LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

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-BF073019.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 | 5.469 | 571 | 575 | 602 | rBV | 1922546 | 1954068 | 63.79% | 4.683% |
| 2 | 6.481 | 743 | 747 | 767 | rBV | 2154786 | 2110123 | 68.88% | 5.058% |
| 3 | 6.622 | 767 | 771 | 774 | rBV | 2442497 | 2071380 | 67.62% | 4.965% |
| 4 | 6.851 | 806 | 810 | 821 | rVB | 893916 | 752773 | 24.57% | 1.804% |
| 5 | 7.004 | 833 | 836 | 851 | rBV | 1799167 | 1671556 | 54.57% | 4.006% |
| 6 | 7.410 | 901 | 905 | 924 | rBV | 1416936 | 1318443 | 43.04% | 3.160% |
| 7 | 8.134 | 1024 | 1028 | 1055 | rBV | 992796 | 991288 | 32.36% | 2.376% |
| 8 | 9.210 | 1207 | 1211 | 1223 | rBV | 2845527 | 2499448 | 81.59% | 5.991% |
| 9 | 9.604 | 1275 | 1278 | 1285 | rBV | 111926 | 116194 | 3.79% | 0.278% |
| 10 | 9.892 | 1323 | 1327 | 1331 | rBV | 1304935 | 1161200 | 37.91% | 2.783% |
| 11 | 9.922 | 1331 | 1332 | 1340 | rVB | 78680 | 65320 | 2.13% | 0.157% |
| 12 | 10.439 | 1417 | 1420 | 1426 | rVB2 | 37932 | 41478 | 1.35% | 0.099% |
| 13 | 10.680 | 1457 | 1461 | 1476 | rBV | 1488405 | 1511999 | 49.36% | 3.624% |
| 14 | 10.992 | 1508 | 1514 | 1516 | rBV3 | 25733 | 32913 | 1.07% | 0.079% |
| 15 | 11.116 | 1530 | 1535 | 1537 | rBV4 | 25781 | 37124 | 1.21% | 0.089% |
| 16 | 11.239 | 1550 | 1556 | 1559 | rBV4 | 37422 | 59201 | 1.93% | 0.142% |
| 17 | 11.275 | 1559 | 1562 | 1568 | rVB2 | 67612 | 74704 | 2.44% | 0.179% |
| 18 | 11.380 | 1576 | 1580 | 1582 | rBV | 1448202 | 1299082 | 42.41% | 3.114% |
| 19 | 11.404 | 1582 | 1584 | 1587 | rVV | 978833 | 819386 | 26.75% | 1.964% |
| 20 | 11.457 | 1590 | 1593 | 1597 | rVV | 286453 | 307196 | 10.03% | 0.736% |
| 21 | 11.504 | 1597 | 1601 | 1604 | rVV2 | 62806 | 91764 | 3.00% | 0.220% |
| 22 | 11.557 | 1608 | 1610 | 1614 | rVB2 | 45274 | 57694 | 1.88% | 0.138% |
| 23 | 11.610 | 1614 | 1619 | 1627 | rBV4 | 85020 | 178176 | 5.82% | 0.427% |
| 24 | 11.674 | 1627 | 1630 | 1636 | rVV4 | 69426 | 145844 | 4.76% | 0.350% |
| 25 | 11.727 | 1637 | 1639 | 1642 | rVV2 | 55294 | 66414 | 2.17% | 0.159% |
| 26 | 11.774 | 1642 | 1647 | 1649 | rVV2 | 75435 | 101138 | 3.30% | 0.242% |
| 27 | 11.798 | 1649 | 1651 | 1653 | rVB2 | 41070 | 33332 | 1.09% | 0.080% |
| 28 | 11.857 | 1657 | 1661 | 1663 | rVV | 47852 | 69420 | 2.27% | 0.166% |
| 29 | 11.880 | 1663 | 1665 | 1667 | rVV | 151654 | 136379 | 4.45% | 0.327% |
| 30 | 11.910 | 1667 | 1670 | 1675 | rVV | 233051 | 250397 | 8.17% | 0.600% |
| 31 | 11.957 | 1675 | 1678 | 1681 | rVV2 | 86171 | 80483 | 2.63% | 0.193% |
| 32 | 11.992 | 1681 | 1684 | 1687 | rVV | 248980 | 283611 | 9.26% | 0.680% |
| 33 | 12.016 | 1687 | 1688 | 1694 | rVB2 | 122112 | 89430 | 2.92% | 0.214% |
| 34 | 12.074 | 1694 | 1698 | 1700 | rBV3 | 33103 | 41135 | 1.34% | 0.099% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

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-BF073019.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 12.174 | 1712 | 1715 | 1718 | rBV | 117672 | 100101 | 3.27% | 0.240% |
| 36 | 12.210 | 1718 | 1721 | 1726 | rVB2 | 64318 | 69415 | 2.27% | 0.166% |
| 37 | 12.327 | 1738 | 1741 | 1743 | rVB | 45403 | 38347 | 1.25% | 0.092% |
| 38 | 12.427 | 1755 | 1758 | 1762 | rBV | 111582 | 132162 | 4.31% | 0.317% |
| 39 | 12.469 | 1762 | 1765 | 1771 | rVB3 | 93349 | 129819 | 4.24% | 0.311% |
| 40 | 12.521 | 1771 | 1774 | 1778 | rVB | 74008 | 88800 | 2.90% | 0.213% |
| 41 | 12.592 | 1782 | 1786 | 1790 | rBV | 1896289 | 1715234 | 55.99% | 4.111% |
| 42 | 12.657 | 1795 | 1797 | 1800 | rVB | 55386 | 46193 | 1.51% | 0.111% |
| 43 | 12.686 | 1800 | 1802 | 1805 | rBV4 | 31327 | 39947 | 1.30% | 0.096% |
| 44 | 12.745 | 1809 | 1812 | 1815 | rVB | 55167 | 58931 | 1.92% | 0.141% |
| 45 | 12.821 | 1819 | 1825 | 1831 | rBV2 | 1524493 | 1798101 | 58.70% | 4.310% |
| 46 | 12.874 | 1831 | 1834 | 1838 | rVB2 | 87993 | 111287 | 3.63% | 0.267% |
| 47 | 12.963 | 1842 | 1849 | 1852 | rBV | 3204846 | 3063284 | 100.00% | 7.342% |
| 48 | 13.045 | 1858 | 1863 | 1866 | rBV2 | 94259 | 165275 | 5.40% | 0.396% |
| 49 | 13.127 | 1874 | 1877 | 1878 | rBV2 | 78467 | 83258 | 2.72% | 0.200% |
| 50 | 13.151 | 1878 | 1881 | 1884 | rVB | 272148 | 244587 | 7.98% | 0.586% |
| 51 | 13.186 | 1884 | 1887 | 1889 | rBV3 | 25883 | 35110 | 1.15% | 0.084% |
| 52 | 13.216 | 1889 | 1892 | 1895 | rBV | 163983 | 134280 | 4.38% | 0.322% |
| 53 | 13.251 | 1895 | 1898 | 1901 | rBV2 | 140330 | 169224 | 5.52% | 0.406% |
| 54 | 13.310 | 1906 | 1908 | 1911 | rVB | 52775 | 45508 | 1.49% | 0.109% |
| 55 | 13.345 | 1911 | 1914 | 1917 | rBV | 80490 | 75066 | 2.45% | 0.180% |
| 56 | 13.380 | 1917 | 1920 | 1923 | rBV3 | 81794 | 95431 | 3.12% | 0.229% |
| 57 | 13.463 | 1933 | 1934 | 1942 | rVB4 | 36225 | 38174 | 1.25% | 0.091% |
| 58 | 13.533 | 1942 | 1946 | 1948 | rBV2 | 38522 | 50012 | 1.63% | 0.120% |
| 59 | 13.639 | 1960 | 1964 | 1965 | rBV2 | 36859 | 43456 | 1.42% | 0.104% |
| 60 | 13.663 | 1965 | 1968 | 1972 | rVB | 128492 | 130116 | 4.25% | 0.312% |
| 61 | 13.768 | 1982 | 1986 | 1988 | rBV | 147547 | 147704 | 4.82% | 0.354% |
| 62 | 13.798 | 1988 | 1991 | 1993 | rVV | 144450 | 123829 | 4.04% | 0.297% |
| 63 | 13.821 | 1993 | 1995 | 2000 | rVV2 | 107617 | 154683 | 5.05% | 0.371% |
| 64 | 13.868 | 2000 | 2003 | 2011 | rVV | 156450 | 233535 | 7.62% | 0.560% |
| 65 | 14.021 | 2020 | 2029 | 2031 | rBV2 | 1789274 | 2433115 | 79.43% | 5.832% |
| 66 | 14.045 | 2031 | 2033 | 2042 | rVB | 864002 | 821425 | 26.82% | 1.969% |
| 67 | 14.127 | 2042 | 2047 | 2052 | rVB | 215517 | 202884 | 6.62% | 0.486% |
| 68 | 14.174 | 2052 | 2055 | 2058 | rBV3 | 84683 | 96871 | 3.16% | 0.232% |
| 69 | 14.210 | 2059 | 2061 | 2064 | rVV2 | 53997 | 54802 | 1.79% | 0.131% |
| 70 | 14.245 | 2064 | 2067 | 2072 | rVB2 | 69654 | 93567 | 3.05% | 0.224% |
| 71 | 14.368 | 2086 | 2088 | 2091 | rBV | 56495 | 62930 | 2.05% | 0.151% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

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-BF073019.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 14.410 | 2091 | 2095 | 2098 | rVV | 157489 | 188011 | 6.14% | 0.451% |
| 73 | 14.439 | 2098 | 2100 | 2103 | rVV | 78745 | 71818 | 2.34% | 0.172% |
| 74 | 14.480 | 2103 | 2107 | 2110 | rVV2 | 147799 | 171993 | 5.61% | 0.412% |
| 75 | 14.533 | 2113 | 2116 | 2118 | rVV | 88437 | 92369 | 3.02% | 0.221% |
| 76 | 14.551 | 2118 | 2119 | 2122 | rVB | 86311 | 68550 | 2.24% | 0.164% |
| 77 | 14.727 | 2145 | 2149 | 2151 | rBV2 | 63840 | 76835 | 2.51% | 0.184% |
| 78 | 14.786 | 2156 | 2159 | 2165 | rVV | 204079 | 230764 | 7.53% | 0.553% |
| 79 | 14.863 | 2169 | 2172 | 2176 | rVB | 39308 | 37473 | 1.22% | 0.090% |
| 80 | 14.904 | 2176 | 2179 | 2183 | rBV2 | 59741 | 74975 | 2.45% | 0.180% |
| 81 | 15.062 | 2201 | 2206 | 2213 | rBV | 652910 | 1280443 | 41.80% | 3.069% |
| 82 | 15.121 | 2213 | 2216 | 2222 | rVV2 | 338244 | 422977 | 13.81% | 1.014% |
| 83 | 15.174 | 2222 | 2225 | 2229 | rVB | 113275 | 124696 | 4.07% | 0.299% |
| 84 | 15.257 | 2236 | 2239 | 2245 | rBV4 | 44447 | 105461 | 3.44% | 0.253% |
| 85 | 15.368 | 2253 | 2258 | 2264 | rVB | 323132 | 484797 | 15.83% | 1.162% |
| 86 | 15.427 | 2264 | 2268 | 2274 | rBV | 500255 | 633661 | 20.69% | 1.519% |
| 87 | 15.492 | 2274 | 2279 | 2293 | rVV3 | 1112415 | 1892020 | 61.76% | 4.535% |
| 88 | 15.939 | 2348 | 2355 | 2365 | rBV | 355006 | 621084 | 20.28% | 1.489% |
| 89 | 16.057 | 2371 | 2375 | 2380 | rVB2 | 30694 | 45264 | 1.48% | 0.108% |
| 90 | 16.439 | 2432 | 2440 | 2451 | rBV | 203002 | 387484 | 12.65% | 0.929% |
| 91 | 16.968 | 2523 | 2530 | 2536 | rBV2 | 191725 | 383941 | 12.53% | 0.920% |
| 92 | 17.033 | 2536 | 2541 | 2552 | rVB2 | 72760 | 166847 | 5.45% | 0.400% |
| 93 | 17.145 | 2554 | 2560 | 2565 | rBV | 36046 | 73758 | 2.41% | 0.177% |
| 94 | 17.198 | 2565 | 2569 | 2576 | rVB2 | 27492 | 49379 | 1.61% | 0.118% |
| 95 | 17.415 | 2599 | 2606 | 2616 | rBV | 132047 | 293944 | 9.60% | 0.705% |
| 96 | 17.662 | 2641 | 2648 | 2654 | rBV | 38286 | 97504 | 3.18% | 0.234% |

Sum of corrected areas: 41722604

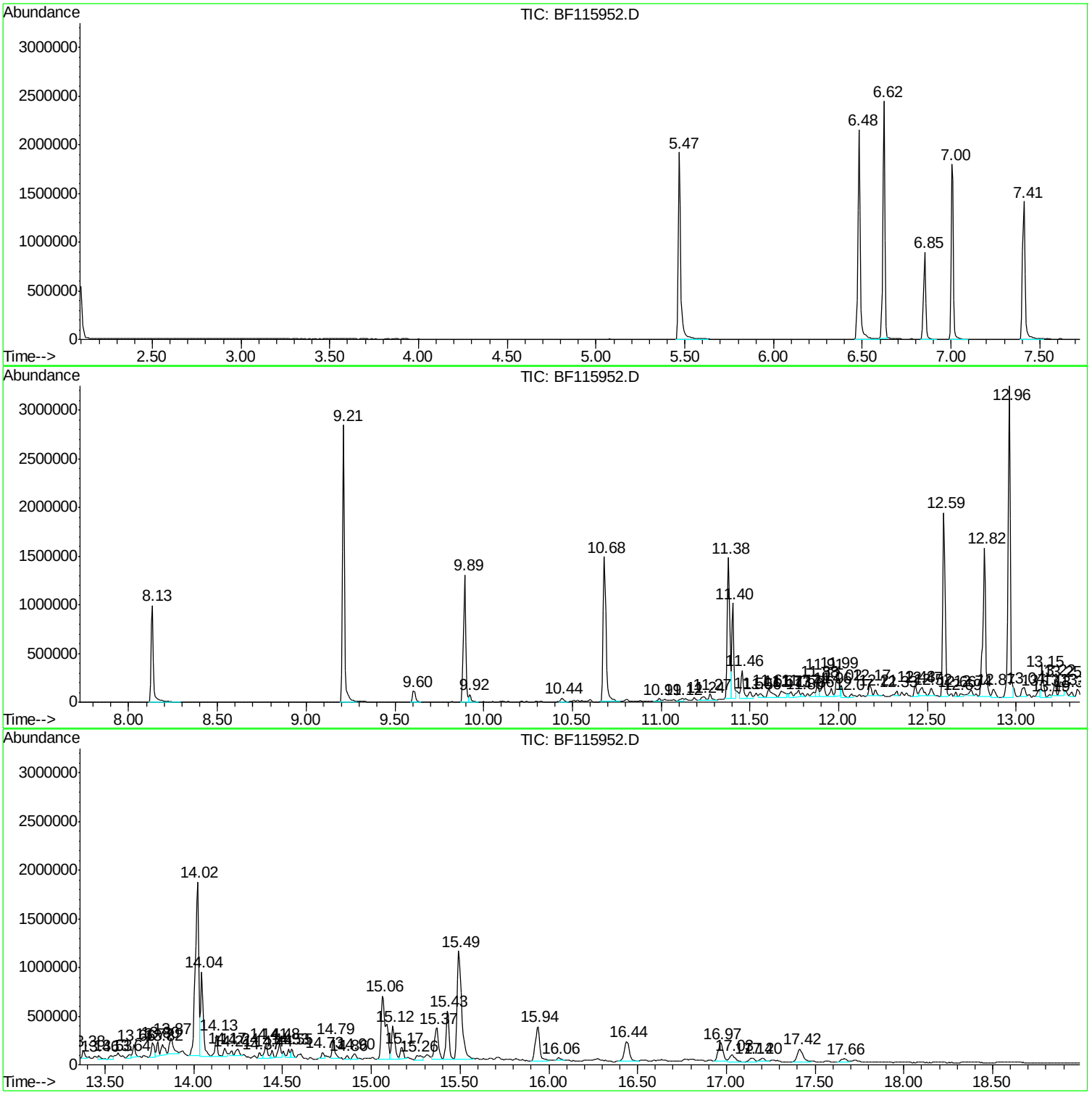
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.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\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

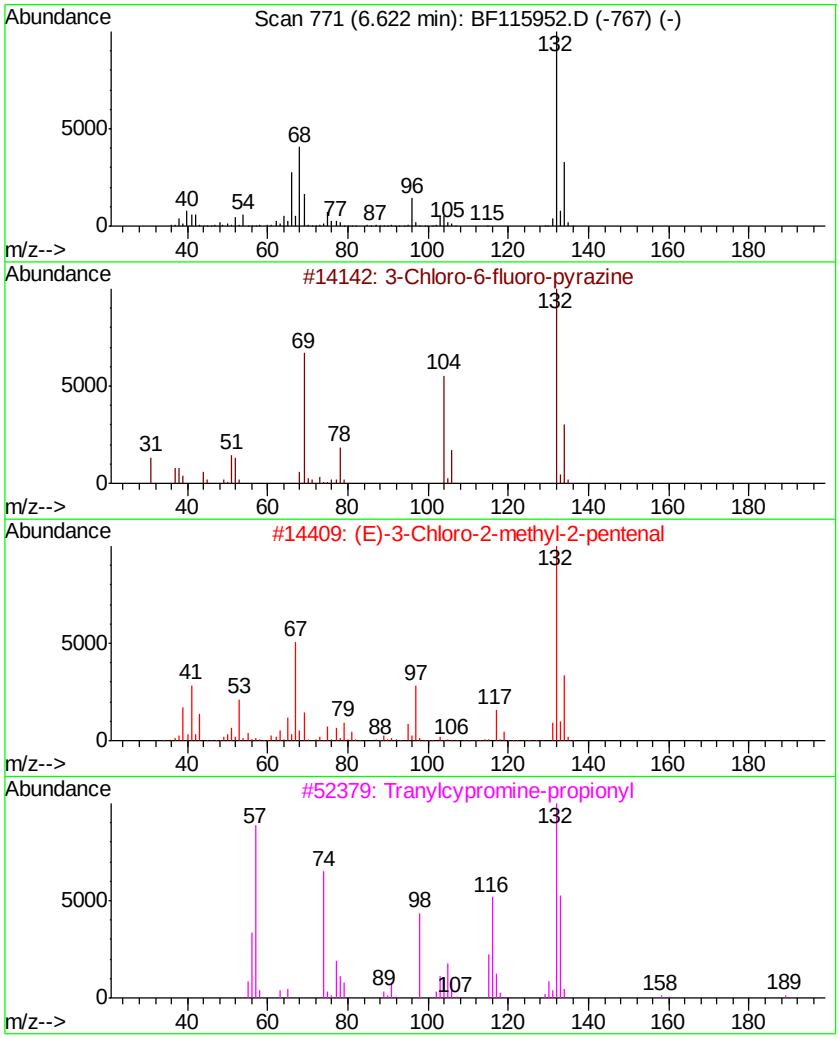
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

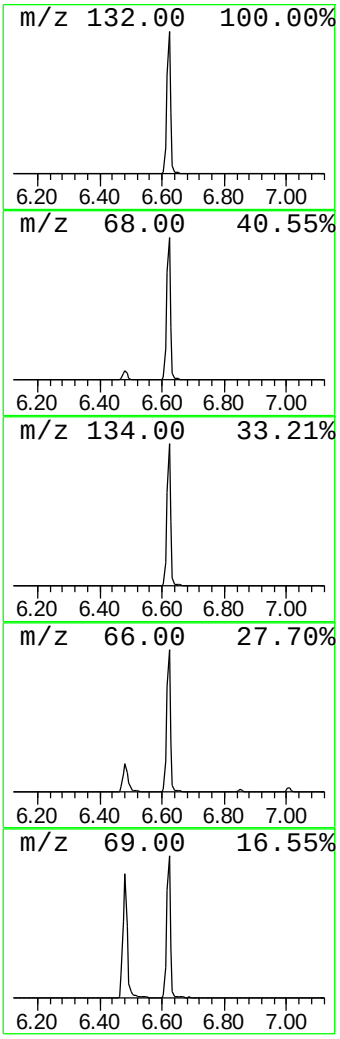
**********

Peak Number 1 unknown6.62 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.62 | 55.03 ng | 2071380 | 1,4-Dichlorobenzene-d4 | 6.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 27 |
| 2 | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO | 031357-76-3 | 16 |
| 3 | Tranylcypromine-propionyl | 189 | C12H15NO | 1000123-86-3 | 12 |
| 4 | Bicyclo[4.2.0]octa-1,3,5-triene,... | 132 | C10H12 | 028749-81-7 | 9 |
| 5 | Benzene, 1-ethenyl-3,5-dimethyl- | 132 | C10H12 | 005379-20-4 | 9 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

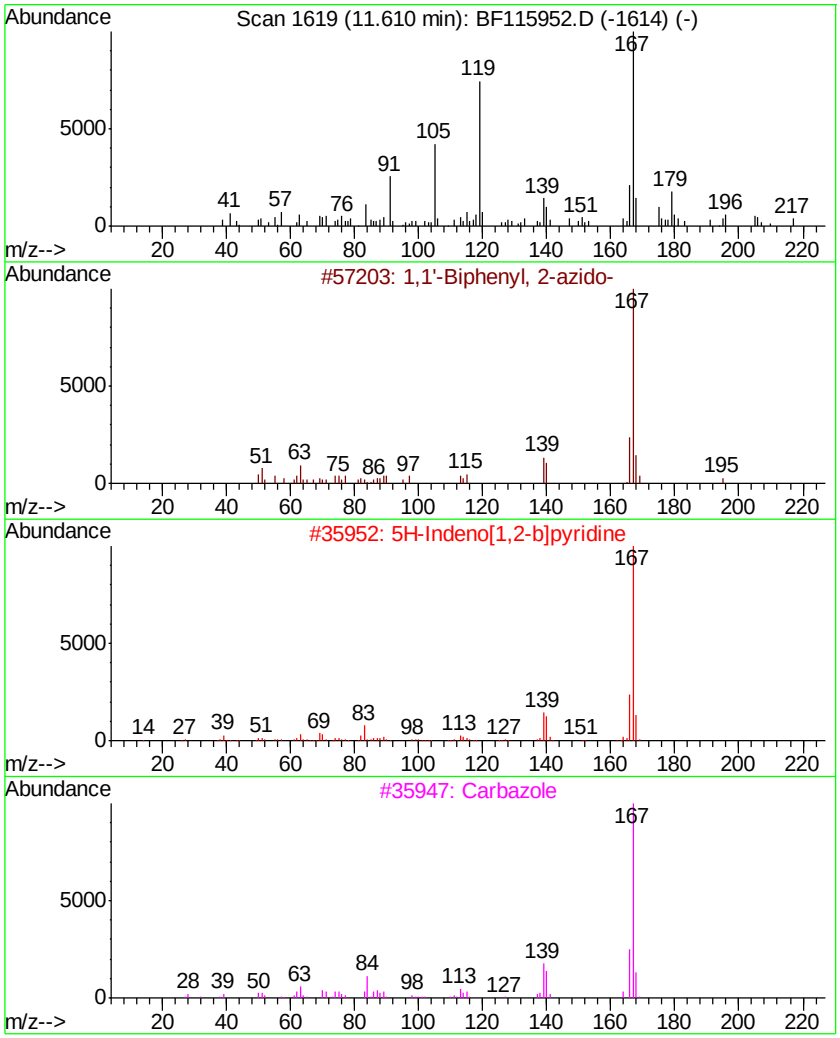
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

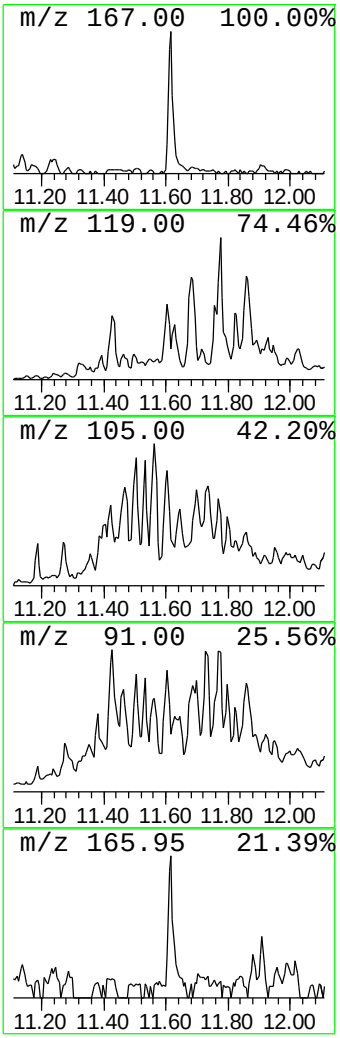
**********

Peak Number 3 1,1'-Biphenyl, 2-azido- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.61 | 2.74 ng | 178176 | Phenanthrene-d10 | 11.38 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,1'-Biphenyl, 2-azido- | 195 | C12H9N3 | 007599-23-7 | 55 |
| 2 | 5H-Indeno[1,2-b]pyridine | 167 | C12H9N | 000244-99-5 | 55 |
| 3 | Carbazole | 167 | C12H9N | 000086-74-8 | 55 |
| 4 | D-Galactitol, 2-(acetylmethylami... | 363 | C16H29NO8 | 074410-42-7 | 46 |
| 5 | 9H-Carbazole, 9-nitroso- | 196 | C12H8N2O | 002788-23-0 | 46 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

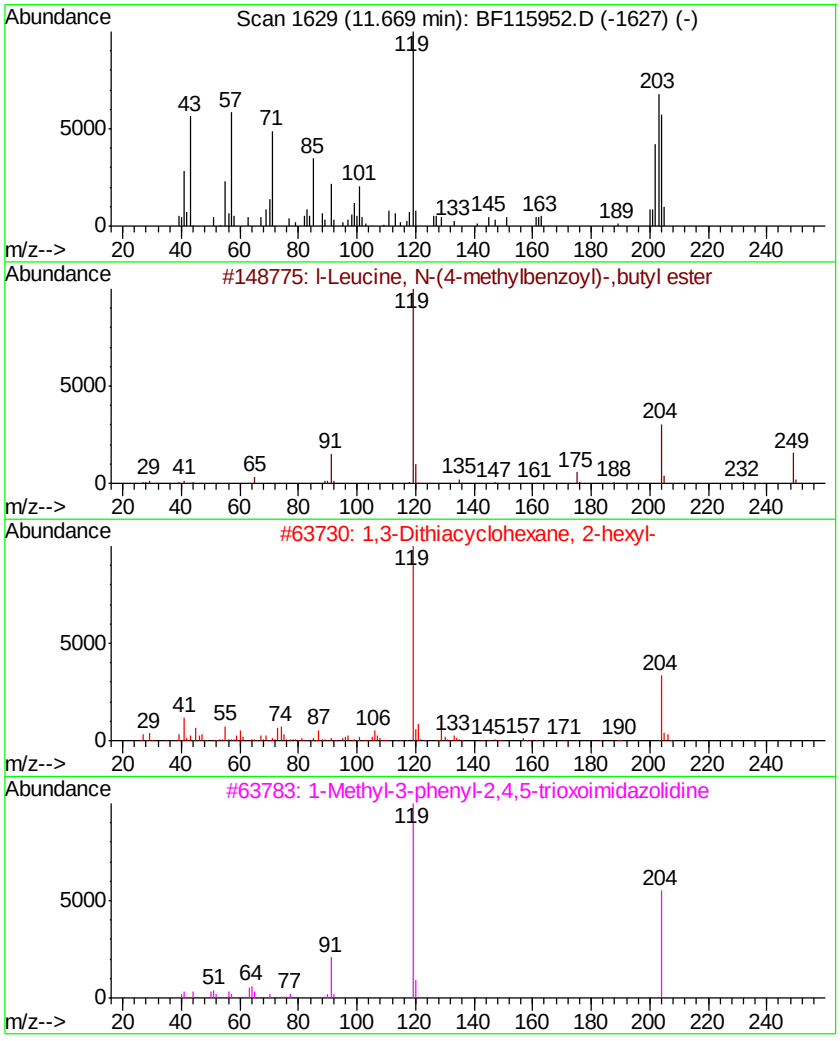
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

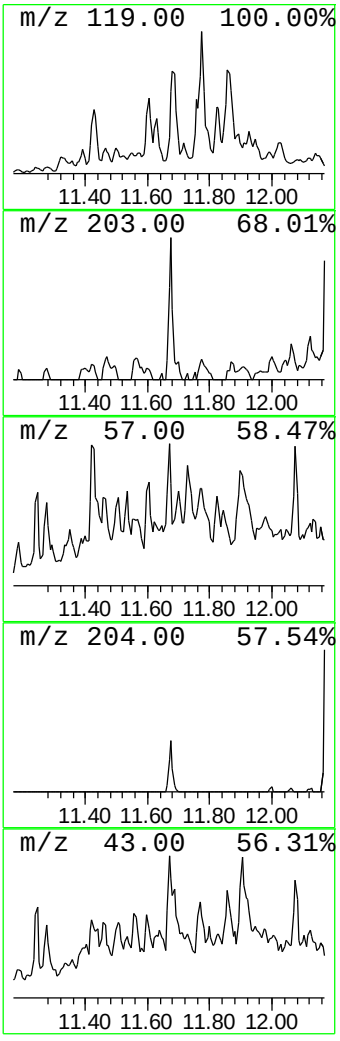
**********

Peak Number 4 l-Leucine, N-(4-methylbenzo... Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.67 | 2.25 ng | 145844 | Phenanthrene-d10 | 11.38 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | l-Leucine, N-(4-methylbenzoyl)-,... | 305 | C18H27NO3 | 1000325-13-2 | 50 |
| 2 | 1,3-Dithiacyclohexane, 2-hexyl- | 204 | C10H20S2 | 026958-42-9 | 50 |
| 3 | 1-Methyl-3-phenyl-2,4,5-trioxoim... | 204 | C10H8N2O3 | 016935-46-9 | 47 |
| 4 | Benzene, (1,1,4,6,6-pentamethylh... | 246 | C18H30 | 055134-07-1 | 43 |
| 5 | p-Toluic acid, pent-2-en-4-ynyl ... | 200 | C13H12O2 | 1000292-50-3 | 43 |



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Data File : BF115952.D
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Sample : K4131-11
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**Instrument :** BNA_F
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

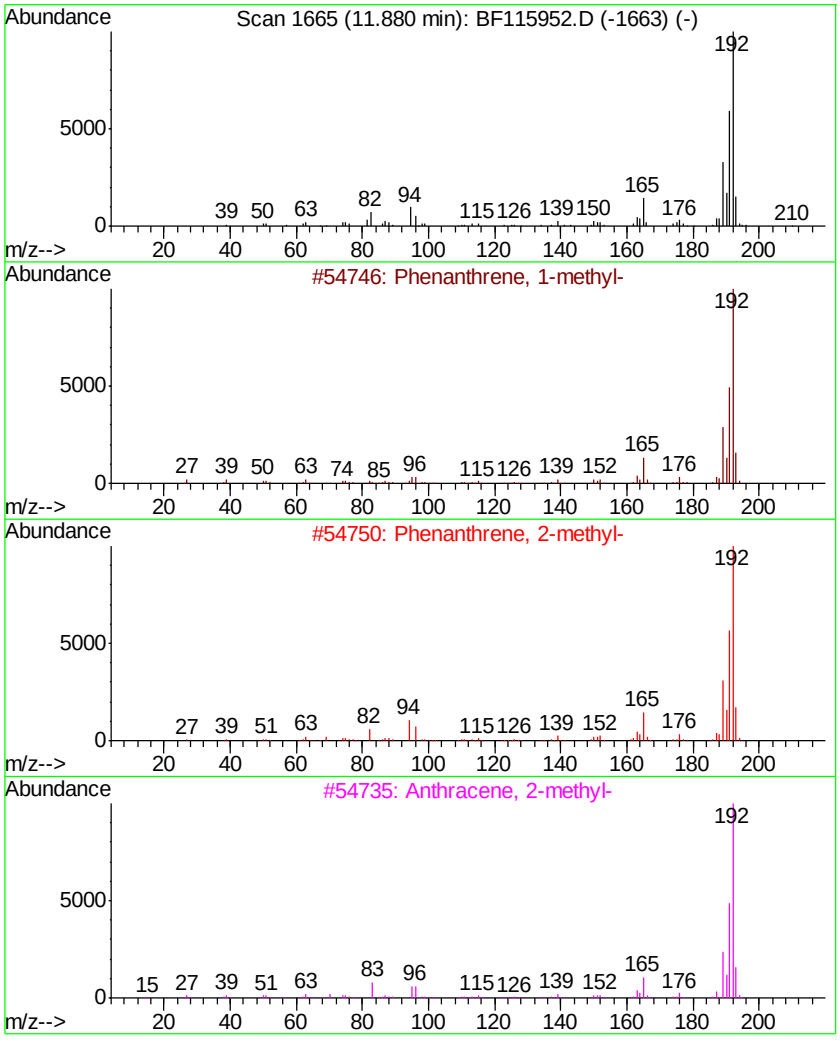
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

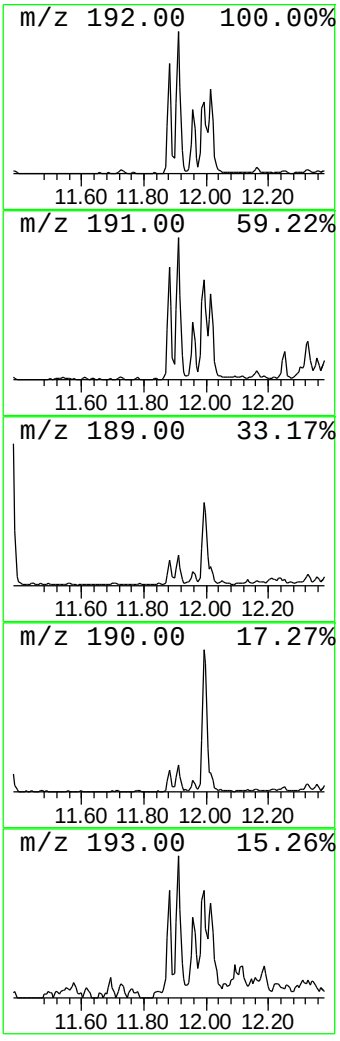
**********

Peak Number 5 Phenanthrene, 1-methyl- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.88 | 2.10 ng | 136379 | Phenanthrene-d10 | 11.38 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 96 |
| 2 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 96 |
| 3 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 95 |
| 4 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 95 |
| 5 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 93 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.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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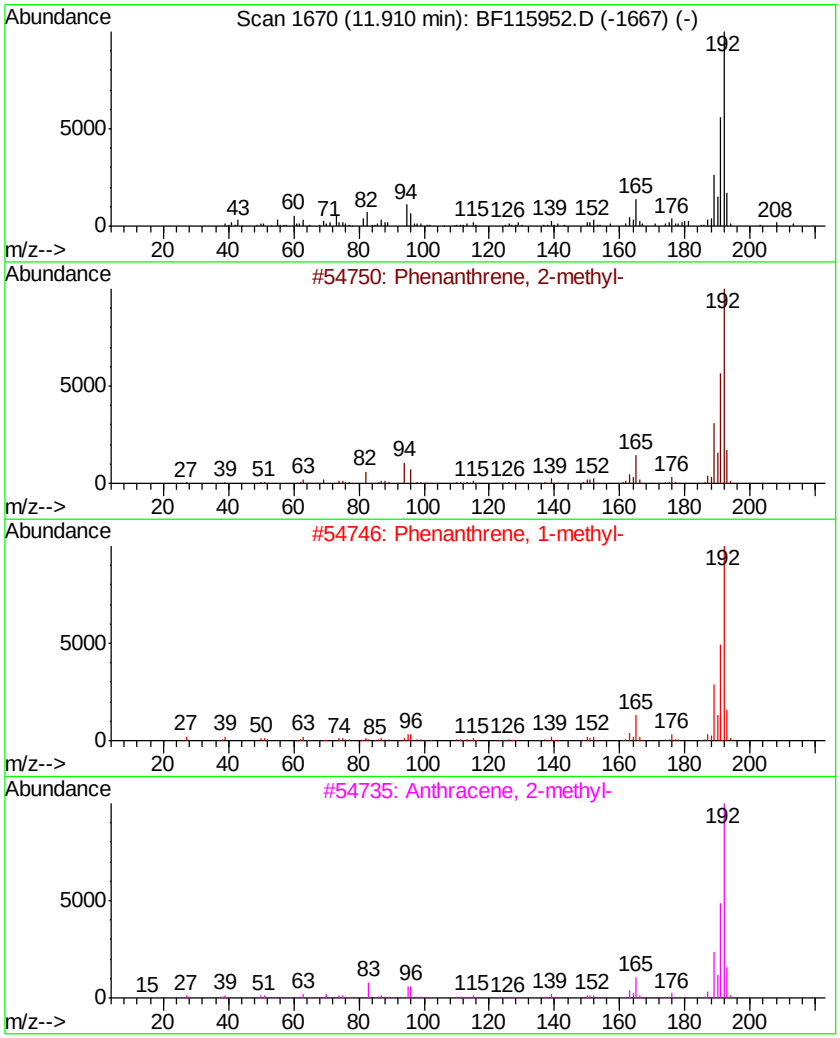
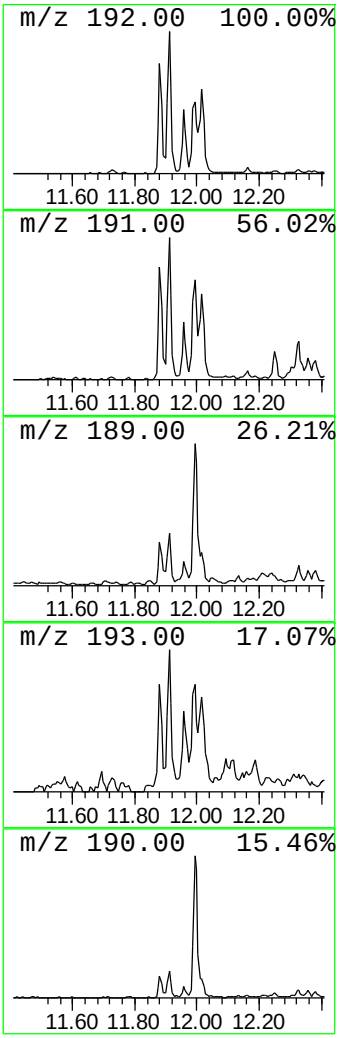
Peak Number 6 Phenanthrene, 2-methyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.91 | 3.85 ng | 250397 | Phenanthrene-d10 | 11.38 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 98 |
| 2 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 97 |
| 3 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 96 |
| 4 | 1H-Indene, 2-phenyl- | 192 | C15H12 | 004505-48-0 | 96 |
| 5 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 96 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.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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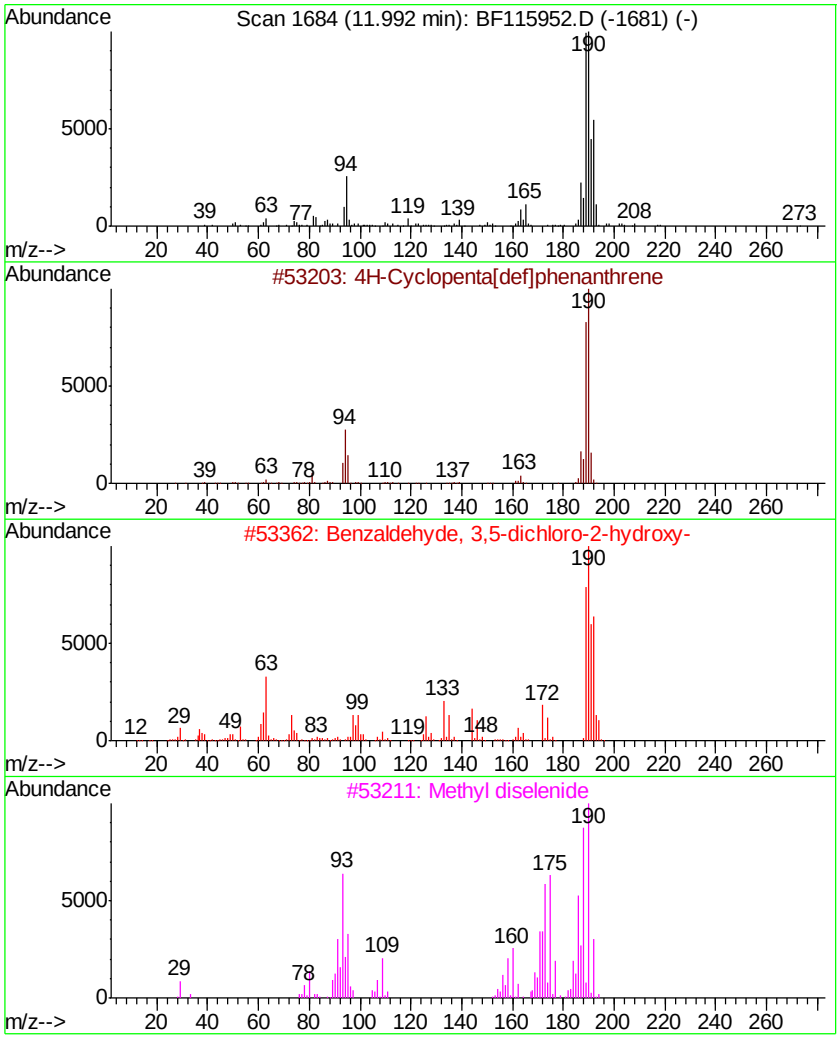
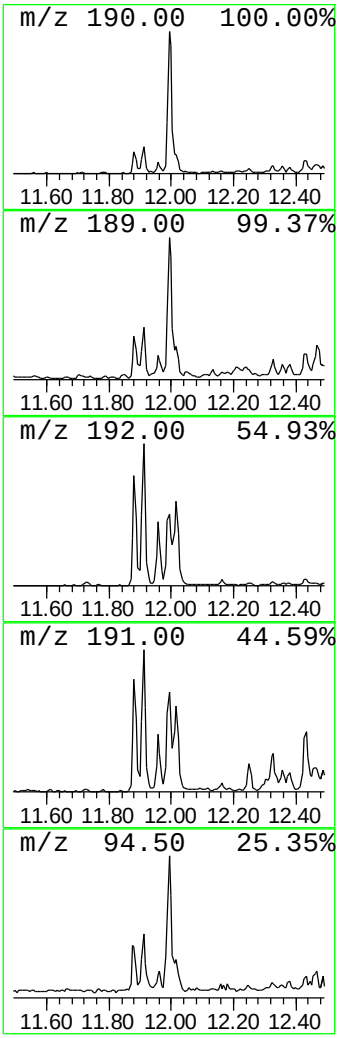
Peak Number 7 4H-Cyclopenta[def]phenanthrene Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.99 | 4.37 ng | 283611 | Phenanthrene-d10 | 11.38 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 92 |
| 2 | Benzaldehyde, 3,5-dichloro-2-hyd... | 190 | C7H4Cl2O2 | 000090-60-8 | 50 |
| 3 | Methyl diselenide | 190 | C2H6Se2 | 007101-31-7 | 27 |
| 4 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 18 |
| 5 | Phenanthrene, 4-methyl- | 192 | C15H12 | 000832-64-4 | 18 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.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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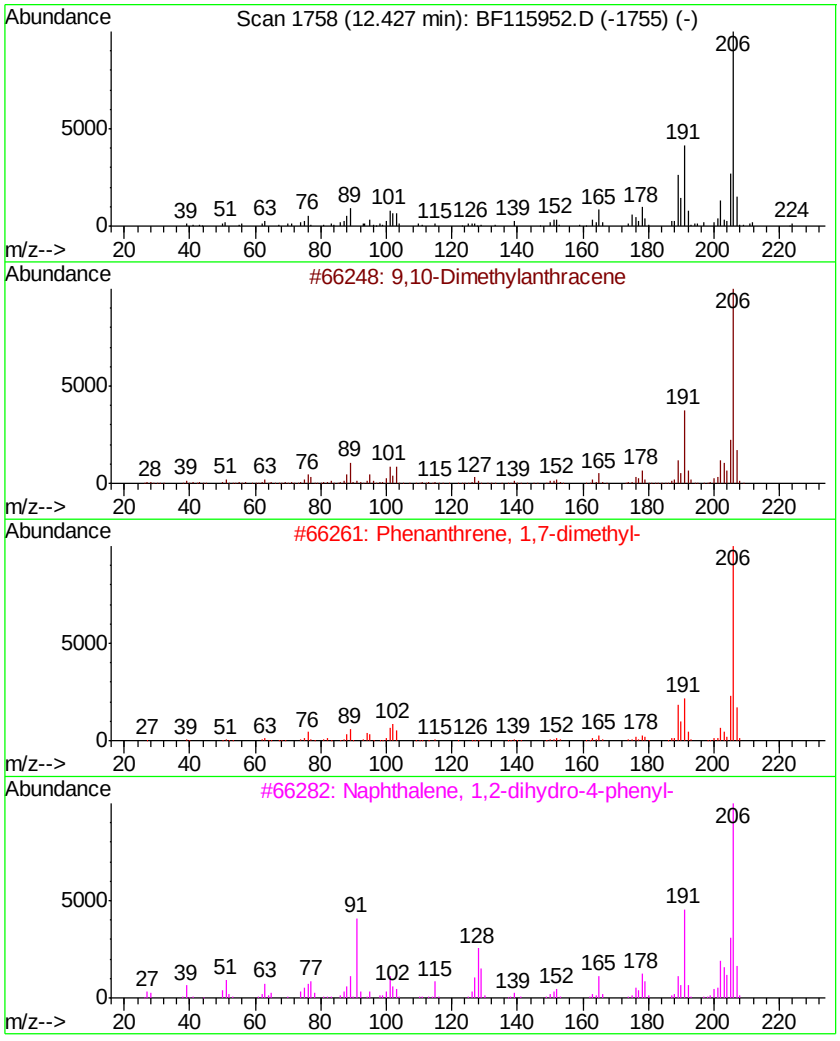
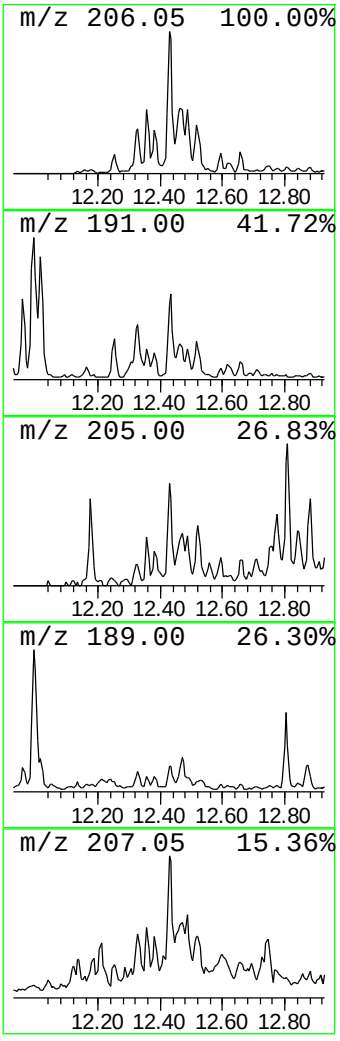
Peak Number 8 9,10-Dimethylanthracene Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.43 | 2.03 ng | 132162 | Phenanthrene-d10 | 11.38 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 91 |
| 2 | Phenanthrene, 1,7-dimethyl- | 206 | C16H14 | 000483-87-4 | 91 |
| 3 | Naphthalene, 1,2-dihydro-4-phenyl- | 206 | C16H14 | 007469-40-1 | 91 |
| 4 | di-p-Tolylacetylene | 206 | C16H14 | 002789-88-0 | 91 |
| 5 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 90 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.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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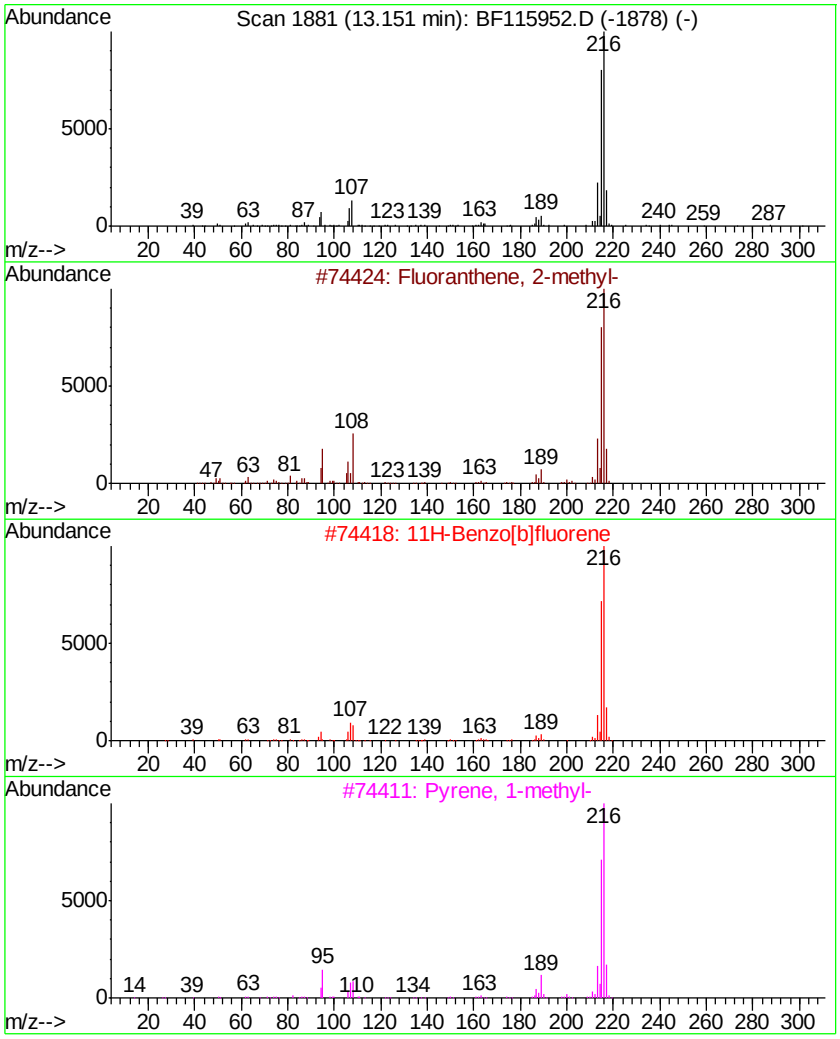
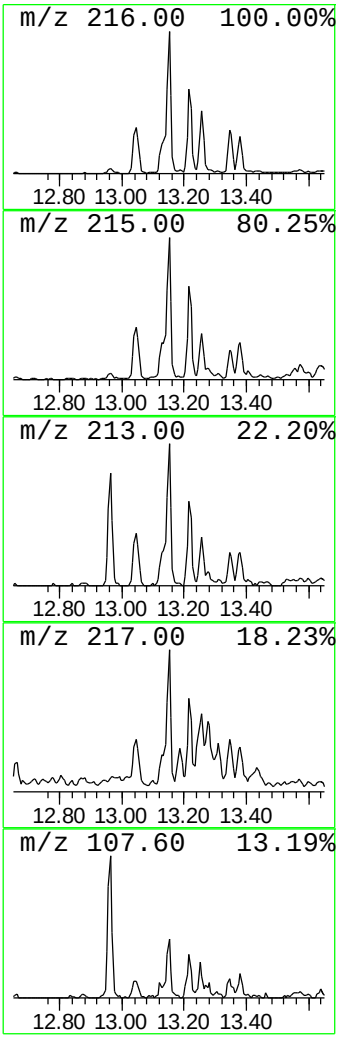
Peak Number 9 Fluoranthene, 2-methyl- Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.15 | 2.01 ng | 244587 | Chrysene-d12 | 14.02 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 95 |
| 2 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 95 |
| 3 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 87 |
| 4 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 83 |
| 5 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 83 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.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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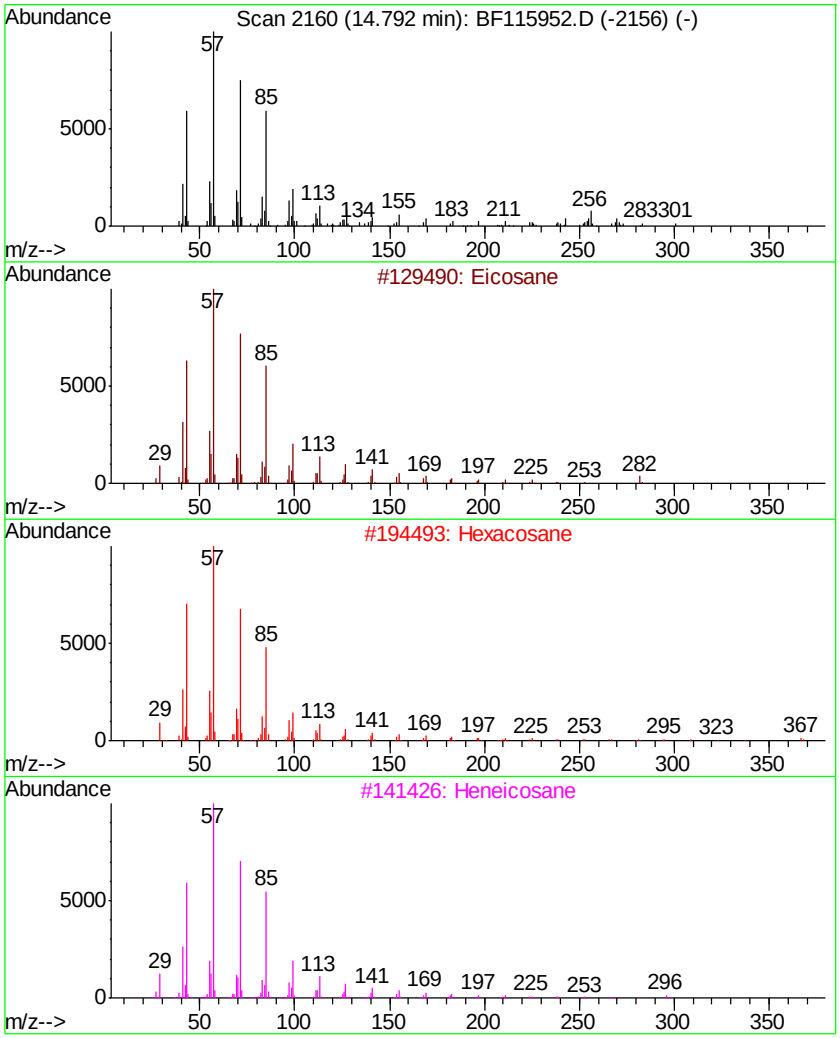
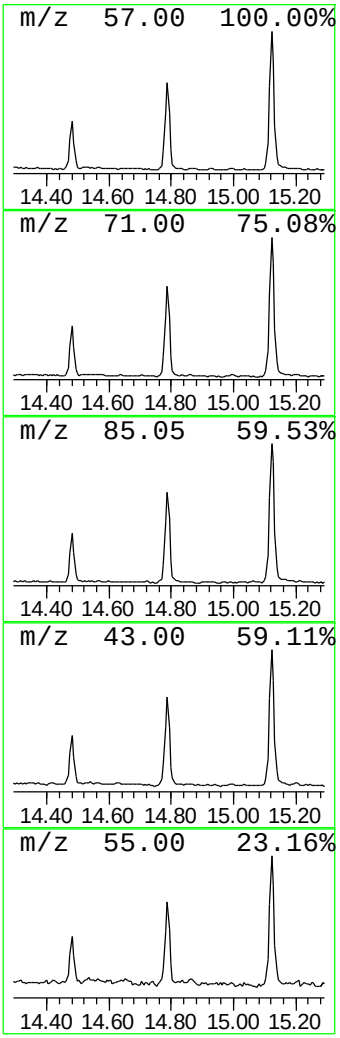
Peak Number 10 Eicosane Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.79 | 2.44 ng | 230764 | Perylene-d12 | 15.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Eicosane | 282 | C20H42 | 000112-95-8 | 96 |
| 2 | Hexacosane | 366 | C26H54 | 000630-01-3 | 94 |
| 3 | Heneicosane | 296 | C21H44 | 000629-94-7 | 91 |
| 4 | 2-methyloctacosane | 408 | C29H60 | 1000376-72-8 | 91 |
| 5 | Heptadecane | 240 | C17H36 | 000629-78-7 | 91 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.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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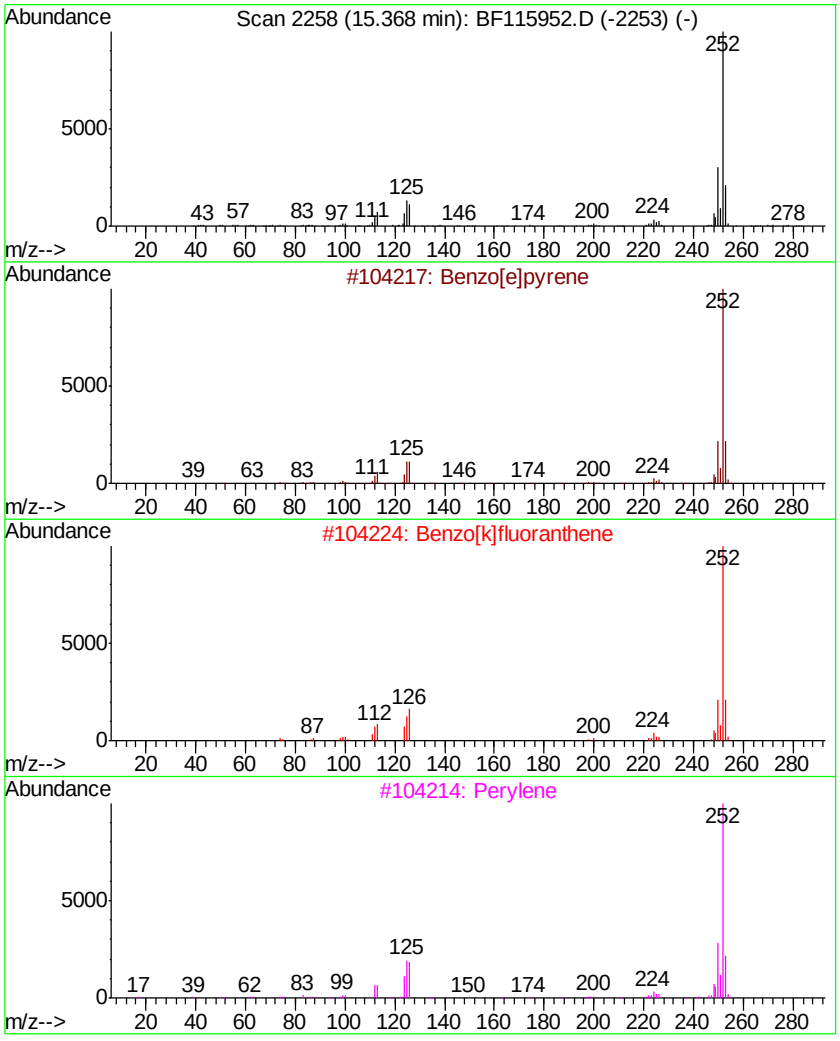
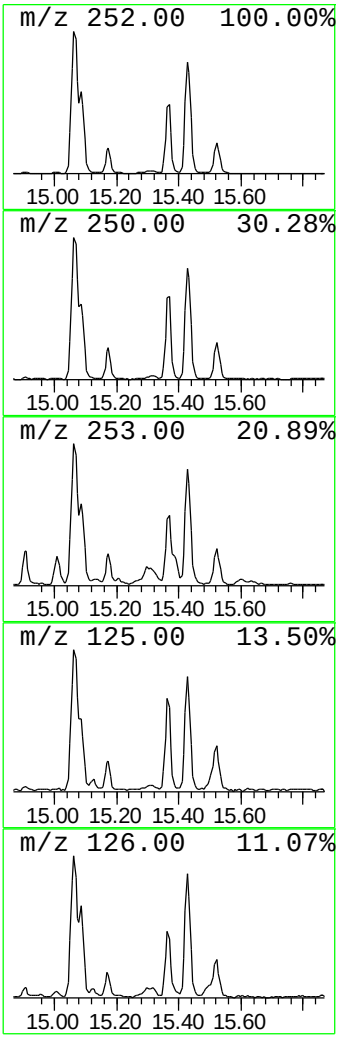
Peak Number 11 Benzo[e]pyrene Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.37 | 5.12 ng | 484797 | Perylene-d12 | 15.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 98 |
| 2 | Benzo[k]fluoranthene | 252 | C20H12 | 000207-08-9 | 97 |
| 3 | Perylene | 252 | C20H12 | 000198-55-0 | 97 |
| 4 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 95 |
| 5 | Benzo[a]pyrene | 252 | C20H12 | 000050-32-8 | 93 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.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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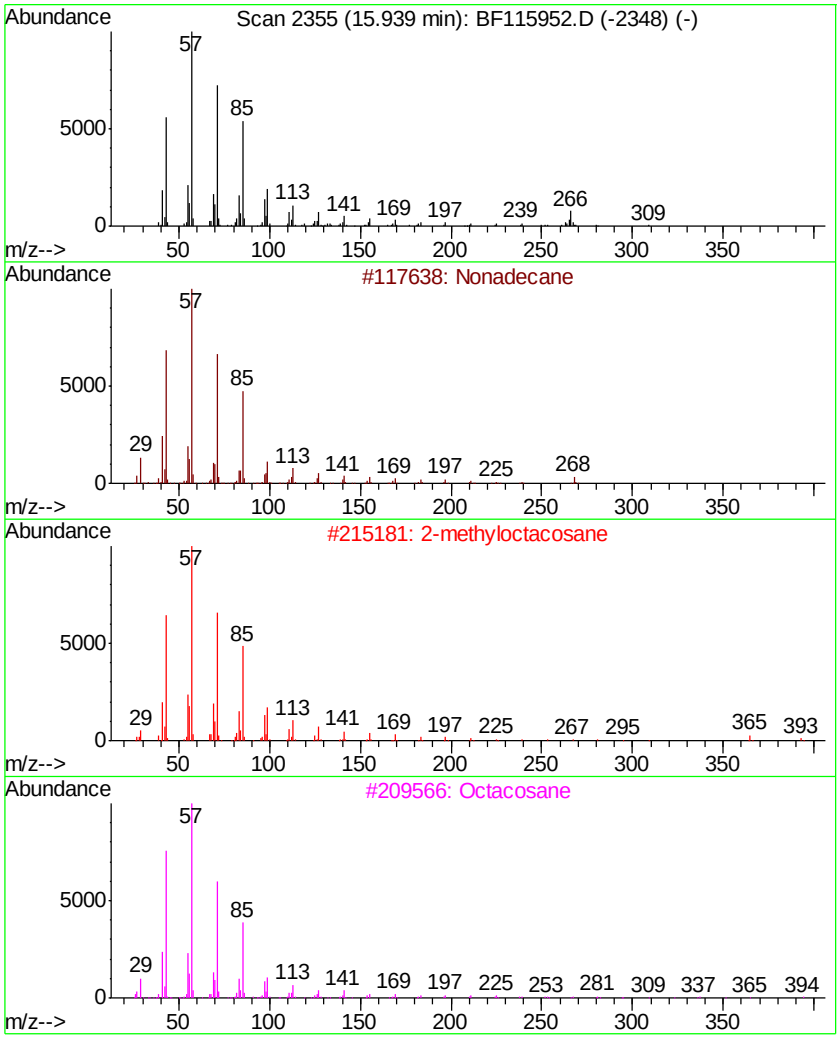
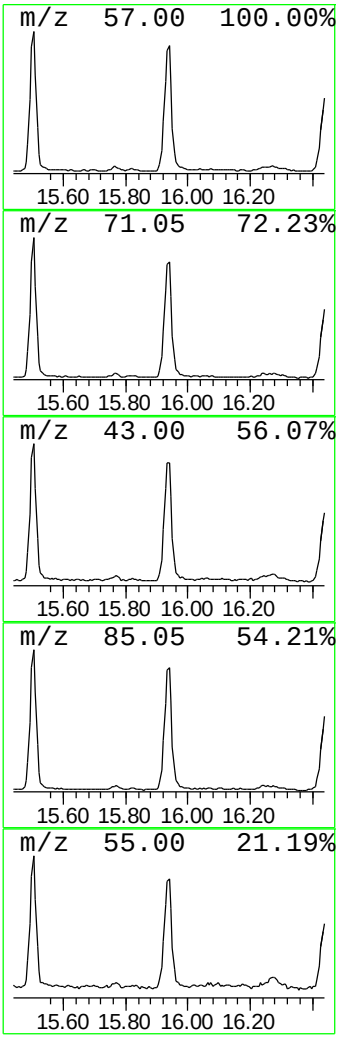
Peak Number 12 Nonadecane Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.94 | 6.57 ng | 621084 | Perylene-d12 | 15.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Nonadecane | 268 | C19H40 | 000629-92-5 | 94 |
| 2 | 2-methyloctacosane | 408 | C29H60 | 1000376-72-8 | 90 |
| 3 | Octacosane | 394 | C28H58 | 000630-02-4 | 90 |
| 4 | Heneicosane | 296 | C21H44 | 000629-94-7 | 90 |
| 5 | Hexacosane | 366 | C26H54 | 000630-01-3 | 87 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.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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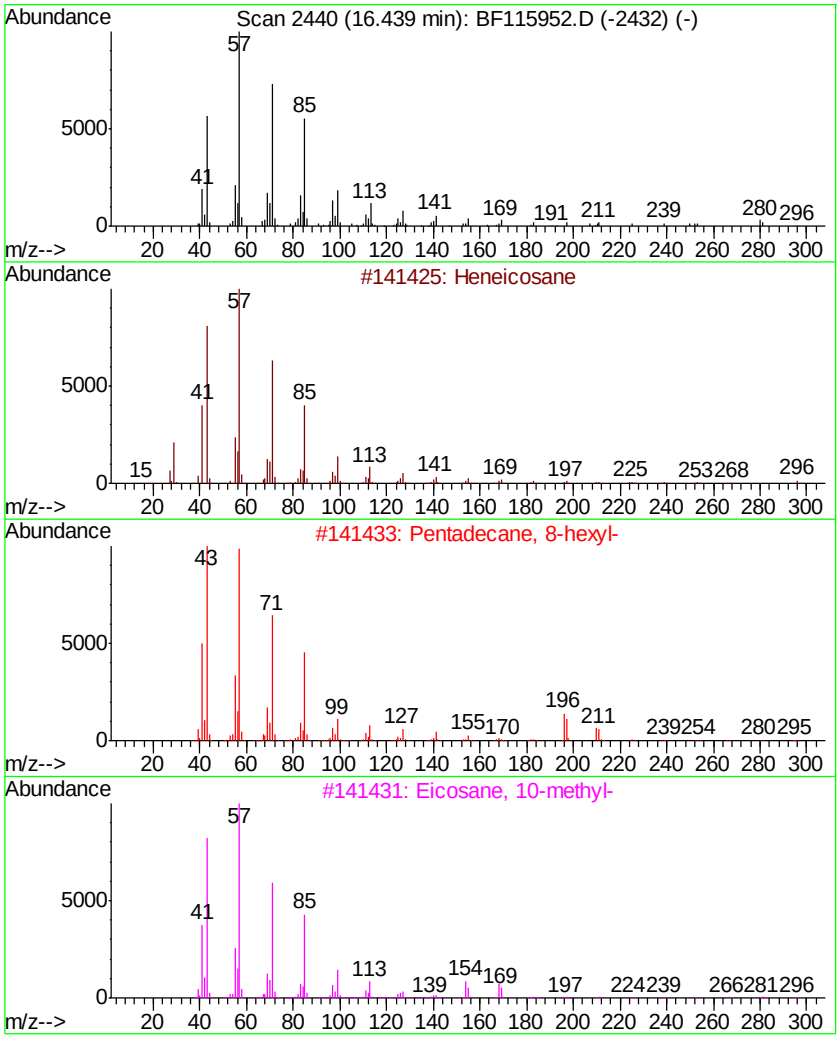
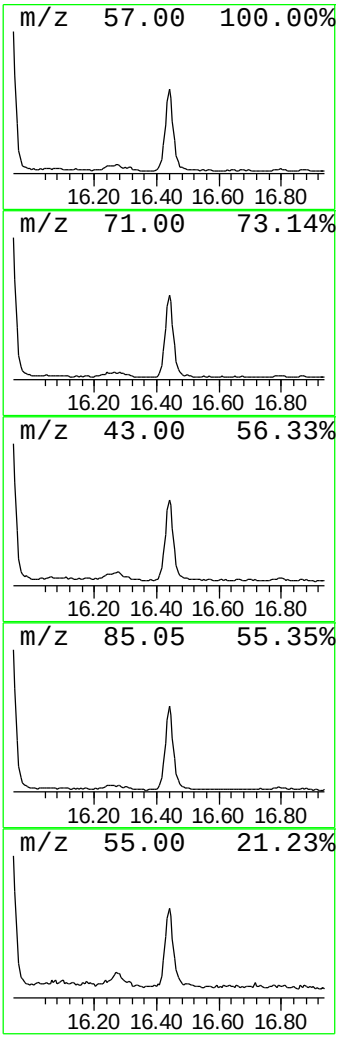
Peak Number 13 Heneicosane Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.44 | 4.10 ng | 387484 | Perylene-d12 | 15.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Heneicosane | 296 | C21H44 | 000629-94-7 | 97 |
| 2 | Pentadecane, 8-hexyl- | 296 | C21H44 | 013475-75-7 | 96 |
| 3 | Eicosane, 10-methyl- | 296 | C21H44 | 054833-23-7 | 94 |
| 4 | Eicosane, 3-methyl- | 296 | C21H44 | 006418-46-8 | 91 |
| 5 | Hexacosane | 366 | C26H54 | 000630-01-3 | 91 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF080219\
Data File : BF115952.D
Acq On : 2 Aug 2019 17:51
Operator : HP/JU
Sample : K4131-11
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 1S-E1-E4-COMP-(0-1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.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 |
| unknown6.62 | 6.62 | 55.0 | ng | 2071380 | 1 | 6.85 | 752773 | 20.0 |
| 1,1'-Biphenyl, 2-... | 11.61 | 2.7 | ng | 178176 | 4 | 11.38 | 1299080 | 20.0 |
| l-Leucine, N-(4-m... | 11.67 | 2.3 | ng | 145844 | 4 | 11.38 | 1299080 | 20.0 |
| Phenanthrene, 1-m... | 11.88 | 2.1 | ng | 136379 | 4 | 11.38 | 1299080 | 20.0 |
| Phenanthrene, 2-m... | 11.91 | 3.9 | ng | 250397 | 4 | 11.38 | 1299080 | 20.0 |
| 4H-Cyclopenta[def... | 11.99 | 4.4 | ng | 283611 | 4 | 11.38 | 1299080 | 20.0 |
| 9,10-Dimethylanth... | 12.43 | 2.0 | ng | 132162 | 4 | 11.38 | 1299080 | 20.0 |
| Fluoranthene, 2-m... | 13.15 | 2.0 | ng | 244587 | 5 | 14.02 | 2433120 | 20.0 |
| Eicosane | 14.79 | 2.4 | ng | 230764 | 6 | 15.49 | 1892020 | 20.0 |
| Benzo[e]pyrene | 15.37 | 5.1 | ng | 484797 | 6 | 15.49 | 1892020 | 20.0 |
| Nonadecane | 15.94 | 6.6 | ng | 621084 | 6 | 15.49 | 1892020 | 20.0 |
| Heneicosane | 16.44 | 4.1 | ng | 387484 | 6 | 15.49 | 1892020 | 20.0 |