

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF100518\  
 Data File : BF109628.D  
 Acq On : 6 Oct 2018 00:20  
 Operator : JU/SJ  
 Sample : J5263-04 2X  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 GRID13-COMP-100318

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-BF092218.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         | 5.316       | 546           | 549         | 576          | rBV      | 501523         | 622575        | 30.71%          | 1.761%        |
| 2         | 6.345       | 721           | 724         | 742          | rBV      | 582151         | 762973        | 37.64%          | 2.158%        |
| 3         | 6.469       | 742           | 745         | 753          | rBV      | 674693         | 719438        | 35.49%          | 2.035%        |
| 4         | 6.698       | 781           | 784         | 807          | rBV      | 541921         | 610356        | 30.11%          | 1.726%        |
| 5         | 6.857       | 807           | 811         | 825          | rBV      | 536662         | 548752        | 27.07%          | 1.552%        |
| 6         | 7.263       | 876           | 880         | 901          | rBV      | 333295         | 474532        | 23.41%          | 1.342%        |
| 7         | 7.981       | 998           | 1002        | 1004         | rBV      | 810611         | 710655        | 35.06%          | 2.010%        |
| 8         | 7.998       | 1004          | 1005        | 1012         | rVV      | 233214         | 265355        | 13.09%          | 0.751%        |
| 9         | 8.692       | 1119          | 1123        | 1130         | rBV      | 142924         | 149617        | 7.38%           | 0.423%        |
| 10        | 8.792       | 1136          | 1140        | 1147         | rVB      | 106713         | 99301         | 4.90%           | 0.281%        |
| 11        | 9.057       | 1181          | 1185        | 1196         | rBV      | 742060         | 786525        | 38.80%          | 2.225%        |
| 12        | 9.322       | 1225          | 1230        | 1238         | rBV      | 77344          | 125752        | 6.20%           | 0.356%        |
| 13        | 9.392       | 1238          | 1242        | 1244         | rVV      | 153333         | 149692        | 7.38%           | 0.423%        |
| 14        | 9.416       | 1244          | 1246        | 1249         | rVV      | 97129          | 89547         | 4.42%           | 0.253%        |
| 15        | 9.451       | 1249          | 1252        | 1257         | rVV      | 88307          | 101563        | 5.01%           | 0.287%        |
| 16        | 9.510       | 1257          | 1262        | 1270         | rVB      | 72323          | 103837        | 5.12%           | 0.294%        |
| 17        | 9.592       | 1270          | 1276        | 1281         | rBV      | 188480         | 190732        | 9.41%           | 0.539%        |
| 18        | 9.728       | 1292          | 1299        | 1303         | rBV      | 875509         | 845765        | 41.72%          | 2.392%        |
| 19        | 9.763       | 1303          | 1305        | 1309         | rVB      | 149750         | 133942        | 6.61%           | 0.379%        |
| 20        | 9.933       | 1330          | 1334        | 1338         | rBV      | 229864         | 232409        | 11.46%          | 0.657%        |
| 21        | 9.975       | 1338          | 1341        | 1348         | rVB      | 94452          | 99143         | 4.89%           | 0.280%        |
| 22        | 10.045      | 1348          | 1353        | 1356         | rBV2     | 83923          | 90967         | 4.49%           | 0.257%        |
| 23        | 10.275      | 1389          | 1392        | 1398         | rVB      | 352309         | 349589        | 17.24%          | 0.989%        |
| 24        | 10.433      | 1416          | 1419        | 1427         | rVB      | 146560         | 145198        | 7.16%           | 0.411%        |
| 25        | 10.516      | 1427          | 1433        | 1438         | rBV2     | 517164         | 591667        | 29.19%          | 1.673%        |
| 26        | 10.639      | 1451          | 1454        | 1461         | rVB2     | 64484          | 82593         | 4.07%           | 0.234%        |
| 27        | 10.822      | 1480          | 1485        | 1488         | rBV2     | 107921         | 150156        | 7.41%           | 0.425%        |
| 28        | 10.951      | 1502          | 1507        | 1509         | rBV2     | 117984         | 125813        | 6.21%           | 0.356%        |
| 29        | 11.016      | 1516          | 1518        | 1523         | rVV2     | 114461         | 132073        | 6.51%           | 0.374%        |
| 30        | 11.063      | 1523          | 1526        | 1529         | rVV      | 106381         | 132286        | 6.53%           | 0.374%        |
| 31        | 11.104      | 1529          | 1533        | 1540         | rVB      | 121945         | 167223        | 8.25%           | 0.473%        |
| 32        | 11.210      | 1547          | 1551        | 1553         | rBV      | 707225         | 729854        | 36.00%          | 2.064%        |
| 33        | 11.233      | 1553          | 1555        | 1561         | rVV      | 1711331        | 1514938       | 74.73%          | 4.285%        |
| 34        | 11.286      | 1561          | 1564        | 1567         | rVV      | 585440         | 574082        | 28.32%          | 1.624%        |

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 ALS Vial : 14 Sample Multiplier: 1

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 ClientSampleId :  
 GRID13-COMP-100318

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-BF092218.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |         |        |
|----|--------|------|------|------|------|---------|---------|---------|--------|
| 35 | 11.445 | 1585 | 1591 | 1593 | rBV  | 141184  | 174424  | 8.60%   | 0.493% |
| 36 | 11.710 | 1632 | 1636 | 1638 | rVV  | 296274  | 288123  | 14.21%  | 0.815% |
| 37 | 11.739 | 1638 | 1641 | 1646 | rVV  | 446150  | 454455  | 22.42%  | 1.285% |
| 38 | 11.786 | 1646 | 1649 | 1651 | rVV  | 200156  | 197195  | 9.73%   | 0.558% |
| 39 | 11.822 | 1651 | 1655 | 1657 | rVV  | 414543  | 497922  | 24.56%  | 1.408% |
| 40 | 11.839 | 1657 | 1658 | 1664 | rVB  | 262309  | 238873  | 11.78%  | 0.676% |
| 41 | 12.004 | 1683 | 1686 | 1688 | rVV  | 182783  | 164511  | 8.12%   | 0.465% |
| 42 | 12.151 | 1706 | 1711 | 1714 | rBV  | 91474   | 109190  | 5.39%   | 0.309% |
| 43 | 12.257 | 1724 | 1729 | 1732 | rVV  | 197892  | 246381  | 12.15%  | 0.697% |
| 44 | 12.298 | 1732 | 1736 | 1737 | rVV2 | 138983  | 198382  | 9.79%   | 0.561% |
| 45 | 12.316 | 1737 | 1739 | 1741 | rVV  | 130889  | 123530  | 6.09%   | 0.349% |
| 46 | 12.339 | 1741 | 1743 | 1749 | rVV2 | 155374  | 219817  | 10.84%  | 0.622% |
| 47 | 12.416 | 1752 | 1756 | 1762 | rVV  | 1685810 | 1776771 | 87.65%  | 5.025% |
| 48 | 12.510 | 1770 | 1772 | 1775 | rVV  | 201856  | 182140  | 8.98%   | 0.515% |
| 49 | 12.563 | 1775 | 1781 | 1786 | rVV4 | 91574   | 190545  | 9.40%   | 0.539% |
| 50 | 12.645 | 1789 | 1795 | 1801 | rVV2 | 1502519 | 1832496 | 90.39%  | 5.183% |
| 51 | 12.692 | 1801 | 1803 | 1809 | rVV2 | 147944  | 198640  | 9.80%   | 0.562% |
| 52 | 12.763 | 1811 | 1815 | 1816 | rVV  | 158315  | 137289  | 6.77%   | 0.388% |
| 53 | 12.786 | 1816 | 1819 | 1826 | rVB  | 556846  | 640005  | 31.57%  | 1.810% |
| 54 | 12.863 | 1826 | 1832 | 1836 | rBV2 | 195669  | 339050  | 16.72%  | 0.959% |
| 55 | 12.945 | 1843 | 1846 | 1848 | rVV2 | 179182  | 231779  | 11.43%  | 0.656% |
| 56 | 12.969 | 1848 | 1850 | 1854 | rVV  | 374997  | 375595  | 18.53%  | 1.062% |
| 57 | 13.039 | 1854 | 1862 | 1864 | rVV  | 276414  | 344505  | 16.99%  | 0.974% |
| 58 | 13.074 | 1864 | 1868 | 1875 | rVV2 | 303620  | 445145  | 21.96%  | 1.259% |
| 59 | 13.163 | 1880 | 1883 | 1886 | rVV  | 142992  | 162793  | 8.03%   | 0.460% |
| 60 | 13.198 | 1886 | 1889 | 1898 | rVV2 | 146807  | 248004  | 12.23%  | 0.701% |
| 61 | 13.280 | 1898 | 1903 | 1907 | rVB4 | 46180   | 86697   | 4.28%   | 0.245% |
| 62 | 13.368 | 1912 | 1918 | 1920 | rBV5 | 97593   | 164635  | 8.12%   | 0.466% |
| 63 | 13.451 | 1929 | 1932 | 1934 | rVV2 | 68913   | 83164   | 4.10%   | 0.235% |
| 64 | 13.480 | 1934 | 1937 | 1941 | rVV  | 207473  | 260104  | 12.83%  | 0.736% |
| 65 | 13.586 | 1950 | 1955 | 1957 | rVV2 | 254875  | 313229  | 15.45%  | 0.886% |
| 66 | 13.610 | 1957 | 1959 | 1962 | rVV  | 206786  | 251943  | 12.43%  | 0.713% |
| 67 | 13.633 | 1962 | 1963 | 1965 | rVV  | 142404  | 136930  | 6.75%   | 0.387% |
| 68 | 13.686 | 1969 | 1972 | 1979 | rVV  | 235560  | 317124  | 15.64%  | 0.897% |
| 69 | 13.751 | 1981 | 1983 | 1989 | rVV  | 63562   | 114520  | 5.65%   | 0.324% |
| 70 | 13.833 | 1989 | 1997 | 2000 | rVV2 | 1261813 | 2027222 | 100.00% | 5.734% |
| 71 | 13.863 | 2000 | 2002 | 2010 | rVV  | 957325  | 1007719 | 49.71%  | 2.850% |

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Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF092218.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|     |        |      |      |      |      |        |         |        |        |
|-----|--------|------|------|------|------|--------|---------|--------|--------|
| 72  | 13.939 | 2013 | 2015 | 2017 | rVV  | 120037 | 112379  | 5.54%  | 0.318% |
| 73  | 13.980 | 2017 | 2022 | 2024 | rVV2 | 165543 | 241565  | 11.92% | 0.683% |
| 74  | 14.010 | 2024 | 2027 | 2029 | rVV3 | 144228 | 211870  | 10.45% | 0.599% |
| 75  | 14.027 | 2029 | 2030 | 2032 | rVV  | 151837 | 121893  | 6.01%  | 0.345% |
| 76  | 14.063 | 2034 | 2036 | 2039 | rVV  | 135627 | 169659  | 8.37%  | 0.480% |
| 77  | 14.092 | 2039 | 2041 | 2044 | rVV2 | 86954  | 107859  | 5.32%  | 0.305% |
| 78  | 14.186 | 2054 | 2057 | 2059 | rVV2 | 102062 | 142324  | 7.02%  | 0.403% |
| 79  | 14.221 | 2059 | 2063 | 2066 | rVV  | 345483 | 415878  | 20.51% | 1.176% |
| 80  | 14.251 | 2066 | 2068 | 2072 | rVV  | 161766 | 206752  | 10.20% | 0.585% |
| 81  | 14.316 | 2072 | 2079 | 2081 | rVV3 | 210926 | 332951  | 16.42% | 0.942% |
| 82  | 14.345 | 2081 | 2084 | 2086 | rVV  | 169125 | 199201  | 9.83%  | 0.563% |
| 83  | 14.363 | 2086 | 2087 | 2093 | rVV3 | 133007 | 192216  | 9.48%  | 0.544% |
| 84  | 14.415 | 2094 | 2096 | 2102 | rVV2 | 86297  | 115587  | 5.70%  | 0.327% |
| 85  | 14.604 | 2124 | 2128 | 2131 | rBV2 | 126946 | 158137  | 7.80%  | 0.447% |
| 86  | 14.698 | 2137 | 2144 | 2147 | rBV3 | 91537  | 172789  | 8.52%  | 0.489% |
| 87  | 14.845 | 2164 | 2169 | 2178 | rBV  | 675529 | 1404562 | 69.29% | 3.973% |
| 88  | 14.915 | 2178 | 2181 | 2183 | rVV  | 145641 | 155441  | 7.67%  | 0.440% |
| 89  | 14.945 | 2183 | 2186 | 2190 | rVB  | 164840 | 187862  | 9.27%  | 0.531% |
| 90  | 15.039 | 2196 | 2202 | 2205 | rBV2 | 66539  | 140741  | 6.94%  | 0.398% |
| 91  | 15.121 | 2212 | 2216 | 2222 | rVB  | 356421 | 503050  | 24.81% | 1.423% |
| 92  | 15.180 | 2222 | 2226 | 2231 | rBV  | 568317 | 684127  | 33.75% | 1.935% |
| 93  | 15.239 | 2231 | 2236 | 2239 | rVV  | 459984 | 588608  | 29.04% | 1.665% |
| 94  | 15.268 | 2239 | 2241 | 2248 | rVB2 | 245312 | 309859  | 15.28% | 0.876% |
| 95  | 15.668 | 2299 | 2309 | 2315 | rBV3 | 96491  | 238638  | 11.77% | 0.675% |
| 96  | 16.121 | 2382 | 2386 | 2391 | rVB  | 50751  | 84150   | 4.15%  | 0.238% |
| 97  | 16.586 | 2459 | 2465 | 2472 | rVB2 | 172598 | 320752  | 15.82% | 0.907% |
| 98  | 16.662 | 2473 | 2478 | 2485 | rVB3 | 44403  | 87413   | 4.31%  | 0.247% |
| 99  | 16.745 | 2486 | 2492 | 2497 | rBV  | 55458  | 115493  | 5.70%  | 0.327% |
| 100 | 16.992 | 2527 | 2534 | 2549 | rVB  | 102384 | 244181  | 12.05% | 0.691% |

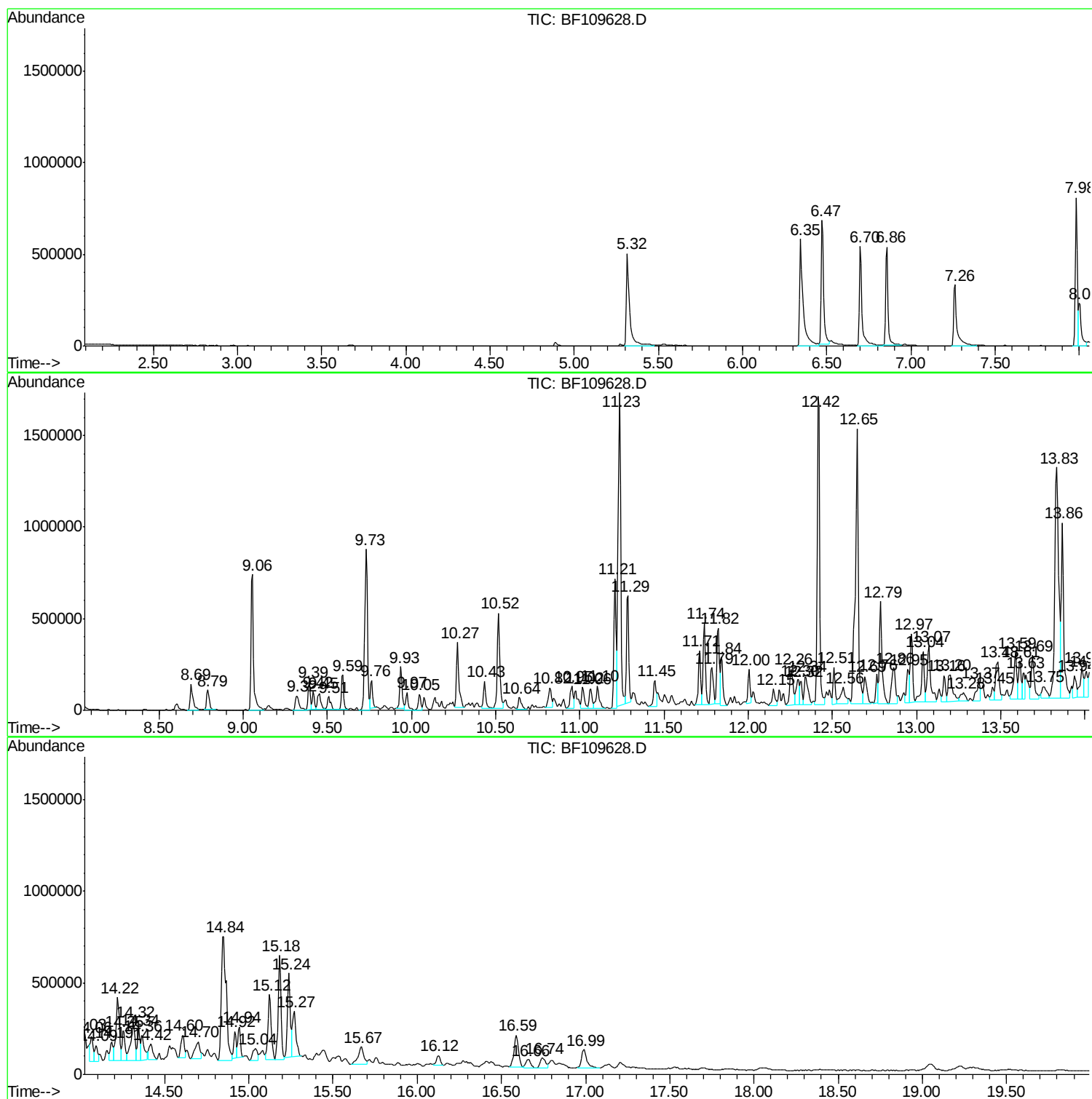
Sum of corrected areas: 35355684

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ALS Vial : 14 Sample Multiplier: 1

Instrument :  
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.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\BF100518\  
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

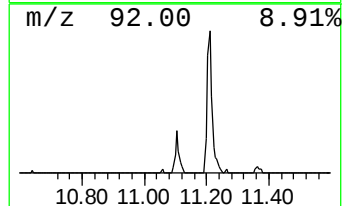
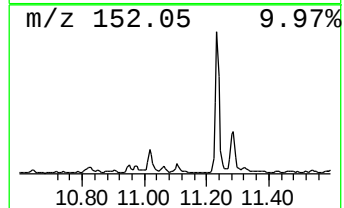
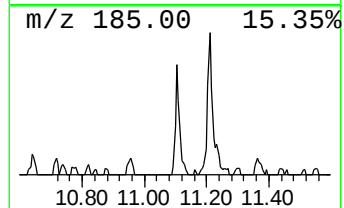
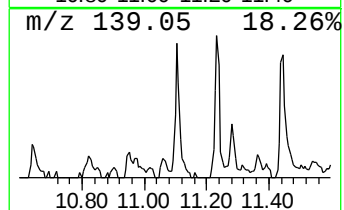
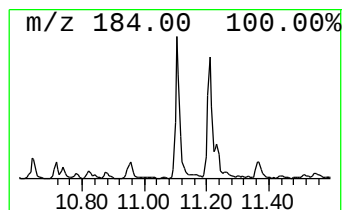
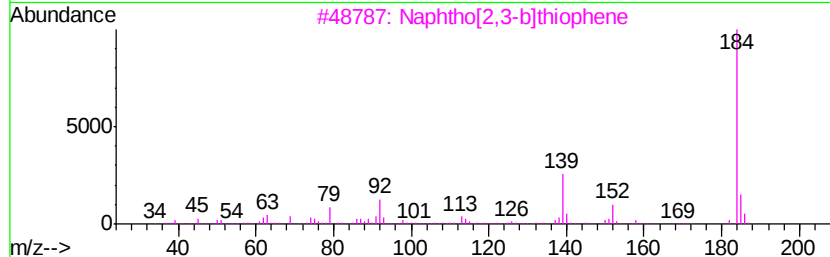
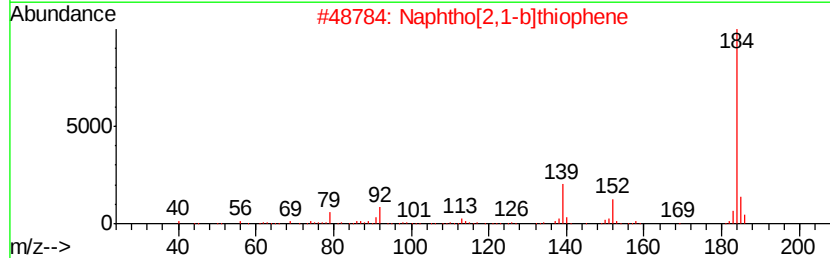
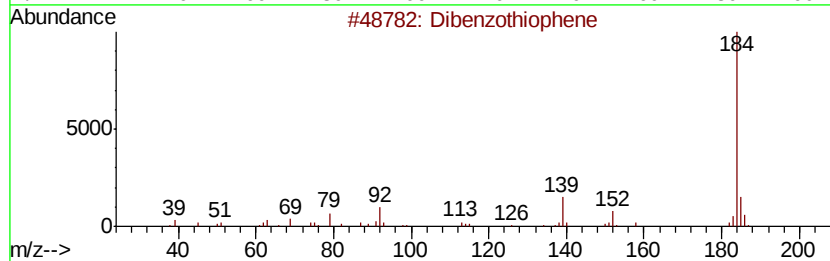
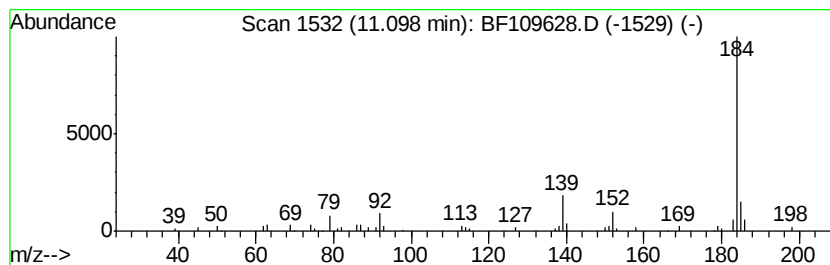
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 3 Dibenzothiophene Concentration Rank 18

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 11.10 | 4.58 ng | 167223 | Phenanthrene-d10 | 11.21 |

| Hit# | of | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------|-----|---------|-------------|------|
| 1    | 5  | Dibenzothiophene        | 184 | C12H8S  | 000132-65-0 | 96   |
| 2    |    | Naphtho[2,1-b]thiophene | 184 | C12H8S  | 000233-02-3 | 95   |
| 3    |    | Naphtho[2,3-b]thiophene | 184 | C12H8S  | 000268-77-9 | 95   |
| 4    |    | Naphtho[1,2-b]thiophene | 184 | C12H8S  | 000234-41-3 | 94   |
| 5    |    | Azuleno(2,1-b)thiophene | 184 | C12H8S  | 000248-13-5 | 90   |



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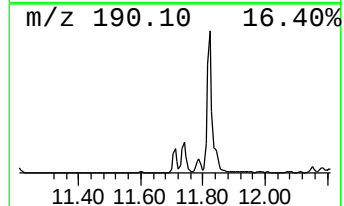
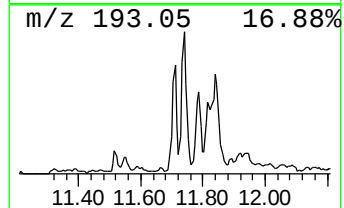
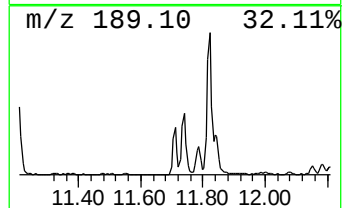
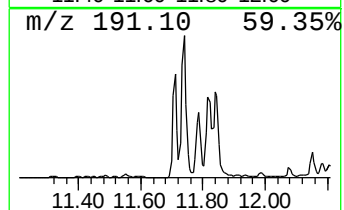
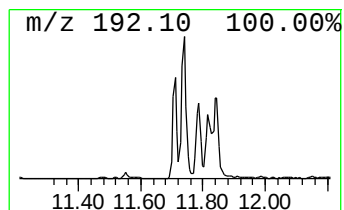
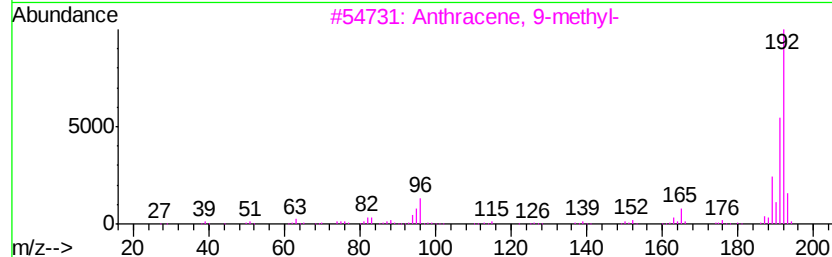
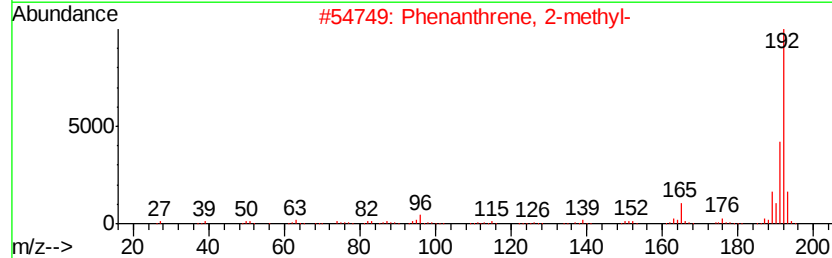
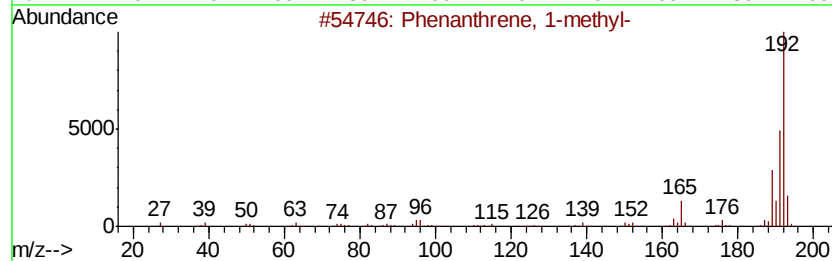
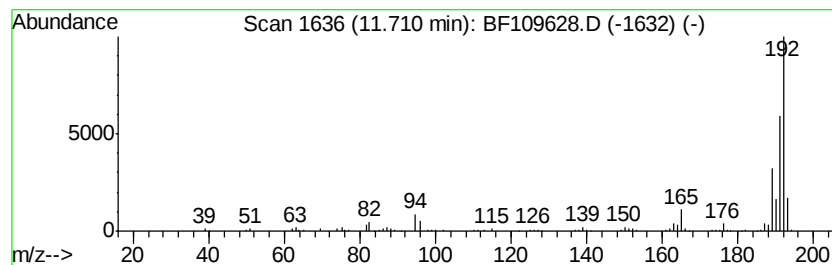
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 4 Phenanthrene, 1-methyl- Concentration Rank 7

| R.T.      | EstConc                 | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------|--------|------------------|-------------|------|
| 11.71     | 7.90 ng                 | 288123 | Phenanthrene-d10 | 11.21       |      |
| Hit# of 5 | Tentative ID            | MW     | MolForm          | CAS#        | Qual |
| 1         | Phenanthrene, 1-methyl- | 192    | C15H12           | 000832-69-9 | 93   |
| 2         | Phenanthrene, 2-methyl- | 192    | C15H12           | 002531-84-2 | 93   |
| 3         | Anthracene, 9-methyl-   | 192    | C15H12           | 000779-02-2 | 93   |
| 4         | Anthracene, 1-methyl-   | 192    | C15H12           | 000610-48-0 | 93   |
| 5         | Anthracene, 2-methyl-   | 192    | C15H12           | 000613-12-7 | 91   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100518\  
Data File : BF109628.D  
Acq On : 6 Oct 2018 00:20  
Operator : JU/SJ  
Sample : J5263-04 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

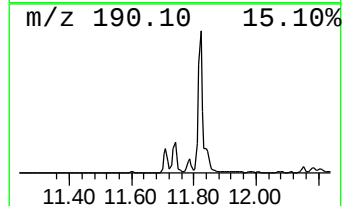
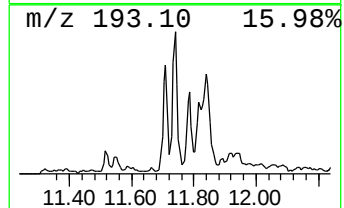
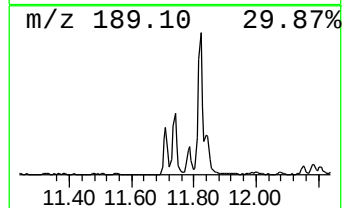
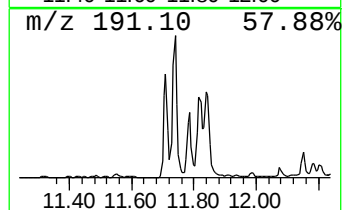
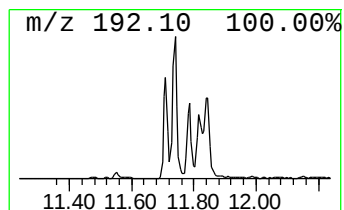
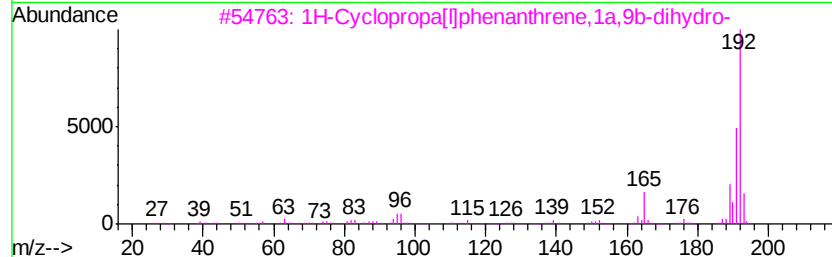
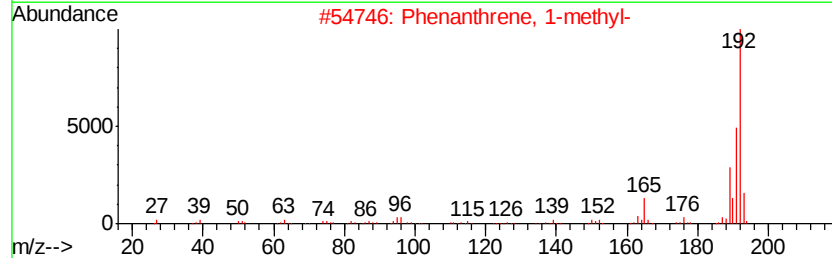
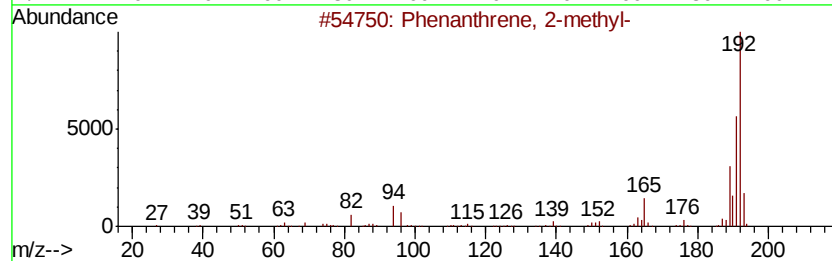
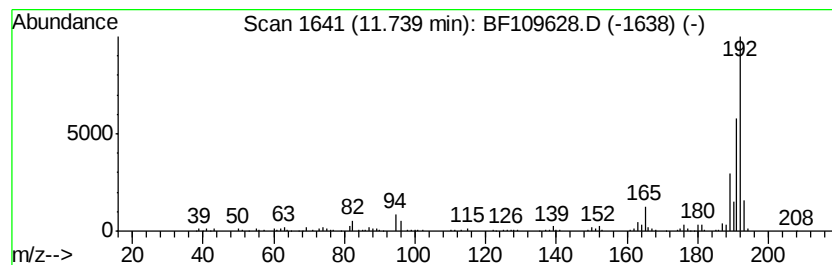
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TIC Integration Parameters: LSCINT.P

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Peak Number 5 1H-Cyclopropa[l]phenanthren... Concentration Rank 5

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 11.74 | 12.45 ng | 454455 | Phenanthrene-d10 | 11.21 |

| Hit# of 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|-----------|-------------------------------------|-----|---------|-------------|------|
| 1         | Phenanthrene, 2-methyl-             | 192 | C15H12  | 002531-84-2 | 98   |
| 2         | Phenanthrene, 1-methyl-             | 192 | C15H12  | 000832-69-9 | 97   |
| 3         | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12  | 000949-41-7 | 95   |
| 4         | Anthracene, 2-methyl-               | 192 | C15H12  | 000613-12-7 | 95   |
| 5         | 1H-Indene, 2-phenyl-                | 192 | C15H12  | 004505-48-0 | 94   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100518\  
Data File : BF109628.D  
Acq On : 6 Oct 2018 00:20  
Operator : JU/SJ  
Sample : J5263-04 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

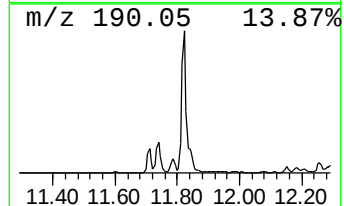
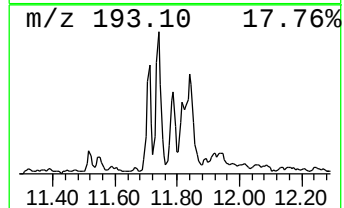
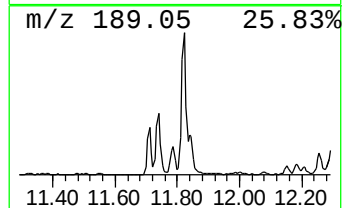
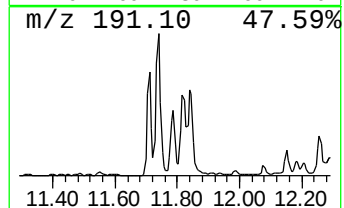
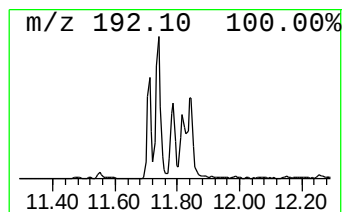
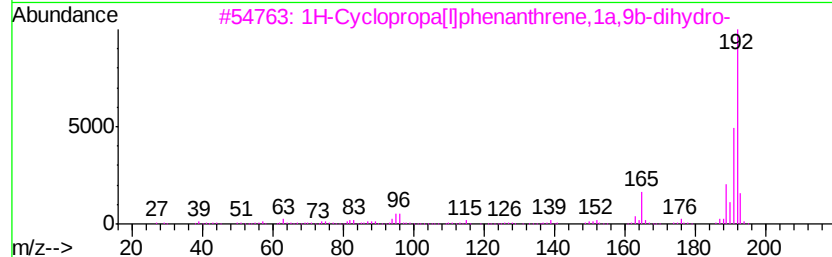
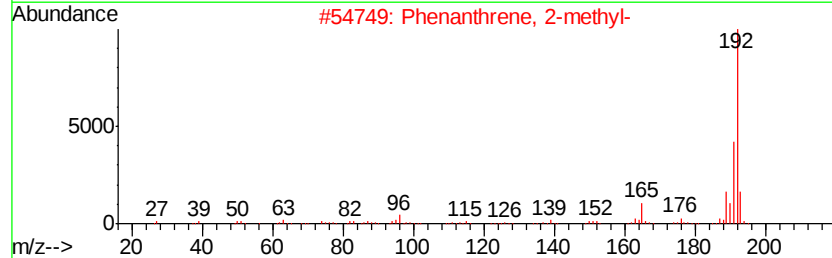
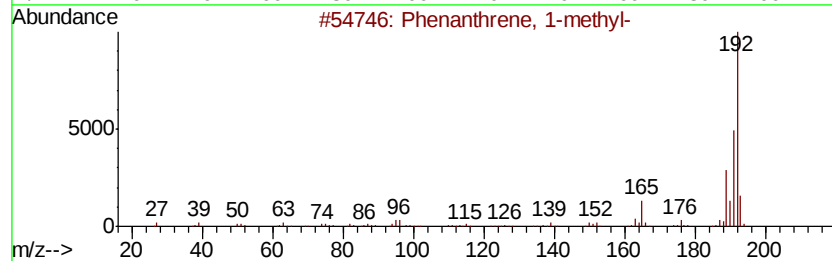
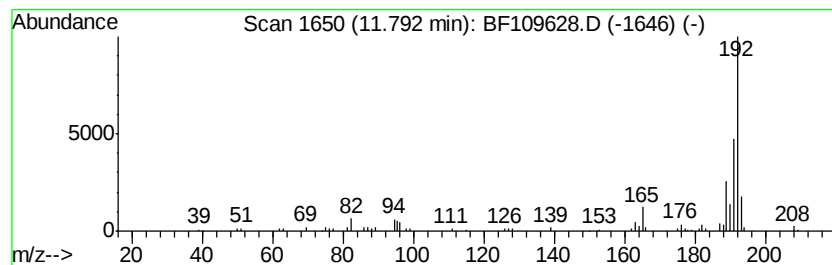
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 6 Anthracene, 2-methyl- Concentration Rank 14

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 11.79 | 5.40 ng | 197195 | Phenanthrene-d10 | 11.21 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Phenanthrene, 1-methyl-             | 192 | C15H12  | 000832-69-9 | 96   |
| 2    |    |   | Phenanthrene, 2-methyl-             | 192 | C15H12  | 002531-84-2 | 96   |
| 3    |    |   | 1H-Cyclopropa[1]phenanthrene,1a,... | 192 | C15H12  | 000949-41-7 | 96   |
| 4    |    |   | Anthracene, 2-methyl-               | 192 | C15H12  | 000613-12-7 | 95   |
| 5    |    |   | Anthracene, 9-methyl-               | 192 | C15H12  | 000779-02-2 | 94   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100518\  
Data File : BF109628.D  
Acq On : 6 Oct 2018 00:20  
Operator : JU/SJ  
Sample : J5263-04 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

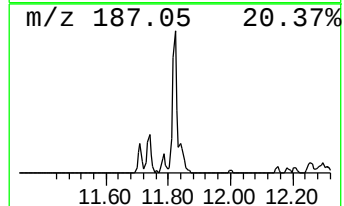
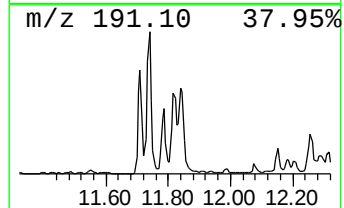
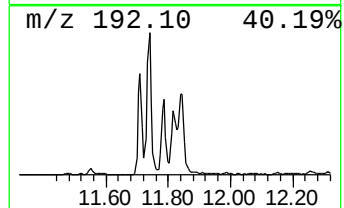
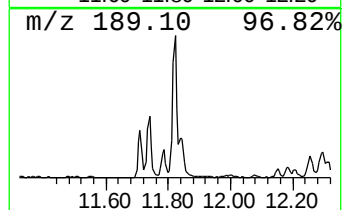
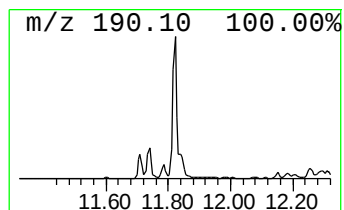
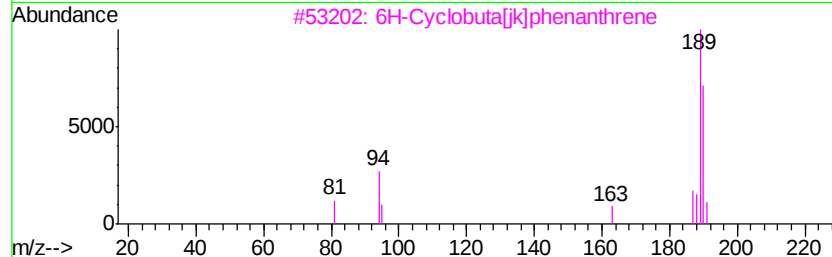
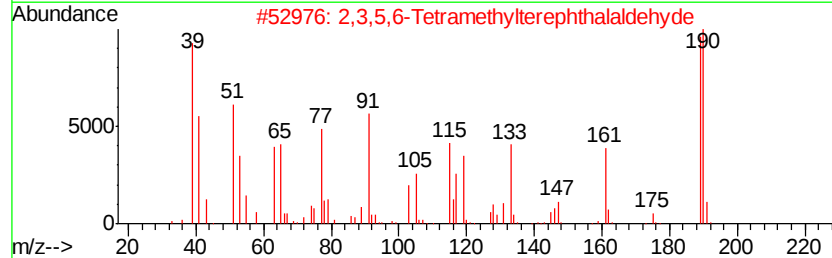
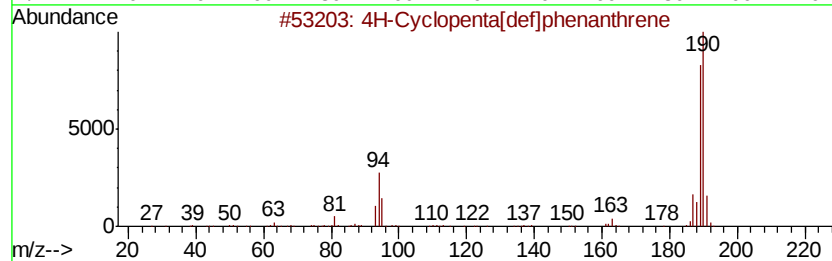
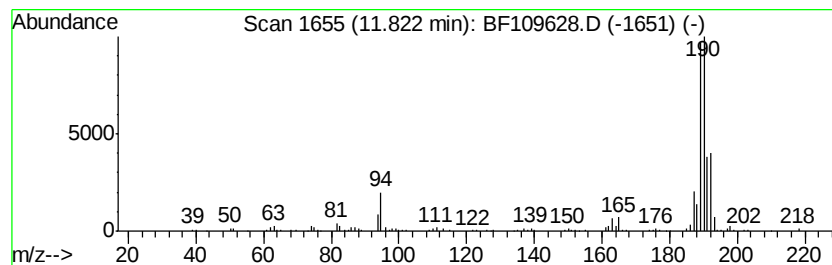
Instrument :  
BNA\_F  
ClientSampleId :  
GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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

| R.T.    | EstConc  | Area                                | Relative to ISTD | R.T.     |             |      |
|---------|----------|-------------------------------------|------------------|----------|-------------|------|
| 11.82   | 13.64 ng | 497922                              | Phenanthrene-d10 | 11.21    |             |      |
| Hit# of | 5        | Tentative ID                        | MW               | MolForm  | CAS#        | Qual |
| 1       |          | 4H-Cyclopenta[def]phenanthrene      | 190              | C15H10   | 000203-64-5 | 93   |
| 2       |          | 2,3,5,6-Tetramethylterephthalald... | 190              | C12H14O2 | 007072-01-7 | 47   |
| 3       |          | 6H-Cyclobuta[ikl]phenanthrene       | 190              | C15H10   | 083469-43-6 | 45   |
| 4       |          | 2,2'-Bis(4,5-dimethylimidazole)     | 190              | C10H14N4 | 069286-06-2 | 42   |
| 5       |          | Megastigmatrienone                  | 190              | C13H18O  | 038818-55-2 | 18   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100518\  
Data File : BF109628.D  
Acq On : 6 Oct 2018 00:20  
Operator : JU/SJ  
Sample : J5263-04 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

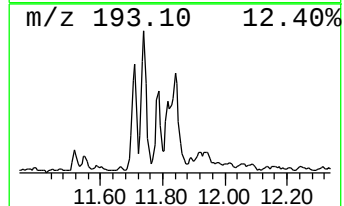
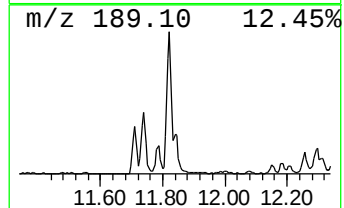
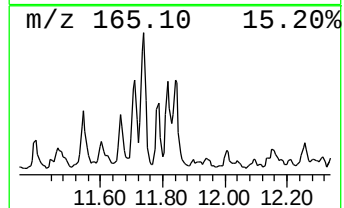
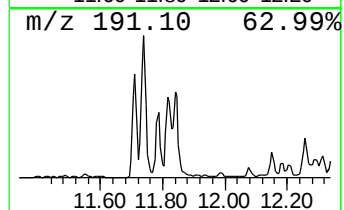
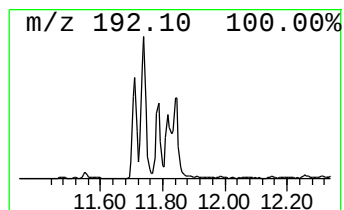
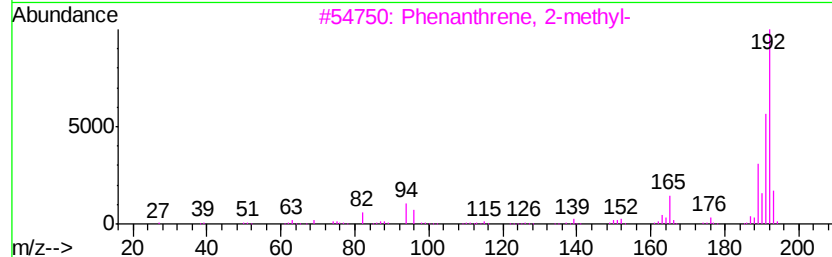
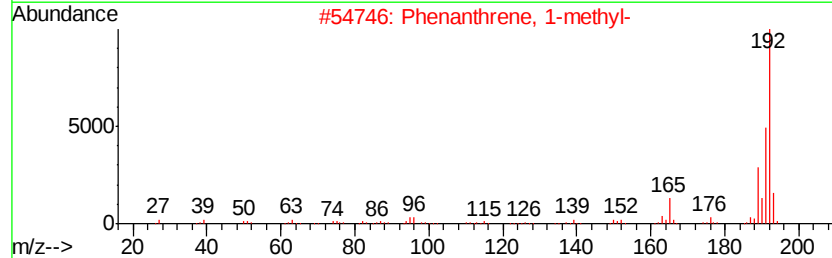
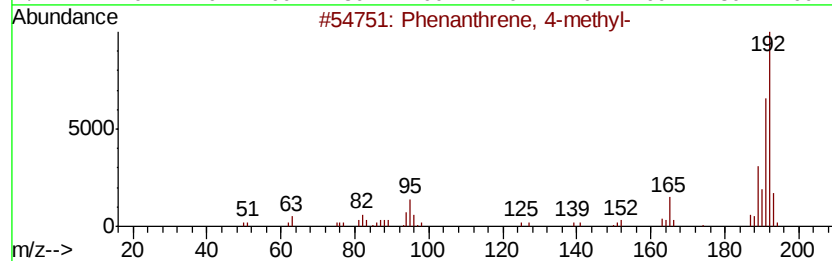
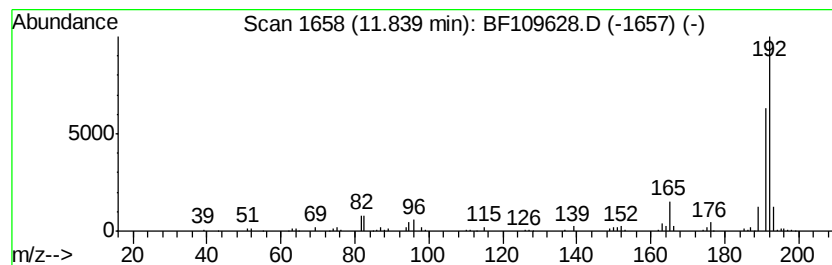
Instrument :  
BNA\_F  
ClientSampleId :  
GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 8 Phenanthrene, 4-methyl- Concentration Rank 9

| R.T.      | EstConc                 | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------|--------|------------------|-------------|------|
| 11.84     | 6.55 ng                 | 238873 | Phenanthrene-d10 | 11.21       |      |
| Hit# of 5 | Tentative ID            | MW     | MolForm          | CAS#        | Qual |
| 1         | Phenanthrene, 4-methyl- | 192    | C15H12           | 000832-64-4 | 93   |
| 2         | Phenanthrene, 1-methyl- | 192    | C15H12           | 000832-69-9 | 87   |
| 3         | Phenanthrene, 2-methyl- | 192    | C15H12           | 002531-84-2 | 87   |
| 4         | 1H-Indene, 2-phenyl-    | 192    | C15H12           | 004505-48-0 | 87   |
| 5         | Anthracene, 2-methyl-   | 192    | C15H12           | 000613-12-7 | 83   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100518\  
Data File : BF109628.D  
Acq On : 6 Oct 2018 00:20  
Operator : JU/SJ  
Sample : J5263-04 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

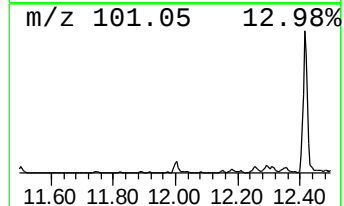
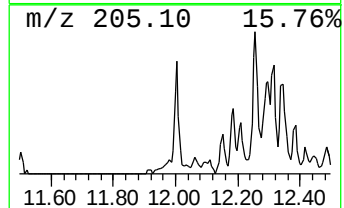
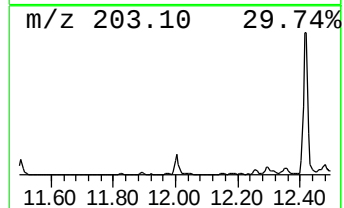
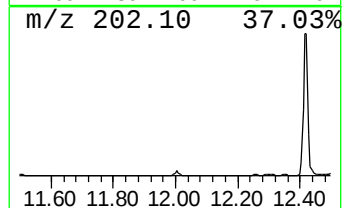
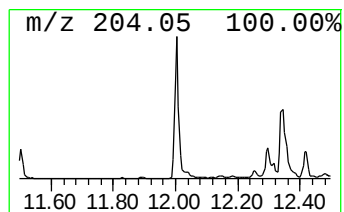
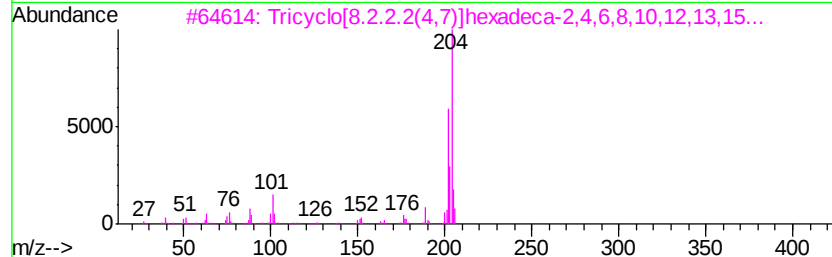
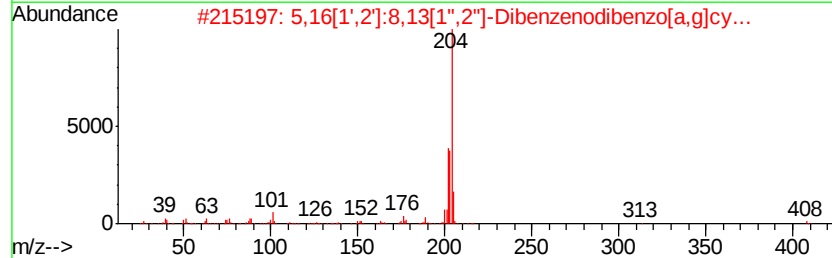
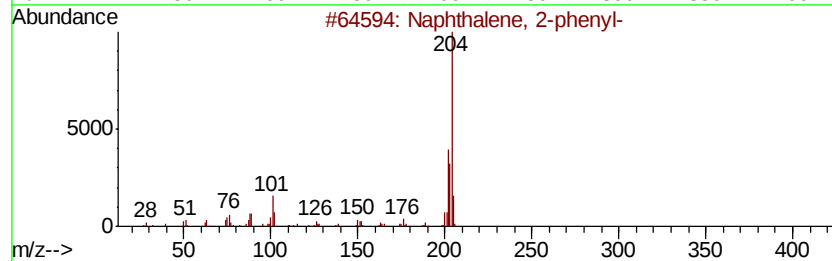
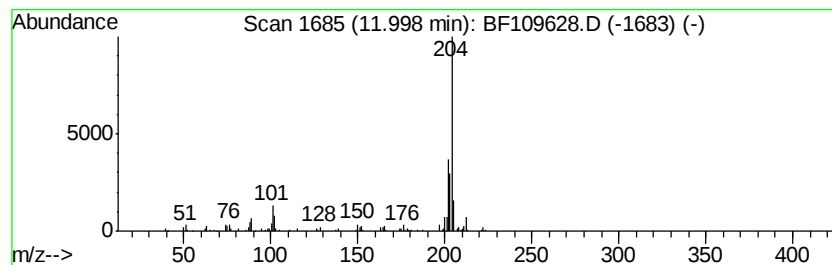
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 5,16[1',2']:8,13[1'',2'']-D... Concentration Rank 19

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 12.00 | 4.51 ng | 164511 | Phenanthrene-d10 | 11.21 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, 2-phenyl-              | 204 | C16H12  | 000612-94-2 | 94   |
| 2    |    | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24  | 005672-97-9 | 86   |
| 3    |    | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12  | 006572-60-7 | 62   |
| 4    |    | Naphthalene, 1-phenyl-              | 204 | C16H12  | 000605-02-7 | 53   |
| 5    |    | 5H-Dibenzo[a,d]cycloheptene, 5-m... | 204 | C16H12  | 002975-79-3 | 49   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100518\  
Data File : BF109628.D  
Acq On : 6 Oct 2018 00:20  
Operator : JU/SJ  
Sample : J5263-04 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

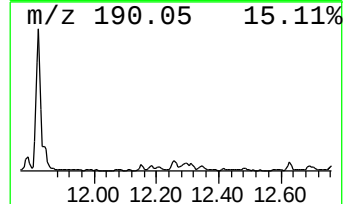
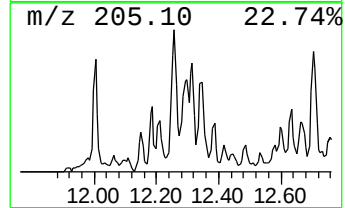
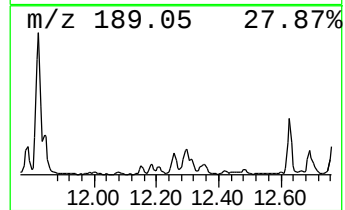
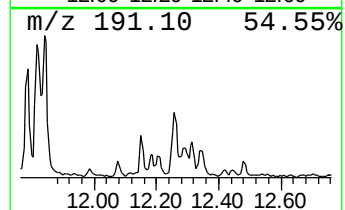
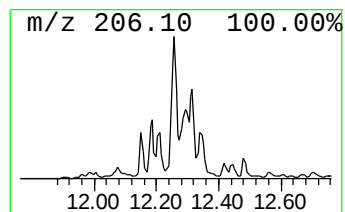
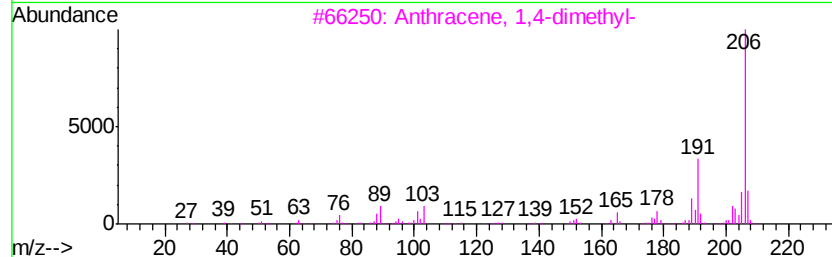
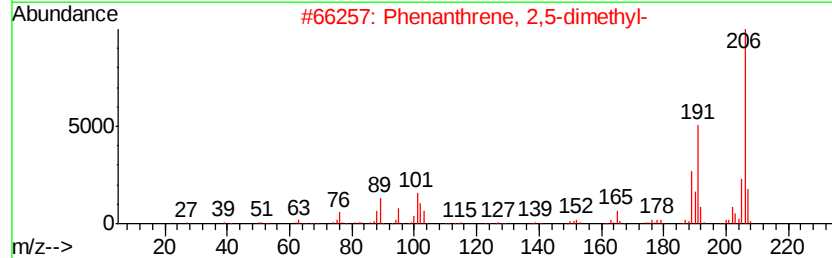
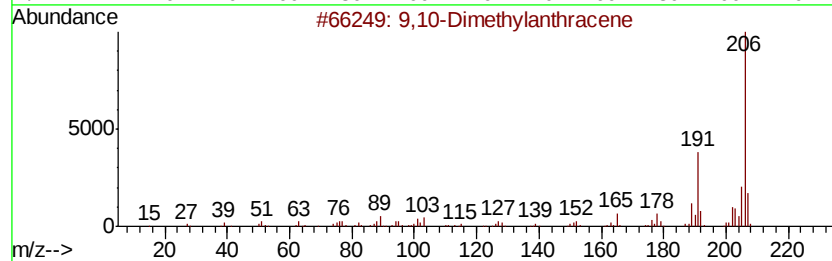
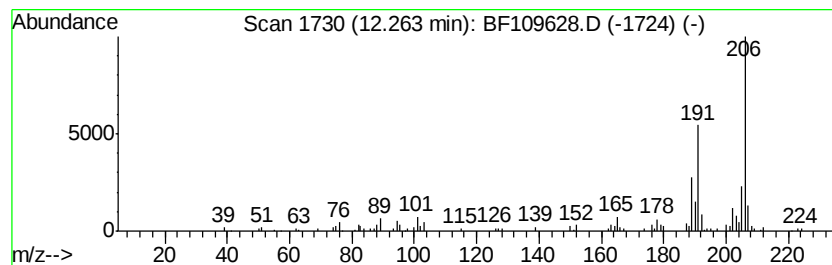
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BNA\_F  
ClientSampleId :  
GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 10 9,10-Dimethylantracene Concentration Rank 8

| R.T.      | EstConc                     | Area   | Relative to ISTD |             | R.T.  |
|-----------|-----------------------------|--------|------------------|-------------|-------|
| 12.26     | 6.75 ng                     | 246381 | Phenanthrene-d10 |             | 11.21 |
| Hit# of 5 | Tentative ID                | MW     | MolForm          | CAS#        | Qual  |
| 1         | 9,10-Dimethylantracene      | 206    | C16H14           | 000781-43-1 | 96    |
| 2         | Phenanthrene, 2,5-dimethyl- | 206    | C16H14           | 003674-66-6 | 93    |
| 3         | Anthracene, 1,4-dimethyl-   | 206    | C16H14           | 000781-92-0 | 93    |
| 4         | Phenanthrene, 2,7-dimethyl- | 206    | C16H14           | 001576-69-8 | 93    |
| 5         | Phenanthrene, 3,6-dimethyl- | 206    | C16H14           | 001576-67-6 | 91    |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100518\  
Data File : BF109628.D  
Acq On : 6 Oct 2018 00:20  
Operator : JU/SJ  
Sample : J5263-04 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

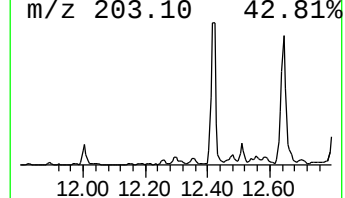
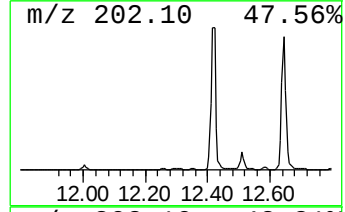
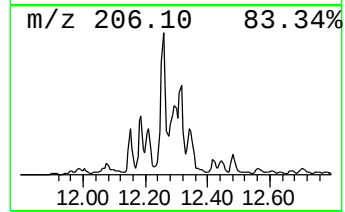
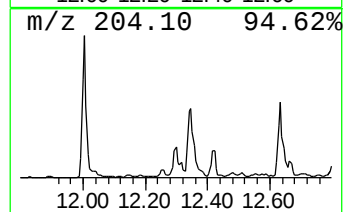
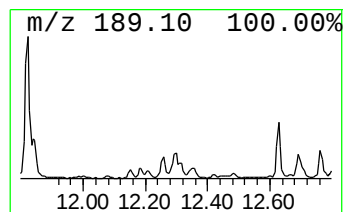
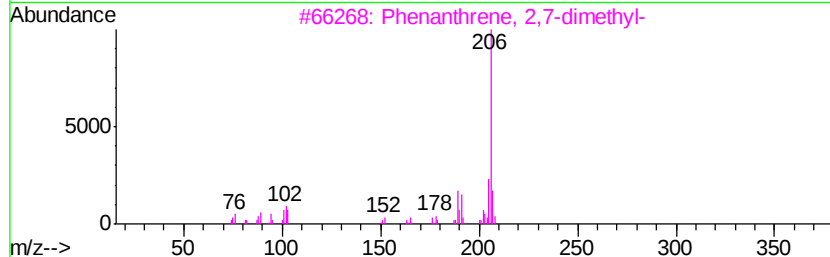
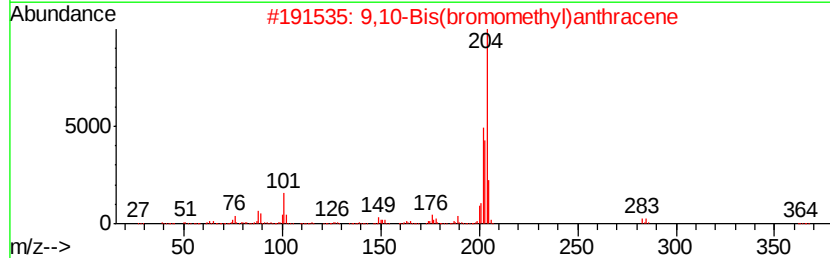
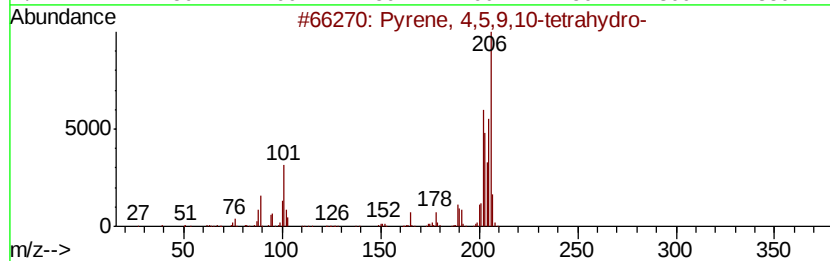
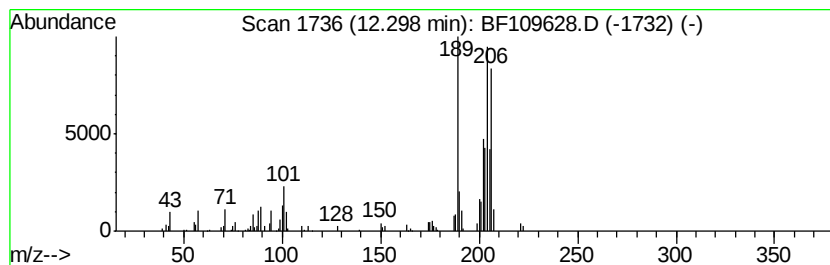
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 11 unknown12.30 Concentration Rank 13

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 12.30 | 5.44 ng | 198382 | Phenanthrene-d10 | 11.21 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#        | Qual |
|------|----|-------------------------------------|-----|-----------|-------------|------|
| 1    | 5  | Pyrene, 4,5,9,10-tetrahydro-        | 206 | C16H14    | 000781-17-9 | 38   |
| 2    |    | 9,10-Bis(bromomethyl)anthracene     | 362 | C16H12Br2 | 034373-96-1 | 38   |
| 3    |    | Phenanthrene, 2,7-dimethyl-         | 206 | C16H14    | 001576-69-8 | 35   |
| 4    |    | Benzene, 1,1'-(1-buten-3-yne-1,4... | 204 | C16H12    | 013141-45-2 | 30   |
| 5    |    | Indeno[2,1-a]indene, 5,10-dihydro-  | 204 | C16H12    | 006543-29-9 | 25   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100518\  
Data File : BF109628.D  
Acq On : 6 Oct 2018 00:20  
Operator : JU/SJ  
Sample : J5263-04 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

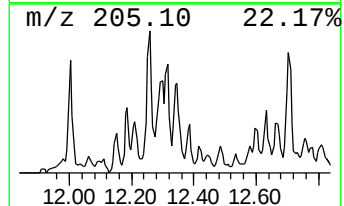
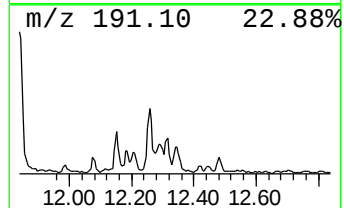
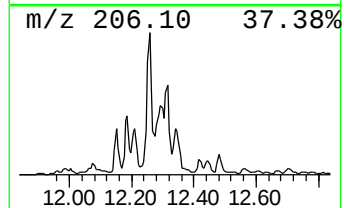
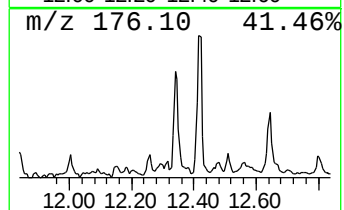
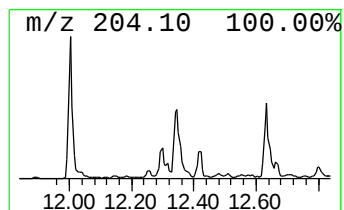
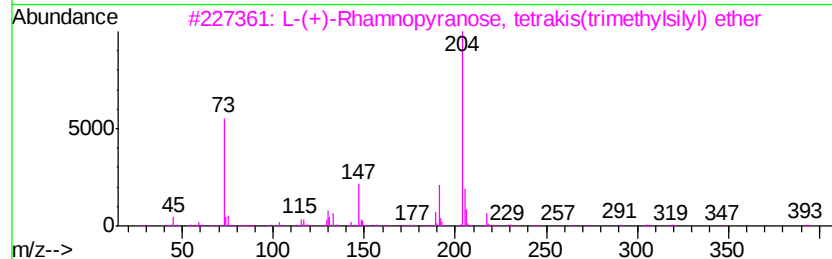
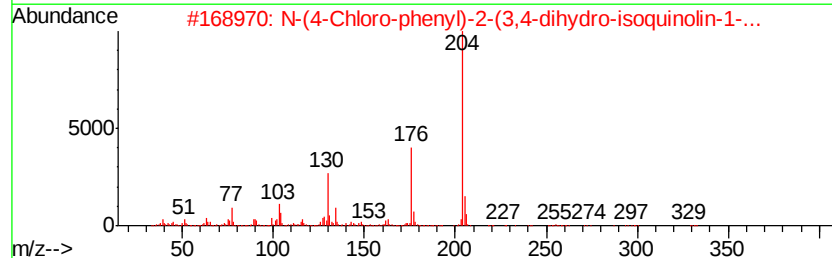
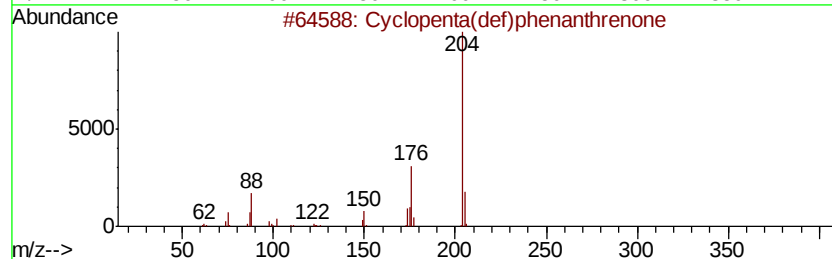
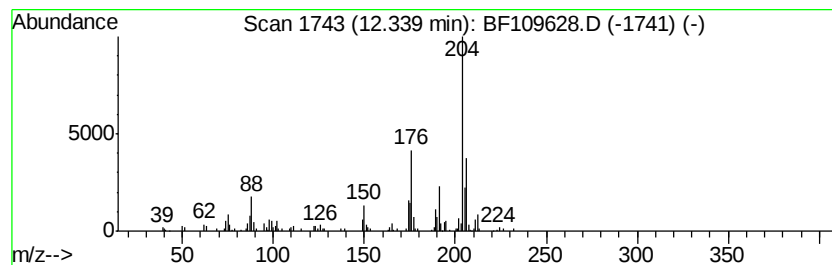
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 12 Cyclopenta(def)phenanthrenone Concentration Rank 11

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 12.34 | 6.02 ng | 219817 | Phenanthrene-d10 | 11.21 |

| Hit# | of | Tentative ID                        | MW  | MolForm      | CAS#         | Qual |
|------|----|-------------------------------------|-----|--------------|--------------|------|
| 1    | 5  | Cyclopenta(def)phenanthrenone       | 204 | C15H8O       | 005737-13-3  | 93   |
| 2    |    | N-(4-Chloro-phenyl)-2-(3,4-dihyd... | 330 | C17H15ClN2OS | 1000296-34-3 | 50   |
| 3    |    | L-(+)-Rhamnopyranose, tetrakis(t... | 452 | C18H44O5Si4  | 1000380-12-9 | 50   |
| 4    |    | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12       | 006572-60-7  | 43   |
| 5    |    | [1,1'-Biphenyl-4-ol], 2-chloro-     | 204 | C12H9ClO     | 023719-22-4  | 43   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100518\  
Data File : BF109628.D  
Acq On : 6 Oct 2018 00:20  
Operator : JU/SJ  
Sample : J5263-04 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

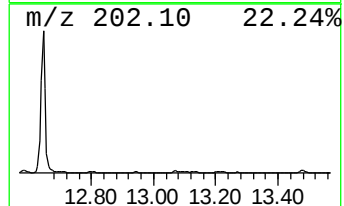
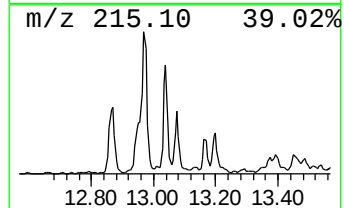
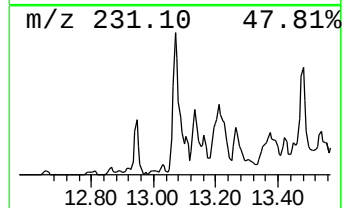
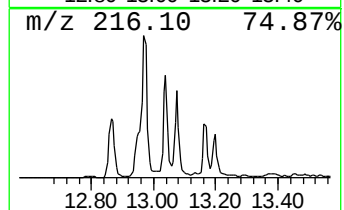
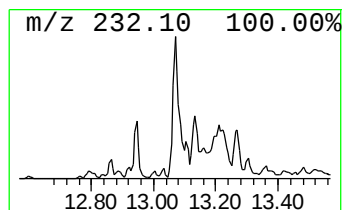
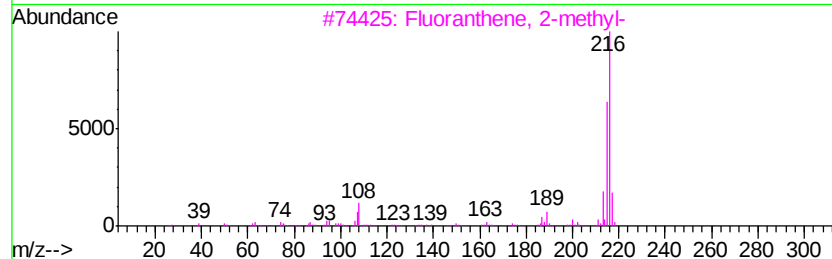
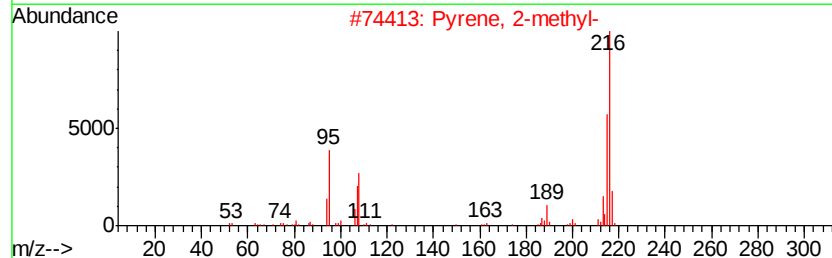
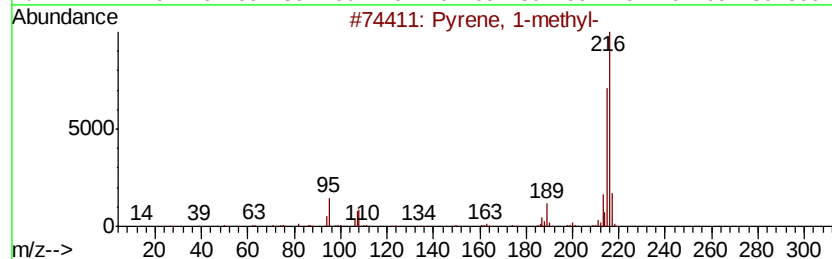
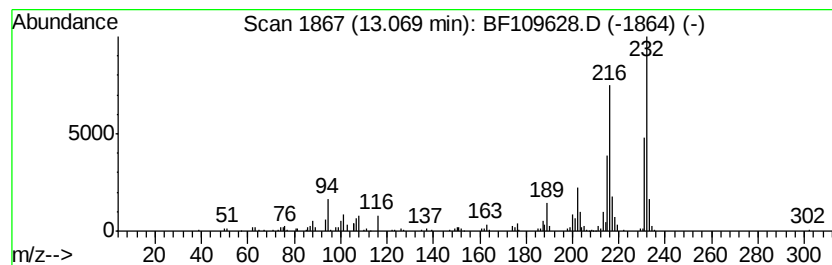
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 14 Pyrene, 1-methyl- Concentration Rank 20

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 13.07 | 4.39 ng | 445145 | Chrysene-d12     | 13.84 |

| Hit# | of | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------|-----|---------|-------------|------|
| 1    | 5  | Pyrene, 1-methyl-       | 216 | C17H12  | 002381-21-7 | 92   |
| 2    |    | Pyrene, 2-methyl-       | 216 | C17H12  | 003442-78-2 | 83   |
| 3    |    | Fluoranthene, 2-methyl- | 216 | C17H12  | 033543-31-6 | 60   |
| 4    |    | 11H-Benzo[alfluorene    | 216 | C17H12  | 000238-84-6 | 60   |
| 5    |    | Pyrene, 4-methyl-       | 216 | C17H12  | 003353-12-6 | 55   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100518\  
Data File : BF109628.D  
Acq On : 6 Oct 2018 00:20  
Operator : JU/SJ  
Sample : J5263-04 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

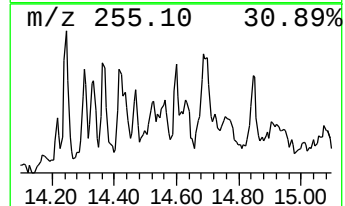
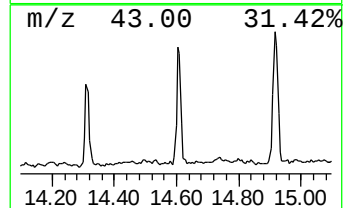
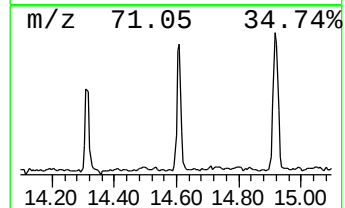
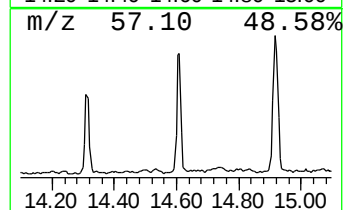
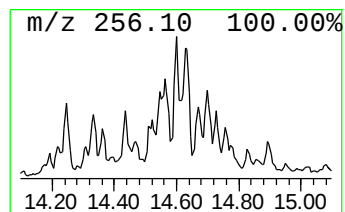
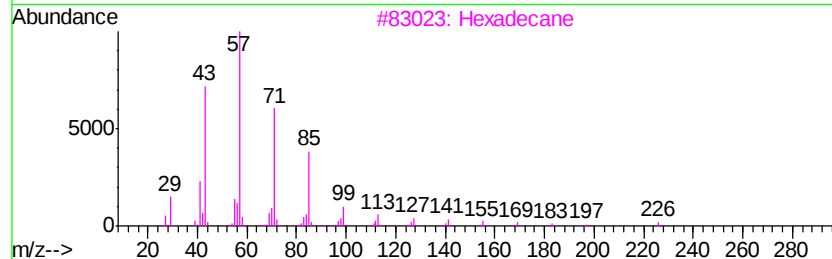
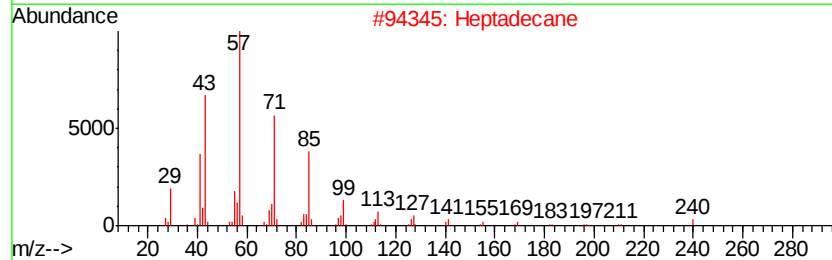
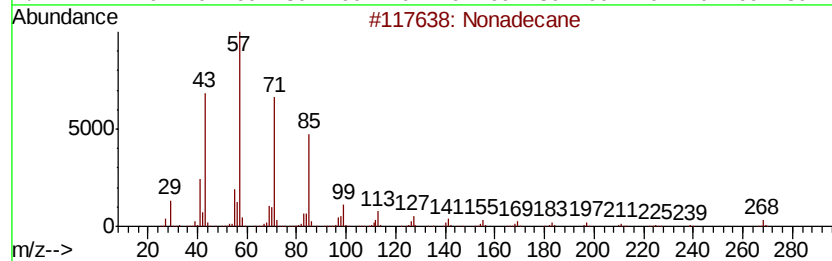
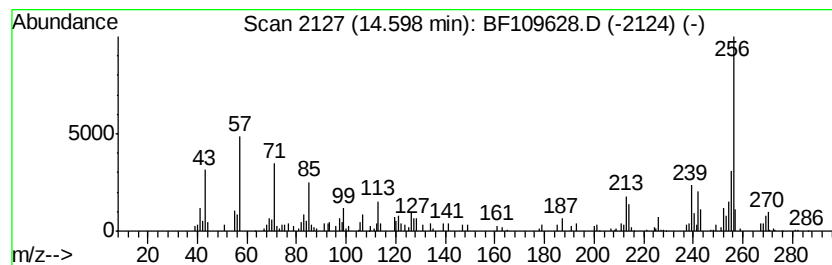
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 15 Nonadecane Concentration Rank 15

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 14.60 | 5.37 ng | 158137 | Perylene-d12     | 15.24 |

| Hit# | of | 5 | Tentative ID | MW  | MolForm | CAS#        | Qual |
|------|----|---|--------------|-----|---------|-------------|------|
| 1    |    |   | Nonadecane   | 268 | C19H40  | 000629-92-5 | 95   |
| 2    |    |   | Heptadecane  | 240 | C17H36  | 000629-78-7 | 95   |
| 3    |    |   | Hexadecane   | 226 | C16H34  | 000544-76-3 | 91   |
| 4    |    |   | Octadecane   | 254 | C18H38  | 000593-45-3 | 64   |
| 5    |    |   | Heneicosane  | 296 | C21H44  | 000629-94-7 | 60   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100518\  
Data File : BF109628.D  
Acq On : 6 Oct 2018 00:20  
Operator : JU/SJ  
Sample : J5263-04 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

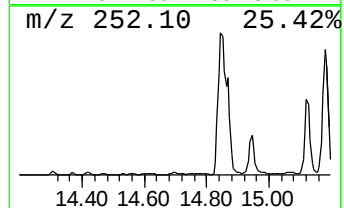
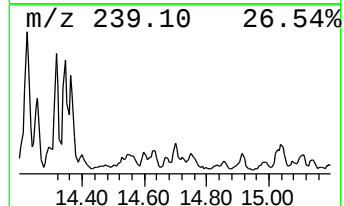
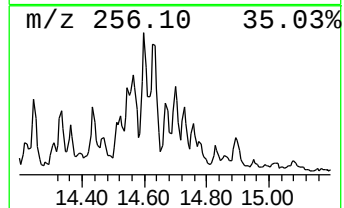
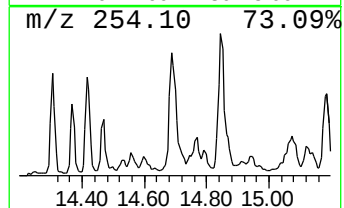
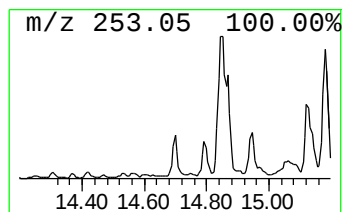
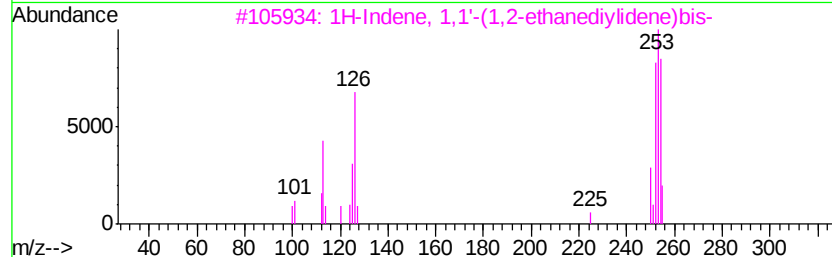
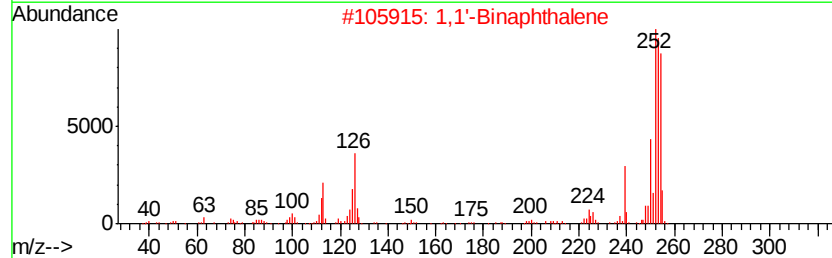
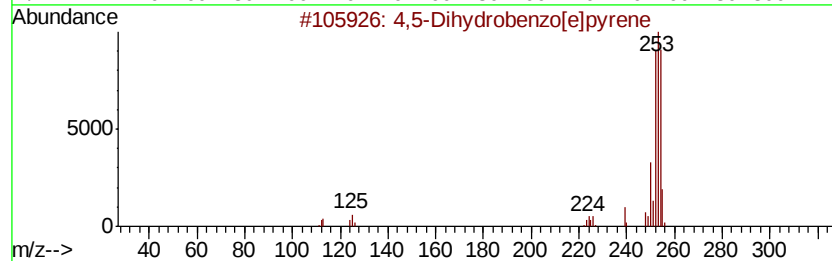
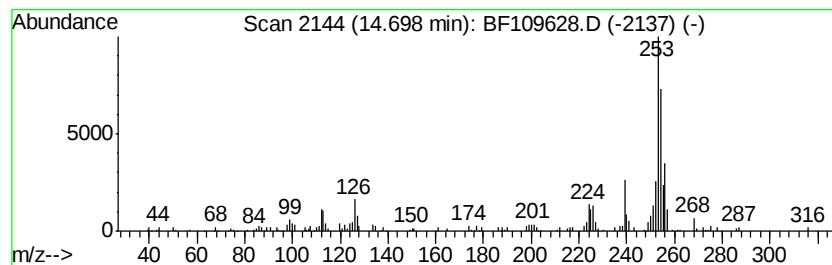
Instrument :  
BNA\_F  
ClientSampleId :  
GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 16 4,5-Dihydrobenzo[e]pyrene Concentration Rank 12

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.         |      |
|-----------|-------------------------------------|--------|------------------|--------------|------|
| 14.70     | 5.87 ng                             | 172789 | Perylene-d12     | 15.24        |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#         | Qual |
| 1         | 4,5-Dihydrobenzo[e]povrene          | 254    | C20H14           | 095676-42-9  | 62   |
| 2         | 1,1'-Binaphthalene                  | 254    | C20H14           | 000604-53-5  | 62   |
| 3         | 1H-Indene, 1,1'-(1,2-ethanedivli... | 254    | C20H14           | 072088-04-1  | 53   |
| 4         | Benz(a)anthracene-7-carbonitrile    | 253    | C19H11N          | 007476-08-6  | 52   |
| 5         | 7,12-Dihydrobenzo[k]fluoranthene    | 254    | C20H14           | 1000080-17-7 | 47   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100518\  
Data File : BF109628.D  
Acq On : 6 Oct 2018 00:20  
Operator : JU/SJ  
Sample : J5263-04 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

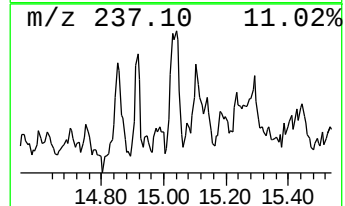
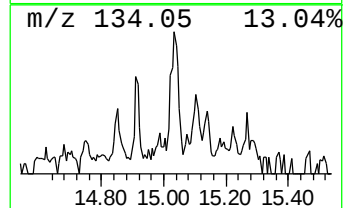
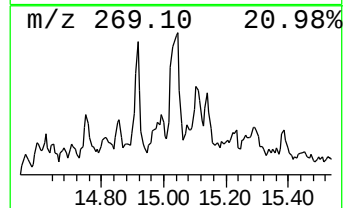
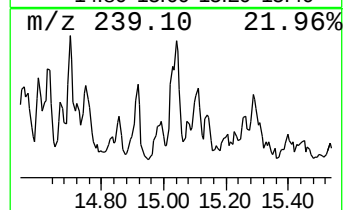
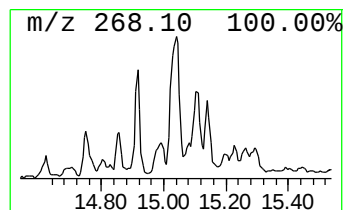
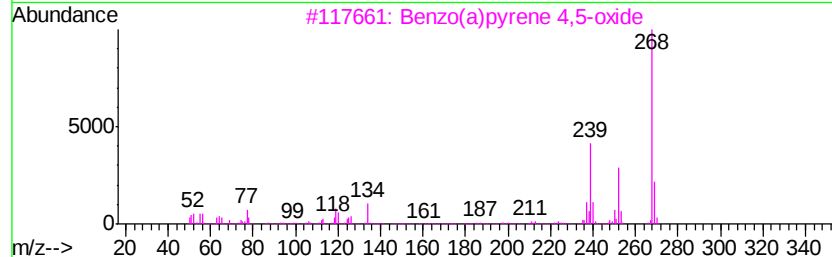
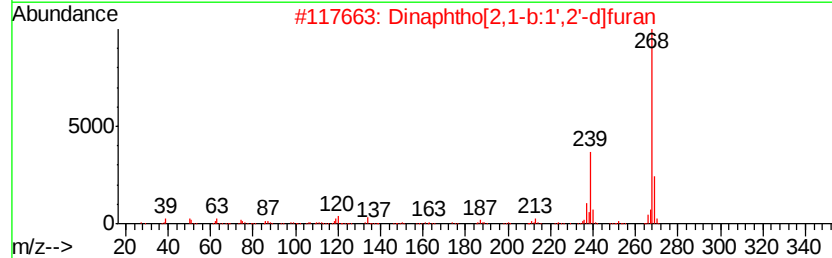
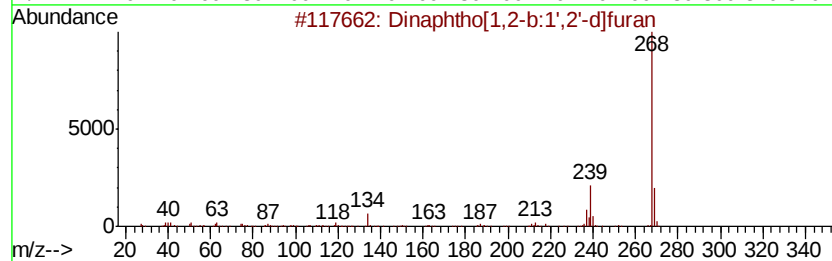
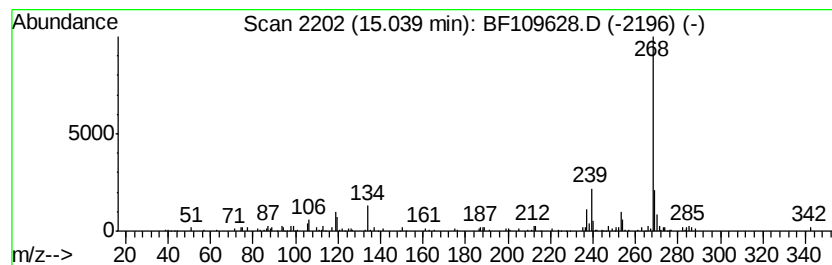
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 18 Dinaphtho[1,2-b:1',2'-d]furan Concentration Rank 17

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 15.04 | 4.78 ng | 140741 | Perylene-d12     | 15.24 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#        | Qual |
|------|----|-------------------------------------|-----|------------|-------------|------|
| 1    | 5  | Dinaphtho[1,2-b:1',2'-d]furan       | 268 | C20H12O    | 000207-93-2 | 87   |
| 2    |    | Dinaphtho[2,1-b:1',2'-d]furan       | 268 | C20H12O    | 000194-63-8 | 83   |
| 3    |    | Benzo(a)pyrene 4,5-oxide            | 268 | C20H12O    | 037574-47-3 | 64   |
| 4    |    | 10-Hydroxy-5-methoxy-2-methyl-1,... | 268 | C16H12O4   | 084542-45-0 | 59   |
| 5    |    | 9,10-Anthracenedione, 1,4-diamin... | 268 | C15H12N2O3 | 002872-48-2 | 59   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100518\  
Data File : BF109628.D  
Acq On : 6 Oct 2018 00:20  
Operator : JU/SJ  
Sample : J5263-04 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

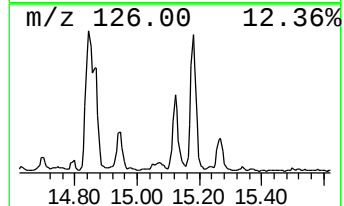
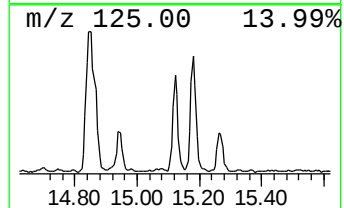
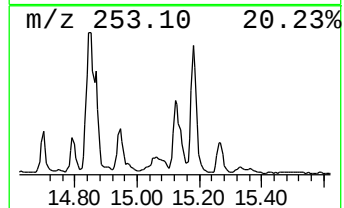
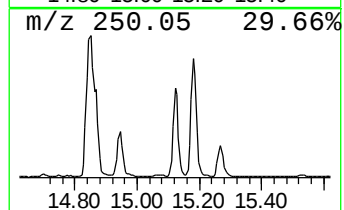
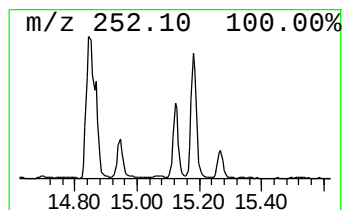
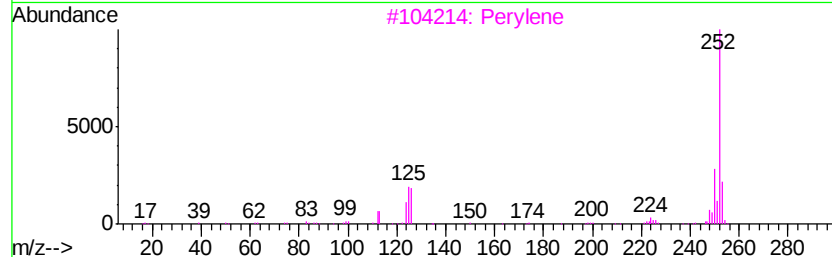
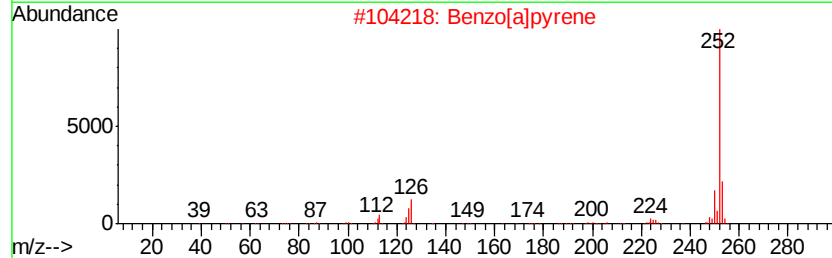
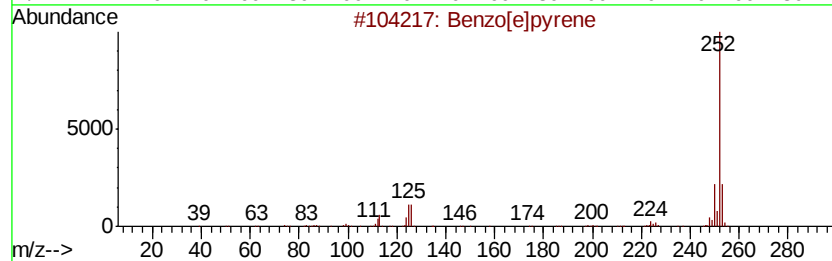
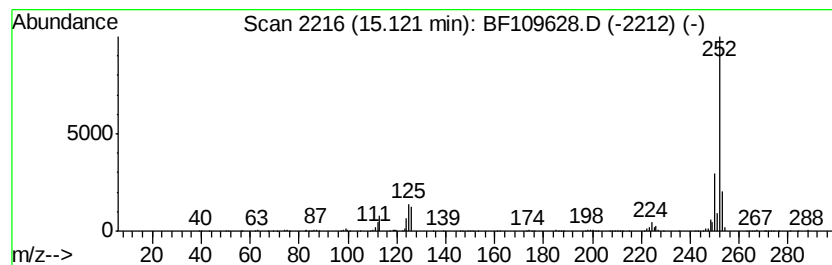
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 19 Benzo[e]pyrene Concentration Rank 3

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 15.12 | 17.09 ng | 503050 | Perylene-d12     | 15.24 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[e]pyrene            | 252 | C20H12  | 000192-97-2 | 99   |
| 2    |    | Benzo[a]pyrene            | 252 | C20H12  | 000050-32-8 | 96   |
| 3    |    | Perylene                  | 252 | C20H12  | 000198-55-0 | 96   |
| 4    |    | Benzo[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 93   |
| 5    |    | Benzo[k]fluoranthene      | 252 | C20H12  | 000207-08-9 | 91   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100518\  
Data File : BF109628.D  
Acq On : 6 Oct 2018 00:20  
Operator : JU/SJ  
Sample : J5263-04 2X  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF092218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

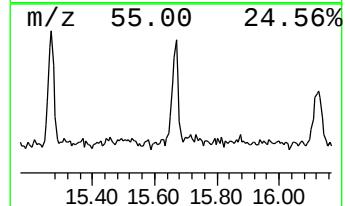
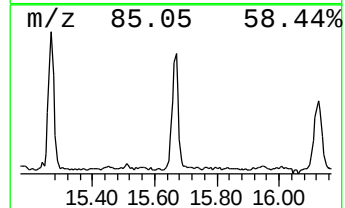
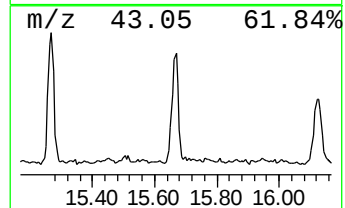
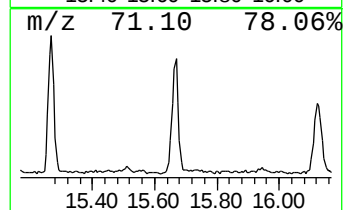
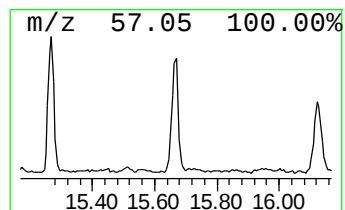
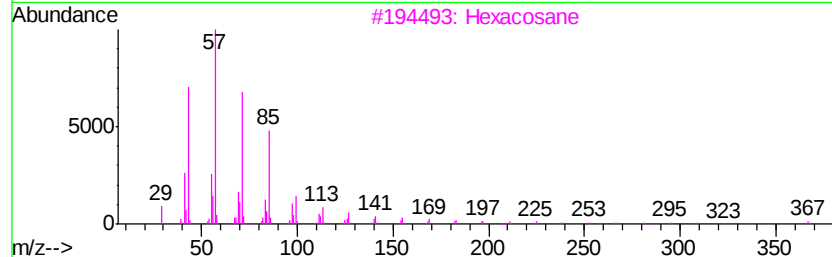
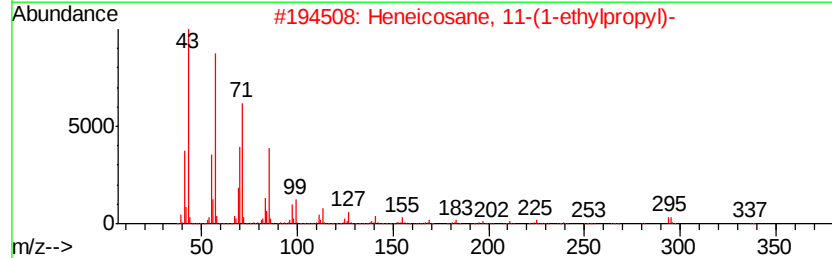
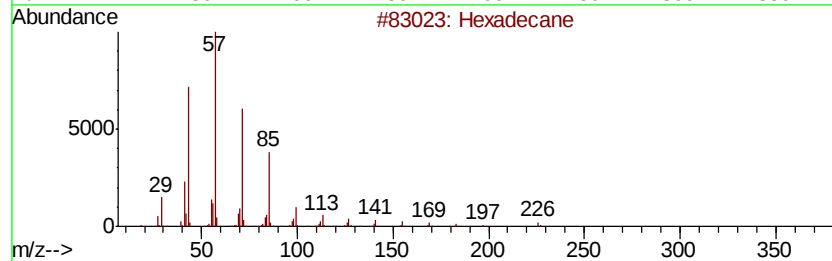
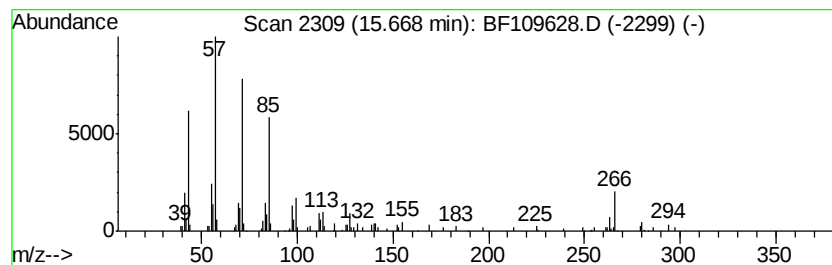
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 20 Hexadecane Concentration Rank 6

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 15.67 | 8.11 ng | 238638 | Perylene-d12     | 15.24 |

| Hit# | of | Tentative ID                     | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------------|-----|---------|-------------|------|
| 1    | 5  | Hexadecane                       | 226 | C16H34  | 000544-76-3 | 95   |
| 2    |    | Heneicosane, 11-(1-ethylpropyl)- | 366 | C26H54  | 055282-11-6 | 83   |
| 3    |    | Hexacosane                       | 366 | C26H54  | 000630-01-3 | 81   |
| 4    |    | Heneicosane                      | 296 | C21H44  | 000629-94-7 | 76   |
| 5    |    | Heptadecane                      | 240 | C17H36  | 000629-78-7 | 76   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF100518\  
 Data File : BF109628.D  
 Acq On : 6 Oct 2018 00:20  
 Operator : JU/SJ  
 Sample : J5263-04 2X  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 GRID13-COMP-100318

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF092218.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 |
| Dibenzothiophene      | 11.10 | 4.6 ng  |       | 167223   | 4                     | 11.21 | 729854  | 20.0 |
| Phenanthrene, 1-m...  | 11.71 | 7.9 ng  |       | 288123   | 4                     | 11.21 | 729854  | 20.0 |
| 1H-Cyclopropa[l]p...  | 11.74 | 12.4 ng |       | 454455   | 4                     | 11.21 | 729854  | 20.0 |
| Anthracene, 2-met...  | 11.79 | 5.4 ng  |       | 197195   | 4                     | 11.21 | 729854  | 20.0 |
| 4H-Cyclopenta[def...  | 11.82 | 13.6 ng |       | 497922   | 4                     | 11.21 | 729854  | 20.0 |
| Phenanthrene, 4-m...  | 11.84 | 6.5 ng  |       | 238873   | 4                     | 11.21 | 729854  | 20.0 |
| 5,16[1',2']:8,13[...  | 12.00 | 4.5 ng  |       | 164511   | 4                     | 11.21 | 729854  | 20.0 |
| 9,10-Dimethylanthe... | 12.26 | 6.8 ng  |       | 246381   | 4                     | 11.21 | 729854  | 20.0 |
| unknown12.30          | 12.30 | 5.4 ng  |       | 198382   | 4                     | 11.21 | 729854  | 20.0 |
| Cyclopenta(def)ph...  | 12.34 | 6.0 ng  |       | 219817   | 4                     | 11.21 | 729854  | 20.0 |
| Pyrene, 1-methyl-     | 13.07 | 4.4 ng  |       | 445145   | 5                     | 13.84 | 2027220 | 20.0 |
| Nonadecane            | 14.60 | 5.4 ng  |       | 158137   | 6                     | 15.24 | 588608  | 20.0 |
| 4,5-Dihydrobenzo[...  | 14.70 | 5.9 ng  |       | 172789   | 6                     | 15.24 | 588608  | 20.0 |
| Dinaphtho[1,2-b:1...  | 15.04 | 4.8 ng  |       | 140741   | 6                     | 15.24 | 588608  | 20.0 |
| Benzo[e]pyrene        | 15.12 | 17.1 ng |       | 503050   | 6                     | 15.24 | 588608  | 20.0 |
| Hexadecane            | 15.67 | 8.1 ng  |       | 238638   | 6                     | 15.24 | 588608  | 20.0 |