

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF073117\  
 Data File : BF097205.D  
 Acq On : 31 Jul 2017 14:01  
 Operator : SJ/JU  
 Sample : I4466-01 5X  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 HD-02-072617

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

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

Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.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         | 4.604       | 459           | 462         | 470          | rBV      | 38714          | 53304         | 1.10%           | 0.138%        |
| 2         | 5.069       | 538           | 541         | 562          | rBV      | 622957         | 772942        | 15.91%          | 2.008%        |
| 3         | 6.134       | 720           | 722         | 738          | rBV      | 595218         | 716217        | 14.74%          | 1.860%        |
| 4         | 6.251       | 738           | 742         | 751          | rVB      | 740939         | 771180        | 15.87%          | 2.003%        |
| 5         | 6.475       | 777           | 780         | 791          | rVB      | 789720         | 735453        | 15.14%          | 1.910%        |
| 6         | 6.634       | 803           | 807         | 816          | rBV      | 483081         | 448251        | 9.22%           | 1.164%        |
| 7         | 7.045       | 873           | 877         | 884          | rBV      | 382366         | 375174        | 7.72%           | 0.975%        |
| 8         | 7.763       | 995           | 999         | 1006         | rBV      | 955148         | 922654        | 18.99%          | 2.397%        |
| 9         | 8.210       | 1072          | 1075        | 1082         | rVB3     | 43690          | 53532         | 1.10%           | 0.139%        |
| 10        | 8.375       | 1099          | 1103        | 1108         | rBV      | 97104          | 93392         | 1.92%           | 0.243%        |
| 11        | 8.804       | 1174          | 1176        | 1178         | rVV      | 81729          | 59399         | 1.22%           | 0.154%        |
| 12        | 8.839       | 1178          | 1182        | 1185         | rVV      | 859048         | 682104        | 14.04%          | 1.772%        |
| 13        | 8.939       | 1195          | 1199        | 1203         | rBV      | 227777         | 198216        | 4.08%           | 0.515%        |
| 14        | 9.122       | 1227          | 1230        | 1233         | rVB4     | 43489          | 51670         | 1.06%           | 0.134%        |
| 15        | 9.239       | 1248          | 1250        | 1252         | rBV      | 123300         | 123713        | 2.55%           | 0.321%        |
| 16        | 9.369       | 1269          | 1272        | 1275         | rBV      | 92353          | 86474         | 1.78%           | 0.225%        |
| 17        | 9.469       | 1285          | 1289        | 1291         | rBV      | 274026         | 251914        | 5.18%           | 0.654%        |
| 18        | 9.504       | 1291          | 1295        | 1299         | rVV2     | 942804         | 889202        | 18.30%          | 2.310%        |
| 19        | 9.539       | 1299          | 1301        | 1305         | rVB      | 116965         | 98600         | 2.03%           | 0.256%        |
| 20        | 9.610       | 1311          | 1313        | 1321         | rVB7     | 24889          | 53727         | 1.11%           | 0.140%        |
| 21        | 9.698       | 1325          | 1328        | 1329         | rVV2     | 42292          | 49348         | 1.02%           | 0.128%        |
| 22        | 9.716       | 1329          | 1331        | 1335         | rVB2     | 68831          | 76424         | 1.57%           | 0.199%        |
| 23        | 9.786       | 1341          | 1343        | 1347         | rVB2     | 94676          | 77568         | 1.60%           | 0.201%        |
| 24        | 9.822       | 1347          | 1349        | 1353         | rBV2     | 58015          | 70720         | 1.46%           | 0.184%        |
| 25        | 9.939       | 1366          | 1369        | 1371         | rBV      | 99767          | 91253         | 1.88%           | 0.237%        |
| 26        | 9.963       | 1371          | 1373        | 1376         | rVB      | 377468         | 274683        | 5.65%           | 0.714%        |
| 27        | 10.051      | 1386          | 1388        | 1391         | rBV      | 99504          | 86670         | 1.78%           | 0.225%        |
| 28        | 10.180      | 1405          | 1410        | 1413         | rBV      | 135293         | 171108        | 3.52%           | 0.444%        |
| 29        | 10.292      | 1426          | 1429        | 1434         | rVB2     | 363406         | 342957        | 7.06%           | 0.891%        |
| 30        | 10.433      | 1450          | 1453        | 1459         | rBV      | 384558         | 428292        | 8.81%           | 1.113%        |
| 31        | 10.627      | 1483          | 1486        | 1489         | rBV3     | 63070          | 60237         | 1.24%           | 0.156%        |
| 32        | 10.716      | 1498          | 1501        | 1505         | rBV3     | 33797          | 57810         | 1.19%           | 0.150%        |
| 33        | 10.751      | 1505          | 1507        | 1512         | rVB3     | 43802          | 55392         | 1.14%           | 0.144%        |
| 34        | 10.880      | 1525          | 1529        | 1531         | rBV      | 300007         | 252199        | 5.19%           | 0.655%        |

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 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 HD-02-072617

Integration Parameters: rteint.p  
 Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.2  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

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

Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |         |         |
|----|--------|------|------|------|------|---------|---------|---------|---------|
| 35 | 10.910 | 1531 | 1534 | 1539 | rVB  | 103502  | 109963  | 2.26%   | 0.286%  |
| 36 | 10.980 | 1543 | 1546 | 1548 | rBV  | 656933  | 548456  | 11.29%  | 1.425%  |
| 37 | 11.004 | 1548 | 1550 | 1555 | rVB  | 740215  | 583708  | 12.01%  | 1.516%  |
| 38 | 11.057 | 1555 | 1559 | 1563 | rBV  | 289284  | 264137  | 5.44%   | 0.686%  |
| 39 | 11.222 | 1583 | 1587 | 1590 | rBV2 | 55081   | 65405   | 1.35%   | 0.170%  |
| 40 | 11.304 | 1598 | 1601 | 1604 | rBV  | 226888  | 189046  | 3.89%   | 0.491%  |
| 41 | 11.404 | 1614 | 1618 | 1622 | rVB  | 2481264 | 2222530 | 45.74%  | 5.773%  |
| 42 | 11.486 | 1622 | 1632 | 1634 | rBV2 | 119710  | 148855  | 3.06%   | 0.387%  |
| 43 | 11.510 | 1634 | 1636 | 1639 | rVB  | 114957  | 98382   | 2.02%   | 0.256%  |
| 44 | 11.545 | 1639 | 1642 | 1647 | rBV2 | 348284  | 373636  | 7.69%   | 0.971%  |
| 45 | 11.592 | 1647 | 1650 | 1653 | rBV  | 203716  | 195909  | 4.03%   | 0.509%  |
| 46 | 11.710 | 1665 | 1670 | 1675 | rVB  | 185249  | 201924  | 4.16%   | 0.525%  |
| 47 | 11.780 | 1679 | 1682 | 1684 | rVV  | 83925   | 76315   | 1.57%   | 0.198%  |
| 48 | 11.810 | 1684 | 1687 | 1691 | rVB2 | 64723   | 66808   | 1.37%   | 0.174%  |
| 49 | 12.033 | 1720 | 1725 | 1728 | rBV2 | 84092   | 112908  | 2.32%   | 0.293%  |
| 50 | 12.092 | 1729 | 1735 | 1736 | rVV  | 3539123 | 4159385 | 85.60%  | 10.805% |
| 51 | 12.116 | 1736 | 1739 | 1745 | rVV  | 4197212 | 4859243 | 100.00% | 12.623% |
| 52 | 12.192 | 1748 | 1752 | 1756 | rBV  | 2317147 | 2137077 | 43.98%  | 5.551%  |
| 53 | 12.251 | 1756 | 1762 | 1772 | rVV2 | 652444  | 1235666 | 25.43%  | 3.210%  |
| 54 | 12.327 | 1772 | 1775 | 1780 | rVB2 | 213839  | 243686  | 5.01%   | 0.633%  |
| 55 | 12.416 | 1785 | 1790 | 1796 | rBV  | 1246966 | 1457525 | 29.99%  | 3.786%  |
| 56 | 12.469 | 1796 | 1799 | 1806 | rVB2 | 176666  | 187855  | 3.87%   | 0.488%  |
| 57 | 12.539 | 1808 | 1811 | 1813 | rBV  | 96251   | 99363   | 2.04%   | 0.258%  |
| 58 | 12.569 | 1813 | 1816 | 1823 | rVB2 | 427812  | 454013  | 9.34%   | 1.179%  |
| 59 | 12.645 | 1823 | 1829 | 1831 | rBV3 | 82978   | 145913  | 3.00%   | 0.379%  |
| 60 | 12.680 | 1831 | 1835 | 1839 | rBV4 | 66256   | 112399  | 2.31%   | 0.292%  |
| 61 | 12.745 | 1843 | 1846 | 1851 | rVB  | 245902  | 215837  | 4.44%   | 0.561%  |
| 62 | 12.816 | 1855 | 1858 | 1860 | rBV2 | 162587  | 182548  | 3.76%   | 0.474%  |
| 63 | 12.916 | 1872 | 1875 | 1877 | rBV2 | 151616  | 140207  | 2.89%   | 0.364%  |
| 64 | 12.939 | 1877 | 1879 | 1882 | rVB2 | 101037  | 87430   | 1.80%   | 0.227%  |
| 65 | 12.974 | 1882 | 1885 | 1889 | rBV2 | 108247  | 120184  | 2.47%   | 0.312%  |
| 66 | 13.068 | 1899 | 1901 | 1904 | rVB3 | 124711  | 132375  | 2.72%   | 0.344%  |
| 67 | 13.163 | 1915 | 1917 | 1925 | rVB3 | 83448   | 100441  | 2.07%   | 0.261%  |
| 68 | 13.257 | 1931 | 1933 | 1935 | rBV  | 81351   | 64207   | 1.32%   | 0.167%  |
| 69 | 13.339 | 1943 | 1947 | 1949 | rBV2 | 104582  | 134823  | 2.77%   | 0.350%  |
| 70 | 13.363 | 1949 | 1951 | 1953 | rVB  | 87980   | 62057   | 1.28%   | 0.161%  |
| 71 | 13.386 | 1953 | 1955 | 1957 | rVB  | 77484   | 53687   | 1.10%   | 0.139%  |

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 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 HD-02-072617

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

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

Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |        |         |        |        |
|----|--------|------|------|------|------|--------|---------|--------|--------|
| 72 | 13.410 | 1957 | 1959 | 1961 | rBV  | 96759  | 82469   | 1.70%  | 0.214% |
| 73 | 13.463 | 1966 | 1968 | 1971 | rBV  | 84237  | 92396   | 1.90%  | 0.240% |
| 74 | 13.492 | 1971 | 1973 | 1976 | rVB2 | 76110  | 66776   | 1.37%  | 0.173% |
| 75 | 13.610 | 1986 | 1993 | 1996 | rBV2 | 905605 | 1555415 | 32.01% | 4.040% |
| 76 | 13.639 | 1996 | 1998 | 2001 | rVB  | 554072 | 441770  | 9.09%  | 1.148% |
| 77 | 13.716 | 2008 | 2011 | 2015 | rVB  | 162392 | 144270  | 2.97%  | 0.375% |
| 78 | 13.810 | 2024 | 2027 | 2029 | rBV3 | 68990  | 62240   | 1.28%  | 0.162% |
| 79 | 13.963 | 2050 | 2053 | 2055 | rBV  | 93411  | 96196   | 1.98%  | 0.250% |
| 80 | 13.998 | 2057 | 2059 | 2062 | rVV  | 108012 | 100220  | 2.06%  | 0.260% |
| 81 | 14.033 | 2062 | 2065 | 2067 | rVV2 | 54266  | 49609   | 1.02%  | 0.129% |
| 82 | 14.404 | 2126 | 2128 | 2133 | rVB  | 100217 | 94988   | 1.95%  | 0.247% |
| 83 | 14.474 | 2137 | 2140 | 2141 | rBV2 | 65528  | 76608   | 1.58%  | 0.199% |
| 84 | 14.498 | 2141 | 2144 | 2148 | rVV  | 264788 | 290956  | 5.99%  | 0.756% |
| 85 | 14.610 | 2159 | 2163 | 2169 | rBV  | 618144 | 1036331 | 21.33% | 2.692% |
| 86 | 14.698 | 2175 | 2178 | 2181 | rVB  | 199508 | 206604  | 4.25%  | 0.537% |
| 87 | 14.857 | 2202 | 2205 | 2210 | rVB  | 341734 | 388991  | 8.01%  | 1.010% |
| 88 | 14.915 | 2211 | 2215 | 2219 | rBV  | 552853 | 634589  | 13.06% | 1.648% |
| 89 | 14.962 | 2220 | 2223 | 2226 | rBV  | 426774 | 511366  | 10.52% | 1.328% |
| 90 | 16.192 | 2428 | 2432 | 2439 | rVB  | 282328 | 484335  | 9.97%  | 1.258% |
| 91 | 16.333 | 2452 | 2456 | 2459 | rBV4 | 106265 | 187118  | 3.85%  | 0.486% |
| 92 | 16.557 | 2491 | 2494 | 2498 | rVB  | 131465 | 167901  | 3.46%  | 0.436% |
| 93 | 17.445 | 2642 | 2645 | 2647 | rBV4 | 47565  | 65267   | 1.34%  | 0.170% |
| 94 | 18.274 | 2780 | 2786 | 2799 | rBV8 | 73218  | 279926  | 5.76%  | 0.727% |
| 95 | 18.403 | 2806 | 2808 | 2816 | rVB4 | 54642  | 117483  | 2.42%  | 0.305% |
| 96 | 19.227 | 2945 | 2948 | 2952 | rBV5 | 45578  | 86523   | 1.78%  | 0.225% |

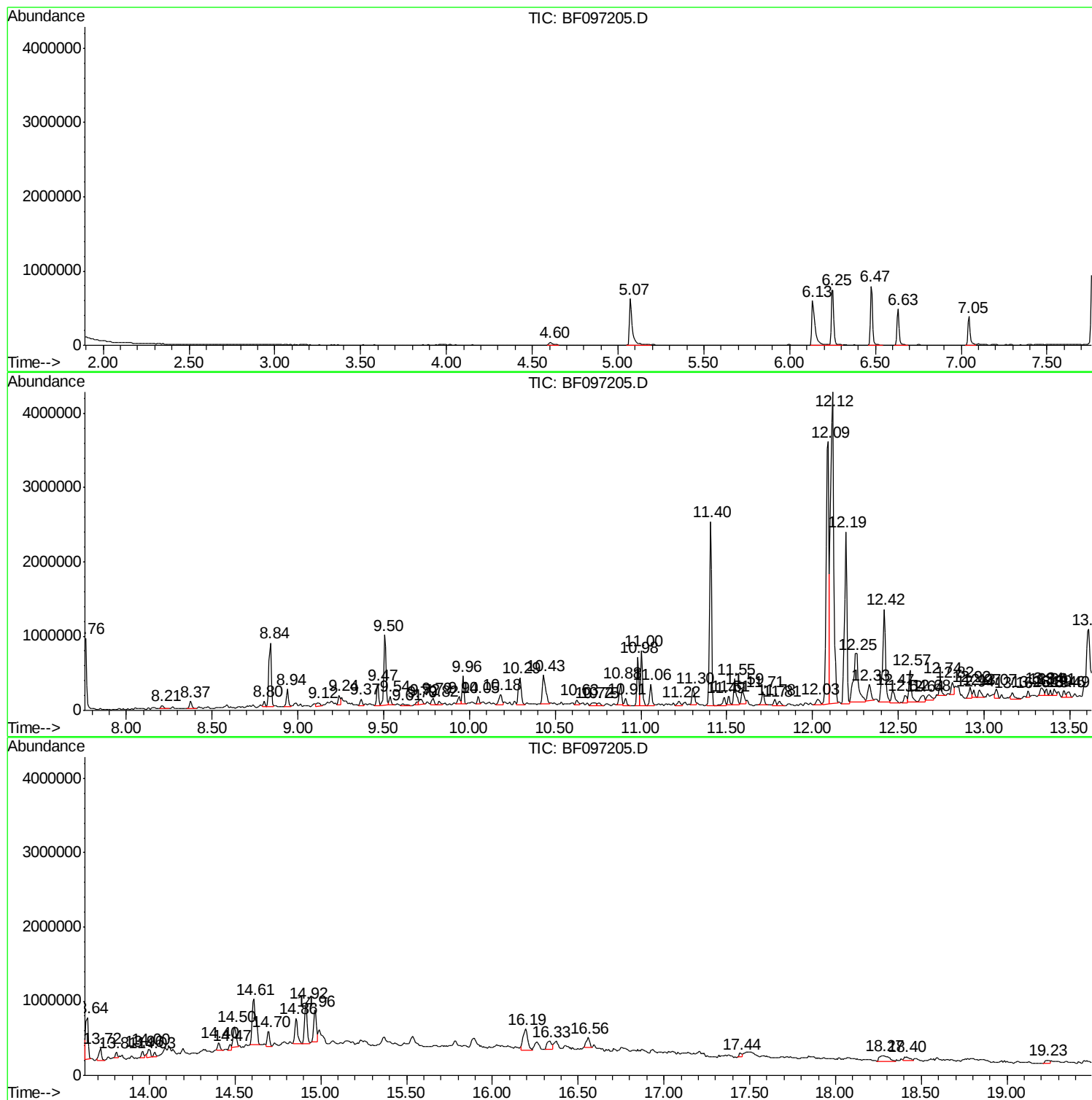
Sum of corrected areas: 38496029

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Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
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Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF073117\  
Data File : BF097205.D  
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Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

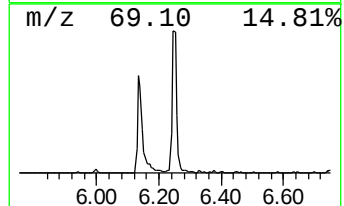
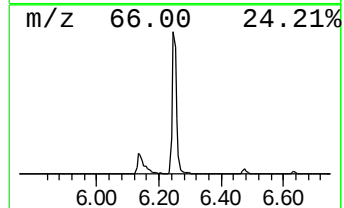
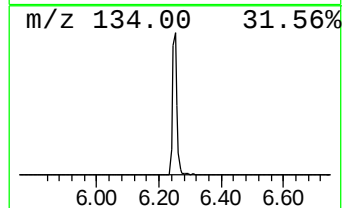
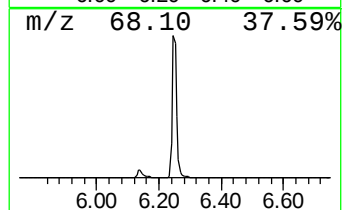
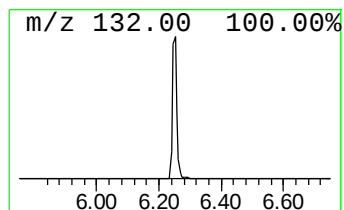
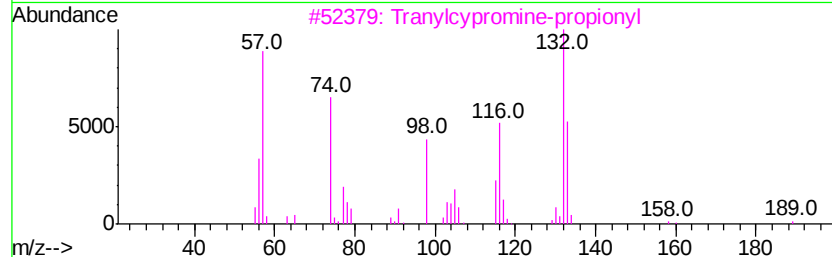
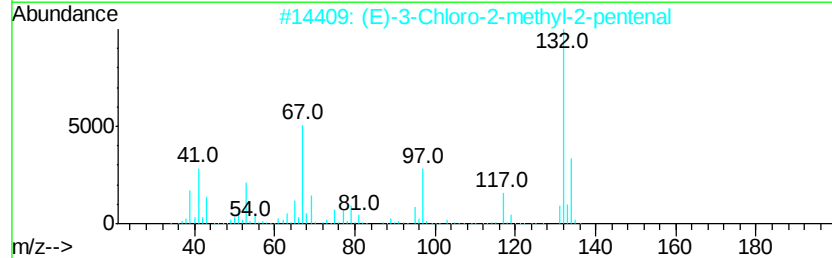
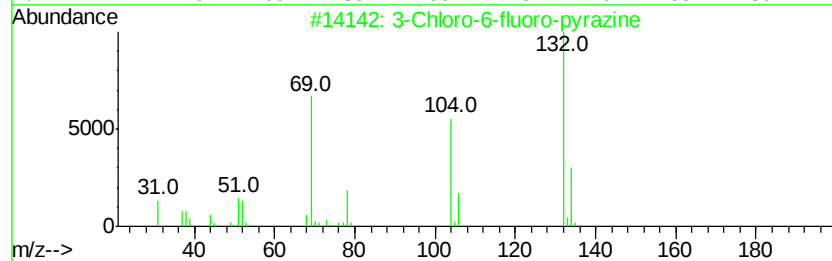
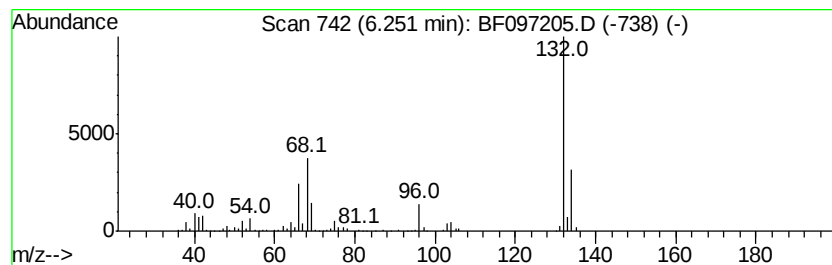
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 1 unknown6.25 Concentration Rank 5

| R.T. | EstConc  | Area   | Relative to ISTD       | R.T. |
|------|----------|--------|------------------------|------|
| 6.25 | 20.97 ng | 771180 | 1,4-Dichlorobenzene-d4 | 6.47 |

| Hit# | of | Tentative ID                     | MW  | MolForm   | CAS#         | Qual |
|------|----|----------------------------------|-----|-----------|--------------|------|
| 1    | 5  | 3-Chloro-6-fluoro-pyrazine       | 132 | C4H2ClFN2 | 1000146-10-7 | 35   |
| 2    |    | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO   | 031357-76-3  | 17   |
| 3    |    | Tranvlcypropane-propionyl        | 189 | C12H15NO  | 1000123-86-3 | 12   |
| 4    |    | Amphetaminil                     | 250 | C17H18N2  | 017590-01-1  | 12   |
| 5    |    | 5-Aminoindole                    | 132 | C8H8N2    | 005192-03-0  | 12   |



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Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

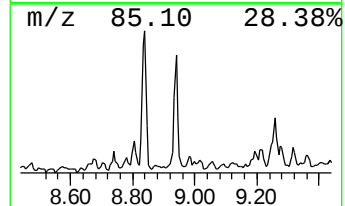
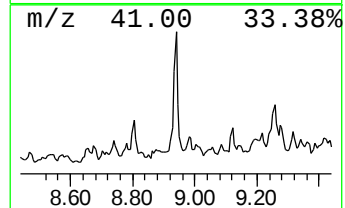
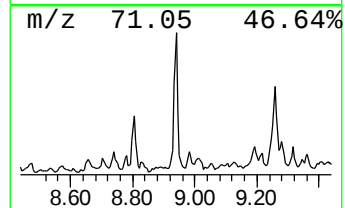
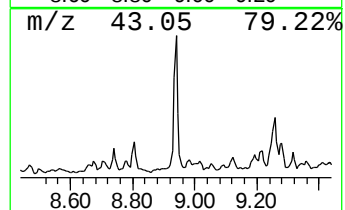
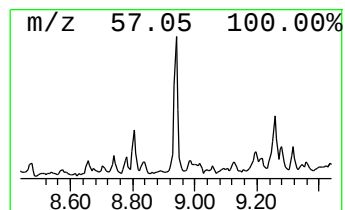
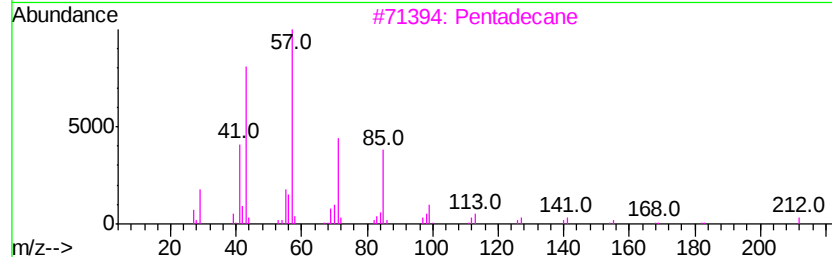
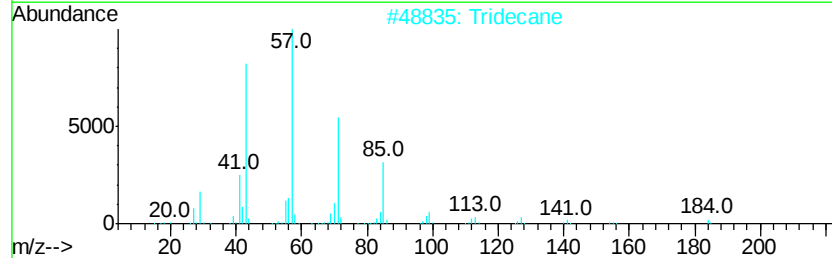
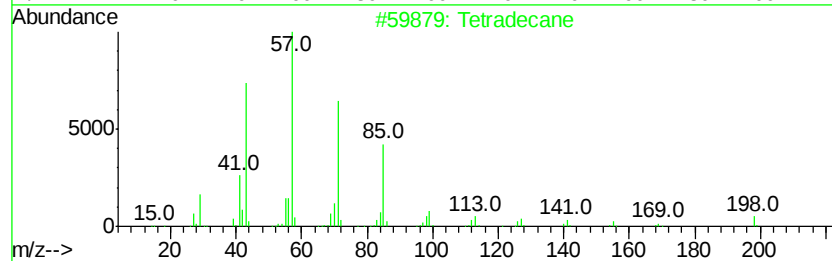
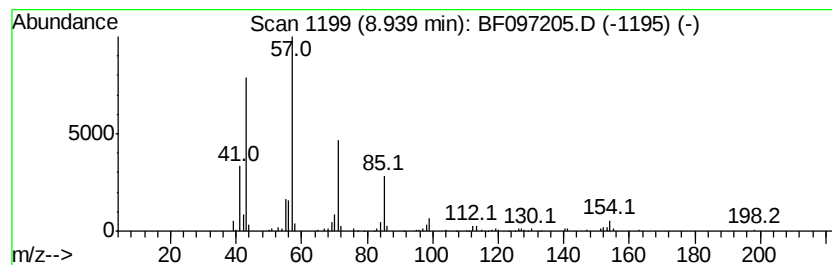
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 3 Tetradecane Concentration Rank 20

| R.T. | EstConc | Area   | Relative to ISTD | R.T. |
|------|---------|--------|------------------|------|
| 8.94 | 4.46 ng | 198216 | Acenaphthene-d10 | 9.50 |

| Hit# of | 5 | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|---------|---|----------------------|-----|---------|-------------|------|
| 1       |   | Tetradecane          | 198 | C14H30  | 000629-59-4 | 91   |
| 2       |   | Tridecane            | 184 | C13H28  | 000629-50-5 | 90   |
| 3       |   | Pentadecane          | 212 | C15H32  | 000629-62-9 | 90   |
| 4       |   | Hexadecane           | 226 | C16H34  | 000544-76-3 | 90   |
| 5       |   | Tridecane, 2-methyl- | 198 | C14H30  | 001560-96-9 | 83   |



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Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

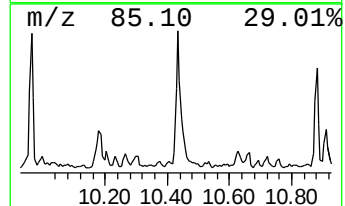
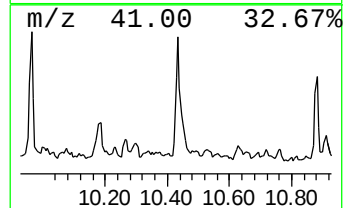
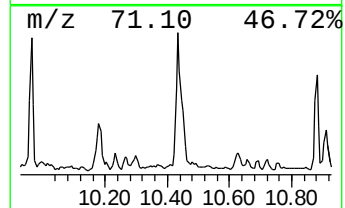
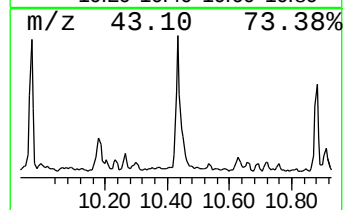
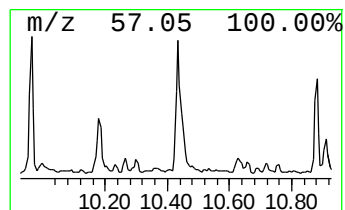
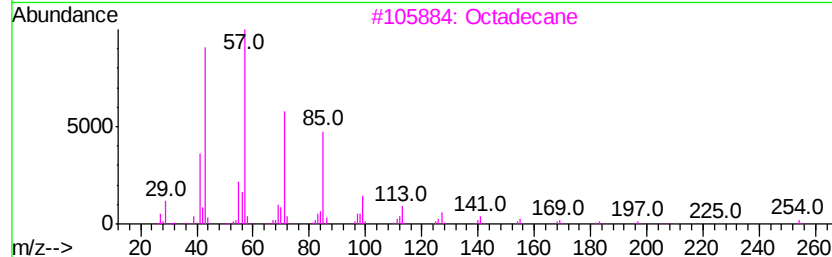
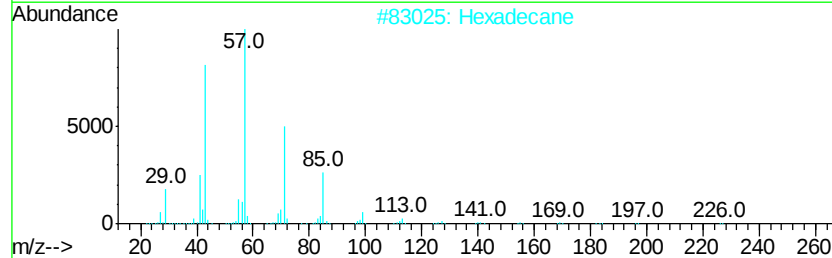
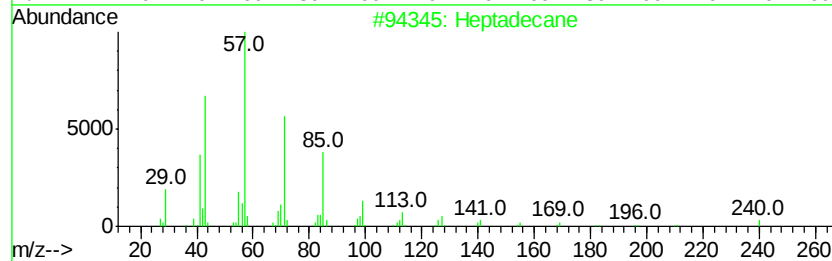
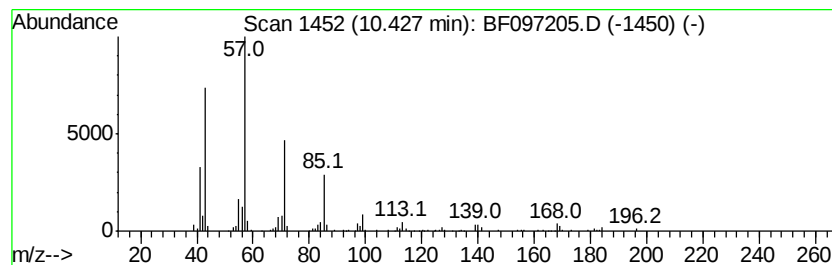
Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

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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 4 Heptadecane Concentration Rank 6

| R.T.    | EstConc  | Area                 | Relative to ISTD |         | R.T.        |      |
|---------|----------|----------------------|------------------|---------|-------------|------|
| 10.43   | 15.62 ng | 428292               | Phenanthrene-d10 |         | 10.98       |      |
| Hit# of | 5        | Tentative ID         | MW               | MolForm | CAS#        | Qual |
| 1       |          | Heptadecane          | 240              | C17H36  | 000629-78-7 | 93   |
| 2       |          | Hexadecane           | 226              | C16H34  | 000544-76-3 | 91   |
| 3       |          | Octadecane           | 254              | C18H38  | 000593-45-3 | 90   |
| 4       |          | Heneicosane          | 296              | C21H44  | 000629-94-7 | 86   |
| 5       |          | Tridecane, 7-propyl- | 226              | C16H34  | 055045-09-5 | 80   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

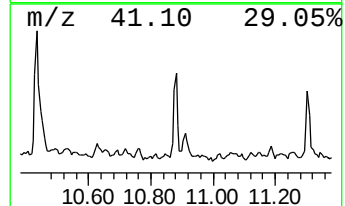
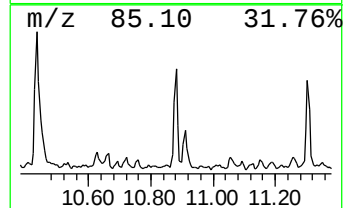
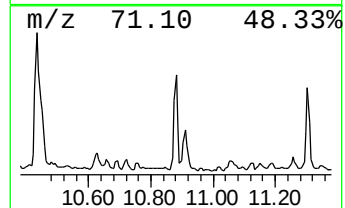
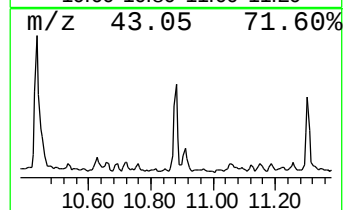
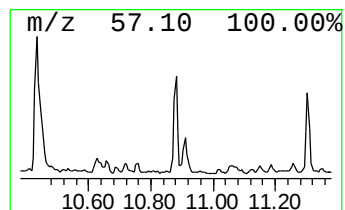
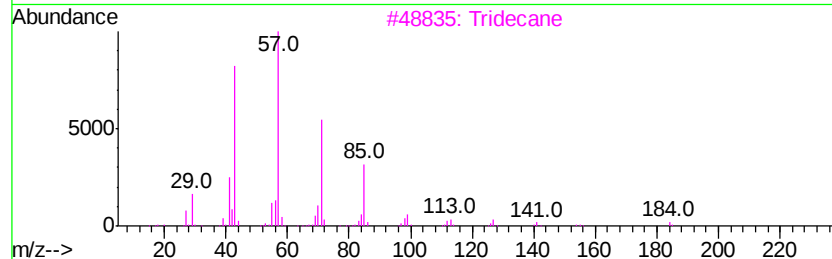
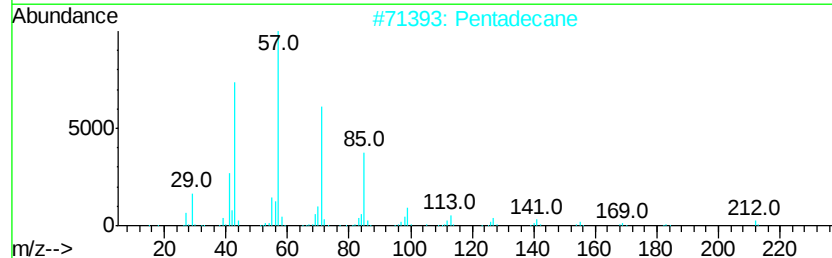
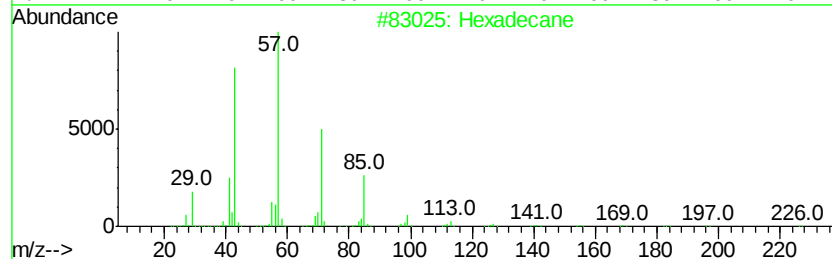
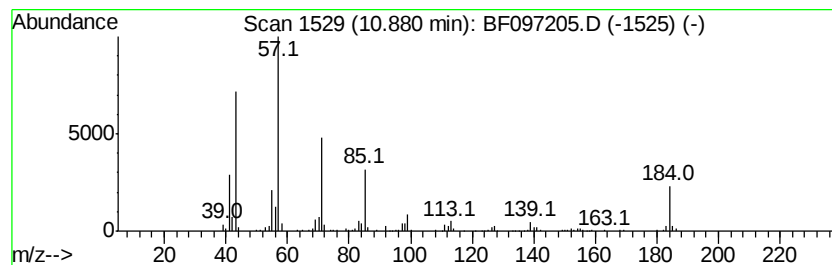
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 5 Hexadecane Concentration Rank 12

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 10.88 | 9.20 ng | 252199 | Phenanthrene-d10 | 10.98 |

| Hit# of | 5                   | Tentative ID | MW  | MolForm | CAS#        | Qual |
|---------|---------------------|--------------|-----|---------|-------------|------|
| 1       | Hexadecane          |              | 226 | C16H34  | 000544-76-3 | 68   |
| 2       | Pentadecane         |              | 212 | C15H32  | 000629-62-9 | 64   |
| 3       | Tridecane           |              | 184 | C13H28  | 000629-50-5 | 64   |
| 4       | Dodecane, 3-methyl- |              | 184 | C13H28  | 017312-57-1 | 58   |
| 5       | Heptacosane         |              | 380 | C27H56  | 000593-49-7 | 58   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

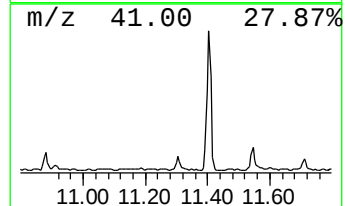
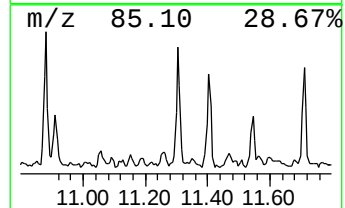
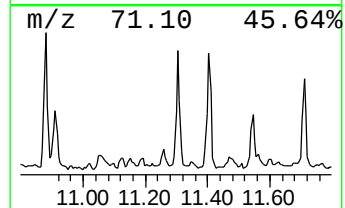
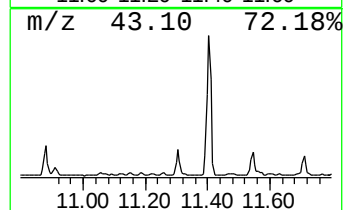
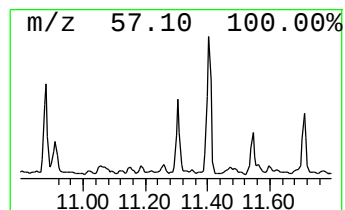
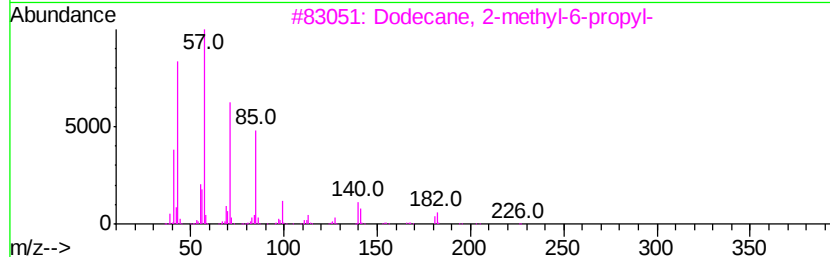
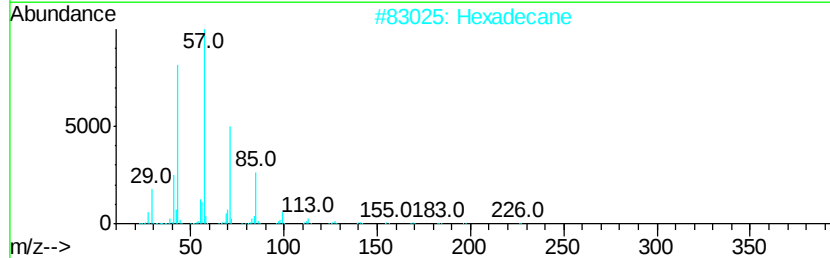
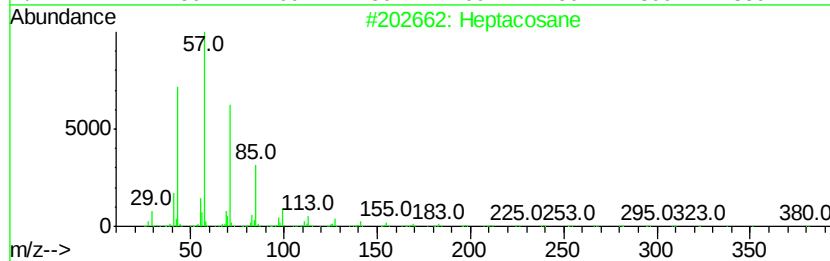
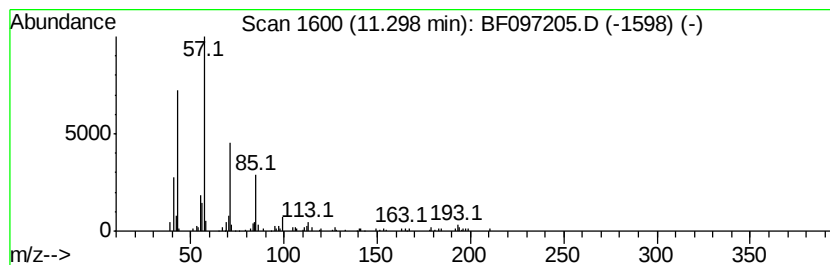
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 6 Heptacosane Concentration Rank 17

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 11.30 | 6.89 ng | 189046 | Phenanthrene-d10 | 10.98 |

| Hit# of | 5                            | Tentative ID | MW  | MolForm | CAS#        | Qual |
|---------|------------------------------|--------------|-----|---------|-------------|------|
| 1       | Heptacosane                  |              | 380 | C27H56  | 000593-49-7 | 87   |
| 2       | Hexadecane                   |              | 226 | C16H34  | 000544-76-3 | 86   |
| 3       | Dodecane, 2-methyl-6-propyl- |              | 226 | C16H34  | 055045-08-4 | 80   |
| 4       | Tridecane, 1-iodo-           |              | 310 | C13H27I | 035599-77-0 | 80   |
| 5       | Pentadecane                  |              | 212 | C15H32  | 000629-62-9 | 80   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

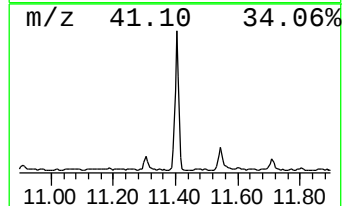
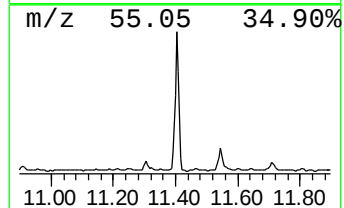
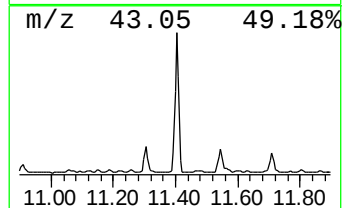
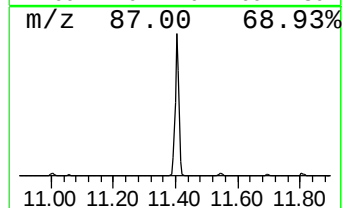
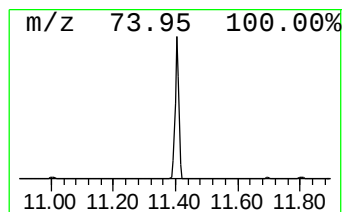
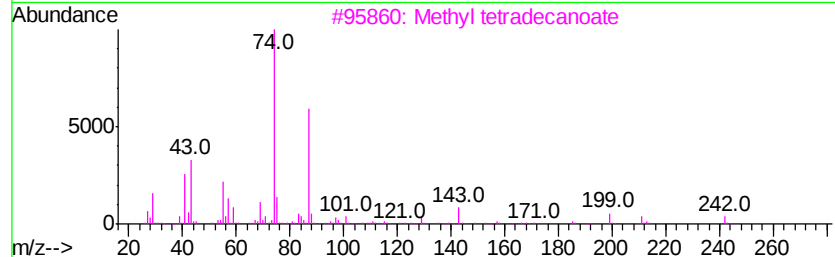
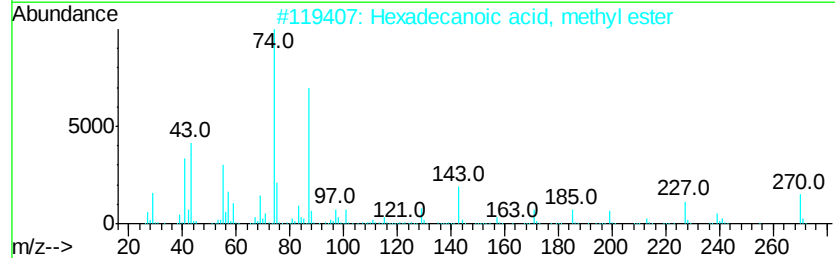
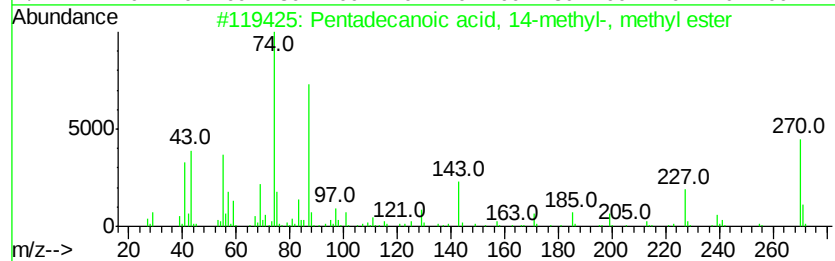
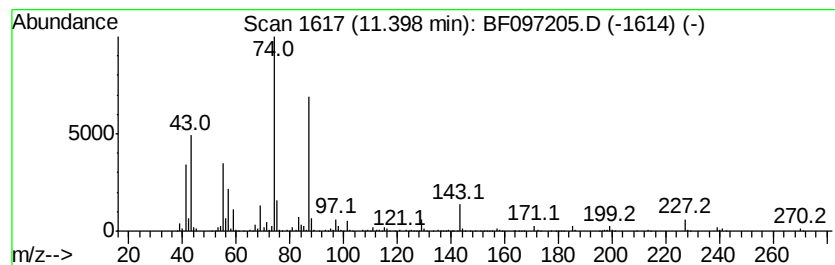
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 7 Pentadecanoic acid, 14-meth... Concentration Rank 3

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 11.40 | 81.05 ng | 2222530 | Phenanthrene-d10 | 10.98 |

| Hit# of | 5 | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|---------|---|-------------------------------------|-----|----------|-------------|------|
| 1       |   | Pentadecanoic acid, 14-methyl-, ... | 270 | C17H34O2 | 005129-60-2 | 94   |
| 2       |   | Hexadecanoic acid, methyl ester     | 270 | C17H34O2 | 000112-39-0 | 91   |
| 3       |   | Methyl tetradecanoate               | 242 | C15H30O2 | 000124-10-7 | 91   |
| 4       |   | Dodecanoic acid, methyl ester       | 214 | C13H26O2 | 000111-82-0 | 90   |
| 5       |   | Tridecanoic acid, methyl ester      | 228 | C14H28O2 | 001731-88-0 | 90   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

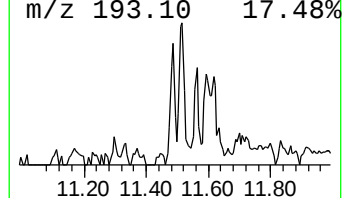
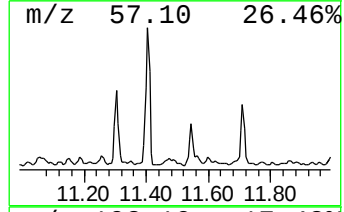
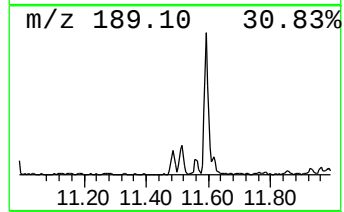
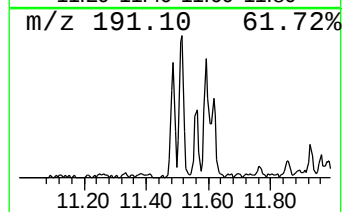
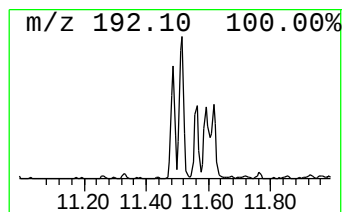
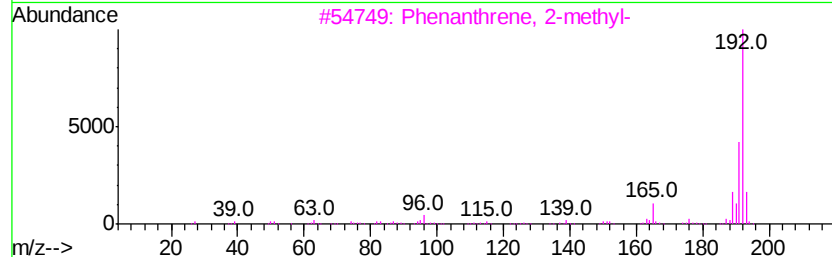
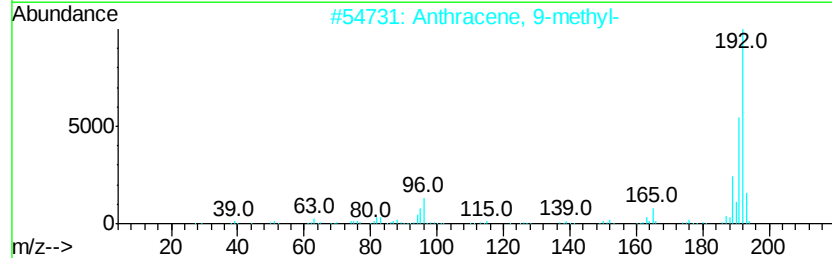
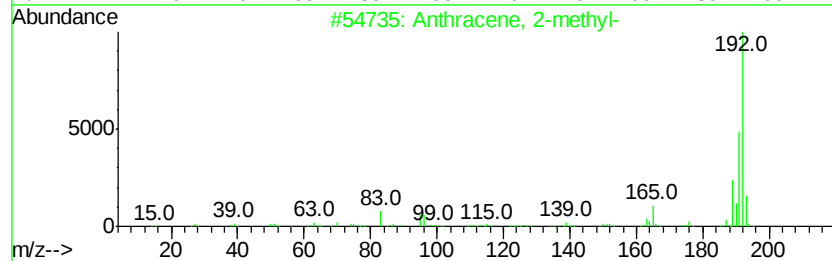
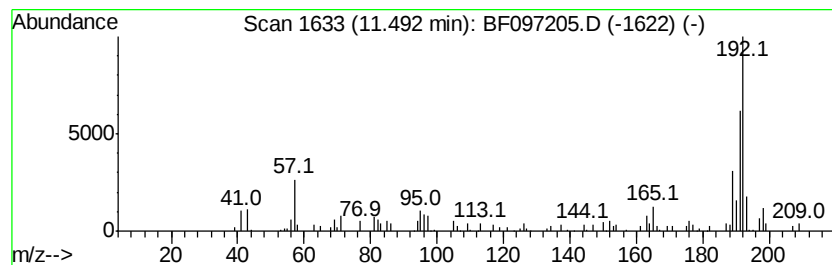
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 8 Anthracene, 2-methyl- Concentration Rank 18

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 11.49 | 5.43 ng | 148855 | Phenanthrene-d10 | 10.98 |

| Hit# of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|---------|---|-------------------------|-----|---------|-------------|------|
| 1       |   | Anthracene, 2-methyl-   | 192 | C15H12  | 000613-12-7 | 95   |
| 2       |   | Anthracene, 9-methyl-   | 192 | C15H12  | 000779-02-2 | 95   |
| 3       |   | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 93   |
| 4       |   | Phenanthrene, 3-methyl- | 192 | C15H12  | 000832-71-3 | 91   |
| 5       |   | Phenanthrene, 1-methyl- | 192 | C15H12  | 000832-69-9 | 91   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

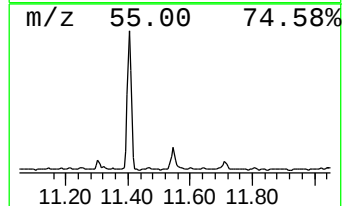
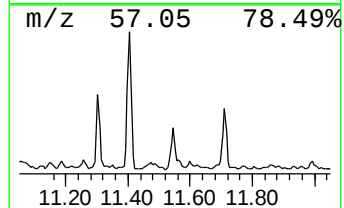
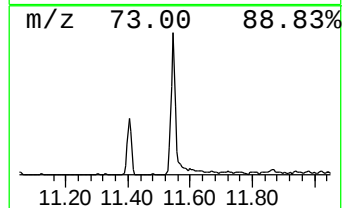
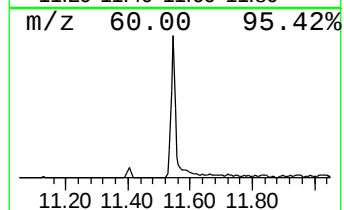
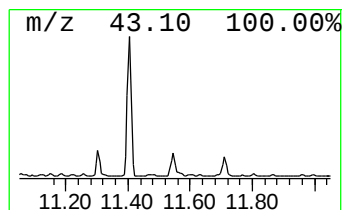
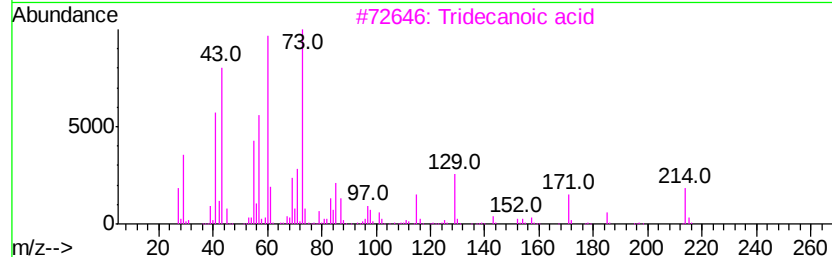
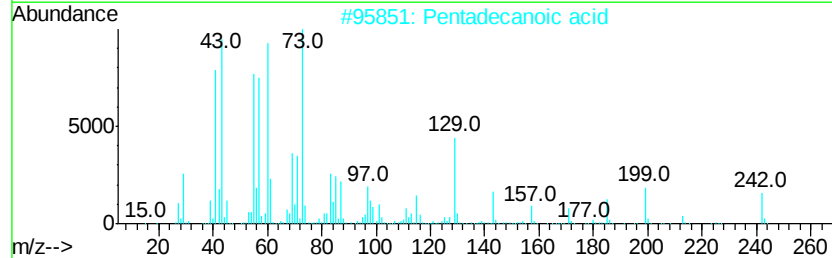
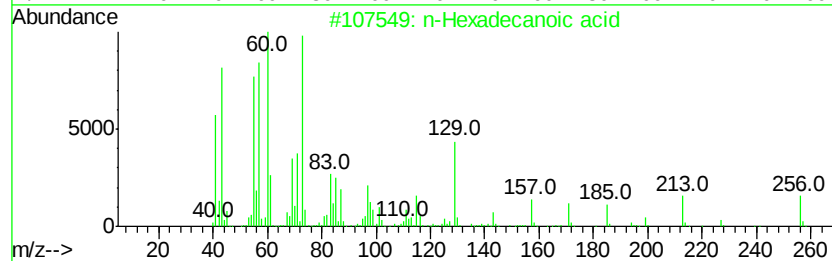
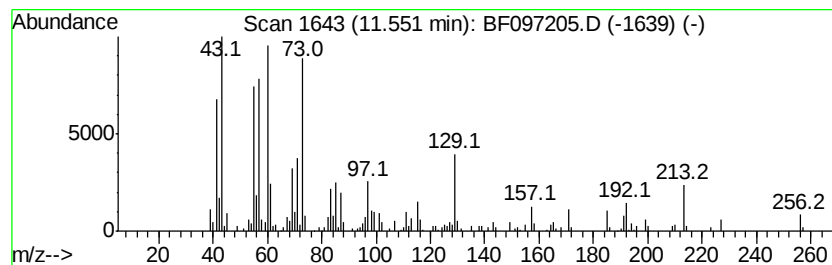
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 n-Hexadecanoic acid Concentration Rank 8

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 11.55 | 13.63 ng | 373636 | Phenanthrene-d10 | 10.98 |

| Hit# of 5 | Tentative ID        | MW  | MolForm  | CAS#        | Qual |
|-----------|---------------------|-----|----------|-------------|------|
| 1         | n-Hexadecanoic acid | 256 | C16H32O2 | 000057-10-3 | 91   |
| 2         | Pentadecanoic acid  | 242 | C15H30O2 | 001002-84-2 | 91   |
| 3         | Tridecanoic acid    | 214 | C13H26O2 | 000638-53-9 | 87   |
| 4         | Tetradecanoic acid  | 228 | C14H28O2 | 000544-63-8 | 80   |
| 5         | Undecanoic acid     | 186 | C11H22O2 | 000112-37-8 | 72   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

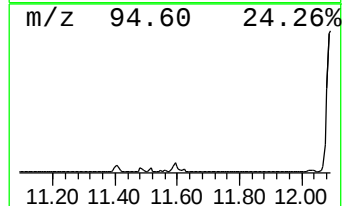
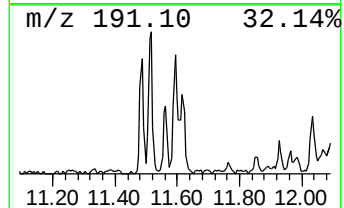
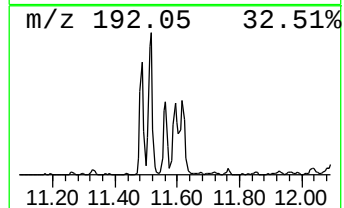
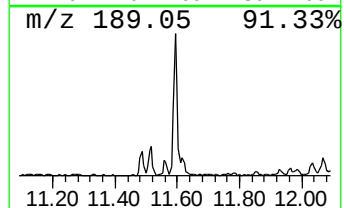
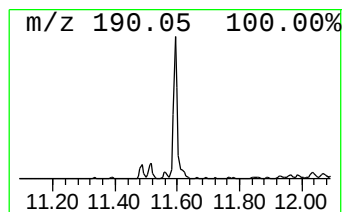
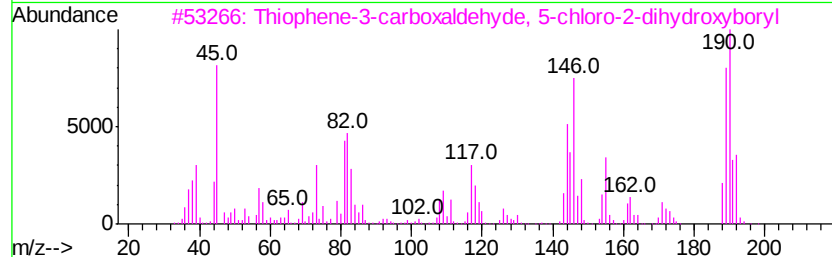
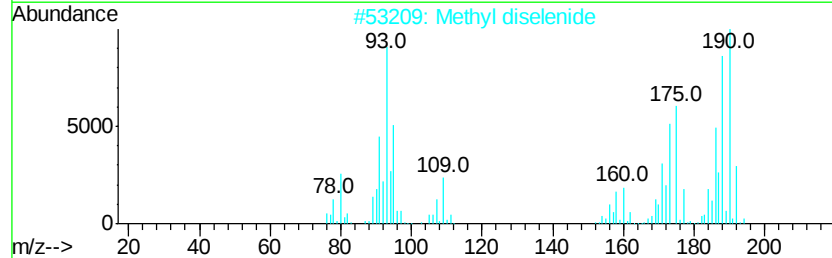
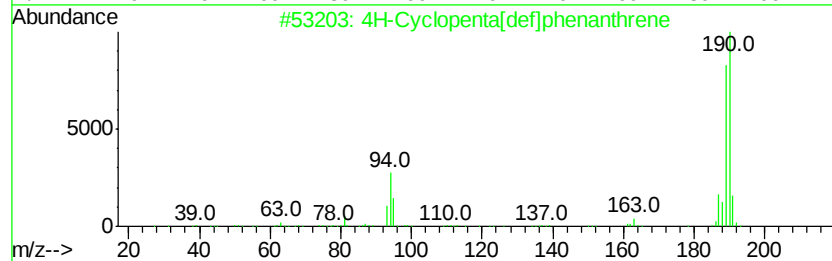
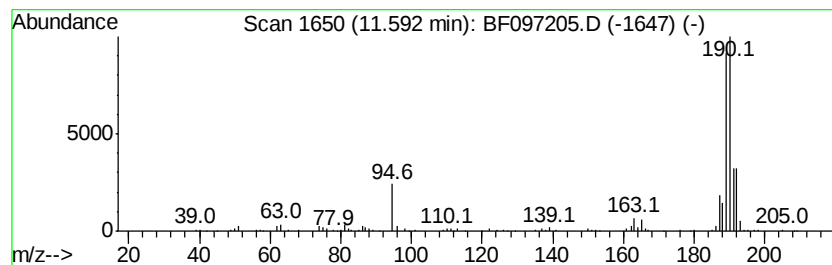
Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 10 4H-Cyclopenta[def]phenanthrene Concentration Rank 16

| R.T.      | EstConc                                               | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------------------------|--------|------------------|-------------|------|
| 11.59     | 7.14 ng                                               | 195909 | Phenanthrene-d10 | 10.98       |      |
| Hit# of 5 | Tentative ID                                          | MW     | MolForm          | CAS#        | Qual |
| 1         | 4H-Cyclopenta[def]phenanthrene                        | 190    | C15H10           | 000203-64-5 | 76   |
| 2         | Methyl diselenide                                     | 190    | C2H6Se2          | 007101-31-7 | 55   |
| 3         | Thiophene-3-carboxaldehyde, 5-chloro-2-dihydroxyboryl | 190    | C5H4BClO3S       | 036155-87-0 | 52   |
| 4         | 6H-Cyclobuta[flk]phenanthrene                         | 190    | C15H10           | 083469-43-6 | 50   |
| 5         | 2,2'-Bis(4,5-dimethylimidazole)                       | 190    | C10H14N4         | 069286-06-2 | 45   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

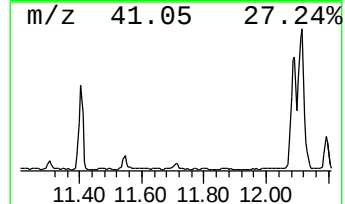
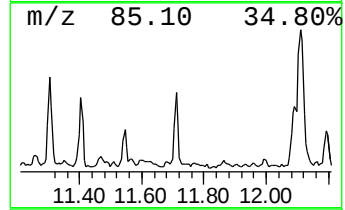
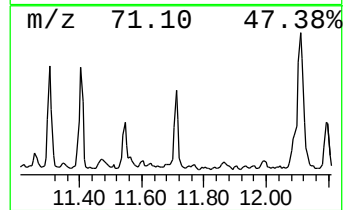
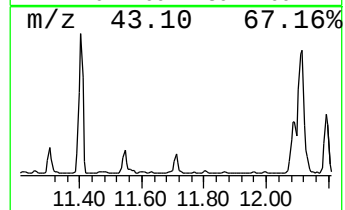
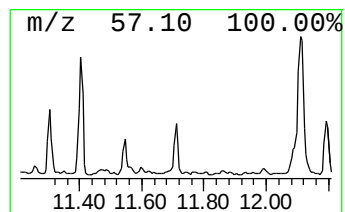
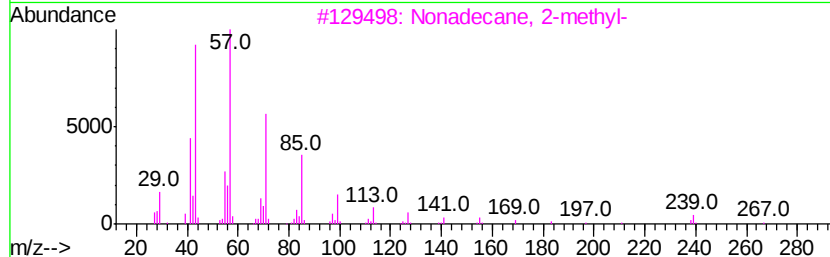
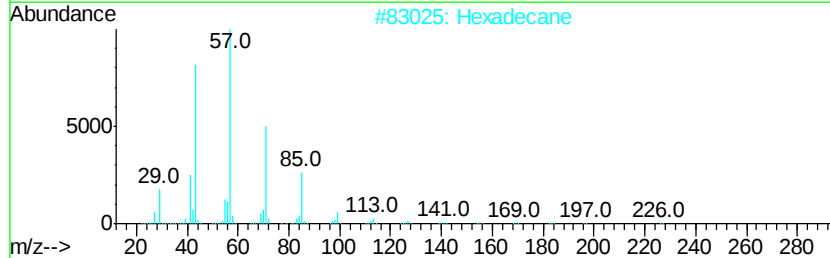
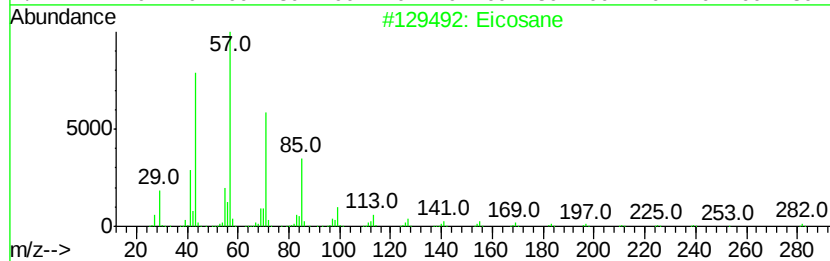
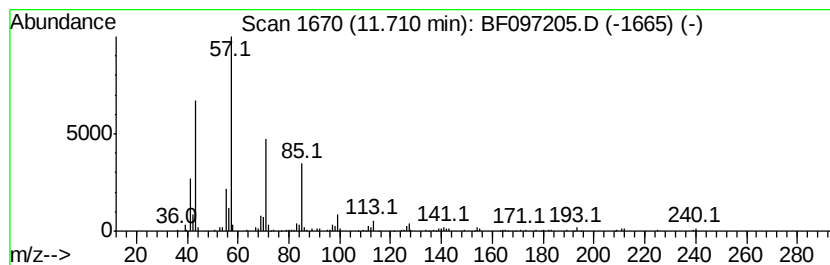
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 11 Eicosane Concentration Rank 14

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 11.71 | 7.36 ng | 201924 | Phenanthrene-d10 | 10.98 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Eicosane                            | 282 | C20H42    | 000112-95-8  | 90   |
| 2    |    | Hexadecane                          | 226 | C16H34    | 000544-76-3  | 86   |
| 3    |    | Nonadecane, 2-methyl-               | 282 | C20H42    | 001560-86-7  | 80   |
| 4    |    | Tetracosane                         | 338 | C24H50    | 000646-31-1  | 80   |
| 5    |    | Sulfurous acid, 2-ethylhexyl hex... | 278 | C14H30O3S | 1000309-20-2 | 72   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

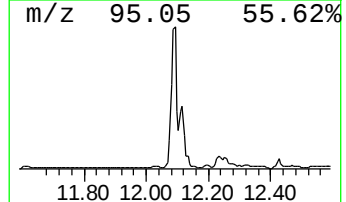
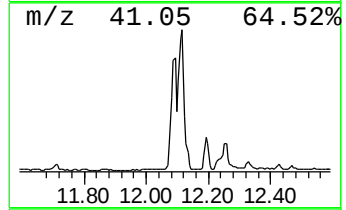
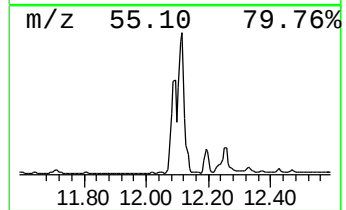
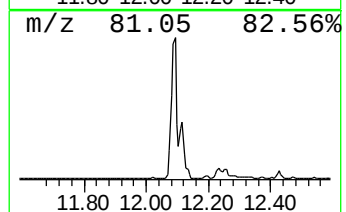
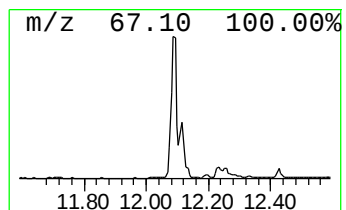
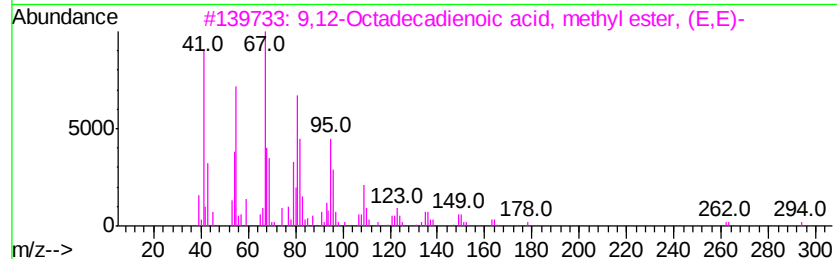
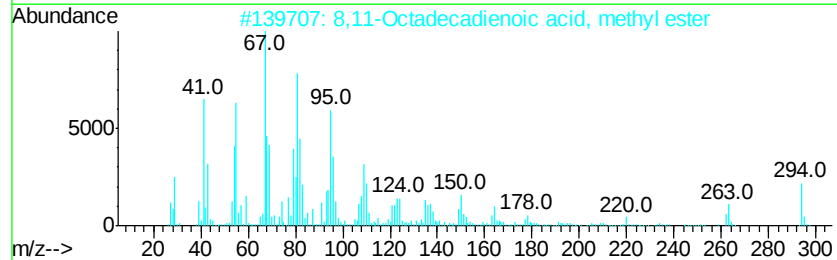
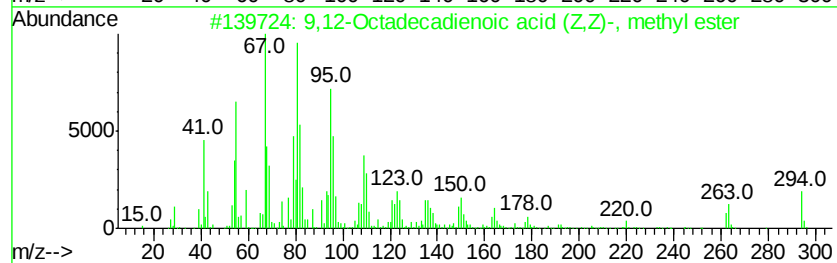
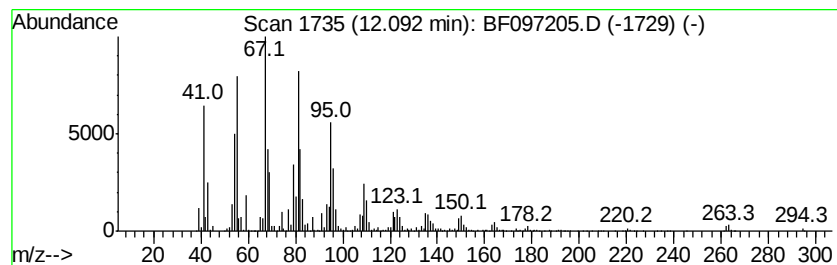
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 12 9,12-Octadecadienoic acid (... Concentration Rank 2

| R.T.  | EstConc   | Area    | Relative to ISTD | R.T.  |
|-------|-----------|---------|------------------|-------|
| 12.09 | 151.68 ng | 4159390 | Phenanthrene-d10 | 10.98 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|----------|-------------|------|
| 1    |    |   | 9,12-Octadecadienoic acid (Z,Z)-... | 294 | C19H34O2 | 000112-63-0 | 99   |
| 2    |    |   | 8,11-Octadecadienoic acid, methy... | 294 | C19H34O2 | 056599-58-7 | 99   |
| 3    |    |   | 9,12-Octadecadienoic acid, methv... | 294 | C19H34O2 | 002566-97-4 | 99   |
| 4    |    |   | 10,13-Octadecadienoic acid, meth... | 294 | C19H34O2 | 056554-62-2 | 97   |
| 5    |    |   | 11,14-Octadecadienoic acid, meth... | 294 | C19H34O2 | 056554-61-1 | 96   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

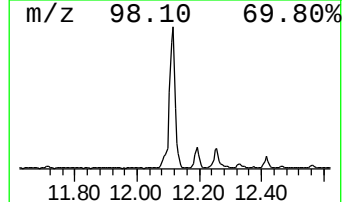
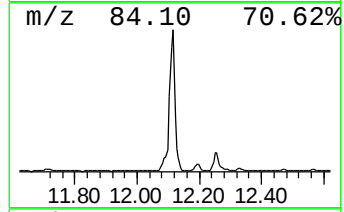
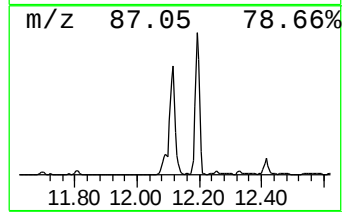
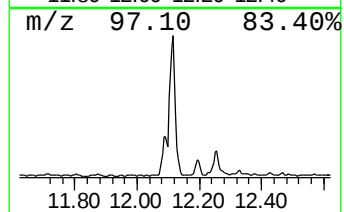
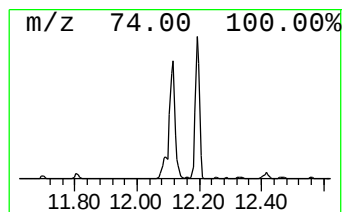
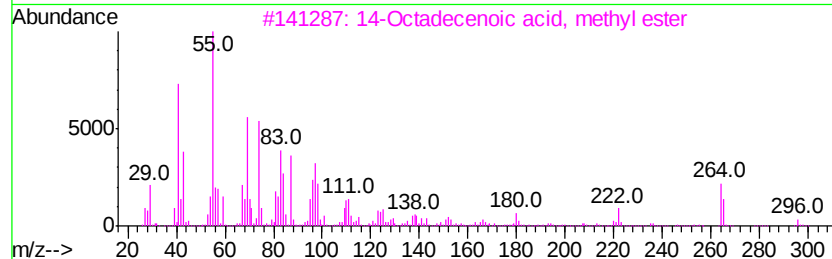
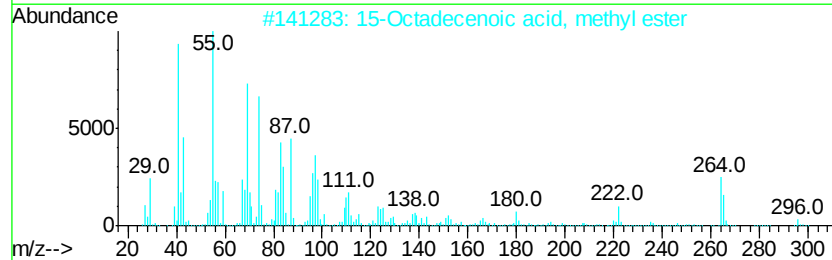
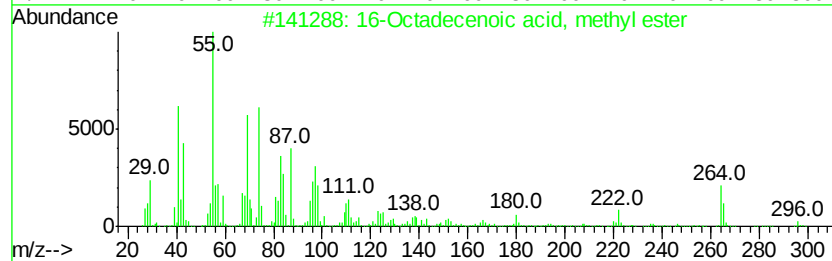
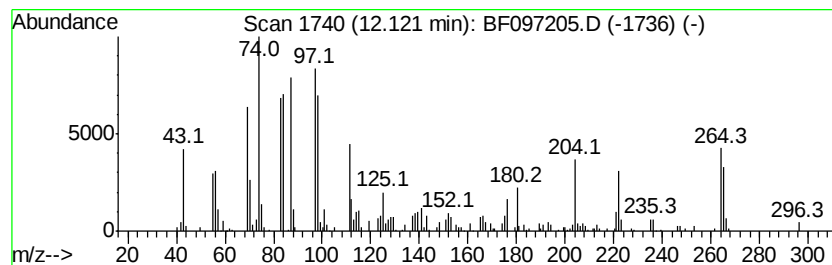
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 13 16-Octadecenoic acid, methyl ester Concentration Rank 1

| R.T.  | EstConc   | Area    | Relative to ISTD | R.T.  |
|-------|-----------|---------|------------------|-------|
| 12.12 | 177.20 ng | 4859240 | Phenanthrene-d10 | 10.98 |

| Hit# | of | Tentative ID                       | MW  | MolForm  | CAS#        | Qual |
|------|----|------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 16-Octadecenoic acid, methyl ester | 296 | C19H36O2 | 056554-49-5 | 96   |
| 2    |    | 15-Octadecenoic acid, methyl ester | 296 | C19H36O2 | 004764-72-1 | 95   |
| 3    |    | 14-Octadecenoic acid, methyl ester | 296 | C19H36O2 | 056554-48-4 | 95   |
| 4    |    | 11-Octadecenoic acid, methyl ester | 296 | C19H36O2 | 052380-33-3 | 93   |
| 5    |    | 12-Octadecenoic acid, methyl ester | 296 | C19H36O2 | 056554-46-2 | 91   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

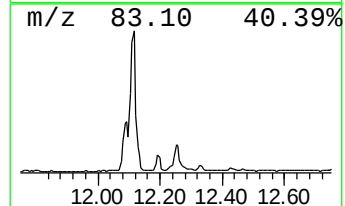
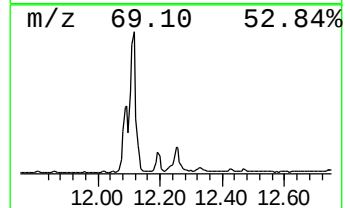
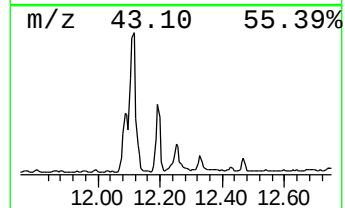
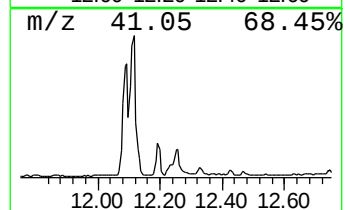
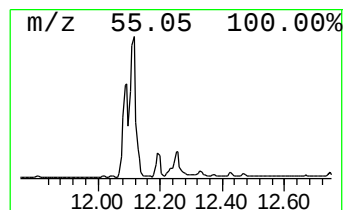
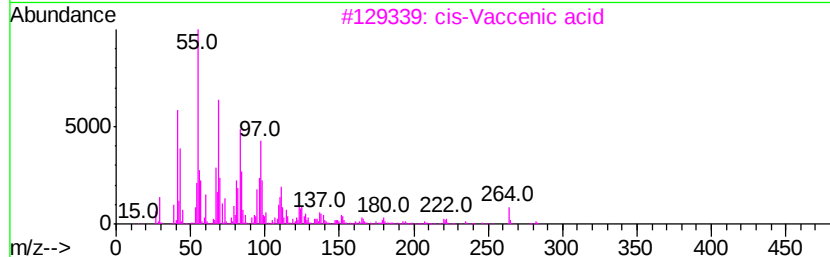
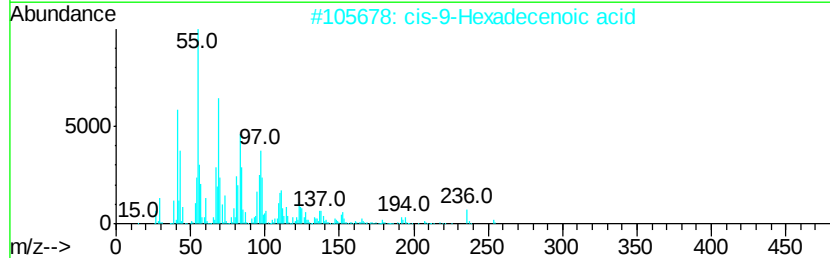
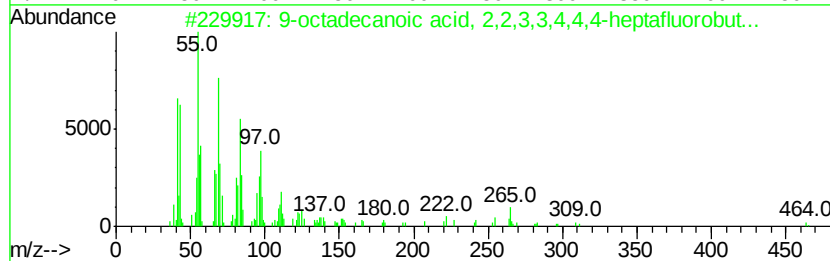
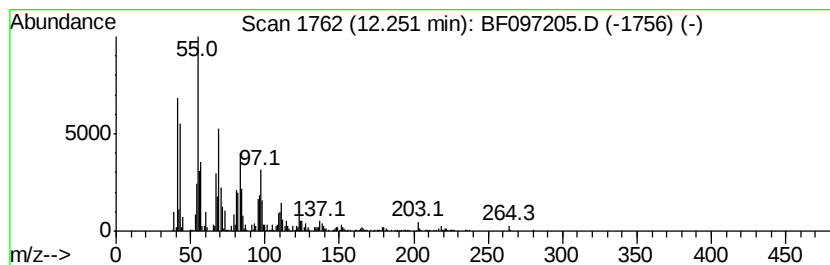
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 14 9-octadecanoic acid, 2,2,3,... Concentration Rank 4

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.25 | 45.06 ng | 1235670 | Phenanthrene-d10 | 10.98 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|-------------------------------------|-----|------------|--------------|------|
| 1    | 5  | 9-octadecanoic acid, 2,2,3,3,4,4... | 464 | C22H35F7O2 | 1000376-61-4 | 91   |
| 2    |    | cis-9-Hexadecenoic acid             | 254 | C16H30O2   | 1000333-19-5 | 91   |
| 3    |    | cis-Vaccenic acid                   | 282 | C18H34O2   | 000506-17-2  | 91   |
| 4    |    | 9-Octadecenoic acid, (E)-           | 282 | C18H34O2   | 000112-79-8  | 91   |
| 5    |    | trans-13-Octadecenoic acid          | 282 | C18H34O2   | 000693-71-0  | 87   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

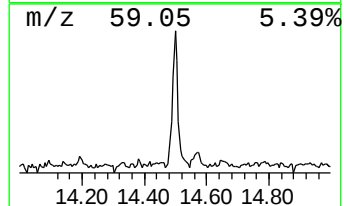
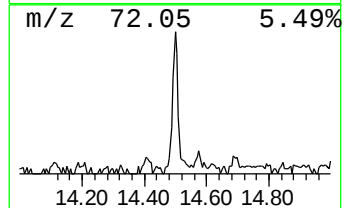
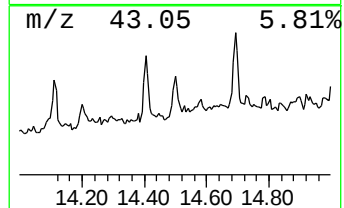
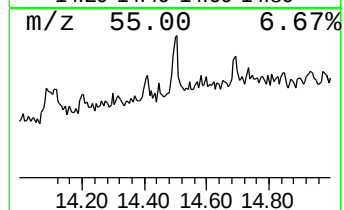
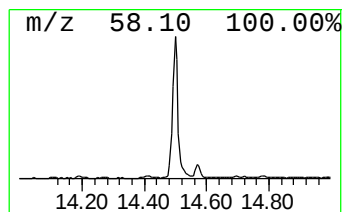
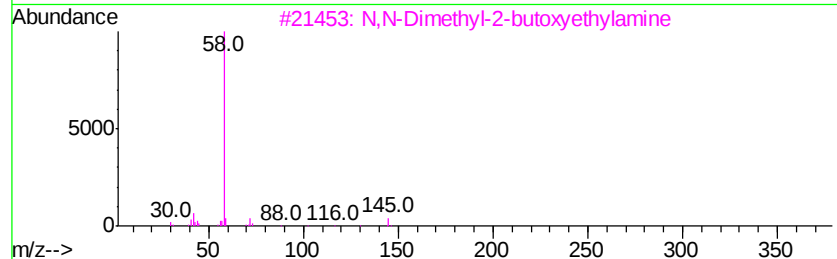
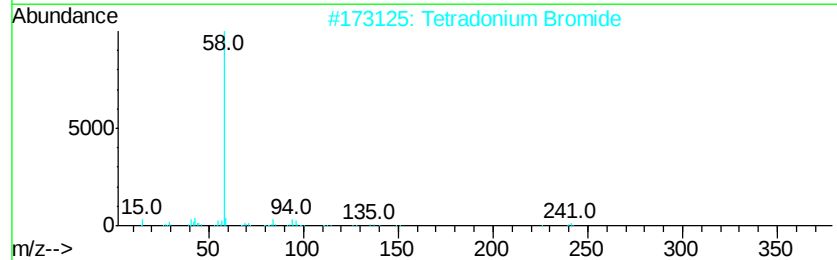
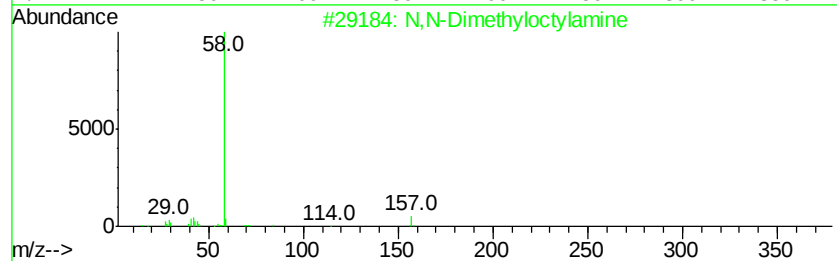
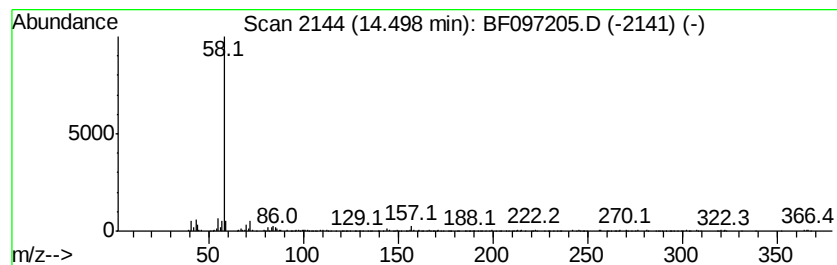
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 15 N,N-Dimethyloctylamine Concentration Rank 10

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 14.50 | 11.38 ng | 290956 | Perylene-d12     | 14.96 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#        | Qual |
|------|----|-------------------------------------|-----|------------|-------------|------|
| 1    | 5  | N,N-Dimethyloctylamine              | 157 | C10H23N    | 007378-99-6 | 72   |
| 2    |    | Tetradonium Bromide                 | 335 | C17H38BrN  | 001119-97-7 | 64   |
| 3    |    | N,N-Dimethyl-2-butoxyethylamine     | 145 | C8H19NO    | 071126-58-4 | 64   |
| 4    |    | 1,4-Bis[3-(dimethylamino)propion... | 276 | C16H24N2O2 | 112169-33-2 | 64   |
| 5    |    | 1-Dodecanamine, N,N-dimethyl-       | 213 | C14H31N    | 000112-18-5 | 64   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

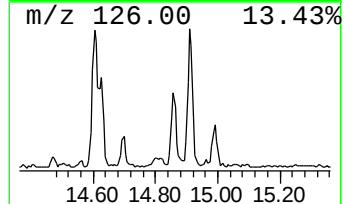
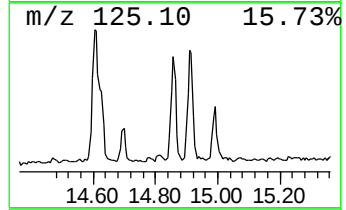
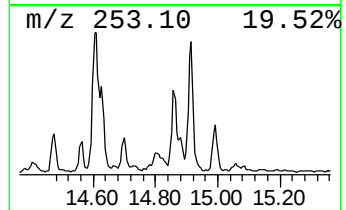
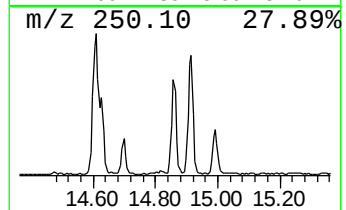
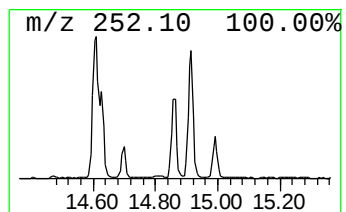
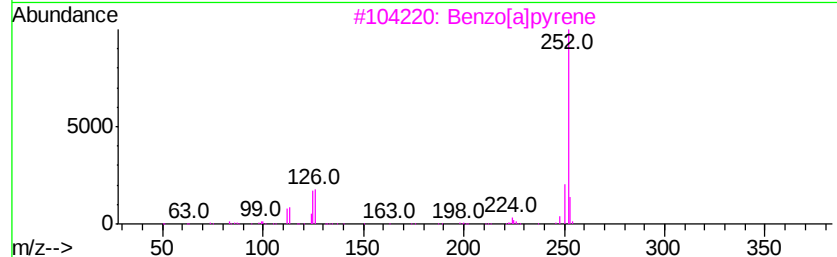
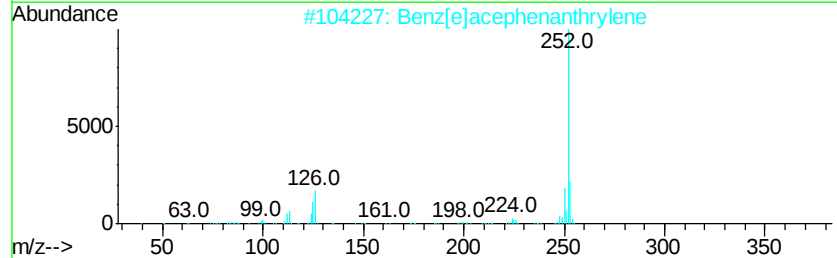
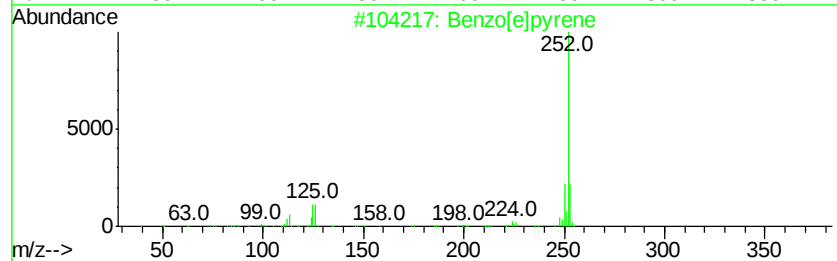
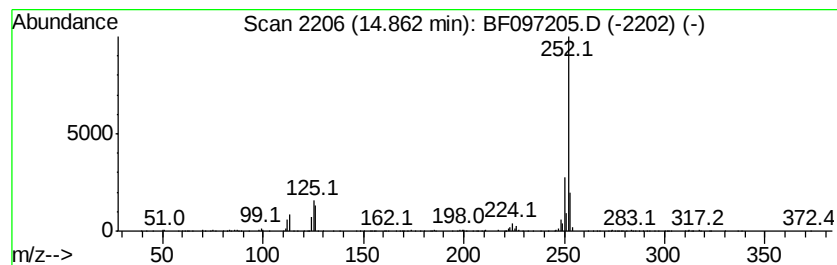
Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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Peak Number 17 Benzo[e]pyrene Concentration Rank 7

| R.T.    | EstConc  | Area                     | Relative to ISTD | R.T.           |
|---------|----------|--------------------------|------------------|----------------|
| 14.86   | 15.21 ng | 388991                   | Perylene-d12     | 14.96          |
| Hit# of | 5        | Tentative ID             | MW MolForm       | CAS# Qual      |
| 1       |          | Benzo[e]pyrene           | 252 C20H12       | 000192-97-2 98 |
| 2       |          | Benz[e]acephenanthrylene | 252 C20H12       | 000205-99-2 98 |
| 3       |          | Benzo[a]pyrene           | 252 C20H12       | 000050-32-8 96 |
| 4       |          | Perylene                 | 252 C20H12       | 000198-55-0 94 |
| 5       |          | Benzo[k]fluoranthene     | 252 C20H12       | 000207-08-9 93 |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

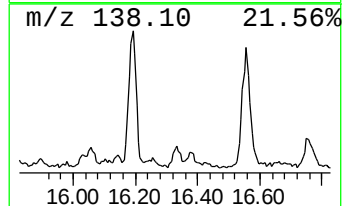
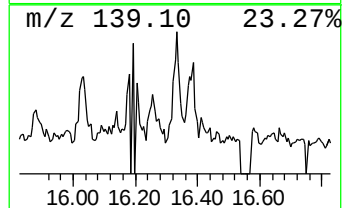
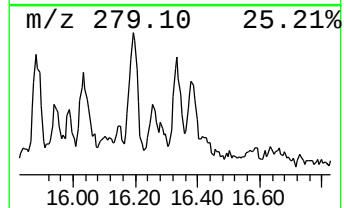
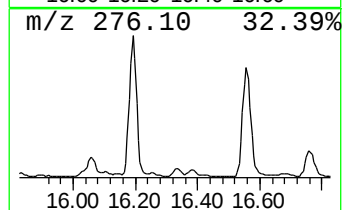
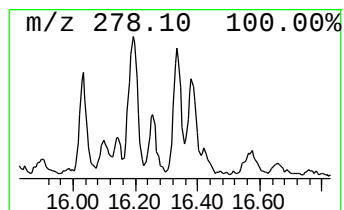
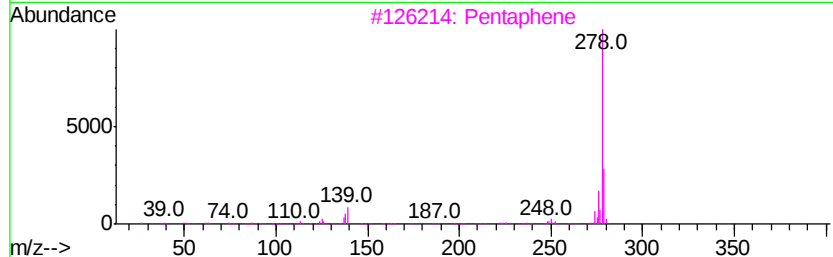
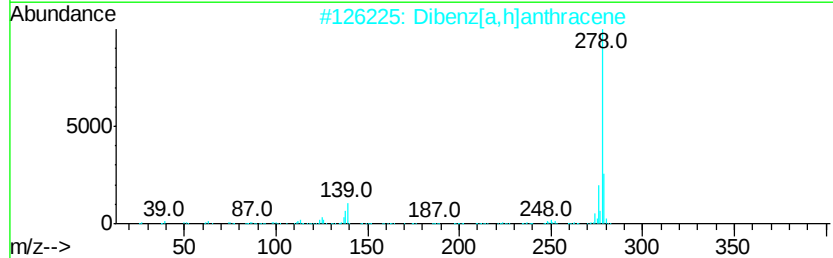
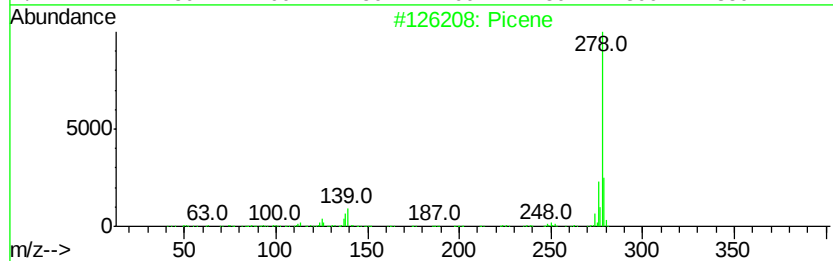
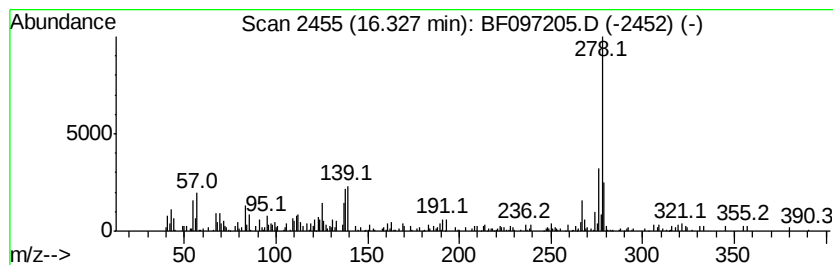
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 18 Picene Concentration Rank 15

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 16.33 | 7.32 ng | 187118 | Perylene-d12     | 14.96 |

| Hit# | of | Tentative ID          | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------|-----|---------|-------------|------|
| 1    | 5  | Picene                | 278 | C22H14  | 000213-46-7 | 96   |
| 2    |    | Dibenz[a,h]anthracene | 278 | C22H14  | 000053-70-3 | 95   |
| 3    |    | Pentaphene            | 278 | C22H14  | 000222-93-5 | 94   |
| 4    |    | Benzo[b]triphenylene  | 278 | C22H14  | 000215-58-7 | 94   |
| 5    |    | Benzo[a]naphthacene   | 278 | C22H14  | 000226-88-0 | 87   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

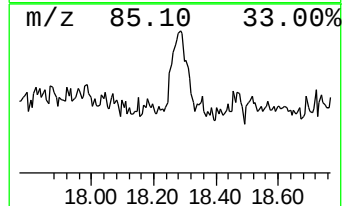
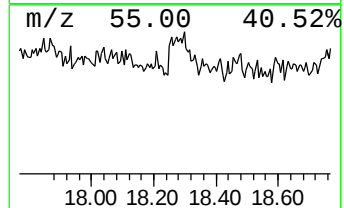
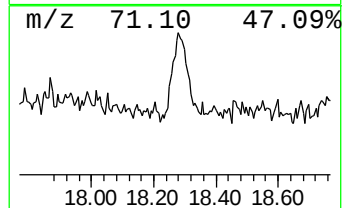
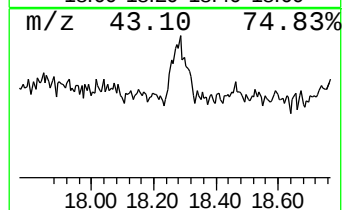
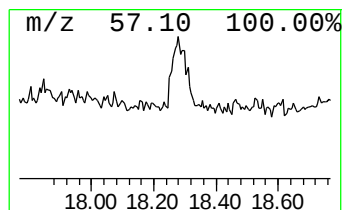
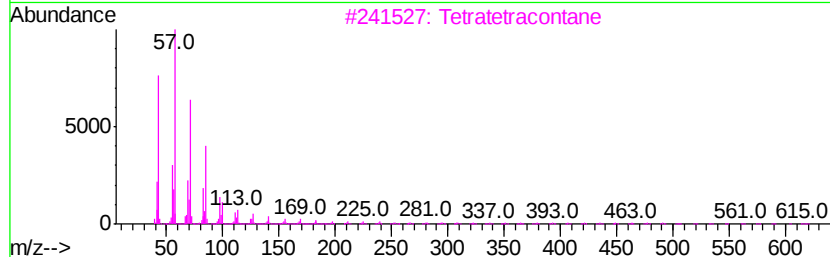
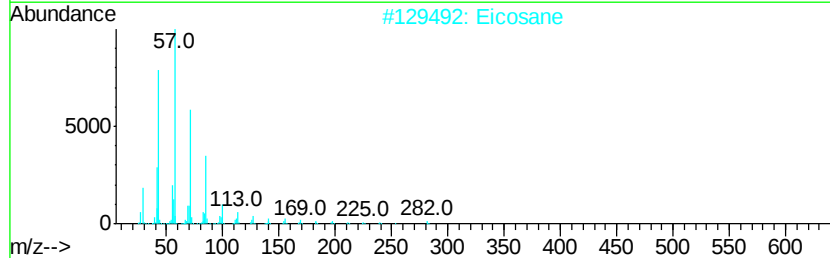
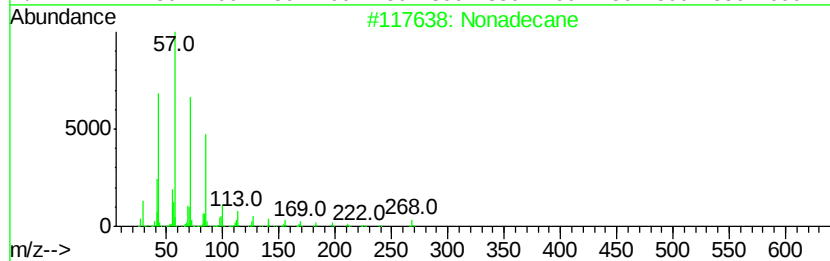
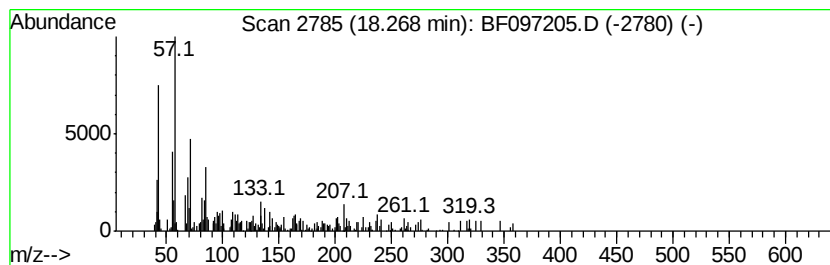
Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.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 Nonadecane Concentration Rank 11

| R.T.  | EstConc  | Area   | Relative to ISTD                   |     | R.T.    |             |      |
|-------|----------|--------|------------------------------------|-----|---------|-------------|------|
| 18.27 | 10.95 ng | 279926 | Perylene-d12                       |     | 14.96   |             |      |
| Hit#  | of       | 5      | Tentative ID                       | MW  | MolForm | CAS#        | Qual |
| 1     |          |        | Nonadecane                         | 268 | C19H40  | 000629-92-5 | 55   |
| 2     |          |        | Eicosane                           | 282 | C20H42  | 000112-95-8 | 55   |
| 3     |          |        | Tetratetracontane                  | 619 | C44H90  | 007098-22-8 | 49   |
| 4     |          |        | Hexadecane, 2,6,10,14-tetramethyl- | 282 | C20H42  | 000638-36-8 | 49   |
| 5     |          |        | Tritetracontane                    | 605 | C43H88  | 007098-21-7 | 47   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF073117\  
Data File : BF097205.D  
Acq On : 31 Jul 2017 14:01  
Operator : SJ/JU  
Sample : I4466-01 5X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
HD-02-072617

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

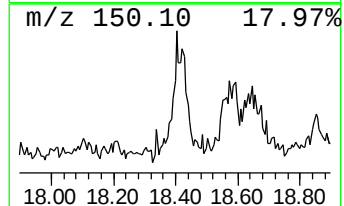
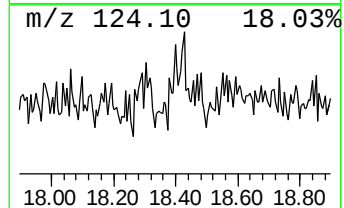
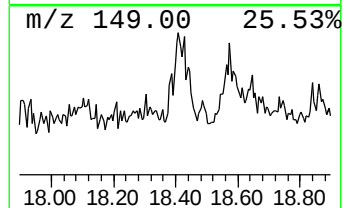
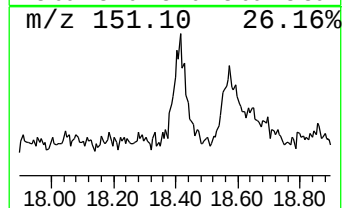
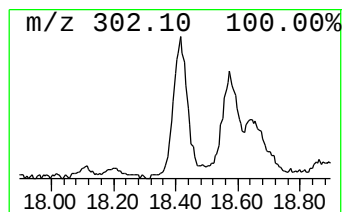
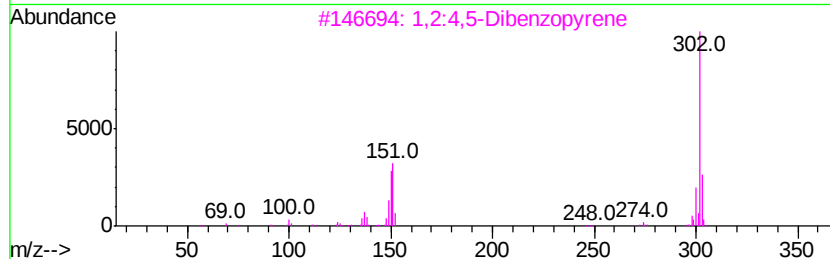
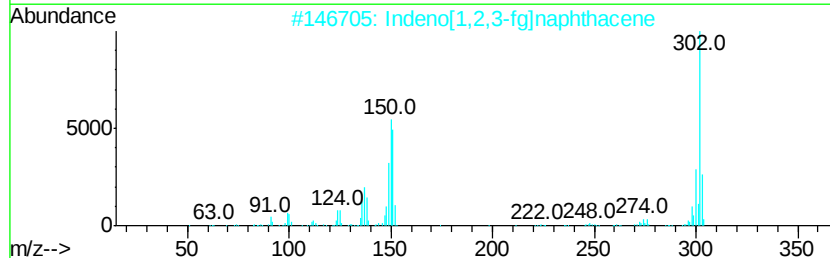
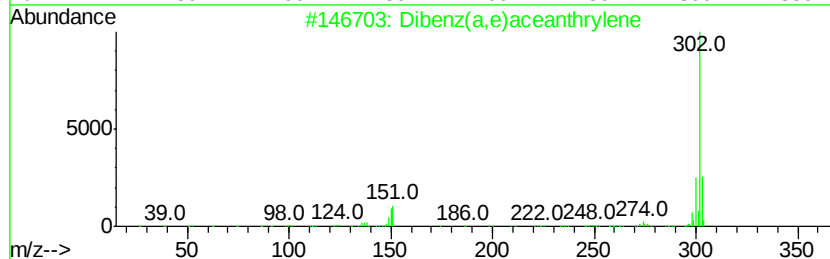
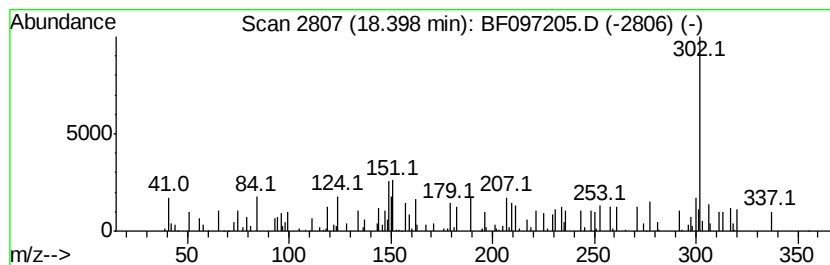
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 20 Dibenz(a,e)aceanthrylene Concentration Rank 19

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 18.40 | 4.59 ng | 117483 | Perylene-d12     | 14.96 |

| Hit# | of | 5 | Tentative ID                | MW  | MolForm | CAS#        | Qual |
|------|----|---|-----------------------------|-----|---------|-------------|------|
| 1    |    |   | Dibenz(a,e)aceanthrylene    | 302 | C24H14  | 005385-75-1 | 76   |
| 2    |    |   | Indeno[1,2,3-fg]naphthacene | 302 | C24H14  | 000203-11-2 | 64   |
| 3    |    |   | 1,2:4,5-Dibenzopyrene       | 302 | C24H14  | 000192-65-4 | 52   |
| 4    |    |   | 3,4:8,9-Dibenzopyrene       | 302 | C24H14  | 000189-64-0 | 52   |
| 5    |    |   | Dibenzo(a,i)pyrene          | 302 | C24H14  | 000189-55-9 | 50   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF073117\  
 Data File : BF097205.D  
 Acq On : 31 Jul 2017 14:01  
 Operator : SJ/JU  
 Sample : I4466-01 5X  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 HD-02-072617

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.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 |
| unknown6.25          | 6.25  | 21.0    | ng    | 771180   | 1                     | 6.47  | 735453 | 20.0 |
| Tetradecane          | 8.94  | 4.5     | ng    | 198216   | 3                     | 9.50  | 889202 | 20.0 |
| Heptadecane          | 10.43 | 15.6    | ng    | 428292   | 4                     | 10.98 | 548456 | 20.0 |
| Hexadecane           | 10.88 | 9.2     | ng    | 252199   | 4                     | 10.98 | 548456 | 20.0 |
| Heptacosane          | 11.30 | 6.9     | ng    | 189046   | 4                     | 10.98 | 548456 | 20.0 |
| Pentadecanoic aci... | 11.40 | 81.0    | ng    | 2222530  | 4                     | 10.98 | 548456 | 20.0 |
| Anthracene, 2-met... | 11.49 | 5.4     | ng    | 148855   | 4                     | 10.98 | 548456 | 20.0 |
| n-Hexadecanoic acid  | 11.55 | 13.6    | ng    | 373636   | 4                     | 10.98 | 548456 | 20.0 |
| 4H-Cyclopenta[def... | 11.59 | 7.1     | ng    | 195909   | 4                     | 10.98 | 548456 | 20.0 |
| Eicosane             | 11.71 | 7.4     | ng    | 201924   | 4                     | 10.98 | 548456 | 20.0 |
| 9,12-Octadecadien... | 12.09 | 151.7   | ng    | 4159390  | 4                     | 10.98 | 548456 | 20.0 |
| 16-Octadecenoic a... | 12.12 | 177.2   | ng    | 4859240  | 4                     | 10.98 | 548456 | 20.0 |
| 9-octadecanoic ac... | 12.25 | 45.1    | ng    | 1235670  | 4                     | 10.98 | 548456 | 20.0 |
| N,N-Dimethyloctyl... | 14.50 | 11.4    | ng    | 290956   | 6                     | 14.96 | 511366 | 20.0 |
| Benzo[e]pyrene       | 14.86 | 15.2    | ng    | 388991   | 6                     | 14.96 | 511366 | 20.0 |
| Picene               | 16.33 | 7.3     | ng    | 187118   | 6                     | 14.96 | 511366 | 20.0 |
| Nonadecane           | 18.27 | 10.9    | ng    | 279926   | 6                     | 14.96 | 511366 | 20.0 |
| Dibenz(a,e)aceant... | 18.40 | 4.6     | ng    | 117483   | 6                     | 14.96 | 511366 | 20.0 |