

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091918\  
 Data File : BF109144.D  
 Acq On : 19 Sep 2018 15:35  
 Operator : JU/SJ  
 Sample : J4967-03  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SUP-UST-091718-03

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

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

Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF091418.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         | 4.919       | 435           | 439         | 446          | rVB      | 99878          | 121153        | 4.91%           | 0.412%        |
| 2         | 5.301       | 501           | 504         | 505          | rBV      | 29442          | 27889         | 1.13%           | 0.095%        |
| 3         | 5.337       | 505           | 510         | 513          | rVB      | 2312688        | 2190610       | 88.73%          | 7.455%        |
| 4         | 6.360       | 680           | 684         | 690          | rVB2     | 2401689        | 2446355       | 99.09%          | 8.325%        |
| 5         | 6.489       | 702           | 706         | 710          | rBV      | 2369439        | 2290841       | 92.79%          | 7.796%        |
| 6         | 6.554       | 714           | 717         | 719          | rBV      | 43449          | 36965         | 1.50%           | 0.126%        |
| 7         | 6.719       | 742           | 745         | 749          | rBV      | 901204         | 800964        | 32.44%          | 2.726%        |
| 8         | 6.878       | 768           | 772         | 775          | rBV      | 2218686        | 1861285       | 75.39%          | 6.334%        |
| 9         | 7.278       | 835           | 840         | 843          | rBV      | 1393033        | 1372714       | 55.60%          | 4.672%        |
| 10        | 8.001       | 959           | 963         | 969          | rBV      | 1187195        | 992368        | 40.20%          | 3.377%        |
| 11        | 9.078       | 1142          | 1146        | 1149         | rBV      | 2868779        | 2468824       | 100.00%         | 8.402%        |
| 12        | 9.472       | 1210          | 1213        | 1216         | rBV      | 375966         | 288855        | 11.70%          | 0.983%        |
| 13        | 9.613       | 1234          | 1237        | 1240         | rVB      | 55508          | 44054         | 1.78%           | 0.150%        |
| 14        | 9.754       | 1256          | 1261        | 1264         | rBV      | 1171313        | 989560        | 40.08%          | 3.368%        |
| 15        | 9.954       | 1292          | 1295        | 1299         | rVB2     | 35958          | 35830         | 1.45%           | 0.122%        |
| 16        | 10.295      | 1350          | 1353        | 1360         | rVB      | 38594          | 39159         | 1.59%           | 0.133%        |
| 17        | 10.536      | 1390          | 1394        | 1399         | rBV      | 1559803        | 1308930       | 53.02%          | 4.455%        |
| 18        | 10.666      | 1413          | 1416        | 1423         | rVB5     | 33789          | 49564         | 2.01%           | 0.169%        |
| 19        | 11.036      | 1476          | 1479        | 1484         | rVB      | 41650          | 43486         | 1.76%           | 0.148%        |
| 20        | 11.124      | 1490          | 1494        | 1497         | rBV2     | 33695          | 38635         | 1.56%           | 0.131%        |
| 21        | 11.230      | 1508          | 1512        | 1514         | rBV      | 1060875        | 898996        | 36.41%          | 3.059%        |
| 22        | 11.254      | 1514          | 1516        | 1519         | rVV      | 640001         | 478235        | 19.37%          | 1.628%        |
| 23        | 11.301      | 1519          | 1524        | 1528         | rVB      | 97991          | 101283        | 4.10%           | 0.345%        |
| 24        | 11.460      | 1546          | 1551        | 1553         | rBV2     | 54397          | 53062         | 2.15%           | 0.181%        |
| 25        | 11.730      | 1594          | 1597        | 1599         | rBV      | 107964         | 92874         | 3.76%           | 0.316%        |
| 26        | 11.760      | 1599          | 1602        | 1607         | rVV2     | 159688         | 256527        | 10.39%          | 0.873%        |
| 27        | 11.801      | 1607          | 1609        | 1612         | rVV2     | 39268          | 40906         | 1.66%           | 0.139%        |
| 28        | 11.842      | 1612          | 1616        | 1618         | rVV      | 123431         | 138496        | 5.61%           | 0.471%        |
| 29        | 11.866      | 1618          | 1620        | 1622         | rVB      | 66763          | 55166         | 2.23%           | 0.188%        |
| 30        | 12.024      | 1644          | 1647        | 1648         | rBV      | 80565          | 61665         | 2.50%           | 0.210%        |
| 31        | 12.042      | 1648          | 1650        | 1657         | rVB      | 106384         | 99150         | 4.02%           | 0.337%        |
| 32        | 12.277      | 1687          | 1690        | 1693         | rBV      | 82971          | 89155         | 3.61%           | 0.303%        |
| 33        | 12.313      | 1694          | 1696        | 1698         | rVV2     | 39651          | 39202         | 1.59%           | 0.133%        |
| 34        | 12.360      | 1701          | 1704        | 1708         | rVB2     | 63919          | 73572         | 2.98%           | 0.250%        |

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF091918\  
Data File : BF109144.D  
Acq On : 19 Sep 2018 15:35  
Operator : JU/SJ  
Sample : J4967-03  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-UST-091718-03

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

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

Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF091418.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |        |        |
|----|--------|------|------|------|------|---------|---------|--------|--------|
| 35 | 12.436 | 1713 | 1717 | 1721 | rVV  | 1005065 | 848705  | 34.38% | 2.888% |
| 36 | 12.666 | 1750 | 1756 | 1759 | rBV  | 806248  | 870396  | 35.26% | 2.962% |
| 37 | 12.783 | 1774 | 1776 | 1777 | rBV  | 54352   | 37766   | 1.53%  | 0.129% |
| 38 | 12.813 | 1777 | 1781 | 1784 | rVV  | 2214616 | 1917028 | 77.65% | 6.524% |
| 39 | 12.883 | 1791 | 1793 | 1796 | rVB  | 62969   | 61679   | 2.50%  | 0.210% |
| 40 | 13.060 | 1820 | 1823 | 1825 | rVB  | 67193   | 57477   | 2.33%  | 0.196% |
| 41 | 13.095 | 1826 | 1829 | 1832 | rBV2 | 110416  | 111855  | 4.53%  | 0.381% |
| 42 | 13.218 | 1848 | 1850 | 1853 | rBV  | 53462   | 42102   | 1.71%  | 0.143% |
| 43 | 13.495 | 1895 | 1897 | 1903 | rVB  | 120273  | 121457  | 4.92%  | 0.413% |
| 44 | 13.607 | 1913 | 1916 | 1919 | rBV2 | 80026   | 89060   | 3.61%  | 0.303% |
| 45 | 13.636 | 1919 | 1921 | 1923 | rBV  | 68064   | 54116   | 2.19%  | 0.184% |
| 46 | 13.701 | 1930 | 1932 | 1933 | rBV  | 78063   | 61622   | 2.50%  | 0.210% |
| 47 | 13.718 | 1933 | 1935 | 1939 | rVB  | 146517  | 149101  | 6.04%  | 0.507% |
| 48 | 13.860 | 1954 | 1959 | 1961 | rBV2 | 1117715 | 1368289 | 55.42% | 4.657% |
| 49 | 13.883 | 1961 | 1963 | 1965 | rVB  | 496285  | 360679  | 14.61% | 1.227% |
| 50 | 14.865 | 2127 | 2130 | 2133 | rBV  | 446064  | 607291  | 24.60% | 2.067% |
| 51 | 14.959 | 2143 | 2146 | 2150 | rBV2 | 274742  | 306026  | 12.40% | 1.041% |
| 52 | 15.148 | 2175 | 2178 | 2184 | rVB  | 296854  | 350302  | 14.19% | 1.192% |
| 53 | 15.207 | 2184 | 2188 | 2191 | rVV  | 386351  | 447078  | 18.11% | 1.521% |
| 54 | 15.265 | 2194 | 2198 | 2201 | rVV  | 691875  | 887878  | 35.96% | 3.022% |
| 55 | 15.312 | 2204 | 2206 | 2214 | rVB  | 333568  | 395515  | 16.02% | 1.346% |
| 56 | 15.718 | 2272 | 2275 | 2281 | rVB  | 223942  | 312284  | 12.65% | 1.063% |

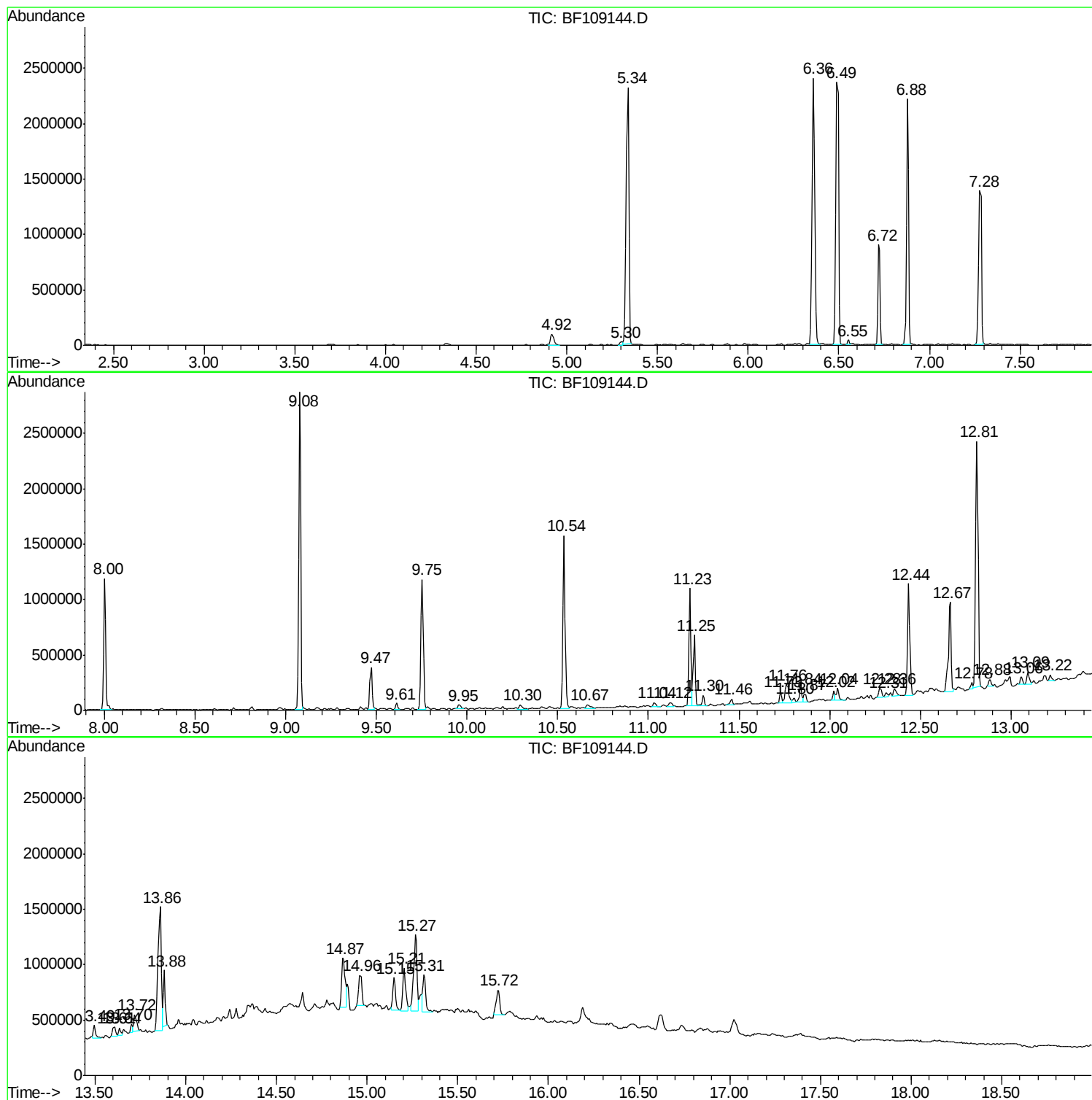
Sum of corrected areas: 29384036

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091918\  
Data File : BF109144.D  
Acq On : 19 Sep 2018 15:35  
Operator : JU/SJ  
Sample : J4967-03  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-UST-091718-03

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091418.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\BF091918\  
Data File : BF109144.D  
Acq On : 19 Sep 2018 15:35  
Operator : JU/SJ  
Sample : J4967-03  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-UST-091718-03

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

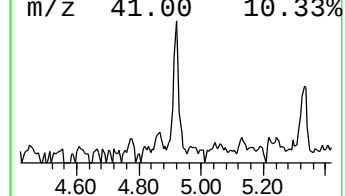
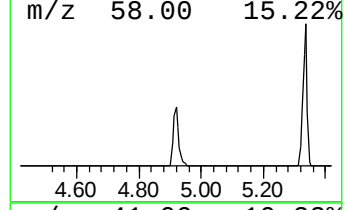
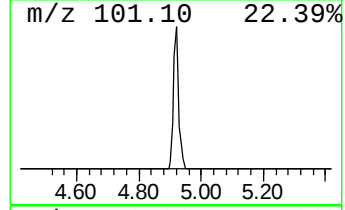
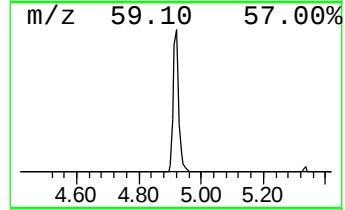
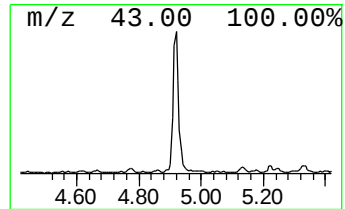
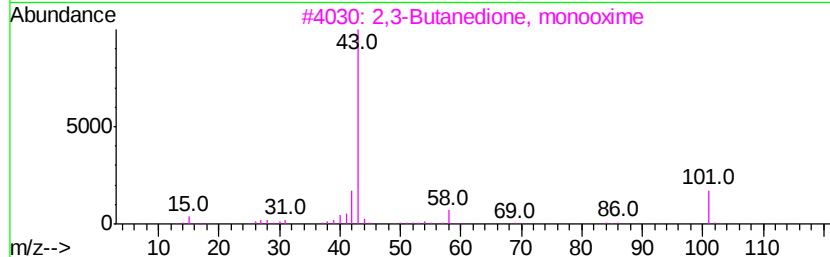
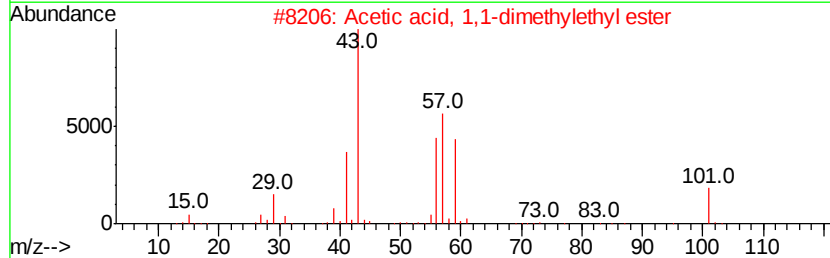
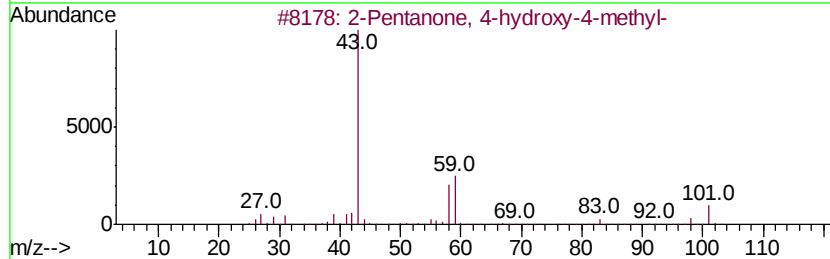
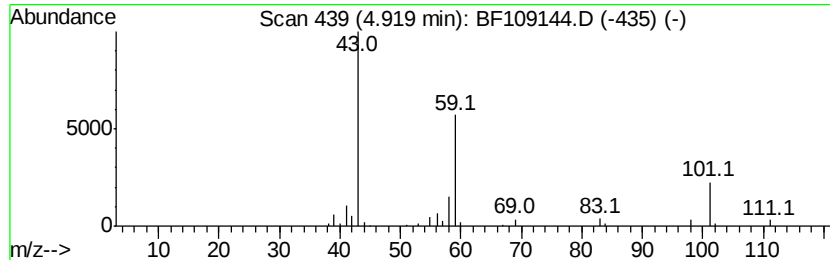
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 8

| R.T. | EstConc | Area   | Relative to ISTD       |  | R.T. |
|------|---------|--------|------------------------|--|------|
| 4.92 | 3.03 ng | 121153 | 1,4-Dichlorobenzene-d4 |  | 6.72 |

| Hit# of | 5                                   | Tentative ID | MW      | MolForm     | CAS# | Qual |
|---------|-------------------------------------|--------------|---------|-------------|------|------|
| 1       | 2-Pentanone, 4-hydroxy-4-methyl-    | 116          | C6H12O2 | 000123-42-2 | 59   |      |
| 2       | Acetic acid, 1,1-dimethylethyl e... | 116          | C6H12O2 | 000540-88-5 | 38   |      |
| 3       | 2,3-Butanedione, monooxime          | 101          | C4H7NO2 | 000057-71-6 | 25   |      |
| 4       | 2-Hexanol, 2-methyl-                | 116          | C7H16O  | 000625-23-0 | 25   |      |
| 5       | Butyl aldoxime, 3-methyl-, syn-     | 101          | C5H11NO | 005780-40-5 | 22   |      |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091918\  
Data File : BF109144.D  
Acq On : 19 Sep 2018 15:35  
Operator : JU/SJ  
Sample : J4967-03  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-UST-091718-03

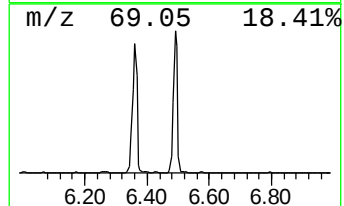
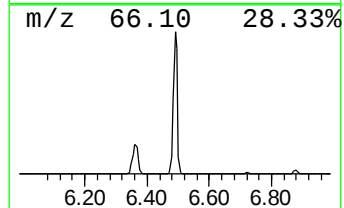
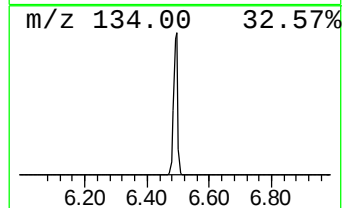
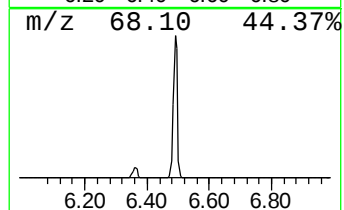
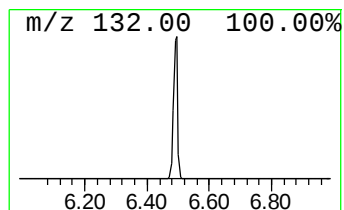
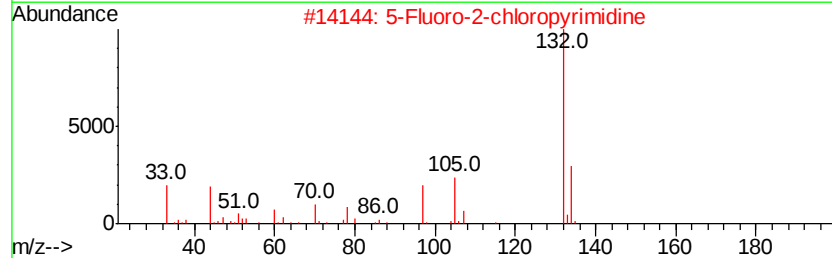
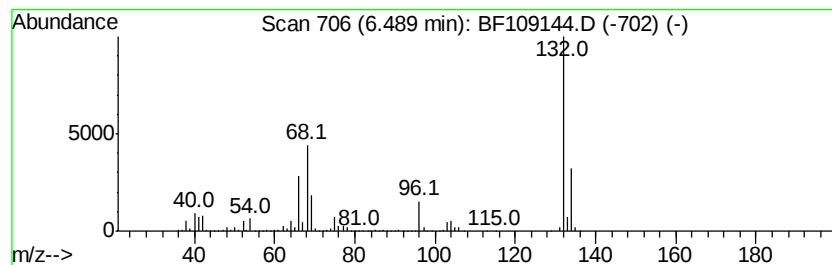
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 2 unknown6.49 Concentration Rank 1

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 6.49 | 57.20 ng | 2290840 | 1,4-Dichlorobenzene-d4 | 6.72 |

| Hit# | of                                  | Tentative ID | MW        | MolForm      | CAS# | Qual |
|------|-------------------------------------|--------------|-----------|--------------|------|------|
| 1    | 3-Chloro-6-fluoro-pyrazine          | 132          | C4H2ClFN2 | 1000146-10-7 | 27   |      |
| 2    | 5-Fluoro-2-chloropyrimidine         | 132          | C4H2ClFN2 | 062802-42-0  | 16   |      |
| 3    | Tranvlcyproline-propionyl           | 189          | C12H15NO  | 1000123-86-3 | 10   |      |
| 4    | Bicyclo[4.2.0]octa-1,3,5-triene,... | 132          | C10H12    | 028749-81-7  | 9    |      |
| 5    | Benzene, 1-ethenyl-3,5-dimethyl-    | 132          | C10H12    | 005379-20-4  | 9    |      |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091918\  
Data File : BF109144.D  
Acq On : 19 Sep 2018 15:35  
Operator : JU/SJ  
Sample : J4967-03  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

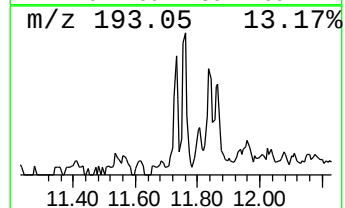
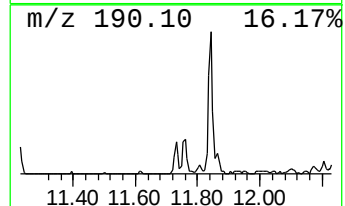
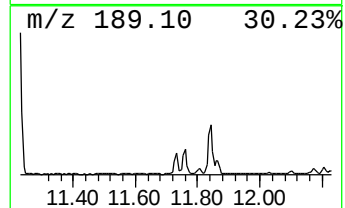
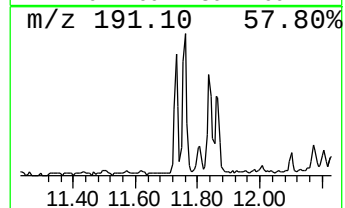
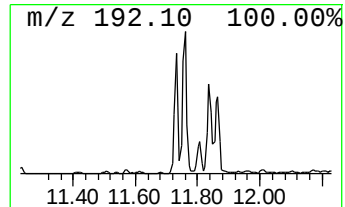
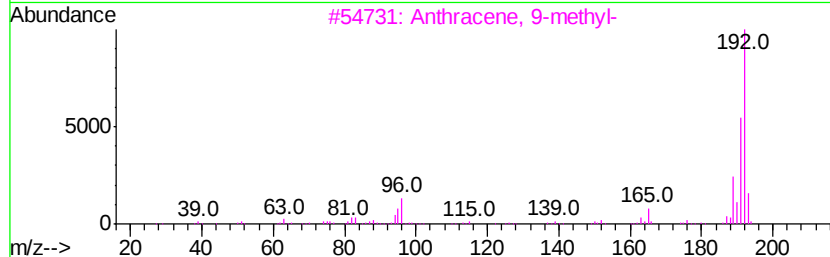
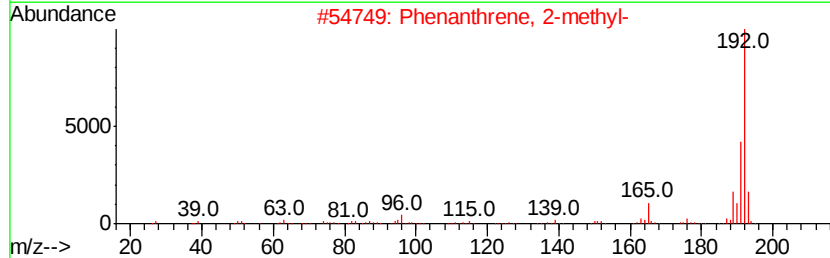
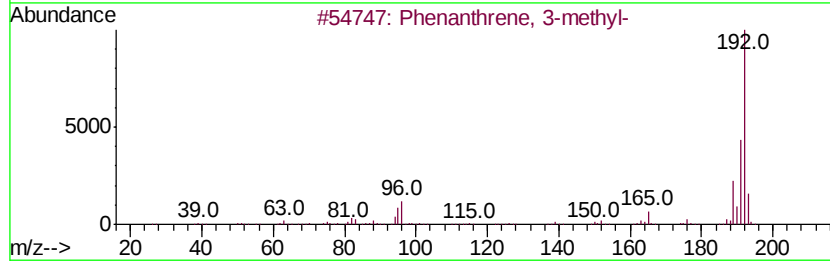
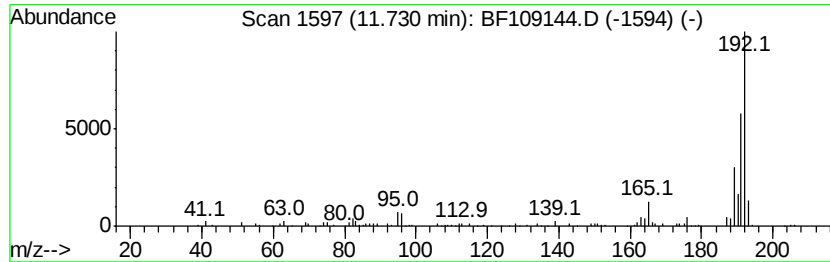
Instrument :  
BNA\_F  
ClientSampleId :  
SUP-UST-091718-03

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 4 Phenanthrene, 3-methyl- Concentration Rank 11

| R.T.      | EstConc                 | Area  | Relative to ISTD |             | R.T.  |
|-----------|-------------------------|-------|------------------|-------------|-------|
| 11.73     | 2.07 ng                 | 92874 | Phenanthrene-d10 |             | 11.23 |
| Hit# of 5 | Tentative ID            | MW    | MolForm          | CAS#        | Qual  |
| 1         | Phenanthrene, 3-methyl- | 192   | C15H12           | 000832-71-3 | 93    |
| 2         | Phenanthrene, 2-methyl- | 192   | C15H12           | 002531-84-2 | 91    |
| 3         | Anthracene, 9-methyl-   | 192   | C15H12           | 000779-02-2 | 91    |
| 4         | Anthracene, 1-methyl-   | 192   | C15H12           | 000610-48-0 | 91    |
| 5         | Phenanthrene, 1-methyl- | 192   | C15H12           | 000832-69-9 | 91    |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091918\  
Data File : BF109144.D  
Acq On : 19 Sep 2018 15:35  
Operator : JU/SJ  
Sample : J4967-03  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

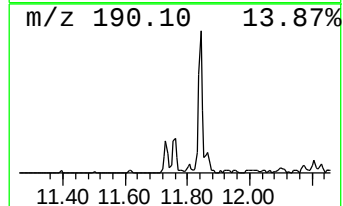
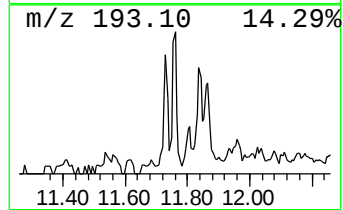
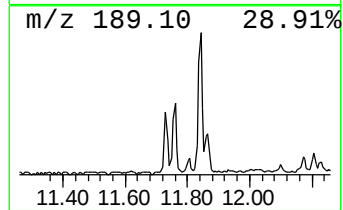
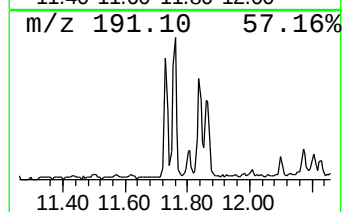
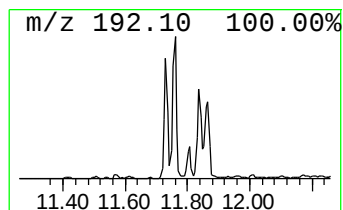
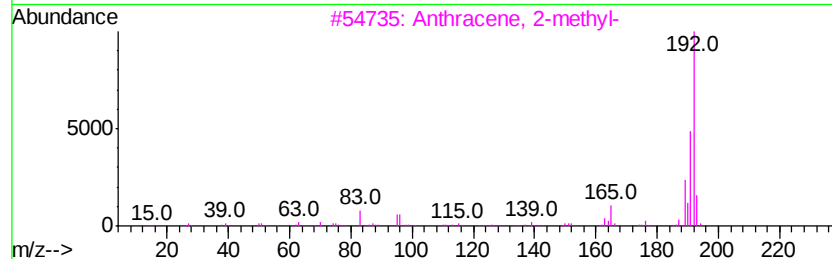
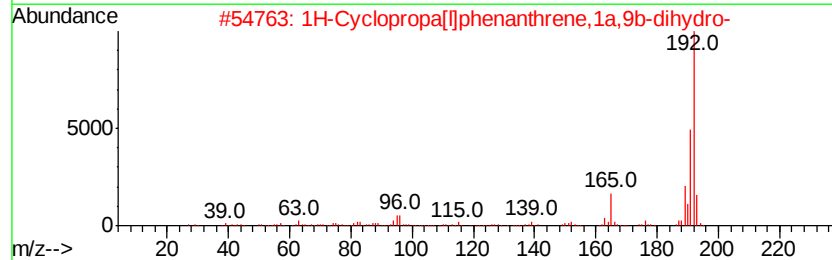
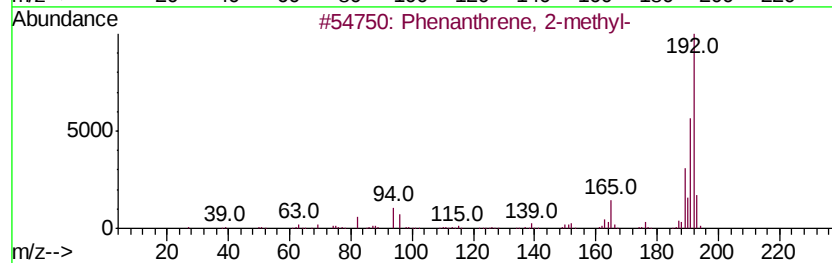
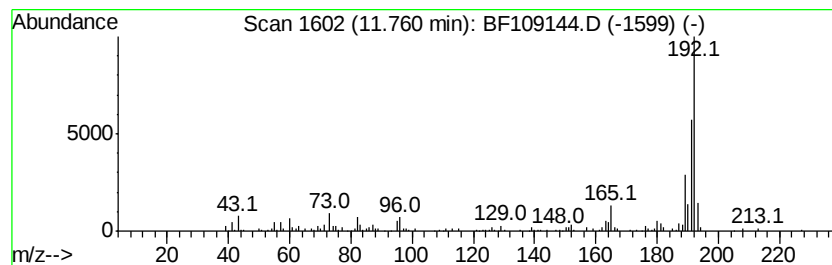
Instrument :  
BNA\_F  
ClientSampleId :  
SUP-UST-091718-03

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 5 Phenanthrene, 2-methyl- Concentration Rank 6

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------|--------|------------------|-------------|------|
| 11.76     | 5.71 ng                             | 256527 | Phenanthrene-d10 | 11.23       |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#        | Qual |
| 1         | Phenanthrene, 2-methyl-             | 192    | C15H12           | 002531-84-2 | 97   |
| 2         | 1H-Cyclopropa[1]phenanthrene,1a,... | 192    | C15H12           | 000949-41-7 | 96   |
| 3         | Anthracene, 2-methyl-               | 192    | C15H12           | 000613-12-7 | 96   |
| 4         | Anthracene, 9-methyl-               | 192    | C15H12           | 000779-02-2 | 95   |
| 5         | Anthracene, 1-methyl-               | 192    | C15H12           | 000610-48-0 | 94   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091918\  
Data File : BF109144.D  
Acq On : 19 Sep 2018 15:35  
Operator : JU/SJ  
Sample : J4967-03  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

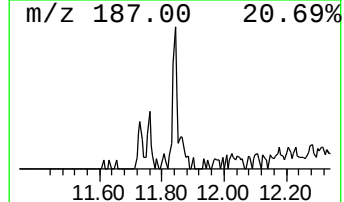
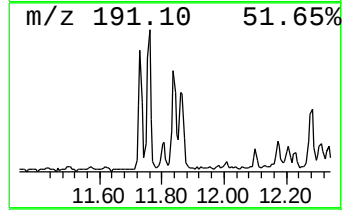
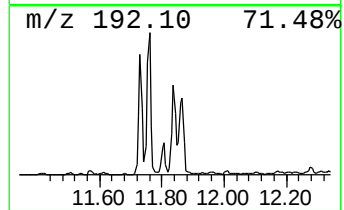
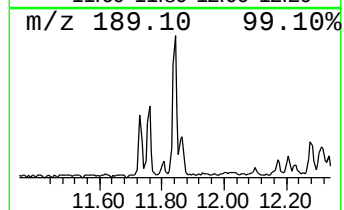
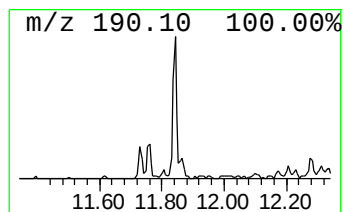
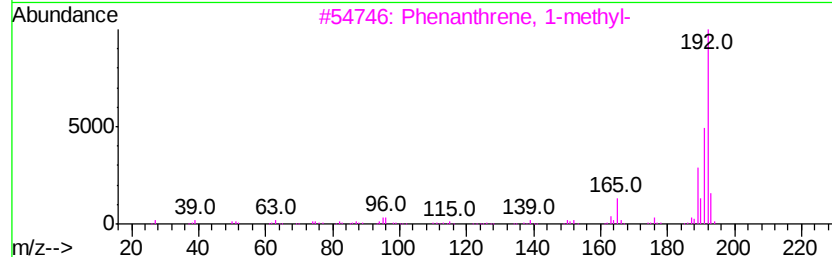
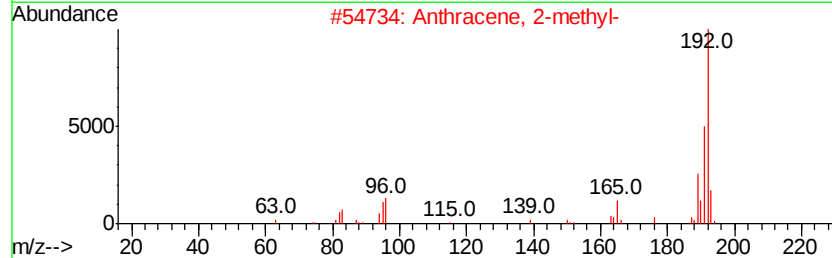
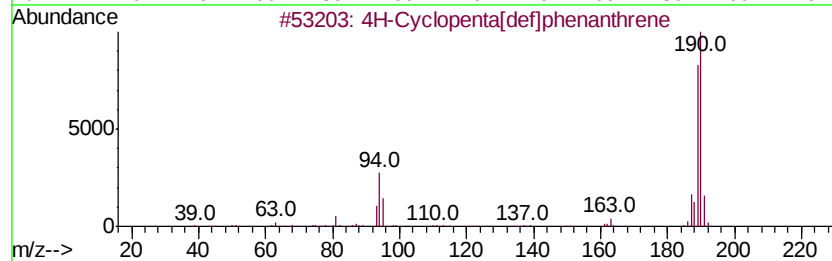
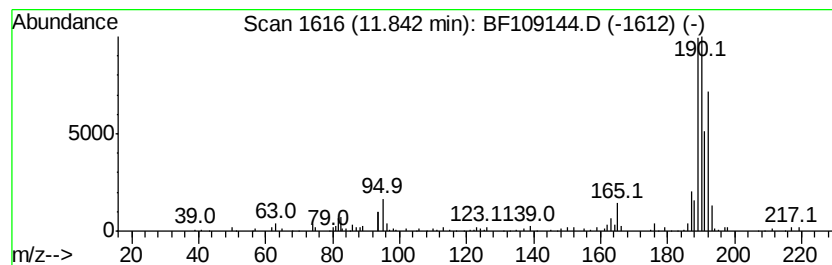
Instrument :  
BNA\_F  
ClientSampleId :  
SUP-UST-091718-03

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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

| R.T.      | EstConc                        | Area   | Relative to ISTD | R.T.        |      |
|-----------|--------------------------------|--------|------------------|-------------|------|
| 11.84     | 3.08 ng                        | 138496 | Phenanthrene-d10 | 11.23       |      |
| Hit# of 5 | Tentative ID                   | MW     | MolForm          | CAS#        | Qual |
| 1         | 4H-Cyclopenta[def]phenanthrene | 190    | C15H10           | 000203-64-5 | 70   |
| 2         | Anthracene, 2-methyl-          | 192    | C15H12           | 000613-12-7 | 42   |
| 3         | Phenanthrene, 1-methyl-        | 192    | C15H12           | 000832-69-9 | 38   |
| 4         | Anthracene, 1-methyl-          | 192    | C15H12           | 000610-48-0 | 38   |
| 5         | Phenanthrene, 4-methyl-        | 192    | C15H12           | 000832-64-4 | 38   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091918\  
Data File : BF109144.D  
Acq On : 19 Sep 2018 15:35  
Operator : JU/SJ  
Sample : J4967-03  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-UST-091718-03

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

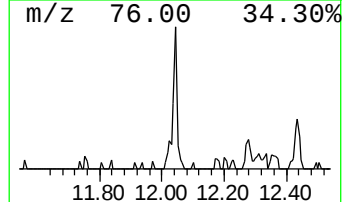
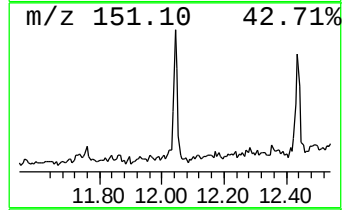
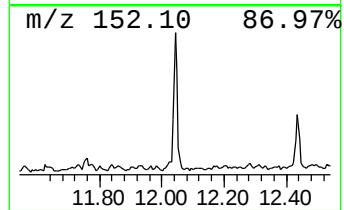
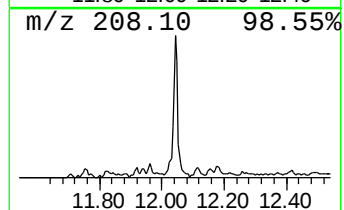
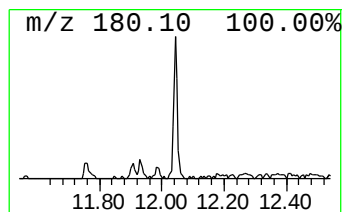
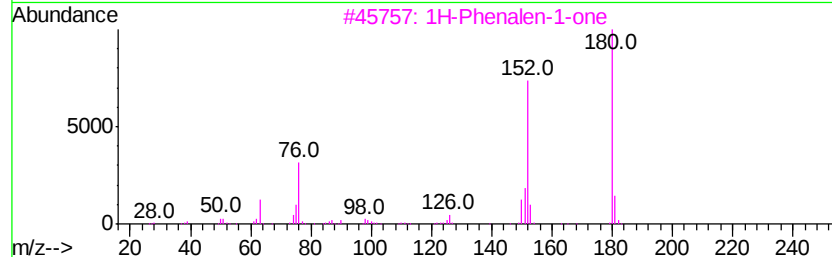
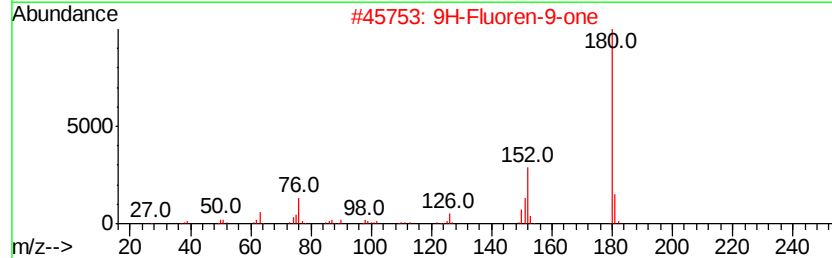
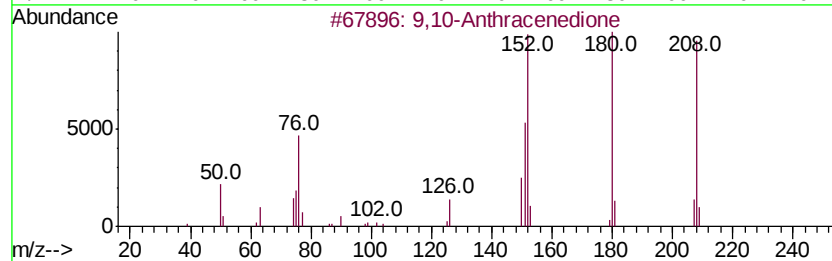
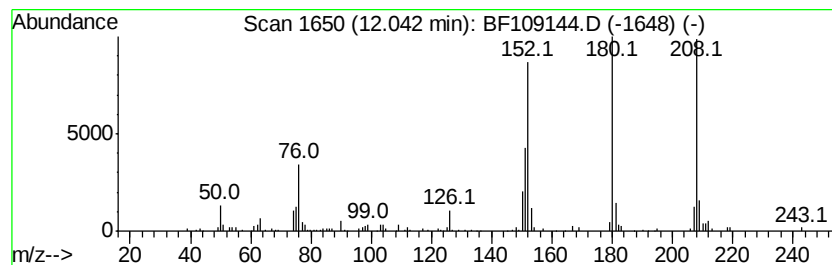
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 7 9,10-Anthracenedione Concentration Rank 9

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 12.04 | 2.21 ng | 99150 | Phenanthrene-d10 | 11.23 |

| Hit# | of | 5 | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|---|----------------------|-----|---------|-------------|------|
| 1    |    |   | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 98   |
| 2    |    |   | 9H-Fluoren-9-one     | 180 | C13H8O  | 000486-25-9 | 60   |
| 3    |    |   | 1H-Phenalen-1-one    | 180 | C13H8O  | 000548-39-0 | 60   |
| 4    |    |   | Benzo[c]cinnoline    | 180 | C12H8N2 | 000230-17-1 | 58   |
| 5    |    |   | 1,4-Anthracenedione  | 208 | C14H8O2 | 000635-12-1 | 52   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091918\  
Data File : BF109144.D  
Acq On : 19 Sep 2018 15:35  
Operator : JU/SJ  
Sample : J4967-03  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-UST-091718-03

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

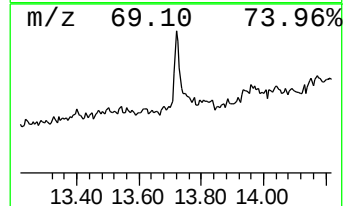
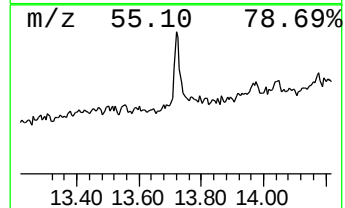
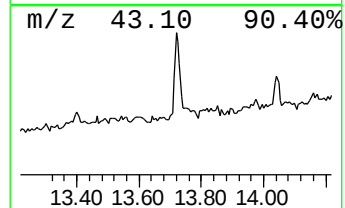
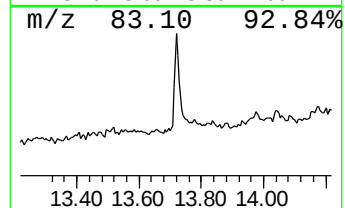
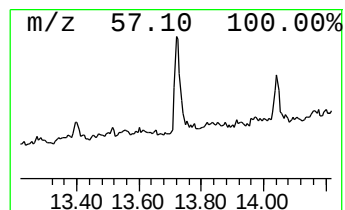
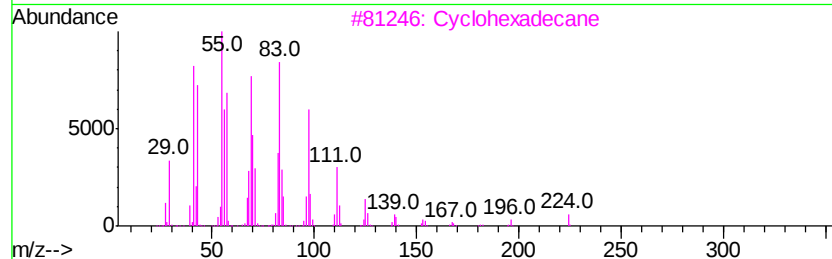
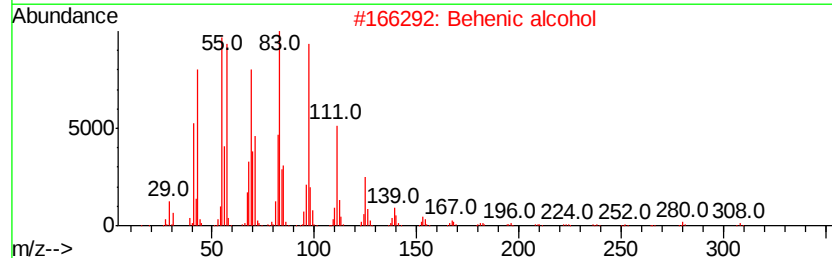
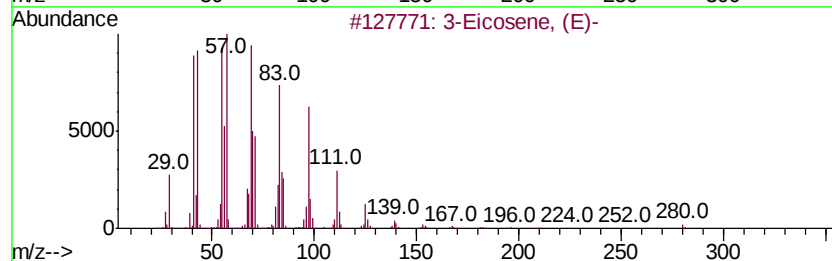
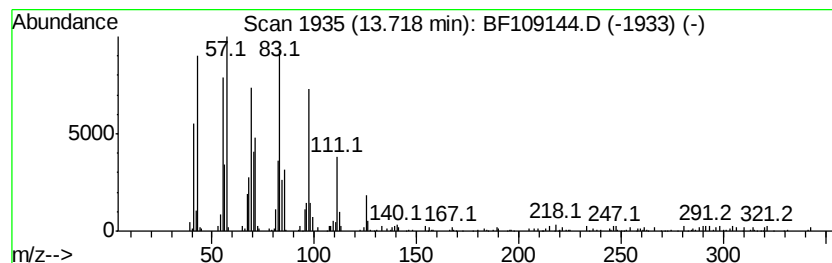
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 8 3-Eicosene, (E)- Concentration Rank 10

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 13.72 | 2.18 ng | 149101 | Chrysene-d12     | 13.86 |

| Hit# | of | Tentative ID     | MW  | MolForm | CAS#        | Qual |
|------|----|------------------|-----|---------|-------------|------|
| 1    | 5  | 3-Eicosene, (E)- | 280 | C20H40  | 074685-33-9 | 95   |
| 2    |    | Behenic alcohol  | 326 | C22H46O | 000661-19-8 | 94   |
| 3    |    | Cyclohexadecane  | 224 | C16H32  | 000295-65-8 | 93   |
| 4    |    | 9-Eicosene, (E)- | 280 | C20H40  | 074685-29-3 | 93   |
| 5    |    | n-Tetracosanol-1 | 354 | C24H50O | 000506-51-4 | 91   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091918\  
Data File : BF109144.D  
Acq On : 19 Sep 2018 15:35  
Operator : JU/SJ  
Sample : J4967-03  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-UST-091718-03

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

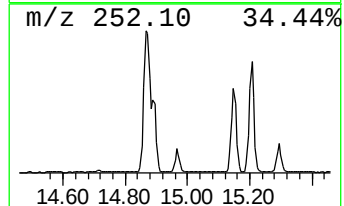
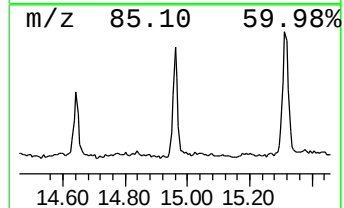
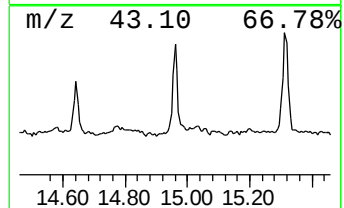
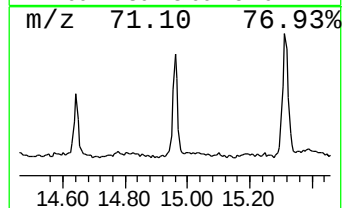
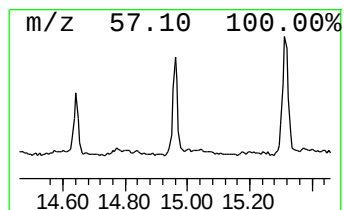
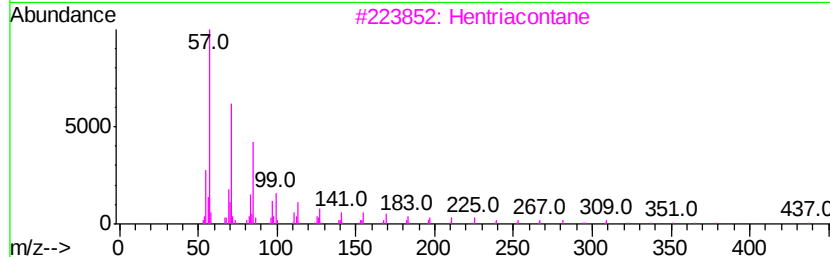
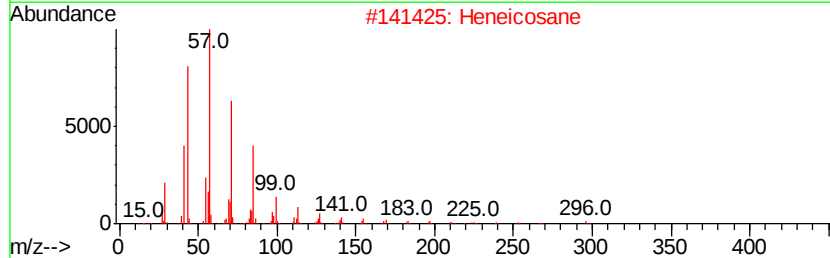
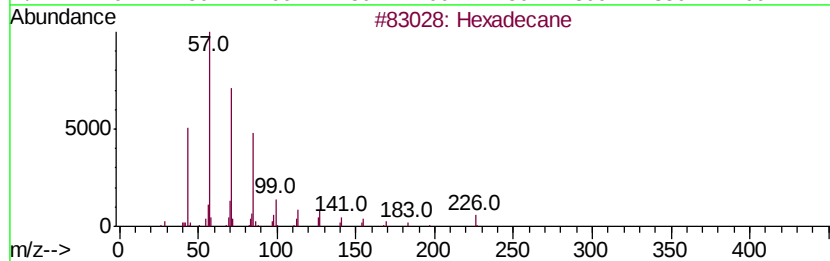
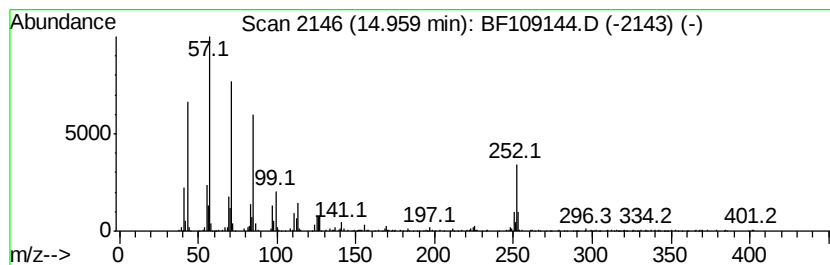
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 9 Hexadecane Concentration Rank 5

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 14.96 | 6.89 ng | 306026 | Perylene-d12     | 15.27 |

| Hit# of 5 | Tentative ID       | MW  | MolForm | CAS#         | Qual |
|-----------|--------------------|-----|---------|--------------|------|
| 1         | Hexadecane         | 226 | C16H34  | 000544-76-3  | 94   |
| 2         | Heneicosane        | 296 | C21H44  | 000629-94-7  | 83   |
| 3         | Hentriacontane     | 437 | C31H64  | 000630-04-6  | 74   |
| 4         | Hexacosane         | 366 | C26H54  | 000630-01-3  | 74   |
| 5         | 2-methyloctacosane | 408 | C29H60  | 1000376-72-8 | 72   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091918\  
Data File : BF109144.D  
Acq On : 19 Sep 2018 15:35  
Operator : JU/SJ  
Sample : J4967-03  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-UST-091718-03

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

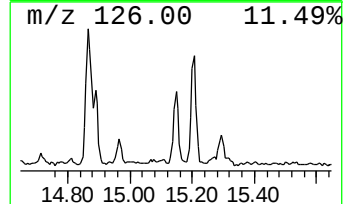
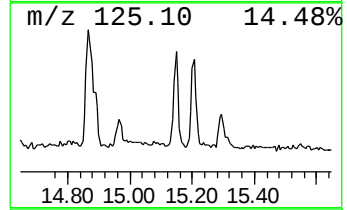
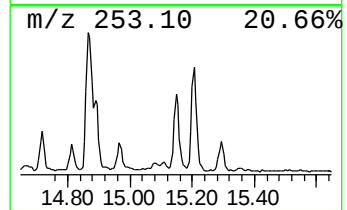
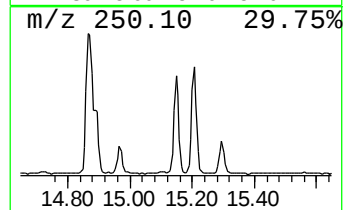
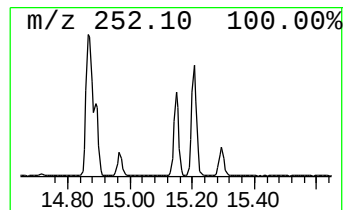
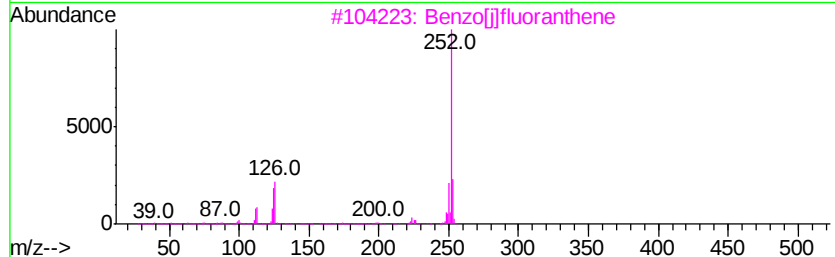
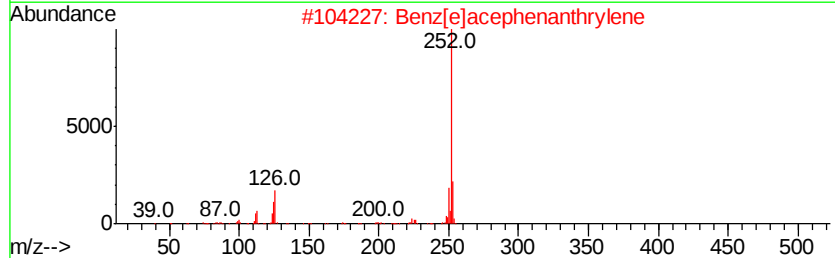
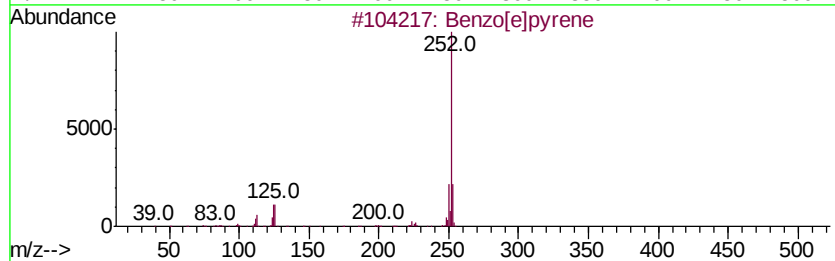
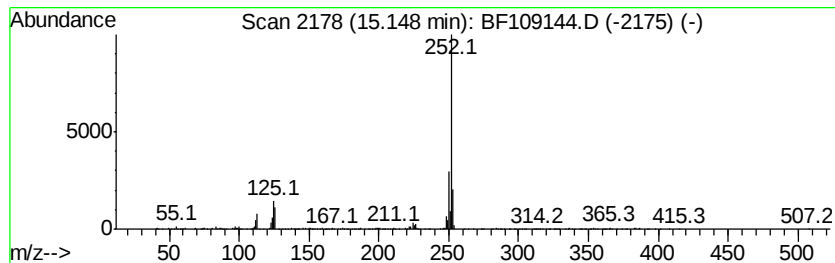
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 10 Benzo[e]pyrene Concentration Rank 3

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 15.15 | 7.89 ng | 350302 | Perylene-d12     | 15.27 |

| Hit# | of | 5 | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---|---------------------------|-----|---------|-------------|------|
| 1    |    |   | Benzo[e]pyrene            | 252 | C20H12  | 000192-97-2 | 98   |
| 2    |    |   | Benzo[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 96   |
| 3    |    |   | Benzo[i]fluoranthene      | 252 | C20H12  | 000205-82-3 | 94   |
| 4    |    |   | Benzo[a]pyrene            | 252 | C20H12  | 000050-32-8 | 94   |
| 5    |    |   | Benzo[k]fluoranthene      | 252 | C20H12  | 000207-08-9 | 90   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091918\  
Data File : BF109144.D  
Acq On : 19 Sep 2018 15:35  
Operator : JU/SJ  
Sample : J4967-03  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-UST-091718-03

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

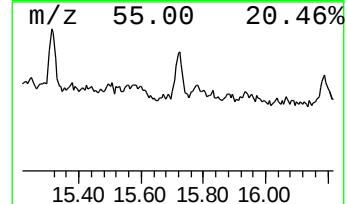
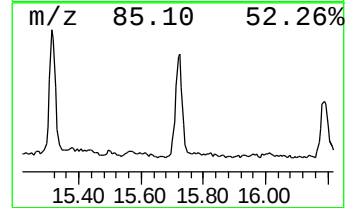
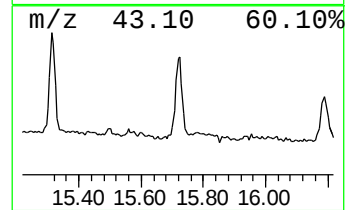
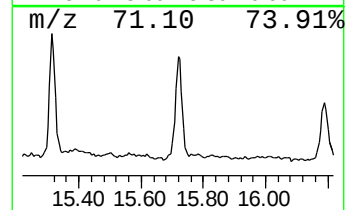
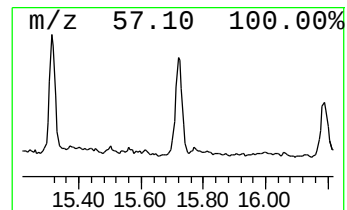
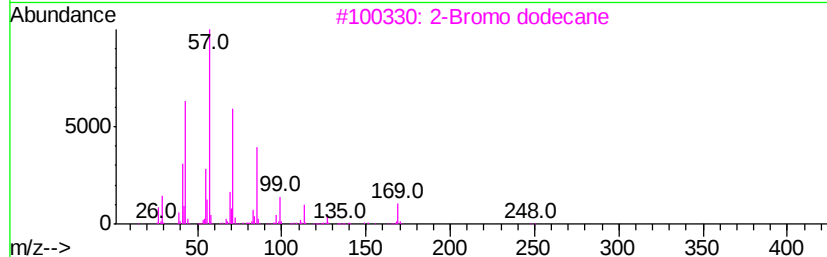
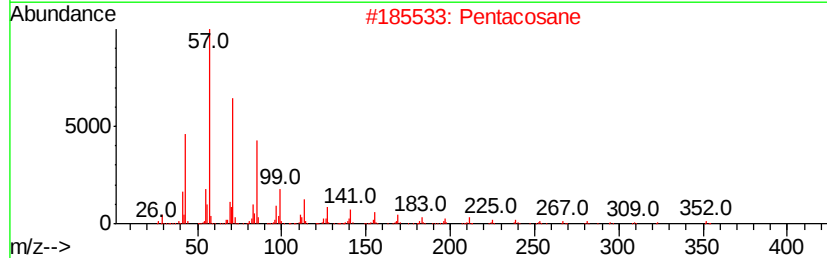
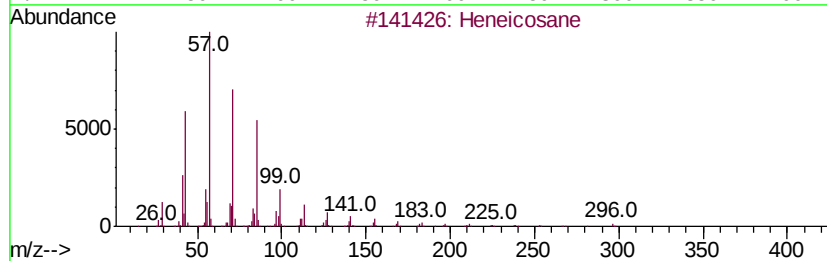
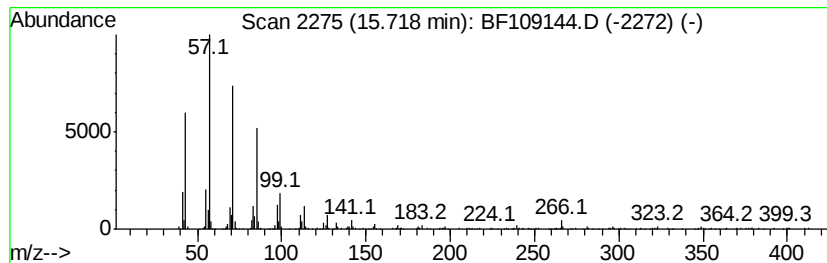
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 11 Heneicosane Concentration Rank 4

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 15.72 | 7.03 ng | 312284 | Perylene-d12     | 15.27 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Heneicosane                         | 296 | C21H44   | 000629-94-7 | 98   |
| 2    |    | Pentacosane                         | 352 | C25H52   | 000629-99-2 | 90   |
| 3    |    | 2-Bromo dodecane                    | 248 | C12H25Br | 013187-99-0 | 90   |
| 4    |    | Hexacosane                          | 366 | C26H54   | 000630-01-3 | 87   |
| 5    |    | Heptadecane, 2,6,10,15-tetramethyl- | 296 | C21H44   | 054833-48-6 | 87   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF091918\  
Data File : BF109144.D  
Acq On : 19 Sep 2018 15:35  
Operator : JU/SJ  
Sample : J4967-03  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-UST-091718-03

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF091418.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... | 4.92  | 3.0     | ng    | 121153   | 1                     | 6.72  | 800964  | 20.0 |
| unknown6.49          | 6.49  | 57.2    | ng    | 2290840  | 1                     | 6.72  | 800964  | 20.0 |
| Phenanthrene, 3-m... | 11.73 | 2.1     | ng    | 92874    | 4                     | 11.23 | 898996  | 20.0 |
| Phenanthrene, 2-m... | 11.76 | 5.7     | ng    | 256527   | 4                     | 11.23 | 898996  | 20.0 |
| 4H-Cyclopenta[def... | 11.84 | 3.1     | ng    | 138496   | 4                     | 11.23 | 898996  | 20.0 |
| 9,10-Anthracenedione | 12.04 | 2.2     | ng    | 99150    | 4                     | 11.23 | 898996  | 20.0 |
| 3-Eicosene, (E)-     | 13.72 | 2.2     | ng    | 149101   | 5                     | 13.86 | 1368290 | 20.0 |
| Hexadecane           | 14.96 | 6.9     | ng    | 306026   | 6                     | 15.27 | 887878  | 20.0 |
| Benzo[e]pyrene       | 15.15 | 7.9     | ng    | 350302   | 6                     | 15.27 | 887878  | 20.0 |
| Heneicosane          | 15.72 | 7.0     | ng    | 312284   | 6                     | 15.27 | 887878  | 20.0 |