LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 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_M\METHODS\SOM-EPA-BM021418.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 | 4.675 | 283 | 287 | 289 | rBV | 49191 | 65914 | 1.19% | 0.105% |
| 2 | 4.698 | 289 | 291 | 298 | rVB3 | 45993 | 68004 | 1.23% | 0.108% |
| 3 | 6.722 | 630 | 635 | 651 | rVB | 282563 | 575380 | 10.40% | 0.916% |
| 4 | 6.869 | 654 | 660 | 668 | rBV | 259100 | 426291 | 7.71% | 0.679% |
| 5 | 7.063 | 686 | 693 | 699 | rBV | 372091 | 618511 | 11.18% | 0.985% |
| 6 | 7.516 | 762 | 770 | 782 | rBV | 416185 | 725676 | 13.12% | 1.156% |
| 7 | 8.245 | 887 | 894 | 906 | rBV2 | 317839 | 630559 | 11.40% | 1.004% |
| 8 | 8.681 | 961 | 968 | 982 | rBV | 353791 | 645187 | 11.66% | 1.028% |
| 9 | 9.398 | 1082 | 1090 | 1099 | rBV2 | 288001 | 558153 | 10.09% | 0.889% |
| 10 | 9.939 | 1175 | 1182 | 1196 | rBV | 360870 | 754925 | 13.65% | 1.202% |
| 11 | 10.286 | 1233 | 1241 | 1247 | rBV | 549942 | 953114 | 17.23% | 1.518% |
| 12 | 10.339 | 1247 | 1250 | 1259 | rVB2 | 58091 | 96890 | 1.75% | 0.154% |
| 13 | 10.451 | 1263 | 1269 | 1283 | rBV | 249239 | 565537 | 10.22% | 0.901% |
| 14 | 12.192 | 1560 | 1565 | 1572 | rBV2 | 32065 | 55732 | 1.01% | 0.089% |
| 15 | 13.498 | 1780 | 1787 | 1792 | rBV3 | 42498 | 81565 | 1.47% | 0.130% |
| 16 | 13.598 | 1799 | 1804 | 1809 | rBV | 754880 | 1055911 | 19.09% | 1.682% |
| 17 | 13.645 | 1809 | 1812 | 1819 | rVB | 171043 | 254214 | 4.60% | 0.405% |
| 18 | 13.868 | 1841 | 1850 | 1864 | rBV | 892284 | 1460699 | 26.40% | 2.327% |
| 19 | 14.080 | 1880 | 1886 | 1891 | rBV2 | 43472 | 56169 | 1.02% | 0.089% |
| 20 | 14.180 | 1895 | 1903 | 1909 | rBV2 | 759960 | 1171857 | 21.18% | 1.866% |
| 21 | 14.239 | 1909 | 1913 | 1918 | rVV | 159283 | 228212 | 4.13% | 0.363% |
| 22 | 14.474 | 1947 | 1953 | 1967 | rBV5 | 78106 | 269245 | 4.87% | 0.429% |
| 23 | 14.586 | 1967 | 1972 | 1979 | rVV2 | 125838 | 221459 | 4.00% | 0.353% |
| 24 | 14.815 | 2005 | 2011 | 2015 | rBV7 | 27816 | 59338 | 1.07% | 0.095% |
| 25 | 15.039 | 2045 | 2049 | 2053 | rVB3 | 44227 | 56385 | 1.02% | 0.090% |
| 26 | 15.180 | 2067 | 2073 | 2078 | rBV | 1054616 | 1478273 | 26.72% | 2.355% |
| 27 | 15.239 | 2078 | 2083 | 2088 | rVB | 229040 | 332579 | 6.01% | 0.530% |
| 28 | 15.357 | 2094 | 2103 | 2108 | rBV7 | 64492 | 151875 | 2.75% | 0.242% |
| 29 | 15.539 | 2129 | 2134 | 2140 | rVB | 70560 | 117085 | 2.12% | 0.186% |
| 30 | 15.686 | 2149 | 2159 | 2167 | rBV3 | 68454 | 173908 | 3.14% | 0.277% |
| 31 | 15.910 | 2192 | 2197 | 2199 | rBV3 | 58180 | 95204 | 1.72% | 0.152% |
| 32 | 16.245 | 2243 | 2254 | 2259 | rBV6 | 68863 | 175026 | 3.16% | 0.279% |
| 33 | 16.298 | 2259 | 2263 | 2267 | rVB4 | 36662 | 57496 | 1.04% | 0.092% |
| 34 | 16.480 | 2290 | 2294 | 2297 | rVV4 | 46181 | 65624 | 1.19% | 0.105% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 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_M\METHODS\SOM-EPA-BM021418.M
Title : SVOA CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 16.604 | 2309 | 2315 | 2320 | rVV | 125574 | 205622 | 3.72% | 0.328% |
| 36 | 16.692 | 2323 | 2330 | 2337 | rVV7 | 84442 | 212935 | 3.85% | 0.339% |
| 37 | 16.757 | 2337 | 2341 | 2350 | rVB | 143439 | 247456 | 4.47% | 0.394% |
| 38 | 16.939 | 2366 | 2372 | 2375 | rBV | 899421 | 1267367 | 22.91% | 2.019% |
| 39 | 16.986 | 2375 | 2380 | 2384 | rVV | 2972896 | 4109688 | 74.28% | 6.546% |
| 40 | 17.039 | 2384 | 2389 | 2392 | rVV2 | 1131900 | 1642590 | 29.69% | 2.616% |
| 41 | 17.074 | 2392 | 2395 | 2401 | rVV | 591127 | 812624 | 14.69% | 1.294% |
| 42 | 17.145 | 2401 | 2407 | 2416 | rVB2 | 71974 | 171896 | 3.11% | 0.274% |
| 43 | 17.356 | 2435 | 2443 | 2451 | rBV2 | 266422 | 528179 | 9.55% | 0.841% |
| 44 | 17.527 | 2468 | 2472 | 2478 | rVB5 | 51661 | 97352 | 1.76% | 0.155% |
| 45 | 17.815 | 2516 | 2521 | 2524 | rBV | 378780 | 527735 | 9.54% | 0.841% |
| 46 | 17.862 | 2524 | 2529 | 2535 | rVV | 521452 | 889793 | 16.08% | 1.417% |
| 47 | 17.915 | 2535 | 2538 | 2541 | rVV | 177380 | 240291 | 4.34% | 0.383% |
| 48 | 17.945 | 2541 | 2543 | 2548 | rVV | 159914 | 204102 | 3.69% | 0.325% |
| 49 | 18.009 | 2548 | 2554 | 2558 | rVV2 | 497913 | 871860 | 15.76% | 1.389% |
| 50 | 18.051 | 2558 | 2561 | 2567 | rVB | 248430 | 330323 | 5.97% | 0.526% |
| 51 | 18.133 | 2571 | 2575 | 2578 | rBV4 | 71934 | 92724 | 1.68% | 0.148% |
| 52 | 18.180 | 2580 | 2583 | 2586 | rVB3 | 48118 | 58090 | 1.05% | 0.093% |
| 53 | 18.215 | 2586 | 2589 | 2594 | rBV7 | 40190 | 66866 | 1.21% | 0.107% |
| 54 | 18.321 | 2603 | 2607 | 2612 | rBV | 239393 | 338335 | 6.12% | 0.539% |
| 55 | 18.380 | 2612 | 2617 | 2622 | rVB2 | 262691 | 356978 | 6.45% | 0.569% |
| 56 | 18.574 | 2646 | 2650 | 2654 | rVV2 | 70625 | 101282 | 1.83% | 0.161% |
| 57 | 18.621 | 2655 | 2658 | 2662 | rVV | 84879 | 101843 | 1.84% | 0.162% |
| 58 | 18.662 | 2662 | 2665 | 2669 | rVB | 76283 | 108267 | 1.96% | 0.172% |
| 59 | 18.745 | 2674 | 2679 | 2683 | rBV2 | 200672 | 322898 | 5.84% | 0.514% |
| 60 | 18.809 | 2685 | 2690 | 2693 | rVV6 | 120432 | 221155 | 4.00% | 0.352% |
| 61 | 18.839 | 2693 | 2695 | 2699 | rVB | 86999 | 78709 | 1.42% | 0.125% |
| 62 | 18.898 | 2699 | 2705 | 2711 | rBV5 | 163144 | 339335 | 6.13% | 0.540% |
| 63 | 19.015 | 2718 | 2725 | 2732 | rBV | 4330719 | 5532380 | 100.00% | 8.812% |
| 64 | 19.080 | 2733 | 2736 | 2739 | rVB2 | 62247 | 64483 | 1.17% | 0.103% |
| 65 | 19.115 | 2739 | 2742 | 2745 | rBV2 | 81447 | 137847 | 2.49% | 0.220% |
| 66 | 19.350 | 2776 | 2782 | 2784 | rBV2 | 1884129 | 2640321 | 47.72% | 4.205% |
| 67 | 19.380 | 2784 | 2787 | 2795 | rVV | 3419196 | 4386804 | 79.29% | 6.987% |
| 68 | 19.450 | 2795 | 2799 | 2806 | rVB3 | 183299 | 302626 | 5.47% | 0.482% |
| 69 | 19.562 | 2814 | 2818 | 2823 | rBV | 194182 | 253211 | 4.58% | 0.403% |
| 70 | 19.627 | 2825 | 2829 | 2833 | rVB | 157366 | 223399 | 4.04% | 0.356% |
| 71 | 19.703 | 2837 | 2842 | 2844 | rBV2 | 233096 | 380079 | 6.87% | 0.605% |

LSC Area Percent Report

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Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 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_M\METHODS\SOM-EPA-BM021418.M
Title : SVOA CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 19.845 | 2861 | 2866 | 2868 | rBV4 | 208422 | 339171 | 6.13% | 0.540% |
| 73 | 19.880 | 2869 | 2872 | 2877 | rVB | 484877 | 642918 | 11.62% | 1.024% |
| 74 | 19.980 | 2886 | 2889 | 2893 | rBV | 302187 | 352006 | 6.36% | 0.561% |
| 75 | 20.039 | 2893 | 2899 | 2903 | rBV2 | 312919 | 537003 | 9.71% | 0.855% |
| 76 | 20.121 | 2910 | 2913 | 2917 | rBV5 | 75793 | 97091 | 1.75% | 0.155% |
| 77 | 20.174 | 2919 | 2922 | 2926 | rVV | 176253 | 233383 | 4.22% | 0.372% |
| 78 | 20.227 | 2927 | 2931 | 2935 | rVV | 184049 | 258915 | 4.68% | 0.412% |
| 79 | 20.639 | 2997 | 3001 | 3006 | rBV | 354382 | 425053 | 7.68% | 0.677% |
| 80 | 20.797 | 3025 | 3028 | 3031 | rBV2 | 317992 | 343203 | 6.20% | 0.547% |
| 81 | 20.833 | 3031 | 3034 | 3037 | rVV | 259078 | 298231 | 5.39% | 0.475% |
| 82 | 20.874 | 3038 | 3041 | 3048 | rVV3 | 360144 | 615948 | 11.13% | 0.981% |
| 83 | 20.939 | 3049 | 3052 | 3056 | rVB | 349986 | 424753 | 7.68% | 0.677% |
| 84 | 21.144 | 3082 | 3087 | 3092 | rBV2 | 2097464 | 4049905 | 73.20% | 6.450% |
| 85 | 21.192 | 3092 | 3095 | 3105 | rVB | 1780578 | 2222528 | 40.17% | 3.540% |
| 86 | 21.303 | 3111 | 3114 | 3122 | rBV | 259780 | 378680 | 6.84% | 0.603% |
| 87 | 21.697 | 3178 | 3181 | 3185 | rVB | 274038 | 336756 | 6.09% | 0.536% |
| 88 | 22.686 | 3344 | 3349 | 3354 | rBV | 1208532 | 2503666 | 45.25% | 3.988% |
| 89 | 23.144 | 3422 | 3427 | 3431 | rBV | 701472 | 1265204 | 22.87% | 2.015% |
| 90 | 23.197 | 3431 | 3436 | 3439 | rVV2 | 959948 | 1724250 | 31.17% | 2.746% |
| 91 | 23.238 | 3439 | 3443 | 3449 | rVB | 1170239 | 1919210 | 34.69% | 3.057% |
| 92 | 23.333 | 3454 | 3459 | 3463 | rBV | 658002 | 1047342 | 18.93% | 1.668% |

Sum of corrected areas: 62784658

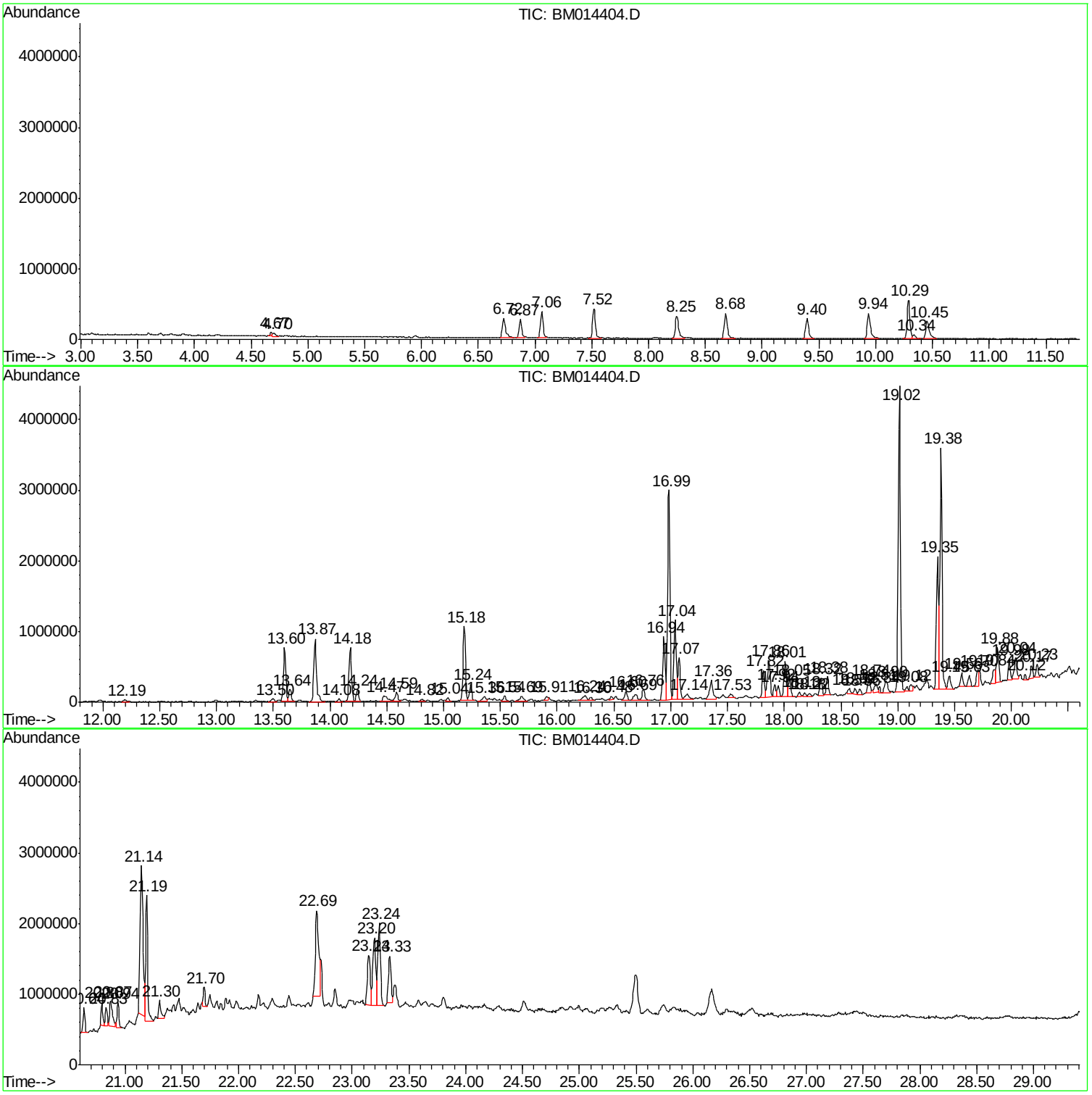
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

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



Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

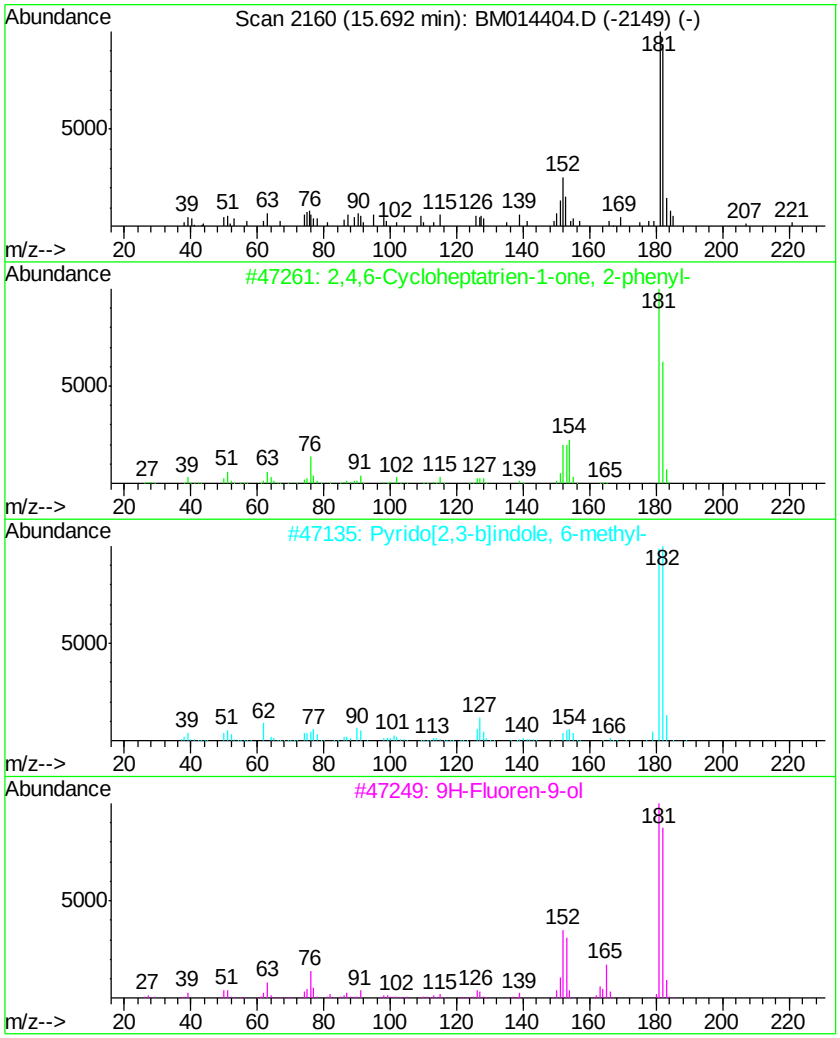
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

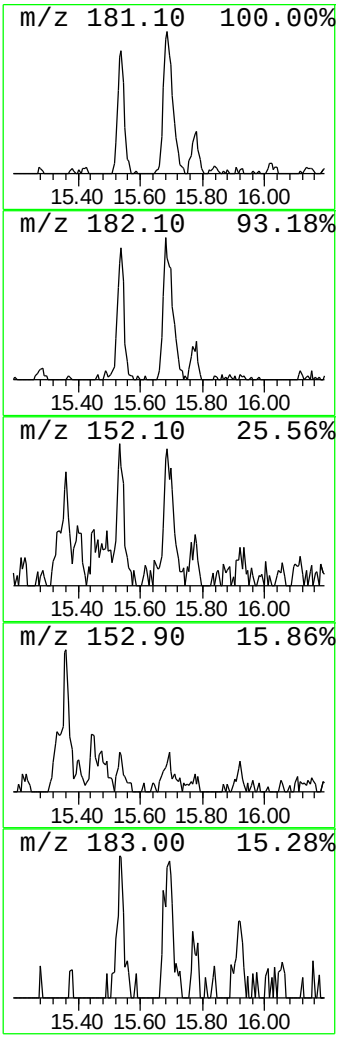
**********

Peak Number 1 2,4,6-Cycloheptatrien-1-one... Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.69 | 2.74 ng/ul | 173908 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2,4,6-Cycloheptatrien-1-one, 2-p... | 182 | C13H10O | 014562-09-5 | 80 |
| 2 | Pyrido[2,3-b]indole, 6-methyl- | 182 | C12H10N2 | 108349-67-3 | 80 |
| 3 | 9H-Fluoren-9-ol | 182 | C13H10O | 001689-64-1 | 72 |
| 4 | 2,4,6-Cycloheptatrien-1-one, 2-p... | 182 | C13H10O | 014562-09-5 | 72 |
| 5 | 9H-Fluoren-9-ol | 182 | C13H10O | 001689-64-1 | 72 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

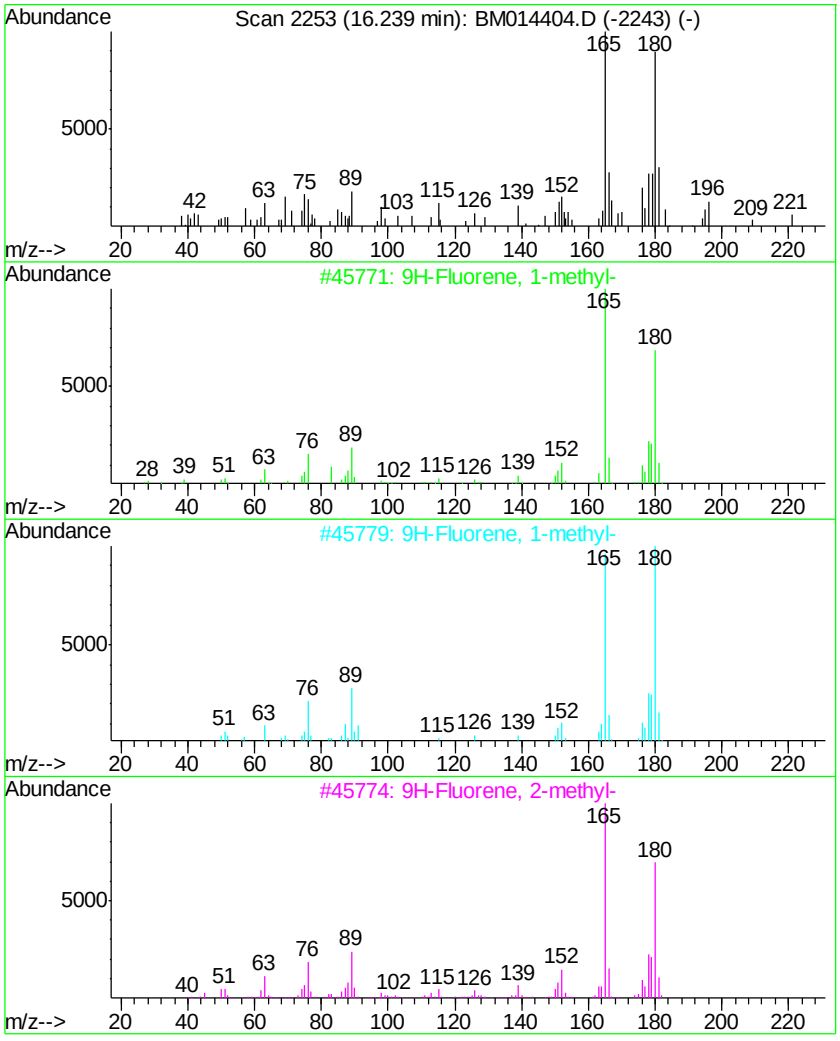
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

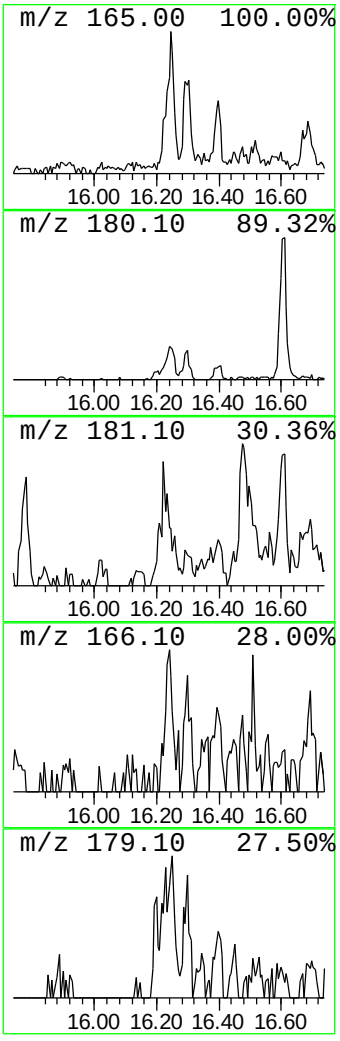
**********

Peak Number 2 9H-Fluorene, 1-methyl- Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.24 | 2.76 ng/ul | 175026 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 83 |
| 2 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 83 |
| 3 | 9H-Fluorene, 2-methyl- | 180 | C14H12 | 001430-97-3 | 83 |
| 4 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 64 |
| 5 | 9H-Fluorene, 2-methyl- | 180 | C14H12 | 001430-97-3 | 64 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

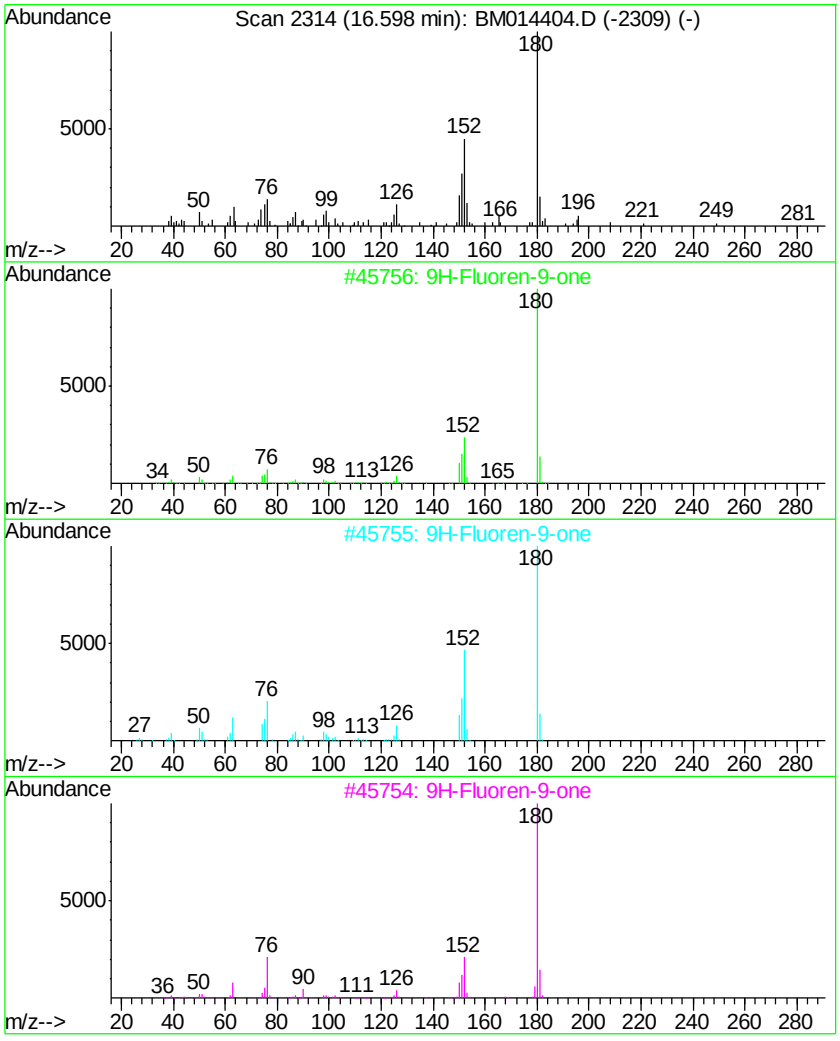
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

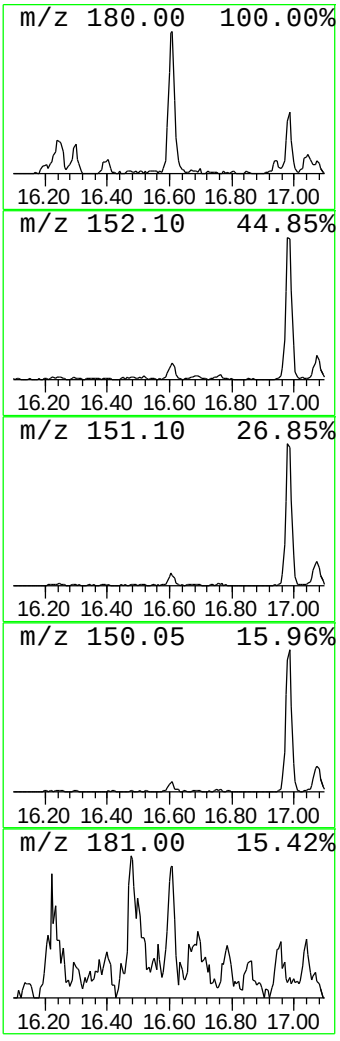
**********

Peak Number 3 9H-Fluoren-9-one Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.60 | 3.24 ng/ul | 205622 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 93 |
| 2 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 93 |
| 3 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 90 |
| 4 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 86 |
| 5 | 9,10-Phenanthrenedione | 208 | C14H8O2 | 000084-11-7 | 83 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

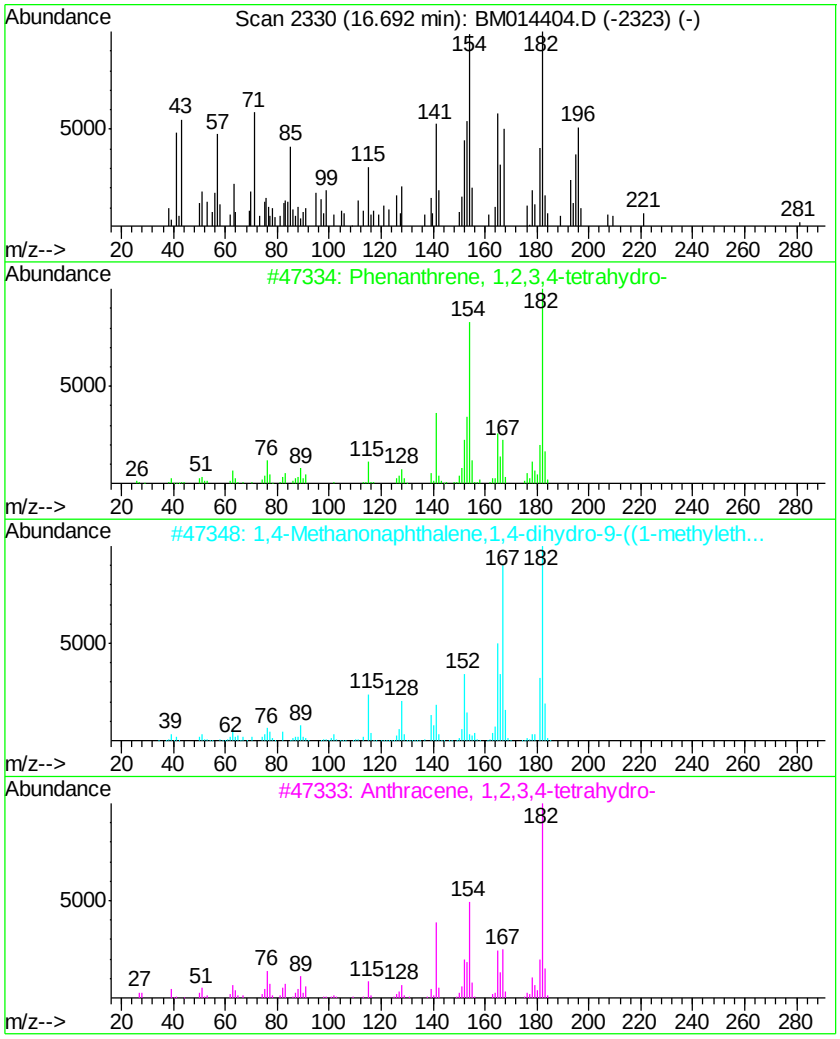
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

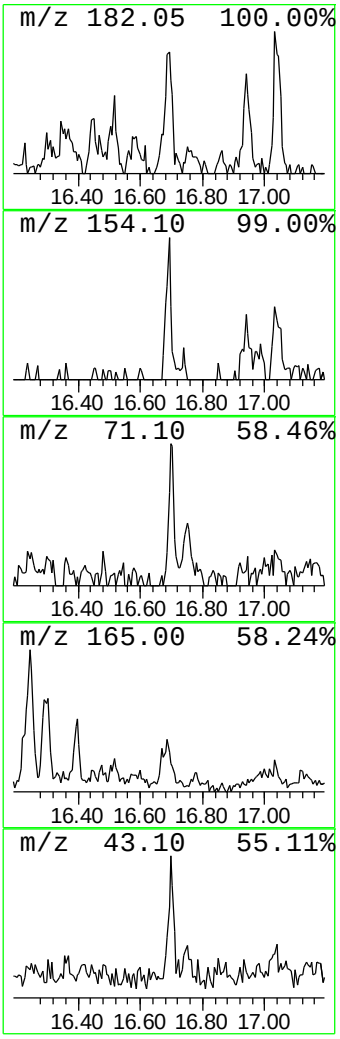
**********

Peak Number 4 Phenanthrene, 1,2,3,4-tetra... Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.69 | 3.36 ng/ul | 212935 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 1,2,3,4-tetrahydro- | 182 | C14H14 | 001013-08-7 | 64 |
| 2 | 1,4-Methanonaphthalene,1,4-dihyd... | 182 | C14H14 | 007350-72-3 | 62 |
| 3 | Anthracene, 1,2,3,4-tetrahydro- | 182 | C14H14 | 002141-42-6 | 49 |
| 4 | Phenanthrene, 1,2,3,4-tetrahydro- | 182 | C14H14 | 001013-08-7 | 49 |
| 5 | Bicyclo[3.2.1]octane-6-carboxyli... | 182 | C10H14O3 | 1000362-16-3 | 35 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

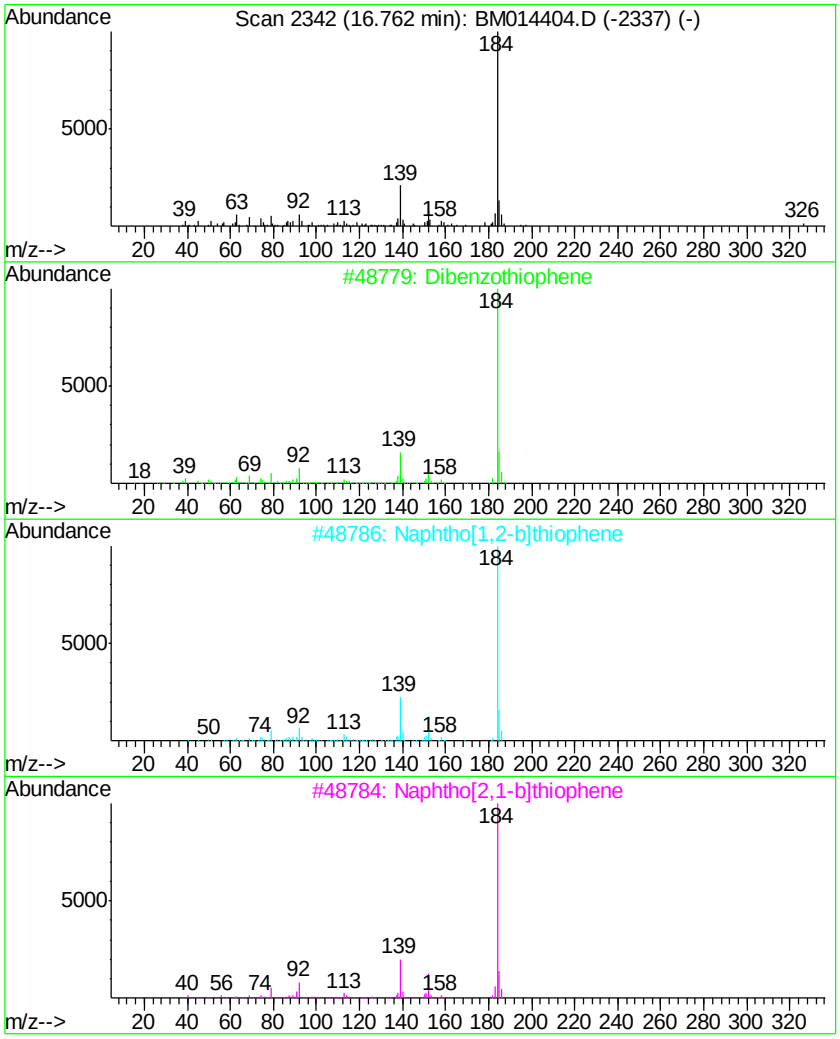
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

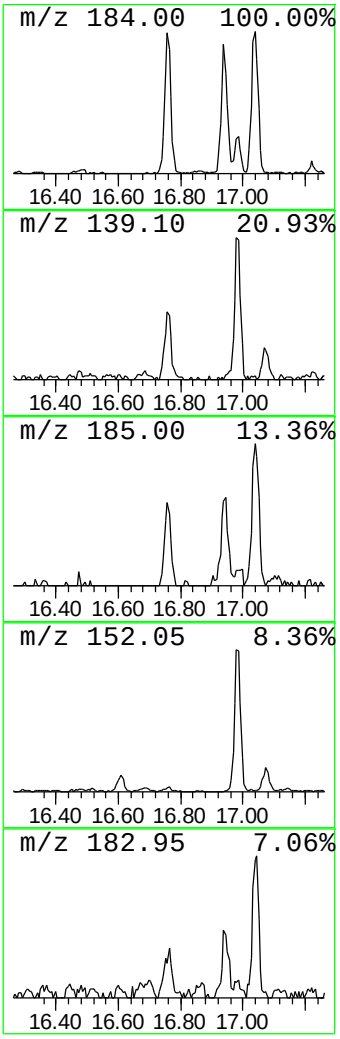
**********

Peak Number 5 Dibenzothiophene Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.76 | 3.91 ng/ul | 247456 | Phenanthrene-d10 | 16.94 |

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



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

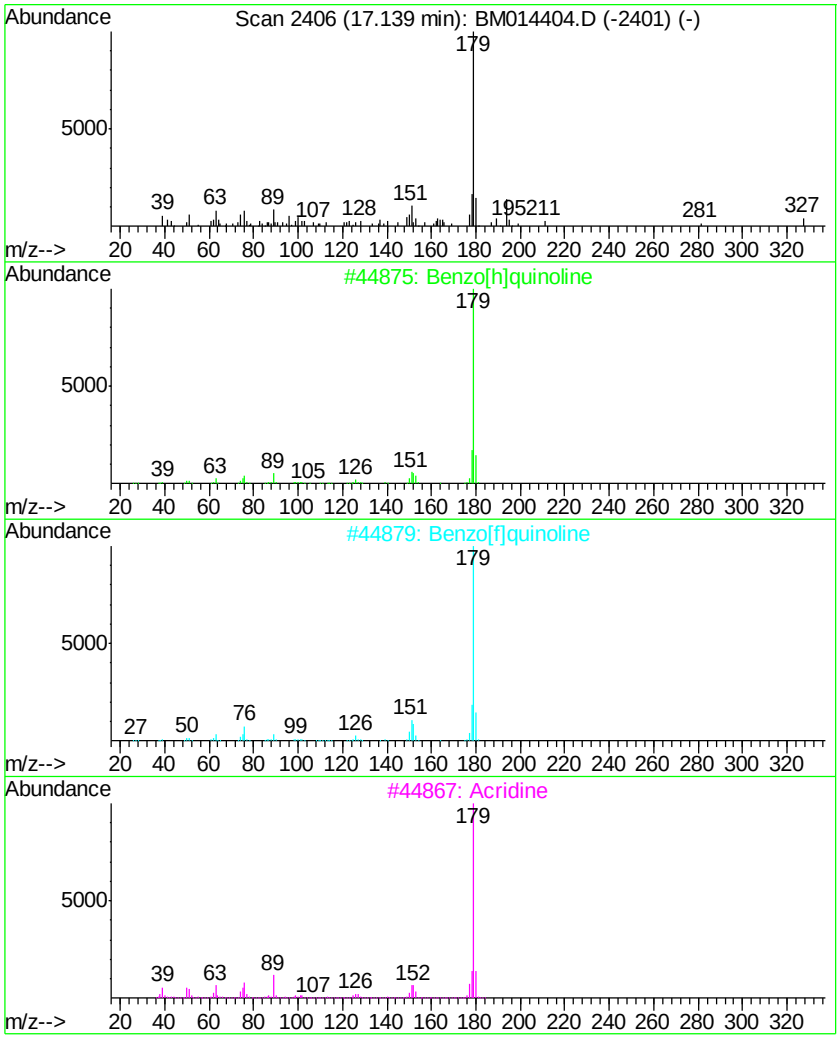
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

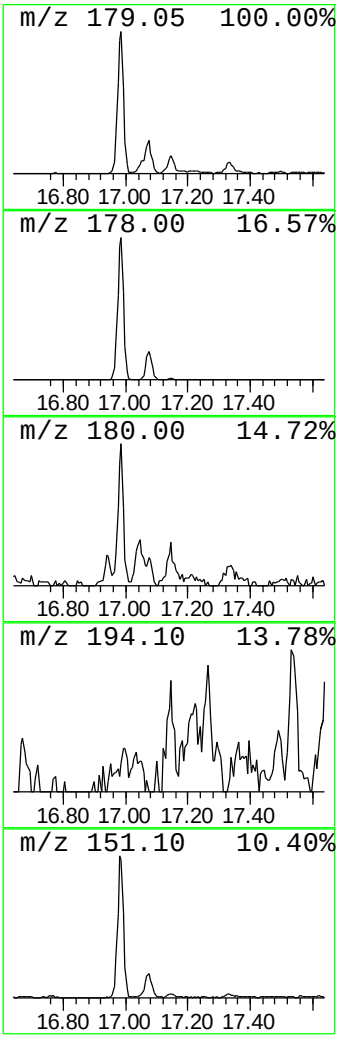
**********

Peak Number 6 Benzo[h]quinoline Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.14 | 2.71 ng/ul | 171896 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[h]quinoline | 179 | C13H9N | 000230-27-3 | 87 |
| 2 | Benzo[f]quinoline | 179 | C13H9N | 000085-02-9 | 87 |
| 3 | Acridine | 179 | C13H9N | 000260-94-6 | 81 |
| 4 | Phenanthridine | 179 | C13H9N | 000229-87-8 | 74 |
| 5 | Acridine | 179 | C13H9N | 000260-94-6 | 74 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

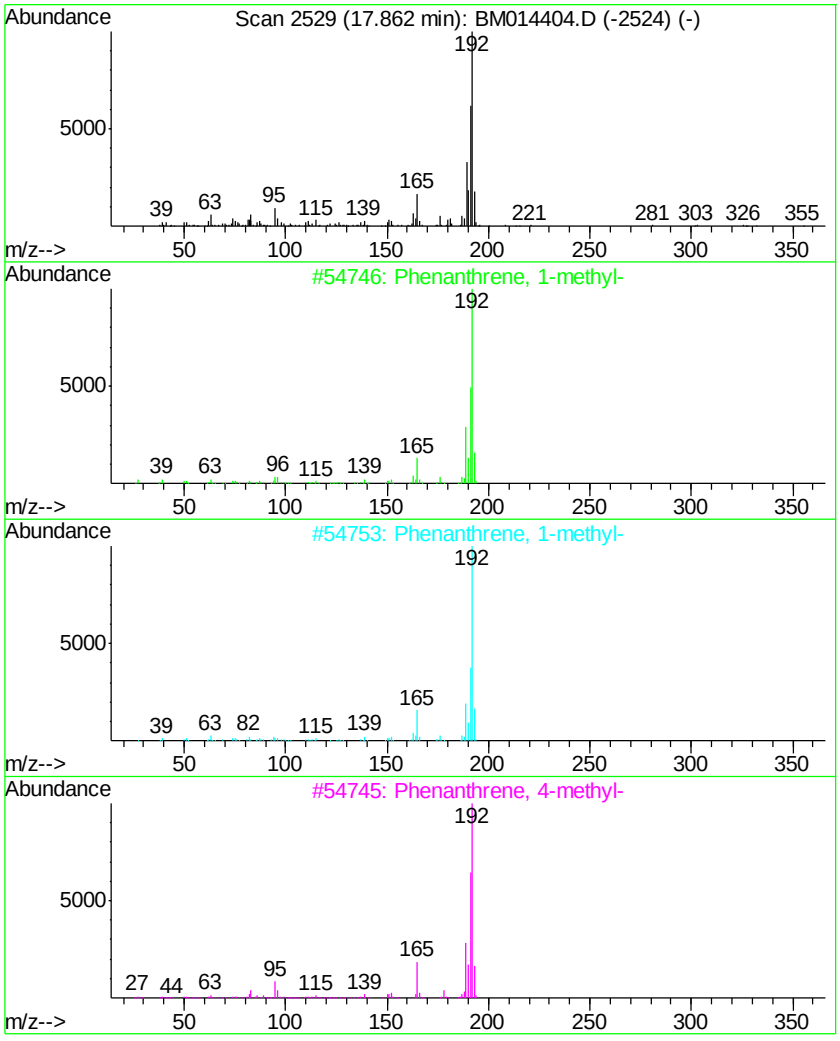
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

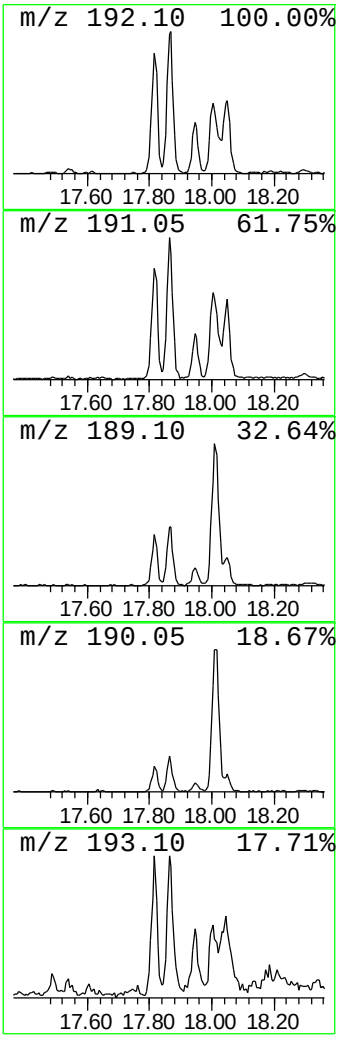
**********

Peak Number 8 Phenanthrene, 1-methyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.86 | 14.04 ng/ul | 889793 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 96 |
| 2 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 94 |
| 3 | Phenanthrene, 4-methyl- | 192 | C15H12 | 000832-64-4 | 94 |
| 4 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 93 |
| 5 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 93 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

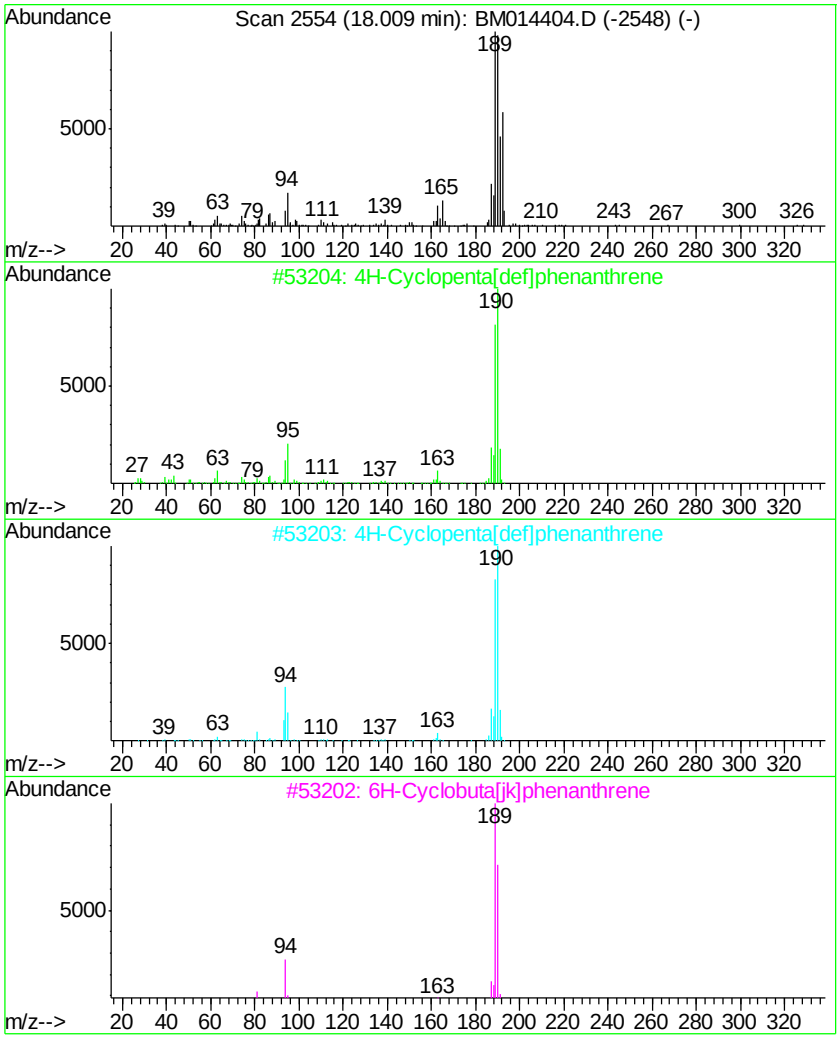
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

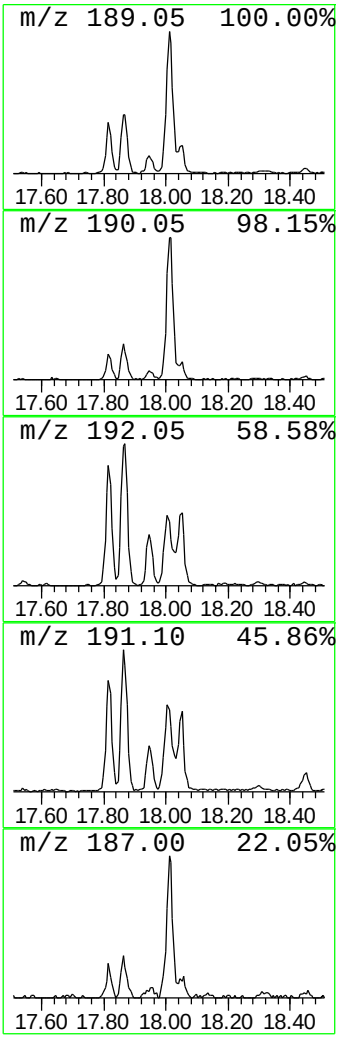
**********

Peak Number 9 4H-Cyclopenta[def]phenanthrene Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.01 | 13.76 ng/ul | 871860 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 64 |
| 2 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 58 |
| 3 | 6H-Cyclobuta[jk]phenanthrene | 190 | C15H10 | 083469-43-6 | 58 |
| 4 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 50 |
| 5 | Thiophene-3-carboxaldehyde, 5-ch... | 190 | C5H4BClO3S | 036155-87-0 | 50 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

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

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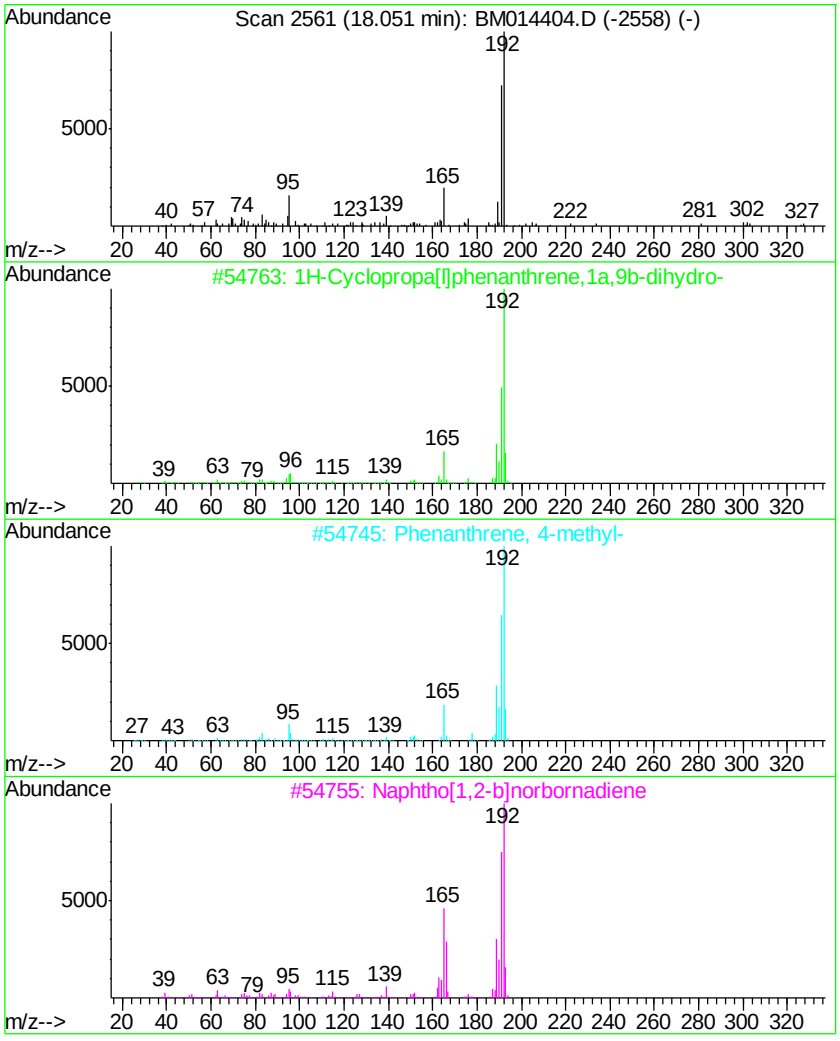
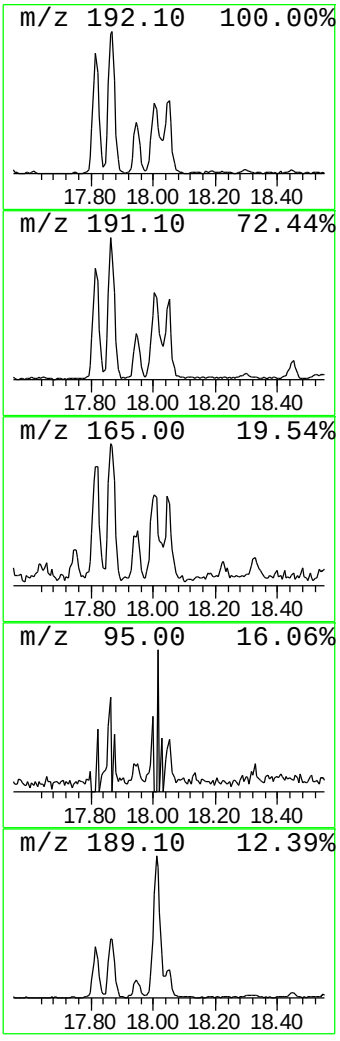
Peak Number 10 1H-Cyclopropa[l]phenanthren... Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.05 | 5.21 ng/ul | 330323 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 80 |
| 2 | Phenanthrene, 4-methyl- | 192 | C15H12 | 000832-64-4 | 80 |
| 3 | Naphtho[1,2-b]norbornadiene | 192 | C15H12 | 1000210-14-8 | 74 |
| 4 | 1H-Indene, 2-phenyl- | 192 | C15H12 | 004505-48-0 | 72 |
| 5 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 72 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

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

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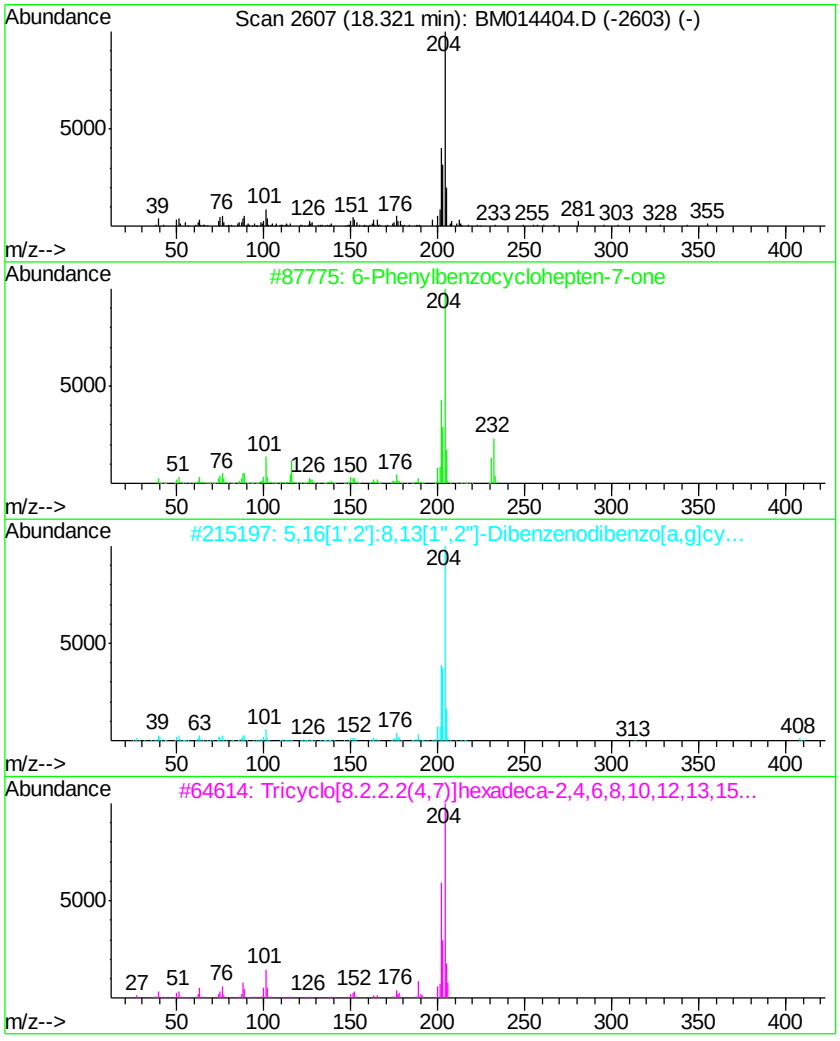
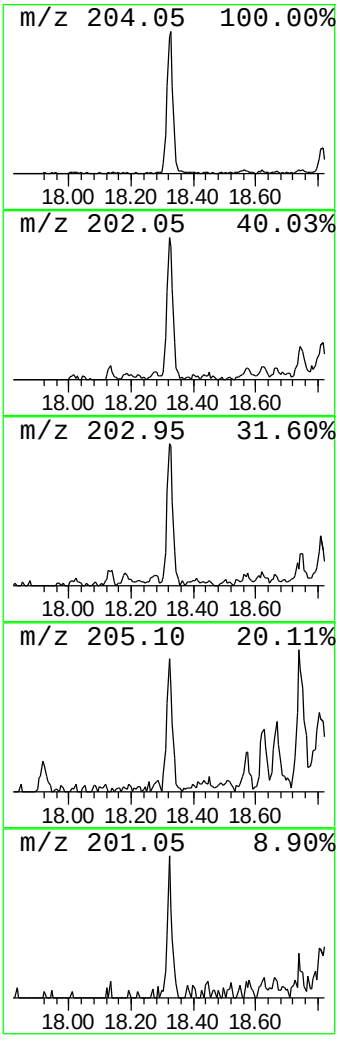
Peak Number 11 6-Phenylbenzocyclohepten-7-one Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.32 | 5.34 ng/ul | 338335 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 6-Phenylbenzocyclohepten-7-one | 232 | C17H12O | 093327-56-1 | 72 |
| 2 | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24 | 005672-97-9 | 72 |
| 3 | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12 | 006572-60-7 | 70 |
| 4 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 70 |
| 5 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 58 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

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

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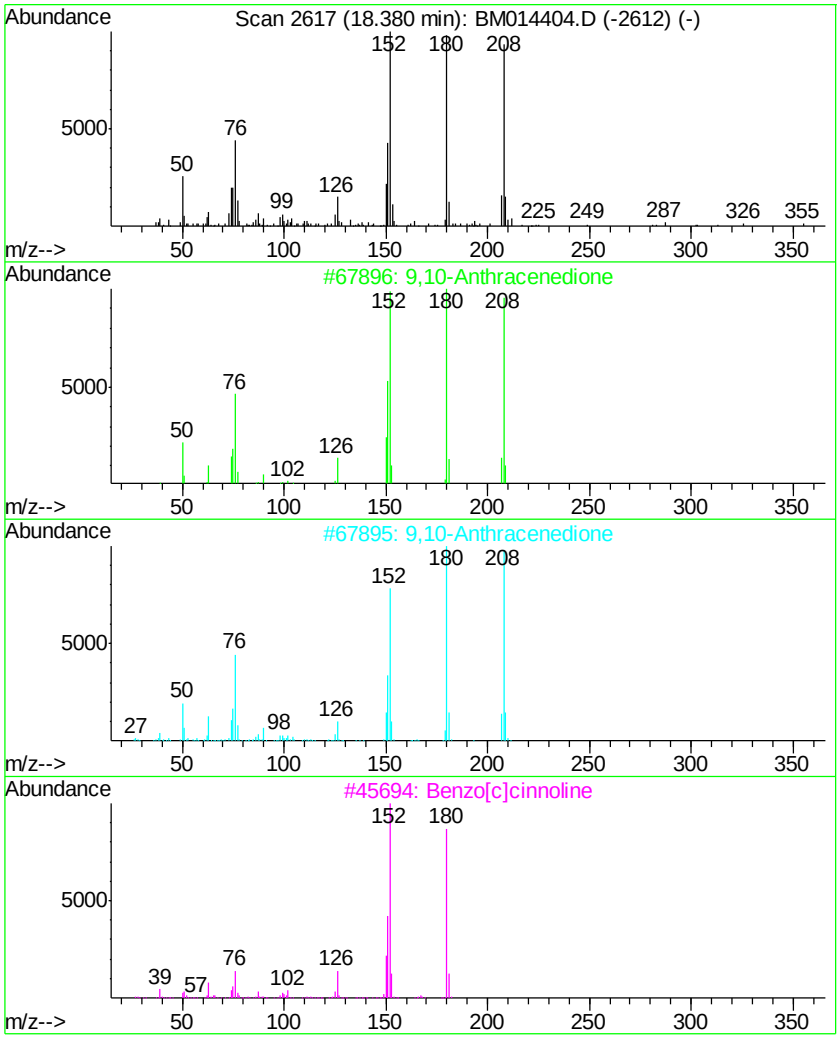
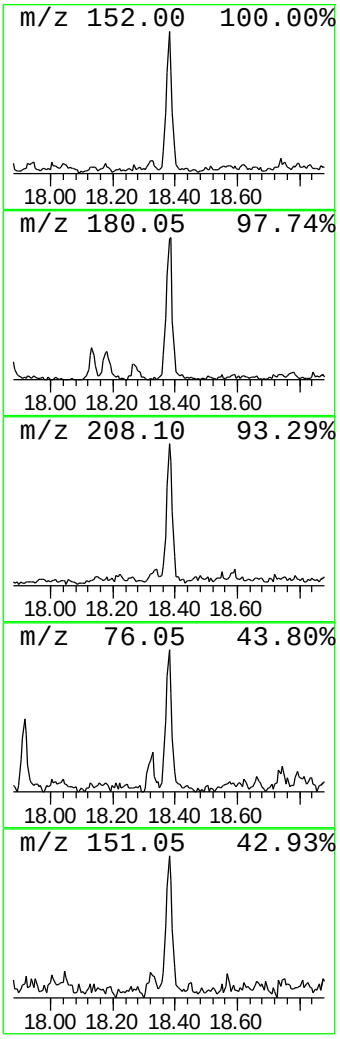
Peak Number 12 9,10-Anthracenedione Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.38 | 5.63 ng/ul | 356978 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 97 |
| 2 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 94 |
| 3 | Benzo[c]cinnoline | 180 | C12H8N2 | 000230-17-1 | 91 |
| 4 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 90 |
| 5 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 83 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

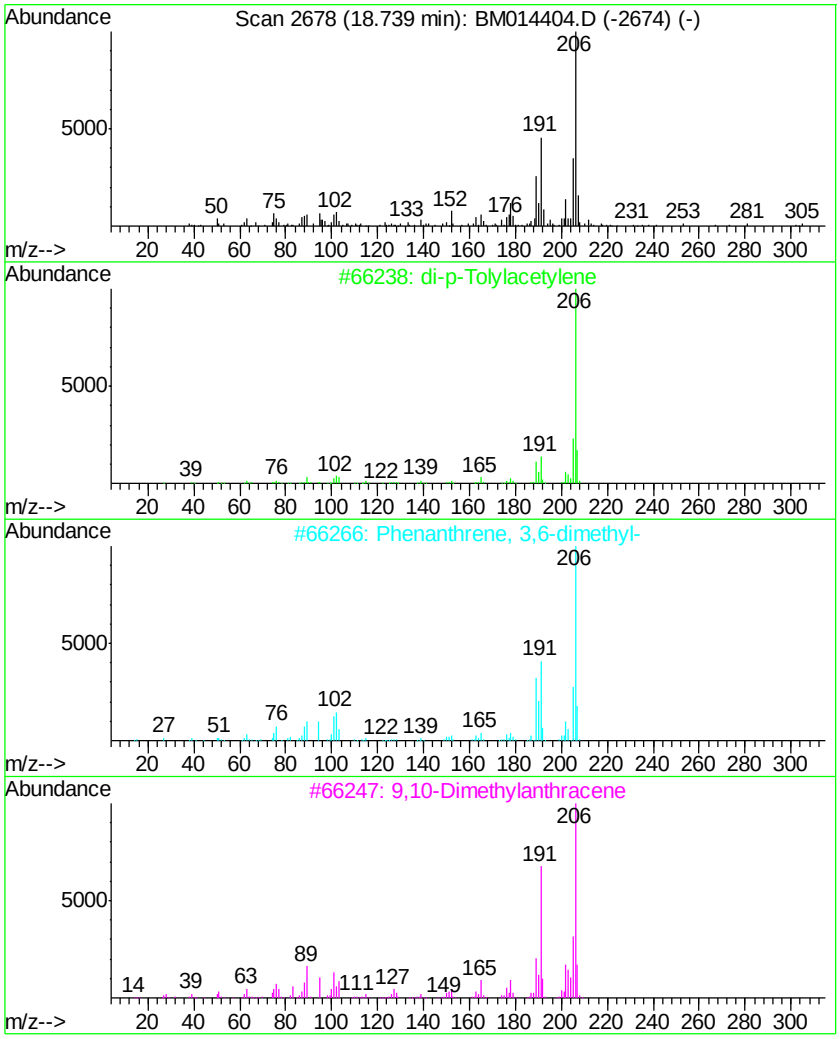
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

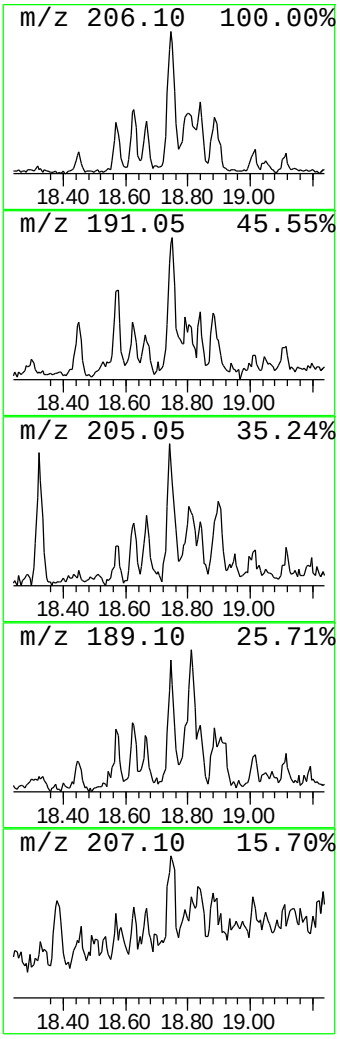
**********

Peak Number 13 di-p-Tolylacetylene Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.74 | 5.10 ng/ul | 322898 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | di-p-Tolylacetylene | 206 | C16H14 | 002789-88-0 | 95 |
| 2 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 94 |
| 3 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 93 |
| 4 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 93 |
| 5 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 91 |



Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

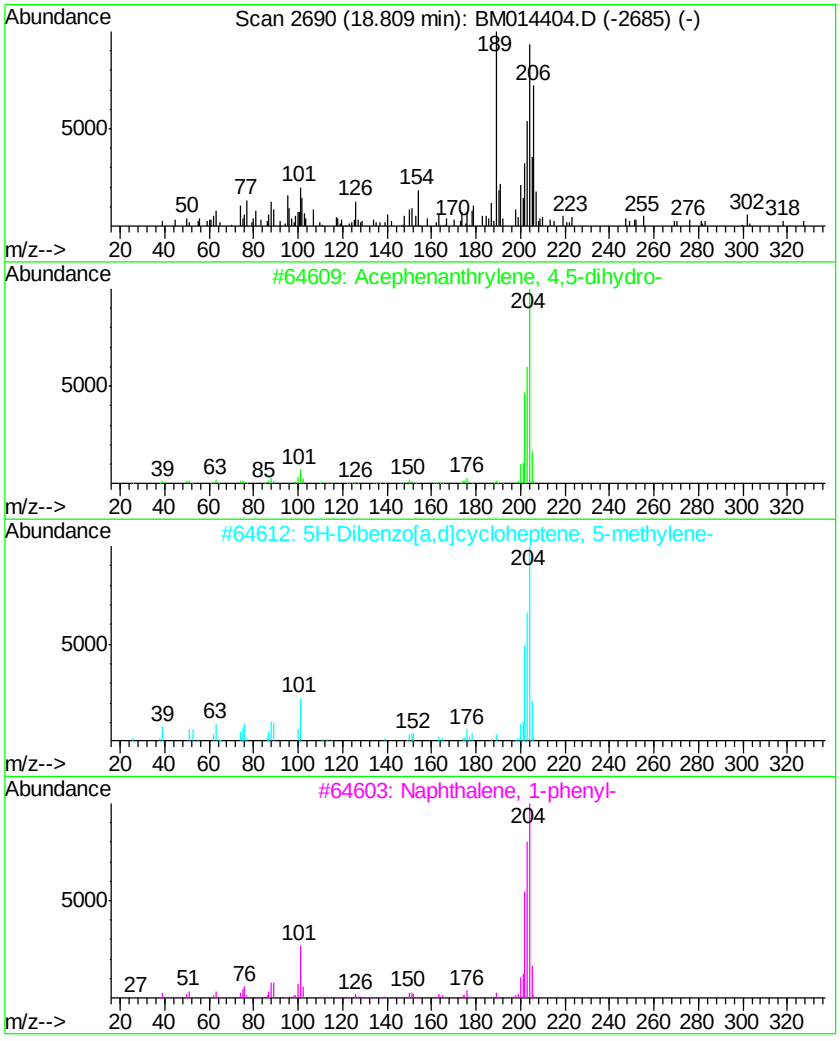
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

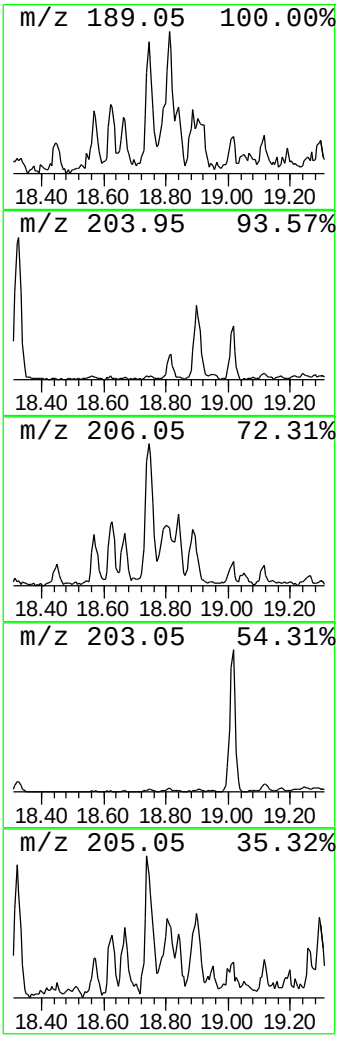
**********

Peak Number 14 unknown-01 Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.81 | 3.49 ng/ul | 221155 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Acephenanthrylene, 4,5-dihydro- | 204 | C16H12 | 006232-48-0 | 46 |
| 2 | 5H-Dibenzo[a,d]cycloheptene, 5-m... | 204 | C16H12 | 002975-79-3 | 46 |
| 3 | Naphthalene, 1-phenyl- | 204 | C16H12 | 000605-02-7 | 38 |
| 4 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 30 |
| 5 | Levamisole | 204 | C11H12N2S | 014769-73-4 | 30 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

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

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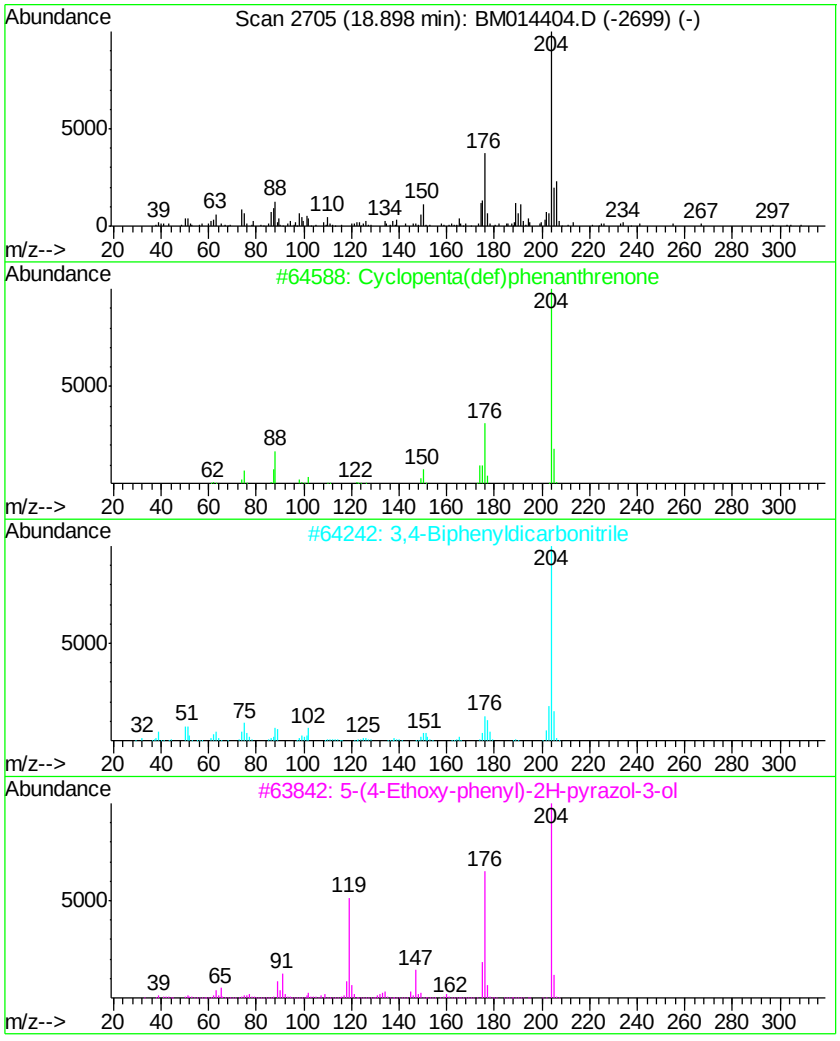
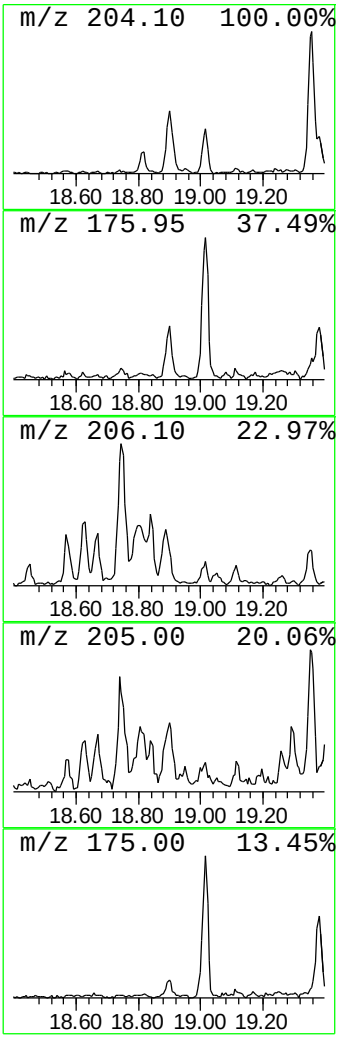
Peak Number 15 Cyclopenta(def)phenanthrenone Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.90 | 5.35 ng/ul | 339335 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(def)phenanthrenone | 204 | C15H8O | 005737-13-3 | 89 |
| 2 | 3,4-Biphenyldicarbonitrile | 204 | C14H8N2 | 004128-63-6 | 53 |
| 3 | 5-(4-Ethoxy-phenyl)-2H-pyrazol-3-ol | 204 | C11H12N2O2 | 1000278-26-8 | 49 |
| 4 | 1,2,4,8-Tetramethylbicyclo[6.3.0... | 204 | C15H24 | 137235-51-9 | 49 |
| 5 | Carbostyril, 3-ethyl-4-hydroxy-7... | 219 | C12H13NO3 | 022048-12-0 | 43 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

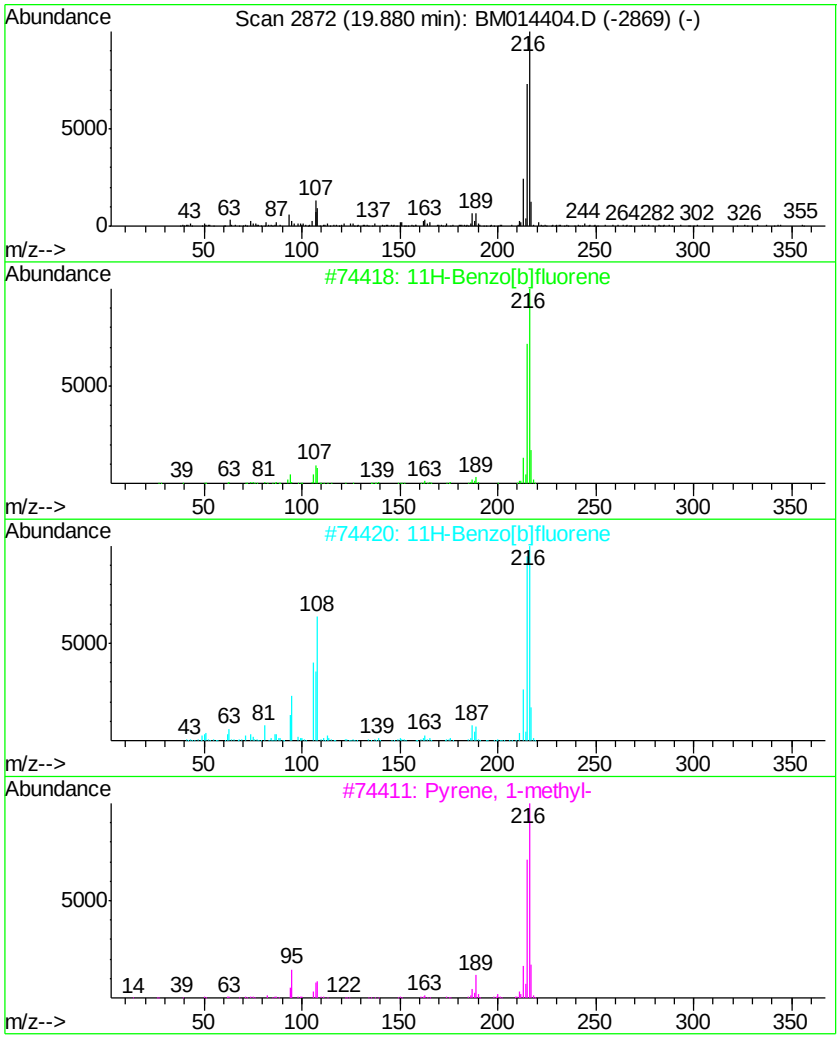
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

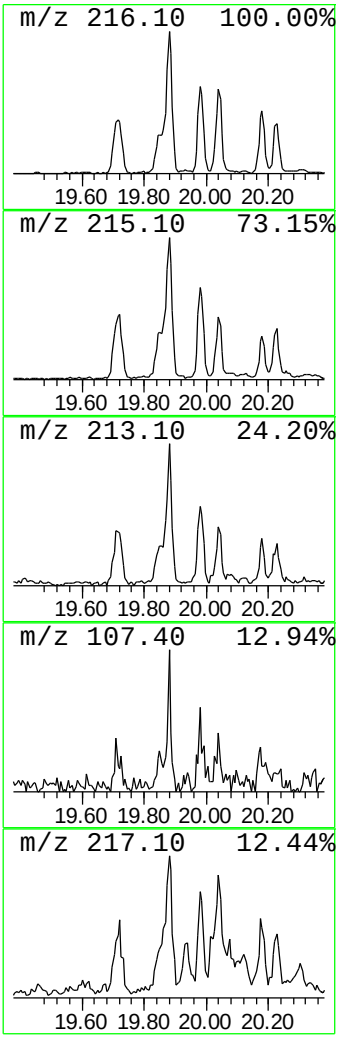
**********

Peak Number 16 11H-Benzo[b]fluorene Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.88 | 3.17 ng/ul | 642918 | Chrysene-d12 | 21.15 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 83 |
| 2 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 81 |
| 3 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 80 |
| 4 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 80 |
| 5 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 72 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

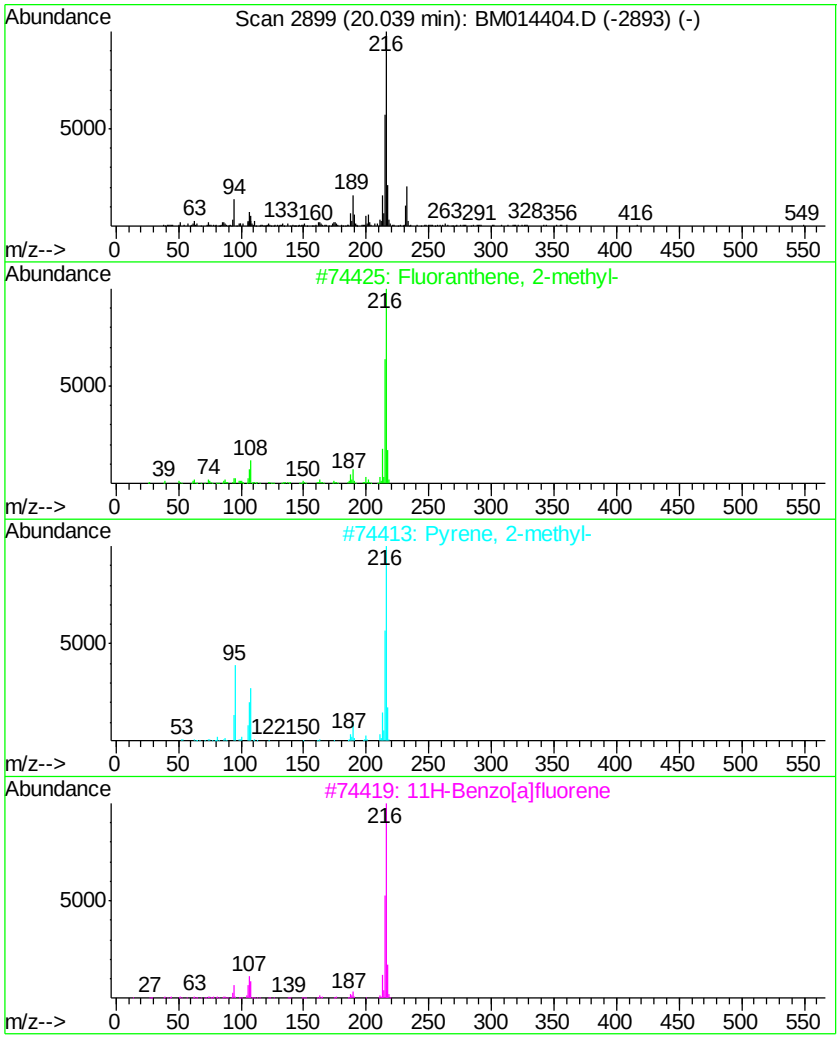
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

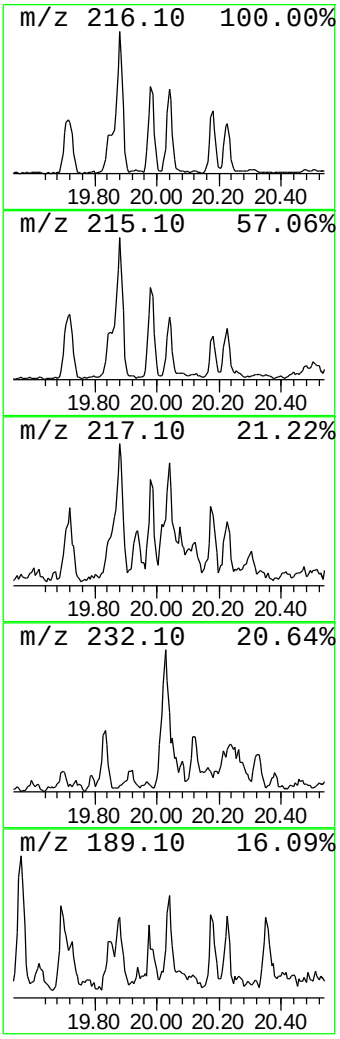
**********

Peak Number 17 Fluoranthene, 2-methyl- Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.04 | 2.65 ng/ul | 537003 | Chrysene-d12 | 21.15 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 93 |
| 2 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 90 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 81 |
| 4 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 81 |
| 5 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 81 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

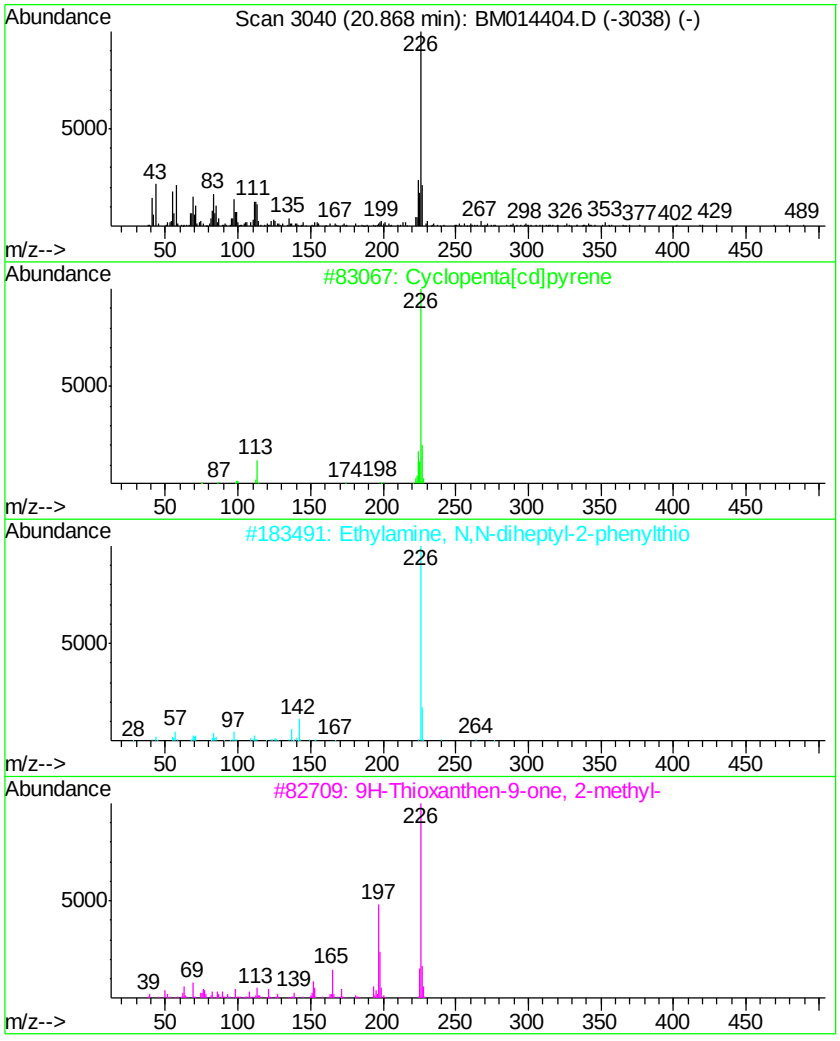
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

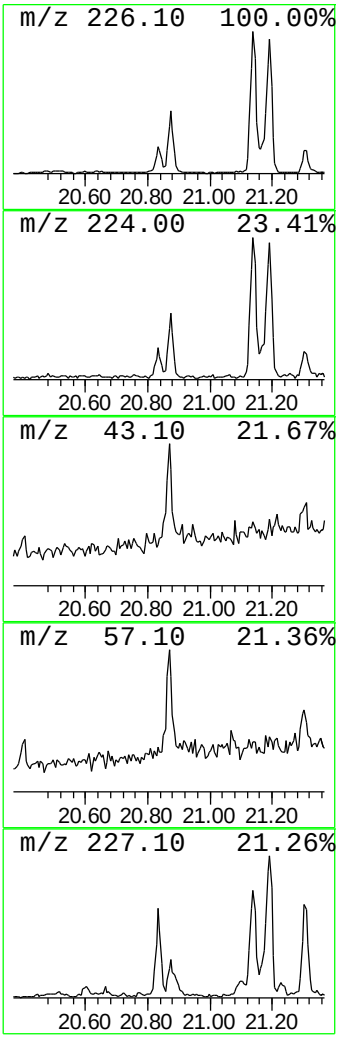
**********

Peak Number 19 Cyclopenta[cd]pyrene Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.87 | 3.04 ng/ul | 615948 | Chrysene-d12 | 21.15 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta[cd]pyrene | 226 | C18H10 | 027208-37-3 | 76 |
| 2 | Ethylamine, N,N-diheptyl-2-phenyl... | 349 | C22H39NS | 1000310-32-6 | 50 |
| 3 | 9H-Thioxanthen-9-one, 2-methyl- | 226 | C14H10OS | 015774-82-0 | 42 |
| 4 | 2,2'-Oxydibenzaldehyde | 226 | C14H10O3 | 049590-51-4 | 40 |
| 5 | p-Anisaldehyde phenylhydrazone | 226 | C14H14N2O | 000622-73-1 | 40 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

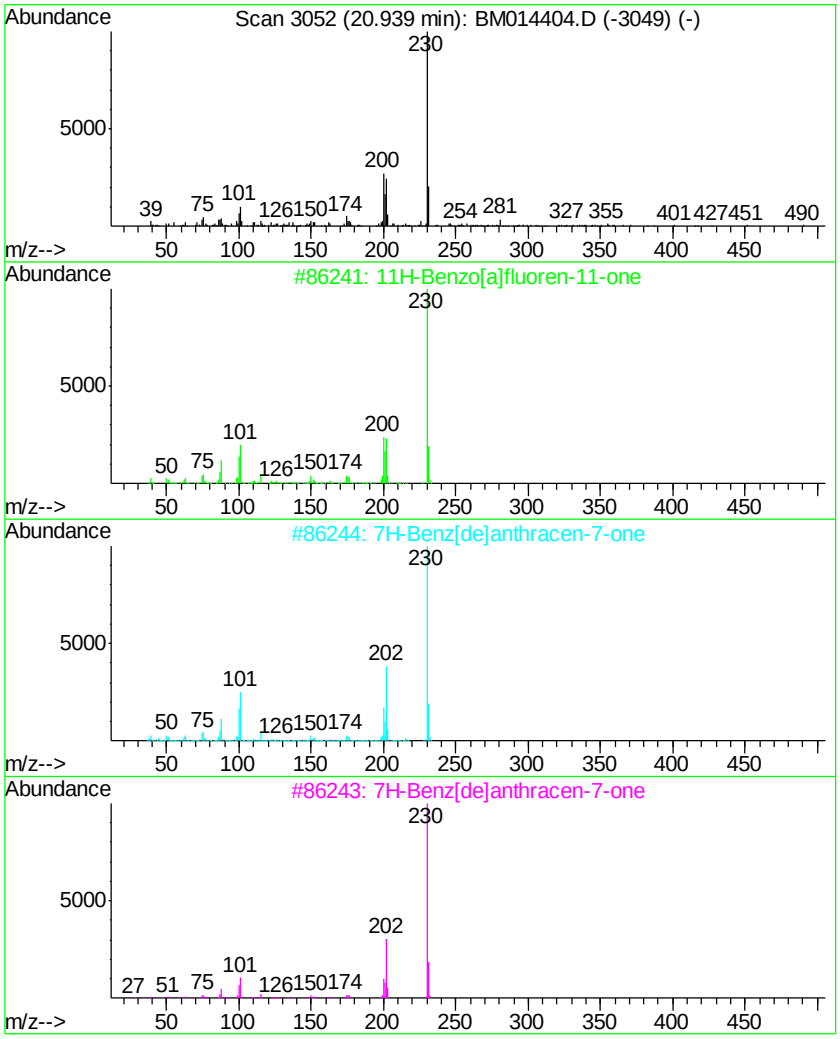
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

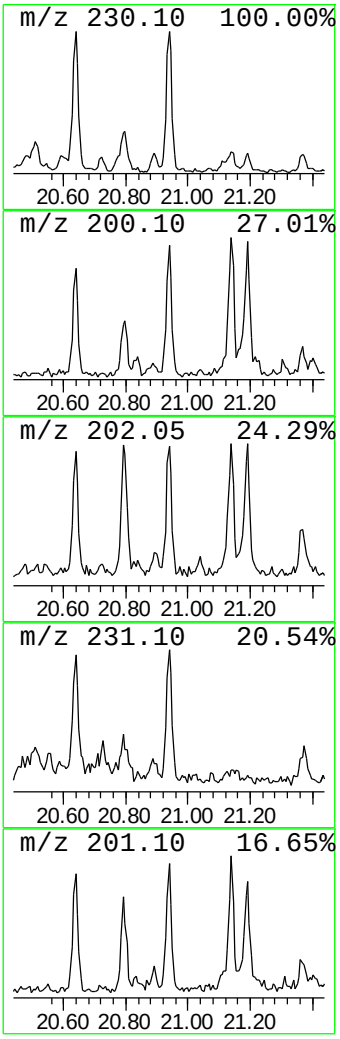
**********

Peak Number 20 11H-Benzo[a]fluoren-11-one Concentration Rank 21

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.94 | 2.10 ng/ul | 424753 | Chrysene-d12 | 21.15 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[a]fluoren-11-one | 230 | C17H10O | 000479-79-8 | 94 |
| 2 | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 87 |
| 3 | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 81 |
| 4 | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 68 |
| 5 | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 64 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM022818\
Data File : BM014404.D
Acq On : 28 Feb 2018 15:12
Operator : SJ/JU
Sample : J1646-22
Misc :
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE600

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA 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 |
| 2,4,6-Cycloheptat... | 15.69 | 2.7 | ng/ul | 173908 | 4 | 16.94 | 1267370 | 20.0 |
| 9H-Fluorene, 1-me... | 16.24 | 2.8 | ng/ul | 175026 | 4 | 16.94 | 1267370 | 20.0 |
| 9H-Fluoren-9-one | 16.60 | 3.2 | ng/ul | 205622 | 4 | 16.94 | 1267370 | 20.0 |
| Phenanthrene, 1,2... | 16.69 | 3.4 | ng/ul | 212935 | 4 | 16.94 | 1267370 | 20.0 |
| Dibenzothiophene | 16.76 | 3.9 | ng/ul | 247456 | 4 | 16.94 | 1267370 | 20.0 |
| Benzo[h]quinoline | 17.14 | 2.7 | ng/ul | 171896 | 4 | 16.94 | 1267370 | 20.0 |
| Phenanthrene, 1-m... | 17.86 | 14.0 | ng/ul | 889793 | 4 | 16.94 | 1267370 | 20.0 |
| 4H-Cyclopenta[def... | 18.01 | 13.8 | ng/ul | 871860 | 4 | 16.94 | 1267370 | 20.0 |
| 1H-Cyclopropa[l]p... | 18.05 | 5.2 | ng/ul | 330323 | 4 | 16.94 | 1267370 | 20.0 |
| 6-Phenylbenzocycl... | 18.32 | 5.3 | ng/ul | 338335 | 4 | 16.94 | 1267370 | 20.0 |
| 9,10-Anthracenedione | 18.38 | 5.6 | ng/ul | 356978 | 4 | 16.94 | 1267370 | 20.0 |
| di-p-Tolylacetylene | 18.74 | 5.1 | ng/ul | 322898 | 4 | 16.94 | 1267370 | 20.0 |
| unknown-01 | 18.81 | 3.5 | ng/ul | 221155 | 4 | 16.94 | 1267370 | 20.0 |
| Cyclopenta(def)ph... | 18.90 | 5.3 | ng/ul | 339335 | 4 | 16.94 | 1267370 | 20.0 |
| 11H-Benzo[b]fluorene | 19.88 | 3.2 | ng/ul | 642918 | 5 | 21.15 | 4049910 | 20.0 |
| Fluoranthene, 2-m... | 20.04 | 2.6 | ng/ul | 537003 | 5 | 21.15 | 4049910 | 20.0 |
| Cyclopenta[cd]pyrene | 20.87 | 3.0 | ng/ul | 615948 | 5 | 21.15 | 4049910 | 20.0 |
| 11H-Benzo[a]fluor... | 20.94 | 2.1 | ng/ul | 424753 | 5 | 21.15 | 4049910 | 20.0 |