LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

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-BF072018.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 | 5.190 | 482 | 485 | 496 | rBV | 233660 | 291176 | 7.21% | 0.589% |
| 2 | 5.595 | 550 | 554 | 580 | rBV | 1180433 | 1715998 | 42.47% | 3.473% |
| 3 | 6.595 | 721 | 724 | 744 | rBV | 1154603 | 1797090 | 44.48% | 3.637% |
| 4 | 6.737 | 744 | 748 | 763 | rVV | 1666939 | 1879774 | 46.52% | 3.804% |
| 5 | 6.966 | 784 | 787 | 810 | rBV | 980093 | 1210547 | 29.96% | 2.450% |
| 6 | 7.119 | 810 | 813 | 827 | rBV | 1351173 | 1484490 | 36.74% | 3.004% |
| 7 | 7.531 | 879 | 883 | 893 | rBV | 768904 | 1036978 | 25.66% | 2.098% |
| 8 | 8.248 | 1001 | 1005 | 1017 | rBV | 1393211 | 1585736 | 39.24% | 3.209% |
| 9 | 8.966 | 1123 | 1127 | 1131 | rBV | 52136 | 63471 | 1.57% | 0.128% |
| 10 | 9.060 | 1140 | 1143 | 1149 | rVB | 51824 | 54155 | 1.34% | 0.110% |
| 11 | 9.319 | 1184 | 1187 | 1197 | rBV | 1897452 | 1898820 | 46.99% | 3.843% |
| 12 | 9.595 | 1230 | 1234 | 1237 | rBV2 | 29912 | 41129 | 1.02% | 0.083% |
| 13 | 9.666 | 1242 | 1246 | 1248 | rBV | 49653 | 56532 | 1.40% | 0.114% |
| 14 | 9.713 | 1251 | 1254 | 1263 | rVB | 163801 | 172368 | 4.27% | 0.349% |
| 15 | 9.872 | 1277 | 1281 | 1286 | rBV | 196052 | 200955 | 4.97% | 0.407% |
| 16 | 10.007 | 1301 | 1304 | 1308 | rBV2 | 1428888 | 1345503 | 33.30% | 2.723% |
| 17 | 10.042 | 1308 | 1310 | 1318 | rVB | 290489 | 265731 | 6.58% | 0.538% |
| 18 | 10.213 | 1334 | 1339 | 1342 | rVV2 | 84979 | 109764 | 2.72% | 0.222% |
| 19 | 10.325 | 1353 | 1358 | 1361 | rBV3 | 33632 | 48607 | 1.20% | 0.098% |
| 20 | 10.419 | 1369 | 1374 | 1379 | rBV3 | 40668 | 58113 | 1.44% | 0.118% |
| 21 | 10.560 | 1394 | 1398 | 1404 | rBV | 237850 | 241839 | 5.99% | 0.489% |
| 22 | 10.619 | 1404 | 1408 | 1410 | rBV2 | 64479 | 74089 | 1.83% | 0.150% |
| 23 | 10.713 | 1422 | 1424 | 1427 | rVB | 53070 | 48182 | 1.19% | 0.098% |
| 24 | 10.801 | 1435 | 1439 | 1452 | rBV | 976571 | 1108939 | 27.44% | 2.244% |
| 25 | 10.901 | 1452 | 1456 | 1458 | rBV4 | 36121 | 57029 | 1.41% | 0.115% |
| 26 | 11.107 | 1485 | 1491 | 1494 | rBV2 | 72900 | 109928 | 2.72% | 0.222% |
| 27 | 11.254 | 1514 | 1516 | 1521 | rVB3 | 38575 | 47870 | 1.18% | 0.097% |
| 28 | 11.307 | 1522 | 1525 | 1528 | rBV | 49152 | 51776 | 1.28% | 0.105% |
| 29 | 11.342 | 1528 | 1531 | 1535 | rVV3 | 64184 | 75284 | 1.86% | 0.152% |
| 30 | 11.401 | 1538 | 1541 | 1546 | rVV | 120484 | 111708 | 2.76% | 0.226% |
| 31 | 11.507 | 1555 | 1559 | 1560 | rBV | 1233402 | 1151339 | 28.49% | 2.330% |
| 32 | 11.530 | 1560 | 1563 | 1568 | rVV | 2256977 | 2170905 | 53.73% | 4.393% |
| 33 | 11.583 | 1568 | 1572 | 1576 | rVV | 546771 | 585986 | 14.50% | 1.186% |
| 34 | 11.742 | 1593 | 1599 | 1602 | rBV2 | 160329 | 237693 | 5.88% | 0.481% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

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-BF072018.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 11.795 | 1606 | 1608 | 1610 | rVV | 62769 | 49797 | 1.23% | 0.101% |
| 36 | 11.836 | 1612 | 1615 | 1619 | rVV3 | 48847 | 54402 | 1.35% | 0.110% |
| 37 | 12.007 | 1640 | 1644 | 1646 | rBV | 372120 | 368044 | 9.11% | 0.745% |
| 38 | 12.036 | 1646 | 1649 | 1654 | rVB | 324905 | 316173 | 7.82% | 0.640% |
| 39 | 12.083 | 1654 | 1657 | 1660 | rBV | 151659 | 129689 | 3.21% | 0.262% |
| 40 | 12.119 | 1660 | 1663 | 1666 | rBV2 | 527930 | 628651 | 15.56% | 1.272% |
| 41 | 12.301 | 1691 | 1694 | 1697 | rBV | 195993 | 191416 | 4.74% | 0.387% |
| 42 | 12.330 | 1697 | 1699 | 1705 | rVB | 132004 | 137481 | 3.40% | 0.278% |
| 43 | 12.554 | 1734 | 1737 | 1740 | rBV | 170461 | 206770 | 5.12% | 0.418% |
| 44 | 12.648 | 1750 | 1753 | 1757 | rBV3 | 114402 | 140695 | 3.48% | 0.285% |
| 45 | 12.730 | 1762 | 1767 | 1774 | rBV | 3199686 | 3772417 | 93.36% | 7.634% |
| 46 | 12.783 | 1774 | 1776 | 1778 | rBV | 61423 | 61815 | 1.53% | 0.125% |
| 47 | 12.877 | 1790 | 1792 | 1794 | rBV | 100488 | 83384 | 2.06% | 0.169% |
| 48 | 12.960 | 1799 | 1806 | 1811 | rBV | 3255932 | 4040622 | 100.00% | 8.177% |
| 49 | 13.001 | 1811 | 1813 | 1818 | rVB2 | 161503 | 161831 | 4.01% | 0.327% |
| 50 | 13.089 | 1823 | 1828 | 1831 | rBV2 | 1464204 | 1532023 | 37.92% | 3.100% |
| 51 | 13.166 | 1838 | 1841 | 1846 | rBV2 | 199721 | 334003 | 8.27% | 0.676% |
| 52 | 13.283 | 1853 | 1861 | 1865 | rBV2 | 585723 | 933867 | 23.11% | 1.890% |
| 53 | 13.348 | 1869 | 1872 | 1875 | rBV | 505454 | 447168 | 11.07% | 0.905% |
| 54 | 13.389 | 1876 | 1879 | 1881 | rVB2 | 205874 | 208144 | 5.15% | 0.421% |
| 55 | 13.483 | 1892 | 1895 | 1897 | rBV | 167840 | 150553 | 3.73% | 0.305% |
| 56 | 13.513 | 1897 | 1900 | 1906 | rVB2 | 198229 | 210525 | 5.21% | 0.426% |
| 57 | 13.795 | 1945 | 1948 | 1952 | rVB | 218325 | 247030 | 6.11% | 0.500% |
| 58 | 13.907 | 1964 | 1967 | 1969 | rBV2 | 285493 | 274381 | 6.79% | 0.555% |
| 59 | 13.930 | 1969 | 1971 | 1973 | rVV | 257380 | 197239 | 4.88% | 0.399% |
| 60 | 13.971 | 1973 | 1978 | 1981 | rVV2 | 291642 | 443077 | 10.97% | 0.897% |
| 61 | 14.107 | 1999 | 2001 | 2003 | rBV | 239153 | 207286 | 5.13% | 0.419% |
| 62 | 14.154 | 2005 | 2009 | 2012 | rVV2 | 2082972 | 3226682 | 79.86% | 6.530% |
| 63 | 14.183 | 2012 | 2014 | 2021 | rVB | 1595198 | 1808375 | 44.75% | 3.659% |
| 64 | 14.265 | 2025 | 2028 | 2030 | rBV | 373448 | 331484 | 8.20% | 0.671% |
| 65 | 15.242 | 2189 | 2194 | 2197 | rBV | 1217054 | 2011070 | 49.77% | 4.070% |
| 66 | 15.354 | 2210 | 2213 | 2218 | rVB | 273758 | 306401 | 7.58% | 0.620% |
| 67 | 15.565 | 2245 | 2249 | 2256 | rVB | 728420 | 1026300 | 25.40% | 2.077% |
| 68 | 15.636 | 2256 | 2261 | 2265 | rBV | 1086795 | 1470537 | 36.39% | 2.976% |
| 69 | 15.701 | 2268 | 2272 | 2275 | rVB | 445753 | 566908 | 14.03% | 1.147% |
| 70 | 17.283 | 2535 | 2541 | 2551 | rVB2 | 428653 | 1016600 | 25.16% | 2.057% |
| 71 | 17.759 | 2618 | 2622 | 2635 | rVB | 306189 | 733886 | 18.16% | 1.485% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

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-BF072018.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Sum of corrected areas: 49416230

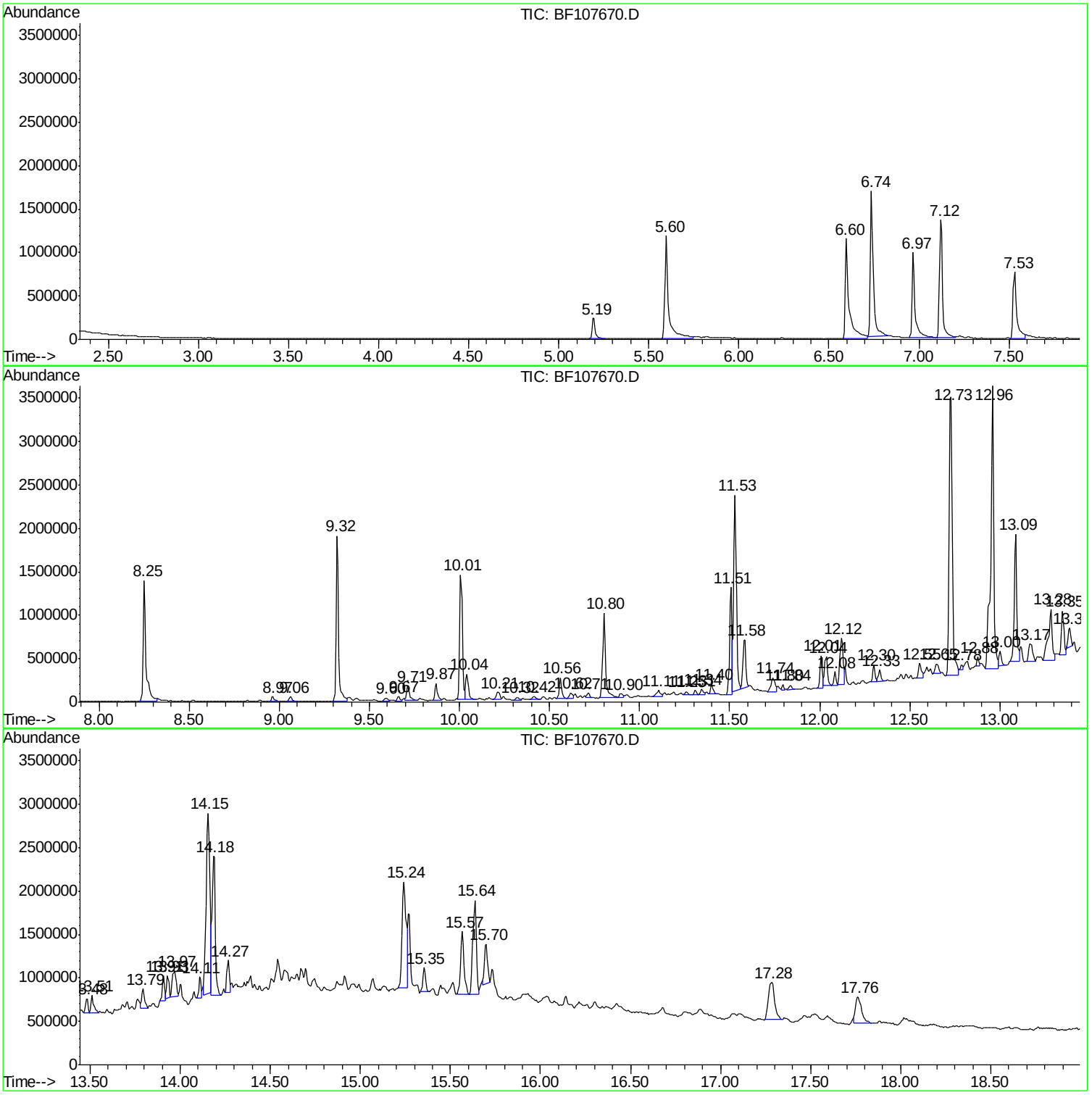
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

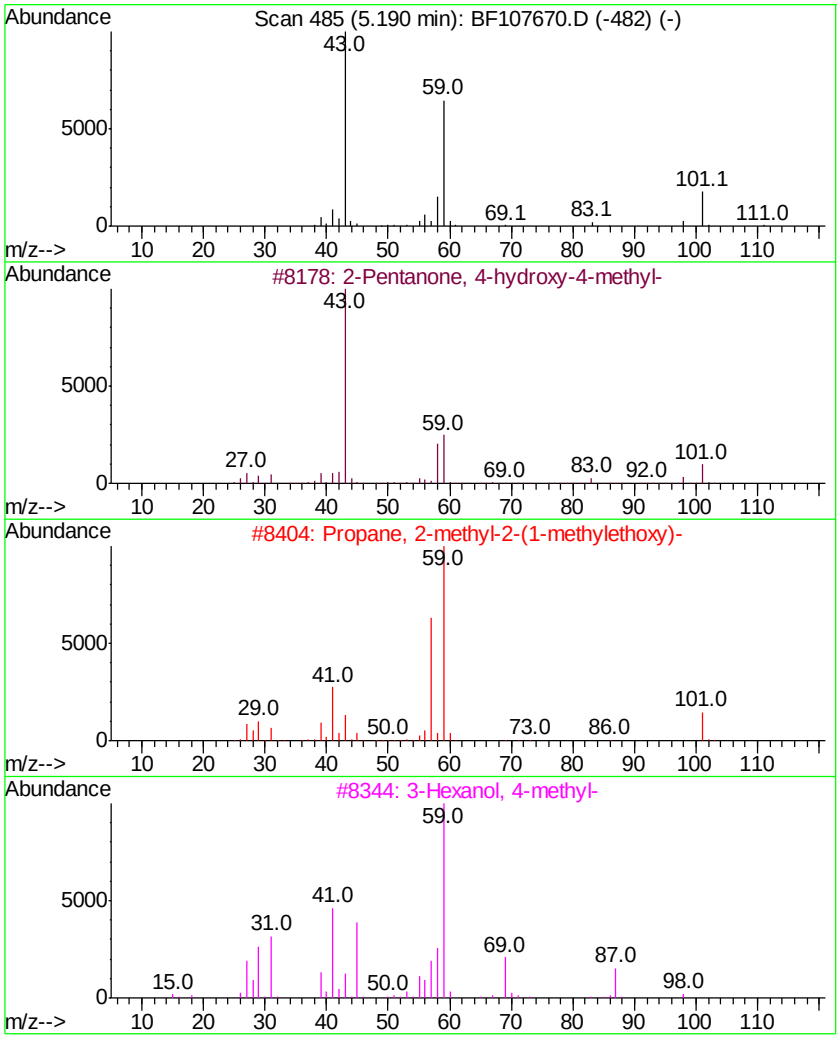
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

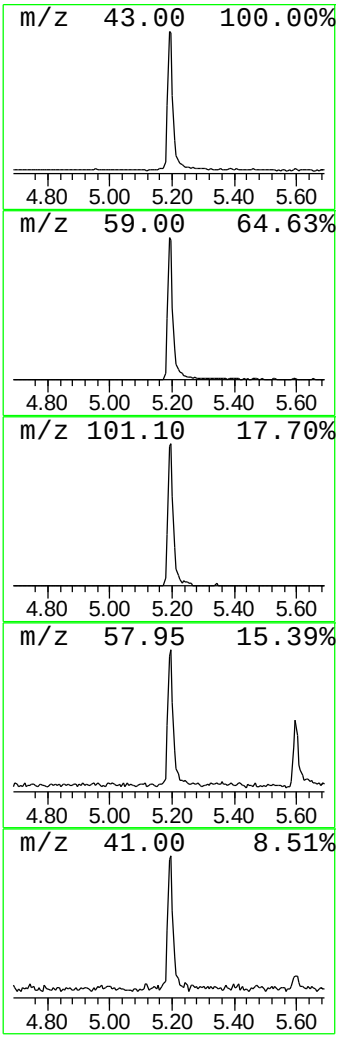
**********

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.19 | 4.81 ng | 291176 | 1,4-Dichlorobenzene-d4 | 6.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 59 |
| 2 | Propane, 2-methyl-2-(1-methyleth... | 116 | C7H16O | 017348-59-3 | 36 |
| 3 | 3-Hexanol, 4-methyl- | 116 | C7H16O | 000615-29-2 | 33 |
| 4 | 3-Hexanol | 102 | C6H14O | 000623-37-0 | 33 |
| 5 | 3-Octanol | 130 | C8H18O | 000589-98-0 | 28 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

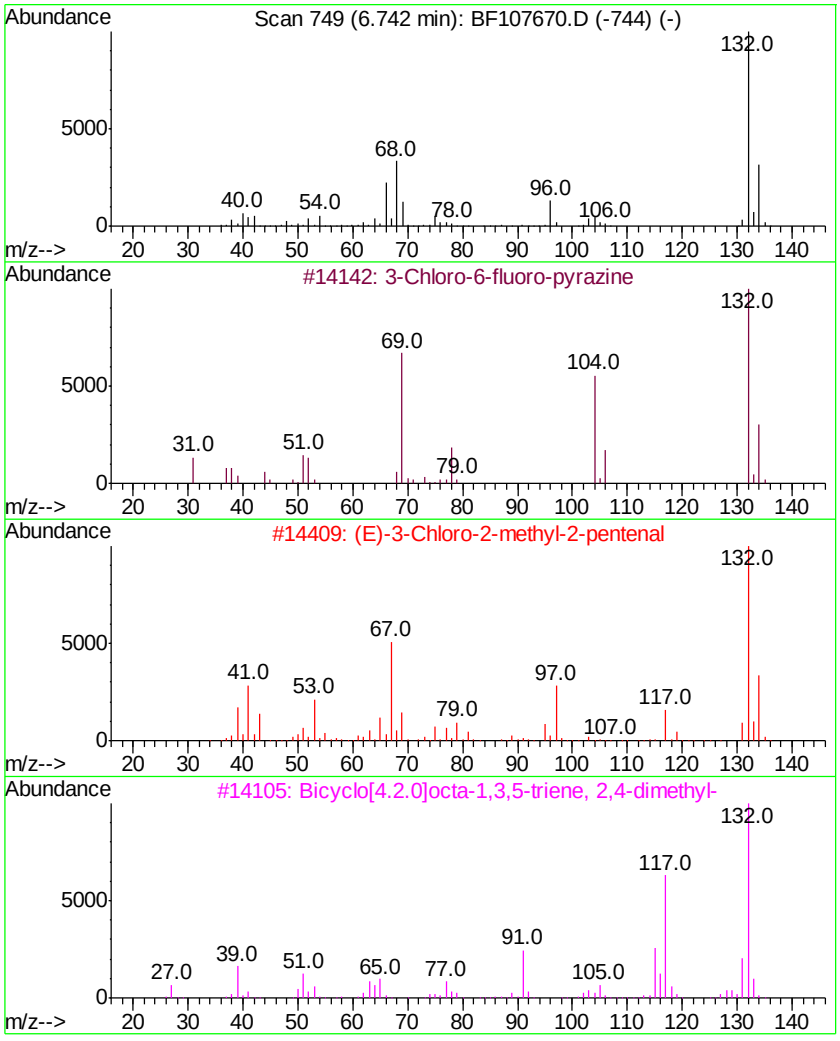
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

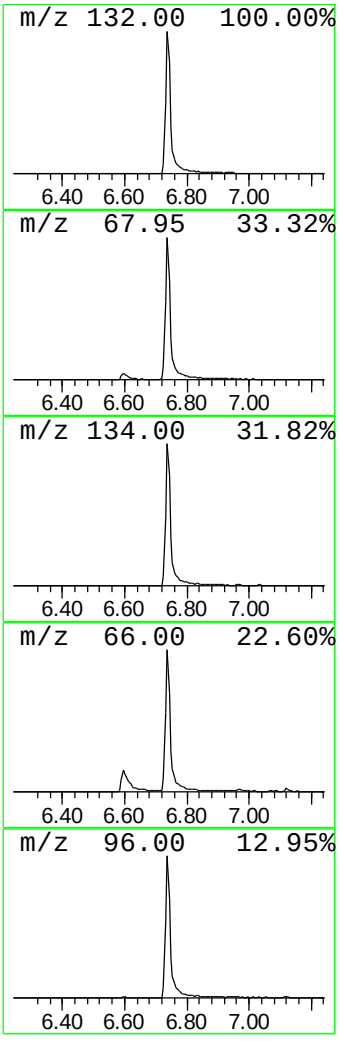
**********

Peak Number 2 unknown6.74 Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.74 | 31.06 ng | 1879770 | 1,4-Dichlorobenzene-d4 | 6.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 35 |
| 2 | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO | 031357-76-3 | 17 |
| 3 | Bicyclo[4.2.0]octa-1,3,5-triene,... | 132 | C10H12 | 028749-81-7 | 9 |
| 4 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 9 |
| 5 | 2H-Cyclopenta[d]pyridazine, 2-me... | 132 | C8H8N2 | 022291-85-6 | 9 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

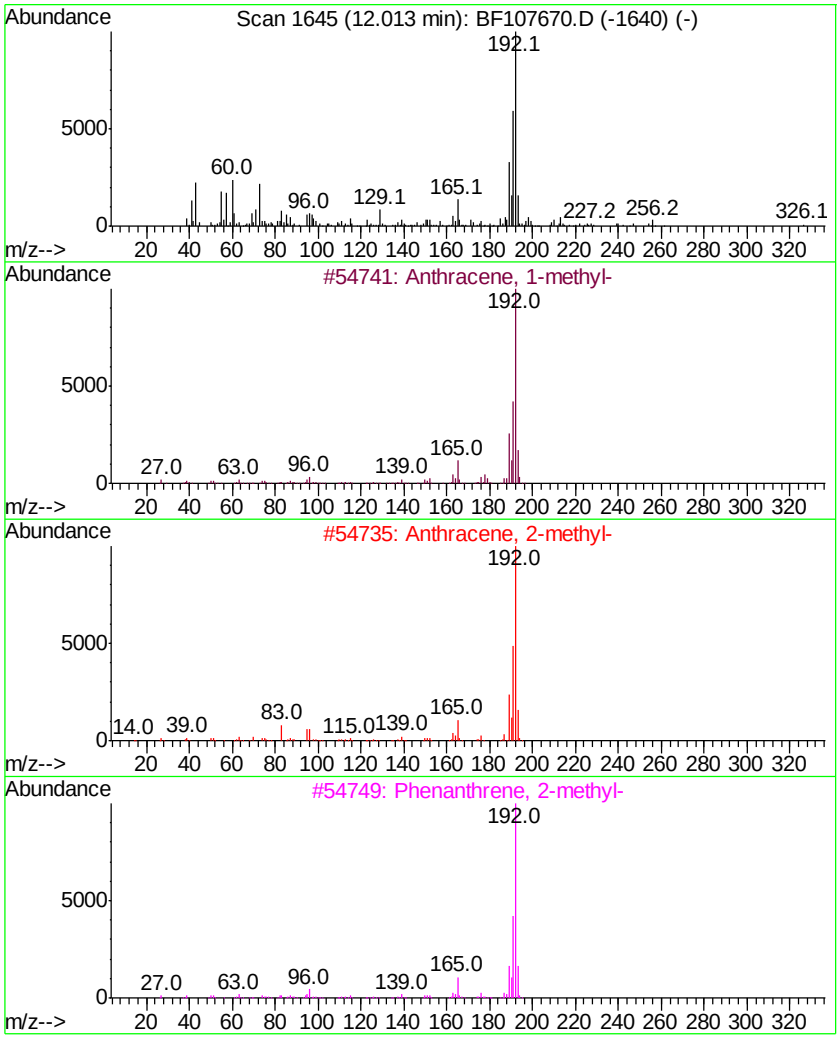
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

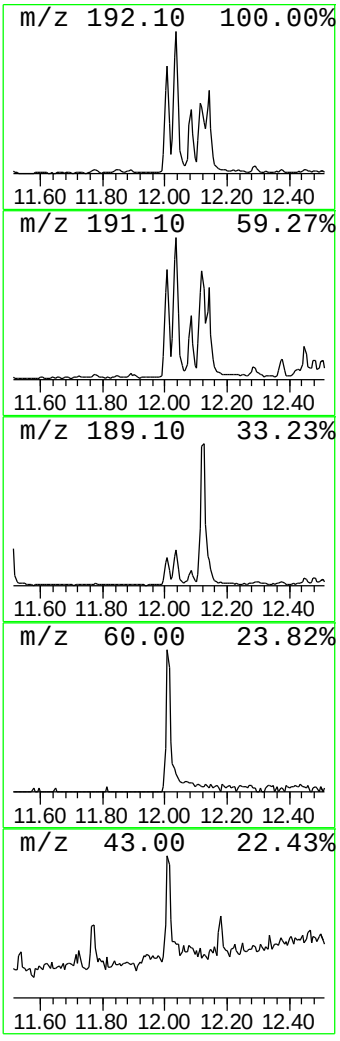
**********

Peak Number 4 Anthracene, 1-methyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.01 | 6.39 ng | 368044 | Phenanthrene-d10 | 11.51 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 95 |
| 2 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 93 |
| 3 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 93 |
| 4 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 93 |
| 5 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 90 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

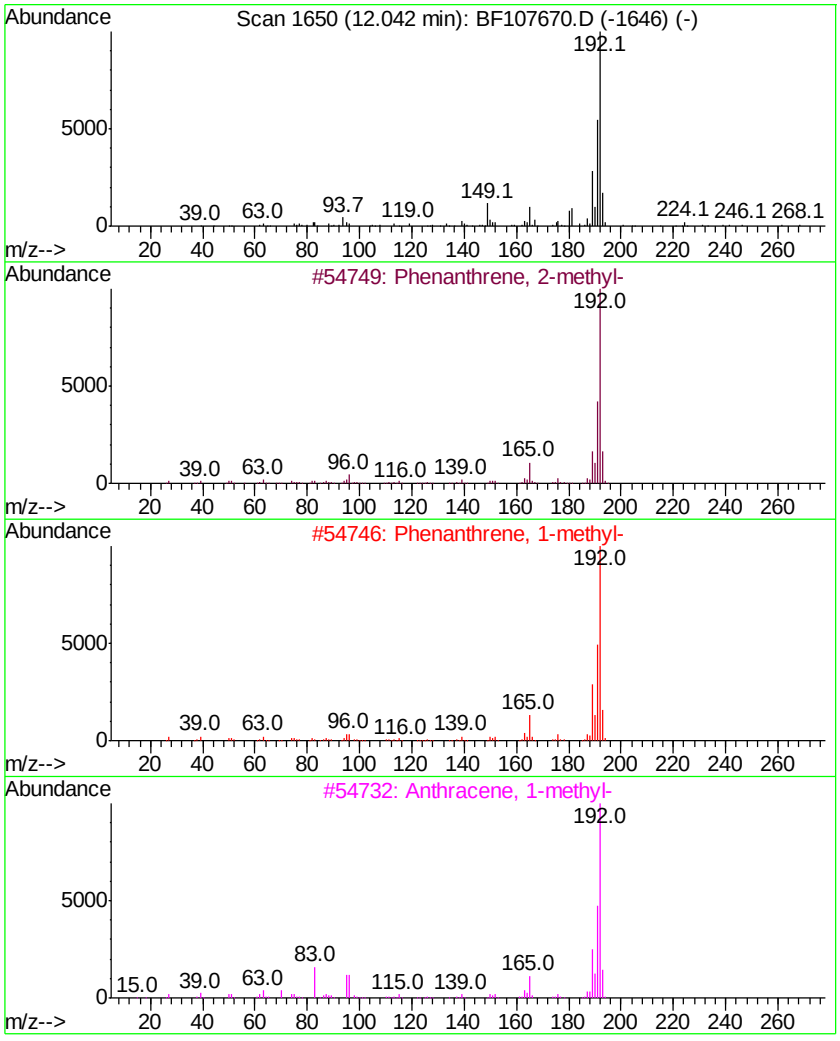
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

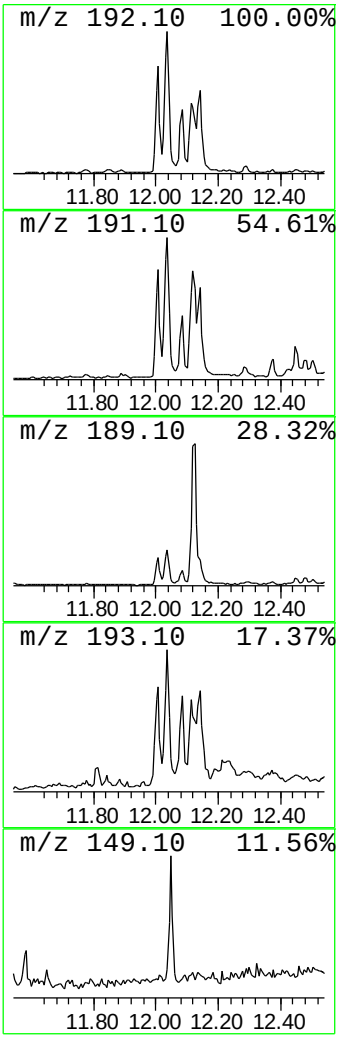
**********

Peak Number 5 Phenanthrene, 2-methyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.04 | 5.49 ng | 316173 | Phenanthrene-d10 | 11.51 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 96 |
| 2 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 95 |
| 3 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 91 |
| 4 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 91 |
| 5 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 91 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

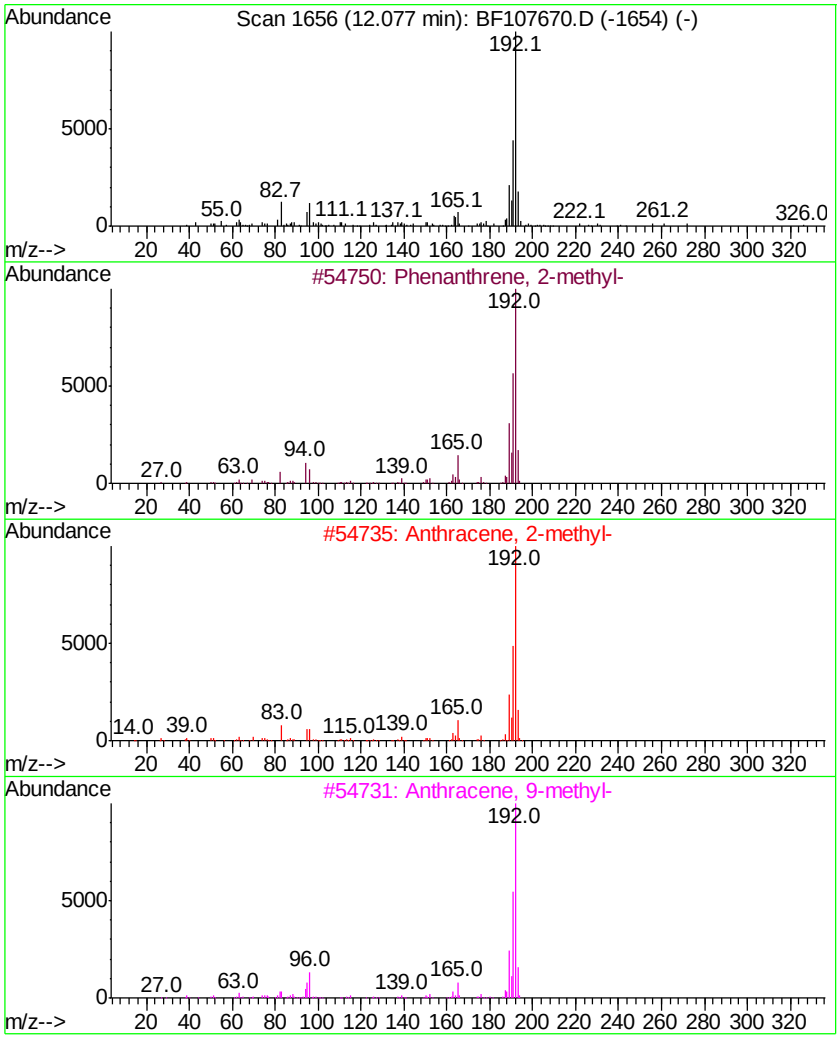
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

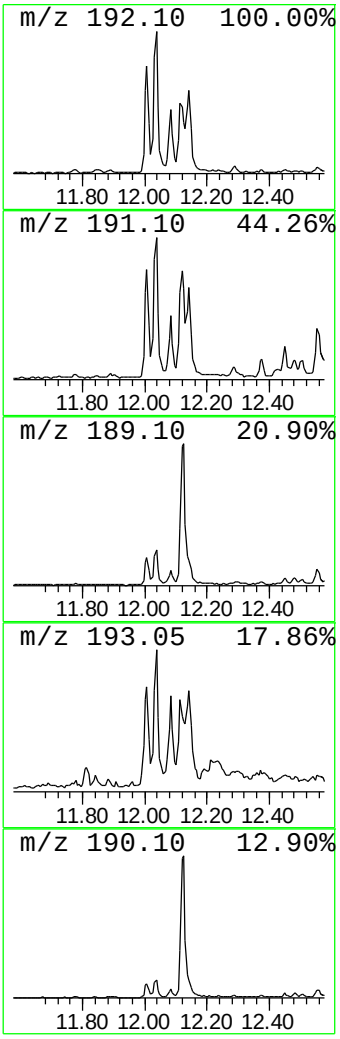
**********

Peak Number 6 Anthracene, 2-methyl- Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.08 | 2.25 ng | 129689 | Phenanthrene-d10 | 11.51 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 95 |
| 2 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 93 |
| 3 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 91 |
| 4 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 91 |
| 5 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 89 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

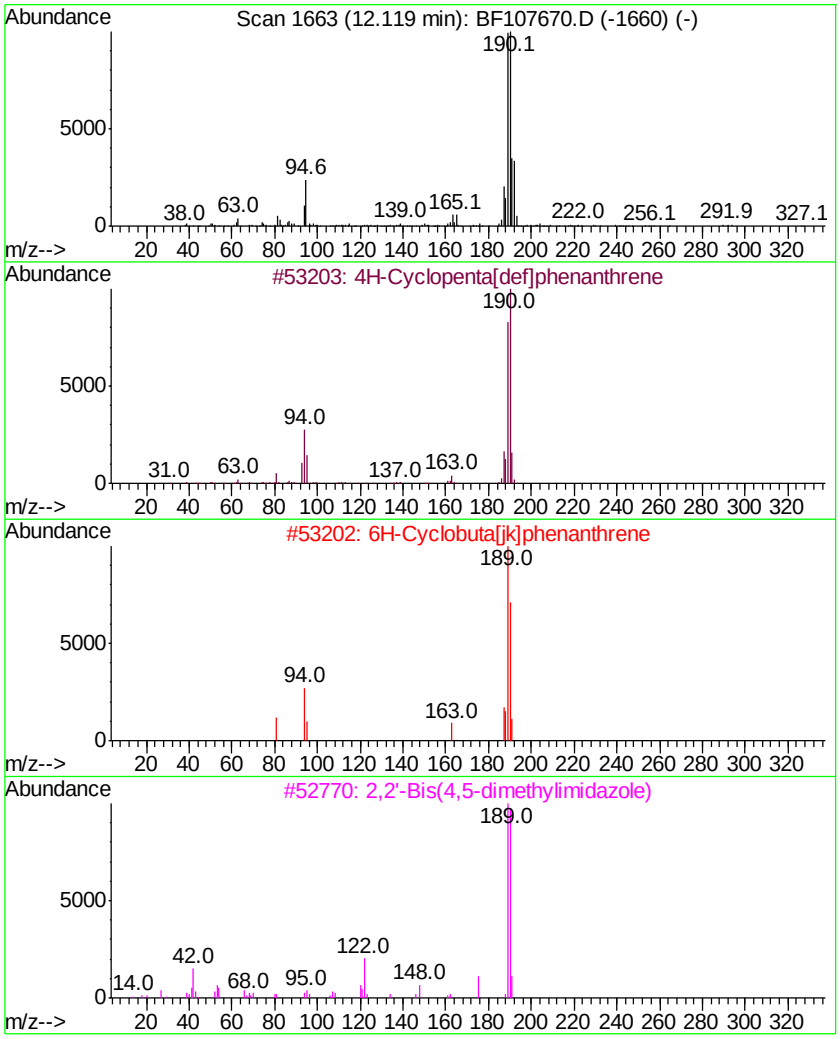
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

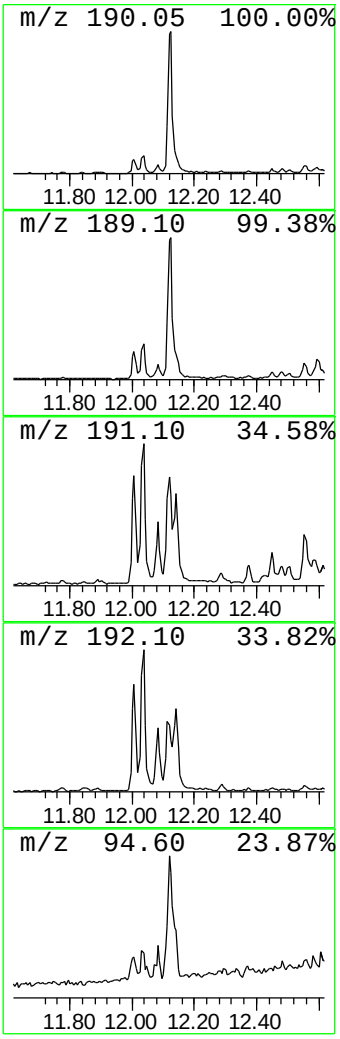
**********

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

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.12 | 10.92 ng | 628651 | Phenanthrene-d10 | 11.51 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 94 |
| 2 | 6H-Cyclobuta[jk]phenanthrene | 190 | C15H10 | 083469-43-6 | 64 |
| 3 | 2,2'-Bis(4,5-dimethylimidazole) | 190 | C10H14N4 | 069286-06-2 | 33 |
| 4 | 2-Naphthaldehyde, 1,2,3,4-tetrah... | 190 | C12H14O2 | 002472-02-8 | 18 |
| 5 | 1,4-Naphthalenedione, 2,5-dihydr... | 190 | C10H6O4 | 004923-55-1 | 17 |



# Library Search Compound Report

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Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

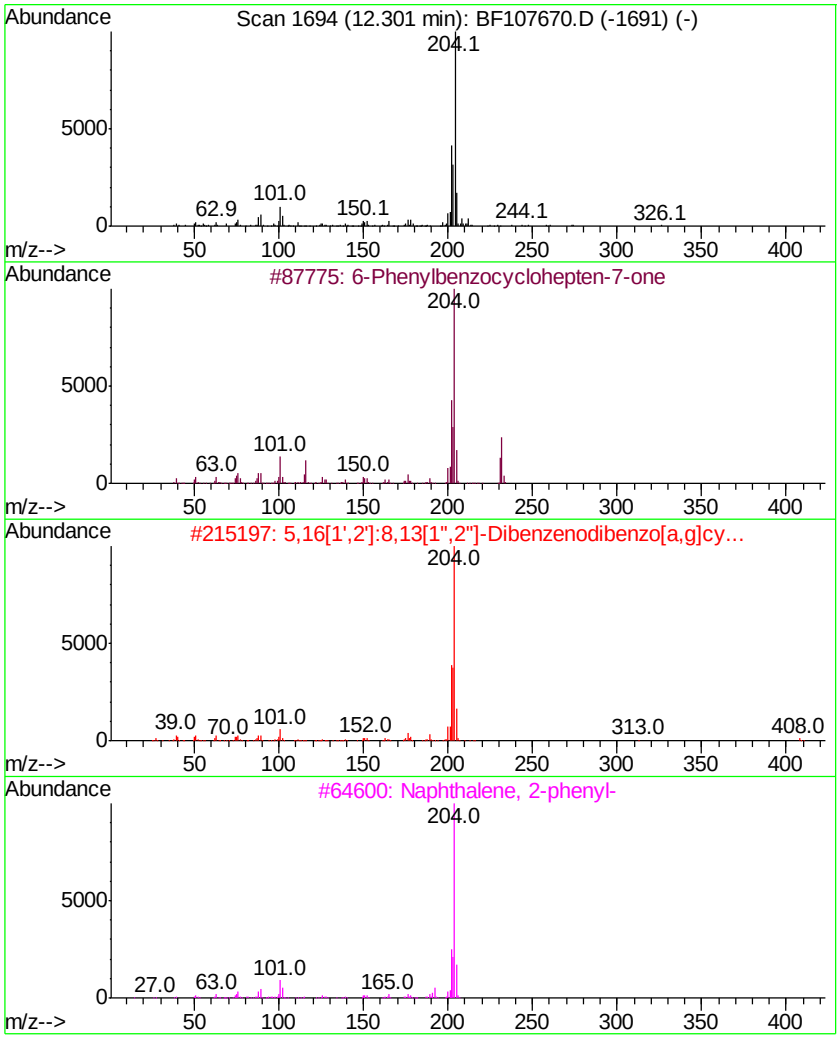
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

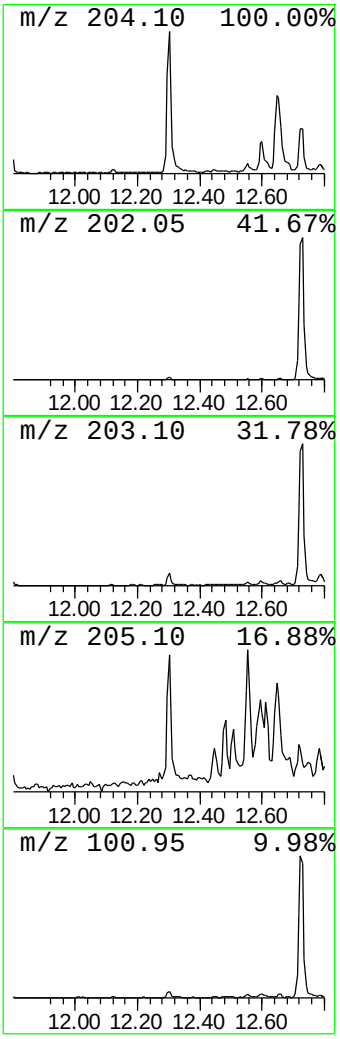
**********

Peak Number 8 6-Phenylbenzocyclohepten-7-one Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.30 | 3.33 ng | 191416 | Phenanthrene-d10 | 11.51 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 6-Phenylbenzocyclohepten-7-one | 232 | C17H12O | 093327-56-1 | 86 |
| 2 | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24 | 005672-97-9 | 86 |
| 3 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 70 |
| 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 | 50 |



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Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

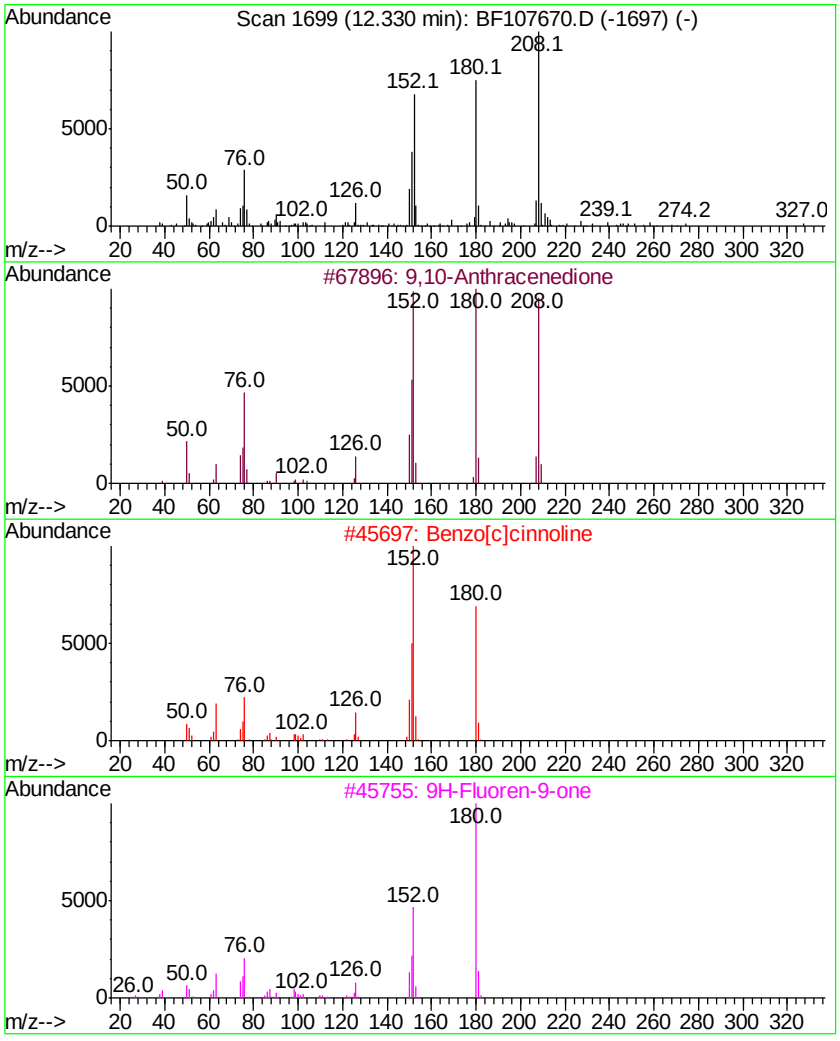
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

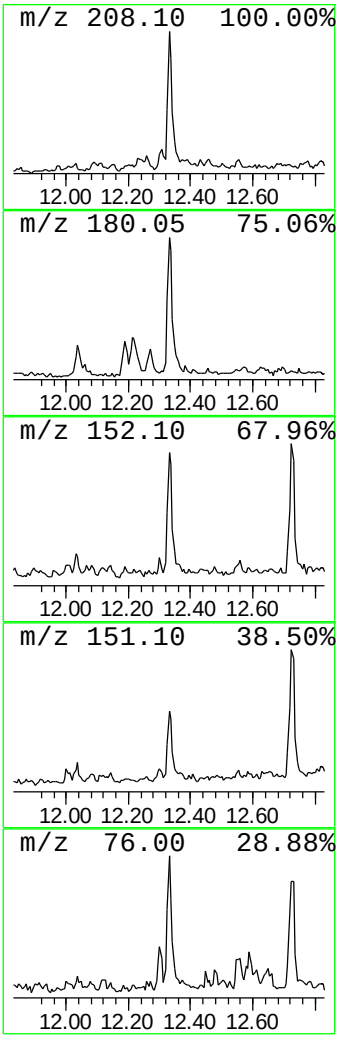
**********

Peak Number 9 9,10-Anthracenedione Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.33 | 2.39 ng | 137481 | Phenanthrene-d10 | 11.51 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 98 |
| 2 | Benzo[c]cinnoline | 180 | C12H8N2 | 000230-17-1 | 60 |
| 3 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 53 |
| 4 | 1H-Phenalen-1-one | 180 | C13H8O | 000548-39-0 | 50 |
| 5 | 1,3-Benzenedicarboxaldehyde, 2,4... | 180 | C9H8O4 | 010209-57-1 | 43 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

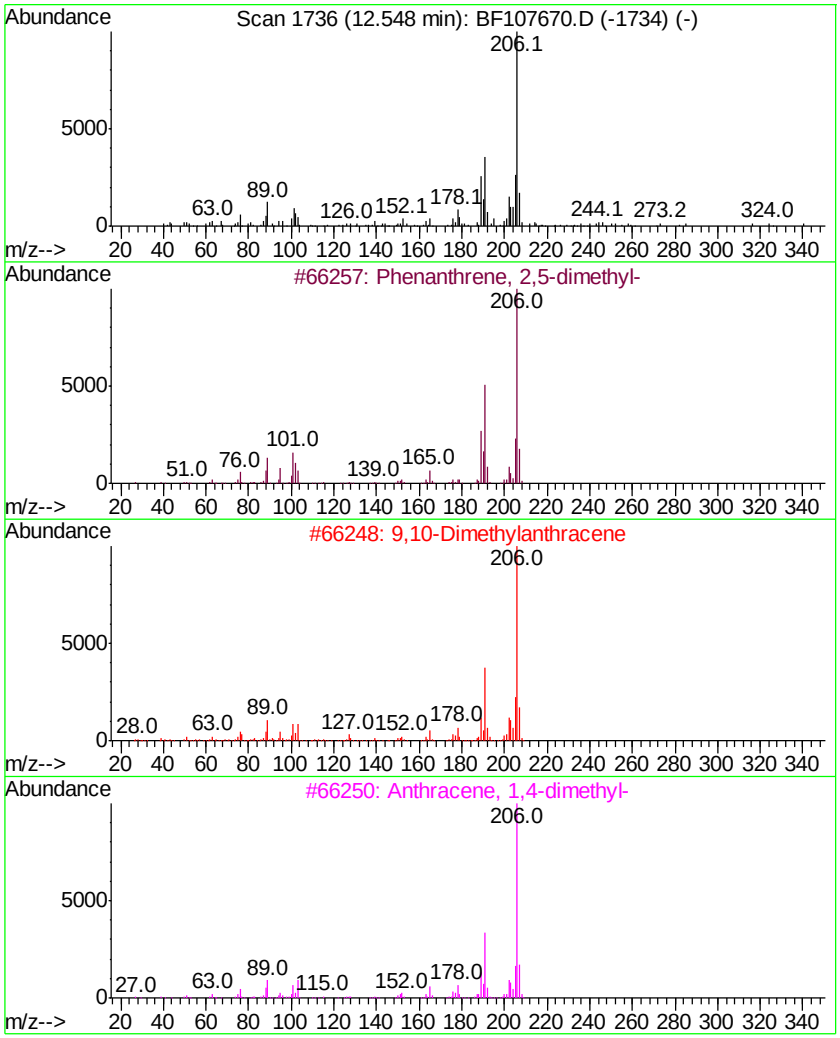
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

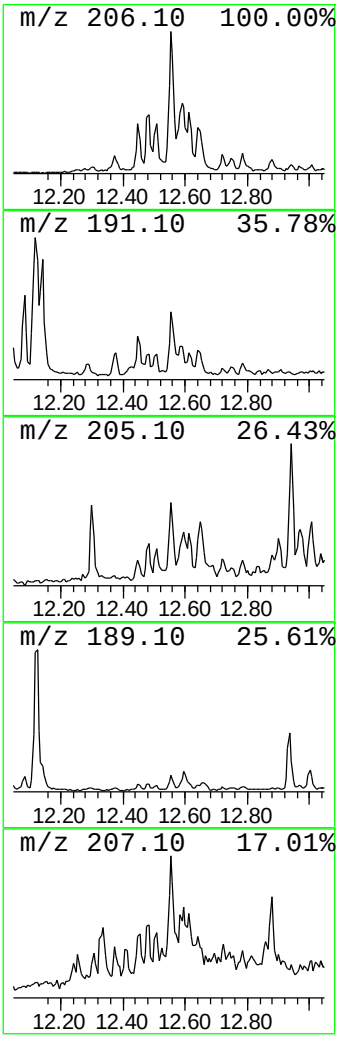
**********

Peak Number 10 Phenanthrene, 2,5-dimethyl- Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.55 | 3.59 ng | 206770 | Phenanthrene-d10 | 11.51 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 95 |
| 2 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 93 |
| 3 | Anthracene, 1,4-dimethyl- | 206 | C16H14 | 000781-92-0 | 89 |
| 4 | Phenanthrene, 2,7-dimethyl- | 206 | C16H14 | 001576-69-8 | 87 |
| 5 | Phenanthrene, 1,7-dimethyl- | 206 | C16H14 | 000483-87-4 | 87 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

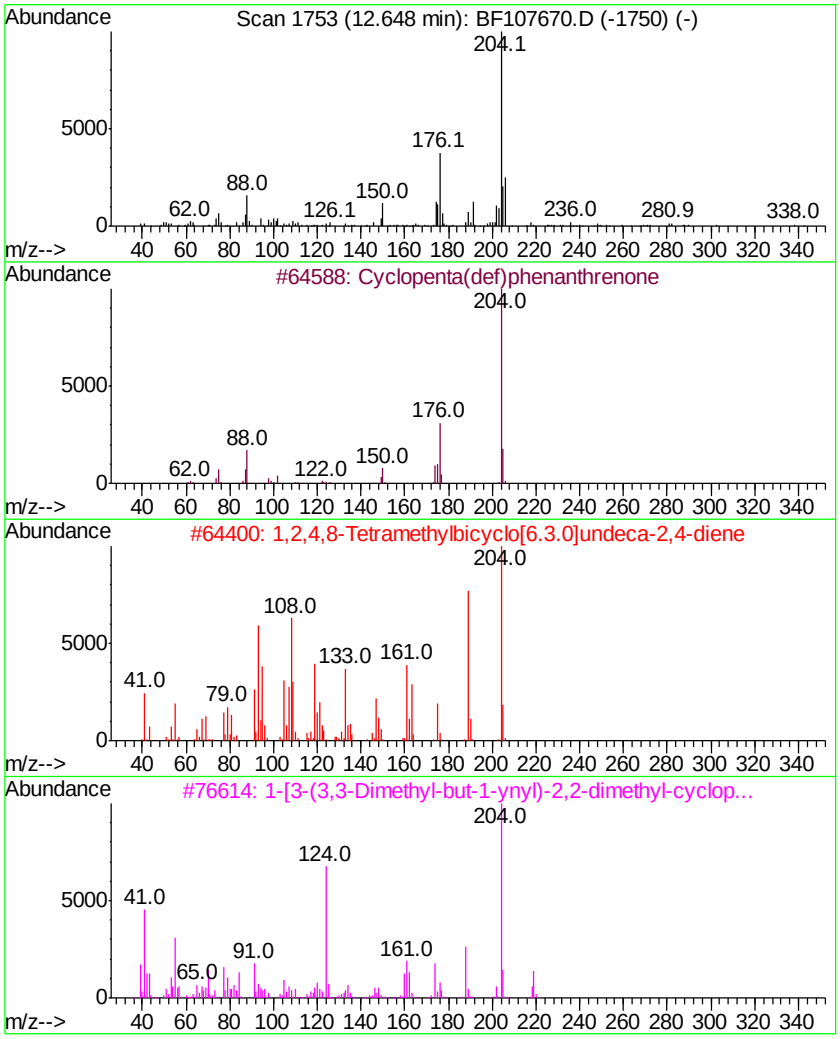
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

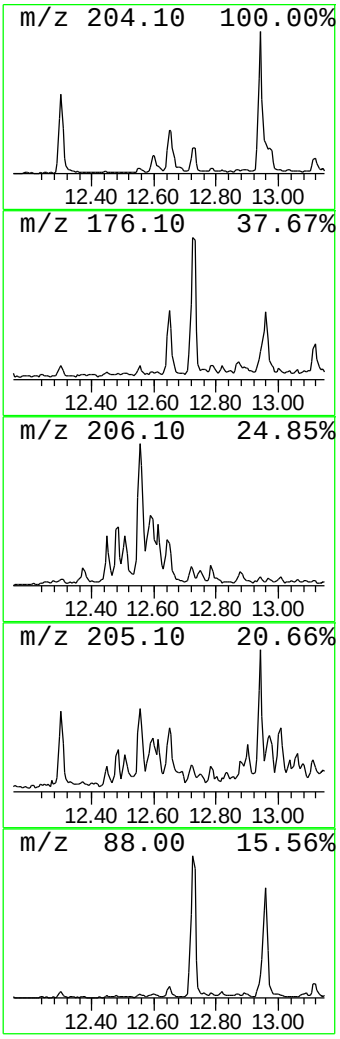
**********

Peak Number 11 Cyclopenta(def)phenanthrenone Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.65 | 2.44 ng | 140695 | Phenanthrene-d10 | 11.51 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(def)phenanthrenone | 204 | C15H8O | 005737-13-3 | 94 |
| 2 | 1,2,4,8-Tetramethylbicyclo[6.3.0... | 204 | C15H24 | 137235-51-9 | 87 |
| 3 | 1-[3-(3,3-Dimethyl-but-1-ynyl)-2... | 219 | C15H25N | 1000275-17-2 | 47 |
| 4 | 3,4-Biphenyldicarbonitrile | 204 | C14H8N2 | 004128-63-6 | 45 |
| 5 | Acephenanthrylene, 4,5-dihydro- | 204 | C16H12 | 006232-48-0 | 43 |



# Library Search Compound Report

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Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

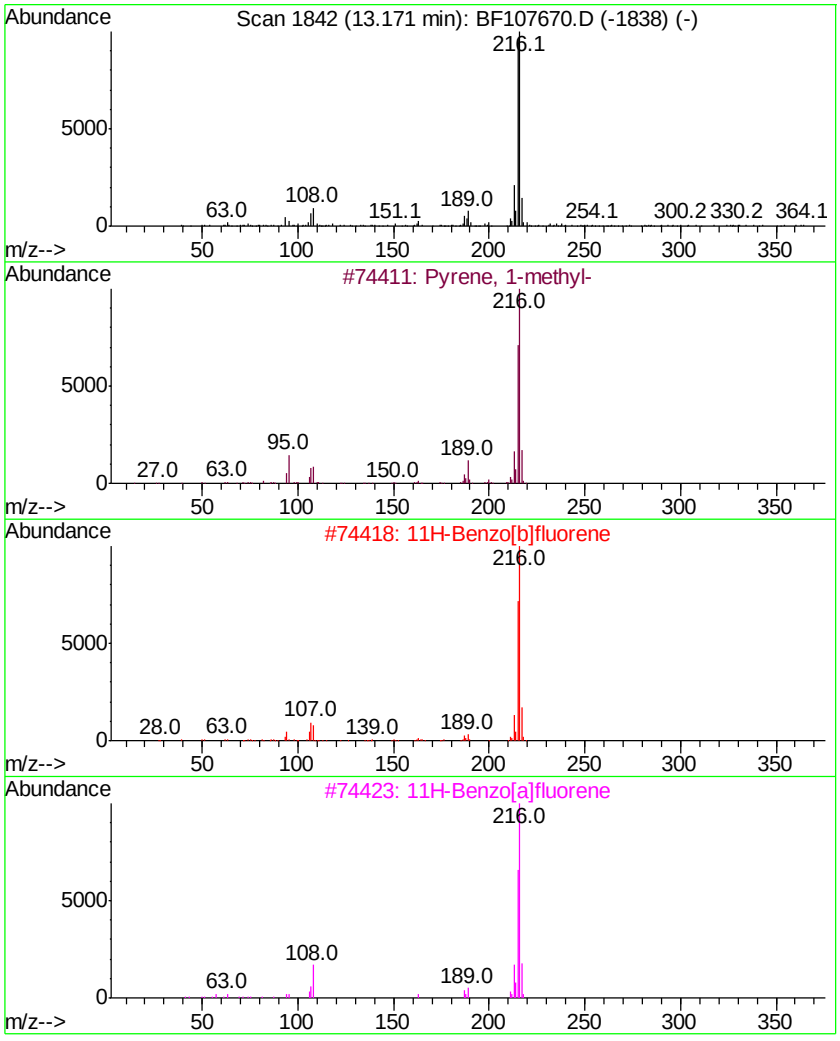
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

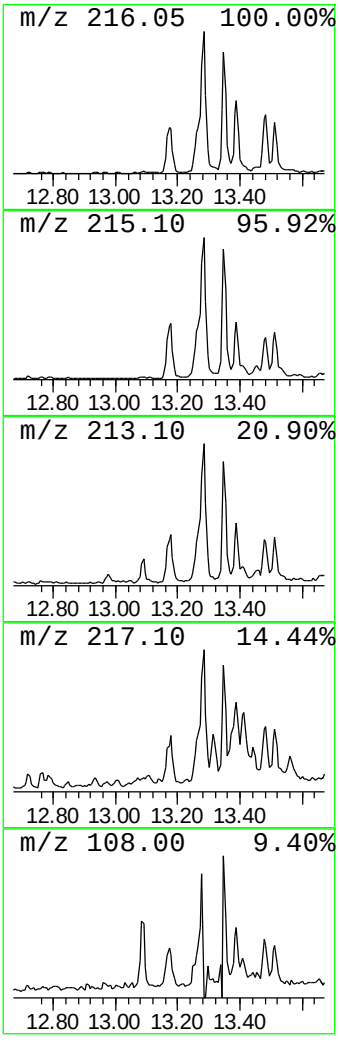
**********

Peak Number 12 Pyrene, 1-methyl- Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.17 | 2.07 ng | 334003 | Chrysene-d12 | 14.16 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 96 |
| 2 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 81 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 81 |
| 4 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 76 |
| 5 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 62 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

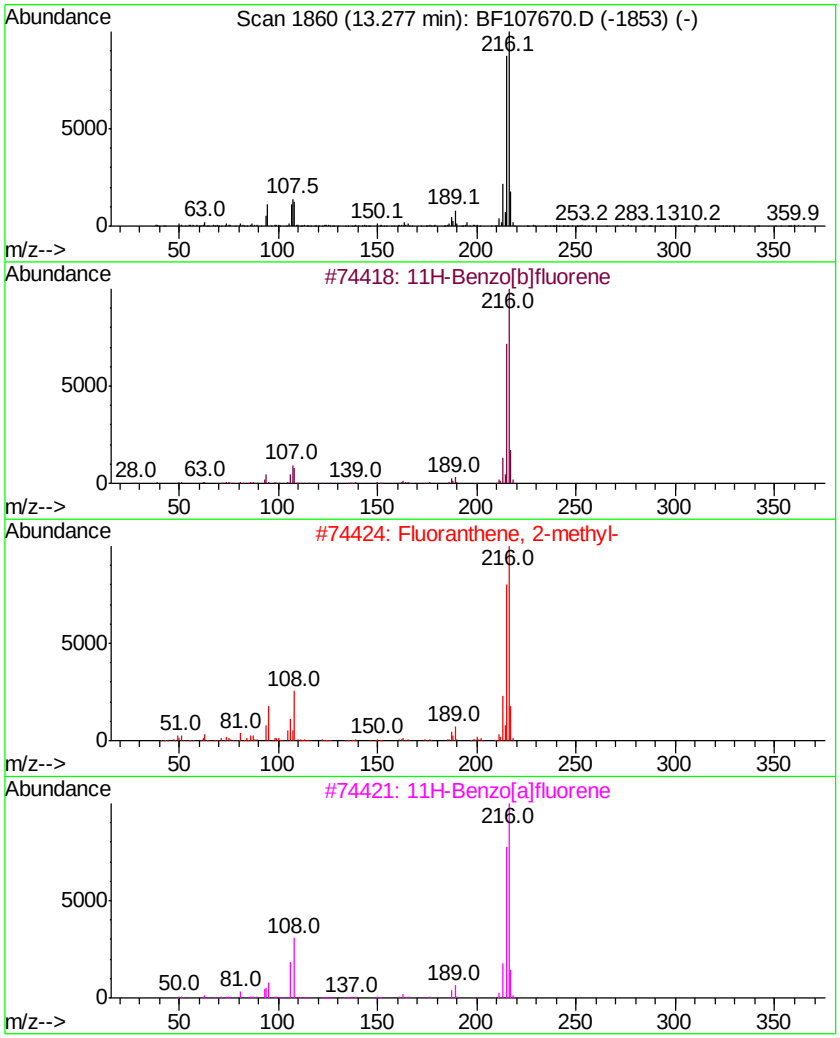
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

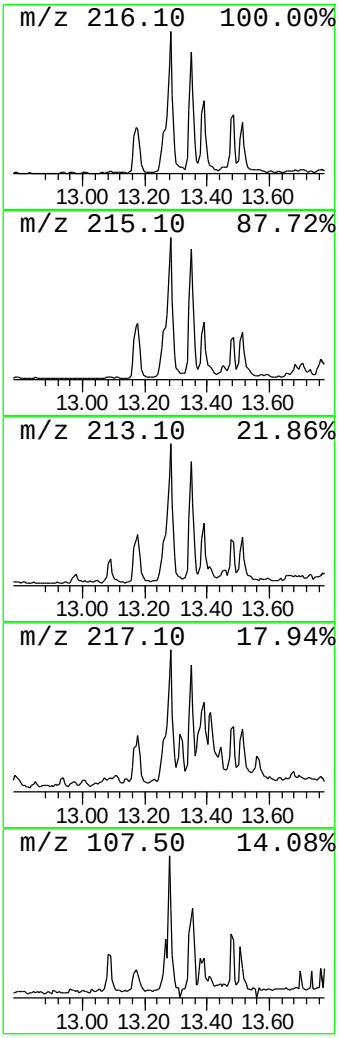
**********

Peak Number 13 11H-Benzo[b]fluorene Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.28 | 5.79 ng | 933867 | Chrysene-d12 | 14.16 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 96 |
| 2 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 91 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 91 |
| 4 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 91 |
| 5 | 7H-Benzo[c]fluorene | 216 | C17H12 | 000205-12-9 | 74 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

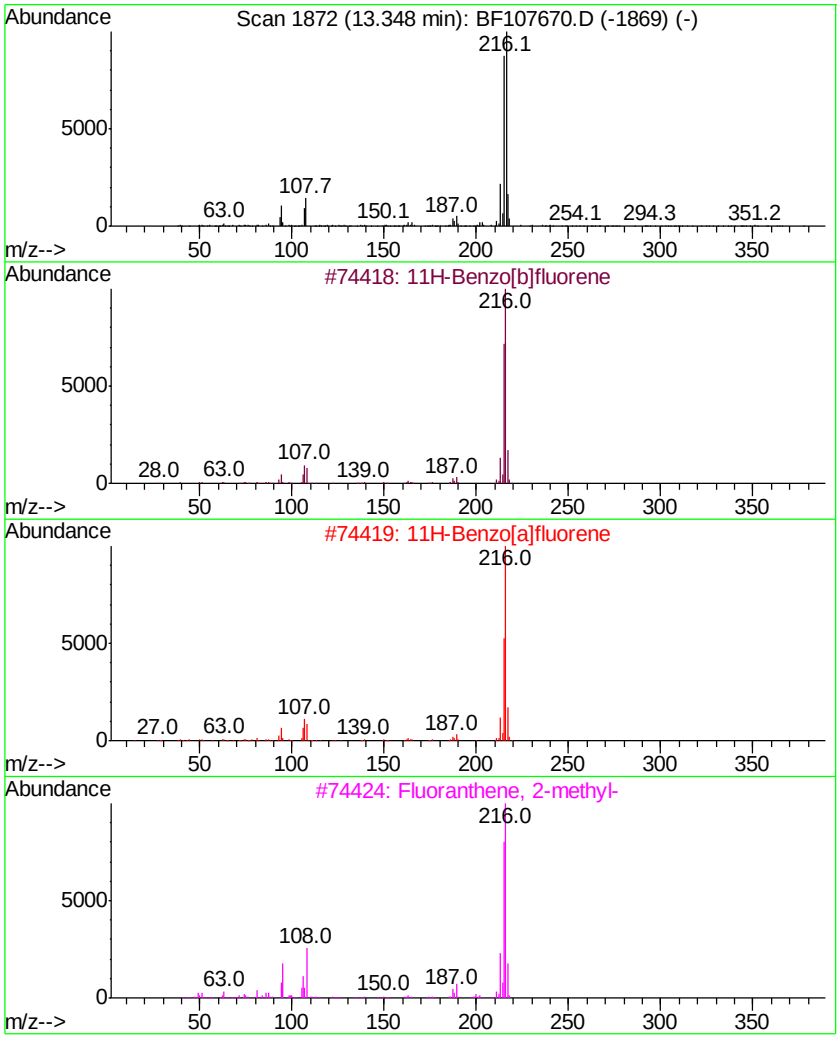
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

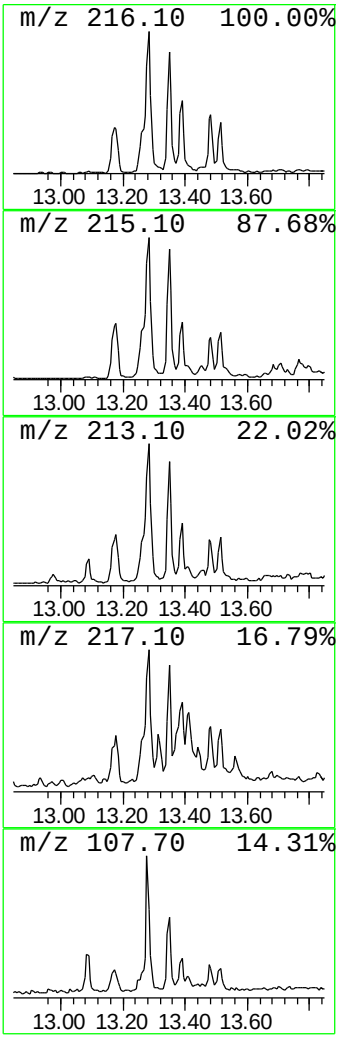
**********

Peak Number 14 11H-Benzo[a]fluorene Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.35 | 2.77 ng | 447168 | Chrysene-d12 | 14.16 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 95 |
| 2 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 94 |
| 3 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 91 |
| 4 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 83 |
| 5 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 60 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

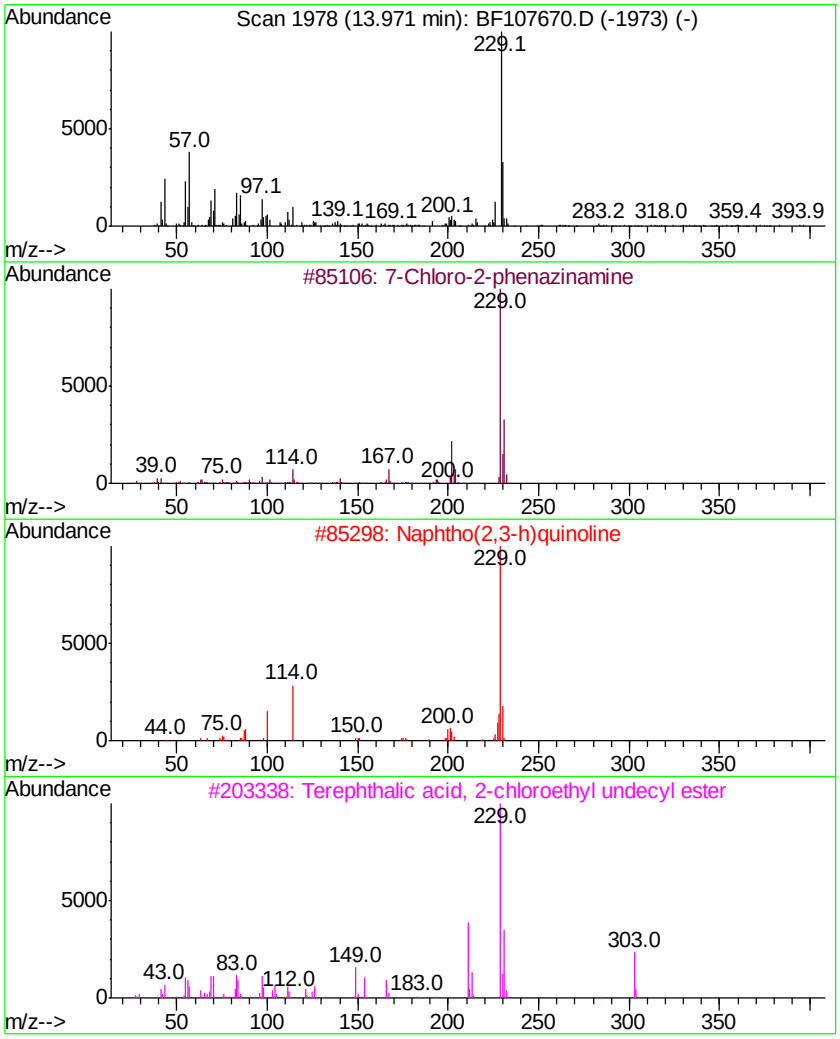
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

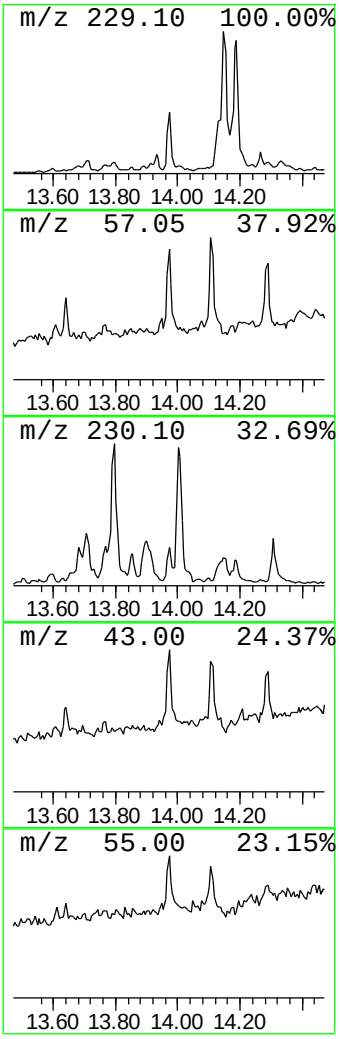
**********

Peak Number 15 unknown13.97 Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.97 | 2.75 ng | 443077 | Chrysene-d12 | 14.16 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 7-Chloro-2-phenazinamine | 229 | C12H8ClN3 | 023677-11-4 | 47 |
| 2 | Naphtho(2,3-h)quinoline | 229 | C17H11N | 000084-56-0 | 47 |
| 3 | Terephthalic acid, 2-chloroethyl... | 382 | C21H31ClO4 | 1000323-94-9 | 43 |
| 4 | Benz[c]acridine | 229 | C17H11N | 000225-51-4 | 40 |
| 5 | Naphtho(2,1-f)quinoline | 229 | C17H11N | 000218-08-6 | 40 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

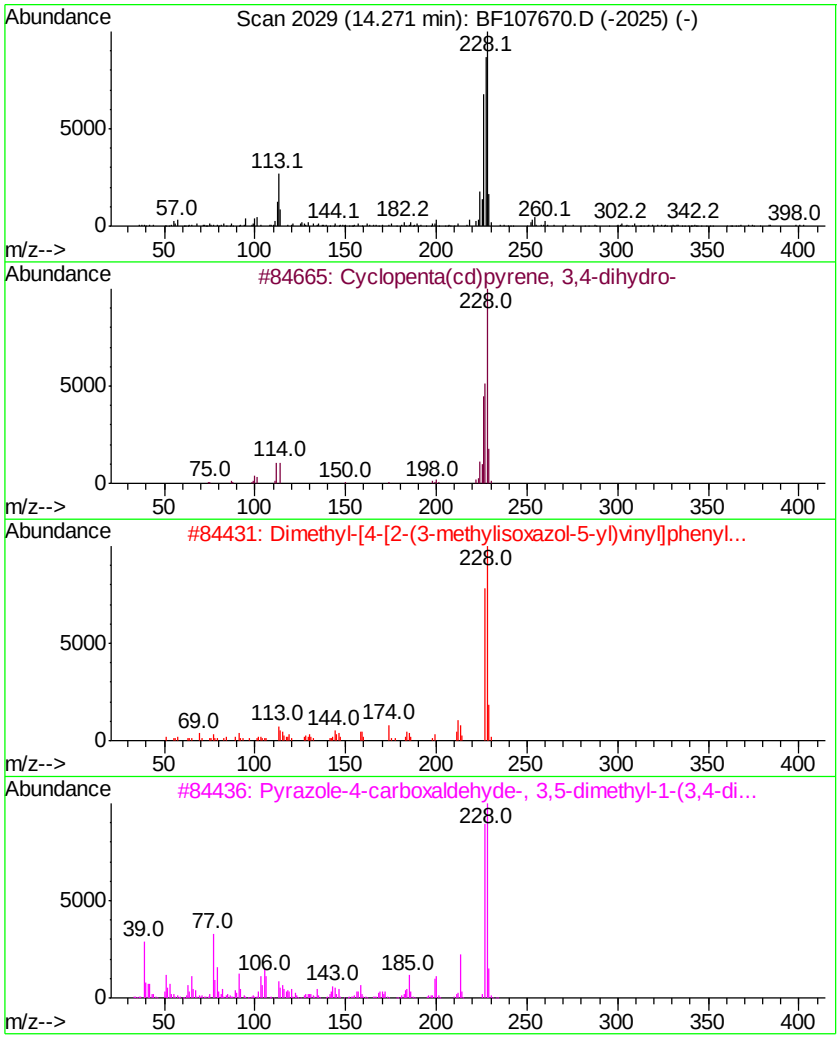
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

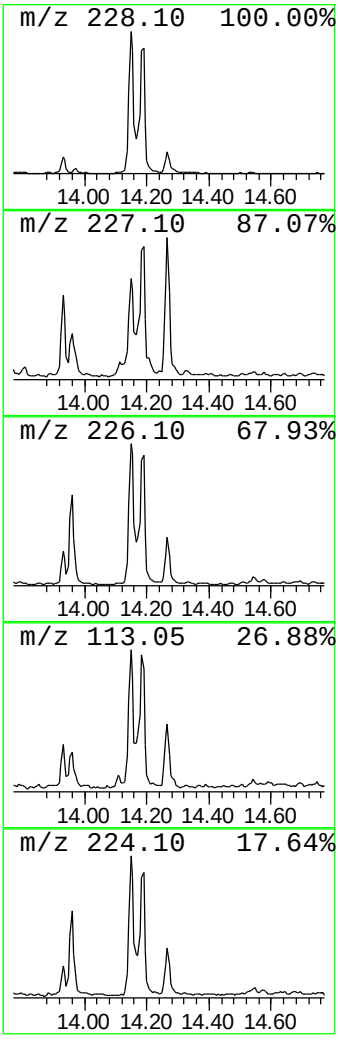
**********

Peak Number 16 Cyclopenta(cd)pyrene, 3,4-d... Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.27 | 2.05 ng | 331484 | Chrysene-d12 | 14.16 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(cd)pyrene, 3,4-dihydro- | 228 | C18H12 | 025732-74-5 | 95 |
| 2 | Dimethyl-[4-[2-(3-methylisoxazol... | 228 | C14H16N2O | 1000306-39-6 | 50 |
| 3 | Pyrazole-4-carboxaldehyde-, 3,5-... | 228 | C14H16N2O | 1000272-54-8 | 50 |
| 4 | Isothiazol-5-amine, 4-bromo-3-ch... | 226 | C4H4BrClN2S | 1000272-59-9 | 50 |
| 5 | Benzo[c]phenanthrene | 228 | C18H12 | 000195-19-7 | 49 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

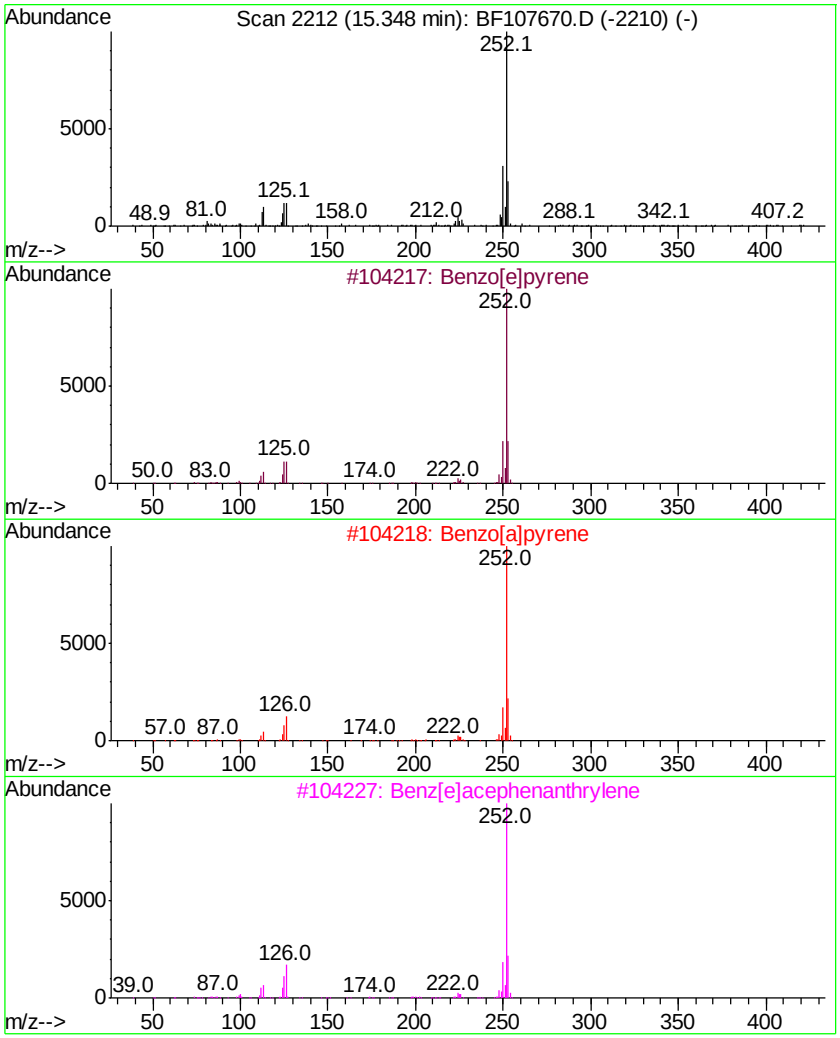
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

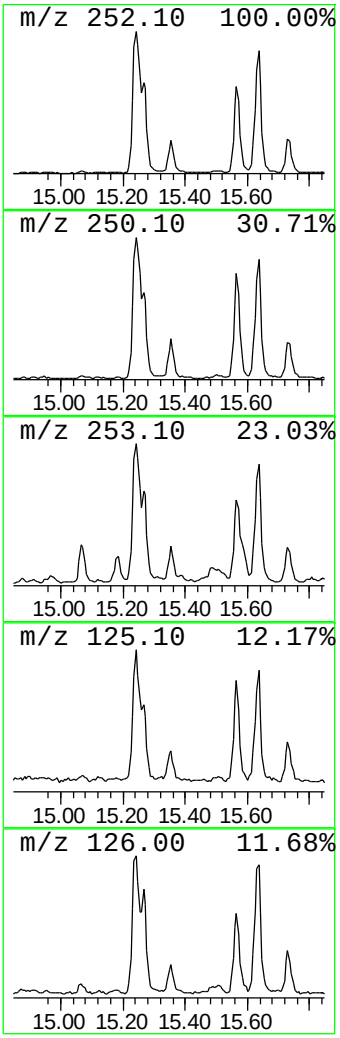
**********

Peak Number 17 Benzo[e]pyrene Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.35 | 10.81 ng | 306401 | Perylene-d12 | 15.70 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 91 |
| 2 | Benzo[a]pyrene | 252 | C20H12 | 000050-32-8 | 90 |
| 3 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 90 |
| 4 | Benzo[k]fluoranthene | 252 | C20H12 | 000207-08-9 | 90 |
| 5 | 1,1'-Binaphthalene, 2,2'-dibromo- | 410 | C20H12Br2 | 074866-28-7 | 90 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

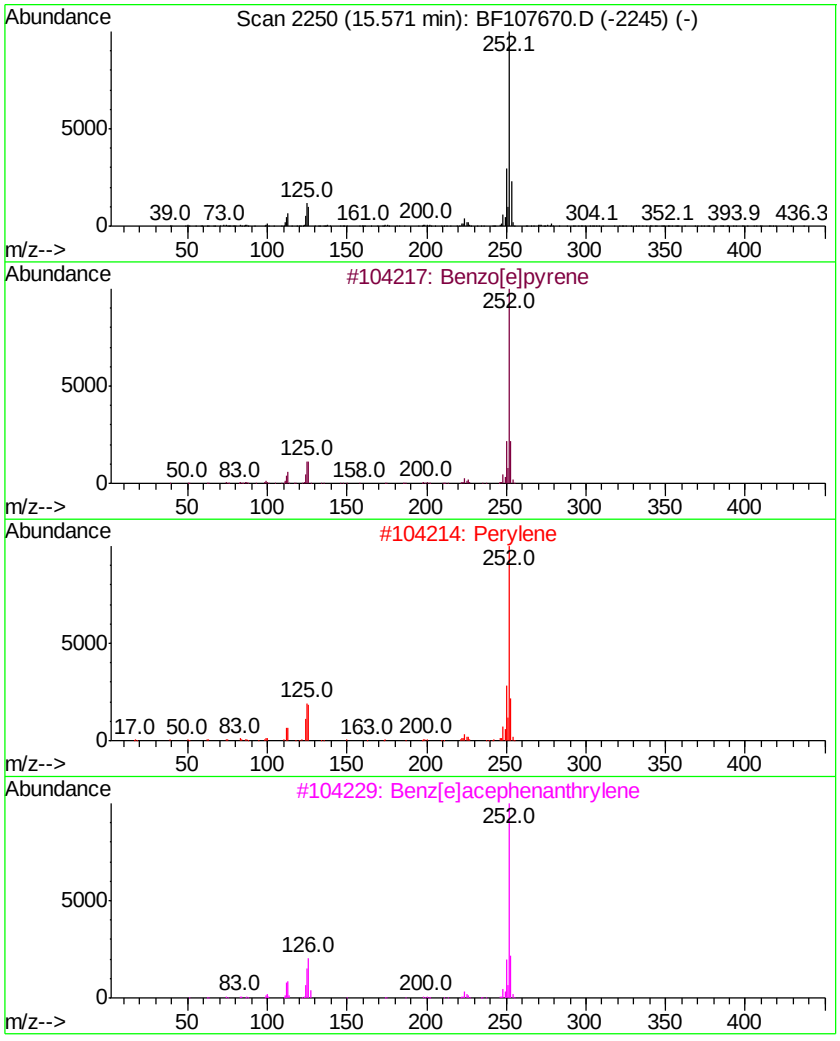
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

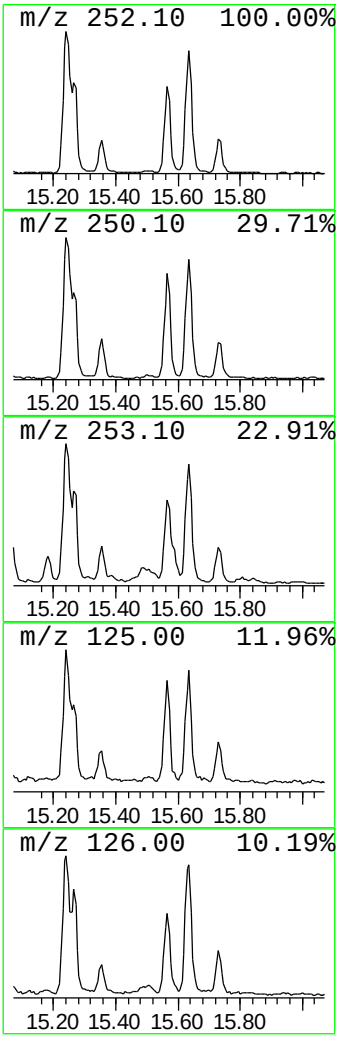
**********

Peak Number 18 Perylene Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.57 | 36.21 ng | 1026300 | Perylene-d12 | 15.70 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 98 |
| 2 | Perylene | 252 | C20H12 | 000198-55-0 | 97 |
| 3 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 96 |
| 4 | Benzo[a]pyrene | 252 | C20H12 | 000050-32-8 | 94 |
| 5 | Benzo[j]fluoranthene | 252 | C20H12 | 000205-82-3 | 93 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF072518\
Data File : BF107670.D
Acq On : 25 Jul 2018 21:11
Operator : JU/SJ
Sample : J4031-05 2X
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** PLANTER-DOC-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF072018.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 |
| 2-Pentanone, 4-hy... | 5.19 | 4.8 | ng | 291176 | 1 | 6.97 | 1210550 | 20.0 |
| unknown6.74 | 6.74 | 31.1 | ng | 1879770 | 1 | 6.97 | 1210550 | 20.0 |
| Anthracene, 1-met... | 12.01 | 6.4 | ng | 368044 | 4 | 11.51 | 1151340 | 20.0 |
| Phenanthrene, 2-m... | 12.04 | 5.5 | ng | 316173 | 4 | 11.51 | 1151340 | 20.0 |
| Anthracene, 2-met... | 12.08 | 2.3 | ng | 129689 | 4 | 11.51 | 1151340 | 20.0 |
| 4H-Cyclopenta[def... | 12.12 | 10.9 | ng | 628651 | 4 | 11.51 | 1151340 | 20.0 |
| 6-Phenylbenzocycl... | 12.30 | 3.3 | ng | 191416 | 4 | 11.51 | 1151340 | 20.0 |
| 9,10-Anthracenedione | 12.33 | 2.4 | ng | 137481 | 4 | 11.51 | 1151340 | 20.0 |
| Phenanthrene, 2,5... | 12.55 | 3.6 | ng | 206770 | 4 | 11.51 | 1151340 | 20.0 |
| Cyclopenta(def)ph... | 12.65 | 2.4 | ng | 140695 | 4 | 11.51 | 1151340 | 20.0 |
| Pyrene, 1-methyl- | 13.17 | 2.1 | ng | 334003 | 5 | 14.16 | 3226680 | 20.0 |
| 11H-Benzo[b]fluorene | 13.28 | 5.8 | ng | 933867 | 5 | 14.16 | 3226680 | 20.0 |
| 11H-Benzo[a]fluorene | 13.35 | 2.8 | ng | 447168 | 5 | 14.16 | 3226680 | 20.0 |
| unknown13.97 | 13.97 | 2.8 | ng | 443077 | 5 | 14.16 | 3226680 | 20.0 |
| Cyclopenta(cd)pyr... | 14.27 | 2.0 | ng | 331484 | 5 | 14.16 | 3226680 | 20.0 |
| Benzo[e]pyrene | 15.35 | 10.8 | ng | 306401 | 6 | 15.70 | 566908 | 20.0 |
| Perylene | 15.57 | 36.2 | ng | 1026300 | 6 | 15.70 | 566908 | 20.0 |