LSC Area Percent Report

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

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-BF110922.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BF131145.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.116 | 3 | 5 | 13 | rVB | 228067 | 233711 | 7.05% | 0.637% |
| 2 | 5.093 | 508 | 511 | 521 | rBV | 90569 | 98016 | 2.96% | 0.267% |
| 3 | 5.504 | 577 | 581 | 591 | rBV | 666414 | 602230 | 18.18% | 1.642% |
| 4 | 6.516 | 749 | 753 | 764 | rVB | 649564 | 569750 | 17.19% | 1.554% |
| 5 | 6.892 | 813 | 817 | 820 | rVB | 500926 | 410600 | 12.39% | 1.120% |
| 6 | 7.451 | 909 | 912 | 916 | rBV | 424487 | 331582 | 10.01% | 0.904% |
| 7 | 8.175 | 1031 | 1035 | 1037 | rBV | 597473 | 470756 | 14.21% | 1.284% |
| 8 | 8.198 | 1037 | 1039 | 1042 | rVB | 155873 | 120037 | 3.62% | 0.327% |
| 9 | 8.886 | 1153 | 1156 | 1160 | rBV | 199063 | 161398 | 4.87% | 0.440% |
| 10 | 8.986 | 1168 | 1173 | 1177 | rBV | 231360 | 193821 | 5.85% | 0.529% |
| 11 | 9.251 | 1214 | 1218 | 1221 | rBV | 719846 | 576569 | 17.40% | 1.572% |
| 12 | 9.522 | 1259 | 1264 | 1267 | rBV | 115943 | 150886 | 4.55% | 0.411% |
| 13 | 9.592 | 1272 | 1276 | 1278 | rBV | 201421 | 201282 | 6.07% | 0.549% |
| 14 | 9.616 | 1278 | 1280 | 1285 | rVB | 114130 | 92128 | 2.78% | 0.251% |
| 15 | 9.710 | 1291 | 1296 | 1297 | rBV | 102204 | 93576 | 2.82% | 0.255% |
| 16 | 9.792 | 1307 | 1310 | 1316 | rBV2 | 221933 | 218102 | 6.58% | 0.595% |
| 17 | 9.933 | 1332 | 1334 | 1337 | rVV | 624533 | 475957 | 14.36% | 1.298% |
| 18 | 9.969 | 1337 | 1340 | 1343 | rVV | 613020 | 464991 | 14.03% | 1.268% |
| 19 | 10.039 | 1349 | 1352 | 1356 | rVB2 | 54744 | 62567 | 1.89% | 0.171% |
| 20 | 10.139 | 1365 | 1369 | 1373 | rVV | 391385 | 352889 | 10.65% | 0.962% |
| 21 | 10.175 | 1373 | 1375 | 1378 | rVB | 98006 | 69374 | 2.09% | 0.189% |
| 22 | 10.251 | 1384 | 1388 | 1390 | rBV2 | 96563 | 103844 | 3.13% | 0.283% |
| 23 | 10.339 | 1399 | 1403 | 1405 | rBV3 | 58874 | 78140 | 2.36% | 0.213% |
| 24 | 10.486 | 1424 | 1428 | 1433 | rVB | 802757 | 672670 | 20.30% | 1.834% |
| 25 | 10.551 | 1433 | 1439 | 1440 | rBV | 86849 | 111902 | 3.38% | 0.305% |
| 26 | 10.569 | 1440 | 1442 | 1444 | rVV3 | 96199 | 84414 | 2.55% | 0.230% |
| 27 | 10.639 | 1452 | 1454 | 1457 | rVB | 138396 | 117963 | 3.56% | 0.322% |
| 28 | 10.728 | 1462 | 1469 | 1473 | rVV | 490260 | 530792 | 16.02% | 1.447% |
| 29 | 10.851 | 1484 | 1490 | 1495 | rVB5 | 72913 | 128685 | 3.88% | 0.351% |
| 30 | 11.033 | 1515 | 1521 | 1524 | rBV2 | 200677 | 238426 | 7.20% | 0.650% |
| 31 | 11.063 | 1524 | 1526 | 1529 | rVV2 | 128260 | 111244 | 3.36% | 0.303% |
| 32 | 11.116 | 1532 | 1535 | 1538 | rVB | 123733 | 107844 | 3.25% | 0.294% |
| 33 | 11.163 | 1538 | 1543 | 1544 | rBV3 | 68405 | 101889 | 3.07% | 0.278% |
| 34 | 11.186 | 1544 | 1547 | 1552 | rVV3 | 86707 | 120564 | 3.64% | 0.329% |
| 35 | 11.233 | 1552 | 1555 | 1559 | rVV3 | 78169 | 86971 | 2.62% | 0.237% |
| 36 | 11.275 | 1559 | 1562 | 1565 | rVV2 | 91101 | 106196 | 3.20% | 0.290% |

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

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-BF110922.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 37 | 11.327 | 1565 | 1571 | 1575 | rVB | 349687 | 348960 | 10.53% | 0.952% |
| 38 | 11.433 | 1585 | 1589 | 1590 | rBV | 524429 | 514980 | 15.54% | 1.404% |
| 39 | 11.463 | 1590 | 1594 | 1597 | rVV | 3185561 | 2959457 | 89.32% | 8.070% |
| 40 | 11.510 | 1598 | 1602 | 1604 | rVV | 1012549 | 865572 | 26.12% | 2.360% |
| 41 | 11.539 | 1604 | 1607 | 1609 | rVV2 | 149957 | 164925 | 4.98% | 0.450% |
| 42 | 11.586 | 1612 | 1615 | 1620 | rVV3 | 60999 | 99331 | 3.00% | 0.271% |
| 43 | 11.663 | 1624 | 1628 | 1633 | rVV | 355531 | 361383 | 10.91% | 0.985% |
| 44 | 11.722 | 1636 | 1638 | 1642 | rVV2 | 113487 | 122835 | 3.71% | 0.335% |
| 45 | 11.763 | 1642 | 1645 | 1649 | rVV | 229604 | 222512 | 6.72% | 0.607% |
| 46 | 11.845 | 1656 | 1659 | 1663 | rVB | 147122 | 152736 | 4.61% | 0.416% |
| 47 | 11.933 | 1670 | 1674 | 1676 | rVV | 599742 | 551867 | 16.66% | 1.505% |
| 48 | 11.963 | 1676 | 1679 | 1682 | rVB | 786351 | 656765 | 19.82% | 1.791% |
| 49 | 12.010 | 1682 | 1687 | 1690 | rBV | 304278 | 287532 | 8.68% | 0.784% |
| 50 | 12.045 | 1690 | 1693 | 1696 | rVV2 | 1002116 | 1178225 | 35.56% | 3.213% |
| 51 | 12.069 | 1696 | 1697 | 1702 | rVB | 448905 | 249954 | 7.54% | 0.682% |
| 52 | 12.116 | 1702 | 1705 | 1707 | rBV2 | 68834 | 66905 | 2.02% | 0.182% |
| 53 | 12.169 | 1711 | 1714 | 1716 | rBV | 80359 | 72526 | 2.19% | 0.198% |
| 54 | 12.227 | 1721 | 1724 | 1727 | rVV | 368935 | 341101 | 10.29% | 0.930% |
| 55 | 12.257 | 1727 | 1729 | 1735 | rVB2 | 181648 | 169772 | 5.12% | 0.463% |
| 56 | 12.357 | 1744 | 1746 | 1748 | rBV | 73216 | 73880 | 2.23% | 0.201% |
| 57 | 12.374 | 1748 | 1749 | 1752 | rVV | 104089 | 88677 | 2.68% | 0.242% |
| 58 | 12.410 | 1752 | 1755 | 1757 | rVV | 181993 | 154080 | 4.65% | 0.420% |
| 59 | 12.433 | 1757 | 1759 | 1761 | rVB2 | 152886 | 112980 | 3.41% | 0.308% |
| 60 | 12.486 | 1764 | 1768 | 1770 | rBV | 384261 | 395106 | 11.92% | 1.077% |
| 61 | 12.522 | 1770 | 1774 | 1776 | rVV3 | 225009 | 310044 | 9.36% | 0.845% |
| 62 | 12.539 | 1776 | 1777 | 1780 | rVB | 108037 | 80285 | 2.42% | 0.219% |
| 63 | 12.574 | 1780 | 1783 | 1787 | rBV3 | 192666 | 276924 | 8.36% | 0.755% |
| 64 | 12.610 | 1787 | 1789 | 1792 | rVB2 | 73377 | 63629 | 1.92% | 0.174% |
| 65 | 12.657 | 1792 | 1797 | 1800 | rBV | 2870371 | 2988909 | 90.20% | 8.150% |
| 66 | 12.692 | 1800 | 1803 | 1805 | rVV | 109129 | 104591 | 3.16% | 0.285% |
| 67 | 12.710 | 1805 | 1806 | 1809 | rVV2 | 108299 | 91347 | 2.76% | 0.249% |
| 68 | 12.745 | 1809 | 1812 | 1814 | rVB2 | 91197 | 73685 | 2.22% | 0.201% |
| 69 | 12.804 | 1819 | 1822 | 1825 | rVB | 199335 | 171172 | 5.17% | 0.467% |
| 70 | 12.892 | 1829 | 1837 | 1841 | rBV | 2676503 | 3313483 | 100.00% | 9.036% |
| 71 | 12.927 | 1841 | 1843 | 1847 | rVB2 | 200070 | 218418 | 6.59% | 0.596% |
| 72 | 12.998 | 1851 | 1855 | 1856 | rBV2 | 168858 | 178844 | 5.40% | 0.488% |
| 73 | 13.016 | 1856 | 1858 | 1861 | rVV | 653618 | 537047 | 16.21% | 1.464% |
| 74 | 13.039 | 1861 | 1862 | 1865 | rVB | 161172 | 108368 | 3.27% | 0.296% |
| 75 | 13.092 | 1867 | 1871 | 1876 | rBV3 | 245882 | 429258 | 12.95% | 1.171% |
| 76 | 13.186 | 1883 | 1887 | 1888 | rBV3 | 207688 | 251572 | 7.59% | 0.686% |

LSC Area Percent Report

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

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-BF110922.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 77 | 13.210 | 1888 | 1891 | 1894 | rVB | 639210 | 579356 | 17.48% | 1.580% |
| 78 | 13.274 | 1899 | 1902 | 1905 | rVV | 520118 | 410705 | 12.39% | 1.120% |
| 79 | 13.316 | 1905 | 1909 | 1912 | rBV2 | 369042 | 380332 | 11.48% | 1.037% |
| 80 | 13.369 | 1916 | 1918 | 1921 | rBV2 | 63100 | 64741 | 1.95% | 0.177% |
| 81 | 13.410 | 1922 | 1925 | 1927 | rBV | 222719 | 192846 | 5.82% | 0.526% |
| 82 | 13.439 | 1927 | 1930 | 1932 | rBV | 268989 | 223235 | 6.74% | 0.609% |
| 83 | 13.580 | 1952 | 1954 | 1957 | rBV4 | 70237 | 91038 | 2.75% | 0.248% |
| 84 | 13.692 | 1970 | 1973 | 1975 | rBV3 | 103958 | 118249 | 3.57% | 0.322% |
| 85 | 13.833 | 1994 | 1997 | 1999 | rBV | 189049 | 166594 | 5.03% | 0.454% |
| 86 | 13.857 | 1999 | 2001 | 2003 | rVB | 187033 | 128101 | 3.87% | 0.349% |
| 87 | 13.886 | 2003 | 2006 | 2011 | rBV3 | 129141 | 191028 | 5.77% | 0.521% |
| 88 | 14.074 | 2035 | 2038 | 2042 | rBV2 | 1085838 | 1387976 | 41.89% | 3.785% |
| 89 | 14.116 | 2042 | 2045 | 2051 | rVB | 955690 | 954014 | 28.79% | 2.602% |
| 90 | 14.168 | 2052 | 2054 | 2055 | rBV | 82315 | 70224 | 2.12% | 0.191% |
| 91 | 14.192 | 2055 | 2058 | 2060 | rVB2 | 174635 | 151666 | 4.58% | 0.414% |
| 92 | 14.227 | 2062 | 2064 | 2070 | rBV4 | 84561 | 121710 | 3.67% | 0.332% |
| 93 | 14.468 | 2101 | 2105 | 2109 | rBV | 275986 | 324346 | 9.79% | 0.884% |
| 94 | 14.504 | 2109 | 2111 | 2114 | rVB | 124378 | 92485 | 2.79% | 0.252% |
| 95 | 15.151 | 2216 | 2221 | 2224 | rBV | 578360 | 946638 | 28.57% | 2.581% |
| 96 | 15.257 | 2236 | 2239 | 2242 | rBV | 148153 | 156894 | 4.74% | 0.428% |
| 97 | 15.463 | 2270 | 2274 | 2280 | rVB | 363901 | 493102 | 14.88% | 1.345% |
| 98 | 15.527 | 2281 | 2285 | 2290 | rVB | 615089 | 754411 | 22.77% | 2.057% |
| 99 | 15.586 | 2292 | 2295 | 2298 | rBV | 199176 | 232183 | 7.01% | 0.633% |
| 100 | 17.115 | 2551 | 2555 | 2562 | rVB2 | 199565 | 378334 | 11.42% | 1.032% |

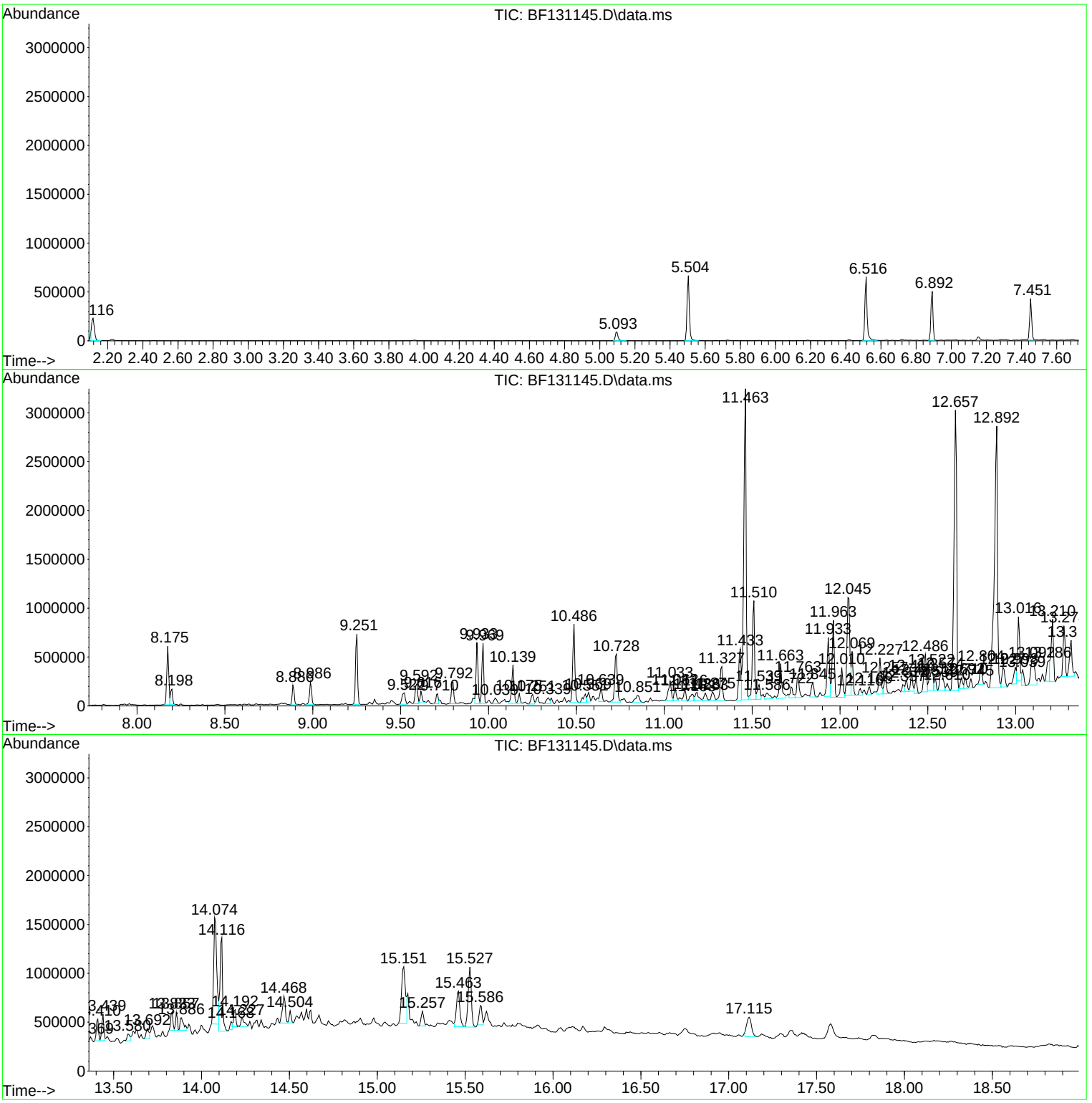
Sum of corrected areas: 36671611

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

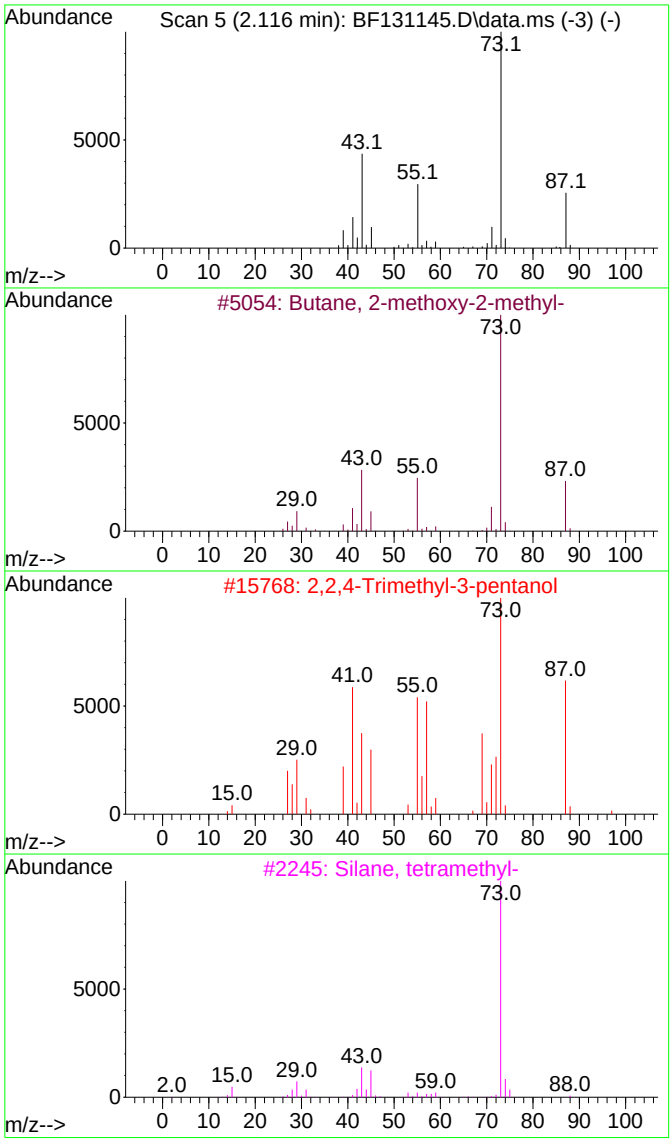
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

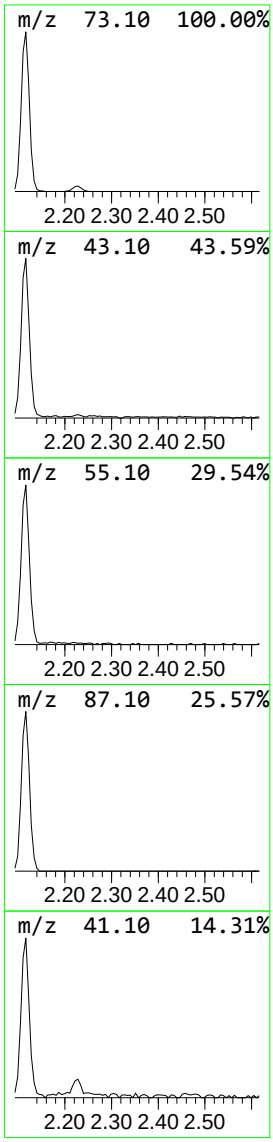
**********

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.116 | 11.38 ng | 233711 | 1,4-Dichlorobenzene-d4 | 6.892 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Butane, 2-methoxy-2-methyl- | 102 | C6H14O | 000994-05-8 | 83 |
| 2 | 2,2,4-Trimethyl-3-pentanol | 130 | C8H18O | 005162-48-1 | 39 |
| 3 | Silane, tetramethyl- | 88 | C4H12Si | 000075-76-3 | 9 |
| 4 | N-Ethylformamide | 73 | C3H7NO | 000627-45-2 | 9 |
| 5 | 1,3-Dioxolane, 2-methyl- | 88 | C4H8O2 | 000497-26-7 | 9 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

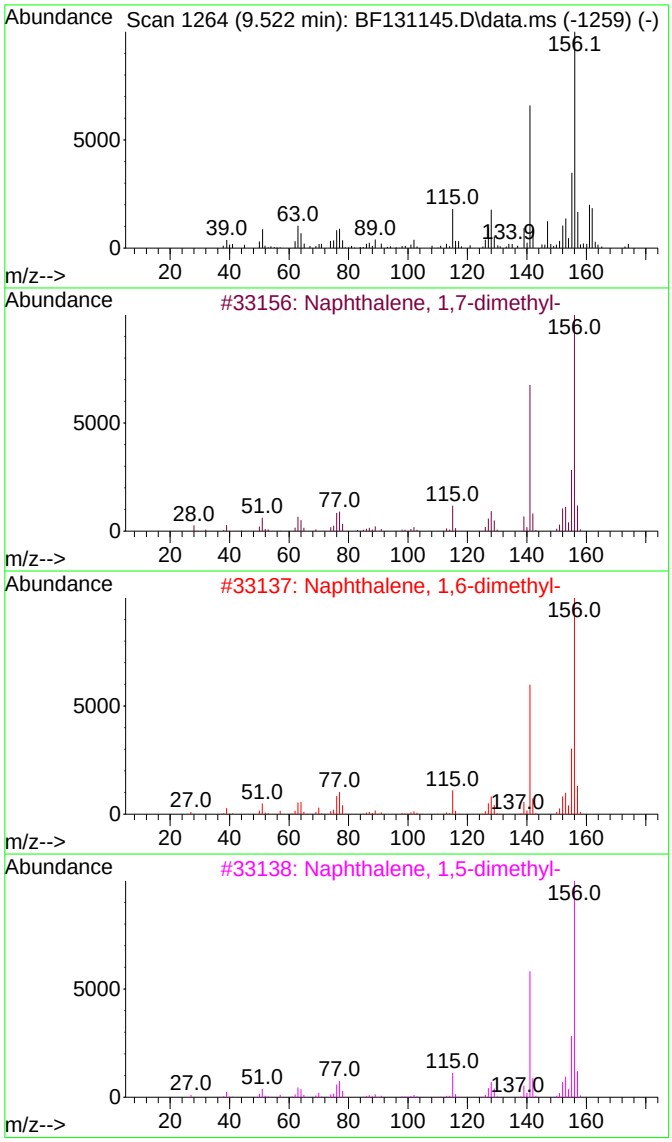
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

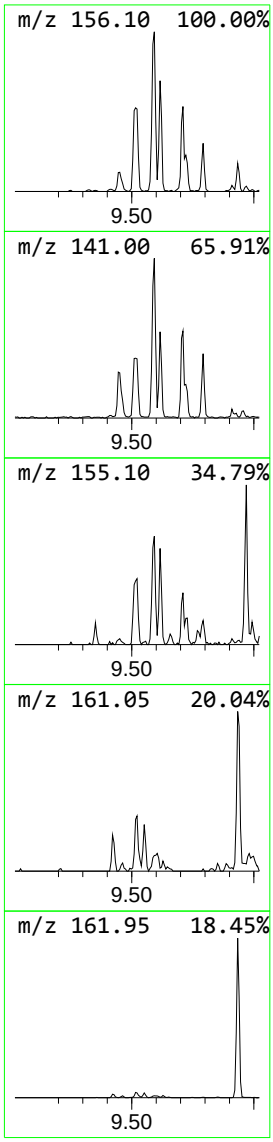
**********

Peak Number 2 Naphthalene, 1,7-dimethyl- Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.522 | 6.34 ng | 150886 | Acenaphthene-d10 | 9.933 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,7-dimethyl- | 156 | C12H12 | 000575-37-1 | 96 |
| 2 | Naphthalene, 1,6-dimethyl- | 156 | C12H12 | 000575-43-9 | 95 |
| 3 | Naphthalene, 1,5-dimethyl- | 156 | C12H12 | 000571-61-9 | 95 |
| 4 | Naphthalene, 2,7-dimethyl- | 156 | C12H12 | 000582-16-1 | 95 |
| 5 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 95 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

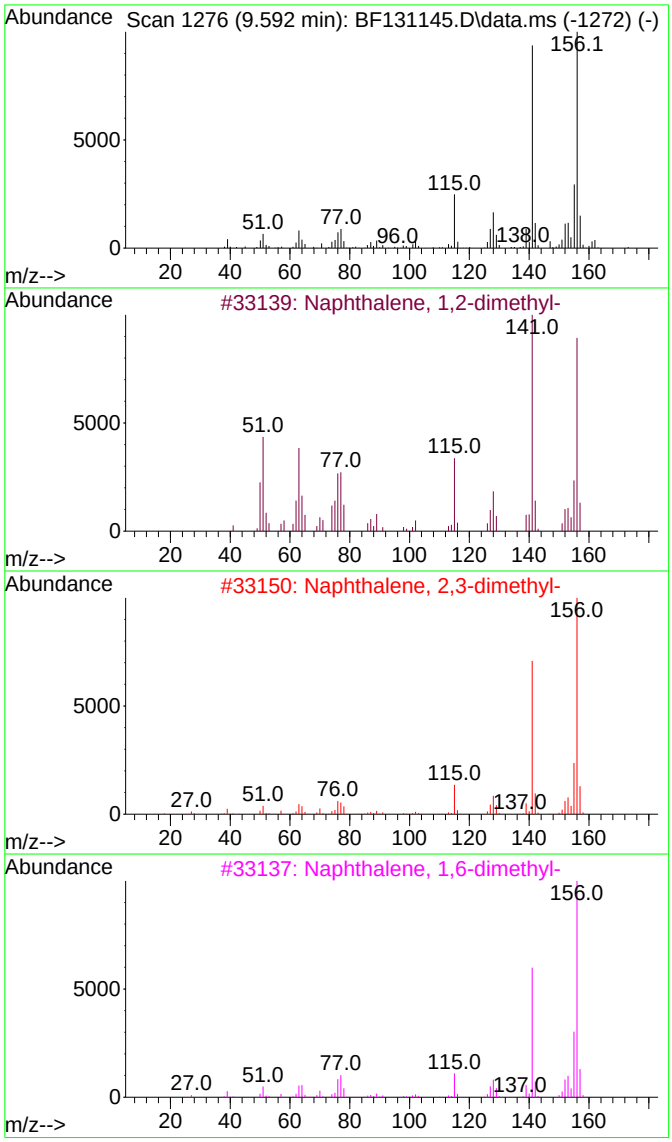
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

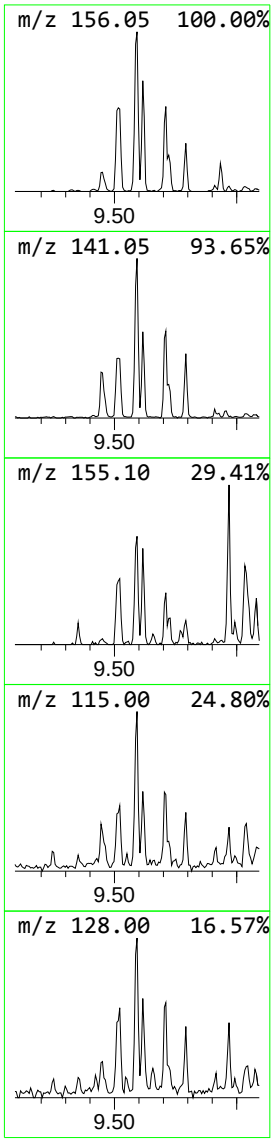
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 3 Naphthalene, 1,2-dimethyl- Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.592 | 8.46 ng | 201282 | Acenaphthene-d10 | 9.933 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,2-dimethyl- | 156 | C12H12 | 000573-98-8 | 97 |
| 2 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 96 |
| 3 | Naphthalene, 1,6-dimethyl- | 156 | C12H12 | 000575-43-9 | 96 |
| 4 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 96 |
| 5 | Naphthalene, 2,7-dimethyl- | 156 | C12H12 | 000582-16-1 | 95 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

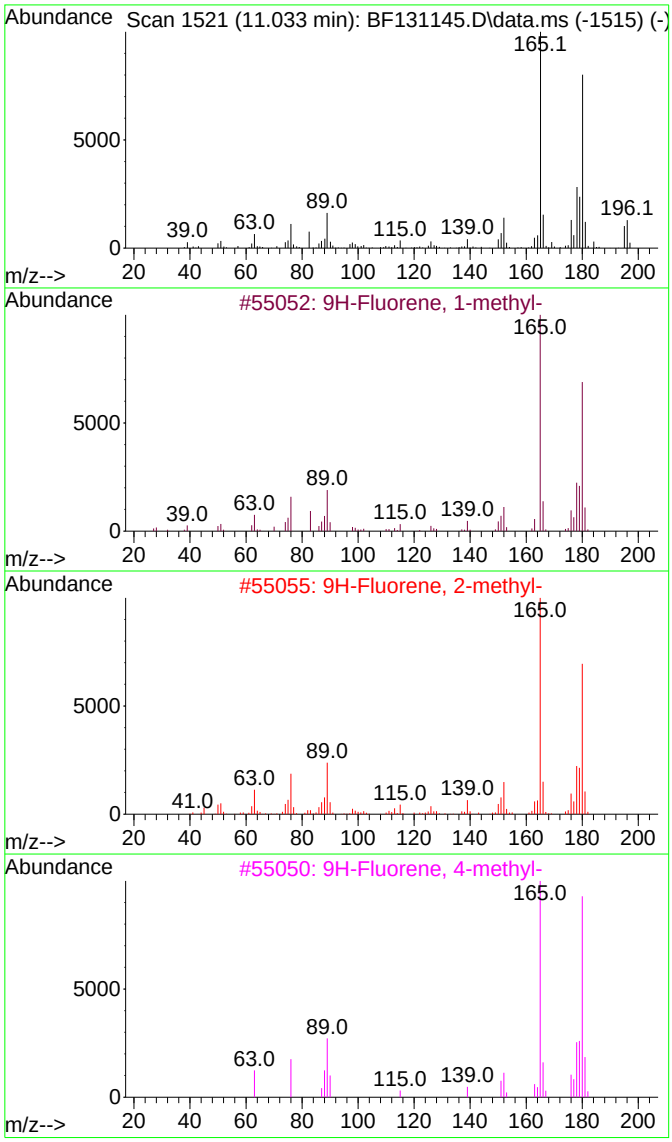
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

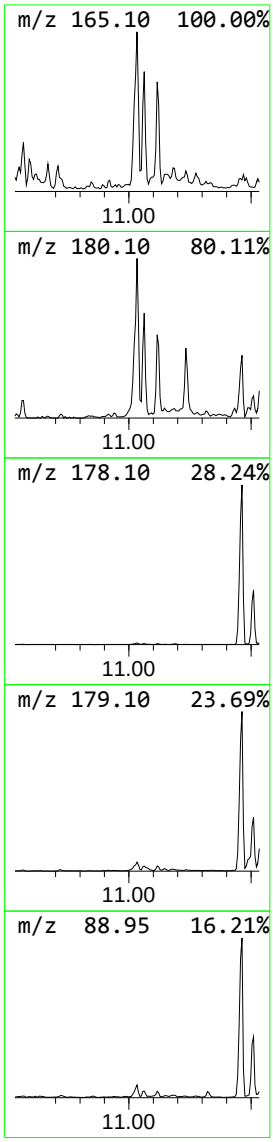
**********

Peak Number 4 9H-Fluorene, 1-methyl- Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.033 | 9.26 ng | 238426 | Phenanthrene-d10 | 11.433 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 96 |
| 2 | 9H-Fluorene, 2-methyl- | 180 | C14H12 | 001430-97-3 | 96 |
| 3 | 9H-Fluorene, 4-methyl- | 180 | C14H12 | 001556-99-6 | 90 |
| 4 | 9H-Fluorene, 3-methyl- | 180 | C14H12 | 002523-39-9 | 89 |
| 5 | 9H-Fluorene, 9-methyl- | 180 | C14H12 | 002523-37-7 | 76 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

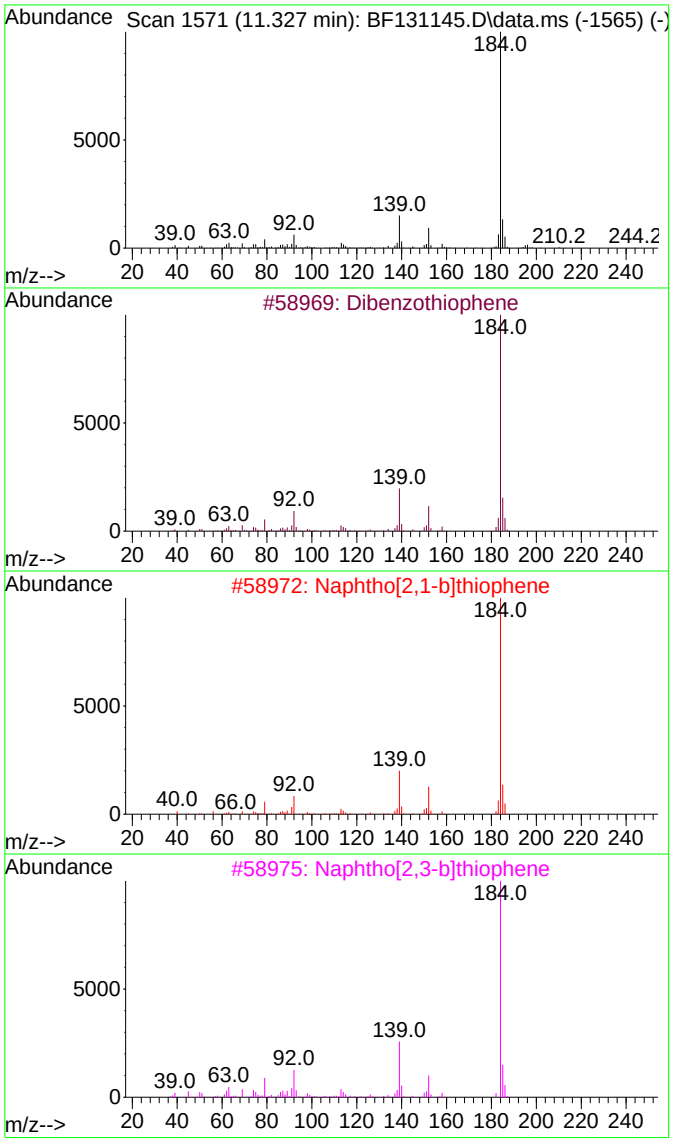
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

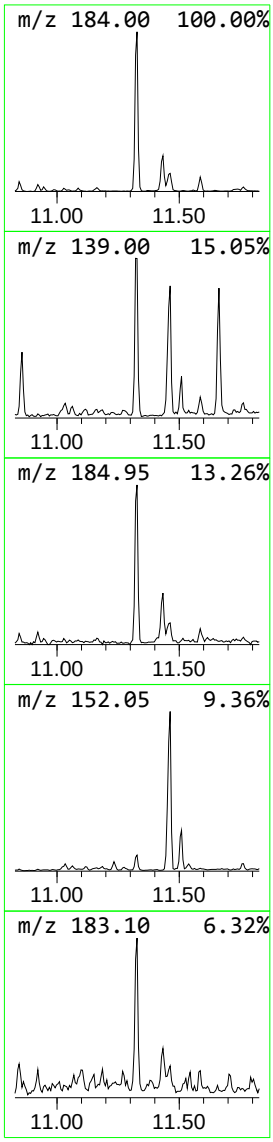
**********

Peak Number 5 Dibenzothiophene Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.328 | 13.55 ng | 348960 | Phenanthrene-d10 | 11.433 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 96 |
| 2 | Naphtho[2,1-b]thiophene | 184 | C12H8S | 000233-02-3 | 95 |
| 3 | Naphtho[2,3-b]thiophene | 184 | C12H8S | 000268-77-9 | 95 |
| 4 | Naphtho[1,2-b]thiophene | 184 | C12H8S | 000234-41-3 | 93 |
| 5 | Azuleno(2,1-b)thiophene | 184 | C12H8S | 000248-13-5 | 90 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

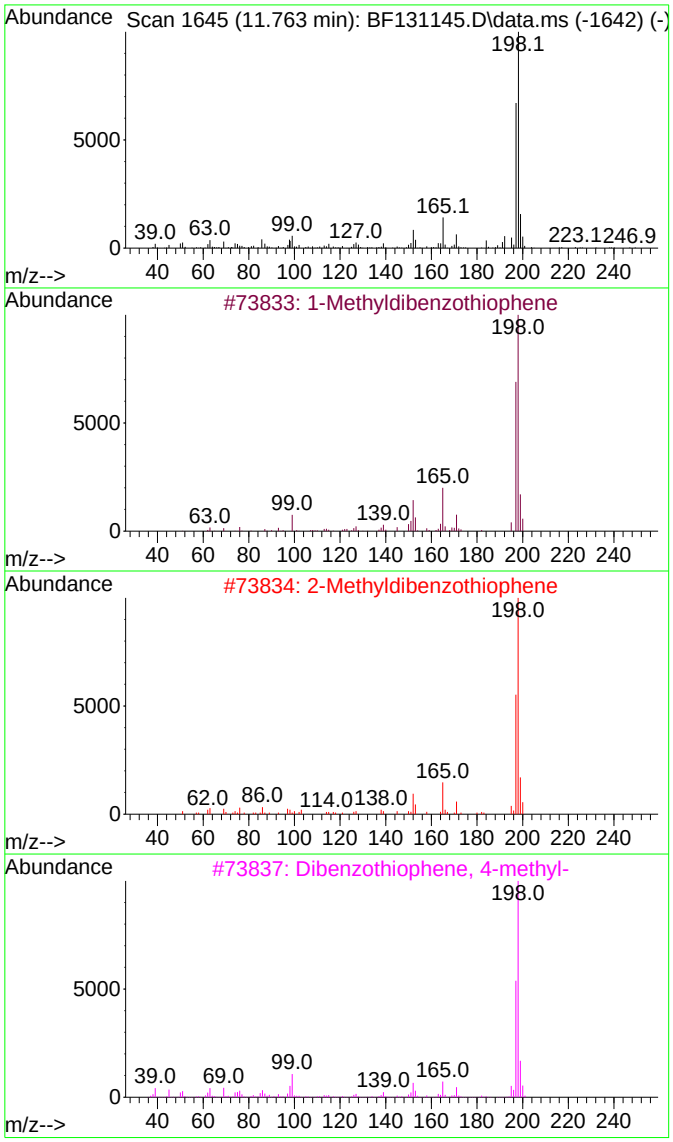
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

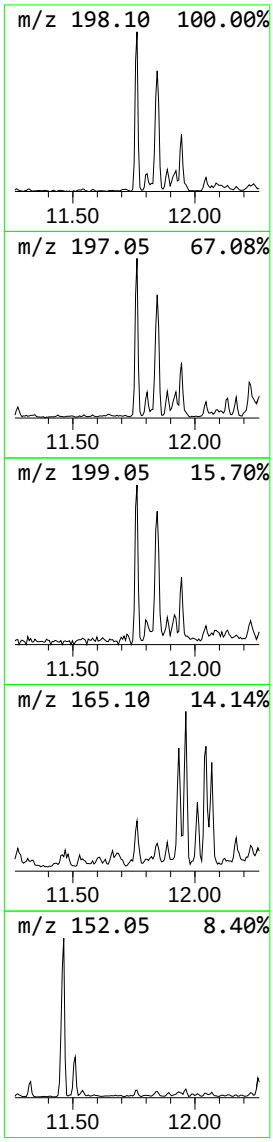
**********

Peak Number 6 1-Methyldibenzothiophene Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.763 | 8.64 ng | 222512 | Phenanthrene-d10 | 11.433 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Methyldibenzothiophene | 198 | C13H10S | 031317-07-4 | 95 |
| 2 | 2-Methyldibenzothiophene | 198 | C13H10S | 1000383-55-1 | 94 |
| 3 | Dibenzothiophene, 4-methyl- | 198 | C13H10S | 007372-88-5 | 93 |
| 4 | Dibenzothiophene, 3-methyl- | 198 | C13H10S | 016587-52-3 | 93 |
| 5 | 4-Methylnaphtho[1,2-b]thiophene | 198 | C13H10S | 067388-11-8 | 93 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

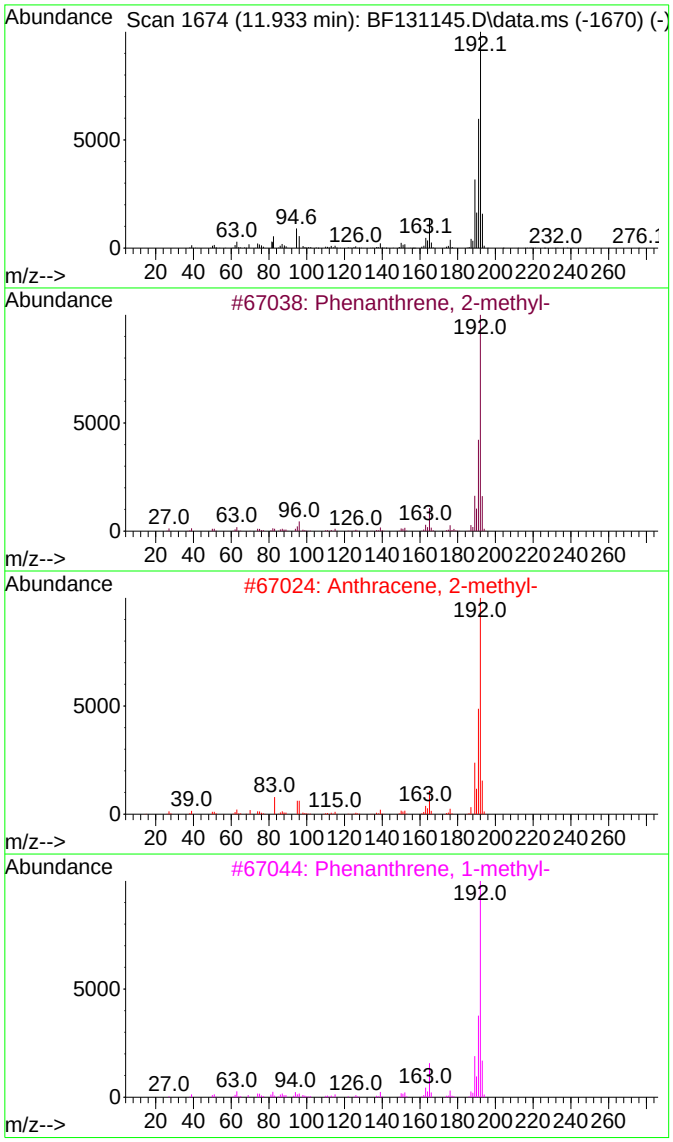
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

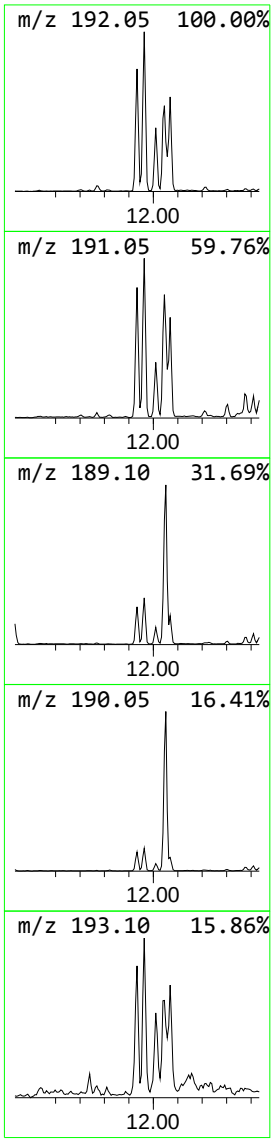
**********

Peak Number 7 Phenanthrene, 2-methyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.933 | 21.43 ng | 551867 | Phenanthrene-d10 | 11.433 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 96 |
| 2 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 96 |
| 3 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 95 |
| 4 | Phenanthrene, 4-methyl- | 192 | C15H12 | 000832-64-4 | 94 |
| 5 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 91 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

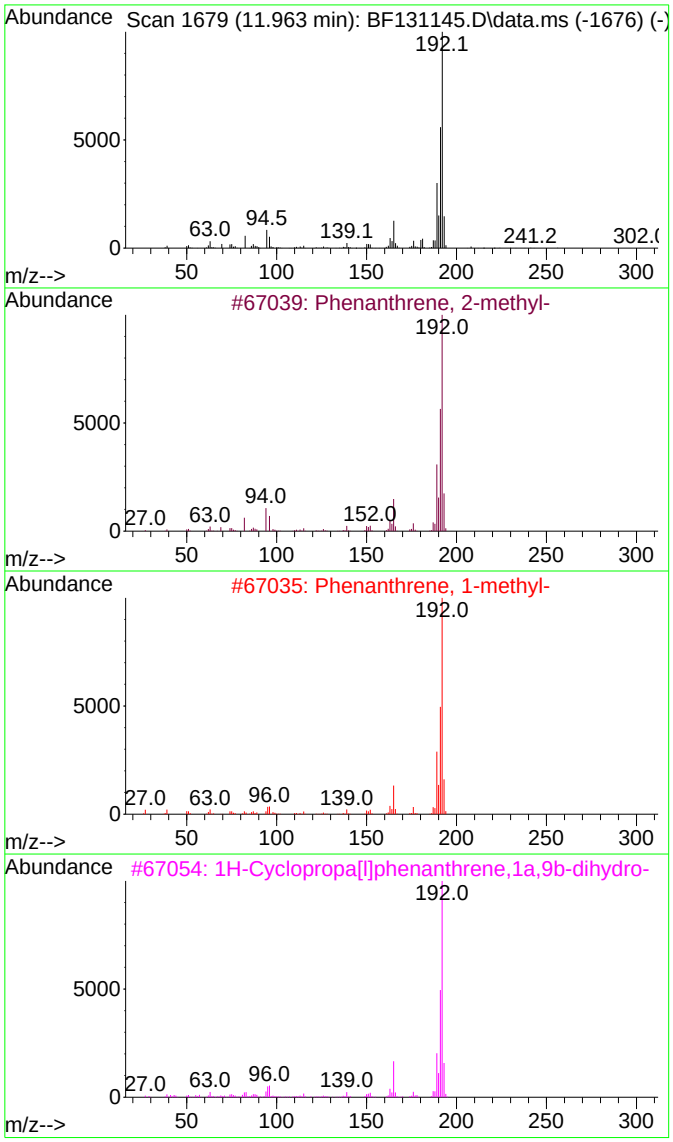
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

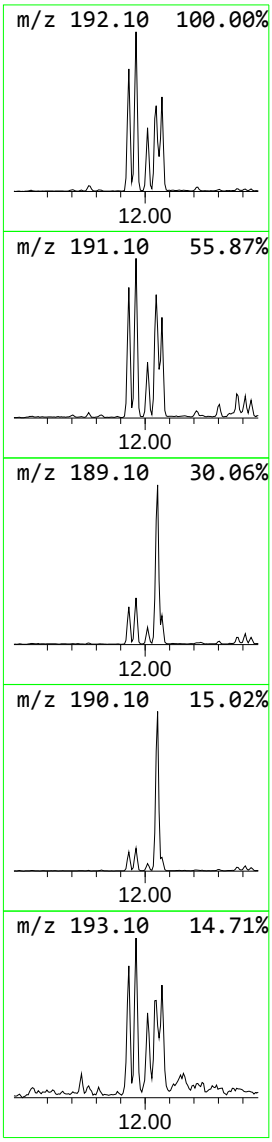
**********

Peak Number 8 Phenanthrene, 1-methyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.963 | 25.51 ng | 656765 | Phenanthrene-d10 | 11.433 |

| 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 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 96 |
| 4 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 96 |
| 5 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 95 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

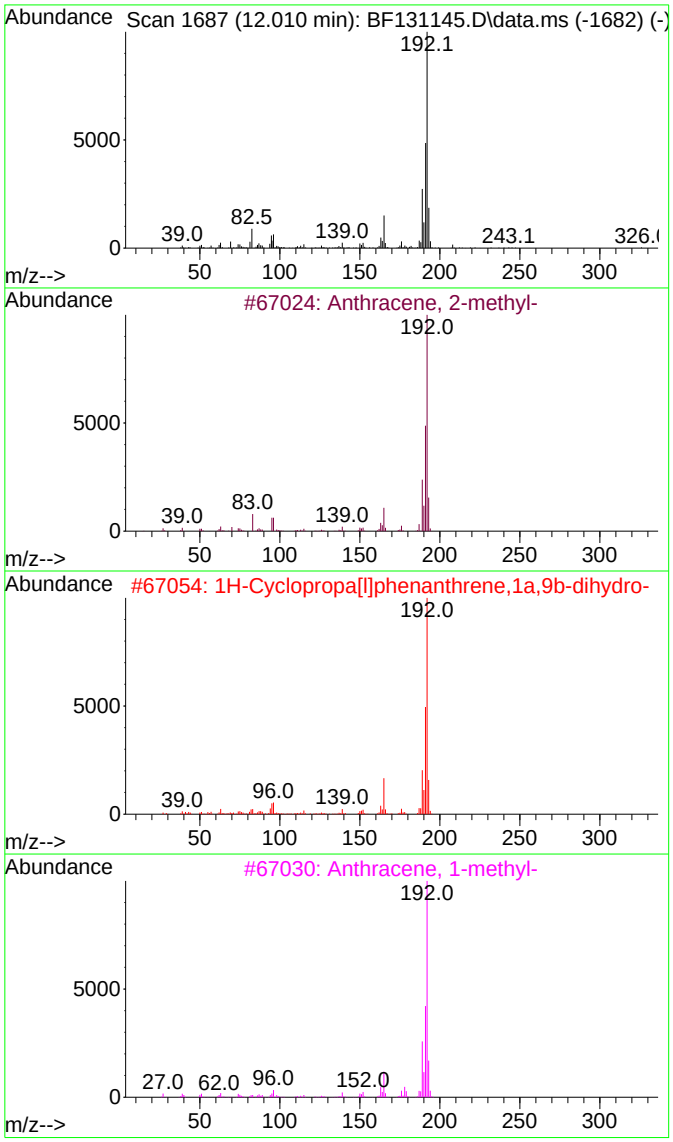
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

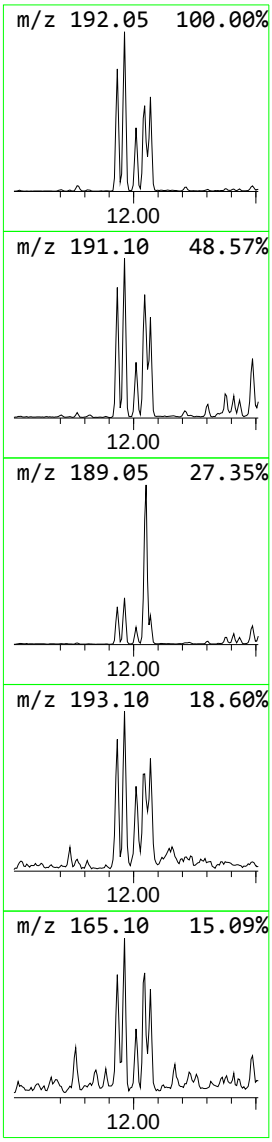
**********

Peak Number 9 Anthracene, 2-methyl- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.010 | 11.17 ng | 287532 | Phenanthrene-d10 | 11.433 |

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



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

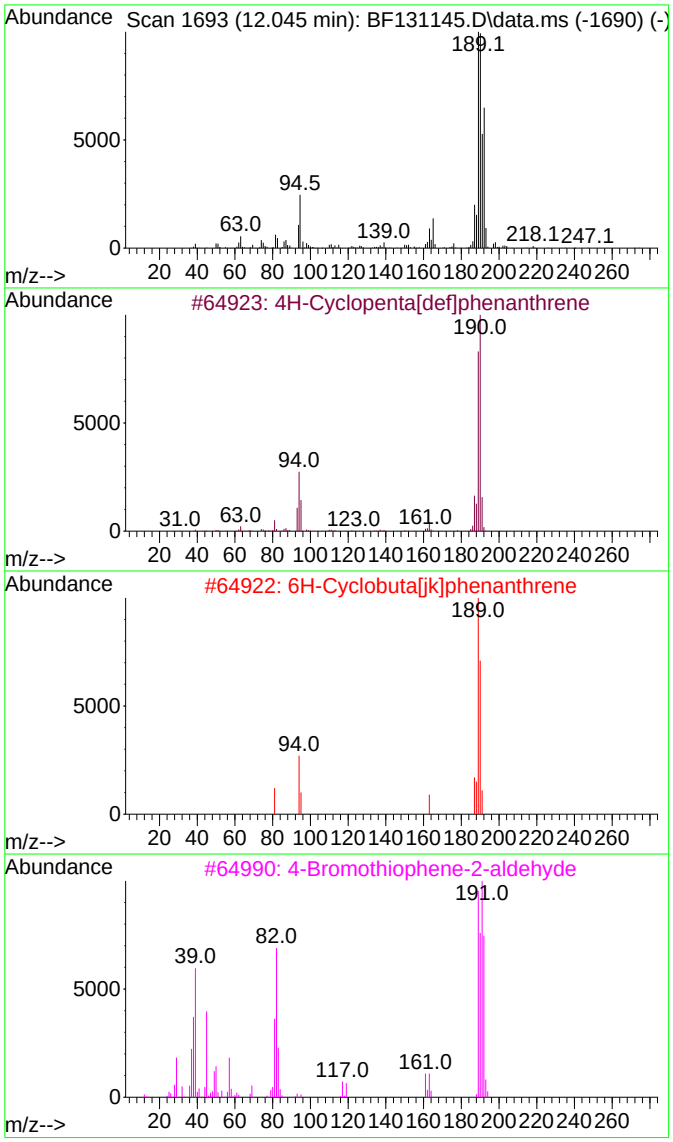
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

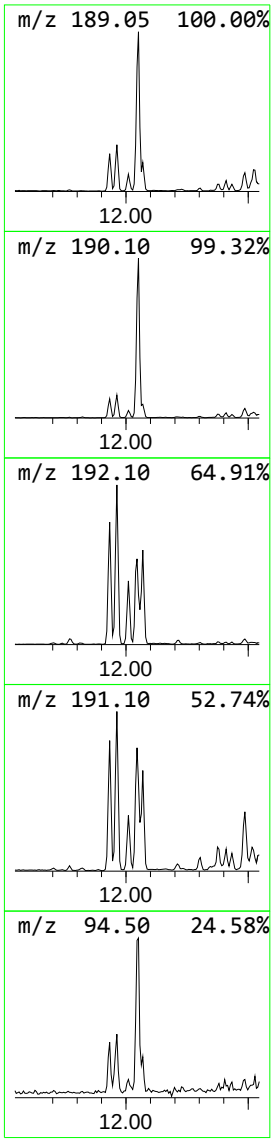
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 10 4H-Cyclopenta[def]phenanthrene Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.045 | 45.76 ng | 1178230 | Phenanthrene-d10 | 11.433 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 70 |
| 2 | 6H-Cyclobuta[jk]phenanthrene | 190 | C15H10 | 083469-43-6 | 58 |
| 3 | 4-Bromothiophene-2-aldehyde | 190 | C5H3BrOS | 018791-75-8 | 43 |
| 4 | 8,9-Dihydrocyclopenta[def]phenan... | 192 | C15H12 | 027410-55-5 | 35 |
| 5 | 5H-Dibenzo[a,d]cycloheptene | 192 | C15H12 | 000256-81-5 | 30 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

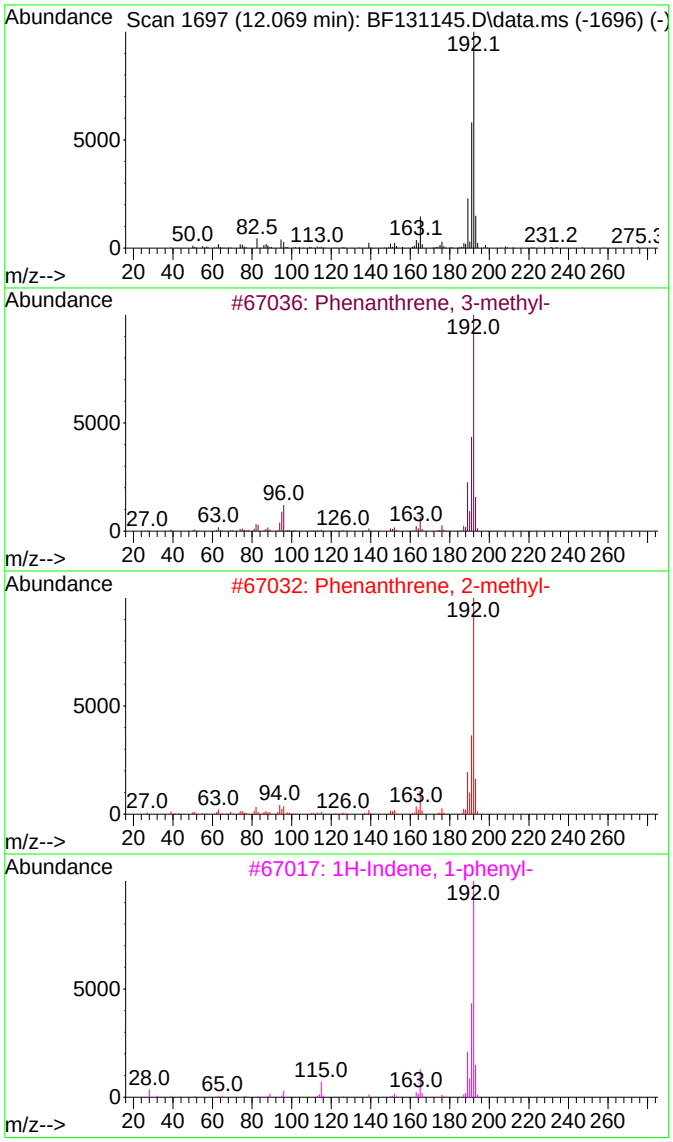
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

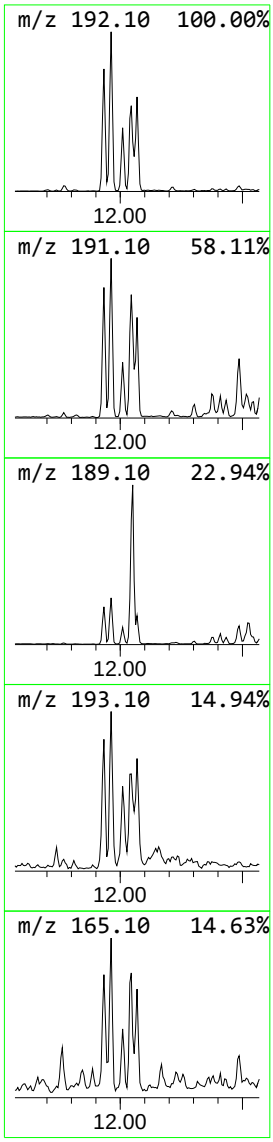
**********

Peak Number 11 Phenanthrene, 3-methyl- Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.069 | 9.71 ng | 249954 | Phenanthrene-d10 | 11.433 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 3-methyl- | 192 | C15H12 | 000832-71-3 | 91 |
| 2 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 89 |
| 3 | 1H-Indene, 1-phenyl- | 192 | C15H12 | 001961-96-2 | 87 |
| 4 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 87 |
| 5 | 1H-Indene, 2-phenyl- | 192 | C15H12 | 004505-48-0 | 87 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

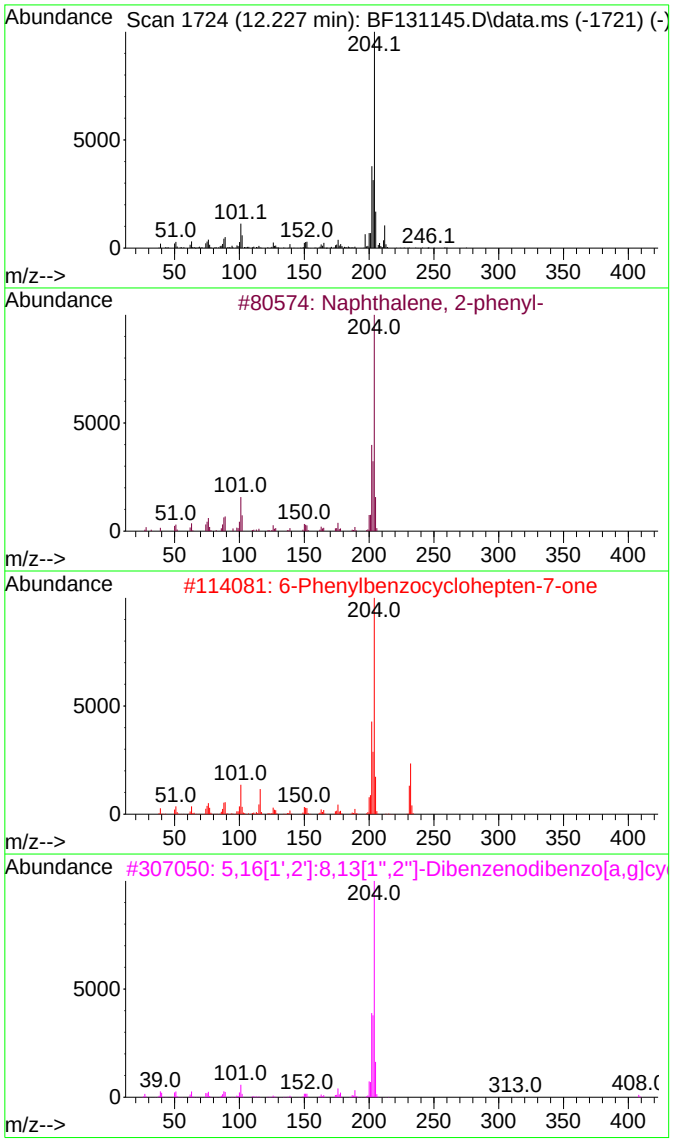
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

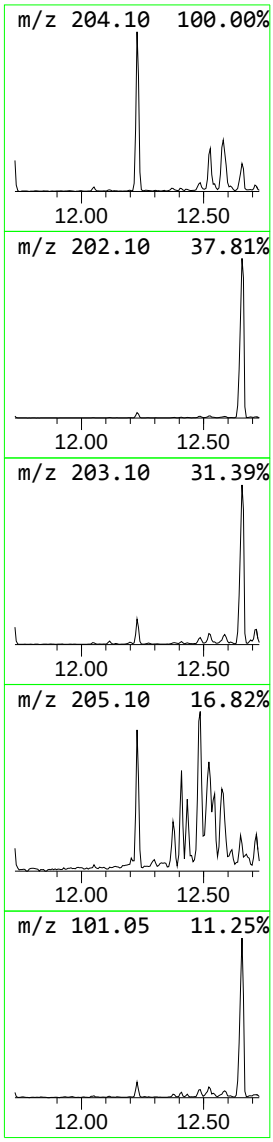
**********

Peak Number 12 Naphthalene, 2-phenyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.227 | 13.25 ng | 341101 | Phenanthrene-d10 | 11.433 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 95 |
| 2 | 6-Phenylbenzocyclohepten-7-one | 232 | C17H12O | 093327-56-1 | 86 |
| 3 | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24 | 005672-97-9 | 83 |
| 4 | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12 | 006572-60-7 | 76 |
| 5 | Naphthalene, 1-phenyl- | 204 | C16H12 | 000605-02-7 | 60 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

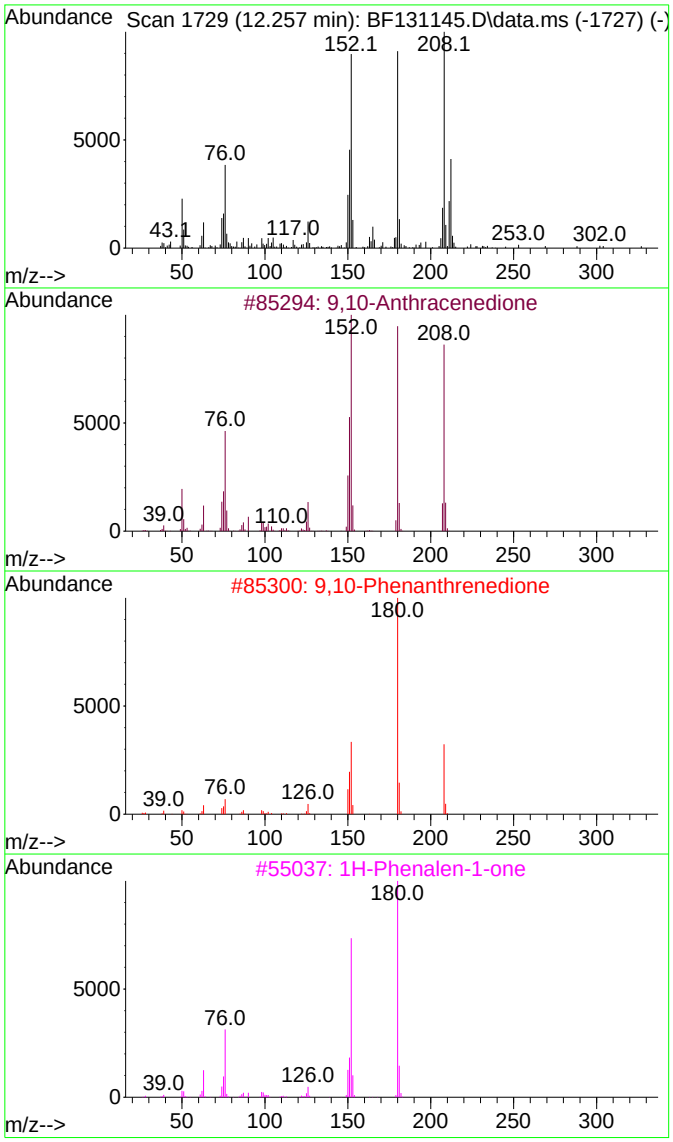
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

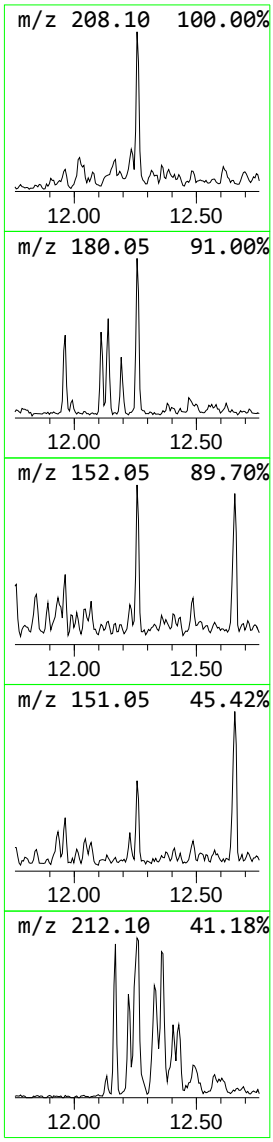
**********

Peak Number 13 9,10-Anthracenedione Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.257 | 6.59 ng | 169772 | Phenanthrene-d10 | 11.433 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 91 |
| 2 | 9,10-Phenanthrenedione | 208 | C14H8O2 | 000084-11-7 | 87 |
| 3 | 1H-Phenalen-1-one | 180 | C13H8O | 000548-39-0 | 86 |
| 4 | Benzo[c]cinnoline | 180 | C12H8N2 | 000230-17-1 | 70 |
| 5 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 64 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

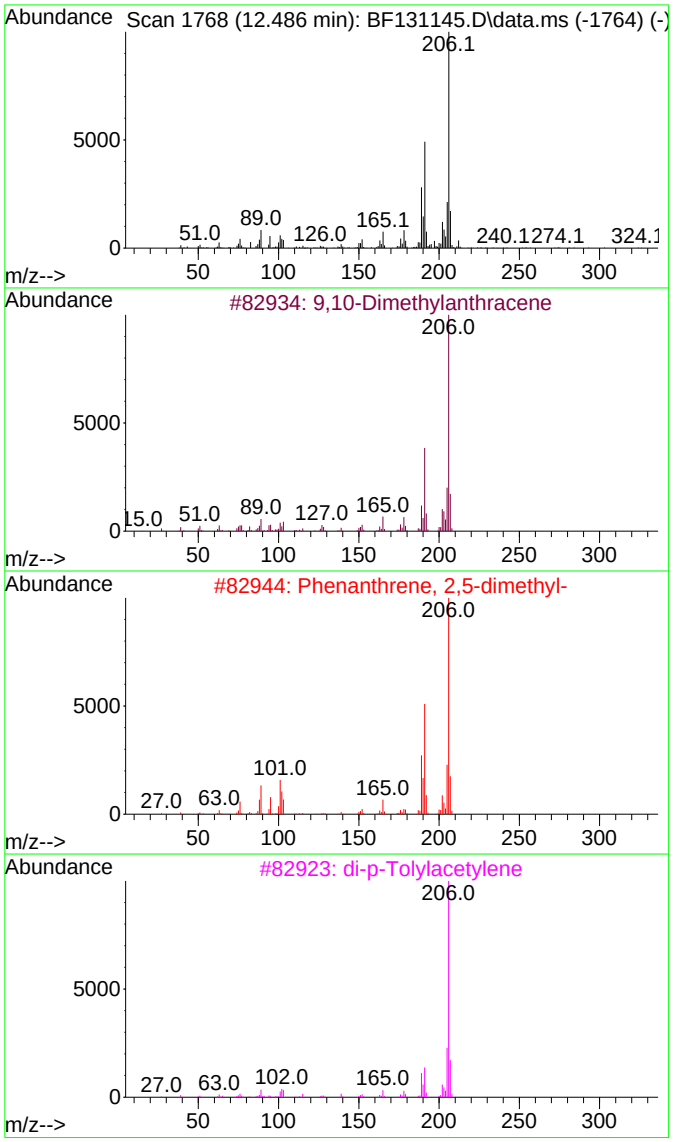
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

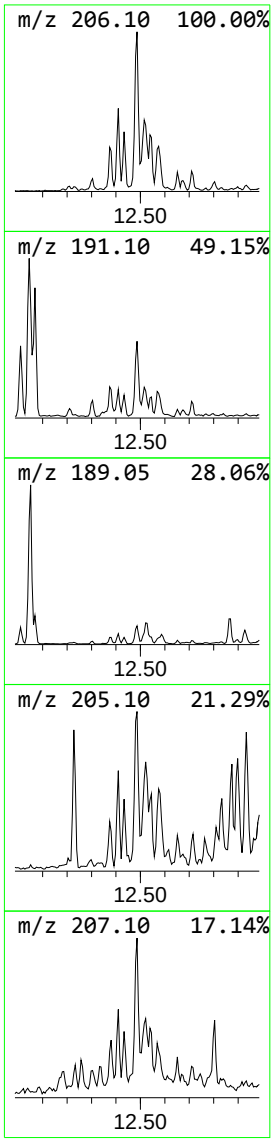
**********

Peak Number 14 9,10-Dimethylanthracene Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.486 | 15.34 ng | 395106 | Phenanthrene-d10 | 11.433 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 96 |
| 2 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 95 |
| 3 | di-p-Tolylacetylene | 206 | C16H14 | 002789-88-0 | 91 |
| 4 | Phenanthrene, 2,3-dimethyl- | 206 | C16H14 | 003674-65-5 | 90 |
| 5 | Phenanthrene, 1,7-dimethyl- | 206 | C16H14 | 000483-87-4 | 89 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

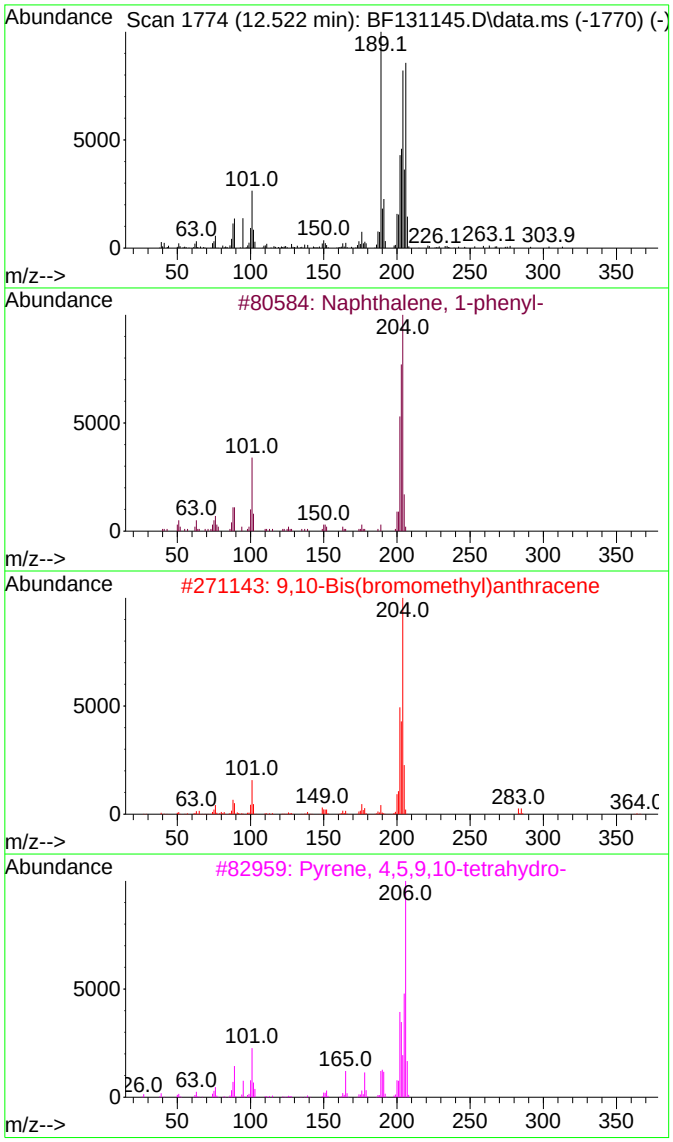
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

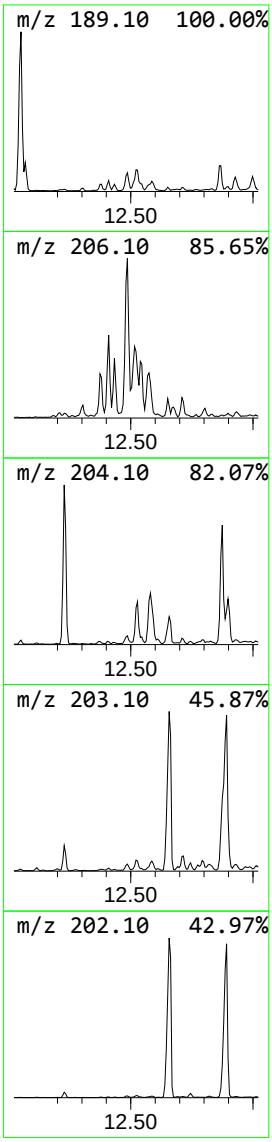
**********

Peak Number 15 Naphthalene, 1-phenyl- Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.522 | 12.04 ng | 310044 | Phenanthrene-d10 | 11.433 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1-phenyl- | 204 | C16H12 | 000605-02-7 | 83 |
| 2 | 9,10-Bis(bromomethyl)anthracene | 362 | C16H12Br2 | 034373-96-1 | 43 |
| 3 | Pyrene, 4,5,9,10-tetrahydro- | 206 | C16H14 | 000781-17-9 | 38 |
| 4 | Indeno[2,1-a]indene, 5,10-dihydro- | 204 | C16H12 | 006543-29-9 | 38 |
| 5 | 5H-Dibenzo[a,d]cycloheptene, 5-m... | 204 | C16H12 | 002975-79-3 | 38 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

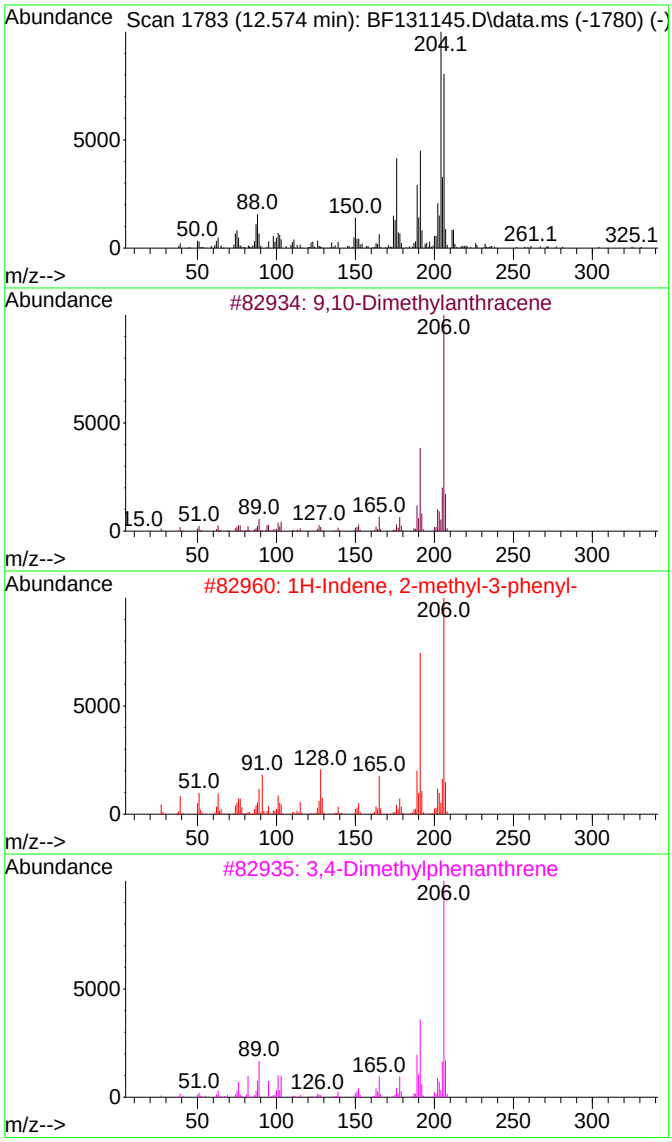
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

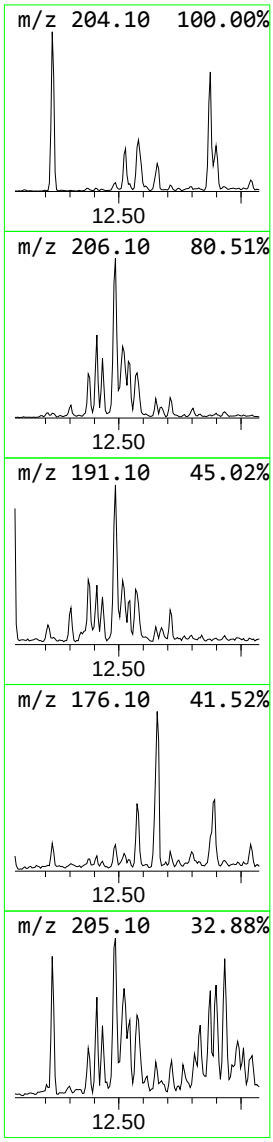
**********

Peak Number 16 unknown12.575 Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.575 | 10.75 ng | 276924 | Phenanthrene-d10 | 11.433 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 50 |
| 2 | 1H-Indene, 2-methyl-3-phenyl- | 206 | C16H14 | 035099-60-6 | 46 |
| 3 | 3,4-Dimethylphenanthrene | 206 | C16H14 | 1000452-24-5 | 45 |
| 4 | [14]Annulene, 1,6:8,13-bis(metha... | 206 | C16H14 | 085385-68-8 | 43 |
| 5 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 43 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

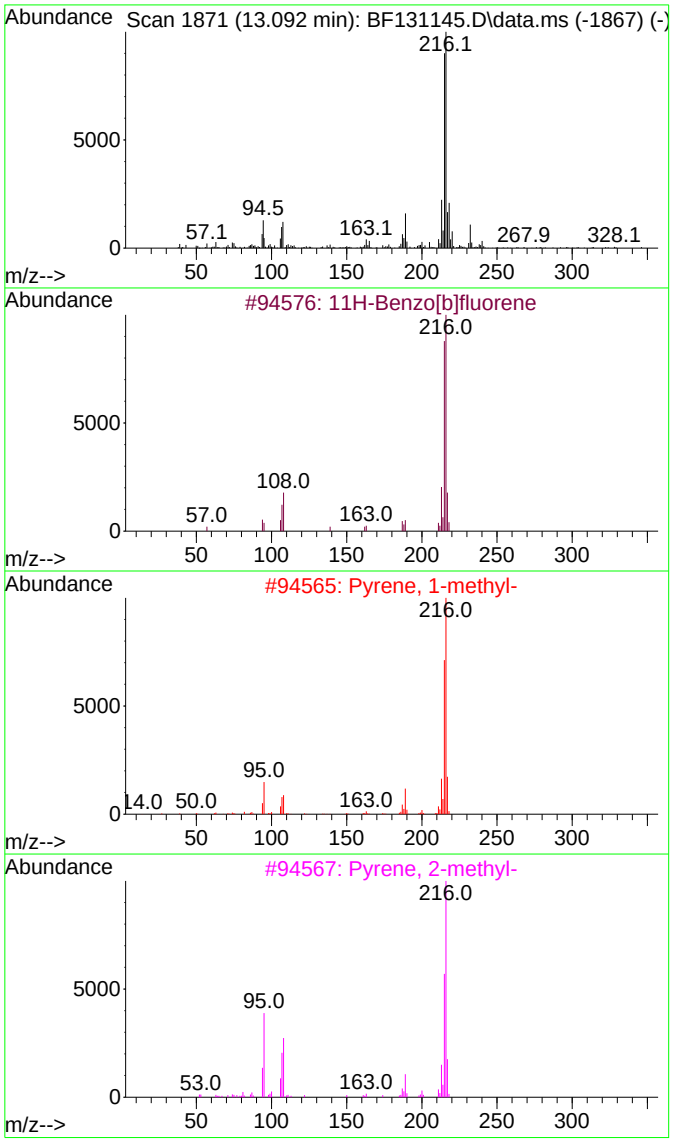
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

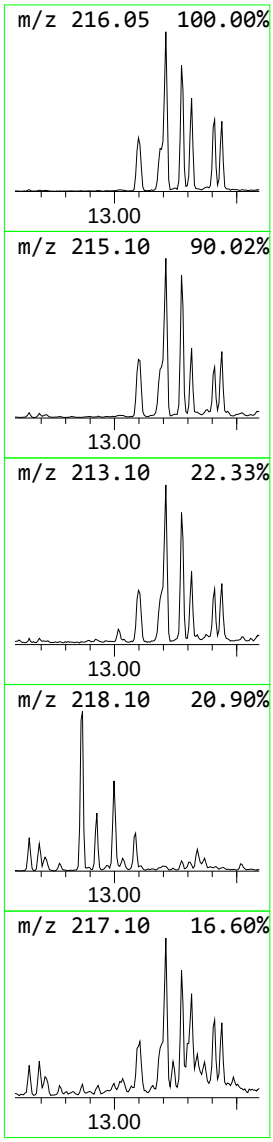
**********

Peak Number 17 11H-Benzo[b]fluorene Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.092 | 6.19 ng | 429258 | Chrysene-d12 | 14.086 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 93 |
| 2 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 93 |
| 3 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 64 |
| 4 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 64 |
| 5 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 64 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

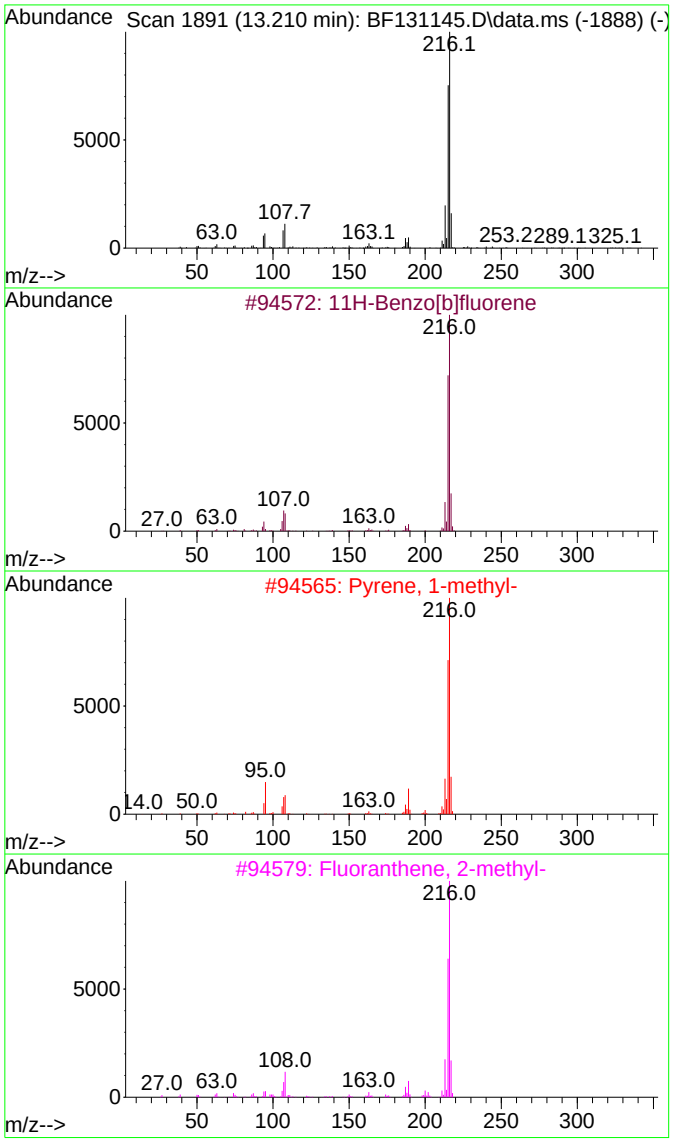
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

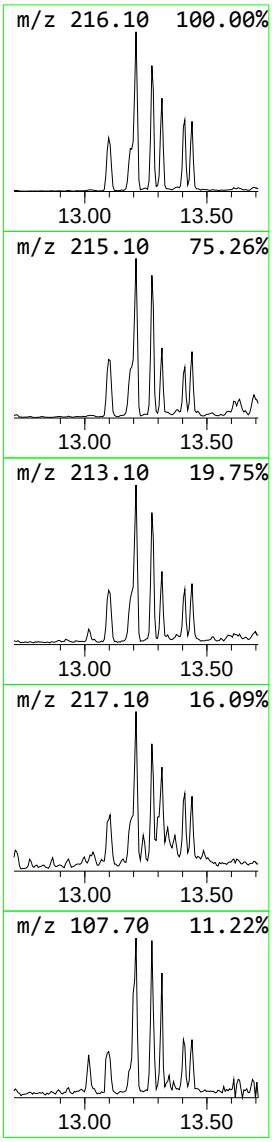
**********

Peak Number 18 Pyrene, 1-methyl- Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.210 | 8.35 ng | 579356 | Chrysene-d12 | 14.086 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 95 |
| 2 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 91 |
| 3 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 91 |
| 4 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 91 |
| 5 | 7H-Benzo[c]fluorene | 216 | C17H12 | 000205-12-9 | 72 |



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

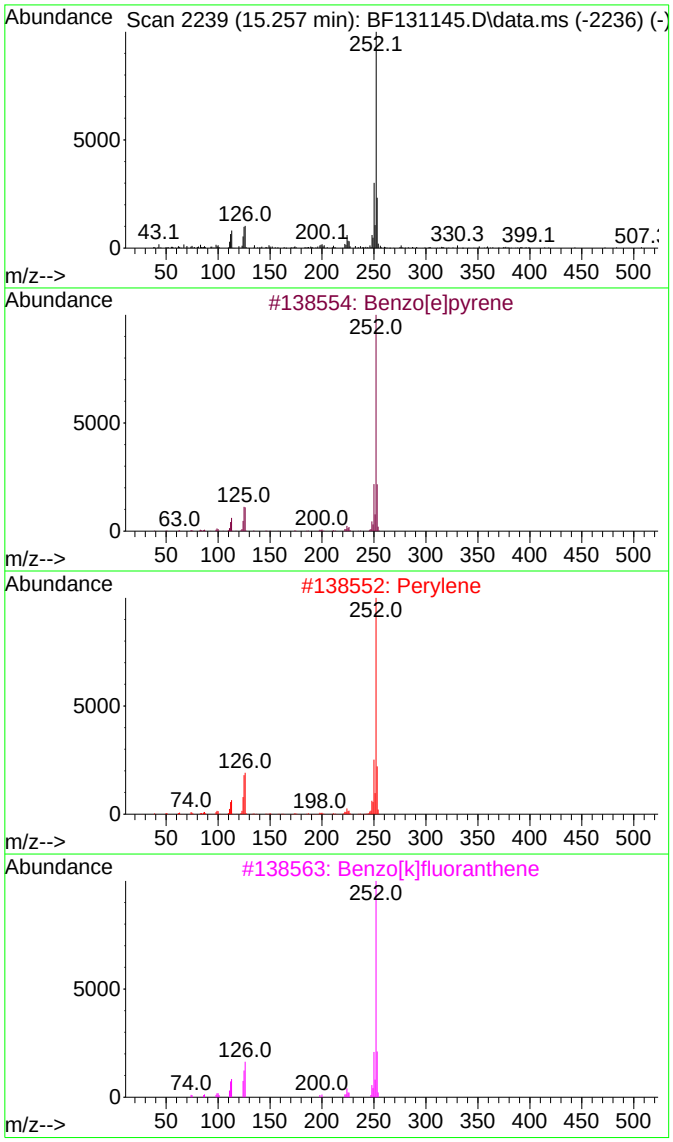
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

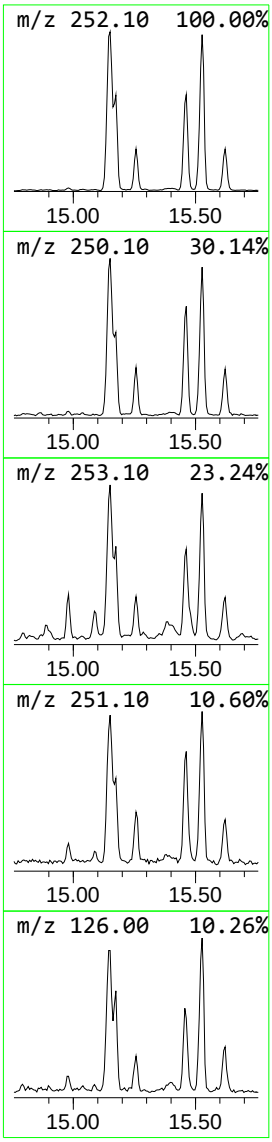
**********

Peak Number 19 Benzo[e]pyrene Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.257 | 13.51 ng | 156894 | Perylene-d12 | 15.586 |

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



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

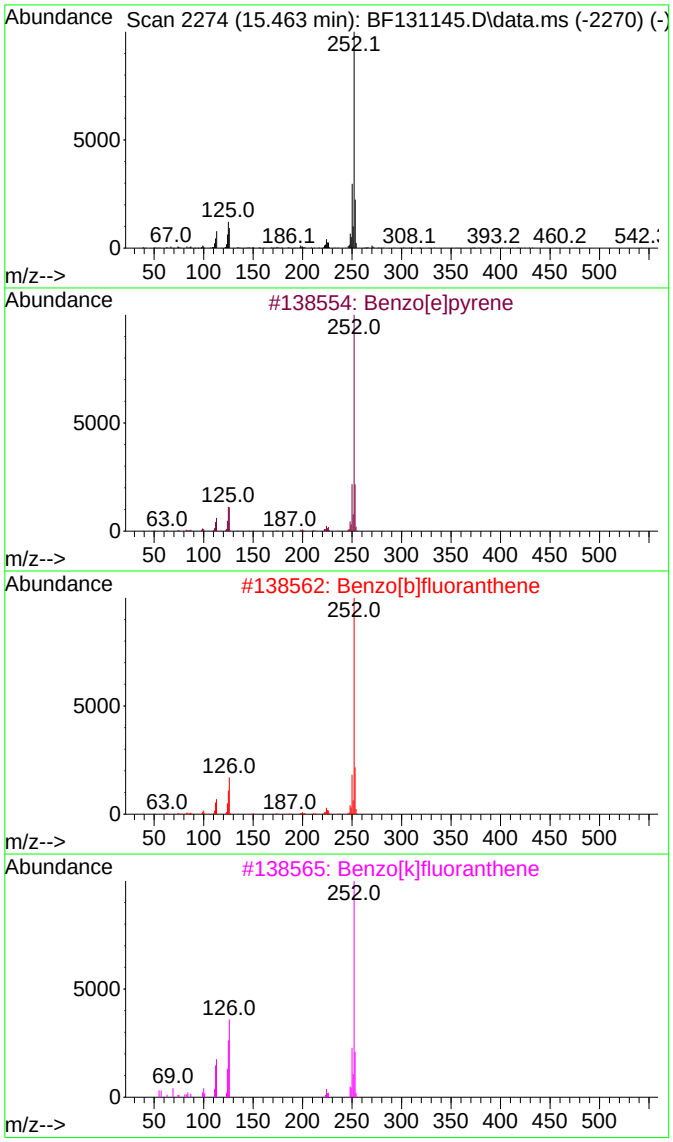
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

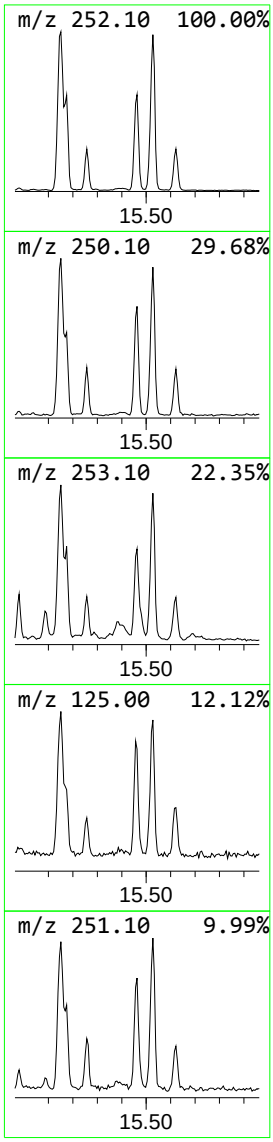
**********

Peak Number 20 Benzo[j]fluoranthene Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.463 | 42.48 ng | 493102 | Perylene-d12 | 15.586 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 98 |
| 2 | Benzo[b]fluoranthene | 252 | C20H12 | 000205-99-2 | 93 |
| 3 | Benzo[k]fluoranthene | 252 | C20H12 | 000207-08-9 | 93 |
| 4 | Benzo[a]pyrene | 252 | C20H12 | 000050-32-8 | 93 |
| 5 | Benzo[j]fluoranthene | 252 | C20H12 | 000205-82-3 | 90 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF111022\
Data File : BF131145.D
Acq On : 11 Nov 2022 02:47
Operator : CG\JU
Sample : N5518-03 2X
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
PAT-03-110822

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF110922.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

| | | | | | --Internal Standard--- | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Butane, 2-metho... | 2.116 | 11.4 | ng | 233711 | 1 | 6.892 | 410600 | 20.0 |
| Naphthalene, 1,... | 9.522 | 6.3 | ng | 150886 | 3 | 9.933 | 475957 | 20.0 |
| Naphthalene, 1,... | 9.592 | 8.5 | ng | 201282 | 3 | 9.933 | 475957 | 20.0 |
| 9H-Fluorene, 1-... | 11.033 | 9.3 | ng | 238426 | 4 | 11.433 | 514980 | 20.0 |
| Dibenzothiophene | 11.328 | 13.6 | ng | 348960 | 4 | 11.433 | 514980 | 20.0 |
| 1-Methyldibenzo... | 11.763 | 8.6 | ng | 222512 | 4 | 11.433 | 514980 | 20.0 |
| Phenanthrene, 2... | 11.933 | 21.4 | ng | 551867 | 4 | 11.433 | 514980 | 20.0 |
| Phenanthrene, 1... | 11.963 | 25.5 | ng | 656765 | 4 | 11.433 | 514980 | 20.0 |
| Anthracene, 2-m... | 12.010 | 11.2 | ng | 287532 | 4 | 11.433 | 514980 | 20.0 |
| 4H-Cyclopenta[d... | 12.045 | 45.8 | ng | 1178230 | 4 | 11.433 | 514980 | 20.0 |
| Phenanthrene, 3... | 12.069 | 9.7 | ng | 249954 | 4 | 11.433 | 514980 | 20.0 |
| Naphthalene, 2-... | 12.227 | 13.3 | ng | 341101 | 4 | 11.433 | 514980 | 20.0 |
| 9,10-Anthracene... | 12.257 | 6.6 | ng | 169772 | 4 | 11.433 | 514980 | 20.0 |
| 9,10-Dimethylan... | 12.486 | 15.3 | ng | 395106 | 4 | 11.433 | 514980 | 20.0 |
| Naphthalene, 1-... | 12.522 | 12.0 | ng | 310044 | 4 | 11.433 | 514980 | 20.0 |
| unknown12.575 | 12.575 | 10.8 | ng | 276924 | 4 | 11.433 | 514980 | 20.0 |
| 11H-Benzo[b]flu... | 13.092 | 6.2 | ng | 429258 | 5 | 14.086 | 1387980 | 20.0 |
| Pyrene, 1-methyl- | 13.210 | 8.3 | ng | 579356 | 5 | 14.086 | 1387980 | 20.0 |
| Benzo[e]pyrene | 15.257 | 13.5 | ng | 156894 | 6 | 15.586 | 232183 | 20.0 |
| Benzo[j]fluoran... | 15.463 | 42.5 | ng | 493102 | 6 | 15.586 | 232183 | 20.0 |