

Data Path : Z:\HPCHEM1\BNA F\DATA\BF011516\  
 Data File : BF084524.D  
 Acq On : 16 Jan 2016 7:13  
 Operator : SJ/UM  
 Sample : H1143-01 5X  
 Misc :  
 ALS Vial : 37 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 POST-EX-6-20160113

Integration Parameters: rteint.p  
 Integrator: RTE  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 3 % of largest Peak  
 Start Thrs: 0.2 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF123115.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 4.327       | 193           | 196         | 200          | rBV      | 25094          | 39833         | 2.11%           | 0.147%        |
| 2         | 4.978       | 251           | 253         | 256          | rBV      | 855307         | 931200        | 49.34%          | 3.443%        |
| 3         | 5.413       | 289           | 291         | 294          | rBV      | 1028319        | 1293497       | 68.53%          | 4.782%        |
| 4         | 5.824       | 325           | 327         | 329          | rBV      | 49603          | 45389         | 2.40%           | 0.168%        |
| 5         | 6.453       | 380           | 382         | 385          | rBV      | 1348826        | 1275434       | 67.58%          | 4.715%        |
| 6         | 6.590       | 392           | 394         | 396          | rBV      | 1393140        | 1373764       | 72.79%          | 5.079%        |
| 7         | 6.819       | 412           | 414         | 416          | rBV      | 1785831        | 1435632       | 76.06%          | 5.308%        |
| 8         | 6.979       | 426           | 428         | 430          | rBV      | 1029637        | 1047068       | 55.48%          | 3.871%        |
| 9         | 7.379       | 461           | 463         | 466          | rBV      | 883067         | 797313        | 42.24%          | 2.948%        |
| 10        | 8.110       | 524           | 527         | 529          | rBV      | 1826288        | 1851136       | 98.08%          | 6.844%        |
| 11        | 9.185       | 619           | 621         | 623          | rBV      | 1764973        | 1424829       | 75.49%          | 5.268%        |
| 12        | 9.276       | 626           | 629         | 631          | rVB      | 12256          | 21040         | 1.11%           | 0.078%        |
| 13        | 9.527       | 649           | 651         | 654          | rBV2     | 13692          | 28376         | 1.50%           | 0.105%        |
| 14        | 9.585       | 654           | 656         | 658          | rBV      | 121525         | 118200        | 6.26%           | 0.437%        |
| 15        | 9.722       | 666           | 668         | 671          | rBV      | 50604          | 43095         | 2.28%           | 0.159%        |
| 16        | 9.802       | 673           | 675         | 678          | rVV2     | 43396          | 44890         | 2.38%           | 0.166%        |
| 17        | 9.859       | 678           | 680         | 682          | rVV      | 1748288        | 1840469       | 97.51%          | 6.804%        |
| 18        | 9.893       | 682           | 683         | 685          | rVB      | 56726          | 45538         | 2.41%           | 0.168%        |
| 19        | 10.065      | 696           | 698         | 700          | rBV      | 33873          | 28753         | 1.52%           | 0.106%        |
| 20        | 10.305      | 714           | 719         | 720          | rBV2     | 28230          | 46340         | 2.46%           | 0.171%        |
| 21        | 10.408      | 727           | 728         | 731          | rVB      | 51207          | 43036         | 2.28%           | 0.159%        |
| 22        | 10.522      | 735           | 738         | 741          | rVB3     | 18977          | 34830         | 1.85%           | 0.129%        |
| 23        | 10.648      | 747           | 749         | 752          | rBV      | 780085         | 713054        | 37.78%          | 2.636%        |
| 24        | 10.773      | 758           | 760         | 764          | rVB      | 59076          | 72673         | 3.85%           | 0.269%        |
| 25        | 10.956      | 773           | 776         | 777          | rBV2     | 19427          | 27876         | 1.48%           | 0.103%        |
| 26        | 11.105      | 785           | 789         | 792          | rBV5     | 13774          | 34375         | 1.82%           | 0.127%        |
| 27        | 11.151      | 792           | 793         | 795          | rVB      | 27542          | 22947         | 1.22%           | 0.085%        |
| 28        | 11.219      | 795           | 799         | 800          | rBV3     | 38641          | 53296         | 2.82%           | 0.197%        |
| 29        | 11.242      | 800           | 801         | 804          | rVB      | 32880          | 34400         | 1.82%           | 0.127%        |
| 30        | 11.345      | 808           | 810         | 811          | rBV      | 1962615        | 1693678       | 89.74%          | 6.262%        |
| 31        | 11.413      | 814           | 816         | 818          | rVB      | 72830          | 111413        | 5.90%           | 0.412%        |
| 32        | 11.573      | 827           | 830         | 835          | rBV5     | 31609          | 68561         | 3.63%           | 0.253%        |
| 33        | 11.642      | 835           | 836         | 838          | rVV      | 20547          | 24025         | 1.27%           | 0.089%        |
| 34        | 11.676      | 838           | 839         | 843          | rVB4     | 21950          | 25693         | 1.36%           | 0.095%        |

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Integration Parameters: rteint.p  
 Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.2  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF123115.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |           |         |         |         |        |
|----|--------|------|------|-----------|---------|---------|---------|--------|
| 35 | 11.848 | 851  | 854  | 855 rBV   | 98593   | 90267   | 4.78%   | 0.334% |
| 36 | 11.871 | 855  | 856  | 858 rVV   | 96868   | 98572   | 5.22%   | 0.364% |
| 37 | 11.916 | 858  | 860  | 862 rVV   | 32381   | 43142   | 2.29%   | 0.159% |
| 38 | 11.962 | 862  | 864  | 868 rVB   | 97201   | 188258  | 9.97%   | 0.696% |
| 39 | 12.145 | 876  | 880  | 884 rBV3  | 58790   | 119801  | 6.35%   | 0.443% |
| 40 | 12.328 | 894  | 896  | 897 rBV2  | 13088   | 23481   | 1.24%   | 0.087% |
| 41 | 12.396 | 899  | 902  | 904 rBV   | 68143   | 83329   | 4.41%   | 0.308% |
| 42 | 12.431 | 904  | 905  | 908 rVB2  | 34987   | 53571   | 2.84%   | 0.198% |
| 43 | 12.476 | 908  | 909  | 913 rBV   | 51792   | 57312   | 3.04%   | 0.212% |
| 44 | 12.556 | 913  | 916  | 918 rBV   | 868143  | 754841  | 39.99%  | 2.791% |
| 45 | 12.602 | 918  | 920  | 923 rBV3  | 19256   | 36159   | 1.92%   | 0.134% |
| 46 | 12.648 | 923  | 924  | 926 rVB   | 23216   | 19688   | 1.04%   | 0.073% |
| 47 | 12.705 | 926  | 929  | 932 rBV3  | 28435   | 69334   | 3.67%   | 0.256% |
| 48 | 12.785 | 932  | 936  | 938 rBV   | 724912  | 840290  | 44.52%  | 3.107% |
| 49 | 12.831 | 938  | 940  | 943 rVB2  | 32869   | 54478   | 2.89%   | 0.201% |
| 50 | 12.899 | 944  | 946  | 947 rBV   | 28272   | 31698   | 1.68%   | 0.117% |
| 51 | 12.934 | 947  | 949  | 951 rVB   | 963187  | 1030234 | 54.58%  | 3.809% |
| 52 | 13.002 | 952  | 955  | 959 rBV3  | 59298   | 131461  | 6.97%   | 0.486% |
| 53 | 13.105 | 960  | 964  | 966 rVB2  | 62846   | 146814  | 7.78%   | 0.543% |
| 54 | 13.174 | 966  | 970  | 972 rBV2  | 60347   | 107033  | 5.67%   | 0.396% |
| 55 | 13.219 | 972  | 974  | 975 rBV   | 61666   | 88625   | 4.70%   | 0.328% |
| 56 | 13.311 | 980  | 982  | 983 rVB   | 47569   | 48541   | 2.57%   | 0.179% |
| 57 | 13.334 | 983  | 984  | 986 rVB   | 34829   | 39597   | 2.10%   | 0.146% |
| 58 | 13.414 | 989  | 991  | 994 rVB3  | 18778   | 28221   | 1.50%   | 0.104% |
| 59 | 13.471 | 994  | 996  | 998 rBV2  | 41586   | 70766   | 3.75%   | 0.262% |
| 60 | 13.516 | 998  | 1000 | 1001 rBV2 | 22880   | 24548   | 1.30%   | 0.091% |
| 61 | 13.619 | 1007 | 1009 | 1011 rBV  | 65457   | 69667   | 3.69%   | 0.258% |
| 62 | 13.734 | 1016 | 1019 | 1020 rBV2 | 60655   | 105780  | 5.60%   | 0.391% |
| 63 | 13.779 | 1022 | 1023 | 1026 rBV3 | 31745   | 46872   | 2.48%   | 0.173% |
| 64 | 13.825 | 1026 | 1027 | 1028 rBV  | 47718   | 42382   | 2.25%   | 0.157% |
| 65 | 13.985 | 1038 | 1041 | 1042 rBV2 | 1482602 | 1887419 | 100.00% | 6.978% |
| 66 | 14.088 | 1048 | 1050 | 1051 rVB  | 39101   | 35325   | 1.87%   | 0.131% |
| 67 | 14.122 | 1051 | 1053 | 1054 rBV2 | 21162   | 25070   | 1.33%   | 0.093% |
| 68 | 14.157 | 1054 | 1056 | 1058 rBV3 | 32022   | 49732   | 2.63%   | 0.184% |
| 69 | 14.362 | 1072 | 1074 | 1076 rVB  | 55388   | 83753   | 4.44%   | 0.310% |
| 70 | 14.397 | 1076 | 1077 | 1079 rVB2 | 37051   | 48750   | 2.58%   | 0.180% |
| 71 | 14.465 | 1079 | 1083 | 1084 rBV3 | 54662   | 116186  | 6.16%   | 0.430% |

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Integration Parameters: rteint.p  
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Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 3 % of largest Peak  
Start Thrs: 0.2 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF123115.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |        |        |
|----|--------|------|------|------|------|---------|---------|--------|--------|
| 72 | 14.499 | 1084 | 1086 | 1089 | rBV4 | 34042   | 83491   | 4.42%  | 0.309% |
| 73 | 15.002 | 1127 | 1130 | 1134 | rBV  | 305770  | 672226  | 35.62% | 2.485% |
| 74 | 15.277 | 1152 | 1154 | 1157 | rVB  | 163954  | 247808  | 13.13% | 0.916% |
| 75 | 15.334 | 1157 | 1159 | 1162 | rVV  | 207165  | 318700  | 16.89% | 1.178% |
| 76 | 15.402 | 1162 | 1165 | 1172 | rVB  | 1185788 | 1575269 | 83.46% | 5.824% |
| 77 | 15.848 | 1202 | 1204 | 1206 | rBV2 | 41152   | 55981   | 2.97%  | 0.207% |
| 78 | 16.065 | 1221 | 1223 | 1229 | rVB4 | 65591   | 152682  | 8.09%  | 0.564% |
| 79 | 16.774 | 1282 | 1285 | 1291 | rVB2 | 123114  | 257705  | 13.65% | 0.953% |
| 80 | 17.185 | 1318 | 1321 | 1326 | rBV  | 94588   | 202033  | 10.70% | 0.747% |

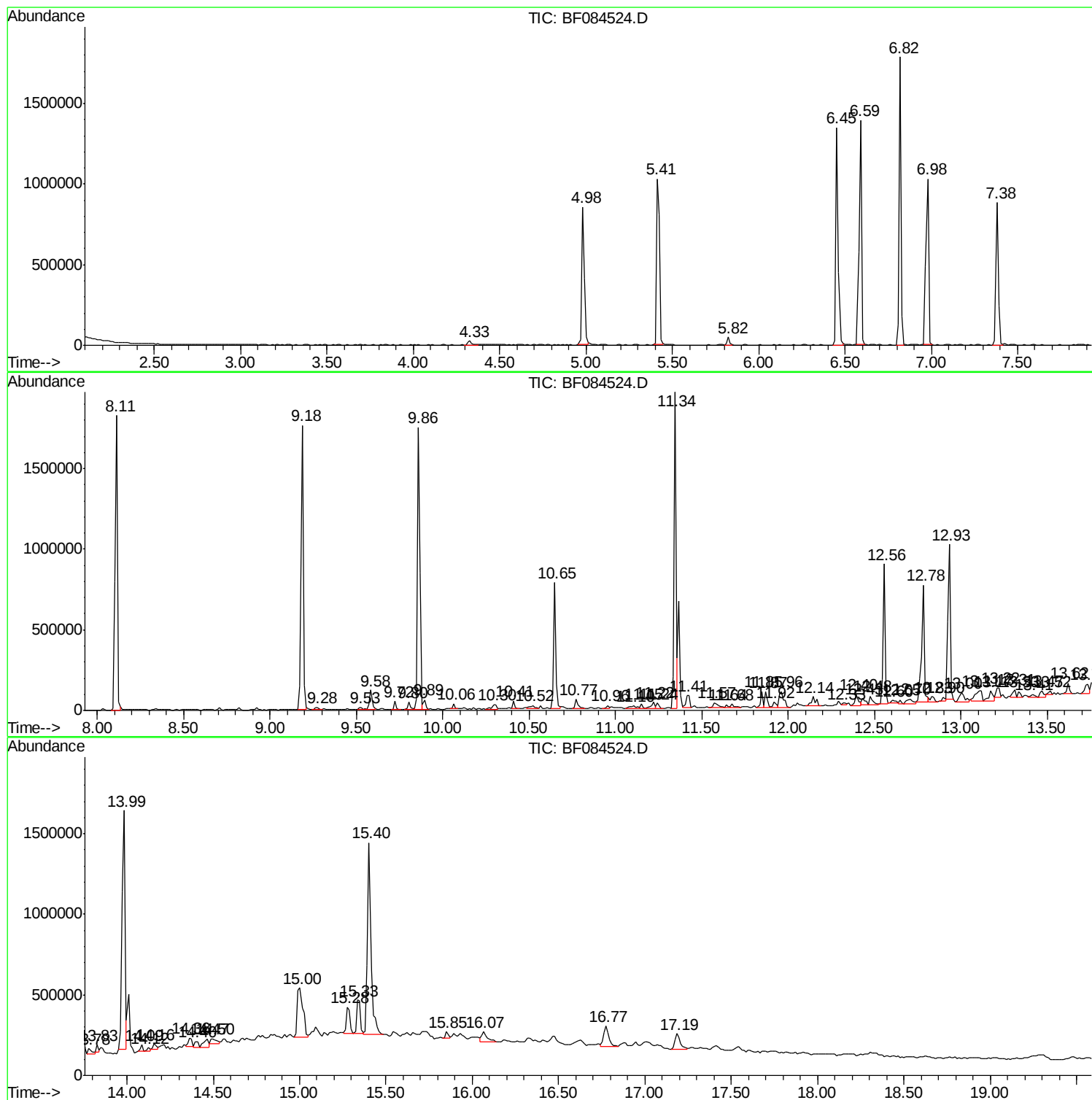
Sum of corrected areas: 27048545

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Instrument :  
BNA\_F  
ClientSampleId :  
POST-EX-6-20160113

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF123115.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF011516\  
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Instrument :  
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Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF123115.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

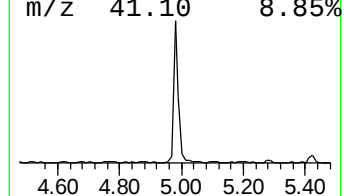
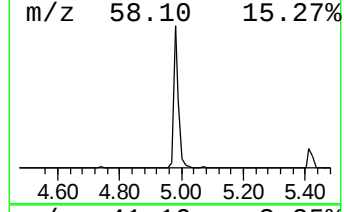
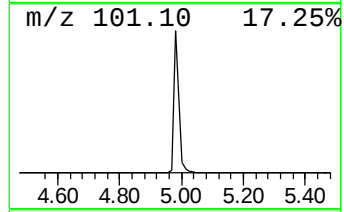
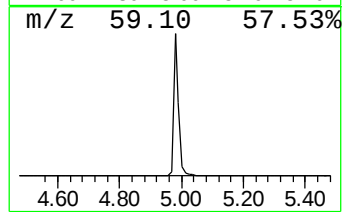
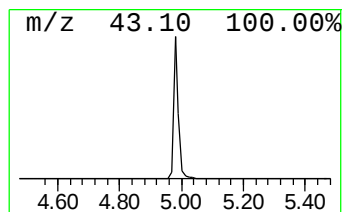
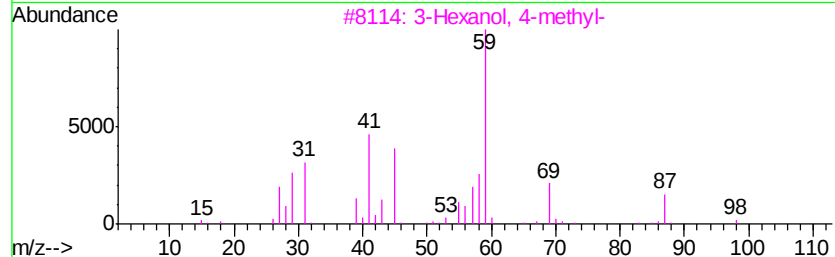
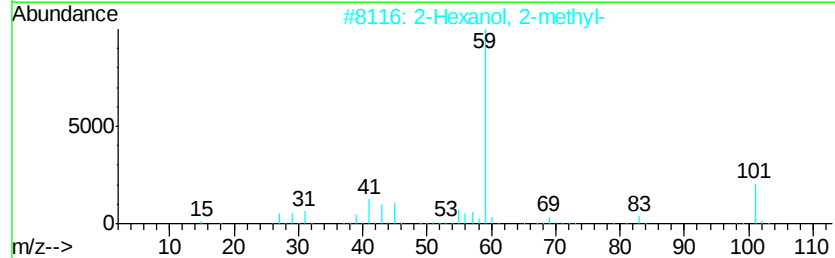
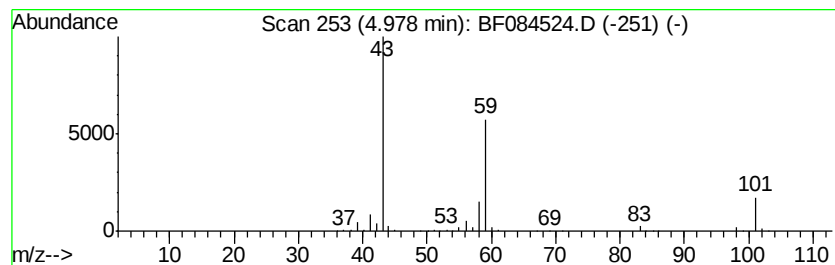
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 3

| R.T. | EstConc  | Area   | Relative to ISTD       | R.T. |
|------|----------|--------|------------------------|------|
| 4.98 | 12.97 ng | 931200 | 1,4-Dichlorobenzene-d4 | 6.82 |

| Hit# | of | 5 | Tentative ID                         | MW  | MolForm  | CAS#        | Qual |
|------|----|---|--------------------------------------|-----|----------|-------------|------|
| 1    |    |   | 2-Pentanone, 4-hydroxy-4-methyl-     | 116 | C6H12O2  | 000123-42-2 | 50   |
| 2    |    |   | 2-Hexanol, 2-methyl-                 | 116 | C7H16O   | 000625-23-0 | 33   |
| 3    |    |   | 3-Hexanol, 4-methyl-                 | 116 | C7H16O   | 000615-29-2 | 33   |
| 4    |    |   | Propane, 2-methyl-2-(1-methylethyl)- | 116 | C7H16O   | 017348-59-3 | 33   |
| 5    |    |   | Acetic acid, cyano-, 1,1-dimethyl-   | 141 | C7H11NO2 | 001116-98-9 | 25   |



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Instrument :  
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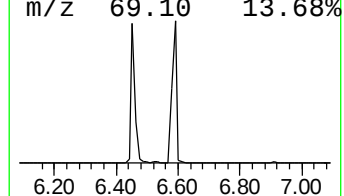
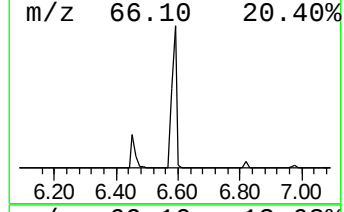
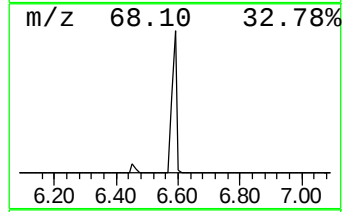
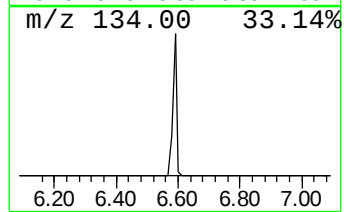
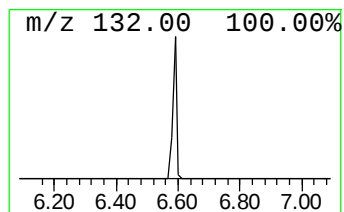
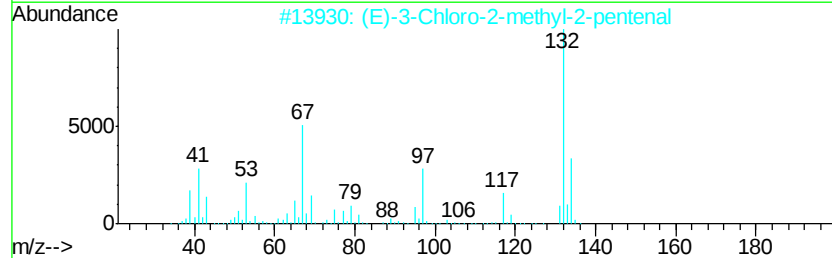
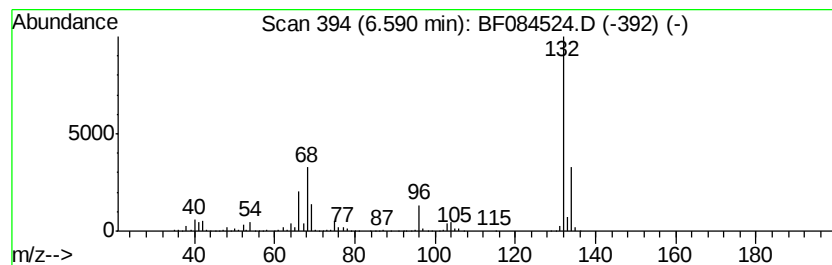
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF123115.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 2 unknown6.59 Concentration Rank 1

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 6.59 | 19.14 ng | 1373760 | 1,4-Dichlorobenzene-d4 | 6.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | 3-Chloro-6-fluoro-pyrazine          | 132 | C4H2ClFN2 | 1000146-10-7 | 38   |
| 2    |    | (E)-3-Chloro-2-methyl-2-pentenal    | 132 | C6H9ClO   | 031357-76-3  | 12   |
| 3    |    | Tranvlcvpromine-propionyl           | 189 | C12H15NO  | 1000123-86-3 | 12   |
| 4    |    | Xenon                               | 132 | Xe        | 007440-63-3  | 9    |
| 5    |    | 2H-Cyclopenta[d]pyridazine, 2-me... | 132 | C8H8N2    | 022291-85-6  | 9    |



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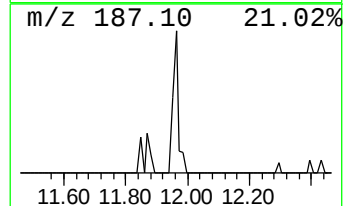
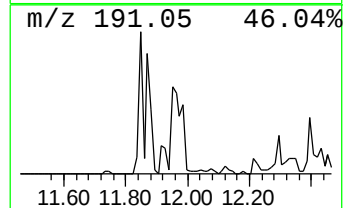
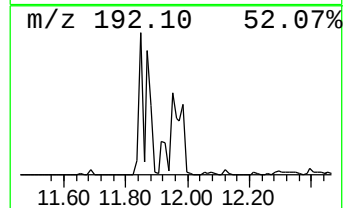
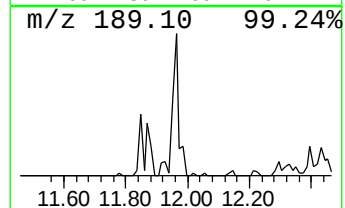
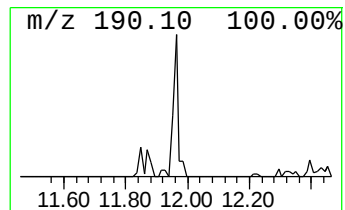
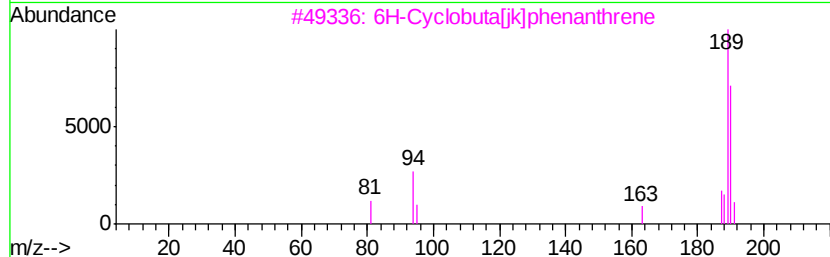
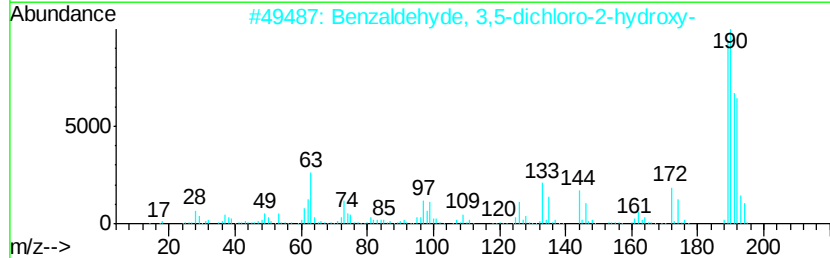
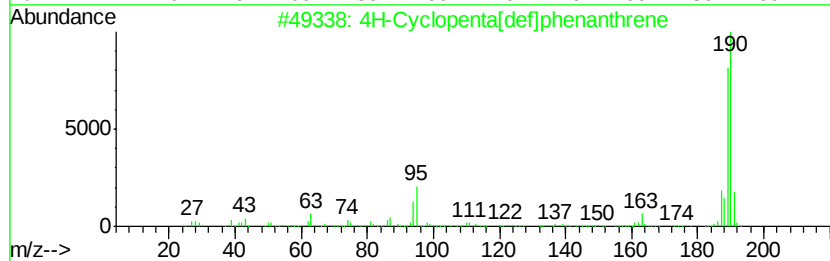
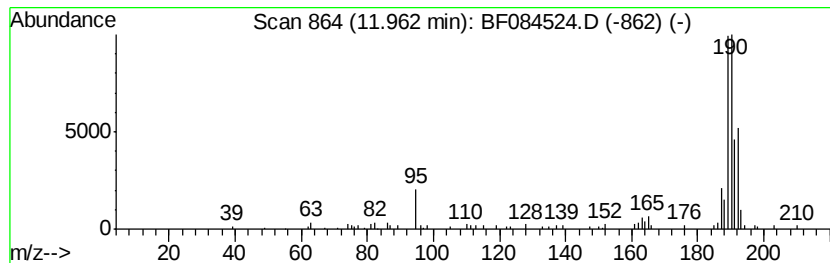
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Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF123115.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 4 4H-Cyclopenta[def]phenanthrene Concentration Rank 5

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------|--------|------------------|-------------|------|
| 11.96     | 2.22 ng                             | 188258 | Phenanthrene-d10 | 11.34       |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#        | Qual |
| 1         | 4H-Cvclopenta[def]phenanthrene      | 190    | C15H10           | 000203-64-5 | 83   |
| 2         | Benzaldehyde, 3,5-dichloro-2-hyd... | 190    | C7H4Cl2O2        | 000090-60-8 | 50   |
| 3         | 6H-Cvclobuta[ikl]phenanthrene       | 190    | C15H10           | 083469-43-6 | 50   |
| 4         | Pyrazole-4-carboxaldehyde, 3-(4-... | 190    | C10H7FN2O        | 306936-57-2 | 49   |
| 5         | Phenanthrene, 1-methyl-             | 192    | C15H12           | 000832-69-9 | 20   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF011516\  
Data File : BF084524.D  
Acq On : 16 Jan 2016 7:13  
Operator : SJ/UM  
Sample : H1143-01 5X  
Misc :  
ALS Vial : 37 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
POST-EX-6-20160113

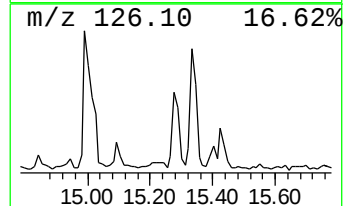
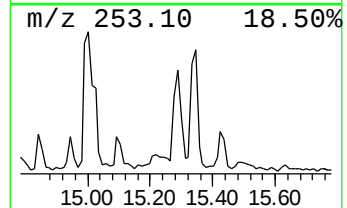
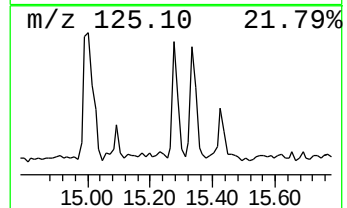
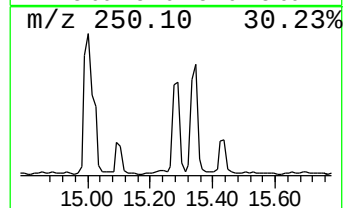
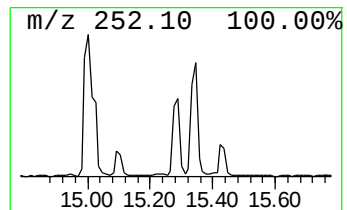
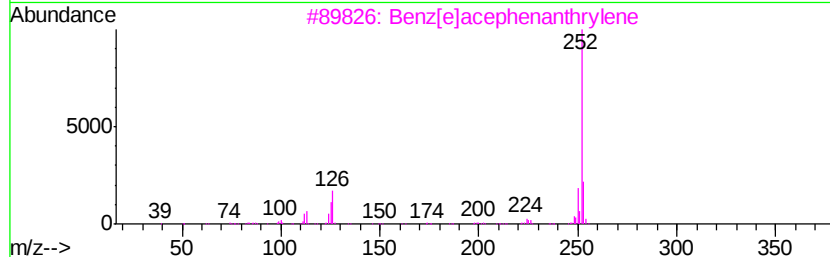
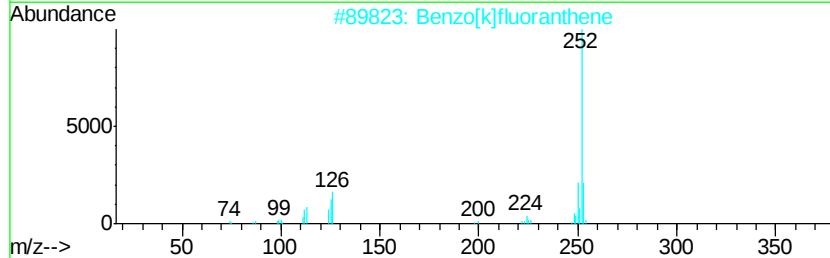
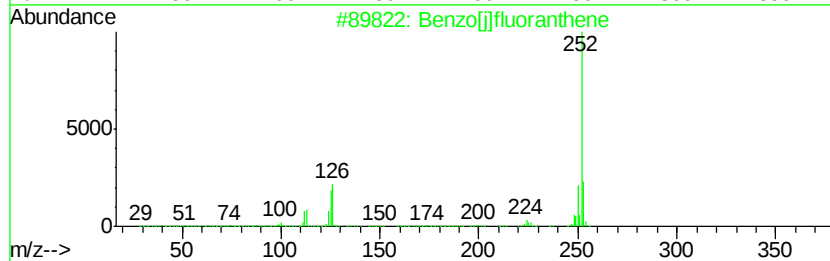
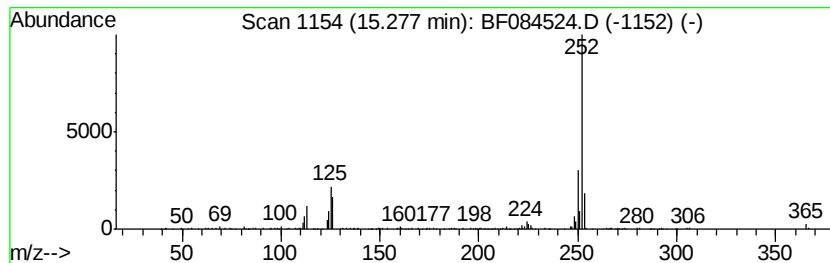
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF123115.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 5 Benzo[j]fluoranthene Concentration Rank 4

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 15.28 | 3.15 ng | 247808 | Perylene-d12     | 15.40 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[i]fluoranthene      | 252 | C20H12  | 000205-82-3 | 93   |
| 2    |    | Benzo[k]fluoranthene      | 252 | C20H12  | 000207-08-9 | 93   |
| 3    |    | Benzo[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 90   |
| 4    |    | Benzo[a]pyrene            | 252 | C20H12  | 000050-32-8 | 90   |
| 5    |    | Benzo[e]pyrene            | 252 | C20H12  | 000192-97-2 | 90   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF011516\  
Data File : BF084524.D  
Acq On : 16 Jan 2016 7:13  
Operator : SJ/UM  
Sample : H1143-01 5X  
Misc :  
ALS Vial : 37 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
POST-EX-6-20160113

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF123115.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name     | RT    | EstConc | Units | Response | --Internal Standard-- |       |         |      |
|----------------------|-------|---------|-------|----------|-----------------------|-------|---------|------|
|                      |       |         |       |          | #                     | RT    | Resp    | Conc |
| 2-Pentanone, 4-hy... | 4.98  | 13.0    | ng    | 931200   | 1                     | 6.82  | 1435630 | 20.0 |
| unknown6.59          | 6.59  | 19.1    | ng    | 1373760  | 1                     | 6.82  | 1435630 | 20.0 |
| 4H-Cyclopenta[def... | 11.96 | 2.2     | ng    | 188258   | 4                     | 11.34 | 1693680 | 20.0 |
| Benzo[j]fluoranthene | 15.28 | 3.1     | ng    | 247808   | 6                     | 15.40 | 1575270 | 20.0 |