LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

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-BF061918.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 | 5.154 | 476 | 479 | 489 | rBV | 79932 | 91435 | 10.44% | 0.637% |
| 2 | 5.572 | 547 | 550 | 565 | rBV | 616108 | 644005 | 73.54% | 4.485% |
| 3 | 6.578 | 718 | 721 | 737 | rBV | 614022 | 630792 | 72.03% | 4.393% |
| 4 | 6.707 | 740 | 743 | 748 | rBV | 689987 | 635931 | 72.62% | 4.429% |
| 5 | 6.931 | 778 | 781 | 786 | rBV | 388323 | 308876 | 35.27% | 2.151% |
| 6 | 7.089 | 804 | 808 | 811 | rBV | 535175 | 510727 | 58.32% | 3.557% |
| 7 | 7.495 | 873 | 877 | 887 | rBV | 411955 | 375005 | 42.82% | 2.612% |
| 8 | 8.219 | 996 | 1000 | 1002 | rBV | 378244 | 346207 | 39.53% | 2.411% |
| 9 | 8.236 | 1002 | 1003 | 1011 | rVB | 53533 | 40769 | 4.66% | 0.284% |
| 10 | 8.936 | 1119 | 1122 | 1126 | rBB | 13261 | 12887 | 1.47% | 0.090% |
| 11 | 9.289 | 1178 | 1182 | 1190 | rBV | 775064 | 649735 | 74.20% | 4.525% |
| 12 | 9.636 | 1237 | 1241 | 1244 | rBV2 | 10042 | 10520 | 1.20% | 0.073% |
| 13 | 9.683 | 1247 | 1249 | 1254 | rVB | 119401 | 104663 | 11.95% | 0.729% |
| 14 | 9.842 | 1272 | 1276 | 1280 | rBV | 15459 | 13903 | 1.59% | 0.097% |
| 15 | 9.983 | 1296 | 1300 | 1303 | rBV | 392048 | 370372 | 42.29% | 2.579% |
| 16 | 10.013 | 1303 | 1305 | 1309 | rVB | 83631 | 62455 | 7.13% | 0.435% |
| 17 | 10.189 | 1330 | 1335 | 1338 | rBV | 26132 | 24339 | 2.78% | 0.170% |
| 18 | 10.383 | 1365 | 1368 | 1374 | rVB | 11378 | 11692 | 1.34% | 0.081% |
| 19 | 10.530 | 1389 | 1393 | 1399 | rVB | 56044 | 52478 | 5.99% | 0.365% |
| 20 | 10.689 | 1418 | 1420 | 1423 | rVB2 | 13286 | 11135 | 1.27% | 0.078% |
| 21 | 10.777 | 1431 | 1435 | 1441 | rBV | 461103 | 449397 | 51.32% | 3.130% |
| 22 | 10.860 | 1447 | 1449 | 1453 | rBV | 9908 | 12061 | 1.38% | 0.084% |
| 23 | 11.083 | 1480 | 1487 | 1490 | rBV2 | 50519 | 59051 | 6.74% | 0.411% |
| 24 | 11.207 | 1503 | 1508 | 1510 | rBV4 | 9851 | 15412 | 1.76% | 0.107% |
| 25 | 11.230 | 1510 | 1512 | 1517 | rVB2 | 11512 | 14371 | 1.64% | 0.100% |
| 26 | 11.289 | 1518 | 1522 | 1524 | rVV2 | 23494 | 22612 | 2.58% | 0.157% |
| 27 | 11.313 | 1524 | 1526 | 1528 | rVV2 | 16318 | 18825 | 2.15% | 0.131% |
| 28 | 11.330 | 1528 | 1529 | 1533 | rVV3 | 15845 | 16523 | 1.89% | 0.115% |
| 29 | 11.377 | 1533 | 1537 | 1540 | rVB | 26610 | 27989 | 3.20% | 0.195% |
| 30 | 11.477 | 1551 | 1554 | 1556 | rBV | 483621 | 448284 | 51.19% | 3.122% |
| 31 | 11.507 | 1556 | 1559 | 1562 | rVV | 527884 | 478046 | 54.59% | 3.329% |
| 32 | 11.554 | 1562 | 1567 | 1571 | rVV | 139142 | 137694 | 15.72% | 0.959% |
| 33 | 11.589 | 1571 | 1573 | 1577 | rVB | 16304 | 17206 | 1.96% | 0.120% |
| 34 | 11.719 | 1590 | 1595 | 1597 | rBV2 | 67862 | 72941 | 8.33% | 0.508% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

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-BF061918.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 11.736 | 1597 | 1598 | 1601 | rVB2 | 15119 | 12089 | 1.38% | 0.084% |
| 36 | 11.813 | 1609 | 1611 | 1617 | rVB3 | 14650 | 14858 | 1.70% | 0.103% |
| 37 | 11.942 | 1631 | 1633 | 1637 | rBV5 | 8954 | 14195 | 1.62% | 0.099% |
| 38 | 11.983 | 1637 | 1640 | 1642 | rVV | 93902 | 85922 | 9.81% | 0.598% |
| 39 | 12.013 | 1642 | 1645 | 1648 | rVV | 129521 | 112633 | 12.86% | 0.784% |
| 40 | 12.060 | 1650 | 1653 | 1656 | rVV | 52497 | 47182 | 5.39% | 0.329% |
| 41 | 12.095 | 1656 | 1659 | 1662 | rVV2 | 127662 | 163872 | 18.71% | 1.141% |
| 42 | 12.119 | 1662 | 1663 | 1666 | rVB | 73026 | 40467 | 4.62% | 0.282% |
| 43 | 12.148 | 1666 | 1668 | 1674 | rBV5 | 17737 | 29814 | 3.40% | 0.208% |
| 44 | 12.277 | 1687 | 1690 | 1693 | rVV | 54602 | 47528 | 5.43% | 0.331% |
| 45 | 12.319 | 1694 | 1697 | 1700 | rVB | 42473 | 41481 | 4.74% | 0.289% |
| 46 | 12.348 | 1700 | 1702 | 1705 | rBV2 | 11804 | 10993 | 1.26% | 0.077% |
| 47 | 12.424 | 1713 | 1715 | 1718 | rVB2 | 28846 | 23923 | 2.73% | 0.167% |
| 48 | 12.460 | 1718 | 1721 | 1723 | rBV | 25054 | 19990 | 2.28% | 0.139% |
| 49 | 12.483 | 1723 | 1725 | 1728 | rBV2 | 27160 | 19389 | 2.21% | 0.135% |
| 50 | 12.536 | 1730 | 1734 | 1737 | rBV | 97990 | 104317 | 11.91% | 0.726% |
| 51 | 12.630 | 1746 | 1750 | 1753 | rBV3 | 43448 | 67955 | 7.76% | 0.473% |
| 52 | 12.660 | 1753 | 1755 | 1758 | rVB2 | 30924 | 26050 | 2.97% | 0.181% |
| 53 | 12.707 | 1759 | 1763 | 1766 | rVV | 794677 | 742102 | 84.74% | 5.168% |
| 54 | 12.730 | 1766 | 1767 | 1770 | rVV | 18444 | 18358 | 2.10% | 0.128% |
| 55 | 12.766 | 1770 | 1773 | 1775 | rVB2 | 24099 | 24895 | 2.84% | 0.173% |
| 56 | 12.913 | 1795 | 1798 | 1800 | rBV2 | 194273 | 221208 | 25.26% | 1.541% |
| 57 | 12.936 | 1800 | 1802 | 1807 | rVV | 754222 | 683644 | 78.07% | 4.761% |
| 58 | 12.983 | 1807 | 1810 | 1814 | rVB2 | 46791 | 55052 | 6.29% | 0.383% |
| 59 | 13.066 | 1819 | 1824 | 1827 | rVV | 972920 | 875710 | 100.00% | 6.099% |
| 60 | 13.101 | 1827 | 1830 | 1833 | rVB | 43312 | 45926 | 5.24% | 0.320% |
| 61 | 13.154 | 1834 | 1839 | 1842 | rBV2 | 57141 | 102675 | 11.72% | 0.715% |
| 62 | 13.266 | 1850 | 1858 | 1862 | rBV2 | 207162 | 287122 | 32.79% | 2.000% |
| 63 | 13.330 | 1866 | 1869 | 1871 | rBV | 97064 | 90049 | 10.28% | 0.627% |
| 64 | 13.366 | 1871 | 1875 | 1878 | rBV2 | 65144 | 84810 | 9.68% | 0.591% |
| 65 | 13.460 | 1889 | 1891 | 1894 | rBV | 53704 | 49768 | 5.68% | 0.347% |
| 66 | 13.495 | 1894 | 1897 | 1899 | rVV | 51852 | 50279 | 5.74% | 0.350% |
| 67 | 13.613 | 1914 | 1917 | 1919 | rBV | 95767 | 80280 | 9.17% | 0.559% |
| 68 | 13.777 | 1943 | 1945 | 1949 | rVB | 63799 | 56519 | 6.45% | 0.394% |
| 69 | 13.889 | 1961 | 1964 | 1966 | rBV | 73884 | 65451 | 7.47% | 0.456% |
| 70 | 13.913 | 1966 | 1968 | 1970 | rVV | 80467 | 60717 | 6.93% | 0.423% |
| 71 | 13.942 | 1970 | 1973 | 1979 | rVV3 | 222863 | 249890 | 28.54% | 1.740% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

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-BF061918.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 13.989 | 1979 | 1981 | 1985 | rVB | 63977 | 56260 | 6.42% | 0.392% |
| 73 | 14.142 | 2002 | 2007 | 2009 | rBV2 | 619925 | 856156 | 97.77% | 5.963% |
| 74 | 14.165 | 2009 | 2011 | 2015 | rVB | 362888 | 313814 | 35.84% | 2.185% |
| 75 | 14.254 | 2023 | 2026 | 2031 | rVB2 | 119313 | 150439 | 17.18% | 1.048% |
| 76 | 14.530 | 2071 | 2073 | 2076 | rVB | 72377 | 54531 | 6.23% | 0.380% |
| 77 | 14.565 | 2076 | 2079 | 2083 | rBV | 143622 | 150110 | 17.14% | 1.045% |
| 78 | 14.883 | 2131 | 2133 | 2137 | rVB | 91389 | 94748 | 10.82% | 0.660% |
| 79 | 15.230 | 2187 | 2192 | 2203 | rVB2 | 260193 | 557321 | 63.64% | 3.881% |
| 80 | 15.548 | 2243 | 2246 | 2252 | rVB | 126211 | 150020 | 17.13% | 1.045% |
| 81 | 15.618 | 2254 | 2258 | 2265 | rBV2 | 182484 | 310460 | 35.45% | 2.162% |
| 82 | 15.683 | 2265 | 2269 | 2272 | rBV | 210210 | 239692 | 27.37% | 1.669% |

Sum of corrected areas: 14359002

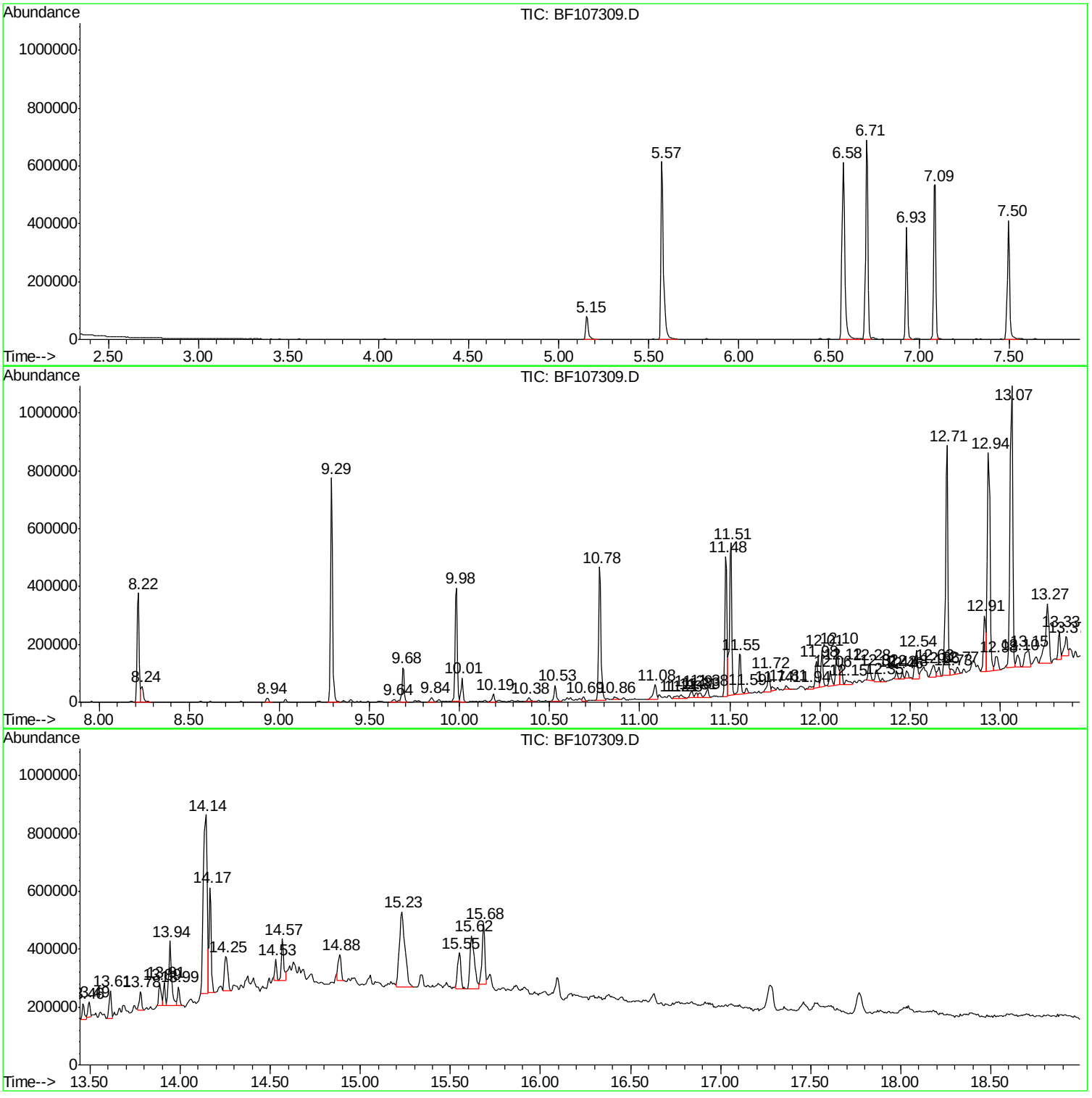
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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\BF071118\
Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

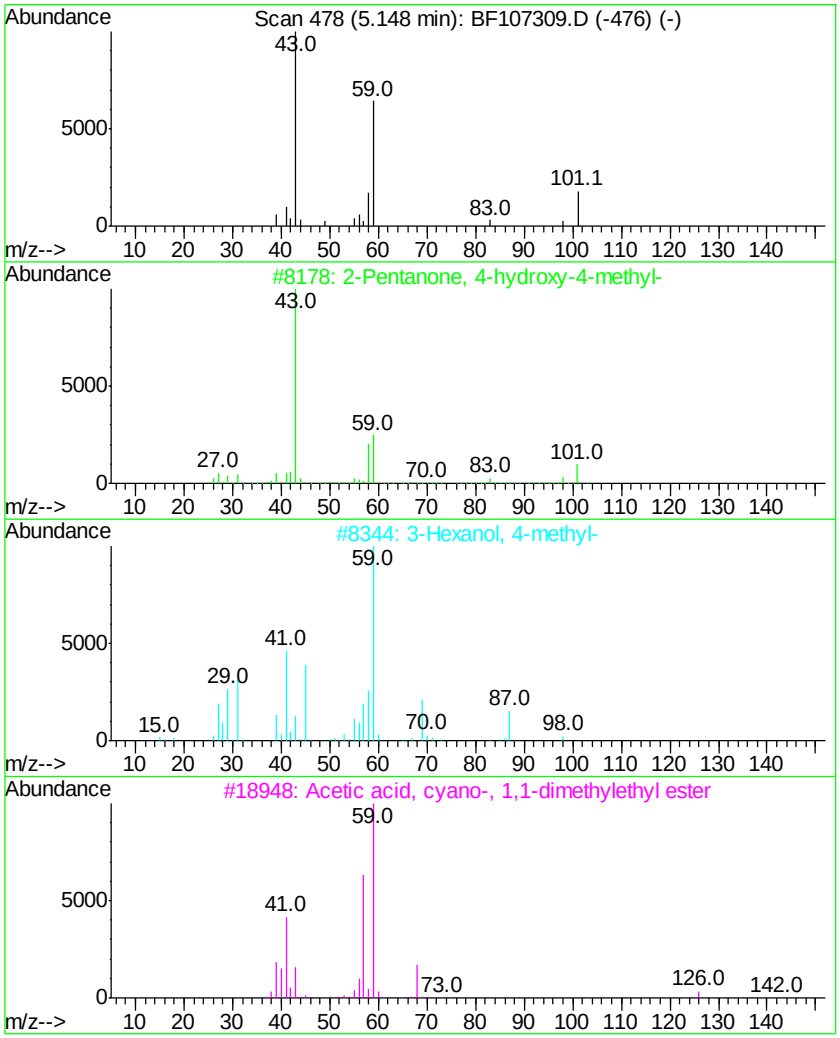
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

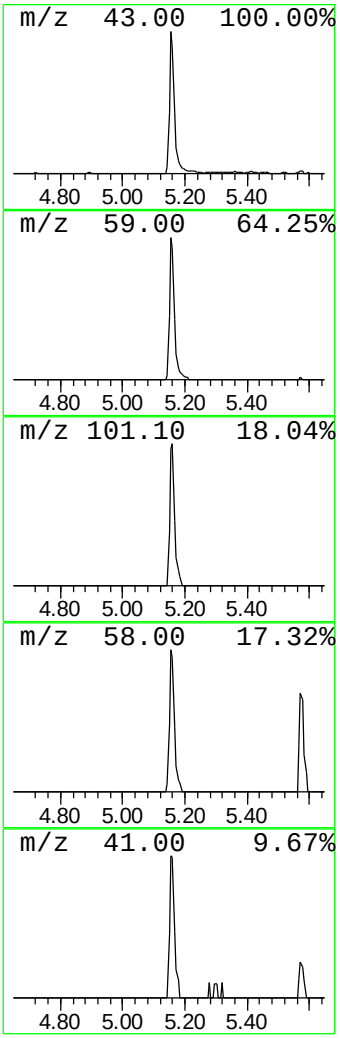
**********

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.15 | 5.92 ng | 91435 | 1,4-Dichlorobenzene-d4 | 6.93 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 64 |
| 2 | 3-Hexanol, 4-methyl- | 116 | C7H16O | 000615-29-2 | 28 |
| 3 | Acetic acid, cyano-, 1,1-dimethy... | 141 | C7H11NO2 | 001116-98-9 | 23 |
| 4 | Morpholine, 4-methyl- | 101 | C5H11NO | 000109-02-4 | 9 |
| 5 | 2,3-Butanedione, monooxime | 101 | C4H7NO2 | 000057-71-6 | 9 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

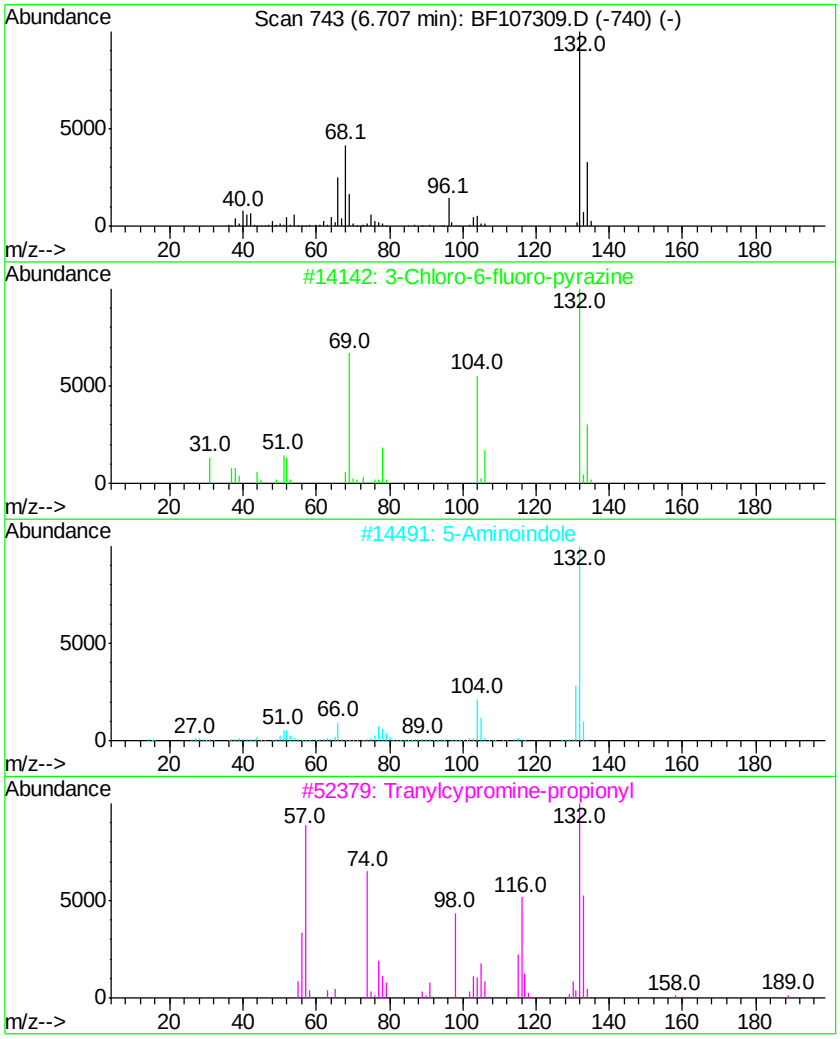
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

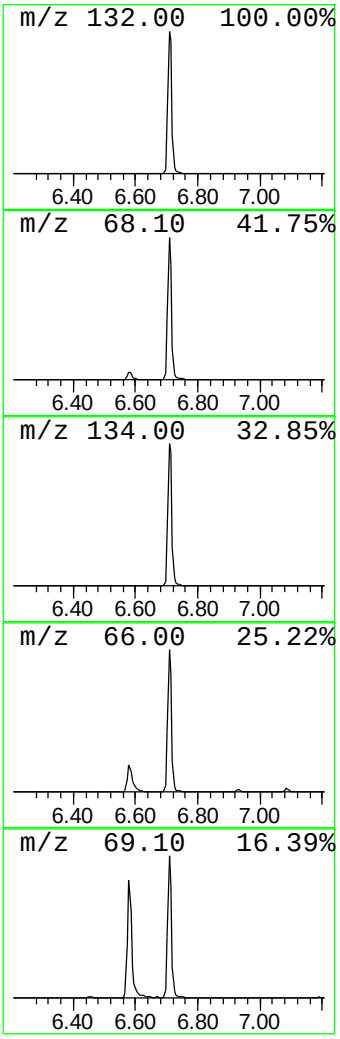
**********

Peak Number 2 unknown6.71 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.71 | 41.18 ng | 635931 | 1,4-Dichlorobenzene-d4 | 6.93 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 16 |
| 2 | 5-Aminoindole | 132 | C8H8N2 | 005192-03-0 | 12 |
| 3 | Tranylcypromine-propionyl | 189 | C12H15NO | 1000123-86-3 | 10 |
| 4 | 2H-Cyclopenta[d]pyridazine, 2-me... | 132 | C8H8N2 | 022291-85-6 | 9 |
| 5 | 1-Methylpyrrolo[1,2-a]pyrazine | 132 | C8H8N2 | 064608-59-9 | 9 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
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Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

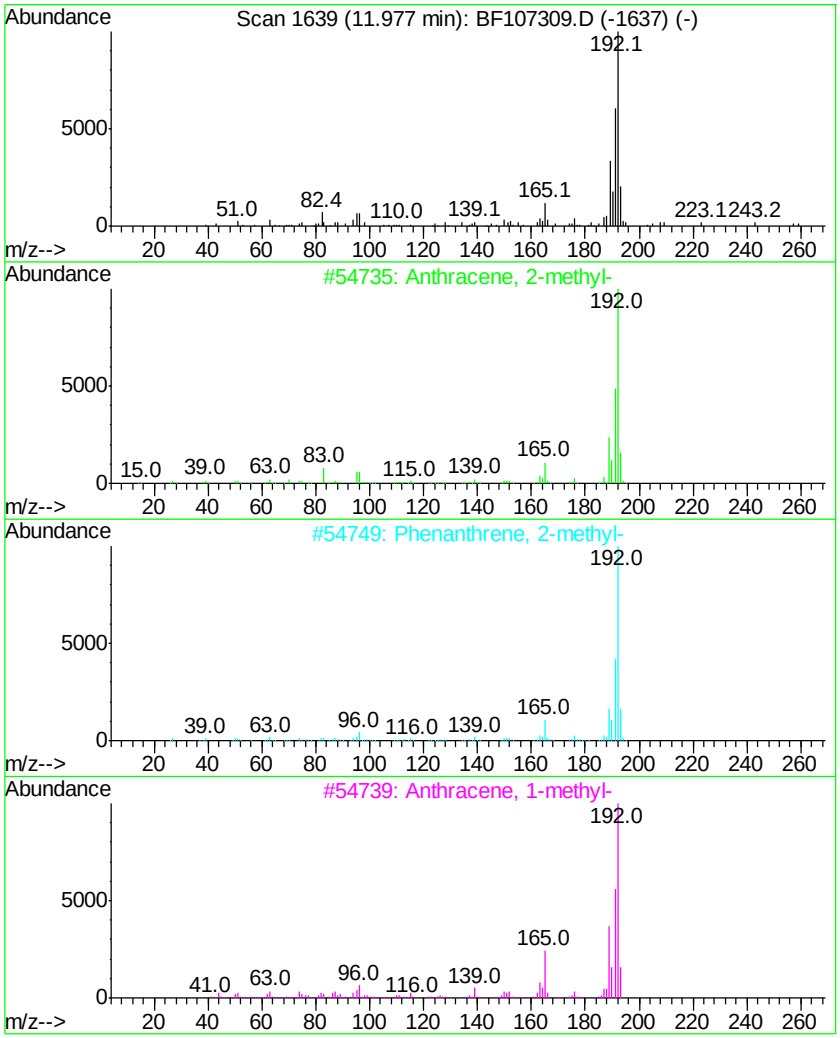
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

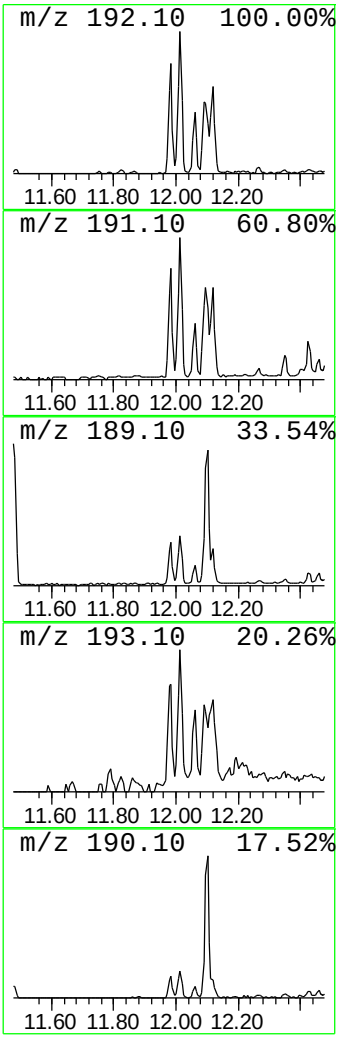
**********

Peak Number 4 Anthracene, 2-methyl- Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.98 | 3.83 ng | 85922 | Phenanthrene-d10 | 11.48 |

| 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 | 93 |
| 4 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 93 |
| 5 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 91 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

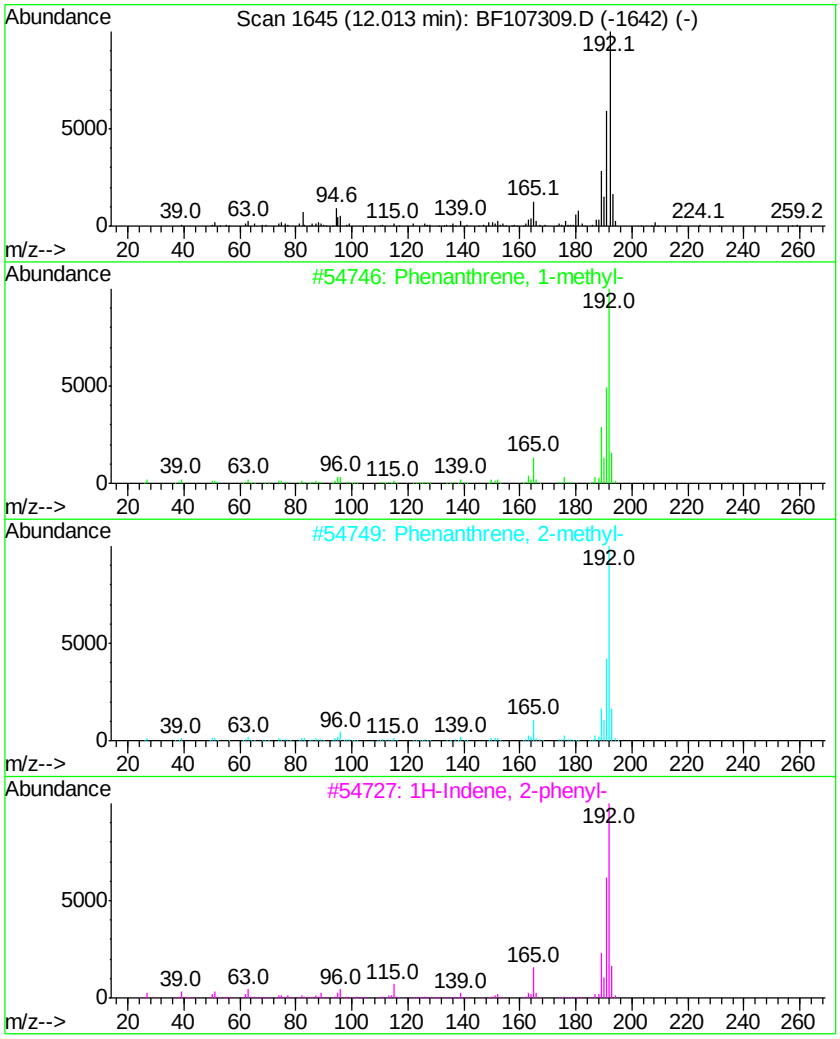
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

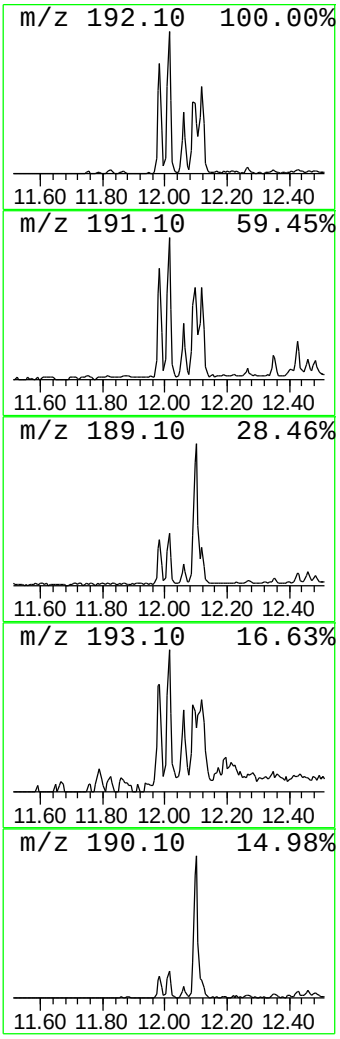
**********

Peak Number 5 Phenanthrene, 1-methyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.01 | 5.03 ng | 112633 | Phenanthrene-d10 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 97 |
| 2 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 96 |
| 3 | 1H-Indene, 2-phenyl- | 192 | C15H12 | 004505-48-0 | 94 |
| 4 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 93 |
| 5 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 93 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

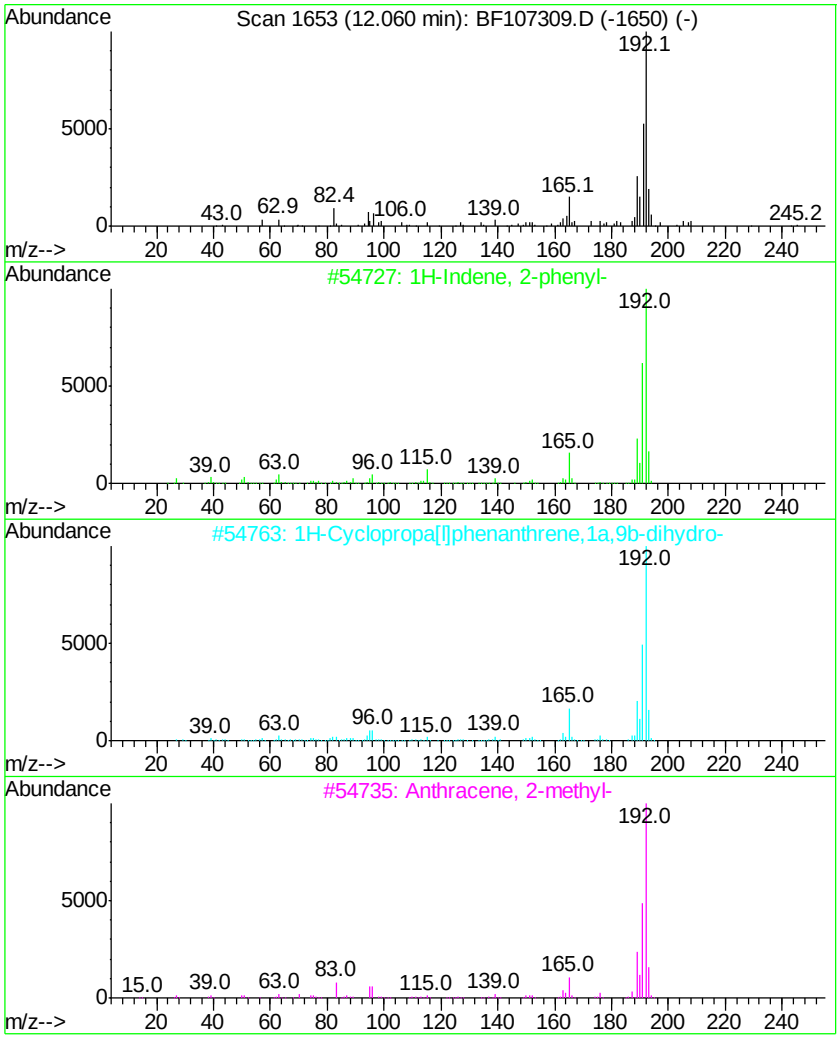
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

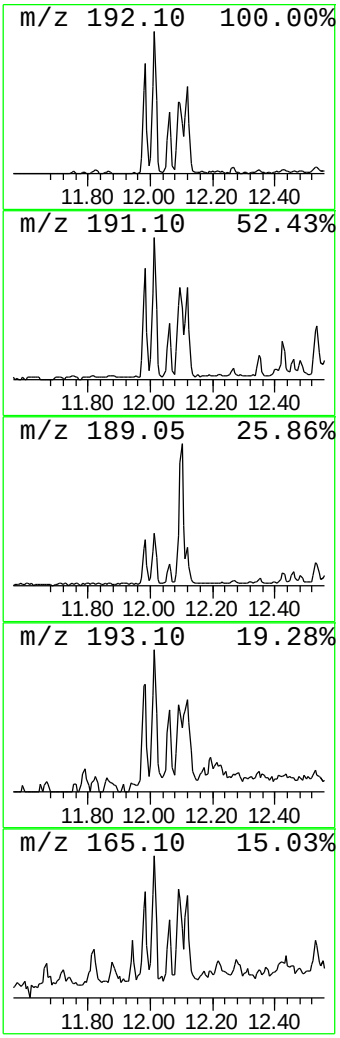
**********

Peak Number 6 1H-Indene, 2-phenyl- Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.06 | 2.11 ng | 47182 | Phenanthrene-d10 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1H-Indene, 2-phenyl- | 192 | C15H12 | 004505-48-0 | 93 |
| 2 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 91 |
| 3 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 91 |
| 4 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 91 |
| 5 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 91 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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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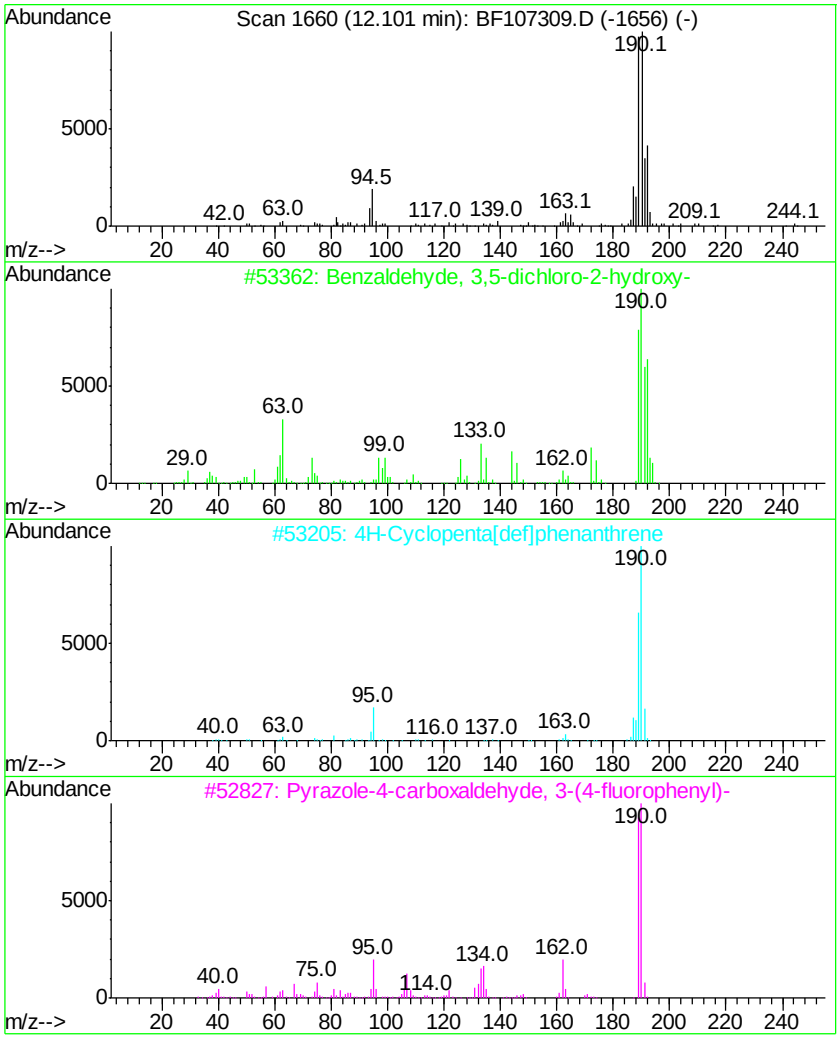
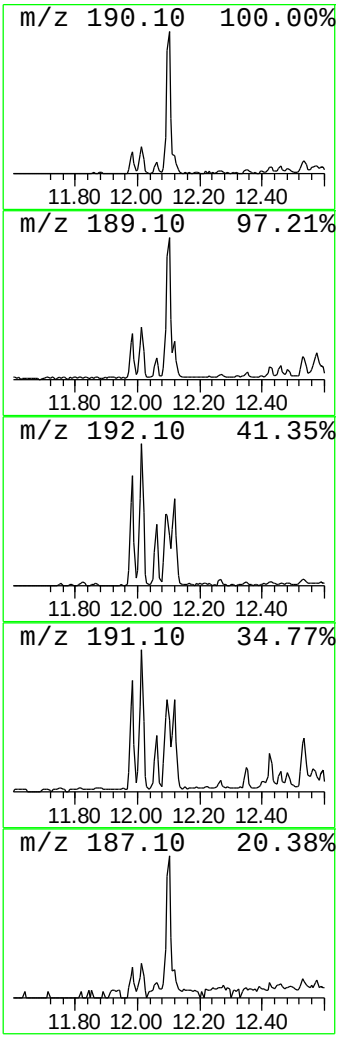
Peak Number 7 Benzaldehyde, 3,5-dichloro-... Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.10 | 7.31 ng | 163872 | Phenanthrene-d10 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzaldehyde, 3,5-dichloro-2-hyd... | 190 | C7H4Cl2O2 | 000090-60-8 | 64 |
| 2 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 62 |
| 3 | Pyrazole-4-carboxaldehyde, 3-(4-... | 190 | C10H7FN2O | 306936-57-2 | 46 |
| 4 | 1H-Indene, 2-phenyl- | 192 | C15H12 | 004505-48-0 | 38 |
| 5 | Naphtho[1,2-b]norbornadiene | 192 | C15H12 | 1000210-14-8 | 38 |



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Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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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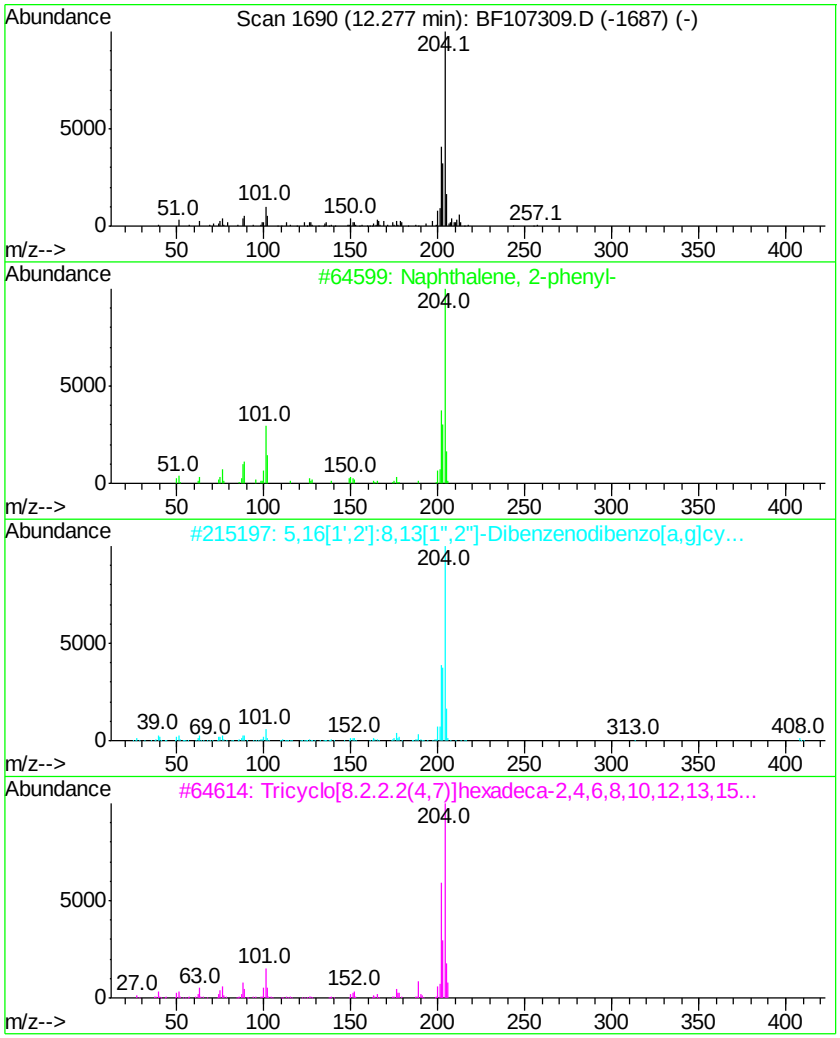
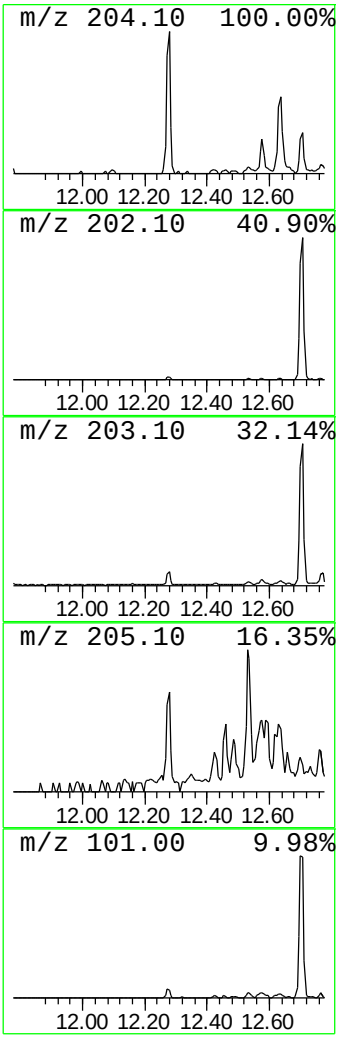
Peak Number 8 Naphthalene, 2-phenyl- Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.28 | 2.12 ng | 47528 | Phenanthrene-d10 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 70 |
| 2 | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24 | 005672-97-9 | 64 |
| 3 | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12 | 006572-60-7 | 62 |
| 4 | Benzene, 1,1'-(1-buten-3-yne-1,4... | 204 | C16H12 | 013141-45-2 | 46 |
| 5 | [1,1'-Biphenyl]-4,4'-dicarbonitrile | 204 | C14H8N2 | 001591-30-6 | 46 |



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Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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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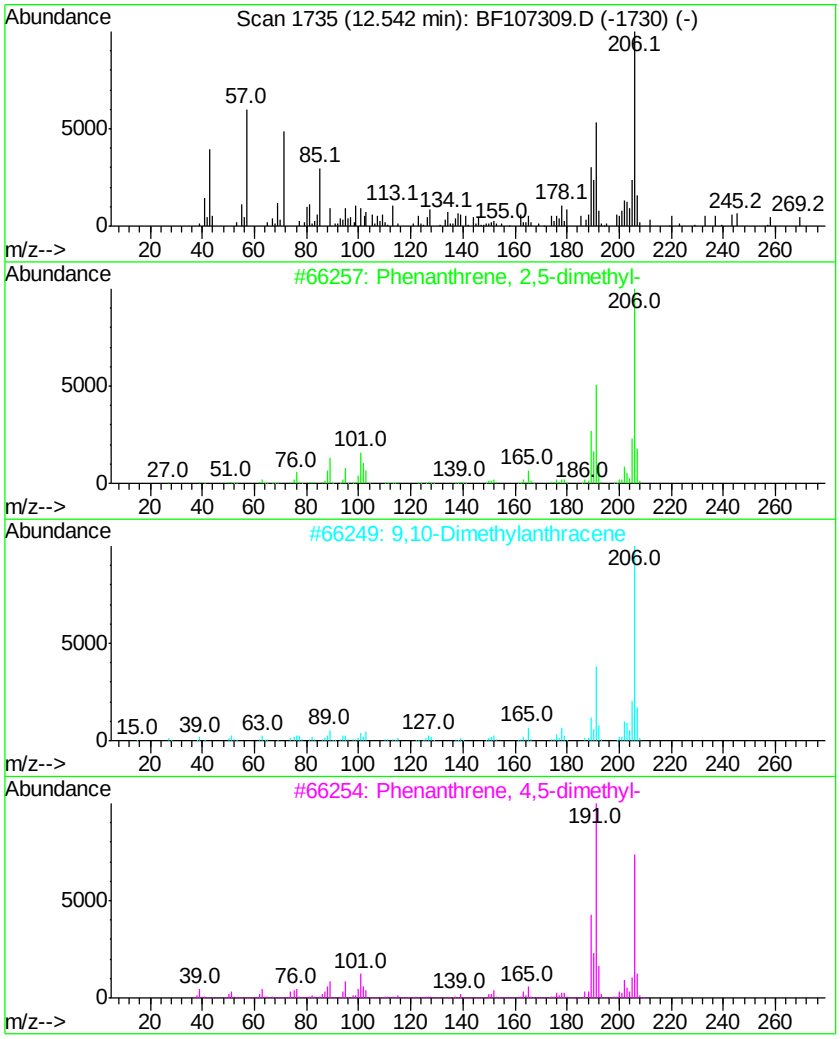
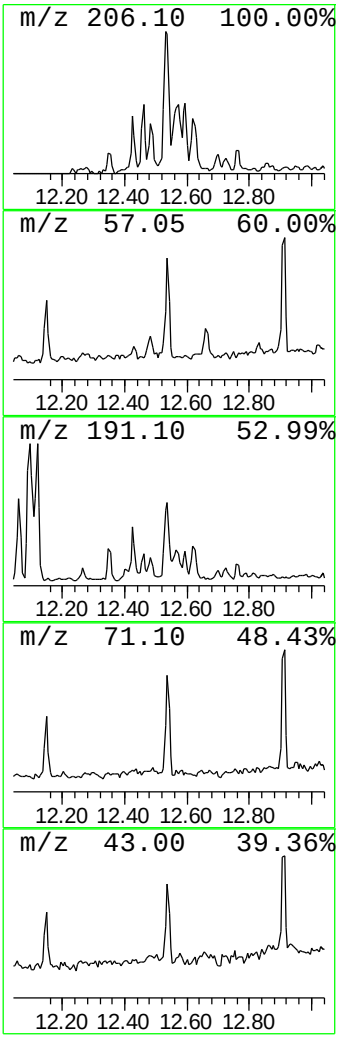
Peak Number 9 Phenanthrene, 2,5-dimethyl- Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.54 | 4.65 ng | 104317 | Phenanthrene-d10 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 90 |
| 2 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 90 |
| 3 | Phenanthrene, 4,5-dimethyl- | 206 | C16H14 | 003674-69-9 | 81 |
| 4 | Naphthalene, 1,2-dihydro-4-phenyl- | 206 | C16H14 | 007469-40-1 | 76 |
| 5 | Phenanthrene, 1,7-dimethyl- | 206 | C16H14 | 000483-87-4 | 76 |



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Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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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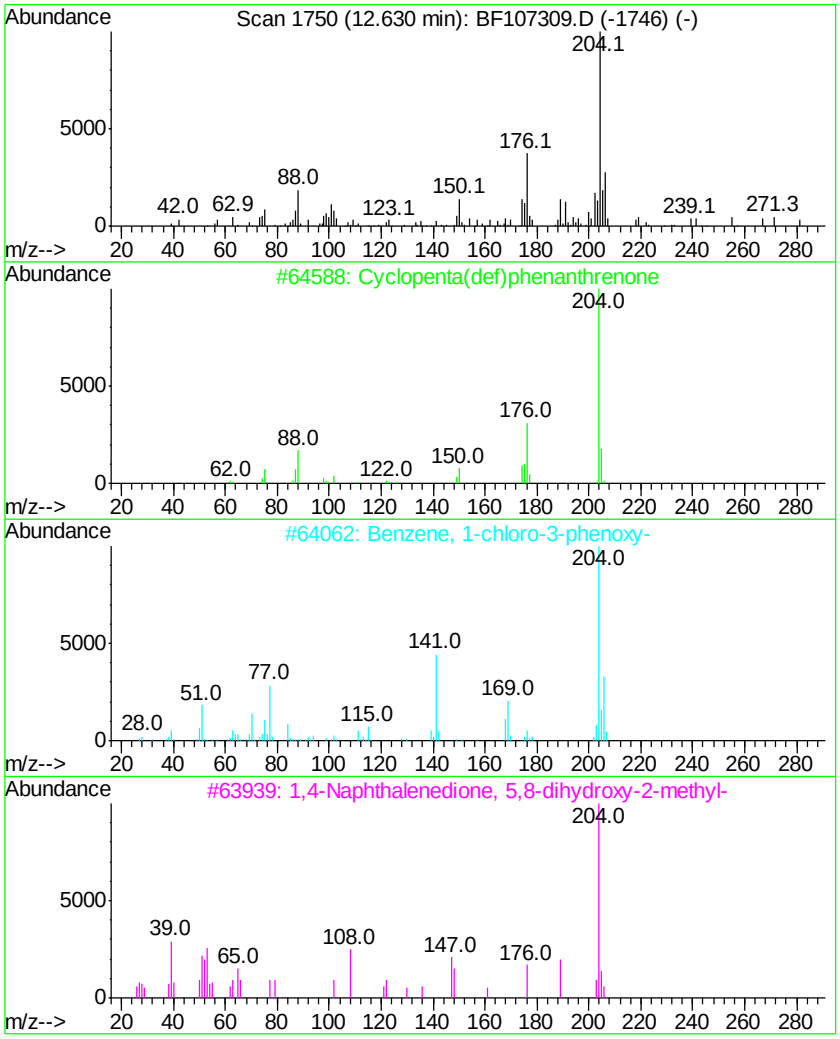
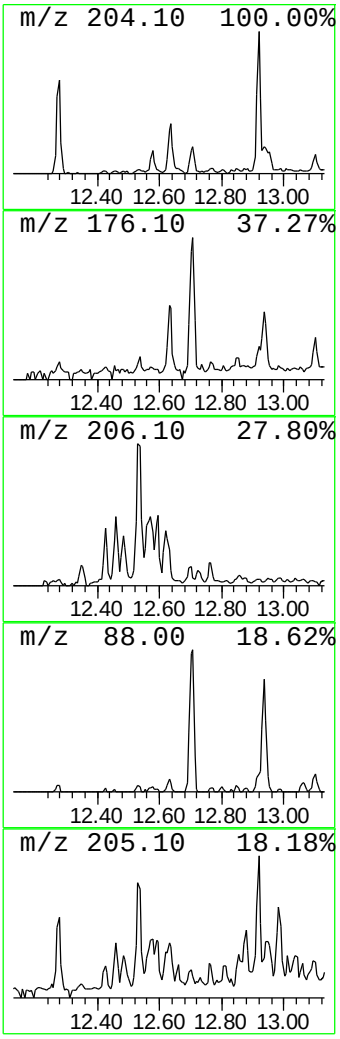
Peak Number 10 Cyclopenta(def)phenanthrenone Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.63 | 3.03 ng | 67955 | Phenanthrene-d10 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(def)phenanthrenone | 204 | C15H8O | 005737-13-3 | 91 |
| 2 | Benzene, 1-chloro-3-phenoxy- | 204 | C12H9ClO | 006452-49-9 | 58 |
| 3 | 1,4-Naphthalenedione, 5,8-dihydr... | 204 | C11H8O4 | 014554-09-7 | 53 |
| 4 | 1,1,4a-Trimethyl-5,6-dimethylene... | 204 | C15H24 | 1000193-60-8 | 50 |
| 5 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 49 |



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Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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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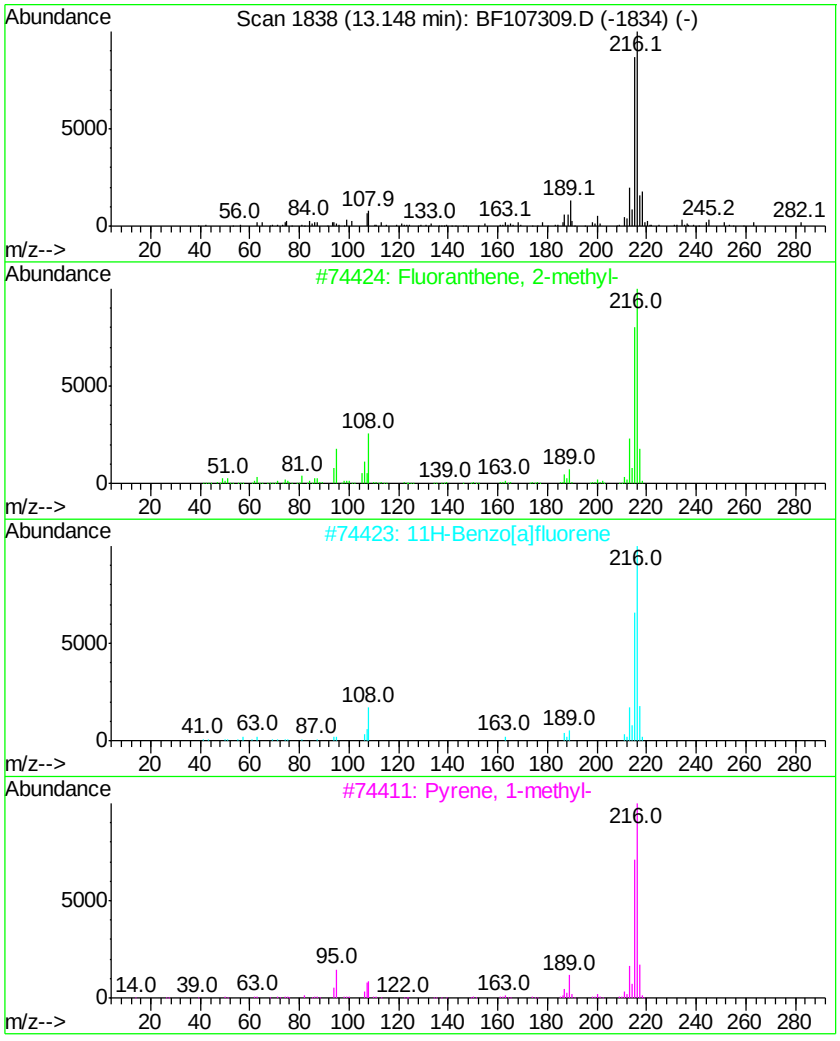
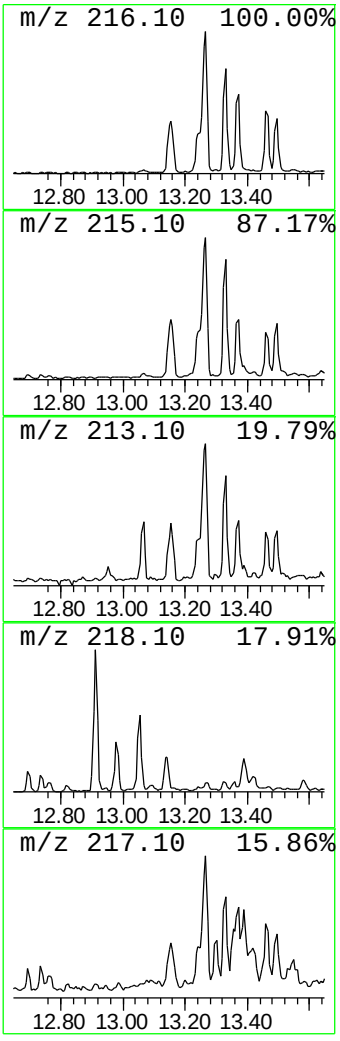
Peak Number 11 Fluoranthene, 2-methyl- Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.15 | 2.40 ng | 102675 | Chrysene-d12 | 14.14 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 91 |
| 2 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 90 |
| 3 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 90 |
| 4 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 87 |
| 5 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 76 |



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Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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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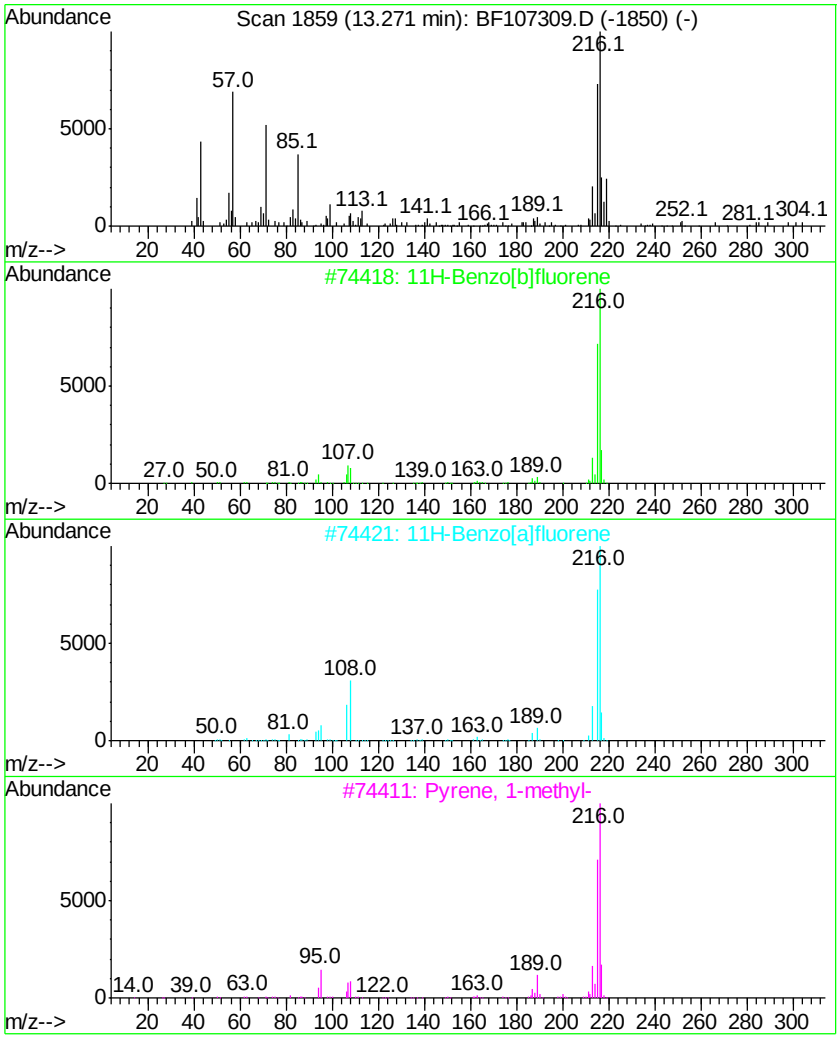
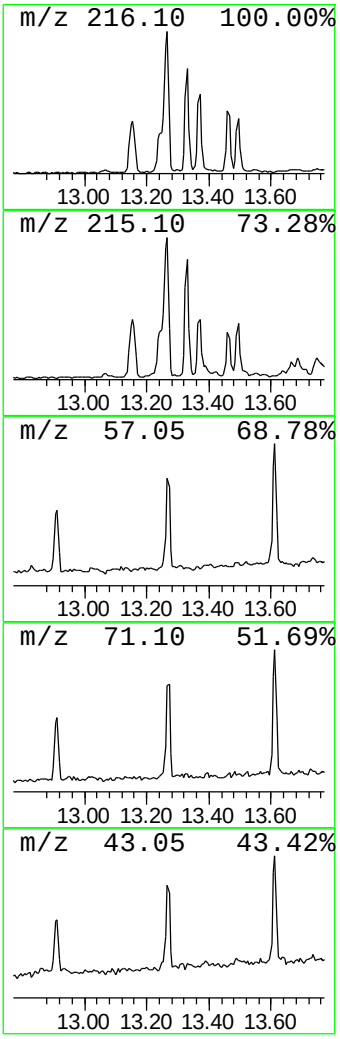
Peak Number 12 11H-Benzo[b]fluorene Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.27 | 6.71 ng | 287122 | Chrysene-d12 | 14.14 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 96 |
| 2 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 87 |
| 3 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 83 |
| 4 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 76 |
| 5 | 1,3,5-Triazine-2,4,6-triamine, N... | 216 | C10H12N6 | 046731-79-7 | 64 |



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Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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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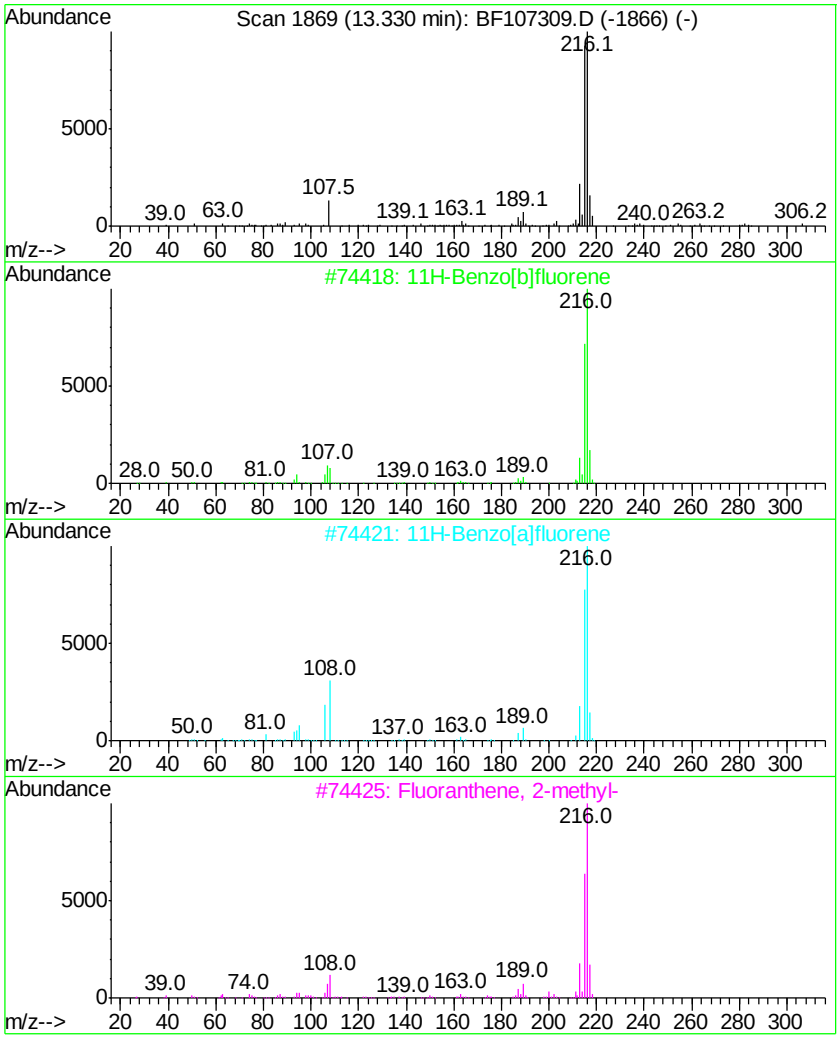
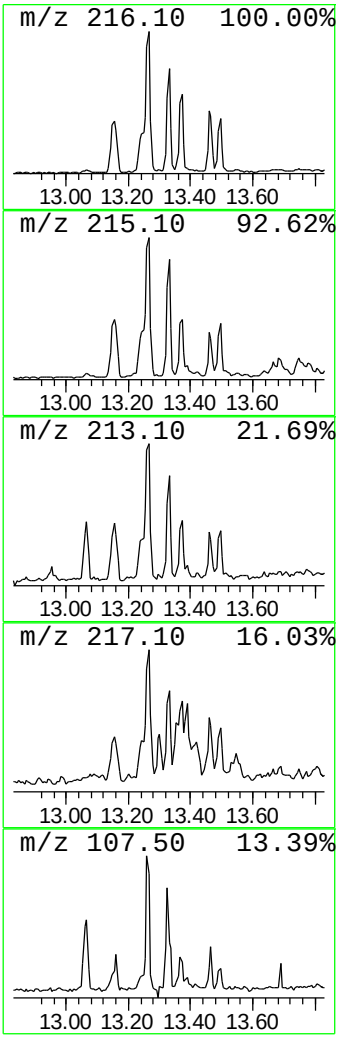
Peak Number 13 11H-Benzo[a]fluorene Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.33 | 2.10 ng | 90049 | Chrysene-d12 | 14.14 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 90 |
| 2 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 87 |
| 3 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 64 |
| 4 | 7H-Benzo[c]fluorene | 216 | C17H12 | 000205-12-9 | 52 |
| 5 | Benzoic acid, 3-(3,5-dimethyl-1-... | 216 | C12H12N2O2 | 312531-88-7 | 50 |



Library Search Compound Report

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Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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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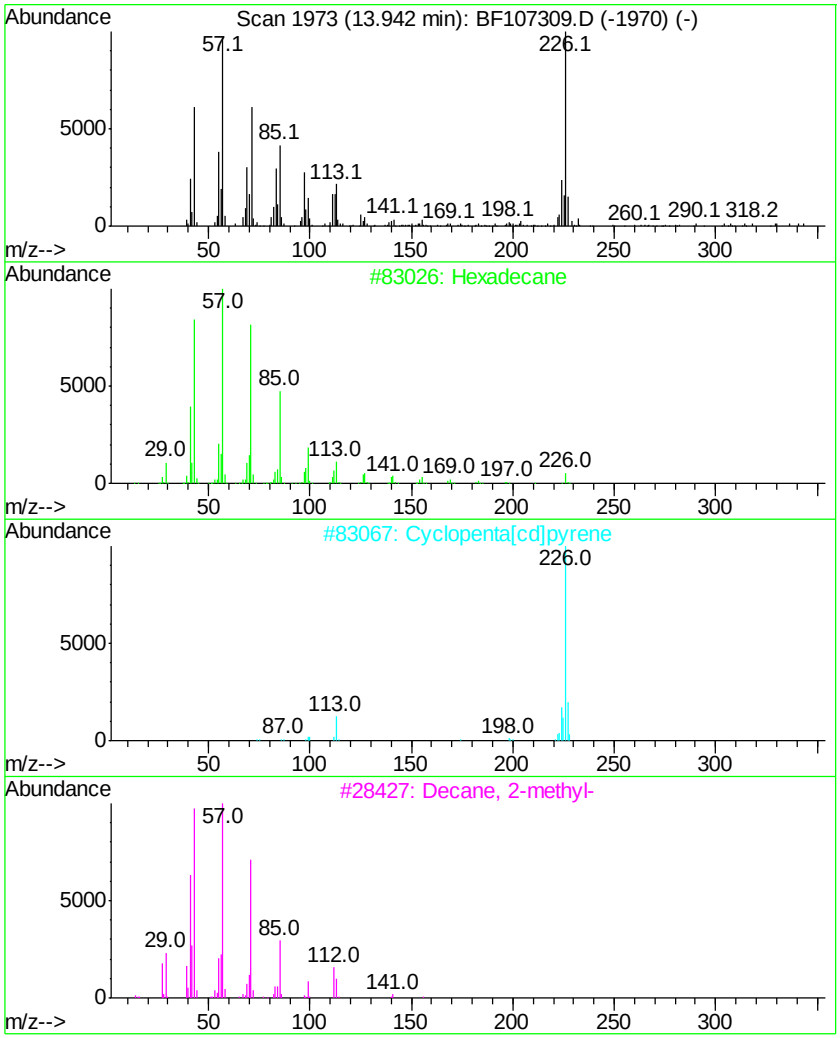
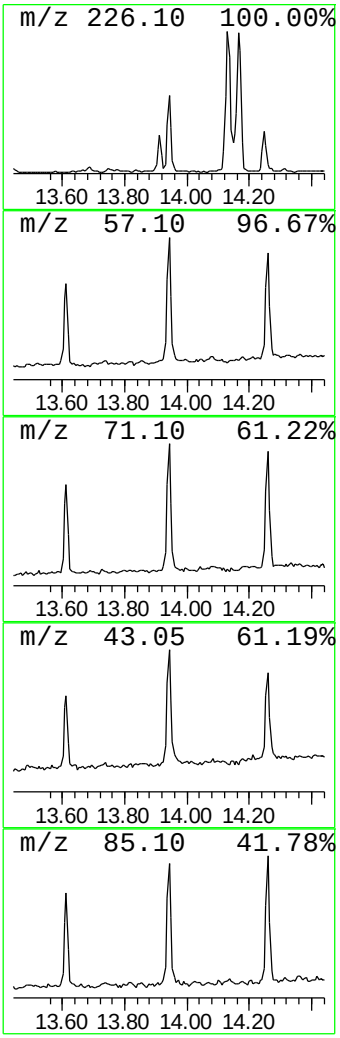
Peak Number 14 Hexadecane Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.94 | 5.84 ng | 249890 | Chrysene-d12 | 14.14 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexadecane | 226 | C16H34 | 000544-76-3 | 70 |
| 2 | Cyclopenta[cd]pyrene | 226 | C18H10 | 027208-37-3 | 43 |
| 3 | Decane, 2-methyl- | 156 | C11H24 | 006975-98-0 | 38 |
| 4 | Sulfurous acid, octadecyl 2-prop... | 376 | C21H44O3S | 1000309-12-7 | 30 |
| 5 | 5-Ethyl-5-methylnonadecane | 310 | C22H46 | 1000360-42-7 | 30 |



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Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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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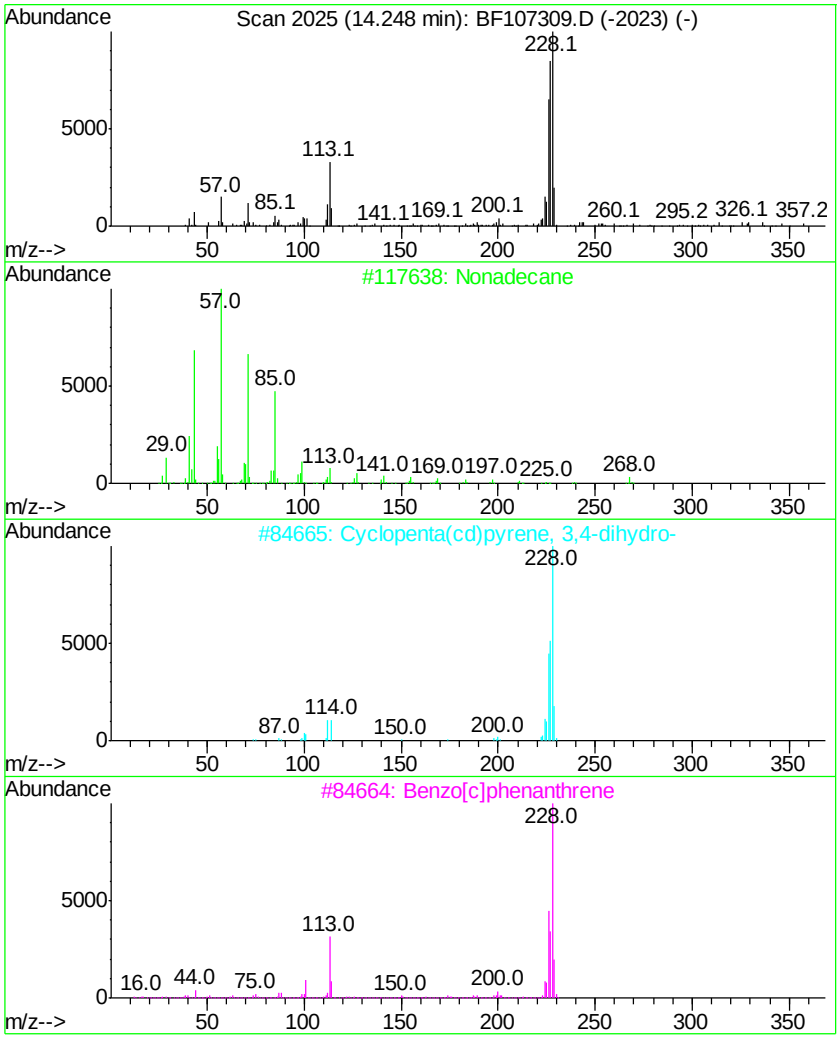
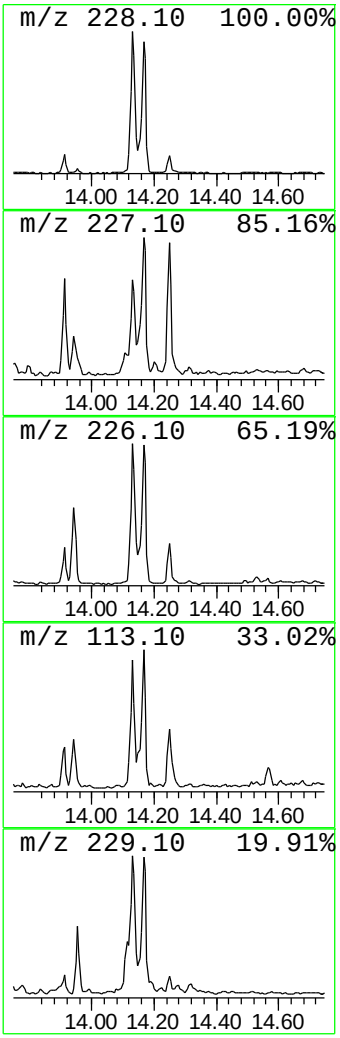
Peak Number 15 Nonadecane Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.25 | 3.51 ng | 150439 | Chrysene-d12 | 14.14 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Nonadecane | 268 | C19H40 | 000629-92-5 | 53 |
| 2 | Cyclopenta(cd)pyrene, 3,4-dihydro- | 228 | C18H12 | 025732-74-5 | 42 |
| 3 | Benzo[c]phenanthrene | 228 | C18H12 | 000195-19-7 | 30 |
| 4 | Heptadecane, 9-octyl- | 352 | C25H52 | 007225-64-1 | 25 |
| 5 | 5-Ethyl-5-methylnonadecane | 310 | C22H46 | 1000360-42-7 | 18 |



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Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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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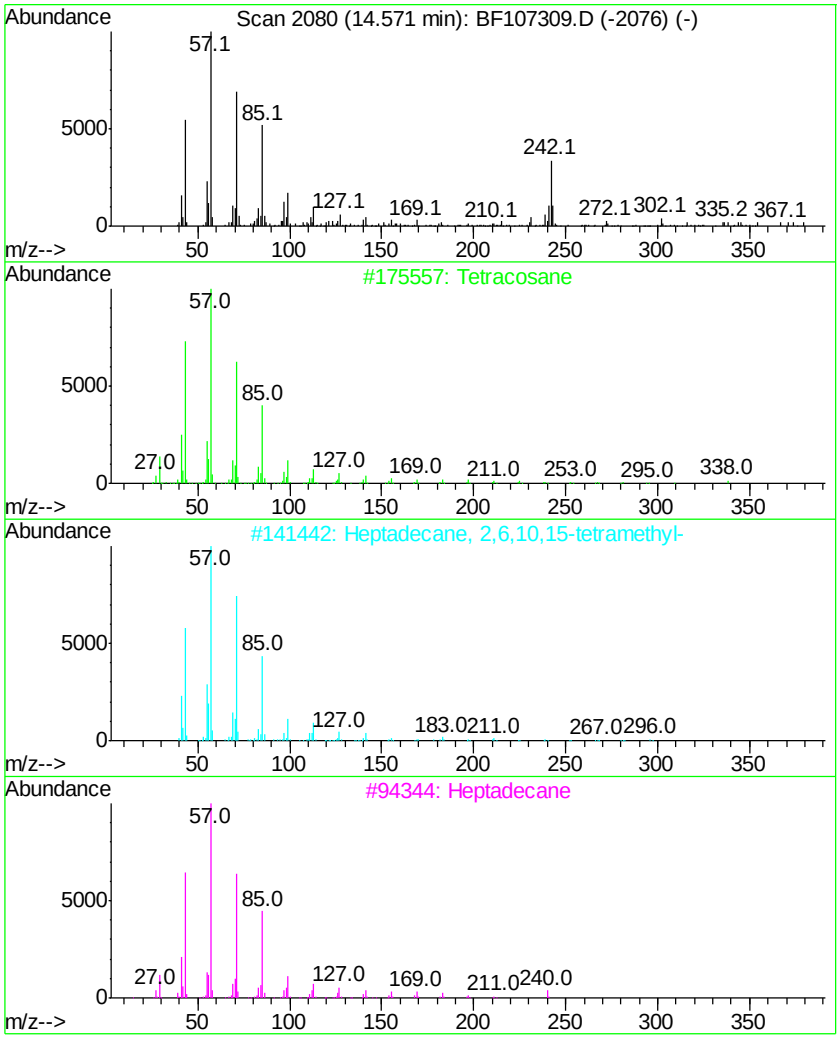
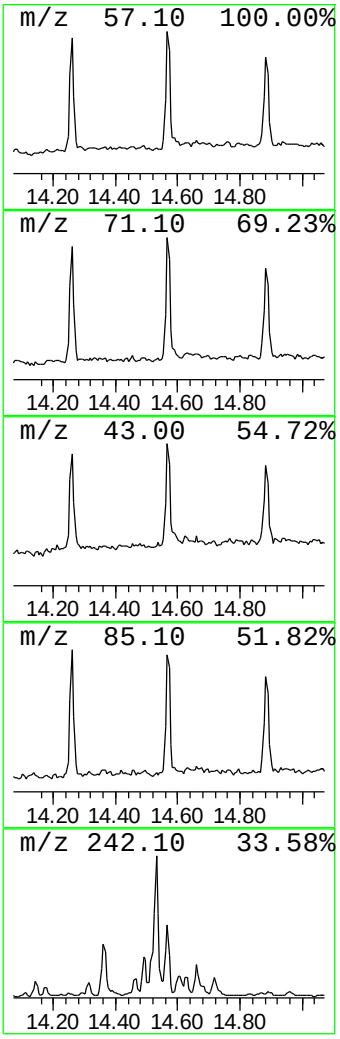
Peak Number 16 Tetracosane Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.57 | 3.51 ng | 150110 | Chrysene-d12 | 14.14 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Tetracosane | 338 | C24H50 | 000646-31-1 | 93 |
| 2 | Heptadecane, 2,6,10,15-tetramethyl- | 296 | C21H44 | 054833-48-6 | 87 |
| 3 | Heptadecane | 240 | C17H36 | 000629-78-7 | 80 |
| 4 | Hexadecane | 226 | C16H34 | 000544-76-3 | 64 |
| 5 | Heneicosane | 296 | C21H44 | 000629-94-7 | 53 |



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Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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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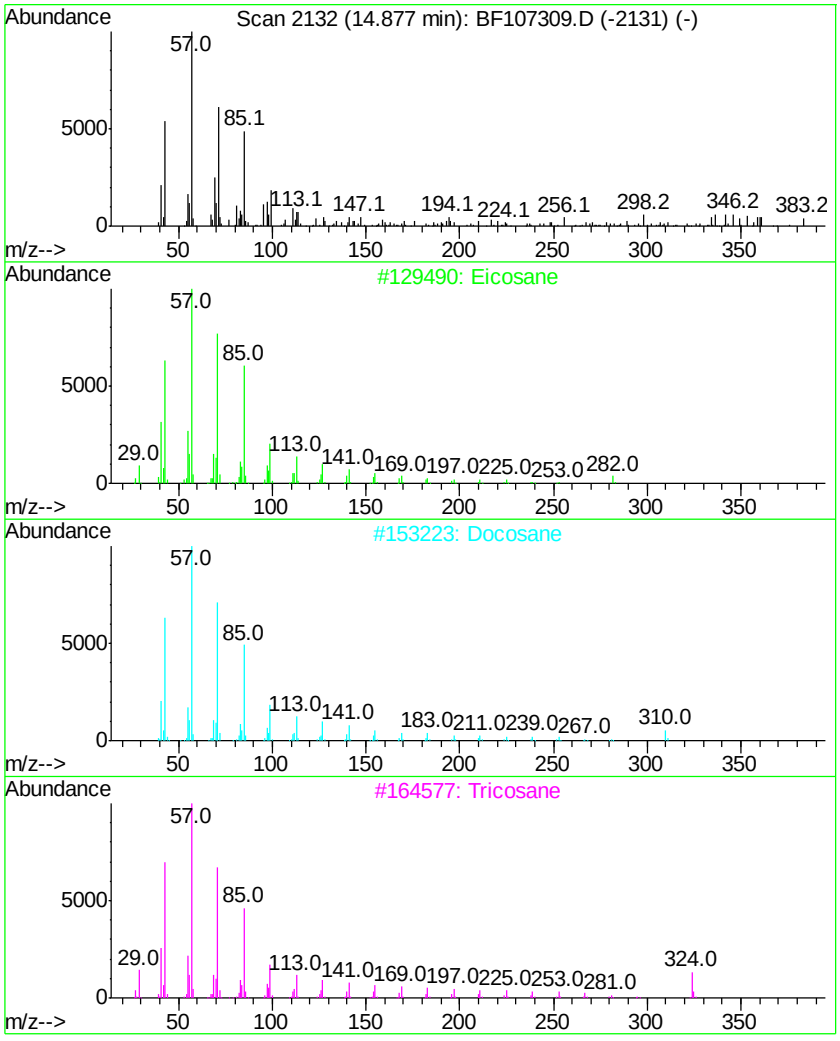
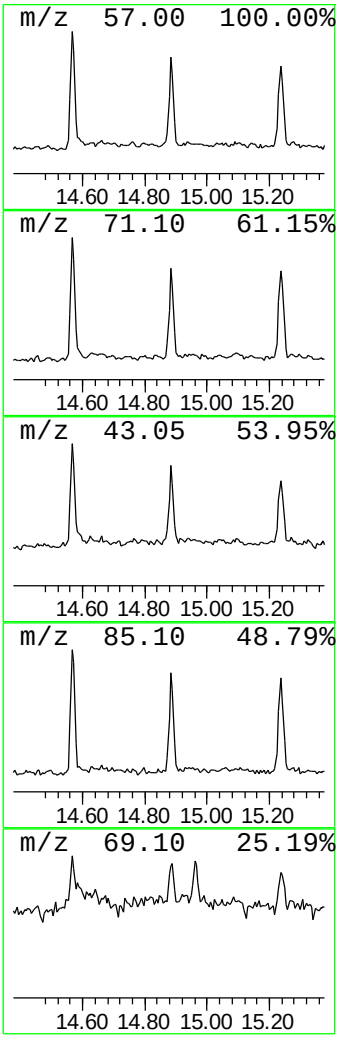
Peak Number 17 Eicosane Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.88 | 2.21 ng | 94748 | Chrysene-d12 | 14.14 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Eicosane | 282 | C20H42 | 000112-95-8 | 93 |
| 2 | Docosane | 310 | C22H46 | 000629-97-0 | 93 |
| 3 | Tricosane | 324 | C23H48 | 000638-67-5 | 87 |
| 4 | Heneicosane | 296 | C21H44 | 000629-94-7 | 87 |
| 5 | Tetracosane | 338 | C24H50 | 000646-31-1 | 87 |



Library Search Compound Report

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Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

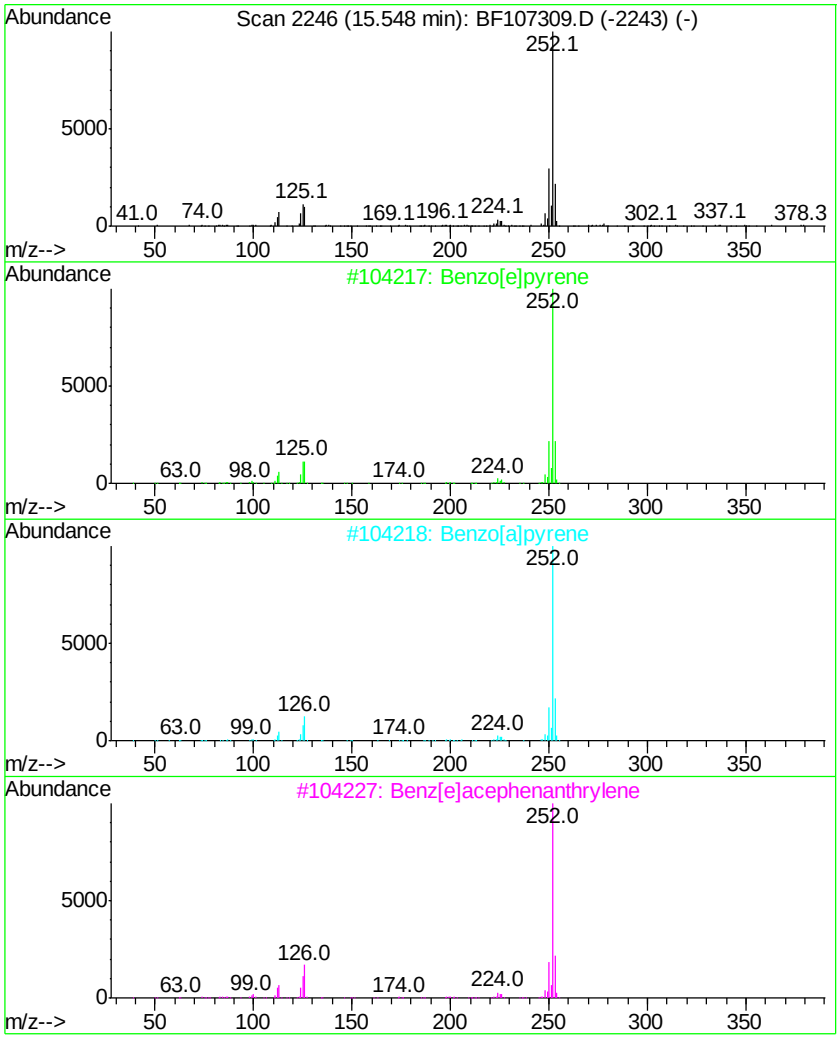
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

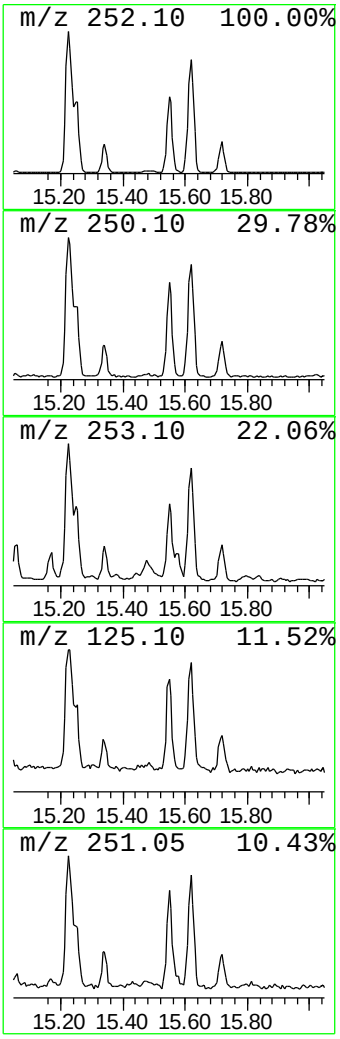
**********

Peak Number 18 Benzo[e]pyrene Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.55 | 12.52 ng | 150020 | Perylene-d12 | 15.68 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 98 |
| 2 | Benzo[a]pyrene | 252 | C20H12 | 000050-32-8 | 94 |
| 3 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 93 |
| 4 | Perylene | 252 | C20H12 | 000198-55-0 | 90 |
| 5 | Benzo[k]fluoranthene | 252 | C20H12 | 000207-08-9 | 89 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF071118\
Data File : BF107309.D
Acq On : 11 Jul 2018 19:19
Operator : JU/SJ
Sample : J3914-03 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| 2-Pentanone, 4-hy... | 5.15 | 5.9 | ng | 91435 | 1 | 6.93 | 308876 | 20.0 |
| unknown6.71 | 6.71 | 41.2 | ng | 635931 | 1 | 6.93 | 308876 | 20.0 |
| Anthracene, 2-met... | 11.98 | 3.8 | ng | 85922 | 4 | 11.48 | 448284 | 20.0 |
| Phenanthrene, 1-m... | 12.01 | 5.0 | ng | 112633 | 4 | 11.48 | 448284 | 20.0 |
| 1H-Indene, 2-phenyl- | 12.06 | 2.1 | ng | 47182 | 4 | 11.48 | 448284 | 20.0 |
| Benzaldehyde, 3,5... | 12.10 | 7.3 | ng | 163872 | 4 | 11.48 | 448284 | 20.0 |
| Naphthalene, 2-ph... | 12.28 | 2.1 | ng | 47528 | 4 | 11.48 | 448284 | 20.0 |
| Phenanthrene, 2,5... | 12.54 | 4.7 | ng | 104317 | 4 | 11.48 | 448284 | 20.0 |
| Cyclopenta(def)ph... | 12.63 | 3.0 | ng | 67955 | 4 | 11.48 | 448284 | 20.0 |
| Fluoranthene, 2-m... | 13.15 | 2.4 | ng | 102675 | 5 | 14.14 | 856156 | 20.0 |
| 11H-Benzo[b]fluorene | 13.27 | 6.7 | ng | 287122 | 5 | 14.14 | 856156 | 20.0 |
| 11H-Benzo[a]fluorene | 13.33 | 2.1 | ng | 90049 | 5 | 14.14 | 856156 | 20.0 |
| Hexadecane | 13.94 | 5.8 | ng | 249890 | 5 | 14.14 | 856156 | 20.0 |
| Nonadecane | 14.25 | 3.5 | ng | 150439 | 5 | 14.14 | 856156 | 20.0 |
| Tetracosane | 14.57 | 3.5 | ng | 150110 | 5 | 14.14 | 856156 | 20.0 |
| Eicosane | 14.88 | 2.2 | ng | 94748 | 5 | 14.14 | 856156 | 20.0 |
| Benzo[e]pyrene | 15.55 | 12.5 | ng | 150020 | 6 | 15.68 | 239692 | 20.0 |