LSC Area Percent Report

Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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 | 6.722 | 629 | 635 | 647 | rBV | 433237 | 858158 | 3.21% | 0.370% |
| 2 | 6.863 | 653 | 659 | 666 | rBV | 333982 | 508015 | 1.90% | 0.219% |
| 3 | 7.051 | 685 | 691 | 701 | rVB | 507628 | 820631 | 3.07% | 0.353% |
| 4 | 7.510 | 763 | 769 | 777 | rBV | 497435 | 785397 | 2.94% | 0.338% |
| 5 | 8.239 | 886 | 893 | 907 | rBV | 562200 | 1019984 | 3.82% | 0.439% |
| 6 | 8.669 | 959 | 966 | 979 | rBV | 590127 | 1041981 | 3.90% | 0.449% |
| 7 | 9.386 | 1080 | 1088 | 1097 | rBV2 | 457215 | 836894 | 3.13% | 0.360% |
| 8 | 9.933 | 1174 | 1181 | 1192 | rBV | 572976 | 1130149 | 4.23% | 0.487% |
| 9 | 10.281 | 1231 | 1240 | 1245 | rBV | 722785 | 1186364 | 4.44% | 0.511% |
| 10 | 10.451 | 1262 | 1269 | 1282 | rBV2 | 167195 | 424898 | 1.59% | 0.183% |
| 11 | 13.486 | 1778 | 1785 | 1791 | rBV3 | 179207 | 355967 | 1.33% | 0.153% |
| 12 | 13.592 | 1798 | 1803 | 1808 | rBV | 1154360 | 1640015 | 6.14% | 0.706% |
| 13 | 13.639 | 1808 | 1811 | 1818 | rVB | 308976 | 447295 | 1.68% | 0.193% |
| 14 | 13.863 | 1840 | 1849 | 1853 | rBV | 1376686 | 2190899 | 8.21% | 0.944% |
| 15 | 14.174 | 1892 | 1902 | 1908 | rBV2 | 1107084 | 1745922 | 6.54% | 0.752% |
| 16 | 14.239 | 1908 | 1913 | 1921 | rVB | 440627 | 695187 | 2.60% | 0.299% |
| 17 | 14.468 | 1946 | 1952 | 1966 | rBV4 | 341056 | 971029 | 3.64% | 0.418% |
| 18 | 14.580 | 1966 | 1971 | 1977 | rVV | 433907 | 695669 | 2.61% | 0.300% |
| 19 | 15.180 | 2066 | 2073 | 2077 | rBV | 1650926 | 2318331 | 8.68% | 0.999% |
| 20 | 15.233 | 2077 | 2082 | 2087 | rVB | 783763 | 1086128 | 4.07% | 0.468% |
| 21 | 15.357 | 2094 | 2103 | 2107 | rBV2 | 488661 | 890106 | 3.33% | 0.383% |
| 22 | 15.527 | 2128 | 2132 | 2141 | rVB | 368743 | 580258 | 2.17% | 0.250% |
| 23 | 15.680 | 2149 | 2158 | 2165 | rBV2 | 361546 | 819619 | 3.07% | 0.353% |
| 24 | 15.915 | 2191 | 2198 | 2208 | rVB6 | 130963 | 339883 | 1.27% | 0.146% |
| 25 | 16.245 | 2242 | 2254 | 2259 | rBV4 | 337593 | 752385 | 2.82% | 0.324% |
| 26 | 16.604 | 2310 | 2315 | 2321 | rVB3 | 348767 | 531978 | 1.99% | 0.229% |
| 27 | 16.668 | 2321 | 2326 | 2328 | rBV3 | 290618 | 432381 | 1.62% | 0.186% |
| 28 | 16.757 | 2336 | 2341 | 2350 | rVB | 527172 | 843721 | 3.16% | 0.363% |
| 29 | 16.939 | 2364 | 2372 | 2375 | rBV | 1288676 | 1989563 | 7.45% | 0.857% |
| 30 | 16.986 | 2375 | 2380 | 2385 | rVV | 11468573 | 15614297 | 58.49% | 6.726% |
| 31 | 17.039 | 2385 | 2389 | 2392 | rVV | 1951175 | 2767225 | 10.37% | 1.192% |
| 32 | 17.074 | 2392 | 2395 | 2400 | rVV | 2421826 | 2996288 | 11.22% | 1.291% |
| 33 | 17.139 | 2400 | 2406 | 2411 | rVV4 | 138614 | 308653 | 1.16% | 0.133% |
| 34 | 17.357 | 2434 | 2443 | 2456 | rBV4 | 353633 | 1075251 | 4.03% | 0.463% |

LSC Area Percent Report

Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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 | 17.456 | 2456 | 2460 | 2463 | rVV | 268217 | 373251 | 1.40% | 0.161% |
| 36 | 17.527 | 2467 | 2472 | 2479 | rVB4 | 184213 | 468397 | 1.75% | 0.202% |
| 37 | 17.815 | 2513 | 2521 | 2524 | rBV | 1484786 | 2072876 | 7.76% | 0.893% |
| 38 | 17.862 | 2524 | 2529 | 2536 | rVB | 2073791 | 3353544 | 12.56% | 1.444% |
| 39 | 17.945 | 2538 | 2543 | 2548 | rVB | 743144 | 975130 | 3.65% | 0.420% |
| 40 | 18.009 | 2548 | 2554 | 2558 | rBV2 | 2029542 | 3490911 | 13.08% | 1.504% |
| 41 | 18.045 | 2558 | 2560 | 2570 | rVB | 977640 | 1301969 | 4.88% | 0.561% |
| 42 | 18.133 | 2570 | 2575 | 2580 | rBV6 | 193658 | 400084 | 1.50% | 0.172% |
| 43 | 18.321 | 2602 | 2607 | 2613 | rBV | 1133336 | 1488200 | 5.57% | 0.641% |
| 44 | 18.386 | 2613 | 2618 | 2624 | rVB | 699186 | 1000940 | 3.75% | 0.431% |
| 45 | 18.568 | 2645 | 2649 | 2655 | rVB2 | 284783 | 398595 | 1.49% | 0.172% |
| 46 | 18.621 | 2655 | 2658 | 2662 | rVB | 322410 | 353052 | 1.32% | 0.152% |
| 47 | 18.662 | 2662 | 2665 | 2670 | rVB2 | 319411 | 407663 | 1.53% | 0.176% |
| 48 | 18.745 | 2674 | 2679 | 2683 | rBV | 809720 | 1291749 | 4.84% | 0.556% |
| 49 | 18.809 | 2685 | 2690 | 2693 | rVV4 | 476752 | 846941 | 3.17% | 0.365% |
| 50 | 18.839 | 2693 | 2695 | 2699 | rVB | 295118 | 323446 | 1.21% | 0.139% |
| 51 | 18.903 | 2699 | 2706 | 2713 | rBV2 | 786349 | 1479353 | 5.54% | 0.637% |
| 52 | 19.027 | 2719 | 2727 | 2732 | rBV | 19391814 | 26696474 | 100.00% | 11.499% |
| 53 | 19.115 | 2739 | 2742 | 2748 | rVV3 | 347526 | 682519 | 2.56% | 0.294% |
| 54 | 19.168 | 2748 | 2751 | 2755 | rVB2 | 261696 | 322986 | 1.21% | 0.139% |
| 55 | 19.256 | 2761 | 2766 | 2770 | rVB2 | 544474 | 844349 | 3.16% | 0.364% |
| 56 | 19.356 | 2777 | 2783 | 2785 | rBV3 | 4690518 | 7138807 | 26.74% | 3.075% |
| 57 | 19.392 | 2785 | 2789 | 2795 | rVV | 15260708 | 20809432 | 77.95% | 8.963% |
| 58 | 19.456 | 2795 | 2800 | 2807 | rVB3 | 775940 | 1175401 | 4.40% | 0.506% |
| 59 | 19.562 | 2814 | 2818 | 2823 | rVB | 935536 | 1245370 | 4.66% | 0.536% |
| 60 | 19.633 | 2825 | 2830 | 2834 | rVB | 569330 | 817177 | 3.06% | 0.352% |
| 61 | 19.709 | 2837 | 2843 | 2844 | rBV | 798525 | 1254550 | 4.70% | 0.540% |
| 62 | 19.845 | 2861 | 2866 | 2867 | rBV | 690826 | 923239 | 3.46% | 0.398% |
| 63 | 19.886 | 2869 | 2873 | 2877 | rVB | 1915774 | 2774650 | 10.39% | 1.195% |
| 64 | 19.986 | 2885 | 2890 | 2893 | rBV | 1294676 | 1602979 | 6.00% | 0.690% |
| 65 | 20.039 | 2893 | 2899 | 2904 | rVV2 | 1336190 | 2596454 | 9.73% | 1.118% |
| 66 | 20.080 | 2904 | 2906 | 2910 | rVV2 | 291807 | 304711 | 1.14% | 0.131% |
| 67 | 20.121 | 2910 | 2913 | 2917 | rVB | 307481 | 396824 | 1.49% | 0.171% |
| 68 | 20.180 | 2919 | 2923 | 2927 | rBV | 698936 | 928291 | 3.48% | 0.400% |
| 69 | 20.227 | 2927 | 2931 | 2935 | rVV2 | 751709 | 1027401 | 3.85% | 0.443% |
| 70 | 20.445 | 2964 | 2968 | 2970 | rBV3 | 242825 | 359690 | 1.35% | 0.155% |
| 71 | 20.515 | 2976 | 2980 | 2984 | rBV3 | 373363 | 552818 | 2.07% | 0.238% |

LSC Area Percent Report

Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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 | 20.645 | 2998 | 3002 | 3007 | rVV | 1272415 | 1557267 | 5.83% | 0.671% |
| 73 | 20.803 | 3025 | 3029 | 3032 | rBV | 1349414 | 1725095 | 6.46% | 0.743% |
| 74 | 20.839 | 3032 | 3035 | 3038 | rVV | 1243790 | 1575324 | 5.90% | 0.679% |
| 75 | 20.880 | 3038 | 3042 | 3050 | rVV3 | 934458 | 2254594 | 8.45% | 0.971% |
| 76 | 20.945 | 3050 | 3053 | 3057 | rVB | 1173950 | 1438135 | 5.39% | 0.619% |
| 77 | 20.992 | 3057 | 3061 | 3064 | rBV | 1207684 | 1249187 | 4.68% | 0.538% |
| 78 | 21.074 | 3070 | 3075 | 3079 | rVB | 14008334 | 14308059 | 53.60% | 6.163% |
| 79 | 21.150 | 3079 | 3088 | 3093 | rBV2 | 9296343 | 16092437 | 60.28% | 6.932% |
| 80 | 21.203 | 3093 | 3097 | 3105 | rVB | 7224675 | 9461550 | 35.44% | 4.075% |
| 81 | 21.309 | 3112 | 3115 | 3119 | rBV | 830163 | 1035231 | 3.88% | 0.446% |
| 82 | 21.374 | 3123 | 3126 | 3129 | rBV3 | 422811 | 644450 | 2.41% | 0.278% |
| 83 | 21.486 | 3139 | 3145 | 3148 | rVB2 | 513687 | 899884 | 3.37% | 0.388% |
| 84 | 21.650 | 3169 | 3173 | 3176 | rBV2 | 467446 | 679784 | 2.55% | 0.293% |
| 85 | 21.703 | 3178 | 3182 | 3187 | rVV | 1333420 | 1973595 | 7.39% | 0.850% |
| 86 | 21.750 | 3187 | 3190 | 3196 | rVB | 611066 | 834923 | 3.13% | 0.360% |
| 87 | 21.815 | 3198 | 3201 | 3204 | rBV2 | 314432 | 375754 | 1.41% | 0.162% |
| 88 | 21.897 | 3211 | 3215 | 3218 | rBV | 510726 | 777590 | 2.91% | 0.335% |
| 89 | 22.186 | 3260 | 3264 | 3268 | rBV5 | 418899 | 688038 | 2.58% | 0.296% |
| 90 | 22.456 | 3306 | 3310 | 3314 | rBV3 | 406519 | 572344 | 2.14% | 0.247% |
| 91 | 22.703 | 3345 | 3352 | 3357 | rBV | 4118009 | 9298127 | 34.83% | 4.005% |
| 92 | 22.862 | 3374 | 3379 | 3385 | rBV | 665624 | 1078380 | 4.04% | 0.464% |
| 93 | 23.162 | 3424 | 3430 | 3434 | rBV | 1920556 | 3537563 | 13.25% | 1.524% |
| 94 | 23.203 | 3434 | 3437 | 3441 | rVV2 | 1034827 | 1821805 | 6.82% | 0.785% |
| 95 | 23.256 | 3441 | 3446 | 3454 | rVB | 3433477 | 5825572 | 21.82% | 2.509% |
| 96 | 23.344 | 3456 | 3461 | 3465 | rBV | 753916 | 1322116 | 4.95% | 0.569% |
| 97 | 23.391 | 3465 | 3469 | 3476 | rVB2 | 910939 | 1626437 | 6.09% | 0.701% |
| 98 | 23.809 | 3536 | 3540 | 3545 | rVB2 | 375981 | 622367 | 2.33% | 0.268% |
| 99 | 25.521 | 3824 | 3831 | 3839 | rVB2 | 1301989 | 3539173 | 13.26% | 1.524% |
| 100 | 26.197 | 3939 | 3946 | 3957 | rVB2 | 782344 | 2164223 | 8.11% | 0.932% |

Sum of corrected areas: 232159748

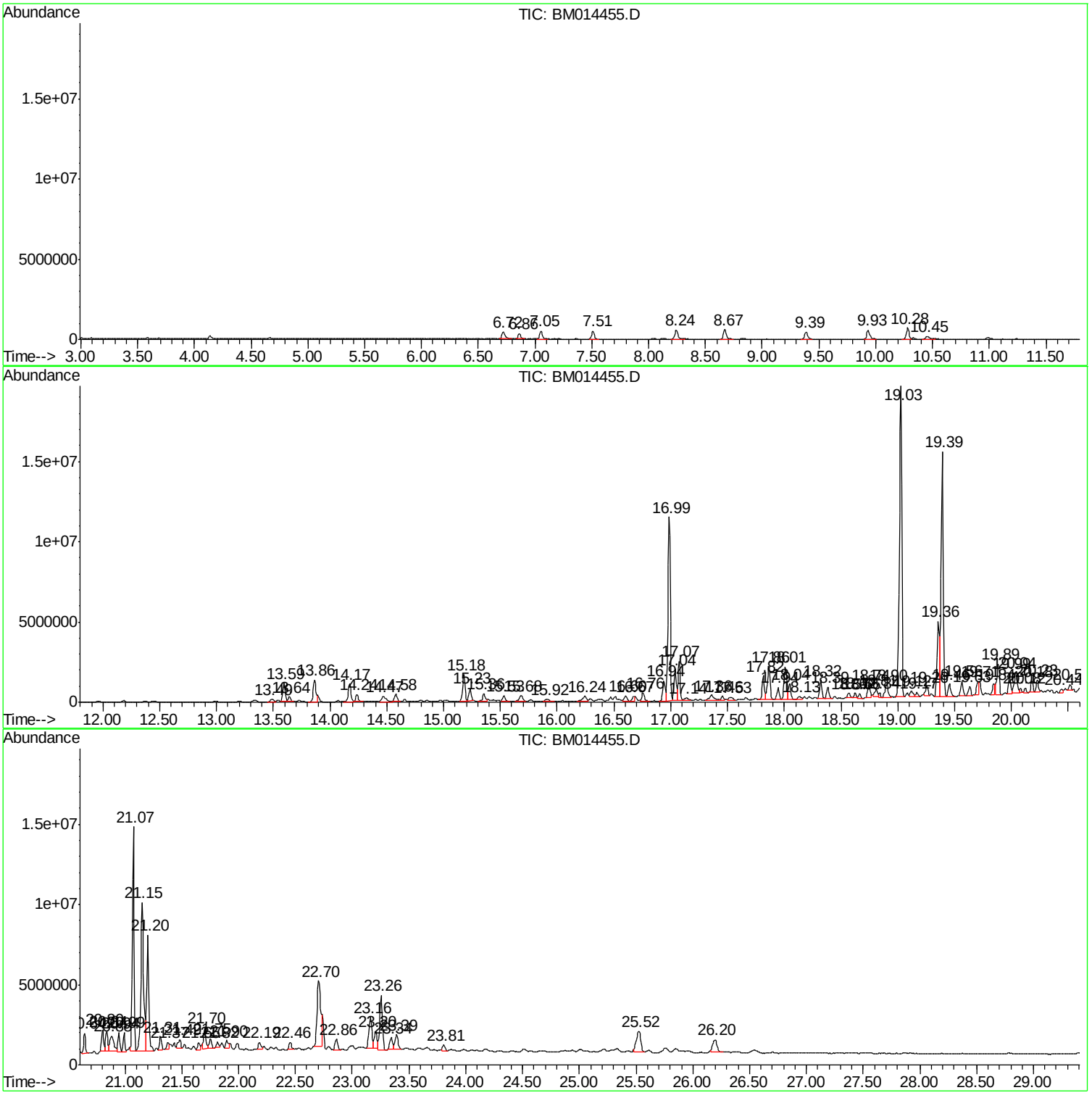
LSC Report - Integrated Chromatogram

Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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 : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

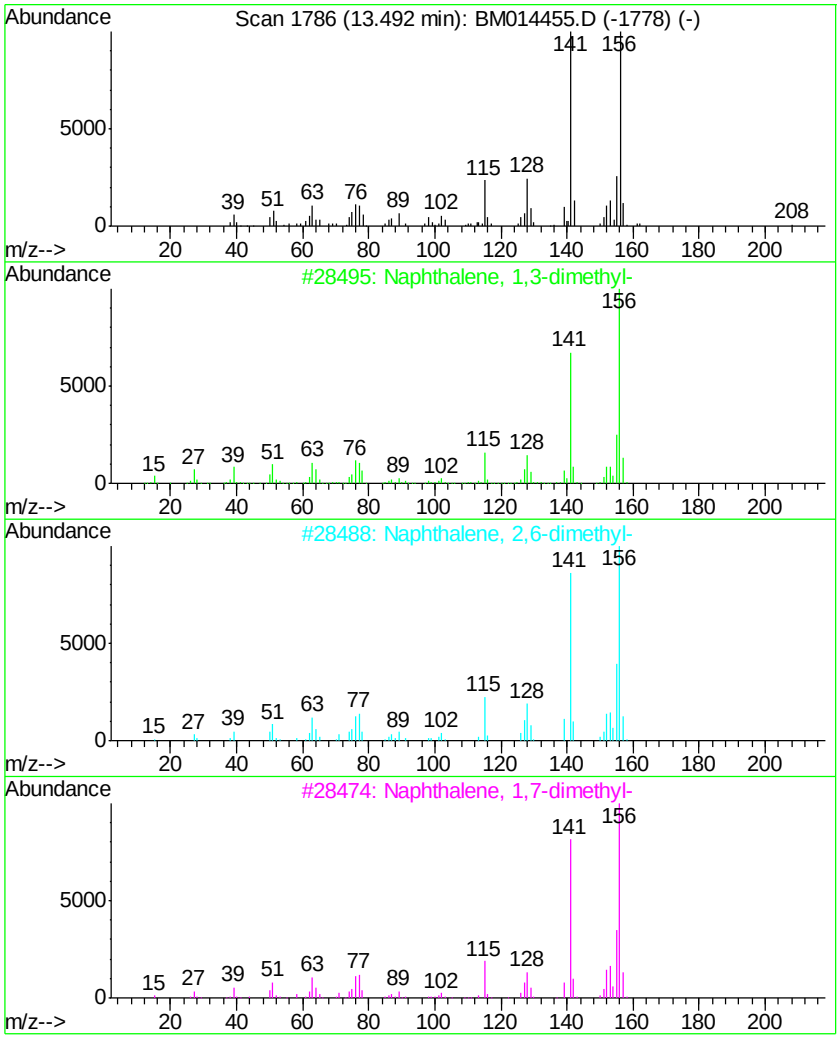
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

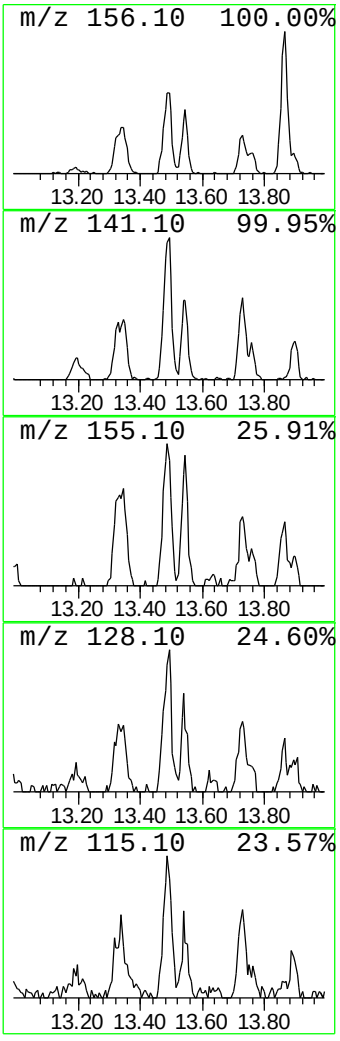
**********

Peak Number 1 Naphthalene, 1,3-dimethyl- Concentration Rank 22

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.49 | 4.08 ng/ul | 355967 | Acenaphthene-d10 | 14.17 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 97 |
| 2 | Naphthalene, 2,6-dimethyl- | 156 | C12H12 | 000581-42-0 | 96 |
| 3 | Naphthalene, 1,7-dimethyl- | 156 | C12H12 | 000575-37-1 | 96 |
| 4 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 95 |
| 5 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 95 |



# Library Search Compound Report

Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

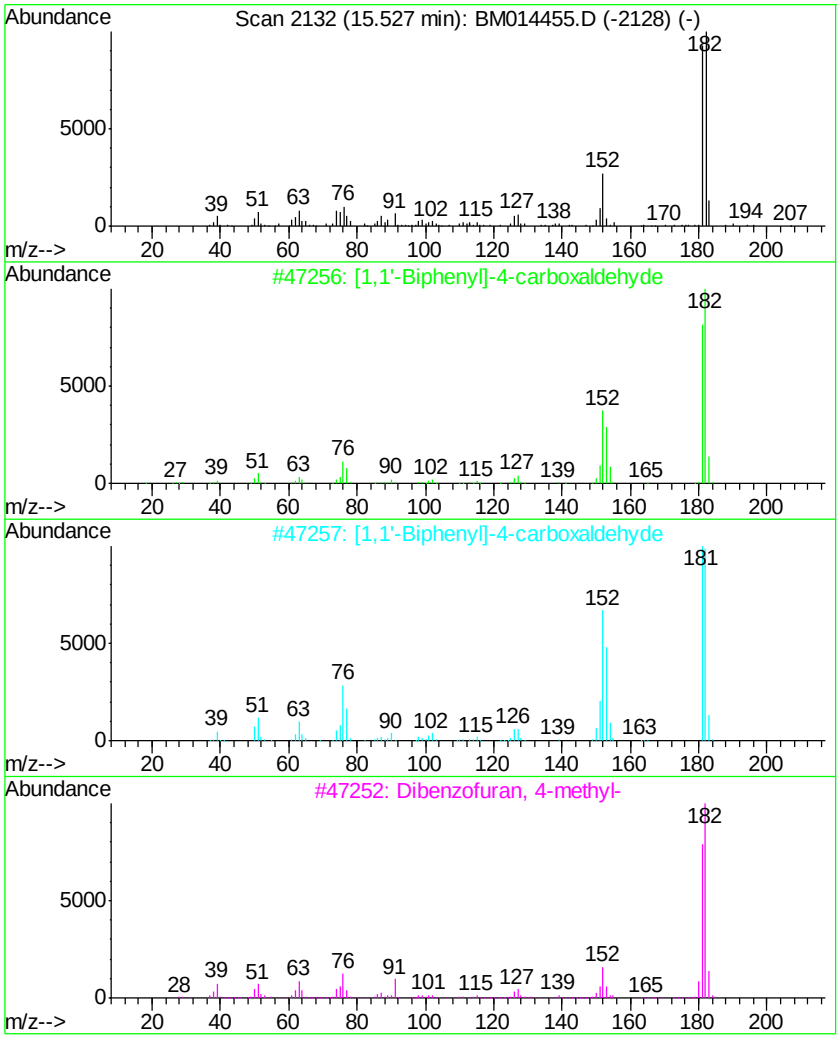
Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

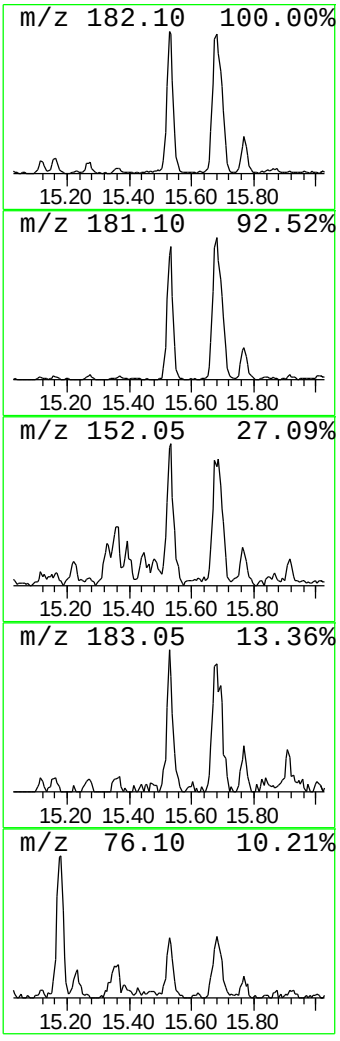
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 2 [1,1'-Biphenyl]-4-carboxald... Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.53 | 6.65 ng/ul | 580258 | Acenaphthene-d10 | 14.17 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | [1,1'-Biphenyl]-4-carboxaldehyde | 182 | C13H10O | 003218-36-8 | 87 |
| 2 | [1,1'-Biphenyl]-4-carboxaldehyde | 182 | C13H10O | 003218-36-8 | 87 |
| 3 | Dibenzofuran, 4-methyl- | 182 | C13H10O | 007320-53-8 | 86 |
| 4 | [1,1'-Biphenyl]-4-carboxaldehyde | 182 | C13H10O | 003218-36-8 | 78 |
| 5 | 9H-Fluoren-9-ol | 182 | C13H10O | 001689-64-1 | 78 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

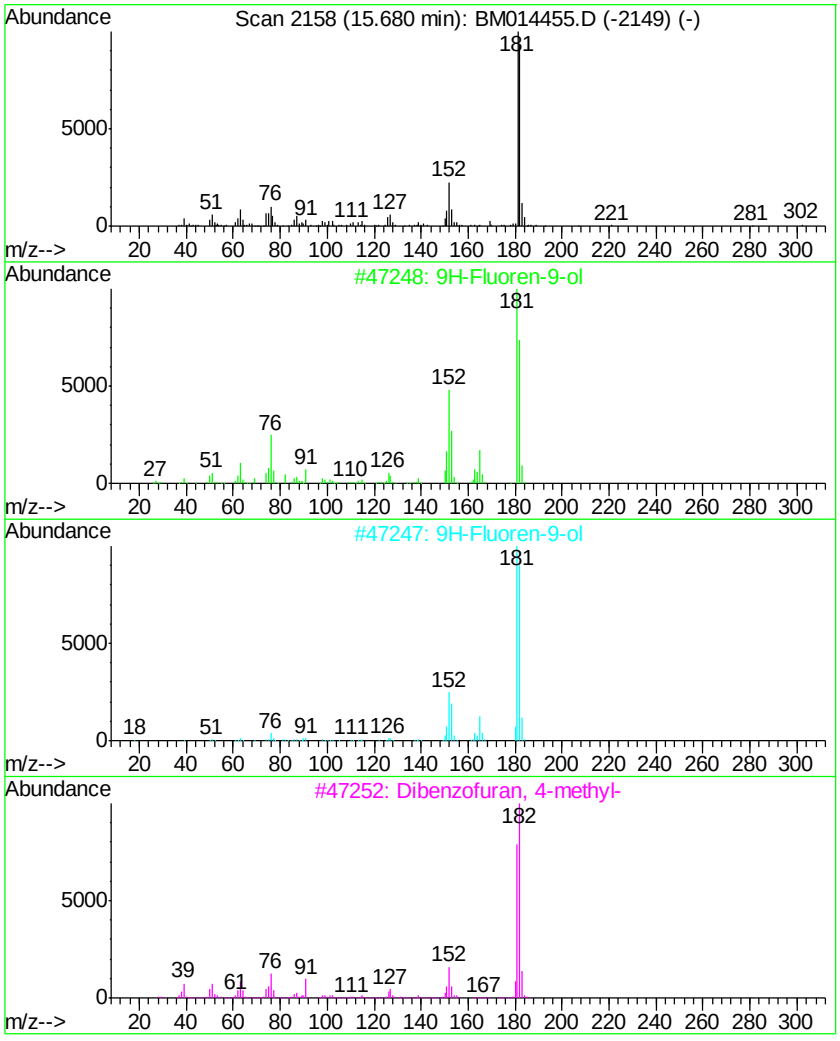
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

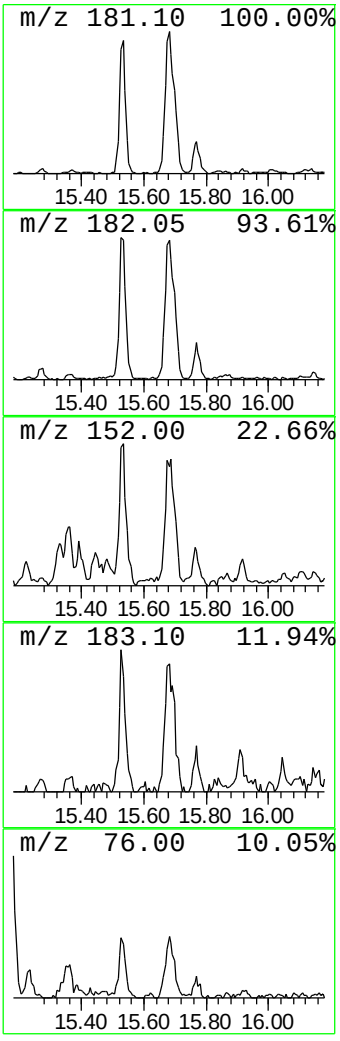
**********

Peak Number 3 9H-Fluoren-9-ol Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.68 | 8.24 ng/ul | 819619 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Fluoren-9-ol | 182 | C13H10O | 001689-64-1 | 90 |
| 2 | 9H-Fluoren-9-ol | 182 | C13H10O | 001689-64-1 | 86 |
| 3 | Dibenzofuran, 4-methyl- | 182 | C13H10O | 007320-53-8 | 76 |
| 4 | 3-(2-Naphthyl)acrylaldehyde | 182 | C13H10O | 020884-05-3 | 72 |
| 5 | 9H-Fluoren-9-ol | 182 | C13H10O | 001689-64-1 | 72 |



# Library Search Compound Report

Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

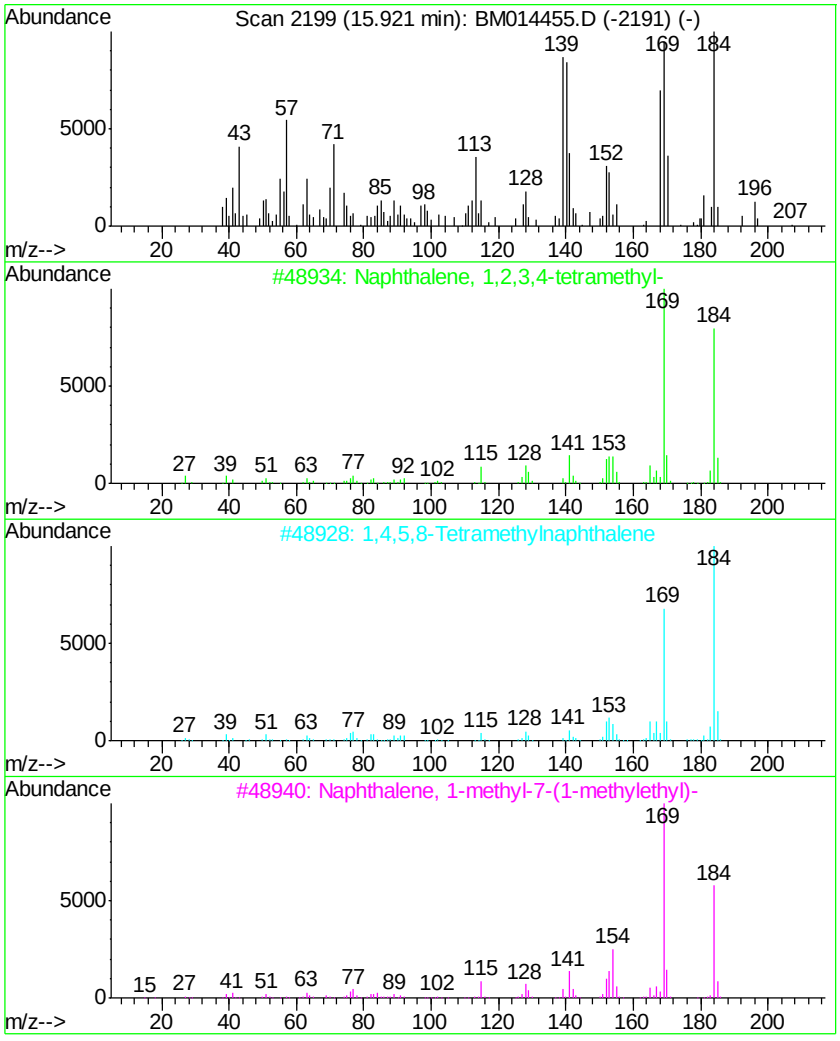
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

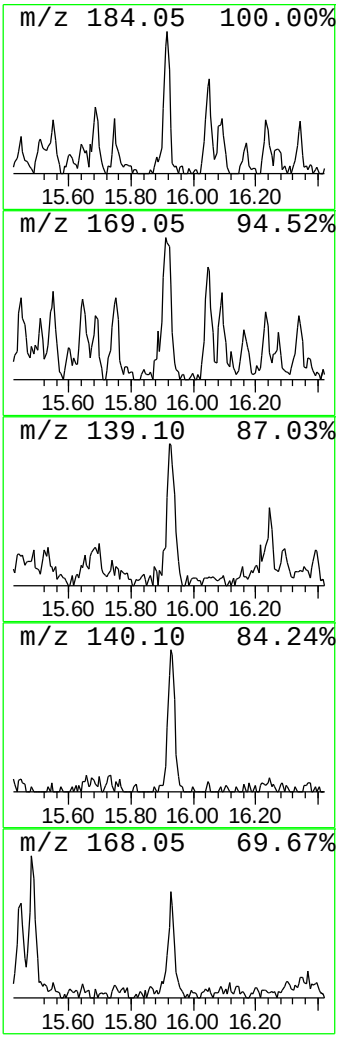
**********

Peak Number 4 unknown-01 Concentration Rank 28

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.92 | 3.42 ng/ul | 339883 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,2,3,4-tetramethyl- | 184 | C14H16 | 003031-15-0 | 49 |
| 2 | 1,4,5,8-Tetramethylnaphthalene | 184 | C14H16 | 002717-39-7 | 49 |
| 3 | Naphthalene, 1-methyl-7-(1-methy... | 184 | C14H16 | 000490-65-3 | 46 |
| 4 | Silane, tetra-1-propynyl- | 184 | C12H12Si | 020143-21-9 | 43 |
| 5 | 4-Methoxy-3,5-dihydroxybenzoic acid | 184 | C8H8O5 | 004319-02-2 | 38 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

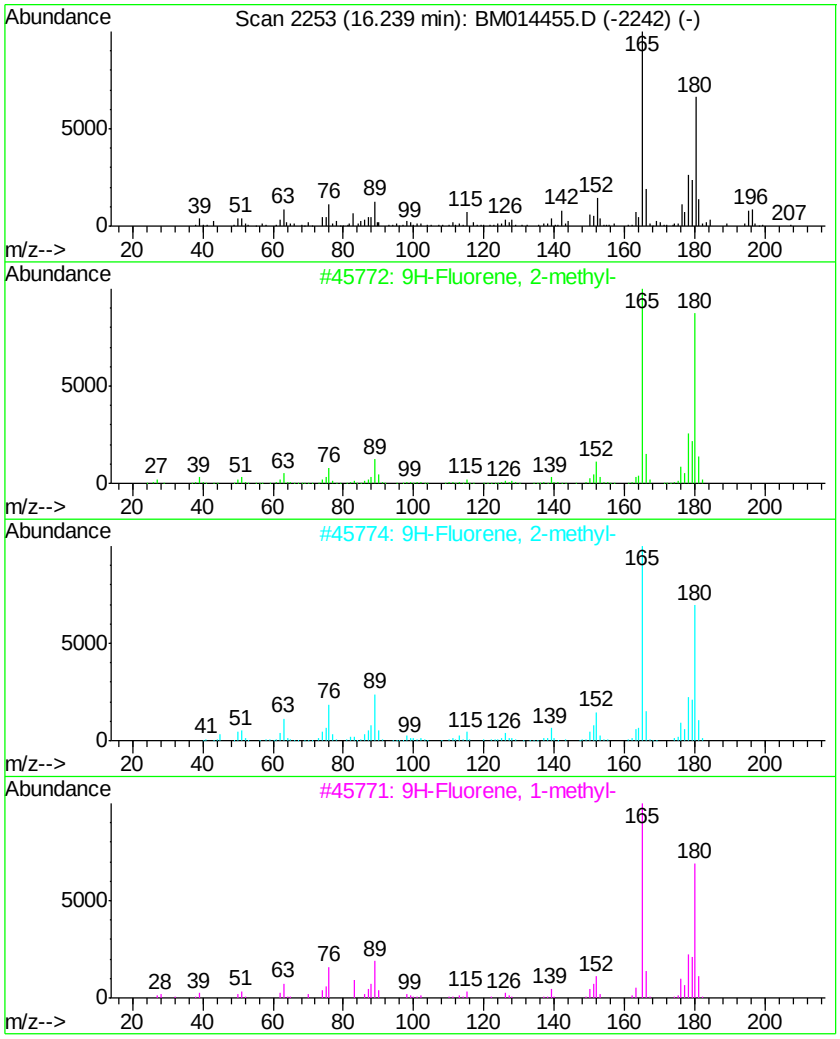
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

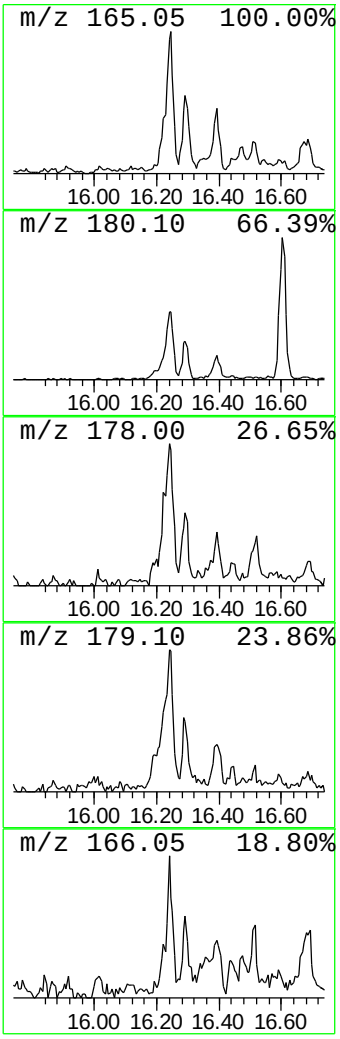
**********

Peak Number 5 9H-Fluorene, 2-methyl- Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.24 | 7.56 ng/ul | 752385 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Fluorene, 2-methyl- | 180 | C14H12 | 001430-97-3 | 93 |
| 2 | 9H-Fluorene, 2-methyl- | 180 | C14H12 | 001430-97-3 | 86 |
| 3 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 86 |
| 4 | 9H-Fluorene, 9-methyl- | 180 | C14H12 | 002523-37-7 | 64 |
| 5 | 9H-Fluorene, 9-methyl- | 180 | C14H12 | 002523-37-7 | 64 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

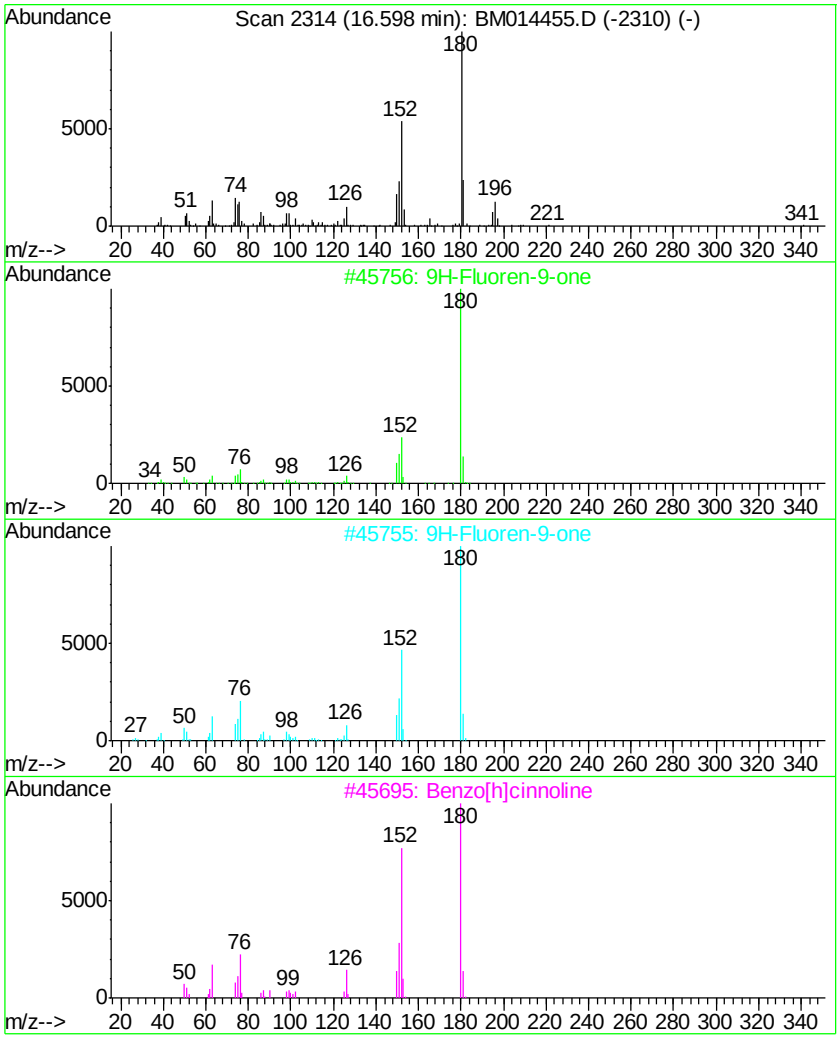
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

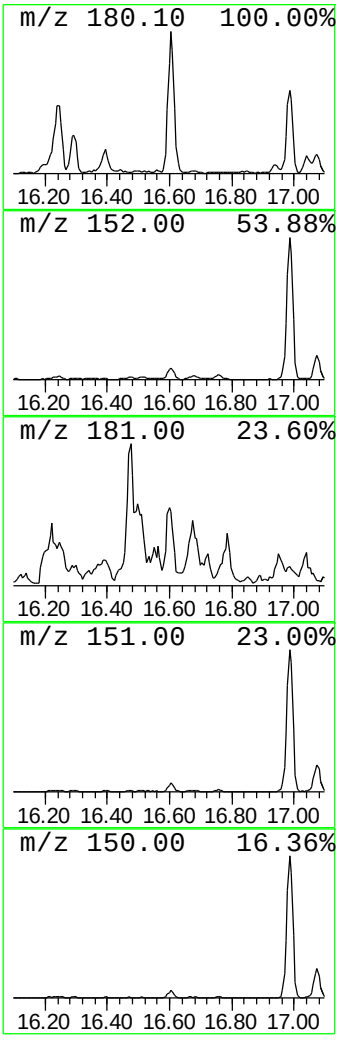
**********

Peak Number 6 9H-Fluoren-9-one Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.60 | 5.35 ng/ul | 531978 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 95 |
| 2 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 91 |
| 3 | Benzo[h]cinnoline | 180 | C12H8N2 | 000230-31-9 | 90 |
| 4 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 83 |
| 5 | 9,10-Phenanthrenedione | 208 | C14H8O2 | 000084-11-7 | 78 |



# Library Search Compound Report

Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

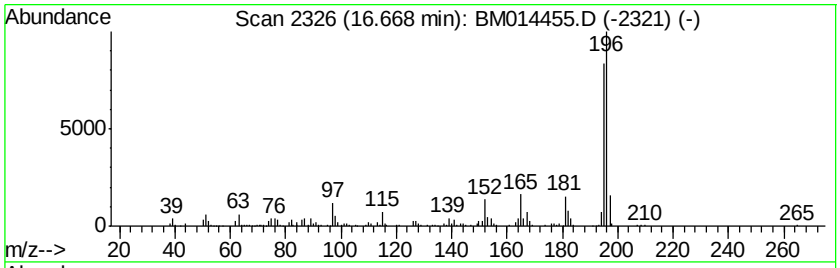
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

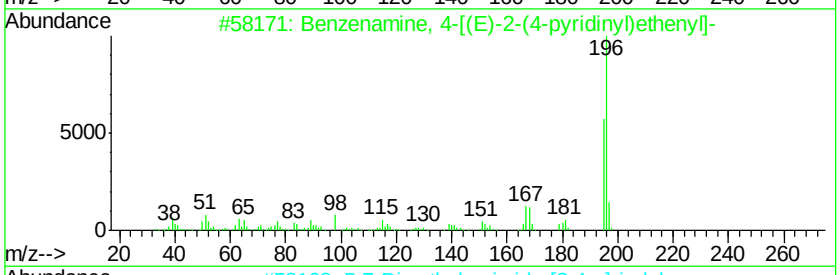
**********

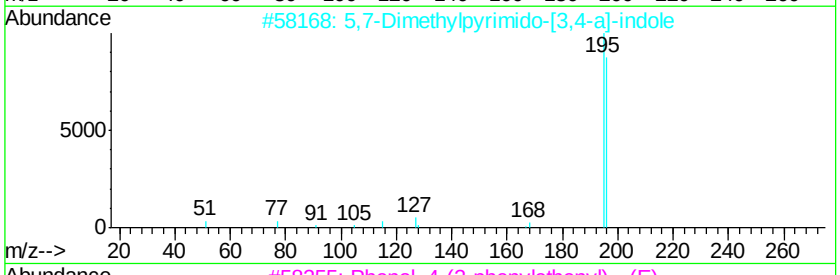
Peak Number 7 Benzenamine, 4-[(E)-2-(4-py... Concentration Rank 20

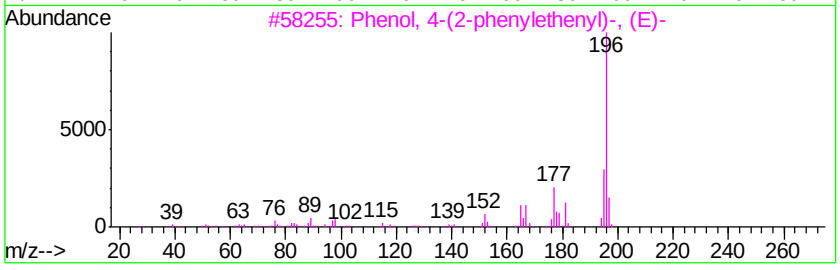
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.67 | 4.35 ng/ul | 432381 | Phenanthrene-d10 | 16.94 |

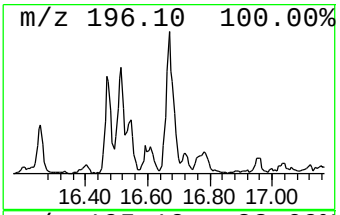
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzenamine, 4-[(E)-2-(4-pyridin... | 196 | C13H12N2 | 1000351-61-4 | 64 |
| 2 | 5,7-Dimethylpyrimido-[3,4-a]-indole | 196 | C13H12N2 | 038349-21-2 | 53 |
| 3 | Phenol, 4-(2-phenylethenyl)-, (E)- | 196 | C14H12O | 006554-98-9 | 52 |
| 4 | Hydrosulfide, (5,6-dimethylthien... | 196 | C8H8N2S2 | 1000362-41-8 | 47 |
| 5 | Methanone, diphenyl-, hydrazone | 196 | C13H12N2 | 005350-57-2 | 46 |

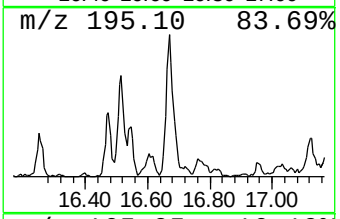


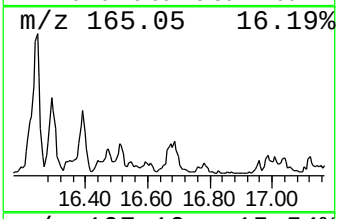



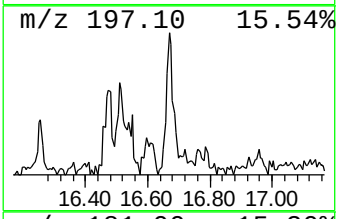



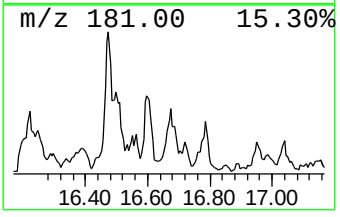



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

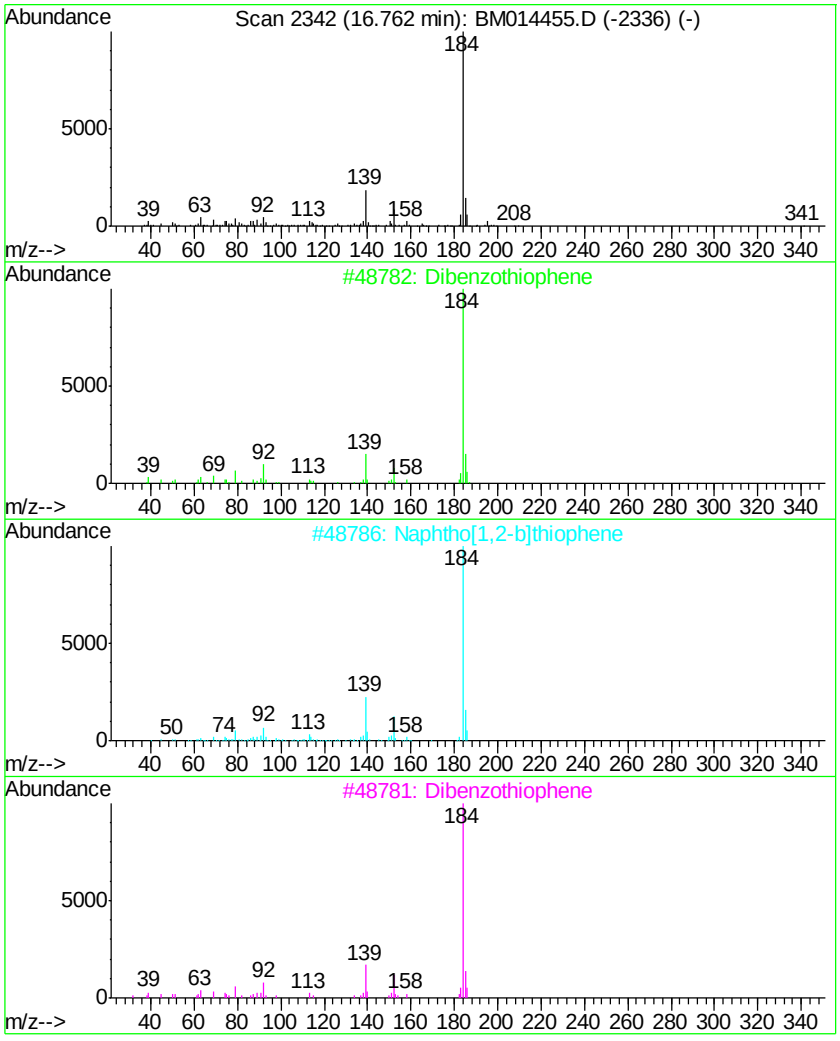
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

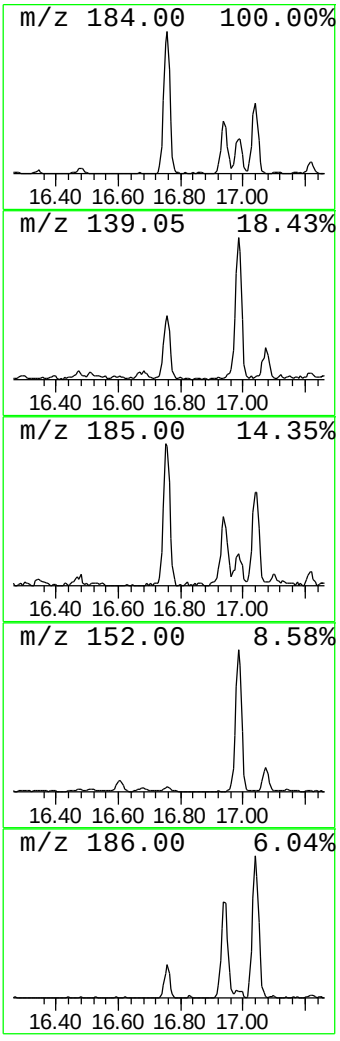
**********

Peak Number 8 Dibenzothiophene Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.76 | 8.48 ng/ul | 843721 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 97 |
| 2 | Naphtho[1,2-b]thiophene | 184 | C12H8S | 000234-41-3 | 95 |
| 3 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 94 |
| 4 | Naphtho[2,1-b]thiophene | 184 | C12H8S | 000233-02-3 | 94 |
| 5 | Azuleno(2,1-b)thiophene | 184 | C12H8S | 000248-13-5 | 91 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

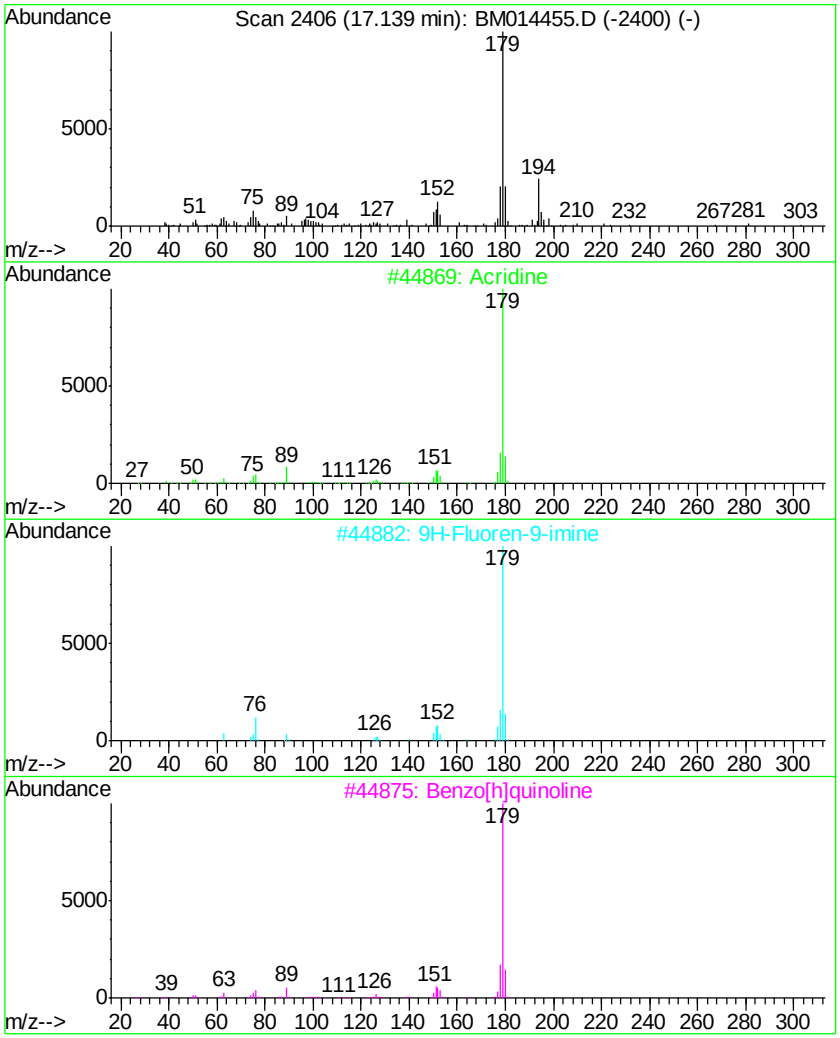
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

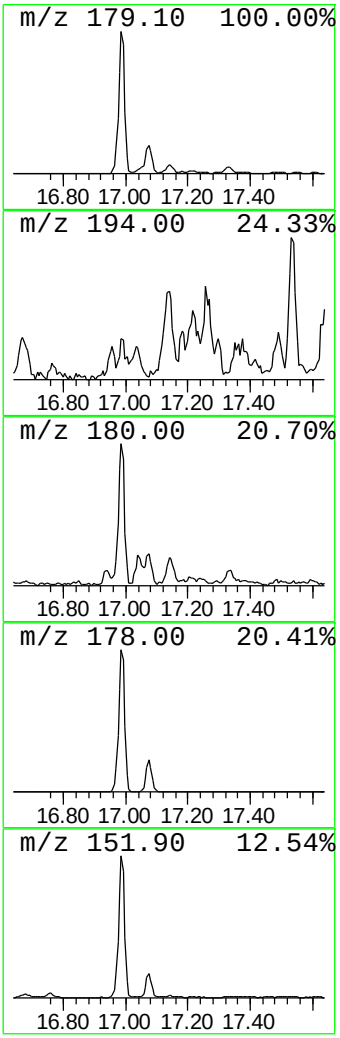
**********

Peak Number 9 Acridine Concentration Rank 31

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.14 | 3.10 ng/ul | 308653 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Acridine | 179 | C13H9N | 000260-94-6 | 76 |
| 2 | 9H-Fluoren-9-imine | 179 | C13H9N | 004440-33-9 | 76 |
| 3 | Benzo[h]quinoline | 179 | C13H9N | 000230-27-3 | 68 |
| 4 | Acridine | 179 | C13H9N | 000260-94-6 | 68 |
| 5 | [1,1'-Biphenyl]-2-carbonitrile | 179 | C13H9N | 024973-49-7 | 68 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

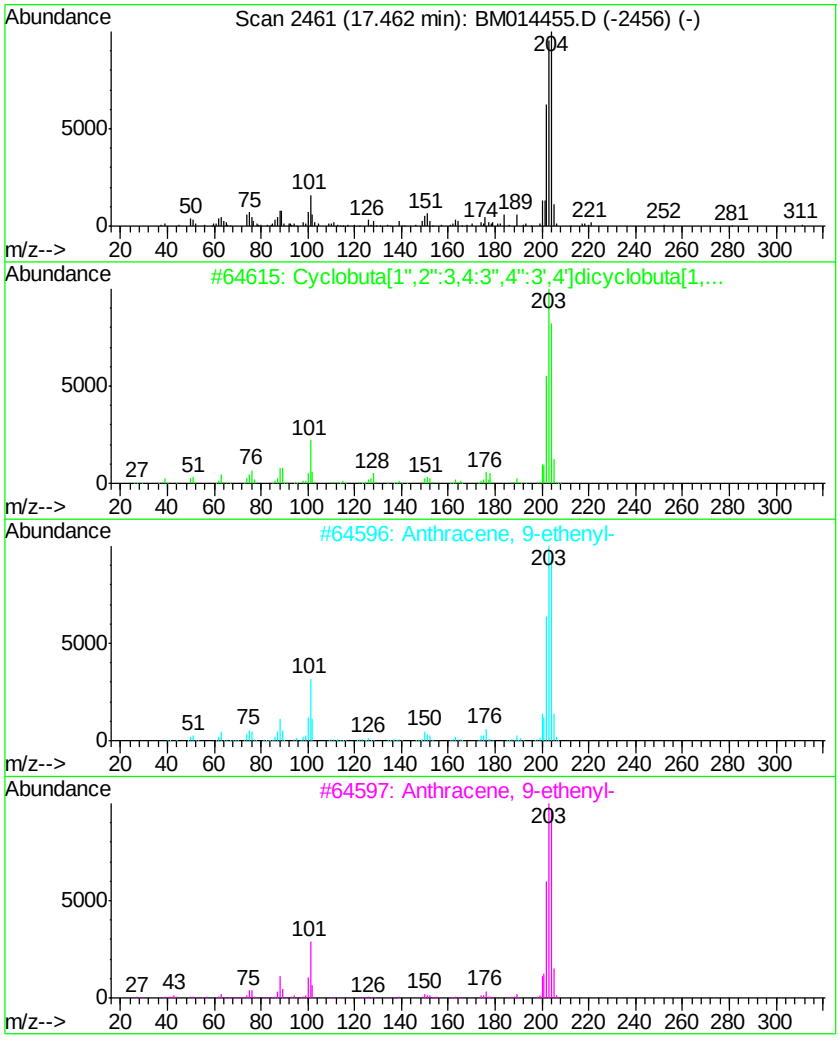
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

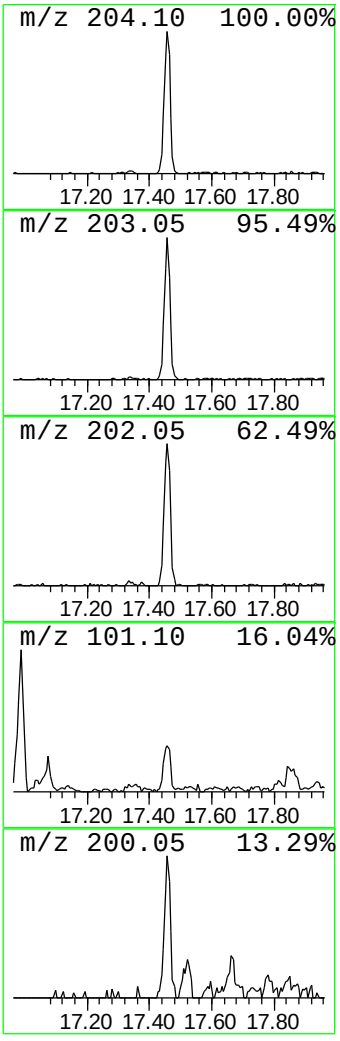
**********

Peak Number 10 Cyclobuta[1'',2'':3,4:3'',4... Concentration Rank 25

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.46 | 3.75 ng/ul | 373251 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclobuta[1'',2'':3,4:3'',4'':3'... | 204 | C16H12 | 006574-36-3 | 93 |
| 2 | Anthracene, 9-ethenyl- | 204 | C16H12 | 002444-68-0 | 89 |
| 3 | Anthracene, 9-ethenyl- | 204 | C16H12 | 002444-68-0 | 89 |
| 4 | Dibenzo[a,e]cyclooctene | 204 | C16H12 | 000262-89-5 | 89 |
| 5 | 1H-Indene, 1-(phenylmethylene)- | 204 | C16H12 | 005394-86-5 | 76 |



# Library Search Compound Report

Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

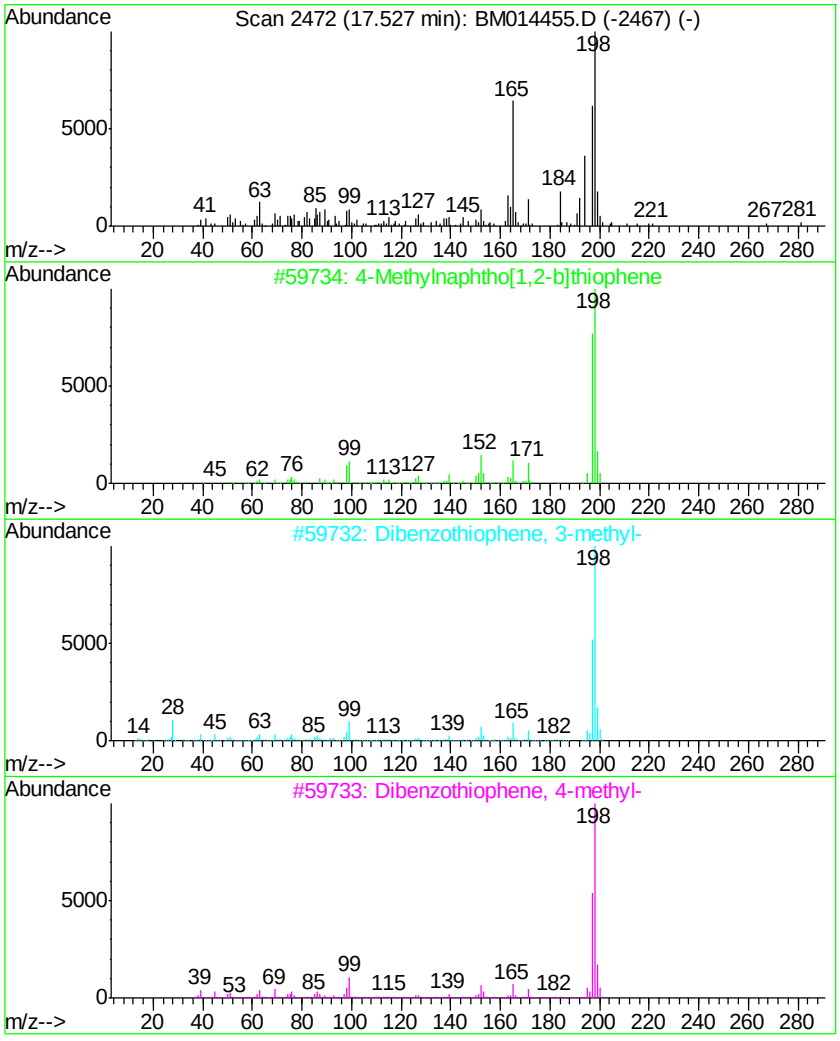
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

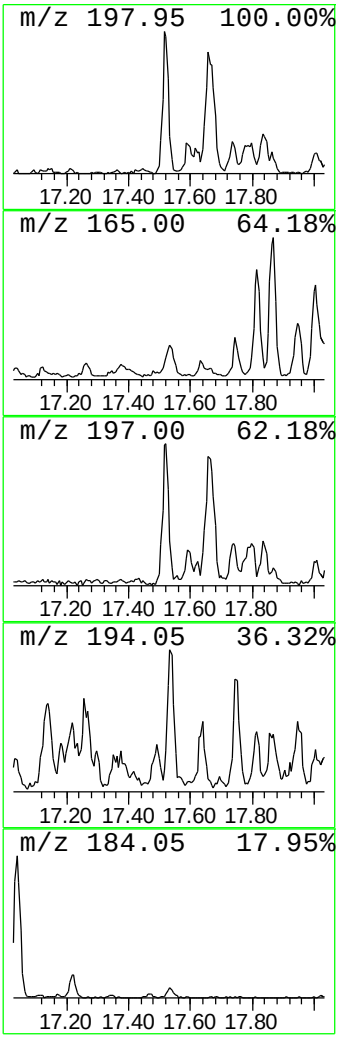
**********

Peak Number 11 4-Methylnaphtho[1,2-b]thiop... Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.53 | 4.71 ng/ul | 468397 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4-Methylnaphtho[1,2-b]thiophene | 198 | C13H10S | 067388-11-8 | 78 |
| 2 | Dibenzothiophene, 3-methyl- | 198 | C13H10S | 016587-52-3 | 60 |
| 3 | Dibenzothiophene, 4-methyl- | 198 | C13H10S | 007372-88-5 | 53 |
| 4 | 1-Methyldibenzothiophene | 198 | C13H10S | 031317-07-4 | 49 |
| 5 | Benzene, 1,1'-(1-fluoro-1,2-ethe... | 198 | C14H11F | 000671-19-2 | 47 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

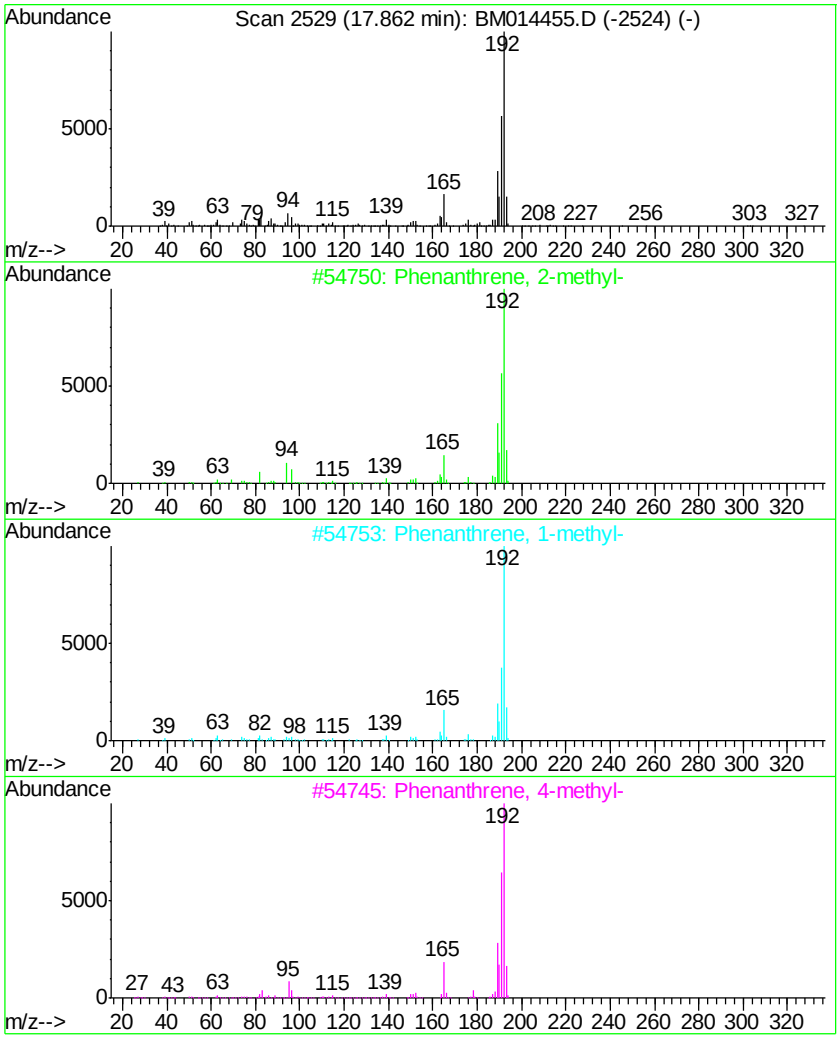
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

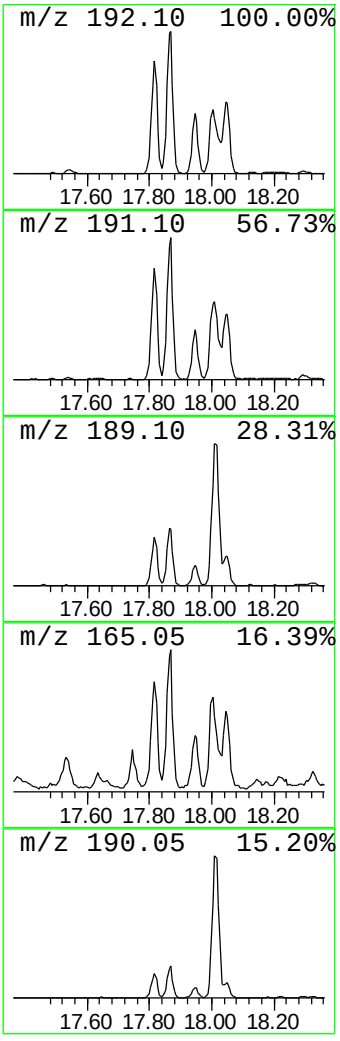
**********

Peak Number 13 Phenanthrene, 2-methyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.86 | 33.71 ng/ul | 3353540 | Phenanthrene-d10 | 16.94 |

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



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

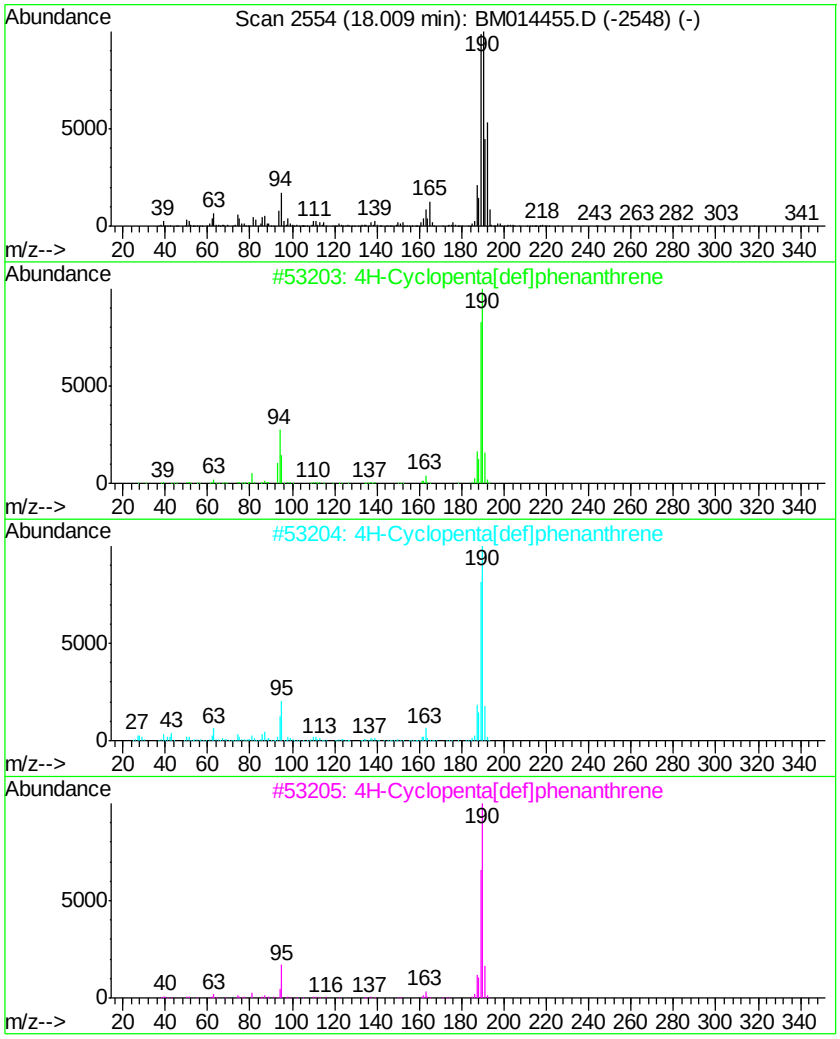
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

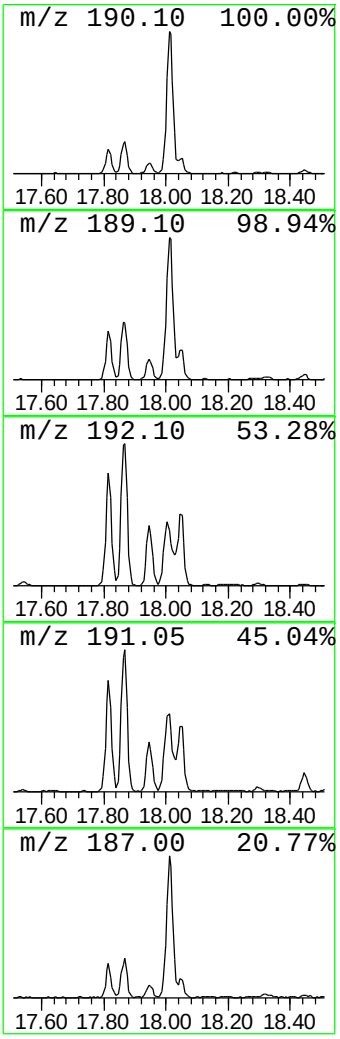
**********

Peak Number 15 4H-Cyclopenta[def]phenanthrene Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.01 | 35.09 ng/ul | 3490910 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 62 |
| 2 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 60 |
| 3 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 50 |
| 4 | 5H-Dibenzo[a,d]cycloheptene | 192 | C15H12 | 000256-81-5 | 30 |
| 5 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 22 |



Library Search Compound Report

Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

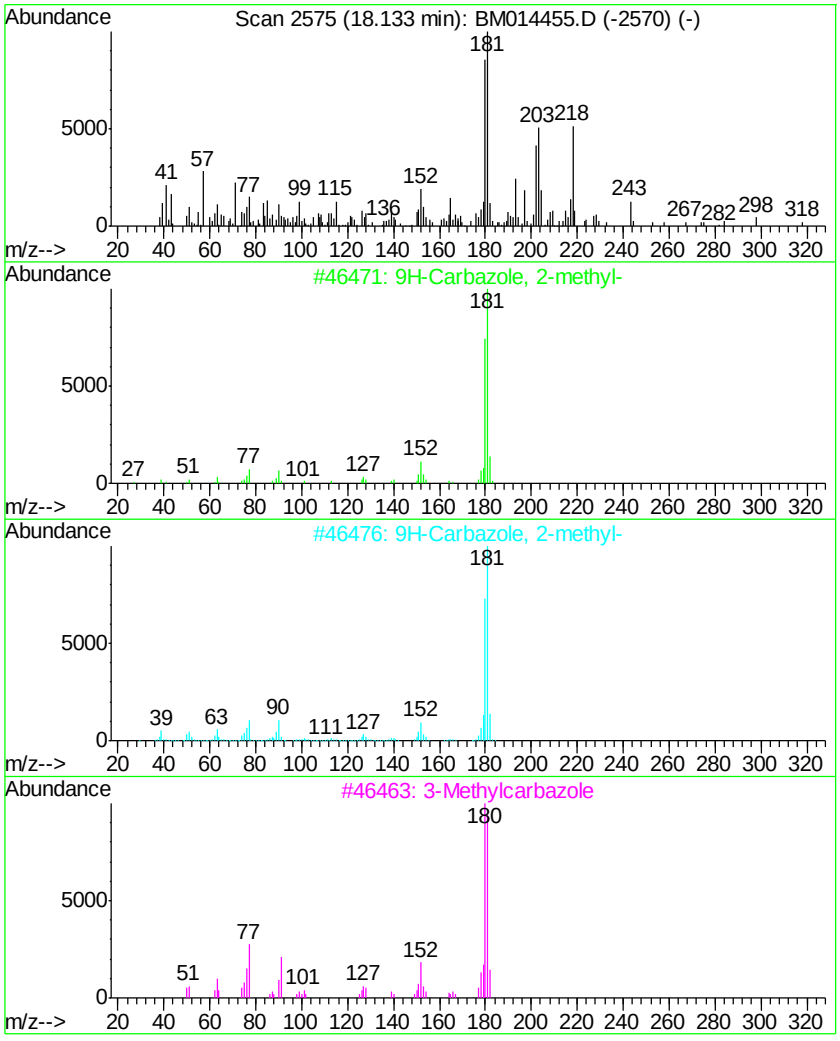
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

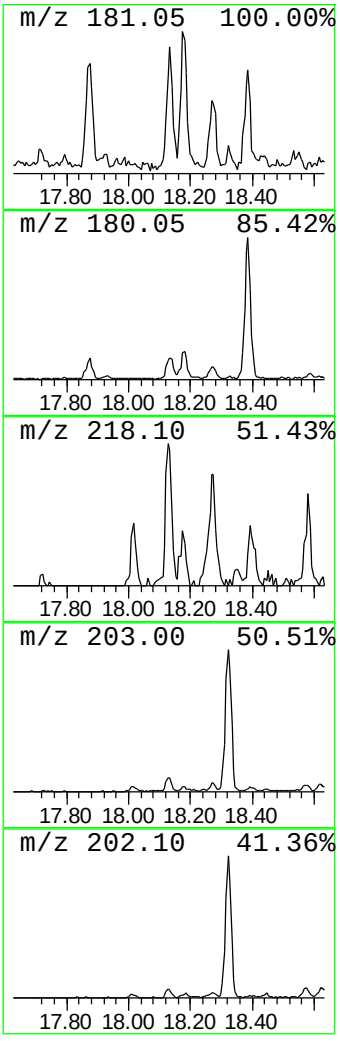
**********

Peak Number 17 9H-Carbazole, 2-methyl- Concentration Rank 23

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.13 | 4.02 ng/ul | 400084 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Carbazole, 2-methyl- | 181 | C13H11N | 003652-91-3 | 86 |
| 2 | 9H-Carbazole, 2-methyl- | 181 | C13H11N | 003652-91-3 | 64 |
| 3 | 3-Methylcarbazole | 181 | C13H11N | 004630-20-0 | 64 |
| 4 | 3-Methylcarbazole | 181 | C13H11N | 004630-20-0 | 64 |
| 5 | 3-Methylcarbazole | 181 | C13H11N | 004630-20-0 | 50 |



# Library Search Compound Report

Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

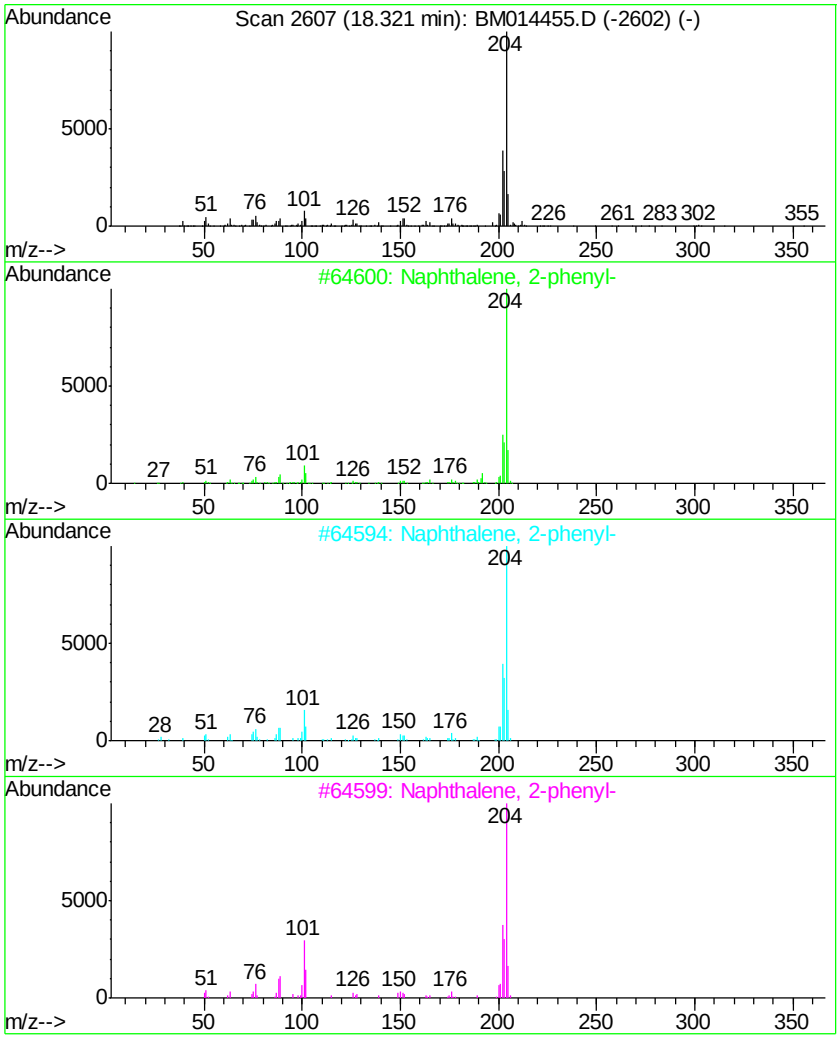
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

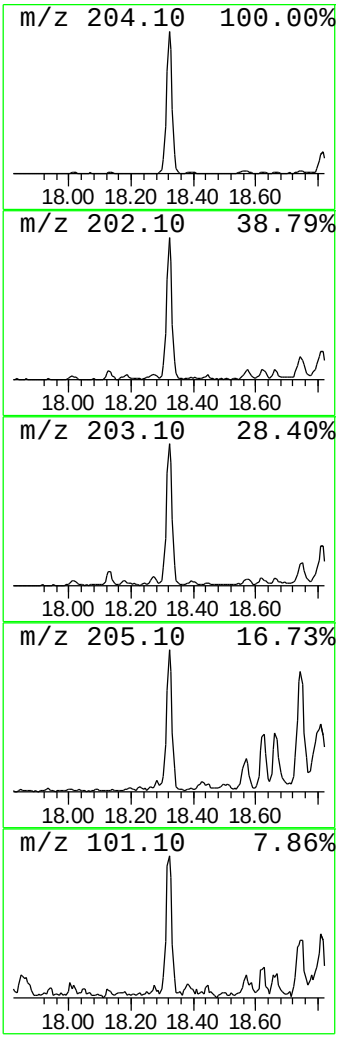
**********

Peak Number 18 Naphthalene, 2-phenyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.32 | 14.96 ng/ul | 1488200 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 68 |
| 2 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 64 |
| 3 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 62 |
| 4 | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12 | 006572-60-7 | 62 |
| 5 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 62 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

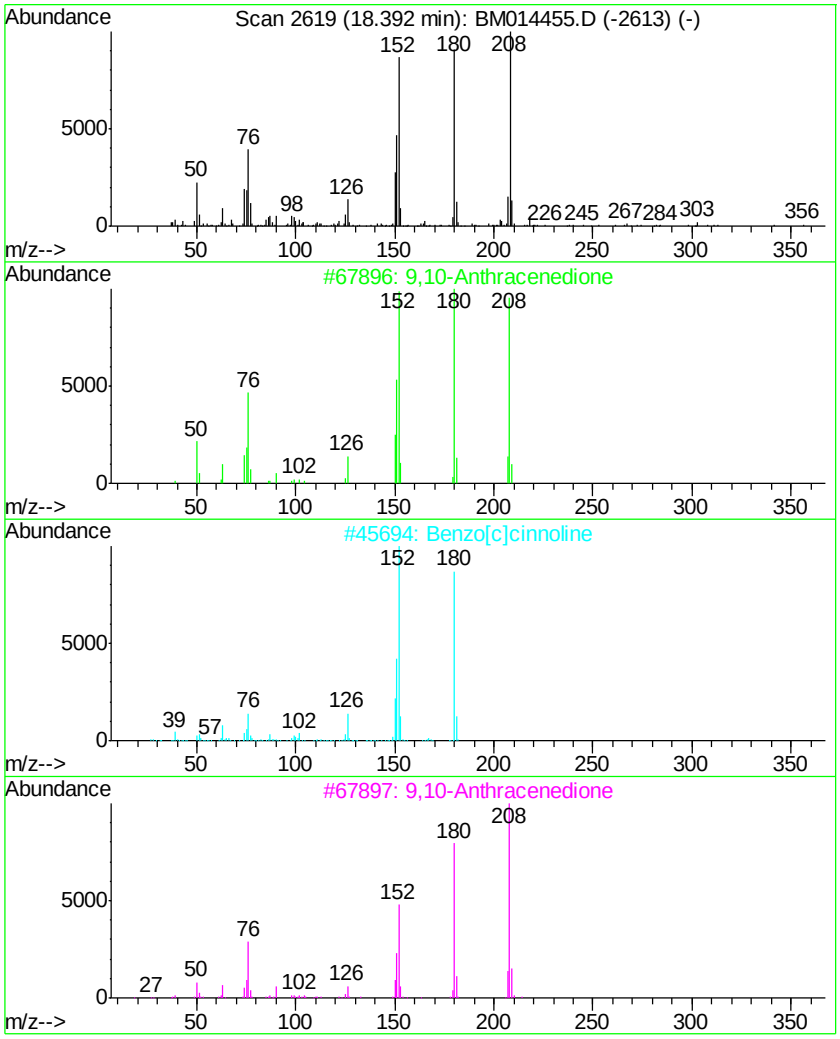
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

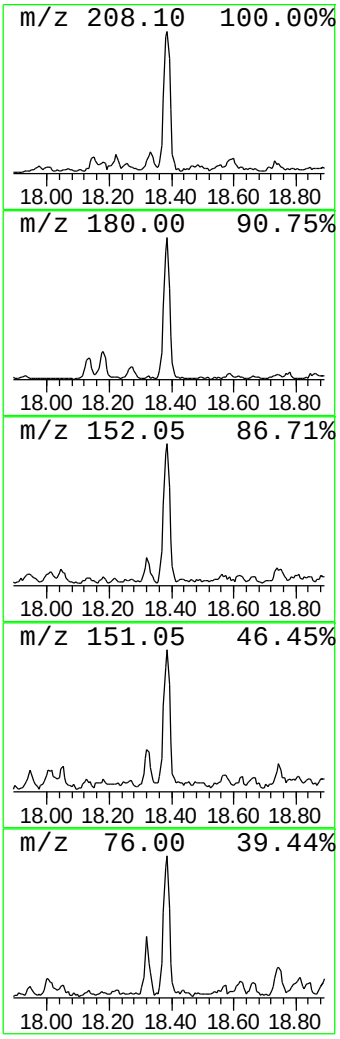
**********

Peak Number 19 9,10-Anthracenedione Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.39 | 10.06 ng/ul | 1000940 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 97 |
| 2 | Benzo[c]cinnoline | 180 | C12H8N2 | 000230-17-1 | 97 |
| 3 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 94 |
| 4 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 94 |
| 5 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 78 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

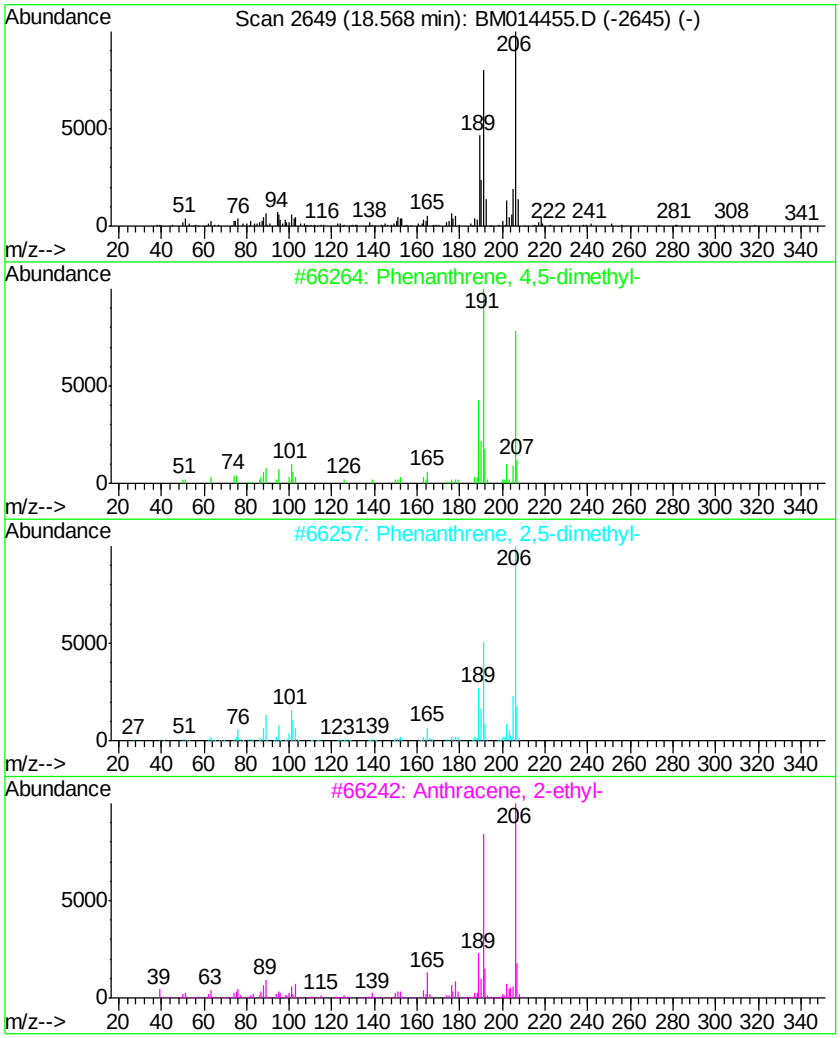
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

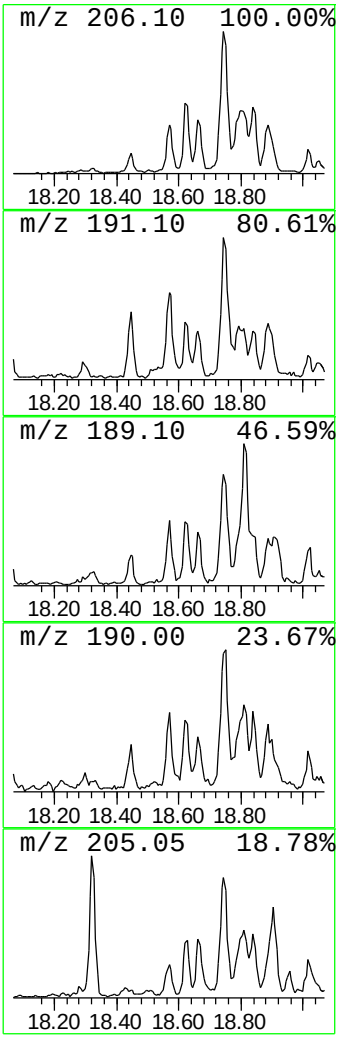
**********

Peak Number 20 Phenanthrene, 4,5-dimethyl- Concentration Rank 24

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.57 | 4.01 ng/ul | 398595 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 4,5-dimethyl- | 206 | C16H14 | 003674-69-9 | 91 |
| 2 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 91 |
| 3 | Anthracene, 2-ethyl- | 206 | C16H14 | 052251-71-5 | 89 |
| 4 | Phenanthrene, 4,5-dimethyl- | 206 | C16H14 | 003674-69-9 | 87 |
| 5 | Phenanthrene, 2,3-dimethyl- | 206 | C16H14 | 003674-65-5 | 87 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

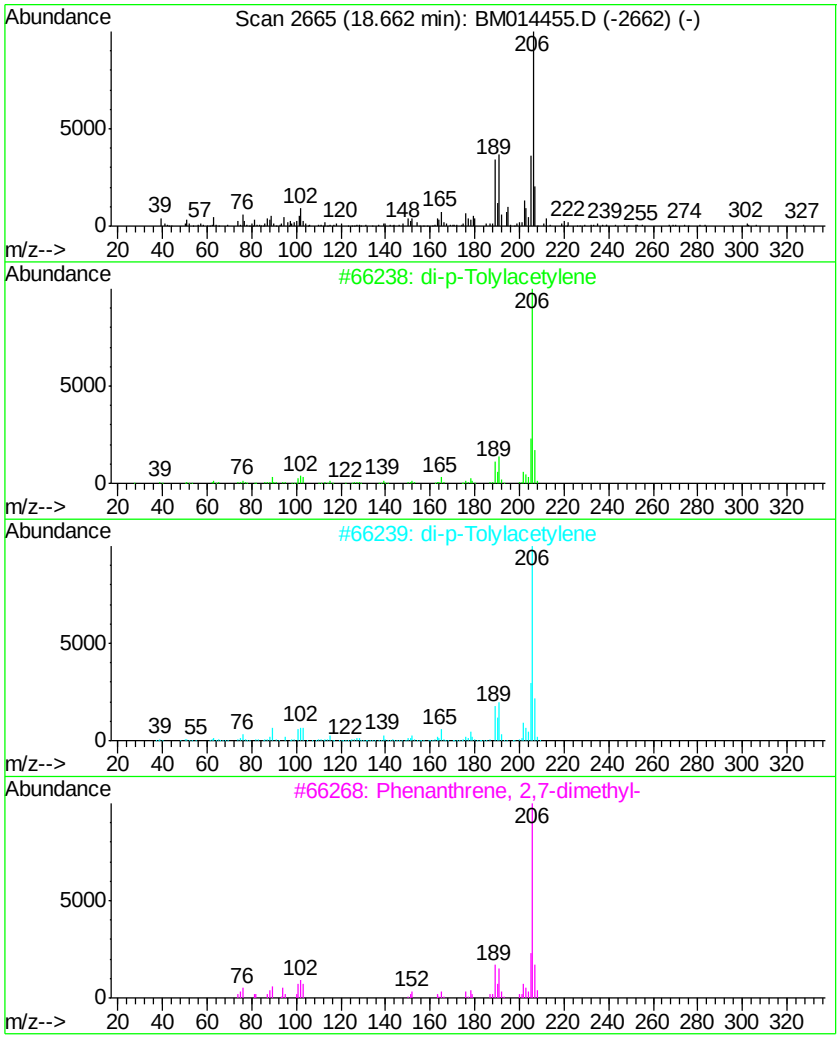
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

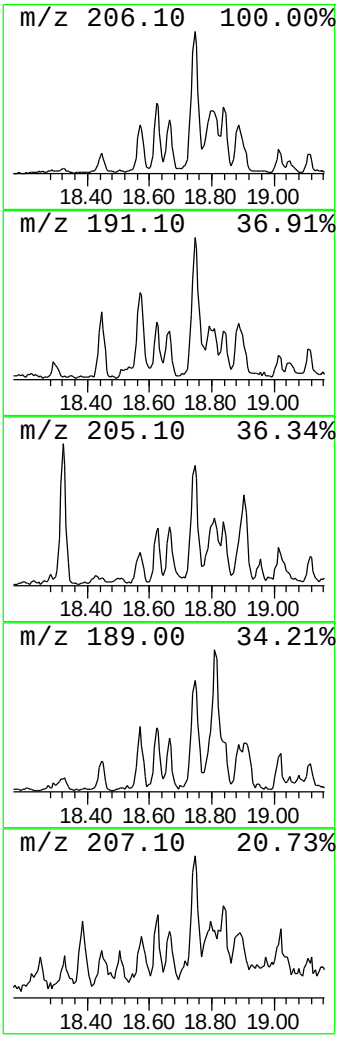
**********

Peak Number 22 di-p-Tolylacetylene Concentration Rank 21

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.66 | 4.10 ng/ul | 407663 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | di-p-Tolylacetylene | 206 | C16H14 | 002789-88-0 | 93 |
| 2 | di-p-Tolylacetylene | 206 | C16H14 | 002789-88-0 | 91 |
| 3 | Phenanthrene, 2,7-dimethyl- | 206 | C16H14 | 001576-69-8 | 87 |
| 4 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 72 |
| 5 | Phenanthrene, 2,7-dimethyl- | 206 | C16H14 | 001576-69-8 | 72 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

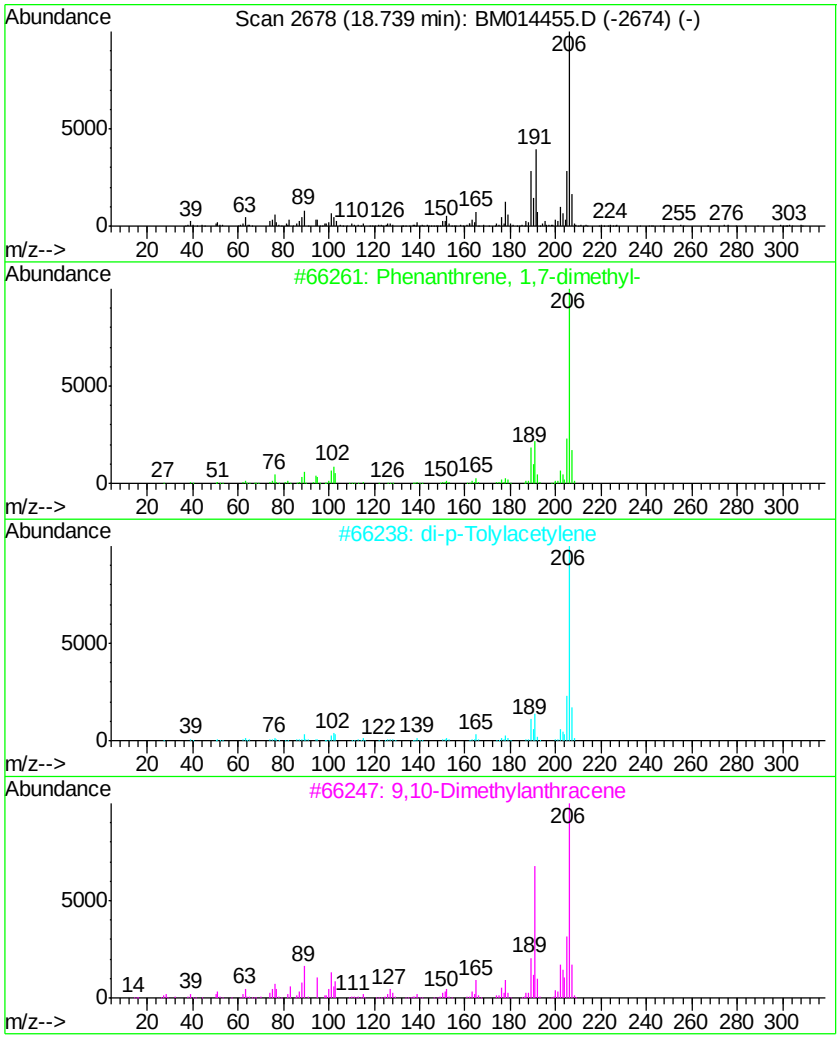
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

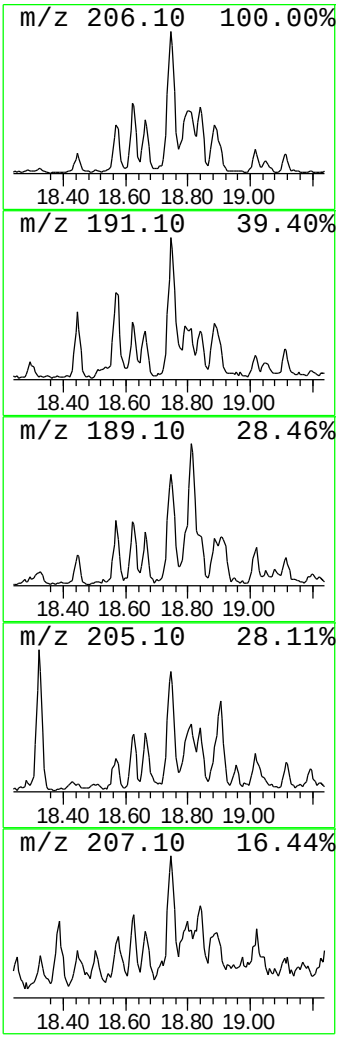
**********

Peak Number 23 Phenanthrene, 1,7-dimethyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.74 | 12.99 ng/ul | 1291750 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 1,7-dimethyl- | 206 | C16H14 | 000483-87-4 | 93 |
| 2 | di-p-Tolylacetylene | 206 | C16H14 | 002789-88-0 | 93 |
| 3 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 91 |
| 4 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 91 |
| 5 | Naphthalene, 1,2-dihydro-4-phenyl- | 206 | C16H14 | 007469-40-1 | 91 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

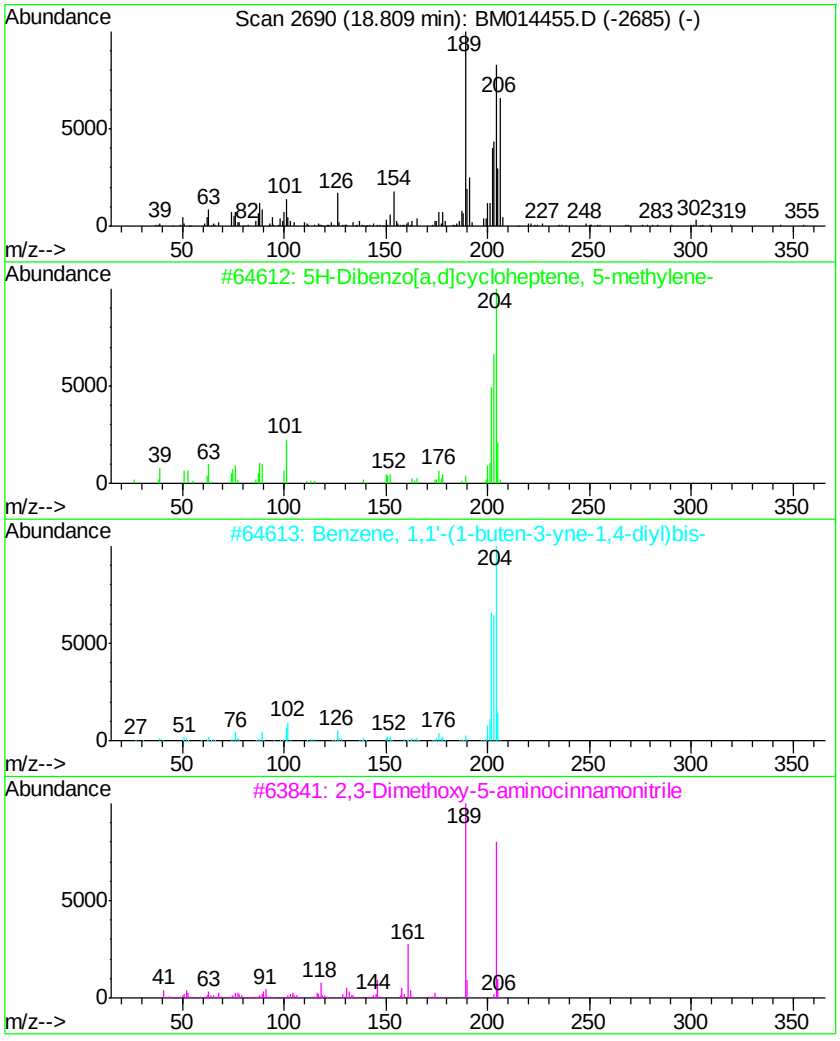
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

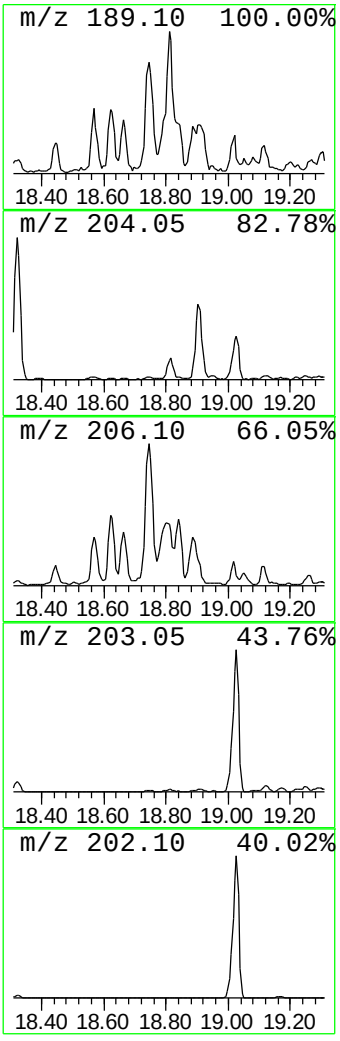
**********

Peak Number 24 5H-Dibenzo[a,d]cycloheptene... Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.81 | 8.51 ng/ul | 846941 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 5H-Dibenzo[a,d]cycloheptene, 5-m... | 204 | C16H12 | 002975-79-3 | 59 |
| 2 | Benzene, 1,1'-(1-buten-3-yne-1,4... | 204 | C16H12 | 013141-45-2 | 49 |
| 3 | 2,3-Dimethoxy-5-aminocinnamonitrile | 204 | C11H12N2O2 | 1000214-46-5 | 43 |
| 4 | 2-Isopropenyl-4a,8-dimethyl-1,2,... | 204 | C15H24 | 1000193-57-0 | 38 |
| 5 | 2-Acetyl-3,5-dimethylbenzo(b)thi... | 204 | C12H12OS | 006179-05-1 | 38 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

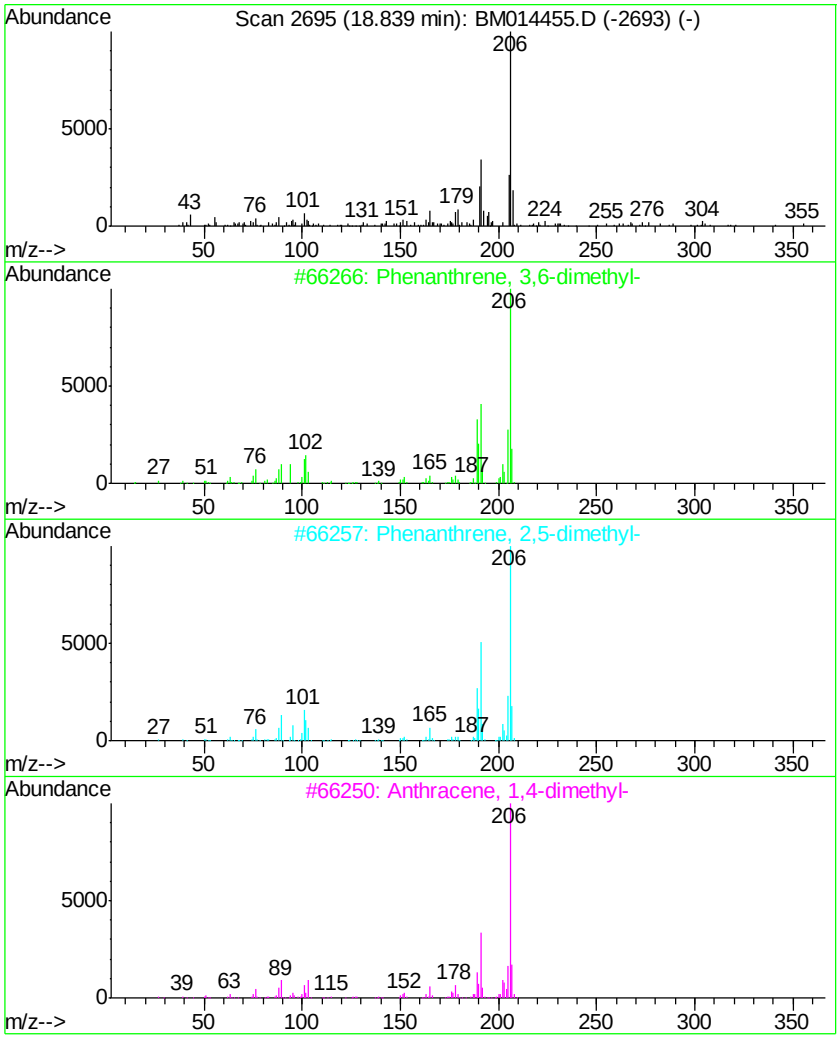
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

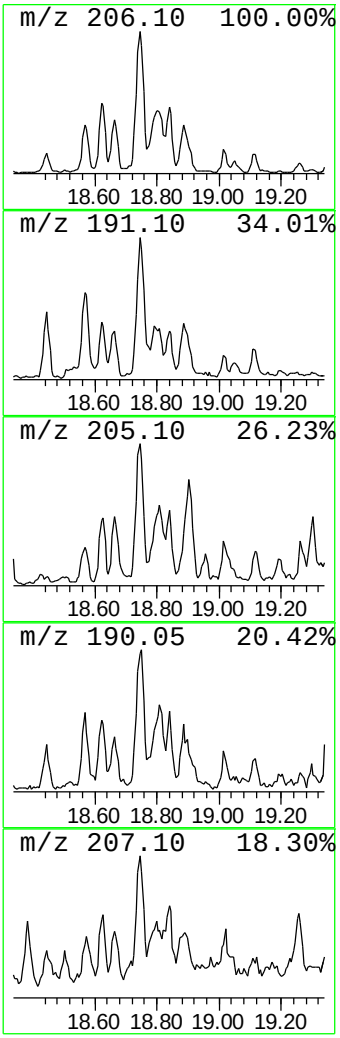
**********

Peak Number 25 Phenanthrene, 3,6-dimethyl- Concentration Rank 29

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.84 | 3.25 ng/ul | 323446 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 86 |
| 2 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 83 |
| 3 | Anthracene, 1,4-dimethyl- | 206 | C16H14 | 000781-92-0 | 76 |
| 4 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 74 |
| 5 | Phenanthrene, 1,7-dimethyl- | 206 | C16H14 | 000483-87-4 | 72 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

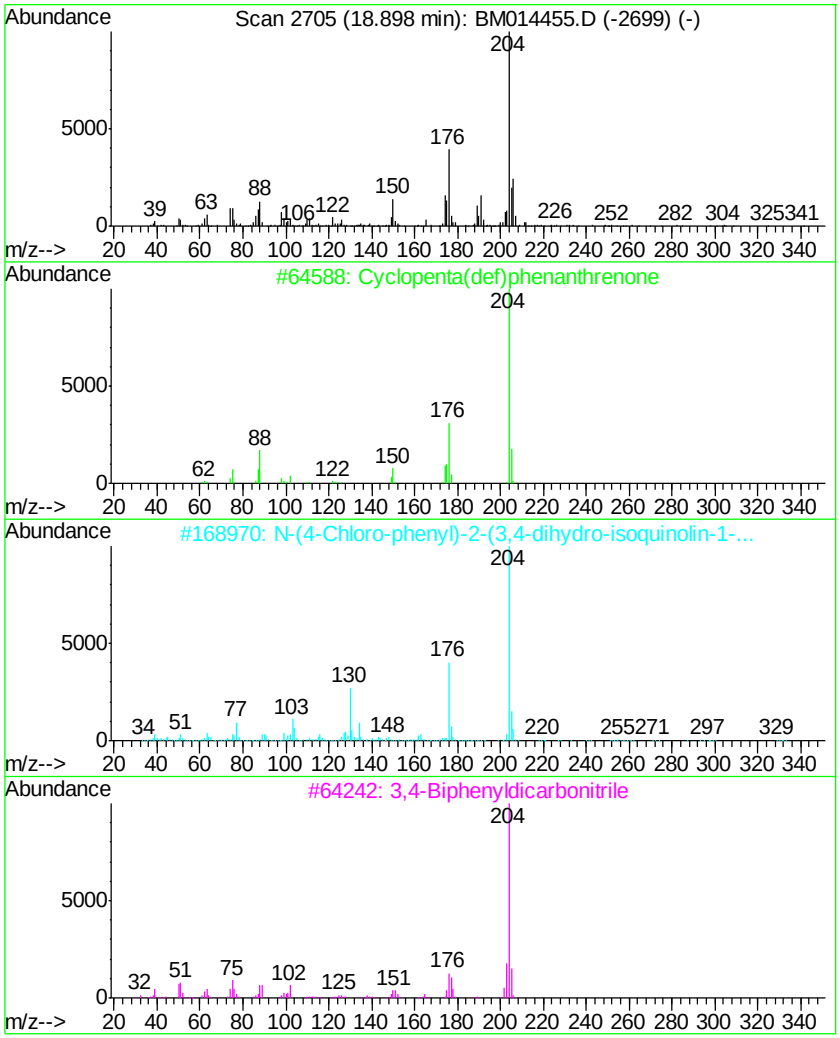
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

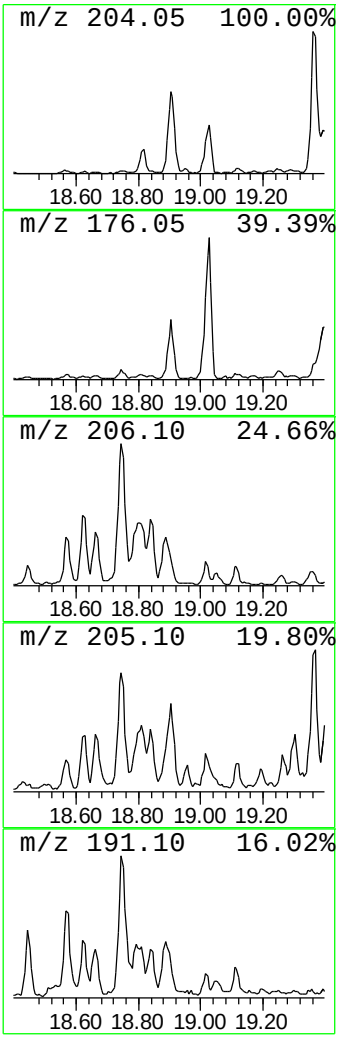
**********

Peak Number 26 Cyclopenta(def)phenanthrenone Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.90 | 14.87 ng/ul | 1479350 | Phenanthrene-d10 | 16.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(def)phenanthrenone | 204 | C15H8O | 005737-13-3 | 76 |
| 2 | N-(4-Chloro-phenyl)-2-(3,4-dihyd... | 330 | C17H15ClN2OS | 1000296-34-3 | 53 |
| 3 | 3,4-Biphenyldicarbonitrile | 204 | C14H8N2 | 004128-63-6 | 53 |
| 4 | 4(equat)-(but-3-en-1-ynyl)-2(axi... | 219 | C14H21NO | 038423-22-2 | 45 |
| 5 | 9-Acridinecarbonitrile | 204 | C14H8N2 | 005326-19-2 | 43 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

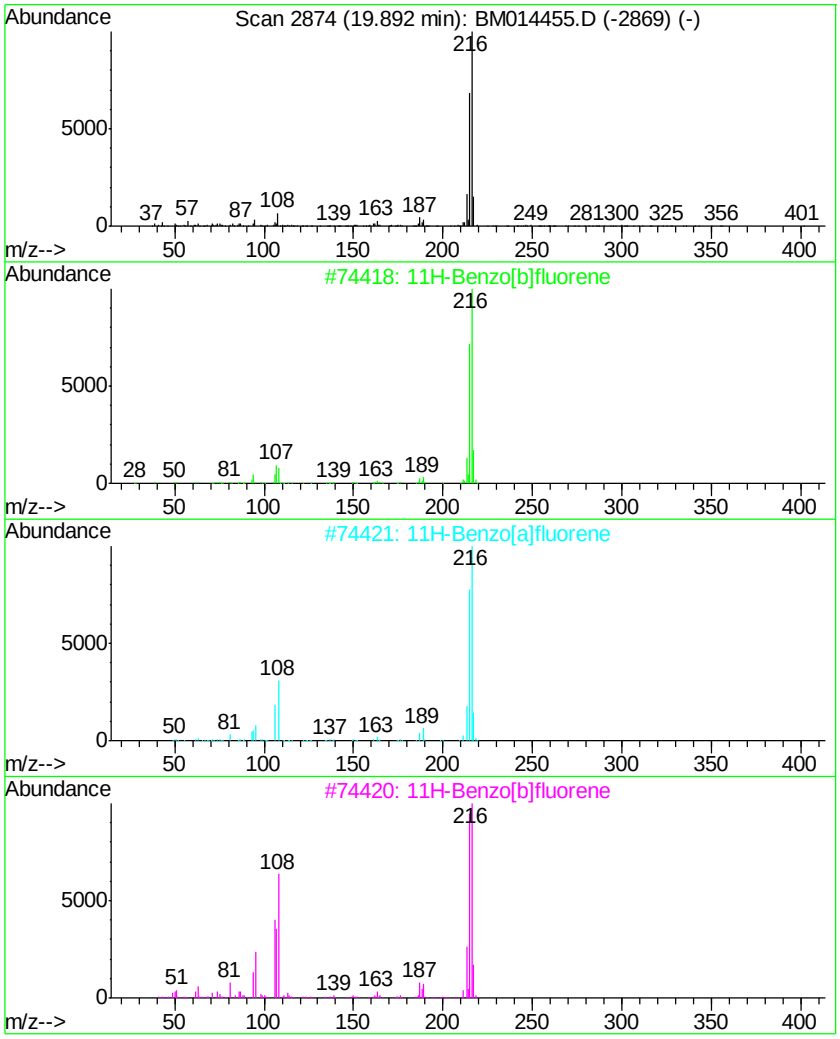
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

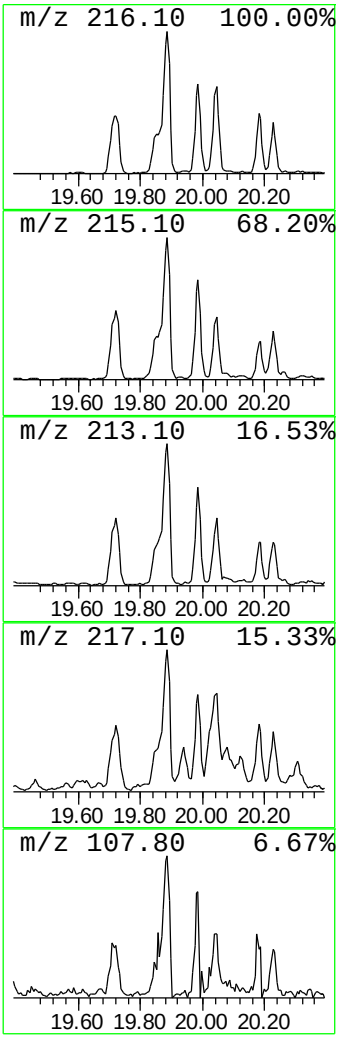
**********

Peak Number 27 11H-Benzo[b]fluorene Concentration Rank 27

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.89 | 3.45 ng/ul | 2774650 | Chrysene-d12 | 21.16 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 94 |
| 2 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 90 |
| 3 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 90 |
| 4 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 90 |
| 5 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 90 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

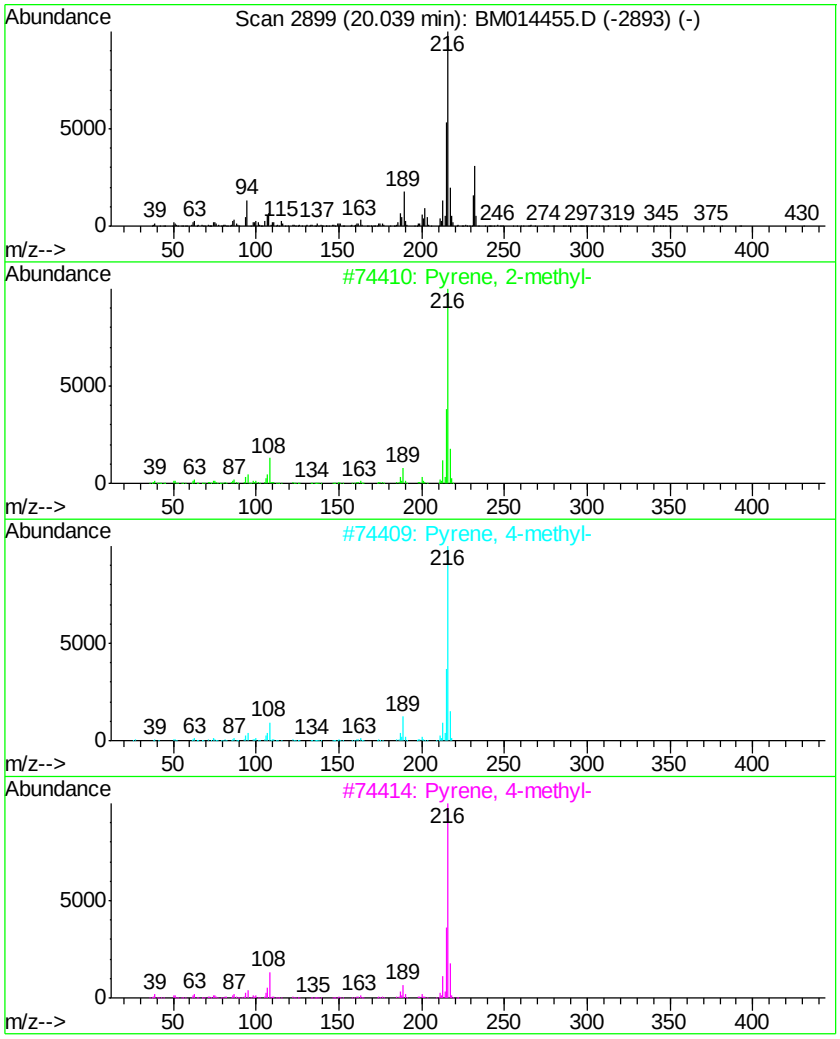
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

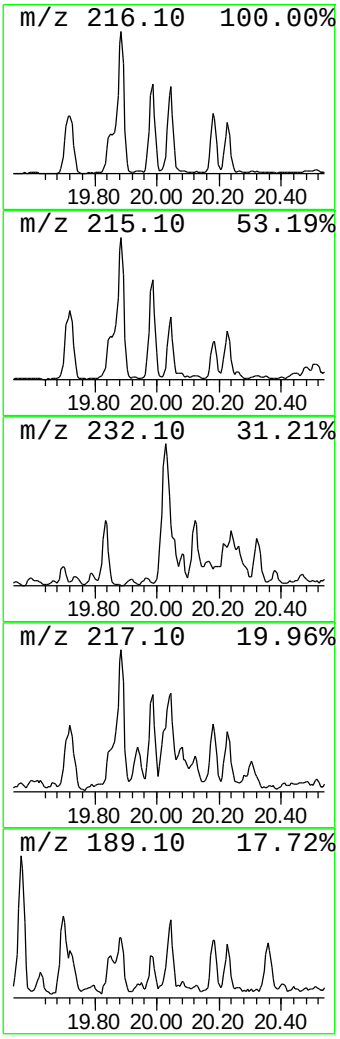
**********

Peak Number 28 Pyrene, 2-methyl- Concentration Rank 30

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.04 | 3.23 ng/ul | 2596450 | Chrysene-d12 | 21.16 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 86 |
| 2 | Pyrene, 4-methyl- | 216 | C17H12 | 003353-12-6 | 76 |
| 3 | Pyrene, 4-methyl- | 216 | C17H12 | 003353-12-6 | 76 |
| 4 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 76 |
| 5 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 70 |



Library Search Compound Report

Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

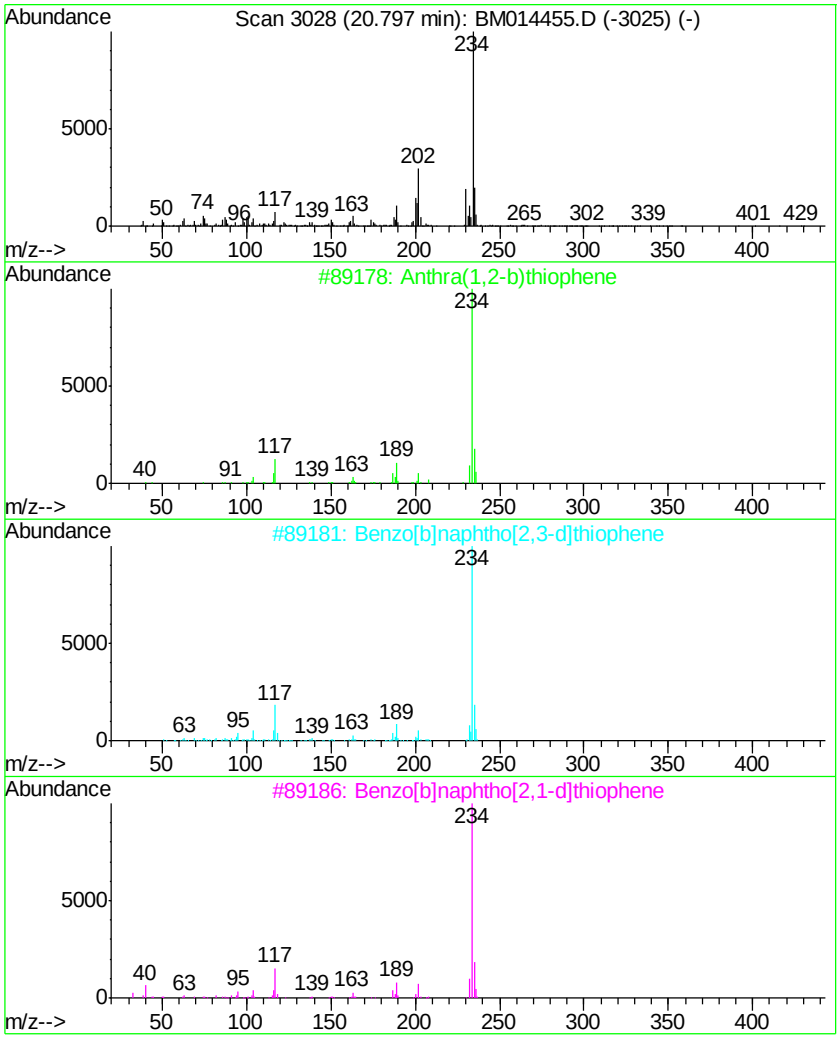
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

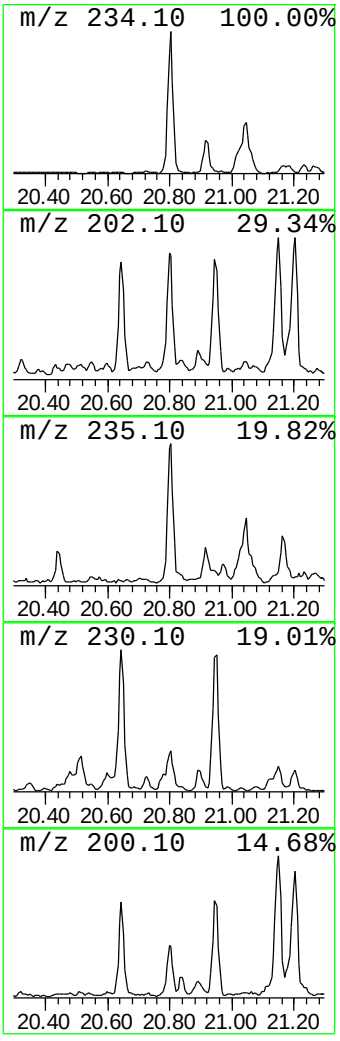
**********

Peak Number 29 Anthra(1,2-b)thiophene Concentration Rank 34

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.80 | 2.14 ng/ul | 1725100 | Chrysene-d12 | 21.16 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Anthra(1,2-b)thiophene | 234 | C16H10S | 000227-86-1 | 86 |
| 2 | Benzo[b]naphtho[2,3-d]thiophene | 234 | C16H10S | 000243-46-9 | 76 |
| 3 | Benzo[b]naphtho[2,1-d]thiophene | 234 | C16H10S | 000239-35-0 | 70 |
| 4 | Anthra(2,3-b)thiophene | 234 | C16H10S | 022108-55-0 | 70 |
| 5 | Benzo[b]naphtho[2,3-d]thiophene | 234 | C16H10S | 000243-46-9 | 68 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

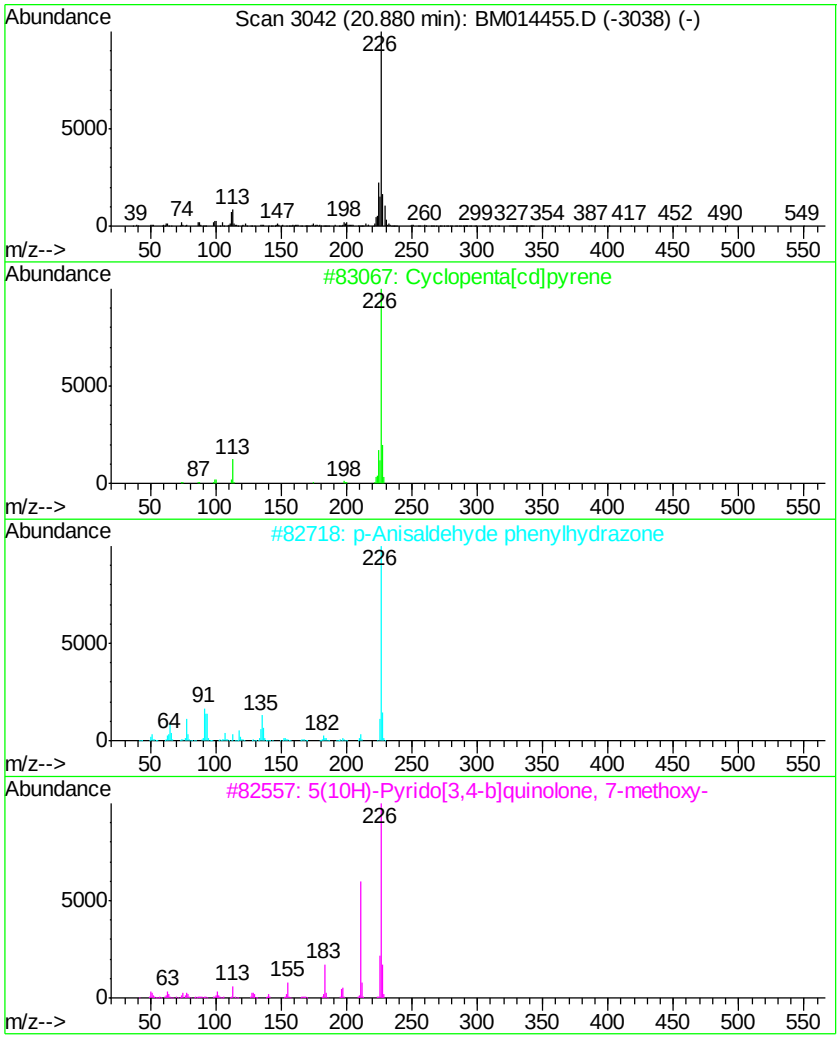
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

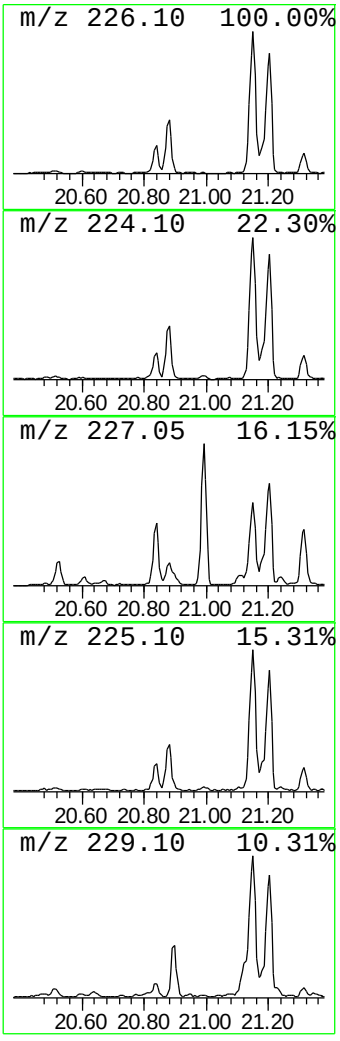
**********

Peak Number 30 Cyclopenta[cd]pyrene Concentration Rank 32

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.88 | 2.80 ng/ul | 2254590 | Chrysene-d12 | 21.16 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta[cd]pyrene | 226 | C18H10 | 027208-37-3 | 64 |
| 2 | p-Anisaldehyde phenylhydrazone | 226 | C14H14N2O | 000622-73-1 | 52 |
| 3 | 5(10H)-Pyrido[3,4-b]quinolone, 7... | 226 | C13H10N2O2 | 1000256-99-5 | 52 |
| 4 | .beta.-Carboline, 7-methoxy-1,2-... | 226 | C14H14N2O | 006519-18-2 | 52 |
| 5 | Benzo[ghi]fluoranthene | 226 | C18H10 | 000203-12-3 | 50 |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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

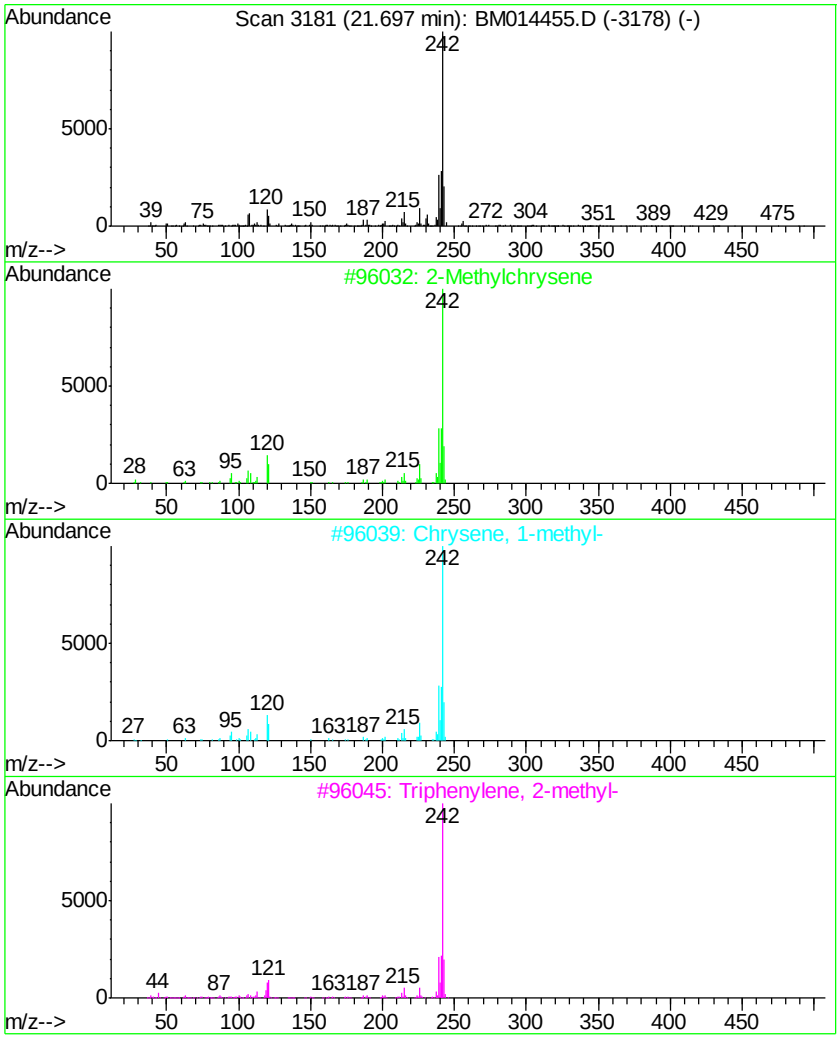
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

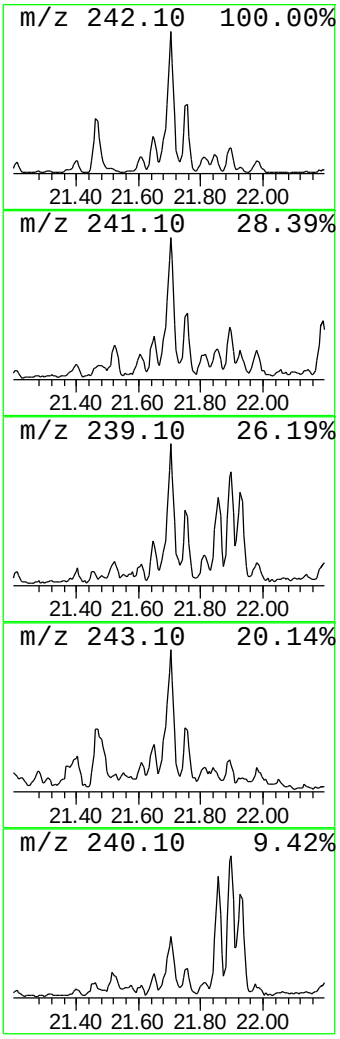
**********

Peak Number 31 2-Methylchrysene Concentration Rank 33

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 21.70 | 2.45 ng/ul | 1973600 | Chrysene-d12 | 21.16 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Methylchrysene | 242 | C19H14 | 003351-32-4 | 93 |
| 2 | Chrysene, 1-methyl- | 242 | C19H14 | 003351-28-8 | 93 |
| 3 | Triphenylene, 2-methyl- | 242 | C19H14 | 001705-84-6 | 93 |
| 4 | Benz[a]anthracene, 1-methyl- | 242 | C19H14 | 002498-77-3 | 89 |
| 5 | Benz[a]anthracene, 8-methyl- | 242 | C19H14 | 002381-31-9 | 89 |



Tentatively Identified Compound (LSC) summary

Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA_M\DATA\BM030218\
Data File : BM014455.D
Acq On : 02 Mar 2018 11:07
Operator : SJ/JU
Sample : J1646-12RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** BE5X6RE

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 |
| Naphthalene, 1,3-... | 13.49 | 4.1 | ng/ul | 355967 | 3 | 14.17 | 1745920 | 20.0 |
| [1,1'-Biphenyl]-4... | 15.53 | 6.7 | ng/ul | 580258 | 3 | 14.17 | 1745920 | 20.0 |
| 9H-Fluoren-9-ol | 15.68 | 8.2 | ng/ul | 819619 | 4 | 16.94 | 1989560 | 20.0 |
| unknown-01 | 15.92 | 3.4 | ng/ul | 339883 | 4 | 16.94 | 1989560 | 20.0 |
| 9H-Fluorene, 2-me... | 16.24 | 7.6 | ng/ul | 752385 | 4 | 16.94 | 1989560 | 20.0 |
| 9H-Fluoren-9-one | 16.60 | 5.3 | ng/ul | 531978 | 4 | 16.94 | 1989560 | 20.0 |
| Benzenamine, 4-[(... | 16.67 | 4.3 | ng/ul | 432381 | 4 | 16.94 | 1989560 | 20.0 |
| Dibenzothiophene | 16.76 | 8.5 | ng/ul | 843721 | 4 | 16.94 | 1989560 | 20.0 |
| Acridine | 17.14 | 3.1 | ng/ul | 308653 | 4 | 16.94 | 1989560 | 20.0 |
| Cyclobuta[1'',2''... | 17.46 | 3.8 | ng/ul | 373251 | 4 | 16.94 | 1989560 | 20.0 |
| 4-Methylnaphtho[1... | 17.53 | 4.7 | ng/ul | 468397 | 4 | 16.94 | 1989560 | 20.0 |
| Phenanthrene, 2-m... | 17.86 | 33.7 | ng/ul | 3353540 | 4 | 16.94 | 1989560 | 20.0 |
| 4H-Cyclopenta[def... | 18.01 | 35.1 | ng/ul | 3490910 | 4 | 16.94 | 1989560 | 20.0 |
| 9H-Carbazole, 2-m... | 18.13 | 4.0 | ng/ul | 400084 | 4 | 16.94 | 1989560 | 20.0 |
| Naphthalene, 2-ph... | 18.32 | 15.0 | ng/ul | 1488200 | 4 | 16.94 | 1989560 | 20.0 |
| 9,10-Anthracenedione | 18.39 | 10.1 | ng/ul | 1000940 | 4 | 16.94 | 1989560 | 20.0 |
| Phenanthrene, 4,5... | 18.57 | 4.0 | ng/ul | 398595 | 4 | 16.94 | 1989560 | 20.0 |
| di-p-Tolylacetylene | 18.66 | 4.1 | ng/ul | 407663 | 4 | 16.94 | 1989560 | 20.0 |
| Phenanthrene, 1,7... | 18.74 | 13.0 | ng/ul | 1291750 | 4 | 16.94 | 1989560 | 20.0 |
| 5H-Dibenzo[a,d]cy... | 18.81 | 8.5 | ng/ul | 846941 | 4 | 16.94 | 1989560 | 20.0 |
| Phenanthrene, 3,6... | 18.84 | 3.3 | ng/ul | 323446 | 4 | 16.94 | 1989560 | 20.0 |
| Cyclopenta(def)ph... | 18.90 | 14.9 | ng/ul | 1479350 | 4 | 16.94 | 1989560 | 20.0 |
| 11H-Benzo[b]fluorene | 19.89 | 3.5 | ng/ul | 2774650 | 5 | 21.16 | 16092400 | 20.0 |
| Pyrene, 2-methyl- | 20.04 | 3.2 | ng/ul | 2596450 | 5 | 21.16 | 16092400 | 20.0 |
| Anthra(1,2-b)thio... | 20.80 | 2.1 | ng/ul | 1725100 | 5 | 21.16 | 16092400 | 20.0 |
| Cyclopenta[cd]pyrene | 20.88 | 2.8 | ng/ul | 2254590 | 5 | 21.16 | 16092400 | 20.0 |
| 2-Methylchrysene | 21.70 | 2.5 | ng/ul | 1973600 | 5 | 21.16 | 16092400 | 20.0 |