LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 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:\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 | 2.140 | 4 | 9 | 24 | rVB | 1183914 | 1616818 | 46.88% | 3.086% |
| 2 | 5.063 | 503 | 506 | 509 | rBV2 | 34784 | 39664 | 1.15% | 0.076% |
| 3 | 5.099 | 509 | 512 | 523 | rVB | 198789 | 251432 | 7.29% | 0.480% |
| 4 | 5.493 | 575 | 579 | 594 | rBV | 3439060 | 3448675 | 100.00% | 6.583% |
| 5 | 6.504 | 746 | 751 | 770 | rBV | 3081644 | 3323098 | 96.36% | 6.343% |
| 6 | 6.640 | 770 | 774 | 778 | rBV | 3464340 | 3317250 | 96.19% | 6.332% |
| 7 | 6.869 | 809 | 813 | 819 | rBV | 1128440 | 923090 | 26.77% | 1.762% |
| 8 | 7.028 | 835 | 840 | 843 | rBV | 2676804 | 2599090 | 75.36% | 4.961% |
| 9 | 7.434 | 904 | 909 | 912 | rBV | 2322934 | 2157958 | 62.57% | 4.119% |
| 10 | 7.892 | 982 | 987 | 990 | rBV | 39766 | 38776 | 1.12% | 0.074% |
| 11 | 8.151 | 1027 | 1031 | 1033 | rBV | 1302061 | 1135852 | 32.94% | 2.168% |
| 12 | 8.175 | 1033 | 1035 | 1041 | rVB | 212856 | 202102 | 5.86% | 0.386% |
| 13 | 8.704 | 1122 | 1125 | 1128 | rBV | 162836 | 143930 | 4.17% | 0.275% |
| 14 | 8.863 | 1149 | 1152 | 1160 | rVB | 81664 | 75330 | 2.18% | 0.144% |
| 15 | 8.963 | 1163 | 1169 | 1176 | rVB | 87094 | 89394 | 2.59% | 0.171% |
| 16 | 9.222 | 1209 | 1213 | 1217 | rBV | 3088607 | 3041343 | 88.19% | 5.805% |
| 17 | 9.328 | 1228 | 1231 | 1234 | rBV | 41720 | 36706 | 1.06% | 0.070% |
| 18 | 9.563 | 1267 | 1271 | 1274 | rBV | 58259 | 65818 | 1.91% | 0.126% |
| 19 | 9.616 | 1277 | 1280 | 1286 | rVB | 158259 | 146907 | 4.26% | 0.280% |
| 20 | 9.769 | 1302 | 1306 | 1308 | rBV | 76201 | 68617 | 1.99% | 0.131% |
| 21 | 9.828 | 1311 | 1316 | 1319 | rVV | 59550 | 63314 | 1.84% | 0.121% |
| 22 | 9.904 | 1326 | 1329 | 1332 | rBV | 1110947 | 1043328 | 30.25% | 1.991% |
| 23 | 9.939 | 1332 | 1335 | 1339 | rVB | 566687 | 449050 | 13.02% | 0.857% |
| 24 | 10.110 | 1361 | 1364 | 1368 | rBV | 156218 | 156884 | 4.55% | 0.299% |
| 25 | 10.145 | 1368 | 1370 | 1375 | rVB4 | 38391 | 39088 | 1.13% | 0.075% |
| 26 | 10.328 | 1395 | 1401 | 1403 | rBV3 | 87251 | 122821 | 3.56% | 0.234% |
| 27 | 10.457 | 1419 | 1423 | 1427 | rBV | 326291 | 298901 | 8.67% | 0.571% |
| 28 | 10.539 | 1435 | 1437 | 1440 | rVB | 64921 | 57671 | 1.67% | 0.110% |
| 29 | 10.616 | 1447 | 1450 | 1457 | rVB | 799159 | 746050 | 21.63% | 1.424% |
| 30 | 10.698 | 1460 | 1464 | 1469 | rBV | 1683977 | 1605634 | 46.56% | 3.065% |
| 31 | 10.798 | 1479 | 1481 | 1491 | rVB5 | 102312 | 186633 | 5.41% | 0.356% |
| 32 | 11.004 | 1513 | 1516 | 1519 | rBV2 | 62555 | 67343 | 1.95% | 0.129% |
| 33 | 11.204 | 1547 | 1550 | 1554 | rVB | 56143 | 54199 | 1.57% | 0.103% |
| 34 | 11.245 | 1554 | 1557 | 1560 | rBV3 | 80683 | 97378 | 2.82% | 0.186% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 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:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 11.292 | 1563 | 1565 | 1571 | rVB | 181258 | 165822 | 4.81% | 0.317% |
| 36 | 11.398 | 1579 | 1583 | 1585 | rBV | 997032 | 946784 | 27.45% | 1.807% |
| 37 | 11.422 | 1585 | 1587 | 1591 | rVV | 2138581 | 1857572 | 53.86% | 3.546% |
| 38 | 11.475 | 1592 | 1596 | 1599 | rVV | 543052 | 468137 | 13.57% | 0.894% |
| 39 | 11.628 | 1618 | 1622 | 1626 | rBV2 | 317722 | 349984 | 10.15% | 0.668% |
| 40 | 11.898 | 1665 | 1668 | 1669 | rBV | 171852 | 142577 | 4.13% | 0.272% |
| 41 | 11.928 | 1671 | 1673 | 1678 | rVB | 311853 | 261748 | 7.59% | 0.500% |
| 42 | 11.975 | 1678 | 1681 | 1684 | rBV | 140344 | 122516 | 3.55% | 0.234% |
| 43 | 12.016 | 1684 | 1688 | 1690 | rBV2 | 316832 | 341006 | 9.89% | 0.651% |
| 44 | 12.080 | 1697 | 1699 | 1701 | rBV | 58524 | 42886 | 1.24% | 0.082% |
| 45 | 12.192 | 1715 | 1718 | 1721 | rBV | 142794 | 123794 | 3.59% | 0.236% |
| 46 | 12.222 | 1721 | 1723 | 1729 | rVB | 105120 | 112962 | 3.28% | 0.216% |
| 47 | 12.616 | 1786 | 1790 | 1793 | rBV | 2341855 | 2157367 | 62.56% | 4.118% |
| 48 | 12.675 | 1798 | 1800 | 1802 | rBV | 52827 | 41336 | 1.20% | 0.079% |
| 49 | 12.698 | 1802 | 1804 | 1808 | rVB3 | 64522 | 81924 | 2.38% | 0.156% |
| 50 | 12.845 | 1822 | 1829 | 1834 | rBV | 1963455 | 2291209 | 66.44% | 4.373% |
| 51 | 12.892 | 1834 | 1837 | 1842 | rVB2 | 108228 | 125012 | 3.62% | 0.239% |
| 52 | 12.980 | 1846 | 1852 | 1855 | rBV | 2076439 | 2006324 | 58.18% | 3.830% |
| 53 | 13.004 | 1855 | 1856 | 1860 | rVB | 157648 | 105327 | 3.05% | 0.201% |
| 54 | 13.057 | 1861 | 1865 | 1869 | rBV2 | 106296 | 165395 | 4.80% | 0.316% |
| 55 | 13.092 | 1869 | 1871 | 1874 | rBV | 58967 | 48144 | 1.40% | 0.092% |
| 56 | 13.151 | 1877 | 1881 | 1882 | rBV3 | 104918 | 144046 | 4.18% | 0.275% |
| 57 | 13.169 | 1882 | 1884 | 1887 | rVB | 339803 | 303341 | 8.80% | 0.579% |
| 58 | 13.198 | 1887 | 1889 | 1892 | rBV2 | 68299 | 56803 | 1.65% | 0.108% |
| 59 | 13.233 | 1893 | 1895 | 1898 | rBV | 248313 | 231286 | 6.71% | 0.441% |
| 60 | 13.274 | 1898 | 1902 | 1905 | rBV2 | 151785 | 193127 | 5.60% | 0.369% |
| 61 | 13.369 | 1916 | 1918 | 1920 | rVB | 74885 | 53283 | 1.55% | 0.102% |
| 62 | 13.398 | 1920 | 1923 | 1931 | rBV3 | 85889 | 124418 | 3.61% | 0.237% |
| 63 | 13.539 | 1945 | 1947 | 1950 | rBV3 | 52752 | 62822 | 1.82% | 0.120% |
| 64 | 13.592 | 1954 | 1956 | 1959 | rVB2 | 70465 | 66296 | 1.92% | 0.127% |
| 65 | 13.651 | 1964 | 1966 | 1969 | rBV3 | 51037 | 53727 | 1.56% | 0.103% |
| 66 | 13.680 | 1969 | 1971 | 1976 | rVB | 112136 | 96876 | 2.81% | 0.185% |
| 67 | 13.792 | 1987 | 1990 | 1992 | rBV | 182162 | 169925 | 4.93% | 0.324% |
| 68 | 13.816 | 1992 | 1994 | 1997 | rVV | 166339 | 156557 | 4.54% | 0.299% |
| 69 | 13.863 | 1997 | 2002 | 2005 | rVV4 | 251127 | 439168 | 12.73% | 0.838% |
| 70 | 13.892 | 2005 | 2007 | 2010 | rVB | 128718 | 112665 | 3.27% | 0.215% |
| 71 | 14.039 | 2025 | 2032 | 2036 | rBV2 | 1326333 | 2214319 | 64.21% | 4.227% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 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:\HPCHEM1\BNA_F\METHODS\8270-BF022218.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 14.074 | 2036 | 2038 | 2045 | rVB | 1087253 | 923662 | 26.78% | 1.763% |
| 73 | 14.151 | 2049 | 2051 | 2054 | rVB | 233680 | 202812 | 5.88% | 0.387% |
| 74 | 14.192 | 2056 | 2058 | 2062 | rBV4 | 71230 | 73721 | 2.14% | 0.141% |
| 75 | 14.239 | 2064 | 2066 | 2069 | rVB | 73044 | 58562 | 1.70% | 0.112% |
| 76 | 14.398 | 2091 | 2093 | 2095 | rBV | 78684 | 69943 | 2.03% | 0.134% |
| 77 | 14.439 | 2097 | 2100 | 2103 | rVB | 169472 | 158564 | 4.60% | 0.303% |
| 78 | 14.569 | 2120 | 2122 | 2124 | rBV | 67185 | 49505 | 1.44% | 0.094% |
| 79 | 14.592 | 2124 | 2126 | 2130 | rVB2 | 113290 | 100570 | 2.92% | 0.192% |
| 80 | 14.763 | 2153 | 2155 | 2158 | rBV | 71245 | 70928 | 2.06% | 0.135% |
| 81 | 14.951 | 2184 | 2187 | 2194 | rVB3 | 97777 | 144475 | 4.19% | 0.276% |
| 82 | 15.116 | 2210 | 2215 | 2217 | rBV | 893363 | 1339833 | 38.85% | 2.557% |
| 83 | 15.221 | 2230 | 2233 | 2245 | rVB | 198863 | 279612 | 8.11% | 0.534% |
| 84 | 15.421 | 2263 | 2267 | 2273 | rVB | 537264 | 735554 | 21.33% | 1.404% |
| 85 | 15.486 | 2273 | 2278 | 2284 | rVV | 852624 | 1109775 | 32.18% | 2.118% |
| 86 | 15.551 | 2284 | 2289 | 2292 | rVV | 669035 | 911342 | 26.43% | 1.740% |
| 87 | 15.580 | 2292 | 2294 | 2301 | rVB | 284494 | 371135 | 10.76% | 0.708% |
| 88 | 15.986 | 2359 | 2363 | 2369 | rBV2 | 168047 | 239251 | 6.94% | 0.457% |
| 89 | 17.062 | 2540 | 2546 | 2555 | rBV | 395029 | 775411 | 22.48% | 1.480% |
| 90 | 17.527 | 2618 | 2625 | 2635 | rVB | 269521 | 628874 | 18.24% | 1.200% |

Sum of corrected areas: 52390158

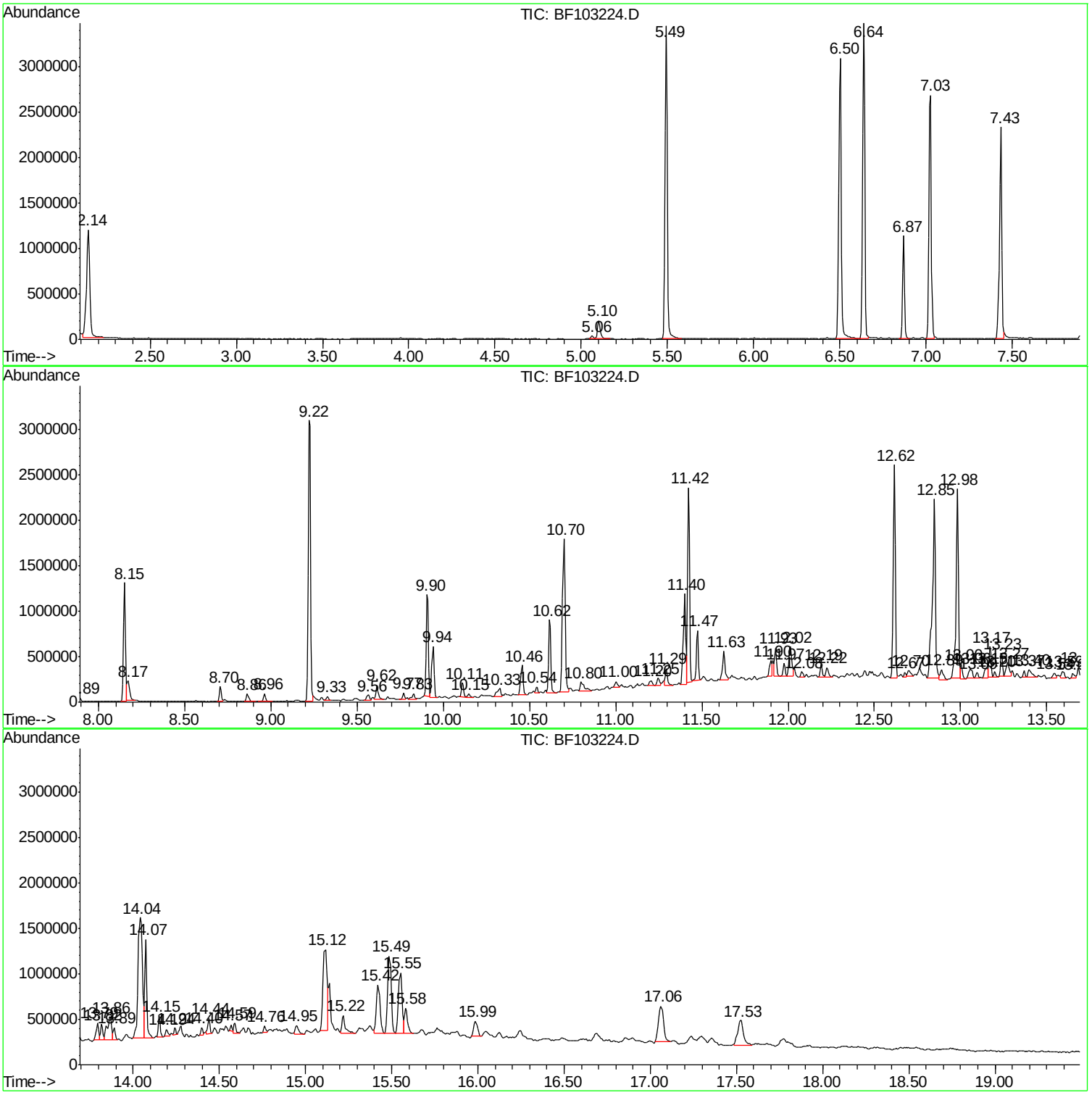
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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

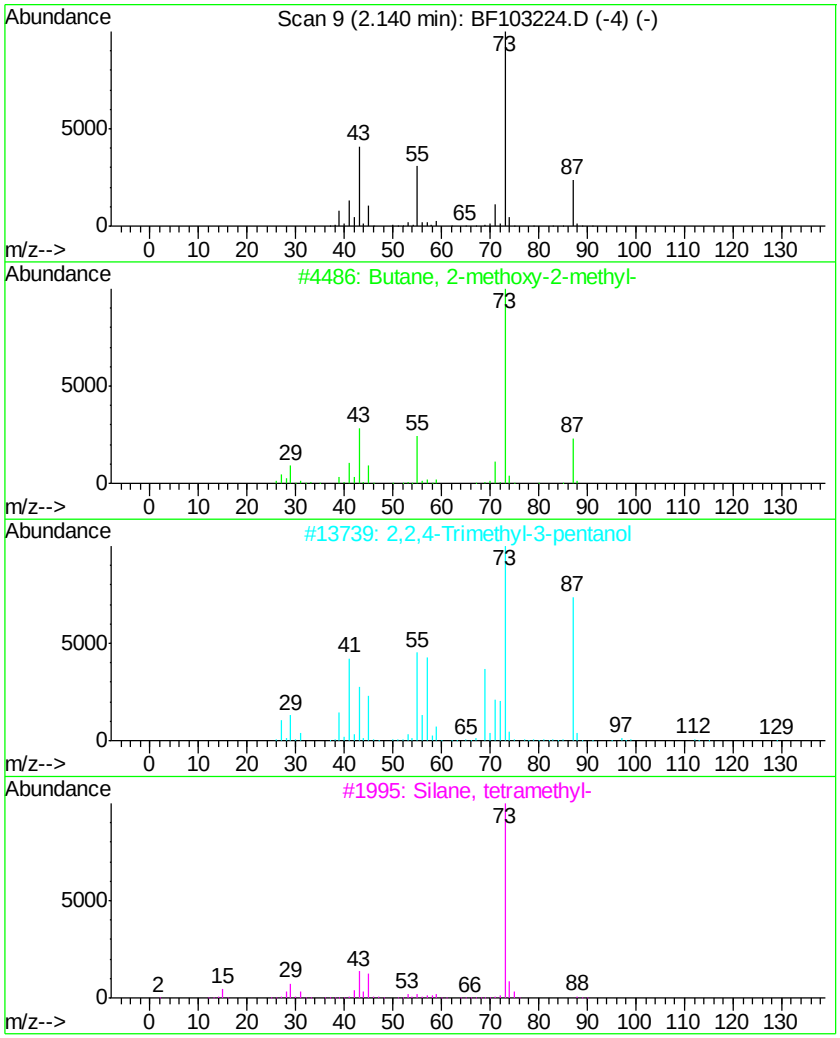
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

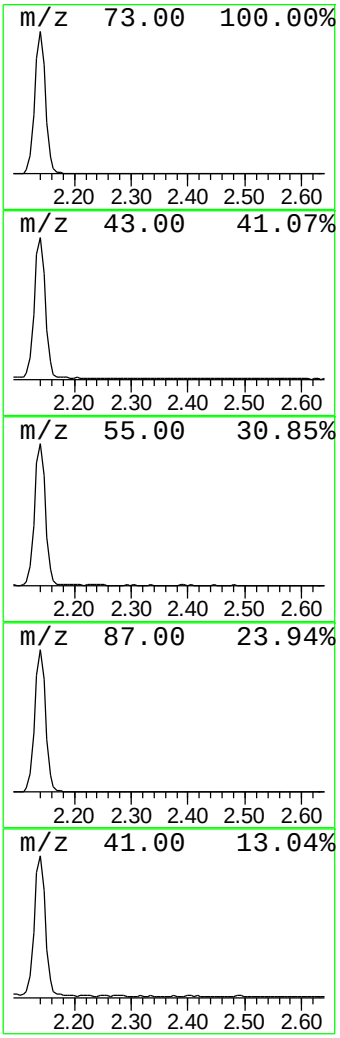
**********

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.14 | 35.03 ng | 1616820 | 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 | 40 |
| 3 | Silane, tetramethyl- | 88 | C4H12Si | 000075-76-3 | 38 |
| 4 | 3-Pentanol, 2,4-dimethyl- | 116 | C7H16O | 000600-36-2 | 37 |
| 5 | 1,3-Dioxolane, 2-methyl- | 88 | C4H8O2 | 000497-26-7 | 23 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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

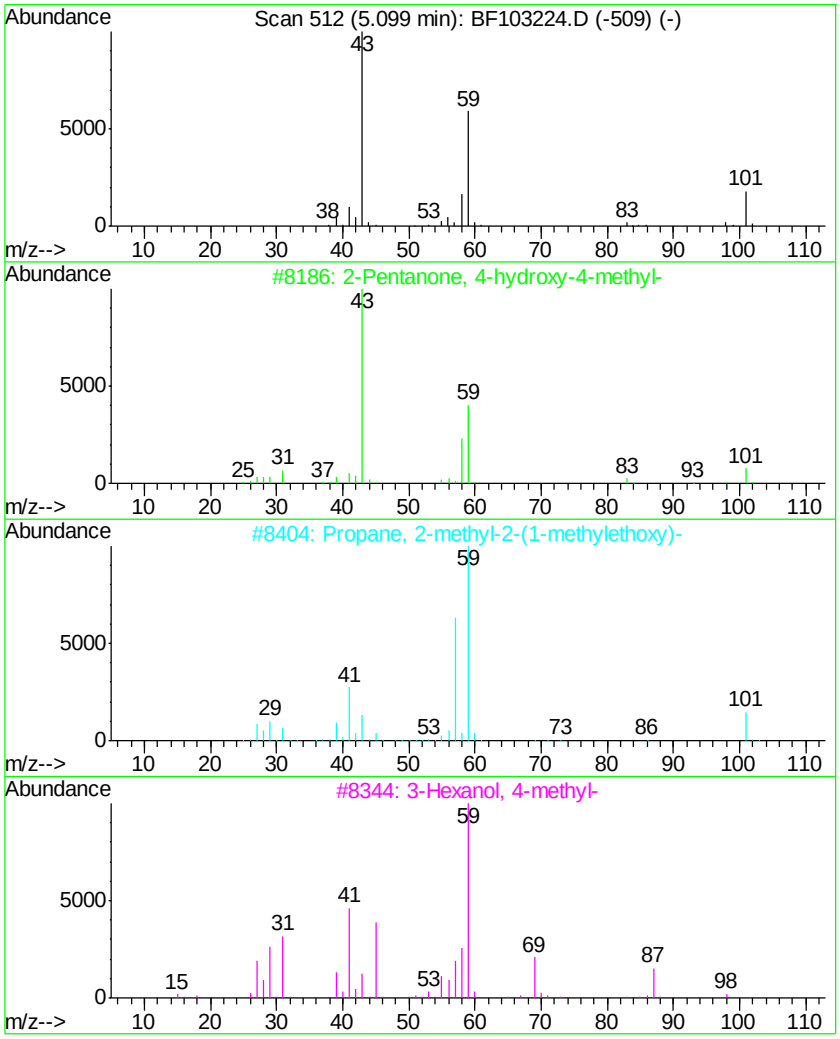
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

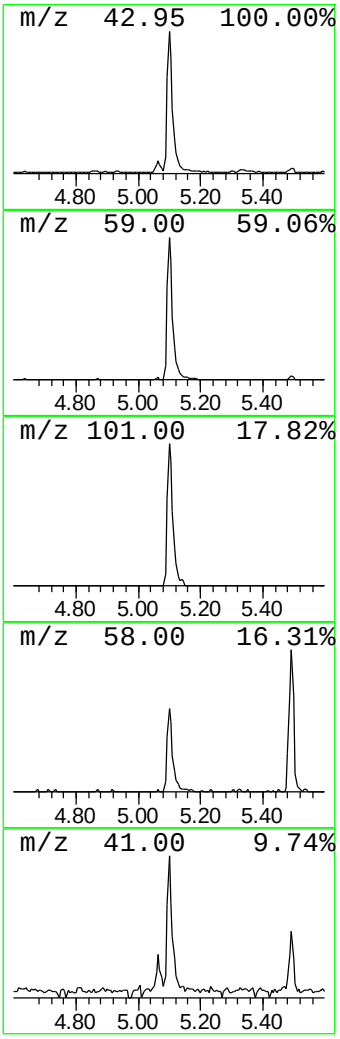
**********

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

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.10 | 5.45 ng | 251432 | 1,4-Dichlorobenzene-d4 | 6.87 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 45 |
| 2 | Propane, 2-methyl-2-(1-methyleth... | 116 | C7H16O | 017348-59-3 | 42 |
| 3 | 3-Hexanol, 4-methyl- | 116 | C7H16O | 000615-29-2 | 33 |
| 4 | Morpholine, 4-methyl- | 101 | C5H11NO | 000109-02-4 | 9 |
| 5 | 3-Hexanol, 4-ethyl- | 130 | C8H18O | 019780-44-0 | 9 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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

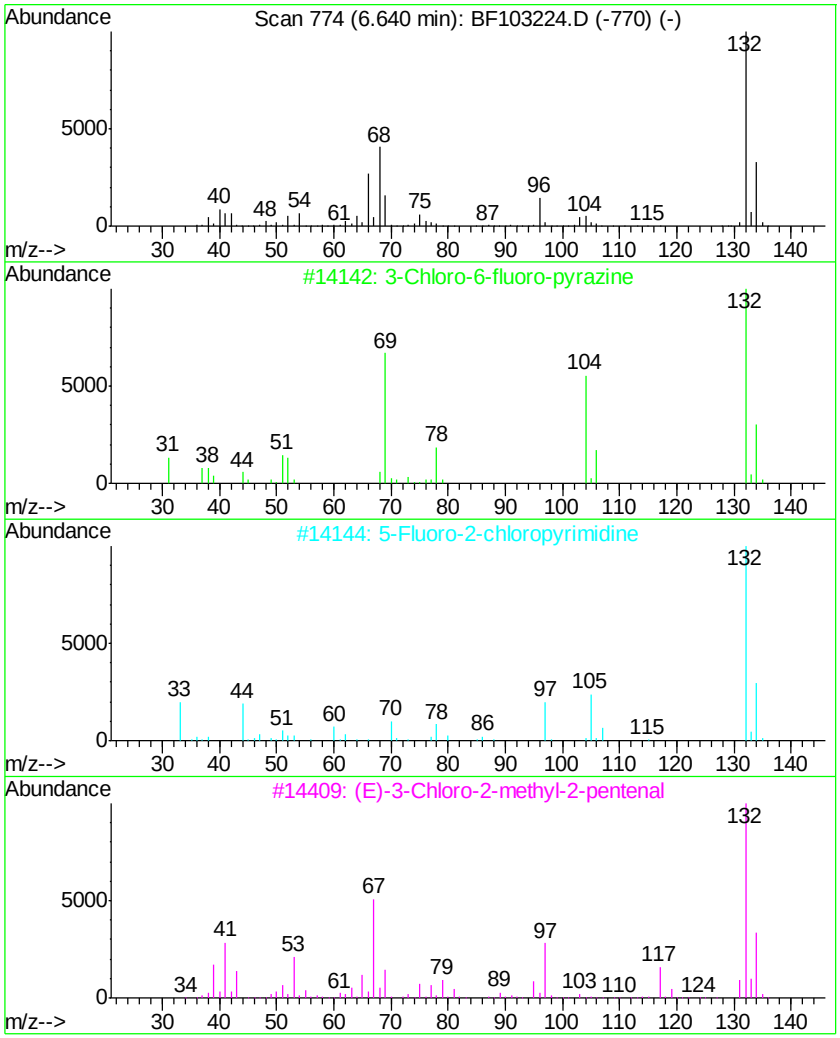
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

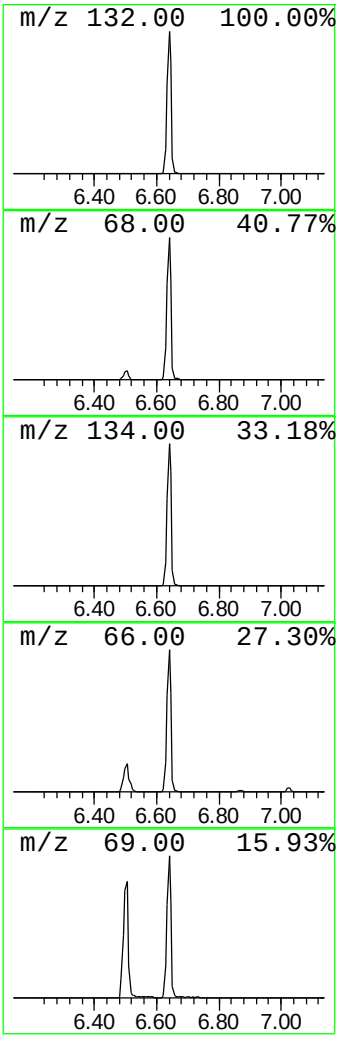
**********

Peak Number 3 unknown6.64 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.64 | 71.87 ng | 3317250 | 1,4-Dichlorobenzene-d4 | 6.87 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 27 |
| 2 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 16 |
| 3 | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO | 031357-76-3 | 16 |
| 4 | 5-Aminoindole | 132 | C8H8N2 | 005192-03-0 | 12 |
| 5 | Tranylcypromine-propionyl | 189 | C12H15NO | 1000123-86-3 | 10 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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

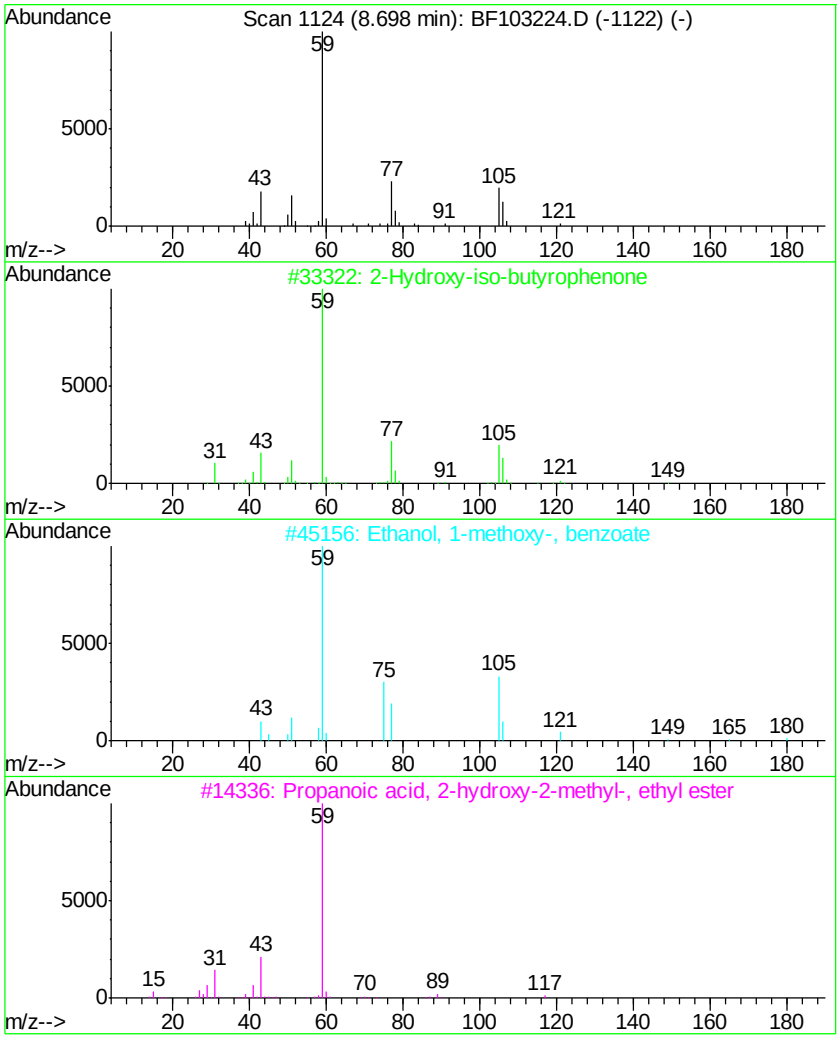
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

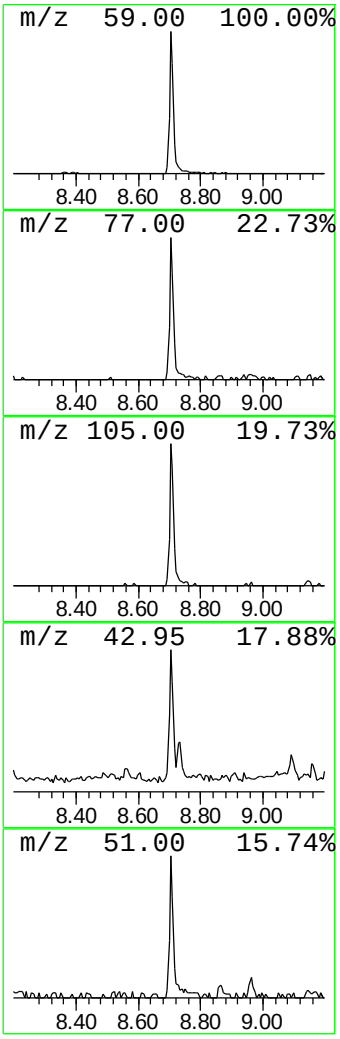
**********

Peak Number 5 2-Hydroxy-iso-butyrophenone Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.70 | 2.53 ng | 143930 | Naphthalene-d8 | 8.15 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Hydroxy-iso-butyrophenone | 164 | C10H12O2 | 007473-98-5 | 90 |
| 2 | Ethanol, 1-methoxy-, benzoate | 180 | C10H12O3 | 051835-44-0 | 72 |
| 3 | Propanoic acid, 2-hydroxy-2-meth... | 132 | C6H12O3 | 000080-55-7 | 9 |
| 4 | Guanidine | 59 | CH5N3 | 000113-00-8 | 7 |
| 5 | Formamide, N-methyl- | 59 | C2H5NO | 000123-39-7 | 5 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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

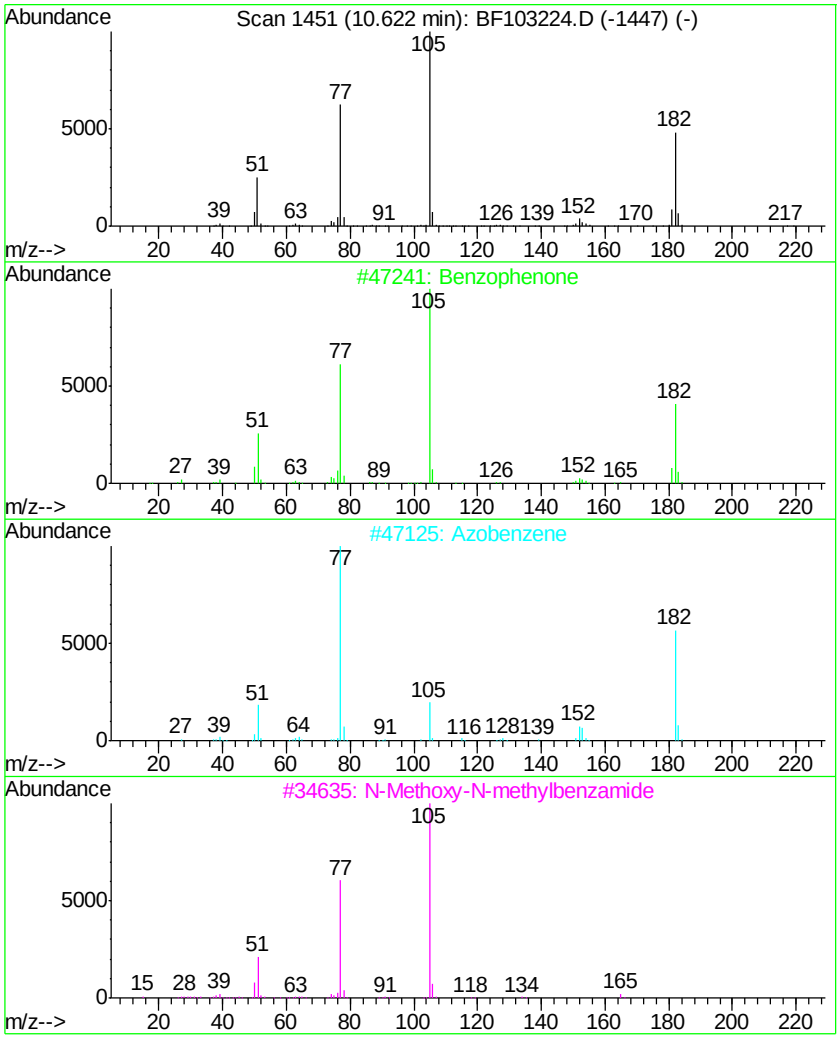
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

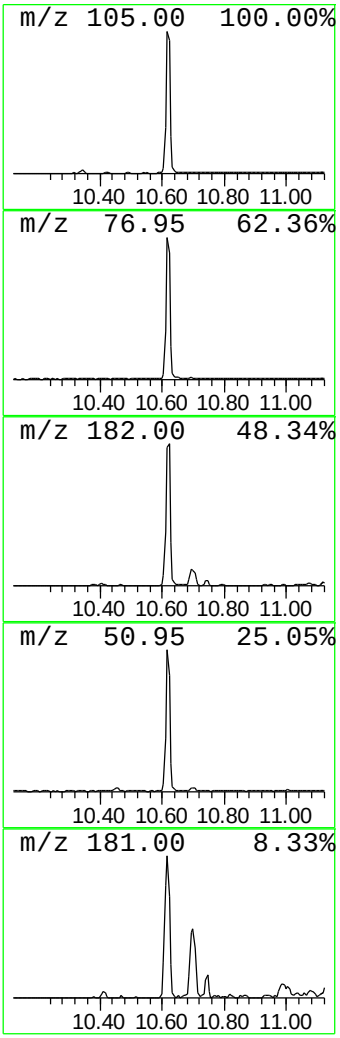
**********

Peak Number 6 Benzophenone Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.62 | 14.30 ng | 746050 | Acenaphthene-d10 | 9.90 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzophenone | 182 | C13H10O | 000119-61-9 | 96 |
| 2 | Azobenzene | 182 | C12H10N2 | 000103-33-3 | 58 |
| 3 | N-Methoxy-N-methylbenzamide | 165 | C9H11NO2 | 006919-61-5 | 47 |
| 4 | Benzeneacetic acid, .alpha.-oxo-... | 164 | C9H8O3 | 015206-55-0 | 47 |
| 5 | Benzoyl bromide | 184 | C7H5BrO | 000618-32-6 | 47 |



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Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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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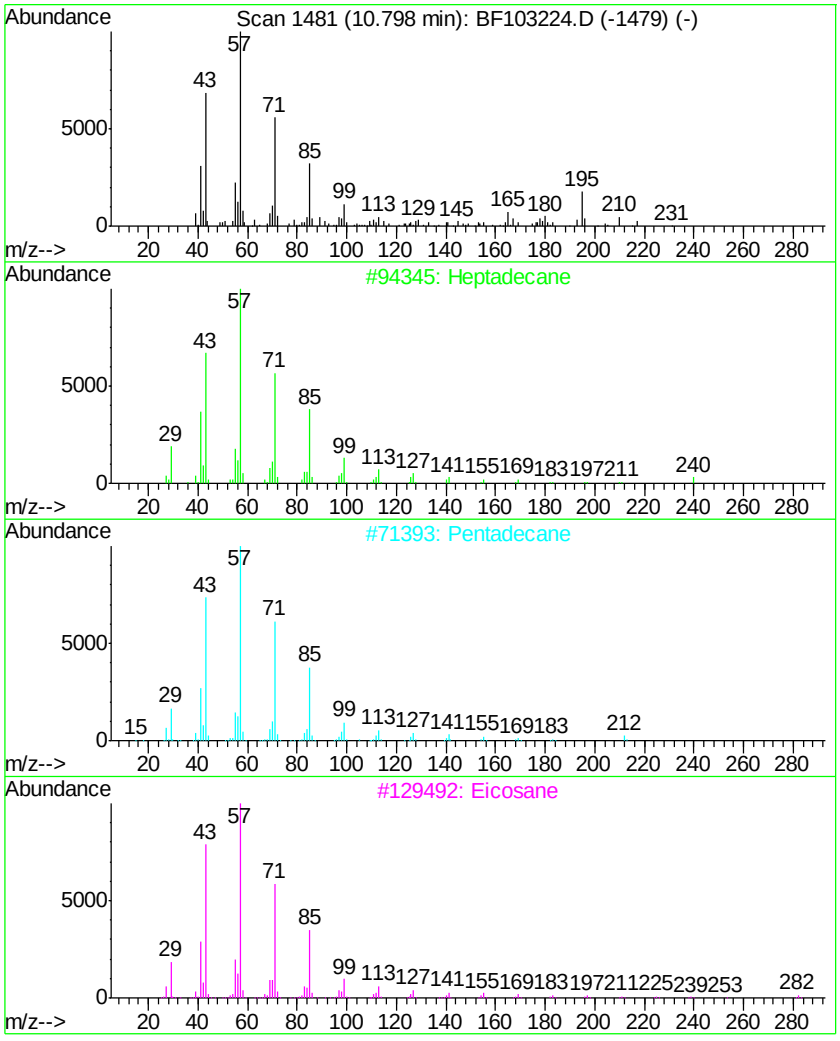
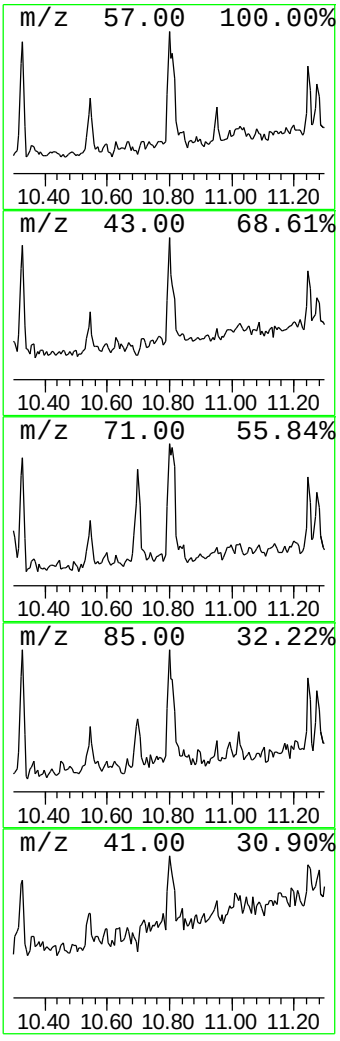
Peak Number 7 Heptadecane Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.80 | 3.94 ng | 186633 | Phenanthrene-d10 | 11.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Heptadecane | 240 | C17H36 | 000629-78-7 | 62 |
| 2 | Pentadecane | 212 | C15H32 | 000629-62-9 | 62 |
| 3 | Eicosane | 282 | C20H42 | 000112-95-8 | 62 |
| 4 | Hexadecane | 226 | C16H34 | 000544-76-3 | 58 |
| 5 | Heptacosane | 380 | C27H56 | 000593-49-7 | 58 |



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Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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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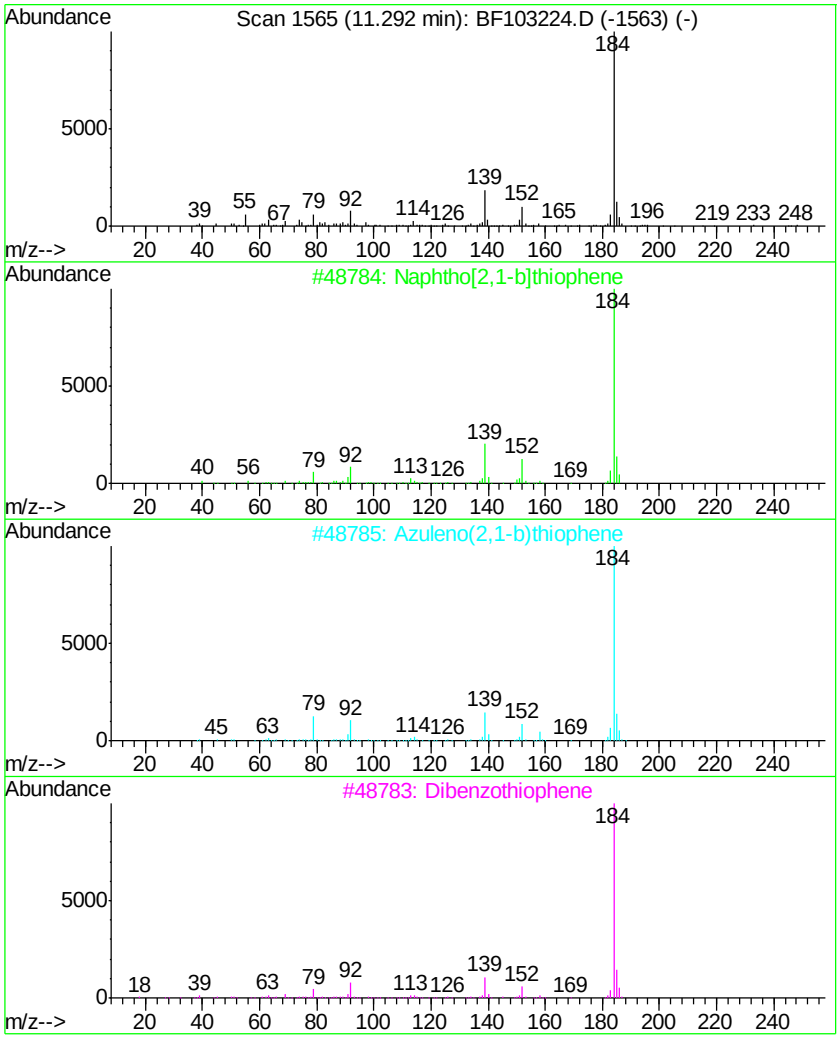
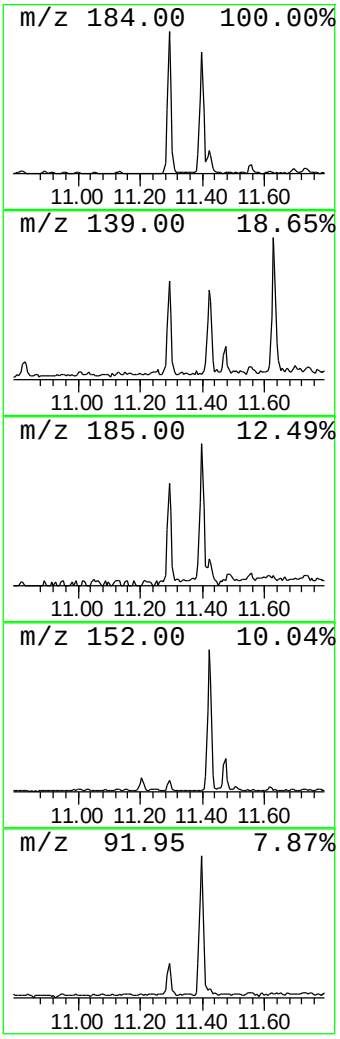
Peak Number 8 Naphtho[2,1-b]thiophene Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.29 | 3.50 ng | 165822 | Phenanthrene-d10 | 11.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphtho[2,1-b]thiophene | 184 | C12H8S | 000233-02-3 | 94 |
| 2 | Azuleno(2,1-b)thiophene | 184 | C12H8S | 000248-13-5 | 91 |
| 3 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 91 |
| 4 | Naphtho[1,2-b]thiophene | 184 | C12H8S | 000234-41-3 | 90 |
| 5 | Naphtho[2,3-b]thiophene | 184 | C12H8S | 000268-77-9 | 90 |



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Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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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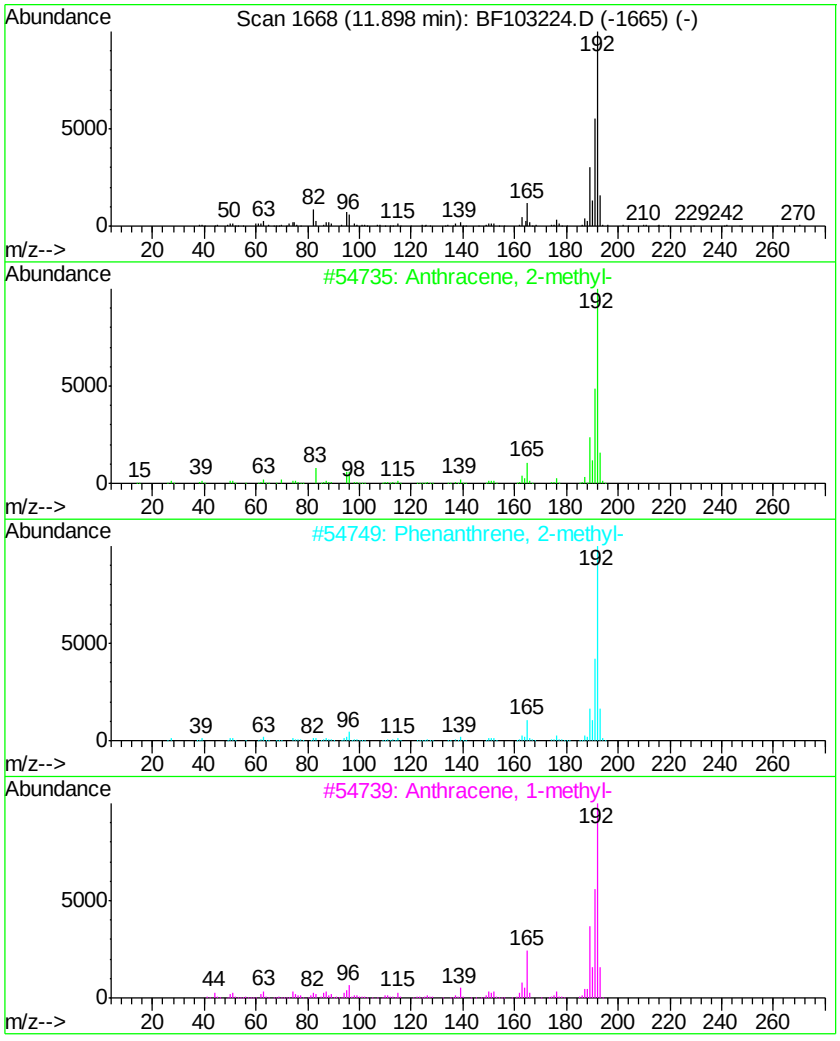
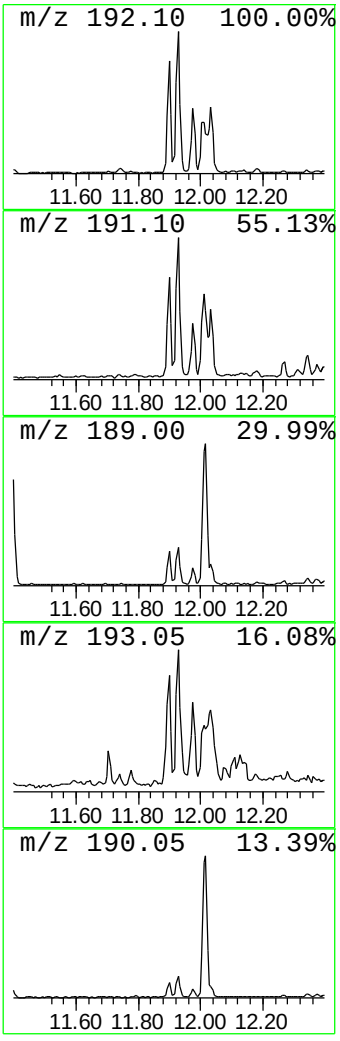
Peak Number 9 Anthracene, 2-methyl- Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.90 | 3.01 ng | 142577 | Phenanthrene-d10 | 11.40 |

| 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 | 95 |
| 4 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 93 |
| 5 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 93 |



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Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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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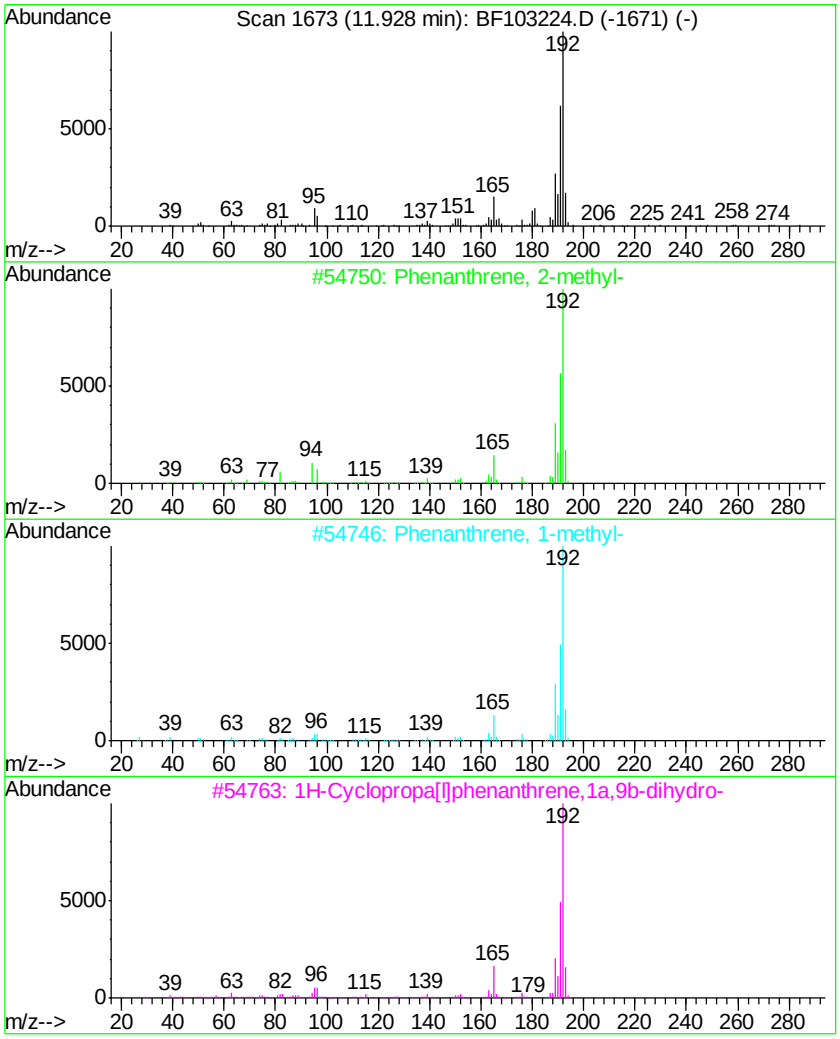
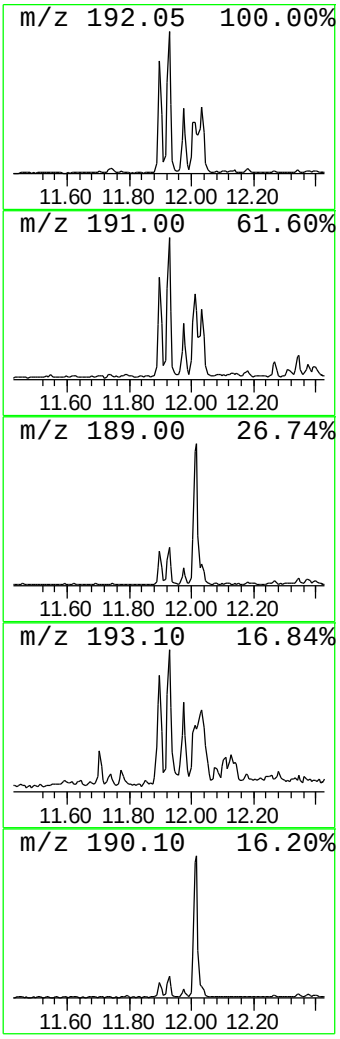
Peak Number 10 Phenanthrene, 2-methyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.93 | 5.53 ng | 261748 | Phenanthrene-d10 | 11.40 |

| 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 | 96 |
| 3 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 95 |
| 4 | 1H-Indene, 1-phenyl- | 192 | C15H12 | 001961-96-2 | 93 |
| 5 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 91 |



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Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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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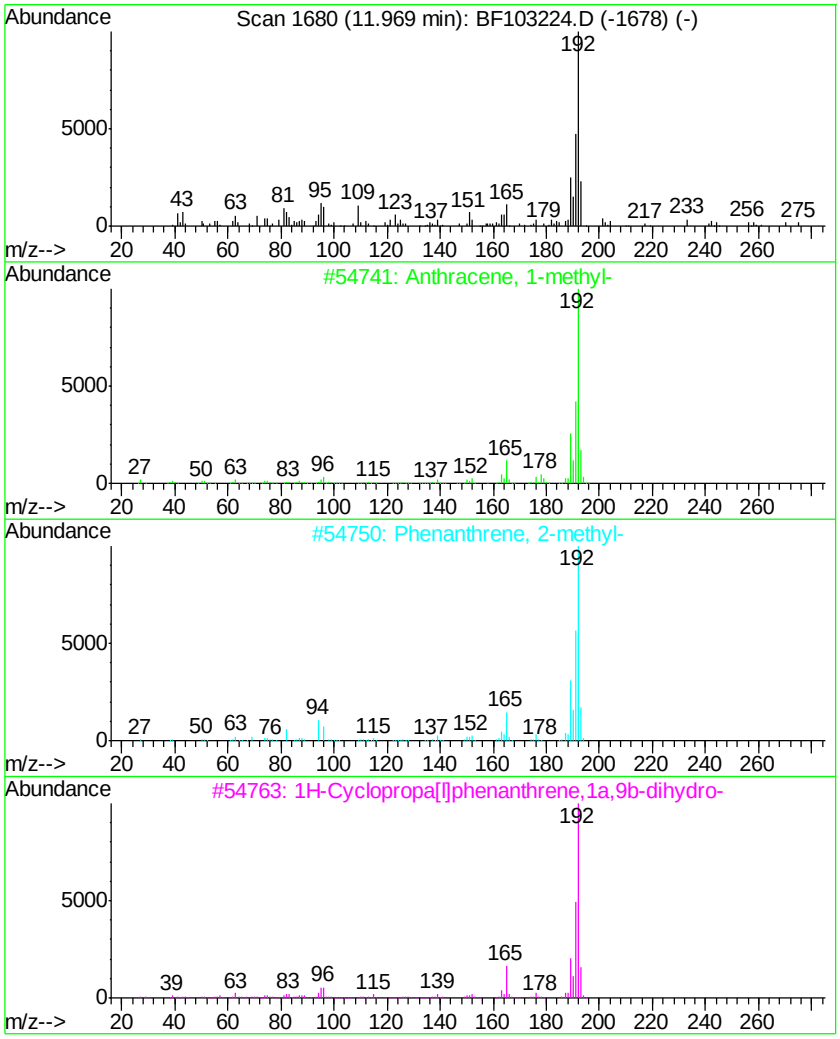
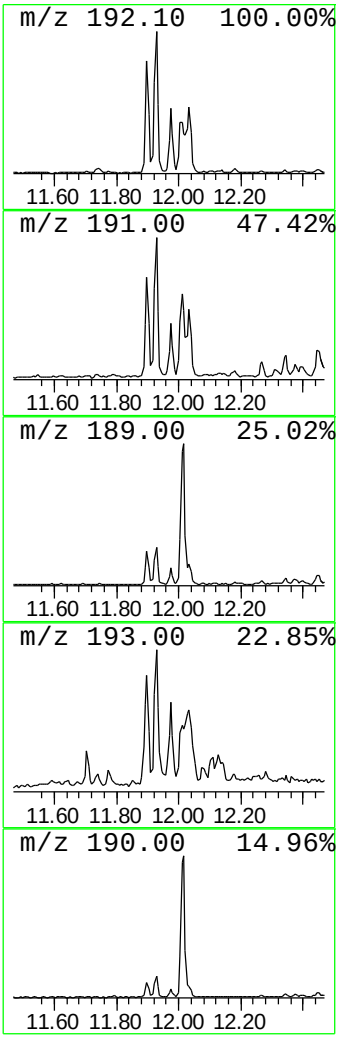
Peak Number 11 Anthracene, 1-methyl- Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.97 | 2.59 ng | 122516 | Phenanthrene-d10 | 11.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 96 |
| 2 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 94 |
| 3 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 94 |
| 4 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 93 |
| 5 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 93 |



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Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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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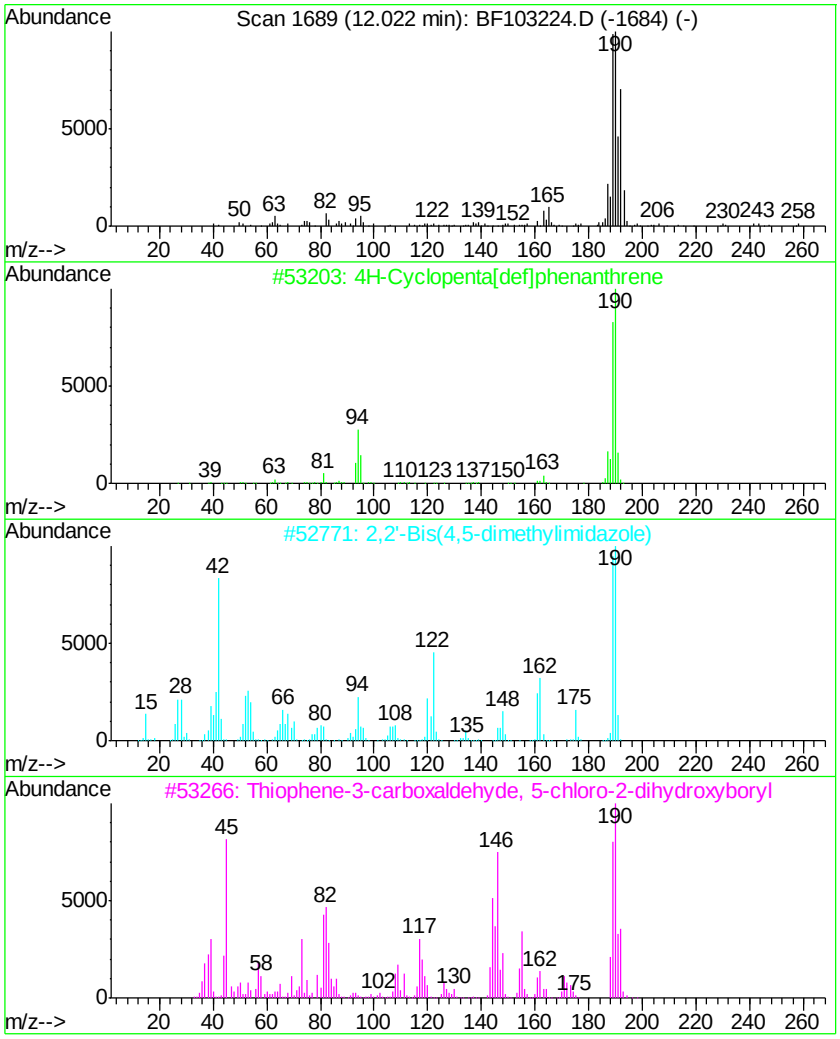
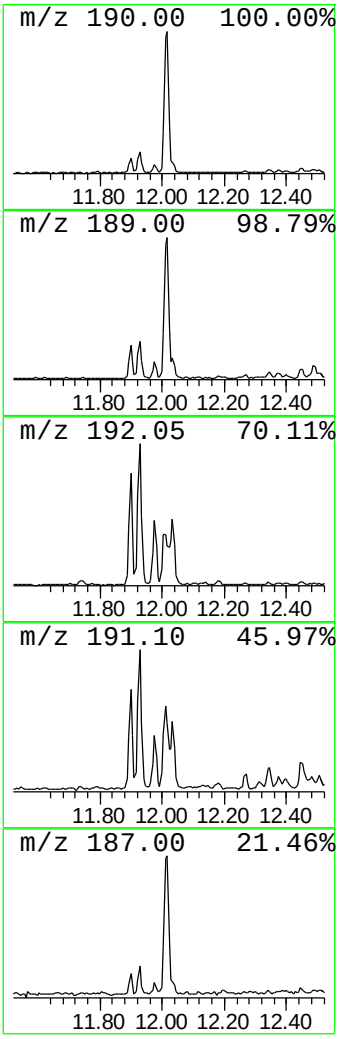
Peak Number 12 4H-Cyclopenta[def]phenanthrene Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.02 | 7.20 ng | 341006 | Phenanthrene-d10 | 11.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 95 |
| 2 | 2,2'-Bis(4,5-dimethylimidazole) | 190 | C10H14N4 | 069286-06-2 | 42 |
| 3 | Thiophene-3-carboxaldehyde, 5-ch... | 190 | C5H4BClO3S | 036155-87-0 | 38 |
| 4 | 6H-Cyclobuta[jk]phenanthrene | 190 | C15H10 | 083469-43-6 | 36 |
| 5 | 1,4-Naphthalenedione, 2,5-dihydr... | 190 | C10H6O4 | 004923-55-1 | 25 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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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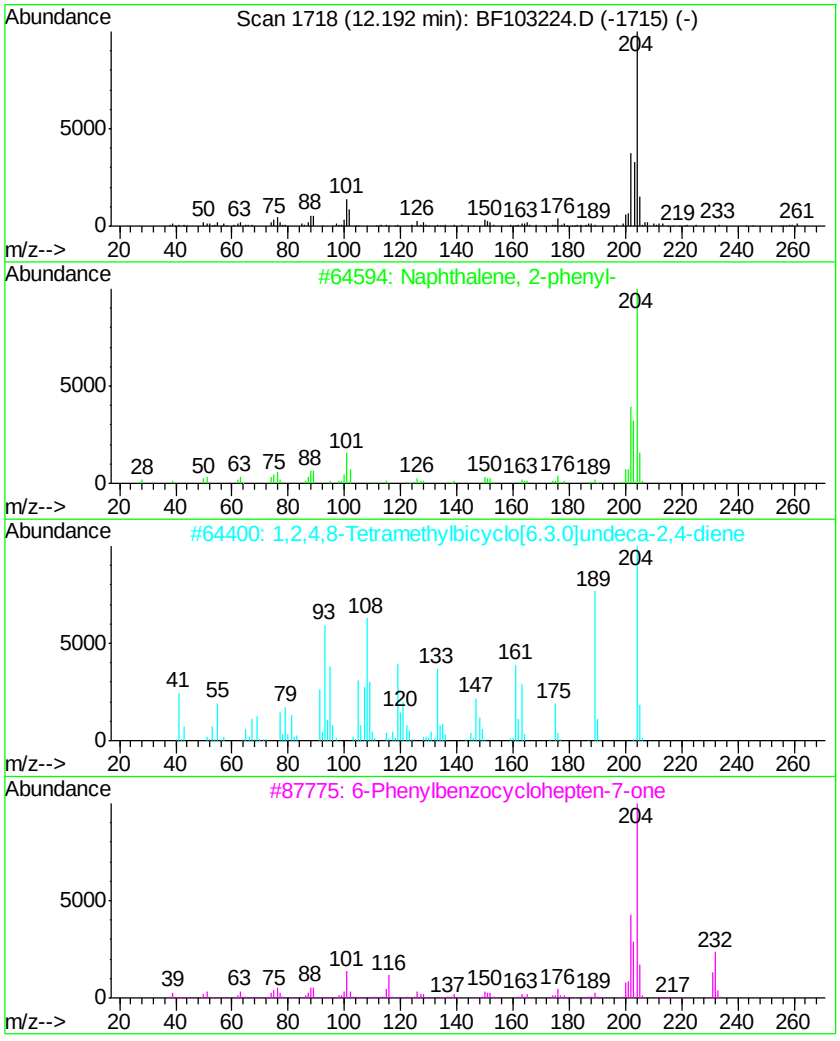
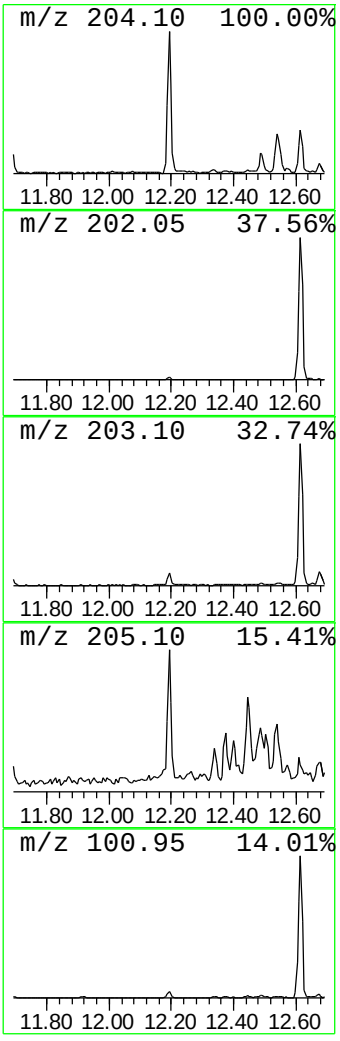
Peak Number 13 Naphthalene, 2-phenyl- Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.19 | 2.62 ng | 123794 | Phenanthrene-d10 | 11.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 90 |
| 2 | 1,2,4,8-Tetramethylbicyclo[6.3.0... | 204 | C15H24 | 137235-51-9 | 86 |
| 3 | 6-Phenylbenzocyclohepten-7-one | 232 | C17H12O | 093327-56-1 | 86 |
| 4 | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12 | 006572-60-7 | 81 |
| 5 | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24 | 005672-97-9 | 78 |



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Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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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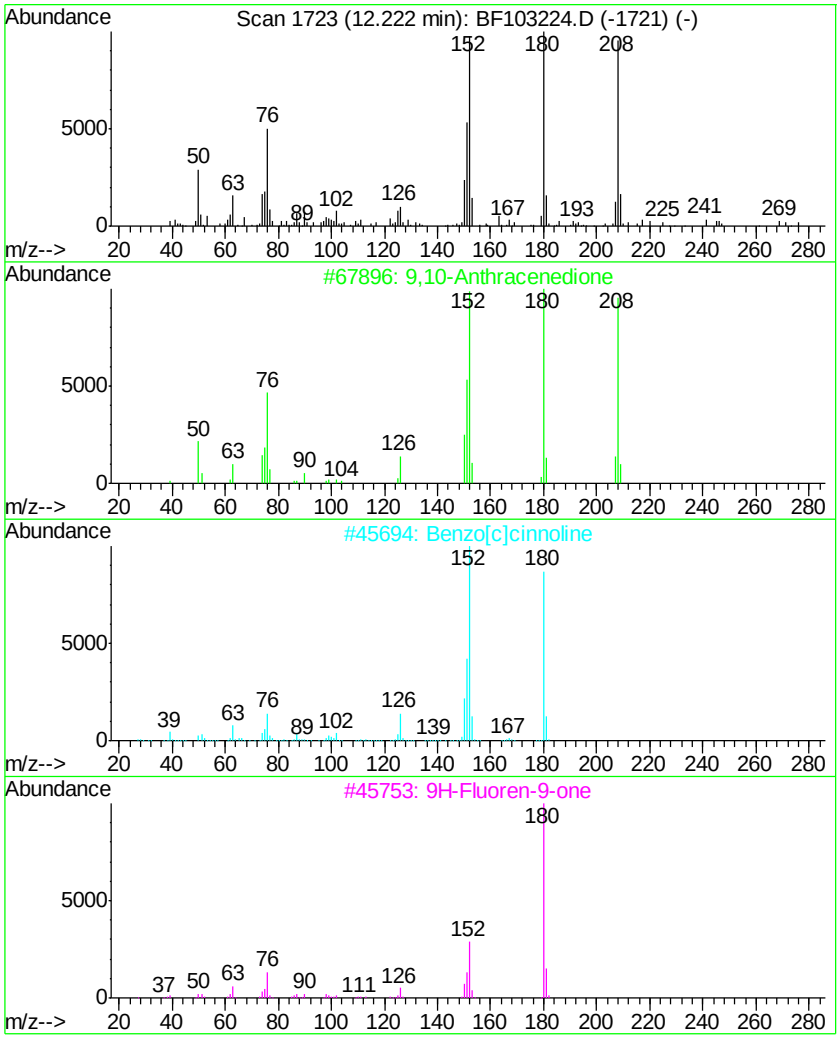
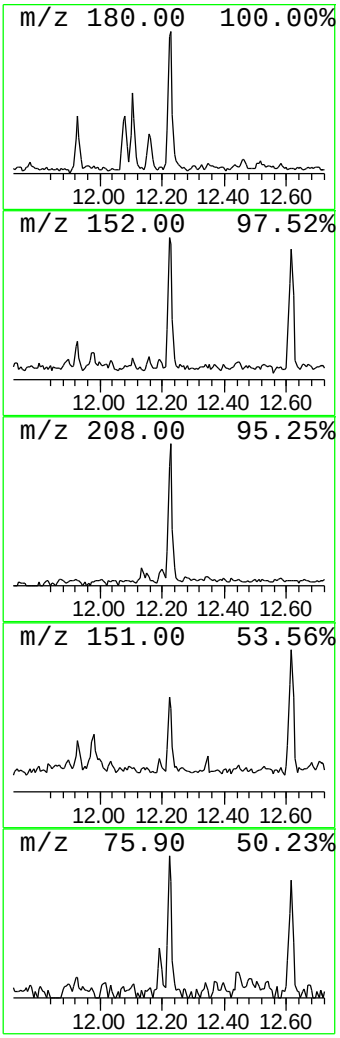
Peak Number 14 9,10-Anthracenedione Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.22 | 2.39 ng | 112962 | Phenanthrene-d10 | 11.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 97 |
| 2 | Benzo[c]cinnoline | 180 | C12H8N2 | 000230-17-1 | 83 |
| 3 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 83 |
| 4 | 1H-Phenalen-1-one | 180 | C13H8O | 000548-39-0 | 64 |
| 5 | Benzo[h]cinnoline | 180 | C12H8N2 | 000230-31-9 | 60 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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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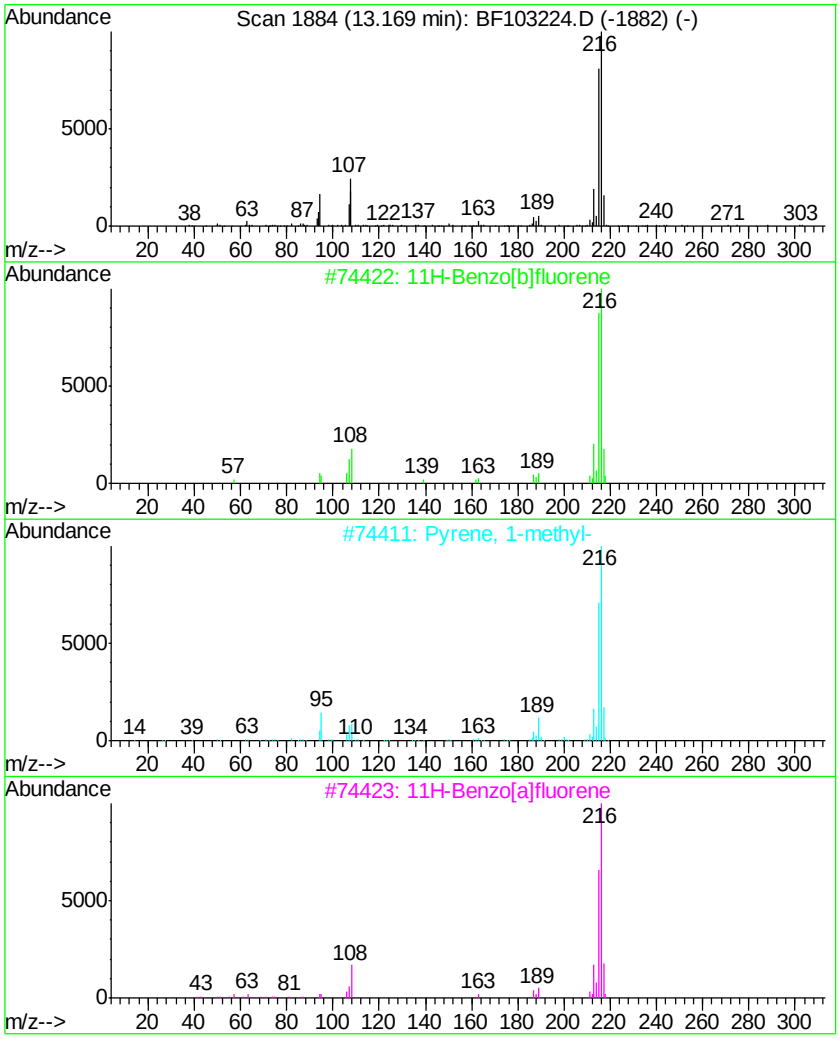
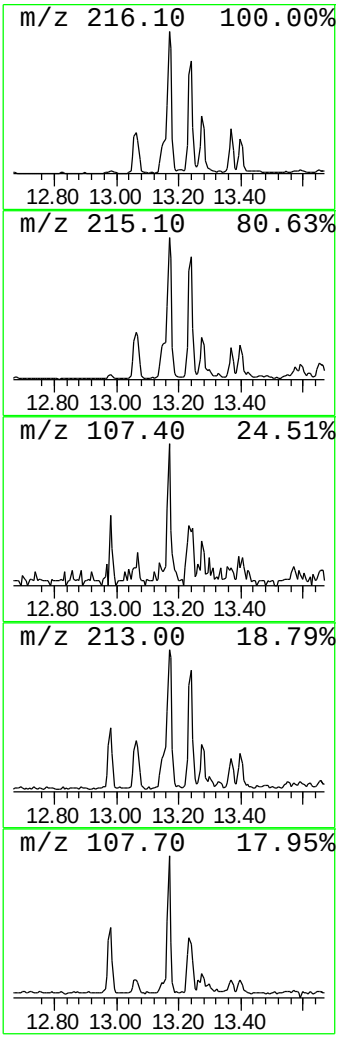
Peak Number 15 11H-Benzo[b]fluorene Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.17 | 2.74 ng | 303341 | Chrysene-d12 | 14.05 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 93 |
| 2 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 87 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 81 |
| 4 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 81 |
| 5 | 7H-Benzo[c]fluorene | 216 | C17H12 | 000205-12-9 | 74 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
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Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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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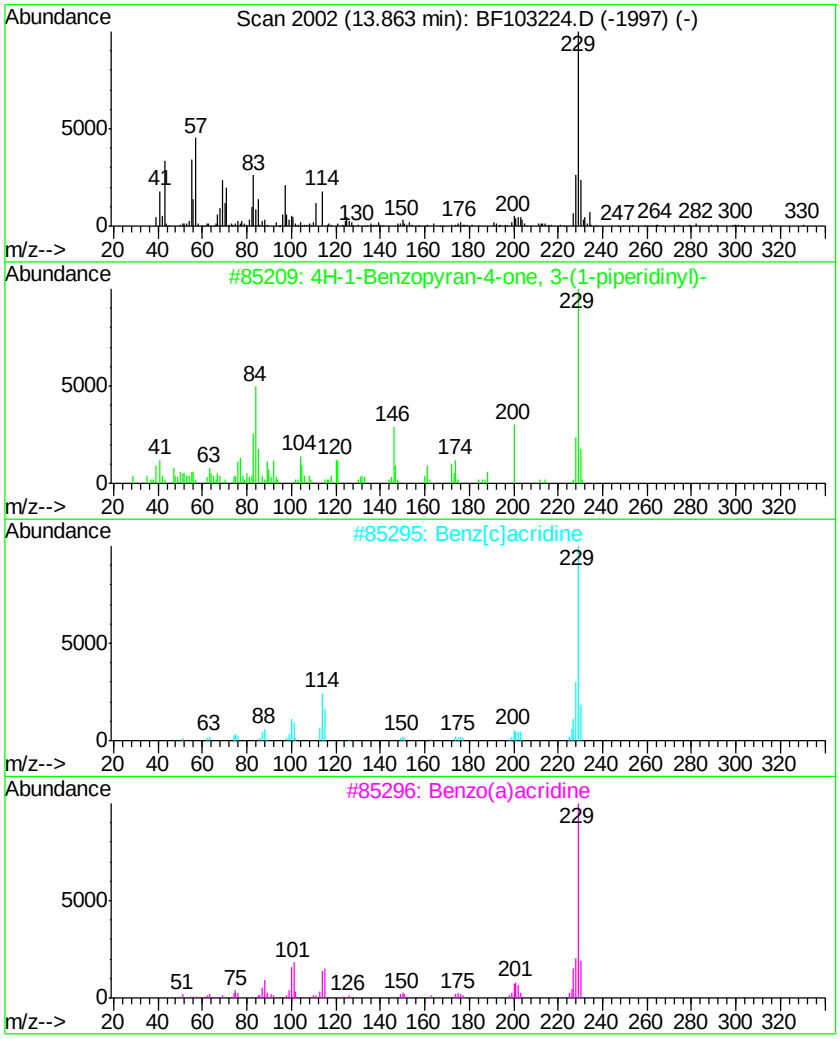
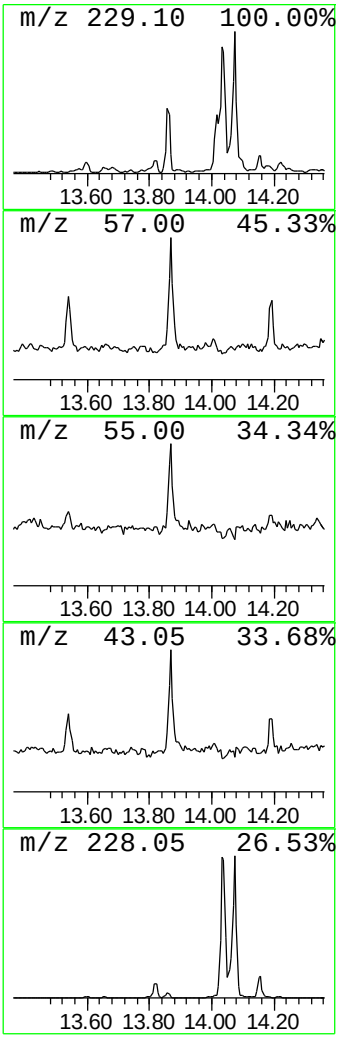
Peak Number 16 4H-1-Benzopyran-4-one, 3-(1... Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.86 | 3.97 ng | 439168 | Chrysene-d12 | 14.05 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-1-Benzopyran-4-one, 3-(1-pipe... | 229 | C14H15NO2 | 040302-79-2 | 53 |
| 2 | Benz[c]acridine | 229 | C17H11N | 000225-51-4 | 46 |
| 3 | Benzo(a)acridine | 229 | C17H11N | 000225-11-6 | 40 |
| 4 | Naphtho(2,1-f)quinoline | 229 | C17H11N | 000218-08-6 | 40 |
| 5 | 4-Acetyl-2,3-O-acetone-d-mannosan | 244 | C11H16O6 | 014440-55-2 | 38 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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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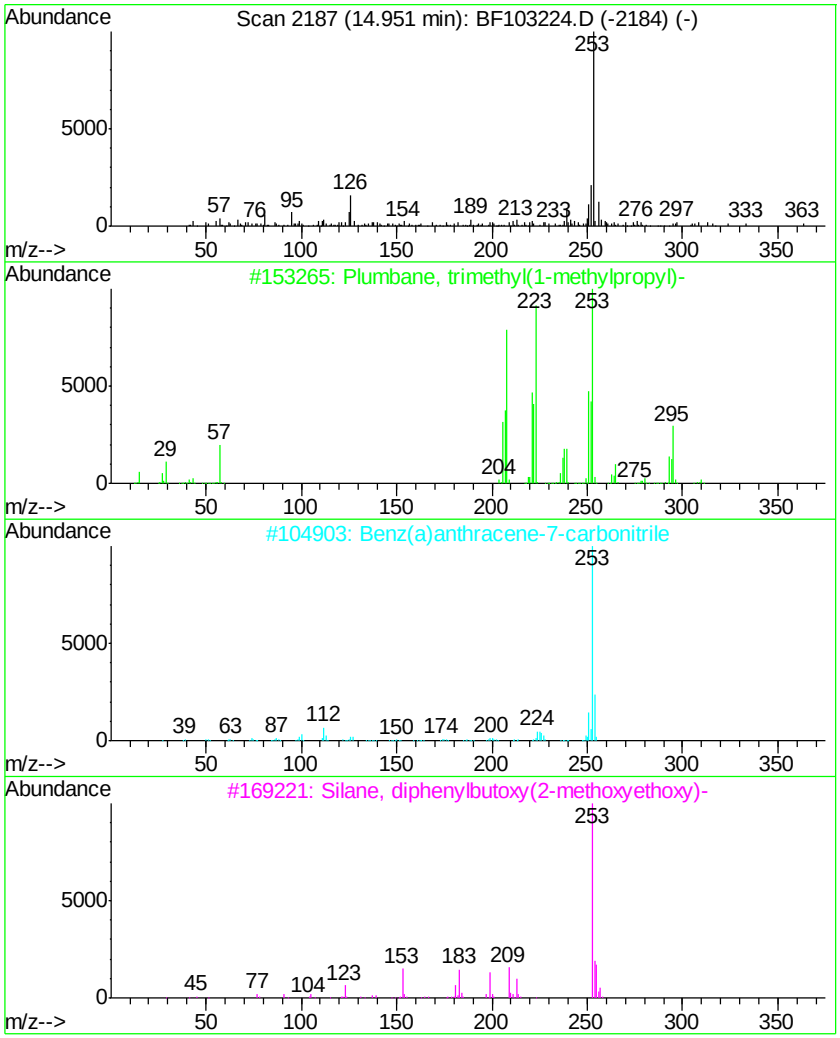
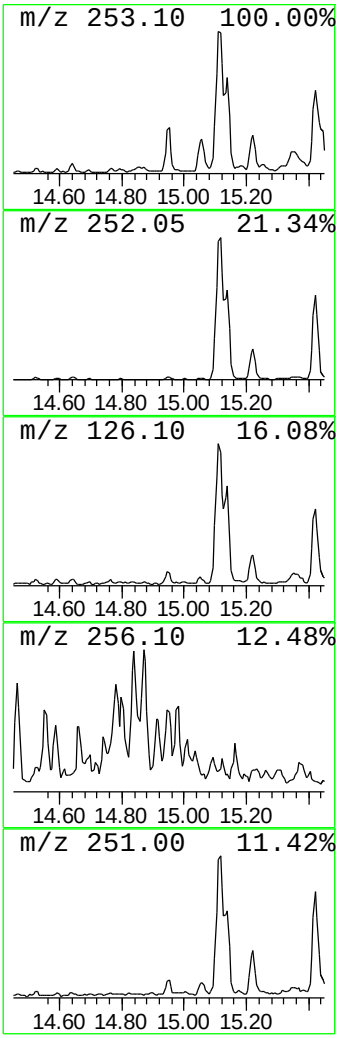
Peak Number 17 Plumbane, trimethyl(1-methy... Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.95 | 3.17 ng | 144475 | Perylene-d12 | 15.55 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Plumbane, trimethyl(1-methylprop... | 310 | C7H18Pb | 054964-76-0 | 53 |
| 2 | Benz(a)anthracene-7-carbonitrile | 253 | C19H11N | 007476-08-6 | 47 |
| 3 | Silane, diphenylbutoxy(2-methoxy... | 330 | C19H26O3Si | 1000367-72-3 | 25 |
| 4 | Silane, diphenyl(2-ethoxyethoxy)... | 330 | C19H26O3Si | 1000367-65-8 | 23 |
| 5 | Stannane, tributylfluoro- | 310 | C12H27FSn | 001983-10-4 | 10 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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

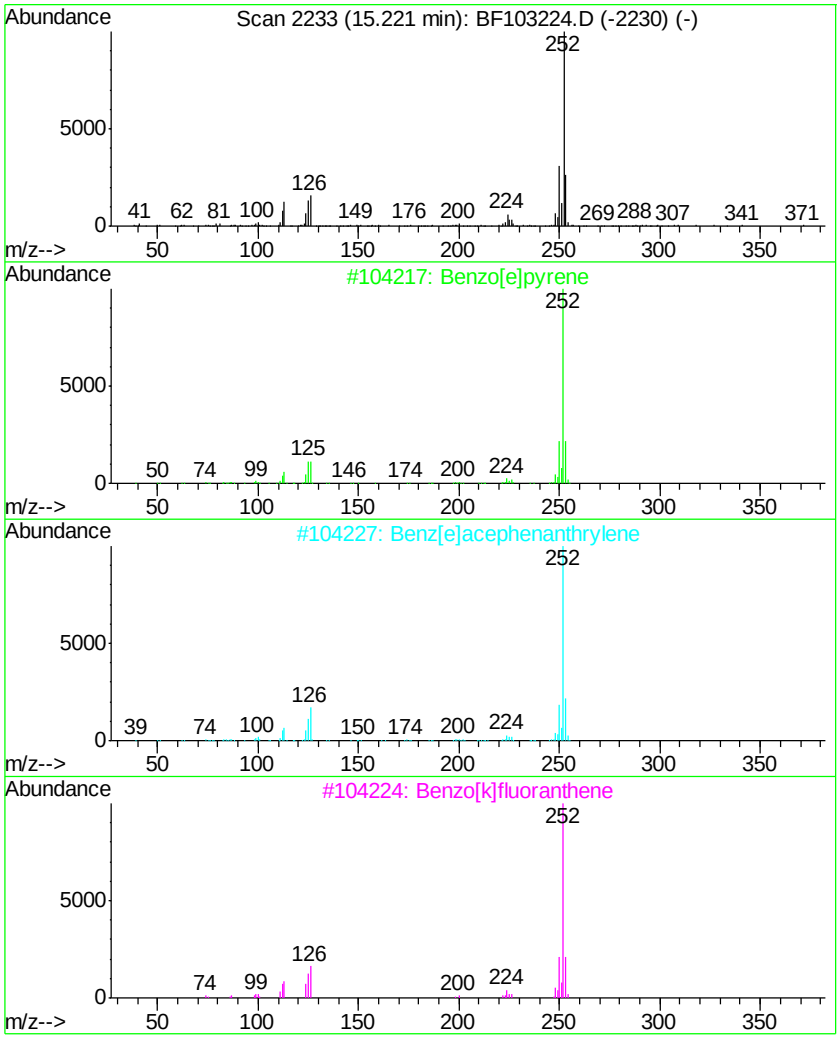
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

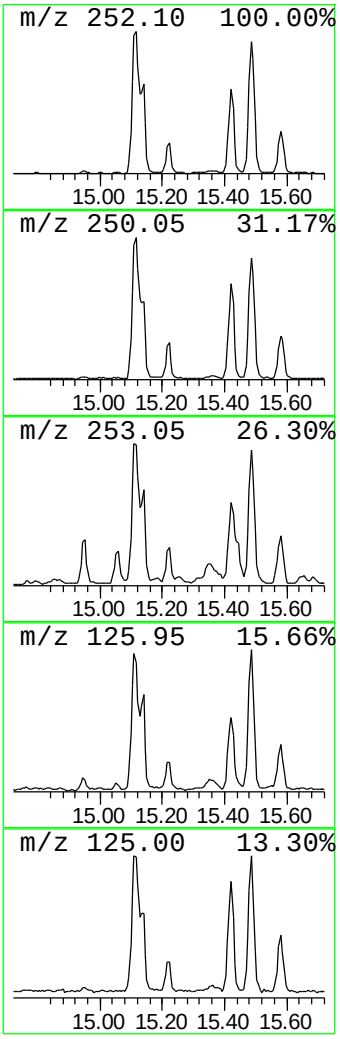
**********

Peak Number 18 Benzo[e]pyrene Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.22 | 6.14 ng | 279612 | Perylene-d12 | 15.55 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 98 |
| 2 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 96 |
| 3 | Benzo[k]fluoranthene | 252 | C20H12 | 000207-08-9 | 95 |
| 4 | Benzo[a]pyrene | 252 | C20H12 | 000050-32-8 | 94 |
| 5 | Perylene | 252 | C20H12 | 000198-55-0 | 89 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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

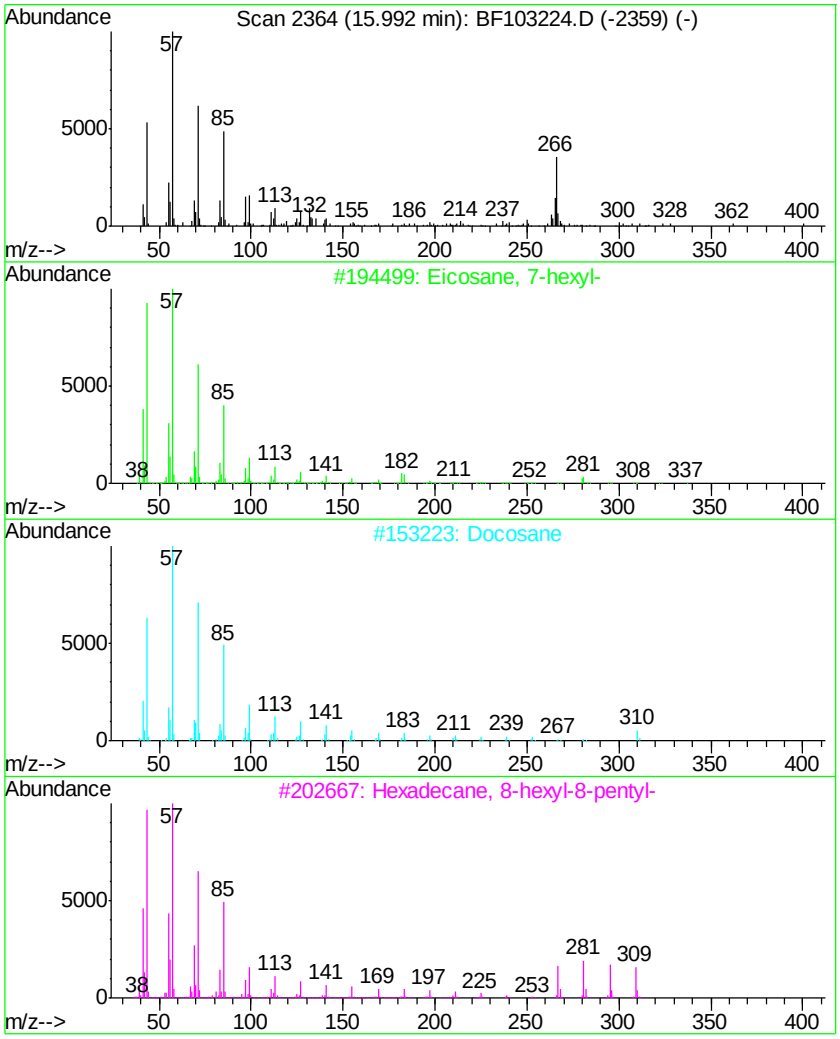
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

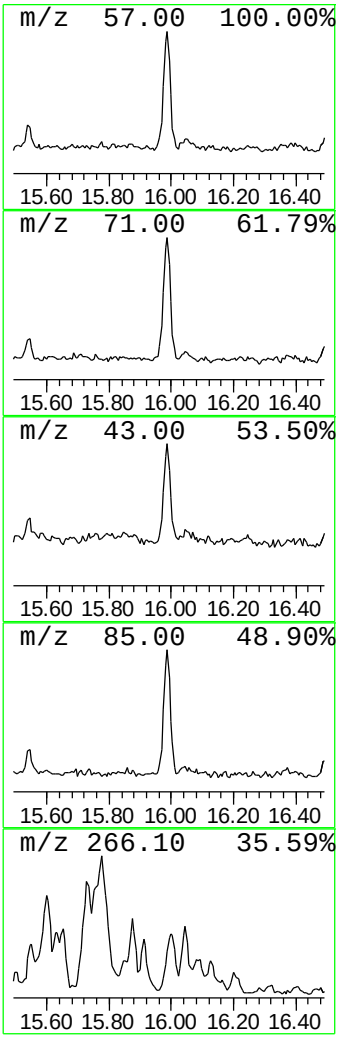
**********

Peak Number 20 Eicosane, 7-hexyl- Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.99 | 5.25 ng | 239251 | Perylene-d12 | 15.55 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Eicosane, 7-hexyl- | 366 | C26H54 | 055333-99-8 | 80 |
| 2 | Docosane | 310 | C22H46 | 000629-97-0 | 80 |
| 3 | Hexadecane, 8-hexyl-8-pentyl- | 380 | C27H56 | 055282-29-6 | 72 |
| 4 | Nonadecane | 268 | C19H40 | 000629-92-5 | 72 |
| 5 | Sulfurous acid, 2-ethylhexyl hex... | 278 | C14H30O3S | 1000309-20-2 | 58 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF022618\
Data File : BF103224.D
Acq On : 26 Feb 2018 18:26
Operator : SJ/JU
Sample : J1691-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

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

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... | 2.14 | 35.0 | ng | 1616820 | 1 | 6.87 | 923090 | 20.0 |
| 2-Pentanone, 4-hy... | 5.10 | 5.5 | ng | 251432 | 1 | 6.87 | 923090 | 20.0 |
| unknown6.64 | 6.64 | 71.9 | ng | 3317250 | 1 | 6.87 | 923090 | 20.0 |
| 2-Hydroxy-iso-but... | 8.70 | 2.5 | ng | 143930 | 2 | 8.15 | 1135850 | 20.0 |
| Benzophenone | 10.62 | 14.3 | ng | 746050 | 3 | 9.90 | 1043330 | 20.0 |
| Heptadecane | 10.80 | 3.9 | ng | 186633 | 4 | 11.40 | 946784 | 20.0 |
| Naphtho[2,1-b]thi... | 11.29 | 3.5 | ng | 165822 | 4 | 11.40 | 946784 | 20.0 |
| Anthracene, 2-met... | 11.90 | 3.0 | ng | 142577 | 4 | 11.40 | 946784 | 20.0 |
| Phenanthrene, 2-m... | 11.93 | 5.5 | ng | 261748 | 4 | 11.40 | 946784 | 20.0 |
| Anthracene, 1-met... | 11.97 | 2.6 | ng | 122516 | 4 | 11.40 | 946784 | 20.0 |
| 4H-Cyclopenta[def... | 12.02 | 7.2 | ng | 341006 | 4 | 11.40 | 946784 | 20.0 |
| Naphthalene, 2-ph... | 12.19 | 2.6 | ng | 123794 | 4 | 11.40 | 946784 | 20.0 |
| 9,10-Anthracenedione | 12.22 | 2.4 | ng | 112962 | 4 | 11.40 | 946784 | 20.0 |
| 11H-Benzo[b]fluorene | 13.17 | 2.7 | ng | 303341 | 5 | 14.05 | 2214320 | 20.0 |
| 4H-1-Benzopyran-4... | 13.86 | 4.0 | ng | 439168 | 5 | 14.05 | 2214320 | 20.0 |
| Plumbane, trimeth... | 14.95 | 3.2 | ng | 144475 | 6 | 15.55 | 911342 | 20.0 |
| Benzo[e]pyrene | 15.22 | 6.1 | ng | 279612 | 6 | 15.55 | 911342 | 20.0 |
| Eicosane, 7-hexyl- | 15.99 | 5.3 | ng | 239251 | 6 | 15.55 | 911342 | 20.0 |