LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070918\
Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

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-BF061918.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 | 5.178 | 480 | 483 | 498 | rBB | 79682 | 96536 | 11.37% | 0.869% |
| 2 | 5.595 | 550 | 554 | 567 | rBV | 642396 | 697747 | 82.16% | 6.279% |
| 3 | 6.601 | 721 | 725 | 739 | rBV | 651116 | 714805 | 84.17% | 6.433% |
| 4 | 6.725 | 743 | 746 | 750 | rVV | 712776 | 685649 | 80.74% | 6.170% |
| 5 | 6.772 | 750 | 754 | 761 | rVB3 | 16793 | 23847 | 2.81% | 0.215% |
| 6 | 6.948 | 780 | 784 | 789 | rBB | 260494 | 216782 | 25.53% | 1.951% |
| 7 | 7.101 | 806 | 810 | 814 | rBV | 604092 | 542996 | 63.94% | 4.887% |
| 8 | 7.513 | 876 | 880 | 890 | rBV | 457084 | 410032 | 48.28% | 3.690% |
| 9 | 8.231 | 998 | 1002 | 1005 | rBV | 285365 | 245752 | 28.94% | 2.212% |
| 10 | 8.254 | 1005 | 1006 | 1013 | rVB2 | 33820 | 22527 | 2.65% | 0.203% |
| 11 | 8.948 | 1121 | 1124 | 1130 | rBB | 22795 | 19676 | 2.32% | 0.177% |
| 12 | 9.042 | 1138 | 1140 | 1144 | rBB | 10938 | 10499 | 1.24% | 0.094% |
| 13 | 9.301 | 1180 | 1184 | 1188 | rBV | 840066 | 727478 | 85.66% | 6.547% |
| 14 | 9.366 | 1191 | 1195 | 1199 | rVV3 | 12815 | 14450 | 1.70% | 0.130% |
| 15 | 9.407 | 1199 | 1202 | 1206 | rVB | 13985 | 12075 | 1.42% | 0.109% |
| 16 | 9.572 | 1226 | 1230 | 1235 | rBV | 7716 | 9566 | 1.13% | 0.086% |
| 17 | 9.648 | 1240 | 1243 | 1245 | rVV | 11350 | 10118 | 1.19% | 0.091% |
| 18 | 9.695 | 1245 | 1251 | 1258 | rVB | 214479 | 189506 | 22.31% | 1.705% |
| 19 | 9.854 | 1274 | 1278 | 1282 | rBV | 21478 | 20710 | 2.44% | 0.186% |
| 20 | 9.895 | 1282 | 1285 | 1288 | rVB2 | 13827 | 11639 | 1.37% | 0.105% |
| 21 | 9.989 | 1298 | 1301 | 1305 | rBV | 267312 | 245010 | 28.85% | 2.205% |
| 22 | 10.025 | 1305 | 1307 | 1310 | rVB | 41654 | 29233 | 3.44% | 0.263% |
| 23 | 10.201 | 1331 | 1337 | 1340 | rBV2 | 20071 | 23725 | 2.79% | 0.214% |
| 24 | 10.395 | 1367 | 1370 | 1372 | rBV2 | 19568 | 15617 | 1.84% | 0.141% |
| 25 | 10.542 | 1391 | 1395 | 1402 | rVB2 | 31928 | 31900 | 3.76% | 0.287% |
| 26 | 10.613 | 1404 | 1407 | 1411 | rVB3 | 7440 | 10656 | 1.25% | 0.096% |
| 27 | 10.789 | 1433 | 1437 | 1443 | rBV | 456542 | 443145 | 52.18% | 3.988% |
| 28 | 10.872 | 1448 | 1451 | 1456 | rBV2 | 15488 | 22963 | 2.70% | 0.207% |
| 29 | 11.301 | 1520 | 1524 | 1525 | rBV2 | 16386 | 16332 | 1.92% | 0.147% |
| 30 | 11.324 | 1525 | 1528 | 1530 | rBV2 | 13930 | 15971 | 1.88% | 0.144% |
| 31 | 11.383 | 1535 | 1538 | 1543 | rVB | 17252 | 17322 | 2.04% | 0.156% |
| 32 | 11.489 | 1552 | 1556 | 1558 | rBV | 319075 | 277791 | 32.71% | 2.500% |
| 33 | 11.513 | 1558 | 1560 | 1564 | rVV | 350185 | 296655 | 34.93% | 2.670% |
| 34 | 11.566 | 1566 | 1569 | 1573 | rVV | 106495 | 88553 | 10.43% | 0.797% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070918\
Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

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-BF061918.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 11.724 | 1591 | 1596 | 1598 | rBV2 | 32686 | 33228 | 3.91% | 0.299% |
| 36 | 11.748 | 1598 | 1600 | 1603 | rVB | 16070 | 13543 | 1.59% | 0.122% |
| 37 | 11.824 | 1611 | 1613 | 1620 | rVB5 | 10133 | 10399 | 1.22% | 0.094% |
| 38 | 11.901 | 1620 | 1626 | 1632 | rBV8 | 5760 | 12358 | 1.46% | 0.111% |
| 39 | 11.989 | 1638 | 1641 | 1644 | rBV | 50447 | 49983 | 5.89% | 0.450% |
| 40 | 12.019 | 1644 | 1646 | 1650 | rVV2 | 67821 | 61897 | 7.29% | 0.557% |
| 41 | 12.071 | 1651 | 1655 | 1657 | rVV | 28523 | 27745 | 3.27% | 0.250% |
| 42 | 12.107 | 1657 | 1661 | 1663 | rVV2 | 80084 | 88968 | 10.48% | 0.801% |
| 43 | 12.130 | 1663 | 1665 | 1667 | rVB | 34403 | 26569 | 3.13% | 0.239% |
| 44 | 12.154 | 1667 | 1669 | 1673 | rBV2 | 11393 | 10376 | 1.22% | 0.093% |
| 45 | 12.224 | 1679 | 1681 | 1685 | rBV3 | 8387 | 9665 | 1.14% | 0.087% |
| 46 | 12.283 | 1688 | 1691 | 1695 | rVV | 52319 | 49280 | 5.80% | 0.443% |
| 47 | 12.324 | 1695 | 1698 | 1701 | rVB2 | 31970 | 30078 | 3.54% | 0.271% |
| 48 | 12.436 | 1712 | 1717 | 1720 | rBV4 | 19693 | 23801 | 2.80% | 0.214% |
| 49 | 12.466 | 1720 | 1722 | 1725 | rVV | 14599 | 12727 | 1.50% | 0.115% |
| 50 | 12.542 | 1732 | 1735 | 1738 | rBV | 61189 | 58879 | 6.93% | 0.530% |
| 51 | 12.583 | 1739 | 1742 | 1744 | rVV2 | 18568 | 23086 | 2.72% | 0.208% |
| 52 | 12.642 | 1747 | 1752 | 1755 | rBV2 | 35560 | 47835 | 5.63% | 0.430% |
| 53 | 12.713 | 1760 | 1764 | 1767 | rBV | 614098 | 536347 | 63.16% | 4.827% |
| 54 | 12.748 | 1767 | 1770 | 1772 | rVB | 11518 | 11131 | 1.31% | 0.100% |
| 55 | 12.771 | 1772 | 1774 | 1778 | rBV2 | 13608 | 14321 | 1.69% | 0.129% |
| 56 | 12.807 | 1778 | 1780 | 1783 | rBV | 12310 | 10020 | 1.18% | 0.090% |
| 57 | 12.866 | 1787 | 1790 | 1791 | rBV3 | 18154 | 15136 | 1.78% | 0.136% |
| 58 | 12.924 | 1796 | 1800 | 1801 | rVV2 | 118772 | 118320 | 13.93% | 1.065% |
| 59 | 12.948 | 1801 | 1804 | 1809 | rVV | 543009 | 506328 | 59.62% | 4.557% |
| 60 | 12.989 | 1809 | 1811 | 1815 | rVB | 33432 | 37316 | 4.39% | 0.336% |
| 61 | 13.077 | 1821 | 1826 | 1829 | rBV | 872306 | 849253 | 100.00% | 7.643% |
| 62 | 13.107 | 1829 | 1831 | 1834 | rVB | 30948 | 31247 | 3.68% | 0.281% |
| 63 | 13.166 | 1836 | 1841 | 1845 | rBV3 | 37075 | 68496 | 8.07% | 0.616% |
| 64 | 13.271 | 1856 | 1859 | 1862 | rVB2 | 83696 | 85401 | 10.06% | 0.769% |
| 65 | 13.336 | 1868 | 1870 | 1873 | rBV | 47585 | 41661 | 4.91% | 0.375% |
| 66 | 13.377 | 1873 | 1877 | 1879 | rBV2 | 49278 | 58947 | 6.94% | 0.530% |
| 67 | 13.471 | 1891 | 1893 | 1895 | rBV | 34588 | 28937 | 3.41% | 0.260% |
| 68 | 13.501 | 1896 | 1898 | 1901 | rVB | 34675 | 32404 | 3.82% | 0.292% |
| 69 | 13.618 | 1916 | 1918 | 1920 | rVB2 | 31017 | 19365 | 2.28% | 0.174% |
| 70 | 13.789 | 1944 | 1947 | 1950 | rBV | 43006 | 42536 | 5.01% | 0.383% |
| 71 | 13.895 | 1963 | 1965 | 1967 | rBV | 42837 | 35258 | 4.15% | 0.317% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070918\
Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

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-BF061918.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 13.918 | 1967 | 1969 | 1972 | rVV | 42535 | 35719 | 4.21% | 0.321% |
| 73 | 13.948 | 1972 | 1974 | 1980 | rVV3 | 129406 | 159125 | 18.74% | 1.432% |
| 74 | 14.001 | 1980 | 1983 | 1986 | rVB | 38557 | 36570 | 4.31% | 0.329% |
| 75 | 14.148 | 2003 | 2008 | 2011 | rBV2 | 315121 | 479952 | 56.51% | 4.319% |
| 76 | 14.177 | 2011 | 2013 | 2016 | rVB | 215907 | 163499 | 19.25% | 1.471% |
| 77 | 14.260 | 2024 | 2027 | 2032 | rBV2 | 62872 | 77315 | 9.10% | 0.696% |
| 78 | 14.571 | 2078 | 2080 | 2086 | rBV3 | 51196 | 79332 | 9.34% | 0.714% |
| 79 | 15.236 | 2190 | 2193 | 2204 | rVB | 163420 | 341102 | 40.16% | 3.070% |
| 80 | 15.559 | 2245 | 2248 | 2256 | rBV | 79447 | 101873 | 12.00% | 0.917% |
| 81 | 15.630 | 2257 | 2260 | 2267 | rVB | 114920 | 157908 | 18.59% | 1.421% |
| 82 | 15.695 | 2268 | 2271 | 2274 | rBV2 | 115332 | 129533 | 15.25% | 1.166% |

Sum of corrected areas: 11112032

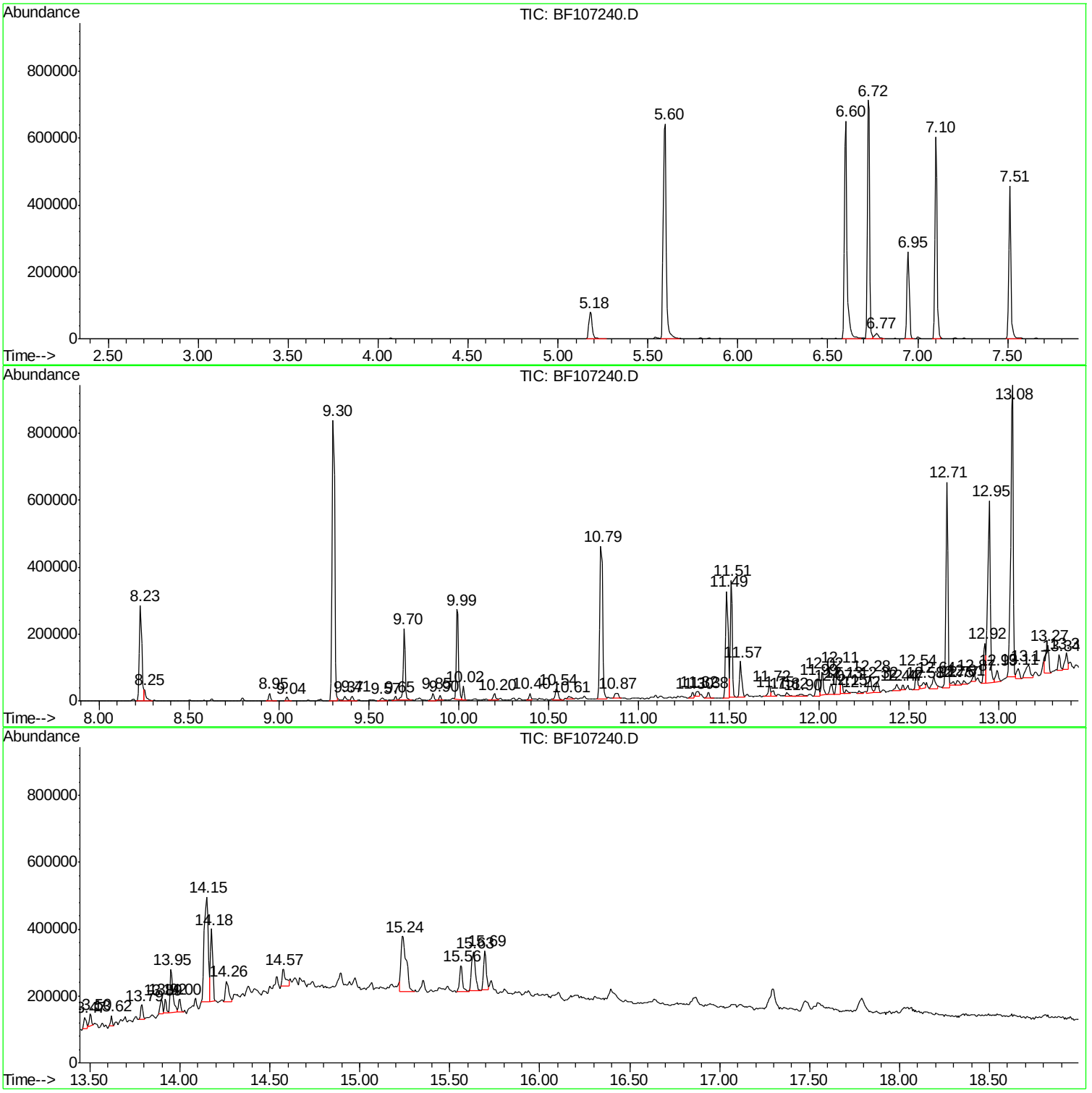
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070918\
Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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\BF070918\
Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

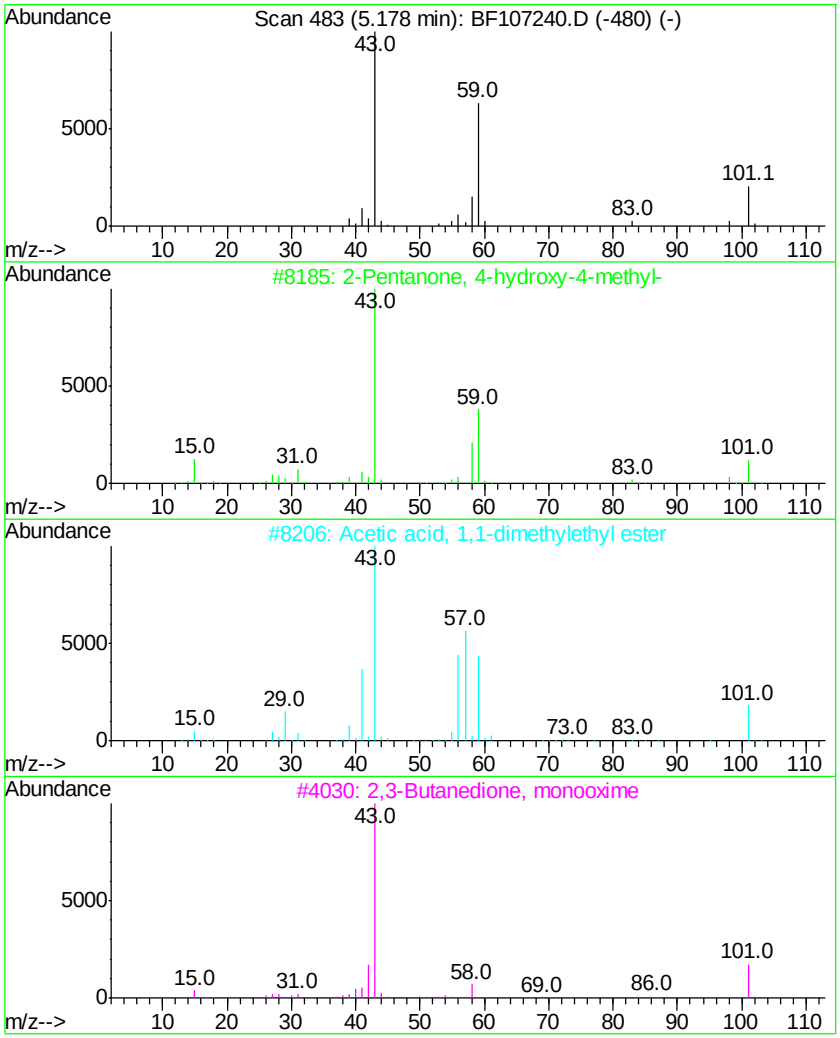
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

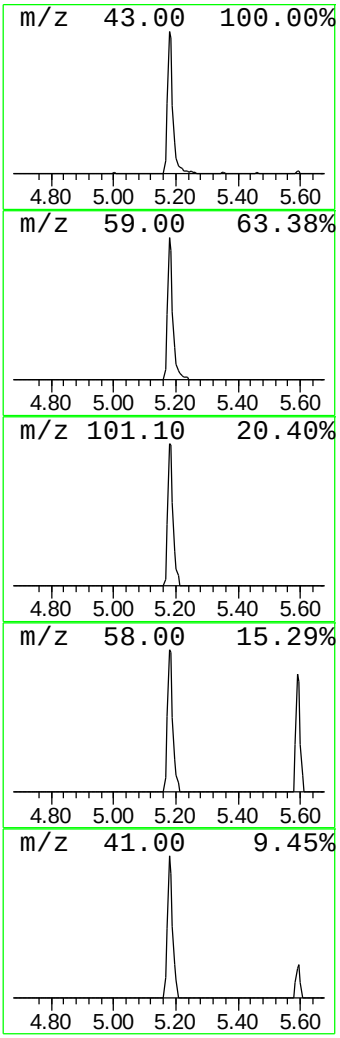
**********

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.18 | 8.91 ng | 96536 | 1,4-Dichlorobenzene-d4 | 6.95 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 72 |
| 2 | Acetic acid, 1,1-dimethylethyl e... | 116 | C6H12O2 | 000540-88-5 | 39 |
| 3 | 2,3-Butanedione, monooxime | 101 | C4H7NO2 | 000057-71-6 | 35 |
| 4 | 3-Hexanol | 102 | C6H14O | 000623-37-0 | 28 |
| 5 | 3-Hexanol, 4-methyl- | 116 | C7H16O | 000615-29-2 | 28 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070918\
Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

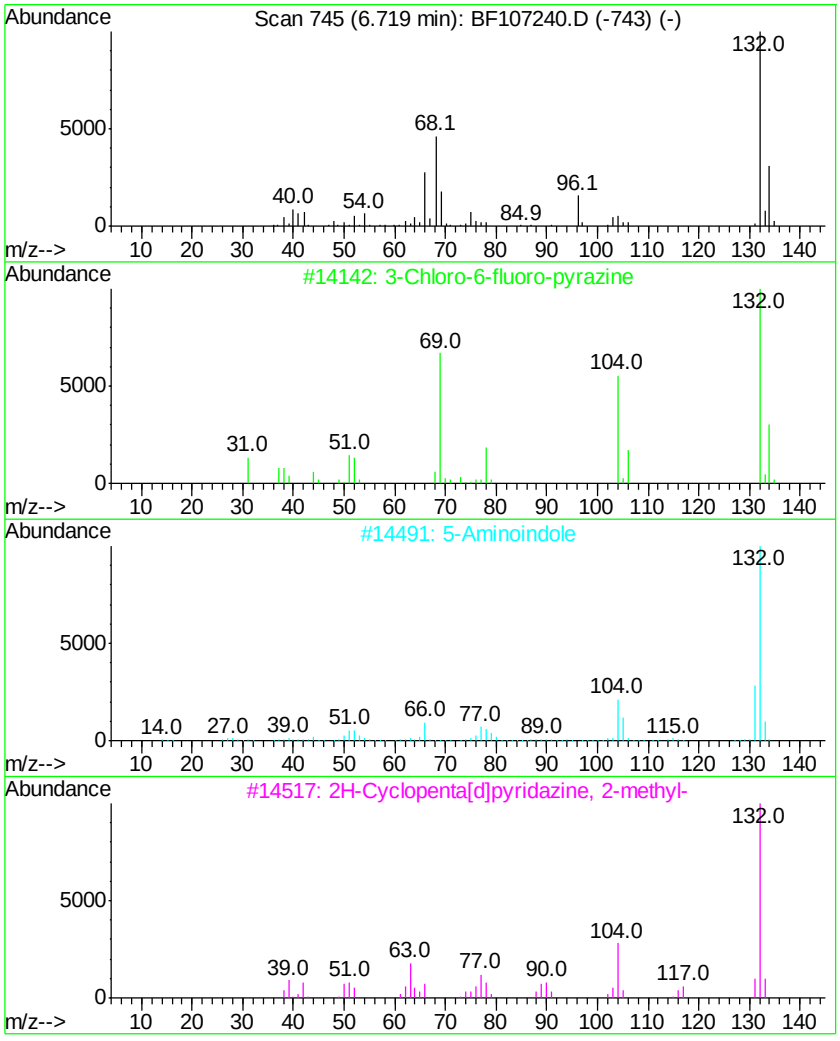
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

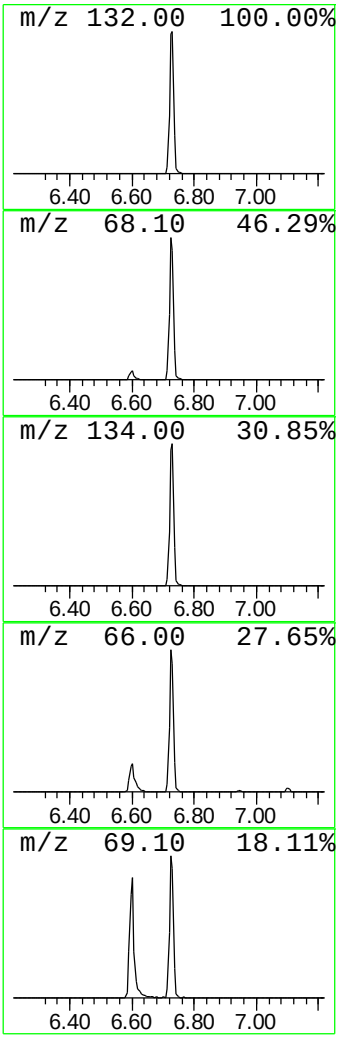
**********

Peak Number 2 unknown6.72 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.72 | 63.26 ng | 685649 | 1,4-Dichlorobenzene-d4 | 6.95 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 16 |
| 2 | 5-Aminoindole | 132 | C8H8N2 | 005192-03-0 | 12 |
| 3 | 2H-Cyclopenta[d]pyridazine, 2-me... | 132 | C8H8N2 | 022291-85-6 | 9 |
| 4 | 4-Chloro-2-fluoro-pyrimidine | 132 | C4H2ClFN2 | 051422-00-5 | 9 |
| 5 | 1-Methylpyrrolo[1,2-a]pyrazine | 132 | C8H8N2 | 064608-59-9 | 9 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070918\
Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
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**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

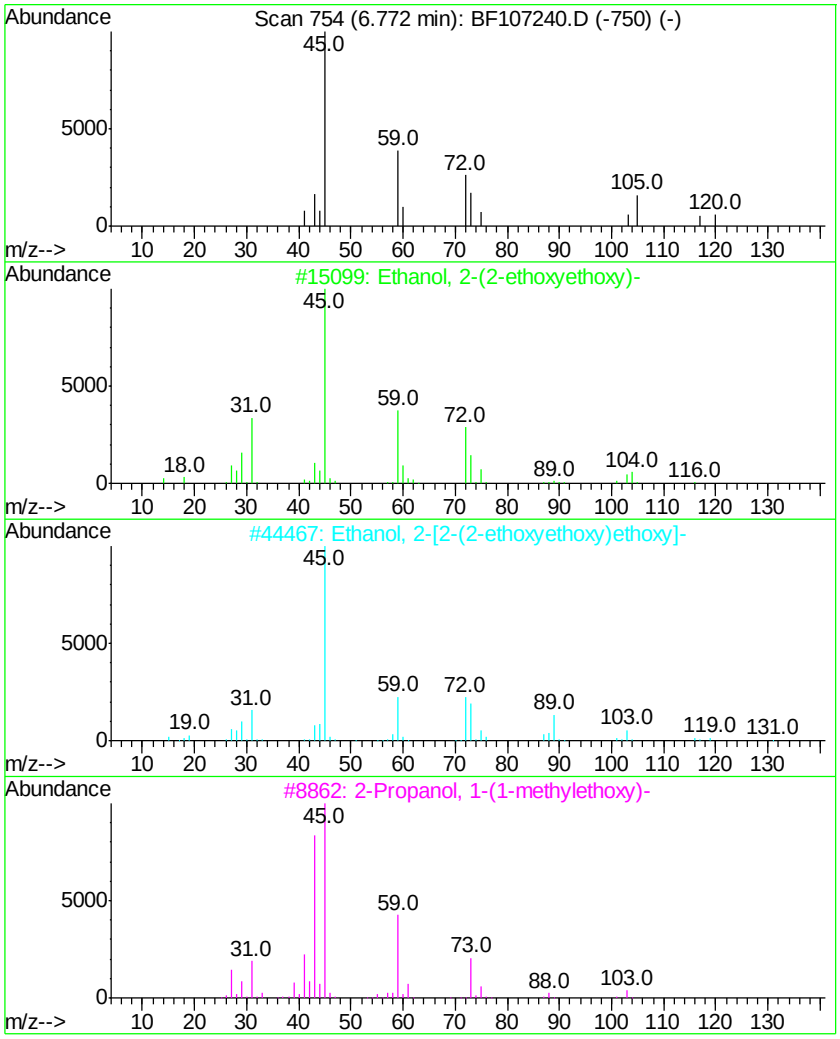
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

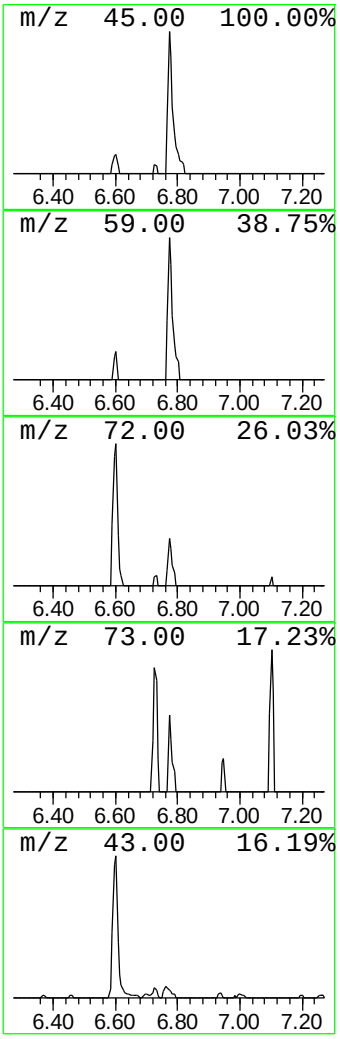
**********

Peak Number 3 Ethanol, 2-(2-ethoxyethoxy)- Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.77 | 2.20 ng | 23847 | 1,4-Dichlorobenzene-d4 | 6.95 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethanol, 2-(2-ethoxyethoxy)- | 134 | C6H14O3 | 000111-90-0 | 72 |
| 2 | Ethanol, 2-[2-(2-ethoxyethoxy)et... | 178 | C8H18O4 | 000112-50-5 | 42 |
| 3 | 2-Propanol, 1-(1-methylethoxy)- | 118 | C6H14O2 | 003944-36-3 | 36 |
| 4 | Methyl 2-(2-methoxyethoxy)acetate | 148 | C6H12O4 | 1000366-88-1 | 9 |
| 5 | Ethanol, 2-(2-methoxyethoxy)- | 120 | C5H12O3 | 000111-77-3 | 9 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070918\
Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

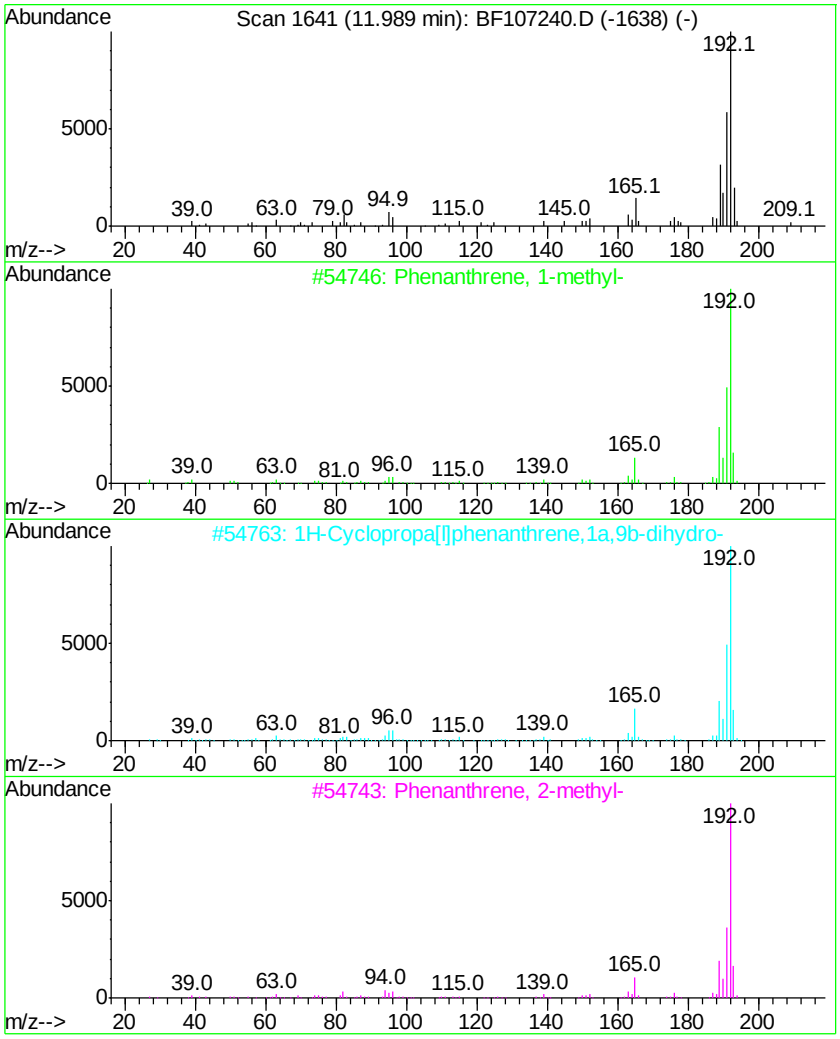
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

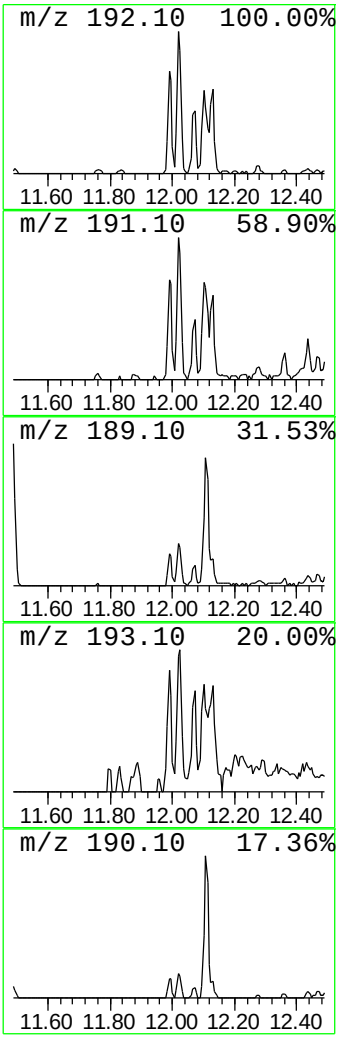
**********

Peak Number 5 Phenanthrene, 1-methyl- Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.99 | 3.60 ng | 49983 | Phenanthrene-d10 | 11.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 97 |
| 2 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 96 |
| 3 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 94 |
| 4 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 94 |
| 5 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 93 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070918\
Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

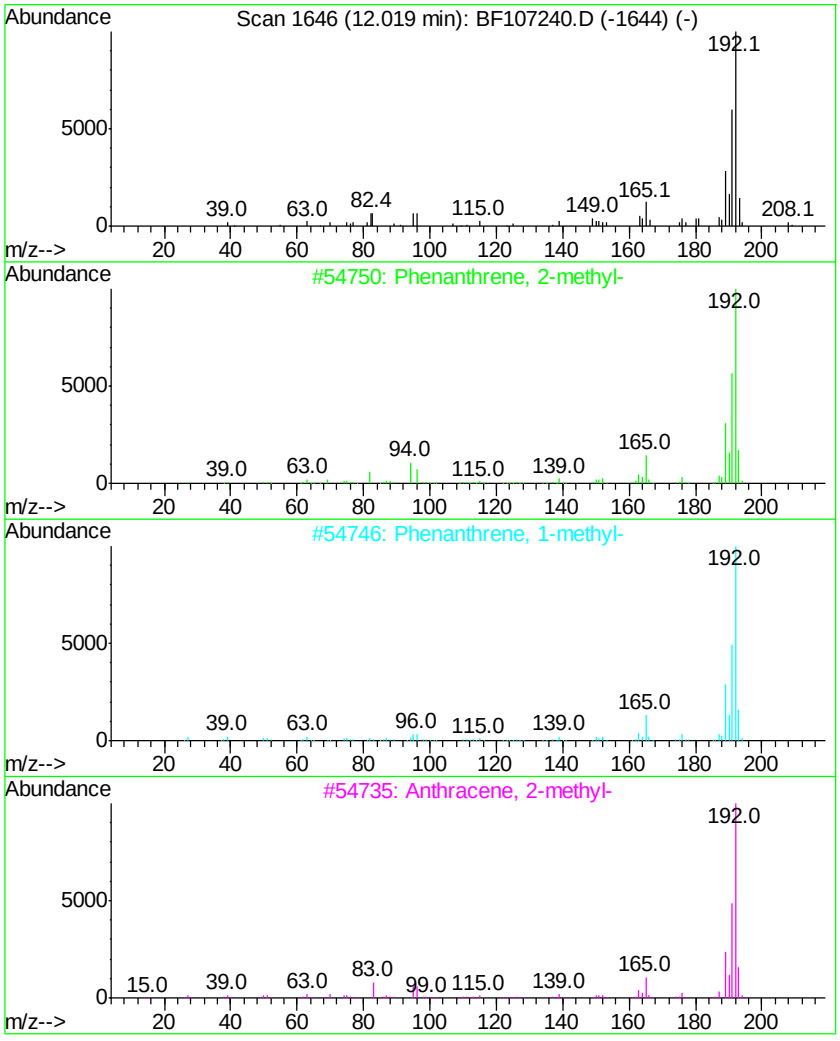
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

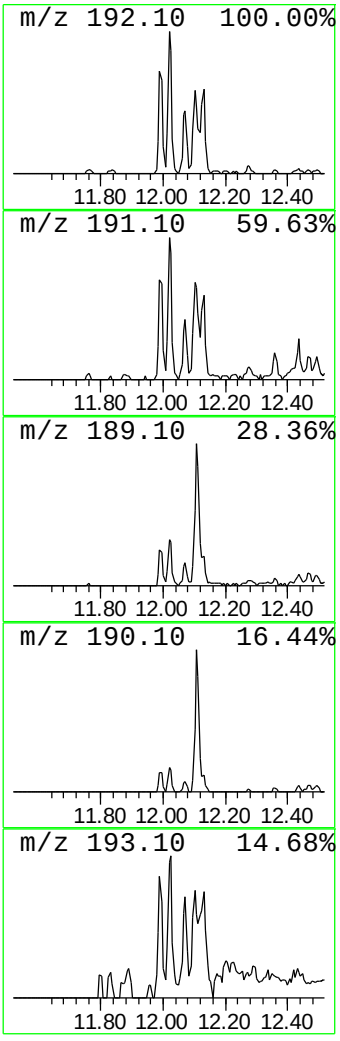
**********

Peak Number 6 Phenanthrene, 2-methyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.02 | 4.46 ng | 61897 | Phenanthrene-d10 | 11.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 96 |
| 2 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 96 |
| 3 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 96 |
| 4 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 94 |
| 5 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 91 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070918\
Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

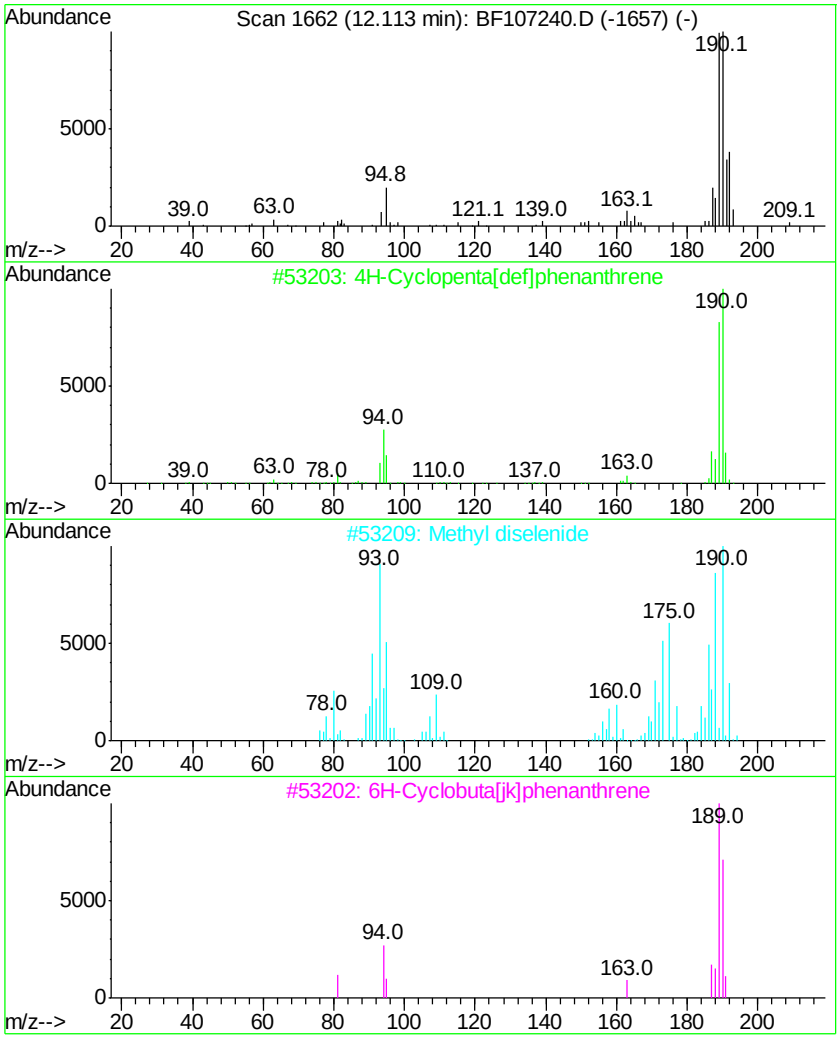
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

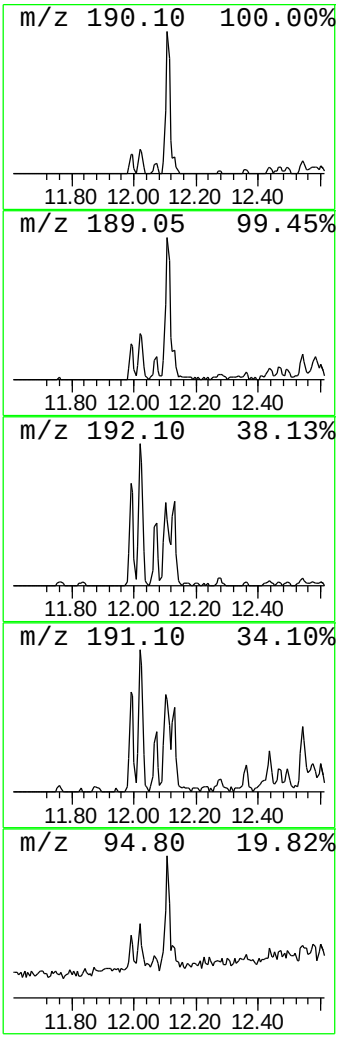
**********

Peak Number 7 4H-Cyclopenta[def]phenanthrene Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.11 | 6.41 ng | 88968 | Phenanthrene-d10 | 11.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 76 |
| 2 | Methyl diselenide | 190 | C2H6Se2 | 007101-31-7 | 45 |
| 3 | 6H-Cyclobuta[jk]phenanthrene | 190 | C15H10 | 083469-43-6 | 42 |
| 4 | 2,2'-Bis(4,5-dimethylimidazole) | 190 | C10H14N4 | 069286-06-2 | 37 |
| 5 | 2,6-Dichlorobenzaldoxime | 189 | C7H5Cl2NO | 025185-95-9 | 30 |



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Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

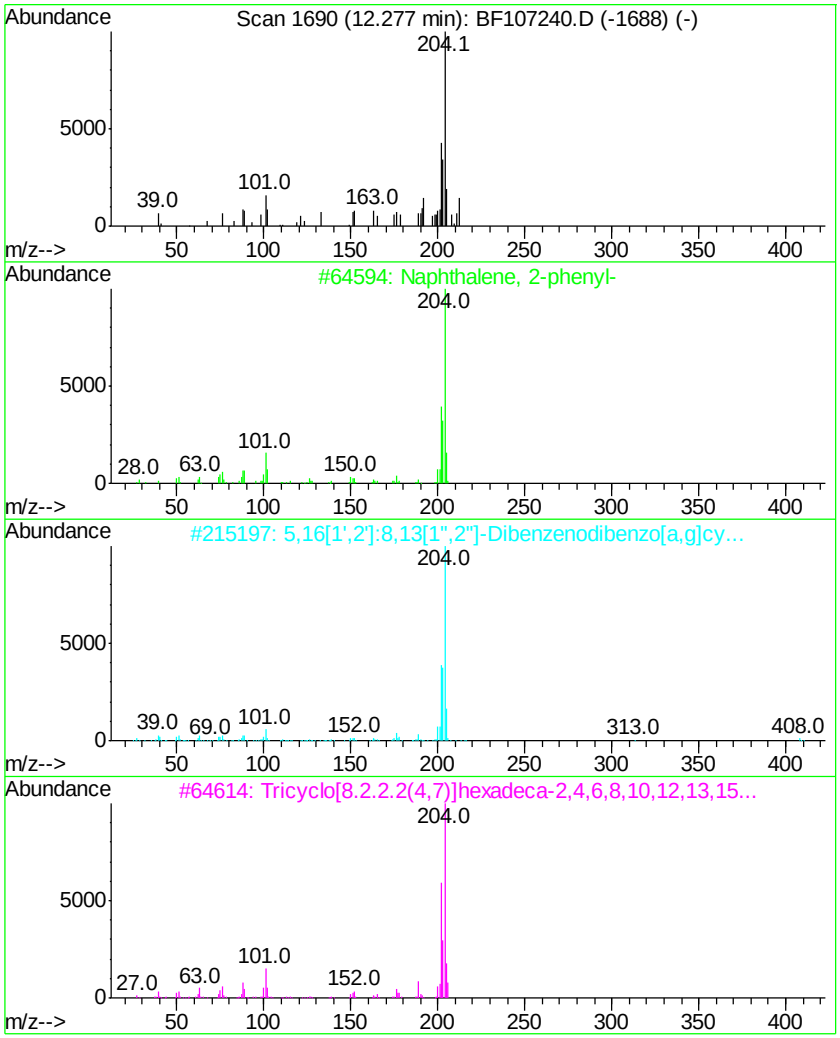
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

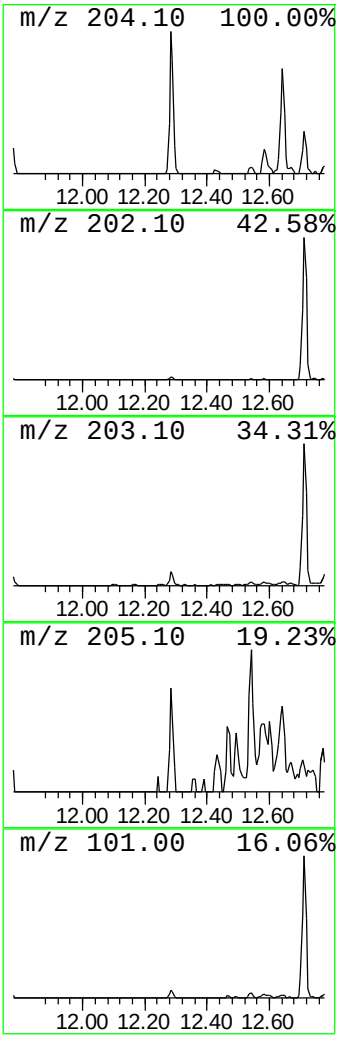
**********

Peak Number 8 Naphthalene, 2-phenyl- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.28 | 3.55 ng | 49280 | Phenanthrene-d10 | 11.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 83 |
| 2 | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24 | 005672-97-9 | 80 |
| 3 | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12 | 006572-60-7 | 64 |
| 4 | 9,10-Bis(bromomethyl)anthracene | 362 | C16H12Br2 | 034373-96-1 | 58 |
| 5 | [1,1'-Biphenyl]-4,4'-dicarbonitrile | 204 | C14H8N2 | 001591-30-6 | 55 |



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Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

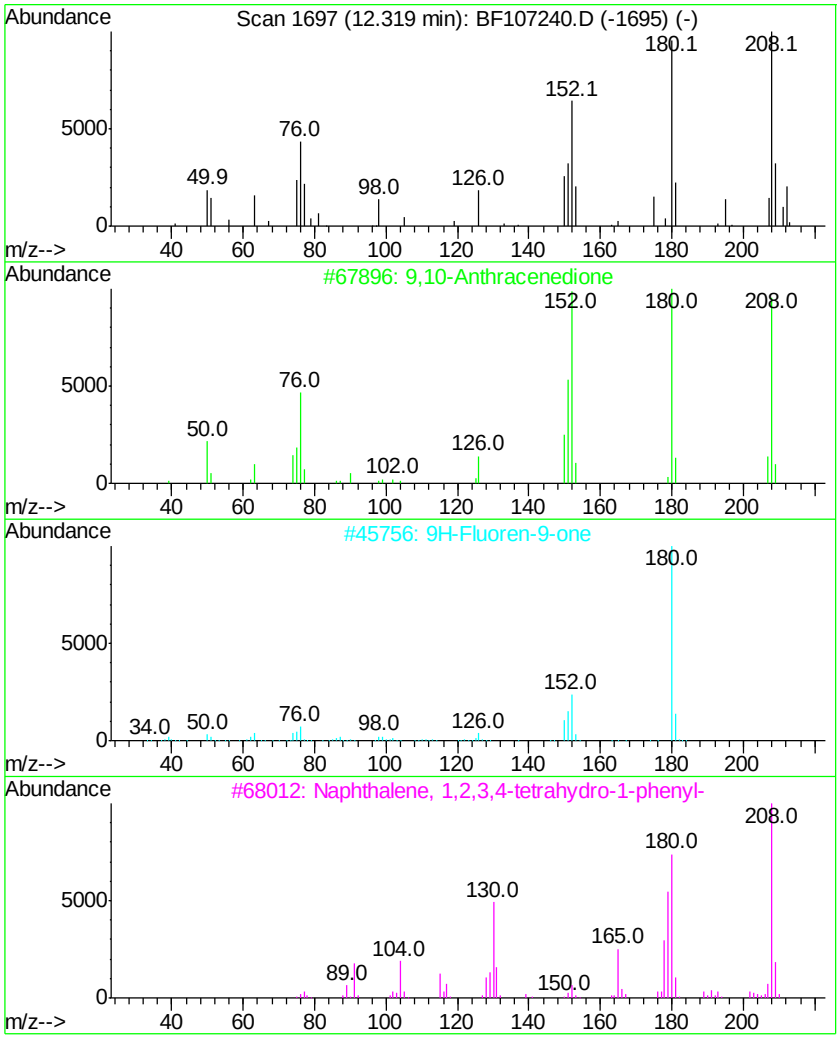
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

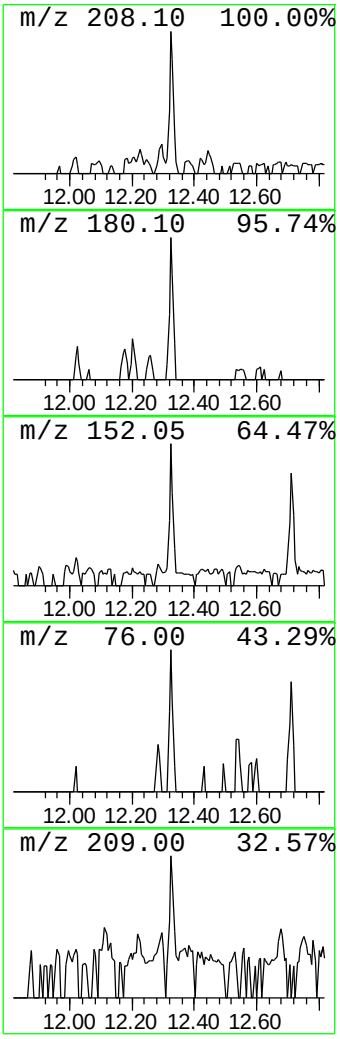
**********

Peak Number 9 9,10-Anthracenedione Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.32 | 2.17 ng | 30078 | Phenanthrene-d10 | 11.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 95 |
| 2 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 60 |
| 3 | Naphthalene, 1,2,3,4-tetrahydro-... | 208 | C16H16 | 003018-20-0 | 52 |
| 4 | Pyrene, 1,2,3,3a,4,5-hexahydro- | 208 | C16H16 | 005385-37-5 | 50 |
| 5 | Benzo[c]cinnoline | 180 | C12H8N2 | 000230-17-1 | 49 |



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Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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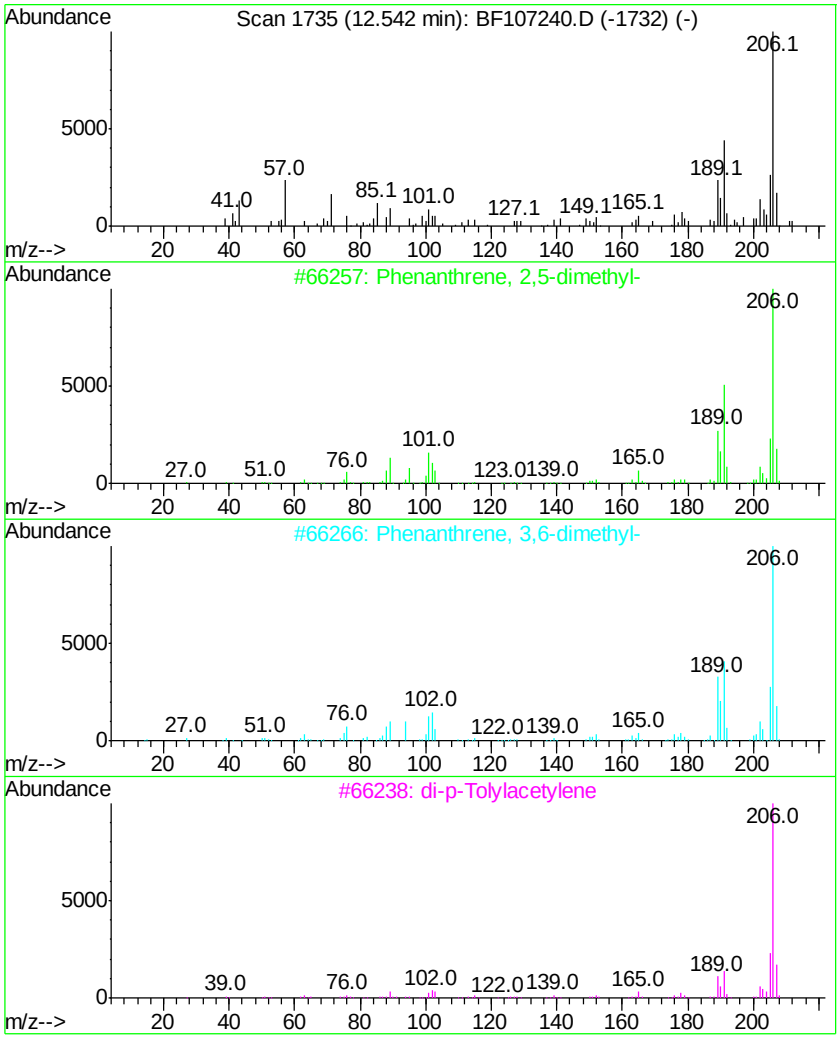
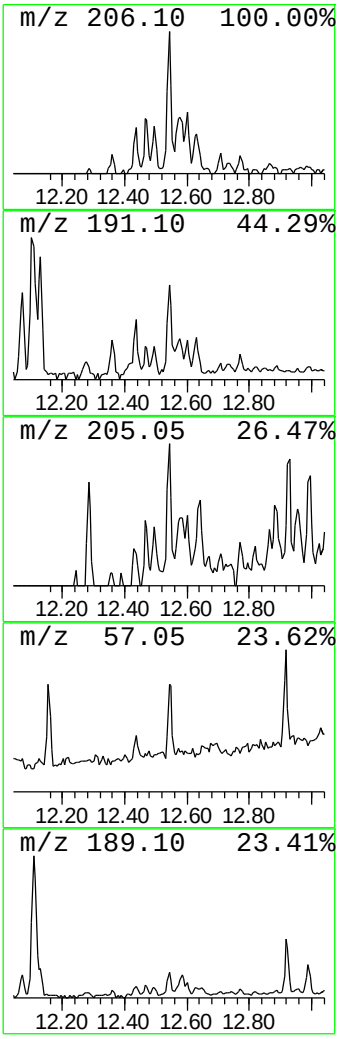
Peak Number 10 Phenanthrene, 2,5-dimethyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.54 | 4.24 ng | 58879 | Phenanthrene-d10 | 11.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 96 |
| 2 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 93 |
| 3 | di-p-Tolylacetylene | 206 | C16H14 | 002789-88-0 | 91 |
| 4 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 90 |
| 5 | Naphthalene, 1,2-dihydro-4-phenyl- | 206 | C16H14 | 007469-40-1 | 90 |



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Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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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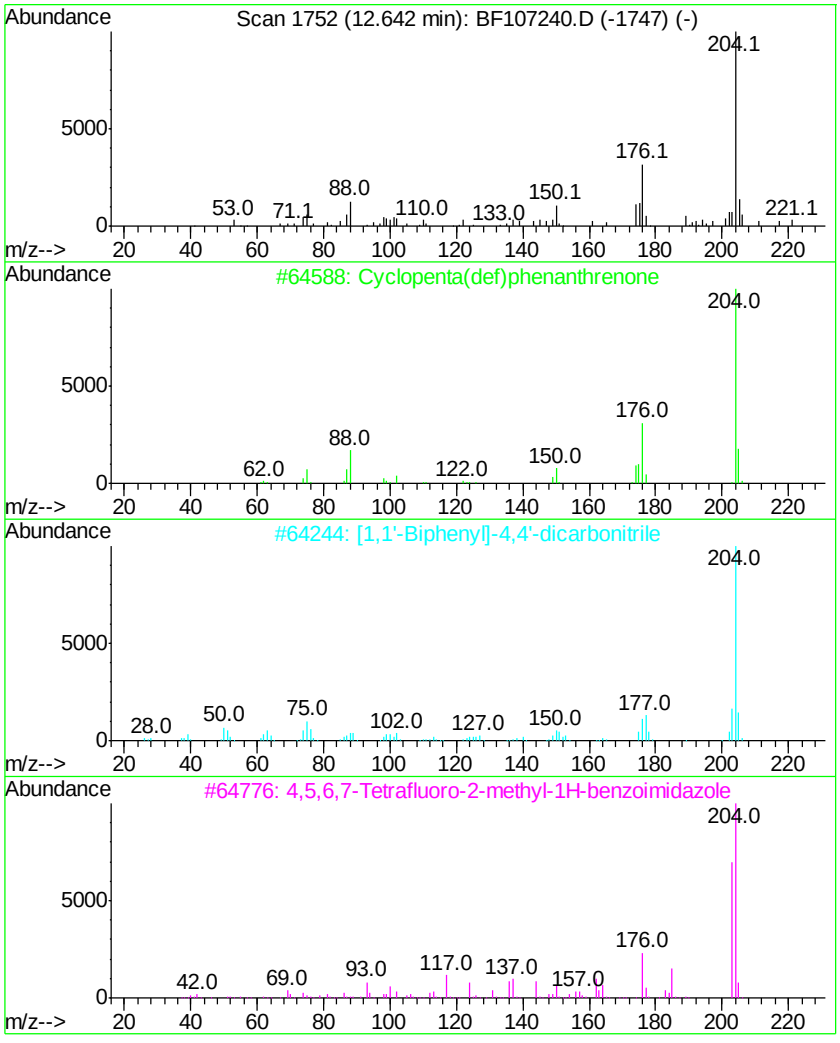
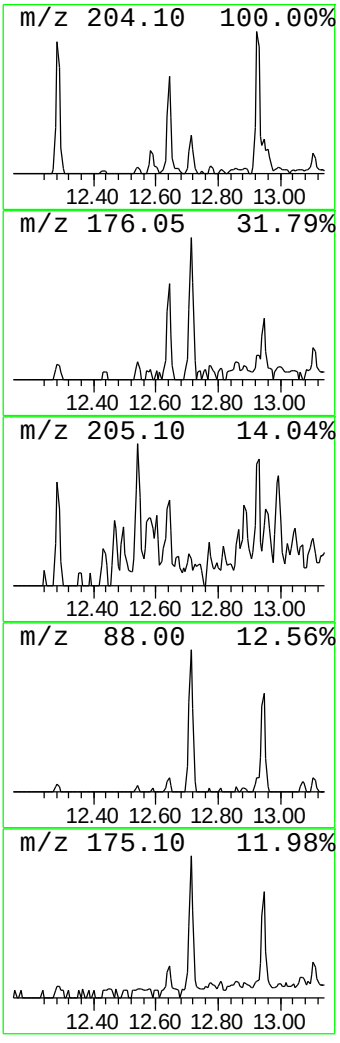
Peak Number 11 Cyclopenta(def)phenanthrenone Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.64 | 3.44 ng | 47835 | Phenanthrene-d10 | 11.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(def)phenanthrenone | 204 | C15H8O | 005737-13-3 | 93 |
| 2 | [1,1'-Biphenyl]-4,4'-dicarbonitrile | 204 | C14H8N2 | 001591-30-6 | 59 |
| 3 | 4,5,6,7-Tetrafluoro-2-methyl-1H-... | 204 | C8H4F4N2 | 081430-75-3 | 53 |
| 4 | 3'-Carboxybenzo[1',2',-b]-1,4-di... | 204 | C11H12N2O2 | 138023-41-3 | 50 |
| 5 | 6-Phenyl-2-thiouracil | 204 | C10H8N2OS | 005590-94-3 | 50 |



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Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

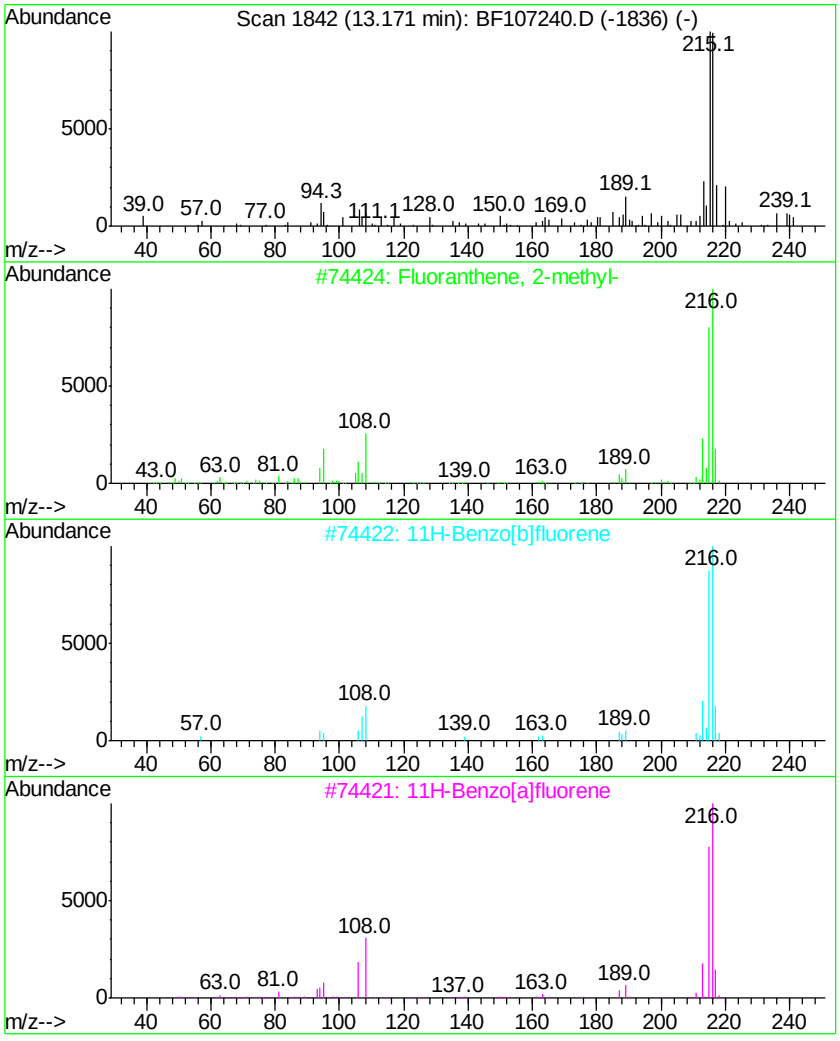
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

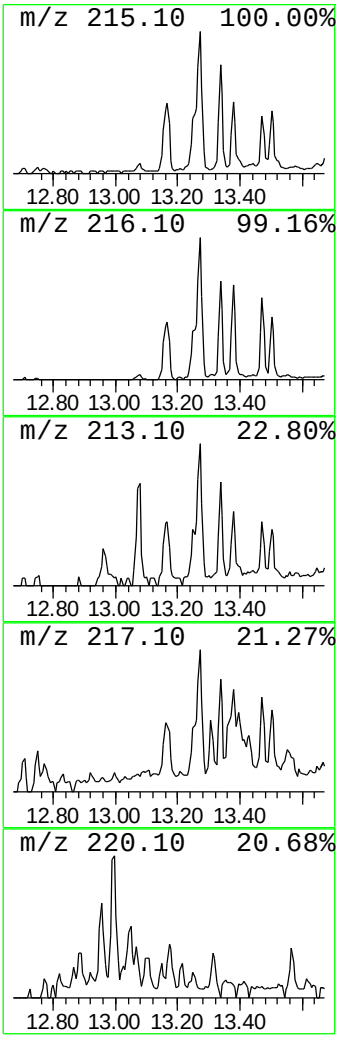
**********

Peak Number 12 Fluoranthene, 2-methyl- Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.17 | 2.85 ng | 68496 | Chrysene-d12 | 14.15 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 93 |
| 2 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 87 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 80 |
| 4 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 70 |
| 5 | 7H-Benzo[c]fluorene | 216 | C17H12 | 000205-12-9 | 64 |



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Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

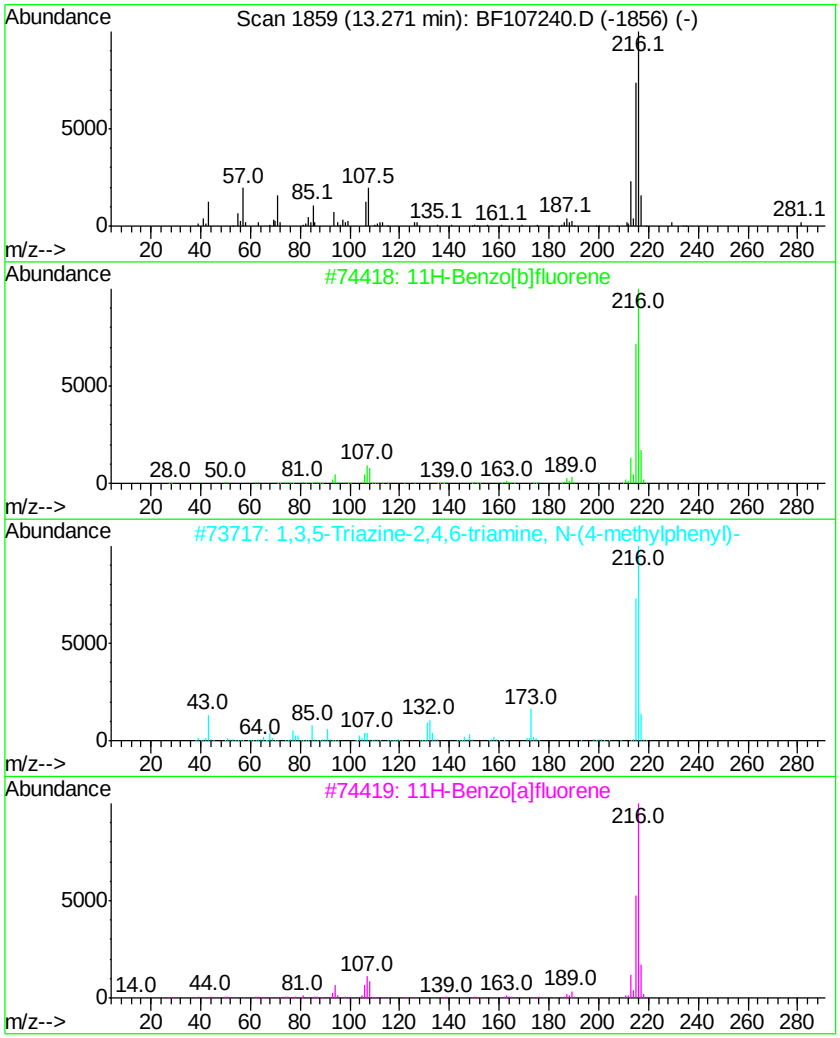
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

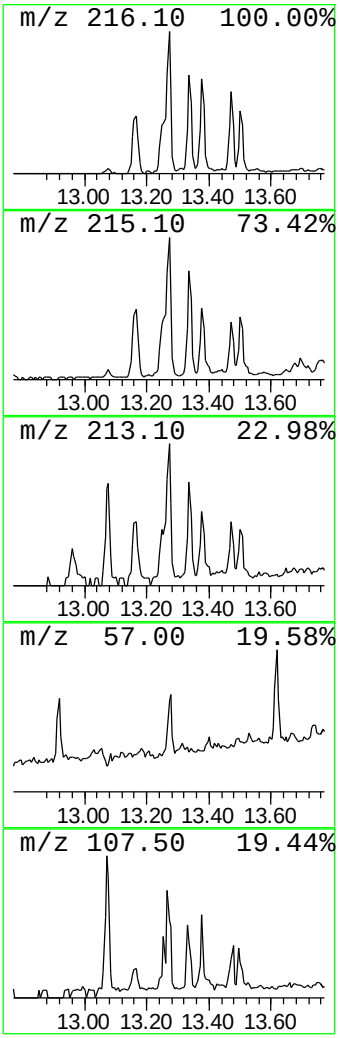
**********

Peak Number 13 11H-Benzo[b]fluorene Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.27 | 3.56 ng | 85401 | Chrysene-d12 | 14.15 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 74 |
| 2 | 1,3,5-Triazine-2,4,6-triamine, N... | 216 | C10H12N6 | 046731-79-7 | 64 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 62 |
| 4 | 7H-Benzo[c]fluorene | 216 | C17H12 | 000205-12-9 | 59 |
| 5 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 59 |



Library Search Compound Report

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Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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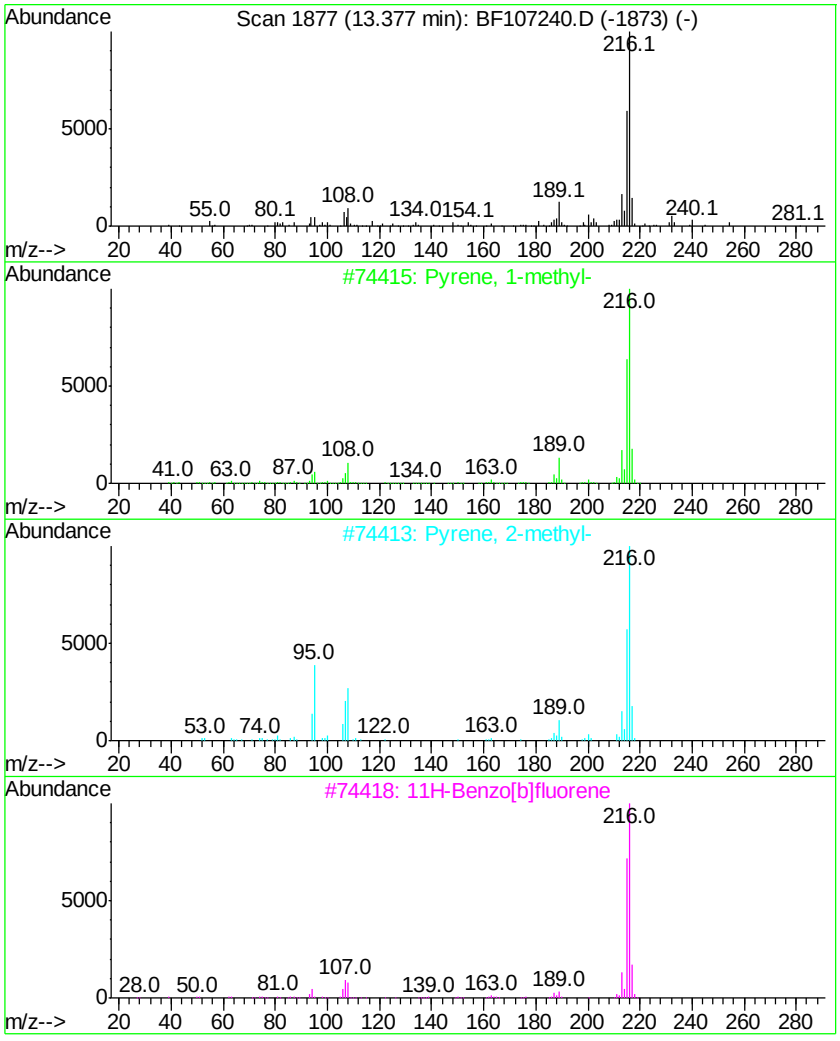
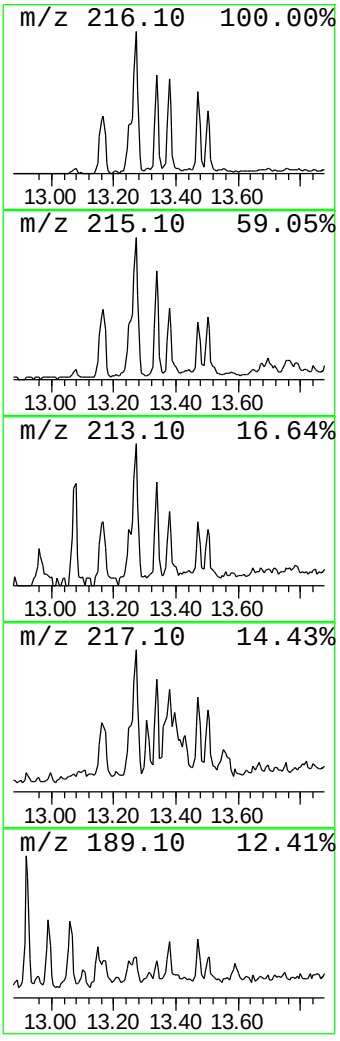
Peak Number 14 Pyrene, 1-methyl- Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.38 | 2.46 ng | 58947 | Chrysene-d12 | 14.15 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 98 |
| 2 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 90 |
| 3 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 87 |
| 4 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 87 |
| 5 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 87 |



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Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

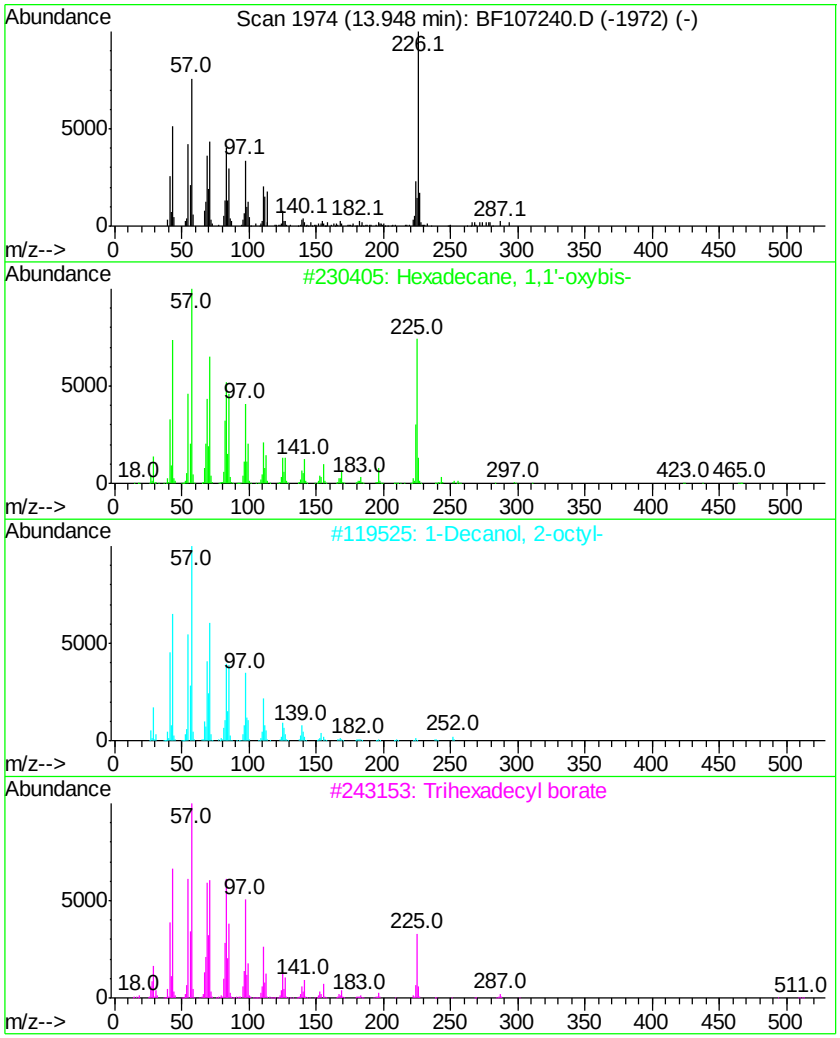
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

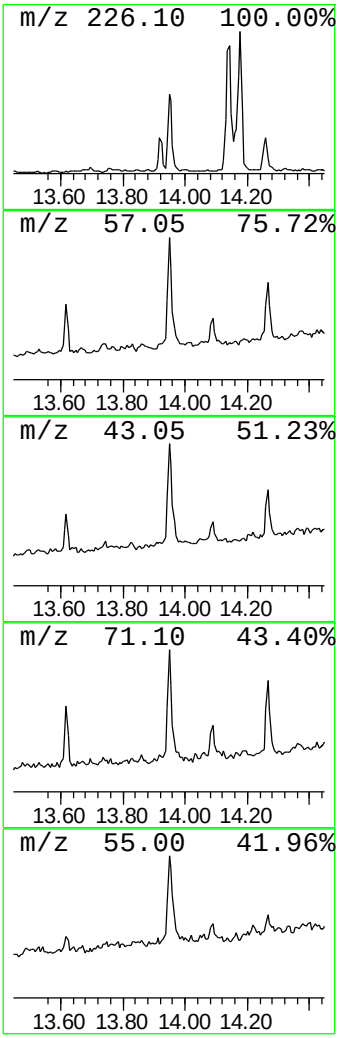
**********

Peak Number 15 Hexadecane, 1,1'-oxybis- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.95 | 6.63 ng | 159125 | Chrysene-d12 | 14.15 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexadecane, 1,1'-oxybis- | 467 | C32H66O | 004113-12-6 | 53 |
| 2 | 1-Decanol, 2-octyl- | 270 | C18H38O | 045235-48-1 | 49 |
| 3 | Trihexadecyl borate | 735 | C48H99BO3 | 002665-11-4 | 49 |
| 4 | Oxalic acid, isobutyl hexadecyl ... | 370 | C22H42O4 | 1000309-38-1 | 45 |
| 5 | Ethanol, 2-(hexadecyloxy)- | 286 | C18H38O2 | 002136-71-2 | 43 |



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Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

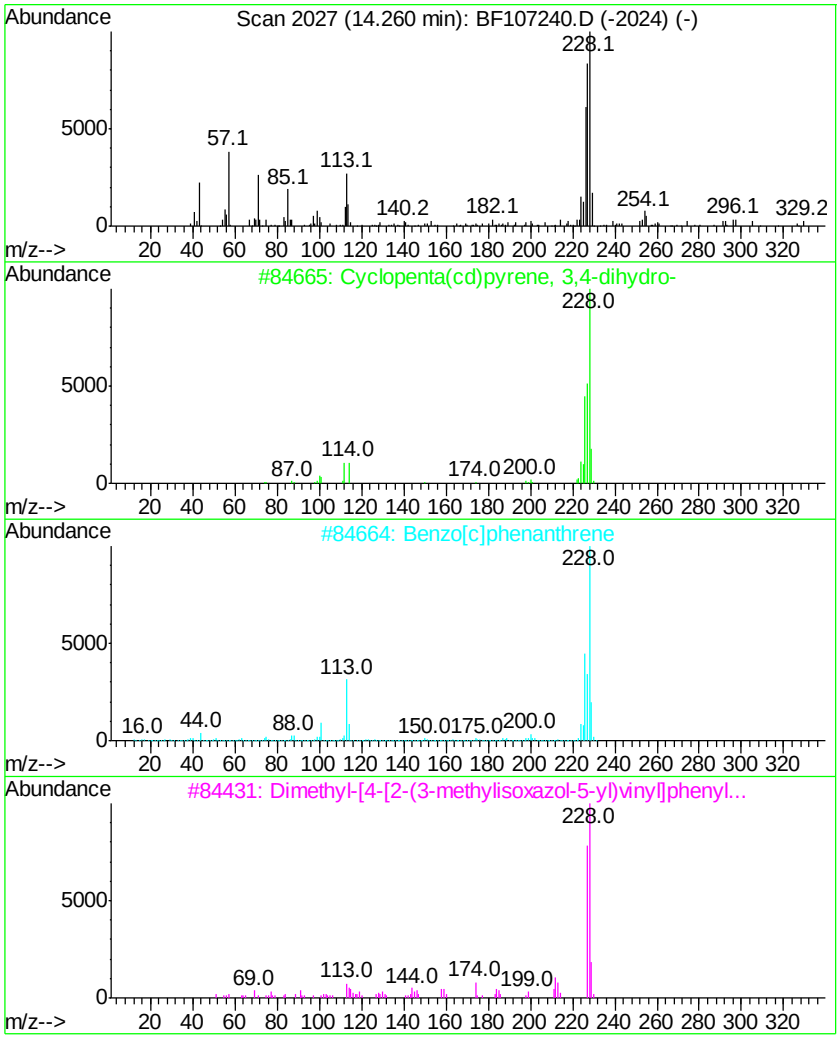
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

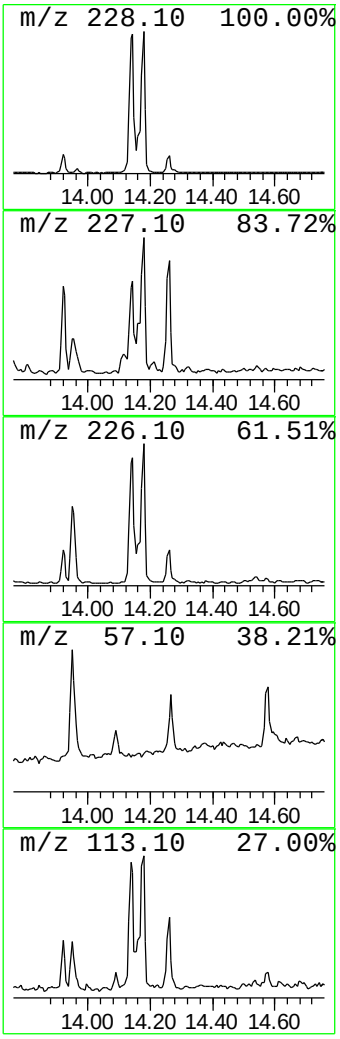
**********

Peak Number 16 Cyclopenta(cd)pyrene, 3,4-d... Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.26 | 3.22 ng | 77315 | Chrysene-d12 | 14.15 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(cd)pyrene, 3,4-dihydro- | 228 | C18H12 | 025732-74-5 | 50 |
| 2 | Benzo[c]phenanthrene | 228 | C18H12 | 000195-19-7 | 50 |
| 3 | Dimethyl-[4-[2-(3-methylisoxazol... | 228 | C14H16N2O | 1000306-39-6 | 49 |
| 4 | Purine-6(1H)-thione, 3,7-dimethy... | 228 | C7H8N4Se | 023663-58-3 | 37 |
| 5 | Chrysene | 228 | C18H12 | 000218-01-9 | 35 |



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Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

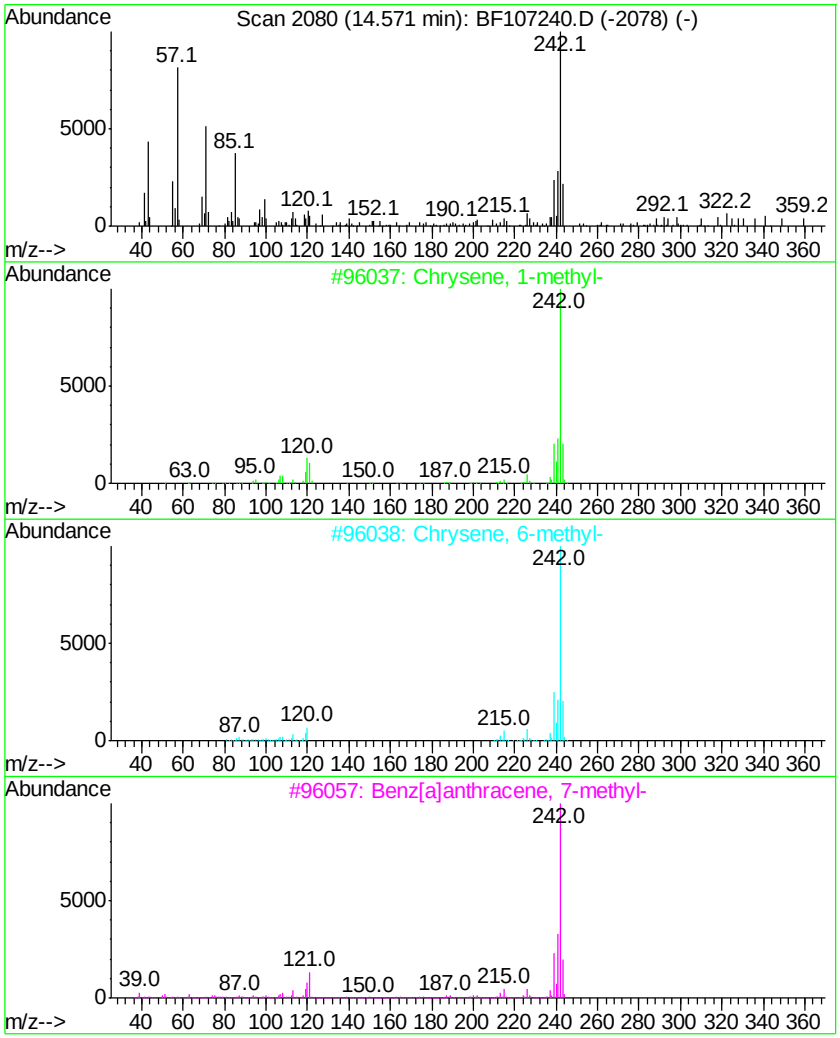
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

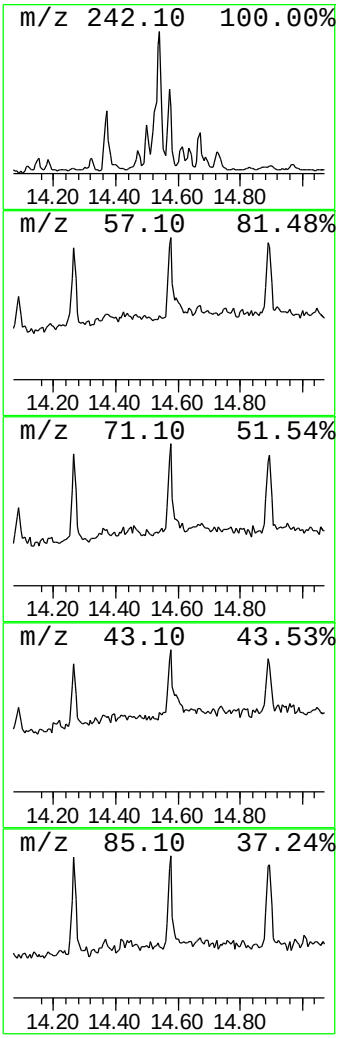
**********

Peak Number 17 Chrysene, 1-methyl- Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.57 | 3.31 ng | 79332 | Chrysene-d12 | 14.15 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Chrysene, 1-methyl- | 242 | C19H14 | 003351-28-8 | 68 |
| 2 | Chrysene, 6-methyl- | 242 | C19H14 | 001705-85-7 | 58 |
| 3 | Benz[a]anthracene, 7-methyl- | 242 | C19H14 | 002541-69-7 | 55 |
| 4 | Chrysene, 5-methyl- | 242 | C19H14 | 003697-24-3 | 46 |
| 5 | Triphenylene, 2-methyl- | 242 | C19H14 | 001705-84-6 | 46 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070918\
Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

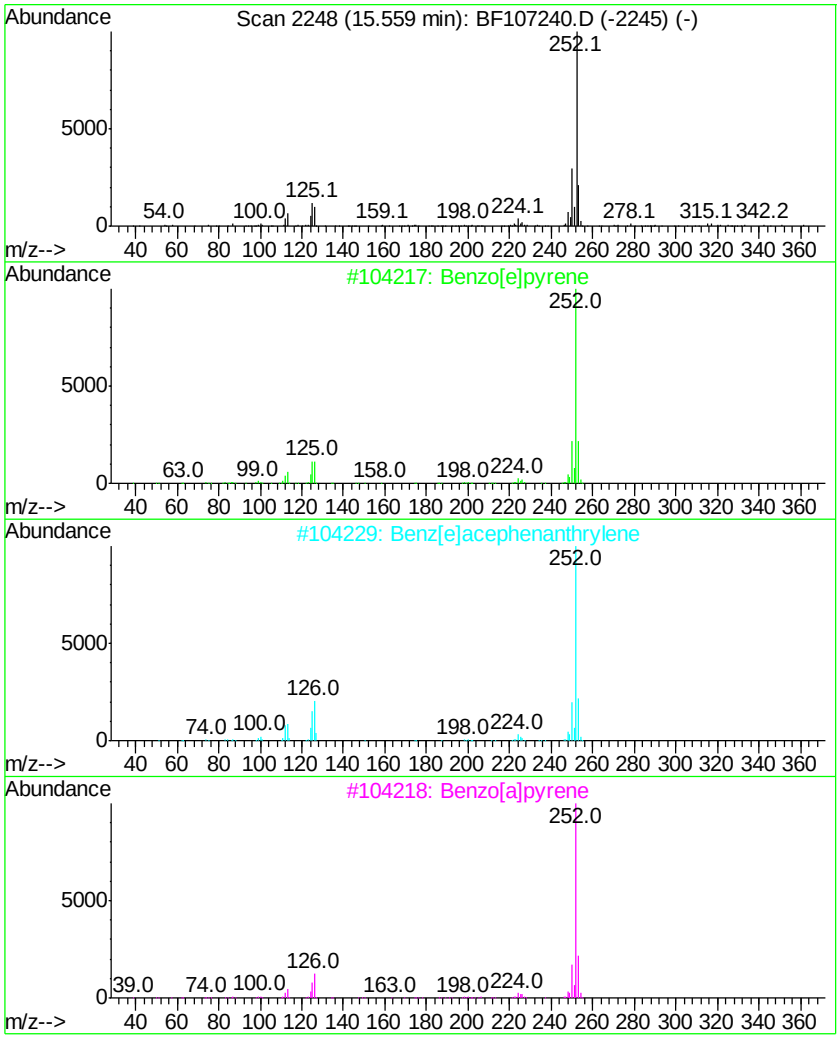
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

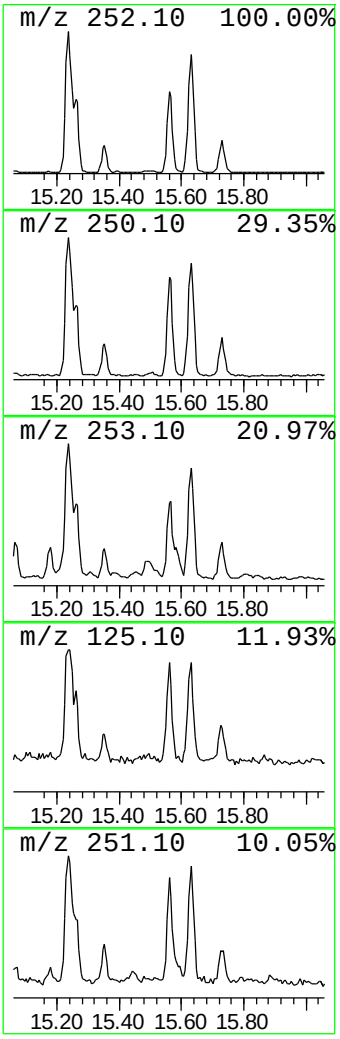
**********

Peak Number 18 Benzo[e]pyrene Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.56 | 15.73 ng | 101873 | Perylene-d12 | 15.69 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 98 |
| 2 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 95 |
| 3 | Benzo[a]pyrene | 252 | C20H12 | 000050-32-8 | 95 |
| 4 | Perylene | 252 | C20H12 | 000198-55-0 | 95 |
| 5 | Benzo[j]fluoranthene | 252 | C20H12 | 000205-82-3 | 95 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF070918\
Data File : BF107240.D
Acq On : 9 Jul 2018 20:21
Operator : JU/SJ
Sample : J3879-13
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SURCHARGE-SP-7

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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 |
| 2-Pentanone, 4-hy... | 5.18 | 8.9 | ng | 96536 | 1 | 6.95 | 216782 | 20.0 |
| unknown6.72 | 6.72 | 63.3 | ng | 685649 | 1 | 6.95 | 216782 | 20.0 |
| Ethanol, 2-(2-eth... | 6.77 | 2.2 | ng | 23847 | 1 | 6.95 | 216782 | 20.0 |
| Phenanthrene, 1-m... | 11.99 | 3.6 | ng | 49983 | 4 | 11.49 | 277791 | 20.0 |
| Phenanthrene, 2-m... | 12.02 | 4.5 | ng | 61897 | 4 | 11.49 | 277791 | 20.0 |
| 4H-Cyclopenta[def... | 12.11 | 6.4 | ng | 88968 | 4 | 11.49 | 277791 | 20.0 |
| Naphthalene, 2-ph... | 12.28 | 3.5 | ng | 49280 | 4 | 11.49 | 277791 | 20.0 |
| 9,10-Anthracenedione | 12.32 | 2.2 | ng | 30078 | 4 | 11.49 | 277791 | 20.0 |
| Phenanthrene, 2,5... | 12.54 | 4.2 | ng | 58879 | 4 | 11.49 | 277791 | 20.0 |
| Cyclopenta(def)ph... | 12.64 | 3.4 | ng | 47835 | 4 | 11.49 | 277791 | 20.0 |
| Fluoranthene, 2-m... | 13.17 | 2.9 | ng | 68496 | 5 | 14.15 | 479952 | 20.0 |
| 11H-Benzo[b]fluorene | 13.27 | 3.6 | ng | 85401 | 5 | 14.15 | 479952 | 20.0 |
| Pyrene, 1-methyl- | 13.38 | 2.5 | ng | 58947 | 5 | 14.15 | 479952 | 20.0 |
| Hexadecane, 1,1'-... | 13.95 | 6.6 | ng | 159125 | 5 | 14.15 | 479952 | 20.0 |
| Cyclopenta(cd)pyr... | 14.26 | 3.2 | ng | 77315 | 5 | 14.15 | 479952 | 20.0 |
| Chrysene, 1-methyl- | 14.57 | 3.3 | ng | 79332 | 5 | 14.15 | 479952 | 20.0 |
| Benzo[e]pyrene | 15.56 | 15.7 | ng | 101873 | 6 | 15.69 | 129533 | 20.0 |