

Data Path : Z:\HPCHEM1\BNA F\DATA\BF061016\  
 Data File : BF087888.D  
 Acq On : 10 Jun 2016 21:46  
 Operator : UM/SJ  
 Sample : H3395-16  
 Misc :  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 STA-953-PLATFORM(0-4)

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

| 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         | 1.656       | 3             | 6           | 8            | rVB      | 3874675        | 5994902       | 100.00%         | 7.020%        |
| 2         | 1.747       | 12            | 14          | 23           | rVB      | 277038         | 611175        | 10.19%          | 0.716%        |
| 3         | 1.873       | 23            | 25          | 39           | rVB      | 1500468        | 2485269       | 41.46%          | 2.910%        |
| 4         | 4.993       | 295           | 298         | 302          | rVB      | 112028         | 171651        | 2.86%           | 0.201%        |
| 5         | 5.404       | 332           | 334         | 337          | rBV      | 1503259        | 2073173       | 34.58%          | 2.428%        |
| 6         | 6.445       | 423           | 425         | 428          | rBV      | 1486929        | 2117975       | 35.33%          | 2.480%        |
| 7         | 6.582       | 434           | 437         | 439          | rBV      | 2242706        | 2142098       | 35.73%          | 2.508%        |
| 8         | 6.810       | 455           | 457         | 459          | rBV      | 758144         | 612715        | 10.22%          | 0.718%        |
| 9         | 6.970       | 468           | 471         | 473          | rBV      | 1920520        | 1690390       | 28.20%          | 1.980%        |
| 10        | 7.382       | 504           | 507         | 509          | rBV      | 1187198        | 1390469       | 23.19%          | 1.628%        |
| 11        | 8.102       | 567           | 570         | 572          | rBV      | 916719         | 923950        | 15.41%          | 1.082%        |
| 12        | 9.176       | 661           | 664         | 666          | rBV      | 2661802        | 2365138       | 39.45%          | 2.770%        |
| 13        | 9.565       | 696           | 698         | 701          | rBV      | 332666         | 317471        | 5.30%           | 0.372%        |
| 14        | 9.713       | 708           | 711         | 713          | rBV      | 533699         | 703126        | 11.73%          | 0.823%        |
| 15        | 9.851       | 720           | 723         | 724          | rBV      | 939086         | 913098        | 15.23%          | 1.069%        |
| 16        | 10.628      | 789           | 791         | 793          | rVB2     | 998189         | 1189914       | 19.85%          | 1.393%        |
| 17        | 10.754      | 800           | 802         | 806          | rVB      | 167179         | 210719        | 3.51%           | 0.247%        |
| 18        | 10.948      | 816           | 819         | 822          | rBV3     | 45387          | 119488        | 1.99%           | 0.140%        |
| 19        | 11.085      | 827           | 831         | 834          | rVV4     | 94645          | 215395        | 3.59%           | 0.252%        |
| 20        | 11.325      | 850           | 852         | 853          | rBV      | 880387         | 771941        | 12.88%          | 0.904%        |
| 21        | 11.405      | 856           | 859         | 860          | rVV      | 446715         | 547556        | 9.13%           | 0.641%        |
| 22        | 11.428      | 860           | 861         | 864          | rVV3     | 87361          | 116976        | 1.95%           | 0.137%        |
| 23        | 11.576      | 869           | 874         | 877          | rBV3     | 145766         | 382605        | 6.38%           | 0.448%        |
| 24        | 11.622      | 877           | 878         | 880          | rVV      | 124106         | 129046        | 2.15%           | 0.151%        |
| 25        | 11.828      | 893           | 896         | 897          | rBV      | 266262         | 272508        | 4.55%           | 0.319%        |
| 26        | 11.851      | 897           | 898         | 900          | rVB      | 247176         | 213788        | 3.57%           | 0.250%        |
| 27        | 11.897      | 900           | 902         | 904          | rBV2     | 224340         | 265275        | 4.43%           | 0.311%        |
| 28        | 11.942      | 904           | 906         | 910          | rVV      | 473862         | 863173        | 14.40%          | 1.011%        |
| 29        | 12.125      | 918           | 922         | 925          | rVV3     | 167103         | 354586        | 5.91%           | 0.415%        |
| 30        | 12.274      | 932           | 935         | 936          | rBV      | 131518         | 183168        | 3.06%           | 0.214%        |
| 31        | 12.297      | 936           | 937         | 938          | rVV      | 157633         | 153193        | 2.56%           | 0.179%        |
| 32        | 12.377      | 941           | 944         | 946          | rVV      | 470047         | 613634        | 10.24%          | 0.719%        |
| 33        | 12.411      | 946           | 947         | 950          | rVV2     | 280292         | 444212        | 7.41%           | 0.520%        |
| 34        | 12.457      | 950           | 951         | 956          | rVV2     | 243931         | 449060        | 7.49%           | 0.526%        |

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 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 | 12.548 | 956  | 959  | 961  | rVV  | 3483429 | 4342468 | 72.44% | 5.085% |
| 36 | 12.594 | 961  | 963  | 965  | rVV3 | 136501  | 305292  | 5.09%  | 0.358% |
| 37 | 12.628 | 965  | 966  | 968  | rVV  | 457780  | 373602  | 6.23%  | 0.438% |
| 38 | 12.708 | 968  | 973  | 975  | rVV2 | 141731  | 431385  | 7.20%  | 0.505% |
| 39 | 12.777 | 975  | 979  | 981  | rVV2 | 2797908 | 4655929 | 77.66% | 5.452% |
| 40 | 12.822 | 981  | 983  | 985  | rVB2 | 201862  | 319574  | 5.33%  | 0.374% |
| 41 | 12.879 | 985  | 988  | 989  | rBV  | 328732  | 377545  | 6.30%  | 0.442% |
| 42 | 12.914 | 989  | 991  | 993  | rVV  | 1610046 | 1749527 | 29.18% | 2.049% |
| 43 | 12.982 | 994  | 997  | 1001 | rBV2 | 584638  | 1055824 | 17.61% | 1.236% |
| 44 | 13.097 | 1003 | 1007 | 1008 | rVV  | 605935  | 1417270 | 23.64% | 1.660% |
| 45 | 13.154 | 1010 | 1012 | 1014 | rVV  | 558684  | 710297  | 11.85% | 0.832% |
| 46 | 13.188 | 1014 | 1015 | 1019 | rVV3 | 589742  | 1135777 | 18.95% | 1.330% |
| 47 | 13.257 | 1019 | 1021 | 1022 | rVV  | 213497  | 333893  | 5.57%  | 0.391% |
| 48 | 13.291 | 1022 | 1024 | 1025 | rVV  | 402623  | 519763  | 8.67%  | 0.609% |
| 49 | 13.314 | 1025 | 1026 | 1028 | rVV  | 436052  | 526320  | 8.78%  | 0.616% |
| 50 | 13.405 | 1031 | 1034 | 1037 | rVV3 | 107245  | 281834  | 4.70%  | 0.330% |
| 51 | 13.497 | 1037 | 1042 | 1045 | rVV5 | 213414  | 805680  | 13.44% | 0.943% |
| 52 | 13.600 | 1047 | 1051 | 1053 | rVV2 | 399014  | 938805  | 15.66% | 1.099% |
| 53 | 13.657 | 1055 | 1056 | 1058 | rVV  | 212298  | 274355  | 4.58%  | 0.321% |
| 54 | 13.702 | 1058 | 1060 | 1062 | rVV  | 530268  | 901982  | 15.05% | 1.056% |
| 55 | 13.737 | 1062 | 1063 | 1064 | rVV  | 678045  | 640976  | 10.69% | 0.751% |
| 56 | 13.760 | 1064 | 1065 | 1068 | rVV2 | 621147  | 1062628 | 17.73% | 1.244% |
| 57 | 13.805 | 1068 | 1069 | 1071 | rVV  | 502377  | 511241  | 8.53%  | 0.599% |
| 58 | 13.874 | 1071 | 1075 | 1078 | rVV2 | 161704  | 533685  | 8.90%  | 0.625% |
| 59 | 13.954 | 1079 | 1082 | 1084 | rVV2 | 2358267 | 4303985 | 71.79% | 5.040% |
| 60 | 13.988 | 1084 | 1085 | 1088 | rVV  | 1700975 | 1777986 | 29.66% | 2.082% |
| 61 | 14.068 | 1088 | 1092 | 1093 | rVV2 | 386563  | 798677  | 13.32% | 0.935% |
| 62 | 14.102 | 1093 | 1095 | 1097 | rVV2 | 287094  | 621774  | 10.37% | 0.728% |
| 63 | 14.137 | 1097 | 1098 | 1100 | rVV2 | 241785  | 375303  | 6.26%  | 0.439% |
| 64 | 14.171 | 1100 | 1101 | 1103 | rVV2 | 334274  | 482393  | 8.05%  | 0.565% |
| 65 | 14.217 | 1103 | 1105 | 1108 | rVV  | 241321  | 471234  | 7.86%  | 0.552% |
| 66 | 14.274 | 1108 | 1110 | 1111 | rVV2 | 178222  | 259054  | 4.32%  | 0.303% |
| 67 | 14.308 | 1111 | 1113 | 1114 | rVV  | 268620  | 385861  | 6.44%  | 0.452% |
| 68 | 14.342 | 1114 | 1116 | 1118 | rVV  | 794746  | 1052826 | 17.56% | 1.233% |
| 69 | 14.377 | 1118 | 1119 | 1121 | rVV  | 458992  | 469382  | 7.83%  | 0.550% |
| 70 | 14.434 | 1121 | 1124 | 1125 | rVV2 | 389239  | 653808  | 10.91% | 0.766% |
| 71 | 14.468 | 1125 | 1127 | 1130 | rVV3 | 446551  | 928524  | 15.49% | 1.087% |

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STA-953-PLATFORM(0-4)

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

|     |        |      |      |      |      |         |         |        |        |
|-----|--------|------|------|------|------|---------|---------|--------|--------|
| 72  | 14.537 | 1130 | 1133 | 1136 | rVV3 | 241052  | 421061  | 7.02%  | 0.493% |
| 73  | 14.583 | 1136 | 1137 | 1140 | rVV3 | 90808   | 175336  | 2.92%  | 0.205% |
| 74  | 14.640 | 1140 | 1142 | 1143 | rVV  | 229506  | 291890  | 4.87%  | 0.342% |
| 75  | 14.720 | 1147 | 1149 | 1150 | rVV  | 145643  | 190961  | 3.19%  | 0.224% |
| 76  | 14.754 | 1150 | 1152 | 1154 | rVB2 | 107406  | 152789  | 2.55%  | 0.179% |
| 77  | 14.811 | 1154 | 1157 | 1161 | rBV3 | 206234  | 517948  | 8.64%  | 0.607% |
| 78  | 14.880 | 1161 | 1163 | 1165 | rVV2 | 116654  | 161290  | 2.69%  | 0.189% |
| 79  | 14.983 | 1168 | 1172 | 1176 | rBV  | 1681501 | 4086060 | 68.16% | 4.785% |
| 80  | 15.074 | 1178 | 1180 | 1182 | rVV  | 622125  | 657286  | 10.96% | 0.770% |
| 81  | 15.177 | 1185 | 1189 | 1190 | rBV3 | 144212  | 330853  | 5.52%  | 0.387% |
| 82  | 15.211 | 1190 | 1192 | 1193 | rVV  | 100906  | 135706  | 2.26%  | 0.159% |
| 83  | 15.257 | 1193 | 1196 | 1199 | rVV  | 1016054 | 1449527 | 24.18% | 1.697% |
| 84  | 15.314 | 1199 | 1201 | 1204 | rVV  | 1207029 | 1896321 | 31.63% | 2.221% |
| 85  | 15.371 | 1204 | 1206 | 1207 | rVV  | 451954  | 543424  | 9.06%  | 0.636% |
| 86  | 15.405 | 1207 | 1209 | 1212 | rVB2 | 450430  | 690860  | 11.52% | 0.809% |
| 87  | 15.703 | 1234 | 1235 | 1238 | rVB2 | 91902   | 111131  | 1.85%  | 0.130% |
| 88  | 15.771 | 1239 | 1241 | 1243 | rVV  | 63148   | 109272  | 1.82%  | 0.128% |
| 89  | 15.817 | 1243 | 1245 | 1247 | rVV  | 72486   | 128030  | 2.14%  | 0.150% |
| 90  | 15.885 | 1250 | 1251 | 1256 | rVB2 | 118044  | 191804  | 3.20%  | 0.225% |
| 91  | 16.423 | 1295 | 1298 | 1305 | rVB5 | 109170  | 323582  | 5.40%  | 0.379% |
| 92  | 16.583 | 1306 | 1312 | 1318 | rBV4 | 131227  | 523086  | 8.73%  | 0.613% |
| 93  | 16.743 | 1321 | 1326 | 1329 | rBV2 | 514602  | 1062631 | 17.73% | 1.244% |
| 94  | 16.891 | 1336 | 1339 | 1342 | rBV  | 136220  | 291337  | 4.86%  | 0.341% |
| 95  | 16.948 | 1342 | 1344 | 1346 | rVV  | 94686   | 162742  | 2.71%  | 0.191% |
| 96  | 17.143 | 1357 | 1361 | 1369 | rVB  | 416470  | 878534  | 14.65% | 1.029% |
| 97  | 17.280 | 1370 | 1373 | 1376 | rVB5 | 51445   | 126232  | 2.11%  | 0.148% |
| 98  | 17.360 | 1376 | 1380 | 1388 | rVB2 | 95827   | 259616  | 4.33%  | 0.304% |
| 99  | 19.212 | 1537 | 1542 | 1550 | rVB2 | 101602  | 446587  | 7.45%  | 0.523% |
| 100 | 19.383 | 1552 | 1557 | 1561 | rBV  | 75795   | 282549  | 4.71%  | 0.331% |

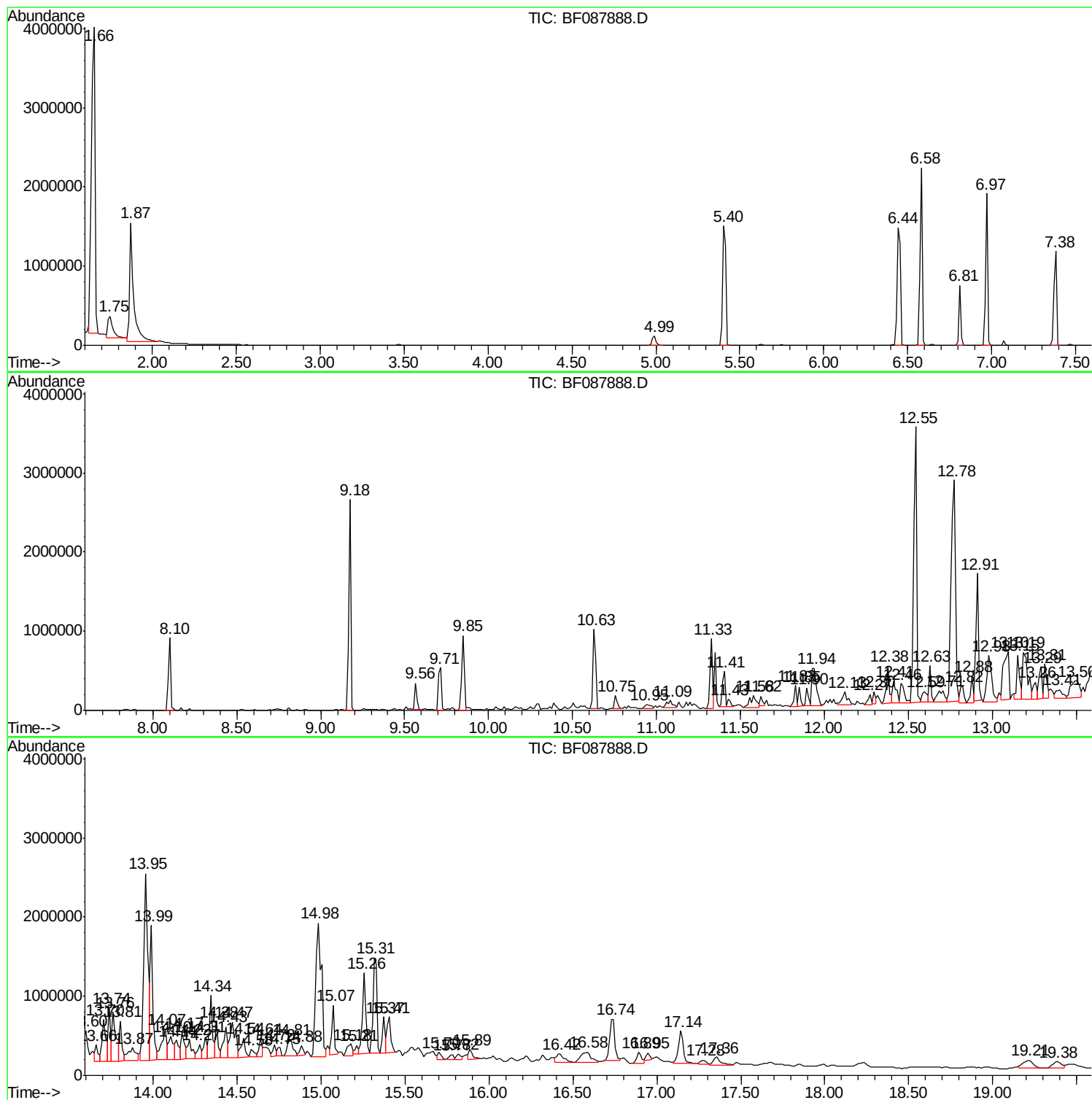
Sum of corrected areas: 85393741

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STA-953-PLATFORM(0-4)

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\BF061016\  
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

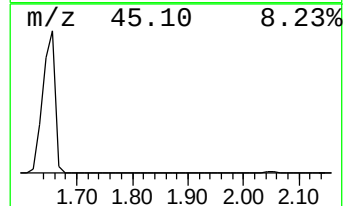
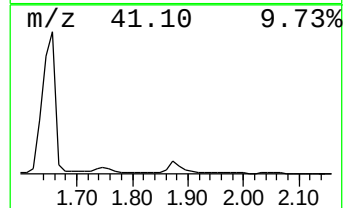
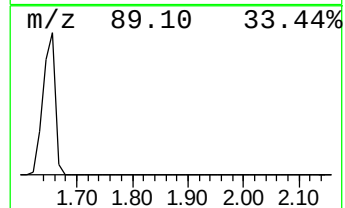
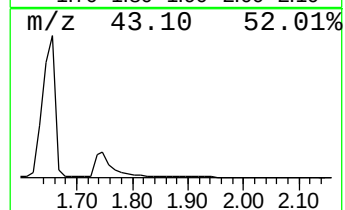
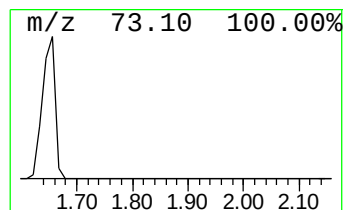
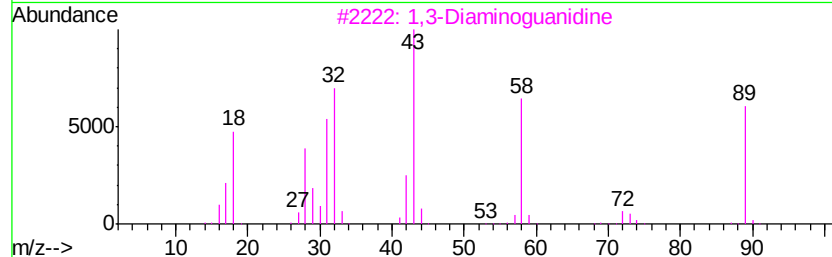
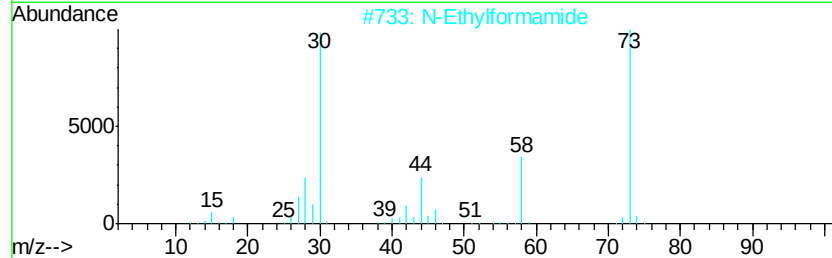
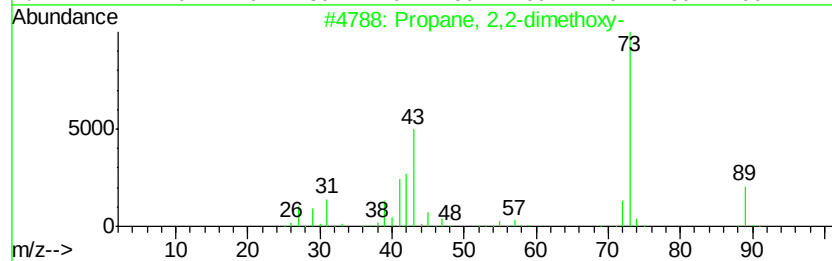
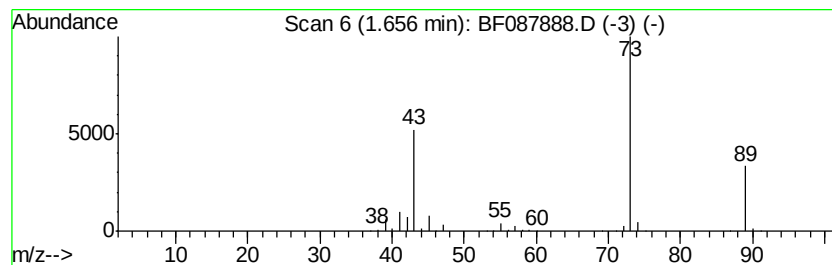
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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

| R.T. | EstConc   | Area    | Relative to ISTD       | R.T. |
|------|-----------|---------|------------------------|------|
| 1.66 | 195.68 ng | 5994900 | 1,4-Dichlorobenzene-d4 | 6.81 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Propane, 2,2-dimethoxy-             | 104 | C5H12O2  | 000077-76-9 | 56   |
| 2    |    | N-Ethylformamide                    | 73  | C3H7NO   | 000627-45-2 | 9    |
| 3    |    | 1,3-Diaminoquanidine                | 89  | CH7N5    | 004364-78-7 | 9    |
| 4    |    | Propane, 2-methoxy-2-methyl-        | 88  | C5H12O   | 001634-04-4 | 9    |
| 5    |    | 1-Hexen-4-ol, 1-chloro-3,5-dimet... | 162 | C8H15ClO | 100244-09-5 | 9    |



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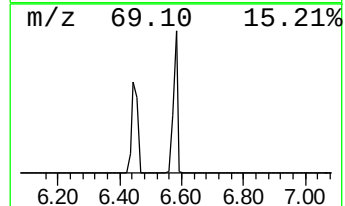
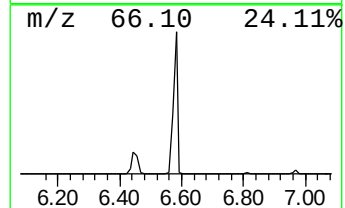
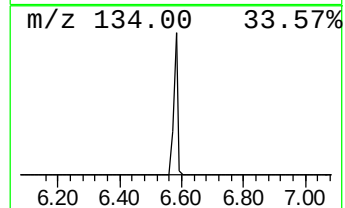
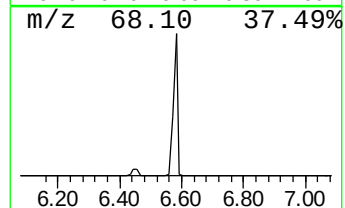
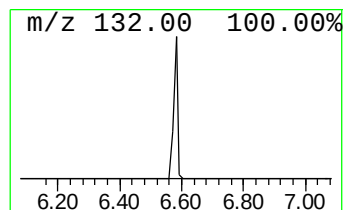
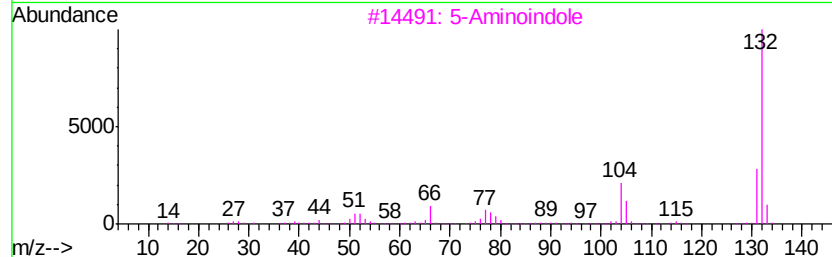
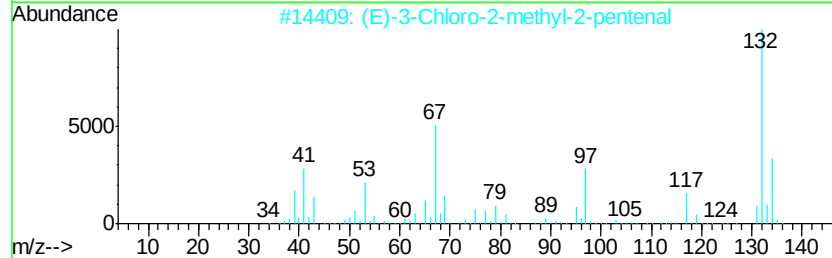
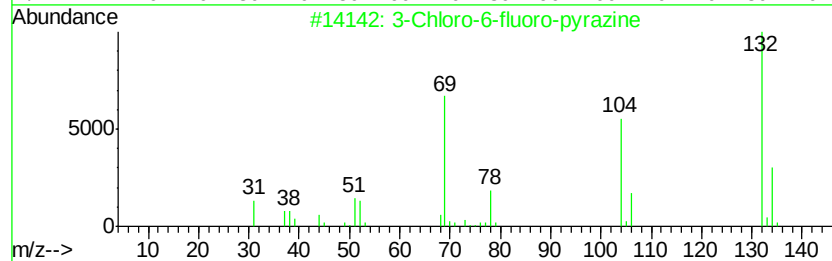
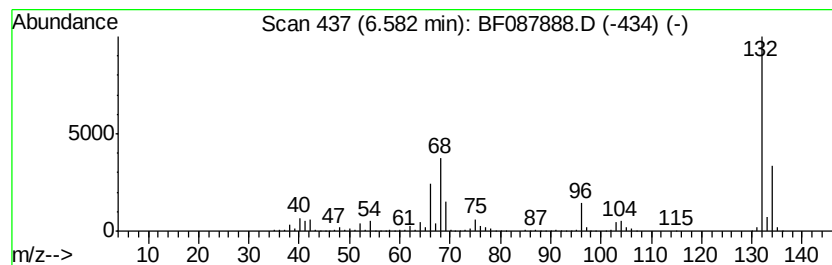
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 4 unknown6.58 Concentration Rank 3

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 6.58 | 69.92 ng | 2142100 | 1,4-Dichlorobenzene-d4 | 6.81 |

| Hit# | of | Tentative ID                     | MW  | MolForm   | CAS#         | Qual |
|------|----|----------------------------------|-----|-----------|--------------|------|
| 1    | 5  | 3-Chloro-6-fluoro-pyrazine       | 132 | C4H2ClFN2 | 1000146-10-7 | 35   |
| 2    |    | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO   | 031357-76-3  | 17   |
| 3    |    | 5-Aminoindole                    | 132 | C8H8N2    | 005192-03-0  | 12   |
| 4    |    | 1H-Benzimidazole, 2-methyl-      | 132 | C8H8N2    | 000615-15-6  | 9    |
| 5    |    | 5-Fluoro-2-chloropyrimidine      | 132 | C4H2ClFN2 | 062802-42-0  | 9    |



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Data File : BF087888.D  
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Operator : UM/SJ  
Sample : H3395-16  
Misc :  
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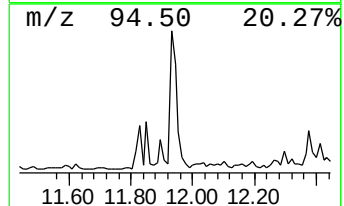
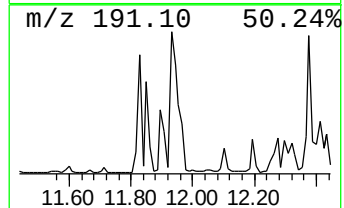
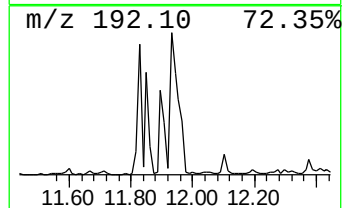
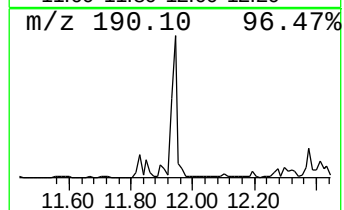
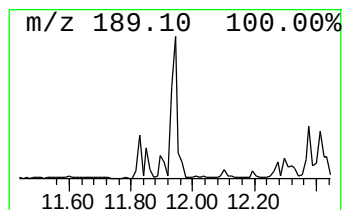
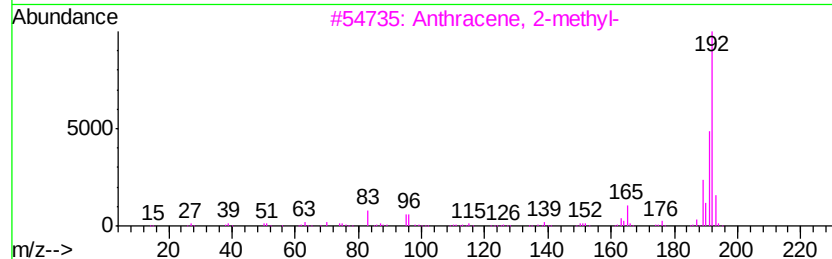
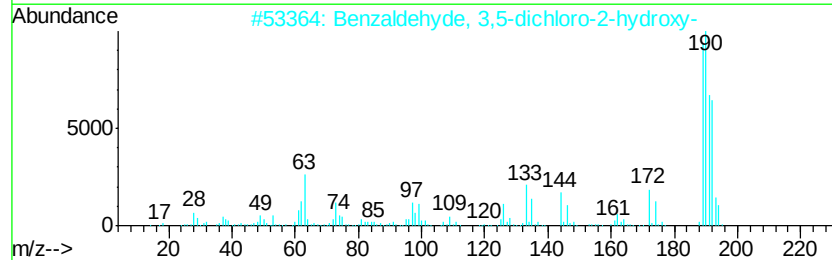
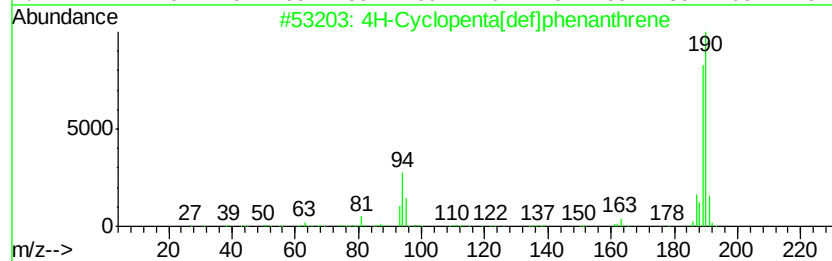
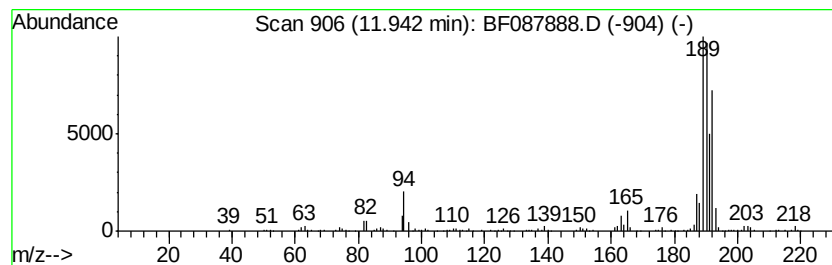
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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Peak Number 6 4H-Cyclopenta[def]phenanthrene Concentration Rank 7

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------|--------|------------------|-------------|------|
| 11.94     | 22.36 ng                            | 863173 | Phenanthrene-d10 | 11.32       |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#        | Qual |
| 1         | 4H-Cyclopenta[def]phenanthrene      | 190    | C15H10           | 000203-64-5 | 93   |
| 2         | Benzaldehyde, 3,5-dichloro-2-hyd... | 190    | C7H4Cl2O2        | 000090-60-8 | 72   |
| 3         | Anthracene, 2-methyl-               | 192    | C15H12           | 000613-12-7 | 38   |
| 4         | 5H-Dibenzo[a,d]cycloheptene         | 192    | C15H12           | 000256-81-5 | 38   |
| 5         | 1H-Indene, 2-phenyl-                | 192    | C15H12           | 004505-48-0 | 38   |





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Data File : BF087888.D  
Acq On : 10 Jun 2016 21:46  
Operator : UM/SJ  
Sample : H3395-16  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
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ClientSampleId :  
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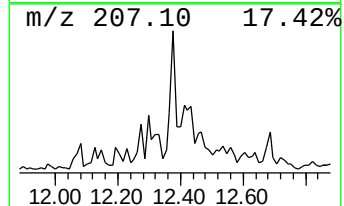
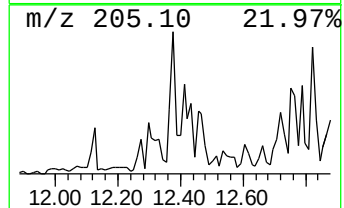
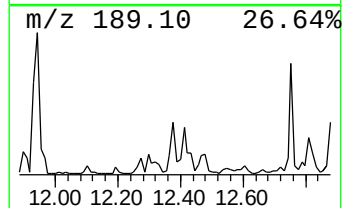
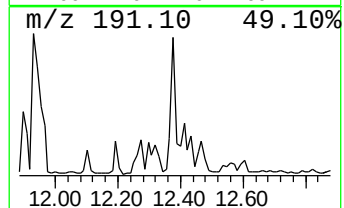
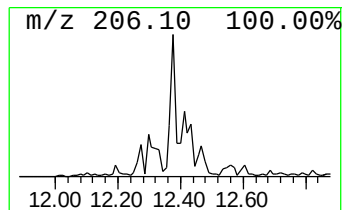
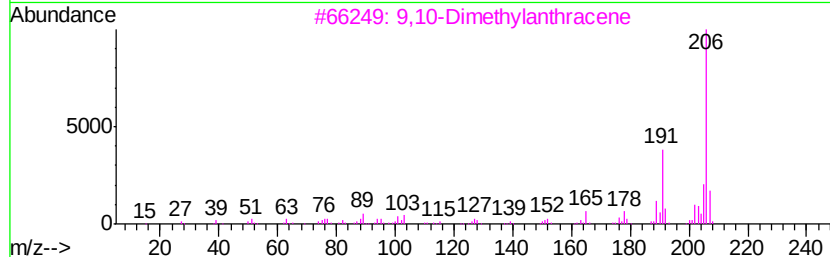
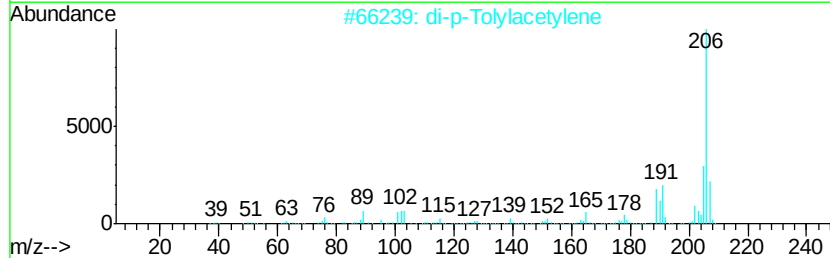
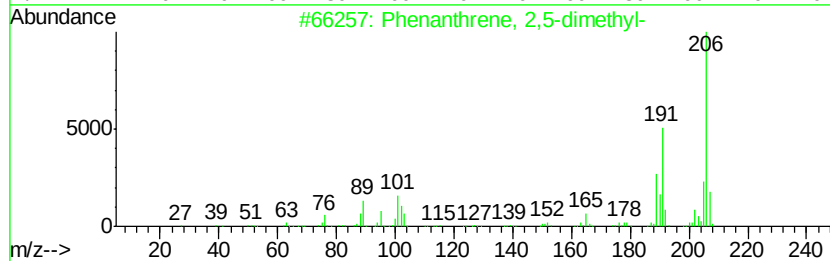
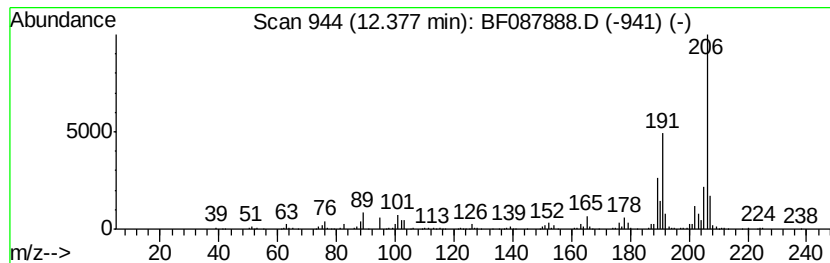
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TIC Integration Parameters: LSCINT.P

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Peak Number 7 Phenanthrene, 2,5-dimethyl- Concentration Rank 12

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 12.38 | 15.90 ng | 613634 | Phenanthrene-d10 | 11.32 |

| Hit# | of | Tentative ID                | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------------|-----|---------|-------------|------|
| 1    | 5  | Phenanthrene, 2,5-dimethyl- | 206 | C16H14  | 003674-66-6 | 97   |
| 2    |    | di-p-Tolylacetylene         | 206 | C16H14  | 002789-88-0 | 96   |
| 3    |    | 9,10-Dimethylanthracene     | 206 | C16H14  | 000781-43-1 | 94   |
| 4    |    | Phenanthrene, 2,3-dimethyl- | 206 | C16H14  | 003674-65-5 | 93   |
| 5    |    | Phenanthrene, 1,7-dimethyl- | 206 | C16H14  | 000483-87-4 | 90   |





Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF061016\  
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Sample : H3395-16  
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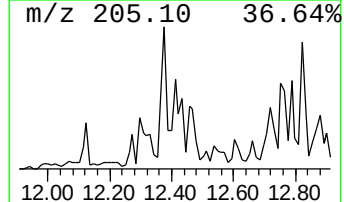
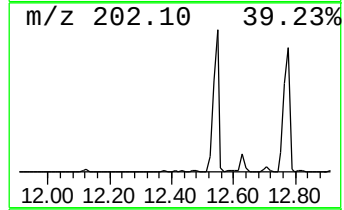
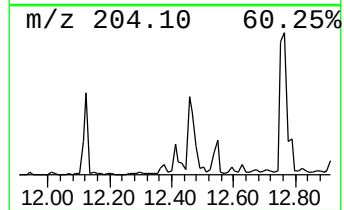
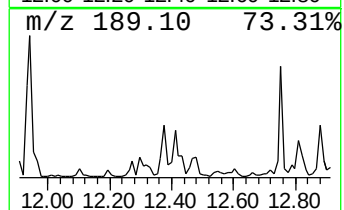
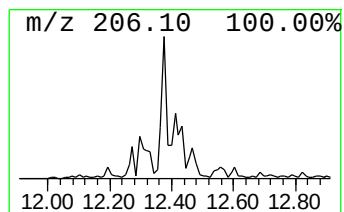
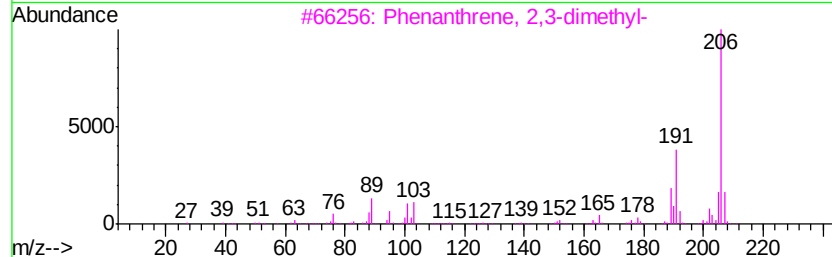
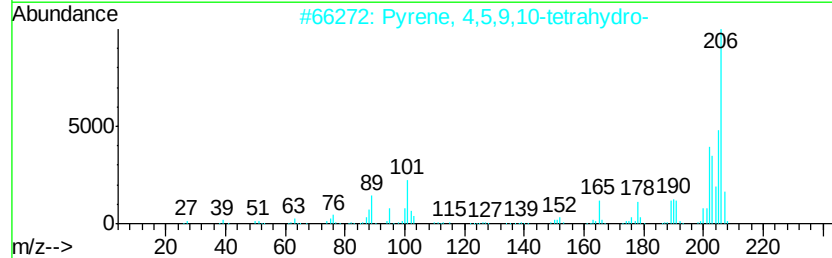
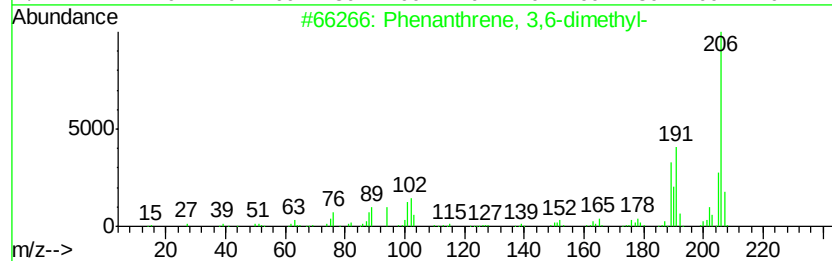
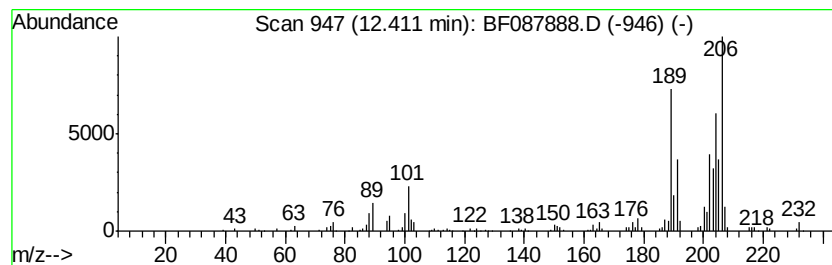
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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Peak Number 8 unknown12.41 Concentration Rank 16

| R.T.  | EstConc  | Area   | Relative to ISTD             |     | R.T.    |             |      |
|-------|----------|--------|------------------------------|-----|---------|-------------|------|
| 12.41 | 11.51 ng | 444212 | Phenanthrene-d10             |     | 11.32   |             |      |
| Hit#  | of       | 5      | Tentative ID                 | MW  | MolForm | CAS#        | Qual |
| 1     |          |        | Phenanthrene, 3,6-dimethyl-  | 206 | C16H14  | 001576-67-6 | 46   |
| 2     |          |        | Pyrene, 4,5,9,10-tetrahydro- | 206 | C16H14  | 000781-17-9 | 46   |
| 3     |          |        | Phenanthrene, 2,3-dimethyl-  | 206 | C16H14  | 003674-65-5 | 42   |
| 4     |          |        | Phenanthrene, 2,7-dimethyl-  | 206 | C16H14  | 001576-69-8 | 38   |
| 5     |          |        | 1,4-Diphenyl-1,3-butadiene   | 206 | C16H14  | 000886-65-7 | 30   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF061016\  
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Instrument :  
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ClientSampleId :  
STA-953-PLATFORM(0-4)

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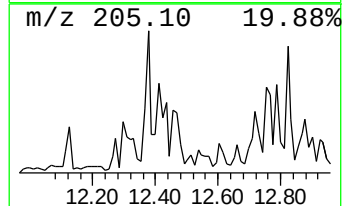
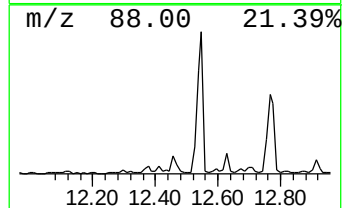
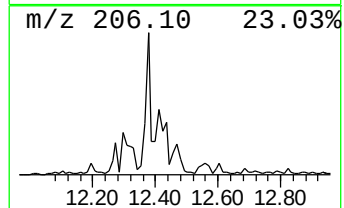
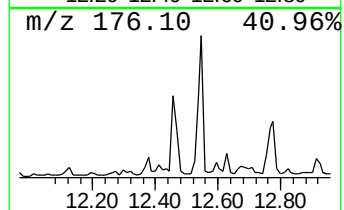
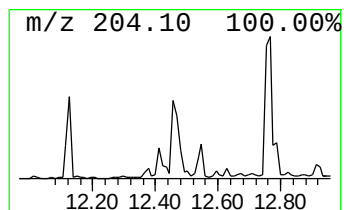
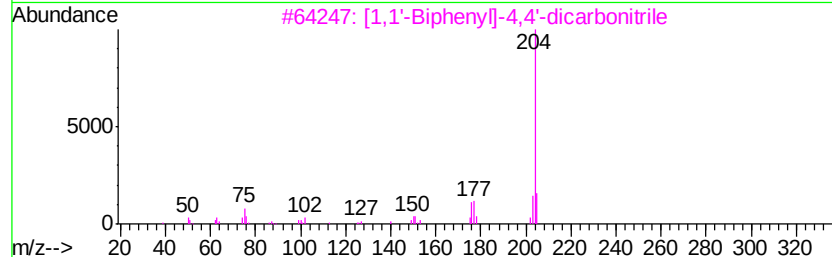
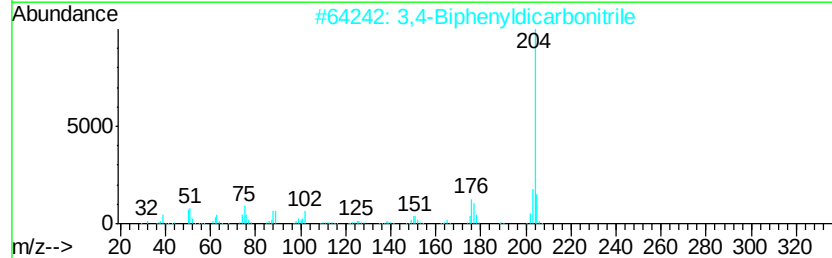
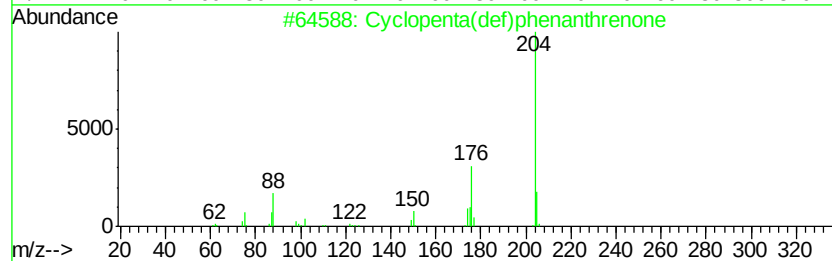
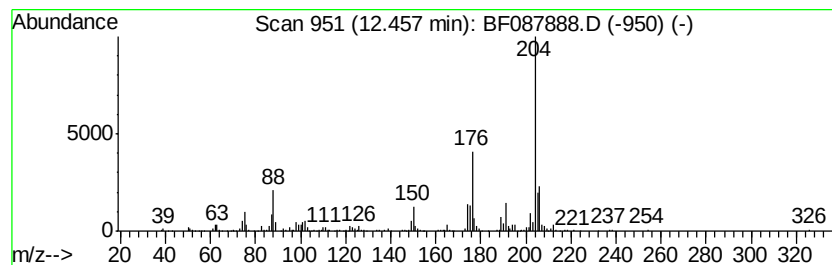
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TIC Integration Parameters: LSCINT.P

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Peak Number 9 Cyclopenta(def)phenanthrenone Concentration Rank 15

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 12.46 | 11.63 ng | 449060 | Phenanthrene-d10 | 11.32 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclopenta(def)phenanthrenone       | 204 | C15H8O  | 005737-13-3 | 96   |
| 2    |    | 3,4-Biphenyldicarbonitrile          | 204 | C14H8N2 | 004128-63-6 | 47   |
| 3    |    | [1,1'-Biphenyl]-4,4'-dicarbonitrile | 204 | C14H8N2 | 001591-30-6 | 47   |
| 4    |    | [1,1'-Biphenyl]-2,2'-dicarbonitrile | 204 | C14H8N2 | 004341-02-0 | 43   |
| 5    |    | 1,2,4,8-Tetramethylbicyclo[6.3.0... | 204 | C15H24  | 137235-51-9 | 41   |



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Operator : UM/SJ  
Sample : H3395-16  
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ALS Vial : 21 Sample Multiplier: 1

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ClientSampleId :  
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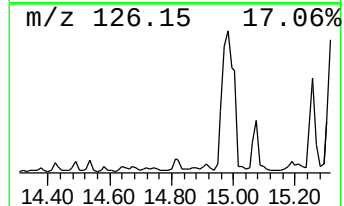
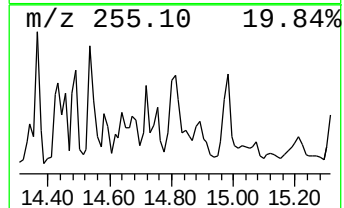
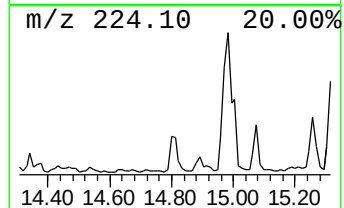
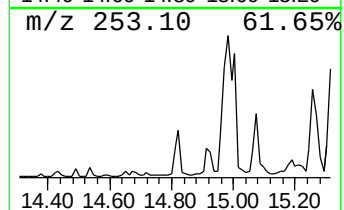
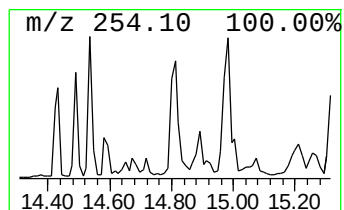
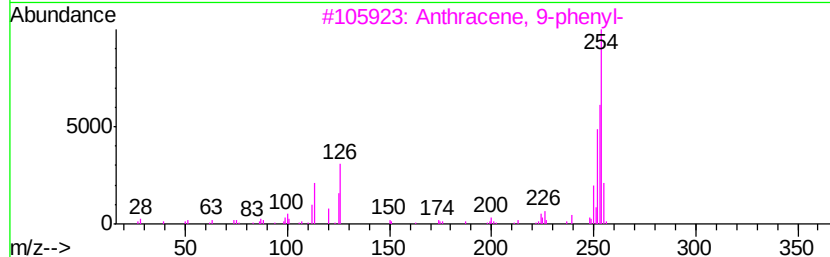
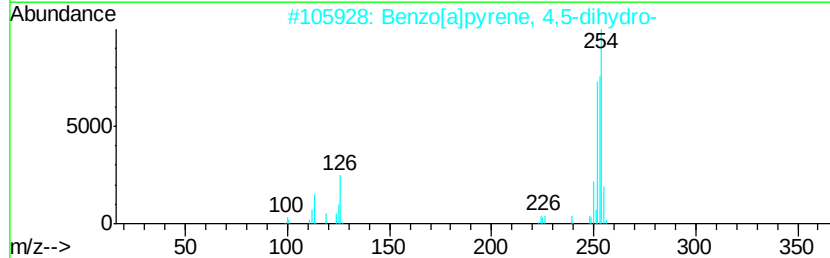
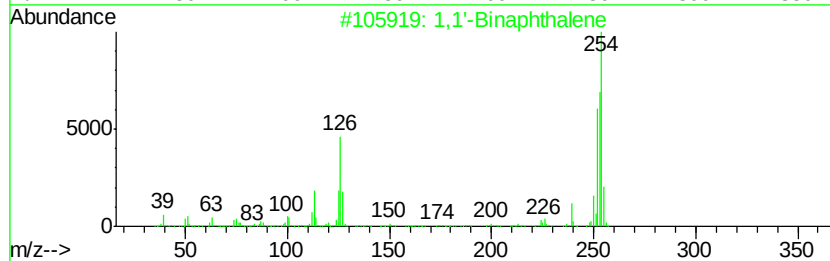
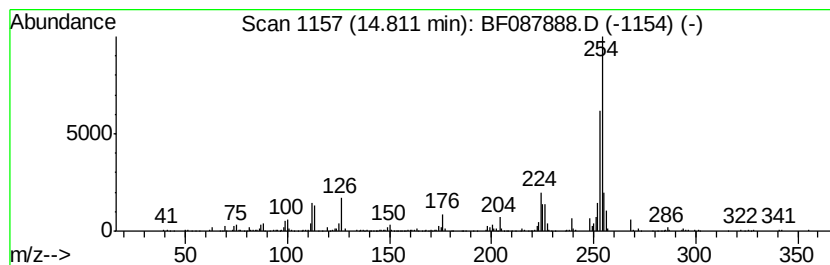
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TIC Integration Parameters: LSCINT.P

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Peak Number 11 1,1'-Binaphthalene Concentration Rank 10

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 14.81 | 19.06 ng | 517948 | Perylene-d12     | 15.37 |

| Hit# | of | Tentative ID                       | MW  | MolForm   | CAS#        | Qual |
|------|----|------------------------------------|-----|-----------|-------------|------|
| 1    | 5  | 1,1'-Binaphthalene                 | 254 | C20H14    | 000604-53-5 | 70   |
| 2    |    | Benzo[a]pyrene, 4,5-dihydro-       | 254 | C20H14    | 057652-66-1 | 68   |
| 3    |    | Anthracene, 9-phenyl-              | 254 | C20H14    | 000602-55-1 | 68   |
| 4    |    | Benzenamine, 4-(2-benzothiazolyl)- | 254 | C15H14N2S | 010205-56-8 | 64   |
| 5    |    | 1,2'-Binaphthalene                 | 254 | C20H14    | 004325-74-0 | 59   |



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Operator : UM/SJ  
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Misc :  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
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ClientSampleId :  
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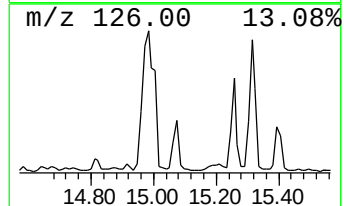
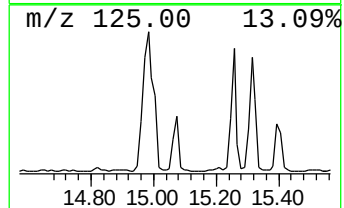
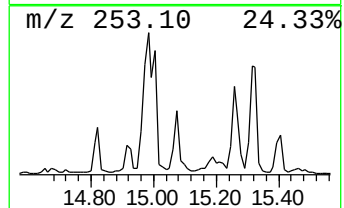
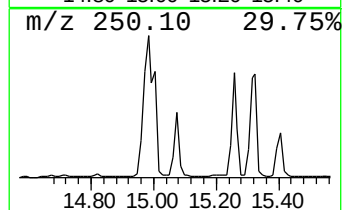
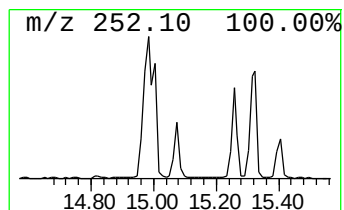
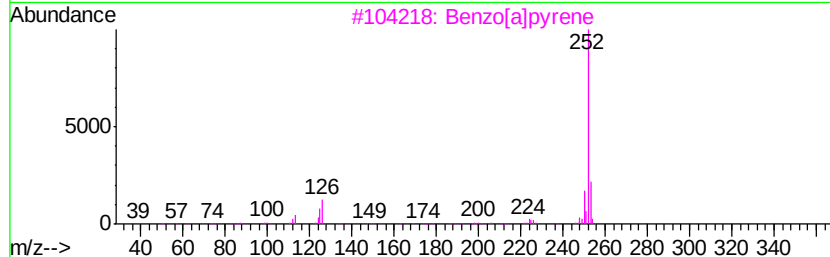
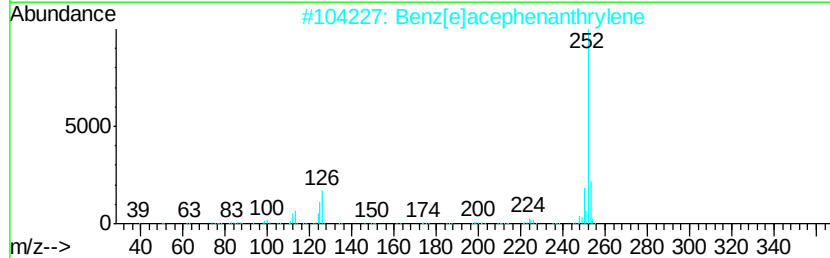
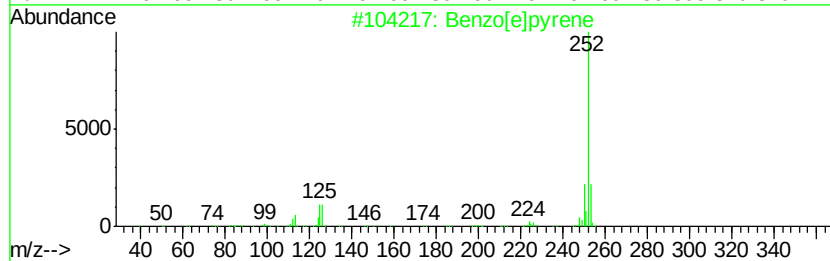
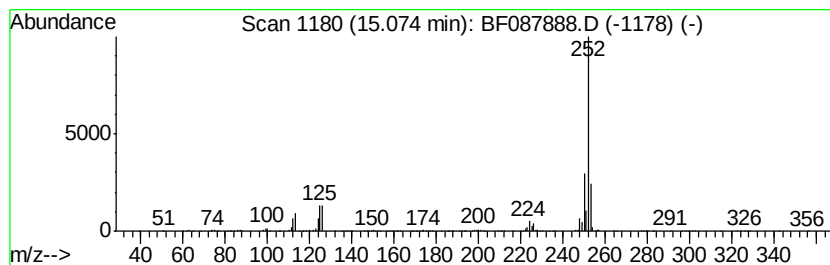
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TIC Integration Parameters: LSCINT.P

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Peak Number 12 Benzo[e]pyrene Concentration Rank 6

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 15.07 | 24.19 ng | 657286 | Perylene-d12     | 15.37 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[e]pyrene            | 252 | C20H12  | 000192-97-2 | 98   |
| 2    |    | Benzo[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 93   |
| 3    |    | Benzo[a]pyrene            | 252 | C20H12  | 000050-32-8 | 93   |
| 4    |    | Benzo[k]fluoranthene      | 252 | C20H12  | 000207-08-9 | 89   |
| 5    |    | Benzo[j]fluoranthene      | 252 | C20H12  | 000205-82-3 | 81   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF061016\  
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STA-953-PLATFORM(0-4)

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

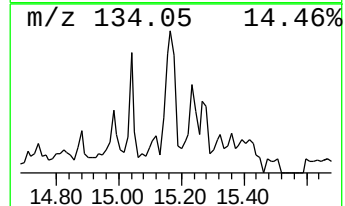
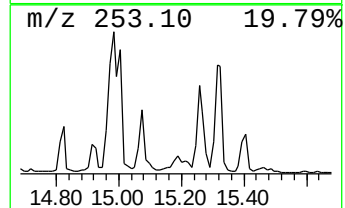
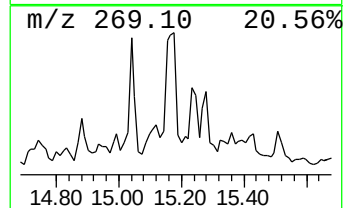
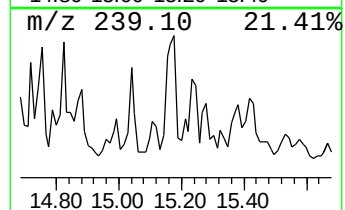
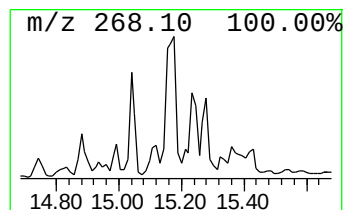
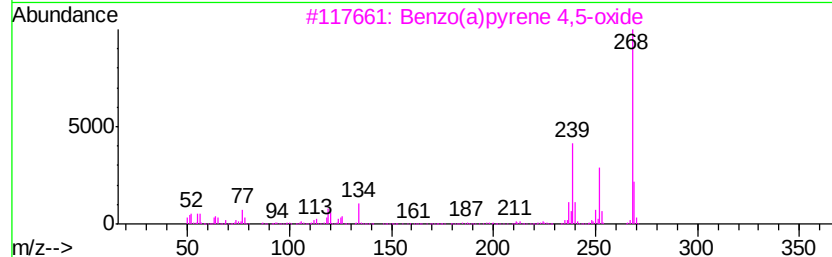
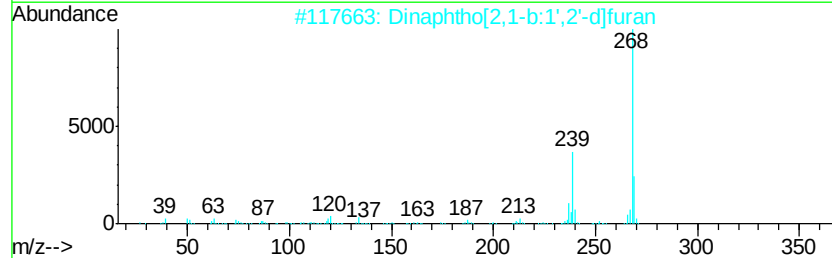
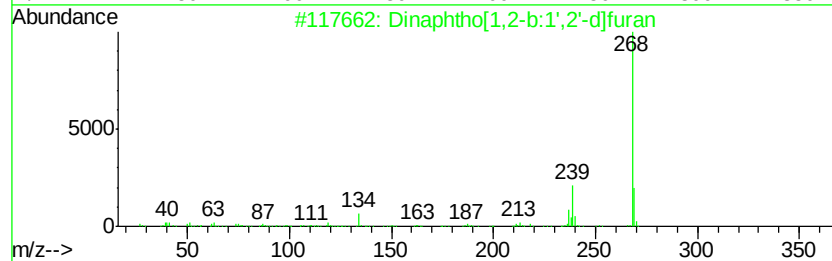
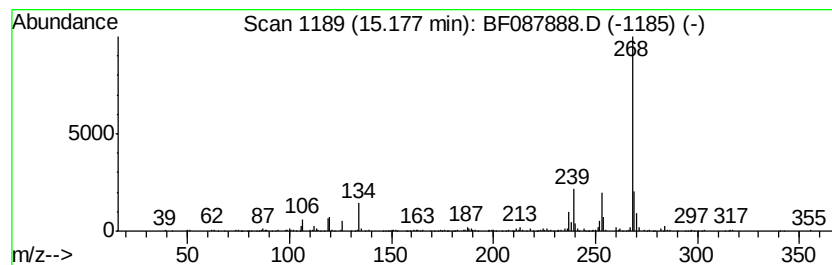
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 13 Dinaphtho[1,2-b:1',2'-d]furan Concentration Rank 13

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 15.18 | 12.18 ng | 330853 | Perylene-d12     | 15.37 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Dinaphtho[1,2-b:1',2'-d]furan       | 268 | C20H12O  | 000207-93-2 | 96   |
| 2    |    | Dinaphtho[2,1-b:1',2'-d]furan       | 268 | C20H12O  | 000194-63-8 | 74   |
| 3    |    | Benzo(a)pyrene 4,5-oxide            | 268 | C20H12O  | 037574-47-3 | 74   |
| 4    |    | trans-3'-Methyl-4-(methylthio)ch... | 268 | C17H16OS | 131316-14-8 | 72   |
| 5    |    | trans-4'-Methyl-4-(methylthio)ch... | 268 | C17H16OS | 126443-27-4 | 72   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF061016\  
Data File : BF087888.D  
Acq On : 10 Jun 2016 21:46  
Operator : UM/SJ  
Sample : H3395-16  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
STA-953-PLATFORM(0-4)

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

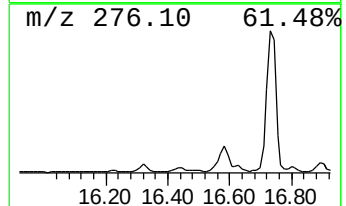
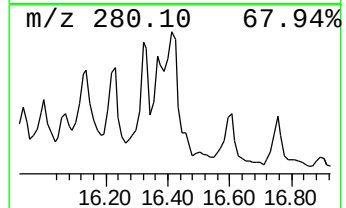
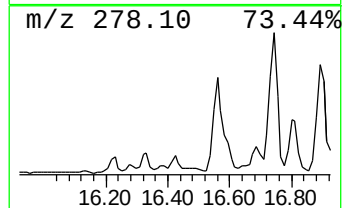
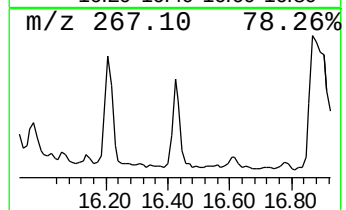
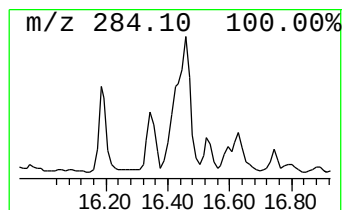
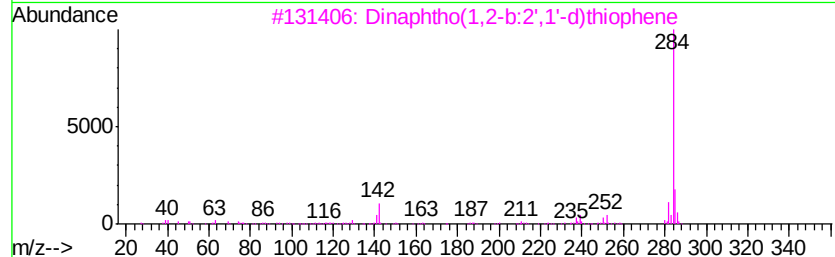
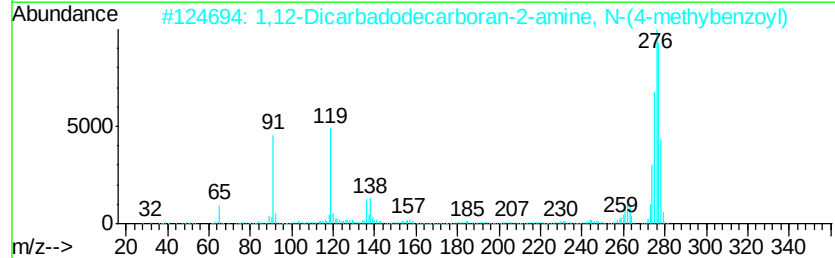
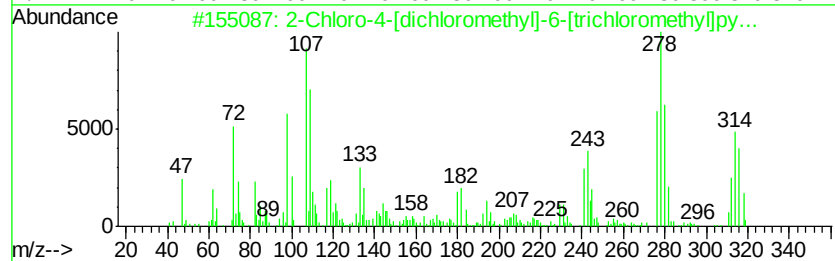
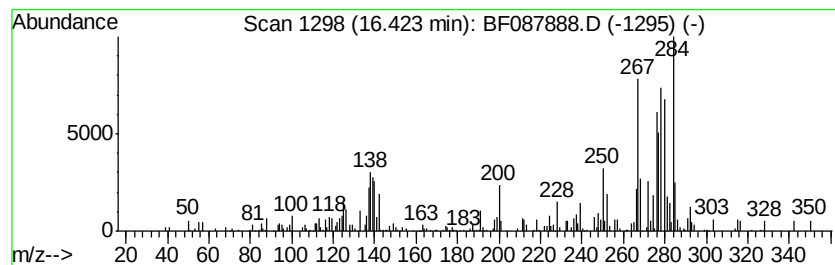
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 15 unknown16.42 Concentration Rank 14

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 16.42 | 11.91 ng | 323582 | Perylene-d12     | 15.37 |

| Hit# | of | 5 | Tentative ID                         | MW  | MolForm     | CAS#         | Qual |
|------|----|---|--------------------------------------|-----|-------------|--------------|------|
| 1    |    |   | 2-Chloro-4-[dichloromethyl]-6-[t...  | 312 | C6H2Cl6N2   | 1000254-14-7 | 22   |
| 2    |    |   | 1,12-Dicarbadoodecarboran-2-amine... | 277 | C10H17B10NO | 1000362-08-2 | 15   |
| 3    |    |   | Dinaphtho(1,2-b:2',1'-d)thiophene    | 284 | C20H12S     | 000239-72-5  | 11   |
| 4    |    |   | 5H-Naphtho[2,3-b]carbazole           | 267 | C20H13N     | 000248-96-4  | 11   |
| 5    |    |   | 2-(9-Acridinyl)-4-methylbenzenea...  | 284 | C20H16N2    | 035586-77-7  | 11   |



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Operator : UM/SJ  
Sample : H3395-16  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
STA-953-PLATFORM(0-4)

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

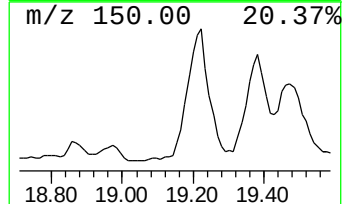
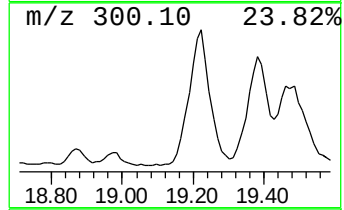
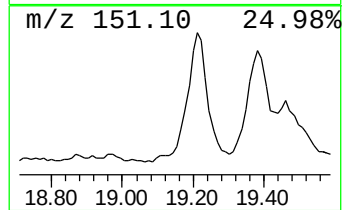
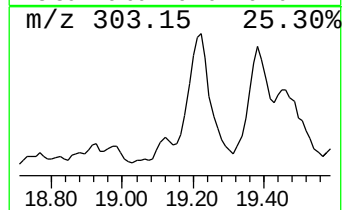
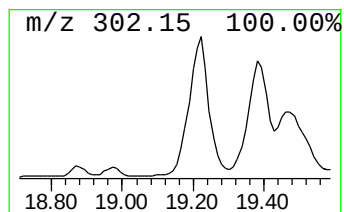
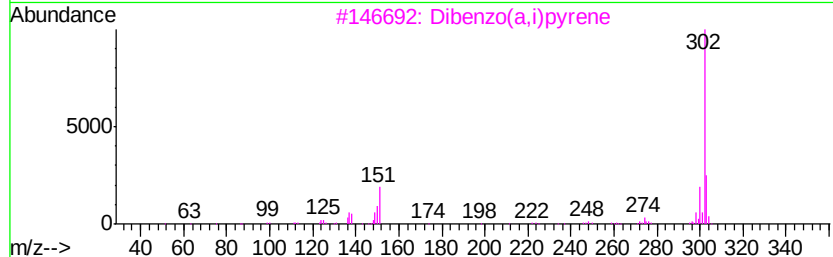
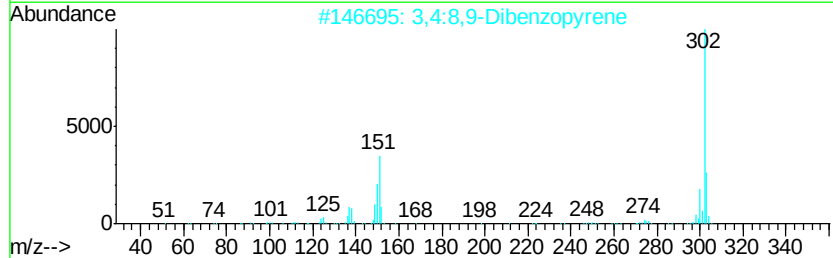
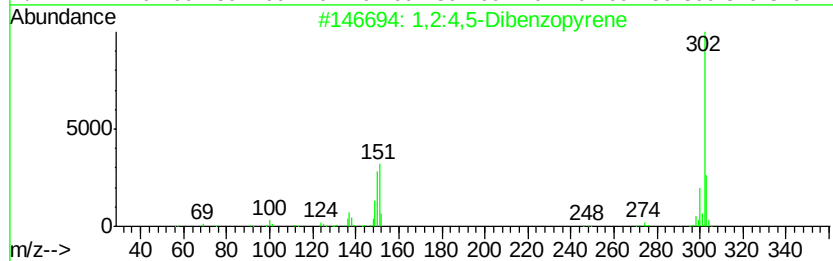
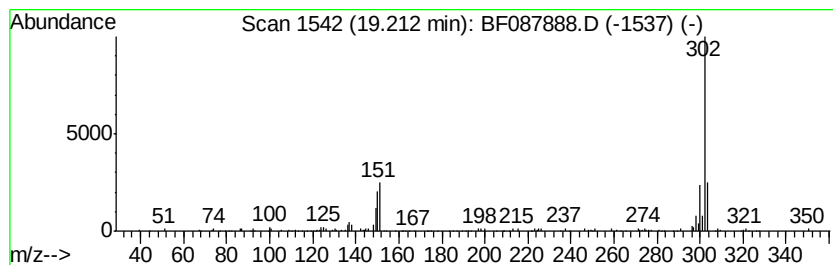
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 19 1,2:4,5-Dibenzopyrene Concentration Rank 11

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 19.21 | 16.44 ng | 446587 | Perylene-d12     | 15.37 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | 1,2:4,5-Dibenzopyrene     | 302 | C24H14  | 000192-65-4 | 95   |
| 2    |    | 3,4:8,9-Dibenzopyrene     | 302 | C24H14  | 000189-64-0 | 80   |
| 3    |    | Dibenzo(a,i)pyrene        | 302 | C24H14  | 000189-55-9 | 76   |
| 4    |    | Dibenz(a,e)aceanthrylene  | 302 | C24H14  | 005385-75-1 | 62   |
| 5    |    | Dibenzo[fg,op]naphthacene | 302 | C24H14  | 000192-51-8 | 59   |





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Misc :  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
STA-953-PLATFORM(0-4)

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

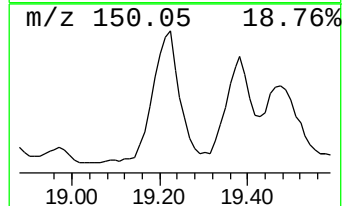
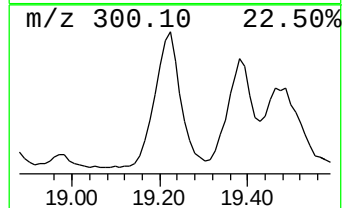
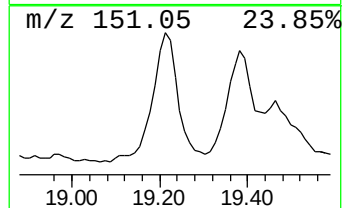
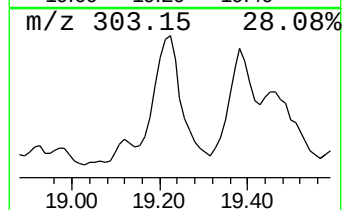
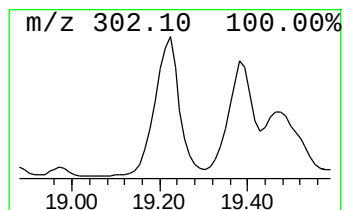
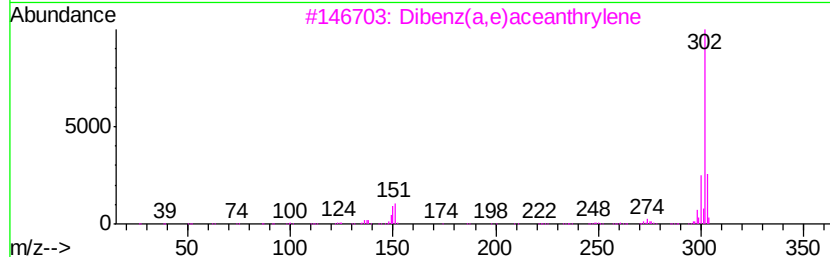
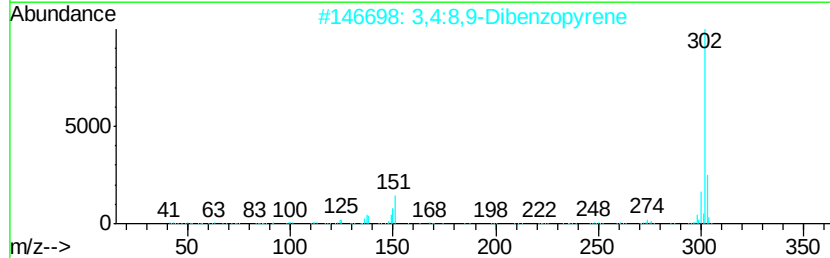
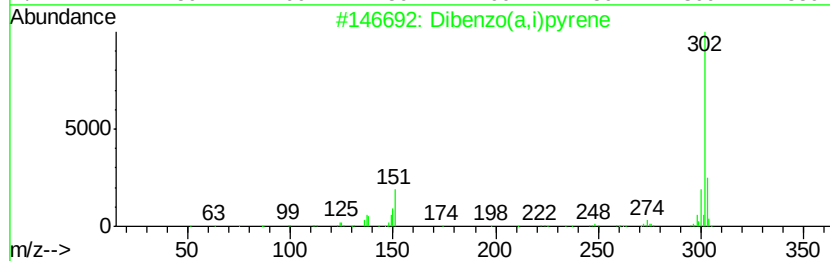
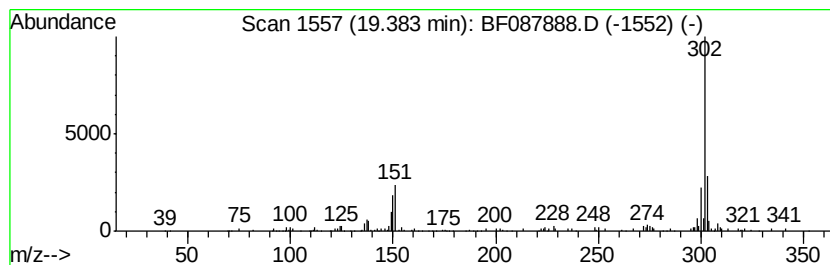
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 20 Dibenzo(a,i)pyrene Concentration Rank 18

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 19.38 | 10.40 ng | 282549 | Perylene-d12     | 15.37 |

| Hit# | of | Tentative ID             | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------|-----|---------|-------------|------|
| 1    | 5  | Dibenzo(a,i)pyrene       | 302 | C24H14  | 000189-55-9 | 99   |
| 2    |    | 3,4:8,9-Dibenzopyrene    | 302 | C24H14  | 000189-64-0 | 97   |
| 3    |    | Dibenz(a,e)aceanthrylene | 302 | C24H14  | 005385-75-1 | 95   |
| 4    |    | 1,2:4,5-Dibenzopyrene    | 302 | C24H14  | 000192-65-4 | 94   |
| 5    |    | 1,2,9,10-Dibenzopyrene   | 302 | C24H14  | 000191-30-0 | 86   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF061016\  
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Acq On : 10 Jun 2016 21:46  
Operator : UM/SJ  
Sample : H3395-16  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
STA-953-PLATFORM(0-4)

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... | 1.66  | 195.7   | ng    | 5994900  | 1                     | 6.81  | 612715 | 20.0 |
| unknown6.58          | 6.58  | 69.9    | ng    | 2142100  | 1                     | 6.81  | 612715 | 20.0 |
| 4H-Cyclopenta[def... | 11.94 | 22.4    | ng    | 863173   | 4                     | 11.32 | 771941 | 20.0 |
| Phenanthrene, 2,5... | 12.38 | 15.9    | ng    | 613634   | 4                     | 11.32 | 771941 | 20.0 |
| unknown12.41         | 12.41 | 11.5    | ng    | 444212   | 4                     | 11.32 | 771941 | 20.0 |
| Cyclopenta(def)ph... | 12.46 | 11.6    | ng    | 449060   | 4                     | 11.32 | 771941 | 20.0 |
| 1,1'-Binaphthalene   | 14.81 | 19.1    | ng    | 517948   | 6                     | 15.37 | 543424 | 20.0 |
| Benzo[e]pyrene       | 15.07 | 24.2    | ng    | 657286   | 6                     | 15.37 | 543424 | 20.0 |
| Dinaphtho[1,2-b:1... | 15.18 | 12.2    | ng    | 330853   | 6                     | 15.37 | 543424 | 20.0 |
| unknown16.42         | 16.42 | 11.9    | ng    | 323582   | 6                     | 15.37 | 543424 | 20.0 |
| 1,2:4,5-Dibenzopy... | 19.21 | 16.4    | ng    | 446587   | 6                     | 15.37 | 543424 | 20.0 |
| Dibenzo(a,i)pyrene   | 19.38 | 10.4    | ng    | 282549   | 6                     | 15.37 | 543424 | 20.0 |