

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF060716\  
 Data File : BF087801.D  
 Acq On : 7 Jun 2016 22:49  
 Operator : UM/SJ  
 Sample : H3379-06  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SS-3

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-BF060716.M

Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BF087802.D

| 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         | 1.690       | 5             | 9           | 11           | rVB      | 3971220        | 6434123       | 100.00%         | 15.140%       |
| 2         | 1.758       | 14            | 15          | 25           | rVB      | 366685         | 585003        | 9.09%           | 1.377%        |
| 3         | 1.896       | 25            | 27          | 42           | rVB      | 1625768        | 2877535       | 44.72%          | 6.771%        |
| 4         | 2.090       | 42            | 44          | 70           | rVB2     | 83451          | 339973        | 5.28%           | 0.800%        |
| 5         | 5.027       | 298           | 301         | 306          | rBV      | 155618         | 243168        | 3.78%           | 0.572%        |
| 6         | 5.439       | 334           | 337         | 339          | rBV      | 2179967        | 2264578       | 35.20%          | 5.329%        |
| 7         | 6.479       | 424           | 428         | 430          | rBV      | 2130884        | 2660939       | 41.36%          | 6.261%        |
| 8         | 6.605       | 436           | 439         | 442          | rBV      | 1983022        | 2430645       | 37.78%          | 5.719%        |
| 9         | 6.845       | 457           | 460         | 462          | rBV      | 412744         | 566752        | 8.81%           | 1.334%        |
| 10        | 6.993       | 471           | 473         | 476          | rVB      | 1729948        | 1881784       | 29.25%          | 4.428%        |
| 11        | 7.405       | 506           | 509         | 511          | rBV      | 1604392        | 1575751       | 24.49%          | 3.708%        |
| 12        | 8.125       | 569           | 572         | 574          | rBV      | 966312         | 849059        | 13.20%          | 1.998%        |
| 13        | 9.199       | 663           | 666         | 669          | rBV      | 2664943        | 2574090       | 40.01%          | 6.057%        |
| 14        | 9.588       | 699           | 700         | 703          | rVB      | 235109         | 246883        | 3.84%           | 0.581%        |
| 15        | 9.873       | 722           | 725         | 727          | rBV      | 1028311        | 903741        | 14.05%          | 2.127%        |
| 16        | 9.908       | 727           | 728         | 730          | rVB      | 94288          | 67071         | 1.04%           | 0.158%        |
| 17        | 10.422      | 771           | 773         | 775          | rBV      | 62878          | 81314         | 1.26%           | 0.191%        |
| 18        | 10.662      | 791           | 794         | 796          | rBV      | 1646940        | 1733671       | 26.94%          | 4.079%        |
| 19        | 10.788      | 803           | 805         | 809          | rVB      | 45497          | 80472         | 1.25%           | 0.189%        |
| 20        | 11.222      | 839           | 843         | 849          | rVB3     | 50447          | 166555        | 2.59%           | 0.392%        |
| 21        | 11.348      | 852           | 854         | 855          | rBV      | 676561         | 764693        | 11.88%          | 1.799%        |
| 22        | 11.428      | 858           | 861         | 862          | rVB      | 222563         | 205896        | 3.20%           | 0.484%        |
| 23        | 11.576      | 871           | 874         | 879          | rBV2     | 61258          | 82618         | 1.28%           | 0.194%        |
| 24        | 11.851      | 896           | 898         | 899          | rBV      | 112818         | 93555         | 1.45%           | 0.220%        |
| 25        | 11.874      | 899           | 900         | 902          | rVB      | 102511         | 121270        | 1.88%           | 0.285%        |
| 26        | 11.919      | 902           | 904         | 906          | rBV      | 50760          | 65593         | 1.02%           | 0.154%        |
| 27        | 11.965      | 906           | 908         | 912          | rVB2     | 192974         | 289915        | 4.51%           | 0.682%        |
| 28        | 12.148      | 920           | 924         | 928          | rVB2     | 103409         | 135182        | 2.10%           | 0.318%        |
| 29        | 12.399      | 943           | 946         | 948          | rBV      | 90498          | 107636        | 1.67%           | 0.253%        |
| 30        | 12.479      | 952           | 953         | 958          | rVB      | 83177          | 82935         | 1.29%           | 0.195%        |
| 31        | 12.559      | 958           | 960         | 962          | rBV      | 1189867        | 1003471       | 15.60%          | 2.361%        |
| 32        | 12.708      | 969           | 973         | 977          | rBV4     | 43313          | 87687         | 1.36%           | 0.206%        |
| 33        | 12.788      | 977           | 980         | 982          | rBV      | 1092137        | 1256889       | 19.53%          | 2.957%        |
| 34        | 12.902      | 988           | 990         | 991          | rBV      | 71919          | 66394         | 1.03%           | 0.156%        |

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 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SS-3

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-BF060716.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |        |        |
|----|--------|------|------|------|------|---------|---------|--------|--------|
| 35 | 12.937 | 991  | 993  | 996  | rVB  | 2232635 | 2098444 | 32.61% | 4.938% |
| 36 | 13.005 | 996  | 999  | 1003 | rBV3 | 79738   | 154018  | 2.39%  | 0.362% |
| 37 | 13.108 | 1003 | 1008 | 1011 | rBV2 | 128777  | 299970  | 4.66%  | 0.706% |
| 38 | 13.177 | 1012 | 1014 | 1016 | rBV  | 151692  | 150860  | 2.34%  | 0.355% |
| 39 | 13.211 | 1016 | 1017 | 1021 | rVB2 | 102743  | 138377  | 2.15%  | 0.326% |
| 40 | 13.337 | 1027 | 1028 | 1030 | rBV  | 73098   | 66783   | 1.04%  | 0.157% |
| 41 | 13.611 | 1049 | 1052 | 1055 | rBV2 | 66311   | 104487  | 1.62%  | 0.246% |
| 42 | 13.725 | 1059 | 1062 | 1064 | rBV  | 84159   | 148968  | 2.32%  | 0.351% |
| 43 | 13.851 | 1072 | 1073 | 1080 | rVB4 | 51737   | 134250  | 2.09%  | 0.316% |
| 44 | 13.977 | 1081 | 1084 | 1085 | rBV2 | 892916  | 1211456 | 18.83% | 2.851% |
| 45 | 14.080 | 1091 | 1093 | 1095 | rBV  | 106274  | 115275  | 1.79%  | 0.271% |
| 46 | 14.365 | 1116 | 1118 | 1119 | rVB  | 90626   | 88976   | 1.38%  | 0.209% |
| 47 | 14.457 | 1122 | 1126 | 1127 | rBV  | 71355   | 92436   | 1.44%  | 0.218% |
| 48 | 14.503 | 1127 | 1130 | 1132 | rVB4 | 65512   | 143141  | 2.22%  | 0.337% |
| 49 | 14.560 | 1132 | 1135 | 1138 | rVB4 | 37611   | 67147   | 1.04%  | 0.158% |
| 50 | 14.834 | 1156 | 1159 | 1163 | rBV3 | 43619   | 96365   | 1.50%  | 0.227% |
| 51 | 14.994 | 1170 | 1173 | 1178 | rBV  | 485484  | 977454  | 15.19% | 2.300% |
| 52 | 15.097 | 1179 | 1182 | 1183 | rVB  | 84329   | 134479  | 2.09%  | 0.316% |
| 53 | 15.280 | 1195 | 1198 | 1201 | rVB  | 294042  | 380615  | 5.92%  | 0.896% |
| 54 | 15.337 | 1201 | 1203 | 1206 | rVV  | 449133  | 526488  | 8.18%  | 1.239% |
| 55 | 15.394 | 1206 | 1208 | 1214 | rVB2 | 454097  | 795177  | 12.36% | 1.871% |
| 56 | 15.554 | 1219 | 1222 | 1224 | rBV3 | 30414   | 77130   | 1.20%  | 0.181% |
| 57 | 15.725 | 1235 | 1237 | 1241 | rVB4 | 53646   | 118397  | 1.84%  | 0.279% |
| 58 | 16.068 | 1265 | 1267 | 1273 | rVB3 | 44627   | 103941  | 1.62%  | 0.245% |
| 59 | 16.606 | 1310 | 1314 | 1319 | rBV3 | 43777   | 139452  | 2.17%  | 0.328% |
| 60 | 16.766 | 1325 | 1328 | 1333 | rVB2 | 189148  | 386699  | 6.01%  | 0.910% |
| 61 | 16.937 | 1340 | 1343 | 1345 | rBV  | 43119   | 79058   | 1.23%  | 0.186% |
| 62 | 17.189 | 1361 | 1365 | 1373 | rBV  | 143541  | 332742  | 5.17%  | 0.783% |
| 63 | 17.394 | 1380 | 1383 | 1390 | rVB2 | 52289   | 145738  | 2.27%  | 0.343% |
| 64 | 19.280 | 1543 | 1548 | 1558 | rVB  | 41306   | 177139  | 2.75%  | 0.417% |
| 65 | 19.452 | 1558 | 1563 | 1567 | rBV  | 23136   | 86147   | 1.34%  | 0.203% |

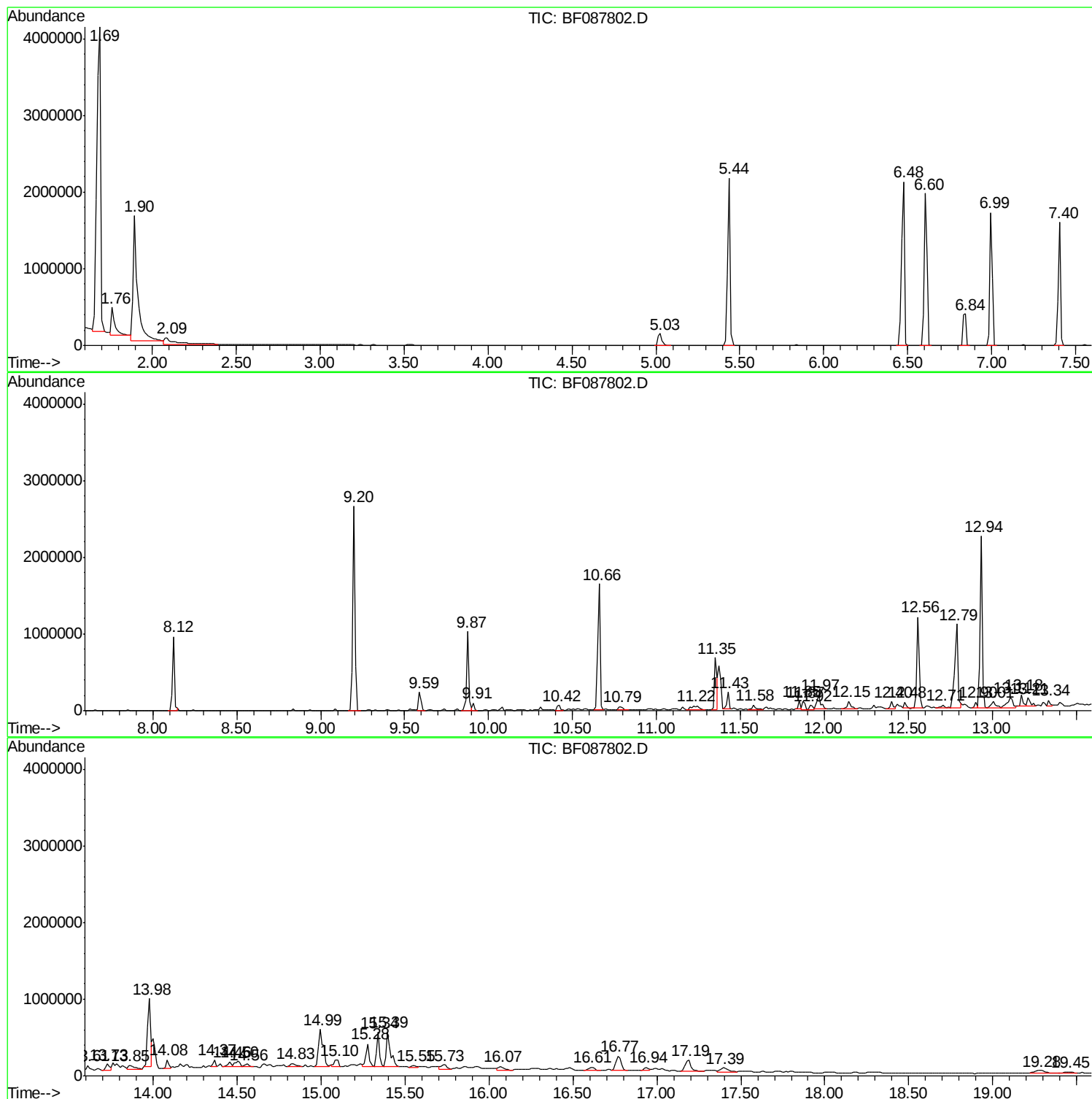
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Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampled :  
SS-3

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF060716\  
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Operator : UM/SJ  
Sample : H3379-06  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

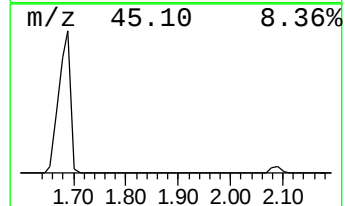
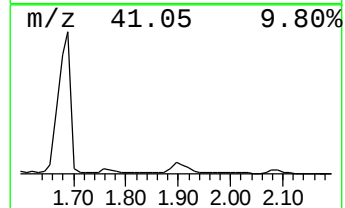
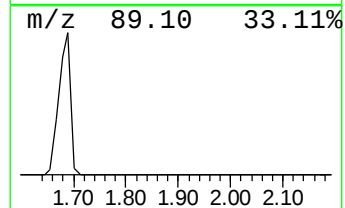
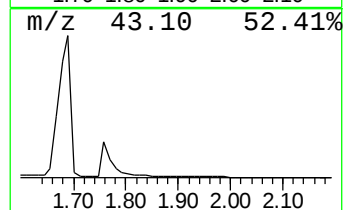
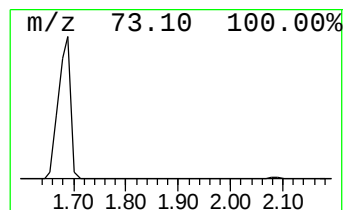
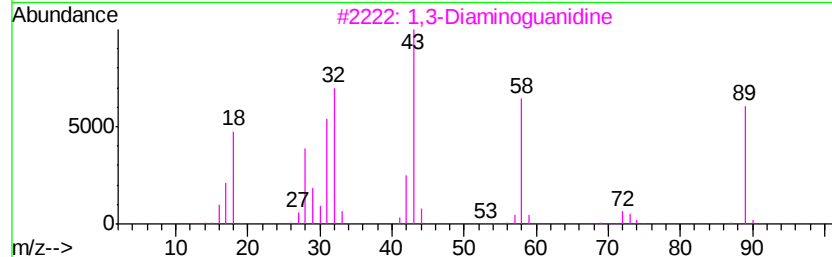
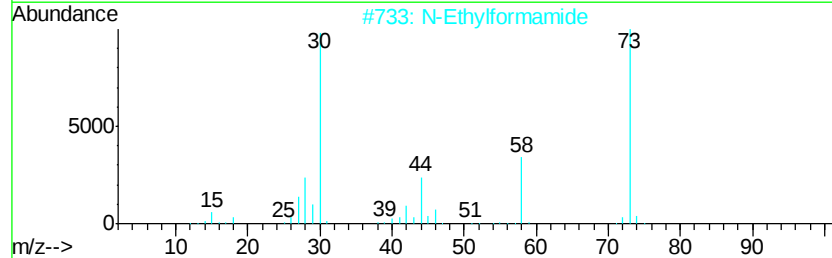
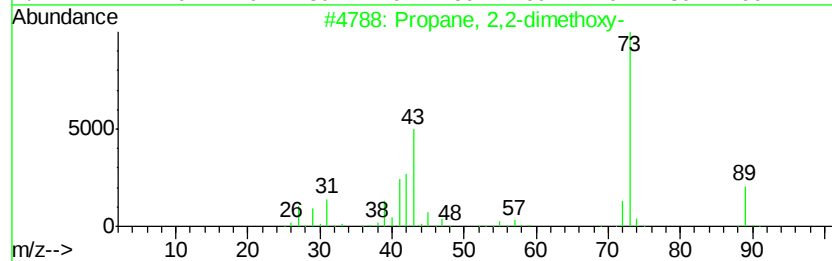
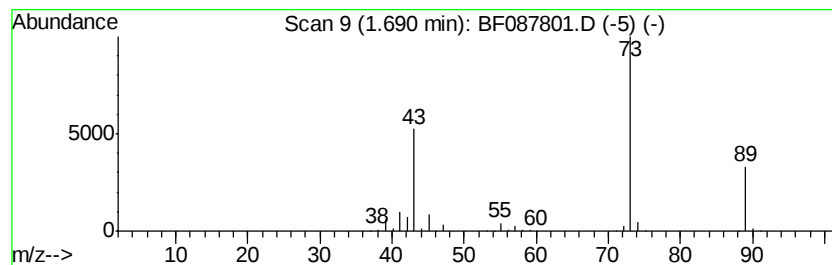
Instrument :  
BNA\_F  
ClientSampleId :  
SS-3

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 1 Propane, 2,2-dimethoxy- Concentration Rank 1

| R.T.      | EstConc                        | Area    | Relative to ISTD       | R.T.        |      |
|-----------|--------------------------------|---------|------------------------|-------------|------|
| 1.69      | 227.05 ng                      | 6434120 | 1,4-Dichlorobenzene-d4 | 6.84        |      |
| Hit# of 5 | Tentative ID                   | MW      | MolForm                | CAS#        | Qual |
| 1         | Propane, 2,2-dimethoxy-        | 104     | C5H12O2                | 000077-76-9 | 56   |
| 2         | N-Ethylformamide               | 73      | C3H7NO                 | 000627-45-2 | 9    |
| 3         | 1,3-Diaminoguanidine           | 89      | CH7N5                  | 004364-78-7 | 9    |
| 4         | Propane, 2-methoxy-2-methyl-   | 88      | C5H12O                 | 001634-04-4 | 9    |
| 5         | 2-Hydroxy-2-methylbutyric acid | 118     | C5H10O3                | 003739-30-8 | 9    |



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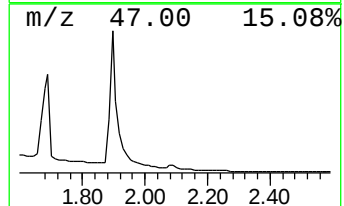
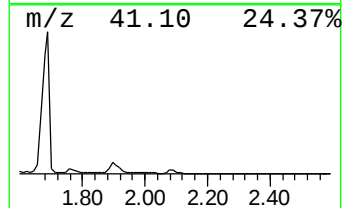
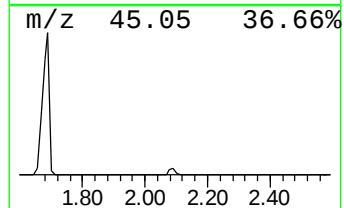
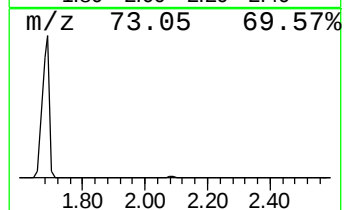
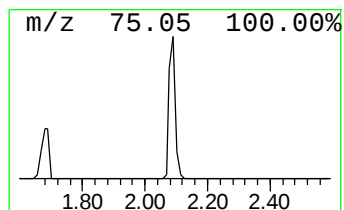
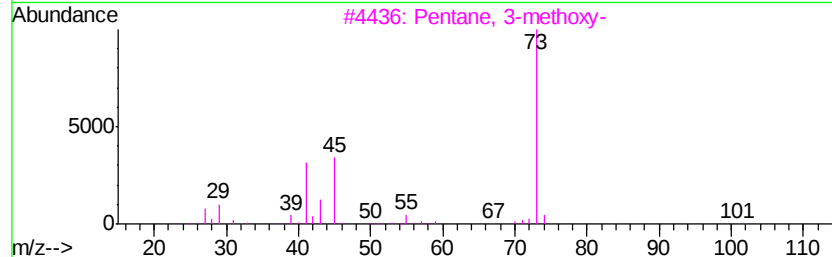
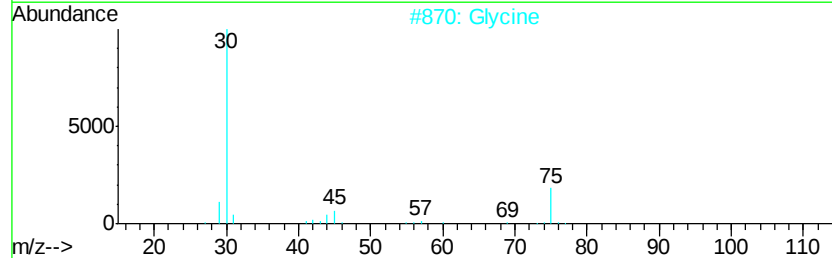
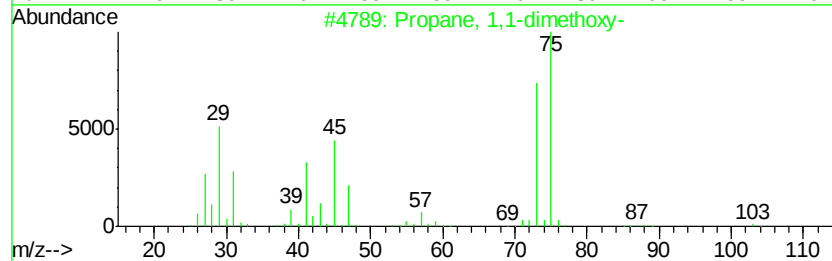
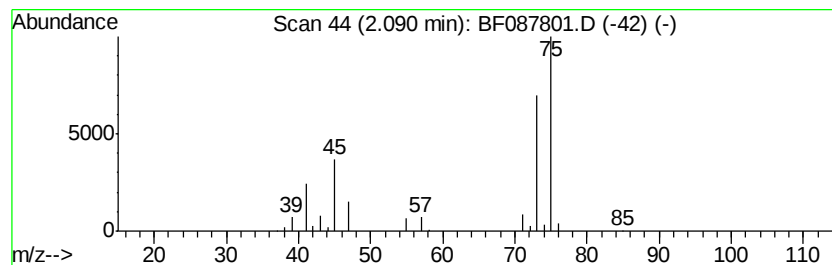
Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 4 Propane, 1,1-dimethoxy- Concentration Rank 6

| R.T. | EstConc  | Area   | Relative to ISTD       | R.T. |
|------|----------|--------|------------------------|------|
| 2.09 | 12.00 ng | 339973 | 1,4-Dichlorobenzene-d4 | 6.84 |

| Hit# | of | Tentative ID                   | MW  | MolForm  | CAS#        | Qual |
|------|----|--------------------------------|-----|----------|-------------|------|
| 1    | 5  | Propane, 1,1-dimethoxy-        | 104 | C5H12O2  | 004744-10-9 | 78   |
| 2    |    | Glycine                        | 75  | C2H5NO2  | 000056-40-6 | 9    |
| 3    |    | Pentane, 3-methoxy-            | 102 | C6H14O   | 036839-67-5 | 9    |
| 4    |    | Glycolaldehyde dimethyl acetal | 106 | C4H10O3  | 030934-97-5 | 9    |
| 5    |    | Silanol, trimethyl-            | 90  | C3H10OSi | 001066-40-6 | 9    |



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Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

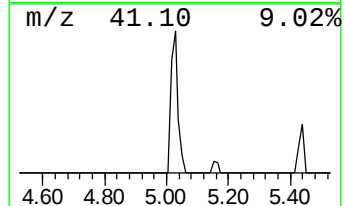
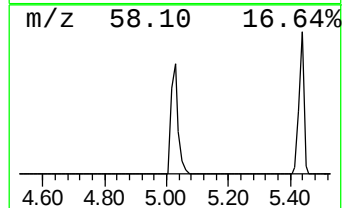
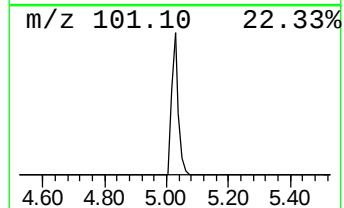
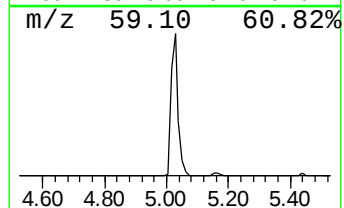
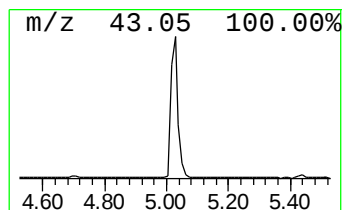
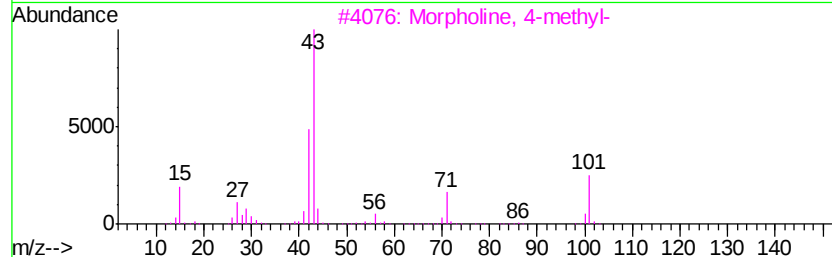
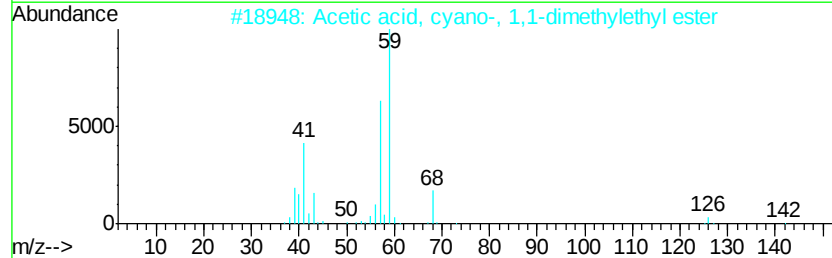
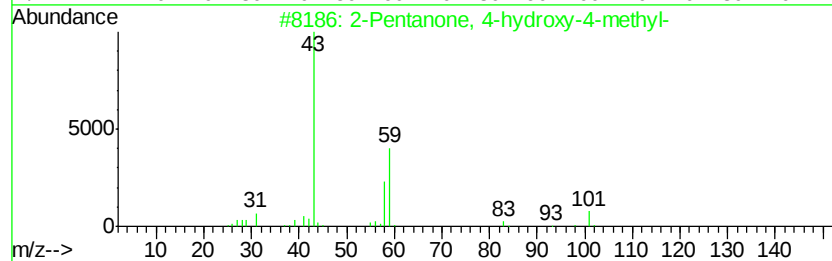
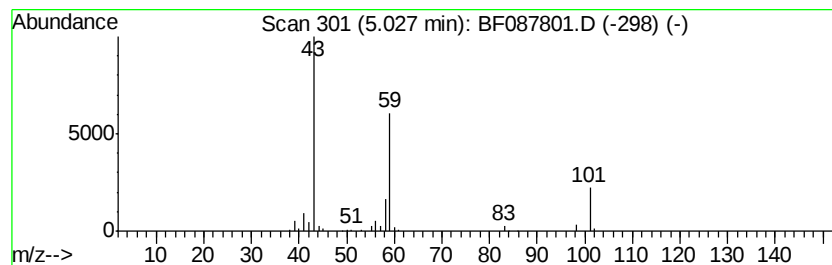
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 5 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 8

| R.T. | EstConc | Area   | Relative to ISTD       | R.T. |
|------|---------|--------|------------------------|------|
| 5.03 | 8.58 ng | 243168 | 1,4-Dichlorobenzene-d4 | 6.84 |

| Hit# | of | Tentative ID                         | MW  | MolForm  | CAS#        | Qual |
|------|----|--------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 2-Pentanone, 4-hydroxy-4-methyl-     | 116 | C6H12O2  | 000123-42-2 | 56   |
| 2    |    | Acetic acid, cyano-, 1,1-dimethyl... | 141 | C7H11NO2 | 001116-98-9 | 23   |
| 3    |    | Morpholine, 4-methyl-                | 101 | C5H11NO  | 000109-02-4 | 9    |
| 4    |    | 5-Hexen-2-one                        | 98  | C6H10O   | 000109-49-9 | 9    |
| 5    |    | Butane, 1-ethoxy-                    | 102 | C6H14O   | 000628-81-9 | 9    |



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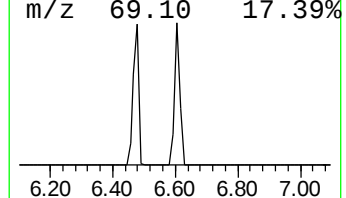
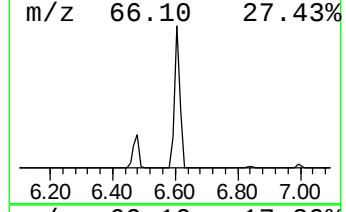
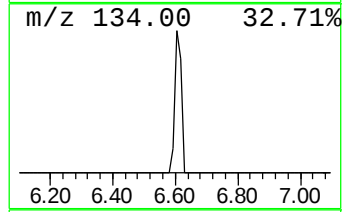
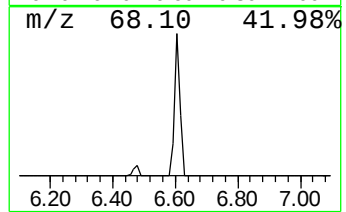
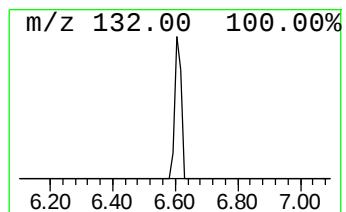
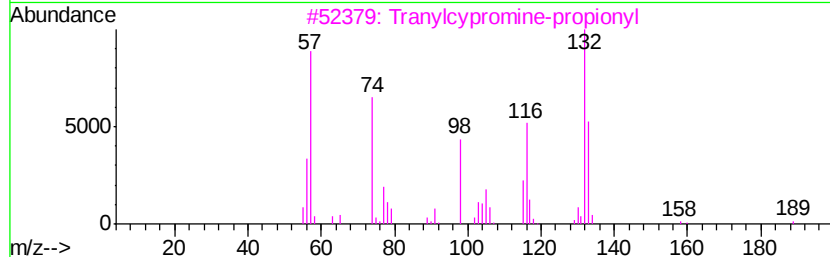
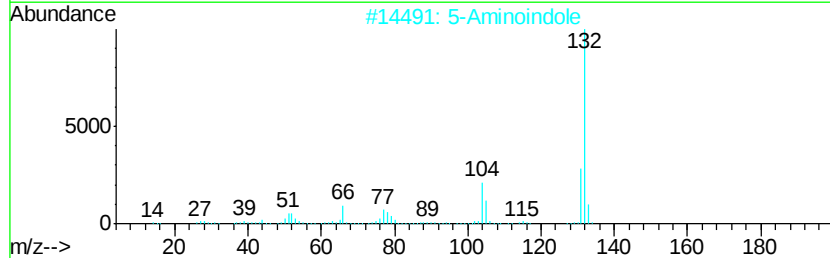
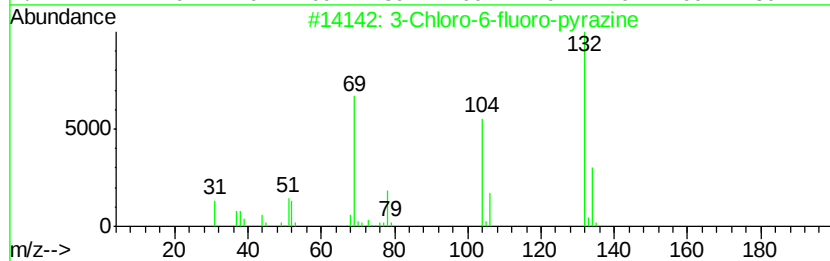
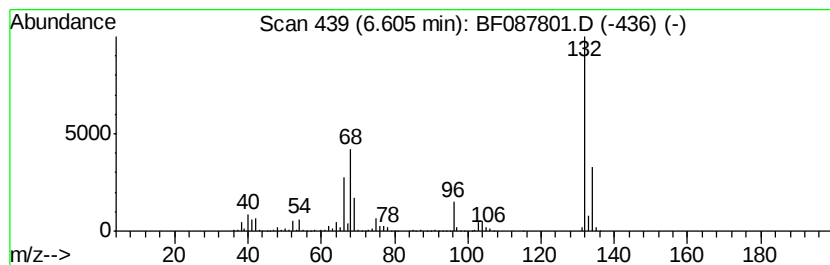
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 6 unknown6.60 Concentration Rank 3

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 6.60 | 85.77 ng | 2430650 | 1,4-Dichlorobenzene-d4 | 6.84 |

| Hit# | of                             | Tentative ID | MW        | MolForm      | CAS# | Qual |
|------|--------------------------------|--------------|-----------|--------------|------|------|
| 1    | 3-Chloro-6-fluoro-pyrazine     | 132          | C4H2ClFN2 | 1000146-10-7 | 27   |      |
| 2    | 5-Aminoindole                  | 132          | C8H8N2    | 005192-03-0  | 12   |      |
| 3    | Tranvlcyproline-propionyl      | 189          | C12H15NO  | 1000123-86-3 | 10   |      |
| 4    | 1-Methylpyrrolo[1,2-a]pyrazine | 132          | C8H8N2    | 064608-59-9  | 9    |      |
| 5    | 4-Methylpyrrolo[1,2-a]pyrazine | 132          | C8H8N2    | 064608-60-2  | 9    |      |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF060716\  
Data File : BF087801.D  
Acq On : 7 Jun 2016 22:49  
Operator : UM/SJ  
Sample : H3379-06  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SS-3

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

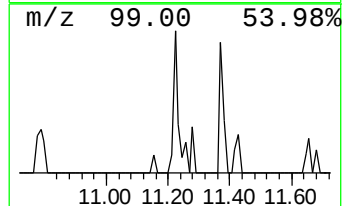
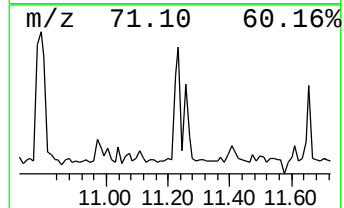
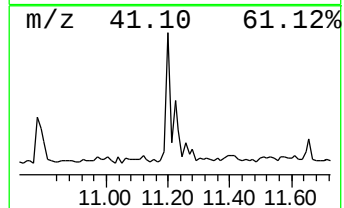
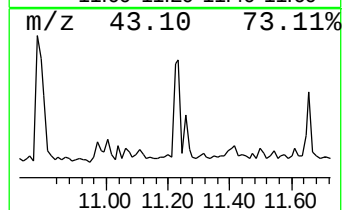
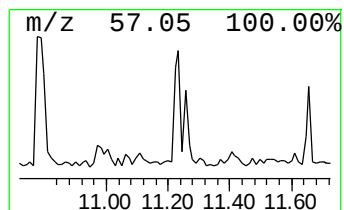
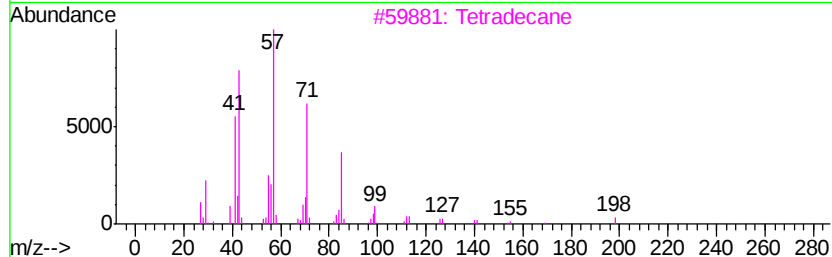
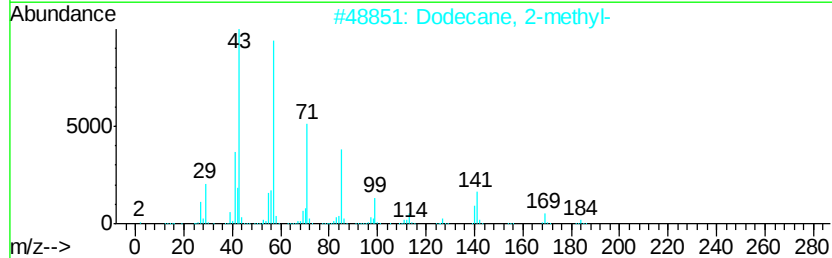
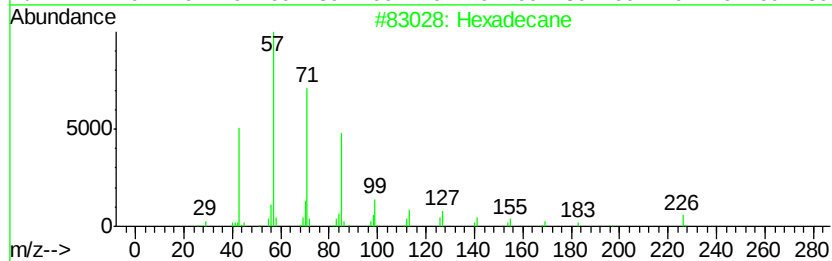
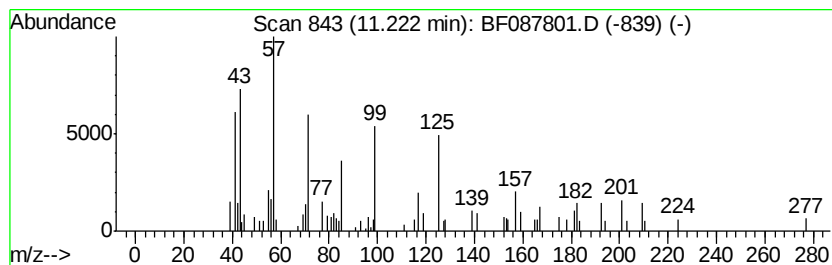
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TIC Integration Parameters: LSCINT.P

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Peak Number 8 unknown11.22 Concentration Rank 12

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 11.22 | 4.36 ng | 166555 | Phenanthrene-d10 | 11.35 |

| Hit# | of | Tentative ID        | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------|-----|---------|-------------|------|
| 1    | 5  | Hexadecane          | 226 | C16H34  | 000544-76-3 | 22   |
| 2    |    | Dodecane, 2-methyl- | 184 | C13H28  | 001560-97-0 | 22   |
| 3    |    | Tetradecane         | 198 | C14H30  | 000629-59-4 | 14   |
| 4    |    | Dodecane            | 170 | C12H26  | 000112-40-3 | 14   |
| 5    |    | Dodecane, 1-iodo-   | 296 | C12H25I | 004292-19-7 | 14   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF060716\  
Data File : BF087801.D  
Acq On : 7 Jun 2016 22:49  
Operator : UM/SJ  
Sample : H3379-06  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SS-3

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

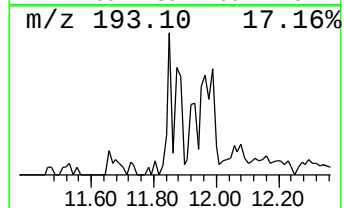
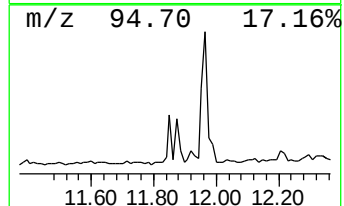
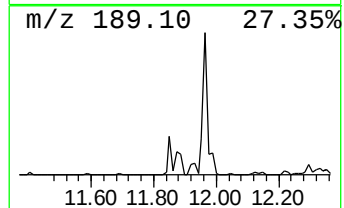
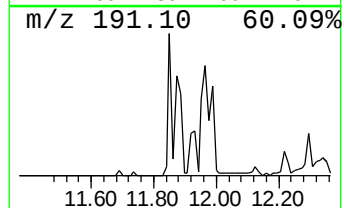
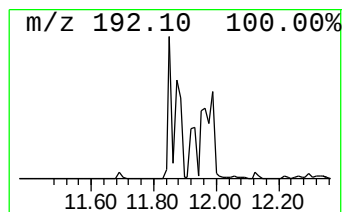
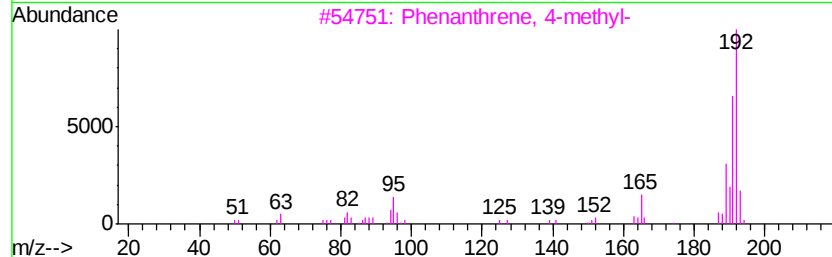
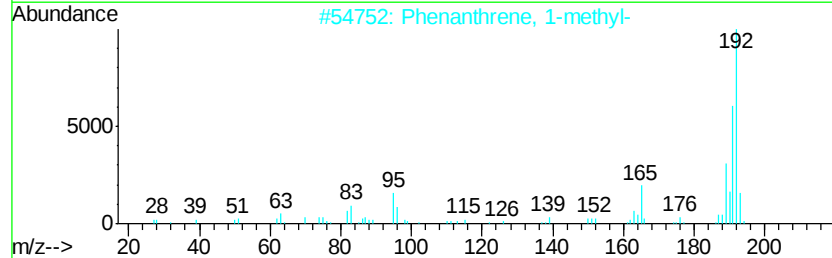
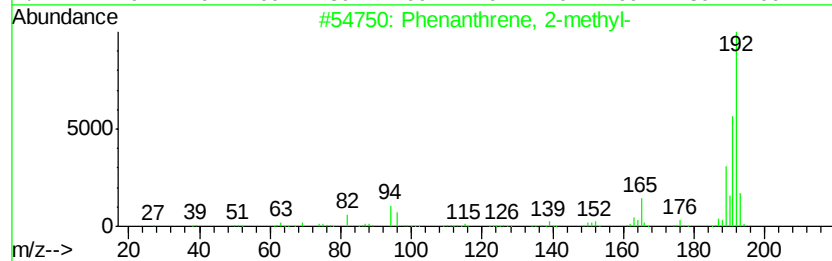
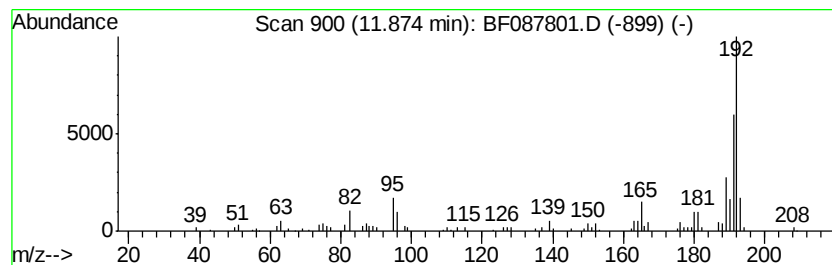
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TIC Integration Parameters: LSCINT.P

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Peak Number 9 Phenanthrene, 2-methyl- Concentration Rank 17

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 11.87 | 3.17 ng | 121270 | Phenanthrene-d10 | 11.35 |

| Hit# | of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------|-----|---------|-------------|------|
| 1    |    |   | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 97   |
| 2    |    |   | Phenanthrene, 1-methyl- | 192 | C15H12  | 000832-69-9 | 96   |
| 3    |    |   | Phenanthrene, 4-methyl- | 192 | C15H12  | 000832-64-4 | 96   |
| 4    |    |   | Anthracene, 1-methyl-   | 192 | C15H12  | 000610-48-0 | 96   |
| 5    |    |   | Anthracene, 2-methyl-   | 192 | C15H12  | 000613-12-7 | 94   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060716\  
Data File : BF087801.D  
Acq On : 7 Jun 2016 22:49  
Operator : UM/SJ  
Sample : H3379-06  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SS-3

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

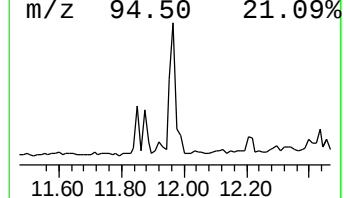
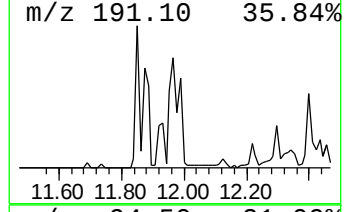
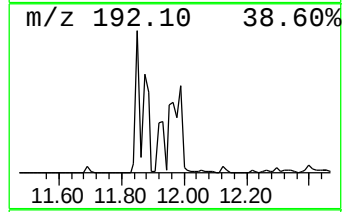
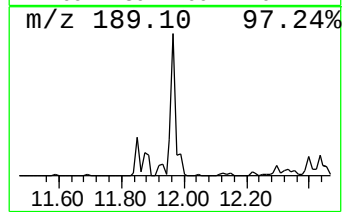
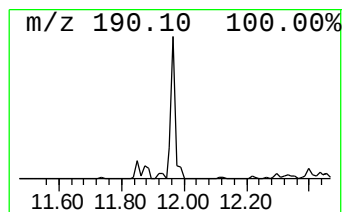
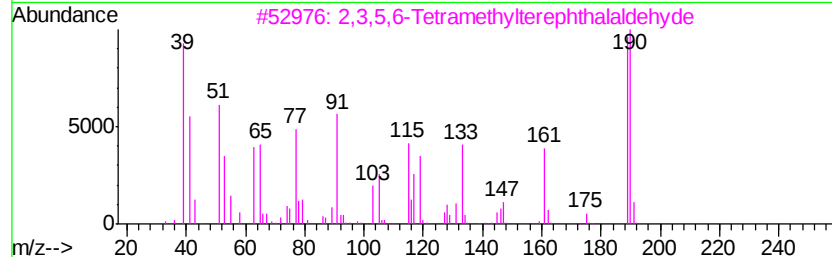
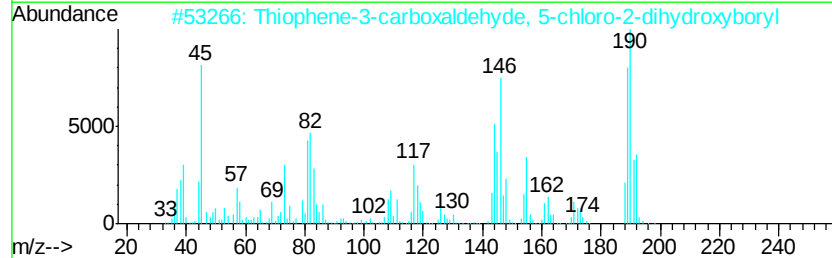
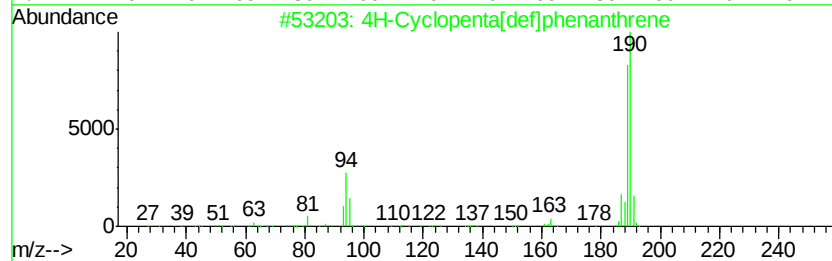
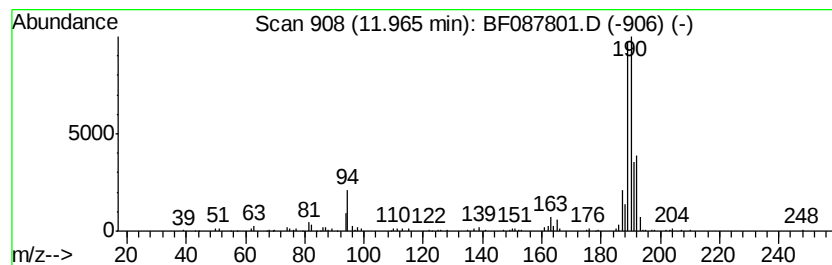
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 10 4H-Cyclopenta[def]phenanthrene Concentration Rank 9

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 11.97 | 7.58 ng | 289915 | Phenanthrene-d10 | 11.35 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm    | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|------------|-------------|------|
| 1    |    |   | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10     | 000203-64-5 | 94   |
| 2    |    |   | Thiophene-3-carboxaldehyde, 5-ch... | 190 | C5H4BClO3S | 036155-87-0 | 50   |
| 3    |    |   | 2,3,5,6-Tetramethylterephthalald... | 190 | C12H14O2   | 007072-01-7 | 47   |
| 4    |    |   | 6H-Cyclobuta[flk]phenanthrene       | 190 | C15H10     | 083469-43-6 | 45   |
| 5    |    |   | 2,2'-Bis(4,5-dimethylimidazole)     | 190 | C10H14N4   | 069286-06-2 | 42   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060716\  
Data File : BF087801.D  
Acq On : 7 Jun 2016 22:49  
Operator : UM/SJ  
Sample : H3379-06  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SS-3

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

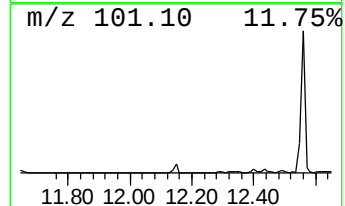
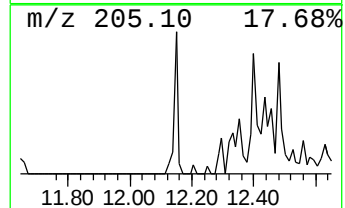
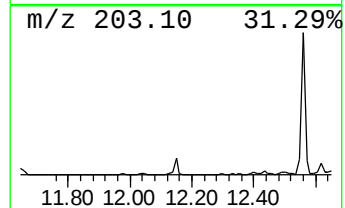
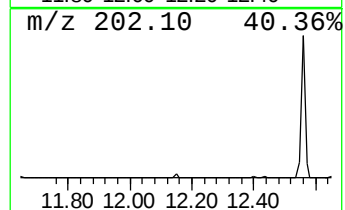
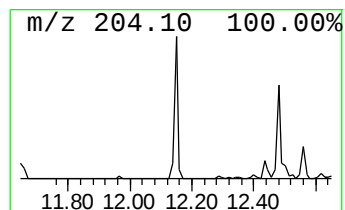
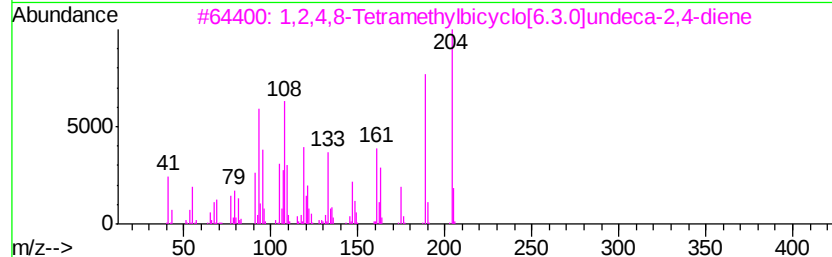
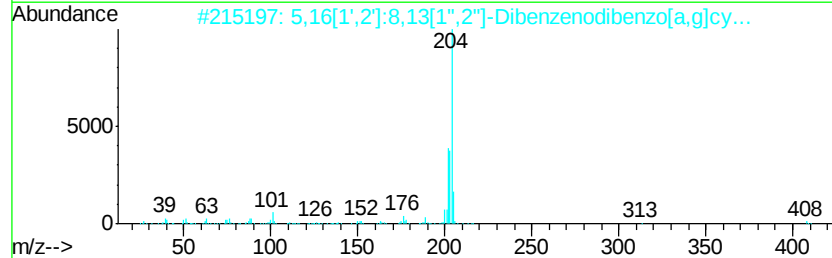
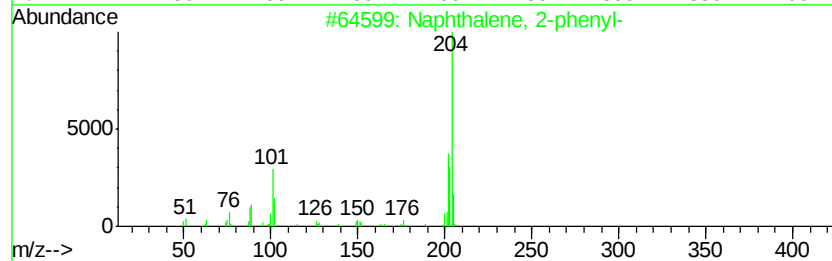
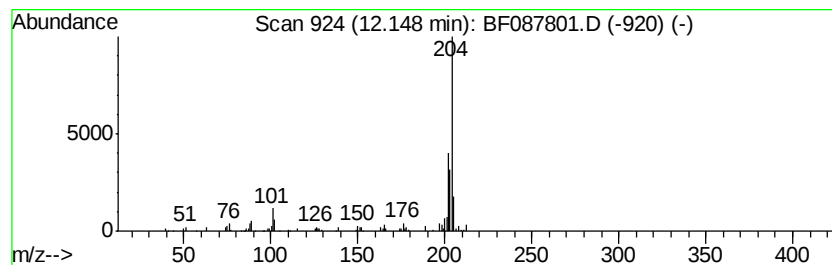
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 11 Naphthalene, 2-phenyl- Concentration Rank 14

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 12.15 | 3.54 ng | 135182 | Phenanthrene-d10 | 11.35 |

| Hit# | of | 5 | Tentative ID                                      | MW  | MolForm | CAS#        | Qual |
|------|----|---|---------------------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Naphthalene, 2-phenyl-                            | 204 | C16H12  | 000612-94-2 | 94   |
| 2    |    |   | 5,16[1',2'] : 8,13[1'',2'']-Dibenz...             | 408 | C32H24  | 005672-97-9 | 91   |
| 3    |    |   | 1,2,4,8-Tetramethylbicvclo[6.3.0]undeca-2,4-diene | 204 | C15H24  | 137235-51-9 | 83   |
| 4    |    |   | Tricyclo[8.2.2.2(4,7)]hexadeca-2,4,6,8-tetraene   | 204 | C16H12  | 006572-60-7 | 58   |
| 5    |    |   | 6-Cyanophenanthridine                             | 204 | C14H8N2 | 002176-28-5 | 55   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060716\  
Data File : BF087801.D  
Acq On : 7 Jun 2016 22:49  
Operator : UM/SJ  
Sample : H3379-06  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SS-3

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

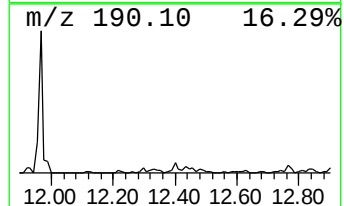
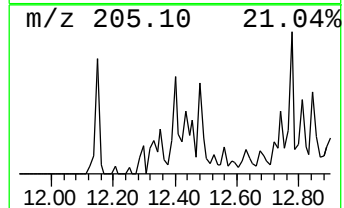
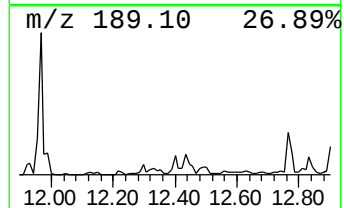
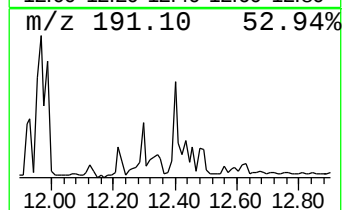
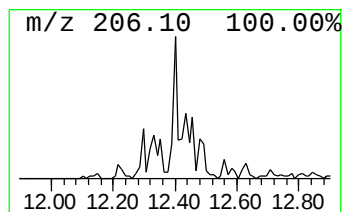
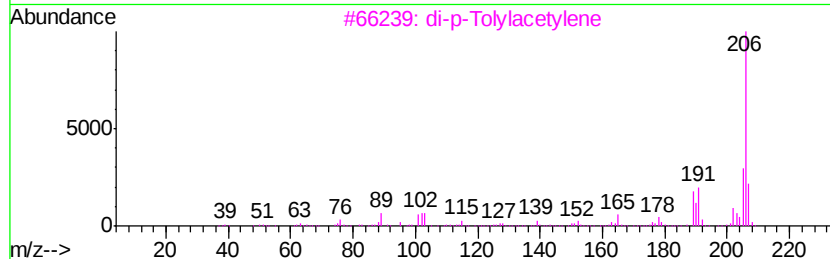
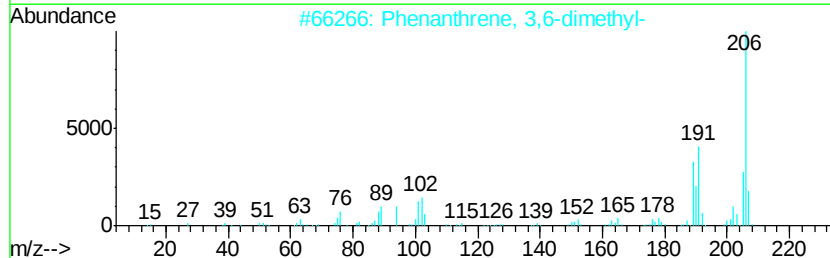
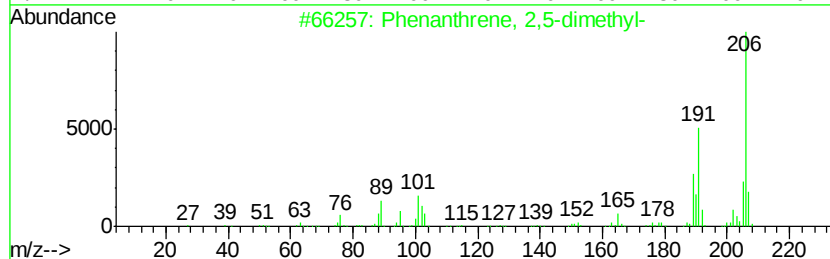
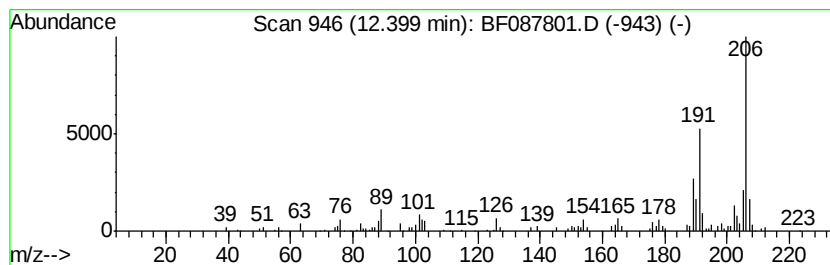
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 12 Phenanthrene, 2,5-dimethyl- Concentration Rank 19

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 12.40 | 2.82 ng | 107636 | Phenanthrene-d10 | 11.35 |

| Hit# | of | 5 | Tentative ID                  | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------|-----|---------|-------------|------|
| 1    |    |   | Phenanthrene, 2,5-dimethyl-   | 206 | C16H14  | 003674-66-6 | 96   |
| 2    |    |   | Phenanthrene, 3,6-dimethyl-   | 206 | C16H14  | 001576-67-6 | 93   |
| 3    |    |   | di-p-Tolylacetvlene           | 206 | C16H14  | 002789-88-0 | 92   |
| 4    |    |   | Phenanthrene, 2,3-dimethyl-   | 206 | C16H14  | 003674-65-5 | 90   |
| 5    |    |   | 1H-Indene, 2-methyl-3-phenyl- | 206 | C16H14  | 035099-60-6 | 89   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060716\  
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Acq On : 7 Jun 2016 22:49  
Operator : UM/SJ  
Sample : H3379-06  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SS-3

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

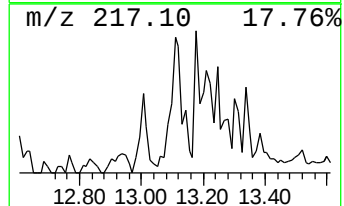
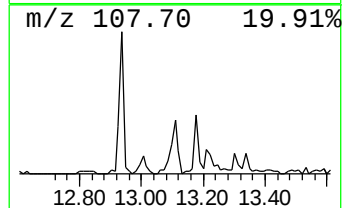
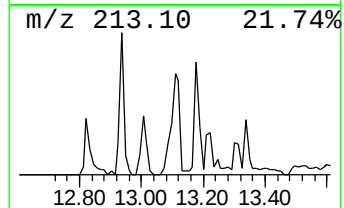
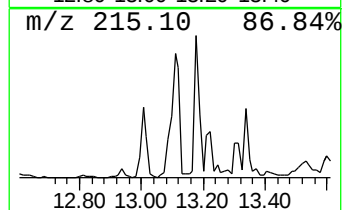
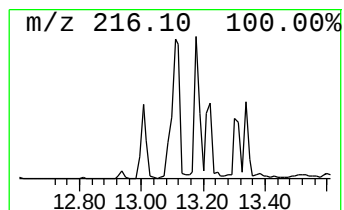
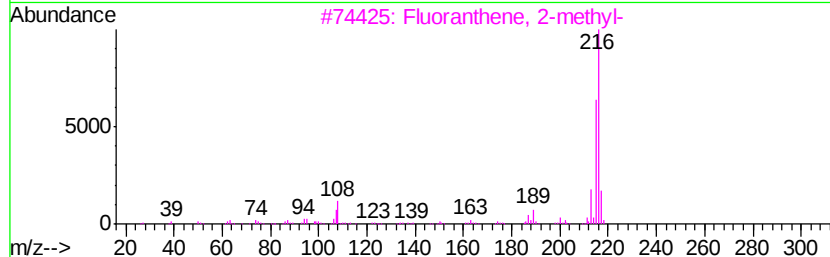
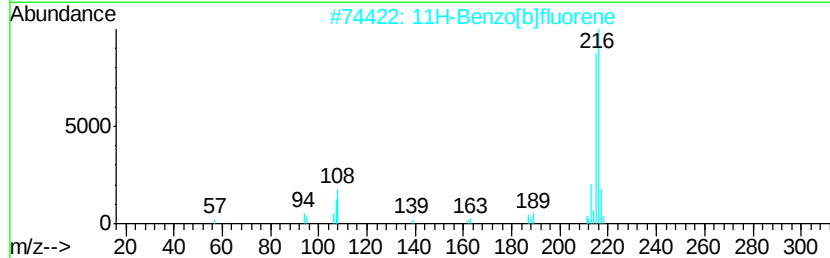
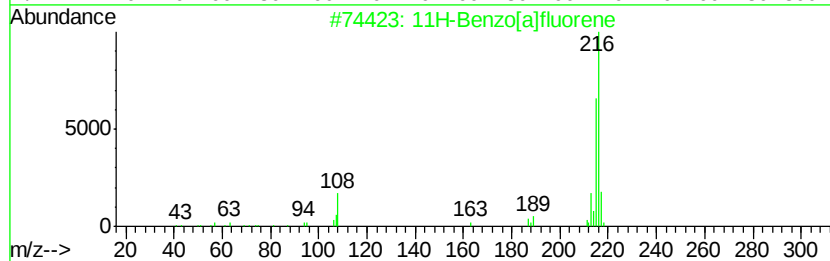
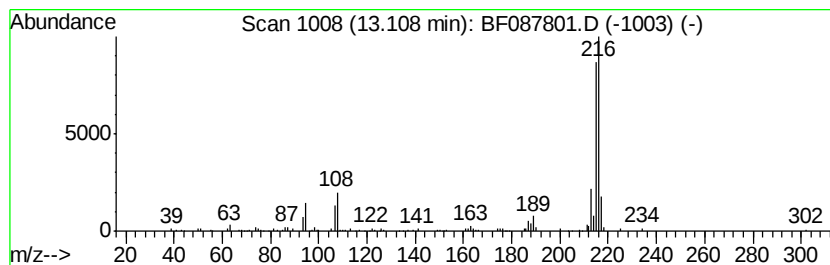
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 13 11H-Benzo[a]fluorene Concentration Rank 10

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 13.11 | 4.95 ng | 299970 | Chrysene-d12     | 13.98 |

| Hit# | of | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------|-----|---------|-------------|------|
| 1    | 5  | 11H-Benzo[a]fluorene    | 216 | C17H12  | 000238-84-6 | 94   |
| 2    |    | 11H-Benzo[b]fluorene    | 216 | C17H12  | 000243-17-4 | 94   |
| 3    |    | Fluoranthene, 2-methyl- | 216 | C17H12  | 033543-31-6 | 93   |
| 4    |    | Pvrene, 1-methyl-       | 216 | C17H12  | 002381-21-7 | 93   |
| 5    |    | 7H-Benzo[c]fluorene     | 216 | C17H12  | 000205-12-9 | 87   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF060716\  
Data File : BF087801.D  
Acq On : 7 Jun 2016 22:49  
Operator : UM/SJ  
Sample : H3379-06  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SS-3

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

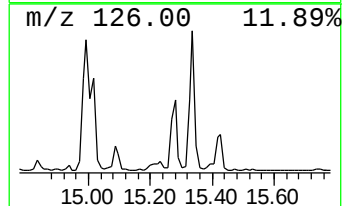
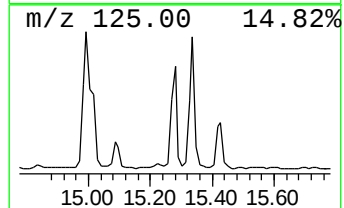
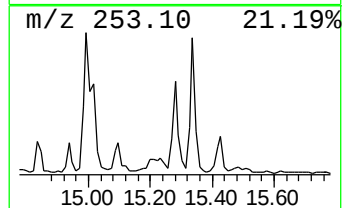
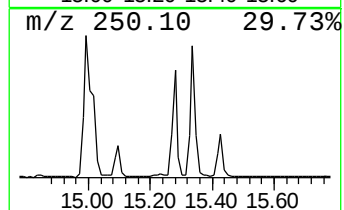
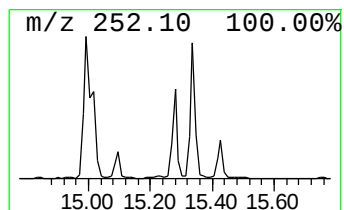
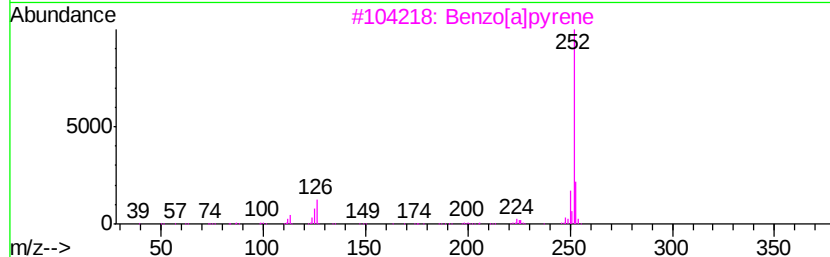
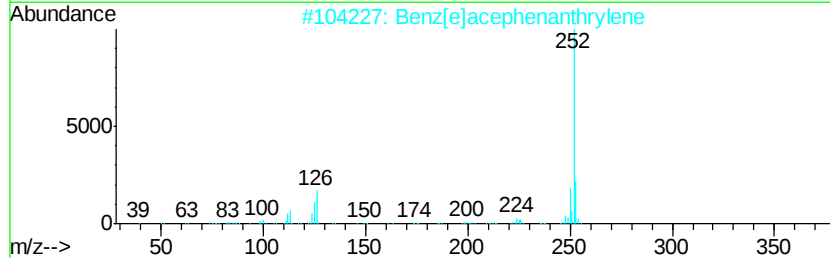
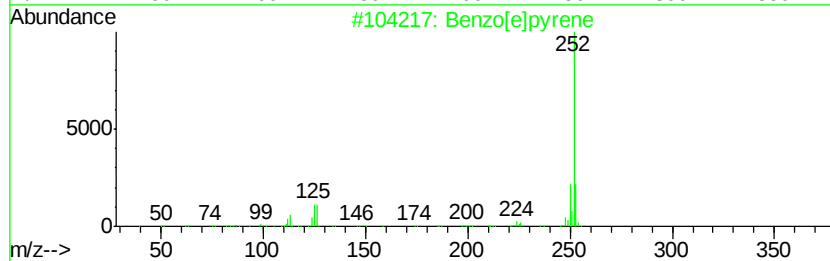
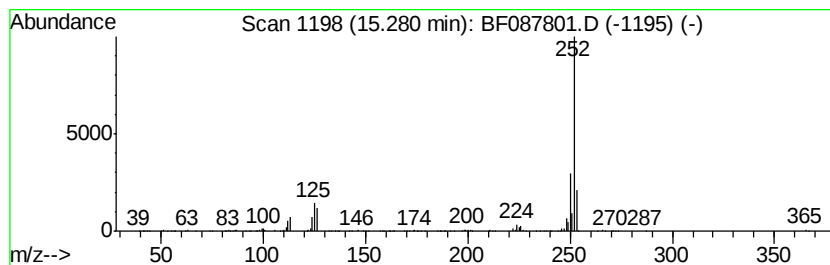
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 15 Benzo[e]pyrene Concentration Rank 7

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 15.28 | 9.57 ng | 380615 | Perylene-d12     | 15.39 |

| Hit# | of | Tentative ID             | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[e]bpvrene          | 252 | C20H12  | 000192-97-2 | 98   |
| 2    |    | Benz[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 96   |
| 3    |    | Benzo[a]bpvrene          | 252 | C20H12  | 000050-32-8 | 96   |
| 4    |    | Perylene                 | 252 | C20H12  | 000198-55-0 | 95   |
| 5    |    | Benzo[k]fluoranthene     | 252 | C20H12  | 000207-08-9 | 93   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060716\  
Data File : BF087801.D  
Acq On : 7 Jun 2016 22:49  
Operator : UM/SJ  
Sample : H3379-06  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SS-3

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

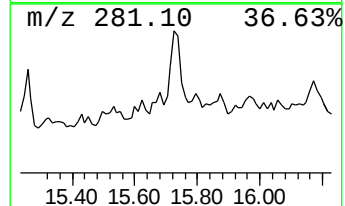
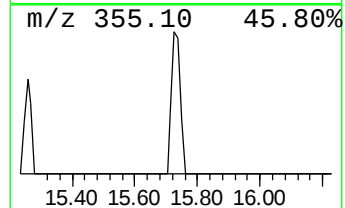
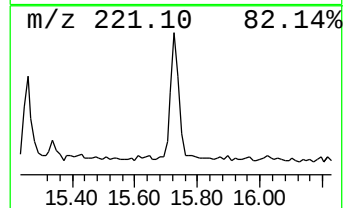
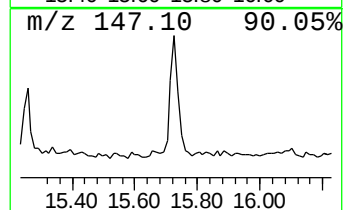
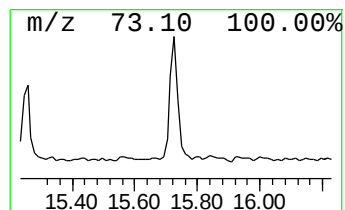
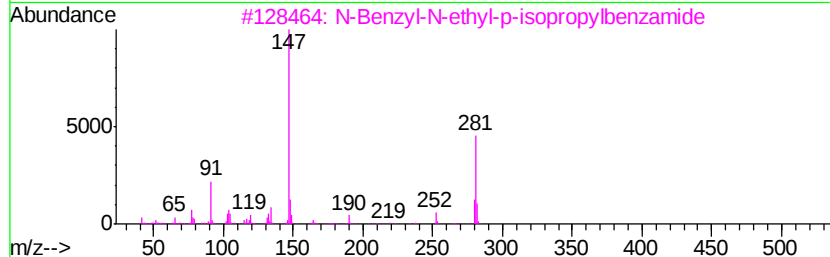
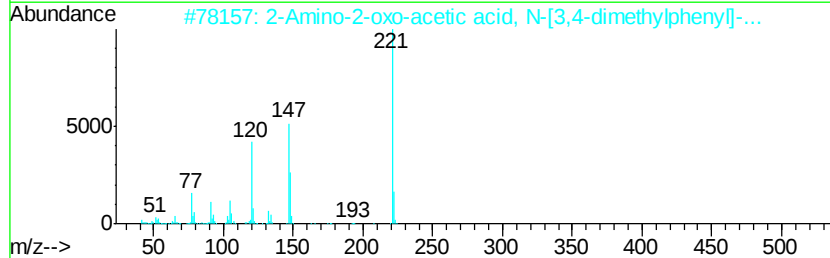
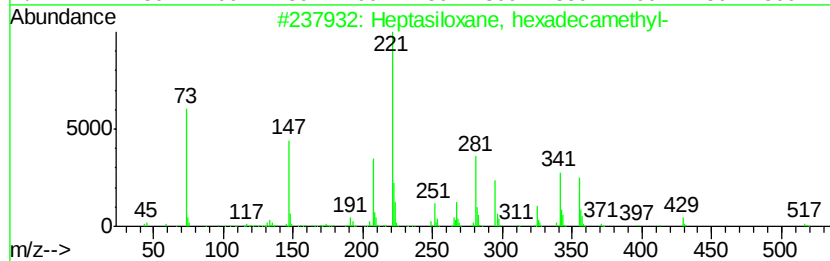
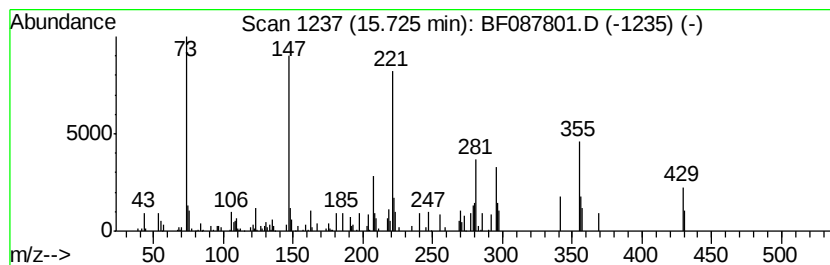
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 16 unknown15.73 Concentration Rank 18

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 15.73 | 2.98 ng | 118397 | Perylene-d12     | 15.39 |

| Hit# | of | Tentative ID                        | MW  | MolForm     | CAS#         | Qual |
|------|----|-------------------------------------|-----|-------------|--------------|------|
| 1    | 5  | Heptasiloxane, hexadecamethyl-      | 532 | C16H48O6Si7 | 000541-01-5  | 38   |
| 2    |    | 2-Amino-2-oxo-acetic acid, N-[3,... | 221 | C12H15N03   | 024451-17-0  | 16   |
| 3    |    | N-Benzyl-N-ethyl-p-isopropylbenz... | 281 | C19H23NO    | 015089-22-2  | 14   |
| 4    |    | 3-Trimethylsilyloxystearic acid,... | 444 | C24H52O3Si2 | 1000079-42-6 | 12   |
| 5    |    | 1,2-Benzenedicarboxylic acid, bi... | 310 | C14H22O4Si2 | 002078-22-0  | 12   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060716\  
Data File : BF087801.D  
Acq On : 7 Jun 2016 22:49  
Operator : UM/SJ  
Sample : H3379-06  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SS-3

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

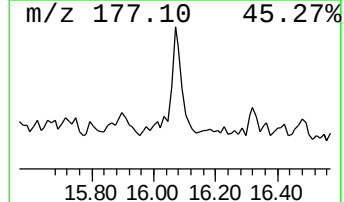
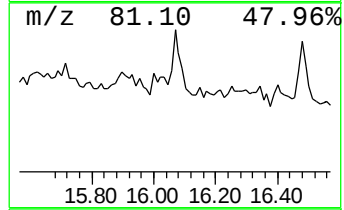
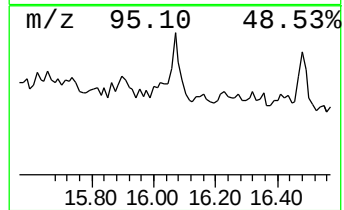
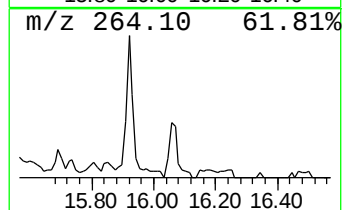
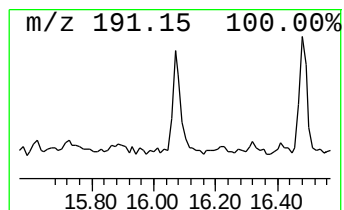
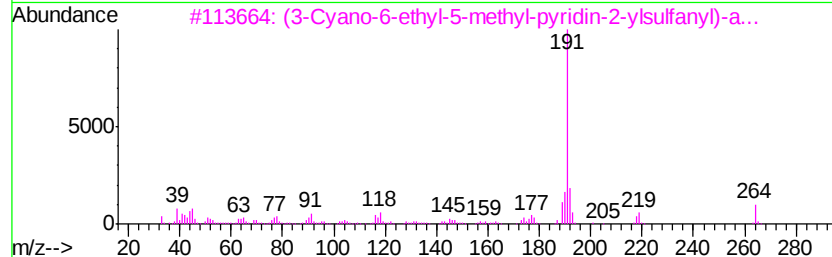
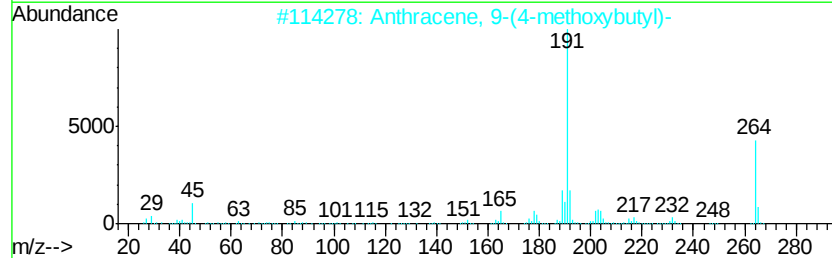
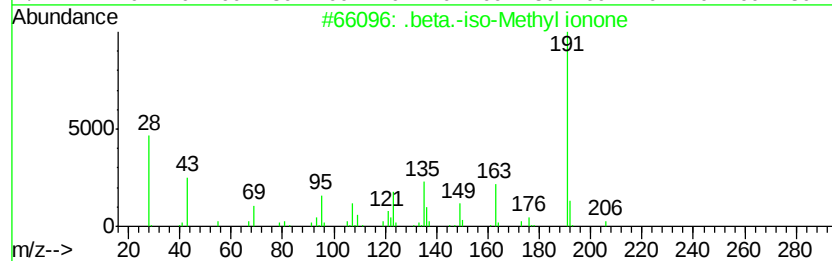
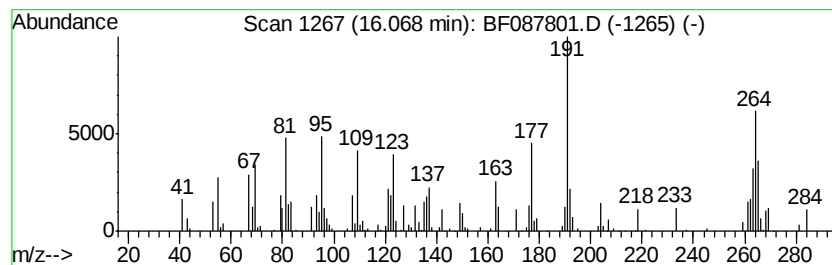
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 17 unknown16.07 Concentration Rank 20

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 16.07 | 2.61 ng | 103941 | Perylene-d12     | 15.39 |

| Hit# | of | Tentative ID                        | MW  | MolForm     | CAS#         | Qual |
|------|----|-------------------------------------|-----|-------------|--------------|------|
| 1    | 5  | .beta.-iso-Methyl ionone            | 206 | C14H22O     | 1000285-40-2 | 32   |
| 2    |    | Anthracene, 9-(4-methoxybutyl)-     | 264 | C19H20O     | 144000-76-0  | 30   |
| 3    |    | (3-Cyano-6-ethyl-5-methyl-pyridi... | 264 | C13H16N2O2S | 1000300-45-4 | 27   |
| 4    |    | 1H-Pyrazole-4-acetic acid, 1-(4-... | 264 | C11H16N6O2  | 1000337-51-2 | 27   |
| 5    |    | Anthracene, 9-dodecyltetradecahy... | 360 | C26H48      | 055401-75-7  | 25   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF060716\  
Data File : BF087801.D  
Acq On : 7 Jun 2016 22:49  
Operator : UM/SJ  
Sample : H3379-06  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

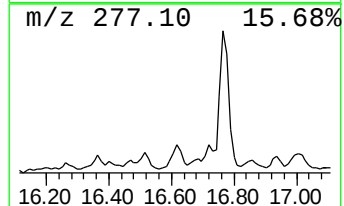
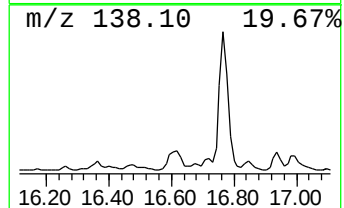
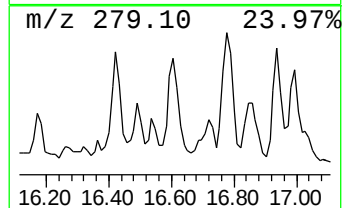
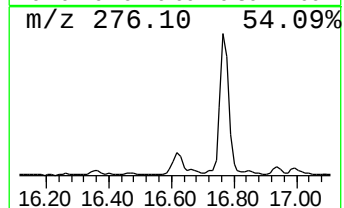
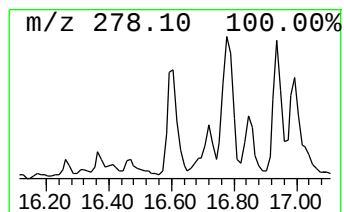
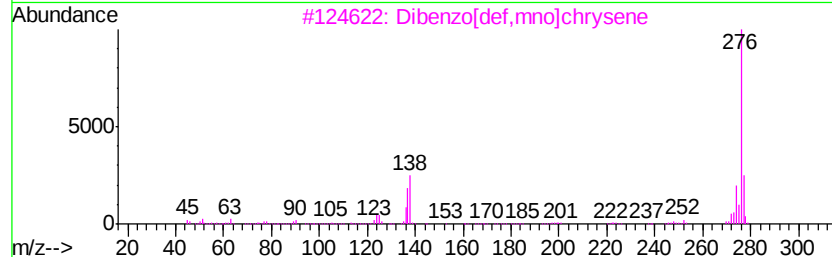
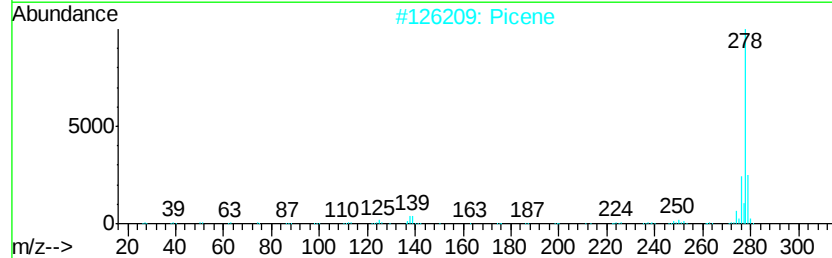
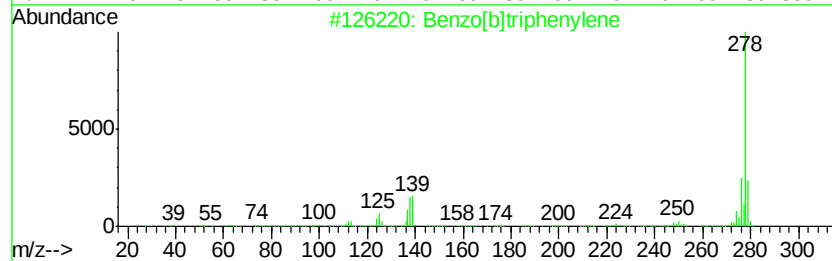
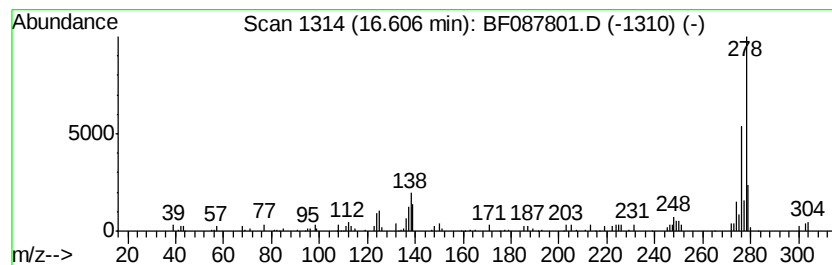
Instrument :  
BNA\_F  
ClientSampleId :  
SS-3

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 18 Benzo[b]triphenylene Concentration Rank 15

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------|--------|------------------|-------------|------|
| 16.61     | 3.51 ng                             | 139452 | Perylene-d12     | 15.39       |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#        | Qual |
| 1         | Benzo[bltriphenylene                | 278    | C22H14           | 000215-58-7 | 64   |
| 2         | Picene                              | 278    | C22H14           | 000213-46-7 | 58   |
| 3         | Dibenzo[def,mno]chrysene            | 276    | C22H12           | 000191-26-4 | 49   |
| 4         | Pyrene, 1-phenyl-                   | 278    | C22H14           | 005101-27-9 | 49   |
| 5         | Benz[a]anthracene-7,12-dicarboni... | 278    | C20H10N2         | 035215-32-8 | 49   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060716\  
Data File : BF087801.D  
Acq On : 7 Jun 2016 22:49  
Operator : UM/SJ  
Sample : H3379-06  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SS-3

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF060716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

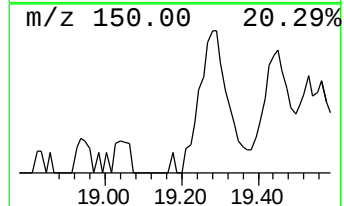
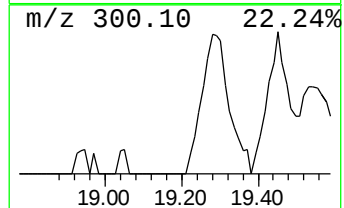
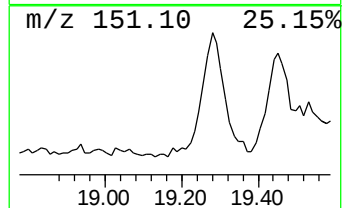
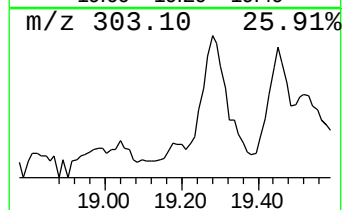
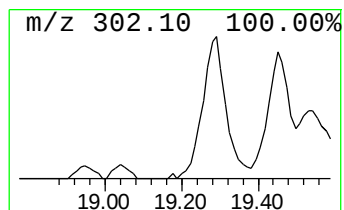
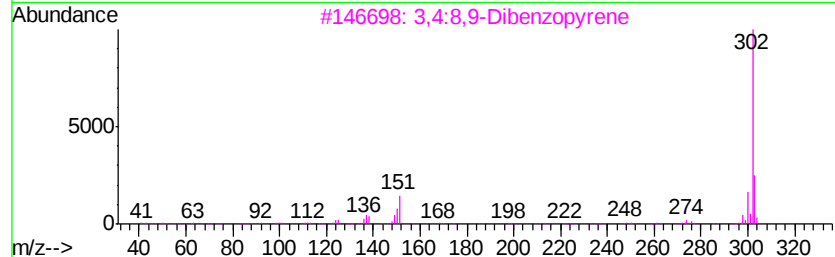
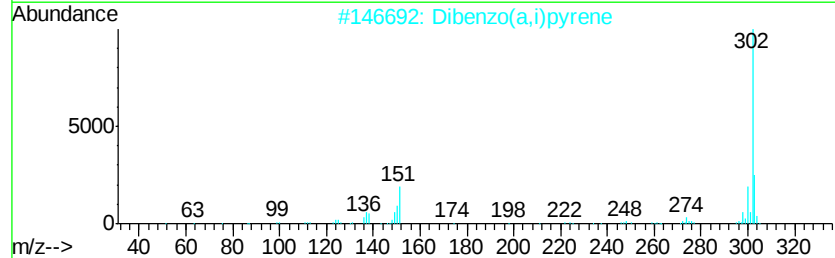
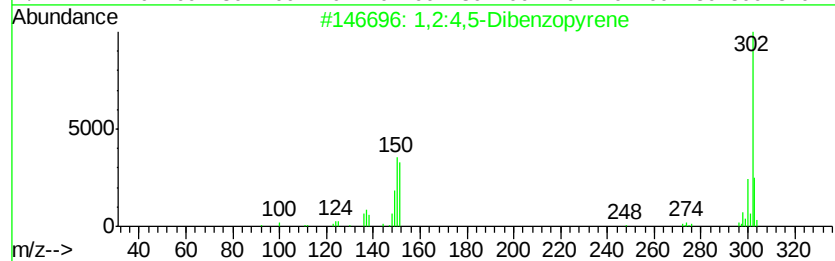
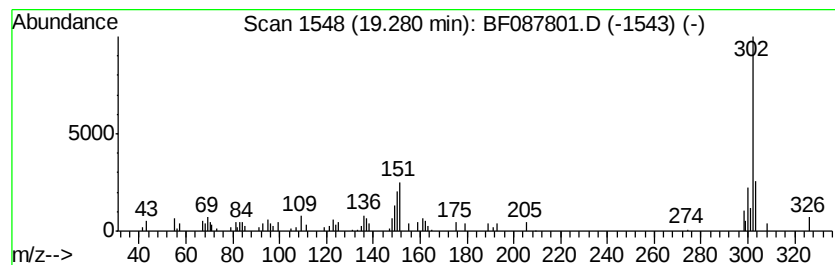
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 20 1,2:4,5-Dibenzopyrene Concentration Rank 11

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 19.28 | 4.46 ng | 177139 | Perylene-d12     | 15.39 |

| Hit# | of | 5 | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---|---------------------------|-----|---------|-------------|------|
| 1    |    |   | 1,2:4,5-Dibenzopyrene     | 302 | C24H14  | 000192-65-4 | 81   |
| 2    |    |   | Dibenzo(a,i)pyrene        | 302 | C24H14  | 000189-55-9 | 68   |
| 3    |    |   | 3,4:8,9-Dibenzopyrene     | 302 | C24H14  | 000189-64-0 | 59   |
| 4    |    |   | Dibenz(a,e)aceanthrylene  | 302 | C24H14  | 005385-75-1 | 50   |
| 5    |    |   | Dibenzo[fg,op]naphthacene | 302 | C24H14  | 000192-51-8 | 50   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF060716\  
 Data File : BF087801.D  
 Acq On : 7 Jun 2016 22:49  
 Operator : UM/SJ  
 Sample : H3379-06  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SS-3

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF060716.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST11.L  
 TIC Integration Parameters: LSCINT.P

| TIC Top Hit name     | RT    | EstConc | Units | Response | --Internal Standard-- |       |         |      |
|----------------------|-------|---------|-------|----------|-----------------------|-------|---------|------|
|                      |       |         |       |          | #                     | RT    | Resp    | Conc |
| Propane, 2,2-dime... | 1.69  | 227.1   | ng    | 6434120  | 1                     | 6.84  | 566752  | 20.0 |
| Propane, 1,1-dime... | 2.09  | 12.0    | ng    | 339973   | 1                     | 6.84  | 566752  | 20.0 |
| 2-Pentanone, 4-hy... | 5.03  | 8.6     | ng    | 243168   | 1                     | 6.84  | 566752  | 20.0 |
| unknown6.60          | 6.60  | 85.8    | ng    | 2430650  | 1                     | 6.84  | 566752  | 20.0 |
| unknown11.22         | 11.22 | 4.4     | ng    | 166555   | 4                     | 11.35 | 764693  | 20.0 |
| Phenanthrene, 2-m... | 11.87 | 3.2     | ng    | 121270   | 4                     | 11.35 | 764693  | 20.0 |
| 4H-Cyclopenta[def... | 11.97 | 7.6     | ng    | 289915   | 4                     | 11.35 | 764693  | 20.0 |
| Naphthalene, 2-ph... | 12.15 | 3.5     | ng    | 135182   | 4                     | 11.35 | 764693  | 20.0 |
| Phenanthrene, 2,5... | 12.40 | 2.8     | ng    | 107636   | 4                     | 11.35 | 764693  | 20.0 |
| 11H-Benzo[a]fluorene | 13.11 | 5.0     | ng    | 299970   | 5                     | 13.98 | 1211460 | 20.0 |
| Benzo[e]pyrene       | 15.28 | 9.6     | ng    | 380615   | 6                     | 15.39 | 795177  | 20.0 |
| unknown15.73         | 15.73 | 3.0     | ng    | 118397   | 6                     | 15.39 | 795177  | 20.0 |
| unknown16.07         | 16.07 | 2.6     | ng    | 103941   | 6                     | 15.39 | 795177  | 20.0 |
| Benzo[b]triphenylene | 16.61 | 3.5     | ng    | 139452   | 6                     | 15.39 | 795177  | 20.0 |
| 1,2:4,5-Dibenzopy... | 19.28 | 4.5     | ng    | 177139   | 6                     | 15.39 | 795177  | 20.0 |