LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

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-BF032519.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 | 5.328 | 546 | 551 | 572 | rBV | 2878714 | 3193264 | 86.93% | 6.350% |
| 2 | 6.357 | 721 | 726 | 743 | rBV | 3171227 | 3336197 | 90.82% | 6.634% |
| 3 | 6.481 | 743 | 747 | 750 | rBV | 3560250 | 3260196 | 88.75% | 6.483% |
| 4 | 6.704 | 782 | 785 | 797 | rVB | 977039 | 818288 | 22.28% | 1.627% |
| 5 | 6.863 | 808 | 812 | 815 | rBV | 2954834 | 2550838 | 69.44% | 5.072% |
| 6 | 7.269 | 876 | 881 | 912 | rBV | 2034316 | 2150256 | 58.54% | 4.276% |
| 7 | 7.987 | 999 | 1003 | 1027 | rBV | 1093944 | 1068859 | 29.10% | 2.125% |
| 8 | 8.698 | 1121 | 1124 | 1131 | rBV | 37125 | 41396 | 1.13% | 0.082% |
| 9 | 8.798 | 1137 | 1141 | 1150 | rVB | 37221 | 38060 | 1.04% | 0.076% |
| 10 | 9.063 | 1181 | 1186 | 1189 | rBV | 3932093 | 3673413 | 100.00% | 7.305% |
| 11 | 9.163 | 1200 | 1203 | 1210 | rVB | 49671 | 62005 | 1.69% | 0.123% |
| 12 | 9.328 | 1226 | 1231 | 1240 | rBV2 | 33193 | 51046 | 1.39% | 0.102% |
| 13 | 9.398 | 1240 | 1243 | 1246 | rBV | 57832 | 60437 | 1.65% | 0.120% |
| 14 | 9.457 | 1250 | 1253 | 1260 | rVB | 200645 | 195658 | 5.33% | 0.389% |
| 15 | 9.598 | 1274 | 1277 | 1282 | rBV | 55223 | 49933 | 1.36% | 0.099% |
| 16 | 9.733 | 1293 | 1300 | 1303 | rBV | 1244275 | 1210469 | 32.95% | 2.407% |
| 17 | 9.769 | 1303 | 1306 | 1316 | rVB | 406042 | 404580 | 11.01% | 0.805% |
| 18 | 9.939 | 1331 | 1335 | 1340 | rBV | 273692 | 275663 | 7.50% | 0.548% |
| 19 | 10.281 | 1390 | 1393 | 1399 | rBV | 511285 | 438494 | 11.94% | 0.872% |
| 20 | 10.345 | 1399 | 1404 | 1406 | rBV | 43206 | 61781 | 1.68% | 0.123% |
| 21 | 10.439 | 1417 | 1420 | 1425 | rVB | 90435 | 82005 | 2.23% | 0.163% |
| 22 | 10.522 | 1430 | 1434 | 1446 | rBV | 2282278 | 2393093 | 65.15% | 4.759% |
| 23 | 10.651 | 1451 | 1456 | 1463 | rVB3 | 101268 | 130211 | 3.54% | 0.259% |
| 24 | 10.828 | 1479 | 1486 | 1489 | rBV2 | 76468 | 100884 | 2.75% | 0.201% |
| 25 | 10.957 | 1502 | 1508 | 1510 | rBV3 | 29249 | 40540 | 1.10% | 0.081% |
| 26 | 11.022 | 1516 | 1519 | 1523 | rVB | 76715 | 75340 | 2.05% | 0.150% |
| 27 | 11.069 | 1523 | 1527 | 1529 | rVV2 | 38172 | 48498 | 1.32% | 0.096% |
| 28 | 11.110 | 1532 | 1534 | 1541 | rVB | 156364 | 144873 | 3.94% | 0.288% |
| 29 | 11.216 | 1548 | 1552 | 1554 | rBV | 1263047 | 1246963 | 33.95% | 2.480% |
| 30 | 11.239 | 1554 | 1556 | 1560 | rVV | 2200100 | 1785752 | 48.61% | 3.551% |
| 31 | 11.292 | 1560 | 1565 | 1568 | rVV | 245355 | 276956 | 7.54% | 0.551% |
| 32 | 11.333 | 1568 | 1572 | 1575 | rVB2 | 45138 | 51073 | 1.39% | 0.102% |
| 33 | 11.445 | 1587 | 1591 | 1595 | rBV | 137610 | 165448 | 4.50% | 0.329% |
| 34 | 11.510 | 1599 | 1602 | 1606 | rVV2 | 61785 | 72120 | 1.96% | 0.143% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

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-BF032519.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 11.545 | 1606 | 1608 | 1614 | rVV4 | 34995 | 51850 | 1.41% | 0.103% |
| 36 | 11.627 | 1616 | 1622 | 1627 | rVB3 | 32395 | 57791 | 1.57% | 0.115% |
| 37 | 11.716 | 1633 | 1637 | 1639 | rBV | 198156 | 175393 | 4.77% | 0.349% |
| 38 | 11.751 | 1639 | 1643 | 1648 | rVV2 | 604051 | 756899 | 20.60% | 1.505% |
| 39 | 11.786 | 1648 | 1649 | 1652 | rVV | 95528 | 101311 | 2.76% | 0.201% |
| 40 | 11.827 | 1652 | 1656 | 1658 | rVV | 381385 | 427112 | 11.63% | 0.849% |
| 41 | 11.845 | 1658 | 1659 | 1665 | rVB | 117692 | 111981 | 3.05% | 0.223% |
| 42 | 12.010 | 1684 | 1687 | 1690 | rBV | 116275 | 100169 | 2.73% | 0.199% |
| 43 | 12.039 | 1690 | 1692 | 1697 | rVB | 88570 | 80456 | 2.19% | 0.160% |
| 44 | 12.157 | 1707 | 1712 | 1715 | rBV3 | 50535 | 59699 | 1.63% | 0.119% |
| 45 | 12.263 | 1726 | 1730 | 1733 | rBV | 86208 | 88040 | 2.40% | 0.175% |
| 46 | 12.304 | 1733 | 1737 | 1742 | rVB3 | 68130 | 102698 | 2.80% | 0.204% |
| 47 | 12.351 | 1742 | 1745 | 1749 | rVB | 81693 | 86902 | 2.37% | 0.173% |
| 48 | 12.422 | 1753 | 1757 | 1761 | rBV | 1756535 | 1627209 | 44.30% | 3.236% |
| 49 | 12.533 | 1772 | 1776 | 1781 | rBV | 839496 | 924287 | 25.16% | 1.838% |
| 50 | 12.651 | 1790 | 1796 | 1799 | rBV | 1419262 | 1484676 | 40.42% | 2.952% |
| 51 | 12.698 | 1802 | 1804 | 1810 | rVB2 | 83447 | 98112 | 2.67% | 0.195% |
| 52 | 12.792 | 1813 | 1820 | 1824 | rBV | 3277271 | 3467998 | 94.41% | 6.896% |
| 53 | 12.869 | 1829 | 1833 | 1837 | rBV3 | 76814 | 123567 | 3.36% | 0.246% |
| 54 | 12.957 | 1845 | 1848 | 1849 | rBV2 | 86753 | 90141 | 2.45% | 0.179% |
| 55 | 12.980 | 1849 | 1852 | 1855 | rVB | 191789 | 194980 | 5.31% | 0.388% |
| 56 | 13.045 | 1858 | 1863 | 1866 | rVV | 178020 | 194907 | 5.31% | 0.388% |
| 57 | 13.080 | 1866 | 1869 | 1876 | rVB2 | 132116 | 191671 | 5.22% | 0.381% |
| 58 | 13.174 | 1882 | 1885 | 1887 | rBV | 75129 | 71181 | 1.94% | 0.142% |
| 59 | 13.204 | 1887 | 1890 | 1894 | rVB2 | 67590 | 69252 | 1.89% | 0.138% |
| 60 | 13.369 | 1913 | 1918 | 1921 | rBV5 | 42670 | 67256 | 1.83% | 0.134% |
| 61 | 13.398 | 1921 | 1923 | 1930 | rVB5 | 30857 | 49838 | 1.36% | 0.099% |
| 62 | 13.486 | 1936 | 1938 | 1946 | rVB | 73061 | 75013 | 2.04% | 0.149% |
| 63 | 13.551 | 1946 | 1949 | 1952 | rBV2 | 54495 | 48593 | 1.32% | 0.097% |
| 64 | 13.592 | 1952 | 1956 | 1959 | rBV | 98746 | 120400 | 3.28% | 0.239% |
| 65 | 13.621 | 1959 | 1961 | 1963 | rVV | 92290 | 79235 | 2.16% | 0.158% |
| 66 | 13.645 | 1963 | 1965 | 1971 | rVV3 | 91699 | 118521 | 3.23% | 0.236% |
| 67 | 13.698 | 1971 | 1974 | 1976 | rVV | 110638 | 110565 | 3.01% | 0.220% |
| 68 | 13.727 | 1976 | 1979 | 1991 | rVB4 | 166873 | 445231 | 12.12% | 0.885% |
| 69 | 13.845 | 1991 | 1999 | 2001 | rBV2 | 1218044 | 1623811 | 44.20% | 3.229% |
| 70 | 13.868 | 2001 | 2003 | 2011 | rVB | 525131 | 514679 | 14.01% | 1.023% |
| 71 | 13.945 | 2011 | 2016 | 2019 | rBV2 | 89087 | 109735 | 2.99% | 0.218% |

LSC Area Percent Report

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Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

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-BF032519.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 14.010 | 2022 | 2027 | 2030 | rBV2 | 114637 | 126638 | 3.45% | 0.252% |
| 73 | 14.192 | 2055 | 2058 | 2060 | rBV2 | 39946 | 41931 | 1.14% | 0.083% |
| 74 | 14.227 | 2060 | 2064 | 2067 | rVV | 94616 | 120533 | 3.28% | 0.240% |
| 75 | 14.263 | 2067 | 2070 | 2074 | rVV3 | 43846 | 46238 | 1.26% | 0.092% |
| 76 | 14.316 | 2075 | 2079 | 2083 | rVB2 | 197456 | 197498 | 5.38% | 0.393% |
| 77 | 14.357 | 2083 | 2086 | 2087 | rBV3 | 74432 | 84658 | 2.30% | 0.168% |
| 78 | 14.374 | 2087 | 2089 | 2093 | rVB2 | 85855 | 90097 | 2.45% | 0.179% |
| 79 | 14.610 | 2125 | 2129 | 2133 | rVB | 223893 | 218717 | 5.95% | 0.435% |
| 80 | 14.674 | 2138 | 2140 | 2143 | rBV | 37593 | 37605 | 1.02% | 0.075% |
| 81 | 14.739 | 2148 | 2151 | 2160 | rVB4 | 90260 | 118852 | 3.24% | 0.236% |
| 82 | 14.857 | 2166 | 2171 | 2178 | rBV | 467419 | 858878 | 23.38% | 1.708% |
| 83 | 14.921 | 2178 | 2182 | 2185 | rVB | 397083 | 383979 | 10.45% | 0.764% |
| 84 | 14.957 | 2185 | 2188 | 2191 | rVB | 59043 | 58857 | 1.60% | 0.117% |
| 85 | 14.998 | 2191 | 2195 | 2198 | rBV6 | 53872 | 89499 | 2.44% | 0.178% |
| 86 | 15.133 | 2214 | 2218 | 2224 | rVB | 280744 | 330796 | 9.01% | 0.658% |
| 87 | 15.192 | 2224 | 2228 | 2233 | rVV | 325242 | 397771 | 10.83% | 0.791% |
| 88 | 15.251 | 2233 | 2238 | 2250 | rVB2 | 927083 | 1553353 | 42.29% | 3.089% |
| 89 | 15.451 | 2269 | 2272 | 2279 | rVB3 | 101502 | 145877 | 3.97% | 0.290% |
| 90 | 15.668 | 2303 | 2309 | 2314 | rBV | 359956 | 508406 | 13.84% | 1.011% |
| 91 | 15.774 | 2324 | 2327 | 2331 | rBV5 | 36604 | 55600 | 1.51% | 0.111% |
| 92 | 16.127 | 2382 | 2387 | 2395 | rVB2 | 132247 | 231454 | 6.30% | 0.460% |
| 93 | 16.386 | 2427 | 2431 | 2436 | rBV | 75643 | 128975 | 3.51% | 0.256% |
| 94 | 16.610 | 2464 | 2469 | 2474 | rBV | 140673 | 272922 | 7.43% | 0.543% |
| 95 | 16.662 | 2474 | 2478 | 2485 | rVB3 | 87961 | 178209 | 4.85% | 0.354% |
| 96 | 17.021 | 2534 | 2539 | 2553 | rVB | 102523 | 236821 | 6.45% | 0.471% |
| 97 | 17.680 | 2647 | 2651 | 2659 | rVB3 | 54871 | 118305 | 3.22% | 0.235% |

Sum of corrected areas: 50288217

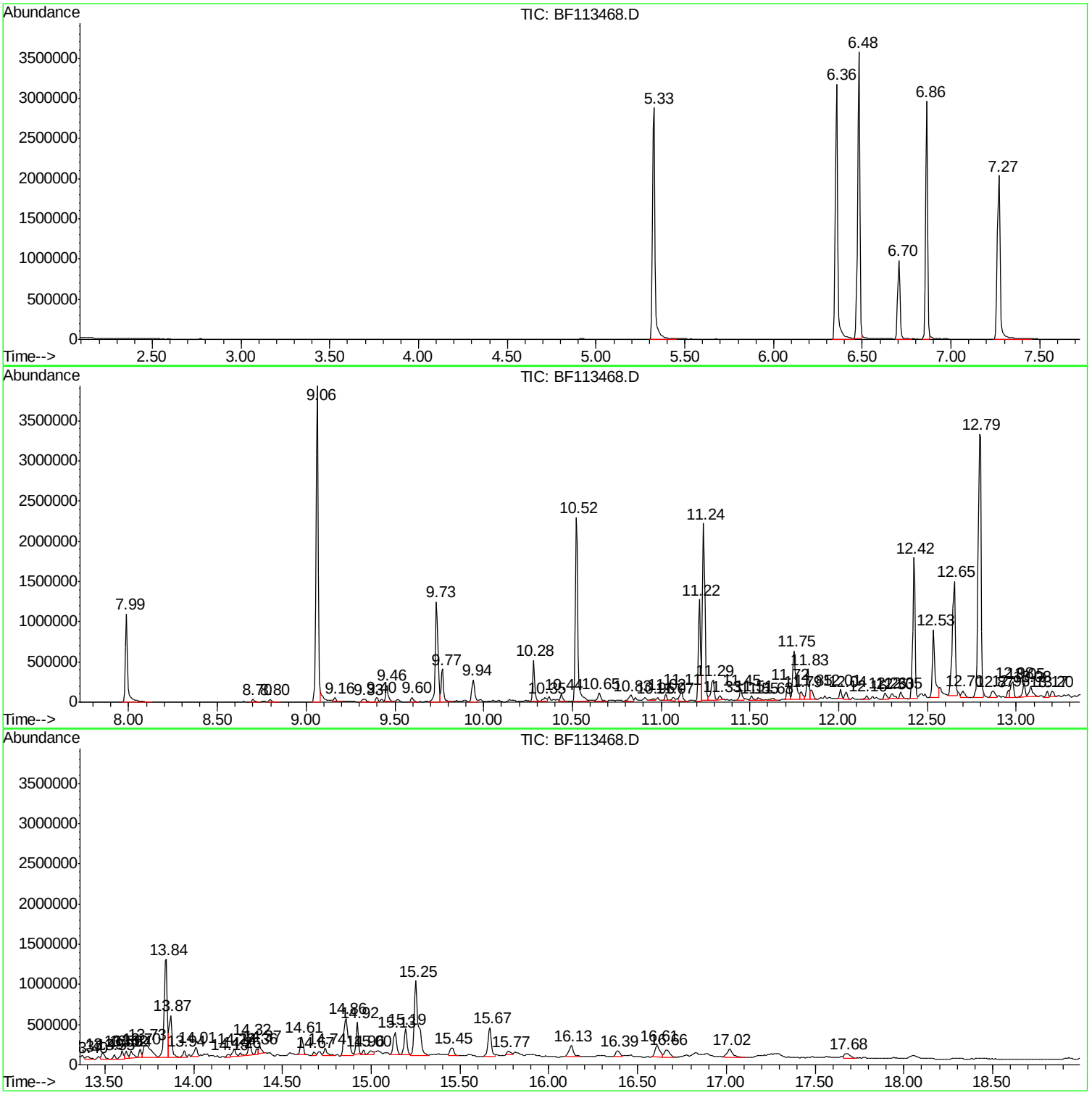
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

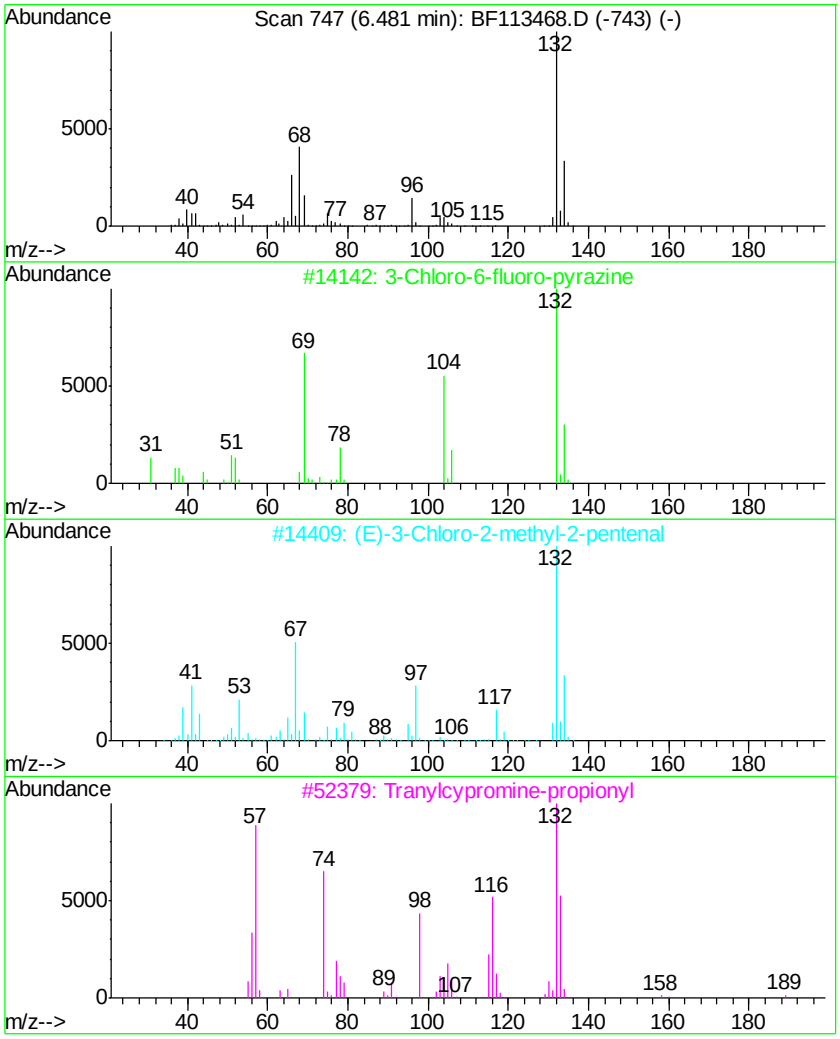
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

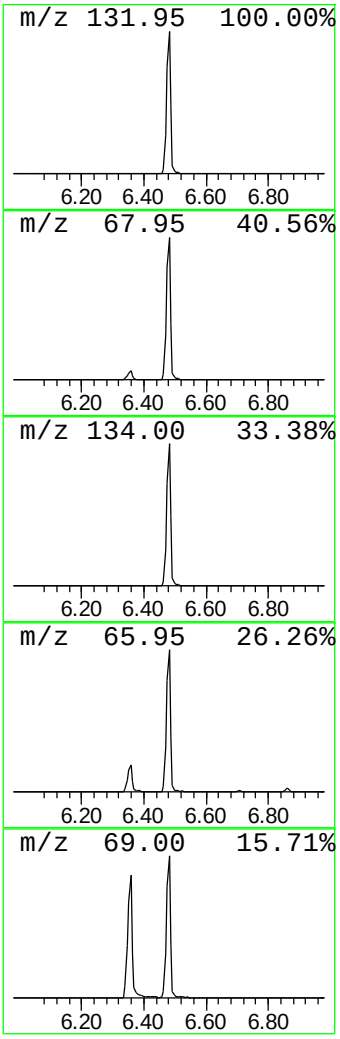
**********

Peak Number 1 unknown6.48 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.48 | 79.68 ng | 3260200 | 1,4-Dichlorobenzene-d4 | 6.70 |

| 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 | 4-Methylpyrrolo[1,2-a]pyrazine | 132 | C8H8N2 | 064608-60-2 | 9 |
| 5 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 9 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

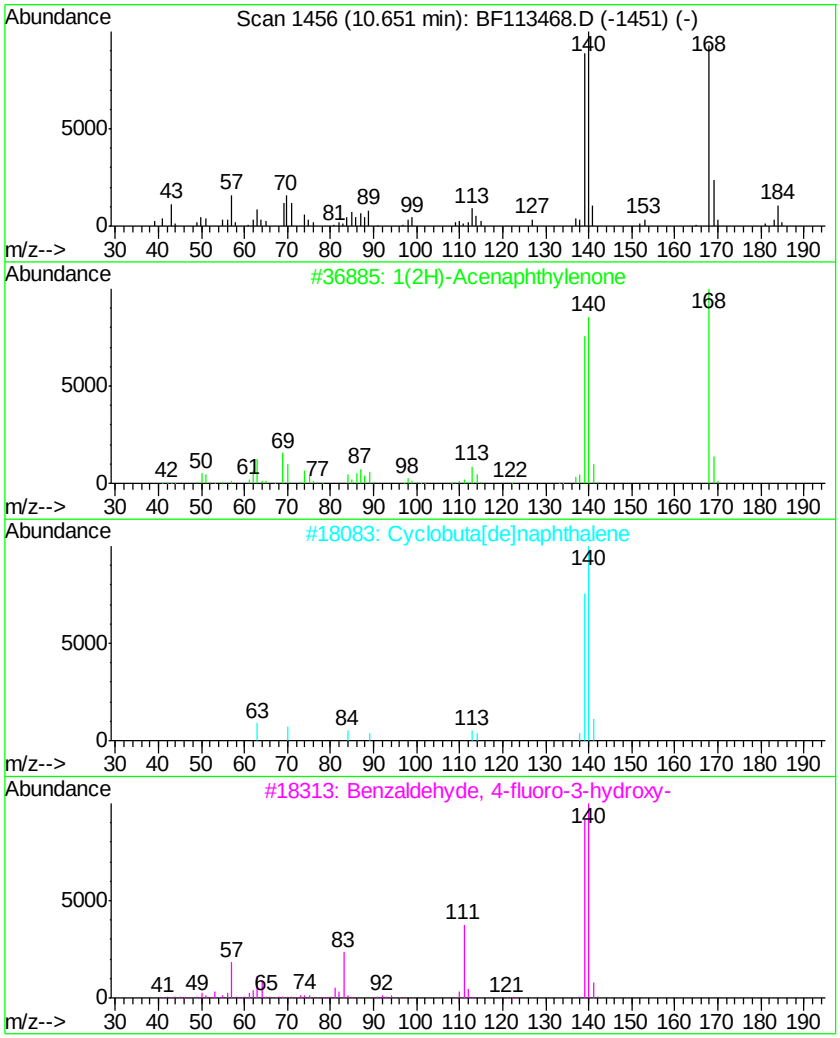
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

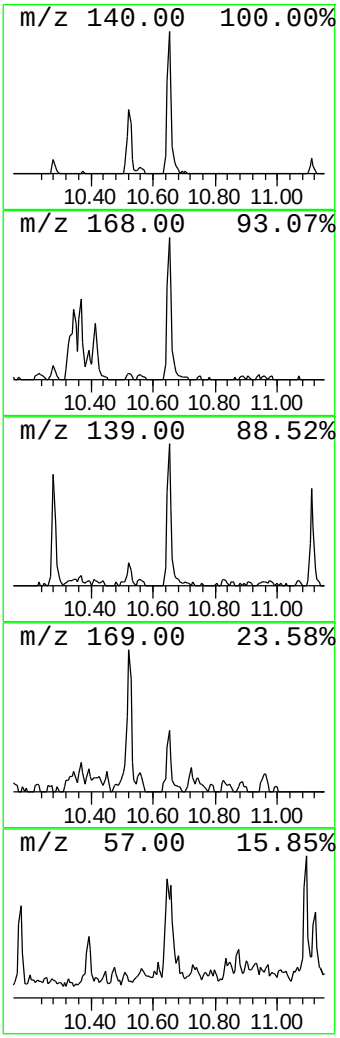
**********

Peak Number 3 1(2H)-Acenaphthylenone Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.65 | 2.09 ng | 130211 | Phenanthrene-d10 | 11.22 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1(2H)-Acenaphthylenone | 168 | C12H8O | 002235-15-6 | 95 |
| 2 | Cyclobuta[de]naphthalene | 140 | C11H8 | 024973-91-9 | 49 |
| 3 | Benzaldehyde, 4-fluoro-3-hydroxy- | 140 | C7H5FO2 | 103438-85-3 | 46 |
| 4 | 2,5-Thiophenedicarboxaldehyde | 140 | C6H4O2S | 000932-95-6 | 43 |
| 5 | Benzaldehyde, 2-fluoro-3-hydroxy- | 140 | C7H5FO2 | 103438-86-4 | 43 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

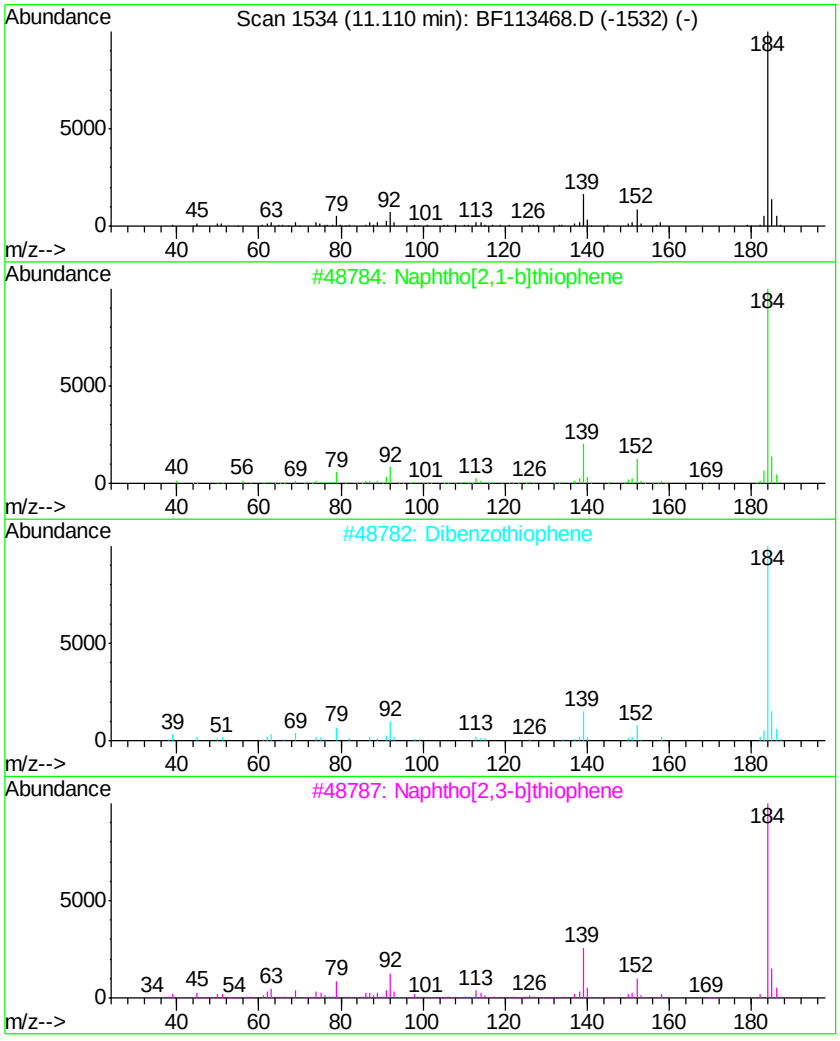
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

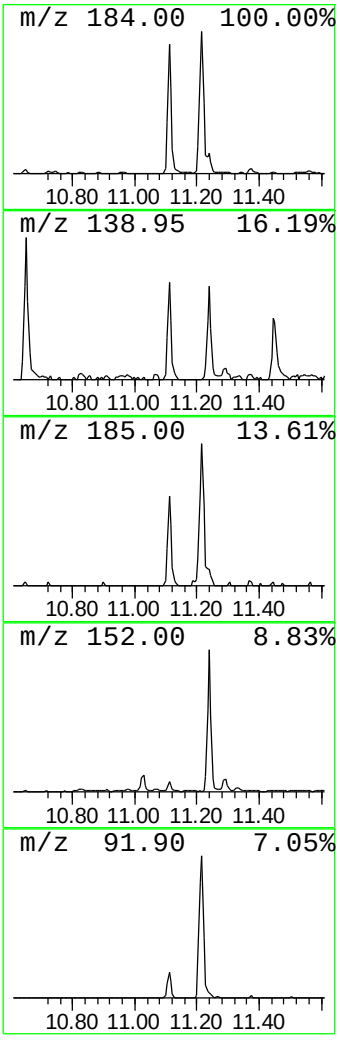
**********

Peak Number 4 Naphtho[2,1-b]thiophene Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.11 | 2.32 ng | 144873 | Phenanthrene-d10 | 11.22 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphtho[2,1-b]thiophene | 184 | C12H8S | 000233-02-3 | 96 |
| 2 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 96 |
| 3 | Naphtho[2,3-b]thiophene | 184 | C12H8S | 000268-77-9 | 95 |
| 4 | Naphtho[1,2-b]thiophene | 184 | C12H8S | 000234-41-3 | 94 |
| 5 | Azuleno(2,1-b)thiophene | 184 | C12H8S | 000248-13-5 | 91 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

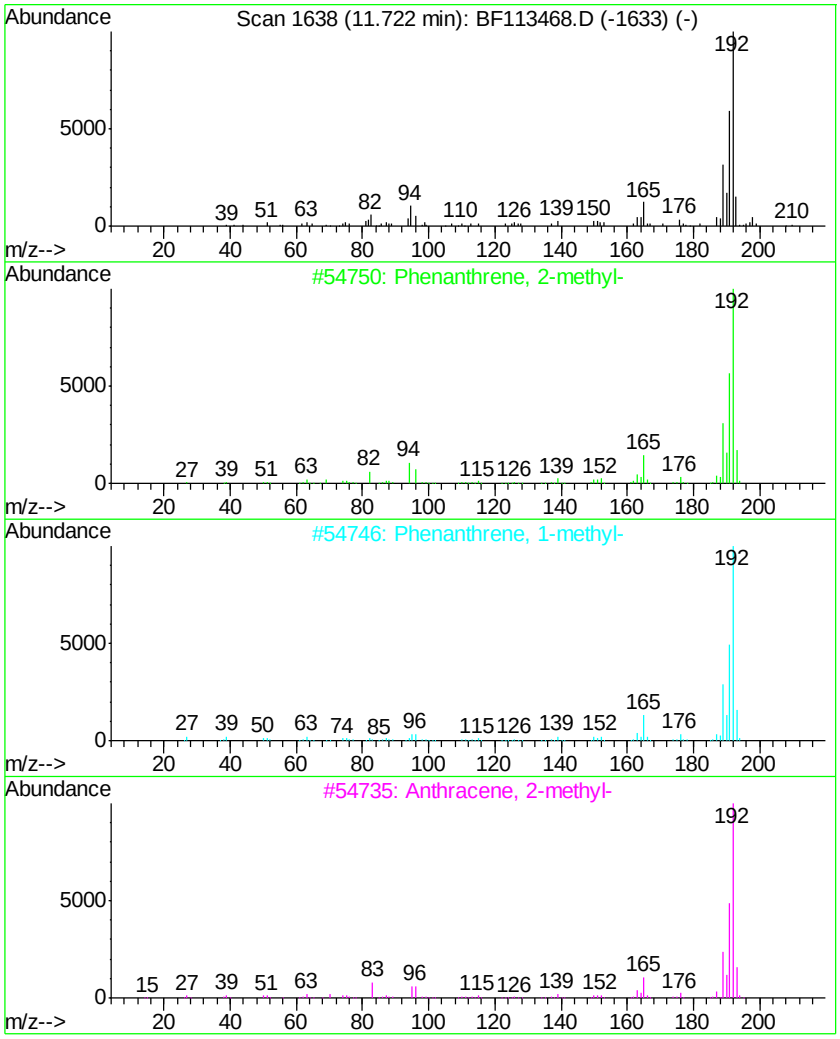
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

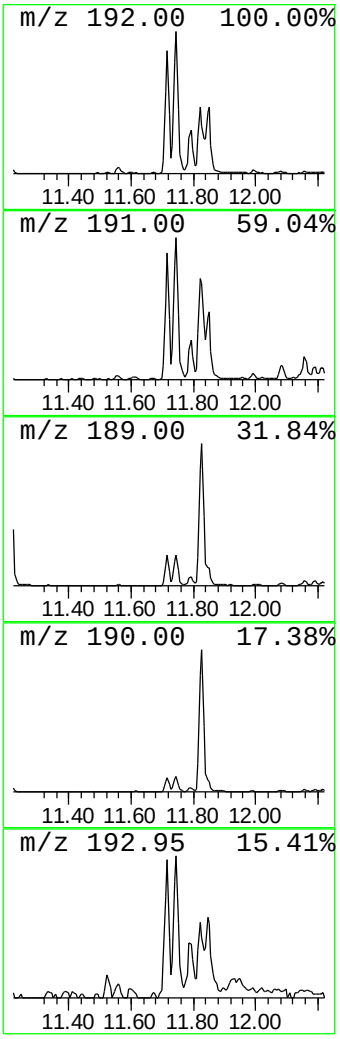
**********

Peak Number 5 Phenanthrene, 2-methyl- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.72 | 2.81 ng | 175393 | Phenanthrene-d10 | 11.22 |

| 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 | 96 |
| 3 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 96 |
| 4 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 94 |
| 5 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 91 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

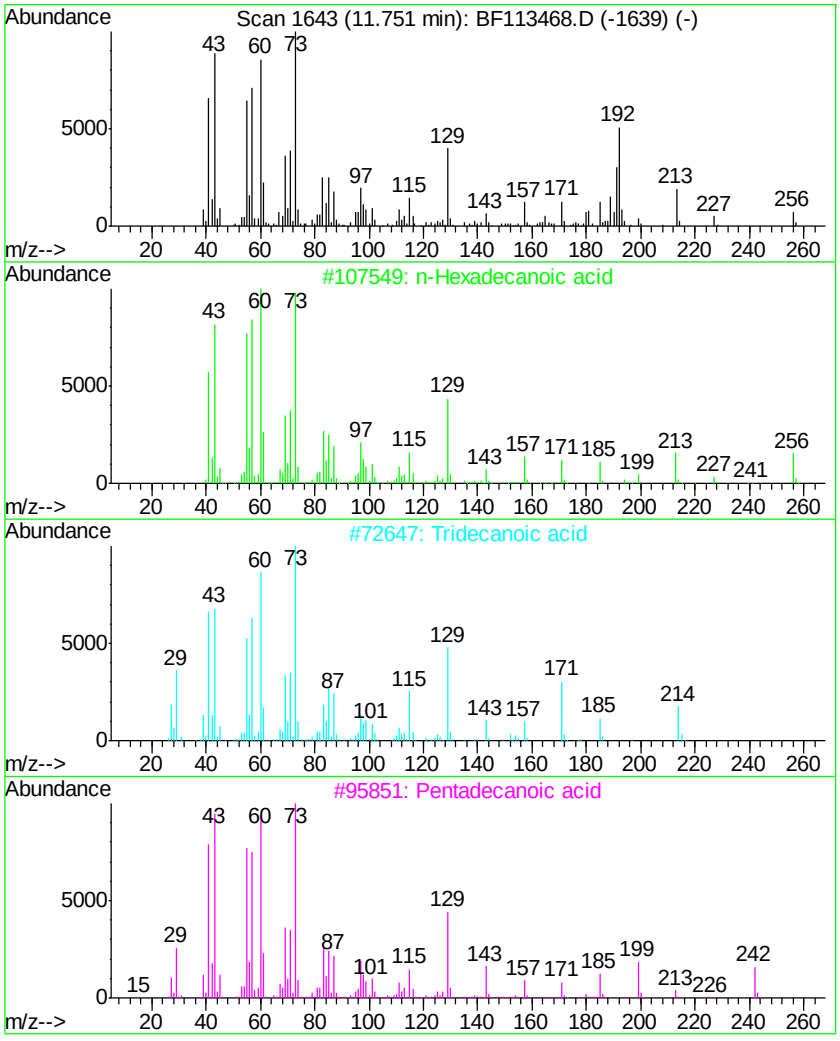
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

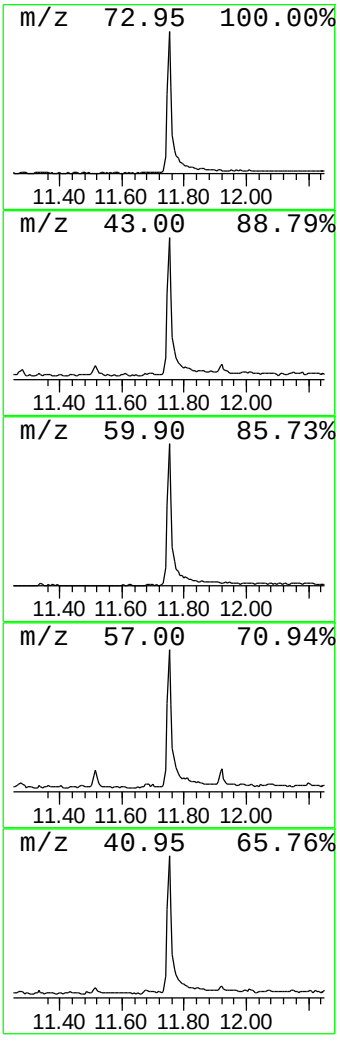
**********

Peak Number 6 n-Hexadecanoic acid Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.75 | 12.14 ng | 756899 | Phenanthrene-d10 | 11.22 |

| 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 | 90 |
| 3 | Pentadecanoic acid | 242 | C15H30O2 | 001002-84-2 | 89 |
| 4 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 64 |
| 5 | n-Decanoic acid | 172 | C10H20O2 | 000334-48-5 | 60 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

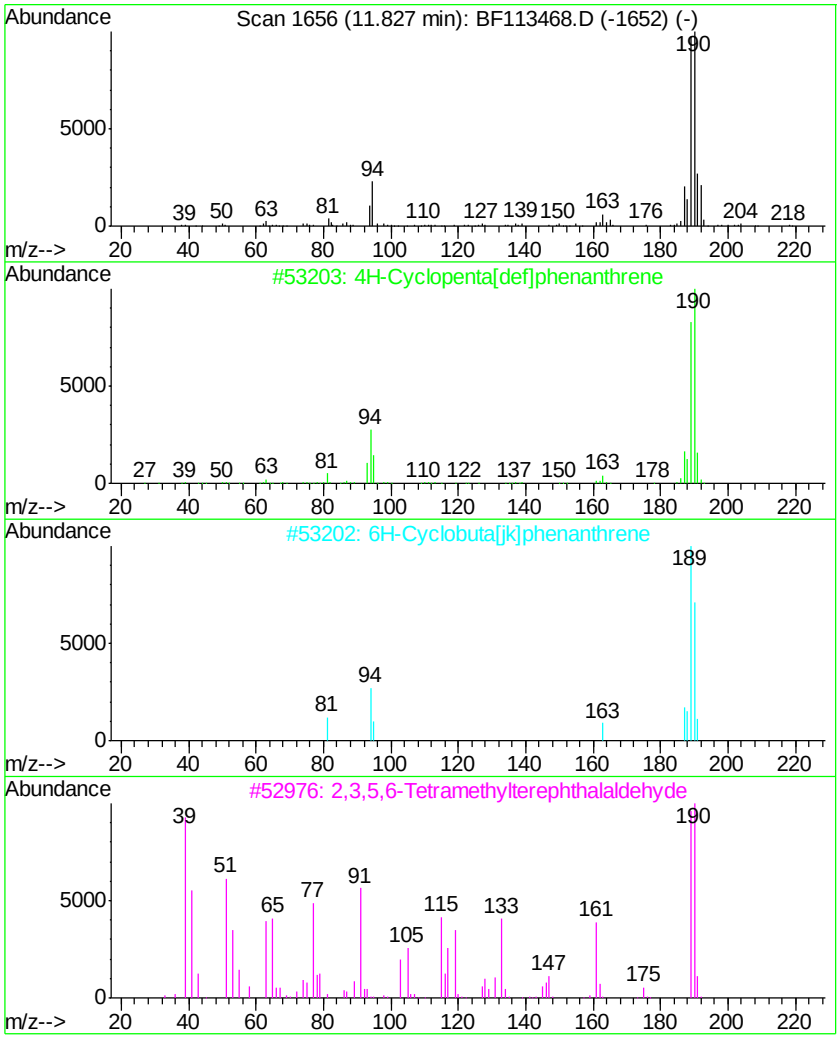
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

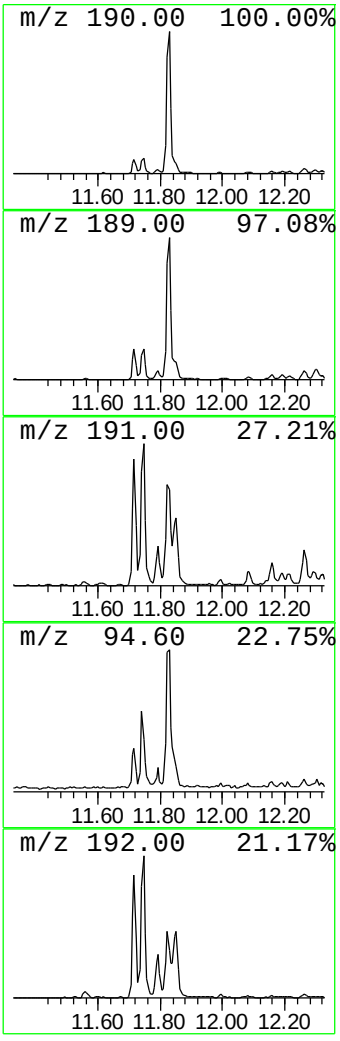
**********

Peak Number 7 4H-Cyclopenta[def]phenanthrene Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.83 | 6.85 ng | 427112 | Phenanthrene-d10 | 11.22 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 93 |
| 2 | 6H-Cyclobuta[jk]phenanthrene | 190 | C15H10 | 083469-43-6 | 56 |
| 3 | 2,3,5,6-Tetramethylterephthalald... | 190 | C12H14O2 | 007072-01-7 | 50 |
| 4 | Methyl diselenide | 190 | C2H6Se2 | 007101-31-7 | 49 |
| 5 | 2,2'-Bis(4,5-dimethylimidazole) | 190 | C10H14N4 | 069286-06-2 | 45 |



# Library Search Compound Report

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Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

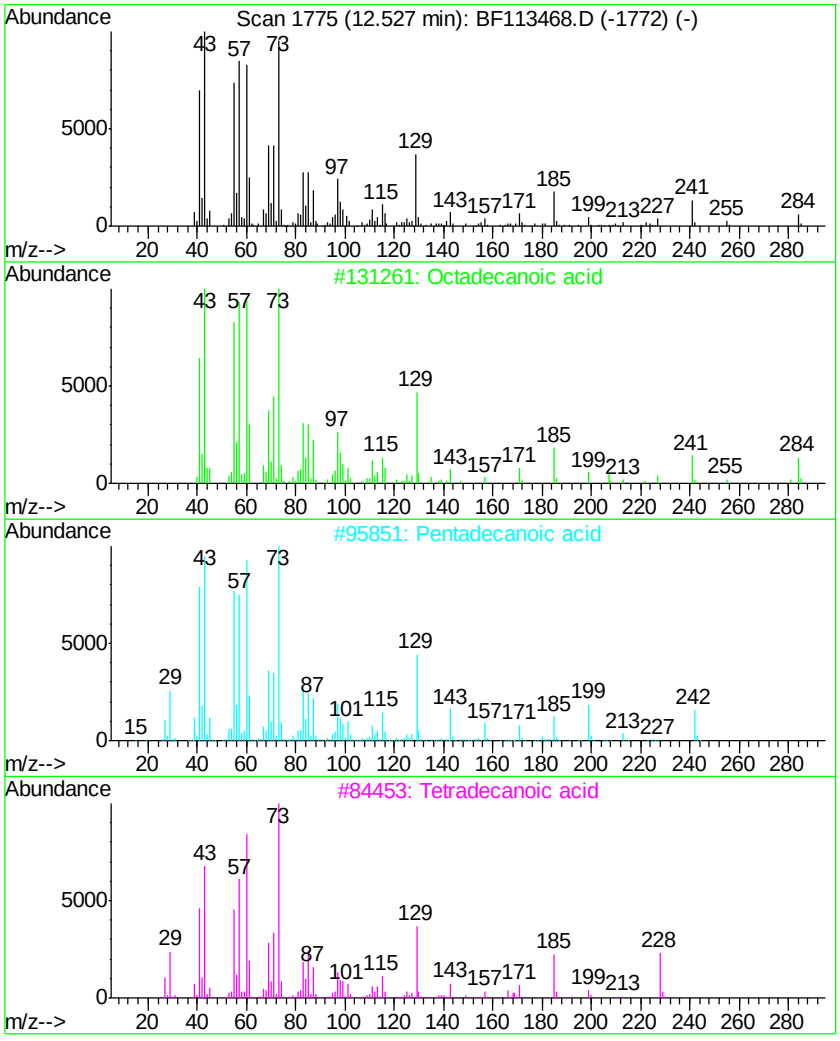
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

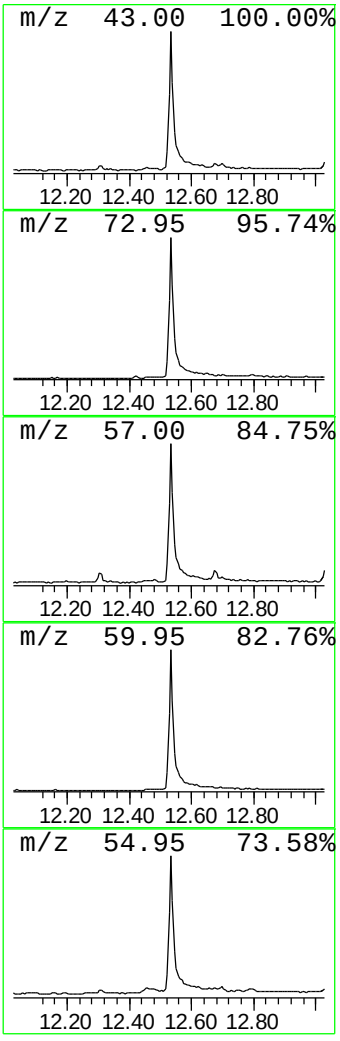
**********

Peak Number 8 Octadecanoic acid Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.53 | 11.38 ng | 924287 | Chrysene-d12 | 13.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Octadecanoic acid | 284 | C18H36O2 | 000057-11-4 | 99 |
| 2 | Pentadecanoic acid | 242 | C15H30O2 | 001002-84-2 | 93 |
| 3 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 90 |
| 4 | n-Hexadecanoic acid | 256 | C16H32O2 | 000057-10-3 | 87 |
| 5 | n-Decanoic acid | 172 | C10H20O2 | 000334-48-5 | 76 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

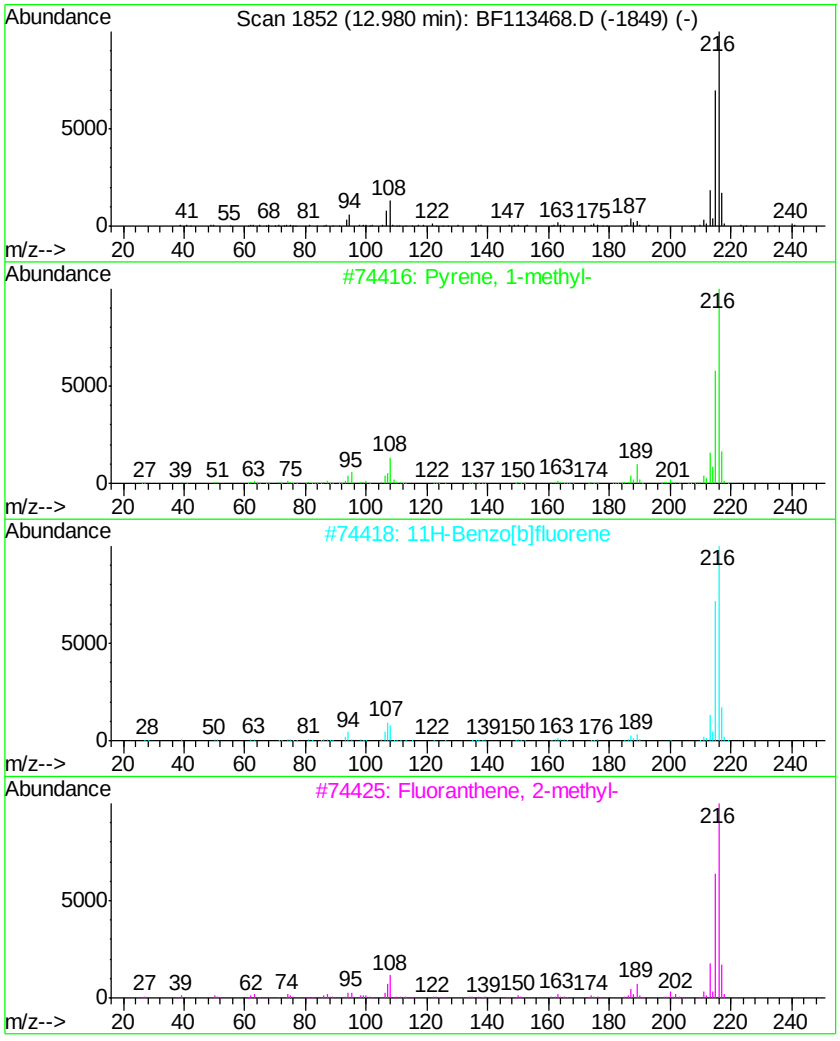
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

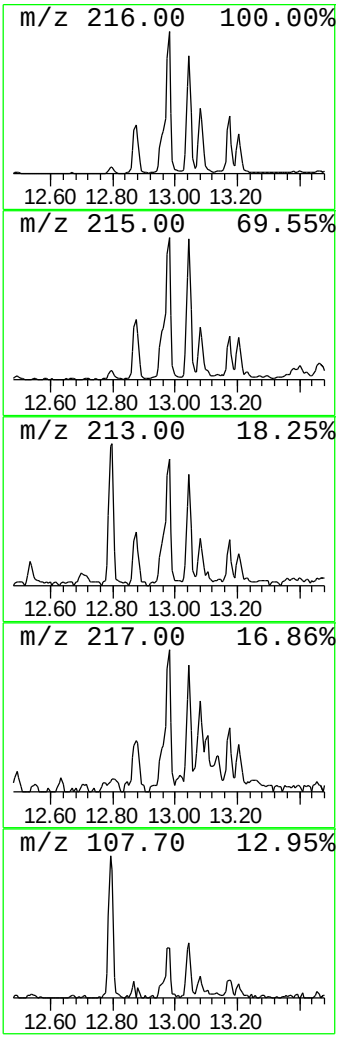
**********

Peak Number 9 Pyrene, 1-methyl- Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.98 | 2.40 ng | 194980 | Chrysene-d12 | 13.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 94 |
| 2 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 91 |
| 3 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 90 |
| 4 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 87 |
| 5 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 87 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

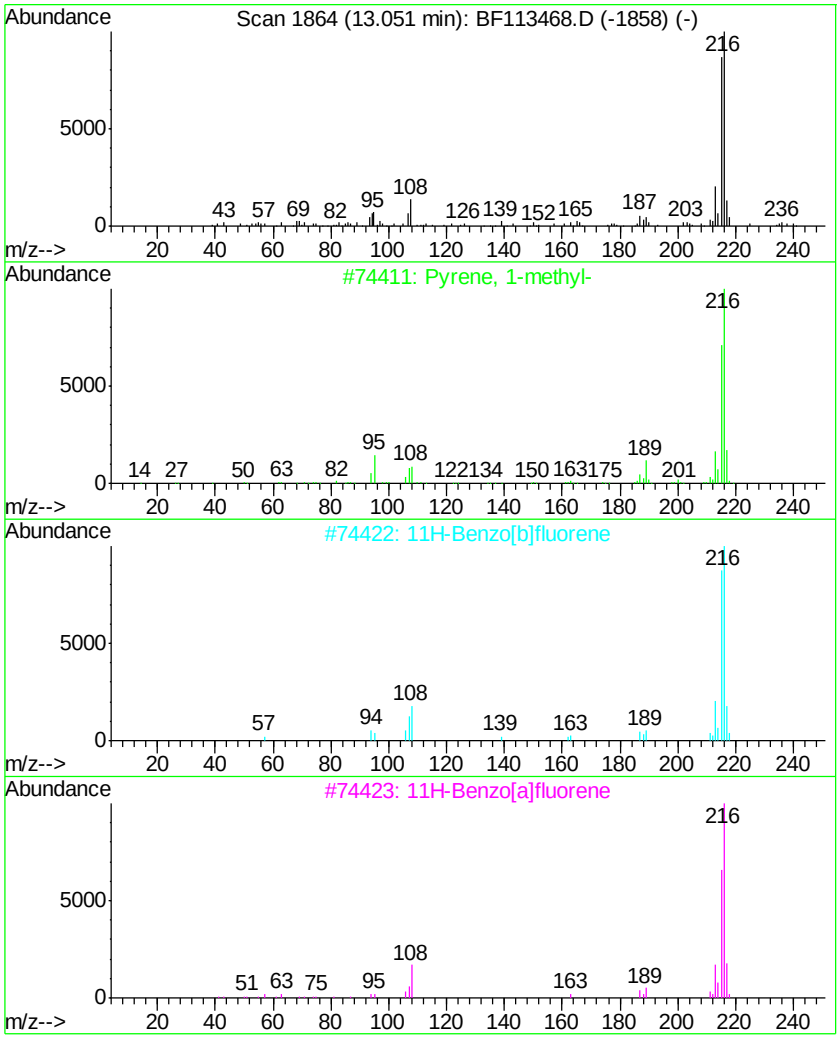
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

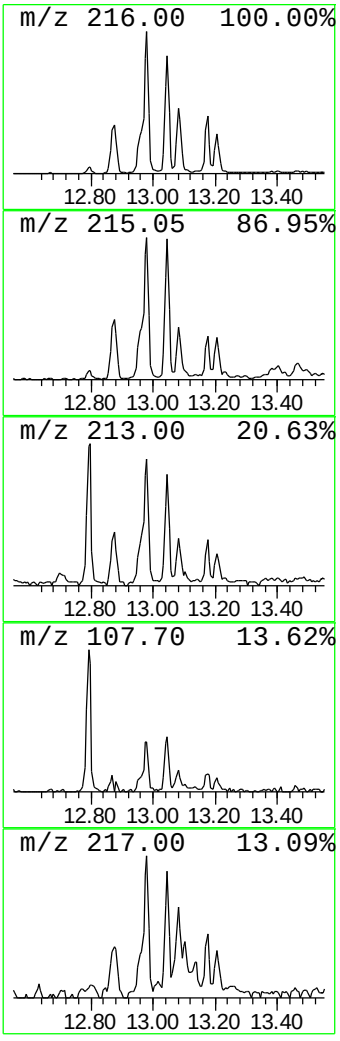
**********

Peak Number 10 11H-Benzo[b]fluorene Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.05 | 2.40 ng | 194907 | Chrysene-d12 | 13.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 95 |
| 2 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 93 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 92 |
| 4 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 87 |
| 5 | 7H-Benzo[c]fluorene | 216 | C17H12 | 000205-12-9 | 81 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

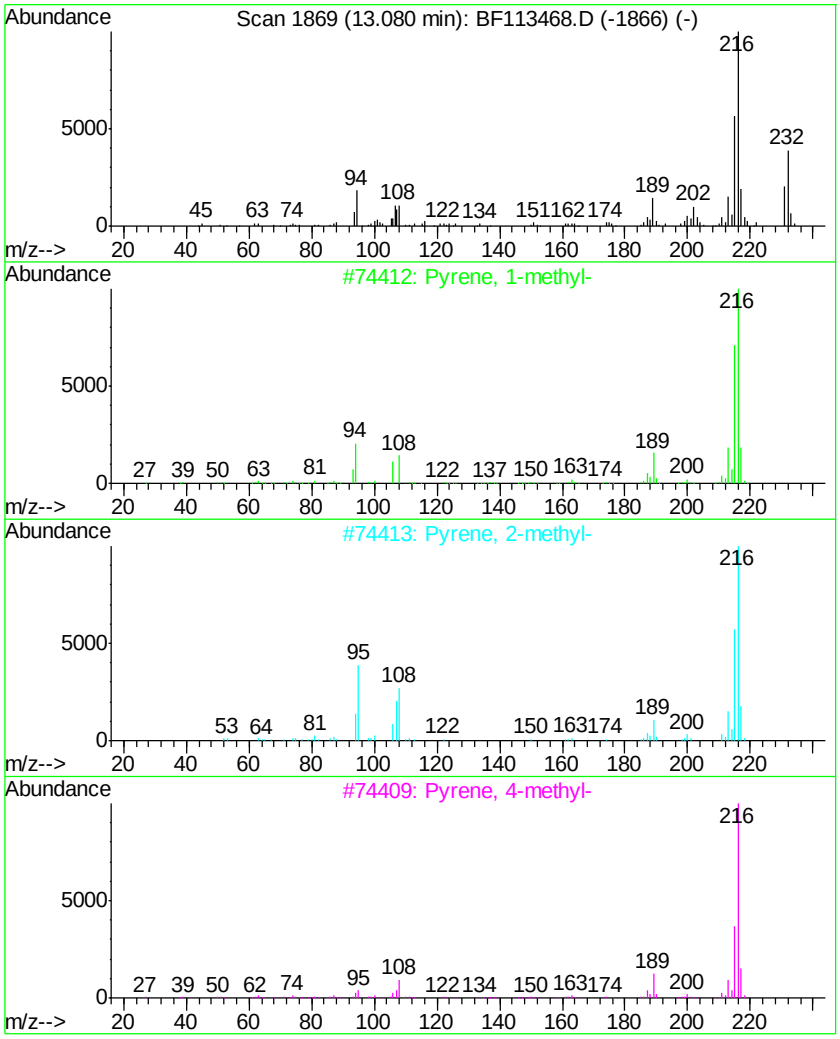
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

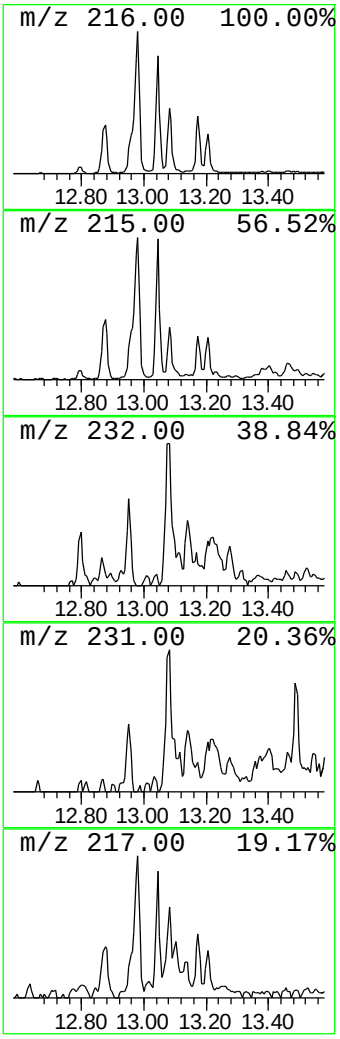
**********

Peak Number 11 Pyrene, 2-methyl- Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.08 | 2.36 ng | 191671 | Chrysene-d12 | 13.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 95 |
| 2 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 90 |
| 3 | Pyrene, 4-methyl- | 216 | C17H12 | 003353-12-6 | 86 |
| 4 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 70 |
| 5 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 60 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

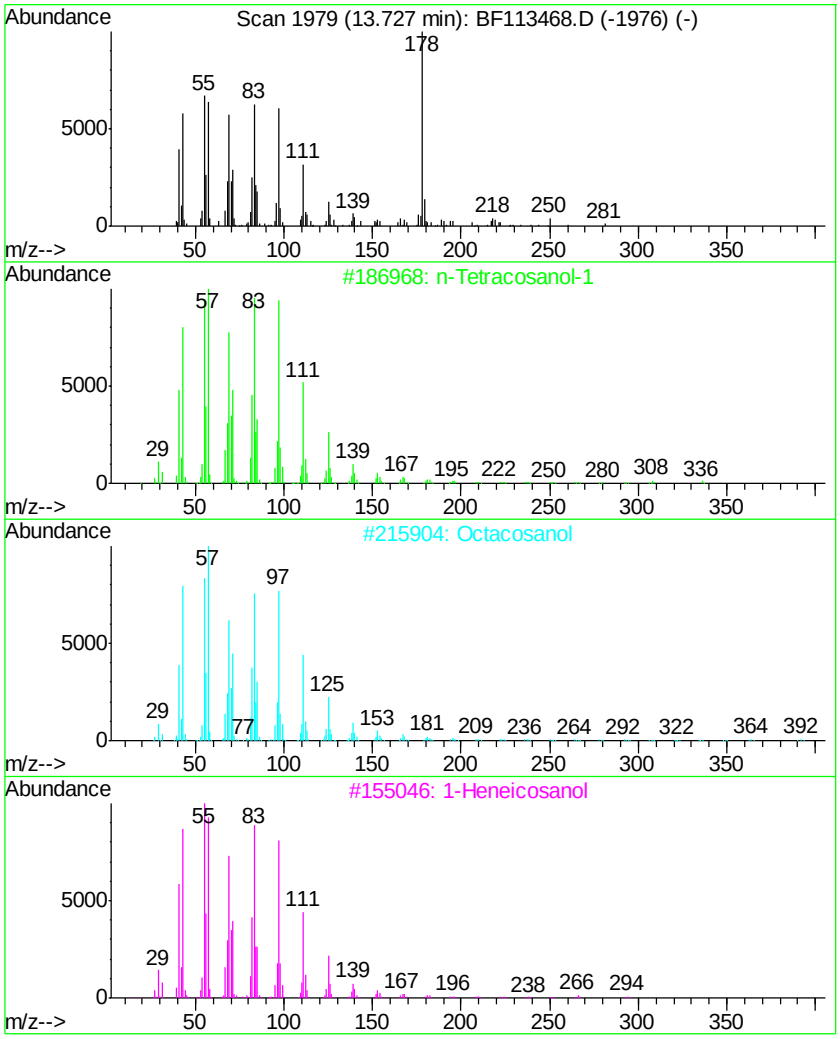
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

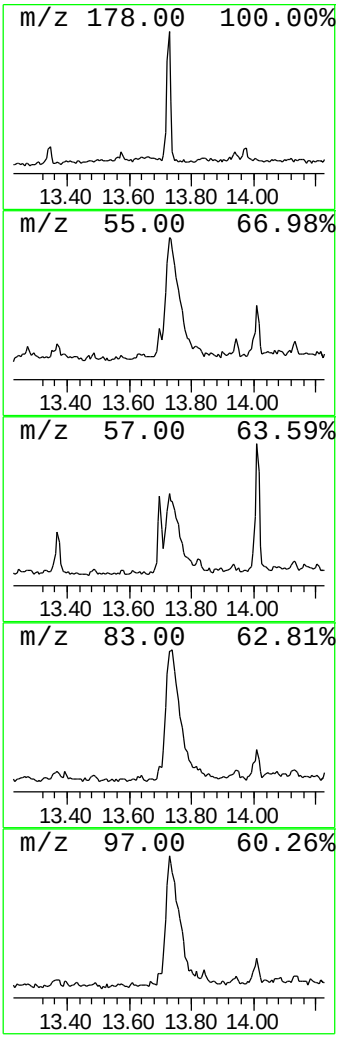
**********

Peak Number 12 n-Tetracosanol-1 Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.73 | 5.48 ng | 445231 | Chrysene-d12 | 13.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | n-Tetracosanol-1 | 354 | C24H50O | 000506-51-4 | 70 |
| 2 | Octacosanol | 410 | C28H58O | 000557-61-9 | 55 |
| 3 | 1-Heneicosanol | 312 | C21H44O | 015594-90-8 | 55 |
| 4 | 1-Heptacosanol | 396 | C27H56O | 002004-39-9 | 55 |
| 5 | Heptacosyl acetate | 438 | C29H58O2 | 1000351-78-2 | 55 |



# Library Search Compound Report

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Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

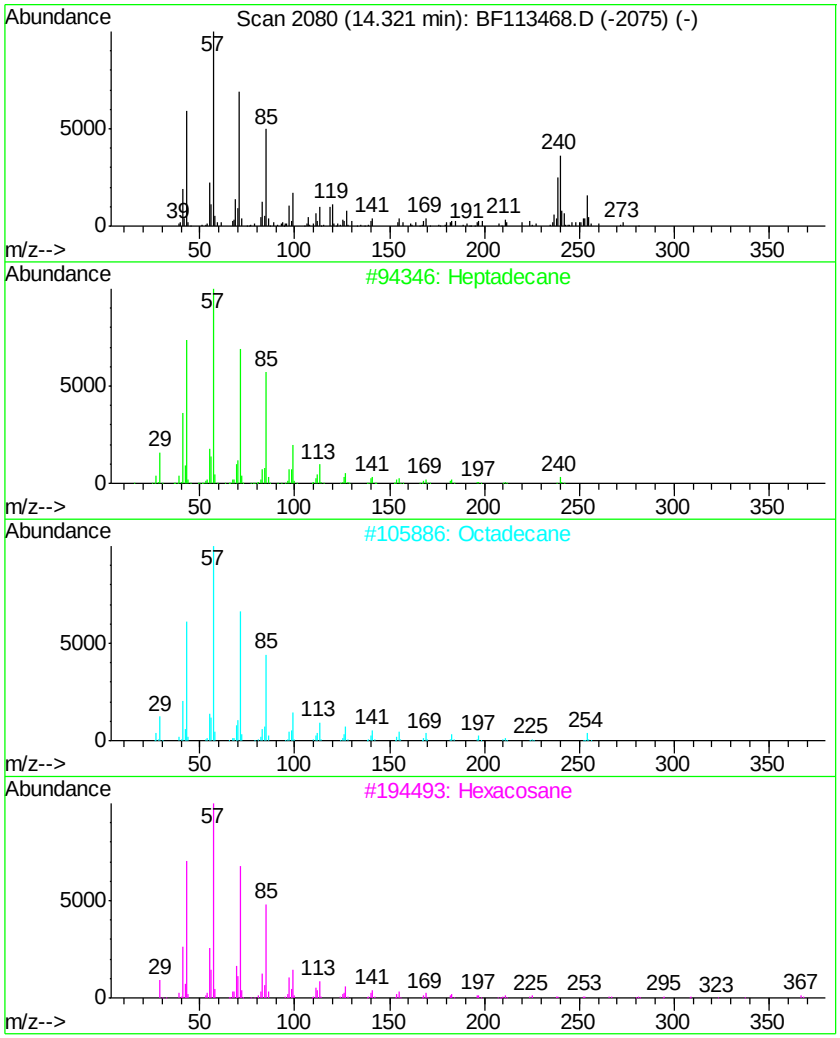
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

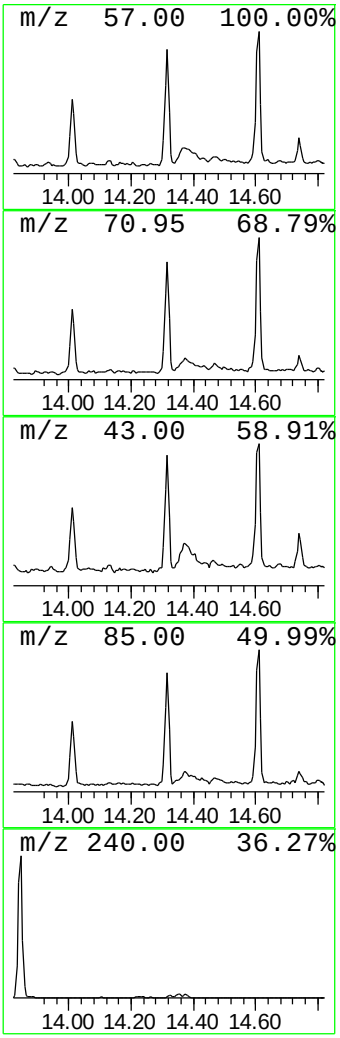
**********

Peak Number 13 Heptadecane Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.32 | 2.43 ng | 197498 | Chrysene-d12 | 13.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Heptadecane | 240 | C17H36 | 000629-78-7 | 90 |
| 2 | Octadecane | 254 | C18H38 | 000593-45-3 | 87 |
| 3 | Hexacosane | 366 | C26H54 | 000630-01-3 | 76 |
| 4 | Tetracosane | 338 | C24H50 | 000646-31-1 | 76 |
| 5 | Tridecane, 7-propyl- | 226 | C16H34 | 055045-09-5 | 70 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

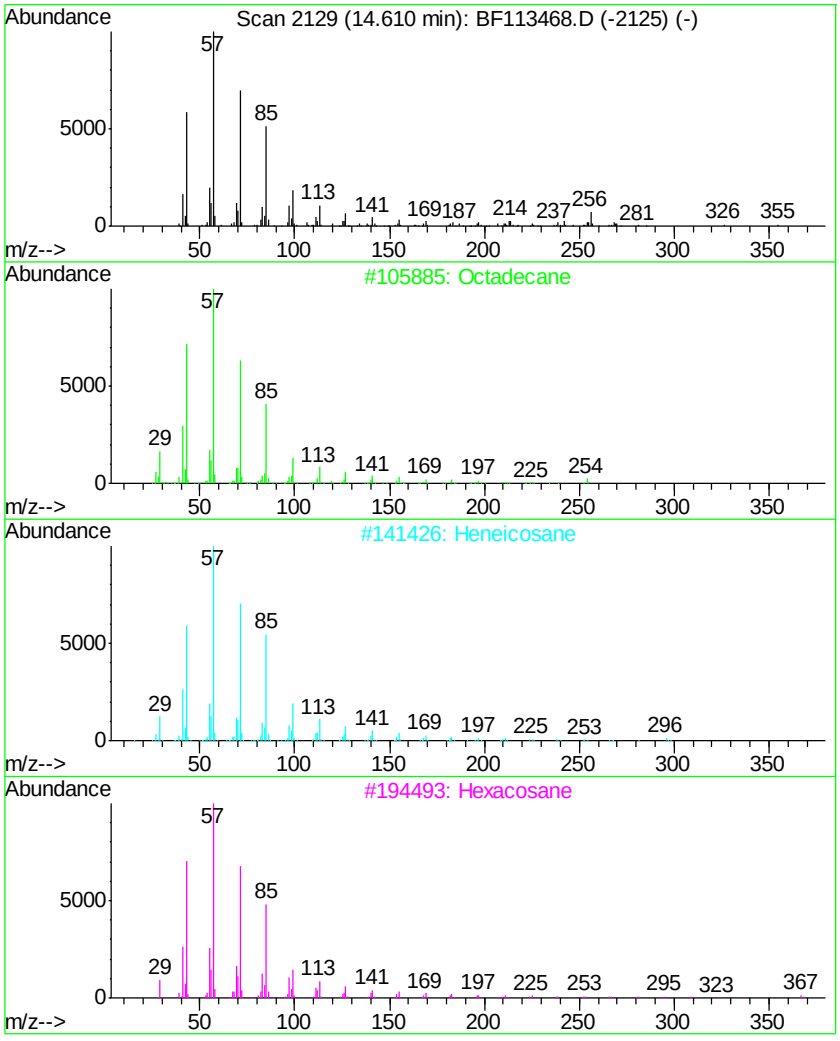
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

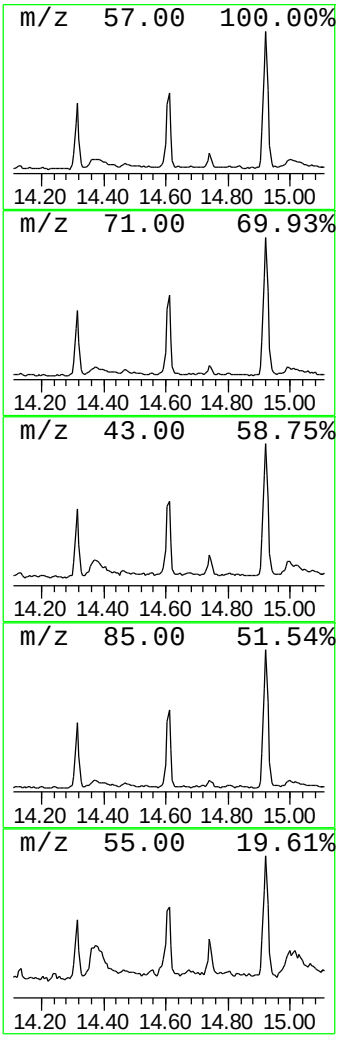
**********

Peak Number 14 Octadecane Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.61 | 2.82 ng | 218717 | Perylene-d12 | 15.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Octadecane | 254 | C18H38 | 000593-45-3 | 92 |
| 2 | Heneicosane | 296 | C21H44 | 000629-94-7 | 90 |
| 3 | Hexacosane | 366 | C26H54 | 000630-01-3 | 90 |
| 4 | Nonadecane | 268 | C19H40 | 000629-92-5 | 87 |
| 5 | Tetradecane, 2,6,10-trimethyl- | 240 | C17H36 | 014905-56-7 | 80 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.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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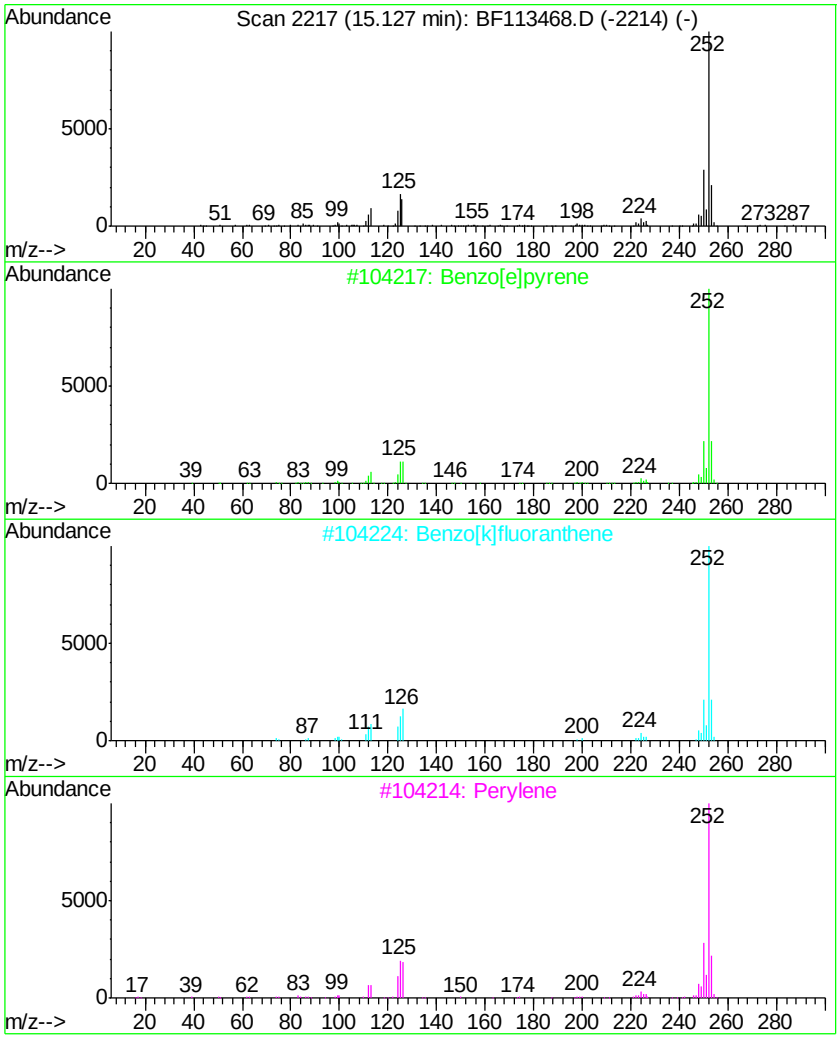
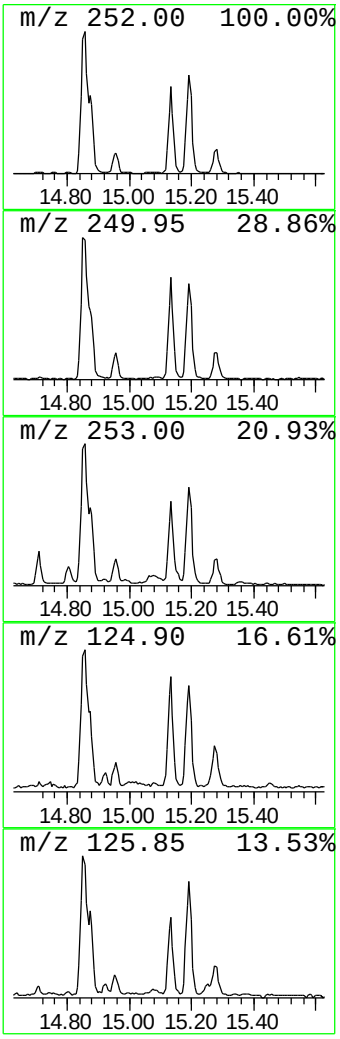
Peak Number 15 Benzo[e]pyrene Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.13 | 4.26 ng | 330796 | Perylene-d12 | 15.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 99 |
| 2 | Benzo[k]fluoranthene | 252 | C20H12 | 000207-08-9 | 96 |
| 3 | Perylene | 252 | C20H12 | 000198-55-0 | 96 |
| 4 | Benzo[a]pyrene | 252 | C20H12 | 000050-32-8 | 95 |
| 5 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 93 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.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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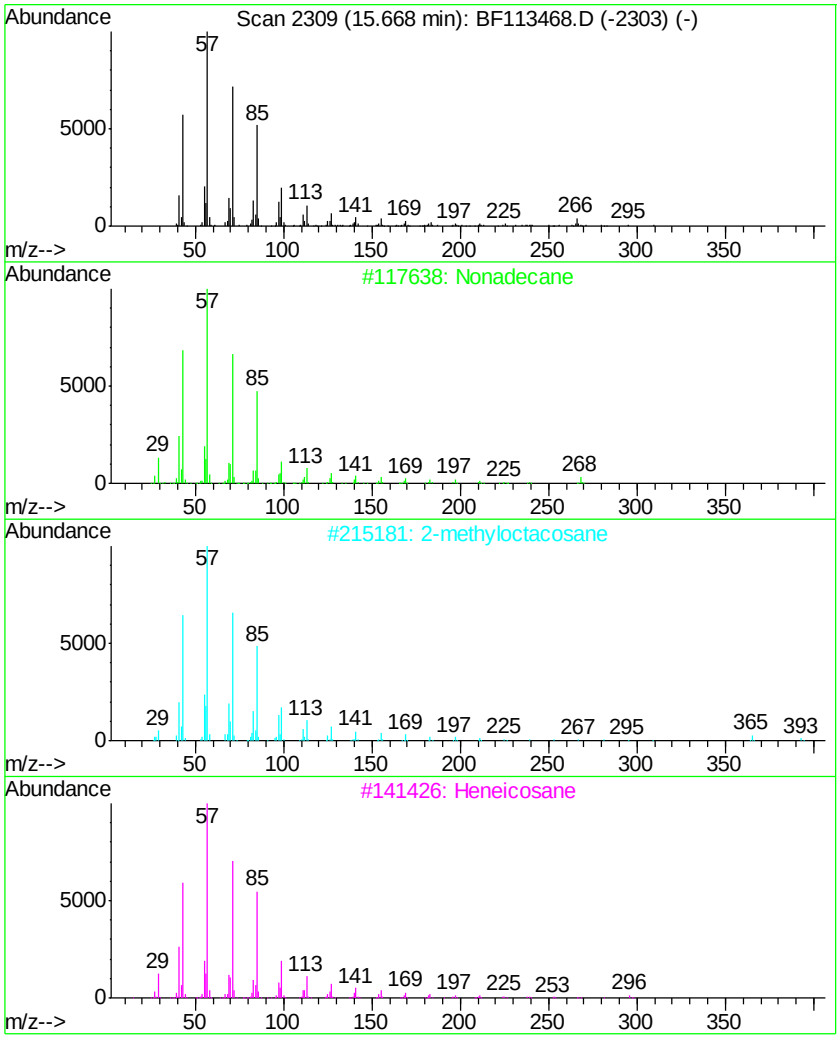
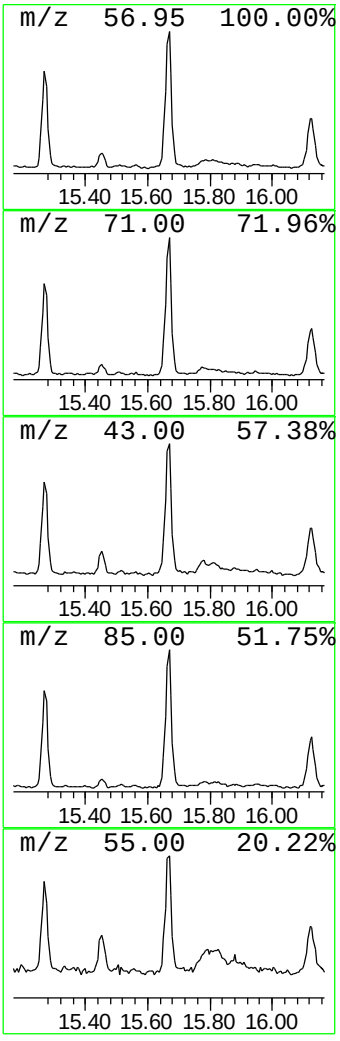
Peak Number 16 Nonadecane Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.67 | 6.55 ng | 508406 | Perylene-d12 | 15.25 |

| 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 | 91 |
| 3 | Heneicosane | 296 | C21H44 | 000629-94-7 | 91 |
| 4 | Eicosane, 2-methyl- | 296 | C21H44 | 001560-84-5 | 90 |
| 5 | Hexacosane | 366 | C26H54 | 000630-01-3 | 87 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

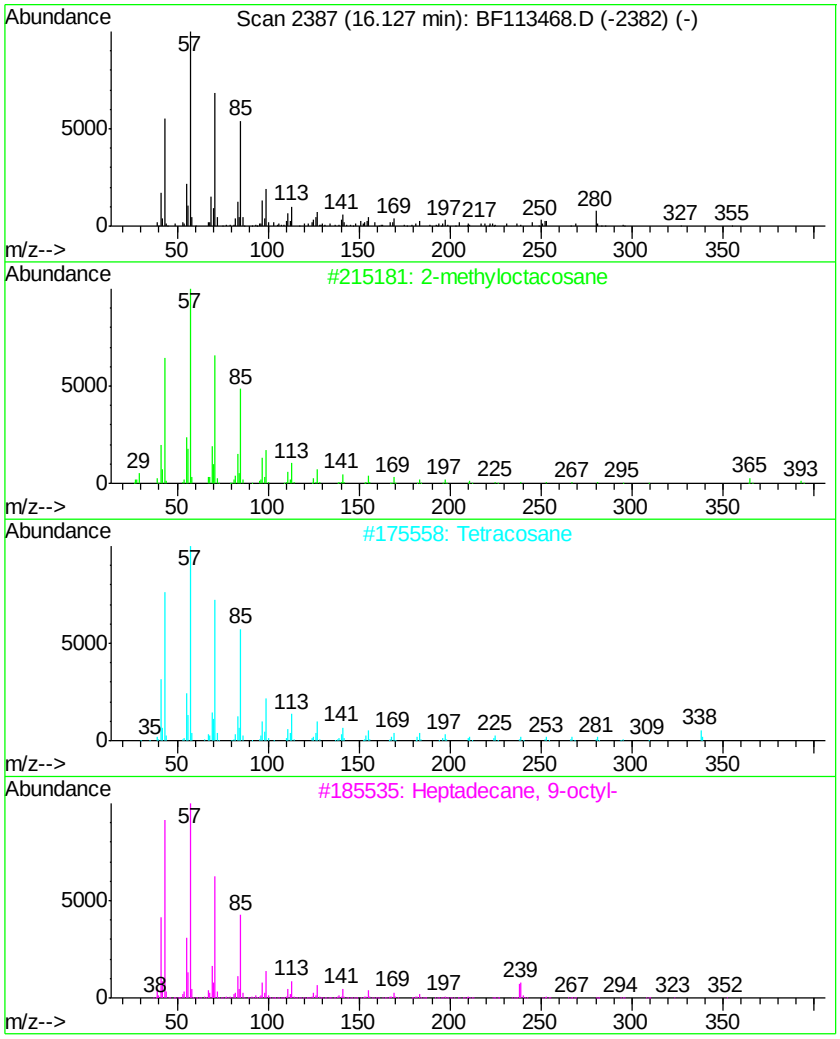
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

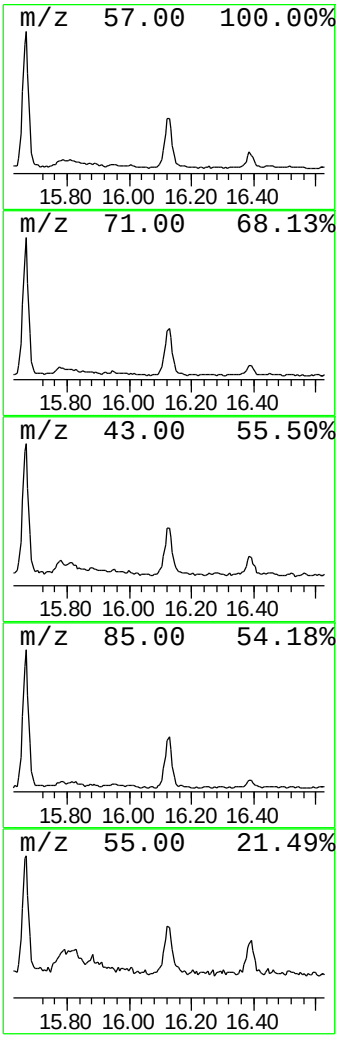
**********

Peak Number 17 2-methyloctacosane Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.13 | 2.98 ng | 231454 | Perylene-d12 | 15.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-methyloctacosane | 408 | C29H60 | 1000376-72-8 | 90 |
| 2 | Tetracosane | 338 | C24H50 | 000646-31-1 | 90 |
| 3 | Heptadecane, 9-octyl- | 352 | C25H52 | 007225-64-1 | 87 |
| 4 | Triacontane | 422 | C30H62 | 000638-68-6 | 87 |
| 5 | Docosane, 11-butyl- | 366 | C26H54 | 013475-76-8 | 86 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

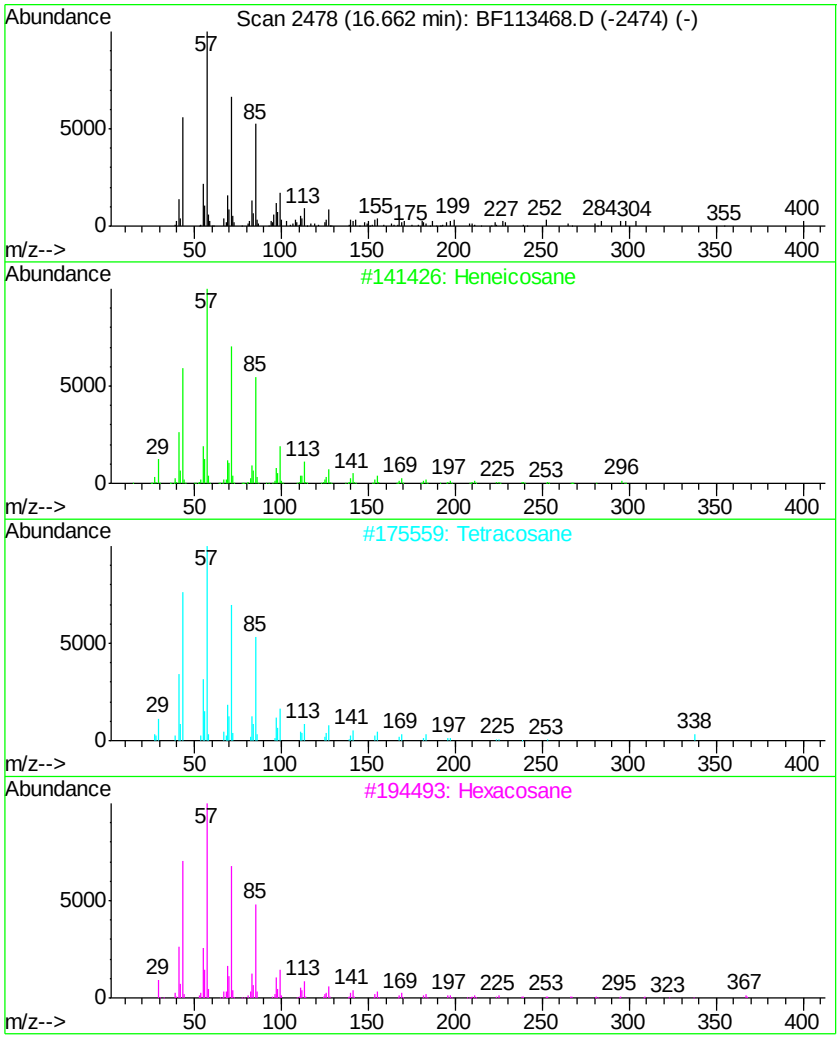
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

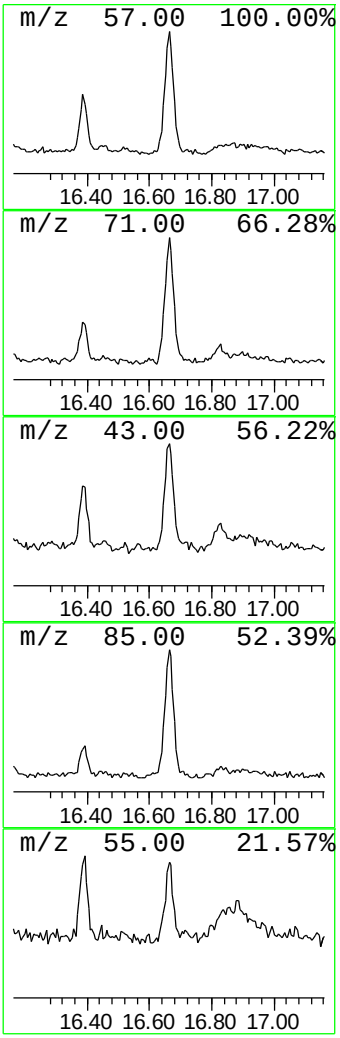
**********

Peak Number 18 Heneicosane Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.66 | 2.29 ng | 178209 | Perylene-d12 | 15.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Heneicosane | 296 | C21H44 | 000629-94-7 | 87 |
| 2 | Tetracosane | 338 | C24H50 | 000646-31-1 | 87 |
| 3 | Hexacosane | 366 | C26H54 | 000630-01-3 | 87 |
| 4 | Eicosane, 7-hexyl- | 366 | C26H54 | 055333-99-8 | 86 |
| 5 | Tridecanol, 2-ethyl-2-methyl- | 242 | C16H34O | 1000115-66-1 | 86 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF040119\
Data File : BF113468.D
Acq On : 1 Apr 2019 16:00
Operator : JU/SJ
Sample : K2174-01
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** RBR200030

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF032519.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 |
| unknown6.48 | 6.48 | 79.7 | ng | 3260200 | 1 | 6.70 | 818288 | 20.0 |
| 1(2H)-Acenaphthyl... | 10.65 | 2.1 | ng | 130211 | 4 | 11.22 | 1246960 | 20.0 |
| Naphtho[2,1-b]thi... | 11.11 | 2.3 | ng | 144873 | 4 | 11.22 | 1246960 | 20.0 |
| Phenanthrene, 2-m... | 11.72 | 2.8 | ng | 175393 | 4 | 11.22 | 1246960 | 20.0 |
| n-Hexadecanoic acid | 11.75 | 12.1 | ng | 756899 | 4 | 11.22 | 1246960 | 20.0 |
| 4H-Cyclopenta[def... | 11.83 | 6.8 | ng | 427112 | 4 | 11.22 | 1246960 | 20.0 |
| Octadecanoic acid | 12.53 | 11.4 | ng | 924287 | 5 | 13.85 | 1623810 | 20.0 |
| Pyrene, 1-methyl- | 12.98 | 2.4 | ng | 194980 | 5 | 13.85 | 1623810 | 20.0 |
| 11H-Benzo[b]fluorene | 13.05 | 2.4 | ng | 194907 | 5 | 13.85 | 1623810 | 20.0 |
| Pyrene, 2-methyl- | 13.08 | 2.4 | ng | 191671 | 5 | 13.85 | 1623810 | 20.0 |
| n-Tetracosanol-1 | 13.73 | 5.5 | ng | 445231 | 5 | 13.85 | 1623810 | 20.0 |
| Heptadecane | 14.32 | 2.4 | ng | 197498 | 5 | 13.85 | 1623810 | 20.0 |
| Octadecane | 14.61 | 2.8 | ng | 218717 | 6 | 15.25 | 1553350 | 20.0 |
| Benzo[e]pyrene | 15.13 | 4.3 | ng | 330796 | 6 | 15.25 | 1553350 | 20.0 |
| Nonadecane | 15.67 | 6.5 | ng | 508406 | 6 | 15.25 | 1553350 | 20.0 |
| 2-methyloctacosane | 16.13 | 3.0 | ng | 231454 | 6 | 15.25 | 1553350 | 20.0 |
| Heneicosane | 16.66 | 2.3 | ng | 178209 | 6 | 15.25 | 1553350 | 20.0 |