LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % 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:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Title : SVOA CALIBRATION

Signal : TIC

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.287 | 99 | 102 | 105 | rBV3 | 2108 | 2694 | 0.28% | 0.039% |
| 2 | 3.322 | 105 | 108 | 109 | rBV2 | 2823 | 2783 | 0.29% | 0.040% |
| 3 | 3.416 | 121 | 124 | 130 | rVB2 | 11279 | 15022 | 1.55% | 0.216% |
| 4 | 3.528 | 140 | 143 | 146 | rBV2 | 2165 | 3352 | 0.35% | 0.048% |
| 5 | 3.657 | 162 | 165 | 167 | rBV3 | 3253 | 3201 | 0.33% | 0.046% |
| 6 | 4.339 | 278 | 281 | 284 | rBV3 | 3401 | 4544 | 0.47% | 0.065% |
| 7 | 4.397 | 289 | 291 | 293 | rVB2 | 3120 | 2557 | 0.26% | 0.037% |
| 8 | 4.644 | 330 | 333 | 334 | rVV | 3111 | 3325 | 0.34% | 0.048% |
| 9 | 4.885 | 373 | 374 | 377 | rVV | 2687 | 2708 | 0.28% | 0.039% |
| 10 | 5.008 | 391 | 395 | 396 | rBV2 | 2226 | 2643 | 0.27% | 0.038% |
| 11 | 6.460 | 639 | 642 | 644 | rBV | 2487 | 2742 | 0.28% | 0.040% |
| 12 | 6.648 | 669 | 674 | 676 | rBV4 | 6572 | 10201 | 1.05% | 0.147% |
| 13 | 6.777 | 691 | 696 | 699 | rBV3 | 4515 | 5734 | 0.59% | 0.083% |
| 14 | 6.977 | 725 | 730 | 733 | rVB3 | 7309 | 9964 | 1.03% | 0.144% |
| 15 | 7.270 | 777 | 780 | 783 | rVB | 2458 | 2580 | 0.27% | 0.037% |
| 16 | 7.335 | 788 | 791 | 796 | rVB | 1849 | 3126 | 0.32% | 0.045% |
| 17 | 7.429 | 800 | 807 | 813 | rBV | 94355 | 142114 | 14.65% | 2.048% |
| 18 | 8.181 | 926 | 935 | 938 | rBV4 | 4746 | 9468 | 0.98% | 0.136% |
| 19 | 8.587 | 999 | 1004 | 1010 | rVB2 | 6097 | 11449 | 1.18% | 0.165% |
| 20 | 9.309 | 1122 | 1127 | 1131 | rVB4 | 6937 | 10659 | 1.10% | 0.154% |
| 21 | 9.862 | 1219 | 1221 | 1227 | rVB4 | 9134 | 11983 | 1.24% | 0.173% |
| 22 | 10.214 | 1274 | 1281 | 1288 | rBV | 128601 | 215036 | 22.17% | 3.099% |
| 23 | 10.896 | 1395 | 1397 | 1402 | rBV | 2180 | 3739 | 0.39% | 0.054% |
| 24 | 11.894 | 1564 | 1567 | 1572 | rVB2 | 3736 | 6067 | 0.63% | 0.087% |
| 25 | 12.124 | 1601 | 1606 | 1609 | rBV2 | 2235 | 3177 | 0.33% | 0.046% |
| 26 | 12.934 | 1743 | 1744 | 1750 | rVV2 | 2873 | 3770 | 0.39% | 0.054% |
| 27 | 13.263 | 1796 | 1800 | 1801 | rBV | 3541 | 3895 | 0.40% | 0.056% |
| 28 | 13.434 | 1824 | 1829 | 1830 | rBV2 | 5609 | 7003 | 0.72% | 0.101% |
| 29 | 13.493 | 1835 | 1839 | 1842 | rVV | 3826 | 5446 | 0.56% | 0.078% |
| 30 | 13.534 | 1842 | 1846 | 1850 | rVV | 21433 | 28637 | 2.95% | 0.413% |
| 31 | 13.581 | 1850 | 1854 | 1856 | rVV | 9784 | 11603 | 1.20% | 0.167% |
| 32 | 13.663 | 1867 | 1868 | 1871 | rVB3 | 3102 | 3249 | 0.33% | 0.047% |
| 33 | 13.804 | 1887 | 1892 | 1896 | rBV2 | 18122 | 27553 | 2.84% | 0.397% |
| 34 | 13.833 | 1896 | 1897 | 1903 | rVV2 | 8637 | 13823 | 1.42% | 0.199% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % 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:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Title : SVOA CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 13.875 | 1903 | 1904 | 1907 | rVV | 5286 | 3485 | 0.36% | 0.050% |
| 36 | 14.115 | 1938 | 1945 | 1952 | rVV2 | 207732 | 317768 | 32.76% | 4.579% |
| 37 | 14.180 | 1952 | 1956 | 1962 | rVV2 | 18398 | 26896 | 2.77% | 0.388% |
| 38 | 14.315 | 1977 | 1979 | 1981 | rBV2 | 2158 | 2581 | 0.27% | 0.037% |
| 39 | 14.392 | 1990 | 1992 | 1997 | rBV3 | 3434 | 4421 | 0.46% | 0.064% |
| 40 | 14.521 | 2009 | 2014 | 2022 | rVV2 | 28895 | 39889 | 4.11% | 0.575% |
| 41 | 14.603 | 2026 | 2028 | 2031 | rVV3 | 7735 | 6564 | 0.68% | 0.095% |
| 42 | 14.744 | 2044 | 2052 | 2058 | rBV3 | 6084 | 12057 | 1.24% | 0.174% |
| 43 | 14.797 | 2058 | 2061 | 2066 | rVB2 | 4299 | 6121 | 0.63% | 0.088% |
| 44 | 14.920 | 2080 | 2082 | 2084 | rVV | 3513 | 3209 | 0.33% | 0.046% |
| 45 | 14.956 | 2086 | 2088 | 2090 | rVV | 2626 | 2560 | 0.26% | 0.037% |
| 46 | 15.120 | 2112 | 2116 | 2121 | rVV3 | 26545 | 40160 | 4.14% | 0.579% |
| 47 | 15.173 | 2121 | 2125 | 2131 | rVB | 47422 | 70574 | 7.28% | 1.017% |
| 48 | 15.291 | 2141 | 2145 | 2149 | rBV5 | 3040 | 6763 | 0.70% | 0.097% |
| 49 | 15.332 | 2150 | 2152 | 2153 | rVV | 3513 | 2896 | 0.30% | 0.042% |
| 50 | 15.396 | 2160 | 2163 | 2166 | rBV3 | 4860 | 6962 | 0.72% | 0.100% |
| 51 | 15.426 | 2166 | 2168 | 2171 | rVB | 4465 | 4164 | 0.43% | 0.060% |
| 52 | 15.479 | 2171 | 2177 | 2182 | rBV2 | 15792 | 25279 | 2.61% | 0.364% |
| 53 | 15.625 | 2197 | 2202 | 2210 | rVB2 | 16451 | 33505 | 3.45% | 0.483% |
| 54 | 15.714 | 2215 | 2217 | 2221 | rVB | 3956 | 5084 | 0.52% | 0.073% |
| 55 | 15.855 | 2238 | 2241 | 2243 | rBV3 | 5474 | 5555 | 0.57% | 0.080% |
| 56 | 15.949 | 2252 | 2257 | 2258 | rBV3 | 4518 | 5154 | 0.53% | 0.074% |
| 57 | 15.990 | 2262 | 2264 | 2270 | rVB2 | 3762 | 5549 | 0.57% | 0.080% |
| 58 | 16.031 | 2270 | 2271 | 2275 | rBV | 3577 | 3677 | 0.38% | 0.053% |
| 59 | 16.166 | 2290 | 2294 | 2295 | rBV3 | 7321 | 9907 | 1.02% | 0.143% |
| 60 | 16.184 | 2295 | 2297 | 2302 | rVV4 | 13562 | 21486 | 2.21% | 0.310% |
| 61 | 16.236 | 2302 | 2306 | 2310 | rVV4 | 6907 | 10561 | 1.09% | 0.152% |
| 62 | 16.283 | 2313 | 2314 | 2318 | rVB3 | 4458 | 3407 | 0.35% | 0.049% |
| 63 | 16.336 | 2318 | 2323 | 2326 | rVB4 | 7838 | 10609 | 1.09% | 0.153% |
| 64 | 16.419 | 2332 | 2337 | 2340 | rBV5 | 8934 | 16118 | 1.66% | 0.232% |
| 65 | 16.460 | 2340 | 2344 | 2347 | rBV3 | 10465 | 13214 | 1.36% | 0.190% |
| 66 | 16.536 | 2353 | 2357 | 2364 | rBV2 | 26050 | 38618 | 3.98% | 0.557% |
| 67 | 16.618 | 2366 | 2371 | 2375 | rBV4 | 11429 | 19919 | 2.05% | 0.287% |
| 68 | 16.695 | 2380 | 2384 | 2390 | rVB | 36580 | 51271 | 5.29% | 0.739% |
| 69 | 16.883 | 2409 | 2416 | 2419 | rBV2 | 291758 | 442809 | 45.65% | 6.381% |
| 70 | 16.924 | 2419 | 2423 | 2428 | rVV | 590693 | 769579 | 79.33% | 11.090% |
| 71 | 16.977 | 2428 | 2432 | 2435 | rVV | 36724 | 58017 | 5.98% | 0.836% |

LSC Area Percent Report

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Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % 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:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Title : SVOA CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 17.012 | 2435 | 2438 | 2443 | rVV | 98852 | 129330 | 13.33% | 1.864% |
| 73 | 17.071 | 2443 | 2448 | 2455 | rVV4 | 10992 | 23160 | 2.39% | 0.334% |
| 74 | 17.118 | 2455 | 2456 | 2458 | rVB2 | 4278 | 2759 | 0.28% | 0.040% |
| 75 | 17.265 | 2477 | 2481 | 2482 | rBV3 | 7859 | 11024 | 1.14% | 0.159% |
| 76 | 17.294 | 2482 | 2486 | 2490 | rVV | 34776 | 45554 | 4.70% | 0.656% |
| 77 | 17.394 | 2501 | 2503 | 2507 | rVB3 | 8790 | 11609 | 1.20% | 0.167% |
| 78 | 17.459 | 2512 | 2514 | 2521 | rVB8 | 15789 | 20517 | 2.12% | 0.296% |
| 79 | 17.723 | 2557 | 2559 | 2560 | rBV2 | 5615 | 4446 | 0.46% | 0.064% |
| 80 | 17.758 | 2560 | 2565 | 2569 | rVV2 | 65130 | 100600 | 10.37% | 1.450% |
| 81 | 17.805 | 2569 | 2573 | 2580 | rVV | 93406 | 135822 | 14.00% | 1.957% |
| 82 | 17.887 | 2583 | 2587 | 2592 | rVV | 29490 | 43259 | 4.46% | 0.623% |
| 83 | 17.952 | 2592 | 2598 | 2602 | rVV2 | 98807 | 166180 | 17.13% | 2.395% |
| 84 | 17.987 | 2602 | 2604 | 2611 | rVB2 | 49685 | 62234 | 6.42% | 0.897% |
| 85 | 18.263 | 2647 | 2651 | 2656 | rBV | 46373 | 67843 | 6.99% | 0.978% |
| 86 | 18.310 | 2656 | 2659 | 2664 | rVB2 | 42867 | 56288 | 5.80% | 0.811% |
| 87 | 18.358 | 2664 | 2667 | 2669 | rBV3 | 9499 | 10664 | 1.10% | 0.154% |
| 88 | 18.516 | 2690 | 2694 | 2699 | rVB8 | 22003 | 35081 | 3.62% | 0.506% |
| 89 | 18.687 | 2719 | 2723 | 2729 | rBV4 | 31874 | 65575 | 6.76% | 0.945% |
| 90 | 18.833 | 2744 | 2748 | 2756 | rVB2 | 37891 | 65179 | 6.72% | 0.939% |
| 91 | 18.957 | 2764 | 2769 | 2775 | rVB | 717442 | 970045 | 100.00% | 13.979% |
| 92 | 19.292 | 2822 | 2826 | 2828 | rBV2 | 138727 | 193926 | 19.99% | 2.795% |
| 93 | 19.321 | 2828 | 2831 | 2839 | rVV | 554502 | 733377 | 75.60% | 10.568% |
| 94 | 19.397 | 2841 | 2844 | 2849 | rVB3 | 28872 | 45160 | 4.66% | 0.651% |
| 95 | 19.509 | 2859 | 2863 | 2867 | rBV | 33677 | 44550 | 4.59% | 0.642% |
| 96 | 19.926 | 2930 | 2934 | 2937 | rBV | 49539 | 64259 | 6.62% | 0.926% |
| 97 | 20.578 | 3042 | 3045 | 3049 | rVB | 56577 | 72868 | 7.51% | 1.050% |
| 98 | 21.090 | 3127 | 3132 | 3136 | rBV2 | 326307 | 609228 | 62.80% | 8.779% |
| 99 | 21.131 | 3136 | 3139 | 3143 | rVB | 212337 | 230807 | 23.79% | 3.326% |
| 100 | 22.617 | 3389 | 3392 | 3397 | rBV | 119773 | 215859 | 22.25% | 3.111% |

Sum of corrected areas: 6939438

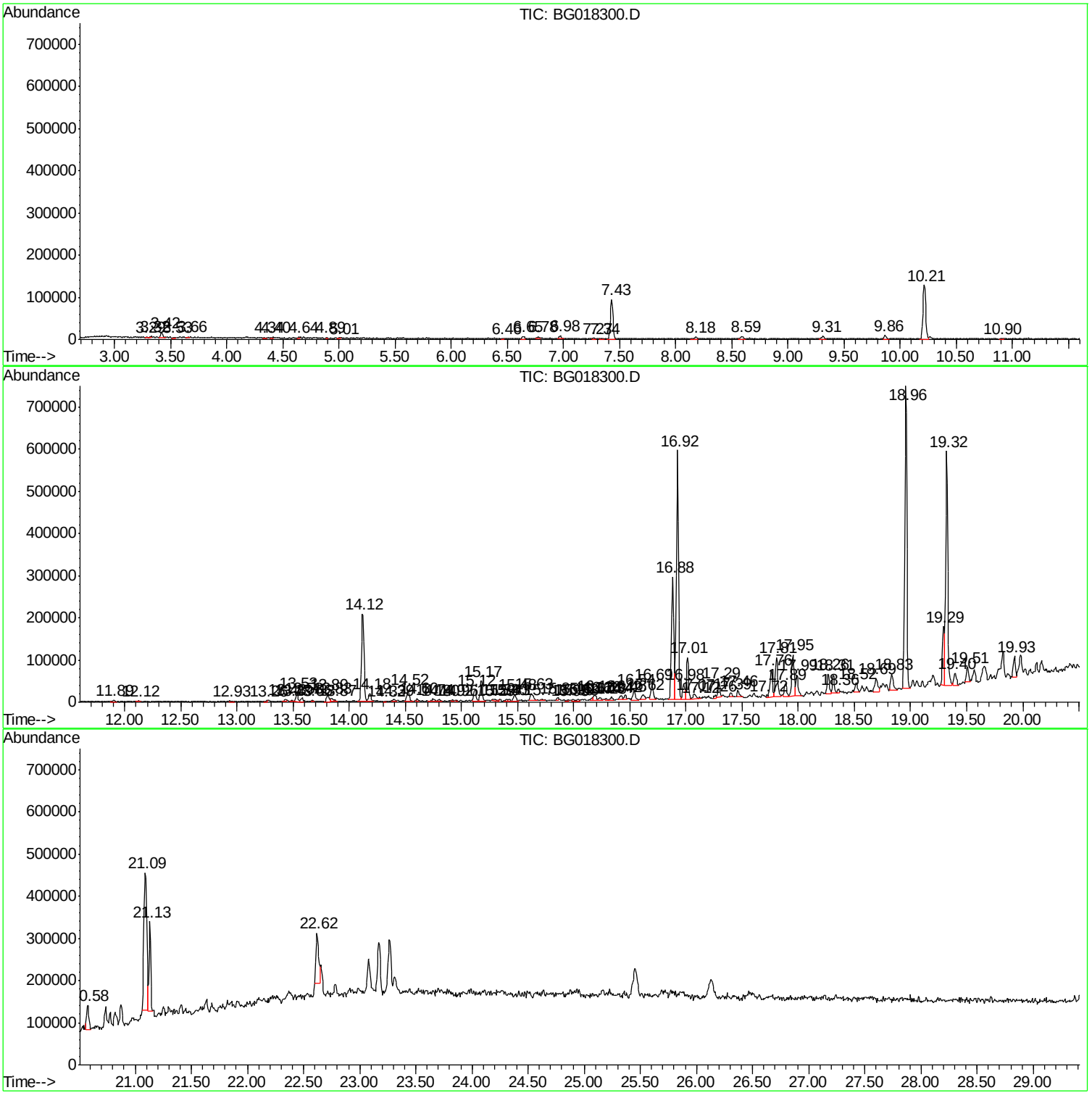
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Quant Title : SVOA CALIBRATION

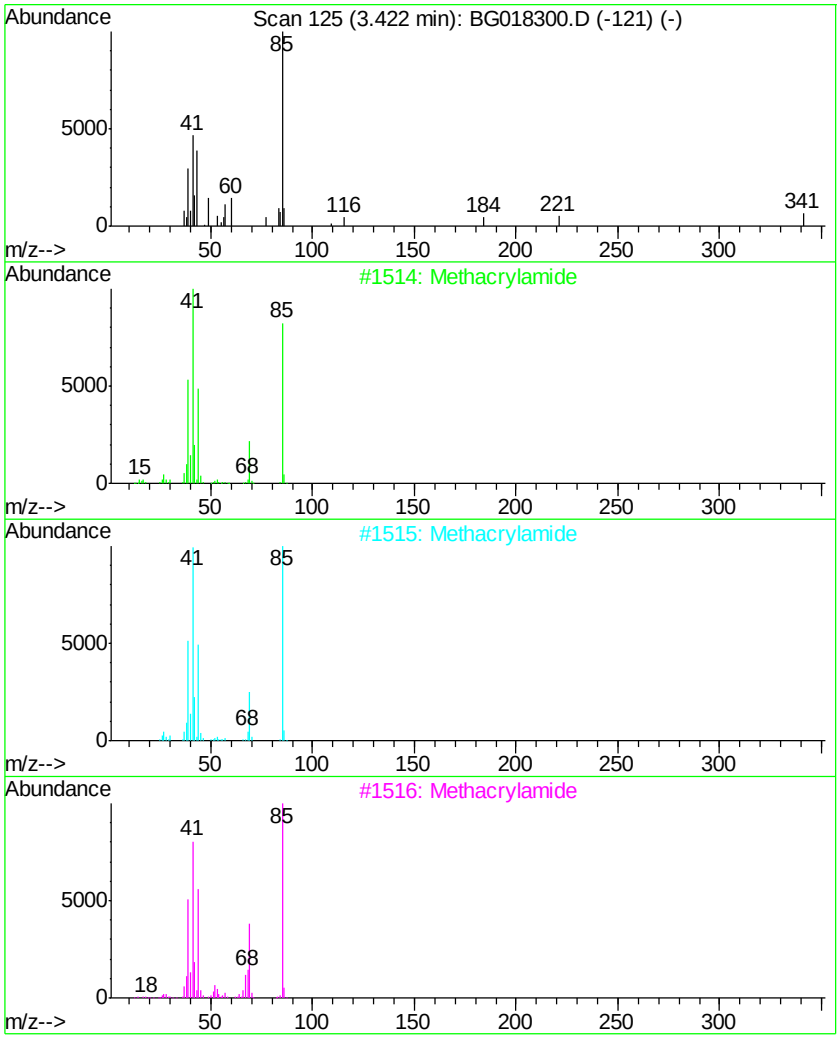
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

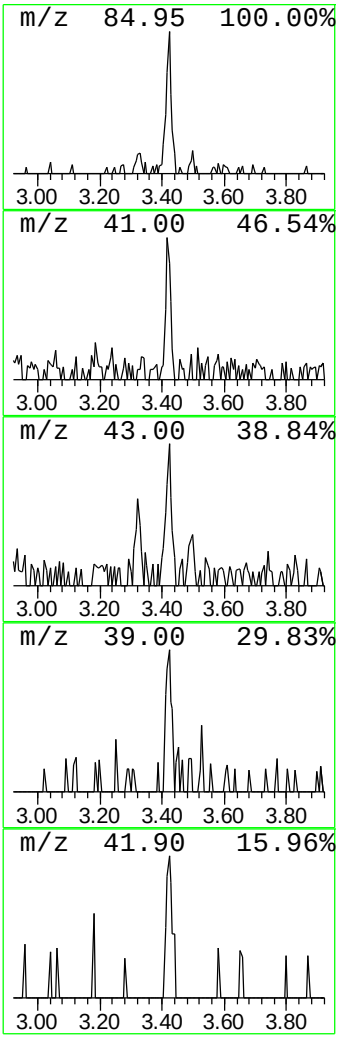
**********

Peak Number 1 unknown-01 Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.42 | 2.11 ng/ul | 15022 | 1,4-Dichlorobenzene-d4 | 7.43 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Methacrylamide | 85 | C4H7NO | 000079-39-0 | 35 |
| 2 | Methacrylamide | 85 | C4H7NO | 000079-39-0 | 35 |
| 3 | Methacrylamide | 85 | C4H7NO | 000079-39-0 | 35 |
| 4 | 2-(Bromomethyl)acrylic acid | 164 | C4H5BrO2 | 072707-66-5 | 35 |
| 5 | 9-Methyl-10-(tetrahydropyran-2-y... | 276 | C17H24O3 | 1000193-81-2 | 25 |



Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Quant Title : SVOA CALIBRATION

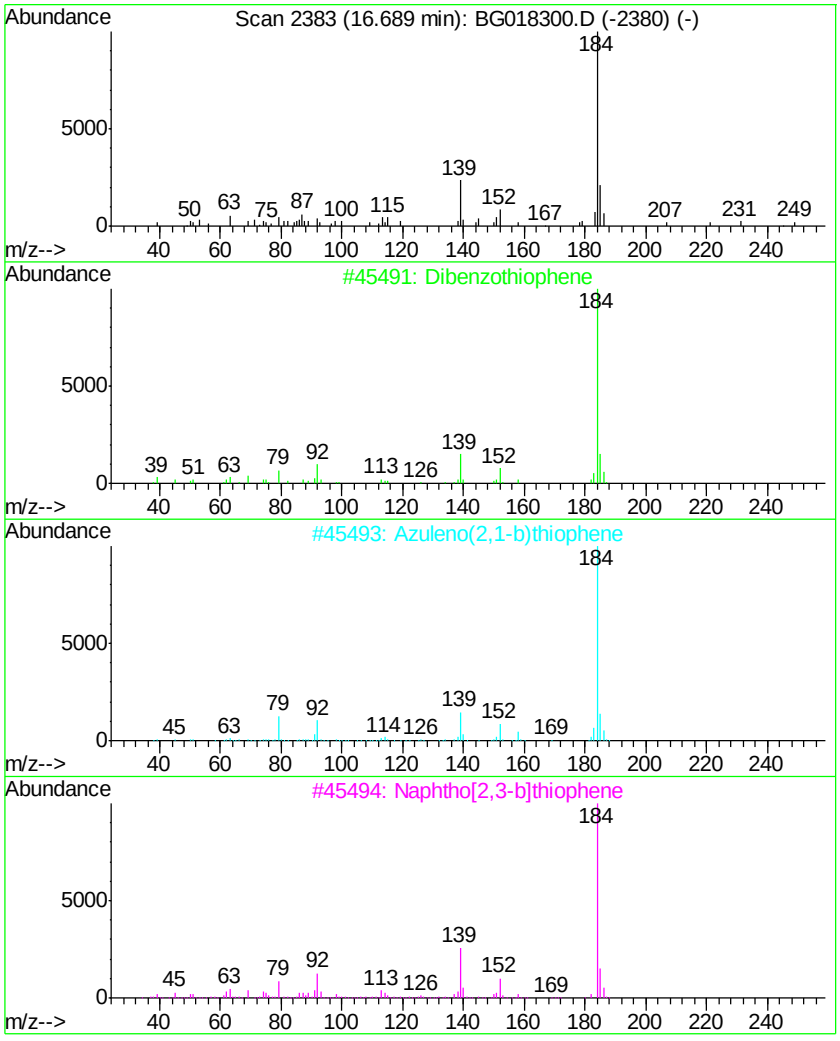
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

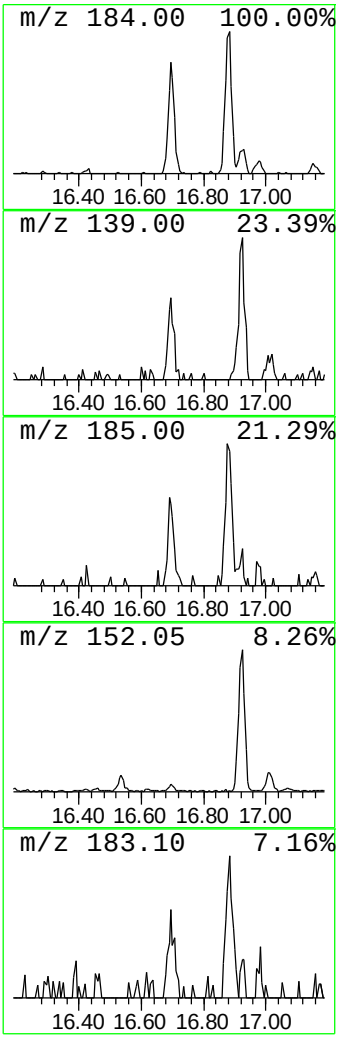
**********

Peak Number 2 Dibenzothiophene Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.69 | 2.32 ng/ul | 51271 | Phenanthrene-d10 | 16.88 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 93 |
| 2 | Azuleno(2,1-b)thiophene | 184 | C12H8S | 000248-13-5 | 90 |
| 3 | Naphtho[2,3-b]thiophene | 184 | C12H8S | 000268-77-9 | 90 |
| 4 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 90 |
| 5 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 87 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Quant Title : SVOA CALIBRATION

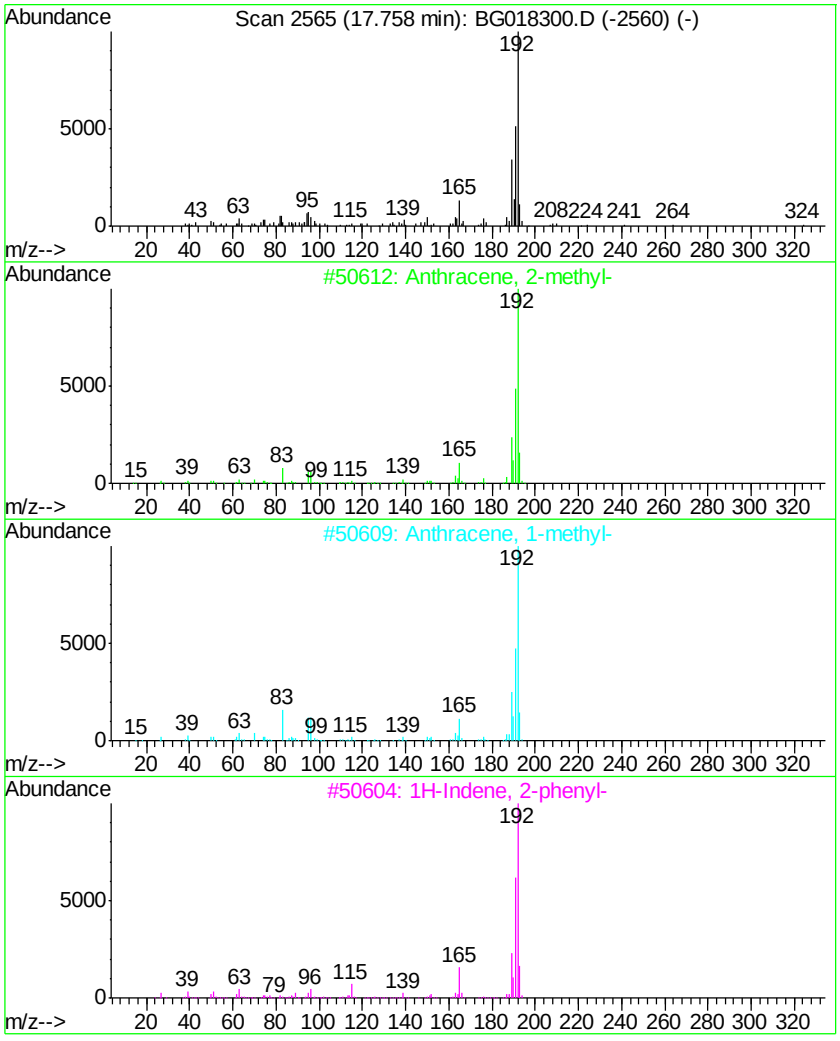
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

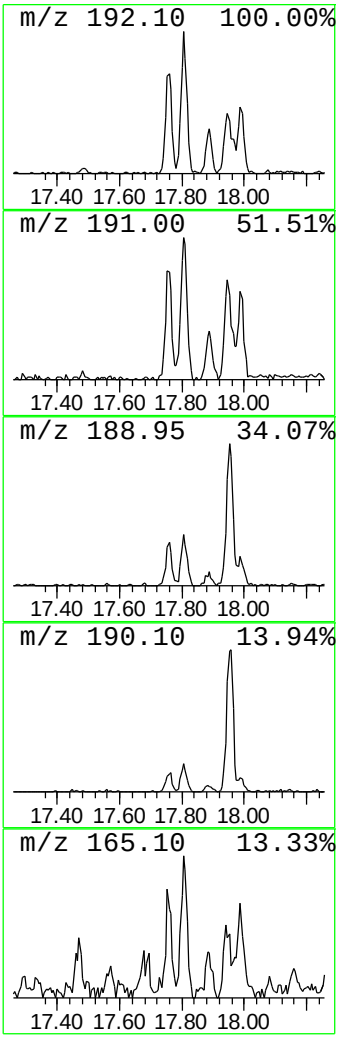
**********

Peak Number 3 Anthracene, 2-methyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.76 | 4.54 ng/ul | 100600 | Phenanthrene-d10 | 16.88 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 93 |
| 2 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 87 |
| 3 | 1H-Indene, 2-phenyl- | 192 | C15H12 | 004505-48-0 | 87 |
| 4 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 83 |
| 5 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 81 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Quant Title : SVOA CALIBRATION

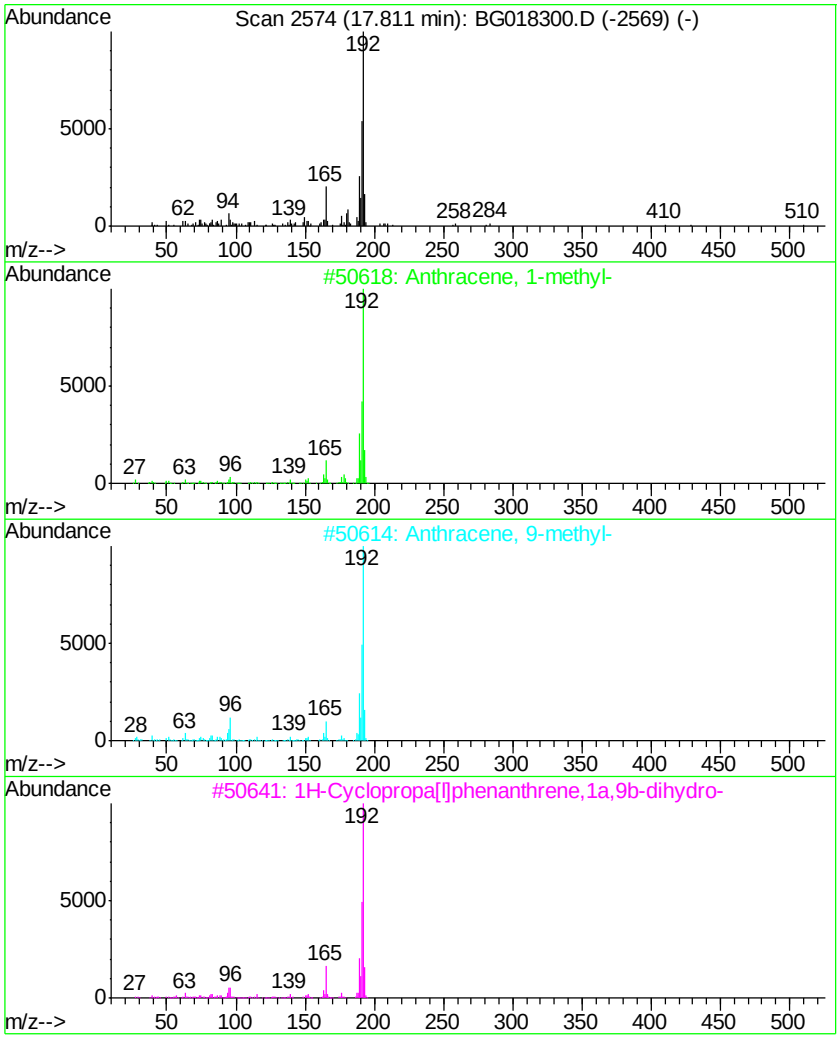
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

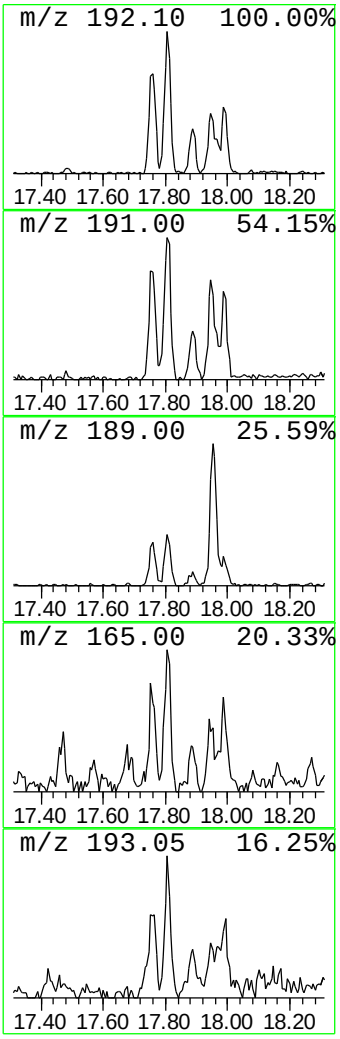
**********

Peak Number 4 Anthracene, 1-methyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.81 | 6.13 ng/ul | 135822 | Phenanthrene-d10 | 16.88 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 87 |
| 2 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 87 |
| 3 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 81 |
| 4 | 1H-Indene, 2-phenyl- | 192 | C15H12 | 004505-48-0 | 81 |
| 5 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 81 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Quant Title : SVOA CALIBRATION

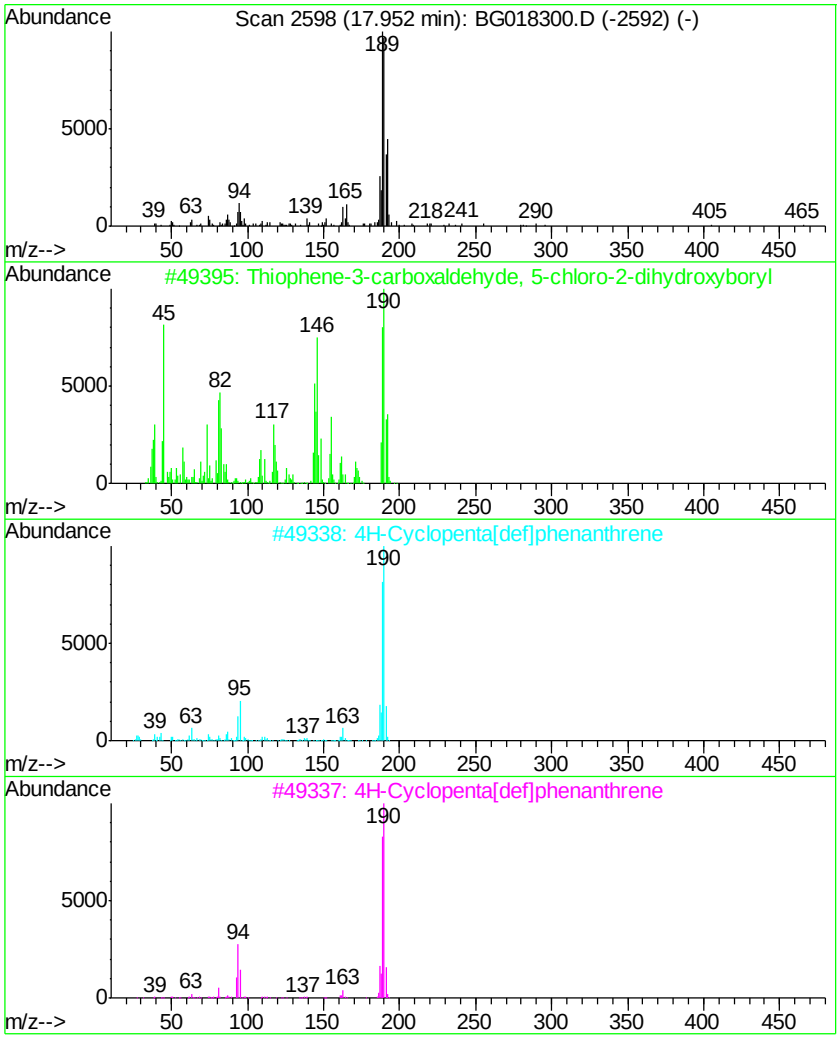
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

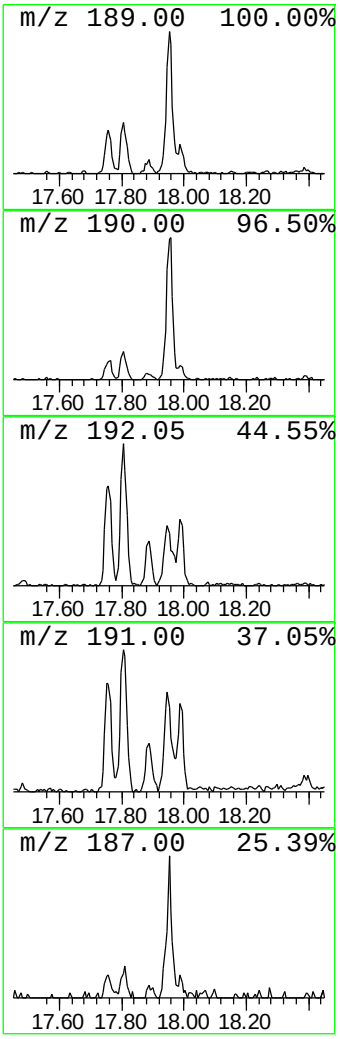
**********

Peak Number 5 Thiophene-3-carboxaldehyde,... Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.95 | 7.51 ng/ul | 166180 | Phenanthrene-d10 | 16.88 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Thiophene-3-carboxaldehyde, 5-ch... | 190 | C5H4BClO3S | 036155-87-0 | 64 |
| 2 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 62 |
| 3 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 59 |
| 4 | 6H-Cyclobuta[jk]phenanthrene | 190 | C15H10 | 083469-43-6 | 59 |
| 5 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 36 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

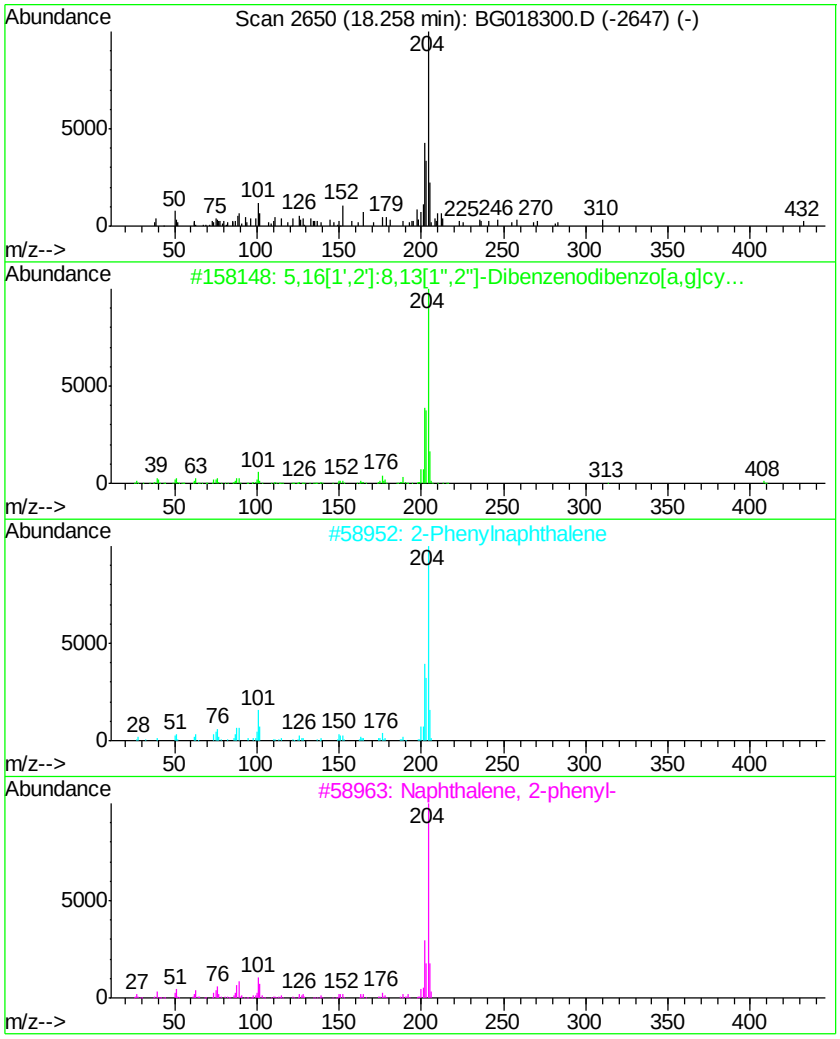
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Quant Title : SVOA CALIBRATION

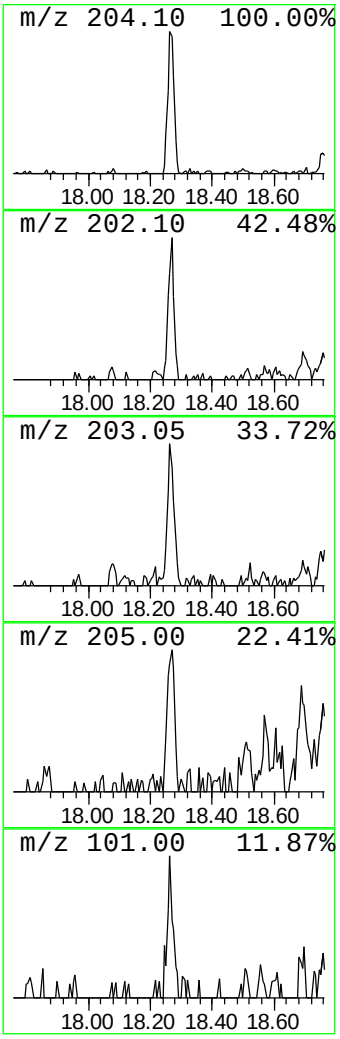
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 7 5,16[1',2']:8,13[1'',2'']-D... Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.26 | 3.06 ng/ul | 67843 | Phenanthrene-d10 | 16.88 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24 | 005672-97-9 | 86 |
| 2 | 2-Phenylnaphthalene | 204 | C16H12 | 035465-71-5 | 76 |
| 3 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 70 |
| 4 | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12 | 006572-60-7 | 64 |
| 5 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 64 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Quant Title : SVOA CALIBRATION

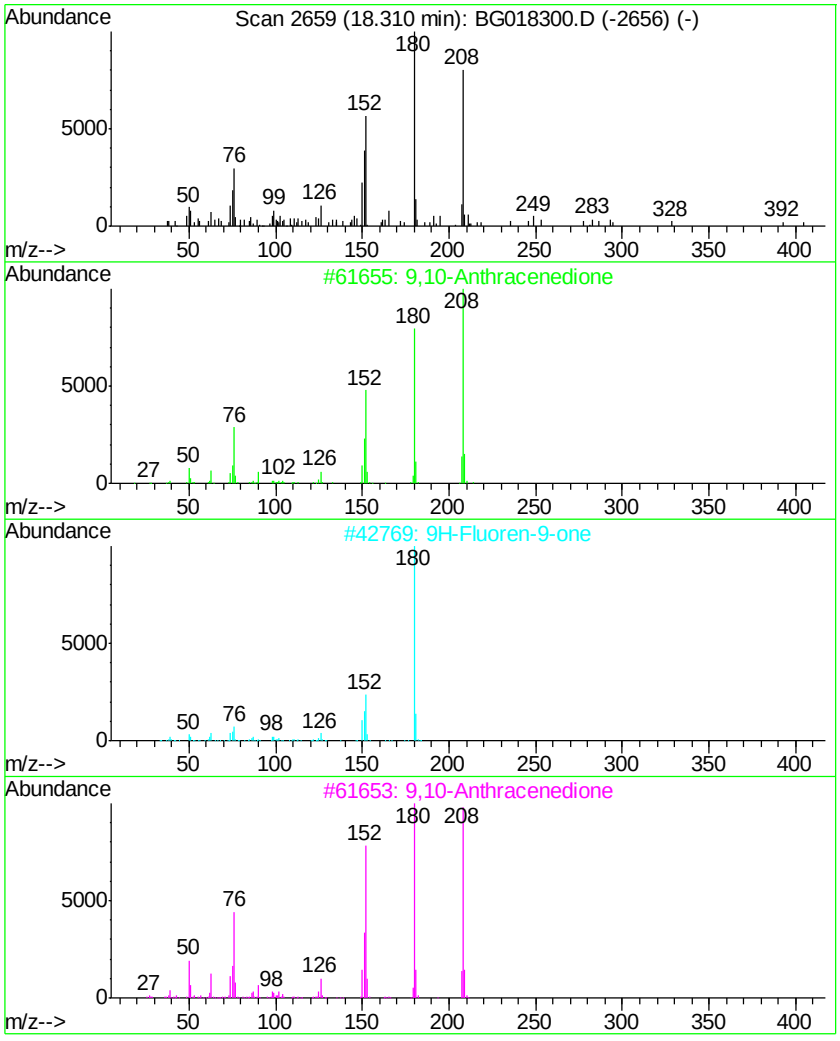
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

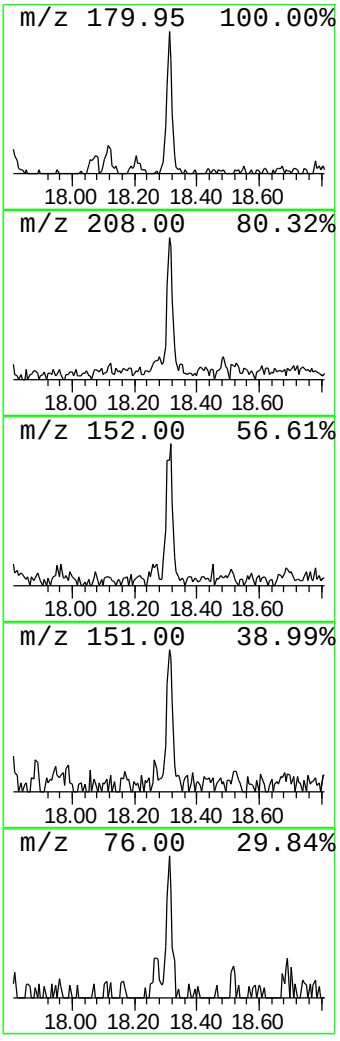
**********

Peak Number 8 9,10-Anthracenedione Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.31 | 2.54 ng/ul | 56288 | Phenanthrene-d10 | 16.88 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 90 |
| 2 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 90 |
| 3 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 87 |
| 4 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 68 |
| 5 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 64 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Quant Title : SVOA CALIBRATION

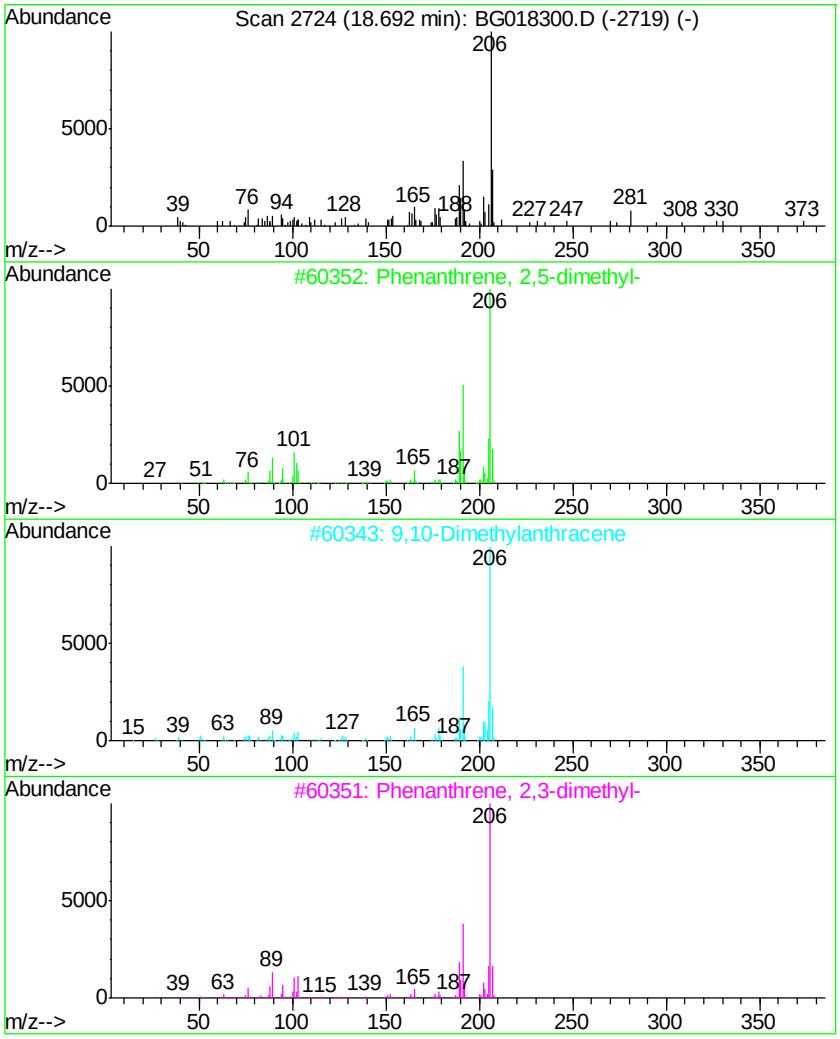
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

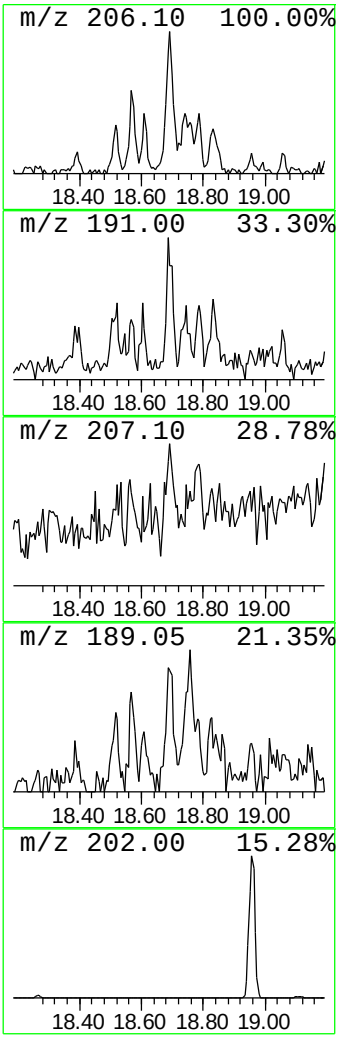
**********

Peak Number 9 Phenanthrene, 2,5-dimethyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.69 | 2.96 ng/ul | 65575 | Phenanthrene-d10 | 16.88 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 81 |
| 2 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 76 |
| 3 | Phenanthrene, 2,3-dimethyl- | 206 | C16H14 | 003674-65-5 | 74 |
| 4 | Phenanthrene, 4,5-dimethyl- | 206 | C16H14 | 003674-69-9 | 72 |
| 5 | 3-Methyl-1-phenyl-1H-indene | 206 | C16H14 | 022360-63-0 | 64 |



Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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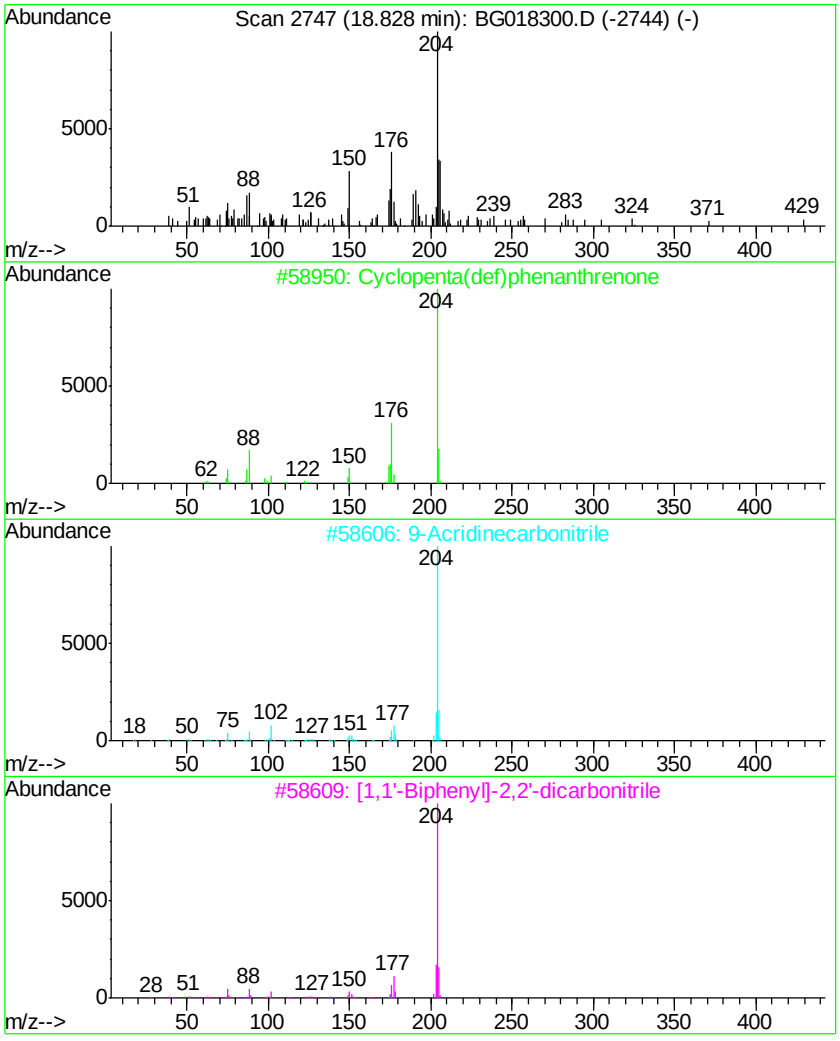
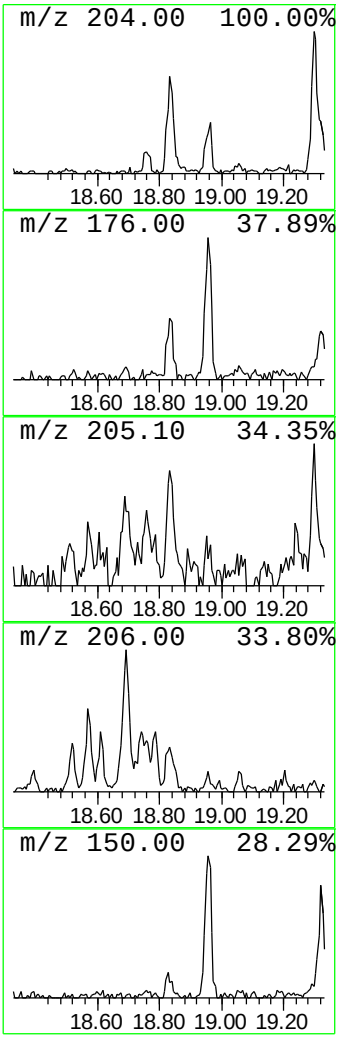
Peak Number 10 Cyclopenta(def)phenanthrenone Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.83 | 2.94 ng/ul | 65179 | Phenanthrene-d10 | 16.88 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(def)phenanthrenone | 204 | C15H8O | 005737-13-3 | 64 |
| 2 | 9-Acridinecarbonitrile | 204 | C14H8N2 | 005326-19-2 | 49 |
| 3 | [1,1'-Biphenyl]-2,2'-dicarbonitrile | 204 | C14H8N2 | 004341-02-0 | 47 |
| 4 | 9-Butyl-9-cyano-9,10-dihydroanth... | 261 | C19H19N | 139642-81-2 | 47 |
| 5 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 46 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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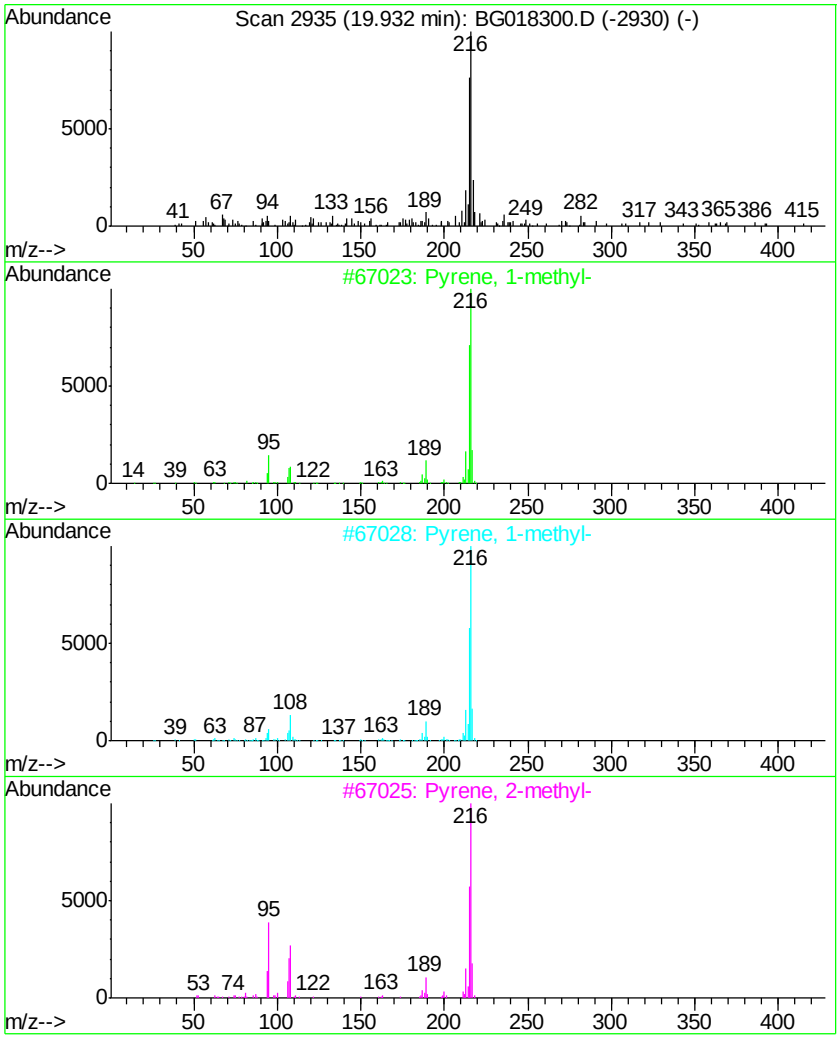
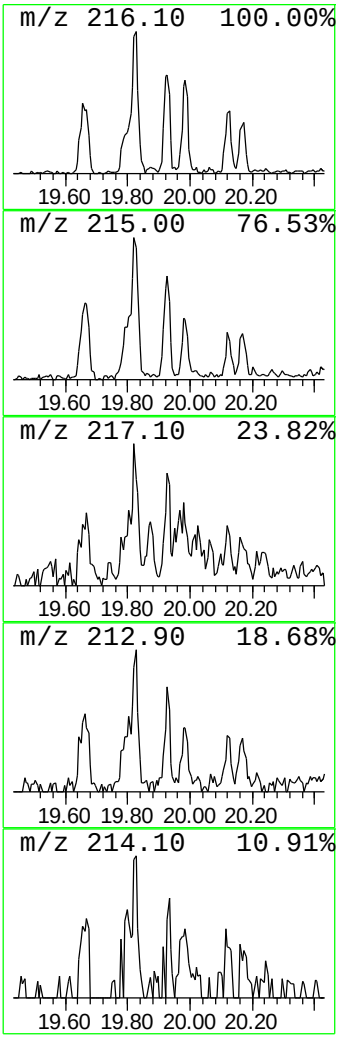
Peak Number 11 Pyrene, 1-methyl- Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.93 | 2.11 ng/ul | 64259 | Chrysene-d12 | 21.10 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 93 |
| 2 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 90 |
| 3 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 90 |
| 4 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 90 |
| 5 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 90 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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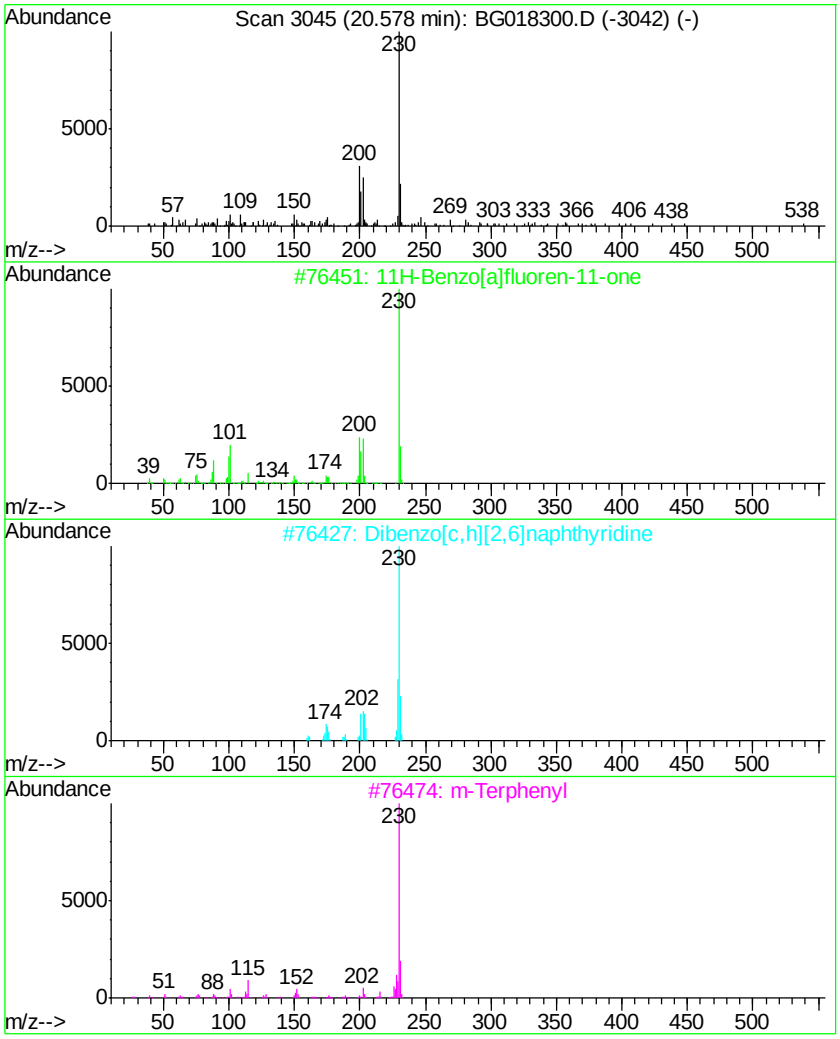
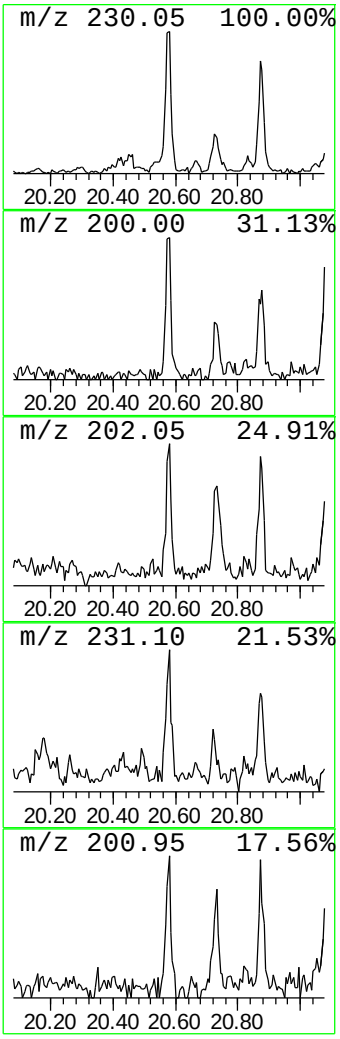
Peak Number 12 11H-Benzo[a]fluoren-11-one Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.58 | 2.39 ng/ul | 72868 | Chrysene-d12 | 21.10 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[a]fluoren-11-one | 230 | C17H10O | 000479-79-8 | 68 |
| 2 | Dibenzo[c,h][2,6]naphthyridine | 230 | C16H10N2 | 000218-30-4 | 53 |
| 3 | m-Terphenyl | 230 | C18H14 | 000092-06-8 | 53 |
| 4 | o-Terphenyl | 230 | C18H14 | 000084-15-1 | 52 |
| 5 | m-Terphenyl | 230 | C18H14 | 000092-06-8 | 50 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_G\DATA\BG080615\
Data File : BG018300.D
Acq On : 6 Aug 2015 12:25
Operator : UM/TP
Sample : G3109-08DL 10X
Misc :
ALS Vial : 26 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** C01J2DL

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG080515.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| unknown-01 | 3.42 | 2.1 | ng/ul | 15022 | 1 | 7.43 | 142114 | 20.0 |
| Dibenzothiophene | 16.69 | 2.3 | ng/ul | 51271 | 4 | 16.88 | 442809 | 20.0 |
| Anthracene, 2-met... | 17.76 | 4.5 | ng/ul | 100600 | 4 | 16.88 | 442809 | 20.0 |
| Anthracene, 1-met... | 17.81 | 6.1 | ng/ul | 135822 | 4 | 16.88 | 442809 | 20.0 |
| Thiophene-3-carbo... | 17.95 | 7.5 | ng/ul | 166180 | 4 | 16.88 | 442809 | 20.0 |
| 5,16[1',2']:8,13[... | 18.26 | 3.1 | ng/ul | 67843 | 4 | 16.88 | 442809 | 20.0 |
| 9,10-Anthracenedione | 18.31 | 2.5 | ng/ul | 56288 | 4 | 16.88 | 442809 | 20.0 |
| Phenanthrene, 2,5... | 18.69 | 3.0 | ng/ul | 65575 | 4 | 16.88 | 442809 | 20.0 |
| Cyclopenta(def)ph... | 18.83 | 2.9 | ng/ul | 65179 | 4 | 16.88 | 442809 | 20.0 |
| Pyrene, 1-methyl- | 19.93 | 2.1 | ng/ul | 64259 | 5 | 21.10 | 609228 | 20.0 |
| 11H-Benzo[a]fluor... | 20.58 | 2.4 | ng/ul | 72868 | 5 | 21.10 | 609228 | 20.0 |