dinitro-2-methylphenol | 15.41 | 200  | 4532     | 2.13  | ng/ul | 0.00     |
| 70) Anthracene-d10             | 17.13 | 188  | 288799   | 18.73 | ng/ul | 0.00     |
| 78) Pyrene-d10                 | 19.44 | 212  | 328886   | 17.89 | ng/ul | 0.01     |
| 89) Benzo(a)pyrene-d12         | 23.31 | 264  | 321140   | 15.80 | ng/ul | 0.01     |

| Target Compounds               | R.T.  | QIon | Response | Conc  | Units  | Qvalue |
|--------------------------------|-------|------|----------|-------|--------|--------|
| 4) Benzaldehyde                | 6.76  | 77   | 4508     | 1.51  | ng/ul# | 82     |
| 6) Phenol                      | 6.82  | 94   | 10120    | 1.59  | ng/ul  | 94     |
| 14) Acetophenone               | 8.44  | 105  | 52867    | 6.62  | ng/ul  | 95     |
| 28) Naphthalene                | 10.45 | 128  | 33250    | 2.33  | ng/ul  | 98     |
| 34) 2-Methylnaphthalene        | 12.07 | 142  | 20671    | 1.94  | ng/ul  | 98     |
| 44) Dimethylphthalate          | 13.74 | 163  | 196174   | 15.52 | ng/ul  | 100    |
| 47) Acenaphthylene             | 14.00 | 152  | 16652    | 1.09  | ng/ul# | 80     |
| 49) Acenaphthene               | 14.34 | 153  | 17933    | 1.75  | ng/ul  | 94     |
| 53) Dibenzofuran               | 14.68 | 168  | 23028    | 1.57  | ng/ul  | 95     |
| 58) Fluorene                   | 15.33 | 166  | 25462    | 2.07  | ng/ul# | 91     |
| 69) Phenanthrene               | 17.07 | 178  | 243303   | 13.67 | ng/ul  | 97     |
| 71) Anthracene                 | 17.16 | 178  | 59528m   | 3.24  | ng/ul  |        |
| 74) Carbazole                  | 17.44 | 167  | 19482    | 1.23  | ng/ul# | 43     |
| 75) Di-n-butylphthalate        | 18.00 | 149  | 302321   | 15.83 | ng/ul  | 97     |
| 76) Fluoranthene               | 19.10 | 202  | 405377   | 19.49 | ng/ul  | 97     |
| 79) Pyrene                     | 19.47 | 202  | 423781   | 17.60 | ng/ul  | 99     |
| 82) Benzo(a)anthracene         | 21.22 | 228  | 189338   | 7.91  | ng/ul# | 89     |
| 83) Bis(2-ethylhexyl)phthalate | 21.14 | 149  | 130767   | 9.74  | ng/ul  | 94     |
| 84) Chrysene                   | 21.27 | 228  | 248090   | 11.06 | ng/ul# | 92     |
| 87) Benzo(b)fluoranthene       | 22.79 | 252  | 361255   | 14.66 | ng/ul# | 85     |
| 88) Benzo(k)fluoranthene       | 22.82 | 252  | 104789m  | 4.42  | ng/ul  |        |
| 90) Benzo(a)pyrene             | 23.36 | 252  | 215805   | 9.32  | ng/ul# | 88     |
| 91) Indeno(1,2,3-cd)pyrene     | 25.68 | 276  | 180713   | 7.44  | ng/ul  | 97     |

T.P  
07/31/2015  
T.P  
07/31/2015

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM072315\  
Data File : BM002023.D  
Acq On : 23 Jul 2015 19:12  
Operator : TP/UM  
Sample : G3000-18RE

Misc :  
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 24 03:26:06 2015  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM071315.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Jul 24 01:29:30 2015  
Response via : Initial Calibration

Instrument :  
BNA\_M  
ClientSampleId :  
C02J2RE

Manual Integrations  
APPROVED

apatel  
7/24/2015 4:49:15 PM

| Internal Standards         | R.T.  | QIon | Response | Conc | Units  | Dev(Min) |
|----------------------------|-------|------|----------|------|--------|----------|
| 92) Dibenzo(a,h)anthracene | 25.68 | 278  | 46901    | 2.28 | ng/ul# | 59       |
| 93) Benzo(g,h,i)perylene   | 26.37 | 276  | 177869   | 8.91 | ng/ul  | 96       |

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