

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF051219\  
 Data File : BF114196.D  
 Acq On : 12 May 2019 16:56  
 Operator : JU/SJ  
 Sample : K2767-15  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 P026-SS012-0002-02

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:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF051019.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         | 2.122       | 3             | 6           | 21           | rVB      | 1290299        | 1671130       | 8.35%           | 0.489%        |
| 2         | 5.487       | 574           | 578         | 582          | rBV      | 5598931        | 5637260       | 28.17%          | 1.650%        |
| 3         | 6.498       | 745           | 750         | 753          | rBV      | 5930148        | 6263139       | 31.30%          | 1.833%        |
| 4         | 6.628       | 768           | 772         | 776          | rBV      | 6265167        | 6239667       | 31.18%          | 1.826%        |
| 5         | 6.851       | 807           | 810         | 818          | rVB      | 2122290        | 1811822       | 9.05%           | 0.530%        |
| 6         | 7.010       | 833           | 837         | 841          | rBV      | 5553965        | 4938495       | 24.68%          | 1.445%        |
| 7         | 7.416       | 897           | 906         | 909          | rBV      | 4753447        | 4420936       | 22.09%          | 1.294%        |
| 8         | 8.134       | 1023          | 1028        | 1030         | rBV      | 2621679        | 2475532       | 12.37%          | 0.724%        |
| 9         | 8.157       | 1030          | 1032        | 1035         | rVV      | 2935192        | 2198584       | 10.99%          | 0.643%        |
| 10        | 8.781       | 1131          | 1138        | 1143         | rVB      | 507642         | 884820        | 4.42%           | 0.259%        |
| 11        | 8.845       | 1146          | 1149        | 1153         | rVB      | 2070147        | 1658458       | 8.29%           | 0.485%        |
| 12        | 8.945       | 1162          | 1166        | 1169         | rBV      | 1522152        | 1191001       | 5.95%           | 0.349%        |
| 13        | 9.210       | 1206          | 1211        | 1214         | rBV      | 6494559        | 6007820       | 30.02%          | 1.758%        |
| 14        | 9.475       | 1252          | 1256        | 1259         | rVB      | 617585         | 754723        | 3.77%           | 0.221%        |
| 15        | 9.545       | 1265          | 1268        | 1270         | rVV      | 1166792        | 1062045       | 5.31%           | 0.311%        |
| 16        | 9.610       | 1275          | 1279        | 1285         | rVB2     | 1602701        | 2250346       | 11.25%          | 0.659%        |
| 17        | 9.751       | 1299          | 1303        | 1306         | rBV      | 4599494        | 3936336       | 19.67%          | 1.152%        |
| 18        | 9.886       | 1324          | 1326        | 1330         | rVB      | 2550718        | 2050666       | 10.25%          | 0.600%        |
| 19        | 10.039      | 1347          | 1352        | 1357         | rBV4     | 454130         | 756327        | 3.78%           | 0.221%        |
| 20        | 10.539      | 1432          | 1437        | 1442         | rVV4     | 753658         | 1095046       | 5.47%           | 0.320%        |
| 21        | 10.680      | 1455          | 1461        | 1465         | rVB      | 3576262        | 3703881       | 18.51%          | 1.084%        |
| 22        | 10.804      | 1477          | 1482        | 1487         | rBV2     | 1452792        | 2364505       | 11.82%          | 0.692%        |
| 23        | 10.980      | 1508          | 1512        | 1515         | rVV4     | 661165         | 1018057       | 5.09%           | 0.298%        |
| 24        | 11.133      | 1536          | 1538        | 1542         | rVV      | 959094         | 931864        | 4.66%           | 0.273%        |
| 25        | 11.180      | 1543          | 1546        | 1550         | rVV      | 1683273        | 1452815       | 7.26%           | 0.425%        |
| 26        | 11.239      | 1550          | 1556        | 1558         | rVV2     | 1221544        | 1218036       | 6.09%           | 0.356%        |
| 27        | 11.269      | 1558          | 1561        | 1567         | rVB      | 1767652        | 1690248       | 8.45%           | 0.495%        |
| 28        | 11.374      | 1576          | 1579        | 1581         | rBV      | 1771504        | 2008390       | 10.04%          | 0.588%        |
| 29        | 11.410      | 1581          | 1585        | 1588         | rVV      | 9896530        | 11743218      | 58.68%          | 3.437%        |
| 30        | 11.451      | 1589          | 1592        | 1595         | rBV      | 2399375        | 1774047       | 8.87%           | 0.519%        |
| 31        | 11.669      | 1623          | 1629        | 1632         | rVB2     | 2812161        | 2936965       | 14.68%          | 0.859%        |
| 32        | 11.710      | 1632          | 1636        | 1640         | rVB2     | 1581298        | 1541900       | 7.71%           | 0.451%        |
| 33        | 11.786      | 1647          | 1649        | 1653         | rVB      | 790376         | 885816        | 4.43%           | 0.259%        |
| 34        | 11.833      | 1653          | 1657        | 1661         | rBV3     | 792870         | 1109987       | 5.55%           | 0.325%        |

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF051219\  
 Data File : BF114196.D  
 Acq On : 12 May 2019 16:56  
 Operator : JU/SJ  
 Sample : K2767-15  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 P026-SS012-0002-02

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:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF051019.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |          |          |         |        |
|----|--------|------|------|------|------|----------|----------|---------|--------|
| 35 | 11.880 | 1661 | 1665 | 1667 | rVV  | 4472460  | 4350226  | 21.74%  | 1.273% |
| 36 | 11.910 | 1667 | 1670 | 1673 | rVV  | 5566692  | 5292444  | 26.45%  | 1.549% |
| 37 | 11.992 | 1680 | 1684 | 1686 | rBV2 | 5944557  | 6073883  | 30.35%  | 1.777% |
| 38 | 12.016 | 1686 | 1688 | 1692 | rVB  | 4283300  | 3449092  | 17.24%  | 1.009% |
| 39 | 12.074 | 1693 | 1698 | 1702 | rBV4 | 1160424  | 1894173  | 9.47%   | 0.554% |
| 40 | 12.174 | 1711 | 1715 | 1717 | rVV  | 3983823  | 3836858  | 19.17%  | 1.123% |
| 41 | 12.210 | 1717 | 1721 | 1725 | rVB  | 4692810  | 4608637  | 23.03%  | 1.349% |
| 42 | 12.322 | 1735 | 1740 | 1743 | rBV2 | 1180096  | 1807264  | 9.03%   | 0.529% |
| 43 | 12.357 | 1743 | 1746 | 1748 | rVV  | 1335416  | 1242829  | 6.21%   | 0.364% |
| 44 | 12.380 | 1748 | 1750 | 1753 | rVB  | 923046   | 751370   | 3.75%   | 0.220% |
| 45 | 12.433 | 1755 | 1759 | 1761 | rBV2 | 3575145  | 3763476  | 18.81%  | 1.101% |
| 46 | 12.463 | 1761 | 1764 | 1767 | rVV3 | 3147475  | 3787418  | 18.93%  | 1.108% |
| 47 | 12.486 | 1767 | 1768 | 1771 | rVB  | 1256579  | 895047   | 4.47%   | 0.262% |
| 48 | 12.527 | 1771 | 1775 | 1779 | rBV3 | 3001023  | 3885909  | 19.42%  | 1.137% |
| 49 | 12.604 | 1782 | 1788 | 1791 | rBV  | 9140154  | 13166329 | 65.80%  | 3.853% |
| 50 | 12.639 | 1791 | 1794 | 1796 | rBV  | 1201284  | 1193152  | 5.96%   | 0.349% |
| 51 | 12.692 | 1800 | 1803 | 1807 | rVB  | 3539947  | 3237893  | 16.18%  | 0.948% |
| 52 | 12.745 | 1808 | 1812 | 1814 | rBV2 | 2112262  | 2346818  | 11.73%  | 0.687% |
| 53 | 12.769 | 1814 | 1816 | 1820 | rVB  | 1076483  | 1044062  | 5.22%   | 0.306% |
| 54 | 12.845 | 1821 | 1829 | 1832 | rBV  | 10691484 | 20011109 | 100.00% | 5.856% |
| 55 | 12.874 | 1832 | 1834 | 1839 | rVB3 | 837103   | 990672   | 4.95%   | 0.290% |
| 56 | 12.963 | 1846 | 1849 | 1851 | rBV  | 3617568  | 3277142  | 16.38%  | 0.959% |
| 57 | 13.045 | 1859 | 1863 | 1869 | rBV2 | 2975065  | 4779226  | 23.88%  | 1.399% |
| 58 | 13.098 | 1869 | 1872 | 1874 | rVV2 | 958608   | 1046142  | 5.23%   | 0.306% |
| 59 | 13.133 | 1874 | 1878 | 1879 | rVV3 | 3019878  | 3736539  | 18.67%  | 1.093% |
| 60 | 13.157 | 1880 | 1882 | 1884 | rVB  | 3588099  | 2837956  | 14.18%  | 0.830% |
| 61 | 13.192 | 1884 | 1888 | 1890 | rBV4 | 847724   | 1108514  | 5.54%   | 0.324% |
| 62 | 13.221 | 1890 | 1893 | 1896 | rVV2 | 1601857  | 1893126  | 9.46%   | 0.554% |
| 63 | 13.263 | 1896 | 1900 | 1907 | rVB  | 4548161  | 4928680  | 24.63%  | 1.442% |
| 64 | 13.321 | 1907 | 1910 | 1912 | rBV3 | 782844   | 800144   | 4.00%   | 0.234% |
| 65 | 13.351 | 1912 | 1915 | 1918 | rVV  | 3803617  | 4072007  | 20.35%  | 1.192% |
| 66 | 13.386 | 1918 | 1921 | 1923 | rVB  | 3712580  | 3306107  | 16.52%  | 0.967% |
| 67 | 13.468 | 1931 | 1935 | 1937 | rBV  | 738460   | 770083   | 3.85%   | 0.225% |
| 68 | 13.663 | 1965 | 1968 | 1972 | rVB  | 3123257  | 3393250  | 16.96%  | 0.993% |
| 69 | 13.774 | 1981 | 1987 | 1989 | rVV  | 3173339  | 4157089  | 20.77%  | 1.217% |
| 70 | 13.798 | 1989 | 1991 | 1994 | rVV  | 3320705  | 3302036  | 16.50%  | 0.966% |
| 71 | 13.827 | 1994 | 1996 | 1998 | rVV  | 2917848  | 2577121  | 12.88%  | 0.754% |

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF051219\  
 Data File : BF114196.D  
 Acq On : 12 May 2019 16:56  
 Operator : JU/SJ  
 Sample : K2767-15  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 P026-SS012-0002-02

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

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

Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF051019.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|     |        |      |      |      |      |         |          |        |        |
|-----|--------|------|------|------|------|---------|----------|--------|--------|
| 72  | 13.851 | 1998 | 2000 | 2002 | rVV2 | 1931410 | 1945295  | 9.72%  | 0.569% |
| 73  | 13.874 | 2002 | 2004 | 2007 | rVB  | 2346819 | 2160914  | 10.80% | 0.632% |
| 74  | 14.021 | 2024 | 2029 | 2032 | rBV2 | 7455506 | 12596968 | 62.95% | 3.686% |
| 75  | 14.063 | 2032 | 2036 | 2039 | rVV  | 8262068 | 12113265 | 60.53% | 3.545% |
| 76  | 14.180 | 2052 | 2056 | 2064 | rVB3 | 4631156 | 6629182  | 33.13% | 1.940% |
| 77  | 14.280 | 2070 | 2073 | 2076 | rVB3 | 855544  | 886513   | 4.43%  | 0.259% |
| 78  | 14.374 | 2086 | 2089 | 2091 | rBV2 | 1025526 | 1022464  | 5.11%  | 0.299% |
| 79  | 14.415 | 2091 | 2096 | 2099 | rBV2 | 2994020 | 3351845  | 16.75% | 0.981% |
| 80  | 14.445 | 2099 | 2101 | 2105 | rVB2 | 1750907 | 1818176  | 9.09%  | 0.532% |
| 81  | 14.492 | 2105 | 2109 | 2114 | rVB3 | 1972861 | 3137513  | 15.68% | 0.918% |
| 82  | 14.539 | 2114 | 2117 | 2119 | rBV2 | 2108053 | 2384949  | 11.92% | 0.698% |
| 83  | 14.604 | 2125 | 2128 | 2131 | rVB  | 2000123 | 2058940  | 10.29% | 0.603% |
| 84  | 14.863 | 2169 | 2172 | 2176 | rVB2 | 878972  | 898494   | 4.49%  | 0.263% |
| 85  | 14.910 | 2177 | 2180 | 2183 | rBV3 | 825085  | 998034   | 4.99%  | 0.292% |
| 86  | 15.092 | 2203 | 2211 | 2223 | rBV2 | 6241144 | 17309194 | 86.50% | 5.065% |
| 87  | 15.186 | 2223 | 2227 | 2231 | rVB  | 2219299 | 2525067  | 12.62% | 0.739% |
| 88  | 15.392 | 2255 | 2262 | 2266 | rVB  | 5563934 | 9298551  | 46.47% | 2.721% |
| 89  | 15.462 | 2266 | 2274 | 2279 | rBV2 | 6090641 | 12029034 | 60.11% | 3.520% |
| 90  | 15.510 | 2279 | 2282 | 2284 | rVV  | 1291151 | 1592507  | 7.96%  | 0.466% |
| 91  | 15.539 | 2284 | 2287 | 2293 | rVB3 | 1538000 | 2377975  | 11.88% | 0.696% |
| 92  | 15.680 | 2307 | 2311 | 2314 | rBV  | 548944  | 996861   | 4.98%  | 0.292% |
| 93  | 15.827 | 2332 | 2336 | 2339 | rVB  | 610526  | 754553   | 3.77%  | 0.221% |
| 94  | 15.862 | 2339 | 2342 | 2348 | rVB  | 696064  | 952220   | 4.76%  | 0.279% |
| 95  | 15.933 | 2350 | 2354 | 2359 | rBV3 | 745673  | 1317267  | 6.58%  | 0.385% |
| 96  | 16.068 | 2374 | 2377 | 2381 | rVB2 | 791866  | 1098364  | 5.49%  | 0.321% |
| 97  | 16.998 | 2526 | 2535 | 2540 | rBV  | 2677485 | 5910196  | 29.53% | 1.730% |
| 98  | 17.151 | 2557 | 2561 | 2566 | rVB  | 495536  | 847804   | 4.24%  | 0.248% |
| 99  | 17.209 | 2566 | 2571 | 2579 | rBV2 | 595899  | 1404236  | 7.02%  | 0.411% |
| 100 | 17.456 | 2603 | 2613 | 2619 | rVB  | 2319235 | 6003773  | 30.00% | 1.757% |

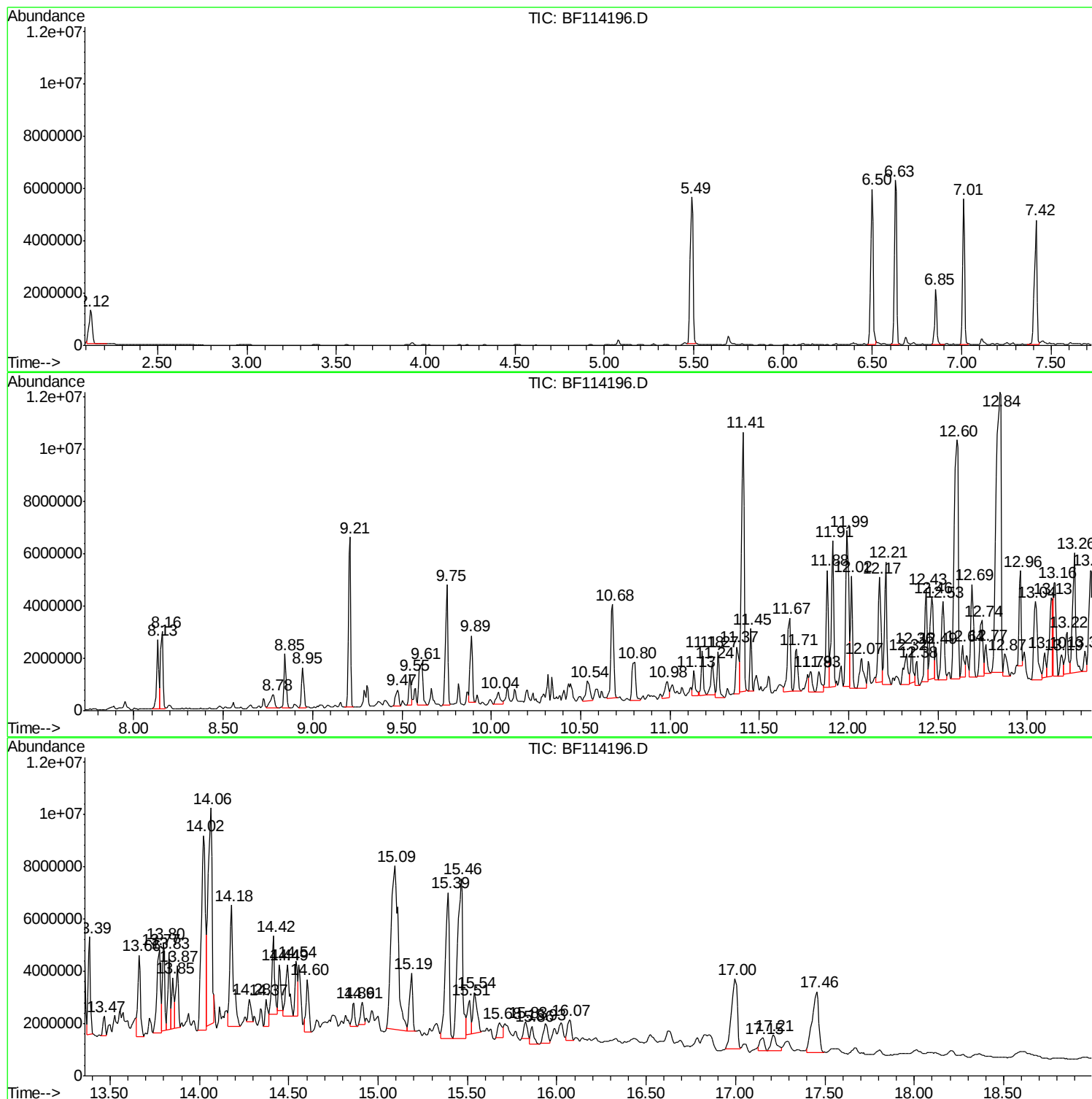
Sum of corrected areas: 341717859

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

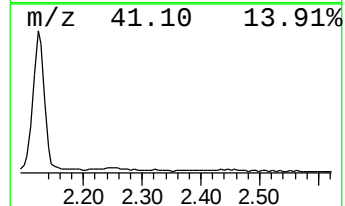
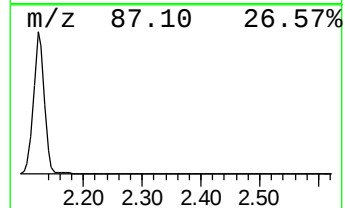
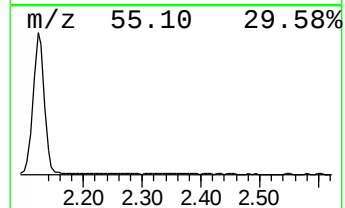
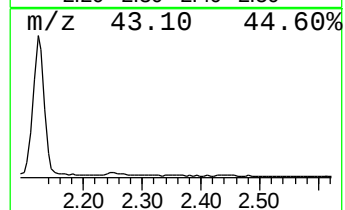
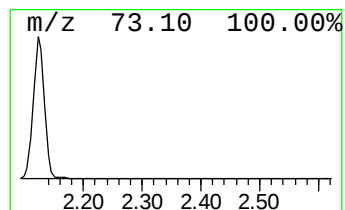
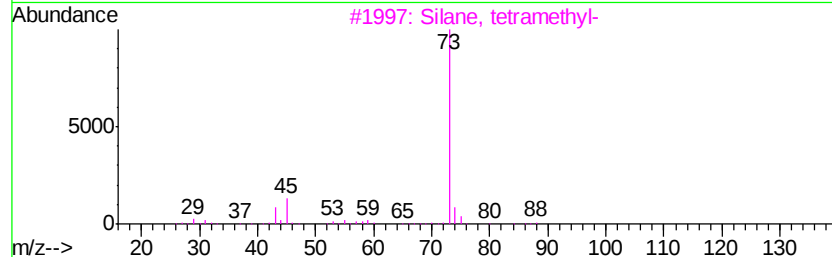
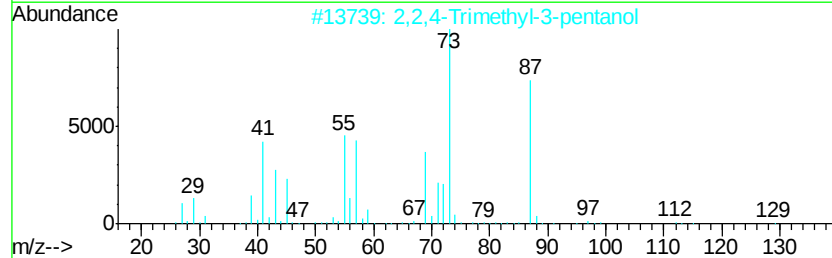
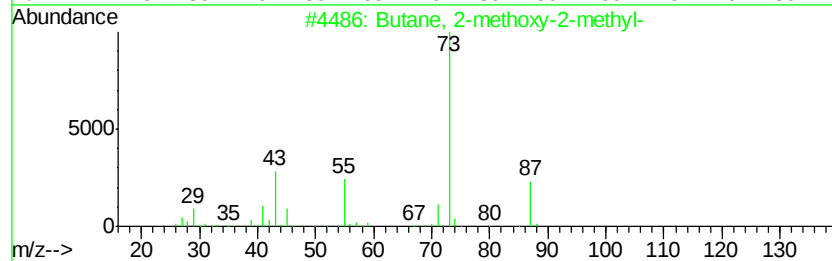
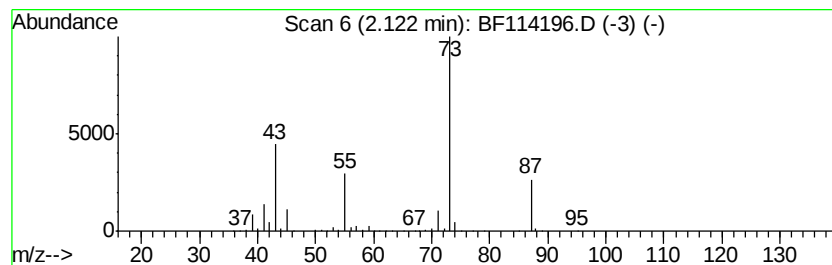
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 18

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 2.12 | 18.45 ng | 1671130 | 1,4-Dichlorobenzene-d4 | 6.85 |

| Hit# | of | Tentative ID                | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------------|-----|---------|-------------|------|
| 1    | 5  | Butane, 2-methoxy-2-methyl- | 102 | C6H14O  | 000994-05-8 | 83   |
| 2    |    | 2,2,4-Trimethyl-3-pentanol  | 130 | C8H18O  | 005162-48-1 | 40   |
| 3    |    | Silane, tetramethyl-        | 88  | C4H12Si | 000075-76-3 | 38   |
| 4    |    | 3-Pentanol, 2,4-dimethyl-   | 116 | C7H16O  | 000600-36-2 | 37   |
| 5    |    | 1,3-Dioxolane, 2-methyl-    | 88  | C4H8O2  | 000497-26-7 | 23   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

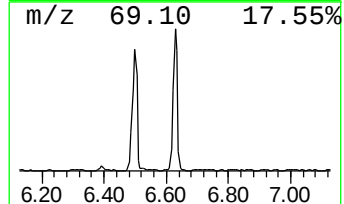
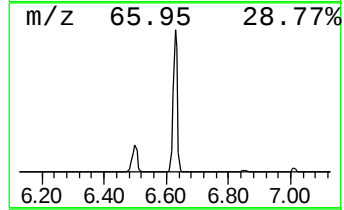
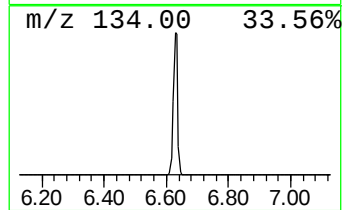
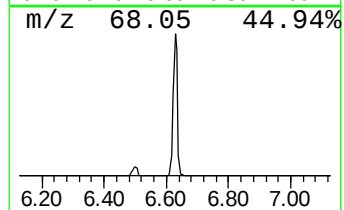
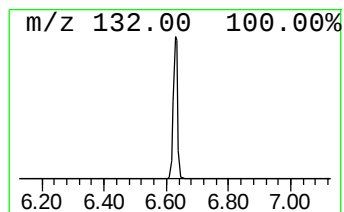
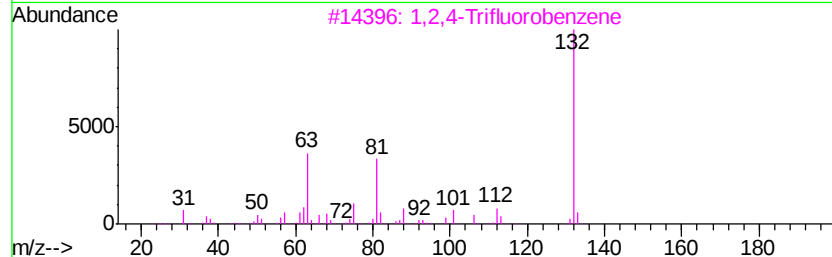
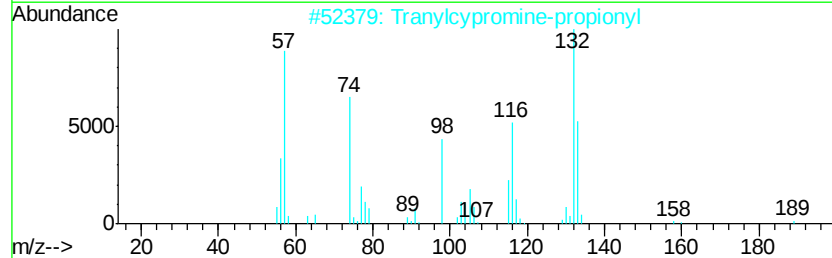
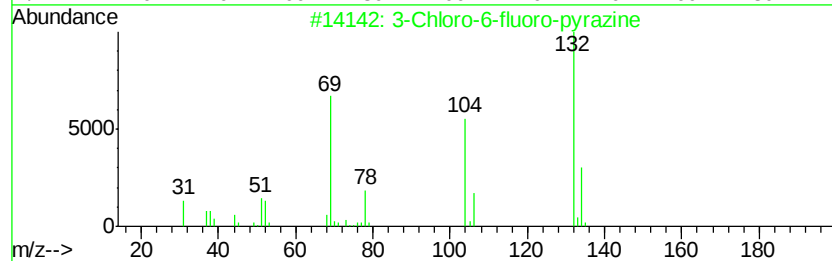
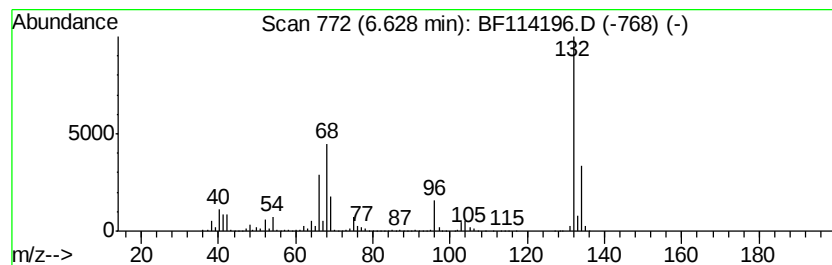
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 2 unknown6.63 Concentration Rank 2

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 6.63 | 68.88 ng | 6239670 | 1,4-Dichlorobenzene-d4 | 6.85 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | 3-Chloro-6-fluoro-pyrazine          | 132 | C4H2ClFN2 | 1000146-10-7 | 27   |
| 2    |    | Tranvlcyppromine-propionyl          | 189 | C12H15NO  | 1000123-86-3 | 10   |
| 3    |    | 1,2,4-Trifluorobenzene              | 132 | C6H3F3    | 000367-23-7  | 9    |
| 4    |    | 1,3,5-Trifluorobenzene              | 132 | C6H3F3    | 000372-38-3  | 9    |
| 5    |    | Bicyclo[4.2.0]octa-1,3,5-triene,... | 132 | C10H12    | 028749-81-7  | 9    |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

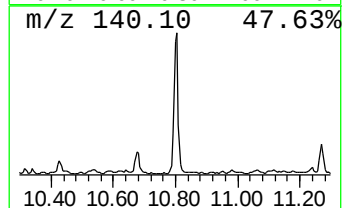
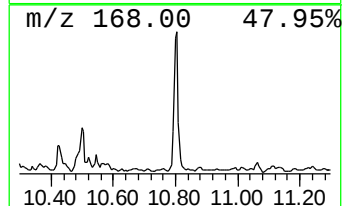
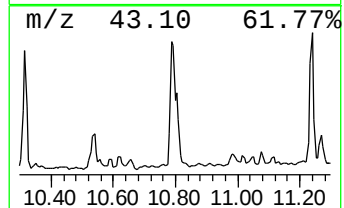
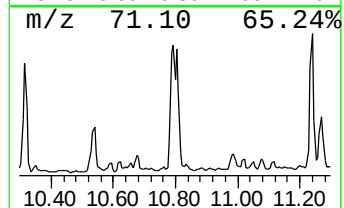
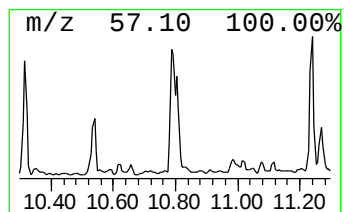
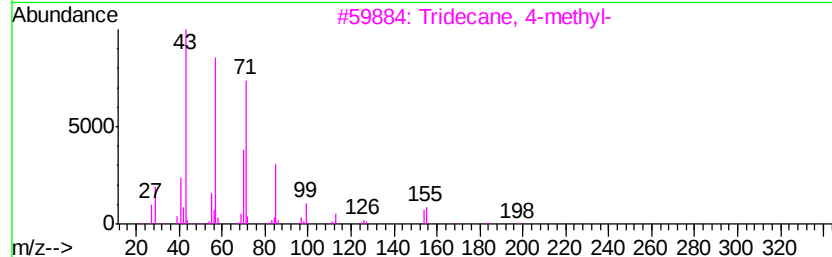
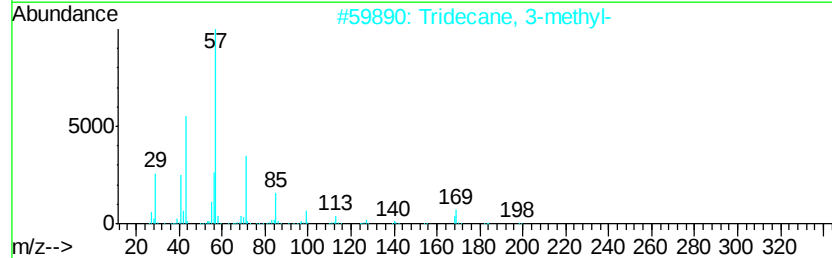
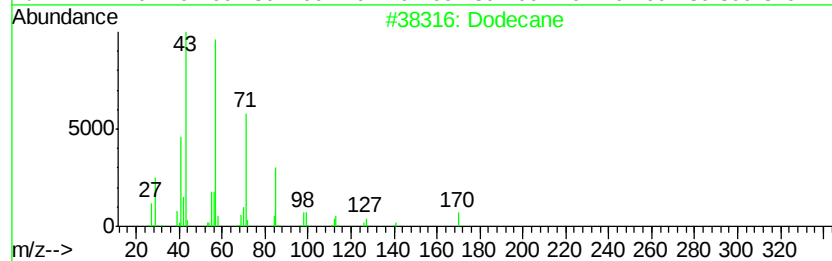
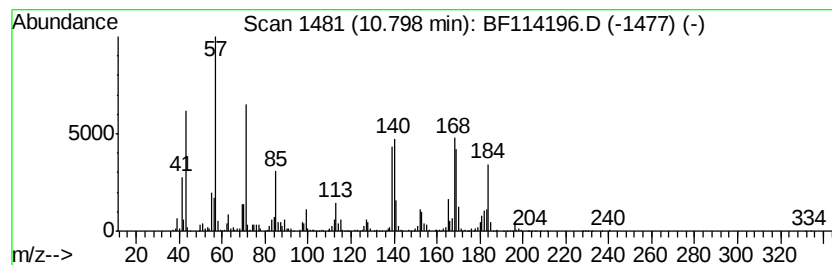
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 4 unknown10.80 Concentration Rank 16

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 10.80 | 23.55 ng | 2364510 | Phenanthrene-d10 | 11.37 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Dodecane                            | 170 | C12H26  | 000112-40-3 | 35   |
| 2    |    | Tridecane, 3-methyl-                | 198 | C14H30  | 006418-41-3 | 25   |
| 3    |    | Tridecane, 4-methyl-                | 198 | C14H30  | 026730-12-1 | 25   |
| 4    |    | Heptadecane, 2,6,10,14-tetramethyl- | 296 | C21H44  | 018344-37-1 | 25   |
| 5    |    | Decane, 2-methyl-                   | 156 | C11H24  | 006975-98-0 | 20   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

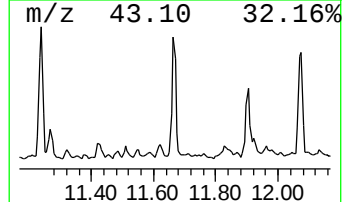
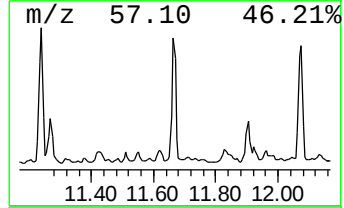
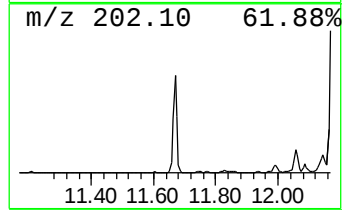
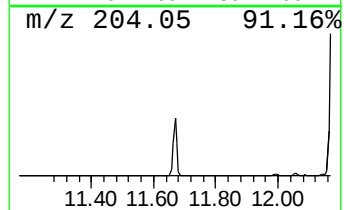
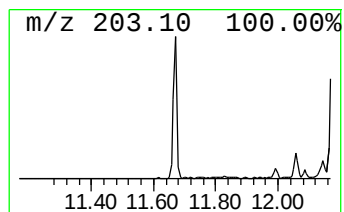
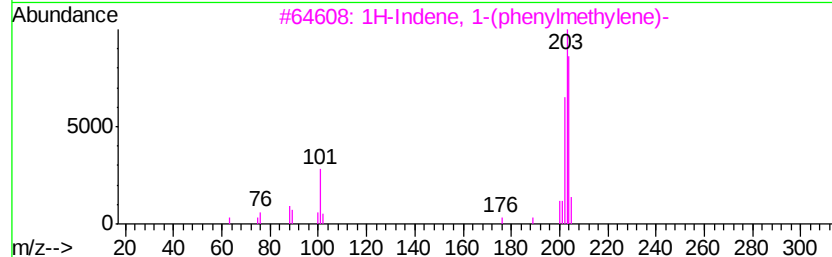
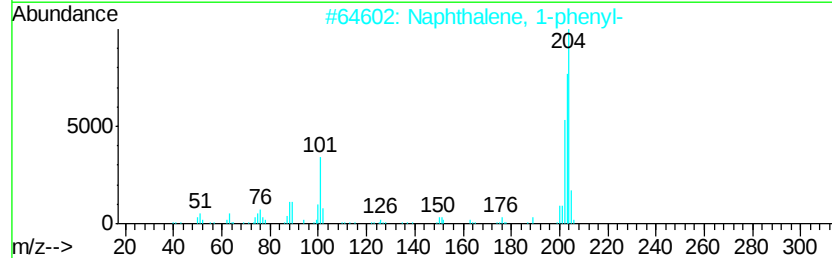
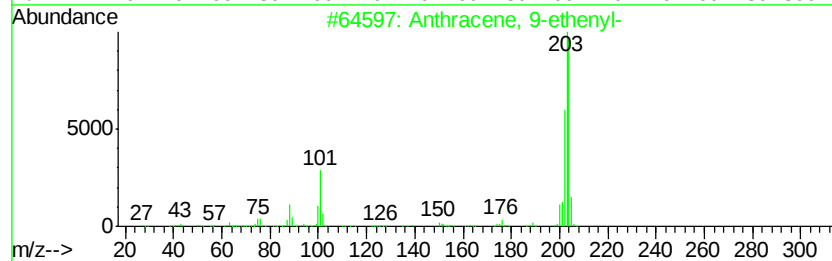
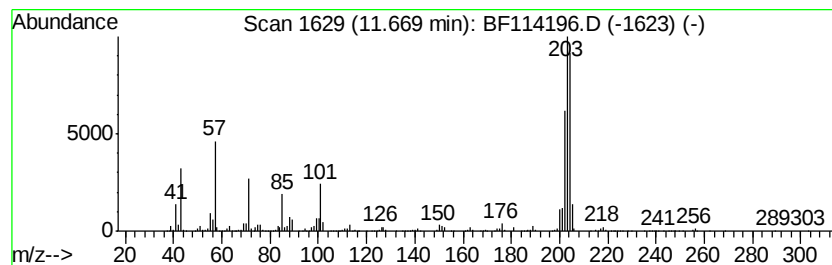
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 5 Anthracene, 9-ethenyl- Concentration Rank 15

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 11.67 | 29.25 ng | 2936970 | Phenanthrene-d10 | 11.37 |

| Hit# | of | Tentative ID                         | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Anthracene, 9-ethenyl-               | 204 | C16H12  | 002444-68-0 | 94   |
| 2    |    | Naphthalene, 1-phenyl-               | 204 | C16H12  | 000605-02-7 | 90   |
| 3    |    | 1H-Indene, 1-(phenylmethylene)-      | 204 | C16H12  | 005394-86-5 | 70   |
| 4    |    | Cyclobuta[1'',2'':3,4:3'',4'':3'...] | 204 | C16H12  | 006574-36-3 | 64   |
| 5    |    | Indeno[2,1-a]indene, 5,10-dihydro-   | 204 | C16H12  | 006543-29-9 | 55   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

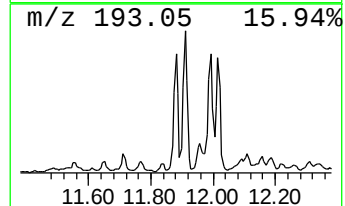
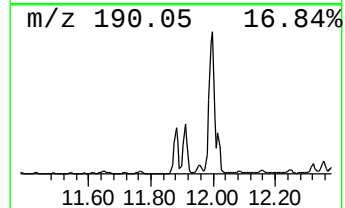
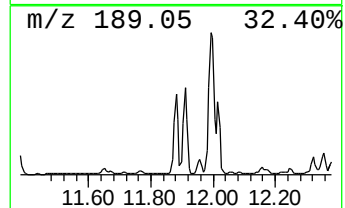
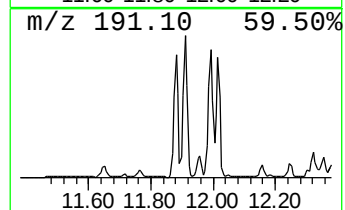
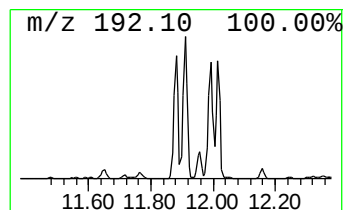
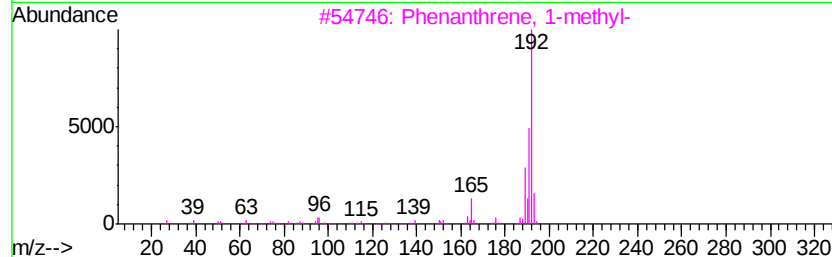
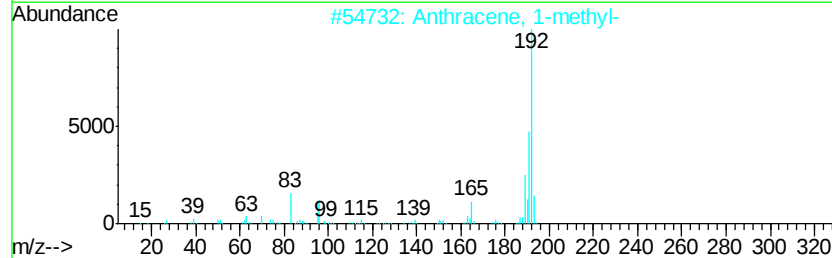
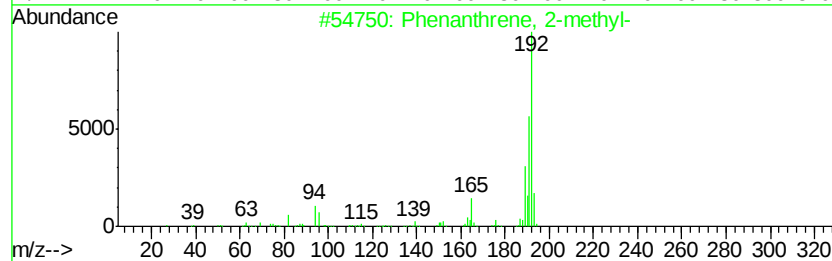
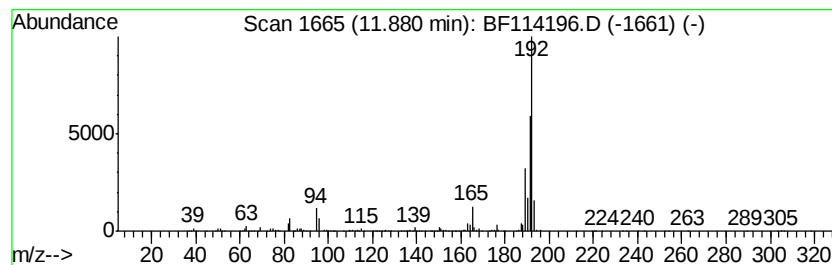
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 6 Phenanthrene, 2-methyl- Concentration Rank 7

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 11.88 | 43.32 ng | 4350230 | Phenanthrene-d10 | 11.37 |

| Hit# | of | Tentative ID                         | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Phenanthrene, 2-methyl-              | 192 | C15H12  | 002531-84-2 | 93   |
| 2    |    | Anthracene, 1-methyl-                | 192 | C15H12  | 000610-48-0 | 91   |
| 3    |    | Phenanthrene, 1-methyl-              | 192 | C15H12  | 000832-69-9 | 91   |
| 4    |    | Anthracene, 2-methyl-                | 192 | C15H12  | 000613-12-7 | 90   |
| 5    |    | 1H-Cyclopropa[1]phenanthrene, 1a,... | 192 | C15H12  | 000949-41-7 | 89   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

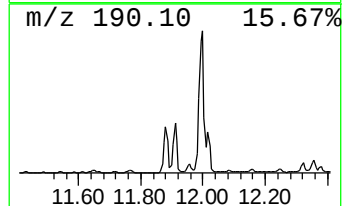
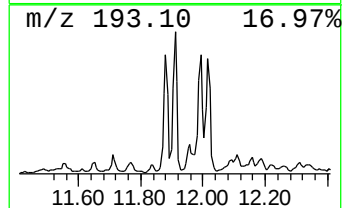
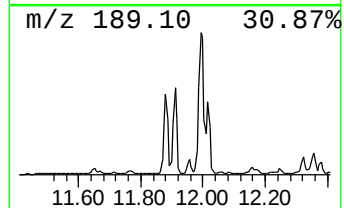
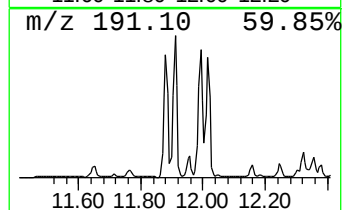
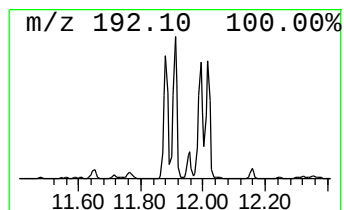
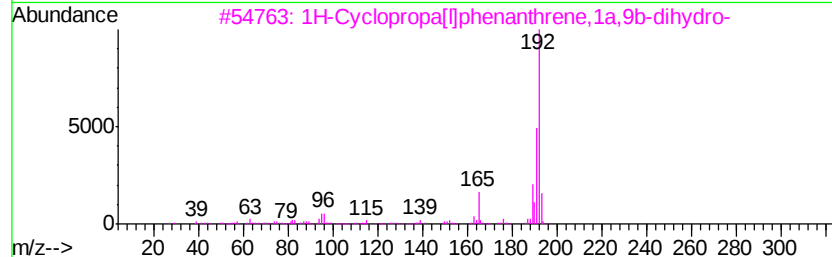
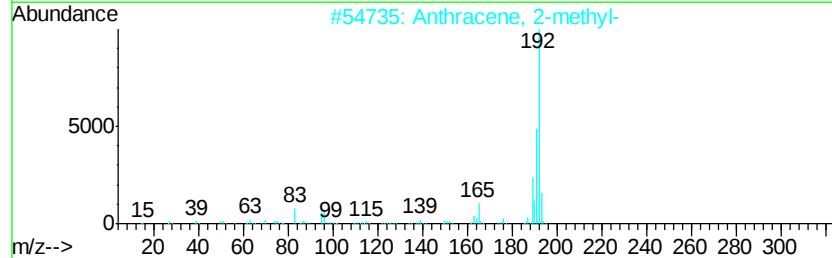
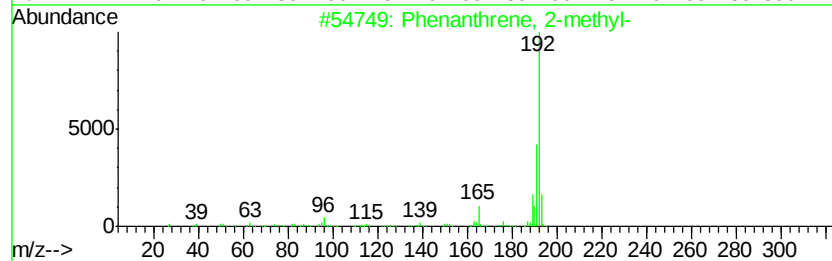
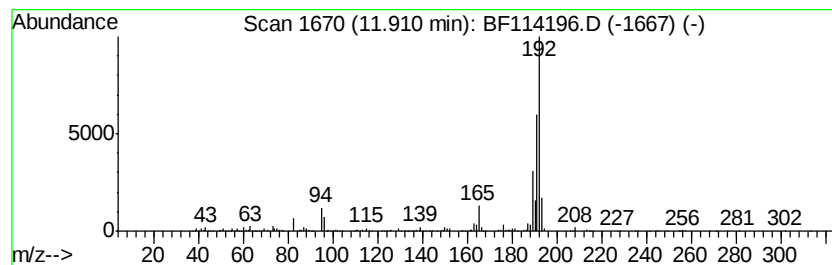
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 7 Anthracene, 2-methyl- Concentration Rank 5

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 11.91 | 52.70 ng | 5292440 | Phenanthrene-d10 | 11.37 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Phenanthrene, 2-methyl-             | 192 | C15H12  | 002531-84-2 | 96   |
| 2    |    | Anthracene, 2-methyl-               | 192 | C15H12  | 000613-12-7 | 96   |
| 3    |    | 1H-Cyclopropa[1]phenanthrene,1a,... | 192 | C15H12  | 000949-41-7 | 95   |
| 4    |    | Anthracene, 9-methyl-               | 192 | C15H12  | 000779-02-2 | 95   |
| 5    |    | 1H-Indene, 2-phenyl-                | 192 | C15H12  | 004505-48-0 | 95   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

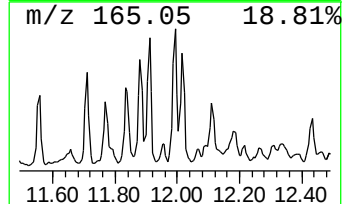
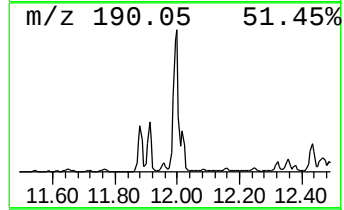
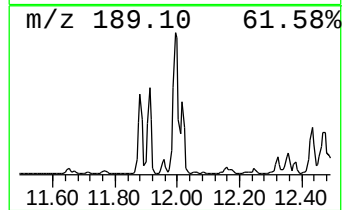
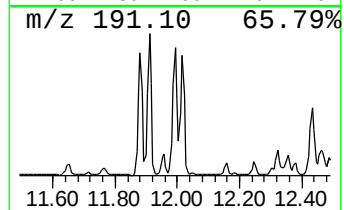
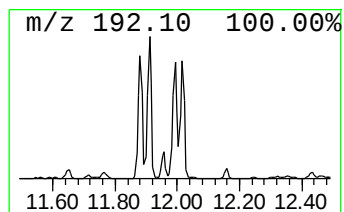
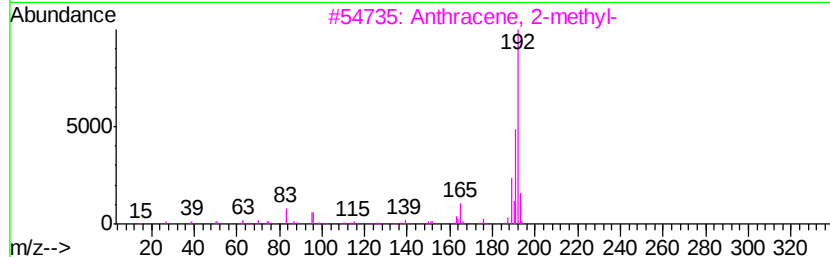
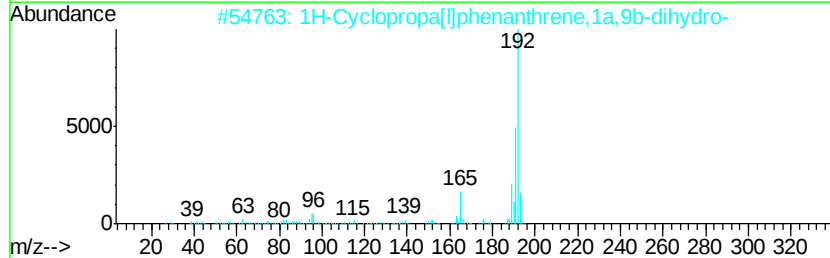
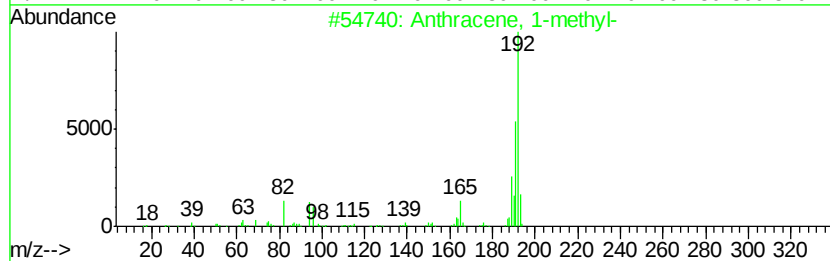
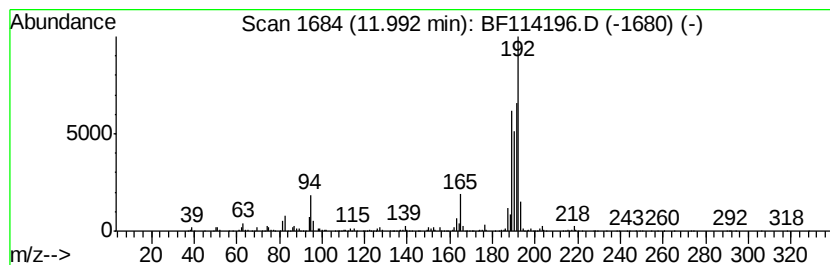
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 8 Anthracene, 1-methyl- Concentration Rank 3

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 11.99 | 60.49 ng | 6073880 | Phenanthrene-d10 | 11.37 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Anthracene, 1-methyl-               | 192 | C15H12  | 000610-48-0 | 78   |
| 2    |    | 1H-Cyclopropa[1]phenanthrene,1a,... | 192 | C15H12  | 000949-41-7 | 60   |
| 3    |    | Anthracene, 2-methyl-               | 192 | C15H12  | 000613-12-7 | 60   |
| 4    |    | 1H-Indene, 2-phenyl-                | 192 | C15H12  | 004505-48-0 | 60   |
| 5    |    | Phenanthrene, 1-methyl-             | 192 | C15H12  | 000832-69-9 | 60   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

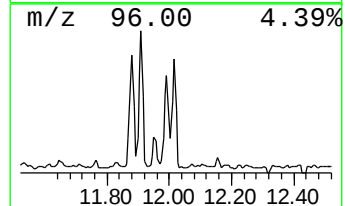
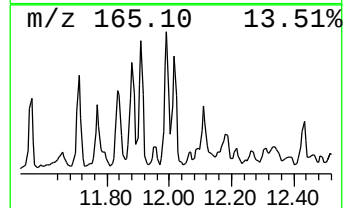
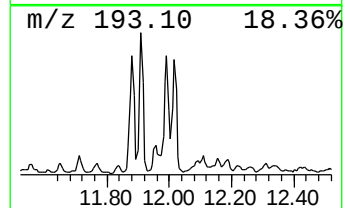
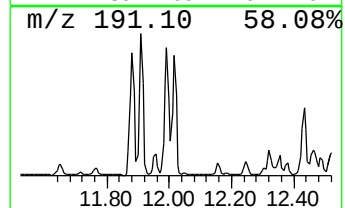
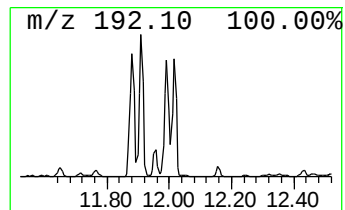
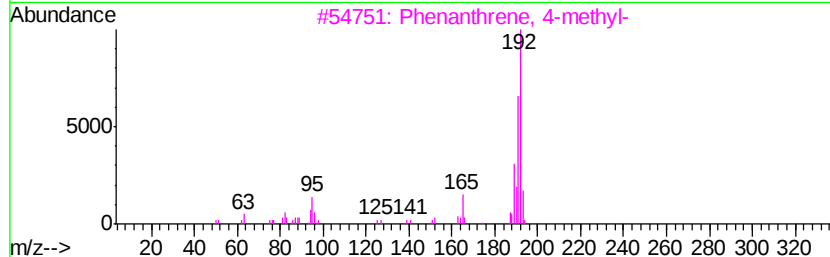
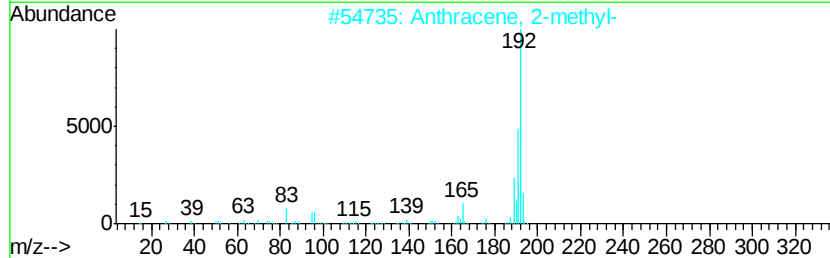
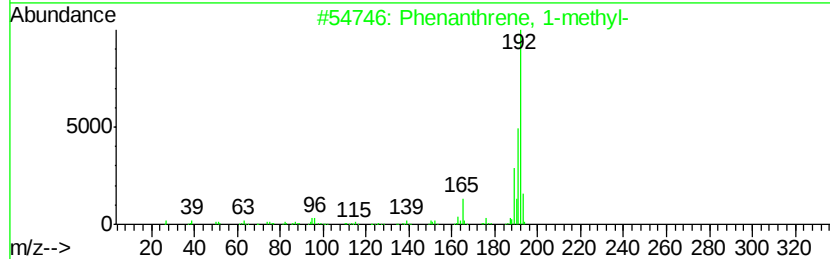
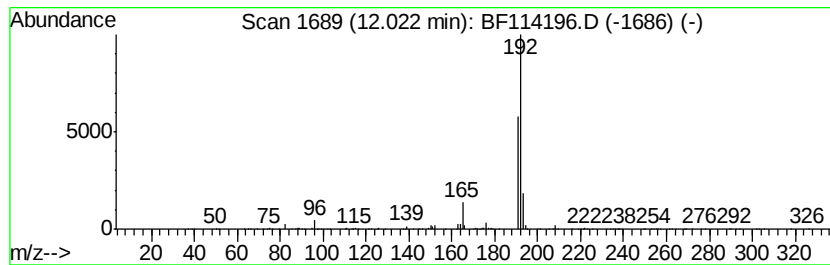
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 9 Phenanthrene, 1-methyl- Concentration Rank 12

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.02 | 34.35 ng | 3449090 | Phenanthrene-d10 | 11.37 |

| Hit# | of | Tentative ID                          | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Phenanthrene, 1-methyl-               | 192 | C15H12  | 000832-69-9 | 95   |
| 2    |    | Anthracene, 2-methyl-                 | 192 | C15H12  | 000613-12-7 | 95   |
| 3    |    | Phenanthrene, 4-methyl-               | 192 | C15H12  | 000832-64-4 | 94   |
| 4    |    | Phenanthrene, 2-methyl-               | 192 | C15H12  | 002531-84-2 | 94   |
| 5    |    | 1H-Cyclopropa[1]phenanthrene, 1a, ... | 192 | C15H12  | 000949-41-7 | 94   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

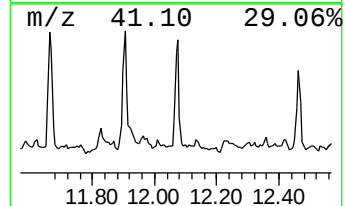
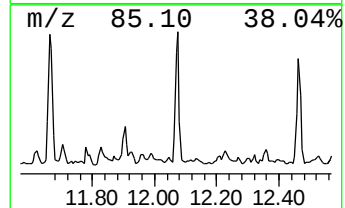
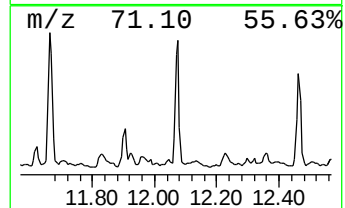
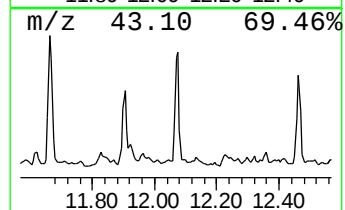
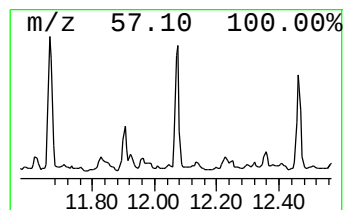
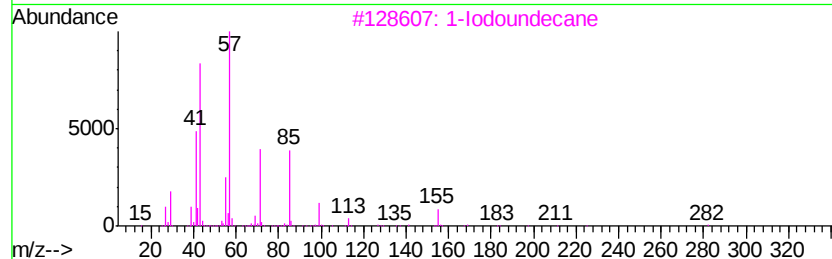
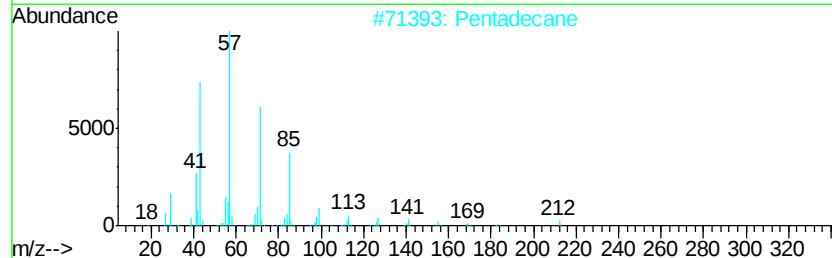
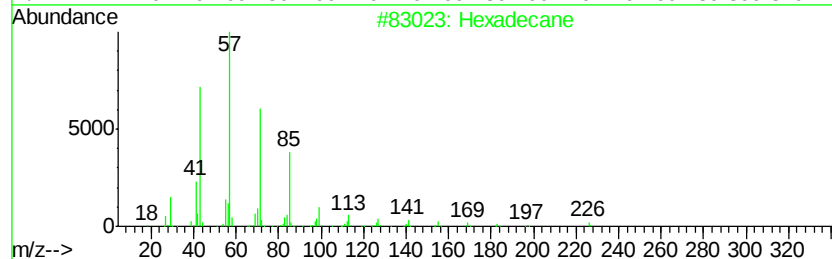
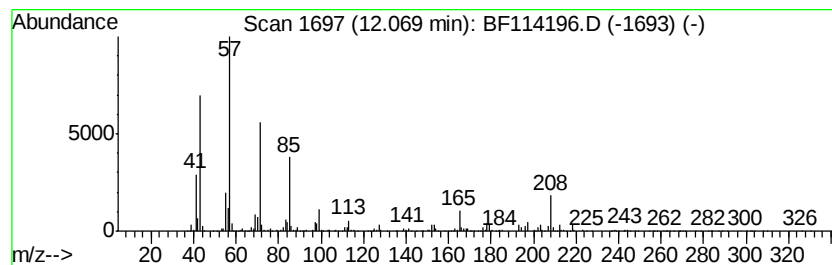
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 10 Hexadecane Concentration Rank 17

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.07 | 18.86 ng | 1894170 | Phenanthrene-d10 | 11.37 |

| Hit# | of | Tentative ID        | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------|-----|---------|-------------|------|
| 1    | 5  | Hexadecane          | 226 | C16H34  | 000544-76-3 | 90   |
| 2    |    | Pentadecane         | 212 | C15H32  | 000629-62-9 | 74   |
| 3    |    | 1-Iodoundecane      | 282 | C11H23I | 004282-44-4 | 68   |
| 4    |    | Tetradecane         | 198 | C14H30  | 000629-59-4 | 64   |
| 5    |    | Undecane, 3-methyl- | 170 | C12H26  | 001002-43-3 | 64   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

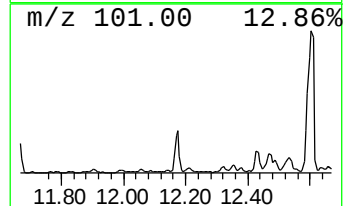
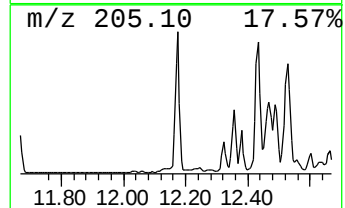
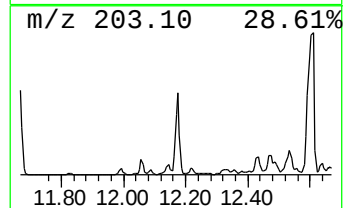
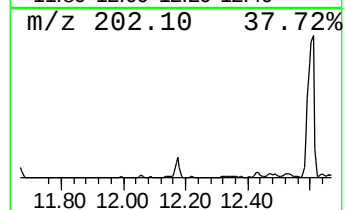
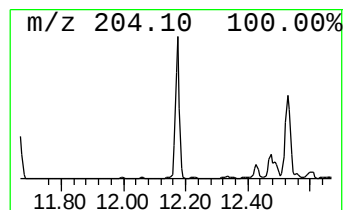
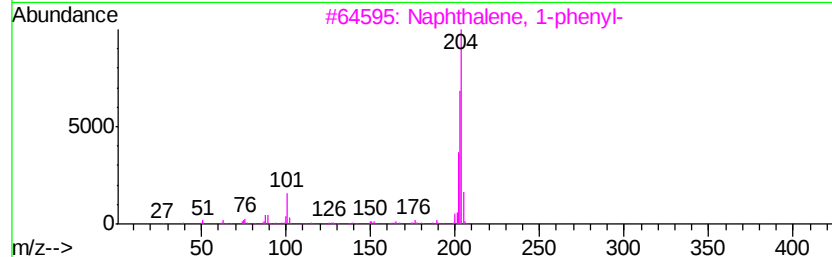
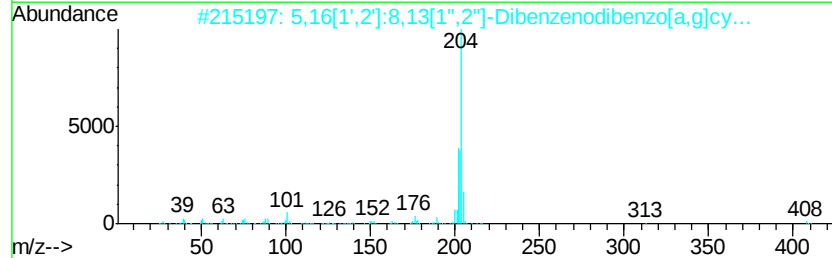
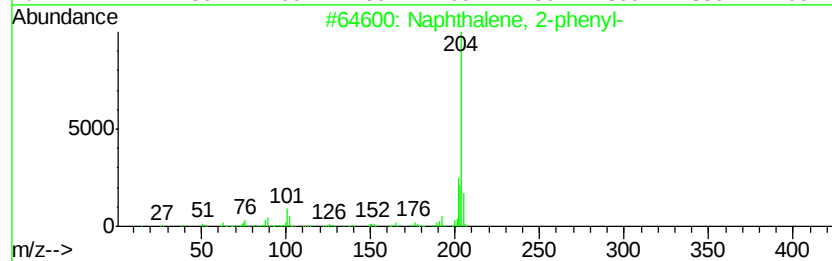
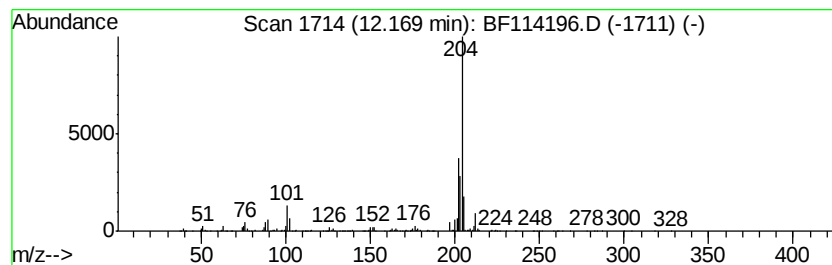
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 11 Naphthalene, 2-phenyl- Concentration Rank 9

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.17 | 38.21 ng | 3836860 | Phenanthrene-d10 | 11.37 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, 2-phenyl-              | 204 | C16H12  | 000612-94-2 | 90   |
| 2    |    | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24  | 005672-97-9 | 87   |
| 3    |    | Naphthalene, 1-phenyl-              | 204 | C16H12  | 000605-02-7 | 64   |
| 4    |    | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12  | 006572-60-7 | 64   |
| 5    |    | [1,1'-Biphenyl]-4,4'-dicarbonitrile | 204 | C14H8N2 | 001591-30-6 | 50   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

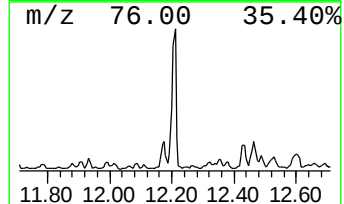
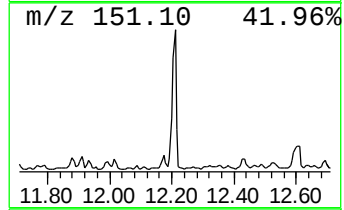
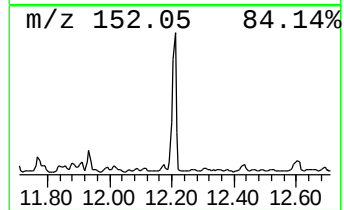
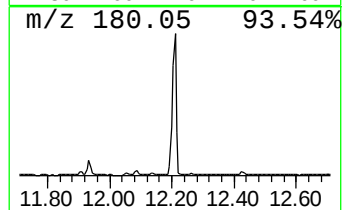
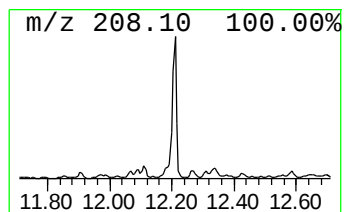
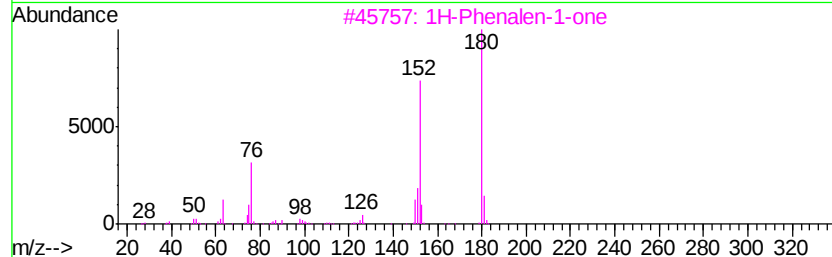
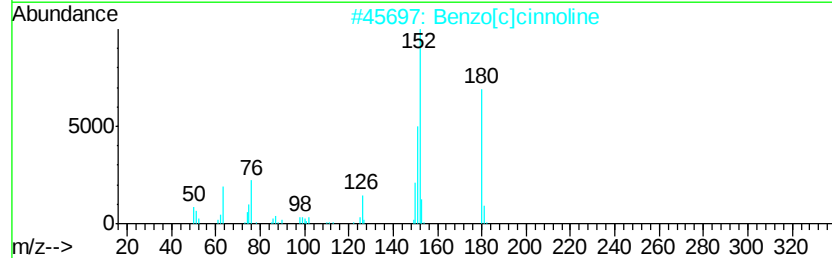
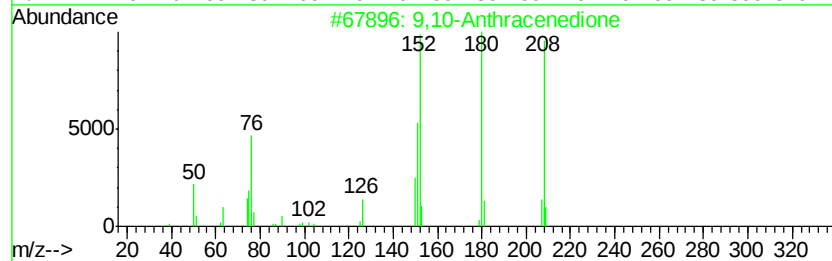
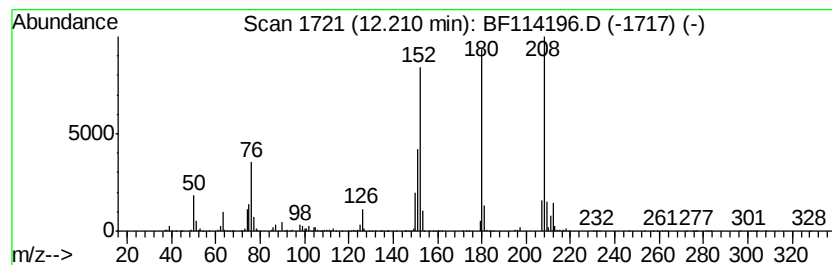
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 12 9,10-Anthracenedione Concentration Rank 6

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.21 | 45.89 ng | 4608640 | Phenanthrene-d10 | 11.37 |

| Hit# | of | Tentative ID                     | MW  | MolForm  | CAS#        | Qual |
|------|----|----------------------------------|-----|----------|-------------|------|
| 1    | 5  | 9,10-Anthracenedione             | 208 | C14H8O2  | 000084-65-1 | 99   |
| 2    |    | Benzo[c]cinnoline                | 180 | C12H8N2  | 000230-17-1 | 60   |
| 3    |    | 1H-Phenalen-1-one                | 180 | C13H8O   | 000548-39-0 | 55   |
| 4    |    | 1,4-Anthracenedione              | 208 | C14H8O2  | 000635-12-1 | 53   |
| 5    |    | 5,6-Dimethyl-1,10-phenanthroline | 208 | C14H12N2 | 003002-81-1 | 38   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

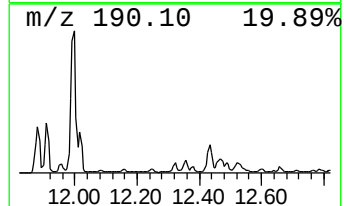
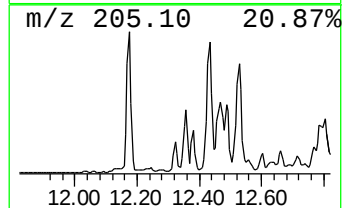
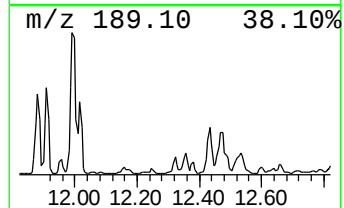
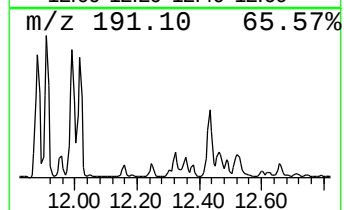
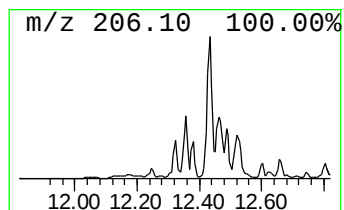
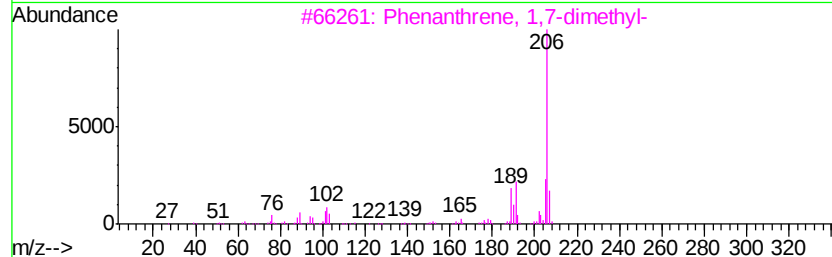
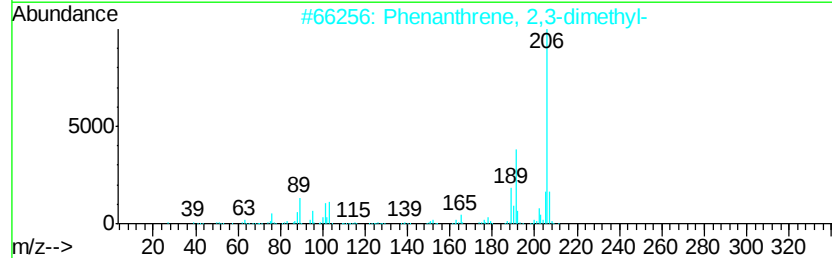
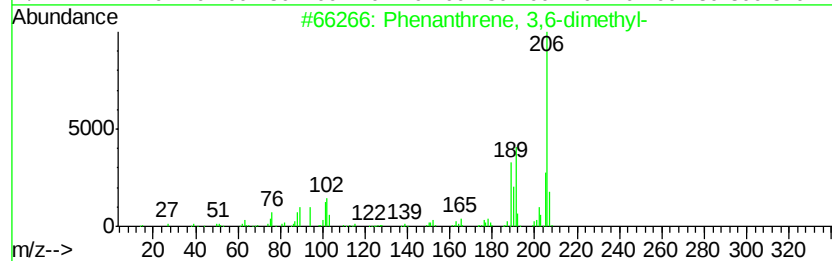
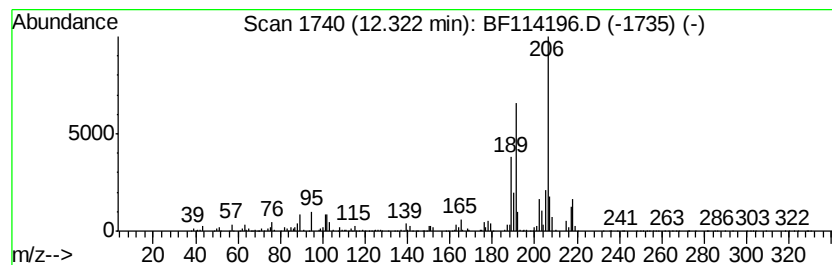
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 13 Phenanthrene, 3,6-dimethyl- Concentration Rank 19

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.32 | 18.00 ng | 1807260 | Phenanthrene-d10 | 11.37 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Phenanthrene, 3,6-dimethyl-         | 206 | C16H14  | 001576-67-6 | 94   |
| 2    |    | Phenanthrene, 2,3-dimethyl-         | 206 | C16H14  | 003674-65-5 | 93   |
| 3    |    | Phenanthrene, 1,7-dimethyl-         | 206 | C16H14  | 000483-87-4 | 90   |
| 4    |    | Phenanthrene, 2,7-dimethyl-         | 206 | C16H14  | 001576-69-8 | 87   |
| 5    |    | [14]Annulene, 1,6:8,13-bis(metha... | 206 | C16H14  | 085385-68-8 | 76   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

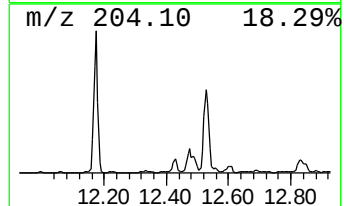
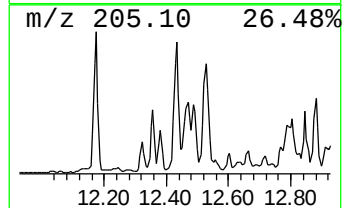
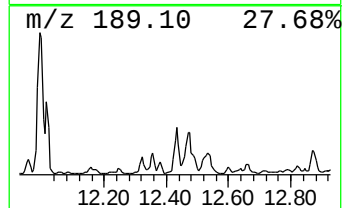
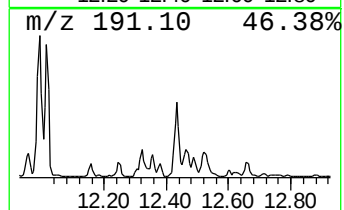
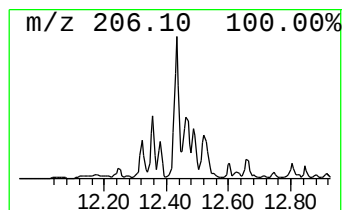
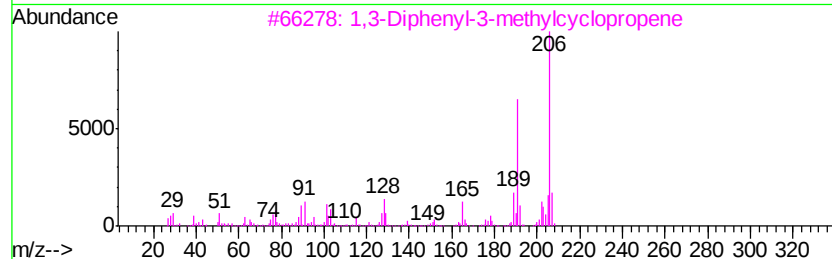
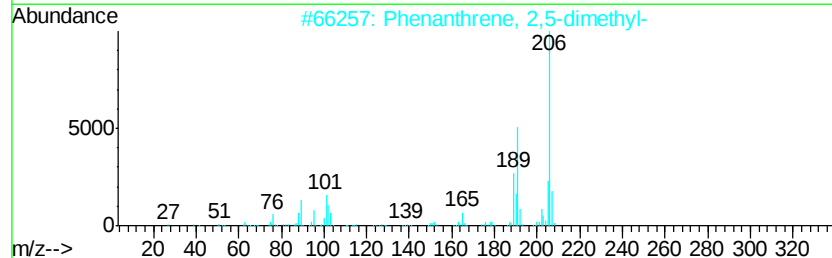
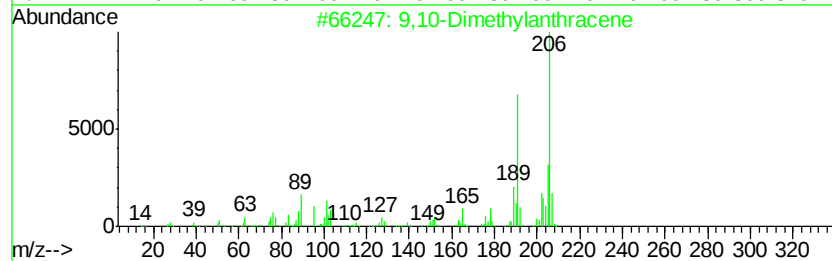
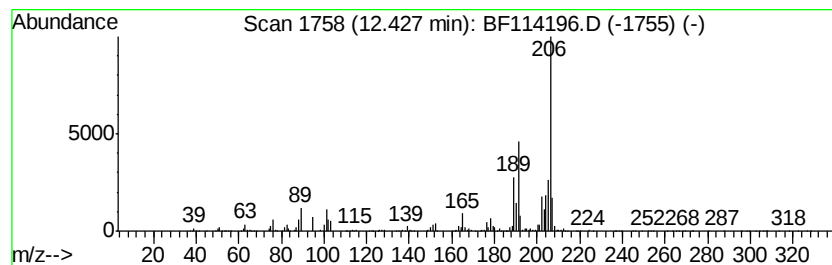
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 14 9,10-Dimethylantracene Concentration Rank 11

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.43 | 37.48 ng | 3763480 | Phenanthrene-d10 | 11.37 |

| Hit# | of | Tentative ID                      | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------------------|-----|---------|-------------|------|
| 1    | 5  | 9,10-Dimethylantracene            | 206 | C16H14  | 000781-43-1 | 97   |
| 2    |    | Phenanthrene, 2,5-dimethyl-       | 206 | C16H14  | 003674-66-6 | 97   |
| 3    |    | 1,3-Diphenyl-3-methylcyclopropene | 206 | C16H14  | 086544-79-8 | 96   |
| 4    |    | 1-Methyl-3-phenyl-1H-indene       | 206 | C16H14  | 022360-62-9 | 93   |
| 5    |    | 3-Methyl-1-phenyl-1H-indene       | 206 | C16H14  | 022360-63-0 | 93   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

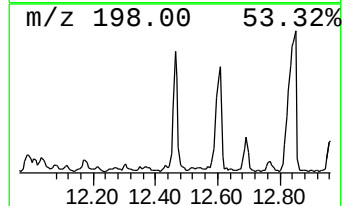
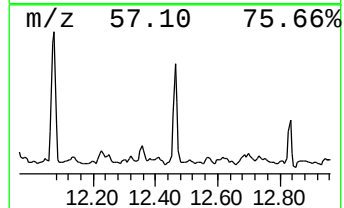
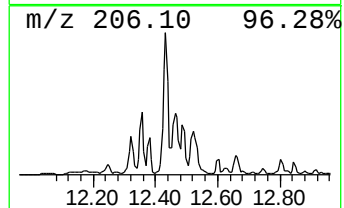
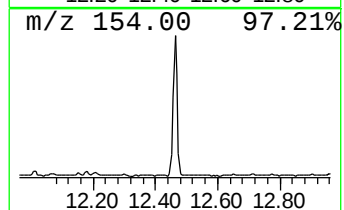
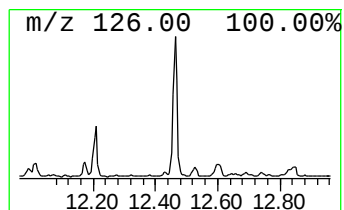
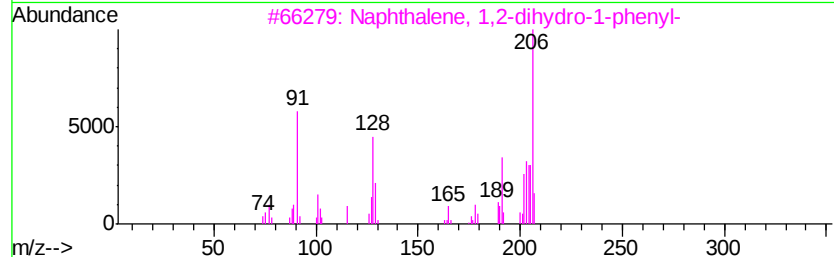
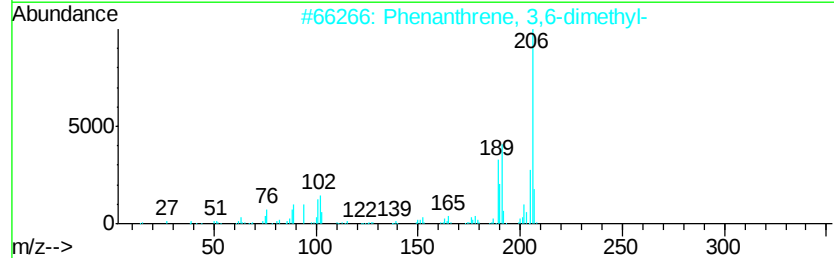
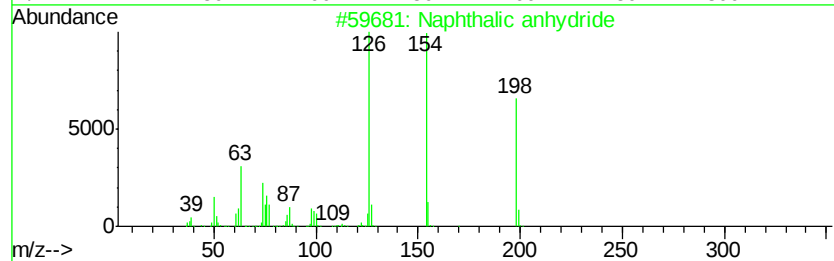
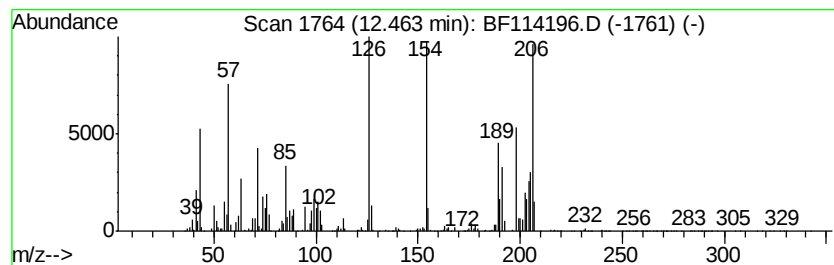
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 15 Naphthalic anhydride Concentration Rank 10

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.46 | 37.72 ng | 3787420 | Phenanthrene-d10 | 11.37 |

| Hit# | of | Tentative ID                           | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalic anhydride                   | 198 | C12H6O3 | 000081-84-5 | 95   |
| 2    |    | Phenanthrene, 3,6-dimethyl-            | 206 | C16H14  | 001576-67-6 | 50   |
| 3    |    | Naphthalene, 1,2-dihydro-1-phenyl-     | 206 | C16H14  | 016606-46-5 | 48   |
| 4    |    | Benzene, 1,1'-(1,3-butadienylidene...) | 206 | C16H14  | 004165-81-5 | 47   |
| 5    |    | Naphtho[1,2-c]furan-1,3-dione          | 198 | C12H6O3 | 005343-99-7 | 41   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

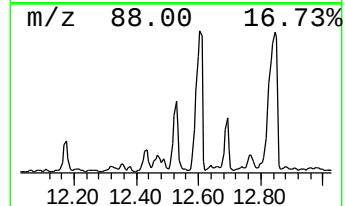
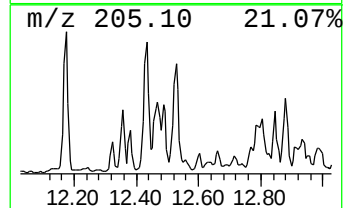
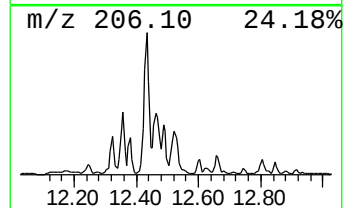
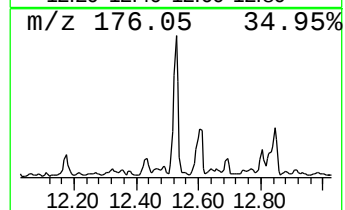
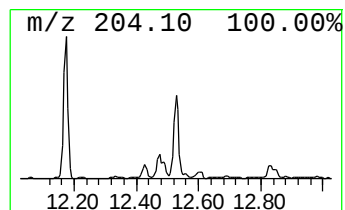
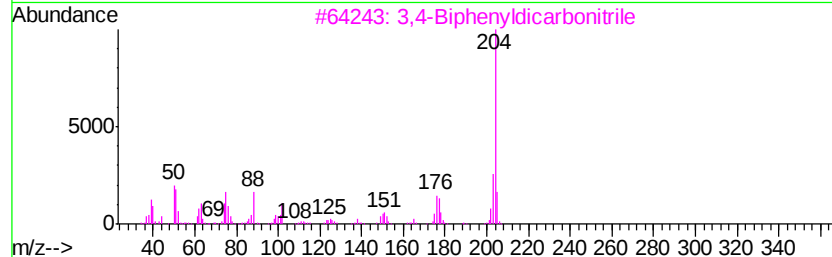
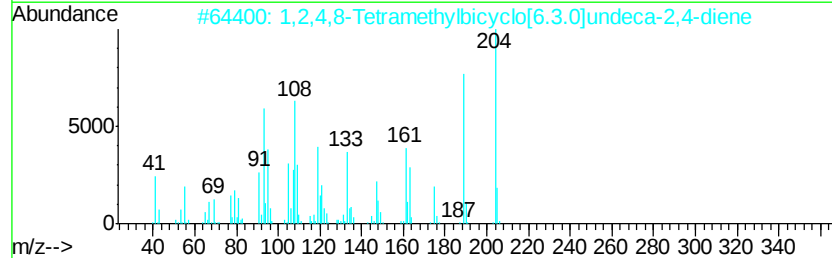
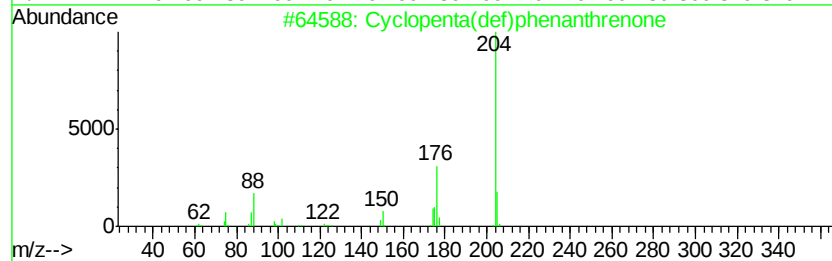
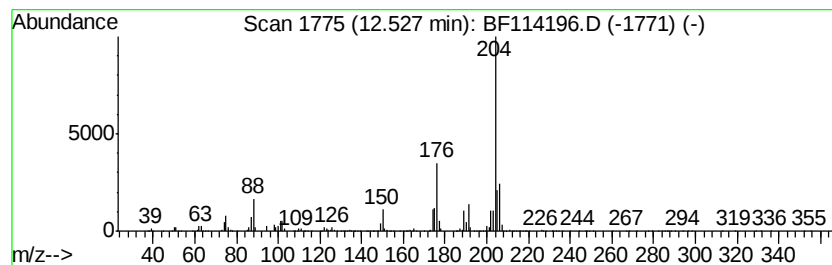
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 16 Cyclopenta(def)phenanthrenone Concentration Rank 8

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.53 | 38.70 ng | 3885910 | Phenanthrene-d10 | 11.37 |

| Hit# | of | Tentative ID                                      | MW  | MolForm     | CAS#        | Qual |
|------|----|---------------------------------------------------|-----|-------------|-------------|------|
| 1    | 5  | Cyclopenta(def)phenanthrenone                     | 204 | C15H8O      | 005737-13-3 | 98   |
| 2    |    | 1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-2,4-diene | 204 | C15H24      | 137235-51-9 | 60   |
| 3    |    | 3,4-Biphenyldicarbonitrile                        | 204 | C14H8N2     | 004128-63-6 | 52   |
| 4    |    | .alpha.-L-Mannopyranose, 6-deoxy...               | 452 | C18H44O5Si4 | 055057-21-1 | 47   |
| 5    |    | [1,1'-Biphenyl]-2-ol, 5-chloro-                   | 204 | C12H9ClO    | 000607-12-5 | 47   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

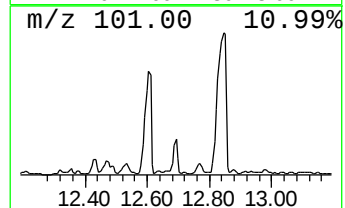
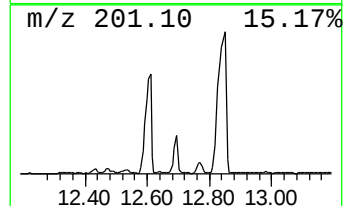
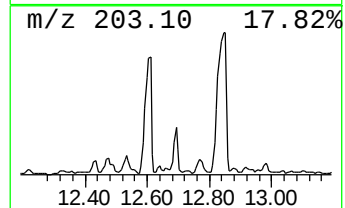
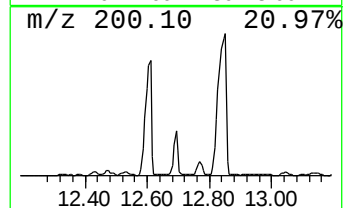
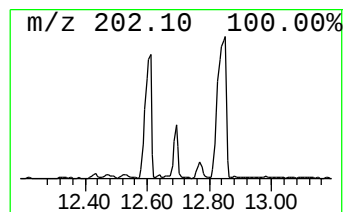
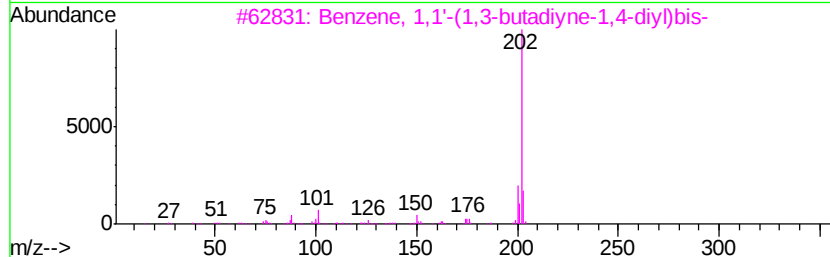
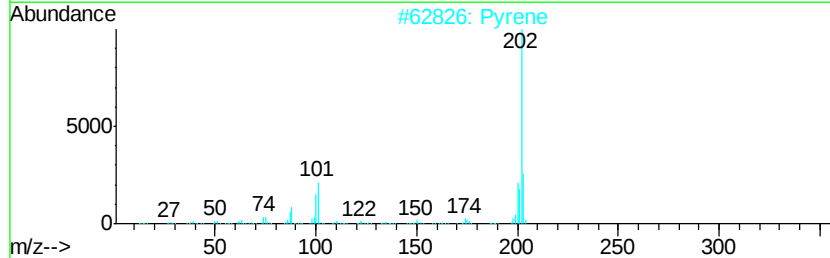
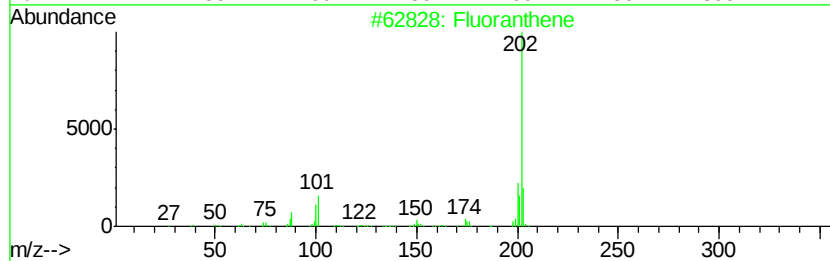
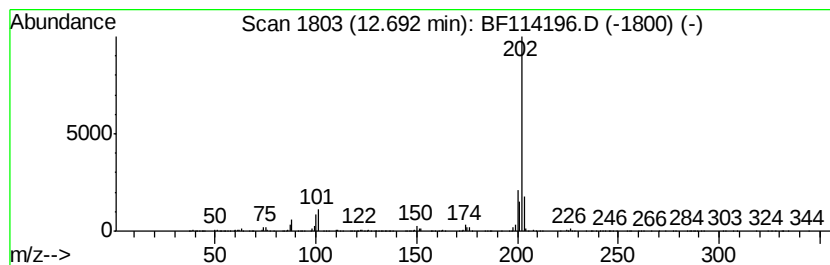
Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 17 Benzene, 1,1'-(1,3-butadiyn... Concentration Rank 13

| R.T.      | EstConc                             | Area    | Relative to ISTD | R.T.         |      |
|-----------|-------------------------------------|---------|------------------|--------------|------|
| 12.69     | 32.24 ng                            | 3237890 | Phenanthrene-d10 | 11.37        |      |
| Hit# of 5 | Tentative ID                        | MW      | MolForm          | CAS#         | Qual |
| 1         | Fluoranthene                        | 202     | C16H10           | 000206-44-0  | 98   |
| 2         | Pyrene                              | 202     | C16H10           | 000129-00-0  | 95   |
| 3         | Benzene, 1,1'-(1,3-butadiyne-1,4... | 202     | C16H10           | 000886-66-8  | 72   |
| 4         | 7H-Furo[3,2-q][1]benzopyran-7-on... | 202     | C11H6O4          | 002009-24-7  | 38   |
| 5         | Succinic acid, di(4-cyanophenyl)... | 320     | C18H12N2O4       | 1000360-71-2 | 28   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

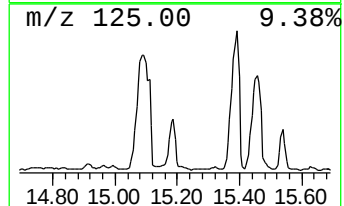
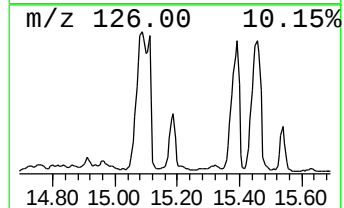
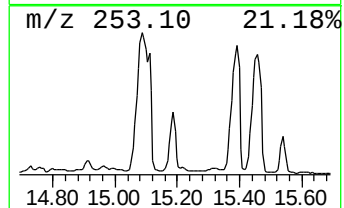
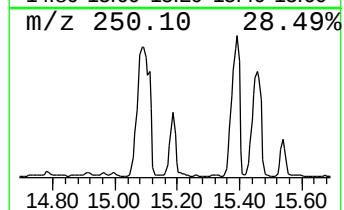
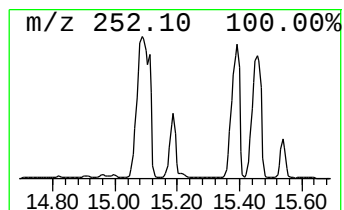
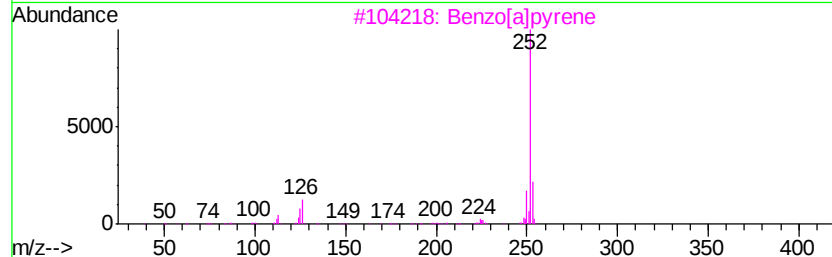
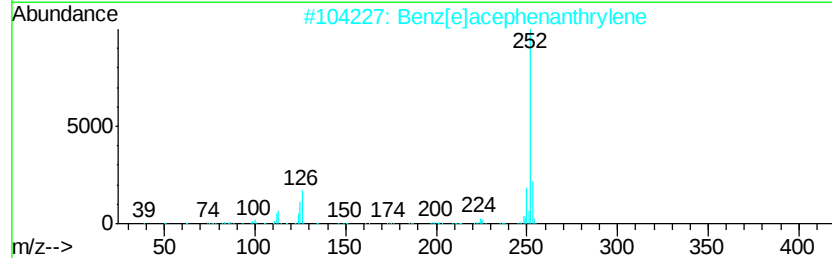
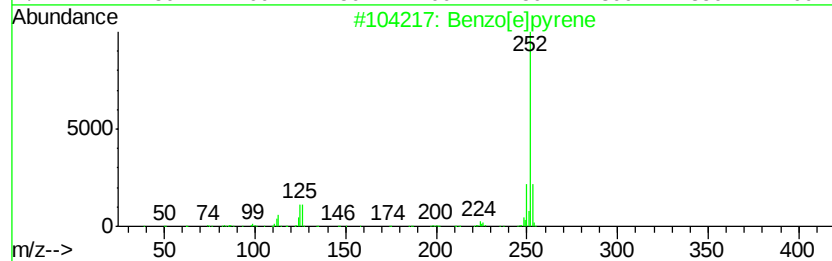
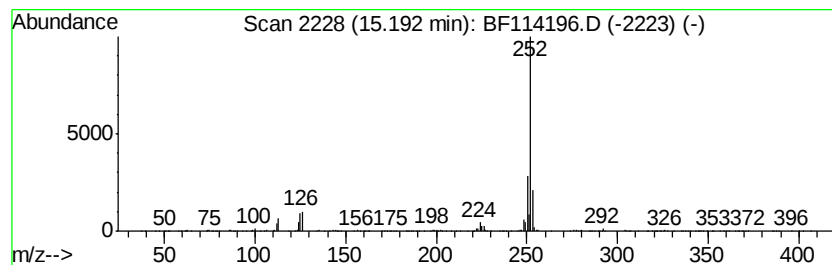
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 18 Benzo[e]pyrene Concentration Rank 14

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 15.19 | 31.71 ng | 2525070 | Perylene-d12     | 15.51 |

| Hit# | of | 5 | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---|---------------------------|-----|---------|-------------|------|
| 1    |    |   | Benzo[e]pyrene            | 252 | C20H12  | 000192-97-2 | 99   |
| 2    |    |   | Benzo[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 96   |
| 3    |    |   | Benzo[a]pyrene            | 252 | C20H12  | 000050-32-8 | 95   |
| 4    |    |   | Benzo[i]fluoranthene      | 252 | C20H12  | 000205-82-3 | 94   |
| 5    |    |   | Benzo[k]fluoranthene      | 252 | C20H12  | 000207-08-9 | 91   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

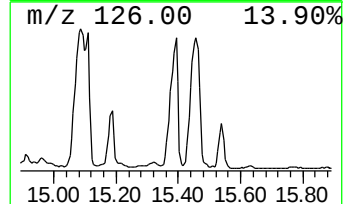
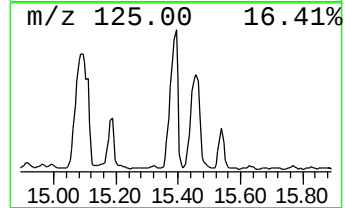
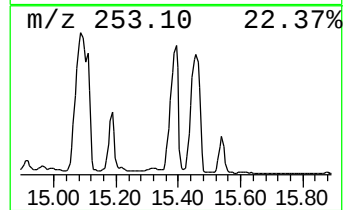
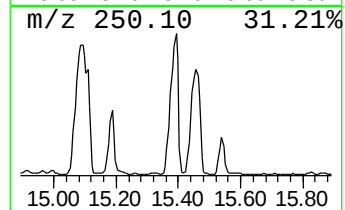
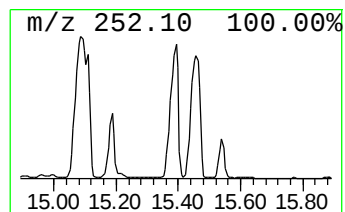
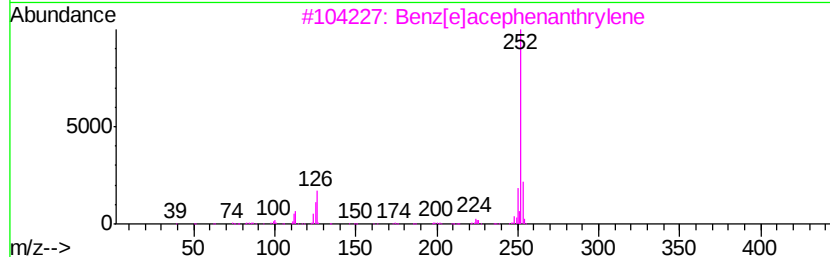
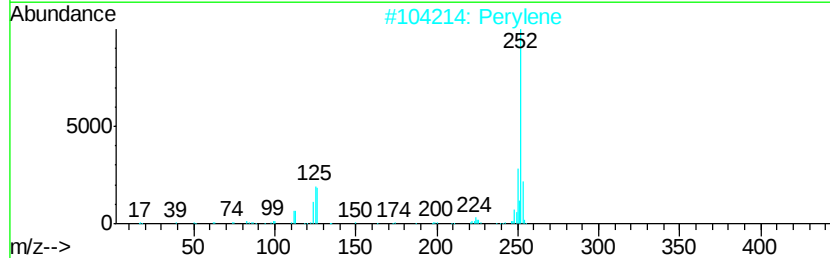
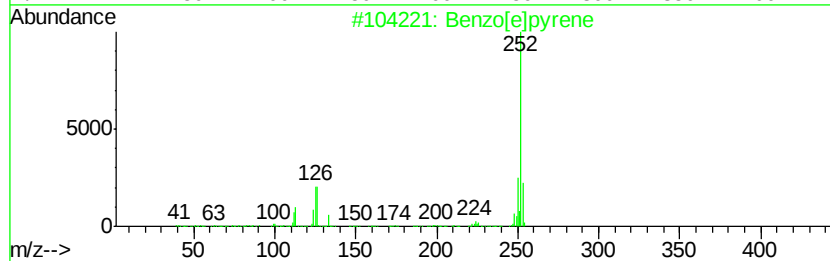
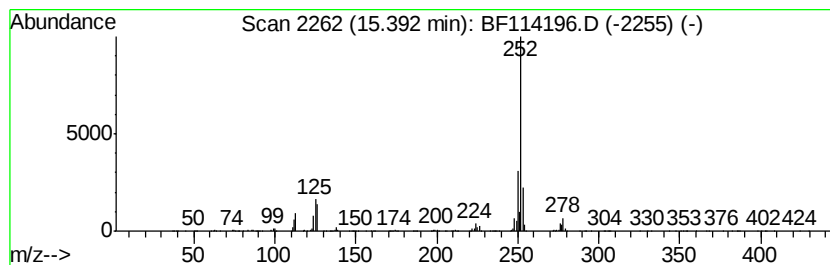
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 19 unknown15.39 Concentration Rank 1

| R.T.  | EstConc   | Area    | Relative to ISTD | R.T.  |
|-------|-----------|---------|------------------|-------|
| 15.39 | 116.78 ng | 9298550 | Perylene-d12     | 15.51 |

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



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051219\  
Data File : BF114196.D  
Acq On : 12 May 2019 16:56  
Operator : JU/SJ  
Sample : K2767-15  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF051019.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

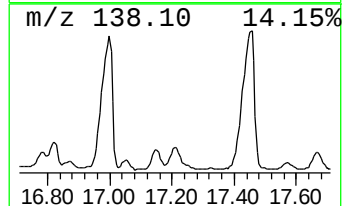
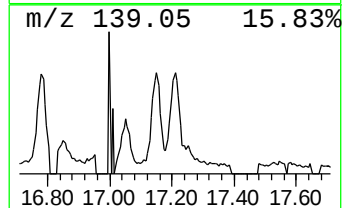
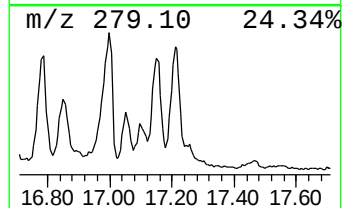
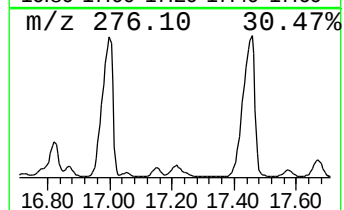
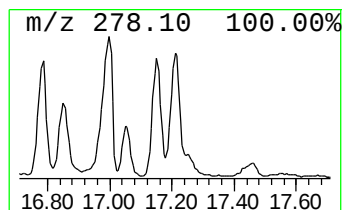
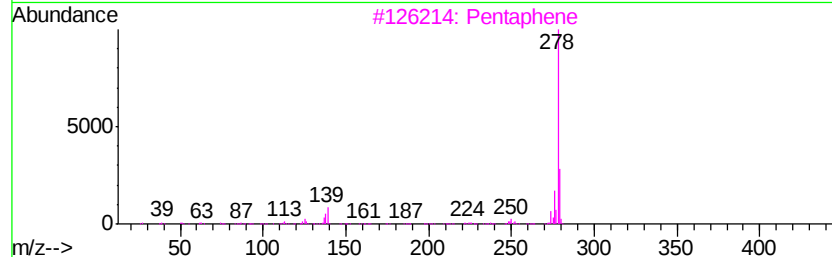
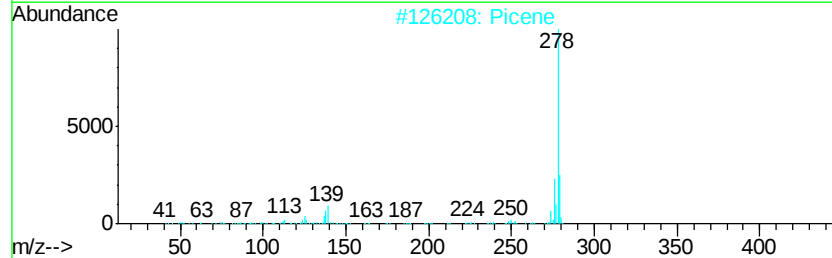
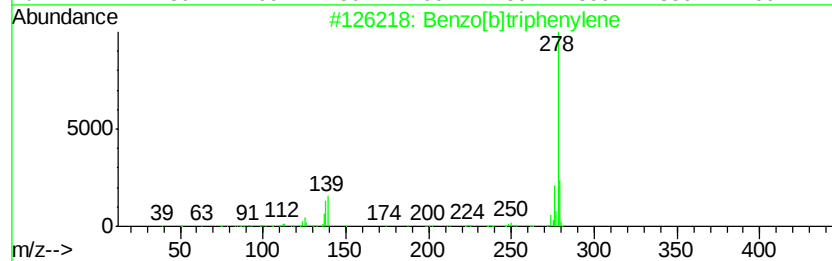
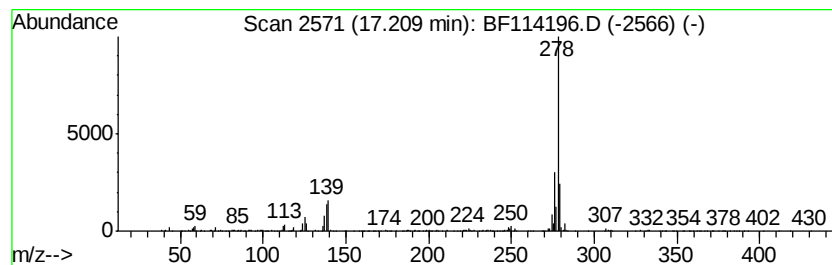
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 20 Benzo[b]triphenylene Concentration Rank 20

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 17.21 | 17.64 ng | 1404240 | Perylene-d12     | 15.51 |

| Hit# | of | 5 | Tentative ID          | MW  | MolForm | CAS#        | Qual |
|------|----|---|-----------------------|-----|---------|-------------|------|
| 1    |    |   | Benzo[b]triphenylene  | 278 | C22H14  | 000215-58-7 | 98   |
| 2    |    |   | Picene                | 278 | C22H14  | 000213-46-7 | 97   |
| 3    |    |   | Pentaphene            | 278 | C22H14  | 000222-93-5 | 96   |
| 4    |    |   | Dibenz[a,h]anthracene | 278 | C22H14  | 000053-70-3 | 93   |
| 5    |    |   | Benzo[b]chrysene      | 278 | C22H14  | 000214-17-5 | 93   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF051219\  
 Data File : BF114196.D  
 Acq On : 12 May 2019 16:56  
 Operator : JU/SJ  
 Sample : K2767-15  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 P026-SS012-0002-02

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF051019.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 |
| Butane, 2-methoxy... | 2.12  | 18.4    | ng    | 1671130  | 1                     | 6.85  | 1811820 | 20.0 |
| unknown6.63          | 6.63  | 68.9    | ng    | 6239670  | 1                     | 6.85  | 1811820 | 20.0 |
| unknown10.80         | 10.80 | 23.6    | ng    | 2364510  | 4                     | 11.37 | 2008390 | 20.0 |
| Anthracene, 9-eth... | 11.67 | 29.3    | ng    | 2936970  | 4                     | 11.37 | 2008390 | 20.0 |
| Phenanthrene, 2-m... | 11.88 | 43.3    | ng    | 4350230  | 4                     | 11.37 | 2008390 | 20.0 |
| Anthracene, 2-met... | 11.91 | 52.7    | ng    | 5292440  | 4                     | 11.37 | 2008390 | 20.0 |
| Anthracene, 1-met... | 11.99 | 60.5    | ng    | 6073880  | 4                     | 11.37 | 2008390 | 20.0 |
| Phenanthrene, 1-m... | 12.02 | 34.4    | ng    | 3449090  | 4                     | 11.37 | 2008390 | 20.0 |
| Hexadecane           | 12.07 | 18.9    | ng    | 1894170  | 4                     | 11.37 | 2008390 | 20.0 |
| Naphthalene, 2-ph... | 12.17 | 38.2    | ng    | 3836860  | 4                     | 11.37 | 2008390 | 20.0 |
| 9,10-Anthracenedione | 12.21 | 45.9    | ng    | 4608640  | 4                     | 11.37 | 2008390 | 20.0 |
| Phenanthrene, 3,6... | 12.32 | 18.0    | ng    | 1807260  | 4                     | 11.37 | 2008390 | 20.0 |
| 9,10-Dimethylantr... | 12.43 | 37.5    | ng    | 3763480  | 4                     | 11.37 | 2008390 | 20.0 |
| Naphthalic anhydride | 12.46 | 37.7    | ng    | 3787420  | 4                     | 11.37 | 2008390 | 20.0 |
| Cyclopenta(def)ph... | 12.53 | 38.7    | ng    | 3885910  | 4                     | 11.37 | 2008390 | 20.0 |
| Benzene, 1,1'-(1,... | 12.69 | 32.2    | ng    | 3237890  | 4                     | 11.37 | 2008390 | 20.0 |
| Benzo[e]pyrene       | 15.19 | 31.7    | ng    | 2525070  | 6                     | 15.51 | 1592510 | 20.0 |
| unknown15.39         | 15.39 | 116.8   | ng    | 9298550  | 6                     | 15.51 | 1592510 | 20.0 |
| Benzo[b]triphenylene | 17.21 | 17.6    | ng    | 1404240  | 6                     | 15.51 | 1592510 | 20.0 |