LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120319\
Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

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-BF111319.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 | 2.157 | 4 | 12 | 20 | rVB | 593732 | 768903 | 23.61% | 1.577% |
| 2 | 5.093 | 505 | 511 | 520 | rVB | 429292 | 554436 | 17.03% | 1.137% |
| 3 | 5.493 | 575 | 579 | 582 | rBV | 2924733 | 2760879 | 84.78% | 5.663% |
| 4 | 6.504 | 746 | 751 | 754 | rBV | 2878711 | 2935487 | 90.14% | 6.021% |
| 5 | 6.645 | 771 | 775 | 778 | rBV | 3501421 | 3141009 | 96.45% | 6.442% |
| 6 | 6.875 | 811 | 814 | 818 | rBV | 996643 | 787537 | 24.18% | 1.615% |
| 7 | 7.034 | 837 | 841 | 844 | rBV | 3004138 | 2393714 | 73.51% | 4.910% |
| 8 | 7.439 | 905 | 910 | 913 | rBV | 2090625 | 1868059 | 57.36% | 3.831% |
| 9 | 8.163 | 1029 | 1033 | 1036 | rBV | 1229993 | 1037396 | 31.86% | 2.128% |
| 10 | 9.239 | 1212 | 1216 | 1220 | rBV | 3590612 | 3256472 | 100.00% | 6.679% |
| 11 | 9.633 | 1280 | 1283 | 1287 | rBV | 654714 | 500025 | 15.35% | 1.026% |
| 12 | 9.786 | 1305 | 1309 | 1312 | rBV | 81673 | 73523 | 2.26% | 0.151% |
| 13 | 9.839 | 1313 | 1318 | 1325 | rVV6 | 21319 | 50286 | 1.54% | 0.103% |
| 14 | 9.928 | 1329 | 1333 | 1336 | rVV | 1328919 | 1223913 | 37.58% | 2.510% |
| 15 | 9.957 | 1336 | 1338 | 1341 | rVB | 92803 | 72650 | 2.23% | 0.149% |
| 16 | 10.128 | 1362 | 1367 | 1371 | rBV | 101774 | 95801 | 2.94% | 0.196% |
| 17 | 10.475 | 1422 | 1426 | 1431 | rVB | 95502 | 93948 | 2.88% | 0.193% |
| 18 | 10.633 | 1450 | 1453 | 1455 | rBV | 47141 | 38972 | 1.20% | 0.080% |
| 19 | 10.716 | 1463 | 1467 | 1474 | rBV | 2893273 | 2635404 | 80.93% | 5.405% |
| 20 | 10.839 | 1483 | 1488 | 1495 | rVB7 | 37460 | 49075 | 1.51% | 0.101% |
| 21 | 11.027 | 1513 | 1520 | 1522 | rBV4 | 30240 | 48853 | 1.50% | 0.100% |
| 22 | 11.151 | 1537 | 1541 | 1543 | rBV3 | 43813 | 45478 | 1.40% | 0.093% |
| 23 | 11.222 | 1550 | 1553 | 1557 | rVB | 126628 | 110165 | 3.38% | 0.226% |
| 24 | 11.275 | 1557 | 1562 | 1564 | rBV4 | 46235 | 74072 | 2.27% | 0.152% |
| 25 | 11.310 | 1566 | 1568 | 1573 | rVB | 101174 | 98466 | 3.02% | 0.202% |
| 26 | 11.416 | 1583 | 1586 | 1588 | rBV | 1402345 | 1258059 | 38.63% | 2.580% |
| 27 | 11.439 | 1588 | 1590 | 1594 | rVV | 1589164 | 1441790 | 44.27% | 2.957% |
| 28 | 11.492 | 1594 | 1599 | 1602 | rVV | 273927 | 277462 | 8.52% | 0.569% |
| 29 | 11.522 | 1602 | 1604 | 1608 | rVB2 | 44305 | 49233 | 1.51% | 0.101% |
| 30 | 11.645 | 1619 | 1625 | 1628 | rBV2 | 173532 | 198879 | 6.11% | 0.408% |
| 31 | 11.710 | 1633 | 1636 | 1640 | rVV3 | 53255 | 65032 | 2.00% | 0.133% |
| 32 | 11.751 | 1640 | 1643 | 1647 | rVB3 | 42344 | 45070 | 1.38% | 0.092% |
| 33 | 11.874 | 1660 | 1664 | 1666 | rBV3 | 40135 | 39681 | 1.22% | 0.081% |
| 34 | 11.922 | 1668 | 1672 | 1673 | rVV | 207131 | 188093 | 5.78% | 0.386% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120319\
Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

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-BF111319.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 11.945 | 1673 | 1676 | 1682 | rVV2 | 892009 | 888888 | 27.30% | 1.823% |
| 36 | 11.998 | 1682 | 1685 | 1688 | rVV | 88319 | 85140 | 2.61% | 0.175% |
| 37 | 12.033 | 1688 | 1691 | 1693 | rVV2 | 263920 | 272173 | 8.36% | 0.558% |
| 38 | 12.057 | 1693 | 1695 | 1699 | rVB | 152650 | 121166 | 3.72% | 0.249% |
| 39 | 12.104 | 1699 | 1703 | 1704 | rBV3 | 32879 | 41307 | 1.27% | 0.085% |
| 40 | 12.216 | 1719 | 1722 | 1724 | rBV | 166708 | 130124 | 4.00% | 0.267% |
| 41 | 12.239 | 1724 | 1726 | 1730 | rVB | 209516 | 176562 | 5.42% | 0.362% |
| 42 | 12.369 | 1745 | 1748 | 1750 | rVB2 | 54760 | 45570 | 1.40% | 0.093% |
| 43 | 12.398 | 1750 | 1753 | 1755 | rBV | 45721 | 38768 | 1.19% | 0.080% |
| 44 | 12.474 | 1762 | 1766 | 1769 | rBV2 | 90826 | 118964 | 3.65% | 0.244% |
| 45 | 12.510 | 1769 | 1772 | 1774 | rVV3 | 57057 | 64200 | 1.97% | 0.132% |
| 46 | 12.557 | 1777 | 1780 | 1786 | rVB | 143834 | 142051 | 4.36% | 0.291% |
| 47 | 12.639 | 1790 | 1794 | 1797 | rBV | 2203697 | 1888599 | 58.00% | 3.874% |
| 48 | 12.698 | 1802 | 1804 | 1806 | rVB | 47924 | 36865 | 1.13% | 0.076% |
| 49 | 12.727 | 1806 | 1809 | 1812 | rBV | 337278 | 306868 | 9.42% | 0.629% |
| 50 | 12.786 | 1817 | 1819 | 1823 | rVV | 91726 | 115730 | 3.55% | 0.237% |
| 51 | 12.869 | 1827 | 1833 | 1836 | rVV | 1894951 | 1893178 | 58.14% | 3.883% |
| 52 | 12.916 | 1838 | 1841 | 1846 | rVB2 | 108913 | 128069 | 3.93% | 0.263% |
| 53 | 13.010 | 1853 | 1857 | 1860 | rVB | 3549851 | 2903677 | 89.17% | 5.956% |
| 54 | 13.080 | 1865 | 1869 | 1873 | rBV2 | 115268 | 202527 | 6.22% | 0.415% |
| 55 | 13.174 | 1881 | 1885 | 1886 | rBV4 | 91778 | 117613 | 3.61% | 0.241% |
| 56 | 13.192 | 1886 | 1888 | 1891 | rVB | 172335 | 153082 | 4.70% | 0.314% |
| 57 | 13.263 | 1897 | 1900 | 1902 | rVB | 74060 | 54469 | 1.67% | 0.112% |
| 58 | 13.298 | 1902 | 1906 | 1909 | rBV2 | 180256 | 198087 | 6.08% | 0.406% |
| 59 | 13.392 | 1920 | 1922 | 1925 | rVB | 95763 | 68684 | 2.11% | 0.141% |
| 60 | 13.421 | 1925 | 1927 | 1931 | rBV2 | 84563 | 97940 | 3.01% | 0.201% |
| 61 | 13.580 | 1951 | 1954 | 1956 | rBV3 | 60527 | 64761 | 1.99% | 0.133% |
| 62 | 13.704 | 1972 | 1975 | 1979 | rVB | 179272 | 158125 | 4.86% | 0.324% |
| 63 | 13.816 | 1990 | 1994 | 1996 | rBV2 | 136903 | 174569 | 5.36% | 0.358% |
| 64 | 13.845 | 1996 | 1999 | 2001 | rVV | 176205 | 180463 | 5.54% | 0.370% |
| 65 | 13.868 | 2001 | 2003 | 2006 | rVV2 | 140250 | 184603 | 5.67% | 0.379% |
| 66 | 13.910 | 2006 | 2010 | 2018 | rVB3 | 428037 | 575435 | 17.67% | 1.180% |
| 67 | 14.068 | 2030 | 2037 | 2040 | rBV2 | 1394445 | 1991883 | 61.17% | 4.085% |
| 68 | 14.098 | 2040 | 2042 | 2047 | rVB | 709416 | 625961 | 19.22% | 1.284% |
| 69 | 14.174 | 2053 | 2055 | 2059 | rVB | 68973 | 55165 | 1.69% | 0.113% |
| 70 | 14.457 | 2101 | 2103 | 2106 | rVB | 136772 | 104564 | 3.21% | 0.214% |
| 71 | 14.492 | 2106 | 2109 | 2112 | rVB2 | 82916 | 84527 | 2.60% | 0.173% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120319\
Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

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-BF111319.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 14.533 | 2113 | 2116 | 2122 | rBV3 | 163992 | 206409 | 6.34% | 0.423% |
| 73 | 14.580 | 2122 | 2124 | 2126 | rBV | 70407 | 54694 | 1.68% | 0.112% |
| 74 | 14.845 | 2166 | 2169 | 2173 | rVB | 163164 | 150349 | 4.62% | 0.308% |
| 75 | 14.921 | 2179 | 2182 | 2186 | rBV | 400966 | 400255 | 12.29% | 0.821% |
| 76 | 15.127 | 2212 | 2217 | 2220 | rBV | 579545 | 980863 | 30.12% | 2.012% |
| 77 | 15.192 | 2225 | 2228 | 2232 | rVV2 | 219429 | 253860 | 7.80% | 0.521% |
| 78 | 15.233 | 2232 | 2235 | 2239 | rVB | 114052 | 111519 | 3.42% | 0.229% |
| 79 | 15.433 | 2265 | 2269 | 2276 | rVB | 352971 | 507085 | 15.57% | 1.040% |
| 80 | 15.498 | 2276 | 2280 | 2286 | rBV | 529482 | 697586 | 21.42% | 1.431% |
| 81 | 15.568 | 2287 | 2292 | 2295 | rBV | 780905 | 1119680 | 34.38% | 2.297% |
| 82 | 16.033 | 2368 | 2371 | 2378 | rVB | 134038 | 210349 | 6.46% | 0.431% |
| 83 | 16.557 | 2456 | 2460 | 2465 | rVB2 | 78986 | 117094 | 3.60% | 0.240% |
| 84 | 17.074 | 2542 | 2548 | 2556 | rVB2 | 261843 | 520903 | 16.00% | 1.068% |
| 85 | 17.168 | 2560 | 2564 | 2570 | rVB6 | 43608 | 98884 | 3.04% | 0.203% |
| 86 | 17.533 | 2619 | 2626 | 2637 | rVB | 198990 | 451751 | 13.87% | 0.927% |
| 87 | 17.768 | 2664 | 2666 | 2674 | rVB2 | 59907 | 106228 | 3.26% | 0.218% |

Sum of corrected areas: 48755688

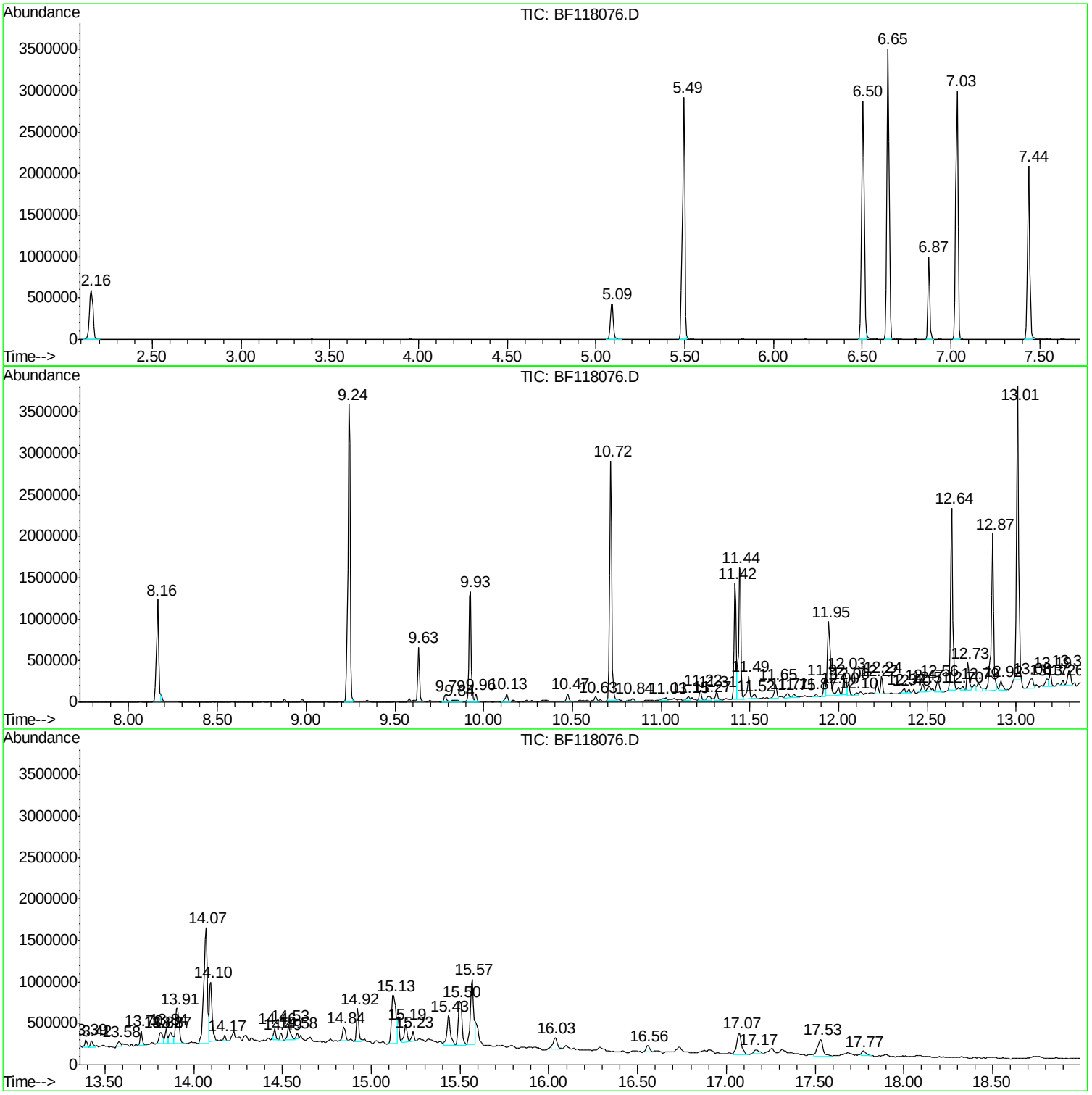
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120319\
Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.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\BF120319\
Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

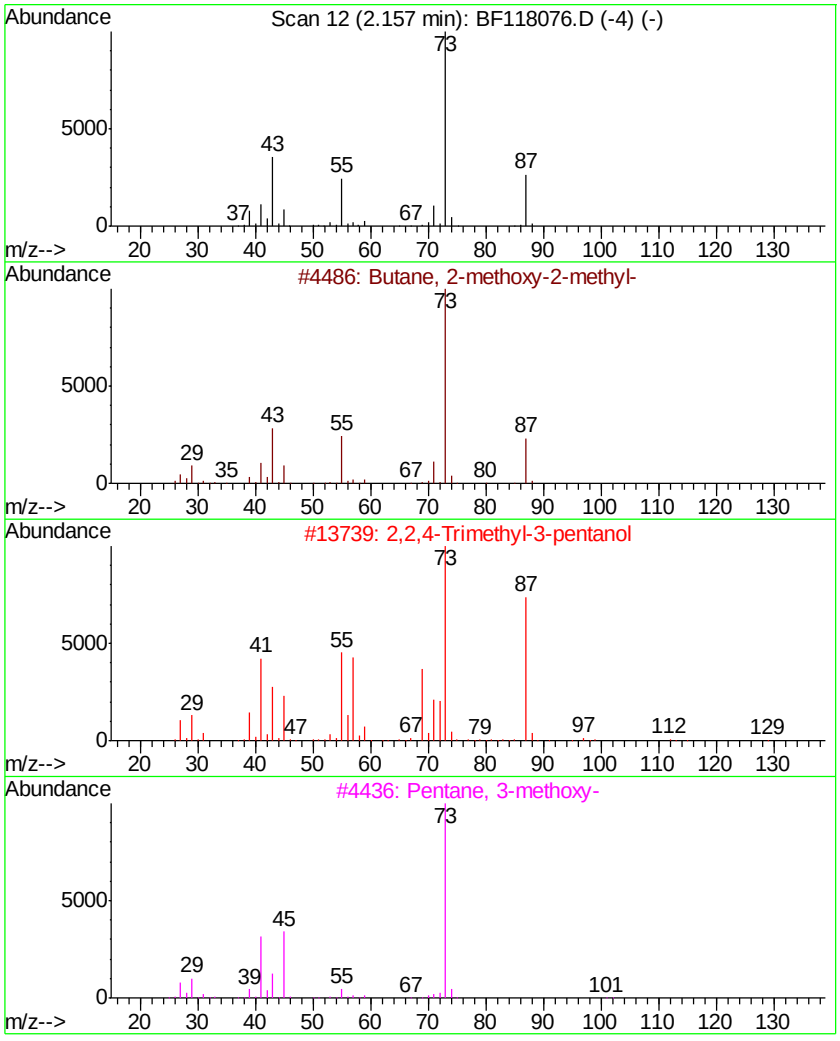
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

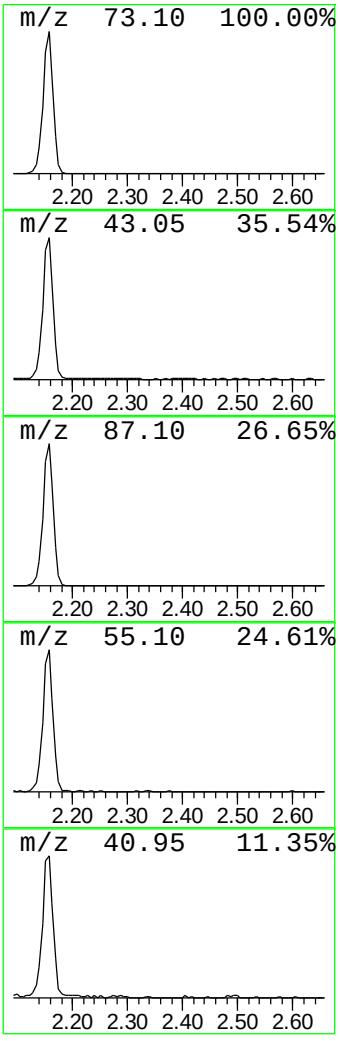
**********

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

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.16 | 19.53 ng | 768903 | 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 | 78 |
| 2 | 2,2,4-Trimethyl-3-pentanol | 130 | C8H18O | 005162-48-1 | 39 |
| 3 | Pentane, 3-methoxy- | 102 | C6H14O | 036839-67-5 | 23 |
| 4 | Acetamide, N-ethyl- | 87 | C4H9NO | 000625-50-3 | 9 |
| 5 | Borane, dimethoxy- | 74 | C2H7BO2 | 004542-61-4 | 9 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120319\
Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

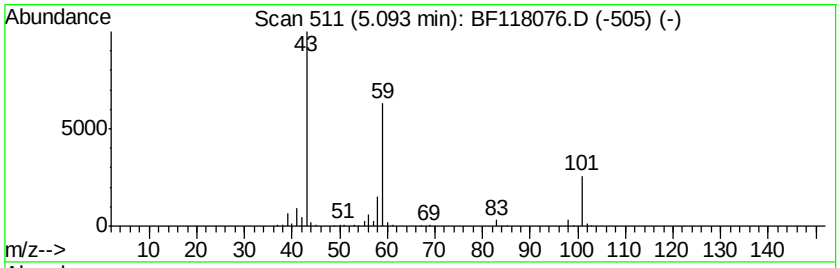
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

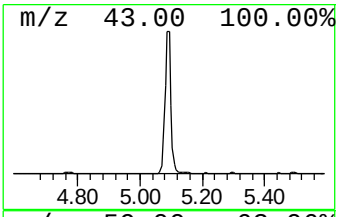
**********

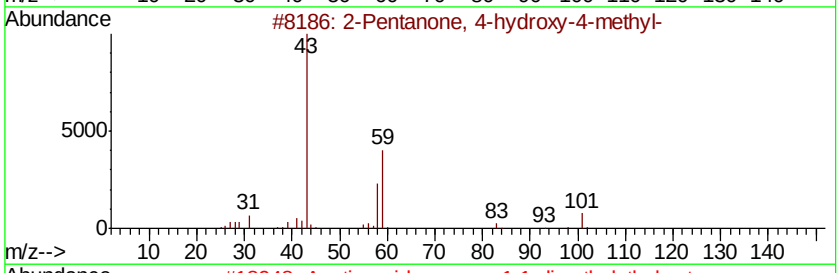
Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 5

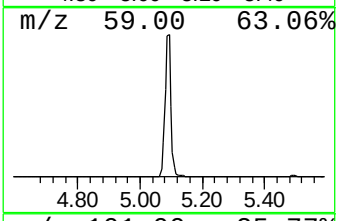
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.09 | 14.08 ng | 554436 | 1,4-Dichlorobenzene-d4 | 6.87 |

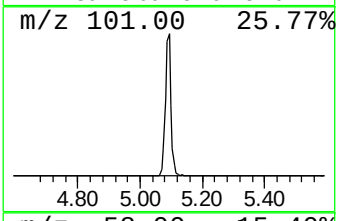
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 72 |
| 2 | Acetic acid, cyano-, 1,1-dimethy... | 141 | C7H11NO2 | 001116-98-9 | 25 |
| 3 | 2,3-Butanedione, monooxime | 101 | C4H7NO2 | 000057-71-6 | 17 |
| 4 | 5-Hexen-2-one | 98 | C6H10O | 000109-49-9 | 10 |
| 5 | Butane, 1-ethoxy- | 102 | C6H14O | 000628-81-9 | 9 |

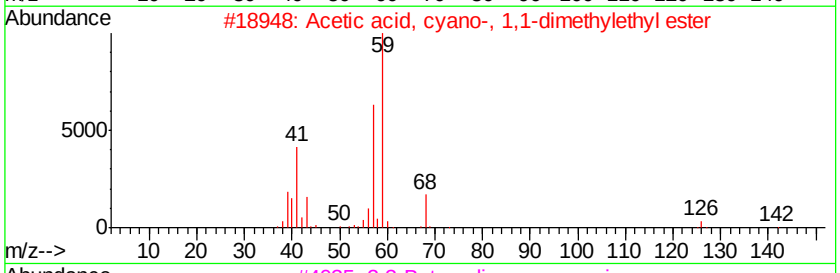


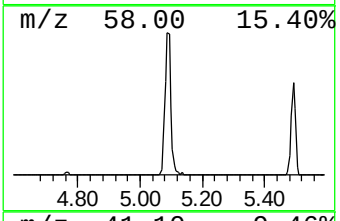



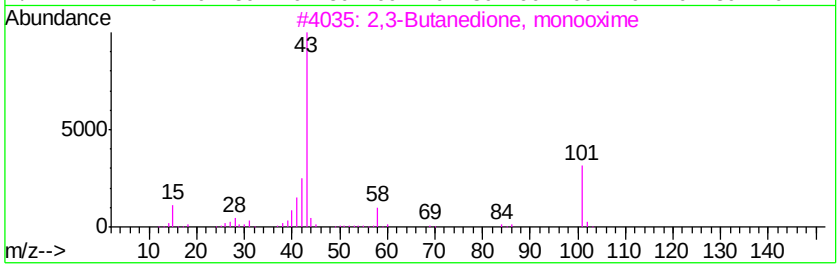



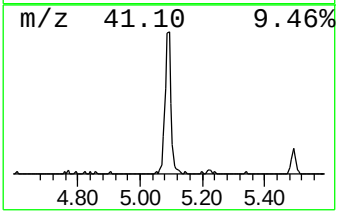



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120319\
Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

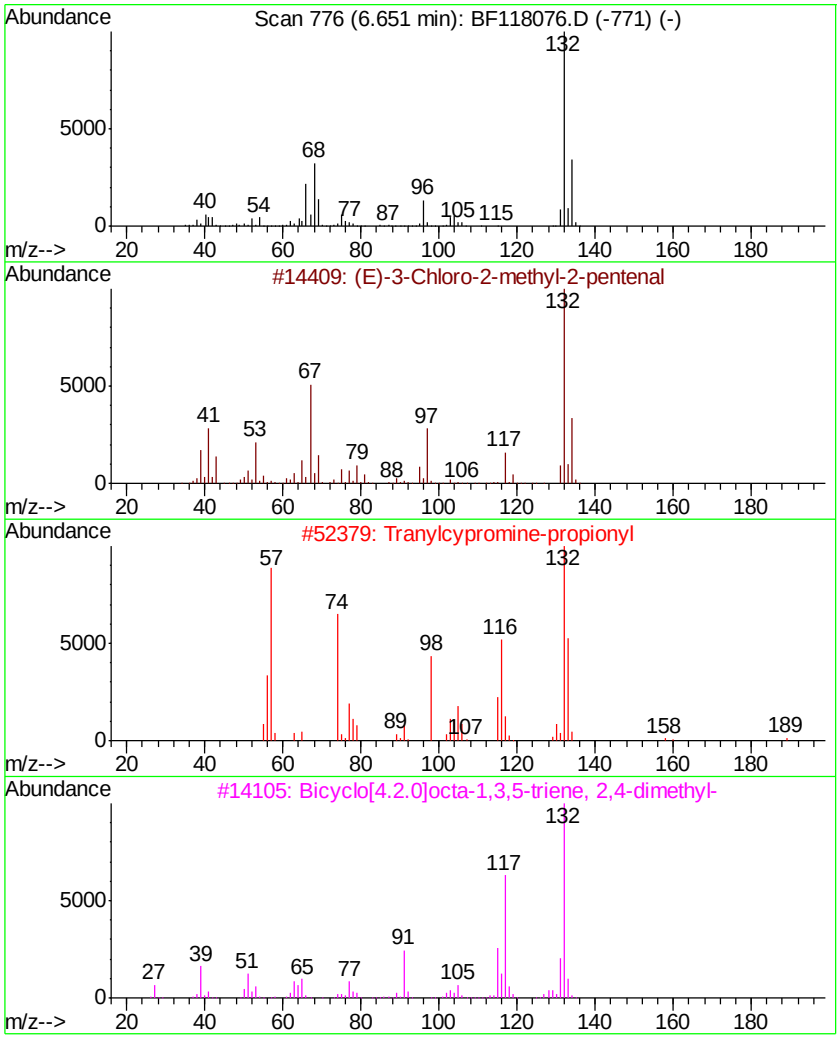
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

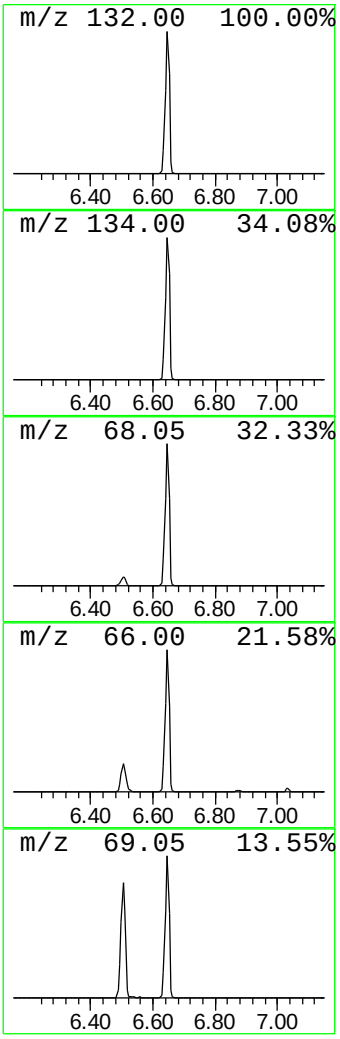
**********

Peak Number 3 unknown6.65 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.65 | 79.77 ng | 3141010 | 1,4-Dichlorobenzene-d4 | 6.87 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO | 031357-76-3 | 17 |
| 2 | Tranylcypromine-propionyl | 189 | C12H15NO | 1000123-86-3 | 16 |
| 3 | Bicyclo[4.2.0]octa-1,3,5-triene,... | 132 | C10H12 | 028749-81-7 | 9 |
| 4 | 1-Methylpyrrolo[1,2-a]pyrazine | 132 | C8H8N2 | 064608-59-9 | 9 |
| 5 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 9 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120319\
Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

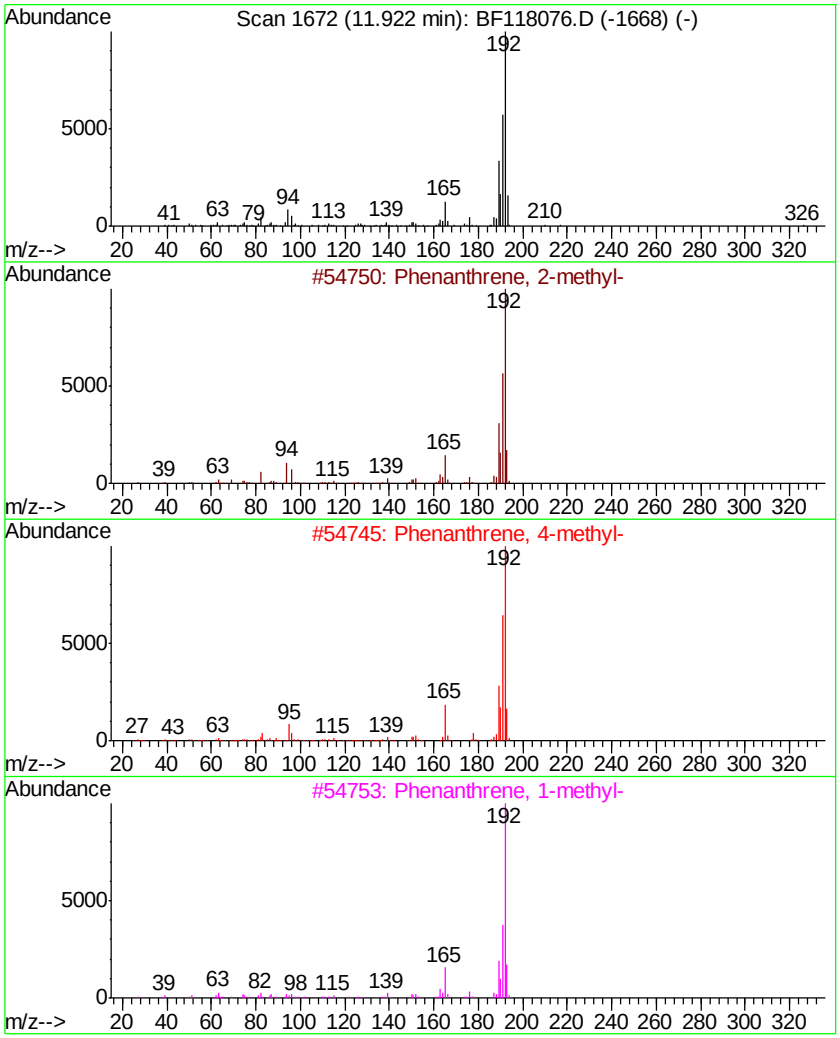
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

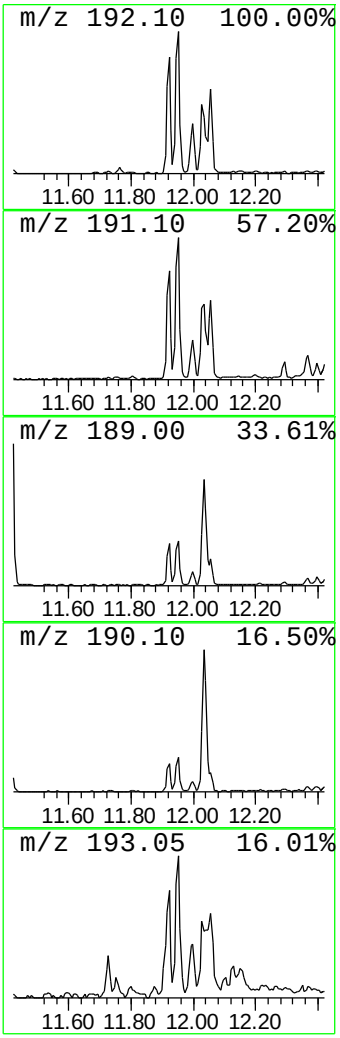
**********

Peak Number 5 Phenanthrene, 2-methyl- Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.92 | 2.99 ng | 188093 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 97 |
| 2 | Phenanthrene, 4-methyl- | 192 | C15H12 | 000832-64-4 | 94 |
| 3 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 93 |
| 4 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 91 |
| 5 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 91 |



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Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.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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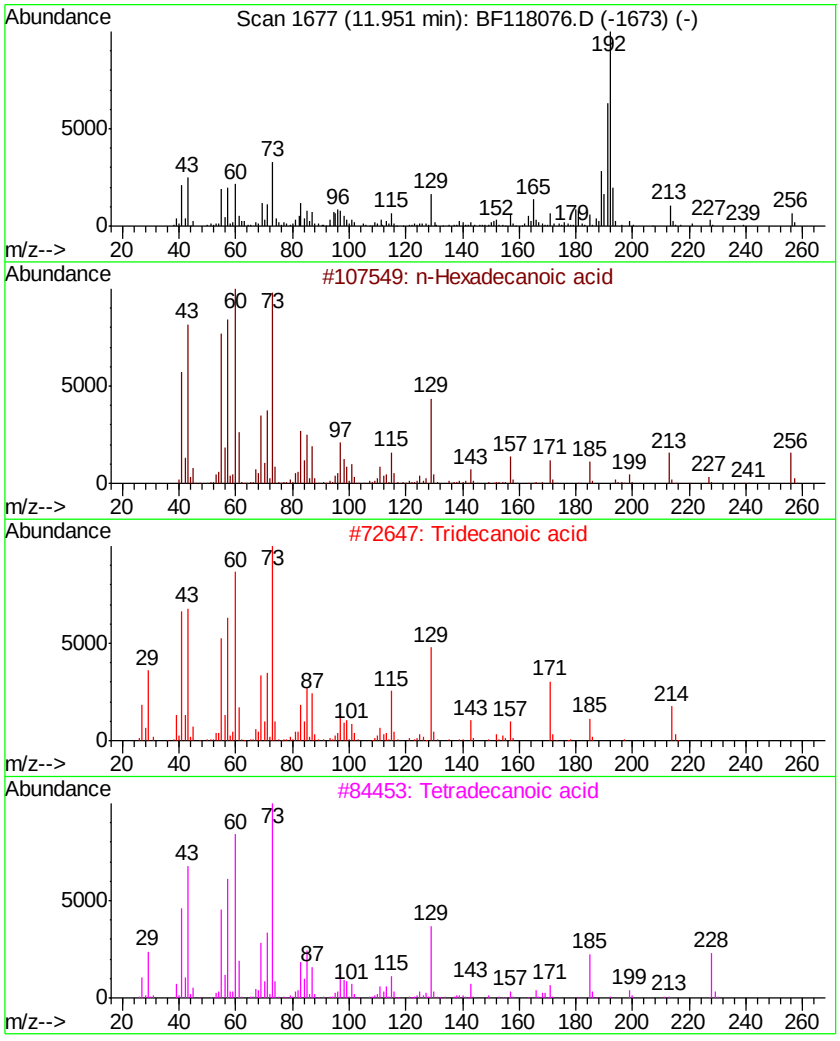
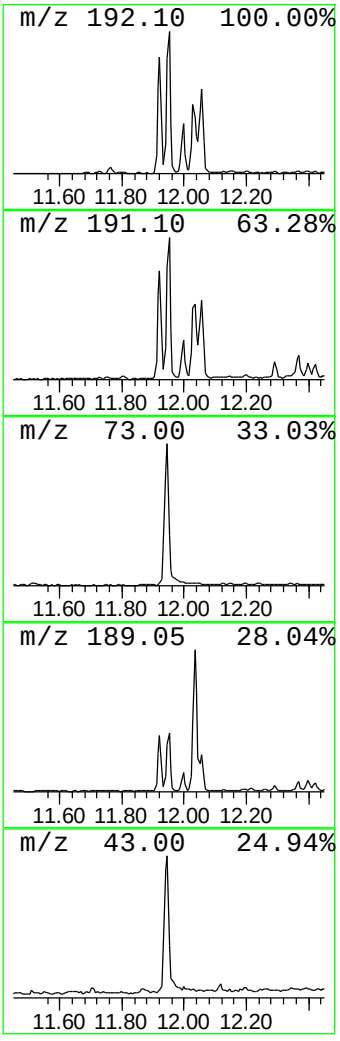
Peak Number 6 n-Hexadecanoic acid Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.95 | 14.13 ng | 888888 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | n-Hexadecanoic acid | 256 | C16H32O2 | 000057-10-3 | 99 |
| 2 | Tridecanoic acid | 214 | C13H26O2 | 000638-53-9 | 91 |
| 3 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 91 |
| 4 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 91 |
| 5 | Undecanoic acid | 186 | C11H22O2 | 000112-37-8 | 53 |



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Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.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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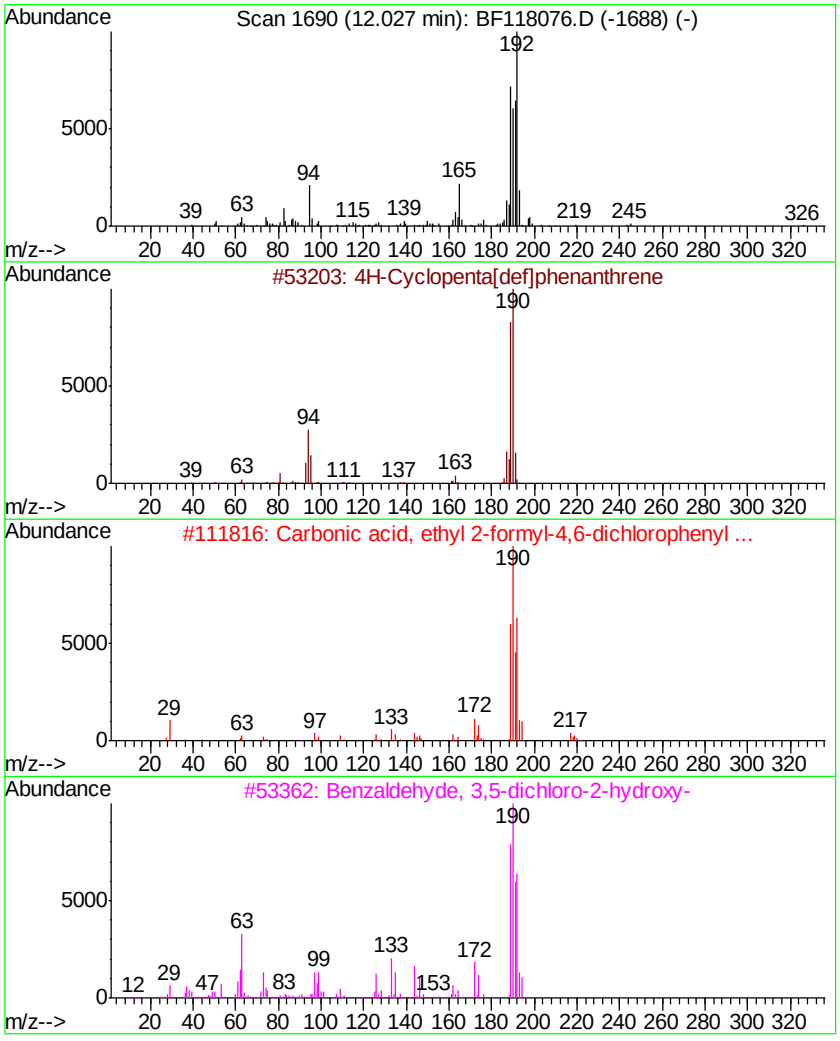
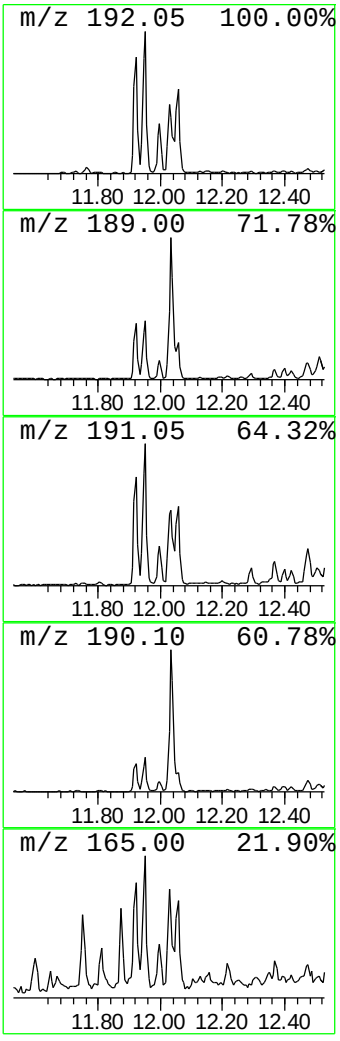
Peak Number 7 4H-Cyclopenta[def]phenanthrene Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.03 | 4.33 ng | 272173 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 70 |
| 2 | Carbonic acid, ethyl 2-formyl-4,... | 262 | C10H8Cl2O4 | 1000331-34-4 | 50 |
| 3 | Benzaldehyde, 3,5-dichloro-2-hyd... | 190 | C7H4Cl2O2 | 000090-60-8 | 50 |
| 4 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 25 |
| 5 | 5H-Dibenzo[a,d]cycloheptene | 192 | C15H12 | 000256-81-5 | 25 |



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Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.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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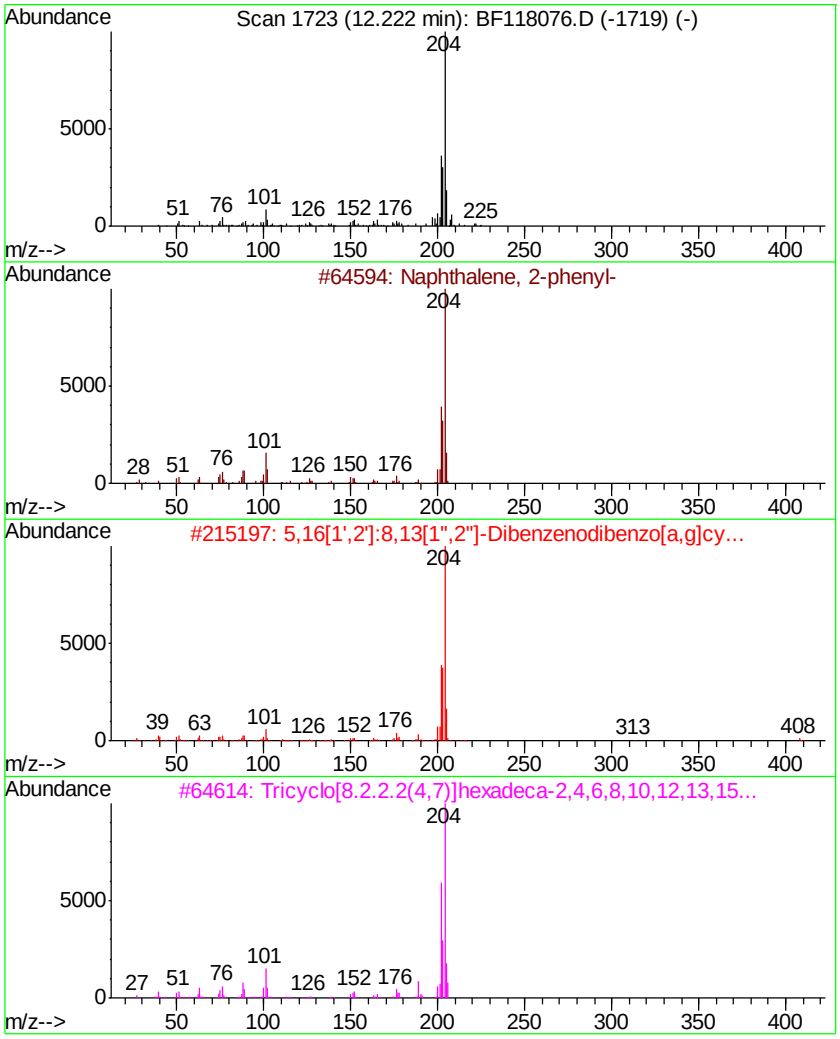
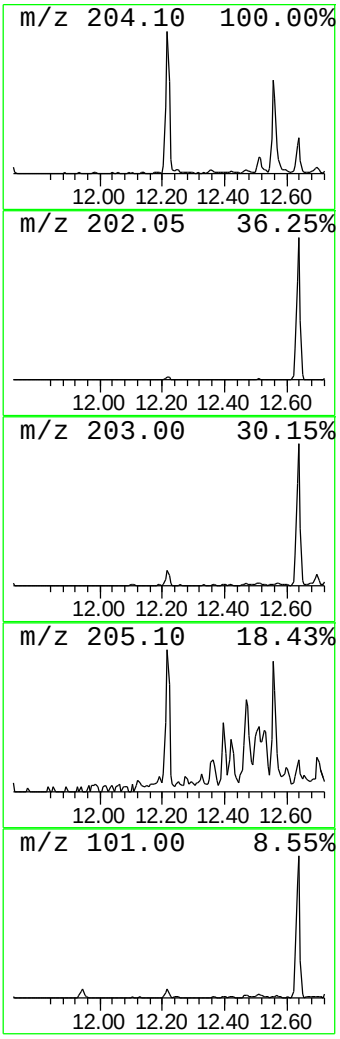
Peak Number 8 Naphthalene, 2-phenyl- Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.22 | 2.07 ng | 130124 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 93 |
| 2 | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24 | 005672-97-9 | 86 |
| 3 | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12 | 006572-60-7 | 81 |
| 4 | Naphthalene, 1-phenyl- | 204 | C16H12 | 000605-02-7 | 64 |
| 5 | 9,10-Bis(bromomethyl)anthracene | 362 | C16H12Br2 | 034373-96-1 | 58 |



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Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.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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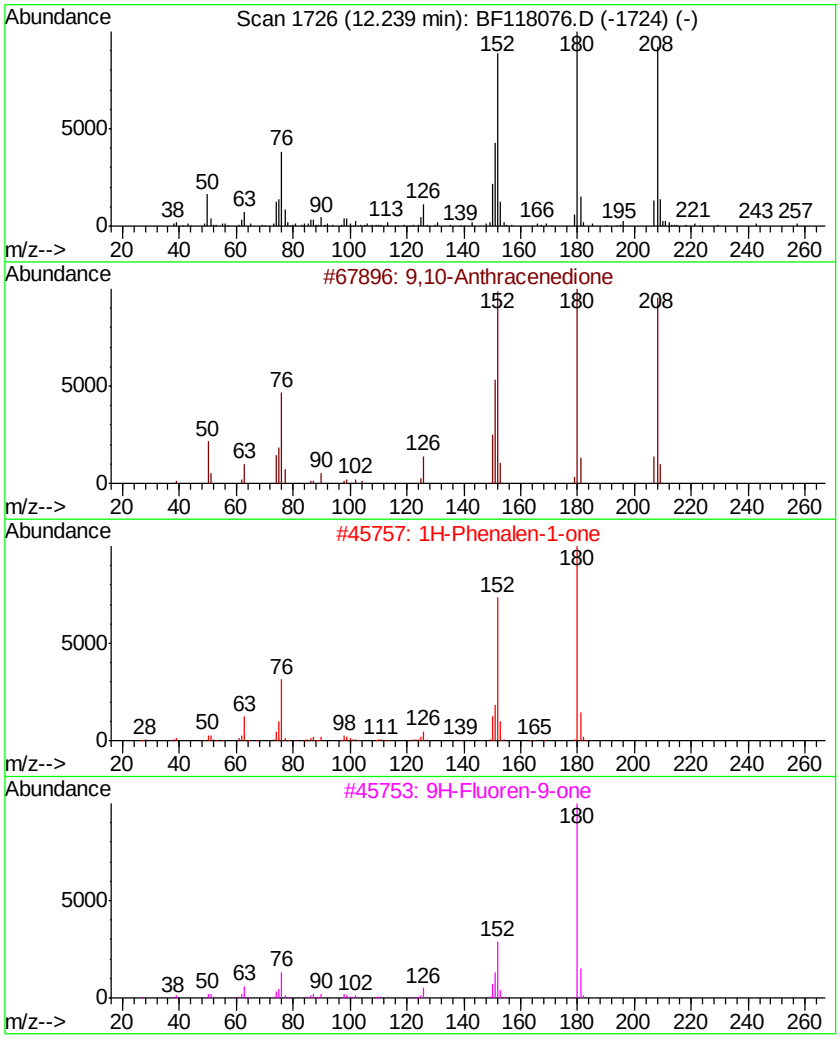
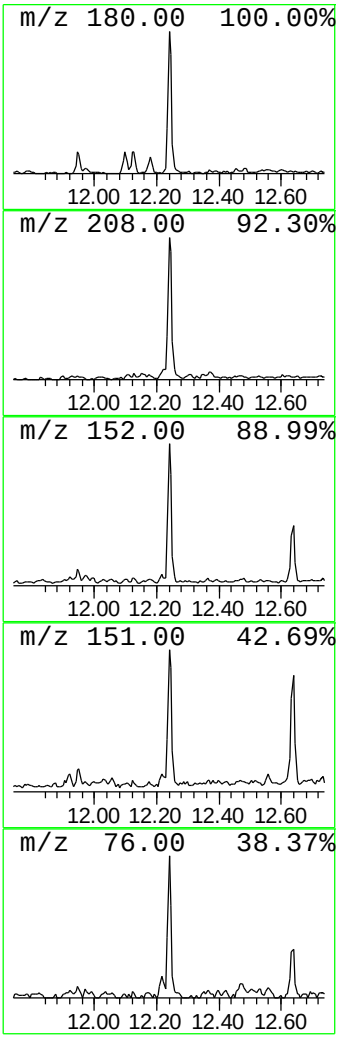
Peak Number 9 9,10-Anthracenedione Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.24 | 2.81 ng | 176562 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 99 |
| 2 | 1H-Phenalen-1-one | 180 | C13H8O | 000548-39-0 | 83 |
| 3 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 83 |
| 4 | Benzo[c]cinnoline | 180 | C12H8N2 | 000230-17-1 | 64 |
| 5 | Benzo[h]cinnoline | 180 | C12H8N2 | 000230-31-9 | 55 |



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Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.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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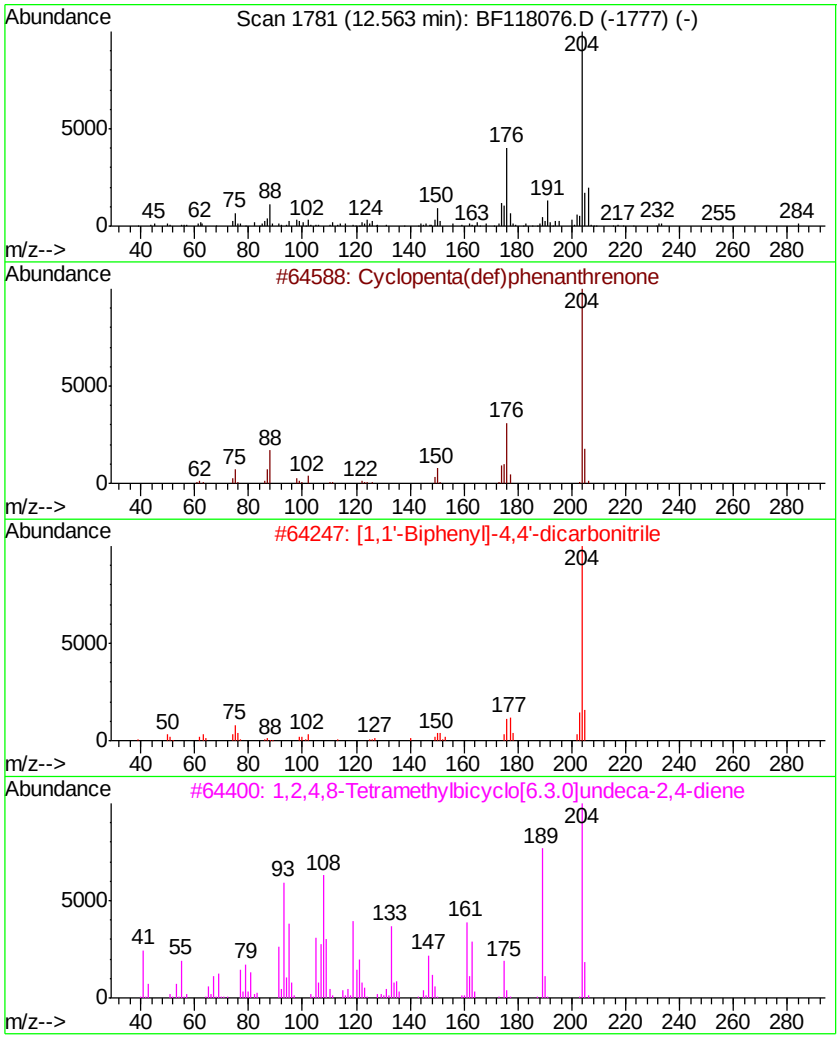
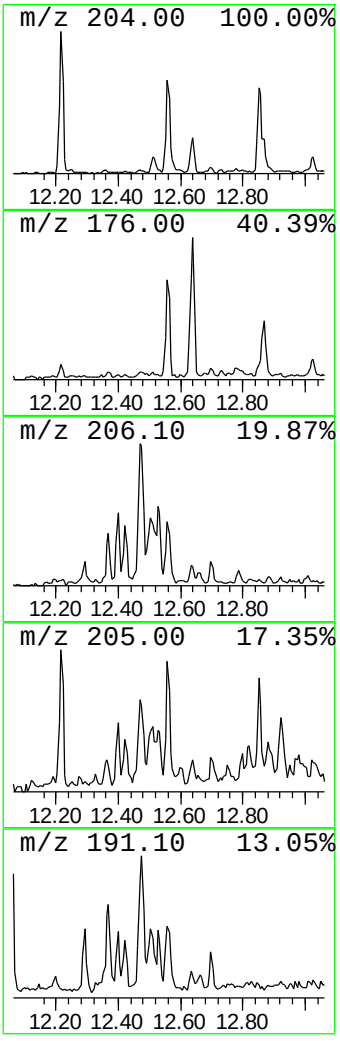
Peak Number 10 Cyclopenta(def)phenanthrenone Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.56 | 2.26 ng | 142051 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(def)phenanthrenone | 204 | C15H8O | 005737-13-3 | 94 |
| 2 | [1,1'-Biphenyl]-4,4'-dicarbonitrile | 204 | C14H8N2 | 001591-30-6 | 46 |
| 3 | 1,2,4,8-Tetramethylbicyclo[6.3.0... | 204 | C15H24 | 137235-51-9 | 45 |
| 4 | 9-Acridinecarbonitrile | 204 | C14H8N2 | 005326-19-2 | 43 |
| 5 | [1,1'-Biphenyl]-2-ol, 5-chloro- | 204 | C12H9ClO | 000607-12-5 | 43 |



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Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.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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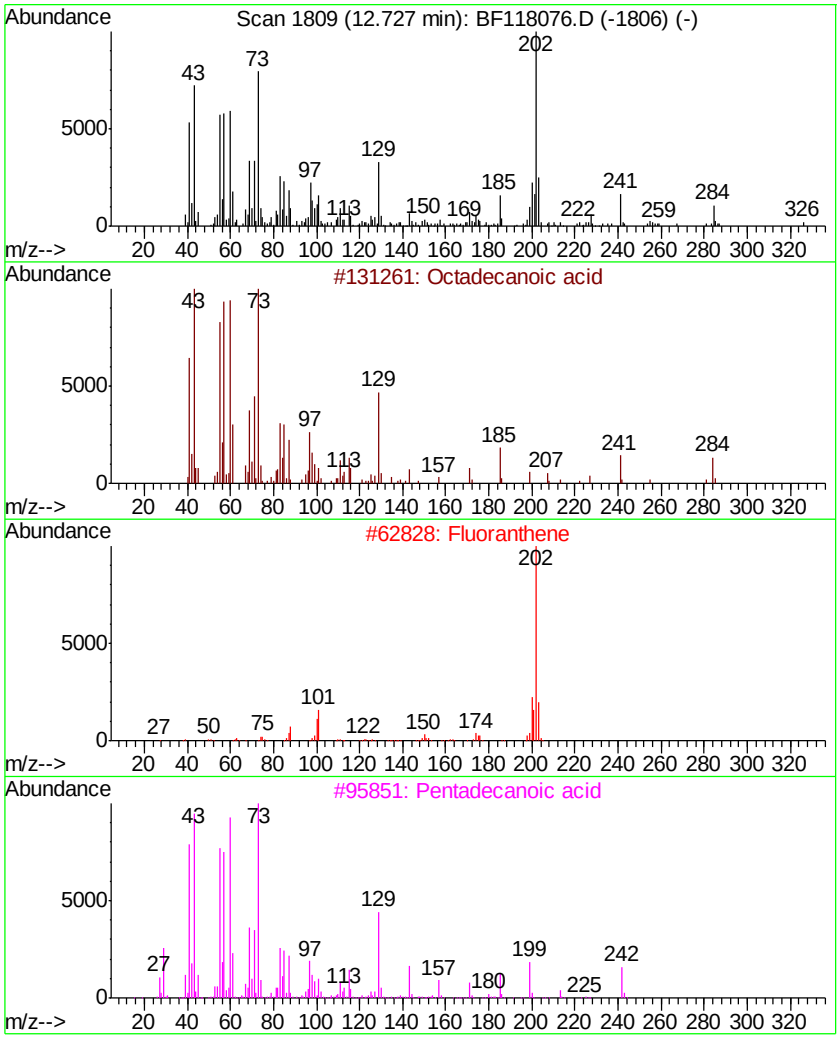
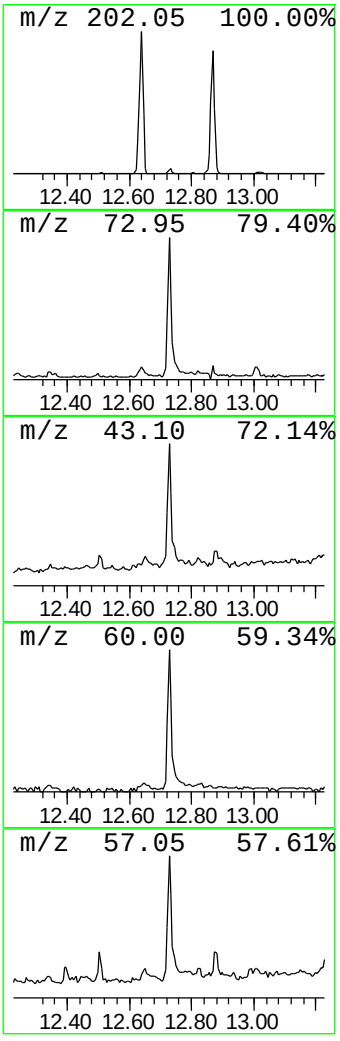
Peak Number 11 Octadecanoic acid Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.73 | 4.88 ng | 306868 | Phenanthrene-d10 | 11.42 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Octadecanoic acid | 284 | C18H36O2 | 000057-11-4 | 98 |
| 2 | Fluoranthene | 202 | C16H10 | 000206-44-0 | 74 |
| 3 | Pentadecanoic acid | 242 | C15H30O2 | 001002-84-2 | 59 |
| 4 | n-Hexadecanoic acid | 256 | C16H32O2 | 000057-10-3 | 49 |
| 5 | Dodecanoic acid | 200 | C12H24O2 | 000143-07-7 | 46 |



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Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.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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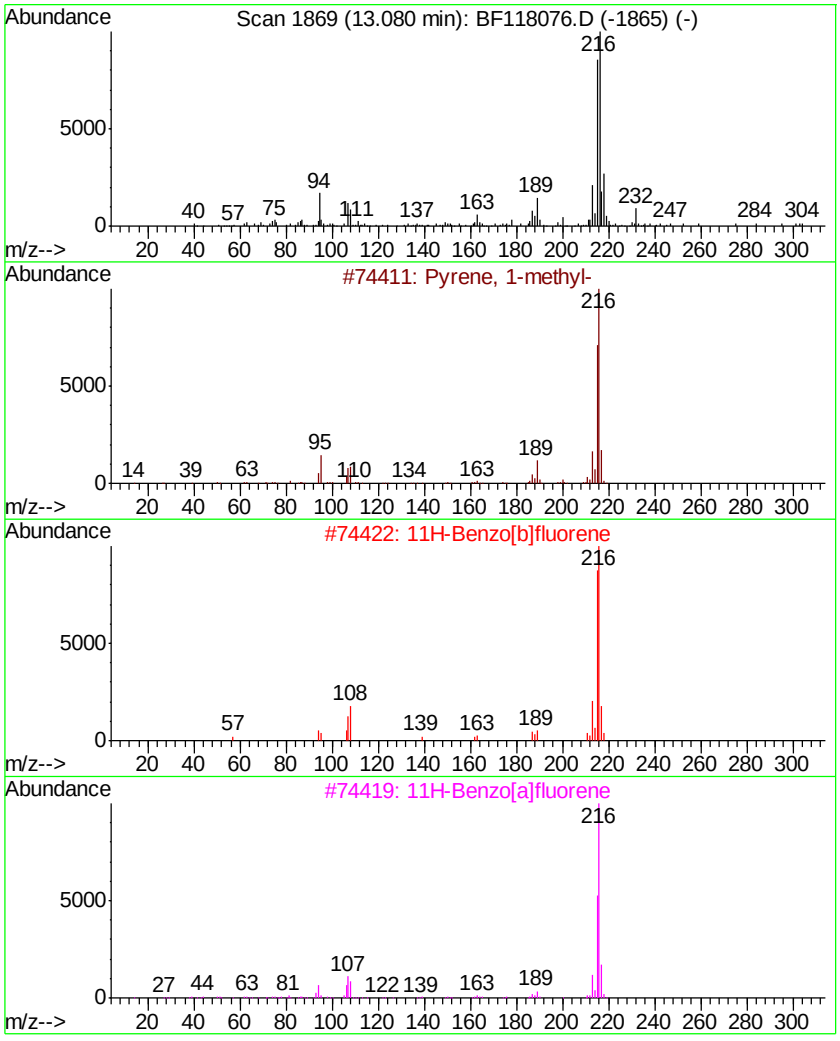
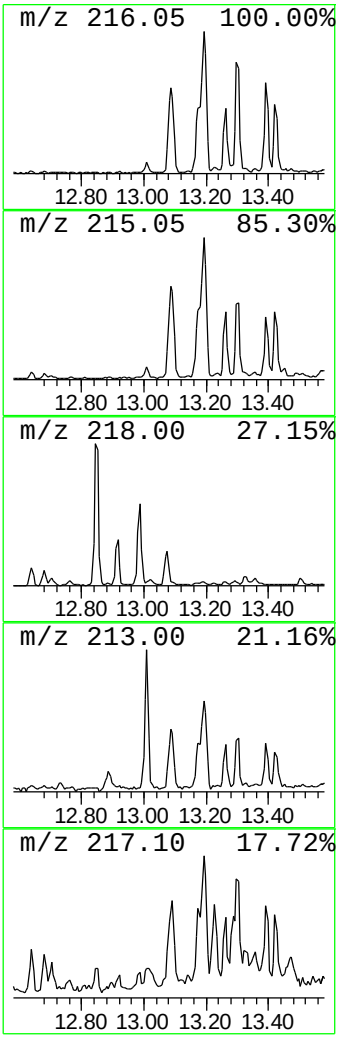
Peak Number 12 Pyrene, 1-methyl- Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.08 | 2.03 ng | 202527 | Chrysene-d12 | 14.07 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 91 |
| 2 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 89 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 80 |
| 4 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 76 |
| 5 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 70 |



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Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.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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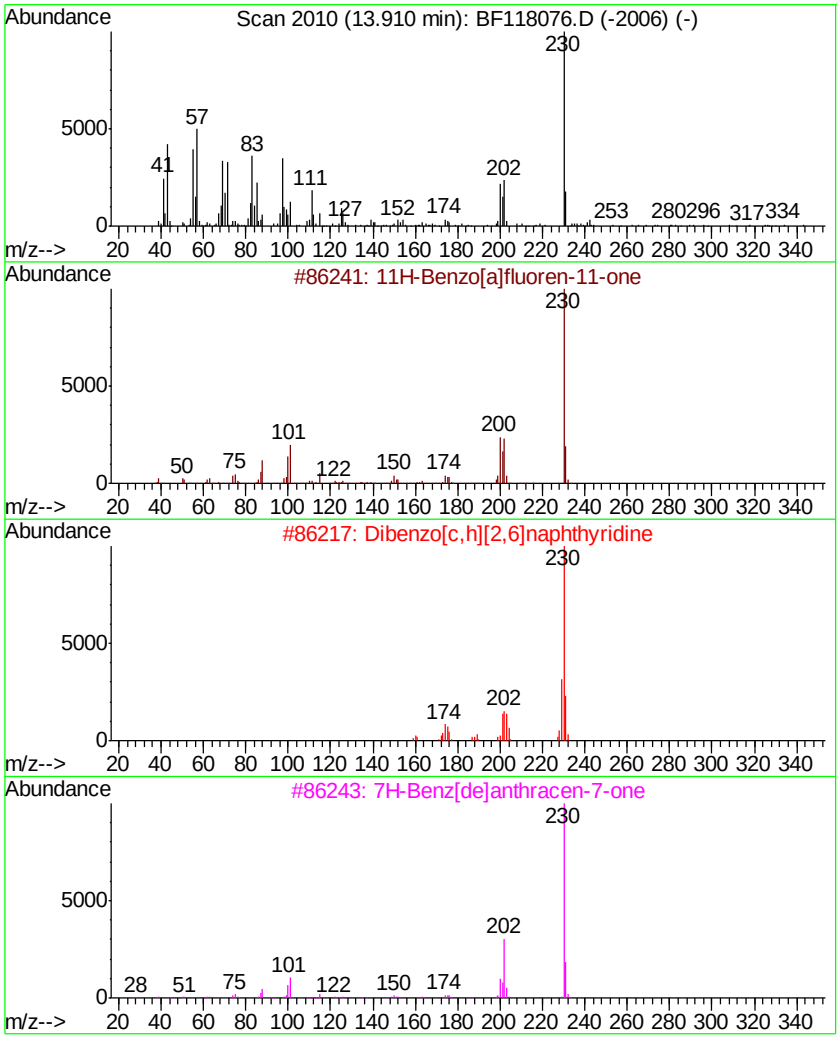
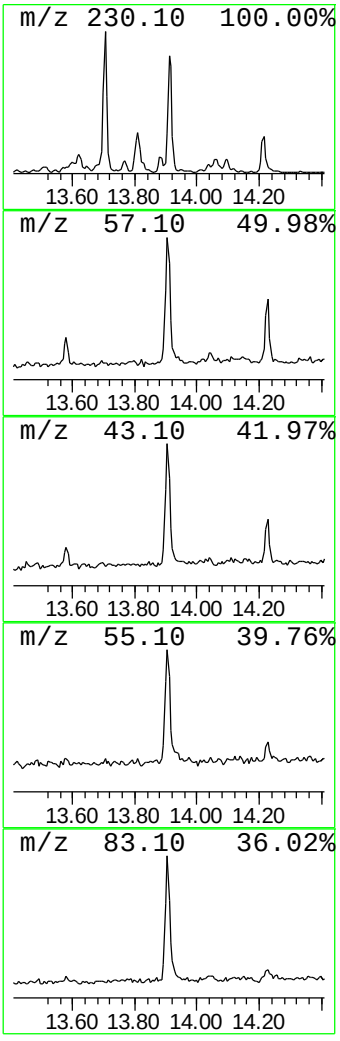
Peak Number 13 11H-Benzo[a]fluoren-11-one Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.91 | 5.78 ng | 575435 | Chrysene-d12 | 14.07 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[a]fluoren-11-one | 230 | C17H10O | 000479-79-8 | 93 |
| 2 | Dibenzo[c,h][2,6]naphthyridine | 230 | C16H10N2 | 000218-30-4 | 64 |
| 3 | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 55 |
| 4 | o-Terphenyl | 230 | C18H14 | 000084-15-1 | 43 |
| 5 | Pyrene, 1,3-dimethyl- | 230 | C18H14 | 064401-21-4 | 43 |



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Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.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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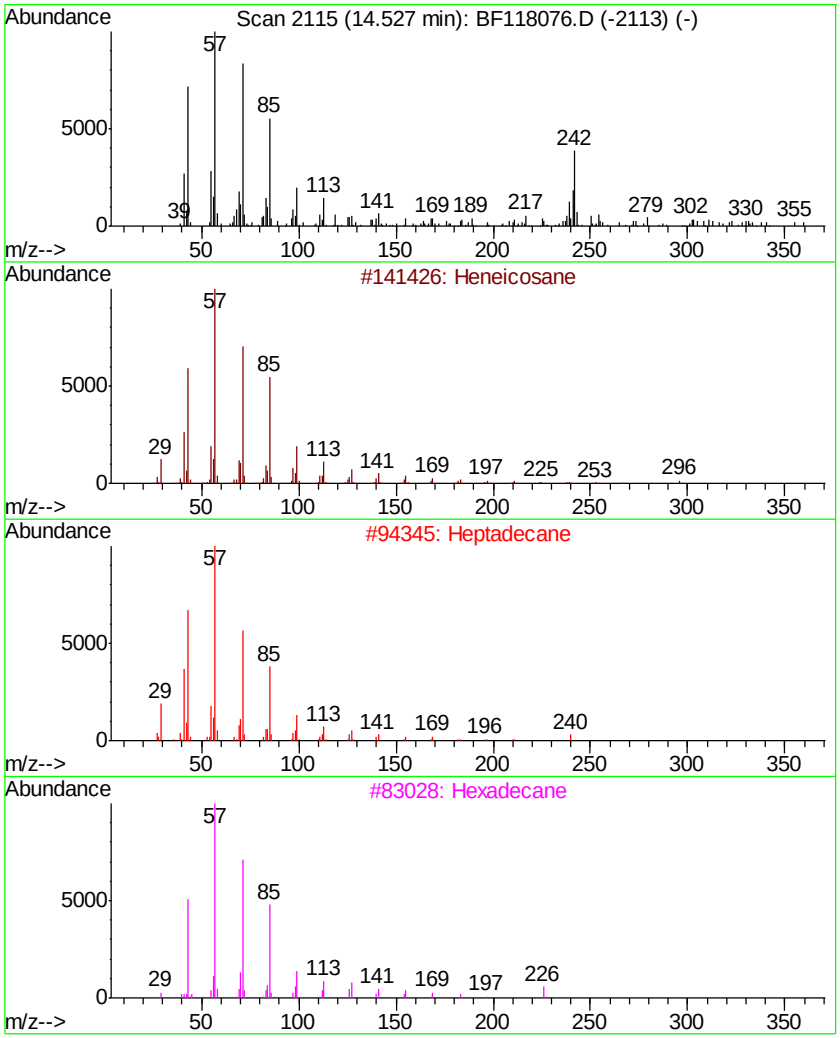
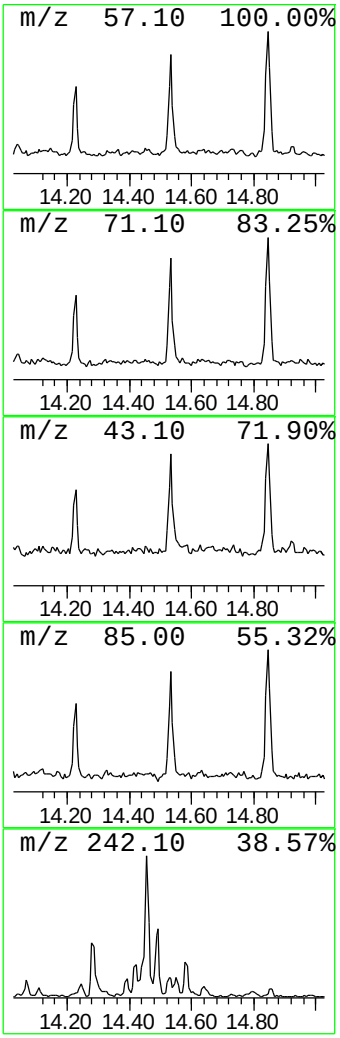
Peak Number 14 Heneicosane Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.53 | 2.07 ng | 206409 | Chrysene-d12 | 14.07 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Heneicosane | 296 | C21H44 | 000629-94-7 | 98 |
| 2 | Heptadecane | 240 | C17H36 | 000629-78-7 | 96 |
| 3 | Hexadecane | 226 | C16H34 | 000544-76-3 | 92 |
| 4 | Heptadecane, 2,6,10,15-tetramethyl- | 296 | C21H44 | 054833-48-6 | 91 |
| 5 | Eicosane, 2-methyl- | 296 | C21H44 | 001560-84-5 | 89 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120319\
Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.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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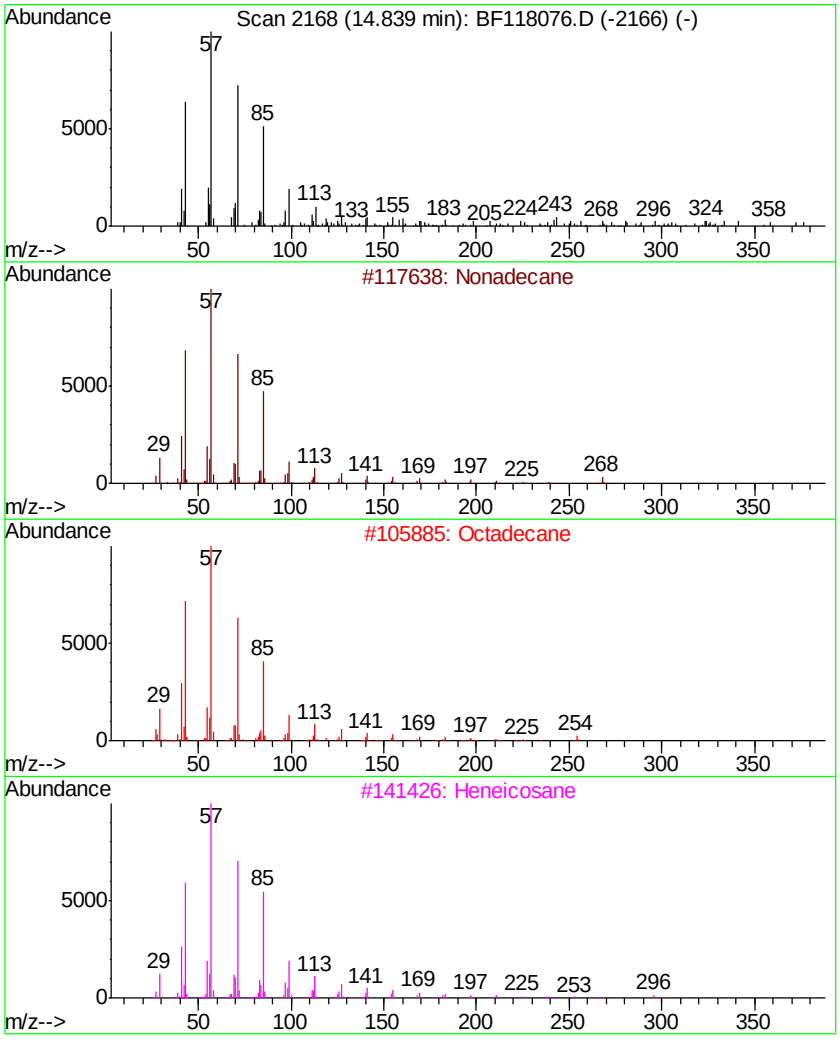
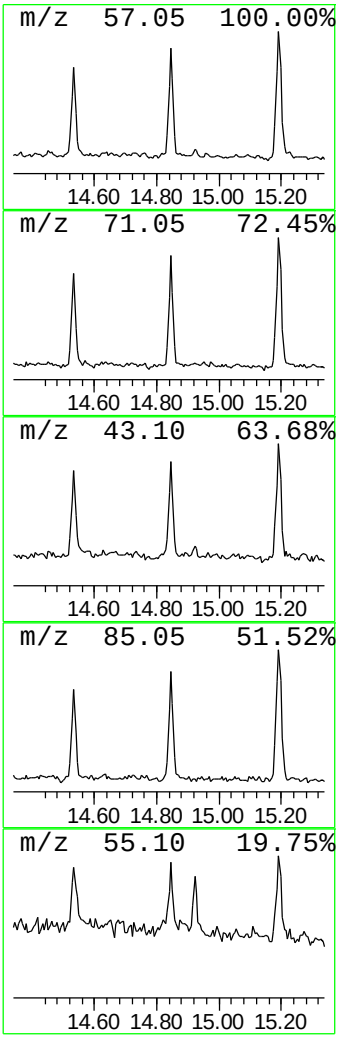
Peak Number 15 Nonadecane Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.84 | 2.69 ng | 150349 | Perylene-d12 | 15.57 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Nonadecane | 268 | C19H40 | 000629-92-5 | 93 |
| 2 | Octadecane | 254 | C18H38 | 000593-45-3 | 93 |
| 3 | Heneicosane | 296 | C21H44 | 000629-94-7 | 91 |
| 4 | Tetracosane | 338 | C24H50 | 000646-31-1 | 91 |
| 5 | Triacontane | 422 | C30H62 | 000638-68-6 | 90 |



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Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.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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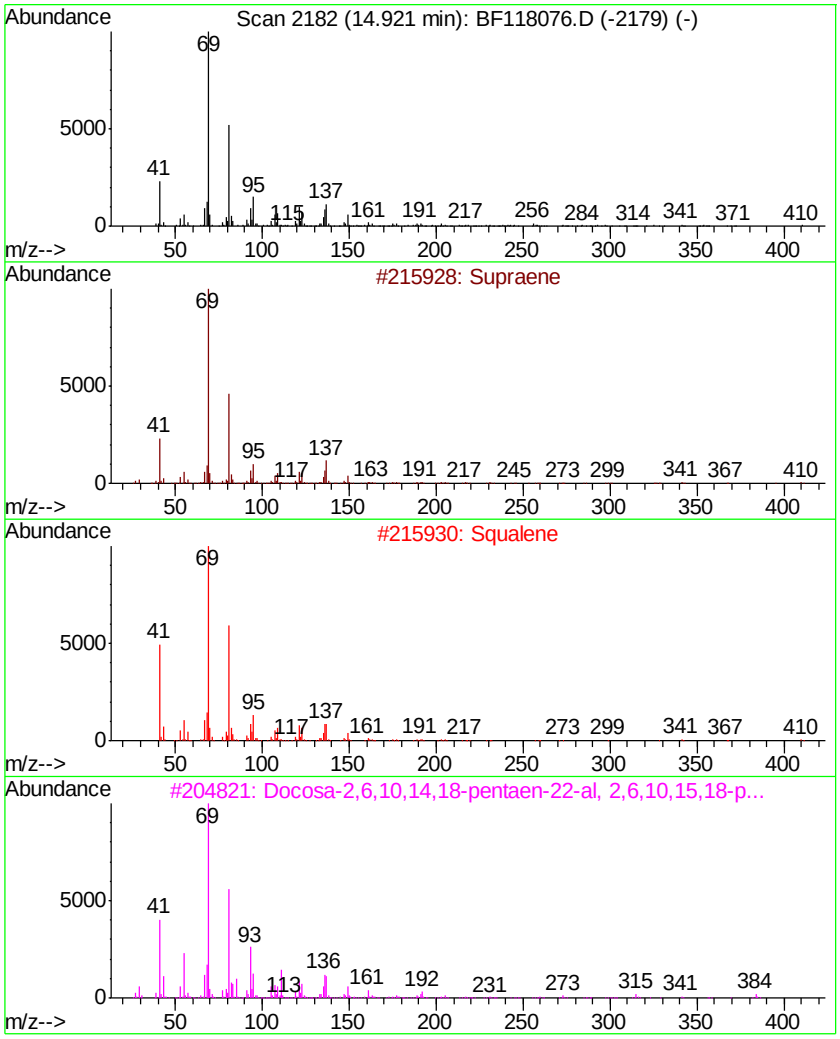
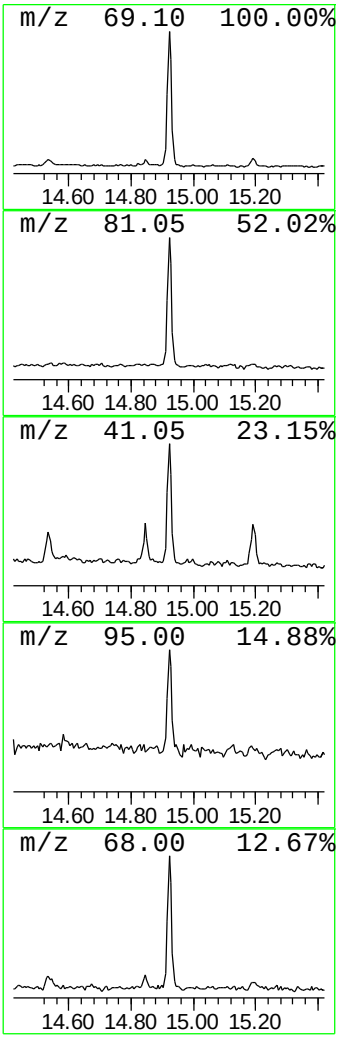
Peak Number 16 Supraene Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.92 | 7.15 ng | 400255 | Perylene-d12 | 15.57 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Supraene | 410 | C30H50 | 007683-64-9 | 98 |
| 2 | Squalene | 410 | C30H50 | 000111-02-4 | 98 |
| 3 | Docosa-2,6,10,14,18-pentaen-22-a... | 384 | C27H44O | 1000163-04-7 | 83 |
| 4 | 4,8,12-Tetradecatrienal, 5,9,13-... | 248 | C17H28O | 066408-55-7 | 72 |
| 5 | 2,3,5-Trimethyl-2,3,5-hexanetric... | 203 | C12H17N3 | 003974-79-6 | 50 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120319\
Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

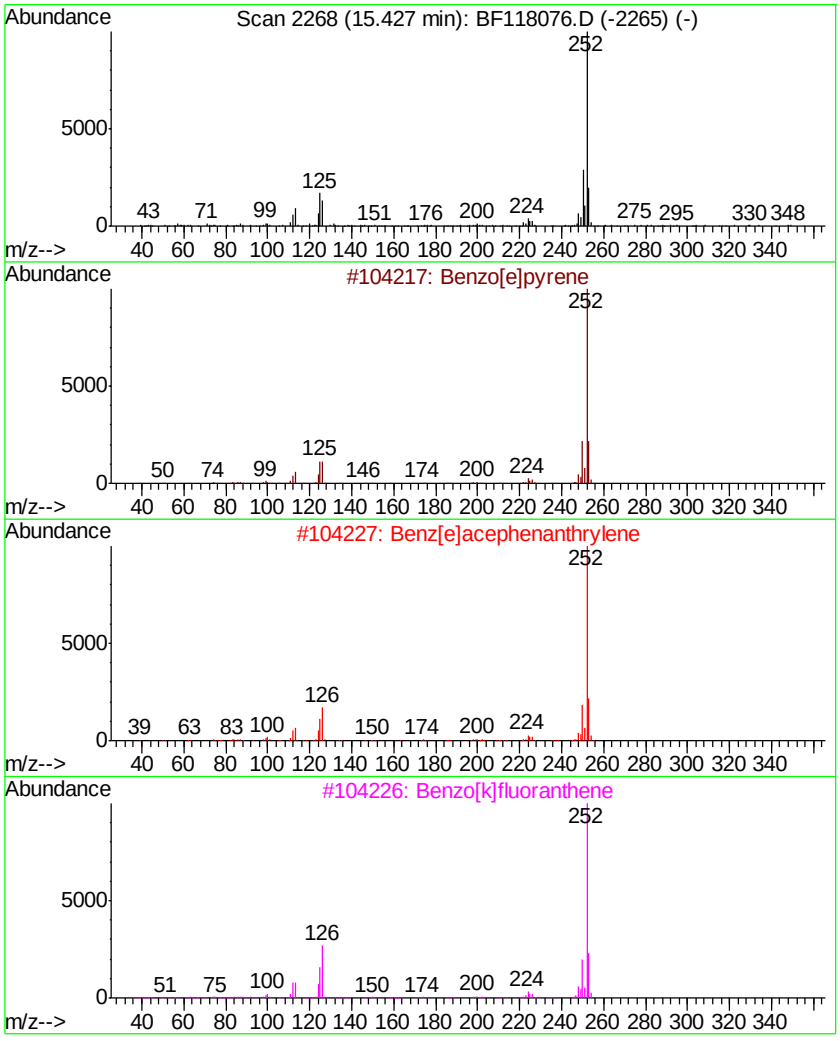
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

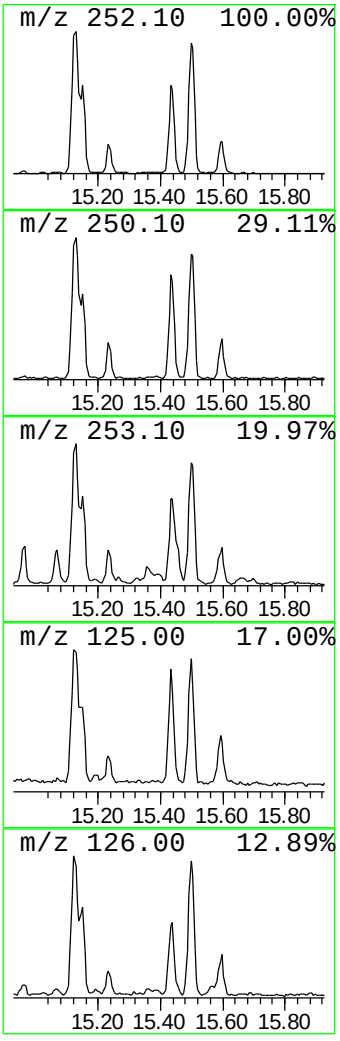
**********

Peak Number 17 Benzo[e]pyrene Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.43 | 9.06 ng | 507085 | Perylene-d12 | 15.57 |

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



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120319\
Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

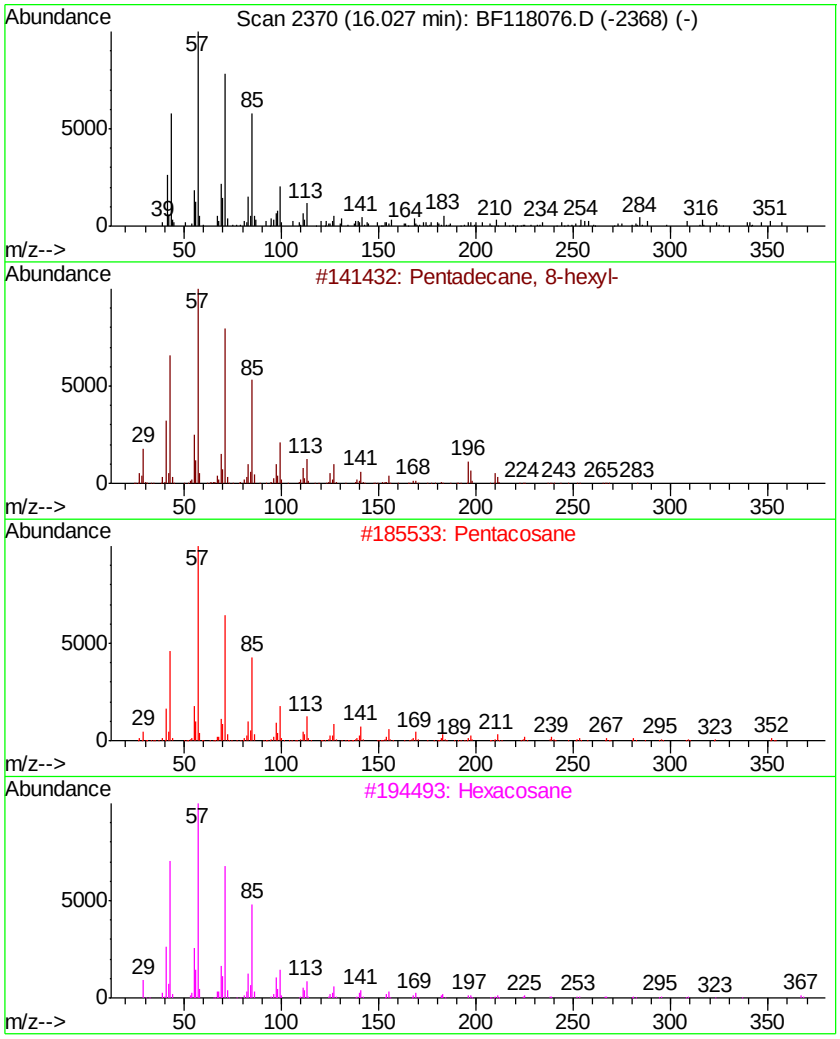
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

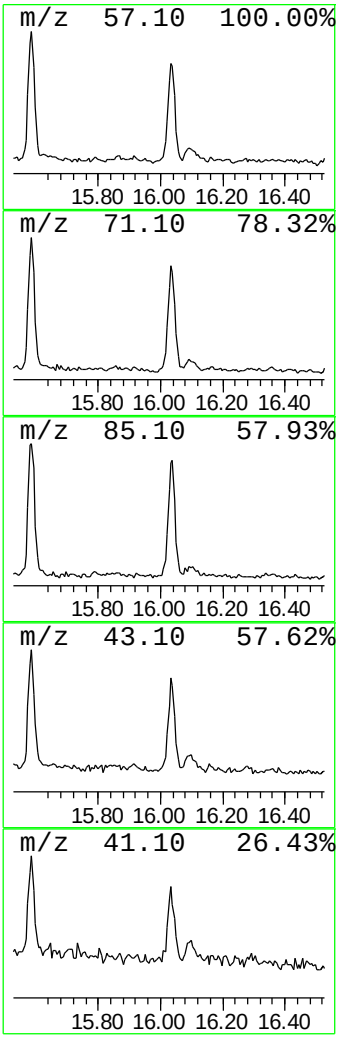
**********

Peak Number 18 Pentadecane, 8-hexyl- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.03 | 3.76 ng | 210349 | Perylene-d12 | 15.57 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pentadecane, 8-hexyl- | 296 | C21H44 | 013475-75-7 | 90 |
| 2 | Pentacosane | 352 | C25H52 | 000629-99-2 | 90 |
| 3 | Hexacosane | 366 | C26H54 | 000630-01-3 | 80 |
| 4 | Heneicosane | 296 | C21H44 | 000629-94-7 | 80 |
| 5 | Tetratetracontane | 619 | C44H90 | 007098-22-8 | 72 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120319\
Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

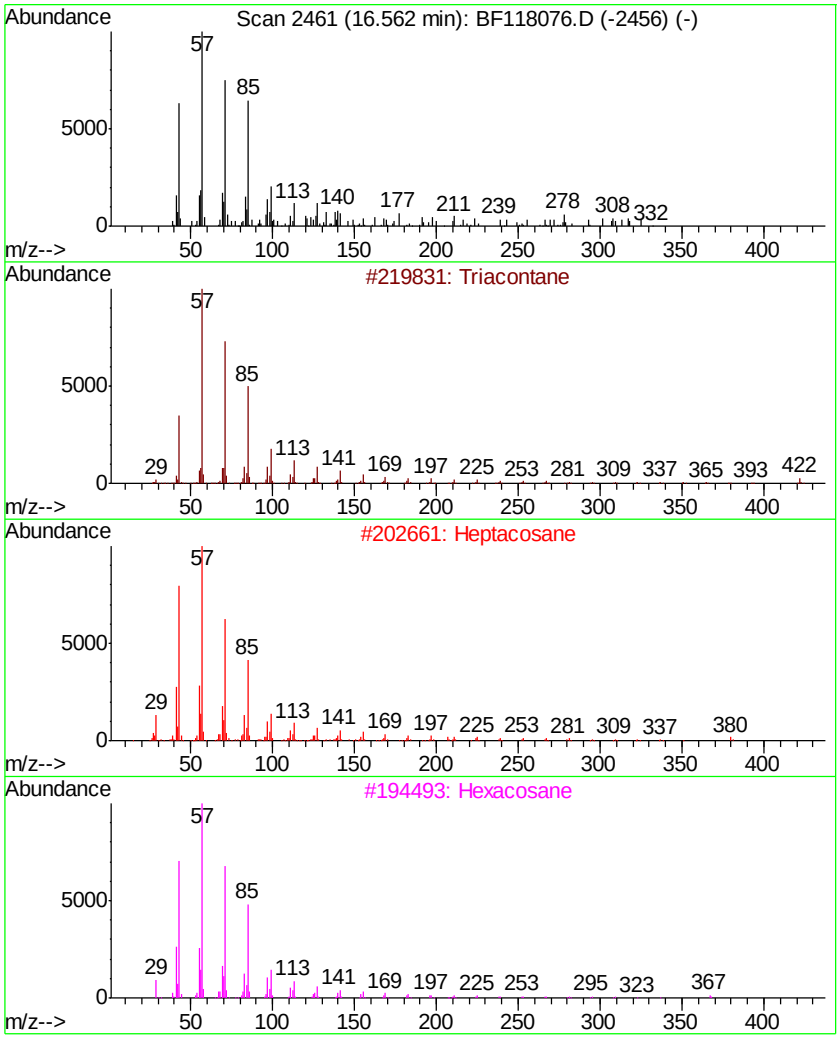
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

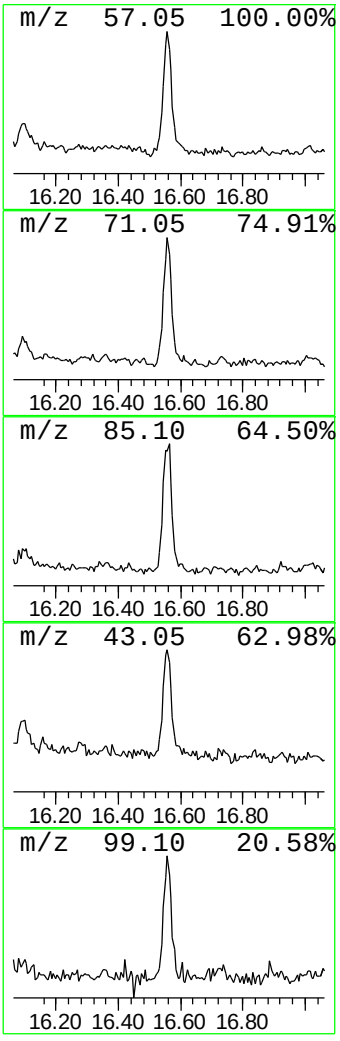
**********

Peak Number 19 Triacontane Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.56 | 2.09 ng | 117094 | Perylene-d12 | 15.57 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Triacontane | 422 | C30H62 | 000638-68-6 | 91 |
| 2 | Heptacosane | 380 | C27H56 | 000593-49-7 | 91 |
| 3 | Hexacosane | 366 | C26H54 | 000630-01-3 | 91 |
| 4 | Pentacosane | 352 | C25H52 | 000629-99-2 | 91 |
| 5 | Docosane, 11-decyl- | 451 | C32H66 | 055401-55-3 | 91 |



# Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF120319\
Data File : BF118076.D
Acq On : 3 Dec 2019 21:44
Operator : JU
Sample : K6024-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** B-2-(0.5-1.0)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF111319.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... | 2.16 | 19.5 | ng | 768903 | 1 | 6.87 | 787537 | 20.0 |
| 2-Pentanone, 4-hy... | 5.09 | 14.1 | ng | 554436 | 1 | 6.87 | 787537 | 20.0 |
| unknown6.65 | 6.65 | 79.8 | ng | 3141010 | 1 | 6.87 | 787537 | 20.0 |
| Phenanthrene, 2-m... | 11.92 | 3.0 | ng | 188093 | 4 | 11.42 | 1258060 | 20.0 |
| n-Hexadecanoic acid | 11.95 | 14.1 | ng | 888888 | 4 | 11.42 | 1258060 | 20.0 |
| 4H-Cyclopenta[def... | 12.03 | 4.3 | ng | 272173 | 4 | 11.42 | 1258060 | 20.0 |
| Naphthalene, 2-ph... | 12.22 | 2.1 | ng | 130124 | 4 | 11.42 | 1258060 | 20.0 |
| 9,10-Anthracenedione | 12.24 | 2.8 | ng | 176562 | 4 | 11.42 | 1258060 | 20.0 |
| Cyclopenta(def)ph... | 12.56 | 2.3 | ng | 142051 | 4 | 11.42 | 1258060 | 20.0 |
| Octadecanoic acid | 12.73 | 4.9 | ng | 306868 | 4 | 11.42 | 1258060 | 20.0 |
| Pyrene, 1-methyl- | 13.08 | 2.0 | ng | 202527 | 5 | 14.07 | 1991880 | 20.0 |
| 11H-Benzo[a]fluor... | 13.91 | 5.8 | ng | 575435 | 5 | 14.07 | 1991880 | 20.0 |
| Heneicosane | 14.53 | 2.1 | ng | 206409 | 5 | 14.07 | 1991880 | 20.0 |
| Nonadecane | 14.84 | 2.7 | ng | 150349 | 6 | 15.57 | 1119680 | 20.0 |
| Supraene | 14.92 | 7.2 | ng | 400255 | 6 | 15.57 | 1119680 | 20.0 |
| Benzo[e]pyrene | 15.43 | 9.1 | ng | 507085 | 6 | 15.57 | 1119680 | 20.0 |
| Pentadecane, 8-he... | 16.03 | 3.8 | ng | 210349 | 6 | 15.57 | 1119680 | 20.0 |
| Triacontane | 16.56 | 2.1 | ng | 117094 | 6 | 15.57 | 1119680 | 20.0 |