LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

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

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

Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.122 | 3 | 6 | 14 | rVB | 230935 | 294104 | 7.24% | 0.489% |
| 2 | 5.116 | 511 | 515 | 526 | rBV | 105705 | 150813 | 3.71% | 0.251% |
| 3 | 5.504 | 577 | 581 | 598 | rBV | 3355427 | 3865968 | 95.16% | 6.423% |
| 4 | 6.522 | 749 | 754 | 772 | rBV | 3335763 | 4062576 | 100.00% | 6.750% |
| 5 | 6.651 | 772 | 776 | 780 | rVV | 3537694 | 3783032 | 93.12% | 6.285% |
| 6 | 6.698 | 782 | 784 | 790 | rVB2 | 41497 | 45964 | 1.13% | 0.076% |
| 7 | 6.875 | 811 | 814 | 821 | rBV | 1153708 | 1045726 | 25.74% | 1.737% |
| 8 | 7.034 | 837 | 841 | 854 | rBV | 2986771 | 2829922 | 69.66% | 4.702% |
| 9 | 7.445 | 907 | 911 | 914 | rBV | 2557050 | 2484227 | 61.15% | 4.127% |
| 10 | 8.163 | 1029 | 1033 | 1036 | rBV | 1389178 | 1336682 | 32.90% | 2.221% |
| 11 | 8.880 | 1152 | 1155 | 1161 | rBV | 51997 | 61923 | 1.52% | 0.103% |
| 12 | 9.233 | 1211 | 1215 | 1224 | rBV | 3351005 | 3313564 | 81.56% | 5.505% |
| 13 | 9.304 | 1224 | 1227 | 1230 | rVV | 102108 | 99354 | 2.45% | 0.165% |
| 14 | 9.339 | 1230 | 1233 | 1238 | rVB2 | 46790 | 50043 | 1.23% | 0.083% |
| 15 | 9.504 | 1257 | 1261 | 1265 | rBV3 | 54268 | 79261 | 1.95% | 0.132% |
| 16 | 9.575 | 1269 | 1273 | 1276 | rVV2 | 81631 | 94478 | 2.33% | 0.157% |
| 17 | 9.627 | 1279 | 1282 | 1289 | rVB | 274883 | 296538 | 7.30% | 0.493% |
| 18 | 9.692 | 1289 | 1293 | 1295 | rBV2 | 47482 | 58010 | 1.43% | 0.096% |
| 19 | 9.780 | 1304 | 1308 | 1313 | rBV | 189868 | 184326 | 4.54% | 0.306% |
| 20 | 9.833 | 1313 | 1317 | 1320 | rVB | 208683 | 166027 | 4.09% | 0.276% |
| 21 | 9.922 | 1328 | 1332 | 1335 | rBV | 1290370 | 1171412 | 28.83% | 1.946% |
| 22 | 9.951 | 1335 | 1337 | 1340 | rVB | 159091 | 132616 | 3.26% | 0.220% |
| 23 | 10.016 | 1344 | 1348 | 1353 | rVB3 | 48218 | 77942 | 1.92% | 0.129% |
| 24 | 10.075 | 1353 | 1358 | 1359 | rBV4 | 57283 | 82309 | 2.03% | 0.137% |
| 25 | 10.122 | 1363 | 1366 | 1369 | rBV2 | 129834 | 138734 | 3.41% | 0.231% |
| 26 | 10.157 | 1369 | 1372 | 1376 | rVB3 | 112850 | 113619 | 2.80% | 0.189% |
| 27 | 10.233 | 1381 | 1385 | 1388 | rBV | 97152 | 112100 | 2.76% | 0.186% |
| 28 | 10.263 | 1388 | 1390 | 1395 | rVB2 | 76257 | 75069 | 1.85% | 0.125% |
| 29 | 10.333 | 1395 | 1402 | 1406 | rBV2 | 261373 | 300342 | 7.39% | 0.499% |
| 30 | 10.469 | 1422 | 1425 | 1431 | rVB2 | 178839 | 185088 | 4.56% | 0.308% |
| 31 | 10.551 | 1437 | 1439 | 1442 | rVV2 | 115797 | 116910 | 2.88% | 0.194% |
| 32 | 10.610 | 1446 | 1449 | 1450 | rVV3 | 62132 | 73830 | 1.82% | 0.123% |
| 33 | 10.627 | 1450 | 1452 | 1455 | rVB2 | 94335 | 95453 | 2.35% | 0.159% |
| 34 | 10.716 | 1463 | 1467 | 1473 | rBV | 1628069 | 1665874 | 41.01% | 2.768% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

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

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

Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 10.810 | 1480 | 1483 | 1492 | rVB2 | 171177 | 284303 | 7.00% | 0.472% |
| 36 | 11.016 | 1513 | 1518 | 1521 | rBV3 | 133452 | 211331 | 5.20% | 0.351% |
| 37 | 11.045 | 1521 | 1523 | 1526 | rVV2 | 128392 | 132180 | 3.25% | 0.220% |
| 38 | 11.098 | 1530 | 1532 | 1535 | rVV2 | 85453 | 78985 | 1.94% | 0.131% |
| 39 | 11.145 | 1535 | 1540 | 1542 | rVV2 | 91076 | 156777 | 3.86% | 0.260% |
| 40 | 11.169 | 1542 | 1544 | 1548 | rVV2 | 117861 | 126511 | 3.11% | 0.210% |
| 41 | 11.221 | 1549 | 1553 | 1556 | rVV | 83142 | 113867 | 2.80% | 0.189% |
| 42 | 11.257 | 1556 | 1559 | 1563 | rVV4 | 217175 | 272252 | 6.70% | 0.452% |
| 43 | 11.310 | 1565 | 1568 | 1574 | rVB | 161838 | 167755 | 4.13% | 0.279% |
| 44 | 11.416 | 1582 | 1586 | 1588 | rBV | 1100595 | 1107568 | 27.26% | 1.840% |
| 45 | 11.439 | 1588 | 1590 | 1593 | rVV | 1991047 | 1603734 | 39.48% | 2.665% |
| 46 | 11.492 | 1595 | 1599 | 1601 | rBV | 578294 | 522015 | 12.85% | 0.867% |
| 47 | 11.651 | 1621 | 1626 | 1629 | rBV3 | 115333 | 197245 | 4.86% | 0.328% |
| 48 | 11.680 | 1629 | 1631 | 1633 | rVV2 | 95538 | 93192 | 2.29% | 0.155% |
| 49 | 11.704 | 1633 | 1635 | 1637 | rVV | 97304 | 71963 | 1.77% | 0.120% |
| 50 | 11.745 | 1637 | 1642 | 1647 | rVV3 | 137006 | 196881 | 4.85% | 0.327% |
| 51 | 11.827 | 1653 | 1656 | 1661 | rVB2 | 73921 | 93839 | 2.31% | 0.156% |
| 52 | 11.874 | 1661 | 1664 | 1666 | rBV | 48227 | 52956 | 1.30% | 0.088% |
| 53 | 11.916 | 1668 | 1671 | 1674 | rVV | 588850 | 678327 | 16.70% | 1.127% |
| 54 | 11.945 | 1674 | 1676 | 1680 | rVV | 769115 | 610367 | 15.02% | 1.014% |
| 55 | 11.992 | 1681 | 1684 | 1687 | rVV | 338390 | 306019 | 7.53% | 0.508% |
| 56 | 12.027 | 1687 | 1690 | 1693 | rVV2 | 767793 | 961363 | 23.66% | 1.597% |
| 57 | 12.051 | 1693 | 1694 | 1698 | rVB | 482463 | 311552 | 7.67% | 0.518% |
| 58 | 12.092 | 1698 | 1701 | 1703 | rBV2 | 98016 | 74709 | 1.84% | 0.124% |
| 59 | 12.151 | 1708 | 1711 | 1713 | rVV | 83329 | 74873 | 1.84% | 0.124% |
| 60 | 12.210 | 1717 | 1721 | 1725 | rVV | 413475 | 422208 | 10.39% | 0.701% |
| 61 | 12.245 | 1725 | 1727 | 1731 | rVB2 | 190901 | 186511 | 4.59% | 0.310% |
| 62 | 12.286 | 1731 | 1734 | 1736 | rBV | 68255 | 59350 | 1.46% | 0.099% |
| 63 | 12.357 | 1741 | 1746 | 1750 | rBV2 | 189098 | 265472 | 6.53% | 0.441% |
| 64 | 12.392 | 1750 | 1752 | 1754 | rVV | 188589 | 136679 | 3.36% | 0.227% |
| 65 | 12.416 | 1754 | 1756 | 1759 | rVB | 150124 | 125972 | 3.10% | 0.209% |
| 66 | 12.468 | 1761 | 1765 | 1768 | rBV | 533120 | 604065 | 14.87% | 1.004% |
| 67 | 12.510 | 1768 | 1772 | 1773 | rVV2 | 249847 | 327182 | 8.05% | 0.544% |
| 68 | 12.527 | 1773 | 1775 | 1777 | rVB | 165682 | 122547 | 3.02% | 0.204% |
| 69 | 12.563 | 1777 | 1781 | 1785 | rBV2 | 272079 | 388010 | 9.55% | 0.645% |
| 70 | 12.639 | 1789 | 1794 | 1797 | rBV | 2754804 | 2857462 | 70.34% | 4.748% |
| 71 | 12.668 | 1797 | 1799 | 1801 | rVV | 99543 | 88523 | 2.18% | 0.147% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

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

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

Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 12.698 | 1801 | 1804 | 1807 | rVB | 120259 | 101842 | 2.51% | 0.169% |
| 73 | 12.727 | 1807 | 1809 | 1812 | rVB | 63334 | 53431 | 1.32% | 0.089% |
| 74 | 12.786 | 1815 | 1819 | 1821 | rBV2 | 180854 | 192179 | 4.73% | 0.319% |
| 75 | 12.810 | 1821 | 1823 | 1826 | rVB | 134364 | 129508 | 3.19% | 0.215% |
| 76 | 12.874 | 1826 | 1834 | 1838 | rBV2 | 2434111 | 3362780 | 82.77% | 5.587% |
| 77 | 12.915 | 1838 | 1841 | 1845 | rVB2 | 241281 | 264474 | 6.51% | 0.439% |
| 78 | 12.998 | 1848 | 1855 | 1858 | rBV | 2107387 | 2153405 | 53.01% | 3.578% |
| 79 | 13.027 | 1858 | 1860 | 1864 | rVB2 | 171830 | 166704 | 4.10% | 0.277% |
| 80 | 13.086 | 1865 | 1870 | 1874 | rBV2 | 314324 | 562207 | 13.84% | 0.934% |
| 81 | 13.192 | 1881 | 1888 | 1894 | rBV | 557424 | 857738 | 21.11% | 1.425% |
| 82 | 13.257 | 1896 | 1899 | 1902 | rVV | 319713 | 285722 | 7.03% | 0.475% |
| 83 | 13.298 | 1902 | 1906 | 1909 | rBV2 | 386407 | 464137 | 11.42% | 0.771% |
| 84 | 13.351 | 1913 | 1915 | 1918 | rVB3 | 92883 | 79095 | 1.95% | 0.131% |
| 85 | 13.392 | 1919 | 1922 | 1924 | rBV | 300423 | 252436 | 6.21% | 0.419% |
| 86 | 13.421 | 1924 | 1927 | 1930 | rBV | 275042 | 264606 | 6.51% | 0.440% |
| 87 | 13.710 | 1973 | 1976 | 1979 | rVB | 297450 | 270218 | 6.65% | 0.449% |
| 88 | 13.815 | 1991 | 1994 | 1996 | rBV | 285625 | 263326 | 6.48% | 0.438% |
| 89 | 13.839 | 1996 | 1998 | 2001 | rVB | 287560 | 233609 | 5.75% | 0.388% |
| 90 | 13.880 | 2001 | 2005 | 2009 | rBV4 | 567267 | 768363 | 18.91% | 1.277% |
| 91 | 13.921 | 2009 | 2012 | 2015 | rVB | 242573 | 227214 | 5.59% | 0.378% |
| 92 | 14.062 | 2032 | 2036 | 2040 | rBV2 | 1429310 | 2201959 | 54.20% | 3.658% |
| 93 | 14.098 | 2040 | 2042 | 2048 | rVB | 1352508 | 1244375 | 30.63% | 2.067% |
| 94 | 14.180 | 2053 | 2056 | 2058 | rBV | 206719 | 206037 | 5.07% | 0.342% |
| 95 | 14.462 | 2102 | 2104 | 2107 | rVB | 250875 | 186812 | 4.60% | 0.310% |
| 96 | 15.139 | 2215 | 2219 | 2222 | rBV | 689040 | 1070375 | 26.35% | 1.778% |
| 97 | 15.251 | 2235 | 2238 | 2242 | rVB | 175397 | 200343 | 4.93% | 0.333% |
| 98 | 15.451 | 2269 | 2272 | 2278 | rVB | 367954 | 458020 | 11.27% | 0.761% |
| 99 | 15.521 | 2280 | 2284 | 2288 | rVV | 570824 | 675174 | 16.62% | 1.122% |
| 100 | 15.586 | 2292 | 2295 | 2297 | rVB | 244498 | 263797 | 6.49% | 0.438% |

Sum of corrected areas: 60188267

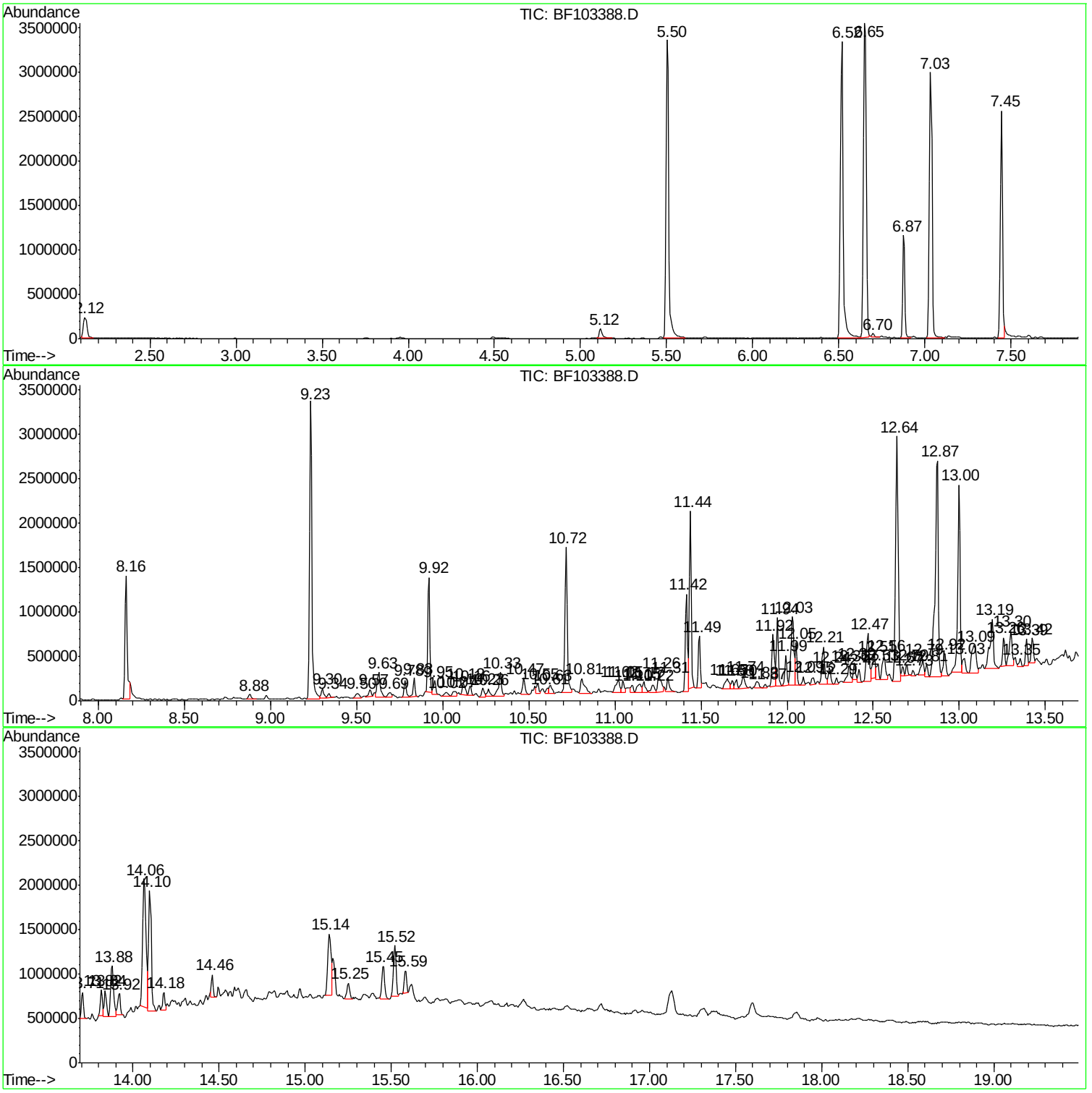
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

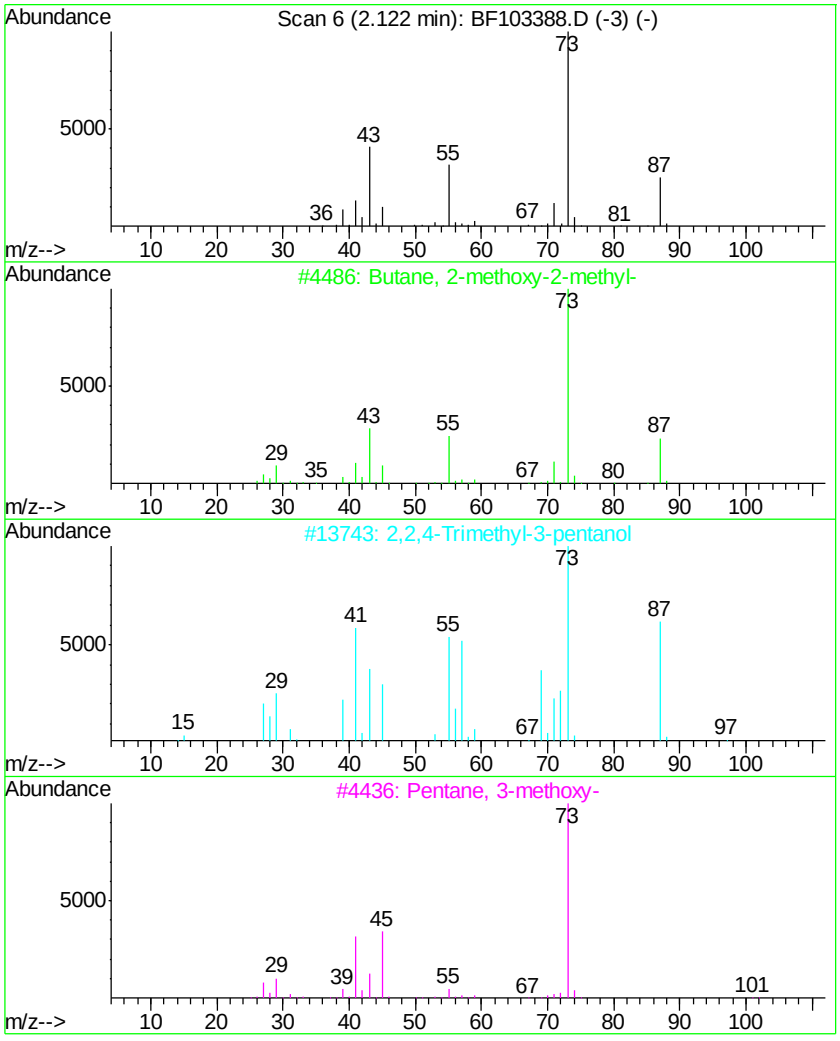
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

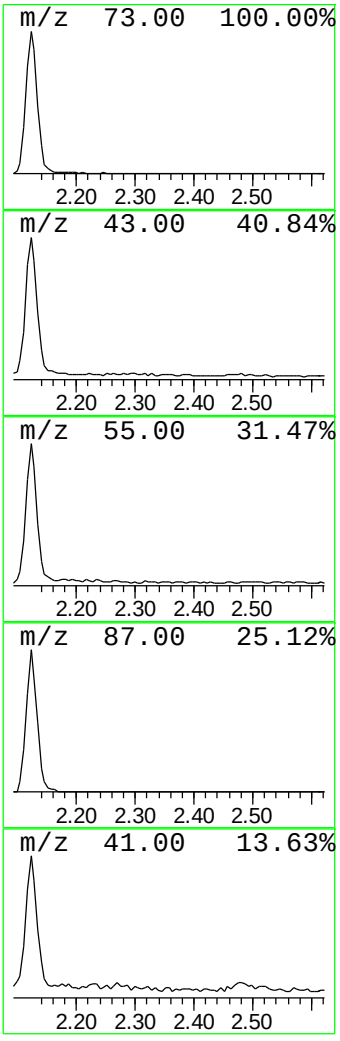
**********

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.12 | 5.62 ng | 294104 | 1,4-Dichlorobenzene-d4 | 6.87 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Butane, 2-methoxy-2-methyl- | 102 | C6H14O | 000994-05-8 | 83 |
| 2 | 2,2,4-Trimethyl-3-pentanol | 130 | C8H18O | 005162-48-1 | 39 |
| 3 | Pentane, 3-methoxy- | 102 | C6H14O | 036839-67-5 | 12 |
| 4 | Octanal, 7-methoxy-3,7-dimethyl- | 186 | C11H22O2 | 003613-30-7 | 12 |
| 5 | Silane, tetramethyl- | 88 | C4H12Si | 000075-76-3 | 10 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

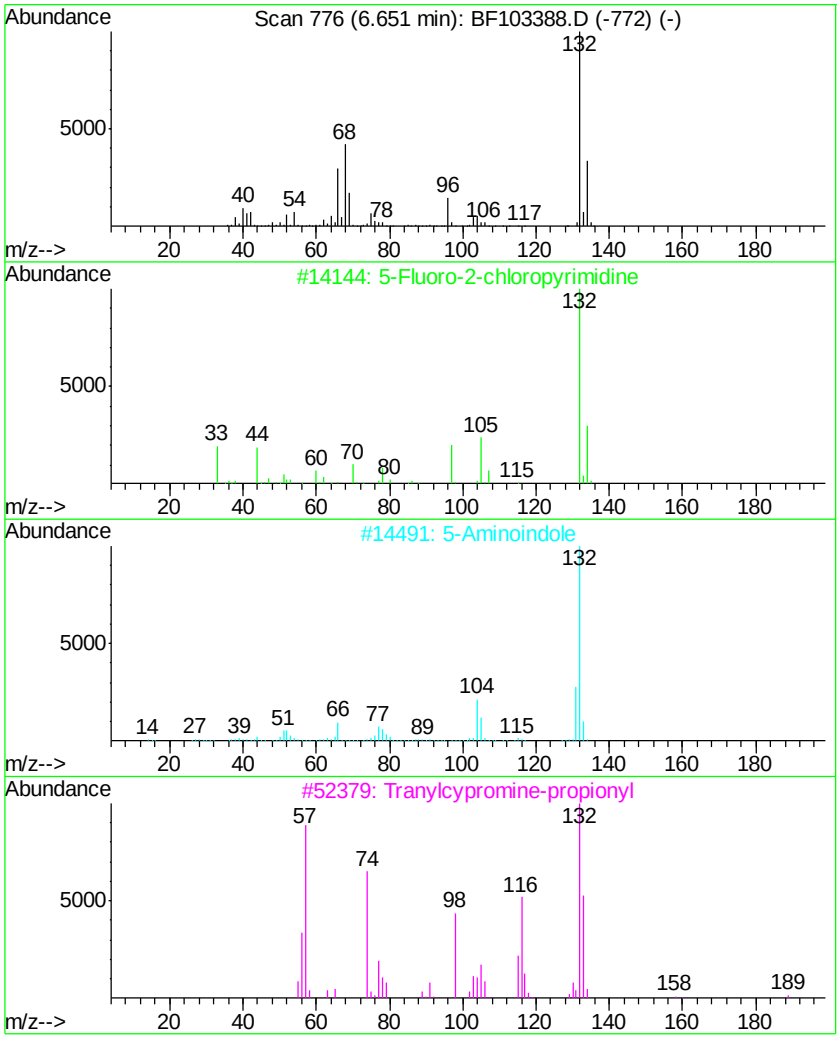
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

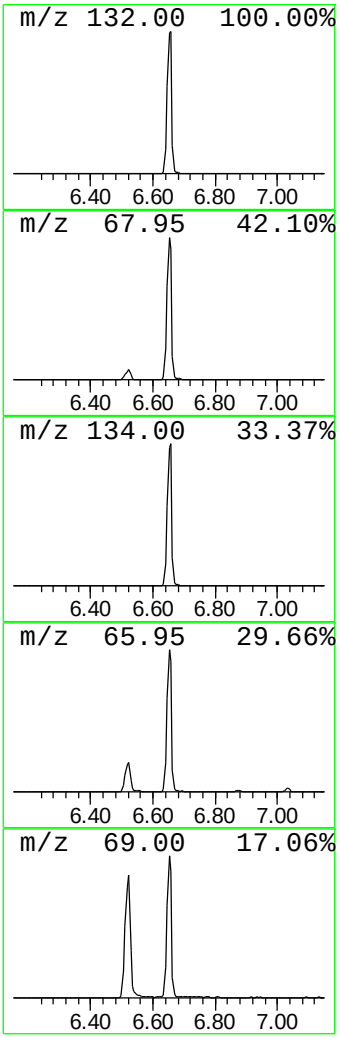
**********

Peak Number 2 unknown6.65 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.65 | 72.35 ng | 3783030 | 1,4-Dichlorobenzene-d4 | 6.87 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 16 |
| 2 | 5-Aminoindole | 132 | C8H8N2 | 005192-03-0 | 12 |
| 3 | Tranylcypromine-propionyl | 189 | C12H15NO | 1000123-86-3 | 10 |
| 4 | (5-Methyl-2-pyridyl)acetonitrile | 132 | C8H8N2 | 1000241-93-9 | 10 |
| 5 | Bicyclo[4.2.0]octa-1,3,5-triene,... | 132 | C10H12 | 028749-81-7 | 9 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

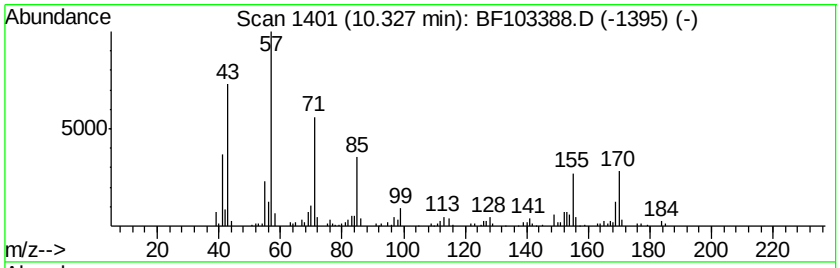
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

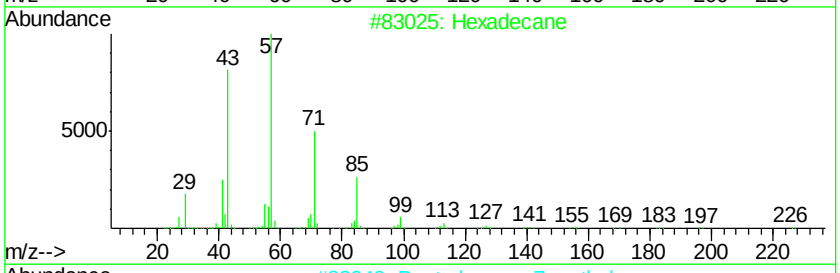
**********

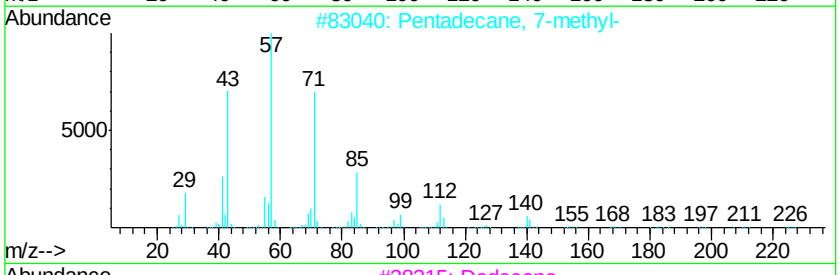
Peak Number 4 Hexadecane Concentration Rank 18

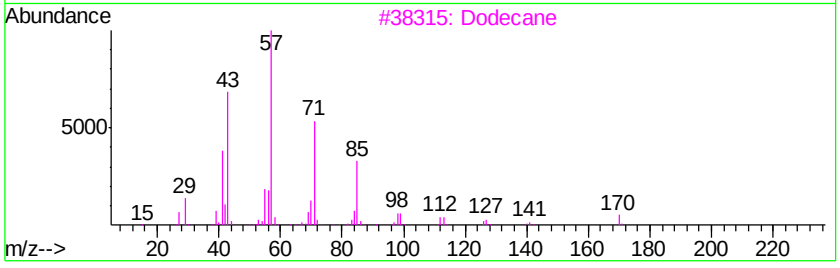
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.33 | 5.13 ng | 300342 | Acenaphthene-d10 | 9.92 |

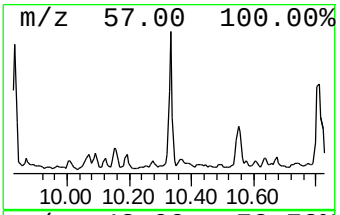
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexadecane | 226 | C16H34 | 000544-76-3 | 95 |
| 2 | Pentadecane, 7-methyl- | 226 | C16H34 | 006165-40-8 | 91 |
| 3 | Dodecane | 170 | C12H26 | 000112-40-3 | 83 |
| 4 | Nonane, 5-butyl- | 184 | C13H28 | 017312-63-9 | 78 |
| 5 | Tetradecane, 6,9-dimethyl- | 226 | C16H34 | 055045-13-1 | 76 |

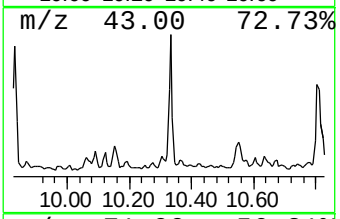


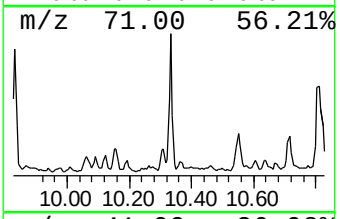



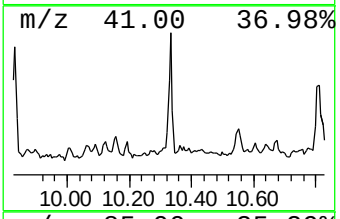



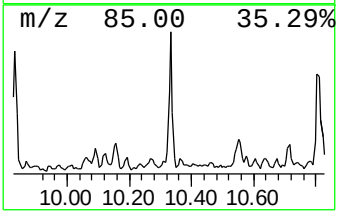



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

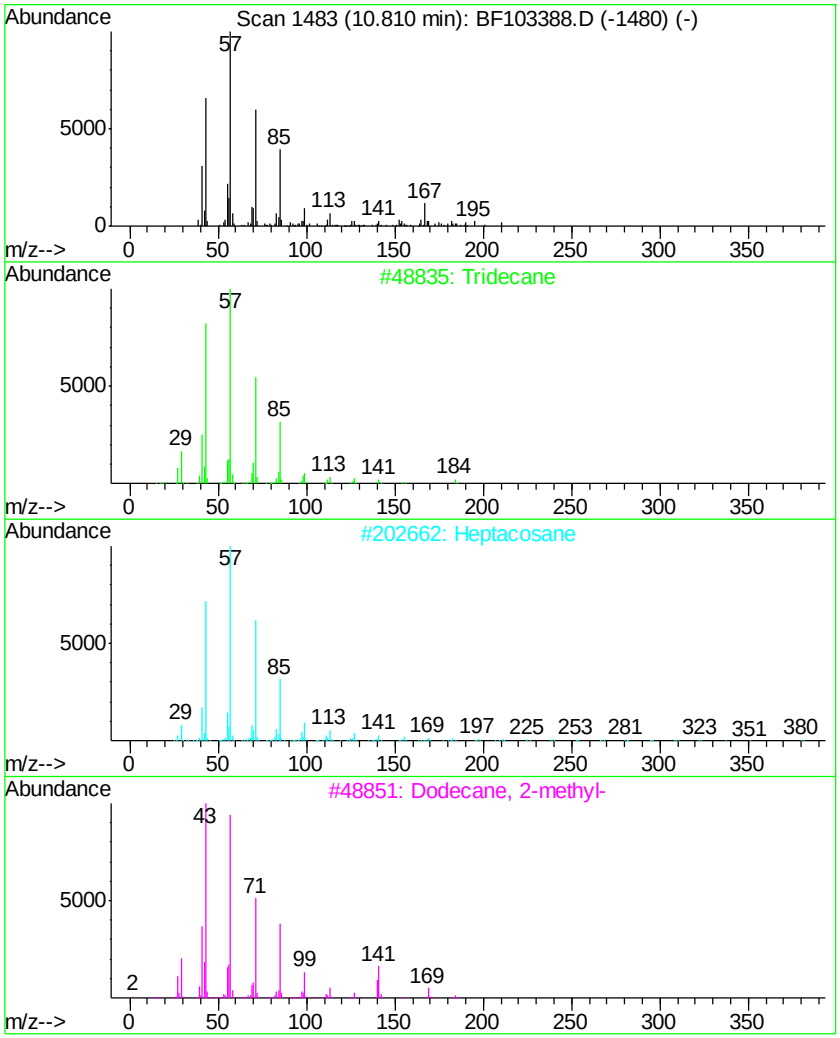
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

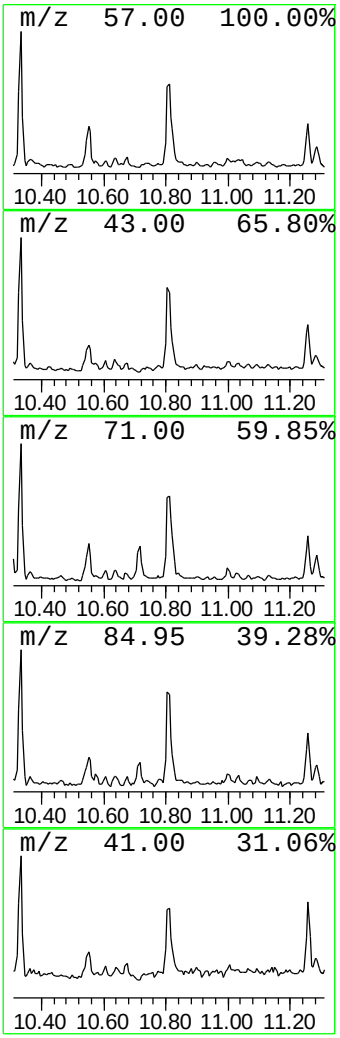
**********

Peak Number 5 Tridecane Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.81 | 5.13 ng | 284303 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Tridecane | 184 | C13H28 | 000629-50-5 | 81 |
| 2 | Heptacosane | 380 | C27H56 | 000593-49-7 | 80 |
| 3 | Dodecane, 2-methyl- | 184 | C13H28 | 001560-97-0 | 72 |
| 4 | Dodecane, 2-methyl-6-propyl- | 226 | C16H34 | 055045-08-4 | 72 |
| 5 | Tetradecane | 198 | C14H30 | 000629-59-4 | 72 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

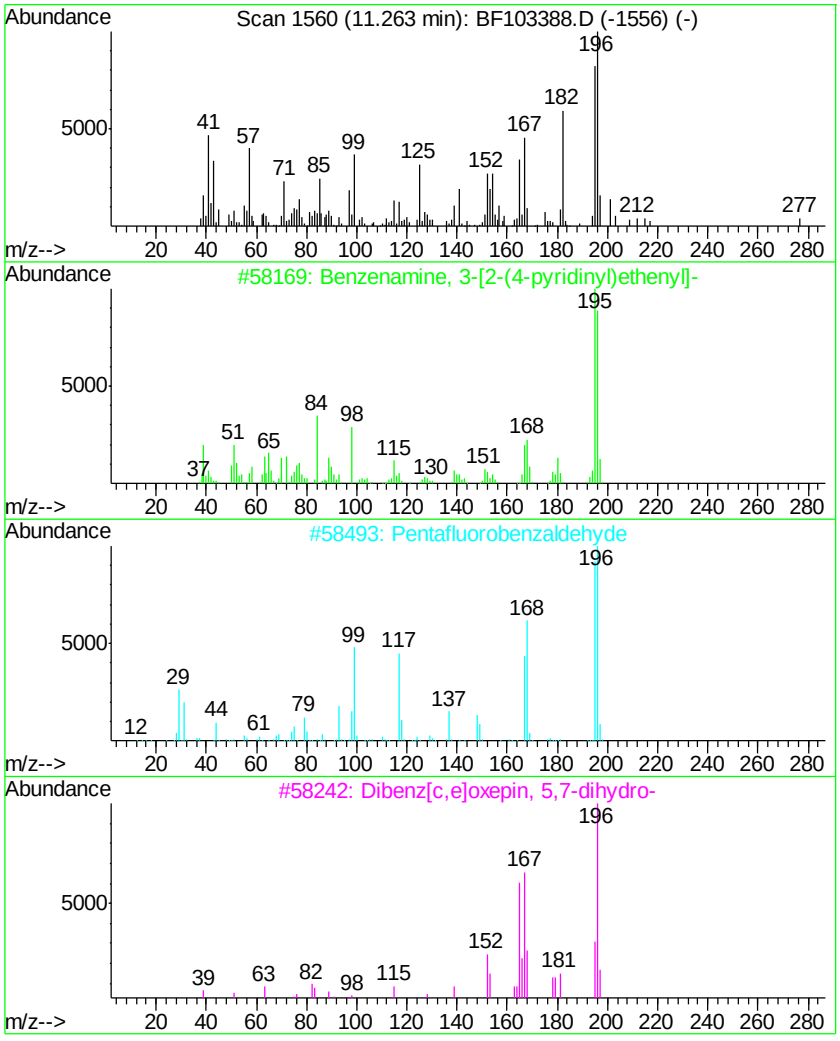
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

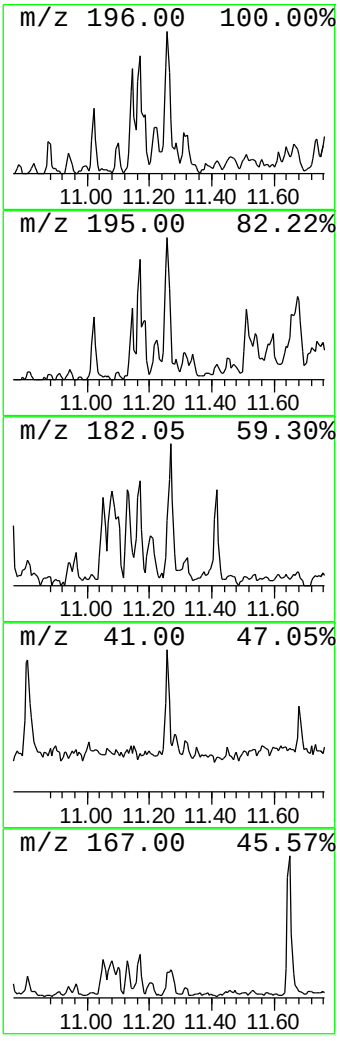
**********

Peak Number 6 unknown11.26 Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.26 | 4.92 ng | 272252 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzenamine, 3-[2-(4-pyridinyl)e... | 196 | C13H12N2 | 1000337-31-3 | 49 |
| 2 | Pentafluorobenzaldehyde | 196 | C7HF5O | 000653-37-2 | 49 |
| 3 | Dibenz[c,e]oxepin, 5,7-dihydro- | 196 | C14H12O | 001136-22-7 | 42 |
| 4 | 5,7-Dimethylpyrimido-[3,4-a]-indole | 196 | C13H12N2 | 038349-21-2 | 35 |
| 5 | 8-Dimethylaminonaphthalene-1-car... | 196 | C13H12N2 | 128644-69-9 | 30 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.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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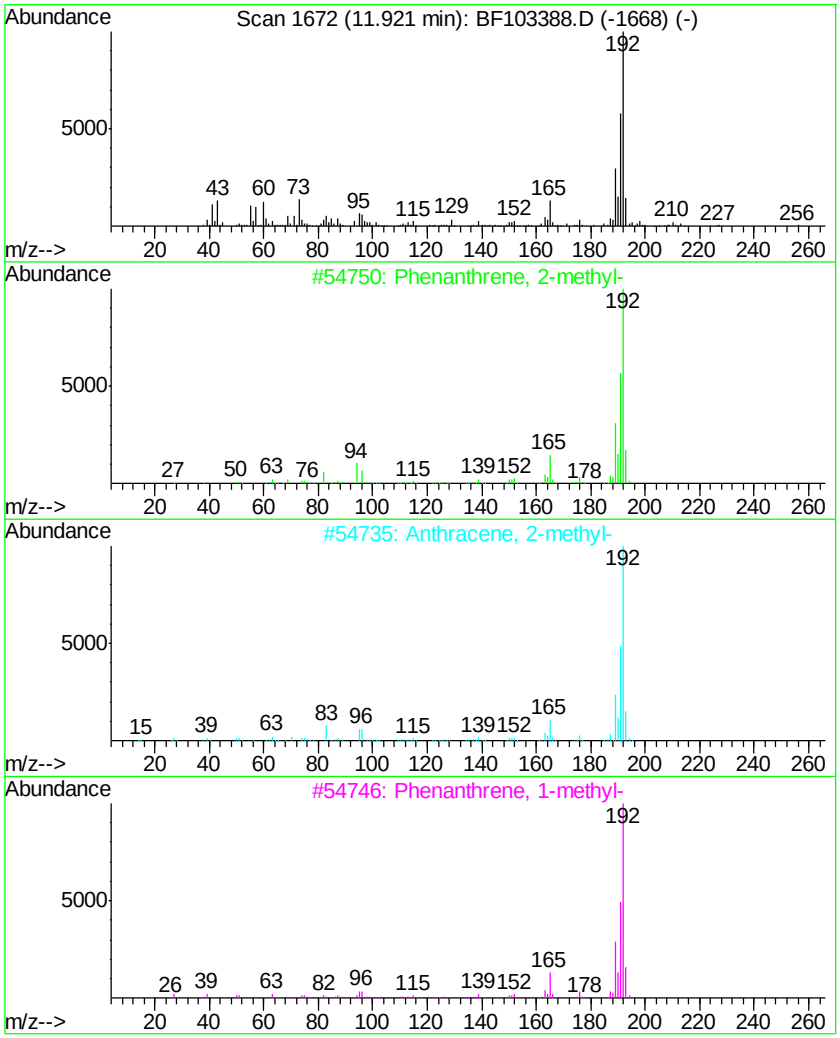
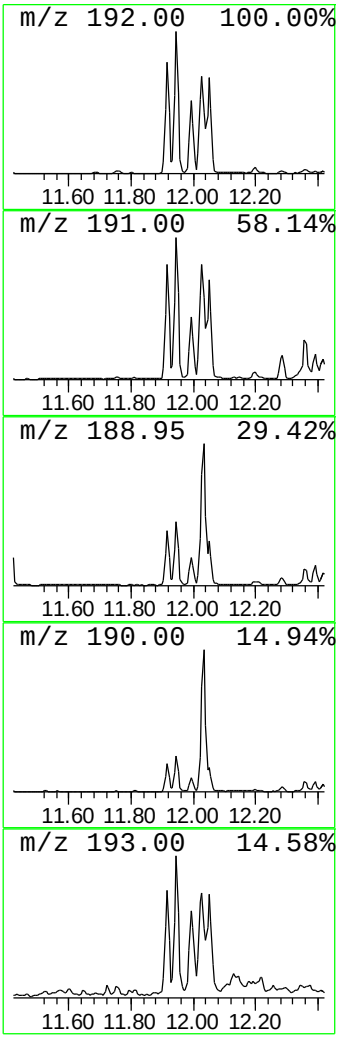
Peak Number 7 Phenanthrene, 2-methyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.92 | 12.25 ng | 678327 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 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 | 96 |
| 4 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 95 |
| 5 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 93 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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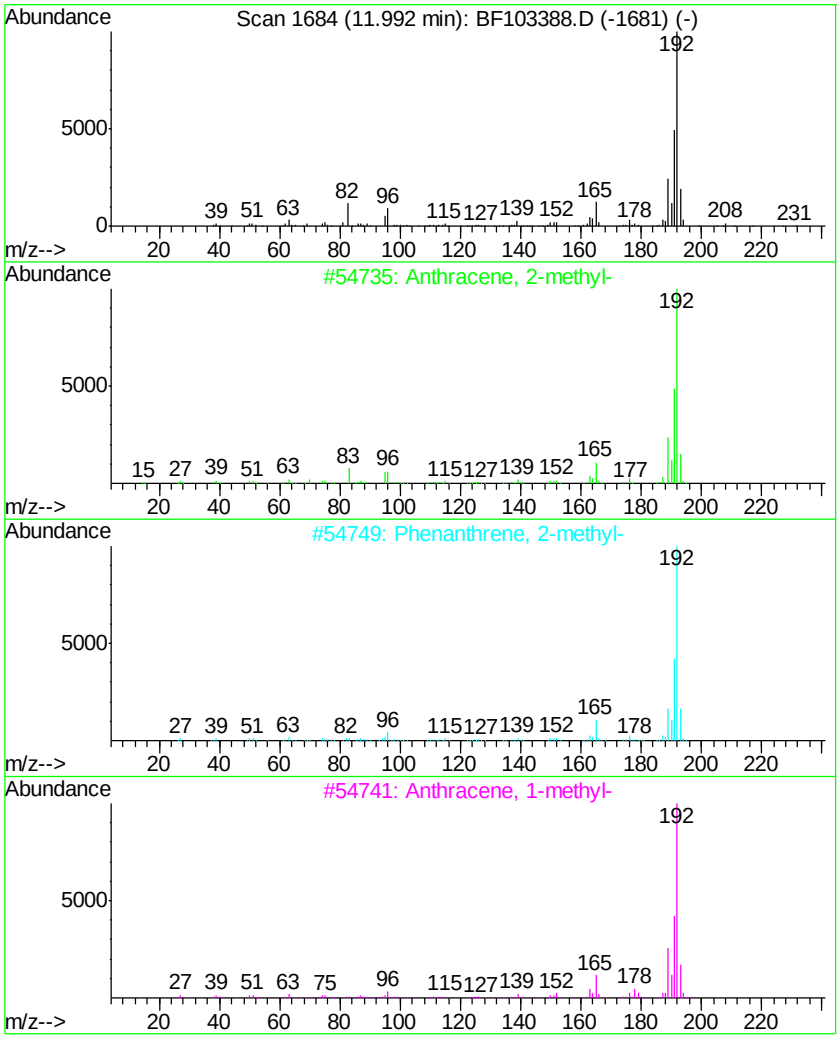
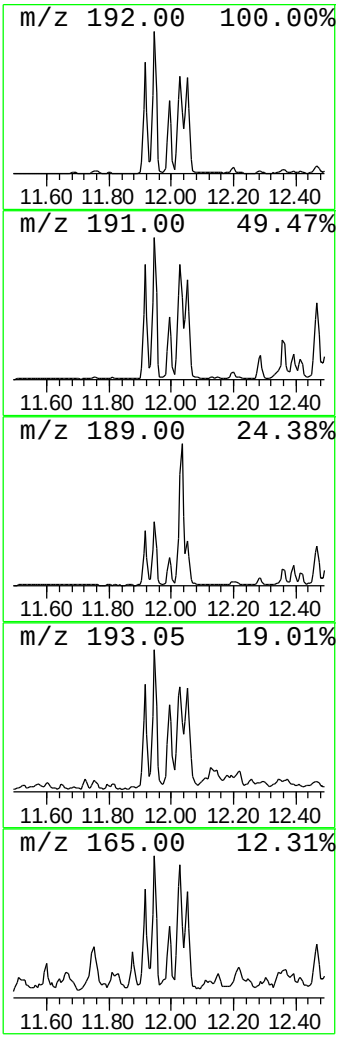
Peak Number 9 Anthracene, 2-methyl- Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.99 | 5.53 ng | 306019 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 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 | 96 |
| 4 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 96 |
| 5 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 94 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.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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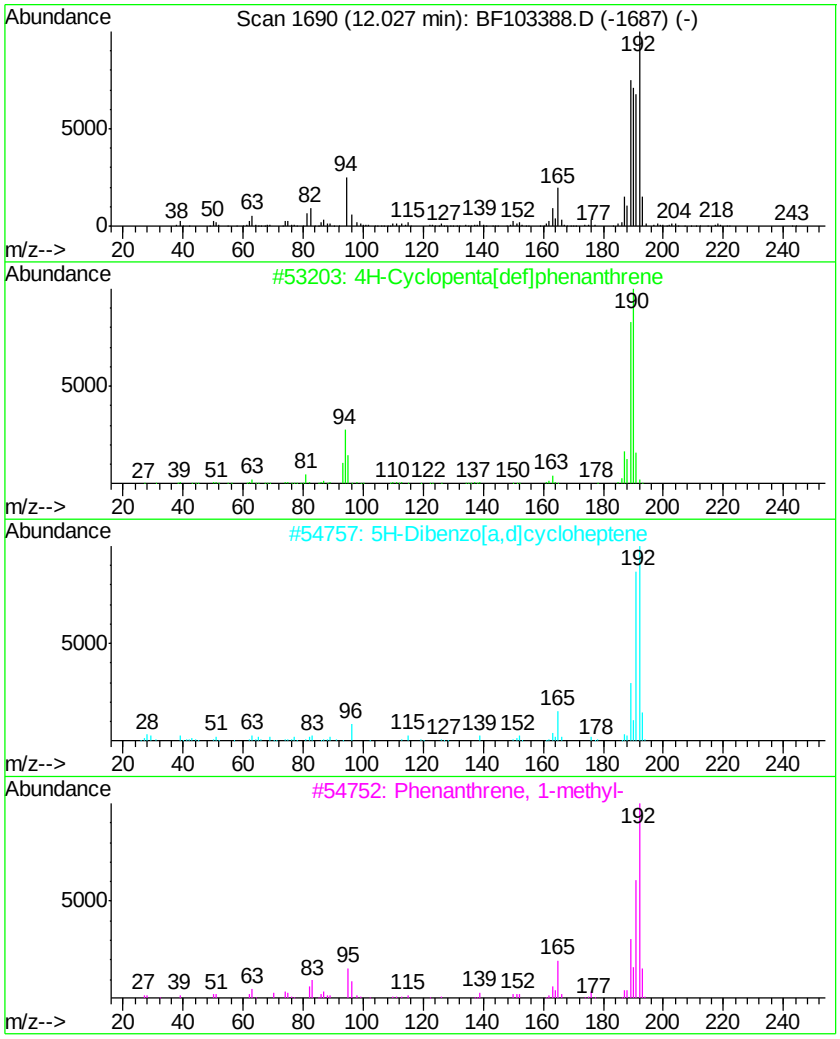
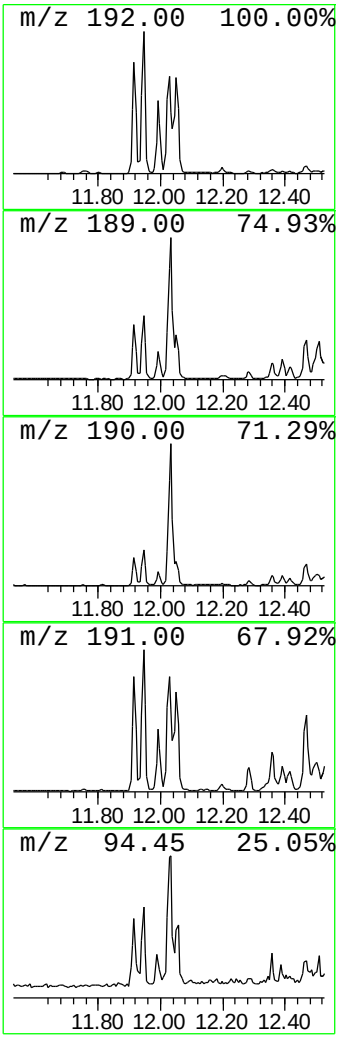
Peak Number 10 4H-Cyclopenta[def]phenanthrene Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.03 | 17.36 ng | 961363 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 55 |
| 2 | 5H-Dibenzo[a,d]cycloheptene | 192 | C15H12 | 000256-81-5 | 50 |
| 3 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 50 |
| 4 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 50 |
| 5 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 50 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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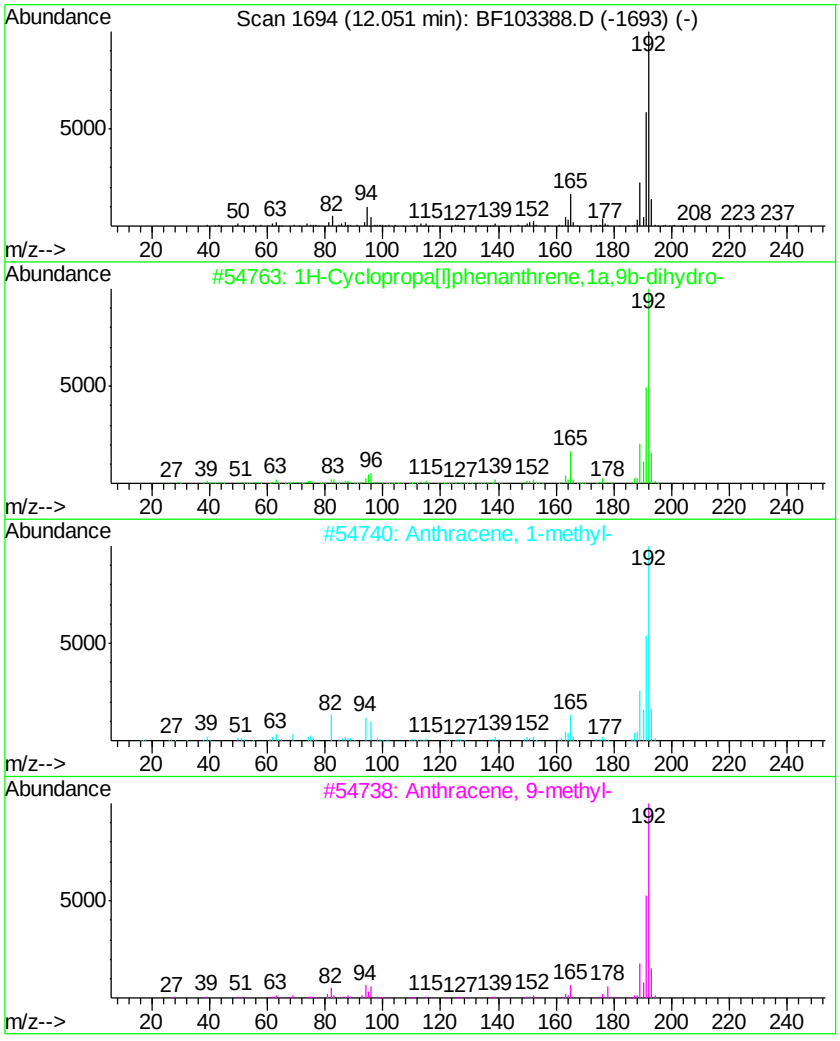
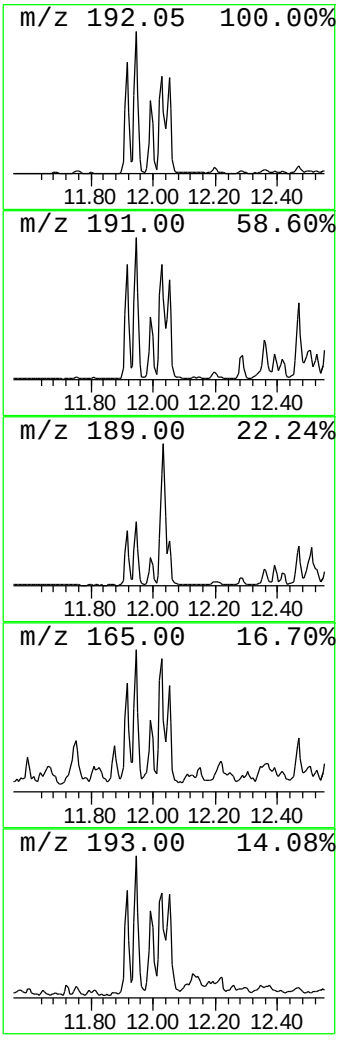
Peak Number 11 1H-Cyclopropa[l]phenanthren... Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.05 | 5.63 ng | 311552 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 90 |
| 2 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 87 |
| 3 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 83 |
| 4 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 81 |
| 5 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 81 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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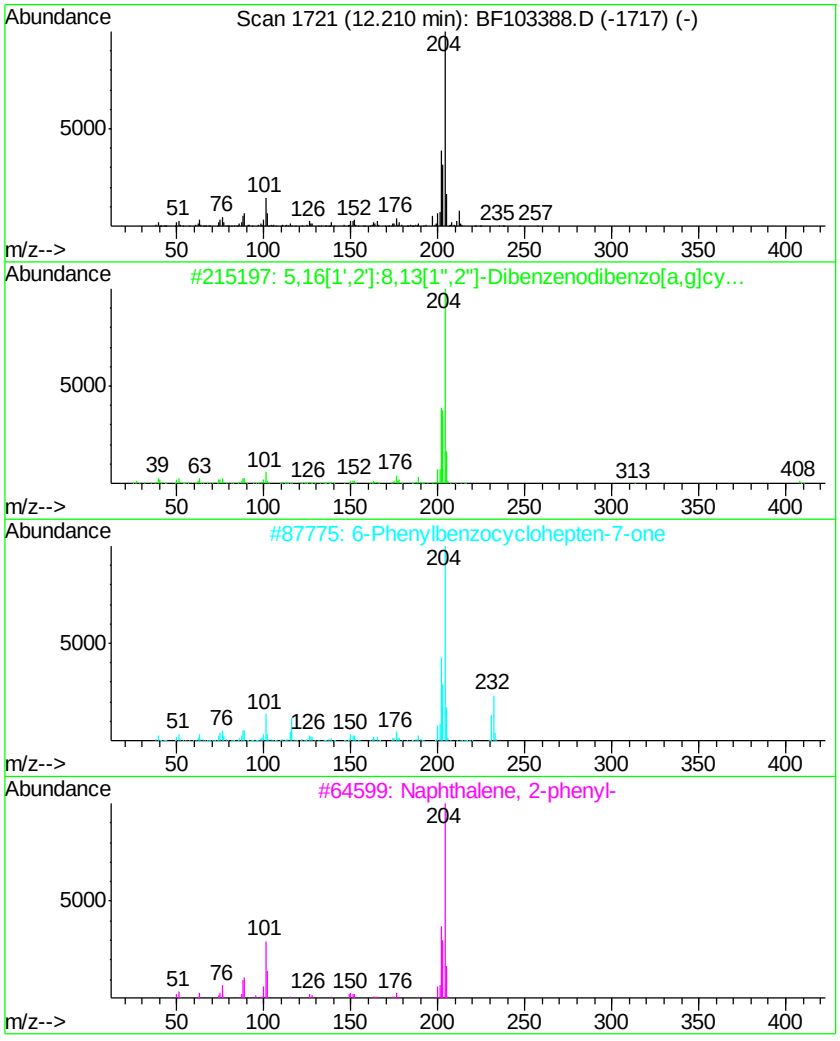
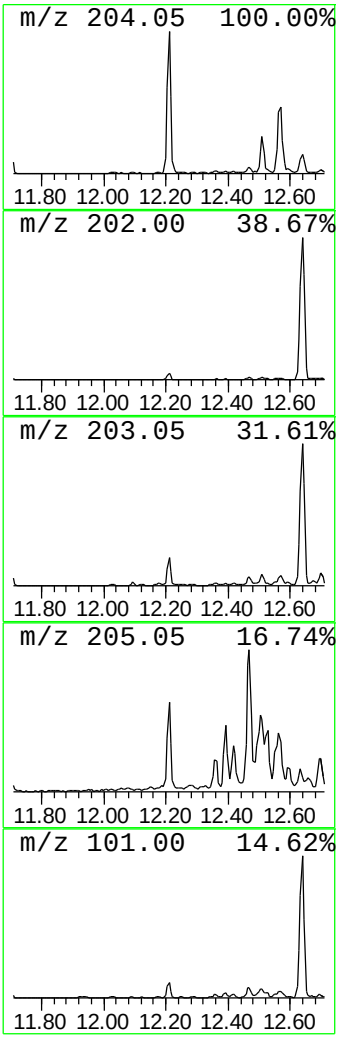
Peak Number 12 5,16[1',2']:8,13[1'',2'']-D... Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.21 | 7.62 ng | 422208 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24 | 005672-97-9 | 86 |
| 2 | 6-Phenylbenzocyclohepten-7-one | 232 | C17H12O | 093327-56-1 | 86 |
| 3 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 64 |
| 4 | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12 | 006572-60-7 | 62 |
| 5 | Naphthalene, 1-phenyl- | 204 | C16H12 | 000605-02-7 | 49 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.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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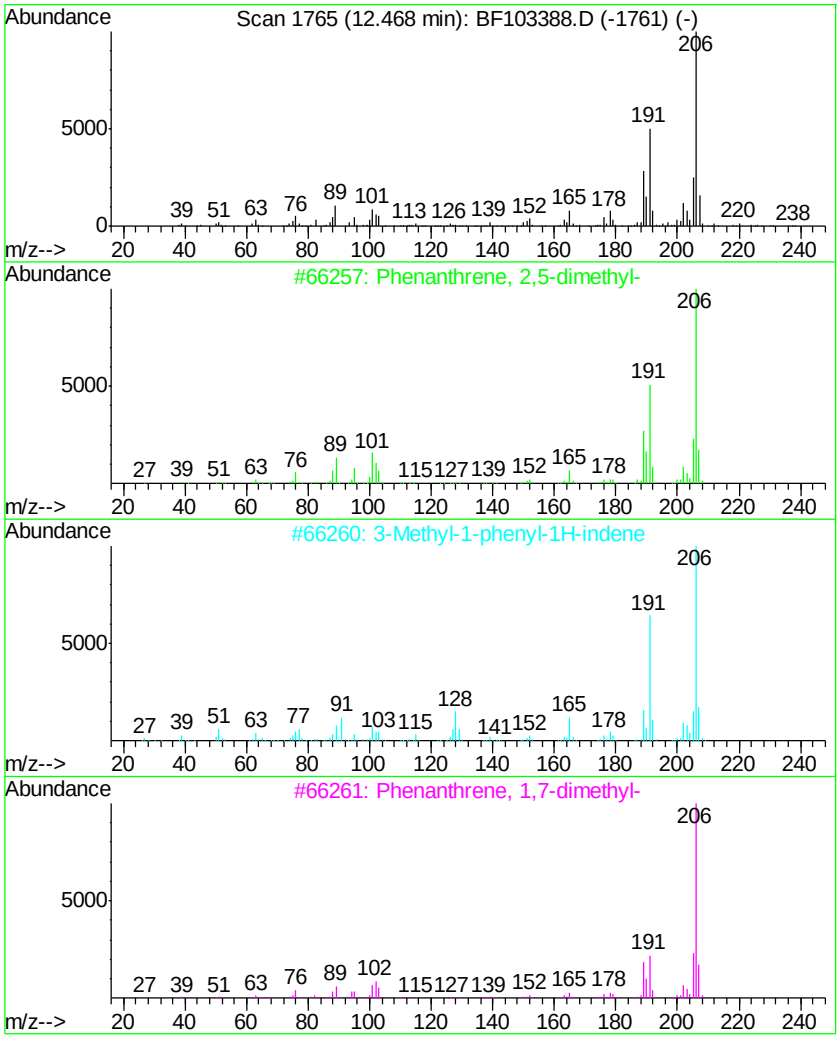
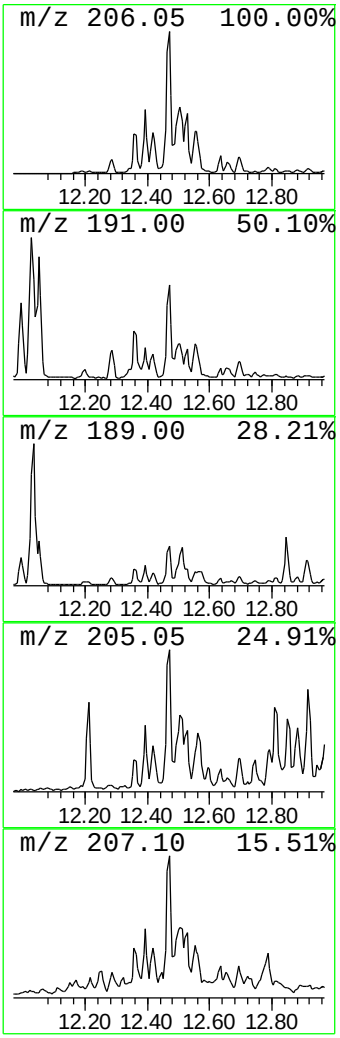
Peak Number 13 Phenanthrene, 2,5-dimethyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.47 | 10.91 ng | 604065 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 97 |
| 2 | 3-Methyl-1-phenyl-1H-indene | 206 | C16H14 | 022360-63-0 | 93 |
| 3 | Phenanthrene, 1,7-dimethyl- | 206 | C16H14 | 000483-87-4 | 93 |
| 4 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 93 |
| 5 | Phenanthrene, 2,3-dimethyl- | 206 | C16H14 | 003674-65-5 | 93 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.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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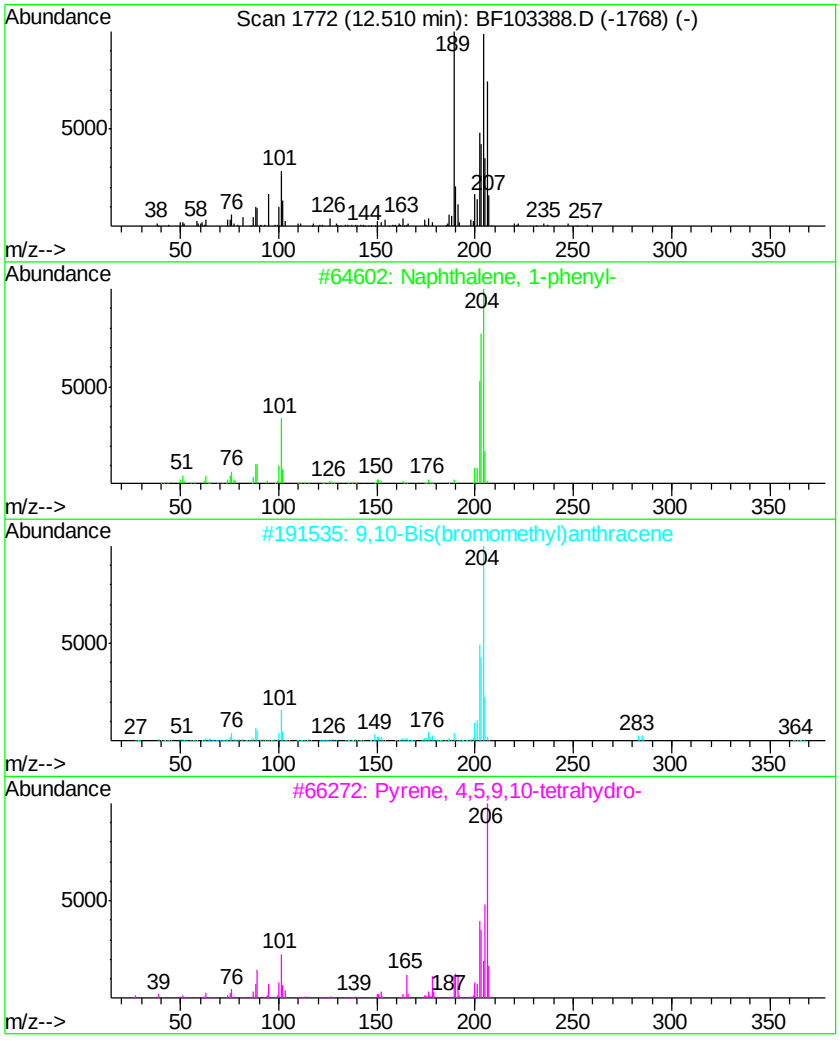
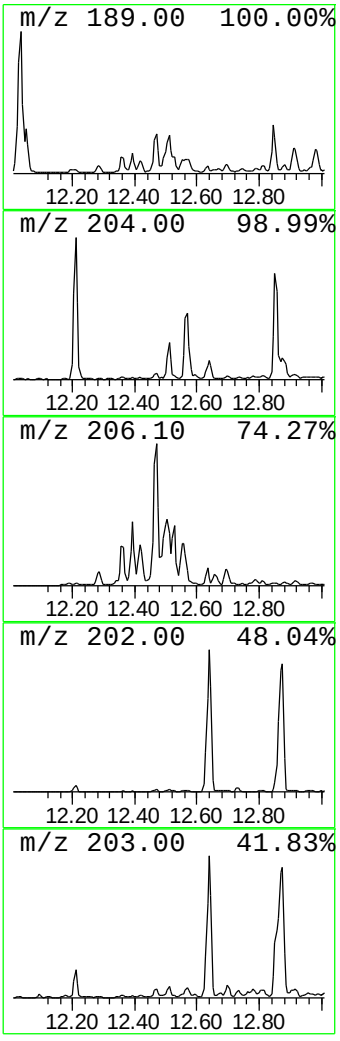
Peak Number 14 unknown12.51 Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.51 | 5.91 ng | 327182 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1-phenyl- | 204 | C16H12 | 000605-02-7 | 47 |
| 2 | 9,10-Bis(bromomethyl)anthracene | 362 | C16H12Br2 | 034373-96-1 | 38 |
| 3 | Pyrene, 4,5,9,10-tetrahydro- | 206 | C16H14 | 000781-17-9 | 35 |
| 4 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 30 |
| 5 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 30 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.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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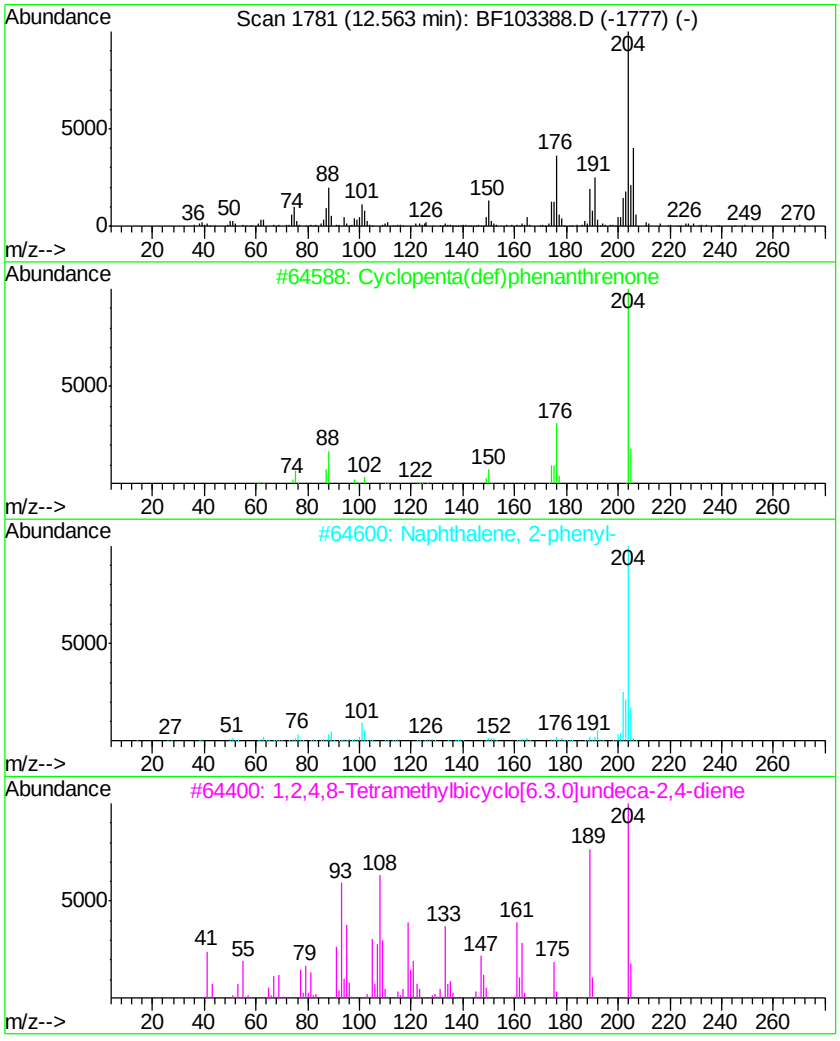
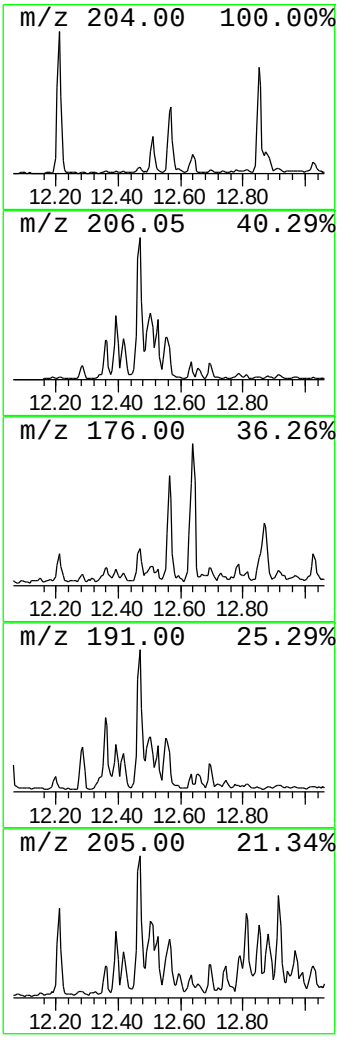
Peak Number 15 Cyclopenta(def)phenanthrenone Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.56 | 7.01 ng | 388010 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(def)phenanthrenone | 204 | C15H8O | 005737-13-3 | 95 |
| 2 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 50 |
| 3 | 1,2,4,8-Tetramethylbicyclo[6.3.0... | 204 | C15H24 | 137235-51-9 | 50 |
| 4 | Benzene, 1-chloro-3-phenoxy- | 204 | C12H9ClO | 006452-49-9 | 49 |
| 5 | 2-Chloro-4-phenylphenol | 204 | C12H9ClO | 000092-04-6 | 47 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.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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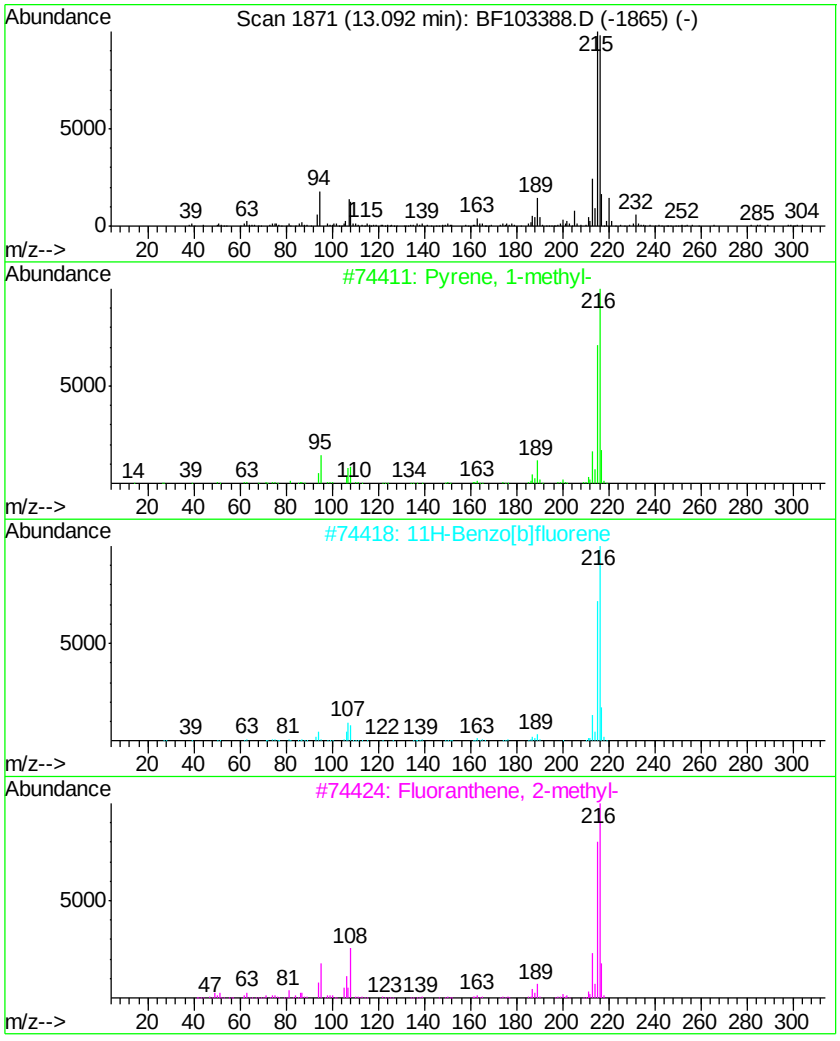
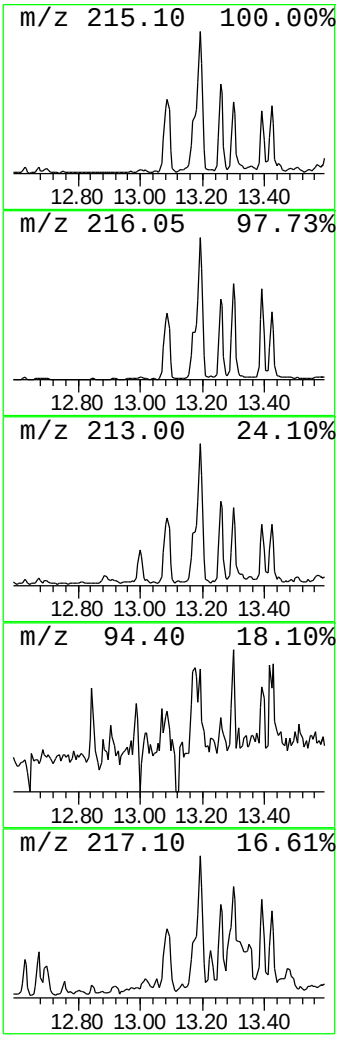
Peak Number 16 Pyrene, 1-methyl- Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.09 | 5.11 ng | 562207 | Chrysene-d12 | 14.07 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 95 |
| 2 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 87 |
| 3 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 76 |
| 4 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 74 |
| 5 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 70 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.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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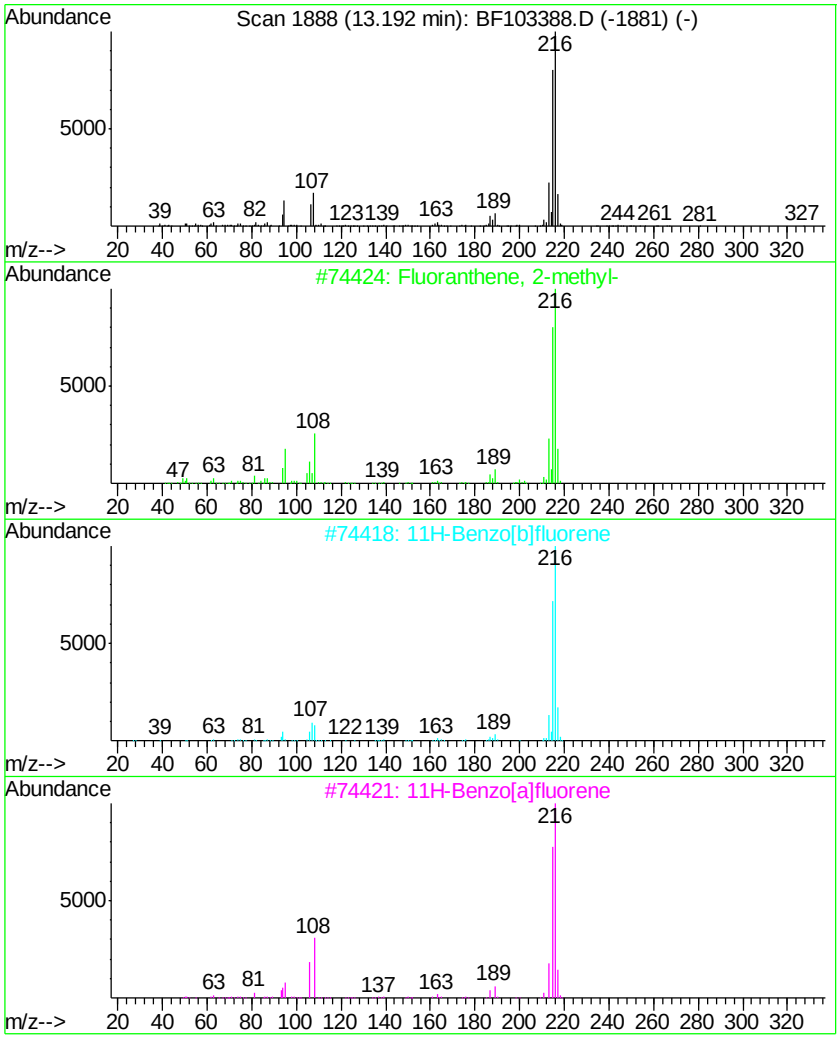
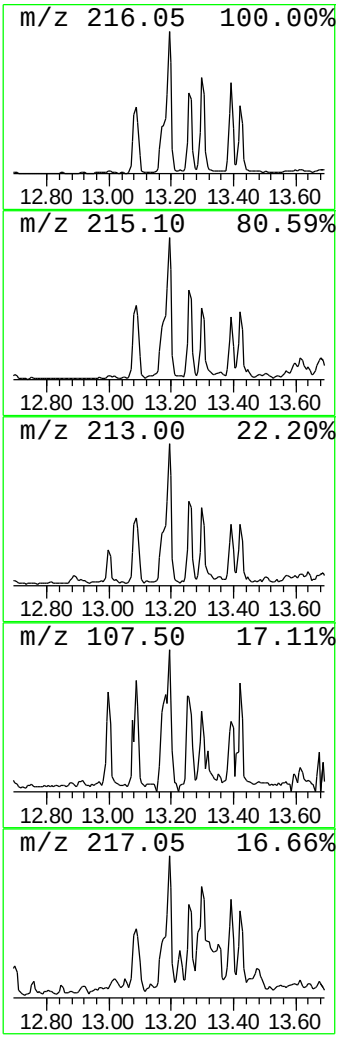
Peak Number 17 Fluoranthene, 2-methyl- Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.19 | 7.79 ng | 857738 | Chrysene-d12 | 14.07 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 95 |
| 2 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 93 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 91 |
| 4 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 87 |
| 5 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 86 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

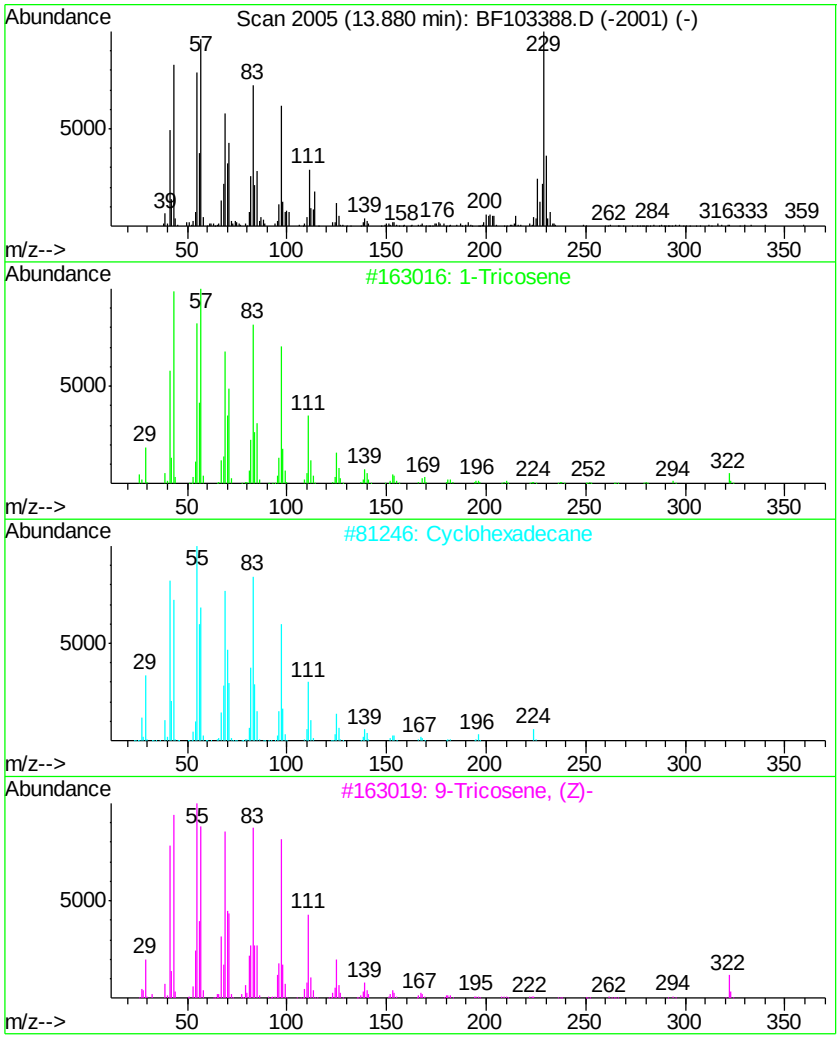
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

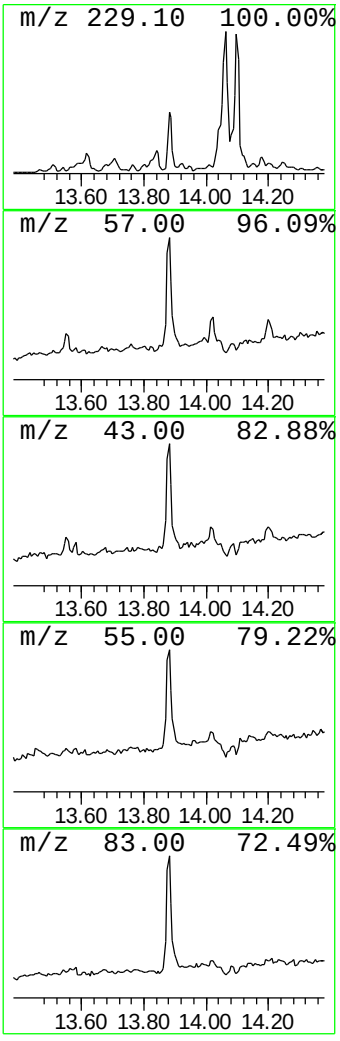
**********

Peak Number 18 1-Tricosene Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.88 | 6.98 ng | 768363 | Chrysene-d12 | 14.07 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Tricosene | 322 | C23H46 | 018835-32-0 | 95 |
| 2 | Cyclohexadecane | 224 | C16H32 | 000295-65-8 | 93 |
| 3 | 9-Tricosene, (Z)- | 322 | C23H46 | 027519-02-4 | 86 |
| 4 | Cyclotetracosane | 336 | C24H48 | 000297-03-0 | 83 |
| 5 | Cyclopentadecane | 210 | C15H30 | 000295-48-7 | 70 |



Data Path : Z:\HPCHEM1\BNA F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

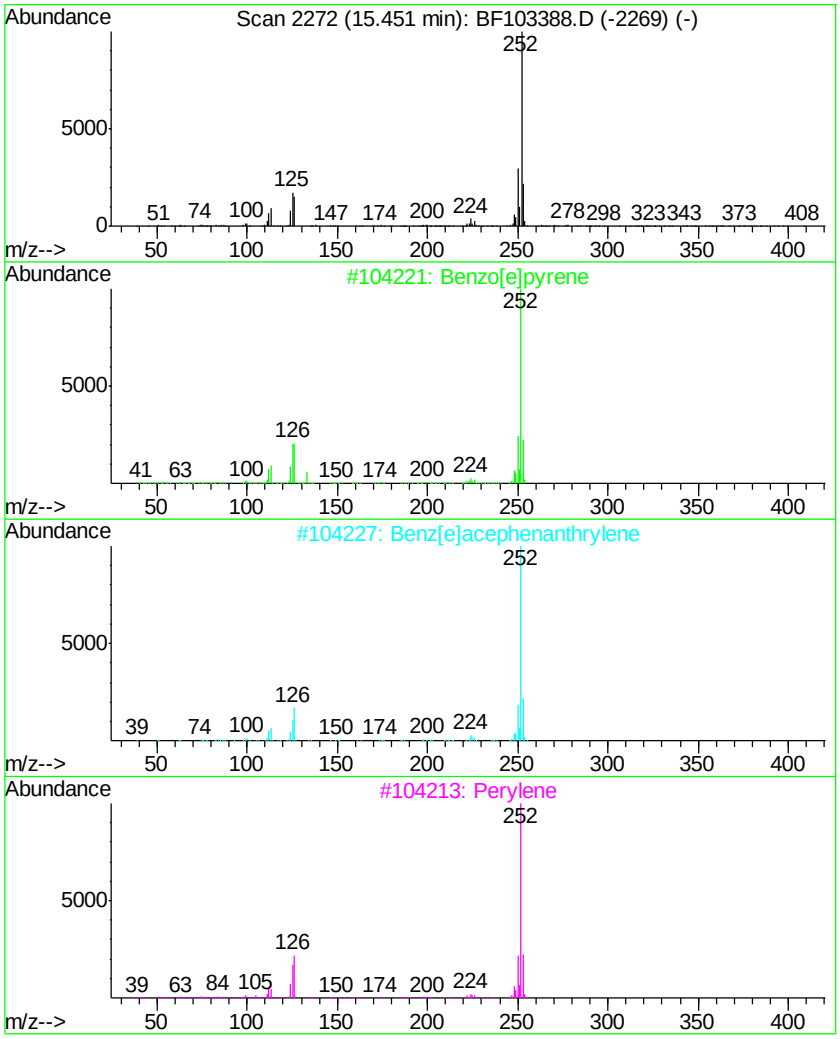
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

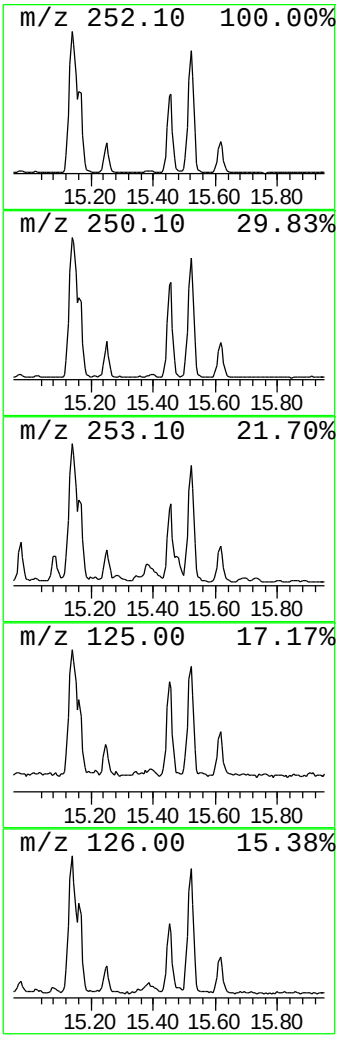
**********

Peak Number 20 Benzo[e]pyrene Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.45 | 34.73 ng | 458020 | Perylene-d12 | 15.59 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 99 |
| 2 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 98 |
| 3 | Perylene | 252 | C20H12 | 000198-55-0 | 96 |
| 4 | Benzo[j]fluoranthene | 252 | C20H12 | 000205-82-3 | 96 |
| 5 | Benzo[a]pyrene | 252 | C20H12 | 000050-32-8 | 95 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\Data\BF030218\
Data File : BF103388.D
Acq On : 3 Mar 2018 1:26
Operator : SJ/JU
Sample : J1724-09
Misc :
ALS Vial : 24 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SP-16

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Butane, 2-methoxy... | 2.12 | 5.6 | ng | 294104 | 1 | 6.87 | 1045730 | 20.0 |
| unknown6.65 | 6.65 | 72.3 | ng | 3783030 | 1 | 6.87 | 1045730 | 20.0 |
| Hexadecane | 10.33 | 5.1 | ng | 300342 | 3 | 9.92 | 1171410 | 20.0 |
| Tridecane | 10.81 | 5.1 | ng | 284303 | 4 | 11.42 | 1107570 | 20.0 |
| unknown11.26 | 11.26 | 4.9 | ng | 272252 | 4 | 11.42 | 1107570 | 20.0 |
| Phenanthrene, 2-m... | 11.92 | 12.3 | ng | 678327 | 4 | 11.42 | 1107570 | 20.0 |
| Anthracene, 2-met... | 11.99 | 5.5 | ng | 306019 | 4 | 11.42 | 1107570 | 20.0 |
| 4H-Cyclopenta[def... | 12.03 | 17.4 | ng | 961363 | 4 | 11.42 | 1107570 | 20.0 |
| 1H-Cyclopropa[l]p... | 12.05 | 5.6 | ng | 311552 | 4 | 11.42 | 1107570 | 20.0 |
| 5,16[1',2']:8,13[... | 12.21 | 7.6 | ng | 422208 | 4 | 11.42 | 1107570 | 20.0 |
| Phenanthrene, 2,5... | 12.47 | 10.9 | ng | 604065 | 4 | 11.42 | 1107570 | 20.0 |
| unknown12.51 | 12.51 | 5.9 | ng | 327182 | 4 | 11.42 | 1107570 | 20.0 |
| Cyclopenta(def)ph... | 12.56 | 7.0 | ng | 388010 | 4 | 11.42 | 1107570 | 20.0 |
| Pyrene, 1-methyl- | 13.09 | 5.1 | ng | 562207 | 5 | 14.07 | 2201960 | 20.0 |
| Fluoranthene, 2-m... | 13.19 | 7.8 | ng | 857738 | 5 | 14.07 | 2201960 | 20.0 |
| 1-Tricosene | 13.88 | 7.0 | ng | 768363 | 5 | 14.07 | 2201960 | 20.0 |
| Benzo[e]pyrene | 15.45 | 34.7 | ng | 458020 | 6 | 15.59 | 263797 | 20.0 |