

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF061518\  
 Data File : BF106509.D  
 Acq On : 15 Jun 2018 22:58  
 Operator : JU/SJ  
 Sample : J3486-05 2X  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 DOCUMENTATION-8

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-BF061118.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         | 5.190       | 481           | 485         | 494          | rBV      | 99279          | 101255        | 5.09%           | 0.359%        |
| 2         | 5.613       | 553           | 557         | 567          | rBV      | 1097709        | 1151612       | 57.93%          | 4.086%        |
| 3         | 6.607       | 723           | 726         | 737          | rBV      | 1309010        | 1159516       | 58.33%          | 4.114%        |
| 4         | 6.742       | 746           | 749         | 753          | rBV      | 1386491        | 1133023       | 56.99%          | 4.020%        |
| 5         | 6.790       | 753           | 757         | 761          | rVB2     | 22533          | 22463         | 1.13%           | 0.080%        |
| 6         | 6.966       | 783           | 787         | 790          | rBV      | 908691         | 730666        | 36.75%          | 2.593%        |
| 7         | 7.119       | 810           | 813         | 817          | rBV      | 1055671        | 909794        | 45.76%          | 3.228%        |
| 8         | 7.231       | 829           | 832         | 835          | rVB2     | 31964          | 29932         | 1.51%           | 0.106%        |
| 9         | 7.278       | 835           | 840         | 846          | rVB      | 46585          | 44152         | 2.22%           | 0.157%        |
| 10        | 7.489       | 873           | 876         | 878          | rBV      | 63350          | 54329         | 2.73%           | 0.193%        |
| 11        | 7.525       | 878           | 882         | 885          | rVV      | 869966         | 676504        | 34.03%          | 2.400%        |
| 12        | 7.595       | 891           | 894         | 899          | rVB3     | 19057          | 23803         | 1.20%           | 0.084%        |
| 13        | 7.725       | 912           | 916         | 919          | rBV      | 41556          | 36788         | 1.85%           | 0.131%        |
| 14        | 7.754       | 919           | 921         | 924          | rVB      | 78650          | 56553         | 2.84%           | 0.201%        |
| 15        | 7.960       | 952           | 956         | 957          | rBV      | 30958          | 27164         | 1.37%           | 0.096%        |
| 16        | 7.984       | 957           | 960         | 962          | rVV      | 65221          | 57669         | 2.90%           | 0.205%        |
| 17        | 8.007       | 962           | 964         | 966          | rVV      | 31865          | 25890         | 1.30%           | 0.092%        |
| 18        | 8.054       | 966           | 972         | 975          | rVV4     | 16077          | 28679         | 1.44%           | 0.102%        |
| 19        | 8.107       | 979           | 981         | 984          | rVB      | 29360          | 22849         | 1.15%           | 0.081%        |
| 20        | 8.248       | 1001          | 1005        | 1008         | rBV      | 1060361        | 900039        | 45.27%          | 3.193%        |
| 21        | 8.960       | 1123          | 1126        | 1129         | rBV      | 45034          | 34849         | 1.75%           | 0.124%        |
| 22        | 9.060       | 1140          | 1143        | 1148         | rVB      | 29127          | 23536         | 1.18%           | 0.084%        |
| 23        | 9.319       | 1183          | 1187        | 1193         | rBV      | 1509213        | 1202205       | 60.47%          | 4.266%        |
| 24        | 9.389       | 1197          | 1199        | 1202         | rVV2     | 31436          | 23208         | 1.17%           | 0.082%        |
| 25        | 9.589       | 1225          | 1233        | 1236         | rBV      | 23790          | 34288         | 1.72%           | 0.122%        |
| 26        | 9.660       | 1239          | 1245        | 1248         | rVV2     | 29364          | 34210         | 1.72%           | 0.121%        |
| 27        | 9.713       | 1251          | 1254        | 1261         | rVB      | 144642         | 142247        | 7.16%           | 0.505%        |
| 28        | 9.778       | 1261          | 1265        | 1267         | rBV2     | 18336          | 20558         | 1.03%           | 0.073%        |
| 29        | 9.866       | 1277          | 1280        | 1283         | rBV      | 89089          | 77034         | 3.87%           | 0.273%        |
| 30        | 9.919       | 1285          | 1289        | 1292         | rVB      | 61335          | 51580         | 2.59%           | 0.183%        |
| 31        | 10.007      | 1300          | 1304        | 1307         | rBV      | 968448         | 809154        | 40.70%          | 2.871%        |
| 32        | 10.036      | 1307          | 1309        | 1313         | rVB      | 103837         | 84403         | 4.25%           | 0.299%        |
| 33        | 10.160      | 1325          | 1330        | 1332         | rBV4     | 19366          | 26286         | 1.32%           | 0.093%        |
| 34        | 10.207      | 1335          | 1338        | 1342         | rVV2     | 53776          | 57337         | 2.88%           | 0.203%        |

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 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 DOCUMENTATION-8

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-BF061118.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |        |        |
|----|--------|------|------|------|------|---------|---------|--------|--------|
| 35 | 10.242 | 1342 | 1344 | 1348 | rVB2 | 31503   | 27426   | 1.38%  | 0.097% |
| 36 | 10.319 | 1354 | 1357 | 1359 | rBV2 | 22784   | 24129   | 1.21%  | 0.086% |
| 37 | 10.419 | 1369 | 1374 | 1377 | rVB  | 83287   | 82511   | 4.15%  | 0.293% |
| 38 | 10.460 | 1377 | 1381 | 1385 | rBV4 | 18875   | 29769   | 1.50%  | 0.106% |
| 39 | 10.554 | 1394 | 1397 | 1403 | rBV  | 95450   | 93594   | 4.71%  | 0.332% |
| 40 | 10.642 | 1409 | 1412 | 1414 | rVB  | 48170   | 40594   | 2.04%  | 0.144% |
| 41 | 10.713 | 1422 | 1424 | 1427 | rVB3 | 25136   | 22282   | 1.12%  | 0.079% |
| 42 | 10.795 | 1434 | 1438 | 1442 | rBV  | 762863  | 690838  | 34.75% | 2.451% |
| 43 | 10.895 | 1452 | 1455 | 1464 | rBV4 | 94854   | 175192  | 8.81%  | 0.622% |
| 44 | 11.183 | 1502 | 1504 | 1508 | rBV3 | 23116   | 24543   | 1.23%  | 0.087% |
| 45 | 11.225 | 1508 | 1511 | 1513 | rBV4 | 28923   | 36797   | 1.85%  | 0.131% |
| 46 | 11.301 | 1521 | 1524 | 1528 | rVB  | 51975   | 43760   | 2.20%  | 0.155% |
| 47 | 11.342 | 1528 | 1531 | 1534 | rBV  | 91553   | 86954   | 4.37%  | 0.309% |
| 48 | 11.372 | 1534 | 1536 | 1538 | rVV2 | 50979   | 53212   | 2.68%  | 0.189% |
| 49 | 11.395 | 1538 | 1540 | 1543 | rVB  | 75471   | 60447   | 3.04%  | 0.214% |
| 50 | 11.501 | 1554 | 1558 | 1560 | rBV  | 979552  | 908130  | 45.68% | 3.222% |
| 51 | 11.525 | 1560 | 1562 | 1565 | rVV  | 1135700 | 878649  | 44.20% | 3.118% |
| 52 | 11.572 | 1567 | 1570 | 1573 | rVV  | 332331  | 294422  | 14.81% | 1.045% |
| 53 | 11.607 | 1573 | 1576 | 1581 | rVB3 | 34424   | 43364   | 2.18%  | 0.154% |
| 54 | 11.654 | 1582 | 1584 | 1587 | rBV3 | 25267   | 26891   | 1.35%  | 0.095% |
| 55 | 11.730 | 1594 | 1597 | 1599 | rVB  | 100887  | 80191   | 4.03%  | 0.285% |
| 56 | 11.772 | 1601 | 1604 | 1606 | rBV  | 62580   | 50637   | 2.55%  | 0.180% |
| 57 | 11.830 | 1612 | 1614 | 1618 | rVB4 | 32106   | 29781   | 1.50%  | 0.106% |
| 58 | 12.001 | 1640 | 1643 | 1645 | rBV  | 136995  | 128435  | 6.46%  | 0.456% |
| 59 | 12.030 | 1645 | 1648 | 1651 | rVB  | 191087  | 163829  | 8.24%  | 0.581% |
| 60 | 12.077 | 1653 | 1656 | 1659 | rBV  | 102784  | 102915  | 5.18%  | 0.365% |
| 61 | 12.119 | 1659 | 1663 | 1665 | rBV2 | 240054  | 285748  | 14.37% | 1.014% |
| 62 | 12.177 | 1671 | 1673 | 1676 | rBV  | 68061   | 64626   | 3.25%  | 0.229% |
| 63 | 12.295 | 1690 | 1693 | 1695 | rBV  | 124491  | 95292   | 4.79%  | 0.338% |
| 64 | 12.324 | 1695 | 1698 | 1701 | rVB2 | 91005   | 83545   | 4.20%  | 0.296% |
| 65 | 12.554 | 1734 | 1737 | 1738 | rBV  | 82010   | 86793   | 4.37%  | 0.308% |
| 66 | 12.636 | 1749 | 1751 | 1755 | rVB  | 79041   | 81074   | 4.08%  | 0.288% |
| 67 | 12.719 | 1761 | 1765 | 1769 | rBV  | 1943504 | 1801066 | 90.60% | 6.390% |
| 68 | 12.754 | 1769 | 1771 | 1773 | rVV2 | 49813   | 40247   | 2.02%  | 0.143% |
| 69 | 12.777 | 1773 | 1775 | 1777 | rVV2 | 42734   | 34094   | 1.71%  | 0.121% |
| 70 | 12.807 | 1778 | 1780 | 1783 | rVV2 | 46911   | 49219   | 2.48%  | 0.175% |
| 71 | 12.871 | 1789 | 1791 | 1793 | rVB  | 54407   | 35383   | 1.78%  | 0.126% |

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 Sample : J3486-05 2X  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 DOCUMENTATION-8

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-BF061118.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |         |        |
|----|--------|------|------|------|------|---------|---------|---------|--------|
| 72 | 12.954 | 1798 | 1805 | 1809 | rBV  | 1694806 | 1987989 | 100.00% | 7.054% |
| 73 | 12.995 | 1809 | 1812 | 1816 | rVB2 | 90619   | 96239   | 4.84%   | 0.341% |
| 74 | 13.083 | 1821 | 1827 | 1830 | rVV  | 1500812 | 1374138 | 69.12%  | 4.876% |
| 75 | 13.107 | 1830 | 1831 | 1834 | rVB  | 105661  | 54789   | 2.76%   | 0.194% |
| 76 | 13.166 | 1836 | 1841 | 1844 | rVV2 | 101644  | 181083  | 9.11%   | 0.643% |
| 77 | 13.248 | 1852 | 1855 | 1856 | rBV2 | 87825   | 95347   | 4.80%   | 0.338% |
| 78 | 13.271 | 1857 | 1859 | 1862 | rVB  | 301509  | 269051  | 13.53%  | 0.955% |
| 79 | 13.301 | 1862 | 1864 | 1866 | rBV2 | 46413   | 44706   | 2.25%   | 0.159% |
| 80 | 13.342 | 1868 | 1871 | 1873 | rBV  | 216582  | 172959  | 8.70%   | 0.614% |
| 81 | 13.377 | 1873 | 1877 | 1880 | rBV2 | 152843  | 179940  | 9.05%   | 0.638% |
| 82 | 13.471 | 1891 | 1893 | 1896 | rBV  | 71891   | 63270   | 3.18%   | 0.224% |
| 83 | 13.507 | 1896 | 1899 | 1904 | rVV2 | 83662   | 117520  | 5.91%   | 0.417% |
| 84 | 13.554 | 1904 | 1907 | 1910 | rVV  | 165947  | 154863  | 7.79%   | 0.549% |
| 85 | 13.783 | 1944 | 1946 | 1951 | rVB  | 136149  | 123283  | 6.20%   | 0.437% |
| 86 | 13.895 | 1963 | 1965 | 1968 | rVB2 | 97644   | 91503   | 4.60%   | 0.325% |
| 87 | 13.924 | 1968 | 1970 | 1972 | rVB  | 141414  | 100940  | 5.08%   | 0.358% |
| 88 | 13.948 | 1972 | 1974 | 1975 | rBV  | 134791  | 105183  | 5.29%   | 0.373% |
| 89 | 14.148 | 2004 | 2008 | 2011 | rBV2 | 1252639 | 1812479 | 91.17%  | 6.431% |
| 90 | 14.177 | 2011 | 2013 | 2019 | rVB  | 856940  | 778372  | 39.15%  | 2.762% |
| 91 | 14.260 | 2025 | 2027 | 2031 | rBV  | 176981  | 148822  | 7.49%   | 0.528% |
| 92 | 14.542 | 2073 | 2075 | 2078 | rVB  | 147234  | 127094  | 6.39%   | 0.451% |
| 93 | 15.236 | 2189 | 2193 | 2196 | rBV  | 557118  | 879056  | 44.22%  | 3.119% |
| 94 | 15.560 | 2245 | 2248 | 2254 | rVB  | 363218  | 449198  | 22.60%  | 1.594% |
| 95 | 15.624 | 2255 | 2259 | 2265 | rVB  | 506331  | 661940  | 33.30%  | 2.349% |
| 96 | 15.689 | 2266 | 2270 | 2274 | rBV  | 460615  | 637061  | 32.05%  | 2.260% |
| 97 | 17.259 | 2532 | 2537 | 2545 | rVB2 | 211047  | 417046  | 20.98%  | 1.480% |
| 98 | 17.736 | 2613 | 2618 | 2632 | rVB2 | 177598  | 389692  | 19.60%  | 1.383% |

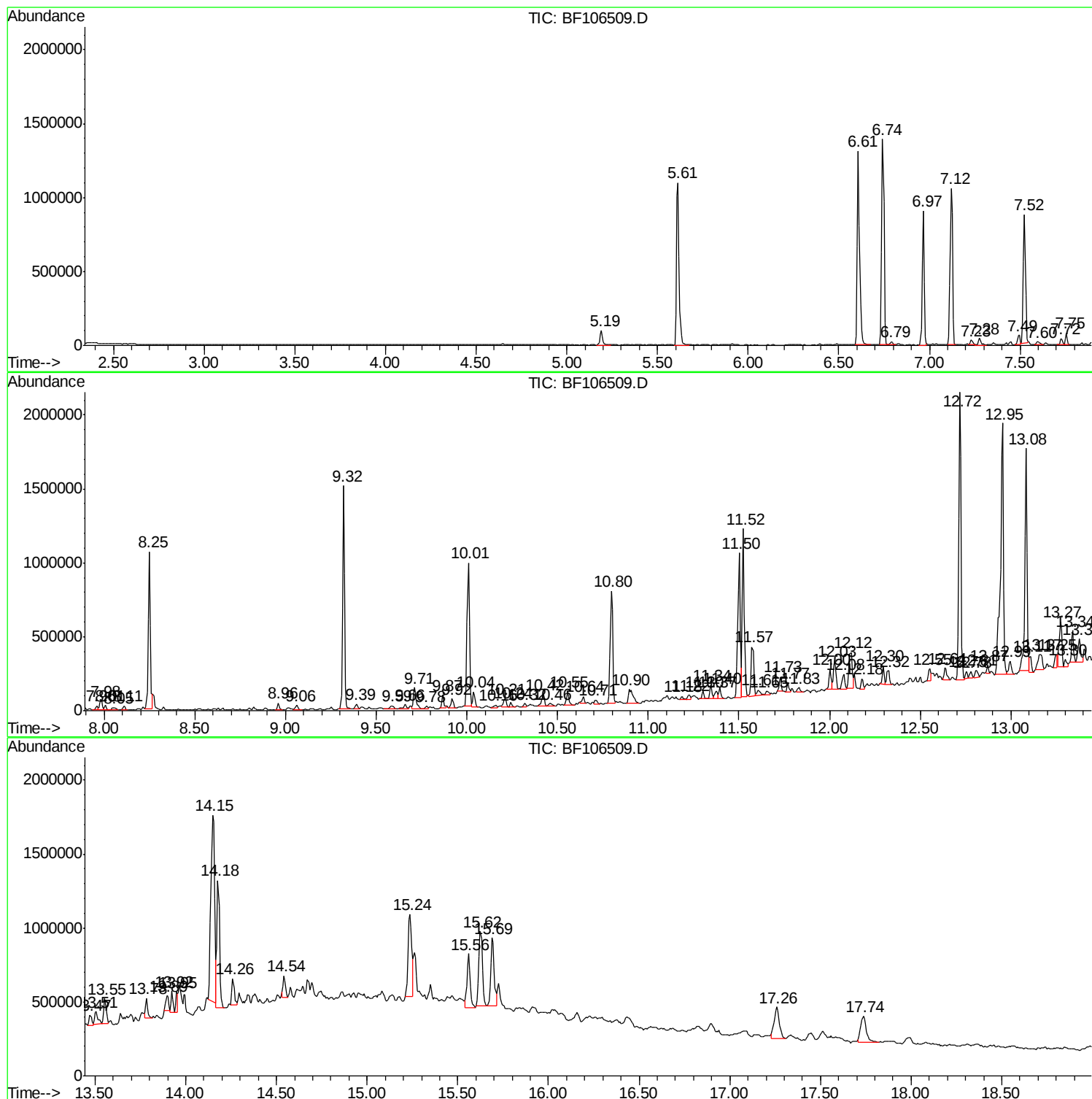
Sum of corrected areas: 28183517

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ALS Vial : 24 Sample Multiplier: 1

Instrument :  
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ClientSampleId :  
DOCUMENTATION-8

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061118.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\BF061518\  
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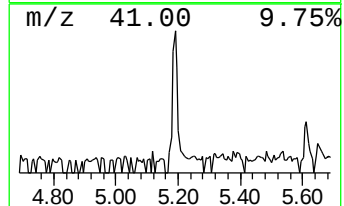
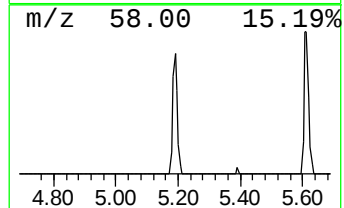
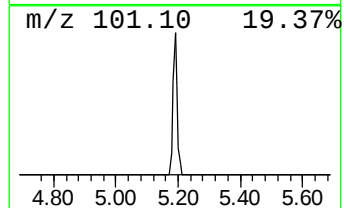
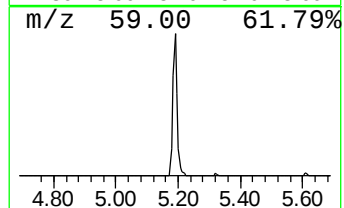
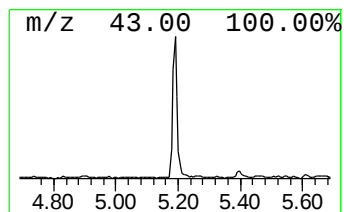
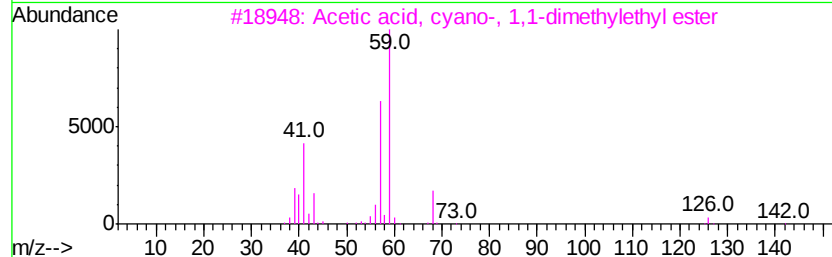
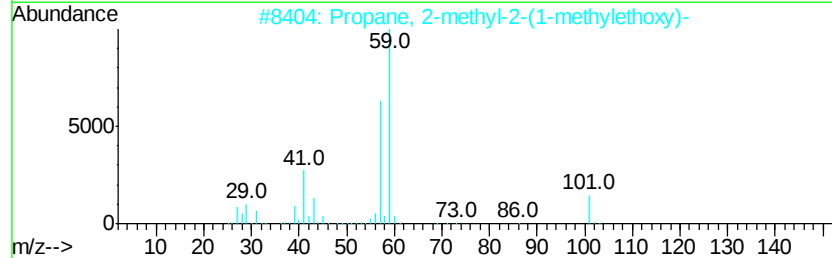
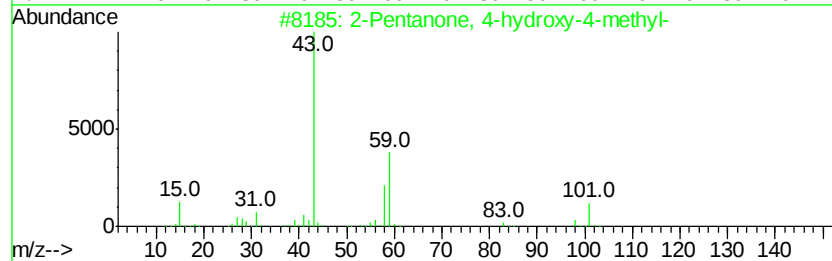
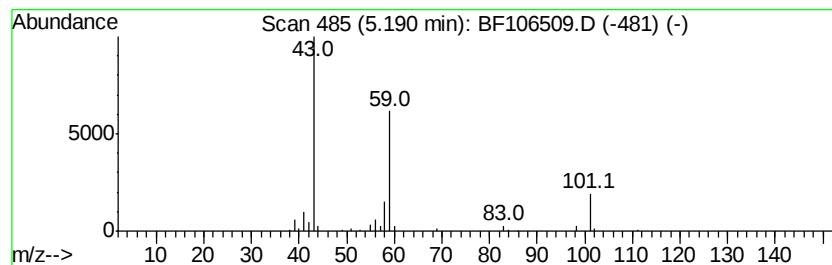
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061118.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 9

| R.T. | EstConc | Area   | Relative to ISTD       | R.T. |
|------|---------|--------|------------------------|------|
| 5.19 | 2.77 ng | 101255 | 1,4-Dichlorobenzene-d4 | 6.97 |

| Hit# | of | 5 | Tentative ID                         | MW  | MolForm  | CAS#        | Qual |
|------|----|---|--------------------------------------|-----|----------|-------------|------|
| 1    |    |   | 2-Pentanone, 4-hydroxy-4-methyl-     | 116 | C6H12O2  | 000123-42-2 | 56   |
| 2    |    |   | Propane, 2-methyl-2-(1-methyleth...  | 116 | C7H16O   | 017348-59-3 | 45   |
| 3    |    |   | Acetic acid, cyano-, 1,1-dimethyl... | 141 | C7H11NO2 | 001116-98-9 | 17   |
| 4    |    |   | Morpholine, 4-methyl-                | 101 | C5H11NO  | 000109-02-4 | 9    |
| 5    |    |   | 2,3-Butanedione, monooxime           | 101 | C4H7NO2  | 000057-71-6 | 9    |



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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

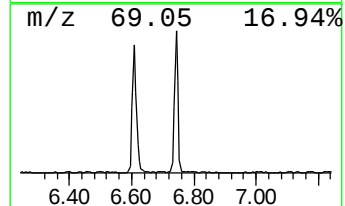
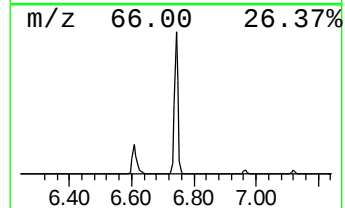
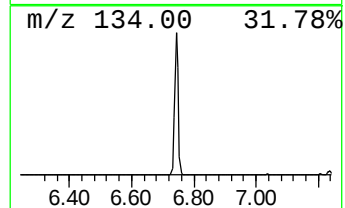
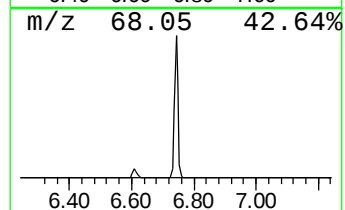
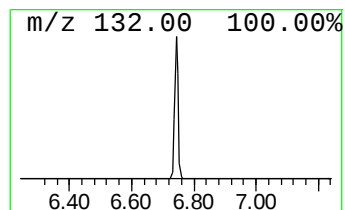
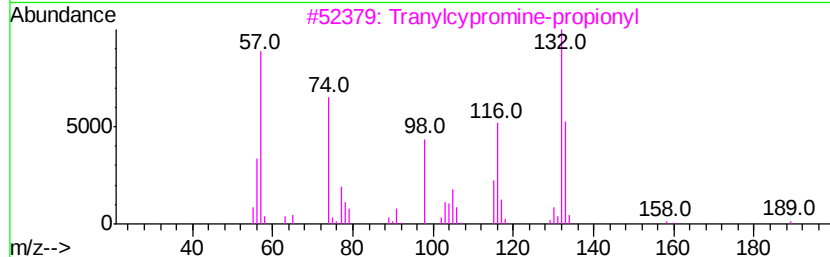
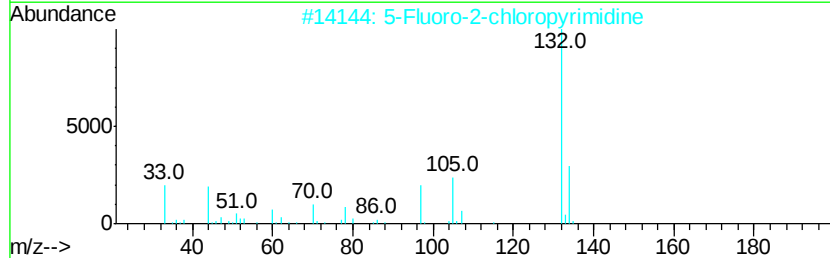
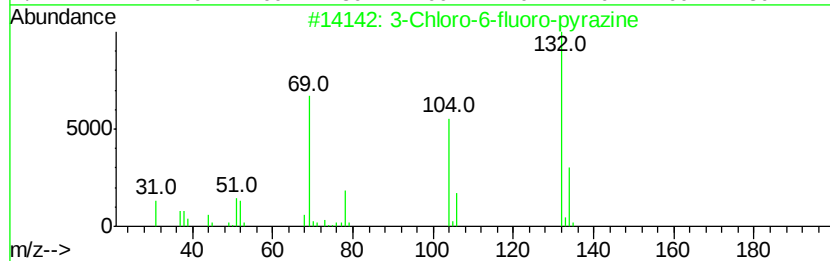
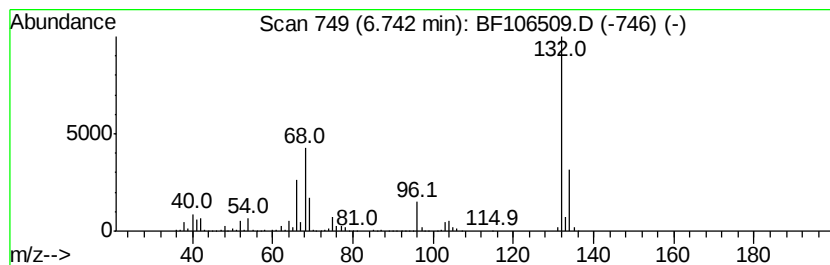
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 2 unknown6.74 Concentration Rank 1

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 6.74 | 31.01 ng | 1133020 | 1,4-Dichlorobenzene-d4 | 6.97 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | 3-Chloro-6-fluoro-pyrazine          | 132 | C4H2ClFN2 | 1000146-10-7 | 35   |
| 2    |    | 5-Fluoro-2-chloropyrimidine         | 132 | C4H2ClFN2 | 062802-42-0  | 12   |
| 3    |    | Tranvlcypropine-propionyl           | 189 | C12H15NO  | 1000123-86-3 | 10   |
| 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\BF061518\  
Data File : BF106509.D  
Acq On : 15 Jun 2018 22:58  
Operator : JU/SJ  
Sample : J3486-05 2X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

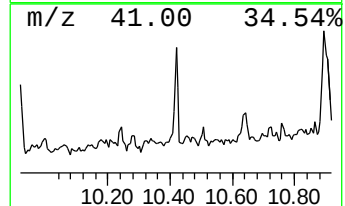
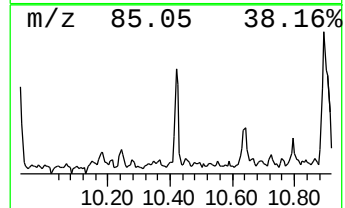
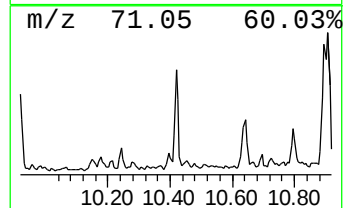
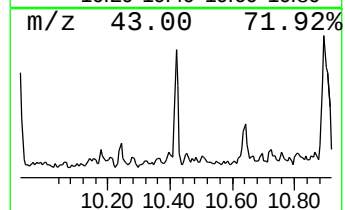
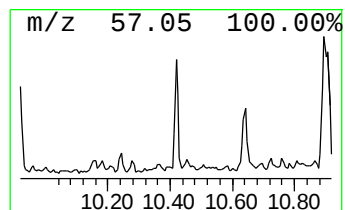
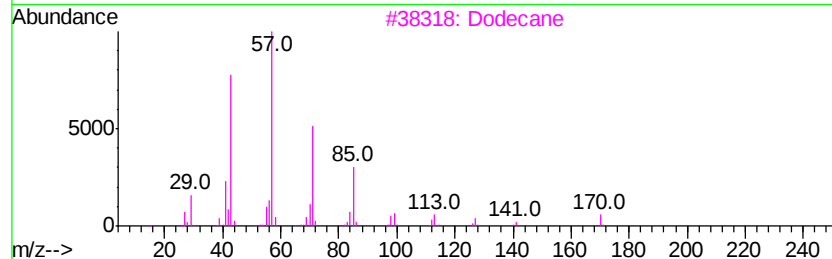
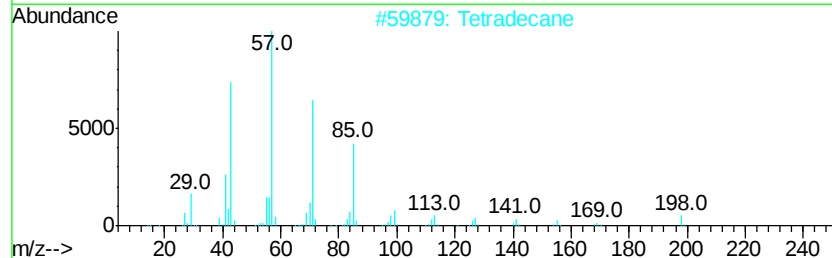
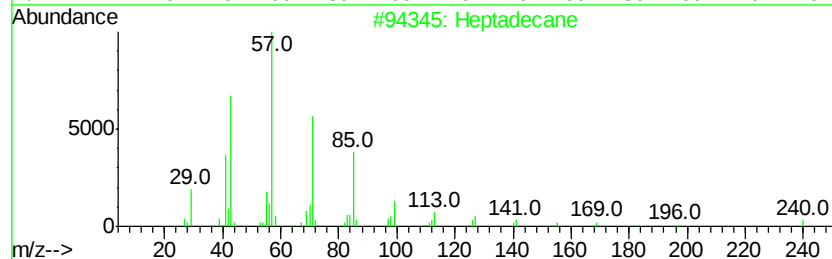
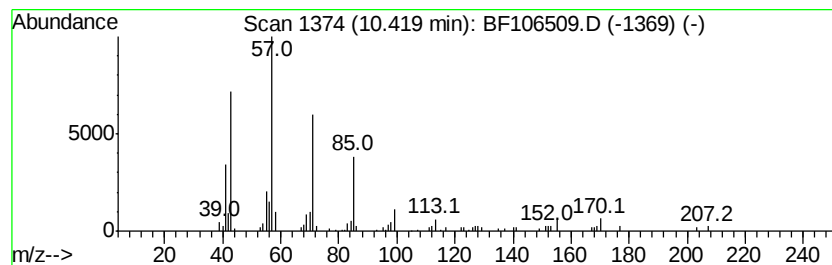
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ClientSampleId :  
DOCUMENTATION-8

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061118.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 4 Heptadecane Concentration Rank 12

| R.T.      | EstConc      | Area  | Relative to ISTD |             | R.T.  |
|-----------|--------------|-------|------------------|-------------|-------|
| 10.42     | 2.04 ng      | 82511 | Acenaphthene-d10 |             | 10.01 |
| Hit# of 5 | Tentative ID | MW    | MolForm          | CAS#        | Qual  |
| 1         | Heptadecane  | 240   | C17H36           | 000629-78-7 | 90    |
| 2         | Tetradecane  | 198   | C14H30           | 000629-59-4 | 90    |
| 3         | Dodecane     | 170   | C12H26           | 000112-40-3 | 87    |
| 4         | Tridecane    | 184   | C13H28           | 000629-50-5 | 86    |
| 5         | Hexadecane   | 226   | C16H34           | 000544-76-3 | 80    |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF061518\  
Data File : BF106509.D  
Acq On : 15 Jun 2018 22:58  
Operator : JU/SJ  
Sample : J3486-05 2X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
DOCUMENTATION-8

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061118.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

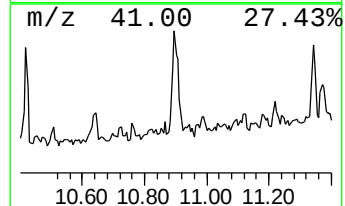
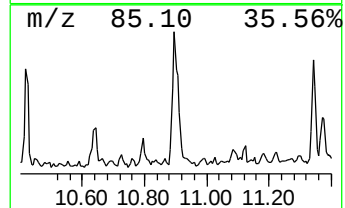
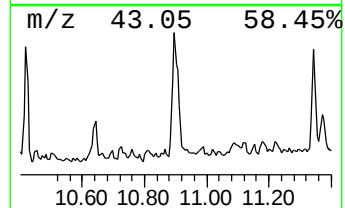
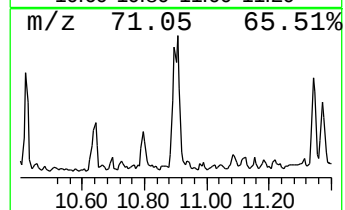
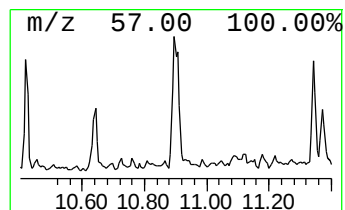
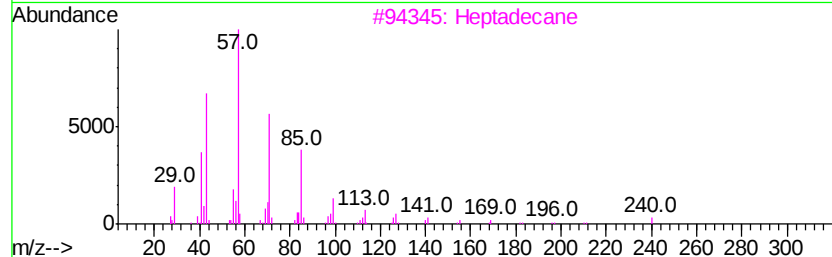
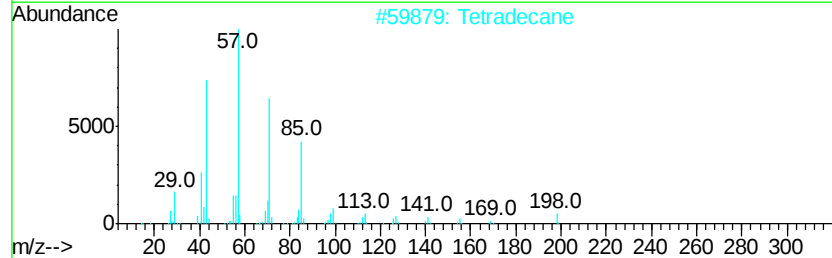
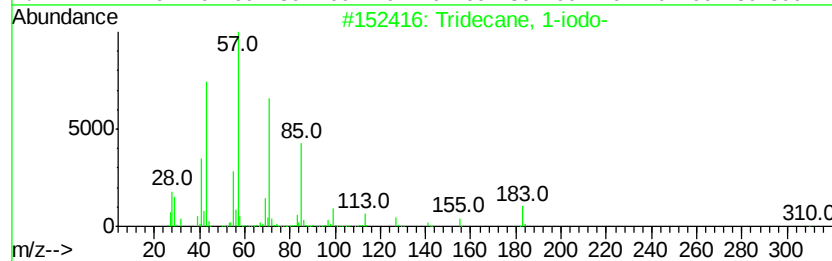
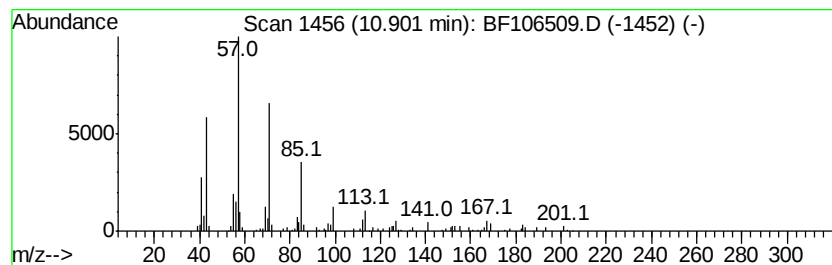
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 5 Tridecane, 1-iodo- Concentration Rank 5

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 10.90 | 3.86 ng | 175192 | Phenanthrene-d10 | 11.50 |

| Hit# of 5 | Tentative ID       | MW  | MolForm | CAS#        | Qual |
|-----------|--------------------|-----|---------|-------------|------|
| 1         | Tridecane, 1-iodo- | 310 | C13H27I | 035599-77-0 | 90   |
| 2         | Tetradecane        | 198 | C14H30  | 000629-59-4 | 87   |
| 3         | Heptadecane        | 240 | C17H36  | 000629-78-7 | 87   |
| 4         | Hexadecane         | 226 | C16H34  | 000544-76-3 | 87   |
| 5         | Pentadecane        | 212 | C15H32  | 000629-62-9 | 87   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF061518\  
Data File : BF106509.D  
Acq On : 15 Jun 2018 22:58  
Operator : JU/SJ  
Sample : J3486-05 2X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
DOCUMENTATION-8

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061118.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

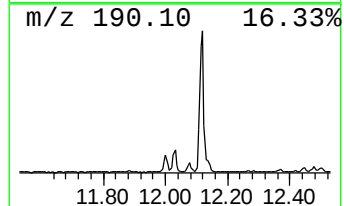
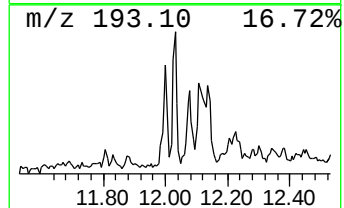
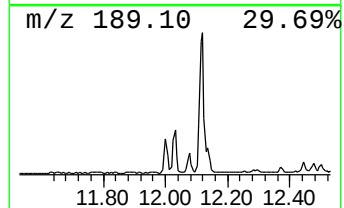
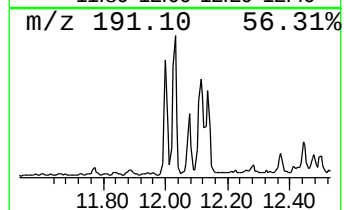
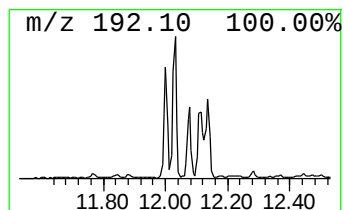
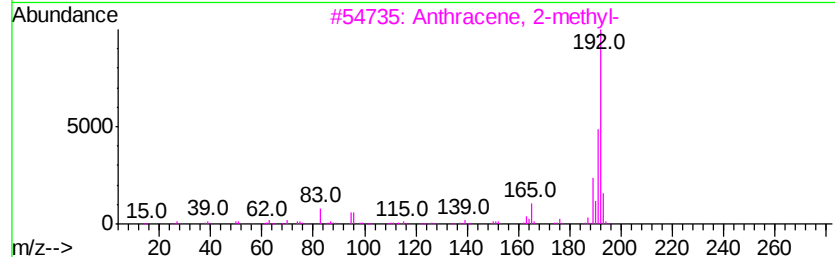
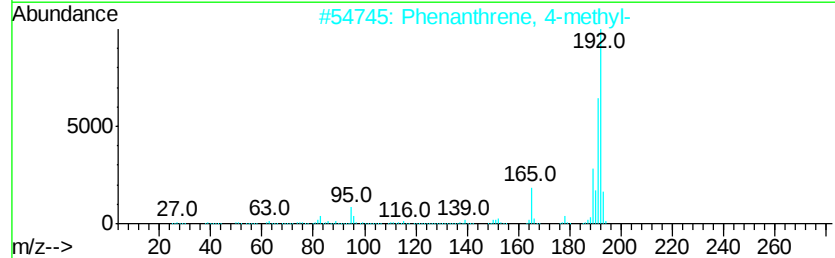
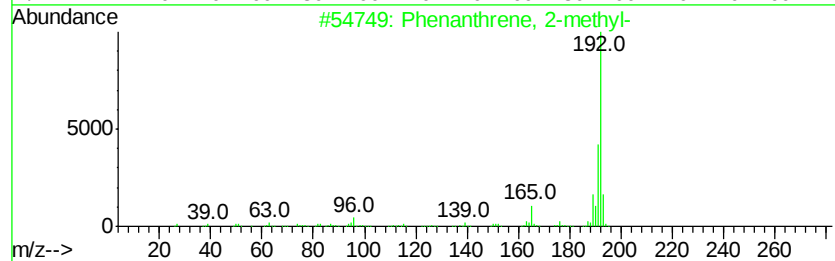
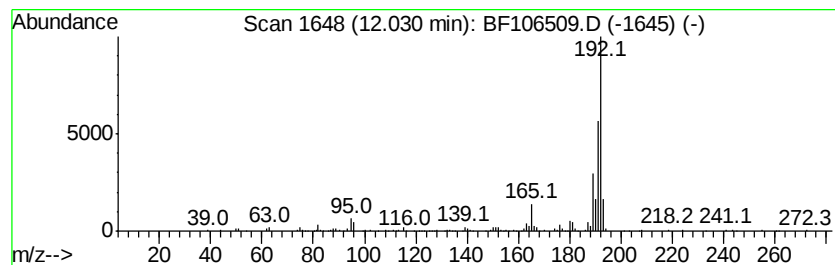
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 12.03 | 3.61 ng | 163829 | Phenanthrene-d10 | 11.50 |

| Hit# | of | 5 | Tentative ID                          | MW  | MolForm | CAS#        | Qual |
|------|----|---|---------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Phenanthrene, 2-methyl-               | 192 | C15H12  | 002531-84-2 | 96   |
| 2    |    |   | Phenanthrene, 4-methyl-               | 192 | C15H12  | 000832-64-4 | 96   |
| 3    |    |   | Anthracene, 2-methyl-                 | 192 | C15H12  | 000613-12-7 | 96   |
| 4    |    |   | Phenanthrene, 1-methyl-               | 192 | C15H12  | 000832-69-9 | 95   |
| 5    |    |   | 1H-Cyclopropa[1]phenanthrene, 1a, ... | 192 | C15H12  | 000949-41-7 | 94   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF061518\  
Data File : BF106509.D  
Acq On : 15 Jun 2018 22:58  
Operator : JU/SJ  
Sample : J3486-05 2X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
DOCUMENTATION-8

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061118.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

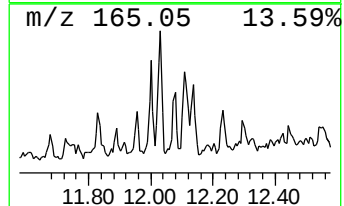
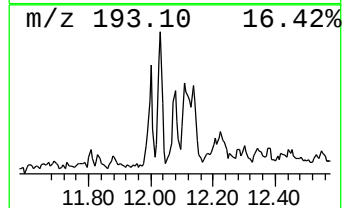
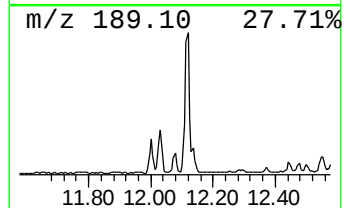
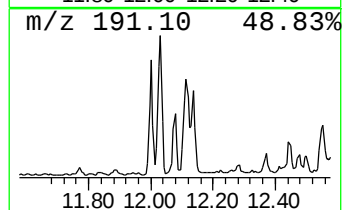
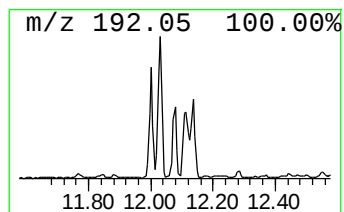
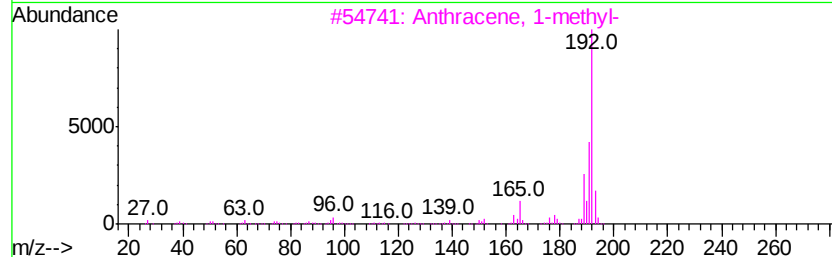
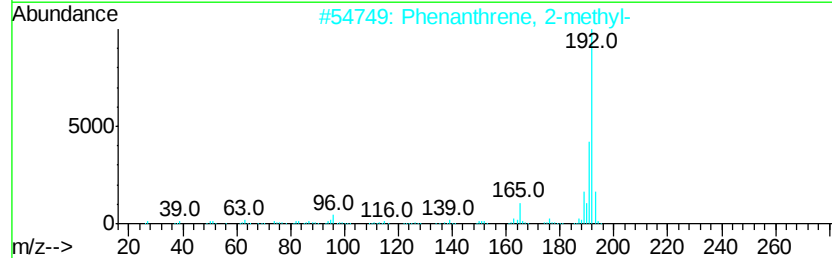
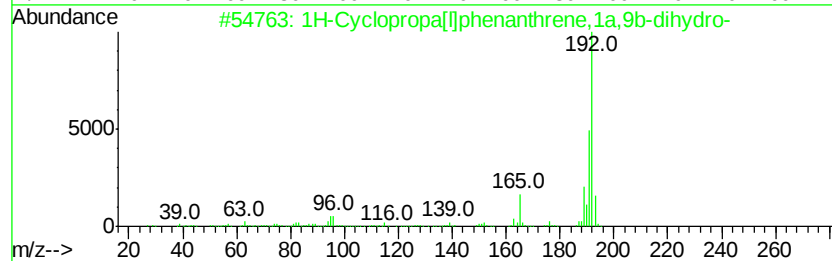
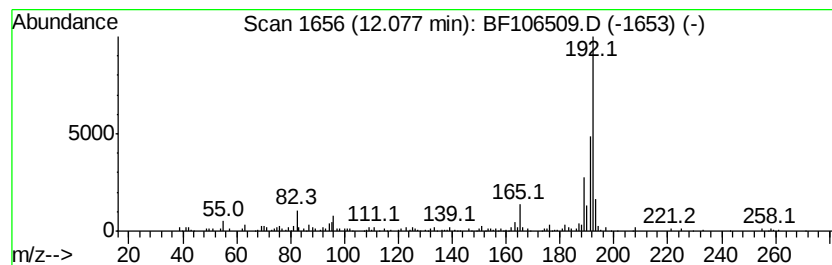
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 8 1H-Cyclopropa[l]phenanthren... Concentration Rank 10

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 12.08 | 2.27 ng | 102915 | Phenanthrene-d10 | 11.50 |

| Hit# | of | Tentative ID                          | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 1H-Cyclopropa[l]phenanthrene, 1a, ... | 192 | C15H12  | 000949-41-7 | 96   |
| 2    |    | Phenanthrene, 2-methyl-               | 192 | C15H12  | 002531-84-2 | 95   |
| 3    |    | Anthracene, 1-methyl-                 | 192 | C15H12  | 000610-48-0 | 95   |
| 4    |    | Phenanthrene, 1-methyl-               | 192 | C15H12  | 000832-69-9 | 94   |
| 5    |    | Anthracene, 9-methyl-                 | 192 | C15H12  | 000779-02-2 | 93   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF061518\  
Data File : BF106509.D  
Acq On : 15 Jun 2018 22:58  
Operator : JU/SJ  
Sample : J3486-05 2X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
DOCUMENTATION-8

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061118.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

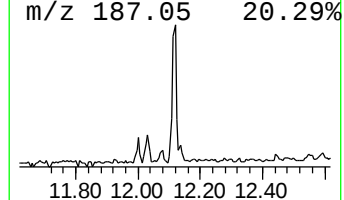
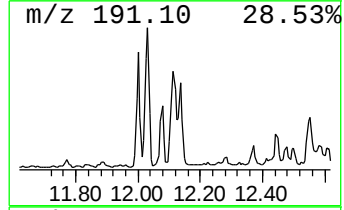
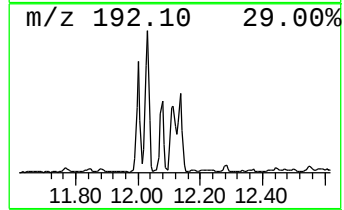
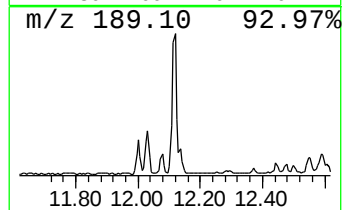
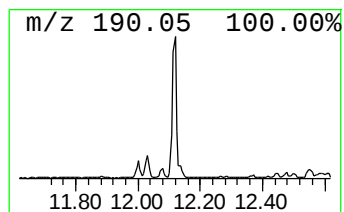
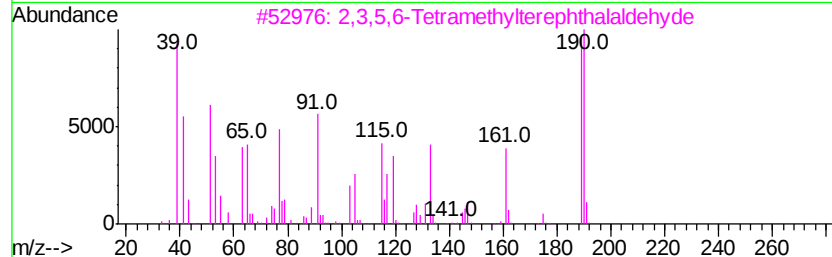
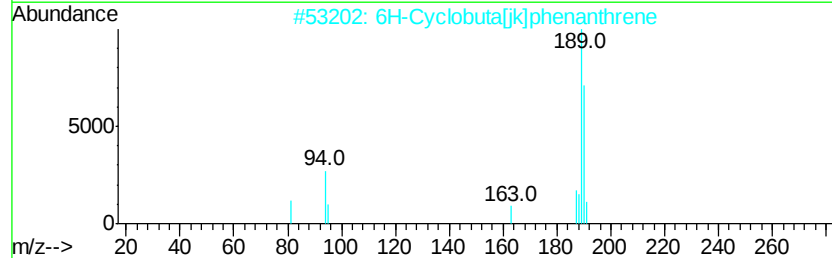
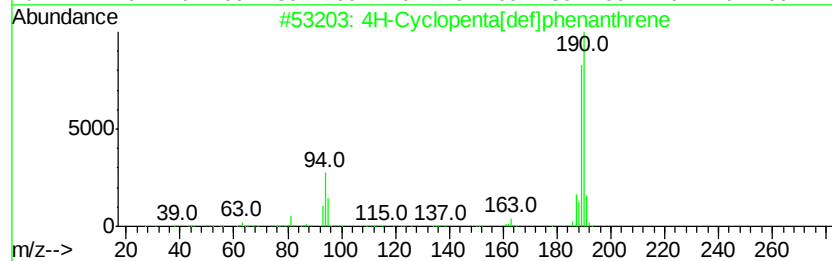
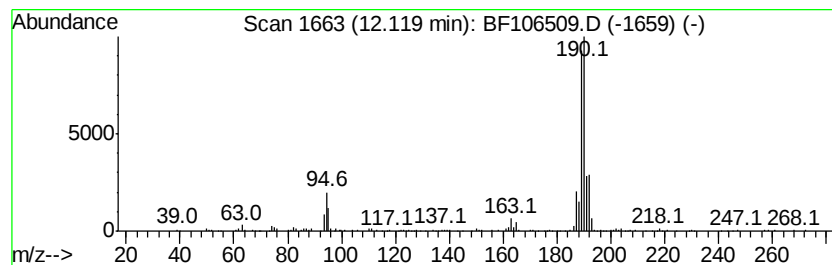
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 12.12 | 6.29 ng | 285748 | Phenanthrene-d10 | 11.50 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#        | Qual |
|------|----|-------------------------------------|-----|-----------|-------------|------|
| 1    | 5  | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10    | 000203-64-5 | 87   |
| 2    |    | 6H-Cyclobuta[ik]phenanthrene        | 190 | C15H10    | 083469-43-6 | 72   |
| 3    |    | 2,3,5,6-Tetramethylterephthalald... | 190 | C12H14O2  | 007072-01-7 | 47   |
| 4    |    | 2,2'-Bis(4,5-dimethylimidazole)     | 190 | C10H14N4  | 069286-06-2 | 42   |
| 5    |    | 2,6-Dichlorobenzaldoxime            | 189 | C7H5Cl2NO | 025185-95-9 | 30   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF061518\  
Data File : BF106509.D  
Acq On : 15 Jun 2018 22:58  
Operator : JU/SJ  
Sample : J3486-05 2X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
DOCUMENTATION-8

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061118.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

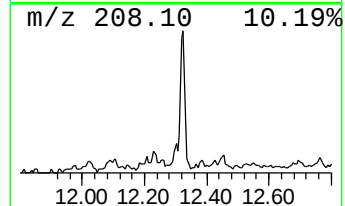
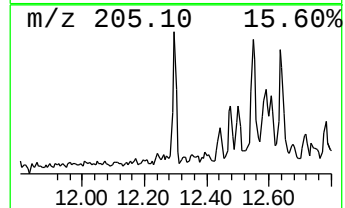
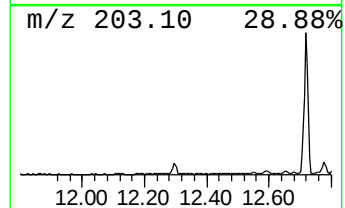
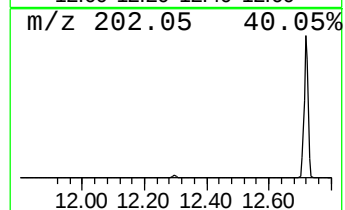
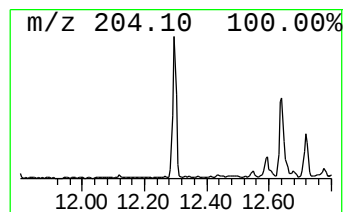
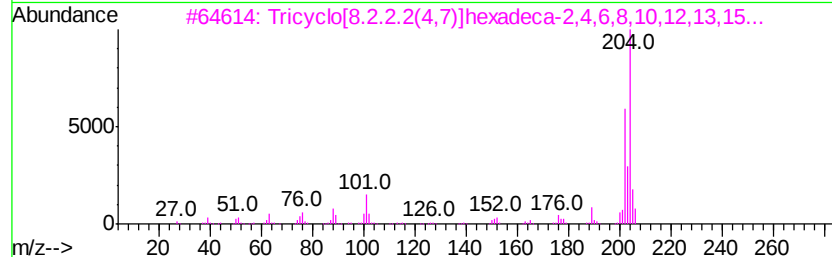
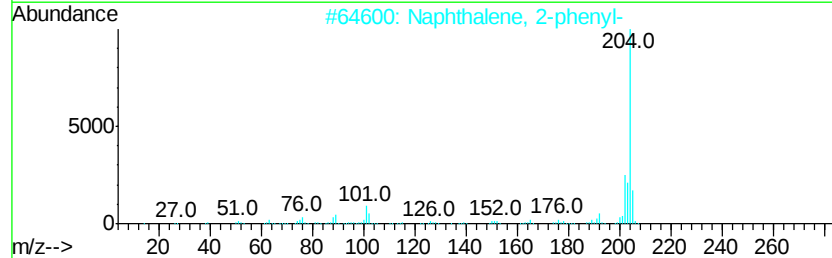
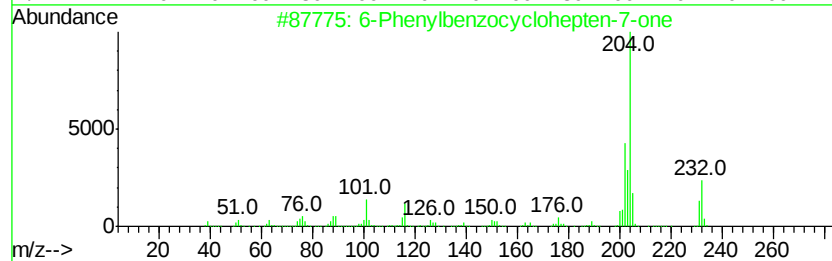
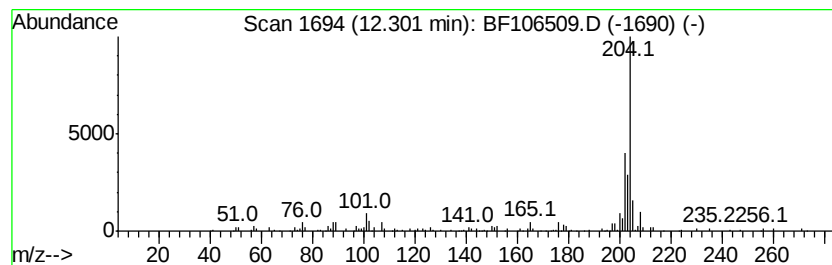
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 10 6-Phenylbenzocyclohepten-7-one Concentration Rank 11

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 12.30 | 2.10 ng | 95292 | Phenanthrene-d10 | 11.50 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 6-Phenylbenzocyclohepten-7-one      | 232 | C17H12O | 093327-56-1 | 87   |
| 2    |    | Naphthalene, 2-phenyl-              | 204 | C16H12  | 000612-94-2 | 86   |
| 3    |    | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12  | 006572-60-7 | 70   |
| 4    |    | Naphthalene, 1-phenyl-              | 204 | C16H12  | 000605-02-7 | 60   |
| 5    |    | Benzene, 1,1'-(1-buten-3-yne-1,4... | 204 | C16H12  | 013141-45-2 | 46   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF061518\  
Data File : BF106509.D  
Acq On : 15 Jun 2018 22:58  
Operator : JU/SJ  
Sample : J3486-05 2X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
DOCUMENTATION-8

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061118.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

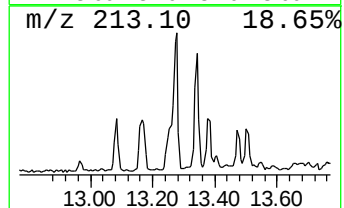
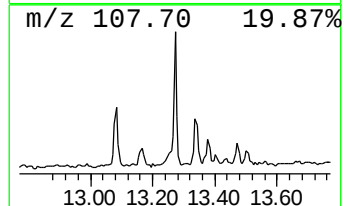
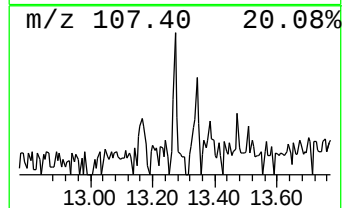
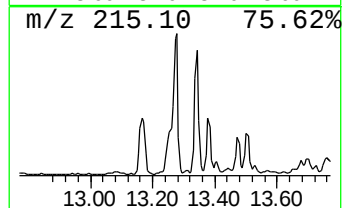
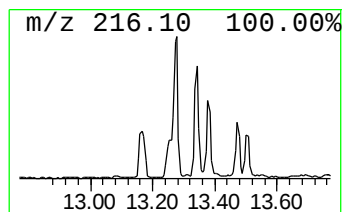
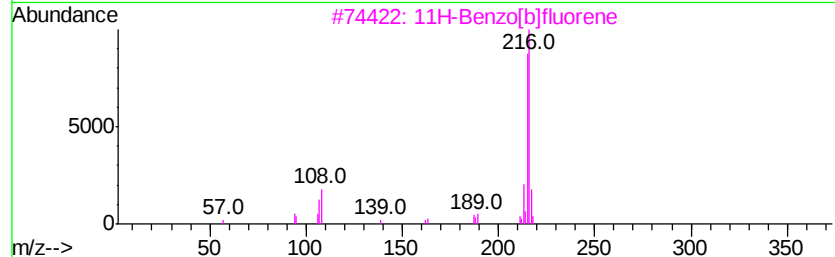
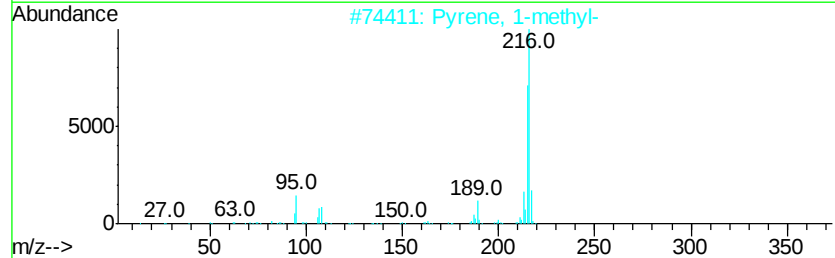
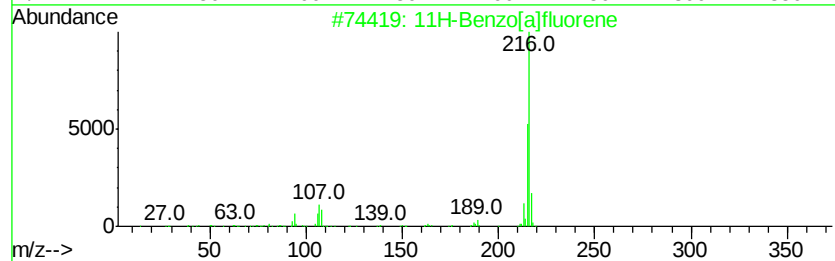
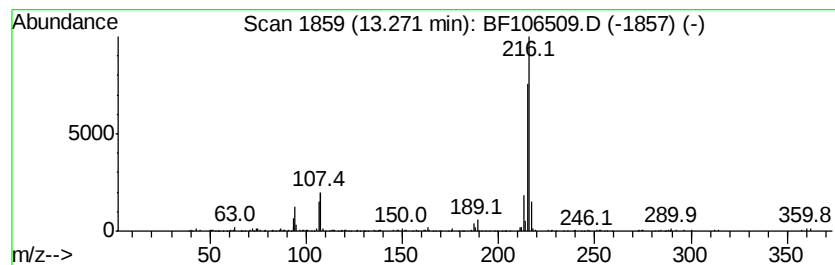
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 11 11H-Benzo[a]fluorene Concentration Rank 7

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 13.27 | 2.97 ng | 269051 | Chrysene-d12     | 14.15 |

| Hit# | of | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------|-----|---------|-------------|------|
| 1    | 5  | 11H-Benzo[a]fluorene | 216 | C17H12  | 000238-84-6 | 90   |
| 2    |    | Pyrene, 1-methyl-    | 216 | C17H12  | 002381-21-7 | 81   |
| 3    |    | 11H-Benzo[b]fluorene | 216 | C17H12  | 000243-17-4 | 81   |
| 4    |    | 7H-Benzo[c]fluorene  | 216 | C17H12  | 000205-12-9 | 72   |
| 5    |    | Pyrene, 4-methyl-    | 216 | C17H12  | 003353-12-6 | 45   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF061518\  
Data File : BF106509.D  
Acq On : 15 Jun 2018 22:58  
Operator : JU/SJ  
Sample : J3486-05 2X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
DOCUMENTATION-8

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061118.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

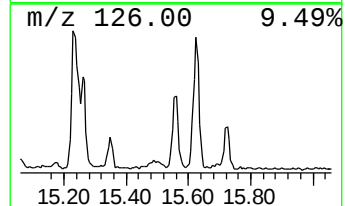
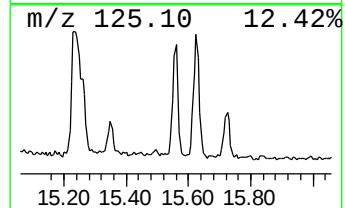
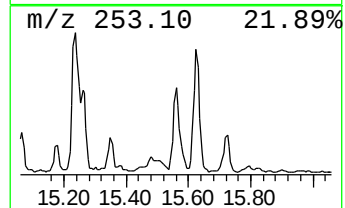
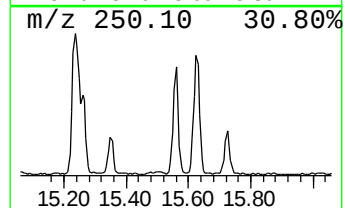
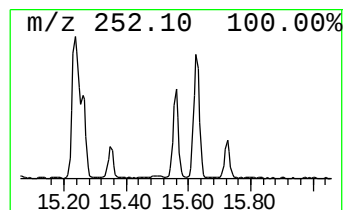
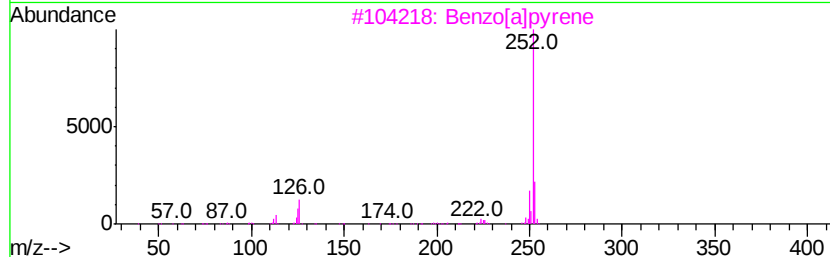
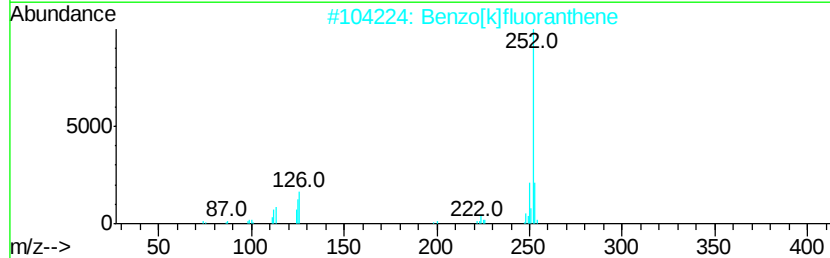
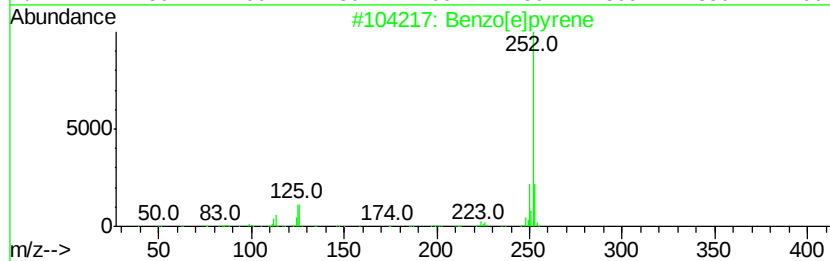
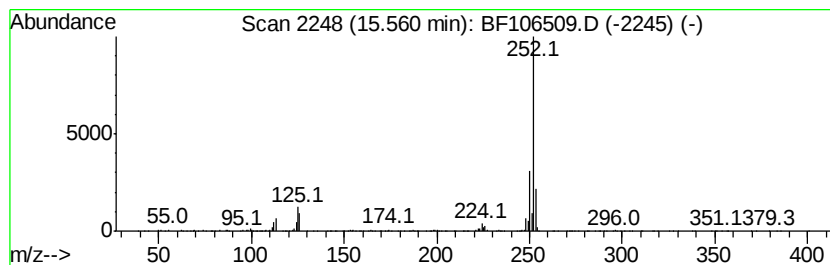
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 12 Benzo[e]pyrene Concentration Rank 3

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 15.56 | 14.10 ng | 449198 | Perylene-d12     | 15.69 |

| Hit# | of | Tentative ID             | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[e]pyrene           | 252 | C20H12  | 000192-97-2 | 98   |
| 2    |    | Benzo[k]fluoranthene     | 252 | C20H12  | 000207-08-9 | 97   |
| 3    |    | Benzo[a]pyrene           | 252 | C20H12  | 000050-32-8 | 95   |
| 4    |    | Benz[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 95   |
| 5    |    | Perylene                 | 252 | C20H12  | 000198-55-0 | 89   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF061518\  
 Data File : BF106509.D  
 Acq On : 15 Jun 2018 22:58  
 Operator : JU/SJ  
 Sample : J3486-05 2X  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 DOCUMENTATION-8

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF061118.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 |
| 2-Pentanone, 4-hy... | 5.19  | 2.8     | ng    | 101255   | 1                     | 6.97  | 730666  | 20.0 |
| unknown6.74          | 6.74  | 31.0    | ng    | 1133020  | 1                     | 6.97  | 730666  | 20.0 |
| Heptadecane          | 10.42 | 2.0     | ng    | 82511    | 3                     | 10.01 | 809154  | 20.0 |
| Tridecane, 1-iodo-   | 10.90 | 3.9     | ng    | 175192   | 4                     | 11.50 | 908130  | 20.0 |
| Phenanthrene, 2-m... | 12.03 | 3.6     | ng    | 163829   | 4                     | 11.50 | 908130  | 20.0 |
| 1H-Cyclopropa[l]p... | 12.08 | 2.3     | ng    | 102915   | 4                     | 11.50 | 908130  | 20.0 |
| 4H-Cyclopenta[def... | 12.12 | 6.3     | ng    | 285748   | 4                     | 11.50 | 908130  | 20.0 |
| 6-Phenylbenzocycl... | 12.30 | 2.1     | ng    | 95292    | 4                     | 11.50 | 908130  | 20.0 |
| 11H-Benzo[a]fluorene | 13.27 | 3.0     | ng    | 269051   | 5                     | 14.15 | 1812480 | 20.0 |
| Benzo[e]pyrene       | 15.56 | 14.1    | ng    | 449198   | 6                     | 15.69 | 637061  | 20.0 |