

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF083120\  
 Data File : BF121491.D  
 Acq On : 31 Aug 2020 22:05  
 Operator : JU/CG  
 Sample : L3847-03 5X  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 LINDEN-JOP-BH-08-B

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

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

Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF082720.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         | 6.863       | 808           | 812         | 817          | rBV      | 2188224        | 1763697       | 10.48%          | 0.733%        |
| 2         | 8.145       | 1025          | 1030        | 1032         | rBV      | 2768060        | 2240393       | 13.32%          | 0.931%        |
| 3         | 9.222       | 1209          | 1213        | 1218         | rVB      | 935115         | 853194        | 5.07%           | 0.355%        |
| 4         | 9.486       | 1253          | 1258        | 1262         | rBV2     | 778478         | 1100799       | 6.54%           | 0.457%        |
| 5         | 9.563       | 1267          | 1271        | 1273         | rBV      | 1901642        | 1881977       | 11.19%          | 0.782%        |
| 6         | 9.586       | 1273          | 1275        | 1278         | rVB      | 1220530        | 827911        | 4.92%           | 0.344%        |
| 7         | 9.674       | 1287          | 1290        | 1292         | rBV      | 1141025        | 996519        | 5.92%           | 0.414%        |
| 8         | 9.763       | 1299          | 1305        | 1309         | rBV2     | 930888         | 1034653       | 6.15%           | 0.430%        |
| 9         | 9.904       | 1322          | 1329        | 1331         | rBV      | 2663760        | 2803214       | 16.66%          | 1.165%        |
| 10        | 9.933       | 1331          | 1334        | 1337         | rVV      | 1839685        | 1589112       | 9.44%           | 0.660%        |
| 11        | 10.010      | 1343          | 1347        | 1351         | rVV3     | 670436         | 969425        | 5.76%           | 0.403%        |
| 12        | 10.057      | 1351          | 1355        | 1358         | rVV2     | 554483         | 825758        | 4.91%           | 0.343%        |
| 13        | 10.104      | 1359          | 1363        | 1366         | rVV      | 1352621        | 1403198       | 8.34%           | 0.583%        |
| 14        | 10.145      | 1366          | 1370        | 1373         | rVB      | 1553946        | 1264951       | 7.52%           | 0.526%        |
| 15        | 10.216      | 1378          | 1382        | 1385         | rBV      | 1435019        | 1472044       | 8.75%           | 0.612%        |
| 16        | 10.310      | 1393          | 1398        | 1399         | rBV      | 960884         | 1157664       | 6.88%           | 0.481%        |
| 17        | 10.398      | 1408          | 1413        | 1415         | rVV4     | 761417         | 883530        | 5.25%           | 0.367%        |
| 18        | 10.445      | 1418          | 1421        | 1427         | rVV3     | 1464640        | 1729973       | 10.28%          | 0.719%        |
| 19        | 10.516      | 1431          | 1433        | 1435         | rVV      | 1201637        | 1063042       | 6.32%           | 0.442%        |
| 20        | 10.563      | 1439          | 1441        | 1443         | rVV      | 883239         | 800310        | 4.76%           | 0.333%        |
| 21        | 10.598      | 1443          | 1447        | 1453         | rVB4     | 671080         | 1429808       | 8.50%           | 0.594%        |
| 22        | 10.686      | 1457          | 1462        | 1466         | rVB2     | 887314         | 991956        | 5.90%           | 0.412%        |
| 23        | 10.816      | 1479          | 1484        | 1487         | rVB3     | 1011643        | 1159725       | 6.89%           | 0.482%        |
| 24        | 10.998      | 1510          | 1515        | 1517         | rBV3     | 1219690        | 1437212       | 8.54%           | 0.597%        |
| 25        | 11.027      | 1517          | 1520        | 1523         | rVV2     | 1177428        | 1224081       | 7.27%           | 0.509%        |
| 26        | 11.080      | 1527          | 1529        | 1532         | rVB      | 988131         | 827885        | 4.92%           | 0.344%        |
| 27        | 11.145      | 1538          | 1540        | 1545         | rVV2     | 743446         | 851873        | 5.06%           | 0.354%        |
| 28        | 11.192      | 1545          | 1548        | 1552         | rVV4     | 820007         | 844110        | 5.02%           | 0.351%        |
| 29        | 11.239      | 1552          | 1556        | 1561         | rVV5     | 528286         | 991349        | 5.89%           | 0.412%        |
| 30        | 11.286      | 1561          | 1564        | 1569         | rVB      | 1033792        | 1065643       | 6.33%           | 0.443%        |
| 31        | 11.392      | 1579          | 1582        | 1583         | rVV      | 2124945        | 2015141       | 11.98%          | 0.837%        |
| 32        | 11.421      | 1583          | 1587        | 1590         | rVV      | 8260019        | 8483578       | 50.42%          | 3.525%        |
| 33        | 11.468      | 1592          | 1595        | 1597         | rVB      | 2523742        | 2263063       | 13.45%          | 0.940%        |
| 34        | 11.498      | 1597          | 1600        | 1603         | rBV2     | 733285         | 954001        | 5.67%           | 0.396%        |

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Instrument :  
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 ClientSampleId :  
 LINDEN-JOP-BH-08-B

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

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

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

Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF082720.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |          |          |         |        |
|----|--------|------|------|------|------|----------|----------|---------|--------|
| 35 | 11.686 | 1630 | 1632 | 1634 | rVB  | 1121560  | 766465   | 4.56%   | 0.319% |
| 36 | 11.721 | 1634 | 1638 | 1643 | rVB  | 1637389  | 1543591  | 9.17%   | 0.641% |
| 37 | 11.804 | 1649 | 1652 | 1656 | rVB  | 727928   | 748972   | 4.45%   | 0.311% |
| 38 | 11.898 | 1663 | 1668 | 1670 | rVV  | 3884254  | 4401338  | 26.16%  | 1.829% |
| 39 | 11.921 | 1670 | 1672 | 1676 | rVB  | 4778679  | 4316936  | 25.66%  | 1.794% |
| 40 | 11.968 | 1676 | 1680 | 1683 | rBV  | 2065239  | 2022249  | 12.02%  | 0.840% |
| 41 | 12.004 | 1683 | 1686 | 1689 | rVV2 | 6015441  | 7194764  | 42.76%  | 2.990% |
| 42 | 12.033 | 1689 | 1691 | 1694 | rVB  | 3834062  | 2934077  | 17.44%  | 1.219% |
| 43 | 12.127 | 1704 | 1707 | 1709 | rVB2 | 899642   | 789658   | 4.69%   | 0.328% |
| 44 | 12.186 | 1714 | 1717 | 1720 | rVV  | 2423852  | 2313010  | 13.75%  | 0.961% |
| 45 | 12.215 | 1720 | 1722 | 1728 | rVB4 | 1542380  | 1588206  | 9.44%   | 0.660% |
| 46 | 12.321 | 1737 | 1740 | 1741 | rBV  | 935783   | 955262   | 5.68%   | 0.397% |
| 47 | 12.339 | 1741 | 1743 | 1745 | rVV  | 1326362  | 1201467  | 7.14%   | 0.499% |
| 48 | 12.368 | 1745 | 1748 | 1750 | rVV  | 1545114  | 1344266  | 7.99%   | 0.559% |
| 49 | 12.392 | 1750 | 1752 | 1755 | rVB2 | 1160762  | 937234   | 5.57%   | 0.389% |
| 50 | 12.445 | 1755 | 1761 | 1764 | rBV  | 3833783  | 5144684  | 30.58%  | 2.138% |
| 51 | 12.480 | 1764 | 1767 | 1770 | rVV2 | 2496973  | 3528034  | 20.97%  | 1.466% |
| 52 | 12.533 | 1773 | 1776 | 1781 | rBV2 | 2498432  | 3307099  | 19.65%  | 1.374% |
| 53 | 12.615 | 1785 | 1790 | 1793 | rBV  | 9669253  | 11396017 | 67.73%  | 4.736% |
| 54 | 12.651 | 1793 | 1796 | 1798 | rVV  | 795765   | 823797   | 4.90%   | 0.342% |
| 55 | 12.757 | 1809 | 1814 | 1816 | rBV3 | 809360   | 1306371  | 7.76%   | 0.543% |
| 56 | 12.851 | 1823 | 1830 | 1833 | rBV  | 10907633 | 16825887 | 100.00% | 6.992% |
| 57 | 12.892 | 1834 | 1837 | 1840 | rVB3 | 1486099  | 1810176  | 10.76%  | 0.752% |
| 58 | 12.974 | 1849 | 1851 | 1853 | rBV2 | 758257   | 787180   | 4.68%   | 0.327% |
| 59 | 13.057 | 1860 | 1865 | 1872 | rBV4 | 2398577  | 3996942  | 23.75%  | 1.661% |
| 60 | 13.110 | 1872 | 1874 | 1876 | rBV2 | 996243   | 872079   | 5.18%   | 0.362% |
| 61 | 13.145 | 1876 | 1880 | 1881 | rVV2 | 1805974  | 2229691  | 13.25%  | 0.927% |
| 62 | 13.162 | 1881 | 1883 | 1886 | rVB  | 3193480  | 3201510  | 19.03%  | 1.330% |
| 63 | 13.210 | 1886 | 1891 | 1892 | rBV3 | 722996   | 955548   | 5.68%   | 0.397% |
| 64 | 13.233 | 1892 | 1895 | 1897 | rVB  | 1591816  | 1427373  | 8.48%   | 0.593% |
| 65 | 13.268 | 1897 | 1901 | 1904 | rBV2 | 3085958  | 3217229  | 19.12%  | 1.337% |
| 66 | 13.327 | 1909 | 1911 | 1913 | rVV  | 747298   | 764788   | 4.55%   | 0.318% |
| 67 | 13.362 | 1913 | 1917 | 1920 | rVV  | 3149074  | 3376274  | 20.07%  | 1.403% |
| 68 | 13.392 | 1920 | 1922 | 1925 | rVV  | 3011898  | 3007258  | 17.87%  | 1.250% |
| 69 | 13.468 | 1932 | 1935 | 1939 | rVB5 | 733872   | 1035493  | 6.15%   | 0.430% |
| 70 | 13.674 | 1963 | 1970 | 1974 | rVV2 | 2095886  | 3123624  | 18.56%  | 1.298% |
| 71 | 13.786 | 1984 | 1989 | 1992 | rBV3 | 2239003  | 3515727  | 20.89%  | 1.461% |

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 BNA\_F  
 ClientSampleId :  
 LINDEN-JOP-BH-08-B

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-BF082720.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|     |        |      |      |      |      |         |          |        |        |
|-----|--------|------|------|------|------|---------|----------|--------|--------|
| 72  | 13.815 | 1992 | 1994 | 1996 | rVV  | 2142396 | 1763651  | 10.48% | 0.733% |
| 73  | 13.839 | 1996 | 1998 | 2001 | rVV2 | 1863706 | 1875163  | 11.14% | 0.779% |
| 74  | 13.880 | 2002 | 2005 | 2009 | rVB  | 1871705 | 2040507  | 12.13% | 0.848% |
| 75  | 14.033 | 2025 | 2031 | 2034 | rBV2 | 6702763 | 10637499 | 63.22% | 4.420% |
| 76  | 14.068 | 2034 | 2037 | 2044 | rVB  | 6821496 | 8519479  | 50.63% | 3.540% |
| 77  | 14.121 | 2044 | 2046 | 2048 | rBV  | 980453  | 899224   | 5.34%  | 0.374% |
| 78  | 14.145 | 2048 | 2050 | 2052 | rBV  | 1217618 | 843766   | 5.01%  | 0.351% |
| 79  | 14.198 | 2057 | 2059 | 2066 | rVV5 | 1269432 | 2263117  | 13.45% | 0.940% |
| 80  | 14.268 | 2066 | 2071 | 2073 | rVV4 | 590014  | 1129524  | 6.71%  | 0.469% |
| 81  | 14.292 | 2073 | 2075 | 2078 | rVV  | 1080426 | 1152191  | 6.85%  | 0.479% |
| 82  | 14.357 | 2082 | 2086 | 2088 | rVV3 | 762234  | 912759   | 5.42%  | 0.379% |
| 83  | 14.386 | 2088 | 2091 | 2093 | rVV  | 999826  | 1047768  | 6.23%  | 0.435% |
| 84  | 14.427 | 2093 | 2098 | 2101 | rVV  | 3214894 | 4440737  | 26.39% | 1.845% |
| 85  | 14.457 | 2101 | 2103 | 2106 | rVV  | 2455290 | 2290509  | 13.61% | 0.952% |
| 86  | 14.515 | 2107 | 2113 | 2116 | rVV3 | 1489856 | 3397624  | 20.19% | 1.412% |
| 87  | 14.551 | 2116 | 2119 | 2121 | rVV  | 2272499 | 2388464  | 14.20% | 0.993% |
| 88  | 14.568 | 2121 | 2122 | 2125 | rVV2 | 1420636 | 1131211  | 6.72%  | 0.470% |
| 89  | 14.615 | 2126 | 2130 | 2134 | rVV3 | 1005724 | 1563363  | 9.29%  | 0.650% |
| 90  | 14.757 | 2152 | 2154 | 2161 | rVB2 | 634148  | 1001847  | 5.95%  | 0.416% |
| 91  | 14.815 | 2161 | 2164 | 2166 | rVV  | 675137  | 748041   | 4.45%  | 0.311% |
| 92  | 14.845 | 2167 | 2169 | 2174 | rVB2 | 848467  | 1026211  | 6.10%  | 0.426% |
| 93  | 15.092 | 2205 | 2211 | 2214 | rBV  | 4175946 | 7708059  | 45.81% | 3.203% |
| 94  | 15.192 | 2225 | 2228 | 2232 | rVB  | 997361  | 1015346  | 6.03%  | 0.422% |
| 95  | 15.392 | 2257 | 2262 | 2267 | rVB  | 2963323 | 4247498  | 25.24% | 1.765% |
| 96  | 15.462 | 2268 | 2274 | 2278 | rVB  | 4349847 | 5955242  | 35.39% | 2.475% |
| 97  | 15.515 | 2279 | 2283 | 2286 | rVV  | 1320845 | 1796654  | 10.68% | 0.747% |
| 98  | 15.551 | 2286 | 2289 | 2295 | rVB2 | 1255077 | 2013476  | 11.97% | 0.837% |
| 99  | 16.998 | 2529 | 2535 | 2542 | rVB2 | 1784546 | 3623707  | 21.54% | 1.506% |
| 100 | 17.445 | 2604 | 2611 | 2621 | rVB  | 1466577 | 3303767  | 19.64% | 1.373% |

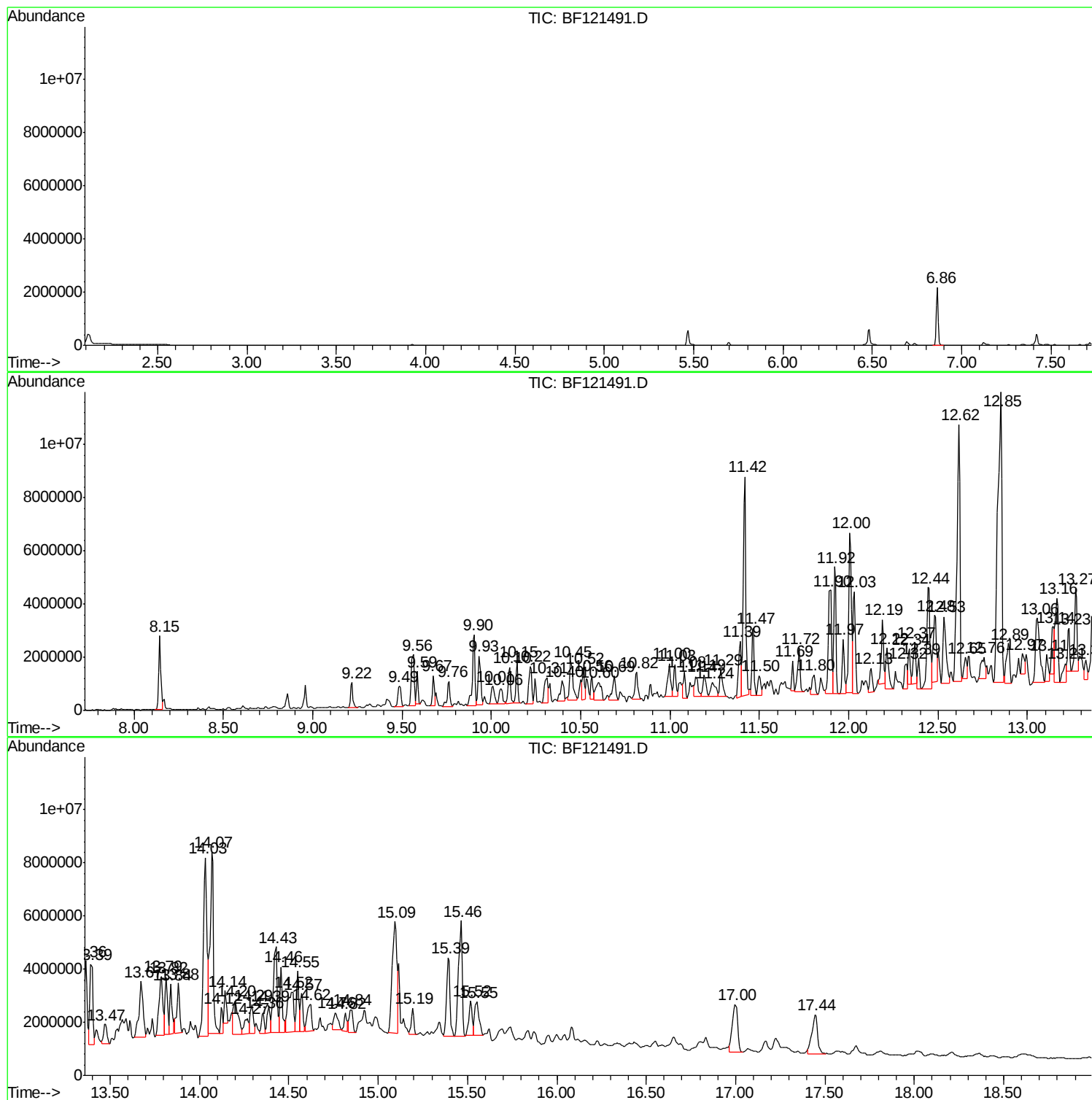
Sum of corrected areas: 240647469

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Instrument :  
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ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.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\BF083120\  
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

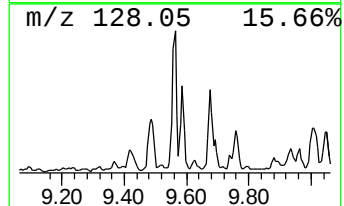
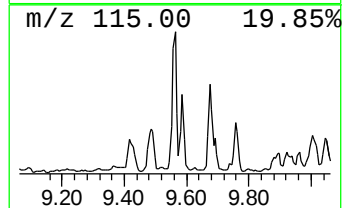
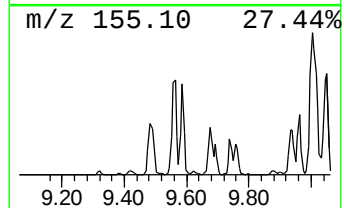
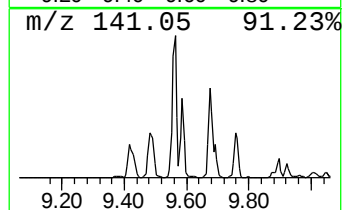
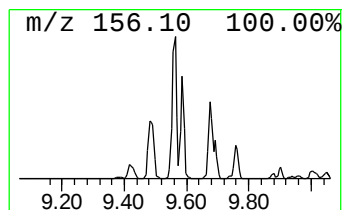
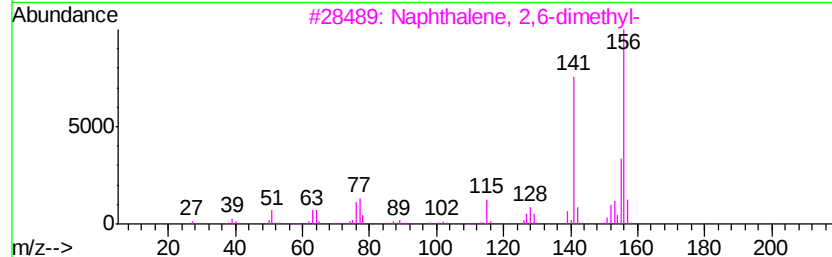
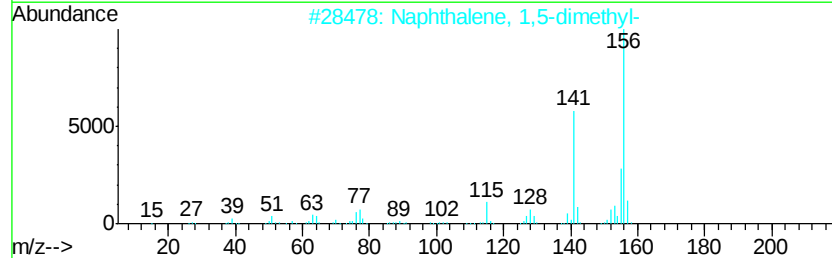
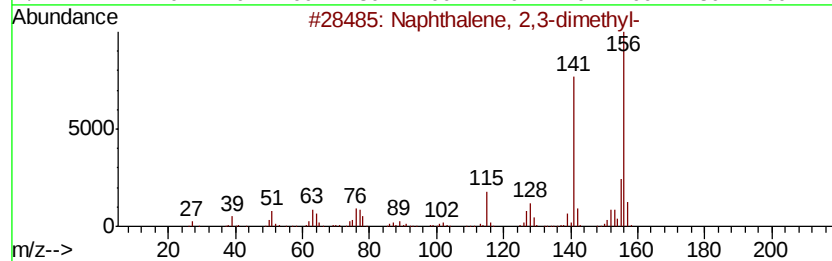
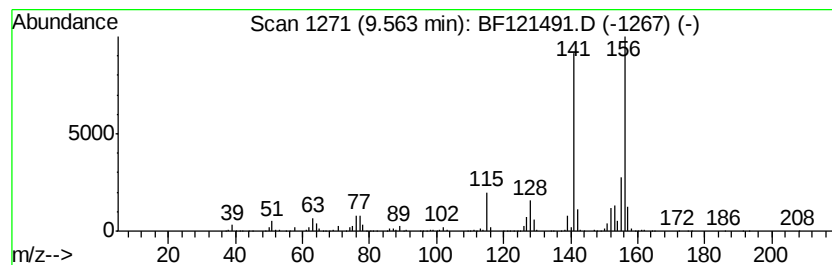
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 1 Naphthalene, 2,3-dimethyl- Concentration Rank 14

| R.T. | EstConc  | Area    | Relative to ISTD | R.T. |
|------|----------|---------|------------------|------|
| 9.56 | 13.43 ng | 1881980 | Acenaphthene-d10 | 9.90 |

| Hit# | of | Tentative ID               | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, 2,3-dimethyl- | 156 | C12H12  | 000581-40-8 | 97   |
| 2    |    | Naphthalene, 1,5-dimethyl- | 156 | C12H12  | 000571-61-9 | 97   |
| 3    |    | Naphthalene, 2,6-dimethyl- | 156 | C12H12  | 000581-42-0 | 97   |
| 4    |    | Naphthalene, 2,7-dimethyl- | 156 | C12H12  | 000582-16-1 | 97   |
| 5    |    | Naphthalene, 1,6-dimethyl- | 156 | C12H12  | 000575-43-9 | 97   |



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Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

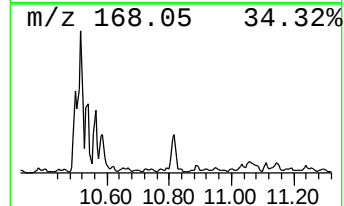
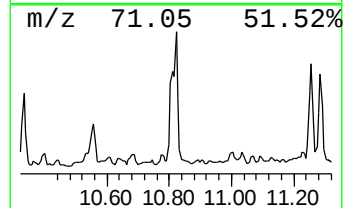
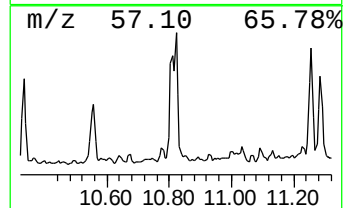
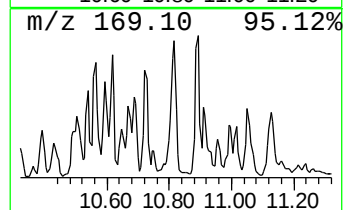
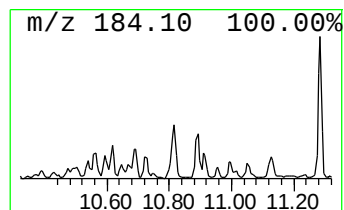
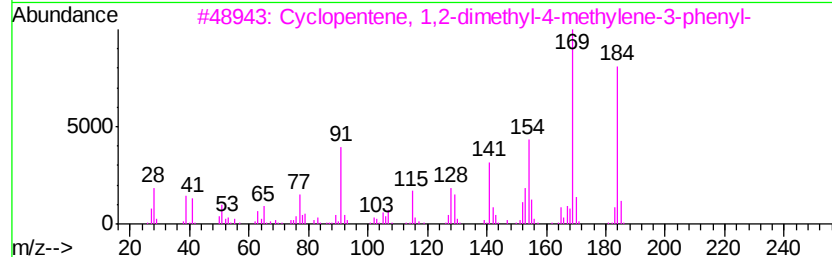
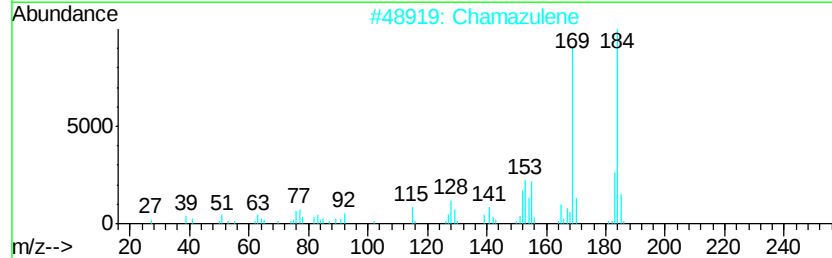
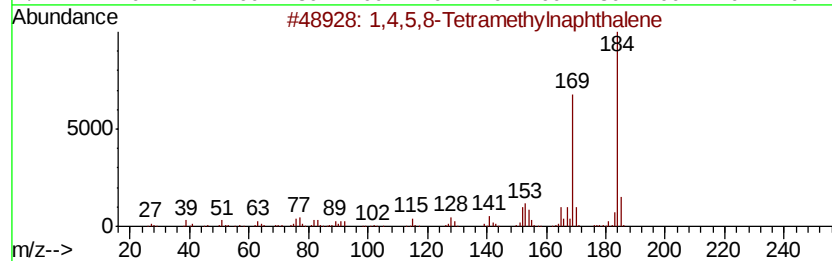
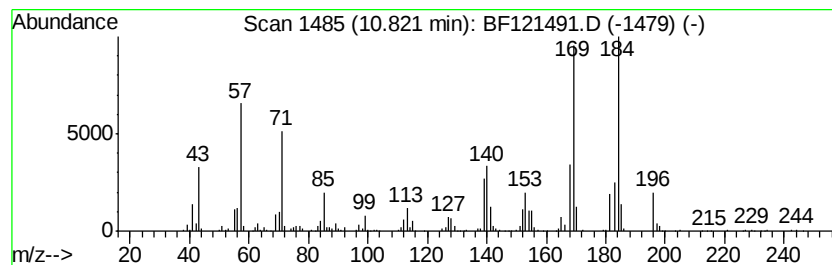
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 2 1,4,5,8-Tetramethylnaphthalene Concentration Rank 18

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 10.82 | 11.51 ng | 1159730 | Phenanthrene-d10 | 11.39 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | 1,4,5,8-Tetramethylnaphthalene      | 184 | C14H16  | 002717-39-7  | 83   |
| 2    |    | Chamazulene                         | 184 | C14H16  | 000529-05-5  | 70   |
| 3    |    | Cyclopentene, 1,2-dimethyl-4-met... | 184 | C14H16  | 1000152-22-4 | 60   |
| 4    |    | Naphthalene, 1,2,3,4-tetramethyl-   | 184 | C14H16  | 003031-15-0  | 53   |
| 5    |    | 3,4-Dimethoxy-6-methylpyrocatechol  | 184 | C9H12O4 | 054826-79-8  | 53   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

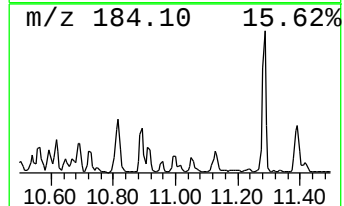
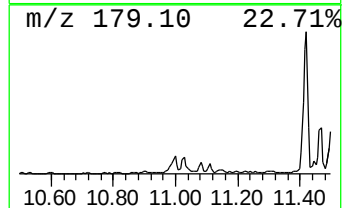
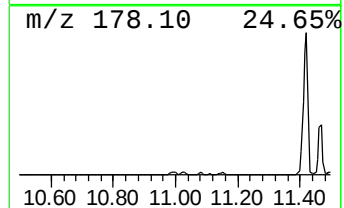
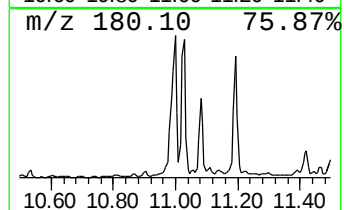
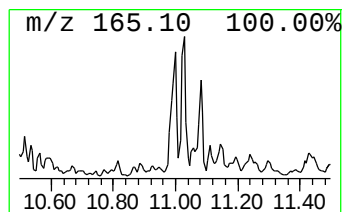
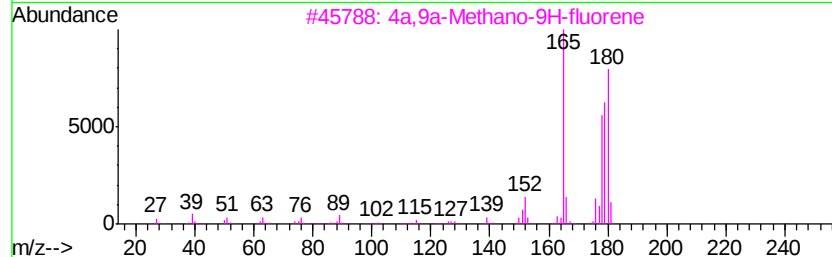
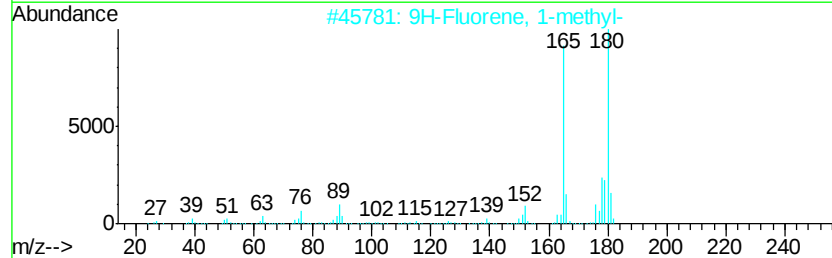
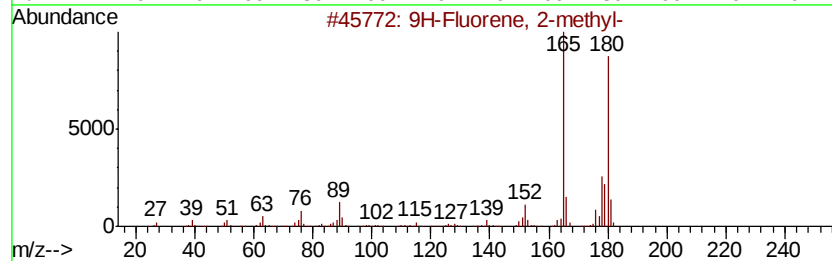
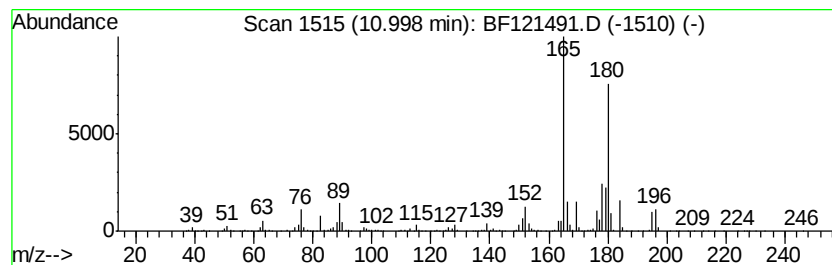
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 3 9H-Fluorene, 2-methyl- Concentration Rank 13

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 11.00 | 14.26 ng | 1437210 | Phenanthrene-d10 | 11.39 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | 9H-Fluorene, 2-methyl-    | 180 | C14H12  | 001430-97-3 | 93   |
| 2    |    | 9H-Fluorene, 1-methyl-    | 180 | C14H12  | 001730-37-6 | 93   |
| 3    |    | 4a,9a-Methano-9H-fluorene | 180 | C14H12  | 019540-84-2 | 83   |
| 4    |    | 9H-Fluorene, 3-methyl-    | 180 | C14H12  | 002523-39-9 | 70   |
| 5    |    | 9H-Fluorene, 9-methyl-    | 180 | C14H12  | 002523-37-7 | 70   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

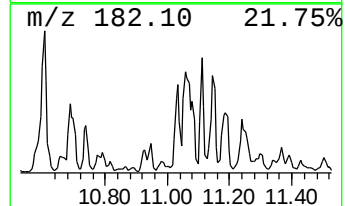
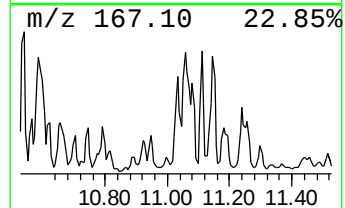
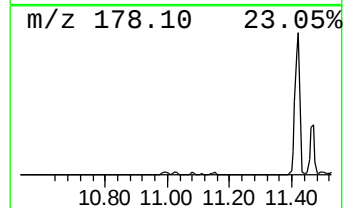
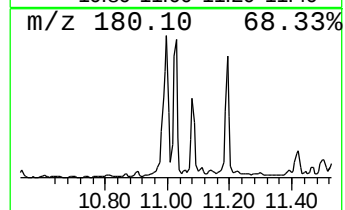
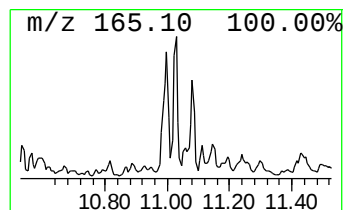
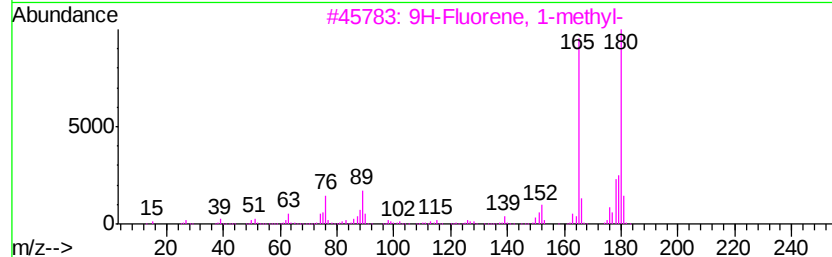
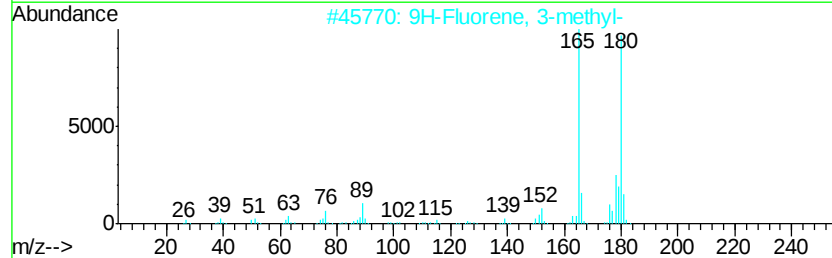
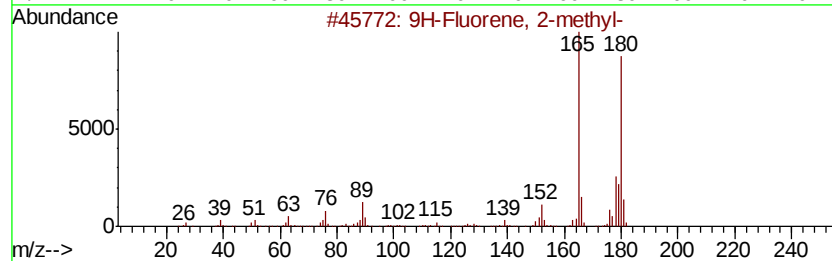
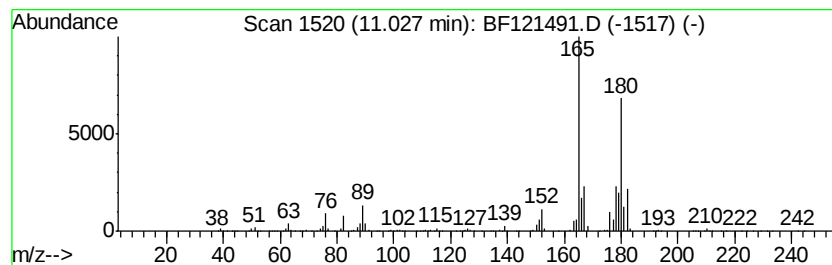
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 4 9H-Fluorene, 3-methyl- Concentration Rank 16

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 11.03 | 12.15 ng | 1224080 | Phenanthrene-d10 | 11.39 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | 9H-Fluorene, 2-methyl-    | 180 | C14H12  | 001430-97-3 | 97   |
| 2    |    | 9H-Fluorene, 3-methyl-    | 180 | C14H12  | 002523-39-9 | 95   |
| 3    |    | 9H-Fluorene, 1-methyl-    | 180 | C14H12  | 001730-37-6 | 90   |
| 4    |    | 9H-Fluorene, 9-methyl-    | 180 | C14H12  | 002523-37-7 | 86   |
| 5    |    | 4a,9a-Methano-9H-fluorene | 180 | C14H12  | 019540-84-2 | 41   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

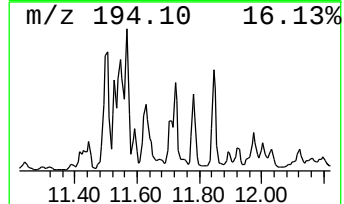
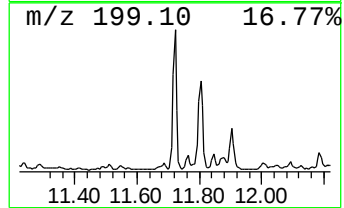
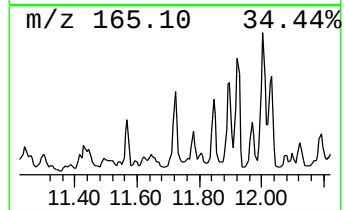
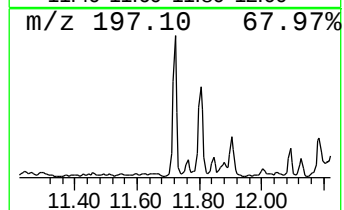
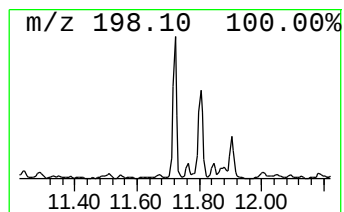
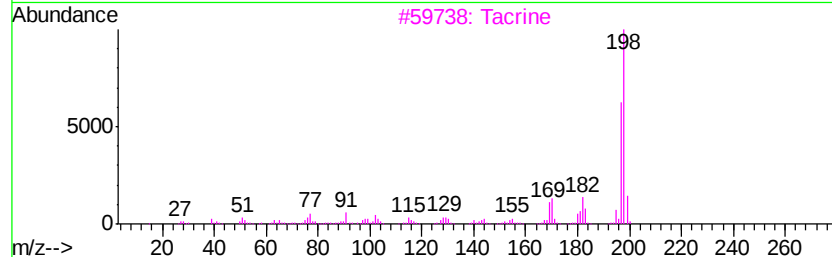
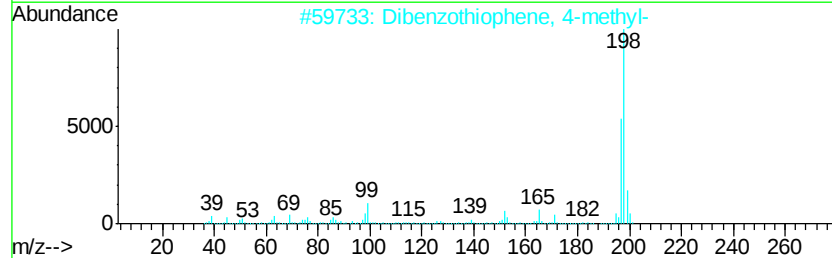
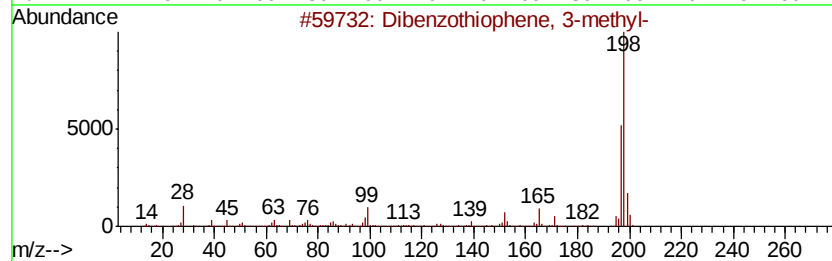
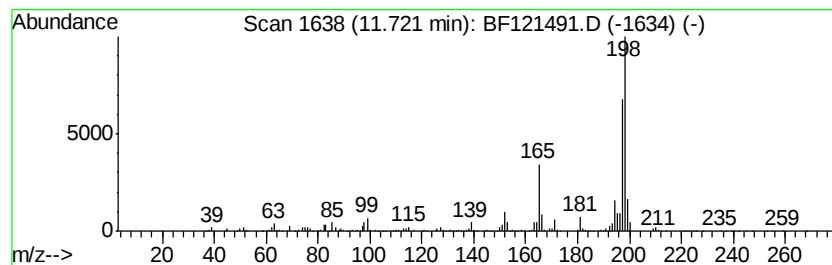
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 5 Dibenzothiophene, 3-methyl- Concentration Rank 12

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 11.72 | 15.32 ng | 1543590 | Phenanthrene-d10 | 11.39 |

| Hit# | of | Tentative ID                    | MW  | MolForm  | CAS#        | Qual |
|------|----|---------------------------------|-----|----------|-------------|------|
| 1    | 5  | Dibenzothiophene, 3-methyl-     | 198 | C13H10S  | 016587-52-3 | 90   |
| 2    |    | Dibenzothiophene, 4-methyl-     | 198 | C13H10S  | 007372-88-5 | 72   |
| 3    |    | Tacrine                         | 198 | C13H14N2 | 000321-64-2 | 64   |
| 4    |    | Thioxanthene                    | 198 | C13H10S  | 000261-31-4 | 64   |
| 5    |    | Benzenamine, 4,4'-methylenebis- | 198 | C13H14N2 | 000101-77-9 | 64   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

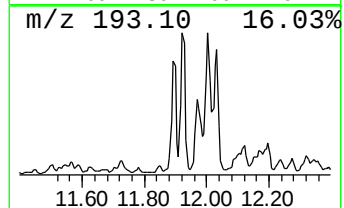
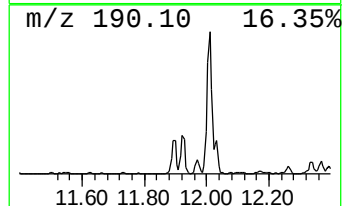
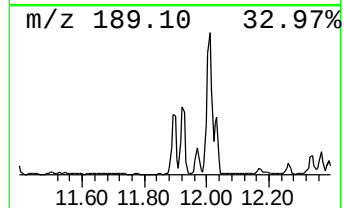
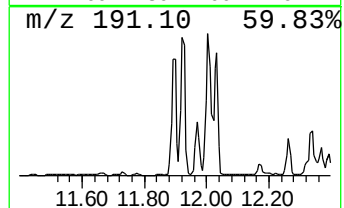
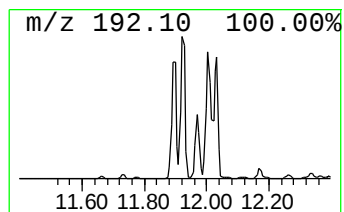
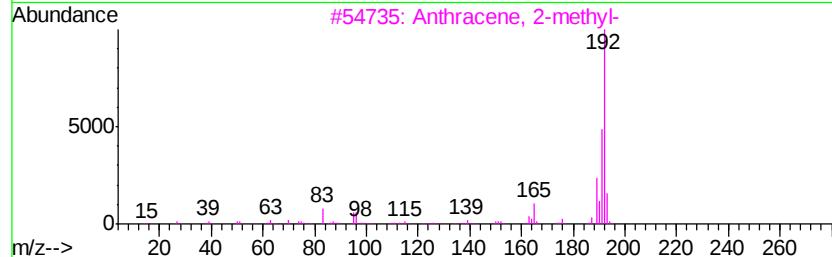
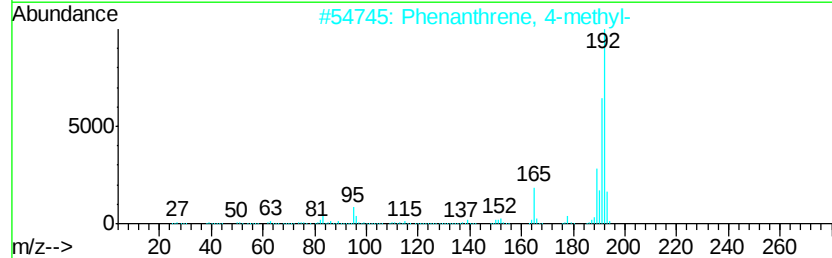
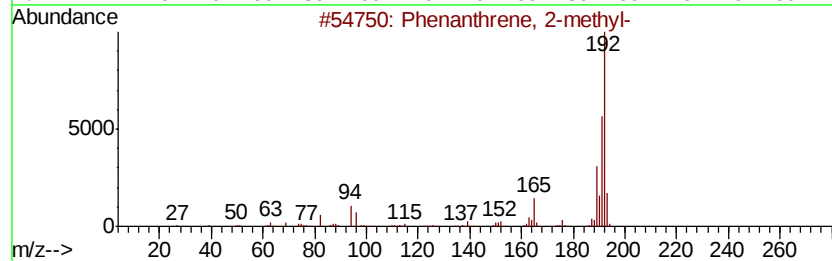
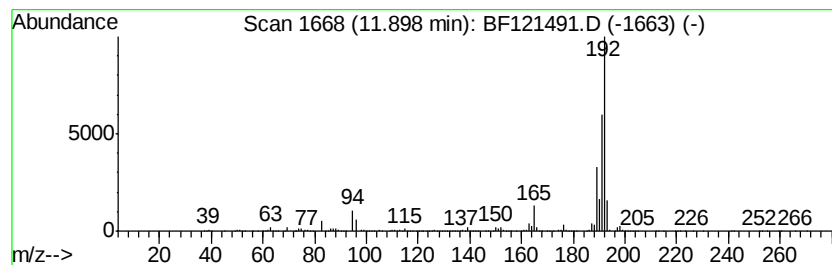
Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 6 Phenanthrene, 2-methyl- Concentration Rank 4

| R.T.      | EstConc                 | Area    | Relative to ISTD | R.T.        |      |
|-----------|-------------------------|---------|------------------|-------------|------|
| 11.90     | 43.68 ng                | 4401340 | Phenanthrene-d10 | 11.39       |      |
| Hit# of 5 | Tentative ID            | MW      | MolForm          | CAS#        | Qual |
| 1         | Phenanthrene, 2-methyl- | 192     | C15H12           | 002531-84-2 | 96   |
| 2         | Phenanthrene, 4-methyl- | 192     | C15H12           | 000832-64-4 | 95   |
| 3         | Anthracene, 2-methyl-   | 192     | C15H12           | 000613-12-7 | 95   |
| 4         | Anthracene, 9-methyl-   | 192     | C15H12           | 000779-02-2 | 91   |
| 5         | Anthracene, 1-methyl-   | 192     | C15H12           | 000610-48-0 | 90   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

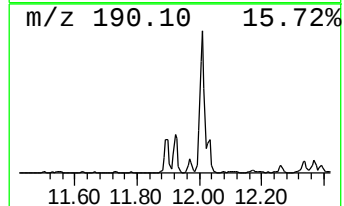
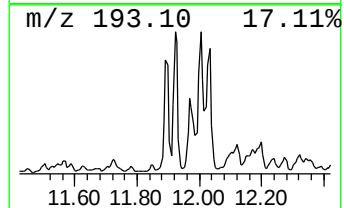
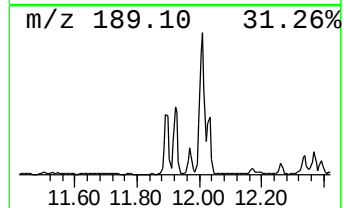
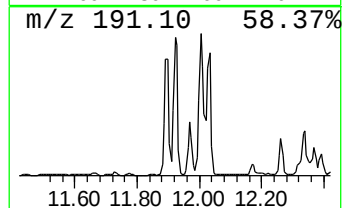
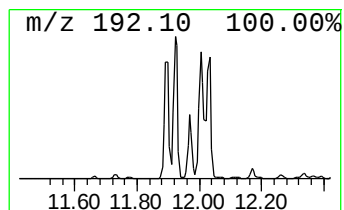
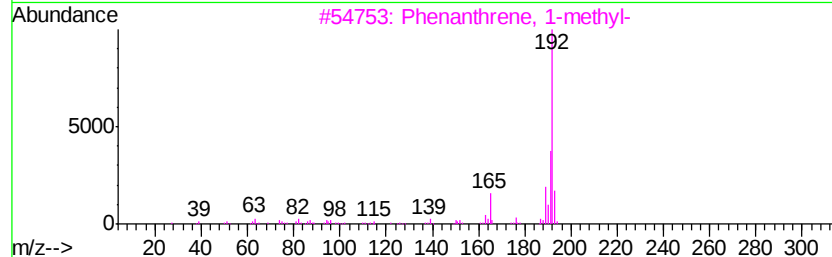
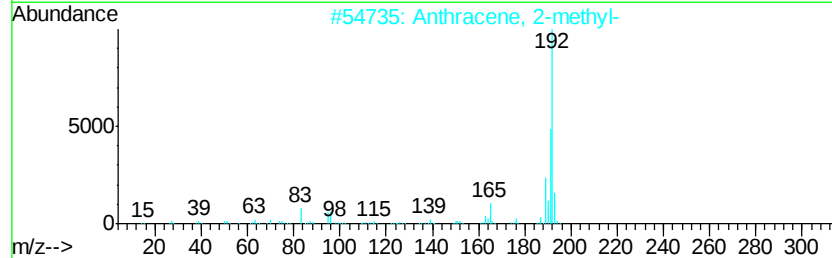
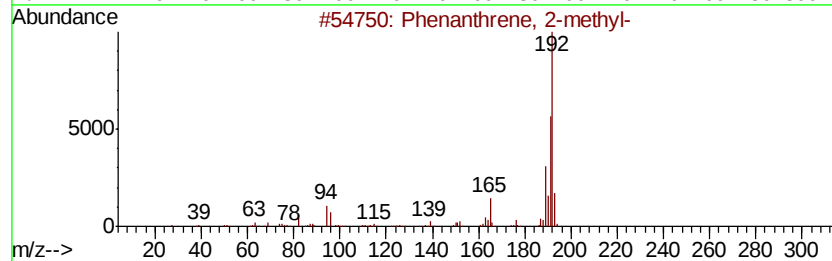
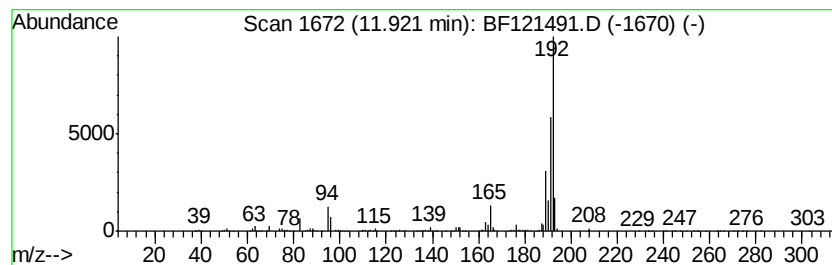
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 11.92 | 42.85 ng | 4316940 | Phenanthrene-d10 | 11.39 |

| Hit# | of | Tentative ID                         | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Phenanthrene, 2-methyl-              | 192 | C15H12  | 002531-84-2 | 98   |
| 2    |    | Anthracene, 2-methyl-                | 192 | C15H12  | 000613-12-7 | 96   |
| 3    |    | Phenanthrene, 1-methyl-              | 192 | C15H12  | 000832-69-9 | 95   |
| 4    |    | 5H-Dibenzo[a,d]cycloheptene          | 192 | C15H12  | 000256-81-5 | 94   |
| 5    |    | 1H-Cyclopropa[1]phenanthrene, 1a,... | 192 | C15H12  | 000949-41-7 | 93   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

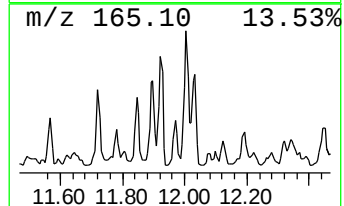
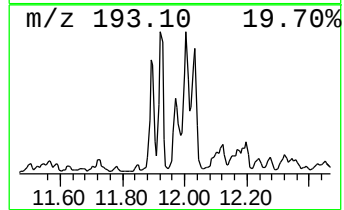
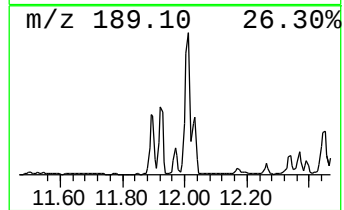
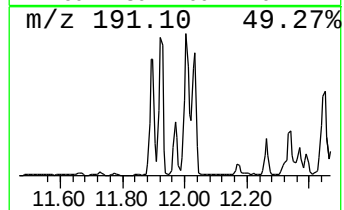
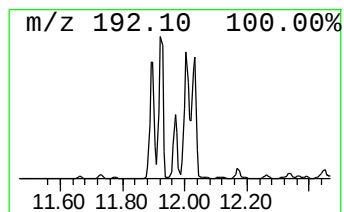
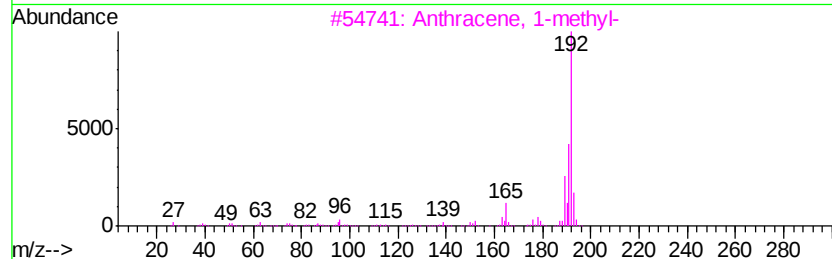
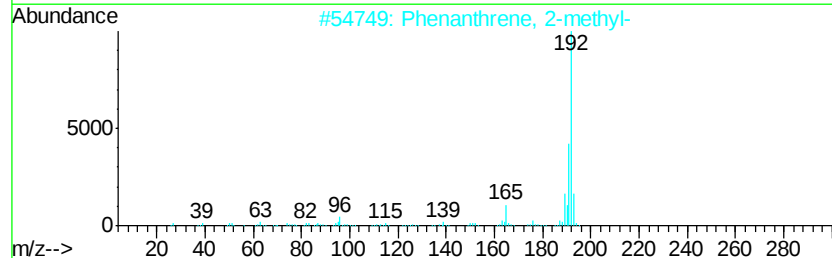
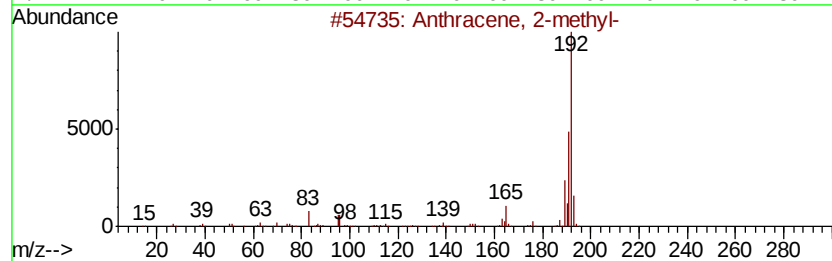
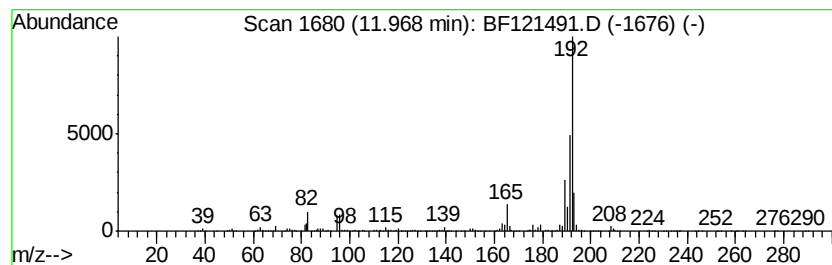
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 8 Anthracene, 1-methyl- Concentration Rank 10

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 11.97 | 20.07 ng | 2022250 | Phenanthrene-d10 | 11.39 |

| Hit# | of | Tentative ID                         | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Anthracene, 2-methyl-                | 192 | C15H12  | 000613-12-7 | 96   |
| 2    |    | Phenanthrene, 2-methyl-              | 192 | C15H12  | 002531-84-2 | 96   |
| 3    |    | Anthracene, 1-methyl-                | 192 | C15H12  | 000610-48-0 | 95   |
| 4    |    | Phenanthrene, 1-methyl-              | 192 | C15H12  | 000832-69-9 | 95   |
| 5    |    | 1H-Cyclopropa[1]phenanthrene, 1a,... | 192 | C15H12  | 000949-41-7 | 93   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

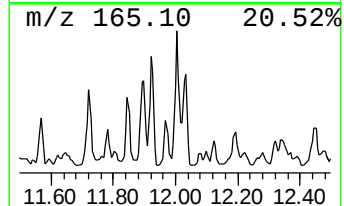
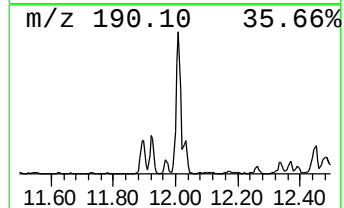
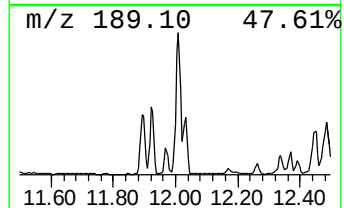
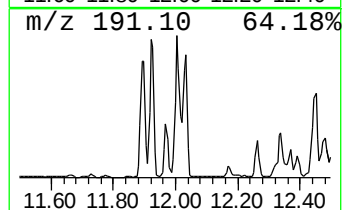
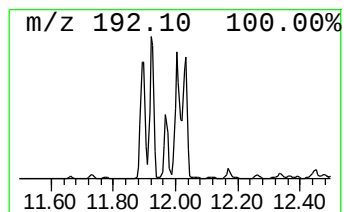
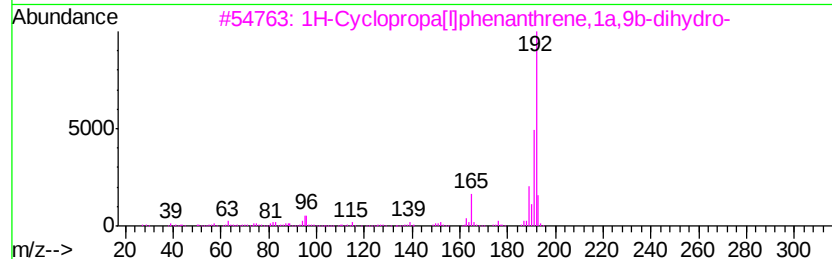
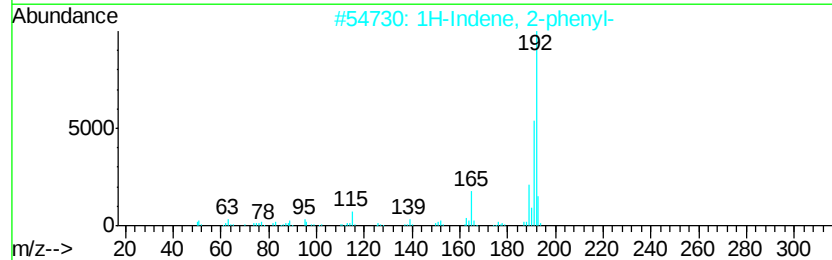
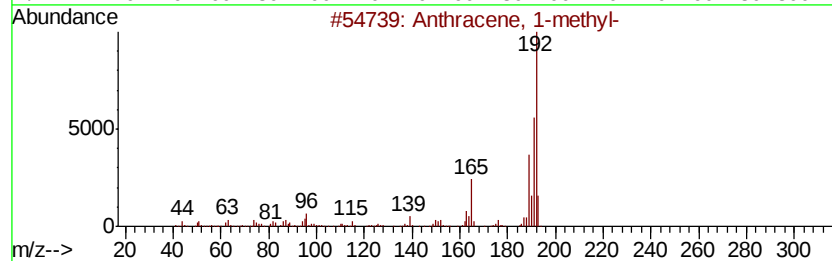
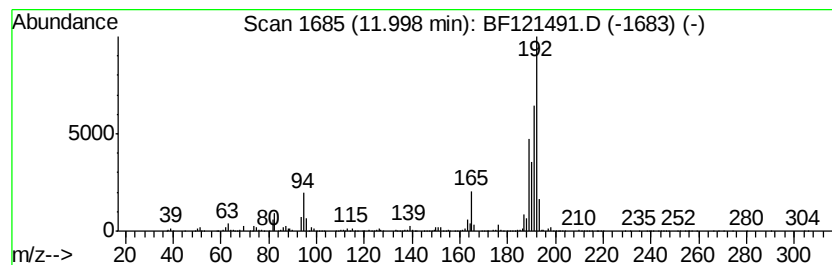
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 9 1H-Indene, 2-phenyl- Concentration Rank 1

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.00 | 71.41 ng | 7194760 | Phenanthrene-d10 | 11.39 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Anthracene, 1-methyl-               | 192 | C15H12  | 000610-48-0 | 70   |
| 2    |    | 1H-Indene, 2-phenyl-                | 192 | C15H12  | 004505-48-0 | 60   |
| 3    |    | 1H-Cyclopropa[1]phenanthrene,1a,... | 192 | C15H12  | 000949-41-7 | 60   |
| 4    |    | Phenanthrene, 2-methyl-             | 192 | C15H12  | 002531-84-2 | 60   |
| 5    |    | Anthracene, 2-methyl-               | 192 | C15H12  | 000613-12-7 | 55   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

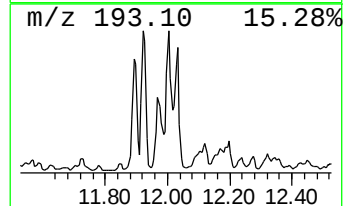
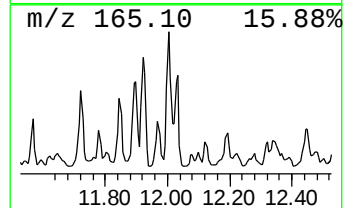
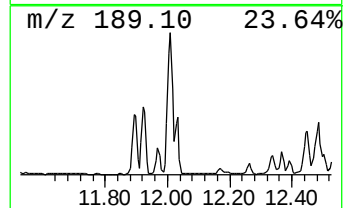
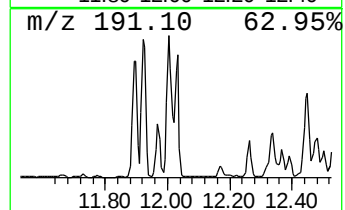
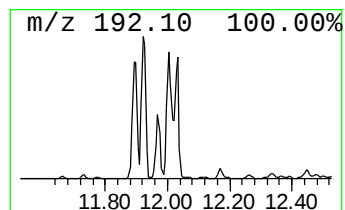
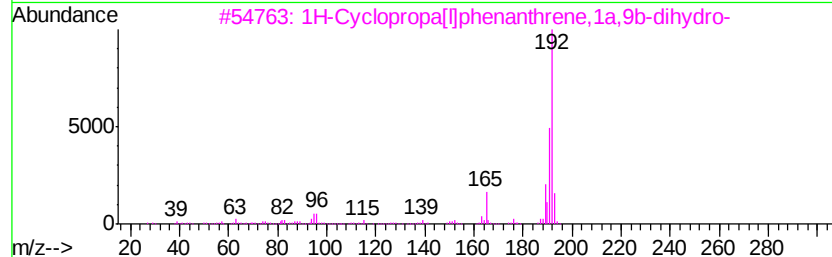
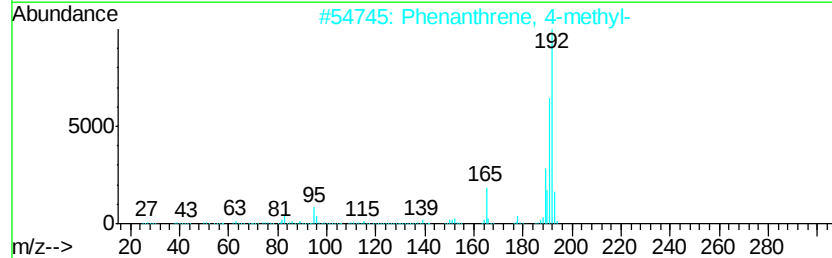
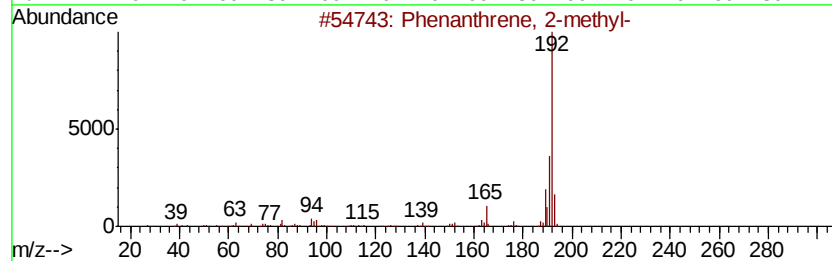
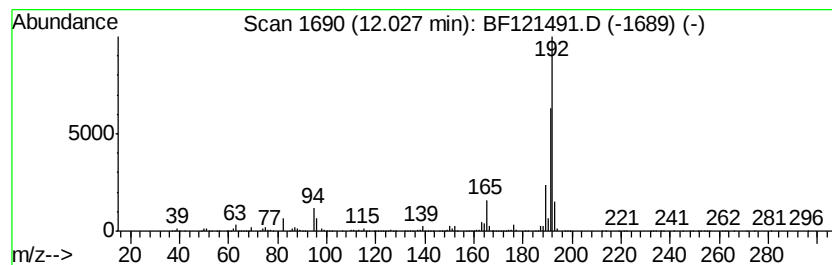
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 10 Phenanthrene, 4-methyl- Concentration Rank 8

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.03 | 29.12 ng | 2934080 | Phenanthrene-d10 | 11.39 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Phenanthrene, 2-methyl-             | 192 | C15H12  | 002531-84-2 | 95   |
| 2    |    | Phenanthrene, 4-methyl-             | 192 | C15H12  | 000832-64-4 | 95   |
| 3    |    | 1H-Cyclopropa[1]phenanthrene,1a,... | 192 | C15H12  | 000949-41-7 | 95   |
| 4    |    | Phenanthrene, 1-methyl-             | 192 | C15H12  | 000832-69-9 | 95   |
| 5    |    | Anthracene, 2-methyl-               | 192 | C15H12  | 000613-12-7 | 93   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

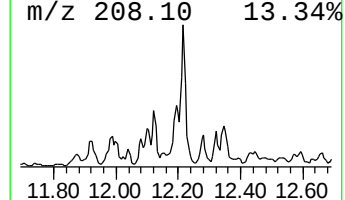
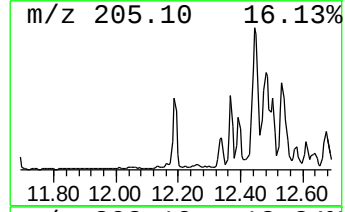
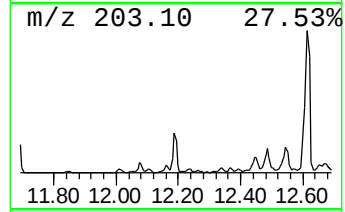
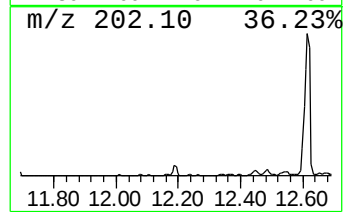
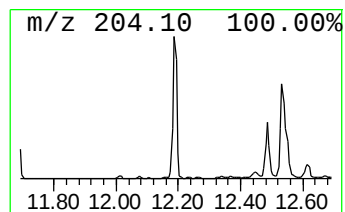
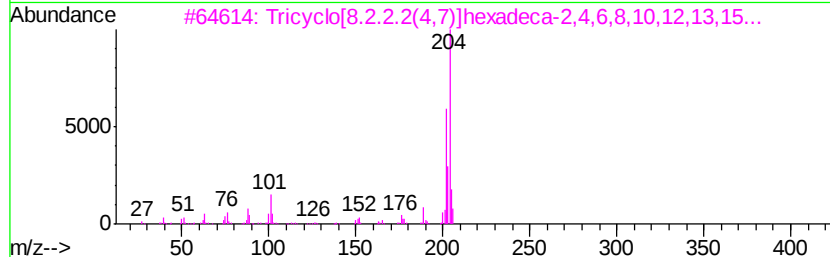
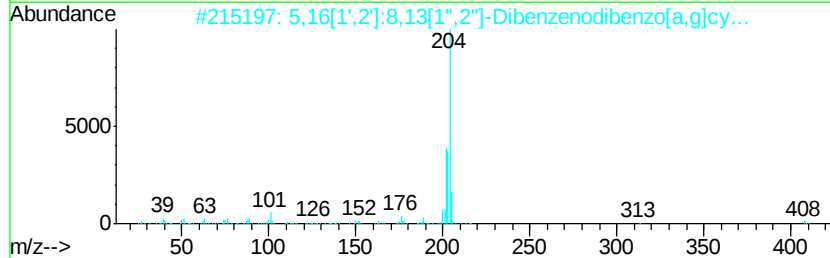
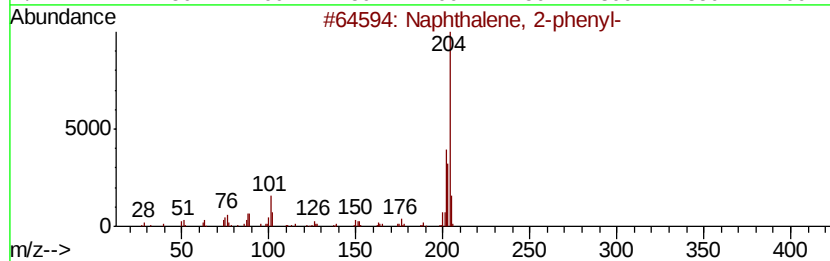
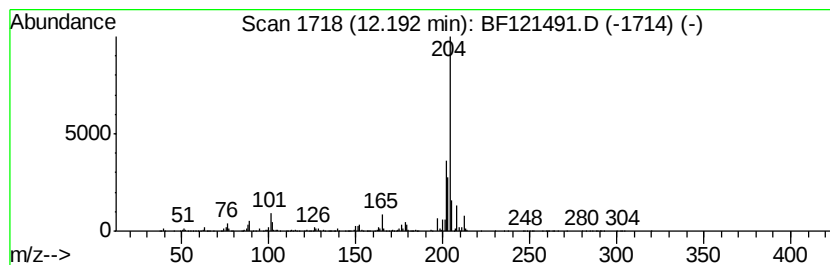
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.19 | 22.96 ng | 2313010 | Phenanthrene-d10 | 11.39 |

| Hit# | of | Tentative ID                          | MW  | MolForm   | CAS#        | Qual |
|------|----|---------------------------------------|-----|-----------|-------------|------|
| 1    | 5  | Naphthalene, 2-phenyl-                | 204 | C16H12    | 000612-94-2 | 93   |
| 2    |    | 5,16[1',2'] : 8,13[1'',2'']-Dibenz... | 408 | C32H24    | 005672-97-9 | 72   |
| 3    |    | Tricyclo[8.2.2.2(4,7)]hexadeca-2...   | 204 | C16H12    | 006572-60-7 | 62   |
| 4    |    | 9,10-Bis(bromomethyl)anthracene       | 362 | C16H12Br2 | 034373-96-1 | 53   |
| 5    |    | [1,1'-Biphenyl]-4,4'-dicarbonitrile   | 204 | C14H8N2   | 001591-30-6 | 49   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

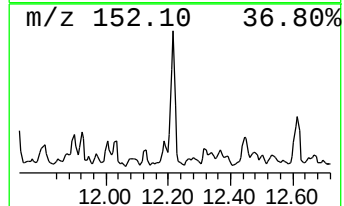
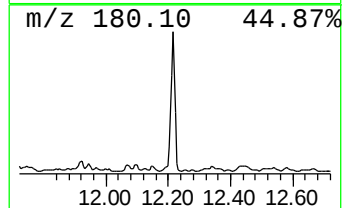
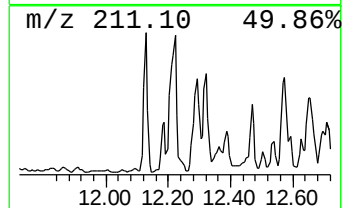
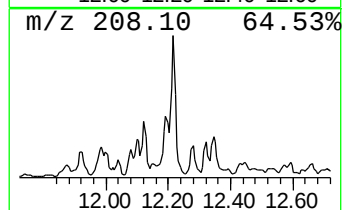
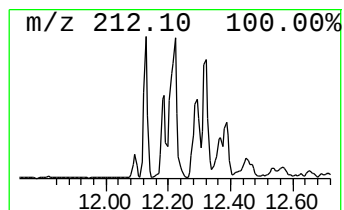
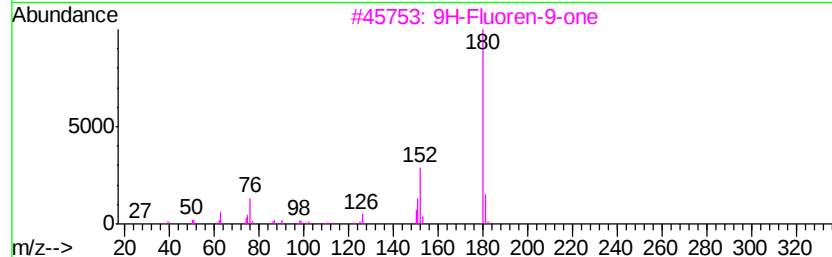
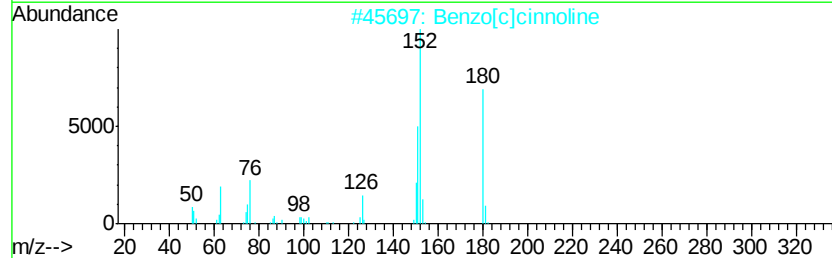
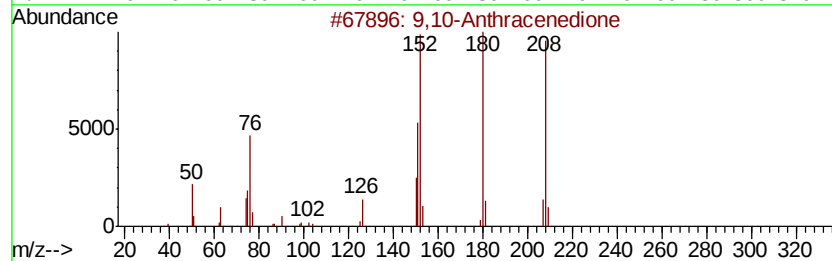
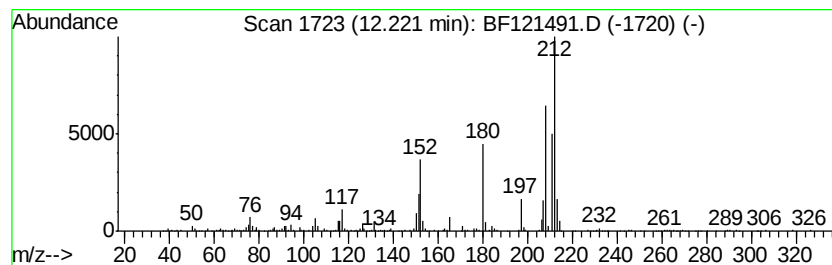
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 12 9,10-Anthracenedione Concentration Rank 11

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.22 | 15.76 ng | 1588210 | Phenanthrene-d10 | 11.39 |

| Hit# | of | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------|-----|---------|-------------|------|
| 1    | 5  | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 97   |
| 2    |    | Benzo[c]cinnoline    | 180 | C12H8N2 | 000230-17-1 | 55   |
| 3    |    | 9H-Fluoren-9-one     | 180 | C13H8O  | 000486-25-9 | 53   |
| 4    |    | 1H-Phenalen-1-one    | 180 | C13H8O  | 000548-39-0 | 50   |
| 5    |    | 1,4-Anthracenedione  | 208 | C14H8O2 | 000635-12-1 | 45   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

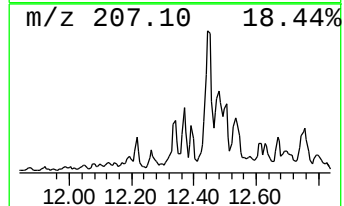
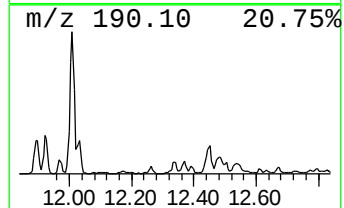
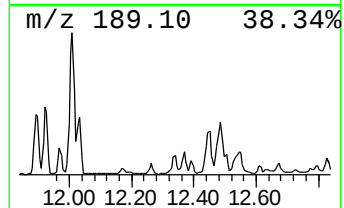
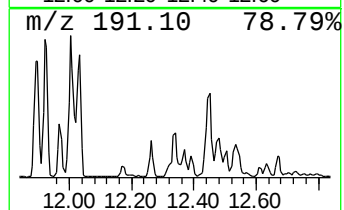
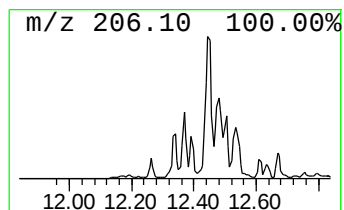
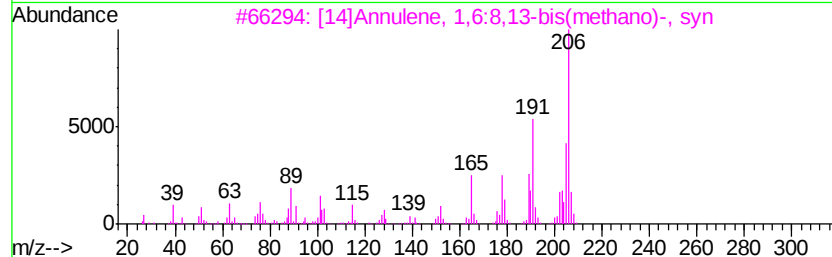
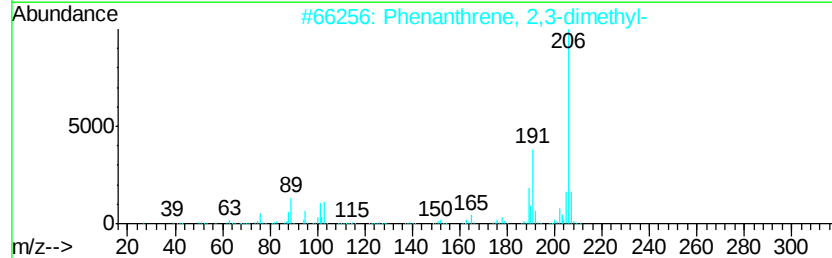
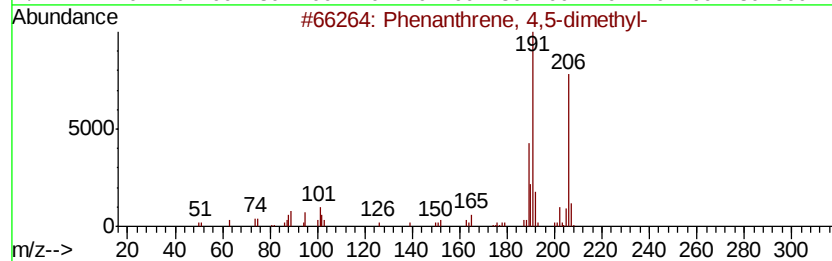
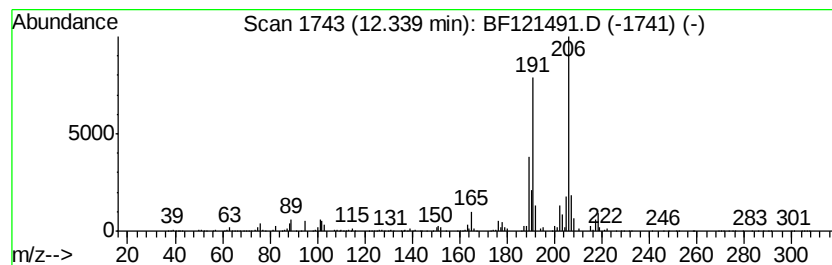
Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.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 13 Phenanthrene, 4,5-dimethyl- Concentration Rank 17

| R.T.    | EstConc  | Area                                | Relative to ISTD |         | R.T.        |      |
|---------|----------|-------------------------------------|------------------|---------|-------------|------|
| 12.34   | 11.92 ng | 1201470                             | Phenanthrene-d10 |         | 11.39       |      |
| Hit# of | 5        | Tentative ID                        | MW               | MolForm | CAS#        | Qual |
| 1       |          | Phenanthrene, 4,5-dimethyl-         | 206              | C16H14  | 003674-69-9 | 93   |
| 2       |          | Phenanthrene, 2,3-dimethyl-         | 206              | C16H14  | 003674-65-5 | 93   |
| 3       |          | [14]Annulene, 1,6:8,13-bis(metha... | 206              | C16H14  | 085385-68-8 | 90   |
| 4       |          | Anthracene, 2-ethyl-                | 206              | C16H14  | 052251-71-5 | 81   |
| 5       |          | 3-Methyl-1-phenyl-1H-indene         | 206              | C16H14  | 022360-63-0 | 76   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

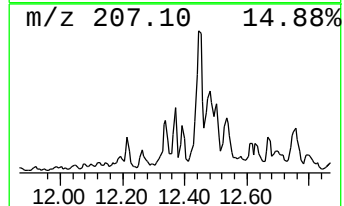
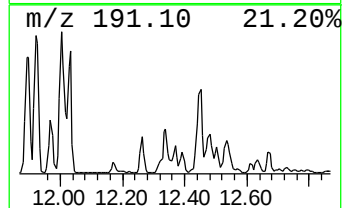
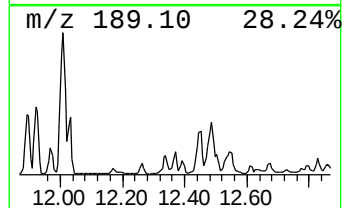
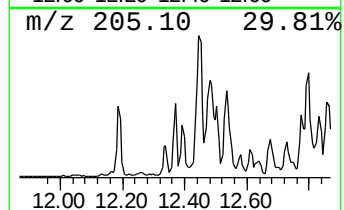
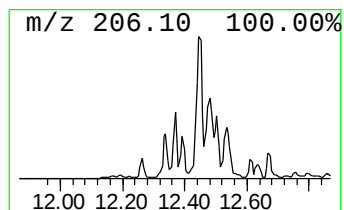
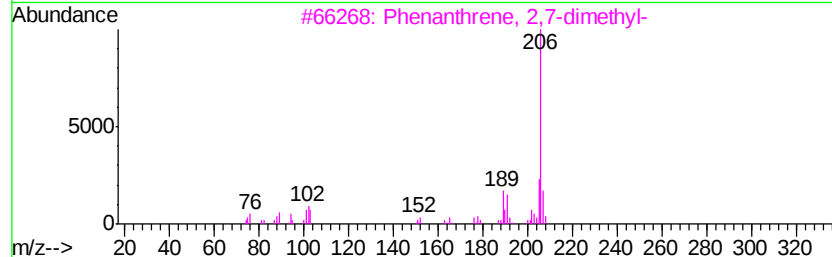
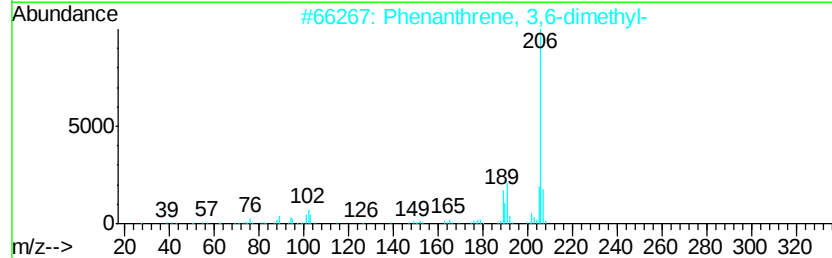
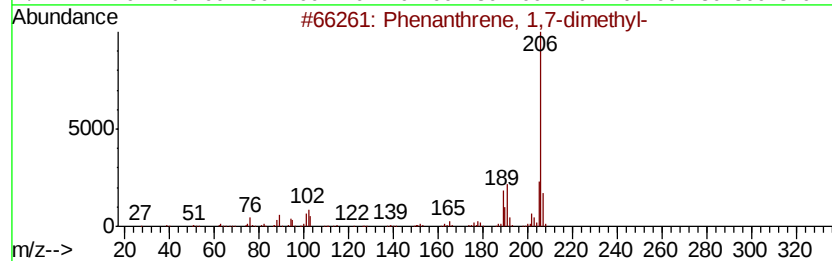
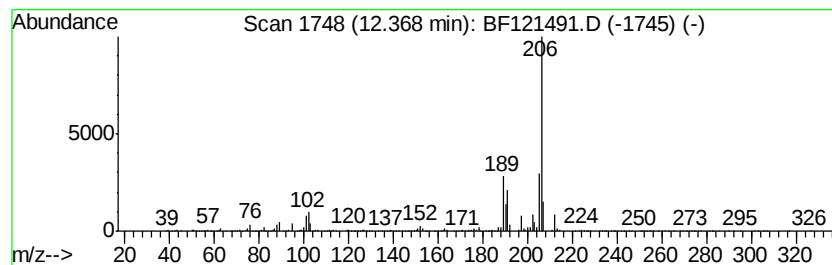
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 14 Phenanthrene, 1,7-dimethyl- Concentration Rank 15

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.37 | 13.34 ng | 1344270 | Phenanthrene-d10 | 11.39 |

| Hit# | of | 5 | Tentative ID                | MW  | MolForm | CAS#        | Qual |
|------|----|---|-----------------------------|-----|---------|-------------|------|
| 1    |    |   | Phenanthrene, 1,7-dimethyl- | 206 | C16H14  | 000483-87-4 | 96   |
| 2    |    |   | Phenanthrene, 3,6-dimethyl- | 206 | C16H14  | 001576-67-6 | 93   |
| 3    |    |   | Phenanthrene, 2,7-dimethyl- | 206 | C16H14  | 001576-69-8 | 91   |
| 4    |    |   | di-p-Tolylacetylene         | 206 | C16H14  | 002789-88-0 | 90   |
| 5    |    |   | Phenanthrene, 2,5-dimethyl- | 206 | C16H14  | 003674-66-6 | 72   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

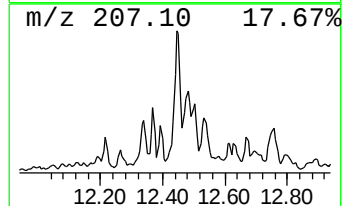
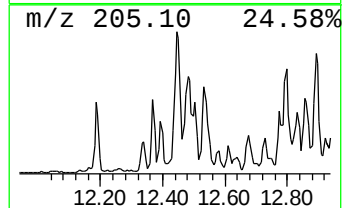
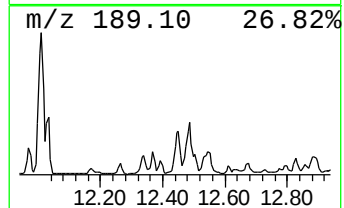
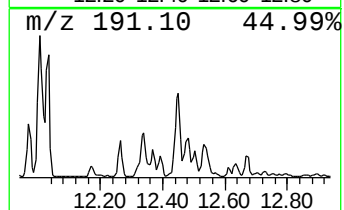
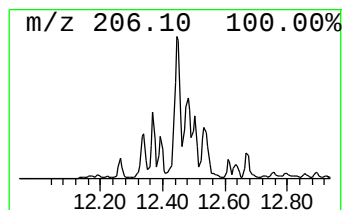
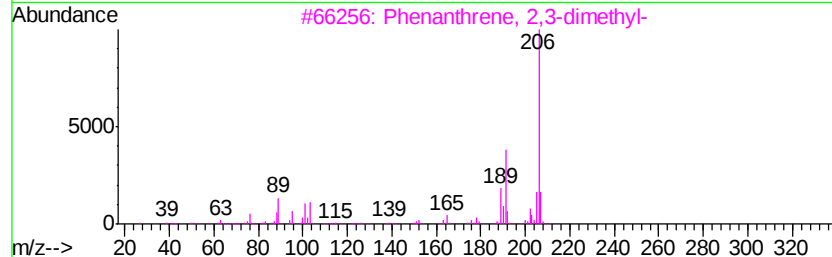
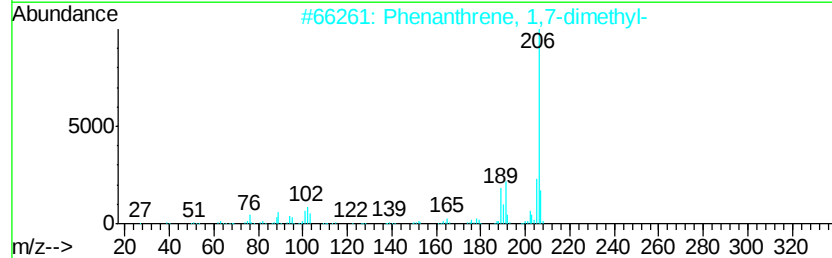
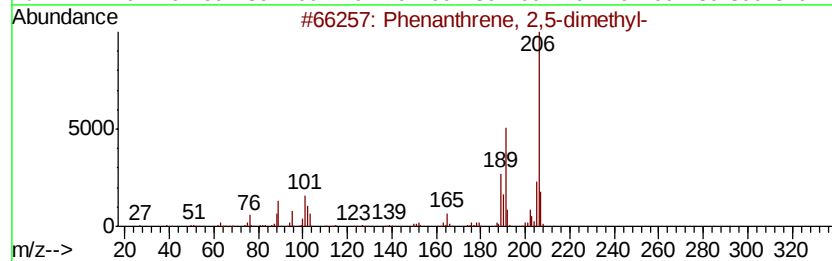
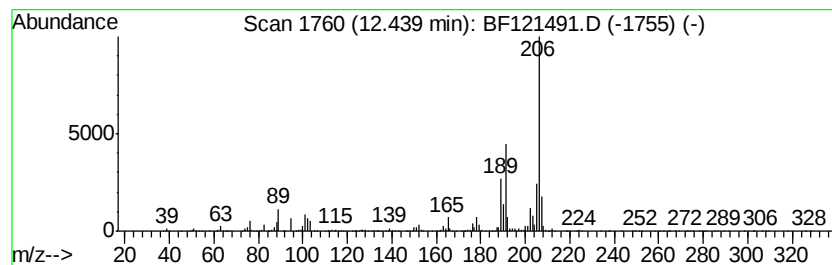
Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 15 Phenanthrene, 2,5-dimethyl- Concentration Rank 2

| R.T.    | EstConc  | Area                        | Relative to ISTD | R.T.    |             |      |
|---------|----------|-----------------------------|------------------|---------|-------------|------|
| 12.44   | 51.06 ng | 5144680                     | Phenanthrene-d10 | 11.39   |             |      |
| Hit# of | 5        | Tentative ID                | MW               | MolForm | CAS#        | Qual |
| 1       |          | Phenanthrene, 2,5-dimethyl- | 206              | C16H14  | 003674-66-6 | 97   |
| 2       |          | Phenanthrene, 1,7-dimethyl- | 206              | C16H14  | 000483-87-4 | 93   |
| 3       |          | Phenanthrene, 2,3-dimethyl- | 206              | C16H14  | 003674-65-5 | 93   |
| 4       |          | 9,10-Dimethylantracene      | 206              | C16H14  | 000781-43-1 | 93   |
| 5       |          | Phenanthrene, 2,7-dimethyl- | 206              | C16H14  | 001576-69-8 | 87   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

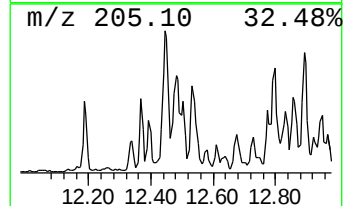
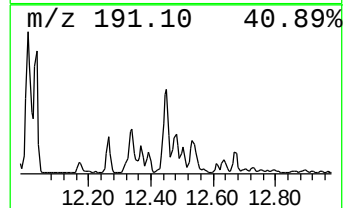
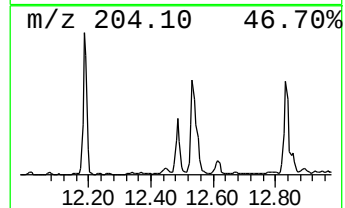
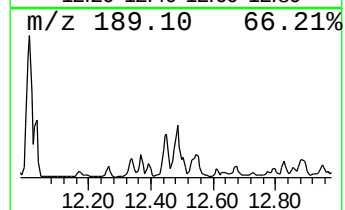
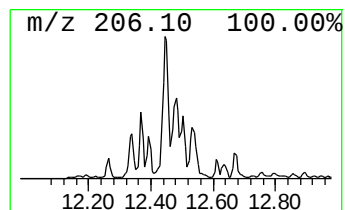
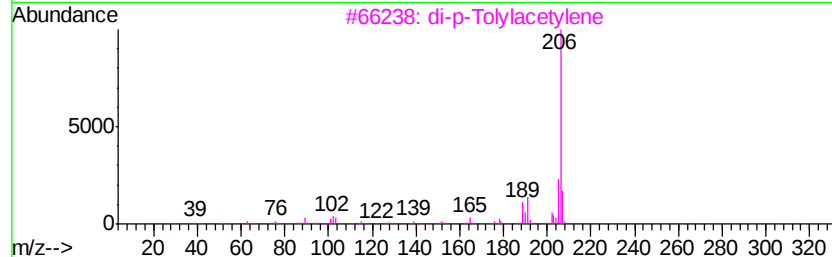
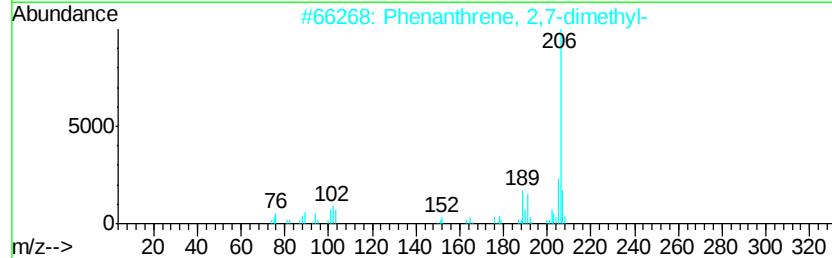
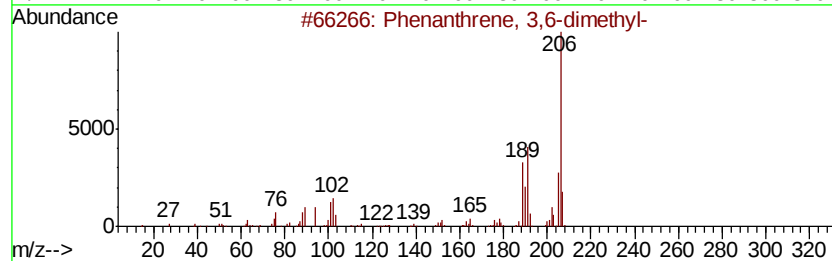
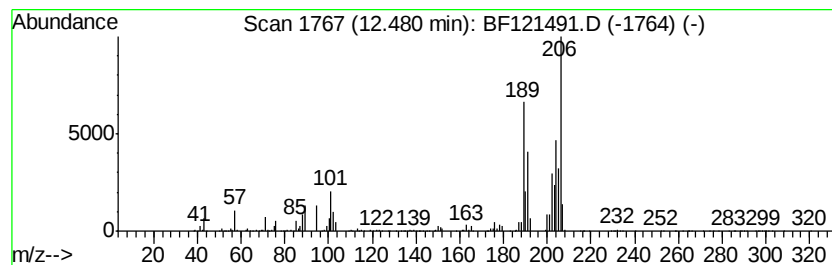
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 16 Phenanthrene, 3,6-dimethyl- Concentration Rank 6

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.48 | 35.02 ng | 3528030 | Phenanthrene-d10 | 11.39 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Phenanthrene, 3,6-dimethyl-         | 206 | C16H14  | 001576-67-6 | 92   |
| 2    |    | Phenanthrene, 2,7-dimethyl-         | 206 | C16H14  | 001576-69-8 | 68   |
| 3    |    | di-p-Tolylacetylene                 | 206 | C16H14  | 002789-88-0 | 58   |
| 4    |    | 9,10-Dimethylantracene              | 206 | C16H14  | 000781-43-1 | 49   |
| 5    |    | [14]Annulene, 1,6:8,13-bis(metha... | 206 | C16H14  | 085385-68-8 | 47   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

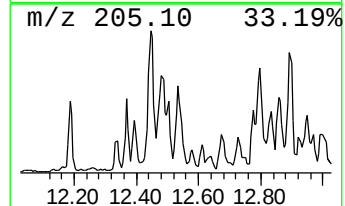
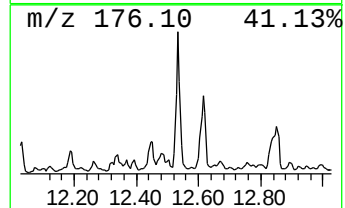
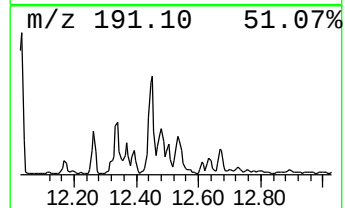
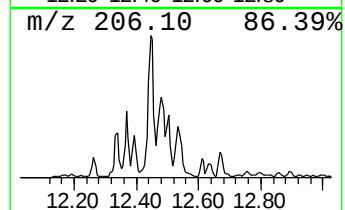
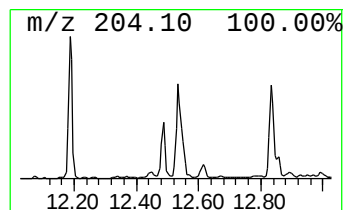
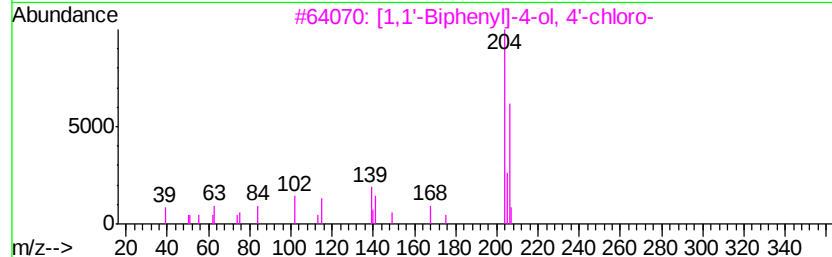
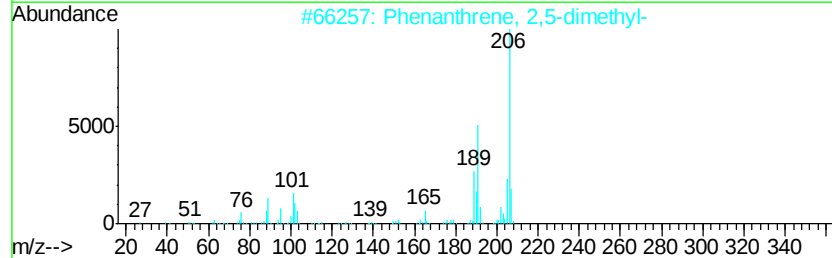
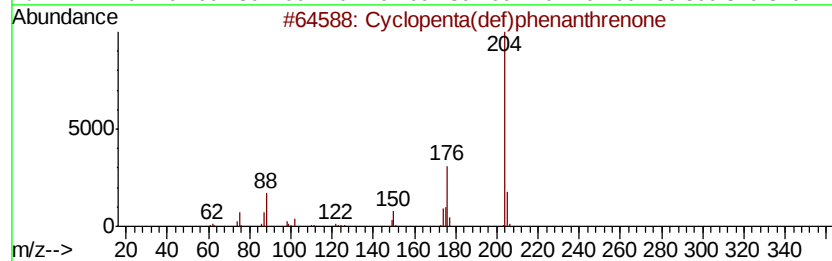
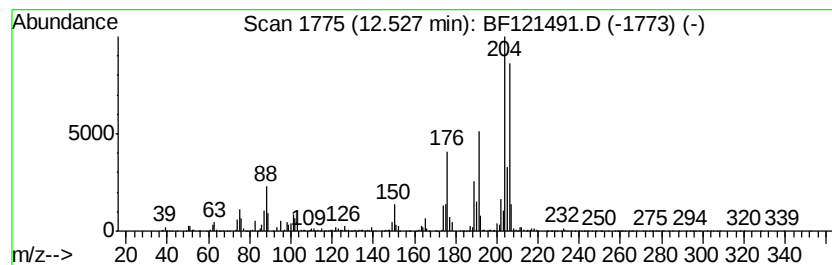
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 17 Cyclopenta(def)phenanthrenone Concentration Rank 7

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 12.53 | 32.82 ng | 3307100 | Phenanthrene-d10 | 11.39 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Cyclopenta(def)phenanthrenone       | 204 | C15H8O   | 005737-13-3 | 95   |
| 2    |    | Phenanthrene, 2,5-dimethyl-         | 206 | C16H14   | 003674-66-6 | 83   |
| 3    |    | [1,1'-Biphenyl]-4-ol, 4'-chloro-    | 204 | C12H9ClO | 028034-99-3 | 46   |
| 4    |    | [14]Annulene, 1,6:8,13-bis(metha... | 206 | C16H14   | 085385-68-8 | 42   |
| 5    |    | 9,10-Dimethylantracene              | 206 | C16H14   | 000781-43-1 | 42   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

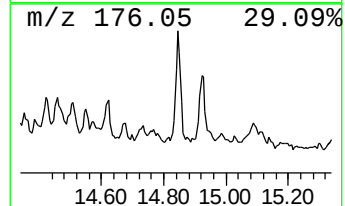
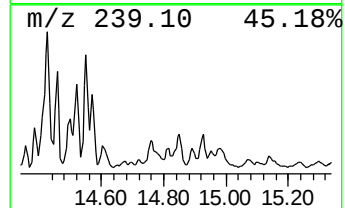
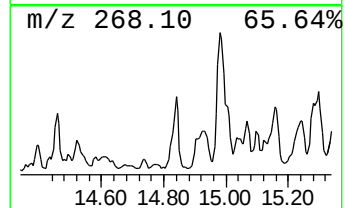
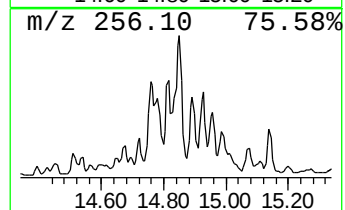
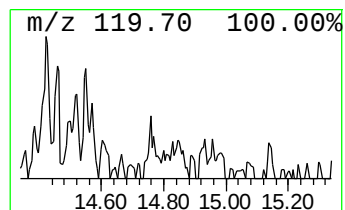
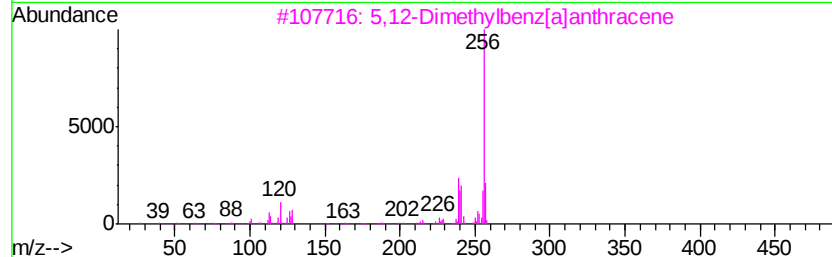
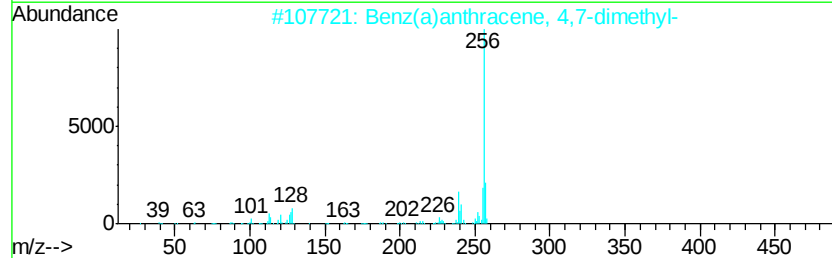
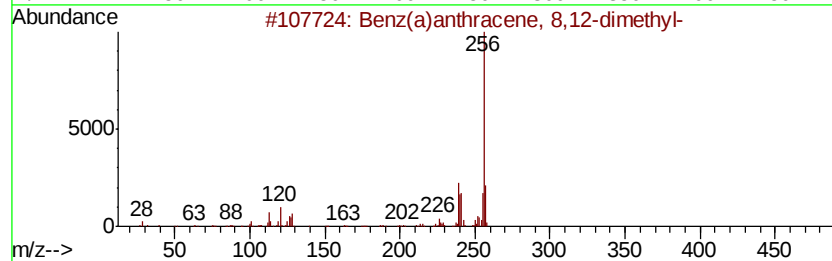
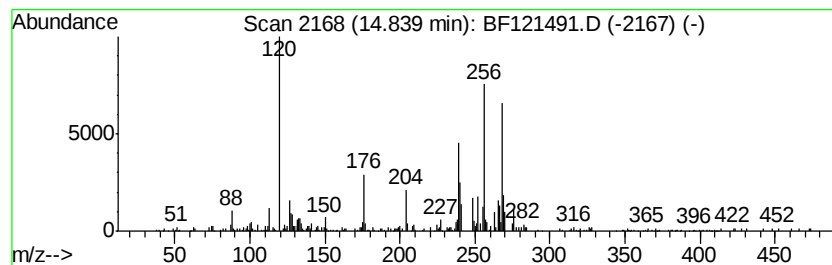
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 18 Benz(a)anthracene, 8,12-dim... Concentration Rank 19

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 14.84 | 11.42 ng | 1026210 | Perylene-d12     | 15.52 |

| Hit# | of | Tentative ID                      | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------------------|-----|---------|-------------|------|
| 1    | 5  | Benz(a)anthracene, 8,12-dimethyl- | 256 | C20H16  | 020627-31-0 | 95   |
| 2    |    | Benz(a)anthracene, 4,7-dimethyl-  | 256 | C20H16  | 035187-18-9 | 91   |
| 3    |    | 5,12-Dimethylbenz[alanthracene    | 256 | C20H16  | 021297-22-3 | 86   |
| 4    |    | Benz[alanthracene, 7,12-dimethyl- | 256 | C20H16  | 000057-97-6 | 81   |
| 5    |    | Benz(a)anthracene, 6,7-dimethyl-  | 256 | C20H16  | 020627-28-5 | 78   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

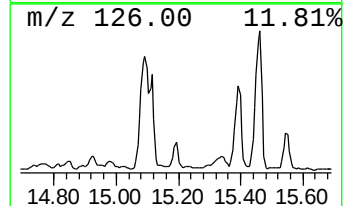
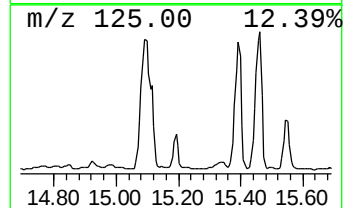
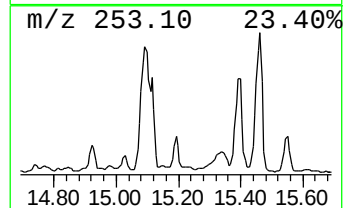
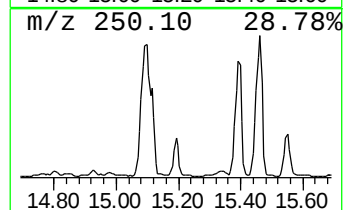
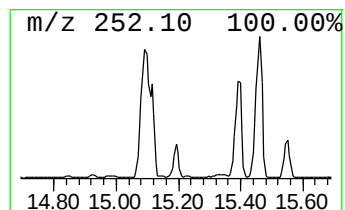
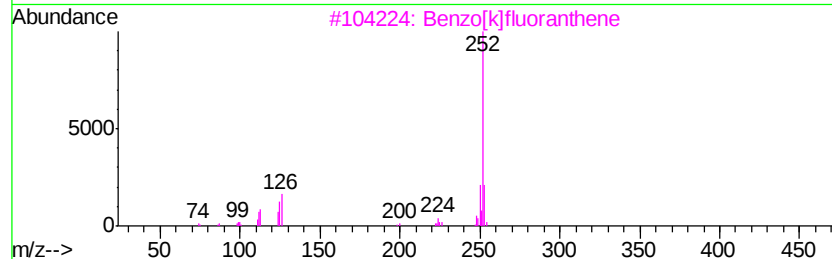
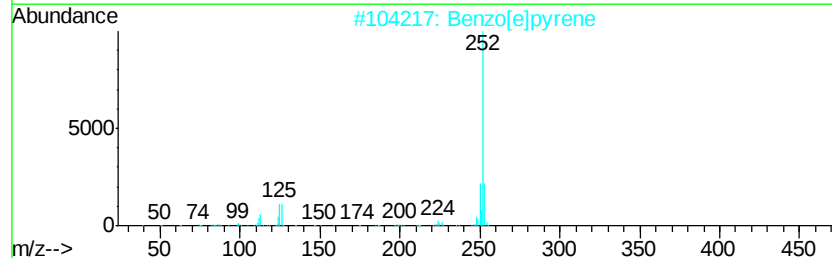
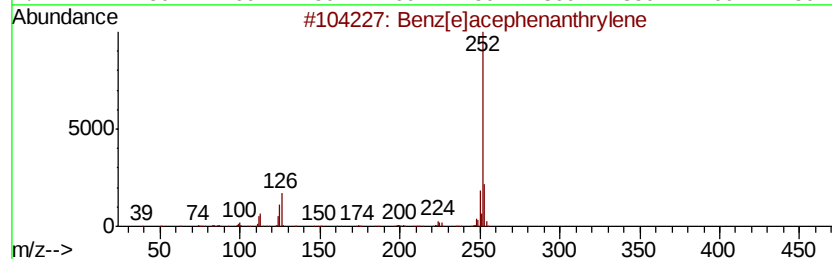
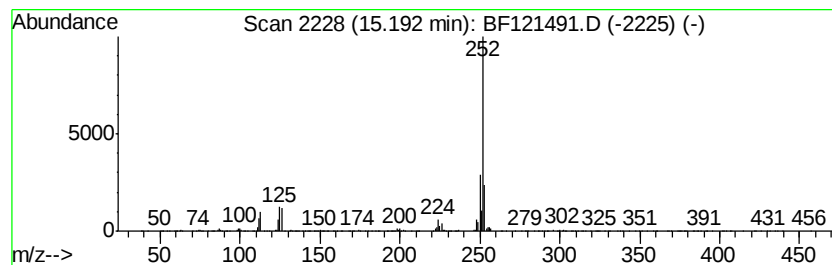
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 19 Benzo[e]pyrene Concentration Rank 20

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 15.19 | 11.30 ng | 1015350 | Perylene-d12     | 15.52 |

| Hit# | of | 5 | Tentative ID             | MW  | MolForm | CAS#        | Qual |
|------|----|---|--------------------------|-----|---------|-------------|------|
| 1    |    |   | Benz[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 93   |
| 2    |    |   | Benzo[e]pyrene           | 252 | C20H12  | 000192-97-2 | 93   |
| 3    |    |   | Benzo[k]fluoranthene     | 252 | C20H12  | 000207-08-9 | 93   |
| 4    |    |   | Benzo[a]pyrene           | 252 | C20H12  | 000050-32-8 | 91   |
| 5    |    |   | Perylene                 | 252 | C20H12  | 000198-55-0 | 90   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\  
Data File : BF121491.D  
Acq On : 31 Aug 2020 22:05  
Operator : JU/CG  
Sample : L3847-03 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

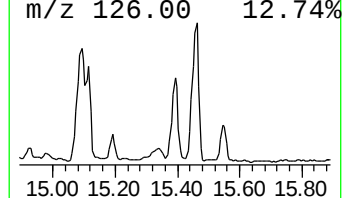
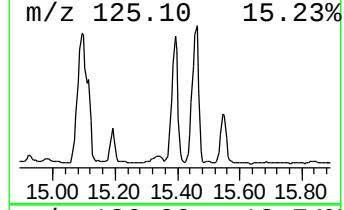
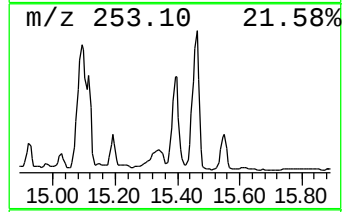
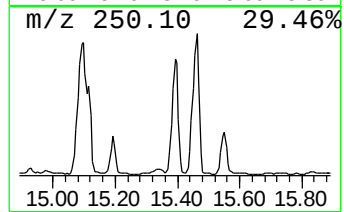
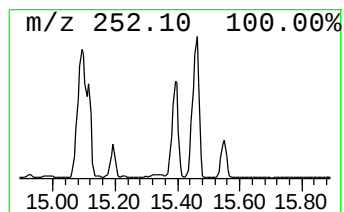
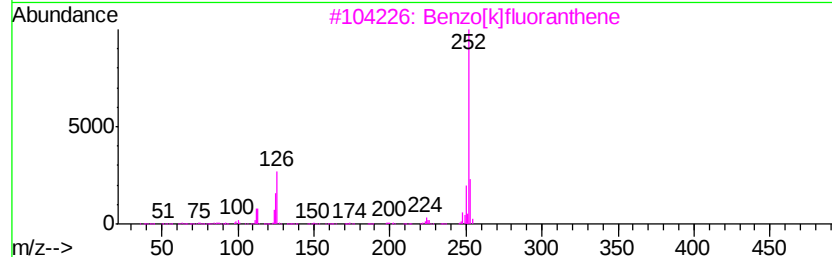
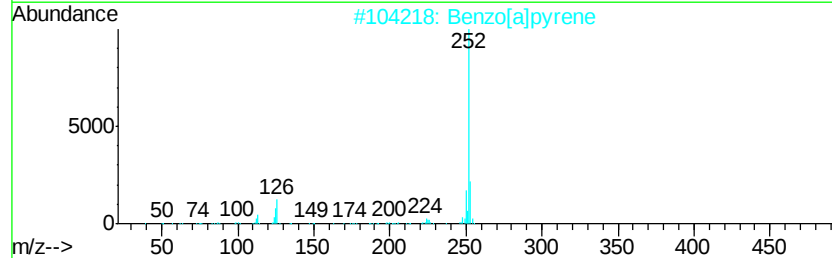
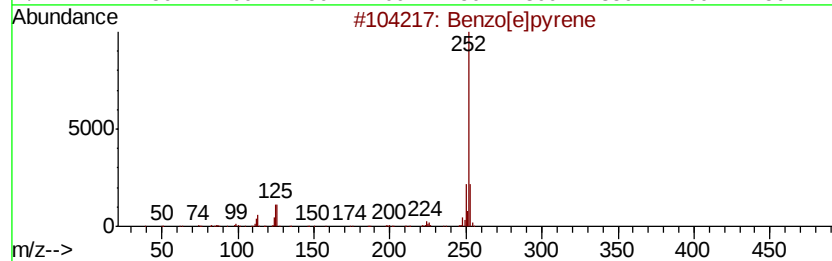
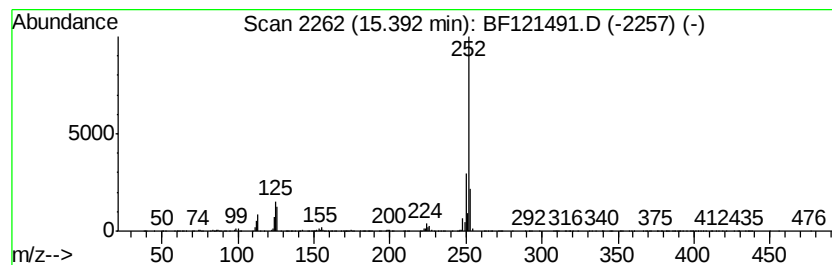
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 20 Benzo[j]fluoranthene Concentration Rank 3

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 15.39 | 47.28 ng | 4247500 | Perylene-d12     | 15.52 |

| Hit# | of | Tentative ID             | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[e]pyrene           | 252 | C20H12  | 000192-97-2 | 94   |
| 2    |    | Benzo[a]pyrene           | 252 | C20H12  | 000050-32-8 | 93   |
| 3    |    | Benzo[k]fluoranthene     | 252 | C20H12  | 000207-08-9 | 93   |
| 4    |    | Benzo[i]fluoranthene     | 252 | C20H12  | 000205-82-3 | 90   |
| 5    |    | Benz[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 90   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF083120\  
 Data File : BF121491.D  
 Acq On : 31 Aug 2020 22:05  
 Operator : JU/CG  
 Sample : L3847-03 5X  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 LINDEN-JOP-BH-08-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF082720.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 |
| Naphthalene, 2,3-... | 9.56  | 13.4    | ng    | 1881980  | 3                     | 9.90  | 2803210 | 20.0 |
| 1,4,5,8-Tetrameth... | 10.82 | 11.5    | ng    | 1159730  | 4                     | 11.39 | 2015140 | 20.0 |
| 9H-Fluorene, 2-me... | 11.00 | 14.3    | ng    | 1437210  | 4                     | 11.39 | 2015140 | 20.0 |
| 9H-Fluorene, 3-me... | 11.03 | 12.2    | ng    | 1224080  | 4                     | 11.39 | 2015140 | 20.0 |
| Dibenzothiophene,... | 11.72 | 15.3    | ng    | 1543590  | 4                     | 11.39 | 2015140 | 20.0 |
| Phenanthrene, 2-m... | 11.90 | 43.7    | ng    | 4401340  | 4                     | 11.39 | 2015140 | 20.0 |
| Anthracene, 2-met... | 11.92 | 42.9    | ng    | 4316940  | 4                     | 11.39 | 2015140 | 20.0 |
| Anthracene, 1-met... | 11.97 | 20.1    | ng    | 2022250  | 4                     | 11.39 | 2015140 | 20.0 |
| 1H-Indene, 2-phenyl- | 12.00 | 71.4    | ng    | 7194760  | 4                     | 11.39 | 2015140 | 20.0 |
| Phenanthrene, 4-m... | 12.03 | 29.1    | ng    | 2934080  | 4                     | 11.39 | 2015140 | 20.0 |
| Naphthalene, 2-ph... | 12.19 | 23.0    | ng    | 2313010  | 4                     | 11.39 | 2015140 | 20.0 |
| 9,10-Anthracenedione | 12.22 | 15.8    | ng    | 1588210  | 4                     | 11.39 | 2015140 | 20.0 |
| Phenanthrene, 4,5... | 12.34 | 11.9    | ng    | 1201470  | 4                     | 11.39 | 2015140 | 20.0 |
| Phenanthrene, 1,7... | 12.37 | 13.3    | ng    | 1344270  | 4                     | 11.39 | 2015140 | 20.0 |
| Phenanthrene, 2,5... | 12.44 | 51.1    | ng    | 5144680  | 4                     | 11.39 | 2015140 | 20.0 |
| Phenanthrene, 3,6... | 12.48 | 35.0    | ng    | 3528030  | 4                     | 11.39 | 2015140 | 20.0 |
| Cyclopenta(def)ph... | 12.53 | 32.8    | ng    | 3307100  | 4                     | 11.39 | 2015140 | 20.0 |
| Benz(a)anthracene... | 14.84 | 11.4    | ng    | 1026210  | 6                     | 15.52 | 1796650 | 20.0 |
| Benzo[e]pyrene       | 15.19 | 11.3    | ng    | 1015350  | 6                     | 15.52 | 1796650 | 20.0 |
| Benzo[j]fluoranthene | 15.39 | 47.3    | ng    | 4247500  | 6                     | 15.52 | 1796650 | 20.0 |