LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF122117\
Data File : BF101612.D
Acq On : 21 Dec 2017 17:39
Operator : SJ/JU
Sample : I6993-02 50X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** ROLL-OFF-4

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-BF121417.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 | 5.463 | 571 | 574 | 583 | rBV3 | 11568 | 30963 | 2.75% | 0.362% |
| 2 | 6.493 | 741 | 749 | 758 | rBV3 | 16369 | 48465 | 4.31% | 0.566% |
| 3 | 6.593 | 763 | 766 | 777 | rVB3 | 31044 | 60042 | 5.34% | 0.701% |
| 4 | 6.798 | 797 | 801 | 817 | rBV | 662711 | 720030 | 64.00% | 8.410% |
| 5 | 6.957 | 825 | 828 | 838 | rVB | 36311 | 47879 | 4.26% | 0.559% |
| 6 | 7.392 | 896 | 902 | 909 | rBV2 | 11759 | 28008 | 2.49% | 0.327% |
| 7 | 8.081 | 1015 | 1019 | 1039 | rBV | 782229 | 943936 | 83.90% | 11.025% |
| 8 | 8.804 | 1138 | 1142 | 1151 | rVB2 | 9044 | 14622 | 1.30% | 0.171% |
| 9 | 9.157 | 1198 | 1202 | 1210 | rBV | 46460 | 53485 | 4.75% | 0.625% |
| 10 | 9.698 | 1290 | 1294 | 1300 | rBV | 63429 | 61514 | 5.47% | 0.718% |
| 11 | 9.833 | 1313 | 1317 | 1321 | rBV | 823247 | 740642 | 65.83% | 8.650% |
| 12 | 9.863 | 1321 | 1322 | 1332 | rVB | 38368 | 37461 | 3.33% | 0.438% |
| 13 | 10.045 | 1347 | 1353 | 1364 | rBV | 36944 | 44849 | 3.99% | 0.524% |
| 14 | 10.386 | 1408 | 1411 | 1417 | rBV | 82200 | 79064 | 7.03% | 0.923% |
| 15 | 10.639 | 1446 | 1454 | 1459 | rBV3 | 18687 | 34674 | 3.08% | 0.405% |
| 16 | 11.222 | 1550 | 1553 | 1557 | rVB | 18036 | 15963 | 1.42% | 0.186% |
| 17 | 11.322 | 1567 | 1570 | 1573 | rBV | 754690 | 702917 | 62.48% | 8.210% |
| 18 | 11.345 | 1573 | 1574 | 1580 | rVV | 402881 | 336391 | 29.90% | 3.929% |
| 19 | 11.404 | 1580 | 1584 | 1589 | rVB | 177771 | 173022 | 15.38% | 2.021% |
| 20 | 11.569 | 1608 | 1612 | 1618 | rBV | 67500 | 67736 | 6.02% | 0.791% |
| 21 | 11.827 | 1653 | 1656 | 1659 | rBV | 24218 | 22137 | 1.97% | 0.259% |
| 22 | 11.857 | 1659 | 1661 | 1666 | rVV | 29902 | 29080 | 2.58% | 0.340% |
| 23 | 11.910 | 1666 | 1670 | 1672 | rVV | 13821 | 13115 | 1.17% | 0.153% |
| 24 | 11.939 | 1672 | 1675 | 1684 | rVB2 | 68481 | 86114 | 7.65% | 1.006% |
| 25 | 12.122 | 1703 | 1706 | 1710 | rBV | 22901 | 19546 | 1.74% | 0.228% |
| 26 | 12.480 | 1764 | 1767 | 1769 | rVB | 13342 | 12014 | 1.07% | 0.140% |
| 27 | 12.539 | 1774 | 1777 | 1783 | rBV | 594359 | 521023 | 46.31% | 6.085% |
| 28 | 12.639 | 1791 | 1794 | 1799 | rVB | 65668 | 56196 | 5.00% | 0.656% |
| 29 | 12.692 | 1801 | 1803 | 1805 | rVV | 16142 | 13362 | 1.19% | 0.156% |
| 30 | 12.769 | 1809 | 1816 | 1822 | rBV | 405823 | 458630 | 40.77% | 5.357% |
| 31 | 12.822 | 1822 | 1825 | 1828 | rVV2 | 11925 | 11664 | 1.04% | 0.136% |
| 32 | 12.904 | 1834 | 1839 | 1843 | rBV2 | 65938 | 70951 | 6.31% | 0.829% |
| 33 | 12.945 | 1843 | 1846 | 1849 | rVV | 15684 | 15479 | 1.38% | 0.181% |
| 34 | 12.980 | 1849 | 1852 | 1858 | rVV3 | 20493 | 31719 | 2.82% | 0.370% |

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Misc :
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Start Thrs: 0.2 Max Peaks: 100
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If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121417.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 13.074 | 1865 | 1868 | 1869 | rBV2 | 16687 | 16421 | 1.46% | 0.192% |
| 36 | 13.104 | 1869 | 1873 | 1878 | rVB | 61214 | 68637 | 6.10% | 0.802% |
| 37 | 13.169 | 1880 | 1884 | 1887 | rVV | 61815 | 63421 | 5.64% | 0.741% |
| 38 | 13.210 | 1887 | 1891 | 1893 | rVV2 | 25556 | 32605 | 2.90% | 0.381% |
| 39 | 13.333 | 1909 | 1912 | 1914 | rBV2 | 13746 | 13057 | 1.16% | 0.153% |
| 40 | 13.621 | 1958 | 1961 | 1964 | rBV2 | 18425 | 16970 | 1.51% | 0.198% |
| 41 | 13.721 | 1975 | 1978 | 1980 | rBV | 39783 | 38247 | 3.40% | 0.447% |
| 42 | 13.745 | 1980 | 1982 | 1984 | rVB | 28571 | 21717 | 1.93% | 0.254% |
| 43 | 13.774 | 1984 | 1987 | 1988 | rBV | 25818 | 21472 | 1.91% | 0.251% |
| 44 | 13.833 | 1995 | 1997 | 2001 | rVB | 22672 | 21727 | 1.93% | 0.254% |
| 45 | 13.892 | 2005 | 2007 | 2010 | rBV3 | 15231 | 16527 | 1.47% | 0.193% |
| 46 | 13.974 | 2014 | 2021 | 2023 | rBV2 | 901183 | 1125035 | 100.00% | 13.140% |
| 47 | 13.998 | 2023 | 2025 | 2028 | rVB | 217675 | 193851 | 17.23% | 2.264% |
| 48 | 14.080 | 2036 | 2039 | 2042 | rBV | 25122 | 20380 | 1.81% | 0.238% |
| 49 | 14.139 | 2046 | 2049 | 2053 | rBV | 28867 | 32399 | 2.88% | 0.378% |
| 50 | 14.180 | 2053 | 2056 | 2057 | rBV | 18871 | 18741 | 1.67% | 0.219% |
| 51 | 14.363 | 2082 | 2087 | 2089 | rBV2 | 35730 | 51573 | 4.58% | 0.602% |
| 52 | 14.486 | 2106 | 2108 | 2109 | rBV | 25798 | 18493 | 1.64% | 0.216% |
| 53 | 15.015 | 2194 | 2198 | 2200 | rBV | 165291 | 230457 | 20.48% | 2.692% |
| 54 | 15.121 | 2213 | 2216 | 2220 | rBV | 35062 | 46463 | 4.13% | 0.543% |
| 55 | 15.310 | 2245 | 2248 | 2252 | rVB | 78262 | 94829 | 8.43% | 1.108% |
| 56 | 15.380 | 2256 | 2260 | 2265 | rBV | 121237 | 176418 | 15.68% | 2.061% |
| 57 | 15.439 | 2265 | 2270 | 2274 | rBV | 496075 | 619746 | 55.09% | 7.238% |

Sum of corrected areas: 8561879

LSC Report - Integrated Chromatogram

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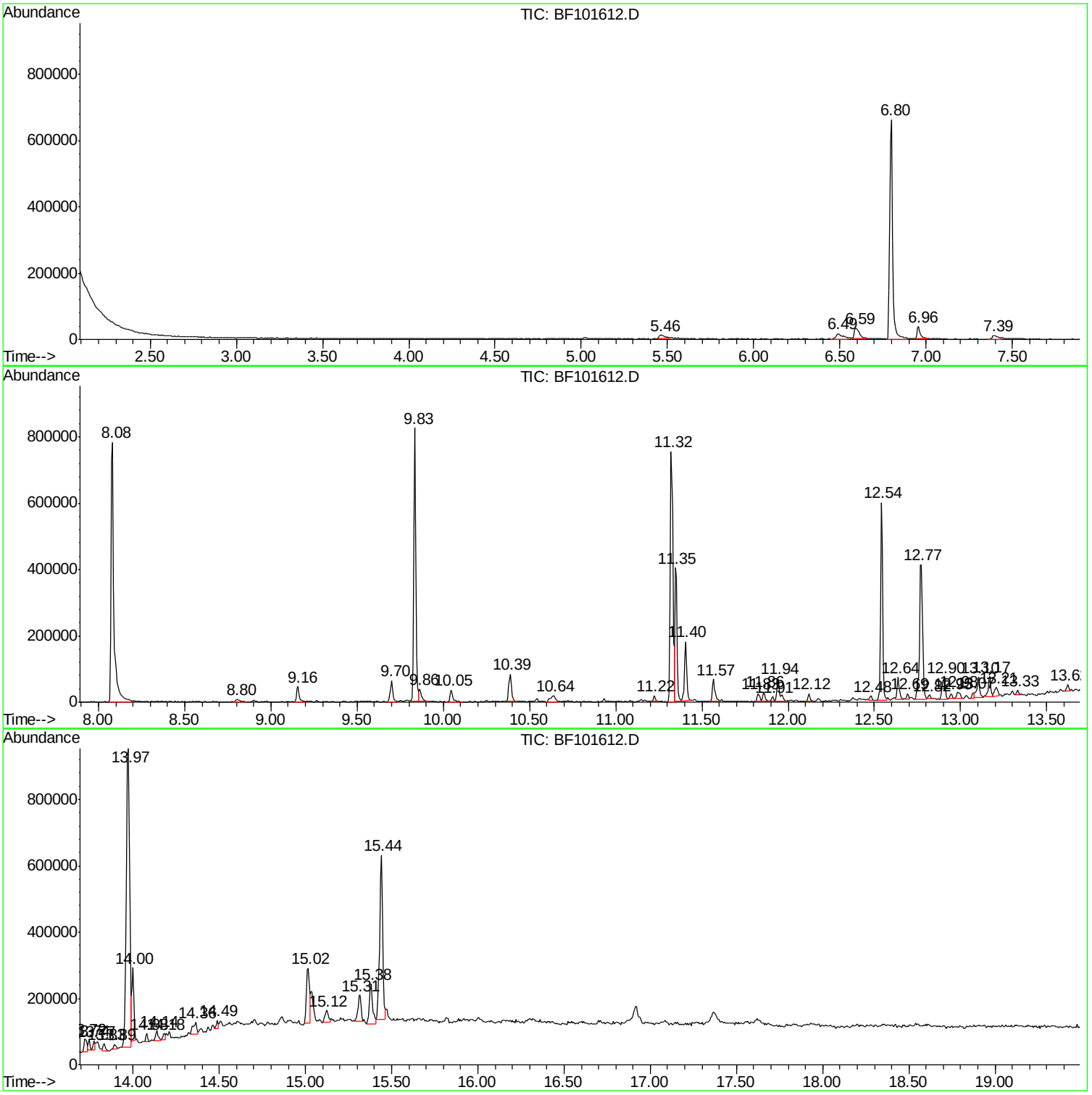
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
ROLL-OFF-4

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121417.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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Sample : I6993-02 50X
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**Instrument :** BNA_F
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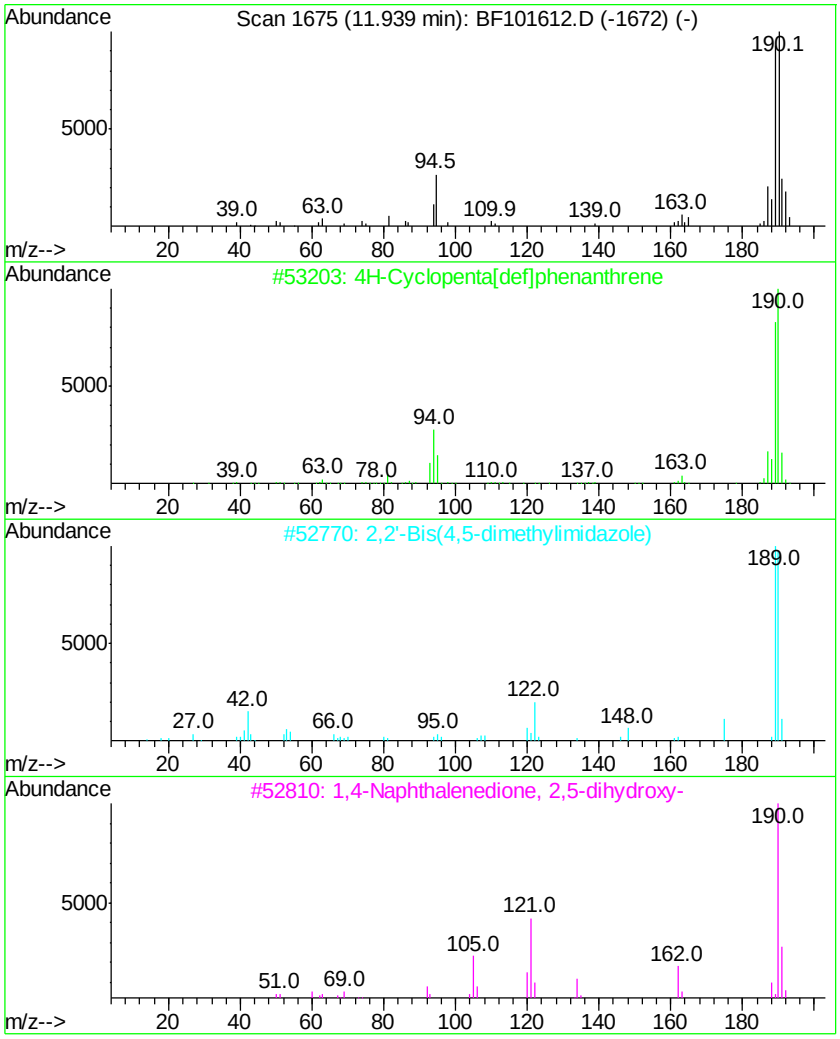
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

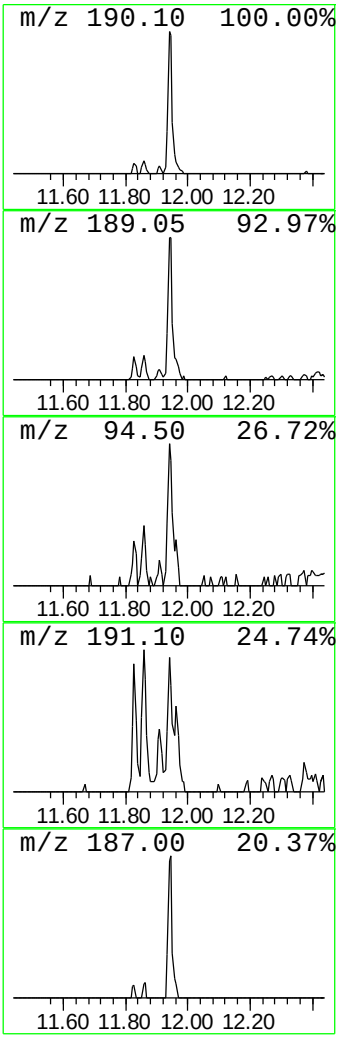
**********

Peak Number 1 4H-Cyclopenta[def]phenanthrene Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.94 | 2.45 ng | 86114 | Phenanthrene-d10 | 11.32 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 93 |
| 2 | 2,2'-Bis(4,5-dimethylimidazole) | 190 | C10H14N4 | 069286-06-2 | 38 |
| 3 | 1,4-Naphthalenedione, 2,5-dihydr... | 190 | C10H6O4 | 004923-55-1 | 17 |
| 4 | 4-(4-Chlorophenyl)pyridine | 189 | C11H8ClN | 005957-96-0 | 16 |
| 5 | 5-Thiazolecarboxamide, 4-amino-2... | 189 | C5H7N3OS2 | 1000338-08-9 | 10 |



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**Instrument :** BNA_F
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Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121417.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

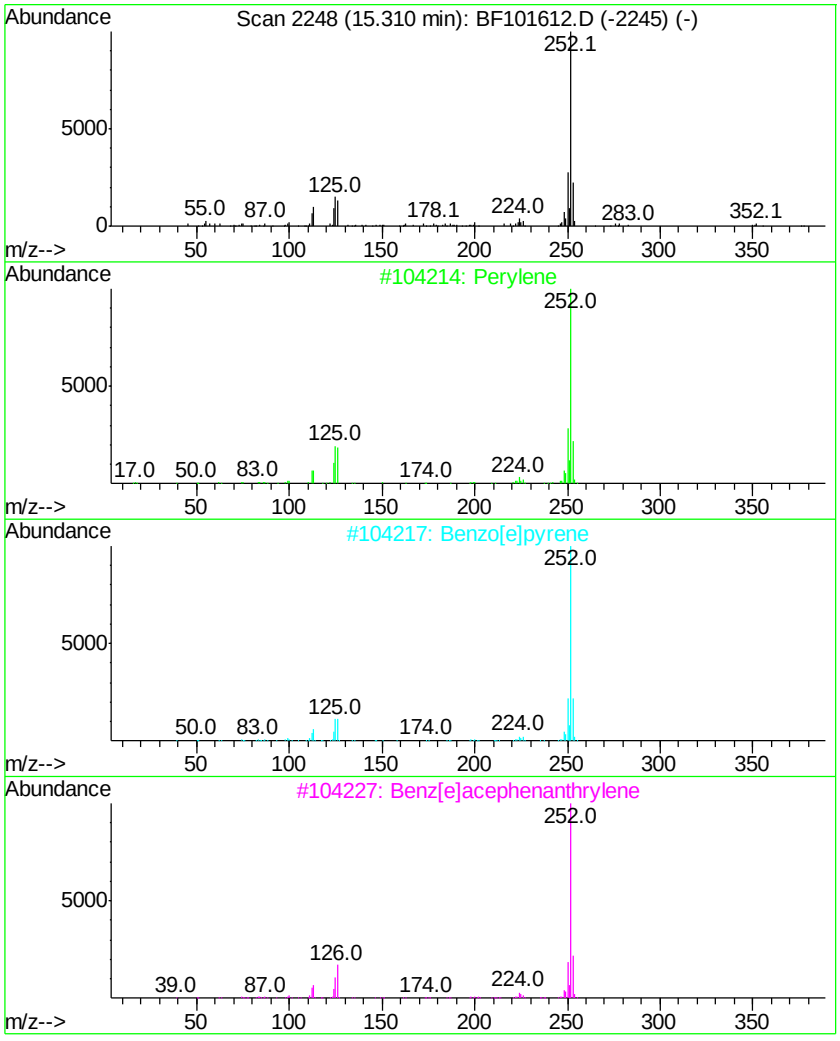
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

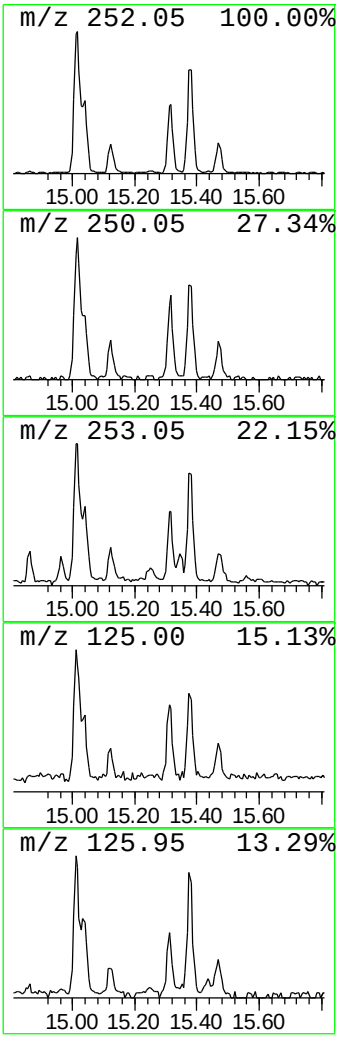
**********

Peak Number 2 Perylene Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.31 | 3.06 ng | 94829 | Perylene-d12 | 15.44 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Perylene | 252 | C20H12 | 000198-55-0 | 99 |
| 2 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 98 |
| 3 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 96 |
| 4 | Benzo[k]fluoranthene | 252 | C20H12 | 000207-08-9 | 94 |
| 5 | Benzo[j]fluoranthene | 252 | C20H12 | 000205-82-3 | 93 |



# Tentatively Identified Compound (LSC) summary

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**Instrument :** BNA_F
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Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121417.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 |
| 4H-Cyclopenta[def... | 11.94 | 2.5 | ng | 86114 | 4 | 11.32 | 702917 | 20.0 |
| Perylene | 15.31 | 3.1 | ng | 94829 | 6 | 15.44 | 619746 | 20.0 |