LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

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_M\METHODS\SOM02.2-EPA-BM012016.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 | 4.081 | 165 | 169 | 180 | rBV2 | 22643 | 31571 | 1.54% | 0.147% |
| 2 | 5.304 | 372 | 377 | 387 | rBB | 39800 | 79375 | 3.88% | 0.369% |
| 3 | 5.675 | 435 | 440 | 445 | rBB | 24239 | 32567 | 1.59% | 0.151% |
| 4 | 7.657 | 771 | 777 | 784 | rBB | 77655 | 119175 | 5.83% | 0.554% |
| 5 | 10.445 | 1244 | 1251 | 1257 | rBV | 128459 | 212716 | 10.40% | 0.989% |
| 6 | 13.722 | 1804 | 1808 | 1813 | rBV | 35260 | 46491 | 2.27% | 0.216% |
| 7 | 14.004 | 1851 | 1856 | 1865 | rBB | 41287 | 58390 | 2.86% | 0.272% |
| 8 | 14.316 | 1903 | 1909 | 1915 | rBV2 | 212318 | 322329 | 15.77% | 1.499% |
| 9 | 14.380 | 1915 | 1920 | 1925 | rVB | 51110 | 70588 | 3.45% | 0.328% |
| 10 | 15.310 | 2073 | 2078 | 2083 | rBV | 63113 | 85055 | 4.16% | 0.396% |
| 11 | 15.368 | 2083 | 2088 | 2093 | rVB | 32695 | 43772 | 2.14% | 0.204% |
| 12 | 17.068 | 2371 | 2377 | 2380 | rBV | 307720 | 432881 | 21.17% | 2.013% |
| 13 | 17.110 | 2380 | 2384 | 2389 | rVV | 450716 | 607803 | 29.73% | 2.827% |
| 14 | 17.162 | 2389 | 2393 | 2396 | rVV | 73692 | 104650 | 5.12% | 0.487% |
| 15 | 17.198 | 2396 | 2399 | 2406 | rVV | 111100 | 146686 | 7.17% | 0.682% |
| 16 | 17.474 | 2439 | 2446 | 2451 | rVV | 41880 | 57796 | 2.83% | 0.269% |
| 17 | 17.945 | 2519 | 2526 | 2530 | rBV | 48685 | 67529 | 3.30% | 0.314% |
| 18 | 17.992 | 2530 | 2534 | 2539 | rVB | 73774 | 97990 | 4.79% | 0.456% |
| 19 | 18.074 | 2542 | 2548 | 2553 | rBV | 28624 | 38215 | 1.87% | 0.178% |
| 20 | 18.139 | 2553 | 2559 | 2563 | rBV3 | 106098 | 174236 | 8.52% | 0.810% |
| 21 | 18.174 | 2563 | 2565 | 2572 | rVB | 34618 | 40423 | 1.98% | 0.188% |
| 22 | 18.445 | 2605 | 2611 | 2616 | rBV | 42223 | 56737 | 2.78% | 0.264% |
| 23 | 18.498 | 2616 | 2620 | 2625 | rVB | 27118 | 36515 | 1.79% | 0.170% |
| 24 | 18.868 | 2678 | 2683 | 2690 | rBV2 | 29609 | 61830 | 3.02% | 0.288% |
| 25 | 18.933 | 2690 | 2694 | 2697 | rVV2 | 19279 | 32410 | 1.59% | 0.151% |
| 26 | 19.015 | 2703 | 2708 | 2716 | rVB2 | 34682 | 58993 | 2.89% | 0.274% |
| 27 | 19.139 | 2722 | 2729 | 2734 | rBV | 1149861 | 1552471 | 75.93% | 7.220% |
| 28 | 19.192 | 2734 | 2738 | 2742 | rVB2 | 46557 | 56861 | 2.78% | 0.264% |
| 29 | 19.239 | 2742 | 2746 | 2750 | rVB2 | 21309 | 27240 | 1.33% | 0.127% |
| 30 | 19.380 | 2764 | 2770 | 2780 | rVB2 | 32401 | 66574 | 3.26% | 0.310% |
| 31 | 19.474 | 2780 | 2786 | 2788 | rBV3 | 344177 | 516865 | 25.28% | 2.404% |
| 32 | 19.503 | 2788 | 2791 | 2799 | rVB | 1001211 | 1308242 | 63.99% | 6.084% |
| 33 | 19.574 | 2799 | 2803 | 2809 | rVB2 | 48230 | 65438 | 3.20% | 0.304% |
| 34 | 19.680 | 2811 | 2821 | 2826 | rBV | 64673 | 99818 | 4.88% | 0.464% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

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_M\METHODS\SOM02.2-EPA-BM012016.M
Title : SVOA CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 19.745 | 2827 | 2832 | 2837 | rBV | 64563 | 92748 | 4.54% | 0.431% |
| 36 | 19.827 | 2840 | 2846 | 2853 | rBV3 | 65982 | 164612 | 8.05% | 0.766% |
| 37 | 19.886 | 2853 | 2856 | 2861 | rVV | 21883 | 27140 | 1.33% | 0.126% |
| 38 | 19.962 | 2864 | 2869 | 2872 | rBV4 | 42976 | 81977 | 4.01% | 0.381% |
| 39 | 20.003 | 2872 | 2876 | 2881 | rVB | 190993 | 256448 | 12.54% | 1.193% |
| 40 | 20.103 | 2888 | 2893 | 2897 | rBV | 155071 | 200501 | 9.81% | 0.932% |
| 41 | 20.162 | 2897 | 2903 | 2906 | rVV2 | 100110 | 181900 | 8.90% | 0.846% |
| 42 | 20.198 | 2906 | 2909 | 2913 | rVV | 83324 | 102680 | 5.02% | 0.478% |
| 43 | 20.239 | 2913 | 2916 | 2921 | rVB | 30949 | 43302 | 2.12% | 0.201% |
| 44 | 20.303 | 2922 | 2927 | 2930 | rBV | 47727 | 62100 | 3.04% | 0.289% |
| 45 | 20.350 | 2930 | 2935 | 2938 | rVV3 | 50732 | 70042 | 3.43% | 0.326% |
| 46 | 20.633 | 2980 | 2983 | 2987 | rVB2 | 31983 | 46977 | 2.30% | 0.218% |
| 47 | 20.715 | 2993 | 2997 | 3000 | rBV4 | 34430 | 56813 | 2.78% | 0.264% |
| 48 | 20.756 | 3000 | 3004 | 3011 | rVB | 102781 | 137891 | 6.74% | 0.641% |
| 49 | 20.921 | 3024 | 3032 | 3035 | rBV3 | 130899 | 206767 | 10.11% | 0.962% |
| 50 | 20.962 | 3035 | 3039 | 3042 | rVV | 109835 | 157487 | 7.70% | 0.732% |
| 51 | 21.003 | 3042 | 3046 | 3050 | rVV2 | 115467 | 214619 | 10.50% | 0.998% |
| 52 | 21.056 | 3050 | 3055 | 3062 | rVB2 | 112098 | 179434 | 8.78% | 0.834% |
| 53 | 21.162 | 3065 | 3073 | 3074 | rBV | 46908 | 79377 | 3.88% | 0.369% |
| 54 | 21.186 | 3074 | 3077 | 3081 | rVV | 246986 | 286528 | 14.01% | 1.332% |
| 55 | 21.268 | 3081 | 3091 | 3096 | rVV3 | 972520 | 2044556 | 100.00% | 9.508% |
| 56 | 21.315 | 3096 | 3099 | 3109 | rVB | 783322 | 994711 | 48.65% | 4.626% |
| 57 | 21.392 | 3109 | 3112 | 3115 | rBV3 | 22190 | 31038 | 1.52% | 0.144% |
| 58 | 21.433 | 3115 | 3119 | 3126 | rVV | 193601 | 276495 | 13.52% | 1.286% |
| 59 | 21.492 | 3126 | 3129 | 3132 | rVV4 | 33211 | 59414 | 2.91% | 0.276% |
| 60 | 21.539 | 3134 | 3137 | 3141 | rVV | 70458 | 96417 | 4.72% | 0.448% |
| 61 | 21.592 | 3141 | 3146 | 3151 | rVB2 | 107960 | 171837 | 8.40% | 0.799% |
| 62 | 21.639 | 3151 | 3154 | 3158 | rBV3 | 24356 | 31249 | 1.53% | 0.145% |
| 63 | 21.727 | 3163 | 3169 | 3172 | rBV3 | 27150 | 52394 | 2.56% | 0.244% |
| 64 | 21.768 | 3172 | 3176 | 3179 | rVV2 | 43333 | 65670 | 3.21% | 0.305% |
| 65 | 21.827 | 3179 | 3186 | 3189 | rVV | 145641 | 254195 | 12.43% | 1.182% |
| 66 | 21.874 | 3191 | 3194 | 3200 | rVV | 87064 | 162107 | 7.93% | 0.754% |
| 67 | 21.939 | 3203 | 3205 | 3208 | rVV2 | 48513 | 69589 | 3.40% | 0.324% |
| 68 | 21.980 | 3208 | 3212 | 3215 | rVV2 | 65216 | 105411 | 5.16% | 0.490% |
| 69 | 22.027 | 3215 | 3220 | 3222 | rVV2 | 107863 | 184599 | 9.03% | 0.858% |
| 70 | 22.056 | 3222 | 3225 | 3231 | rVV4 | 120614 | 198256 | 9.70% | 0.922% |
| 71 | 22.115 | 3231 | 3235 | 3240 | rVB2 | 61798 | 101720 | 4.98% | 0.473% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

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_M\METHODS\SOM02.2-EPA-BM012016.M
Title : SVOA CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 22.197 | 3245 | 3249 | 3255 | rVB4 | 15734 | 29688 | 1.45% | 0.138% |
| 73 | 22.309 | 3263 | 3268 | 3272 | rBV3 | 78343 | 164219 | 8.03% | 0.764% |
| 74 | 22.592 | 3311 | 3316 | 3322 | rBV2 | 57310 | 117202 | 5.73% | 0.545% |
| 75 | 22.756 | 3341 | 3344 | 3350 | rVB | 21543 | 34351 | 1.68% | 0.160% |
| 76 | 22.850 | 3350 | 3360 | 3364 | rBV | 634400 | 1522608 | 74.47% | 7.081% |
| 77 | 23.015 | 3382 | 3388 | 3393 | rBV | 116508 | 189015 | 9.24% | 0.879% |
| 78 | 23.144 | 3405 | 3410 | 3418 | rBV2 | 46960 | 130031 | 6.36% | 0.605% |
| 79 | 23.227 | 3418 | 3424 | 3427 | rBV5 | 28731 | 66193 | 3.24% | 0.308% |
| 80 | 23.321 | 3433 | 3440 | 3445 | rBV | 354665 | 666306 | 32.59% | 3.099% |
| 81 | 23.368 | 3445 | 3448 | 3451 | rVV | 73005 | 117922 | 5.77% | 0.548% |
| 82 | 23.415 | 3451 | 3456 | 3463 | rVB | 525479 | 956474 | 46.78% | 4.448% |
| 83 | 23.515 | 3465 | 3473 | 3477 | rBV | 311918 | 611125 | 29.89% | 2.842% |
| 84 | 23.562 | 3477 | 3481 | 3488 | rVB2 | 174929 | 336243 | 16.45% | 1.564% |
| 85 | 23.768 | 3511 | 3516 | 3520 | rBV2 | 25106 | 54471 | 2.66% | 0.253% |
| 86 | 23.991 | 3550 | 3554 | 3560 | rVV3 | 22357 | 45017 | 2.20% | 0.209% |
| 87 | 24.056 | 3560 | 3565 | 3574 | rVB4 | 25919 | 62294 | 3.05% | 0.290% |
| 88 | 24.374 | 3613 | 3619 | 3632 | rVB2 | 37730 | 101095 | 4.94% | 0.470% |
| 89 | 24.609 | 3655 | 3659 | 3672 | rVB4 | 15372 | 41747 | 2.04% | 0.194% |
| 90 | 25.074 | 3733 | 3738 | 3743 | rBV3 | 19452 | 40699 | 1.99% | 0.189% |
| 91 | 25.456 | 3792 | 3803 | 3807 | rBV2 | 34884 | 104886 | 5.13% | 0.488% |
| 92 | 25.515 | 3809 | 3813 | 3821 | rVV | 35156 | 97324 | 4.76% | 0.453% |
| 93 | 25.603 | 3822 | 3828 | 3834 | rVV7 | 19223 | 57788 | 2.83% | 0.269% |
| 94 | 25.674 | 3836 | 3840 | 3845 | rVV2 | 20382 | 47486 | 2.32% | 0.221% |
| 95 | 25.762 | 3845 | 3855 | 3865 | rVV | 241068 | 694622 | 33.97% | 3.230% |
| 96 | 25.868 | 3867 | 3873 | 3883 | rVB | 17669 | 47525 | 2.32% | 0.221% |
| 97 | 26.015 | 3890 | 3898 | 3905 | rBV2 | 44413 | 115174 | 5.63% | 0.536% |
| 98 | 26.103 | 3907 | 3913 | 3922 | rBV | 30086 | 86167 | 4.21% | 0.401% |
| 99 | 26.450 | 3961 | 3972 | 3991 | rBV | 134703 | 462570 | 22.62% | 2.151% |
| 100 | 26.815 | 4027 | 4034 | 4050 | rVB2 | 36346 | 143648 | 7.03% | 0.668% |

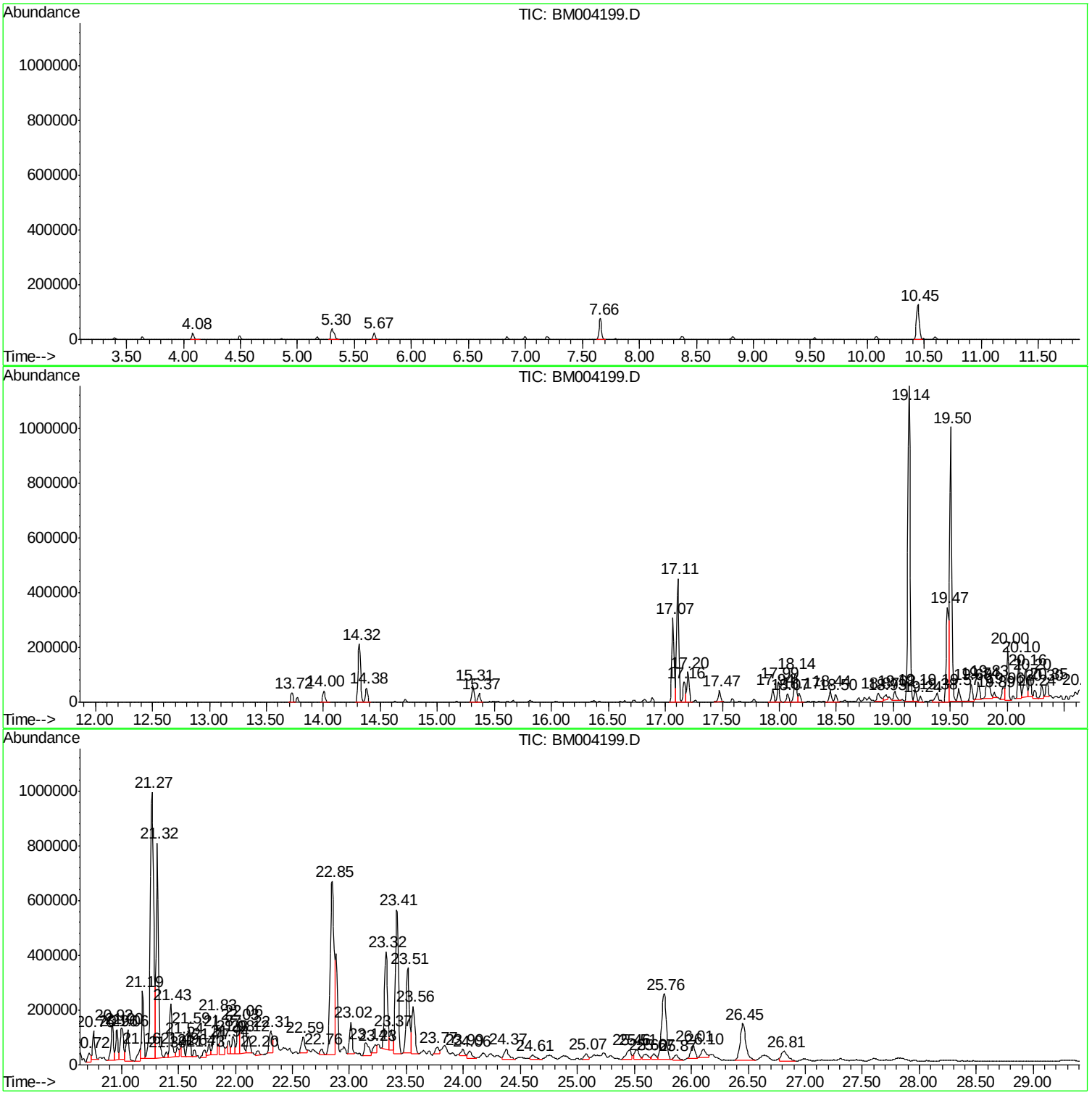
Sum of corrected areas: 21503123

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :**
BNA_M
**ClientSampleId :**
C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

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



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

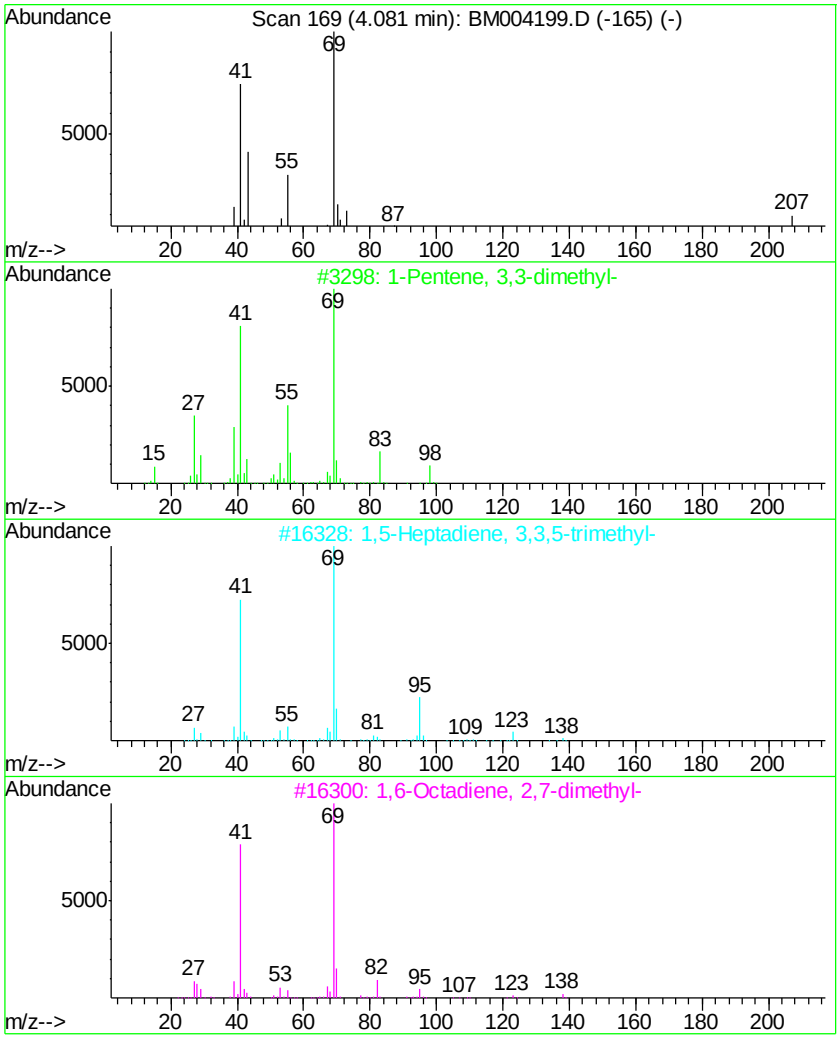
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

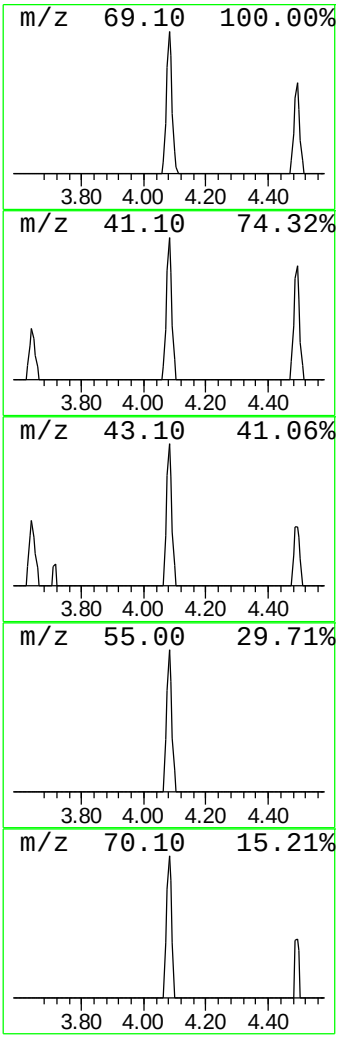
**********

Peak Number 1 (DEL) Alkane: Cyclic4.08 Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.08 | 5.30 ng/ul | 31571 | 1,4-Dichlorobenzene-d4 | 7.66 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Pentene, 3,3-dimethyl- | 98 | C7H14 | 003404-73-7 | 64 |
| 2 | 1,5-Heptadiene, 3,3,5-trimethyl- | 138 | C10H18 | 074630-29-8 | 39 |
| 3 | 1,6-Octadiene, 2,7-dimethyl- | 138 | C10H18 | 040195-09-3 | 39 |
| 4 | 1,5-Heptadiene, 2,3,6-trimethyl- | 138 | C10H18 | 033501-88-1 | 9 |
| 5 | 1-Hexene, 3,5-dimethyl- | 112 | C8H16 | 007423-69-0 | 9 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

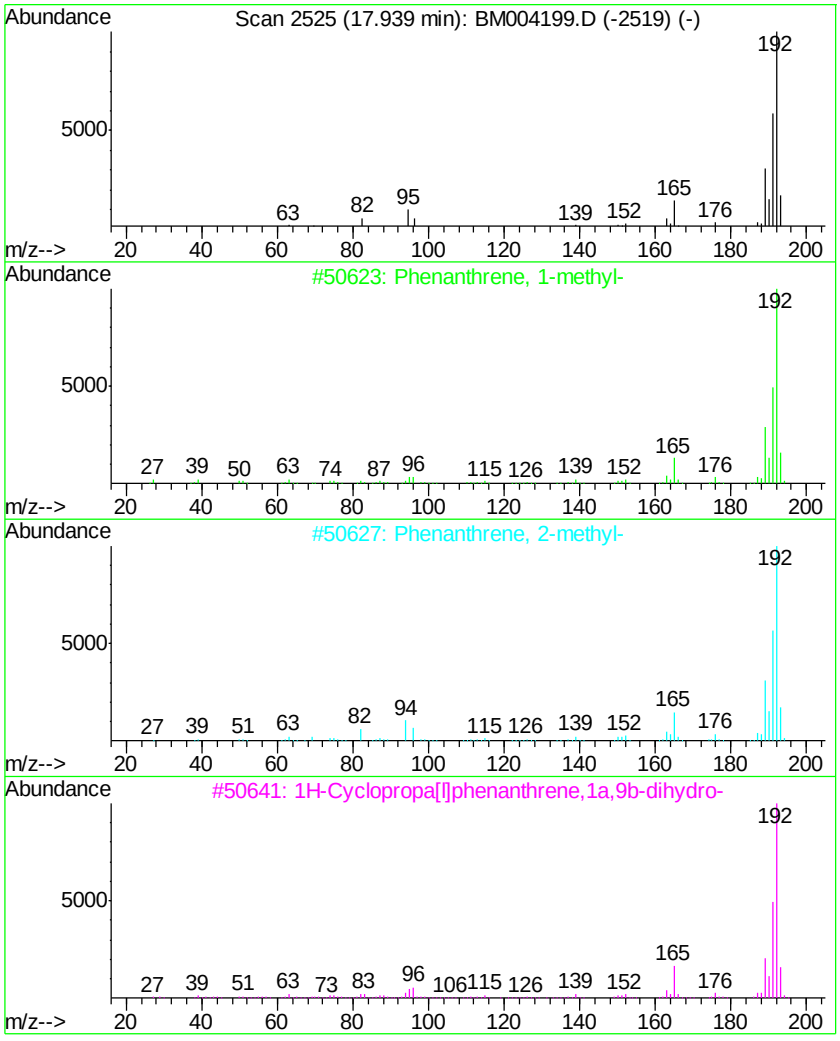
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

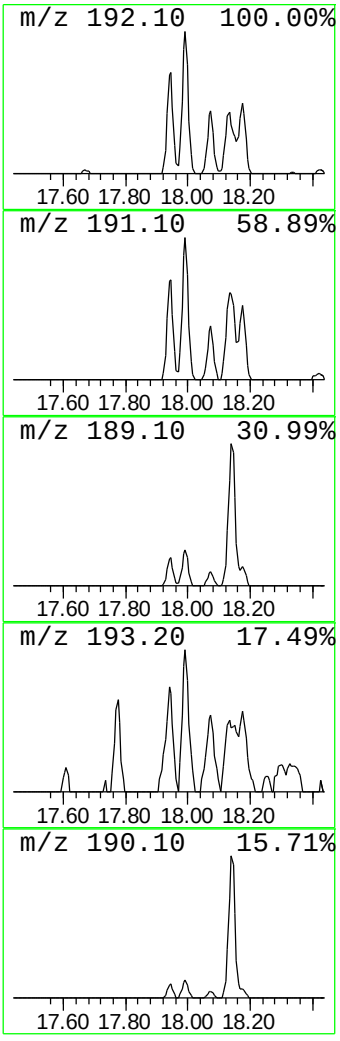
**********

Peak Number 4 Phenanthrene, 1-methyl- Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.94 | 3.12 ng/ul | 67529 | Phenanthrene-d10 | 17.07 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 96 |
| 2 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 96 |
| 3 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 95 |
| 4 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 95 |
| 5 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 94 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

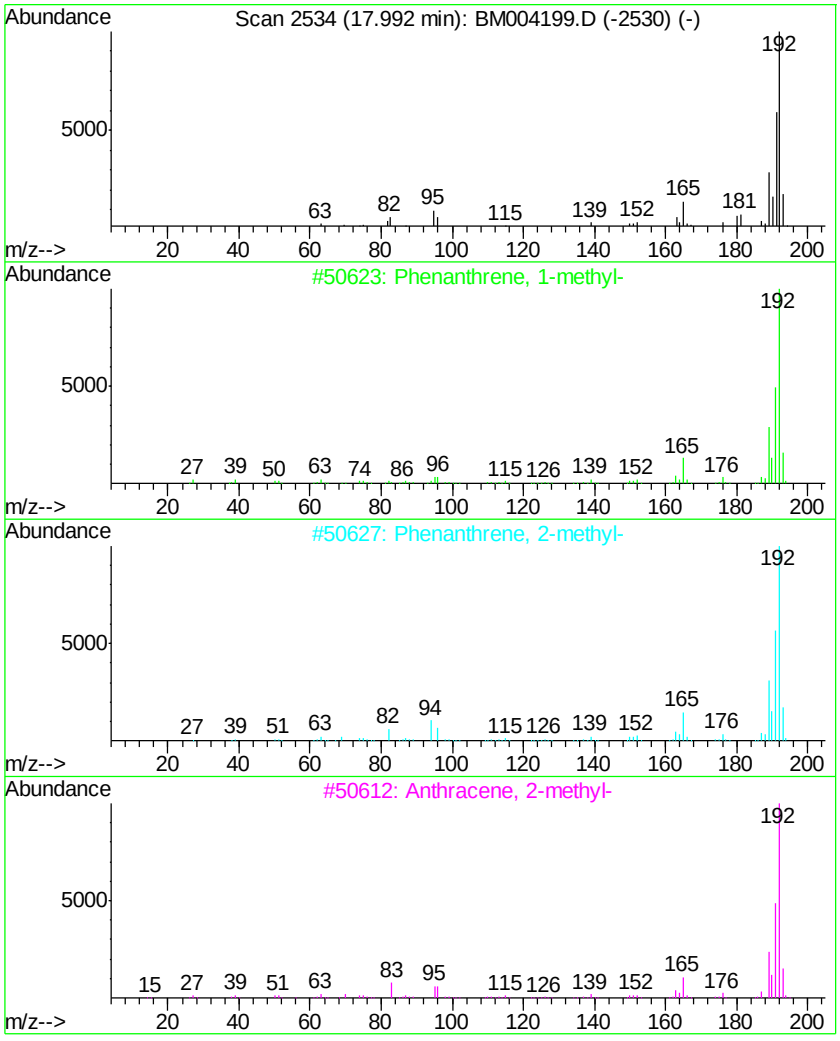
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

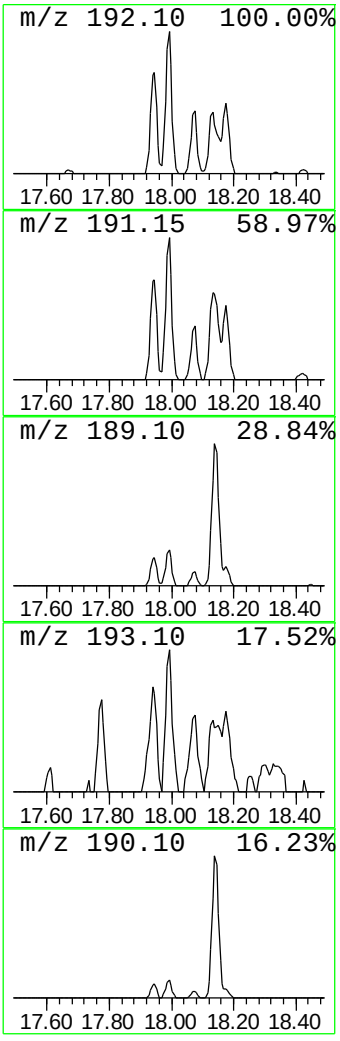
**********

Peak Number 5 Phenanthrene, 2-methyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.99 | 4.53 ng/ul | 97990 | Phenanthrene-d10 | 17.07 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 97 |
| 2 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 96 |
| 3 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 96 |
| 4 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 95 |
| 5 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 95 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

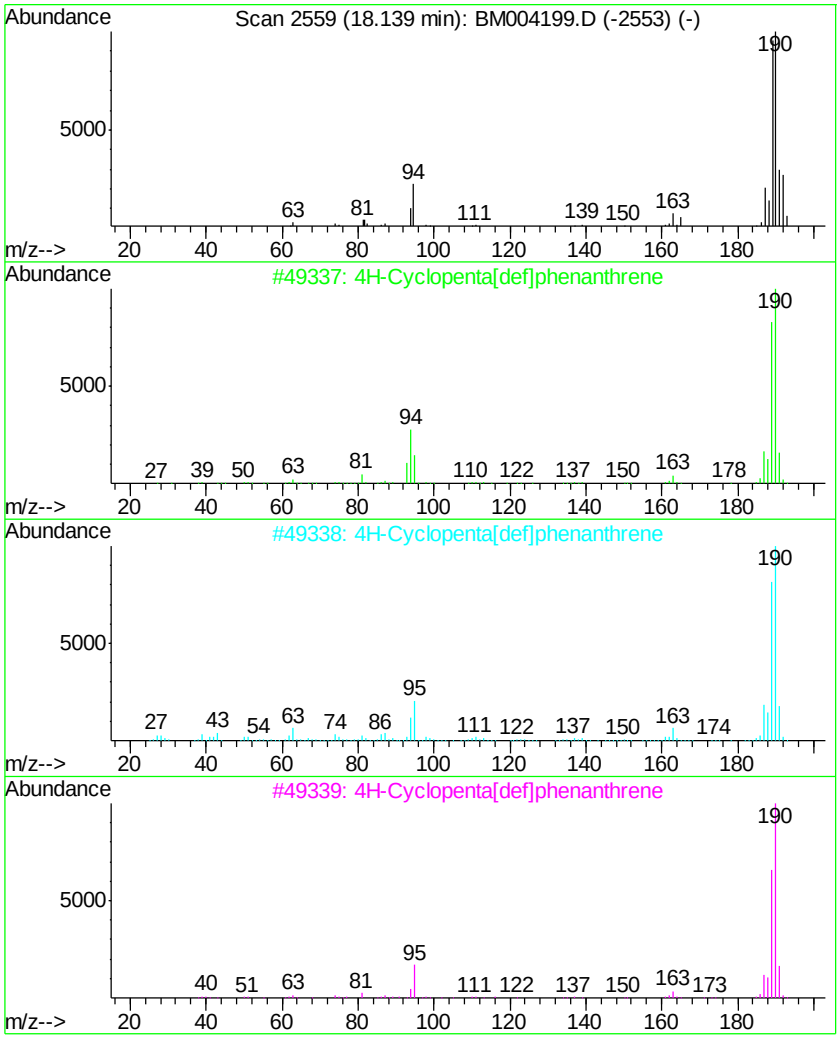
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

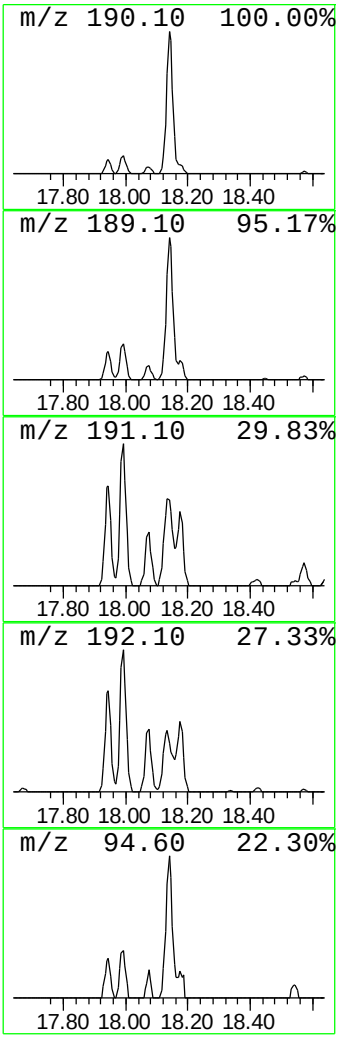
**********

Peak Number 6 4H-Cyclopenta[def]phenanthrene Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.14 | 8.05 ng/ul | 174236 | Phenanthrene-d10 | 17.07 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 93 |
| 2 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 76 |
| 3 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 76 |
| 4 | Methyl diselenide | 190 | C2H6Se2 | 007101-31-7 | 55 |
| 5 | 6H-Cyclobuta[jk]phenanthrene | 190 | C15H10 | 083469-43-6 | 50 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

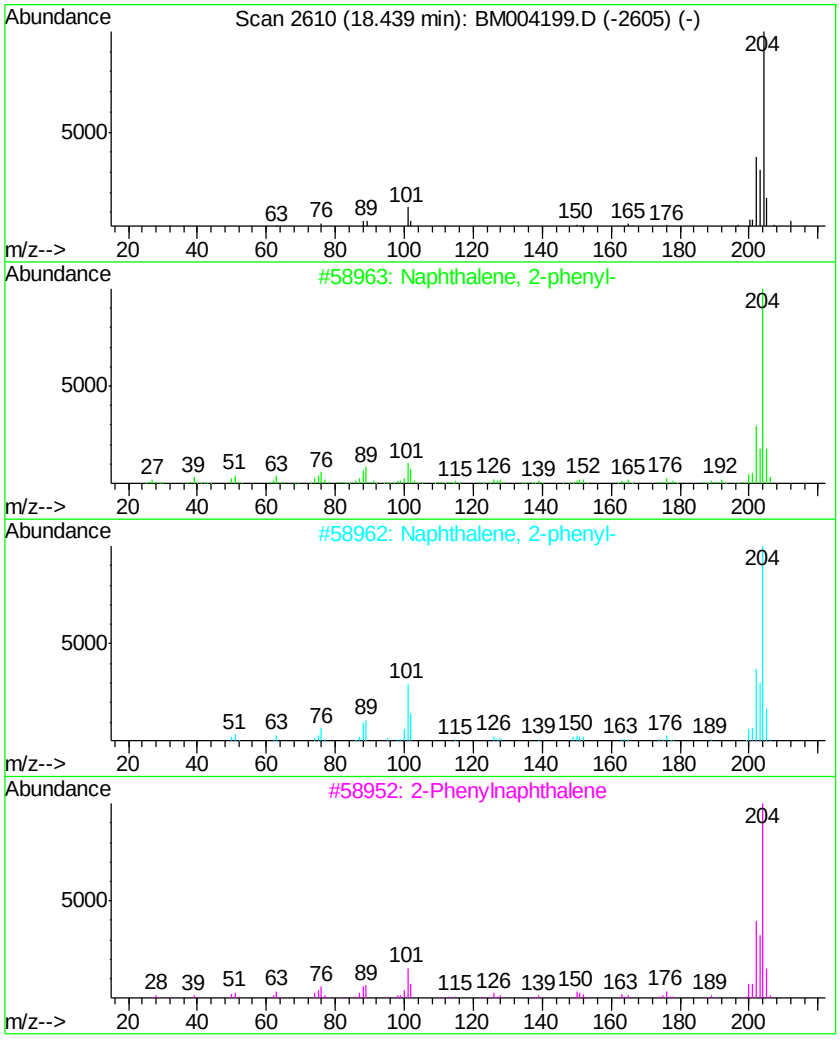
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

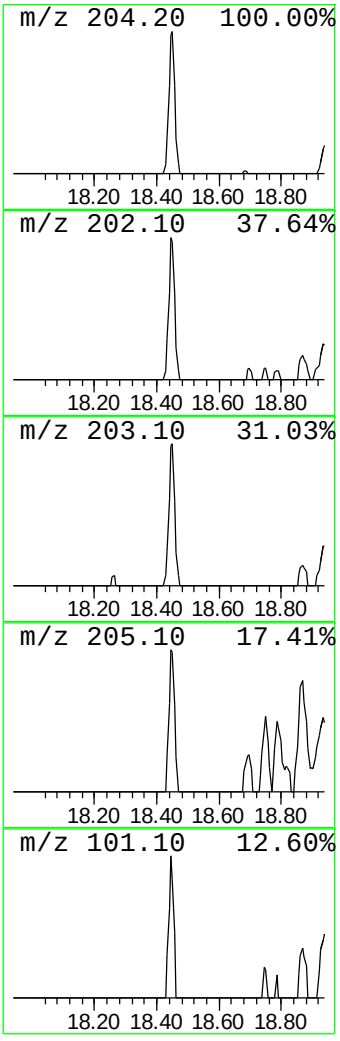
**********

Peak Number 7 Naphthalene, 2-phenyl- Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.44 | 2.62 ng/ul | 56737 | Phenanthrene-d10 | 17.07 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 91 |
| 2 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 86 |
| 3 | 2-Phenylnaphthalene | 204 | C16H12 | 035465-71-5 | 86 |
| 4 | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24 | 005672-97-9 | 86 |
| 5 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 70 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

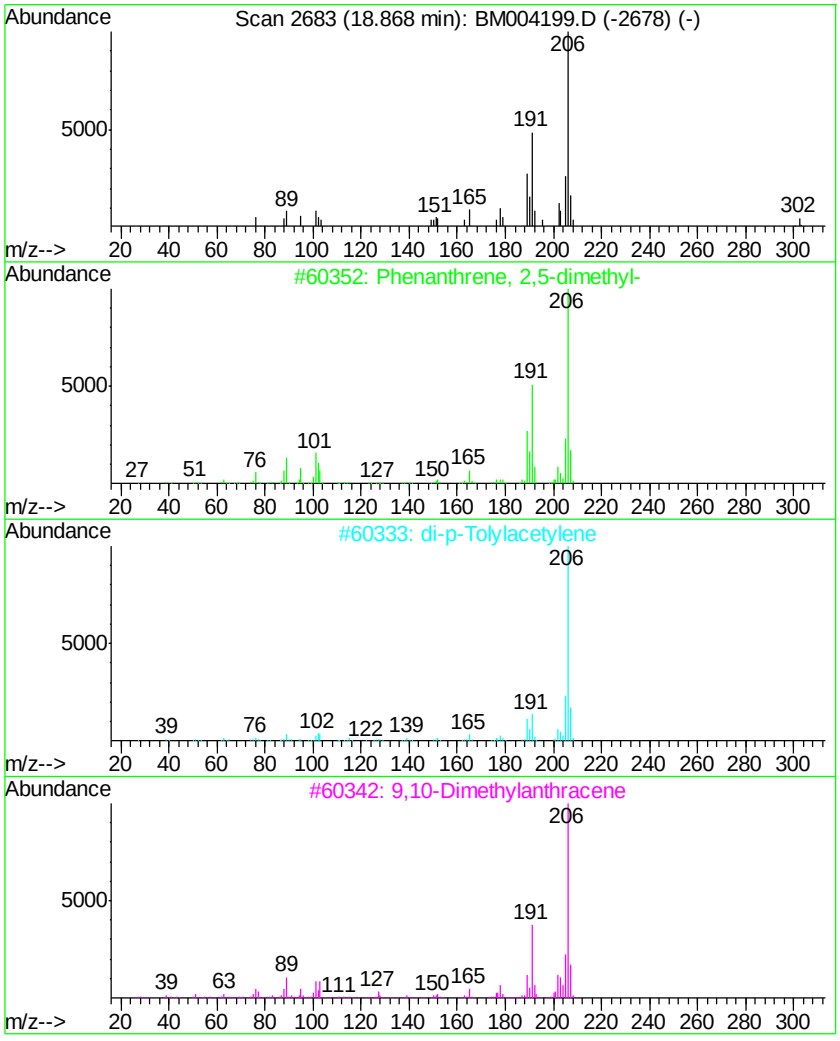
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

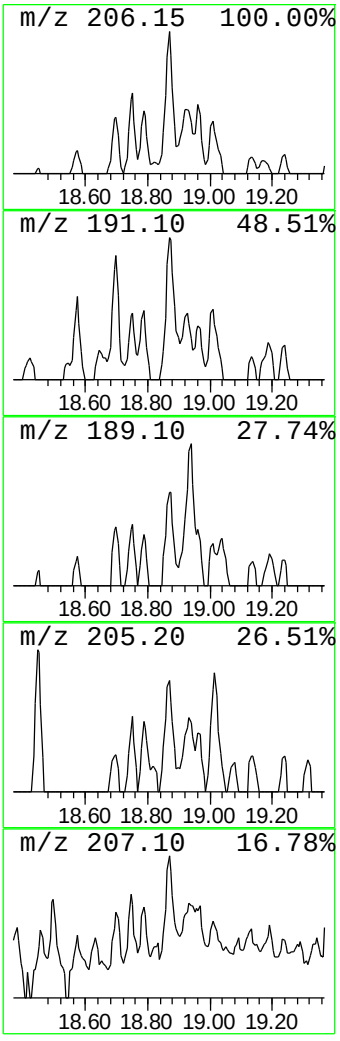
**********

Peak Number 8 Phenanthrene, 2,5-dimethyl- Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.87 | 2.86 ng/ul | 61830 | Phenanthrene-d10 | 17.07 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 95 |
| 2 | di-p-Tolylacetylene | 206 | C16H14 | 002789-88-0 | 91 |
| 3 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 91 |
| 4 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 89 |
| 5 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 87 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

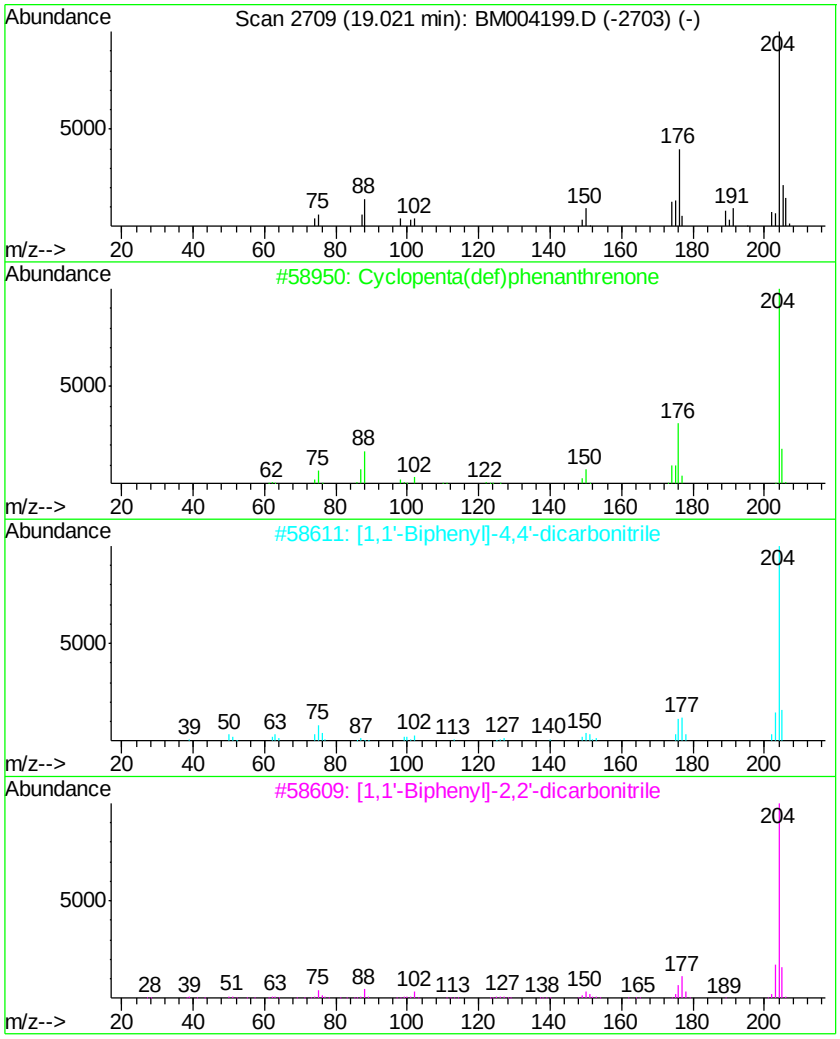
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

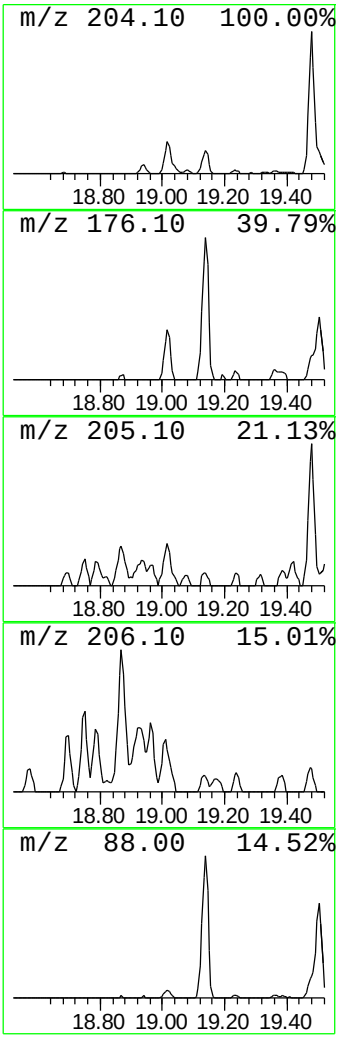
**********

Peak Number 9 Cyclopenta(def)phenanthrenone Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.02 | 2.73 ng/ul | 58993 | Phenanthrene-d10 | 17.07 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(def)phenanthrenone | 204 | C15H8O | 005737-13-3 | 94 |
| 2 | [1,1'-Biphenyl]-4,4'-dicarbonitrile | 204 | C14H8N2 | 001591-30-6 | 50 |
| 3 | [1,1'-Biphenyl]-2,2'-dicarbonitrile | 204 | C14H8N2 | 004341-02-0 | 49 |
| 4 | [1,1'-Biphenyl]-2,2'-dicarbonitrile | 204 | C14H8N2 | 004341-02-0 | 43 |
| 5 | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12 | 006572-60-7 | 43 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

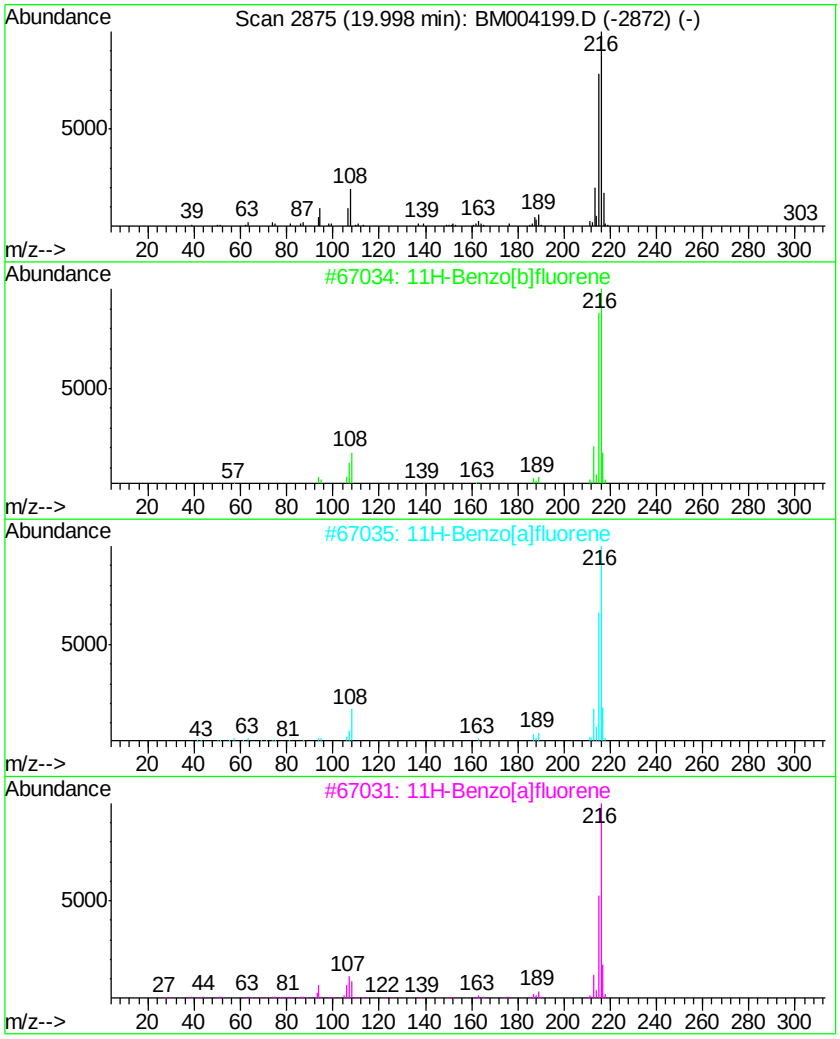
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

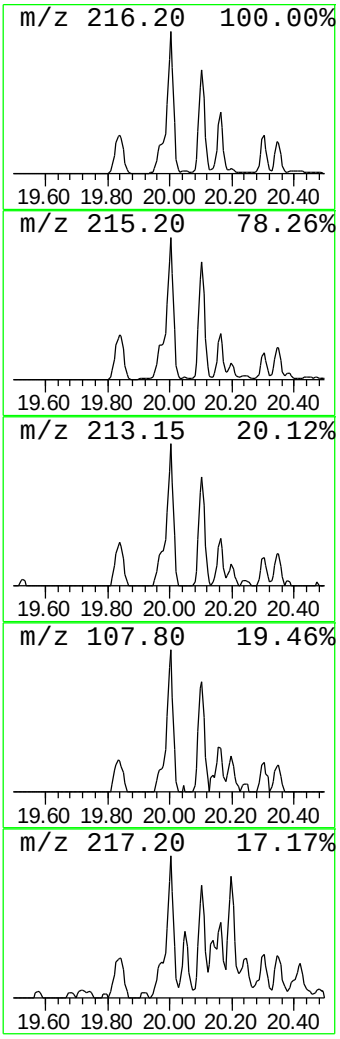
**********

Peak Number 10 11H-Benzo[b]fluorene Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.00 | 2.51 ng/ul | 256448 | Chrysene-d12 | 21.28 |

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



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

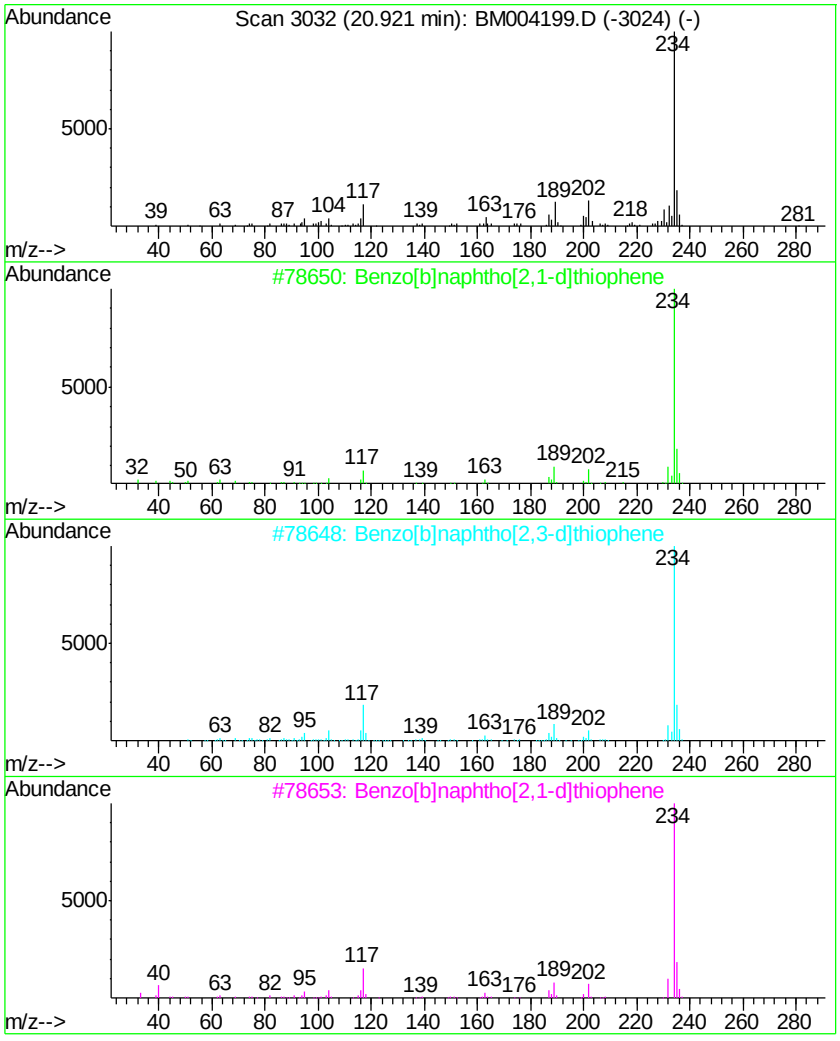
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

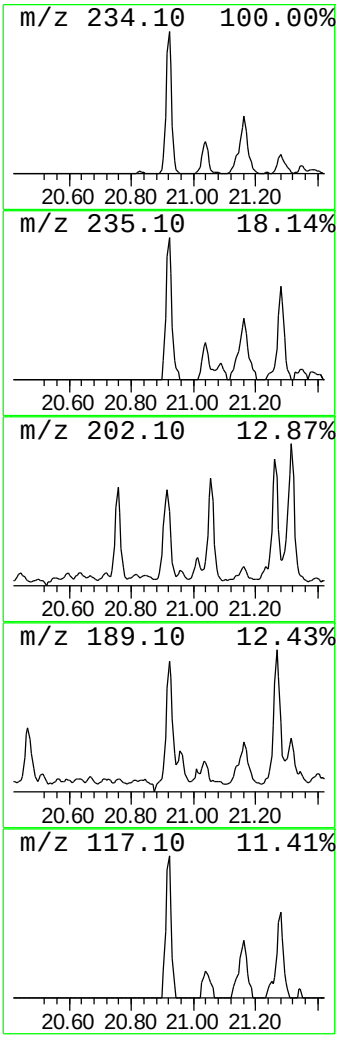
**********

Peak Number 11 Benzo[b]naphtho[2,1-d]thiop... Concentration Rank 25

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.92 | 2.02 ng/ul | 206767 | Chrysene-d12 | 21.28 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[b]naphtho[2,1-d]thiophene | 234 | C16H10S | 000239-35-0 | 96 |
| 2 | Benzo[b]naphtho[2,3-d]thiophene | 234 | C16H10S | 000243-46-9 | 94 |
| 3 | Benzo[b]naphtho[2,1-d]thiophene | 234 | C16H10S | 000239-35-0 | 93 |
| 4 | Benzo[b]naphtho[2,3-d]thiophene | 234 | C16H10S | 000243-46-9 | 91 |
| 5 | Benzo[b]naphtho[2,1-d]thiophene | 234 | C16H10S | 000239-35-0 | 91 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

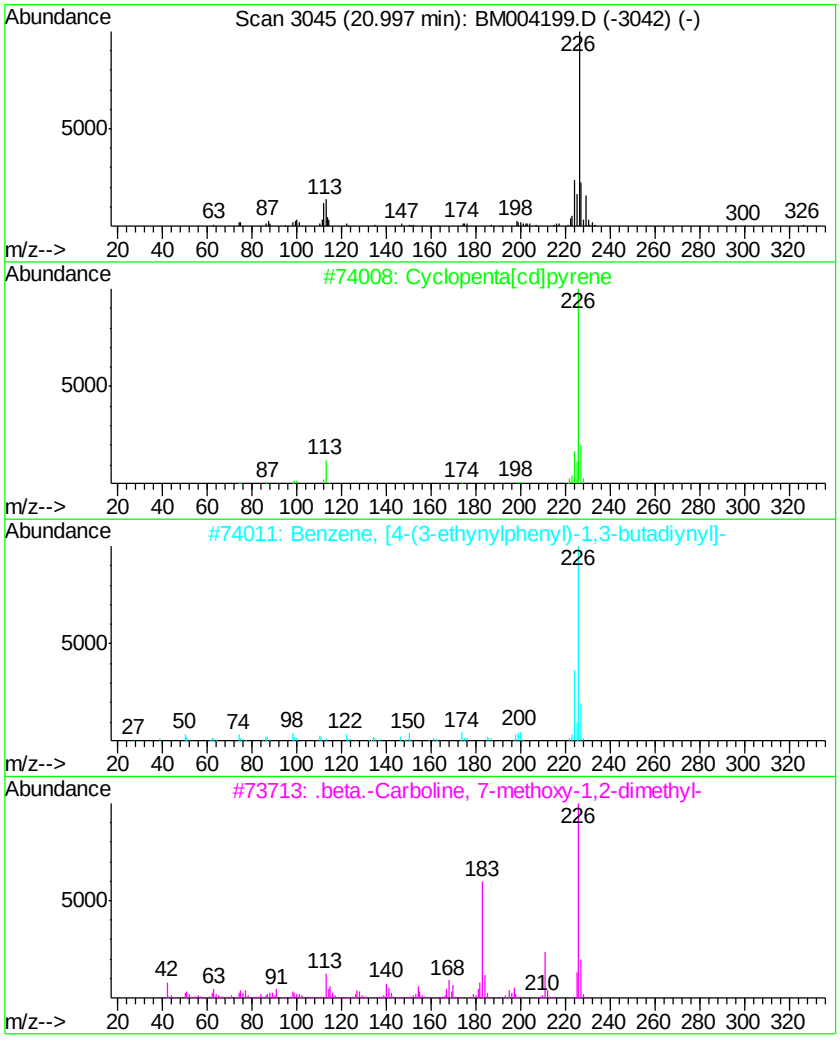
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

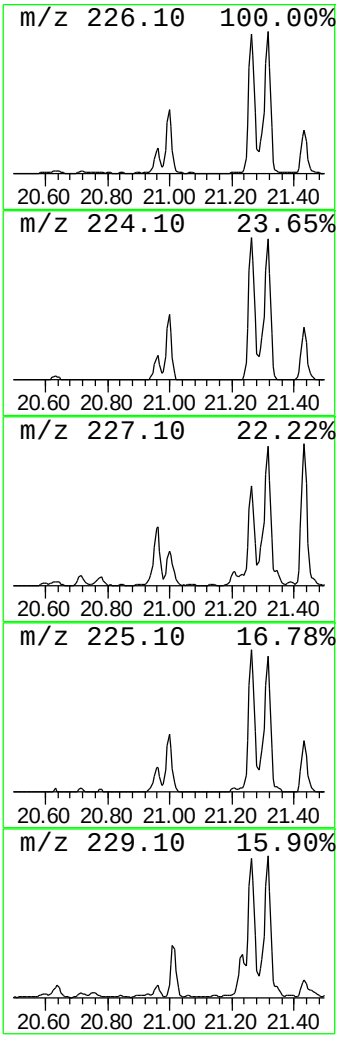
**********

Peak Number 12 unknown-01 Concentration Rank 23

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 21.00 | 2.10 ng/ul | 214619 | Chrysene-d12 | 21.28 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta[cd]pyrene | 226 | C18H10 | 027208-37-3 | 46 |
| 2 | Benzene, [4-(3-ethynylphenyl)-1,... | 226 | C18H10 | 1000115-87-3 | 43 |
| 3 | .beta.-Carboline, 7-methoxy-1,2-... | 226 | C14H14N2O | 006519-18-2 | 43 |
| 4 | 1,1,3,3-Tetrachloro-1,3-disilacy... | 224 | C2H4Cl4Si2 | 002146-97-6 | 38 |
| 5 | Benz[c]acridine | 229 | C17H11N | 000225-51-4 | 38 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

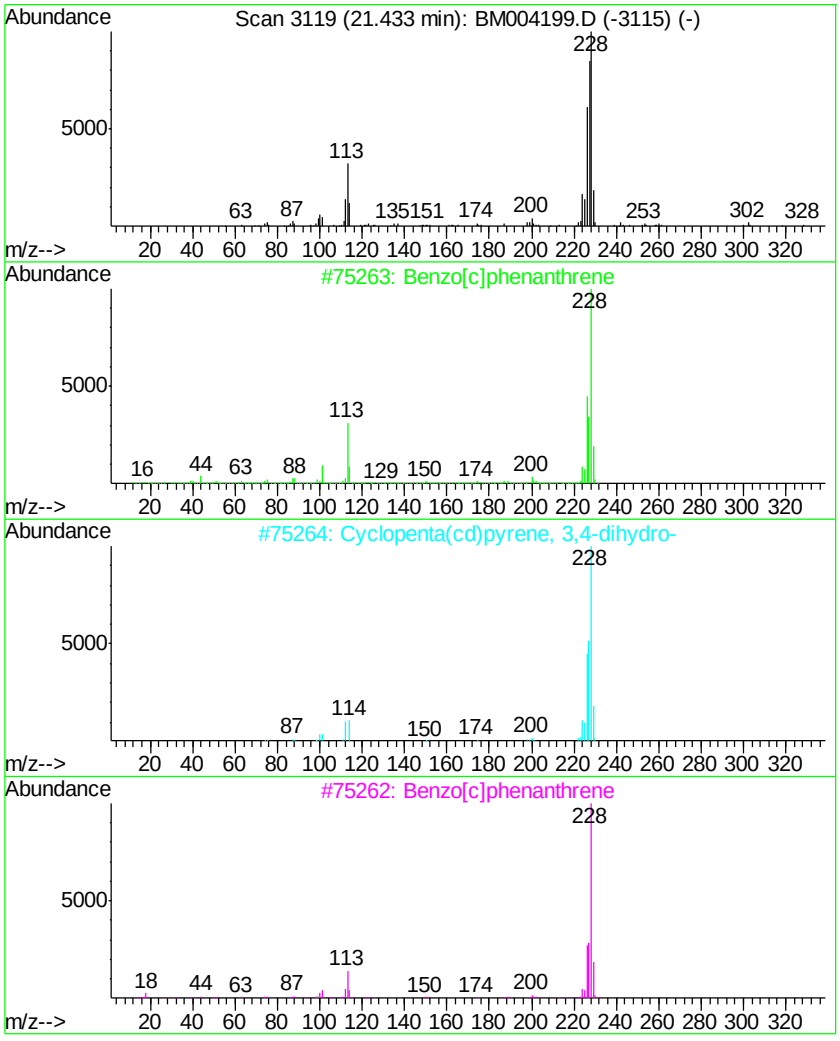
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

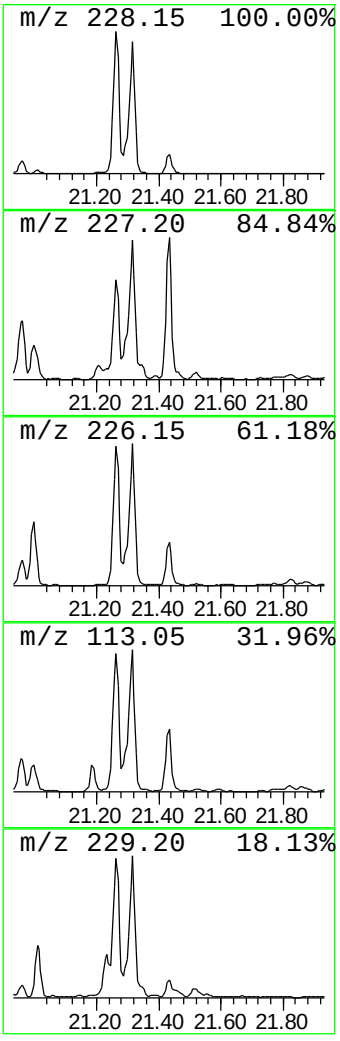
**********

Peak Number 13 Benzo[c]phenanthrene Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 21.43 | 2.70 ng/ul | 276495 | Chrysene-d12 | 21.28 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[c]phenanthrene | 228 | C18H12 | 000195-19-7 | 87 |
| 2 | Cyclopenta(cd)pyrene, 3,4-dihydro- | 228 | C18H12 | 025732-74-5 | 55 |
| 3 | Benzo[c]phenanthrene | 228 | C18H12 | 000195-19-7 | 49 |
| 4 | Pyrazole-4-carboxaldehyde-, 3,5-... | 228 | C14H16N2O | 1000272-54-8 | 47 |
| 5 | Isothiazol-5-amine, 4-bromo-3-ch... | 226 | C4H4BrClN2S | 1000272-59-9 | 47 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

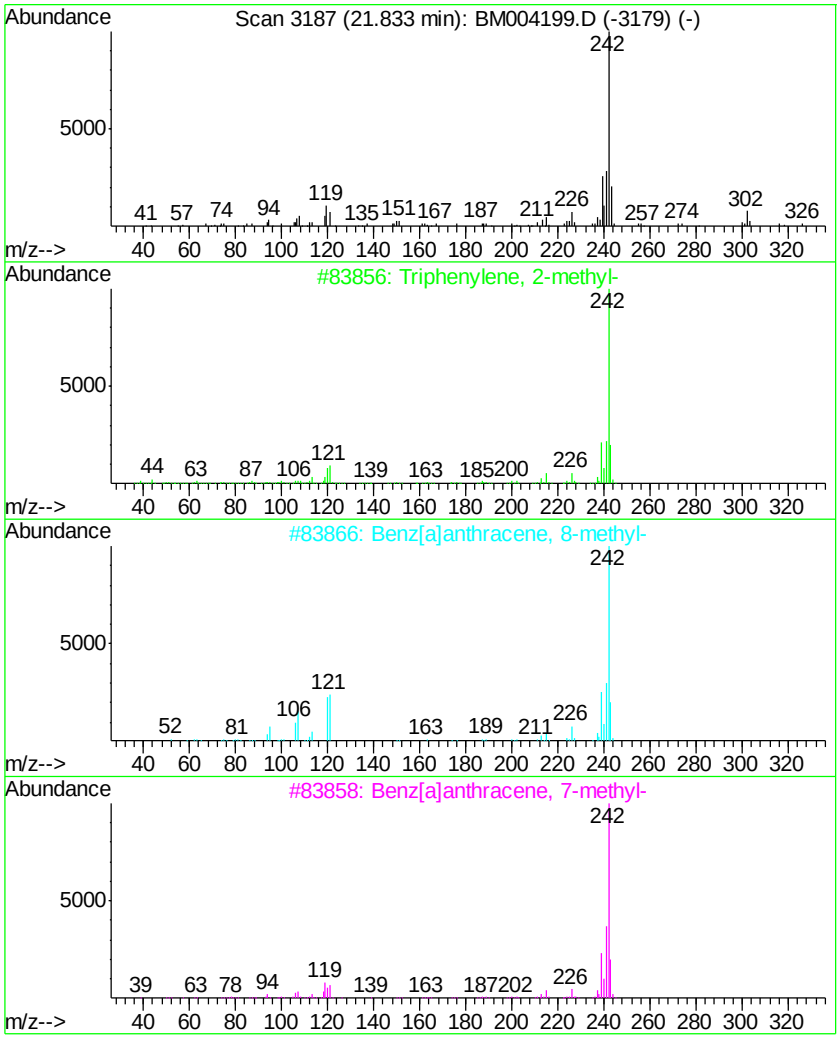
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

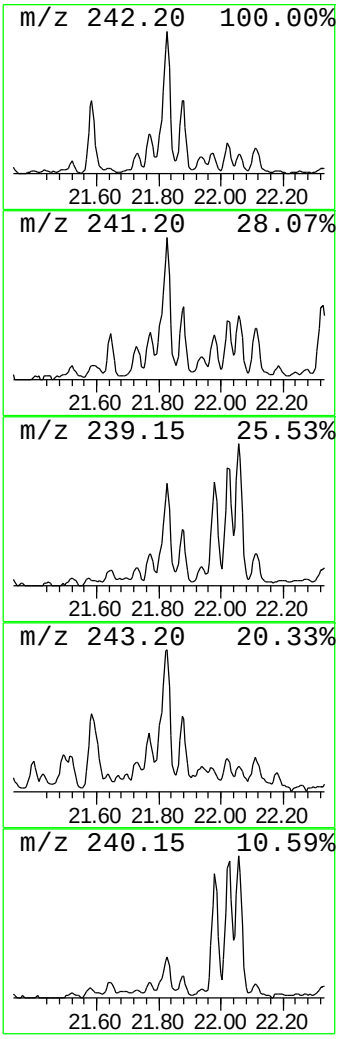
**********

Peak Number 14 Triphenylene, 2-methyl- Concentration Rank 21

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 21.83 | 2.49 ng/ul | 254195 | Chrysene-d12 | 21.28 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Triphenylene, 2-methyl- | 242 | C19H14 | 001705-84-6 | 98 |
| 2 | Benz[a]anthracene, 8-methyl- | 242 | C19H14 | 002381-31-9 | 96 |
| 3 | Benz[a]anthracene, 7-methyl- | 242 | C19H14 | 002541-69-7 | 94 |
| 4 | Benz[a]anthracene, 7-methyl- | 242 | C19H14 | 002541-69-7 | 93 |
| 5 | Benz[a]anthracene, 6-methyl- | 242 | C19H14 | 000316-14-3 | 92 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

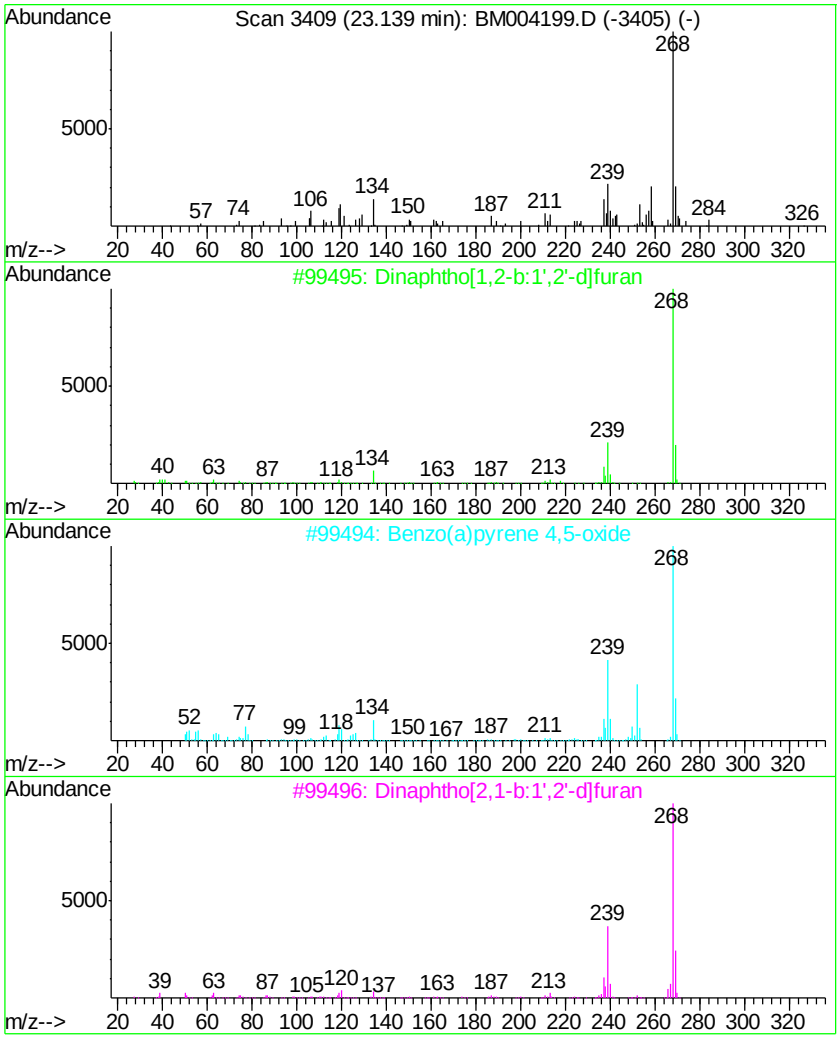
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

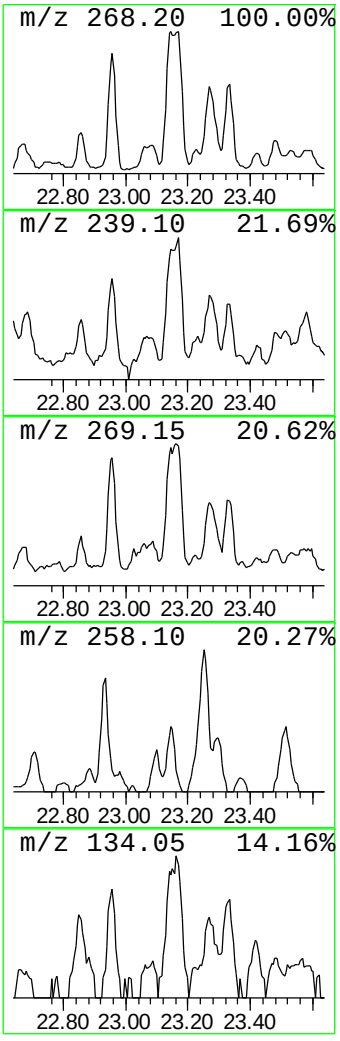
**********

Peak Number 17 Dinaphtho[1,2-b:1',2'-d]furan Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 23.14 | 4.26 ng/ul | 130031 | Perylene-d12 | 23.52 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dinaphtho[1,2-b:1',2'-d]furan | 268 | C20H12O | 000207-93-2 | 74 |
| 2 | Benzo(a)pyrene 4,5-oxide | 268 | C20H12O | 037574-47-3 | 68 |
| 3 | Dinaphtho[2,1-b:1',2'-d]furan | 268 | C20H12O | 000194-63-8 | 64 |
| 4 | 4H-1-Benzopyran-4-one, 5-hydroxy... | 268 | C16H12O4 | 000520-28-5 | 53 |
| 5 | 4H-1-Benzopyran-4-one, 3-hydroxy... | 268 | C16H12O4 | 007478-60-6 | 52 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

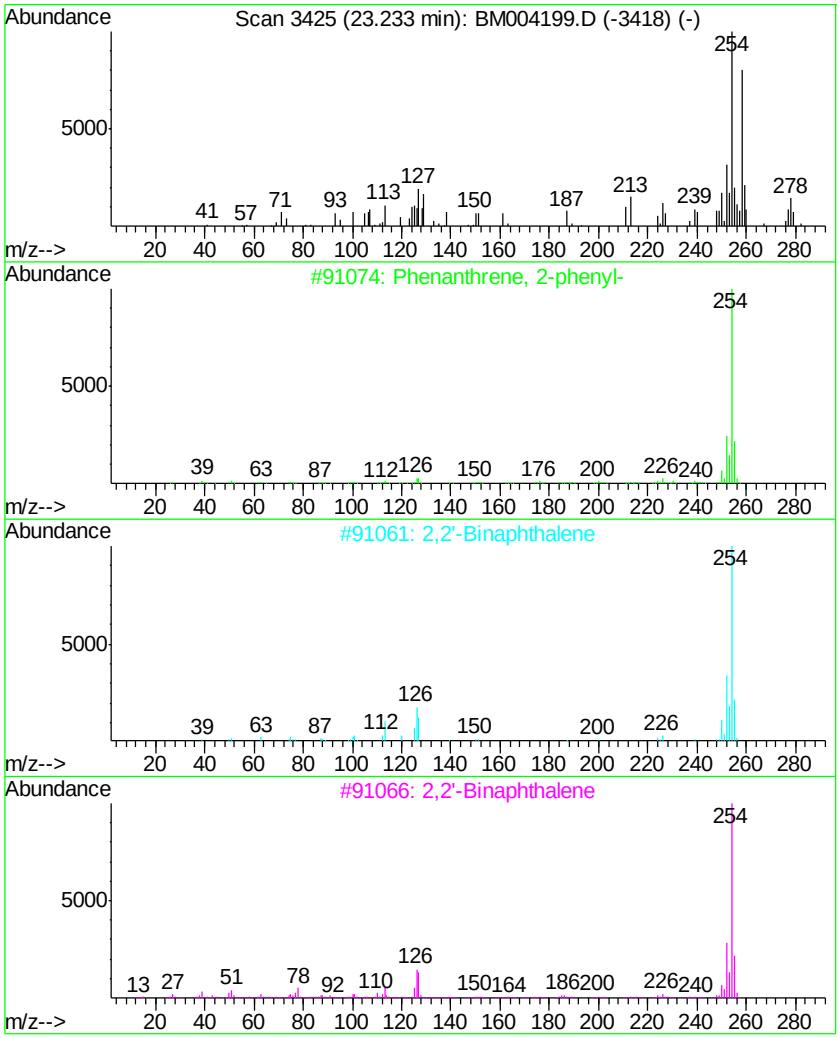
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

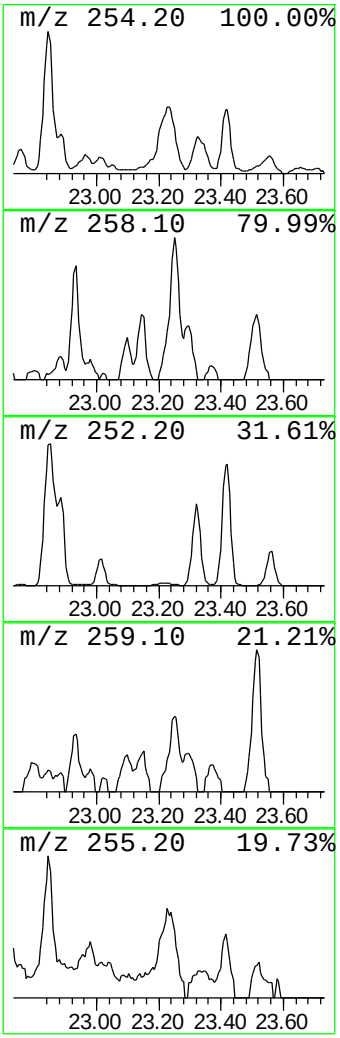
**********

Peak Number 18 Phenanthrene, 2-phenyl- Concentration Rank 22

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 23.23 | 2.17 ng/ul | 66193 | Perylene-d12 | 23.52 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-phenyl- | 254 | C20H14 | 004325-77-3 | 53 |
| 2 | 2,2'-Binaphthalene | 254 | C20H14 | 000612-78-2 | 49 |
| 3 | 2,2'-Binaphthalene | 254 | C20H14 | 000612-78-2 | 43 |
| 4 | 6,6'-Biazulene, | 254 | C20H14 | 073393-11-0 | 43 |
| 5 | 2,6-(Etheno[1,4]benzenoetheno)na... | 254 | C20H14 | 117054-70-3 | 43 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

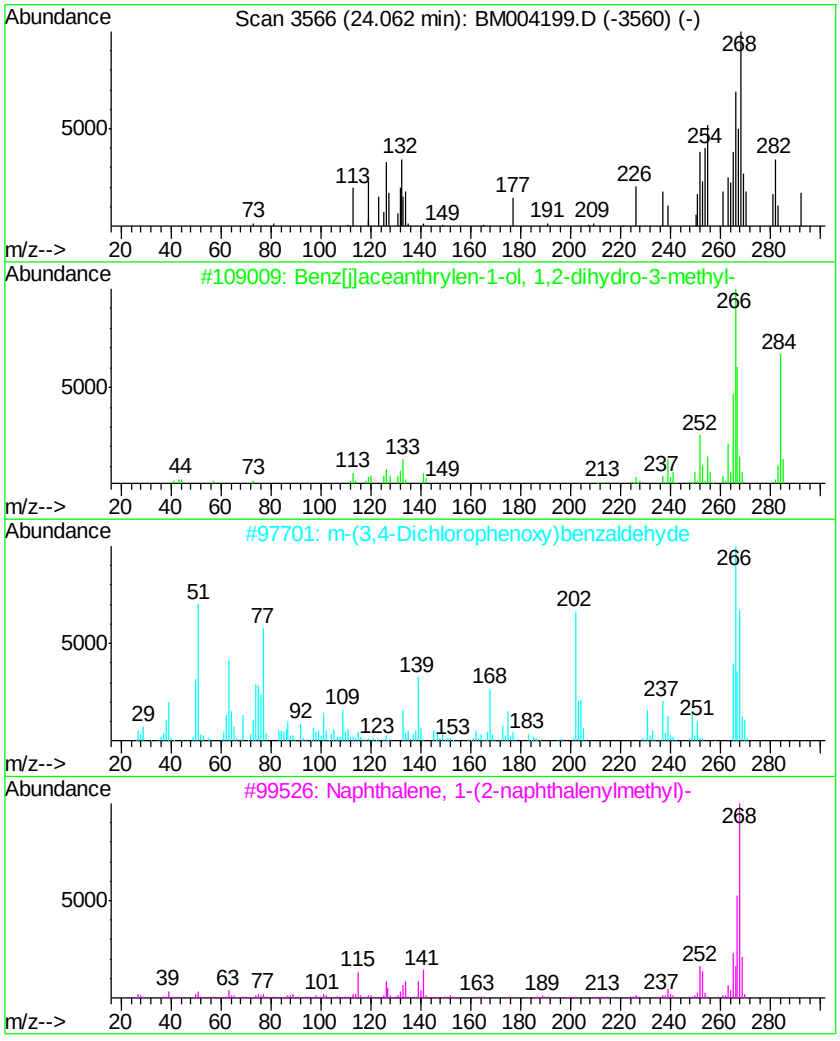
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

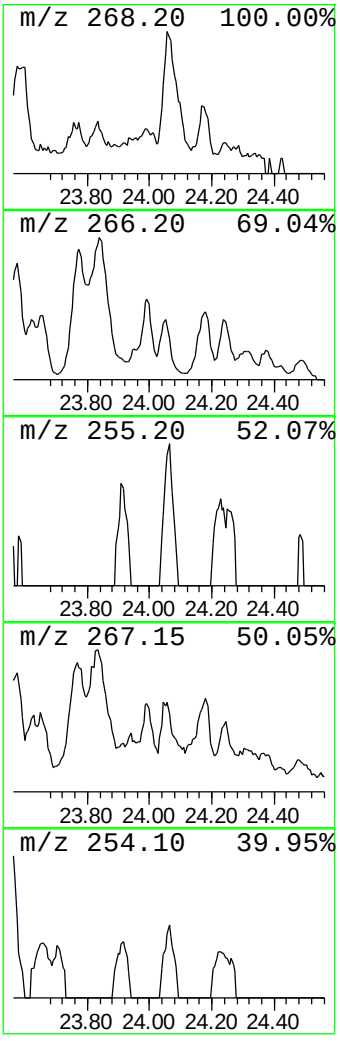
**********

Peak Number 19 unknown-02 Concentration Rank 24

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 24.06 | 2.04 ng/ul | 62294 | Perylene-d12 | 23.52 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benz[j]aceanthrylen-1-ol, 1,2-di... | 284 | C21H16O | 003342-98-1 | 43 |
| 2 | m-(3,4-Dichlorophenoxy)benzaldehyde | 266 | C13H8Cl2O2 | 079124-76-8 | 38 |
| 3 | Naphthalene, 1-(2-naphthalenylme... | 268 | C21H16 | 000611-48-3 | 27 |
| 4 | Lycorine, 1,2,15,16-tetradehydro... | 267 | C16H13NO3 | 1000111-50-5 | 25 |
| 5 | Naphthalene, 1,1'-methylenebis- | 268 | C21H16 | 000607-50-1 | 25 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

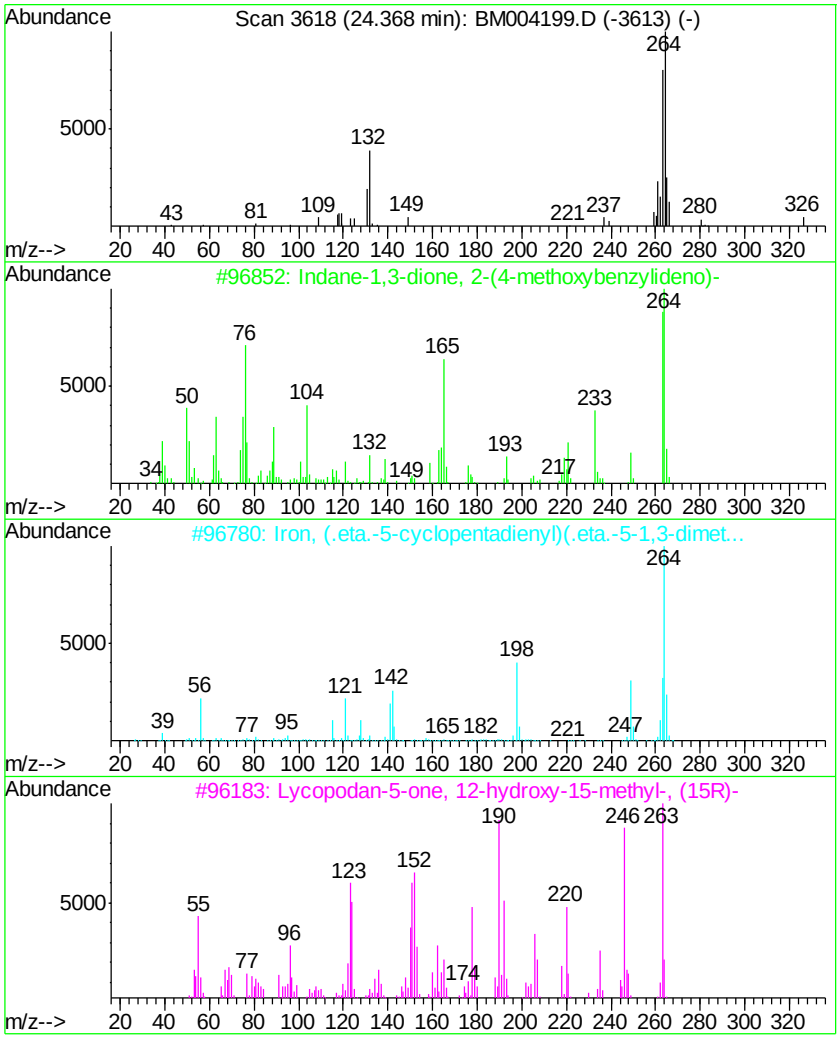
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

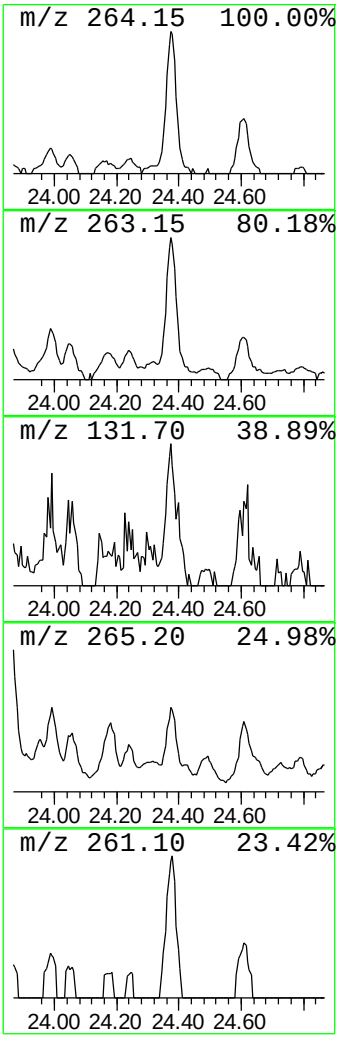
**********

Peak Number 20 unknown-03 Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 24.37 | 3.31 ng/ul | 101095 | Perylene-d12 | 23.52 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Indane-1,3-dione, 2-(4-methoxybe... | 264 | C17H12O3 | 007421-76-3 | 38 |
| 2 | Iron, (.eta.-5-cyclopentadienyl)... | 264 | C16H16Fe | 1000155-06-6 | 32 |
| 3 | Lycopodan-5-one, 12-hydroxy-15-m... | 263 | C16H25NO2 | 006900-92-1 | 22 |
| 4 | 3,5-Dibromo-4-methylphenol | 264 | C7H6Br2O | 013979-81-2 | 16 |
| 5 | Benzonitrile, 2-chloro-6-iodo- | 263 | C7H3ClIN | 089642-53-5 | 16 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.M
Quant Title : SVOA CALIBRATION

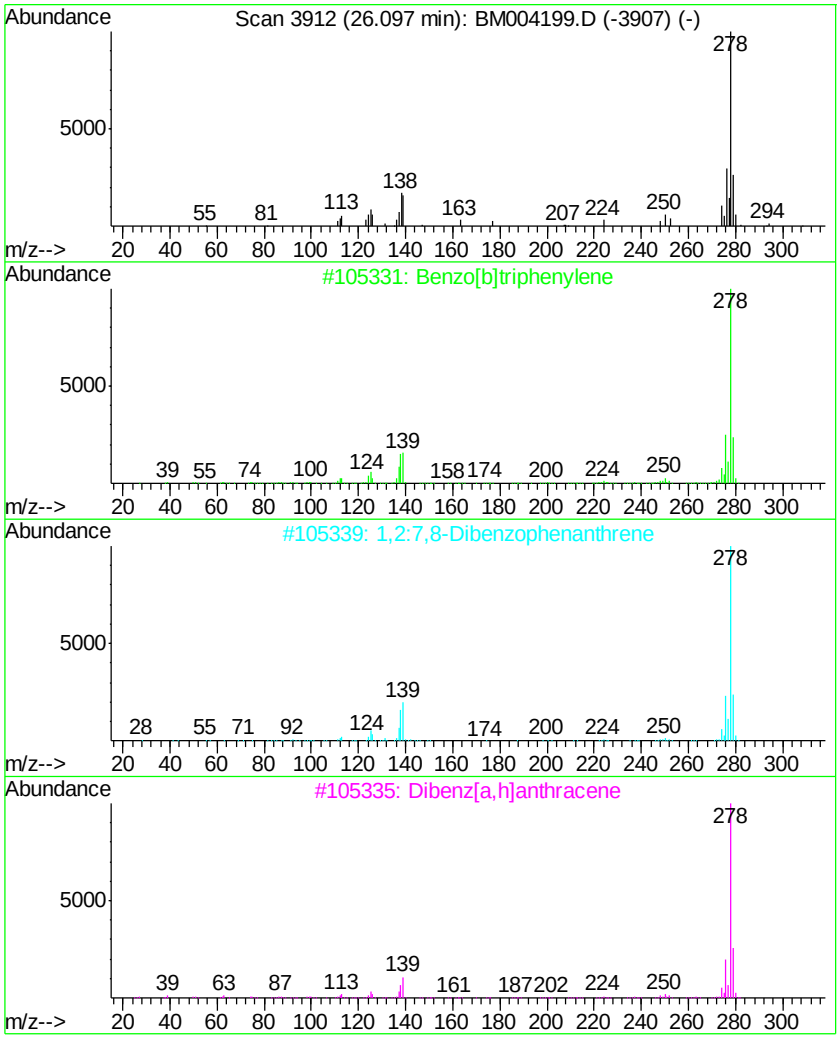
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

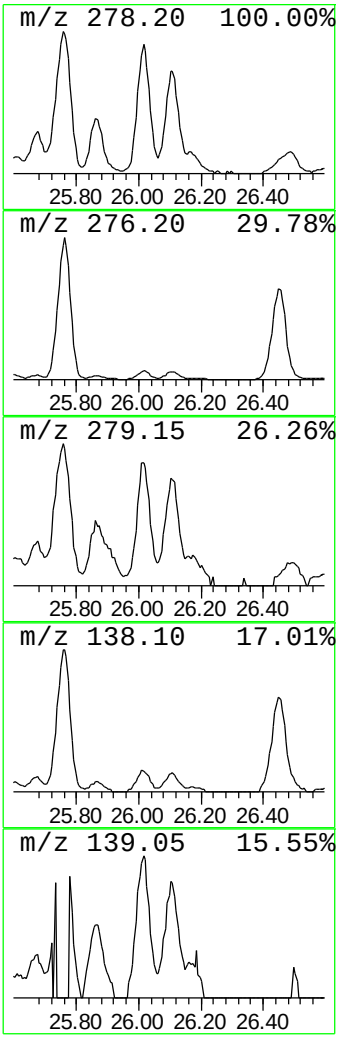
**********

Peak Number 24 Benzo[b]triphenylene Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 26.10 | 2.82 ng/ul | 86167 | Perylene-d12 | 23.52 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[b]triphenylene | 278 | C22H14 | 000215-58-7 | 94 |
| 2 | 1,2:7,8-Dibenzophenanthrene | 278 | C22H14 | 000213-46-7 | 89 |
| 3 | Dibenz[a,h]anthracene | 278 | C22H14 | 000053-70-3 | 89 |
| 4 | Benzo[a]naphthacene | 278 | C22H14 | 000226-88-0 | 87 |
| 5 | Benzo[b]chrysene | 278 | C22H14 | 000214-17-5 | 81 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM020816\
Data File : BM004199.D
Acq On : 08 Feb 2016 14:35
Operator : SJ/IZ
Sample : H1340-13 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** C04K3

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM012016.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 |
| (DEL) Alkane: Cyc... | 4.08 | 5.3 | ng/ul | 31571 | 1 | 7.66 | 119175 | 20.0 |
| Phenanthrene, 1-m... | 17.94 | 3.1 | ng/ul | 67529 | 4 | 17.07 | 432881 | 20.0 |
| Phenanthrene, 2-m... | 17.99 | 4.5 | ng/ul | 97990 | 4 | 17.07 | 432881 | 20.0 |
| 4H-Cyclopenta[def... | 18.14 | 8.1 | ng/ul | 174236 | 4 | 17.07 | 432881 | 20.0 |
| Naphthalene, 2-ph... | 18.44 | 2.6 | ng/ul | 56737 | 4 | 17.07 | 432881 | 20.0 |
| Phenanthrene, 2,5... | 18.87 | 2.9 | ng/ul | 61830 | 4 | 17.07 | 432881 | 20.0 |
| Cyclopenta(def)ph... | 19.02 | 2.7 | ng/ul | 58993 | 4 | 17.07 | 432881 | 20.0 |
| 11H-Benzo[b]fluorene | 20.00 | 2.5 | ng/ul | 256448 | 5 | 21.28 | 2044560 | 20.0 |
| Benzo[b]naphtho[2... | 20.92 | 2.0 | ng/ul | 206767 | 5 | 21.28 | 2044560 | 20.0 |
| unknown-01 | 21.00 | 2.1 | ng/ul | 214619 | 5 | 21.28 | 2044560 | 20.0 |
| Benzo[c]phenanthrene | 21.43 | 2.7 | ng/ul | 276495 | 5 | 21.28 | 2044560 | 20.0 |
| Triphenylene, 2-m... | 21.83 | 2.5 | ng/ul | 254195 | 5 | 21.28 | 2044560 | 20.0 |
| Dinaphtho[1,2-b:1... | 23.14 | 4.3 | ng/ul | 130031 | 6 | 23.52 | 611125 | 20.0 |
| Phenanthrene, 2-p... | 23.23 | 2.2 | ng/ul | 66193 | 6 | 23.52 | 611125 | 20.0 |
| unknown-02 | 24.06 | 2.0 | ng/ul | 62294 | 6 | 23.52 | 611125 | 20.0 |
| unknown-03 | 24.37 | 3.3 | ng/ul | 101095 | 6 | 23.52 | 611125 | 20.0 |
| Benzo[b]triphenylene | 26.10 | 2.8 | ng/ul | 86167 | 6 | 23.52 | 611125 | 20.0 |