LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF030217\
Data File : BF093343.D
Acq On : 3 Mar 2017 1:34
Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.956 | 248 | 251 | 262 | rVB | 1215942 | 1791566 | 32.54% | 1.731% |
| 2 | 5.390 | 287 | 289 | 303 | rBV | 3265150 | 3779117 | 68.64% | 3.651% |
| 3 | 5.596 | 305 | 307 | 311 | rVB2 | 46665 | 70289 | 1.28% | 0.068% |
| 4 | 6.442 | 379 | 381 | 384 | rBV | 2668218 | 3483337 | 63.27% | 3.365% |
| 5 | 6.567 | 389 | 392 | 394 | rVV | 3699042 | 3620658 | 65.76% | 3.498% |
| 6 | 6.624 | 394 | 397 | 400 | rVB2 | 54317 | 86536 | 1.57% | 0.084% |
| 7 | 6.796 | 409 | 412 | 414 | rBV | 1023911 | 940328 | 17.08% | 0.908% |
| 8 | 6.956 | 423 | 426 | 428 | rBV | 2313268 | 2828741 | 51.38% | 2.733% |
| 9 | 7.367 | 460 | 462 | 465 | rBV | 2155560 | 2160252 | 39.24% | 2.087% |
| 10 | 7.836 | 499 | 503 | 505 | rBV3 | 37707 | 89533 | 1.63% | 0.086% |
| 11 | 8.087 | 522 | 525 | 537 | rVB2 | 1428388 | 1830067 | 33.24% | 1.768% |
| 12 | 8.465 | 554 | 558 | 560 | rBV4 | 41356 | 98810 | 1.79% | 0.095% |
| 13 | 8.602 | 567 | 570 | 574 | rBV4 | 29343 | 106985 | 1.94% | 0.103% |
| 14 | 8.682 | 576 | 577 | 579 | rVV | 90490 | 91930 | 1.67% | 0.089% |
| 15 | 8.739 | 579 | 582 | 584 | rVV3 | 50608 | 97883 | 1.78% | 0.095% |
| 16 | 8.808 | 586 | 588 | 590 | rVB | 235263 | 188882 | 3.43% | 0.182% |
| 17 | 8.899 | 594 | 596 | 599 | rBV | 311563 | 453339 | 8.23% | 0.438% |
| 18 | 9.116 | 613 | 615 | 617 | rVB | 105662 | 90942 | 1.65% | 0.088% |
| 19 | 9.173 | 617 | 620 | 622 | rBV | 3878854 | 3682813 | 66.89% | 3.558% |
| 20 | 9.253 | 625 | 627 | 628 | rBV | 188720 | 205916 | 3.74% | 0.199% |
| 21 | 9.288 | 628 | 630 | 632 | rVB2 | 81248 | 123601 | 2.24% | 0.119% |
| 22 | 9.368 | 635 | 637 | 640 | rVB | 231101 | 278090 | 5.05% | 0.269% |
| 23 | 9.436 | 640 | 643 | 645 | rBV | 255656 | 362116 | 6.58% | 0.350% |
| 24 | 9.505 | 647 | 649 | 653 | rBV | 373809 | 658331 | 11.96% | 0.636% |
| 25 | 9.573 | 653 | 655 | 657 | rVV | 1268736 | 1106704 | 20.10% | 1.069% |
| 26 | 9.630 | 657 | 660 | 664 | rVB | 235634 | 309756 | 5.63% | 0.299% |
| 27 | 9.710 | 665 | 667 | 669 | rBV | 723914 | 630446 | 11.45% | 0.609% |
| 28 | 9.779 | 672 | 673 | 675 | rBV | 235014 | 219354 | 3.98% | 0.212% |
| 29 | 9.848 | 675 | 679 | 681 | rBV | 1409750 | 1594069 | 28.95% | 1.540% |
| 30 | 9.882 | 681 | 682 | 684 | rVB2 | 446443 | 384752 | 6.99% | 0.372% |
| 31 | 9.950 | 687 | 688 | 691 | rBV | 127151 | 195293 | 3.55% | 0.189% |
| 32 | 10.008 | 691 | 693 | 695 | rBV3 | 110871 | 211059 | 3.83% | 0.204% |
| 33 | 10.053 | 695 | 697 | 699 | rVB2 | 224376 | 263634 | 4.79% | 0.255% |
| 34 | 10.099 | 699 | 701 | 705 | rVB2 | 197591 | 255715 | 4.64% | 0.247% |

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Data File : BF093343.D
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Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 10.168 | 705 | 707 | 708 | rBV | 256722 | 273079 | 4.96% | 0.264% |
| 36 | 10.202 | 708 | 710 | 713 | rVB3 | 106500 | 177183 | 3.22% | 0.171% |
| 37 | 10.248 | 713 | 714 | 716 | rBV | 193474 | 367252 | 6.67% | 0.355% |
| 38 | 10.282 | 716 | 717 | 718 | rVB | 388249 | 266145 | 4.83% | 0.257% |
| 39 | 10.351 | 720 | 723 | 724 | rBV2 | 79758 | 129139 | 2.35% | 0.125% |
| 40 | 10.396 | 726 | 727 | 730 | rVB | 366480 | 411380 | 7.47% | 0.397% |
| 41 | 10.465 | 731 | 733 | 734 | rBV2 | 80181 | 104611 | 1.90% | 0.101% |
| 42 | 10.499 | 734 | 736 | 739 | rVB2 | 205922 | 352270 | 6.40% | 0.340% |
| 43 | 10.556 | 739 | 741 | 742 | rBV | 90061 | 110655 | 2.01% | 0.107% |
| 44 | 10.648 | 746 | 749 | 751 | rVV | 1391695 | 1715859 | 31.17% | 1.658% |
| 45 | 10.762 | 756 | 759 | 762 | rVB2 | 572608 | 934683 | 16.98% | 0.903% |
| 46 | 10.842 | 762 | 766 | 770 | rBV4 | 140246 | 401201 | 7.29% | 0.388% |
| 47 | 10.945 | 773 | 775 | 776 | rBV | 329904 | 467482 | 8.49% | 0.452% |
| 48 | 10.979 | 776 | 778 | 779 | rVB | 248228 | 289240 | 5.25% | 0.279% |
| 49 | 11.025 | 781 | 782 | 784 | rVB2 | 142903 | 149979 | 2.72% | 0.145% |
| 50 | 11.093 | 784 | 788 | 790 | rBV4 | 217663 | 467631 | 8.49% | 0.452% |
| 51 | 11.151 | 790 | 793 | 794 | rBV | 219603 | 241953 | 4.39% | 0.234% |
| 52 | 11.196 | 795 | 797 | 799 | rBV | 411691 | 466519 | 8.47% | 0.451% |
| 53 | 11.231 | 799 | 800 | 803 | rVB | 499751 | 474894 | 8.63% | 0.459% |
| 54 | 11.368 | 807 | 812 | 814 | rBV | 3693191 | 5331194 | 96.83% | 5.150% |
| 55 | 11.414 | 814 | 816 | 818 | rVV | 1144097 | 903175 | 16.40% | 0.873% |
| 56 | 11.448 | 818 | 819 | 822 | rVB3 | 157175 | 187055 | 3.40% | 0.181% |
| 57 | 11.562 | 828 | 829 | 832 | rBV3 | 297429 | 490462 | 8.91% | 0.474% |
| 58 | 11.631 | 832 | 835 | 836 | rVV | 898926 | 918195 | 16.68% | 0.887% |
| 59 | 11.665 | 836 | 838 | 841 | rVB3 | 276751 | 450948 | 8.19% | 0.436% |
| 60 | 11.791 | 847 | 849 | 851 | rBV2 | 201531 | 376937 | 6.85% | 0.364% |
| 61 | 11.836 | 851 | 853 | 855 | rVV | 1211071 | 1723580 | 31.31% | 1.665% |
| 62 | 11.871 | 855 | 856 | 858 | rVV | 1734542 | 1347286 | 24.47% | 1.302% |
| 63 | 11.916 | 858 | 860 | 861 | rVV | 651063 | 673322 | 12.23% | 0.650% |
| 64 | 11.951 | 861 | 863 | 867 | rVB2 | 1799553 | 3126796 | 56.79% | 3.021% |
| 65 | 12.031 | 867 | 870 | 872 | rBV2 | 670770 | 805297 | 14.63% | 0.778% |
| 66 | 12.076 | 872 | 874 | 875 | rVV2 | 172212 | 207157 | 3.76% | 0.200% |
| 67 | 12.134 | 877 | 879 | 881 | rVV | 1076479 | 1135894 | 20.63% | 1.097% |
| 68 | 12.168 | 881 | 882 | 884 | rVB2 | 341808 | 361607 | 6.57% | 0.349% |
| 69 | 12.282 | 890 | 892 | 893 | rBV | 317746 | 242433 | 4.40% | 0.234% |
| 70 | 12.316 | 893 | 895 | 899 | rVB | 473366 | 718490 | 13.05% | 0.694% |
| 71 | 12.385 | 899 | 901 | 903 | rBV2 | 1527349 | 2607751 | 47.36% | 2.519% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF030217\
Data File : BF093343.D
Acq On : 3 Mar 2017 1:34
Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 12.419 | 903 | 904 | 908 | rVV2 | 863003 | 1481106 | 26.90% | 1.431% |
| 73 | 12.488 | 908 | 910 | 913 | rVB2 | 590885 | 917666 | 16.67% | 0.887% |
| 74 | 12.556 | 913 | 916 | 918 | rBV | 2910982 | 2906473 | 52.79% | 2.808% |
| 75 | 12.614 | 918 | 921 | 923 | rVV3 | 292072 | 591590 | 10.75% | 0.571% |
| 76 | 12.648 | 923 | 924 | 927 | rVB | 381744 | 352256 | 6.40% | 0.340% |
| 77 | 12.785 | 933 | 936 | 939 | rBV | 3618696 | 5505679 | 100.00% | 5.319% |
| 78 | 12.842 | 939 | 941 | 942 | rVB | 367394 | 474409 | 8.62% | 0.458% |
| 79 | 12.922 | 945 | 948 | 952 | rVB | 2170607 | 2582207 | 46.90% | 2.495% |
| 80 | 13.002 | 952 | 955 | 958 | rBV3 | 640829 | 1117518 | 20.30% | 1.080% |
| 81 | 13.105 | 961 | 964 | 966 | rVB2 | 661358 | 1330668 | 24.17% | 1.285% |
| 82 | 13.151 | 966 | 968 | 969 | rBV2 | 194793 | 256174 | 4.65% | 0.247% |
| 83 | 13.208 | 972 | 973 | 976 | rBV | 732222 | 1010349 | 18.35% | 0.976% |
| 84 | 13.311 | 980 | 982 | 983 | rBV | 727684 | 1042483 | 18.93% | 1.007% |
| 85 | 13.334 | 983 | 984 | 986 | rBV | 871027 | 781707 | 14.20% | 0.755% |
| 86 | 13.619 | 1007 | 1009 | 1011 | rVB | 583244 | 659712 | 11.98% | 0.637% |
| 87 | 13.722 | 1016 | 1018 | 1019 | rBV2 | 348836 | 543695 | 9.88% | 0.525% |
| 88 | 13.974 | 1037 | 1040 | 1041 | rBV | 1778134 | 2699903 | 49.04% | 2.608% |
| 89 | 14.008 | 1041 | 1043 | 1044 | rVB | 1813377 | 1899823 | 34.51% | 1.835% |
| 90 | 14.134 | 1052 | 1054 | 1059 | rVB2 | 486070 | 947073 | 17.20% | 0.915% |
| 91 | 14.362 | 1072 | 1074 | 1076 | rVB | 697189 | 811089 | 14.73% | 0.784% |
| 92 | 15.002 | 1127 | 1130 | 1136 | rVB2 | 1306016 | 2945285 | 53.50% | 2.845% |
| 93 | 15.105 | 1137 | 1139 | 1141 | rBV | 328156 | 385521 | 7.00% | 0.372% |
| 94 | 15.288 | 1152 | 1155 | 1158 | rVB | 1453528 | 2175281 | 39.51% | 2.101% |
| 95 | 15.357 | 1158 | 1161 | 1163 | rBV | 1354394 | 2120380 | 38.51% | 2.048% |
| 96 | 15.402 | 1163 | 1165 | 1167 | rBV | 384507 | 575621 | 10.46% | 0.556% |
| 97 | 15.711 | 1190 | 1192 | 1193 | rBV | 232817 | 317997 | 5.78% | 0.307% |
| 98 | 16.808 | 1285 | 1288 | 1298 | rVB | 857355 | 2107815 | 38.28% | 2.036% |
| 99 | 16.968 | 1299 | 1302 | 1304 | rBV | 242391 | 574649 | 10.44% | 0.555% |
| 100 | 17.243 | 1322 | 1326 | 1333 | rVB | 1031119 | 2701765 | 49.07% | 2.610% |

Sum of corrected areas: 103515472

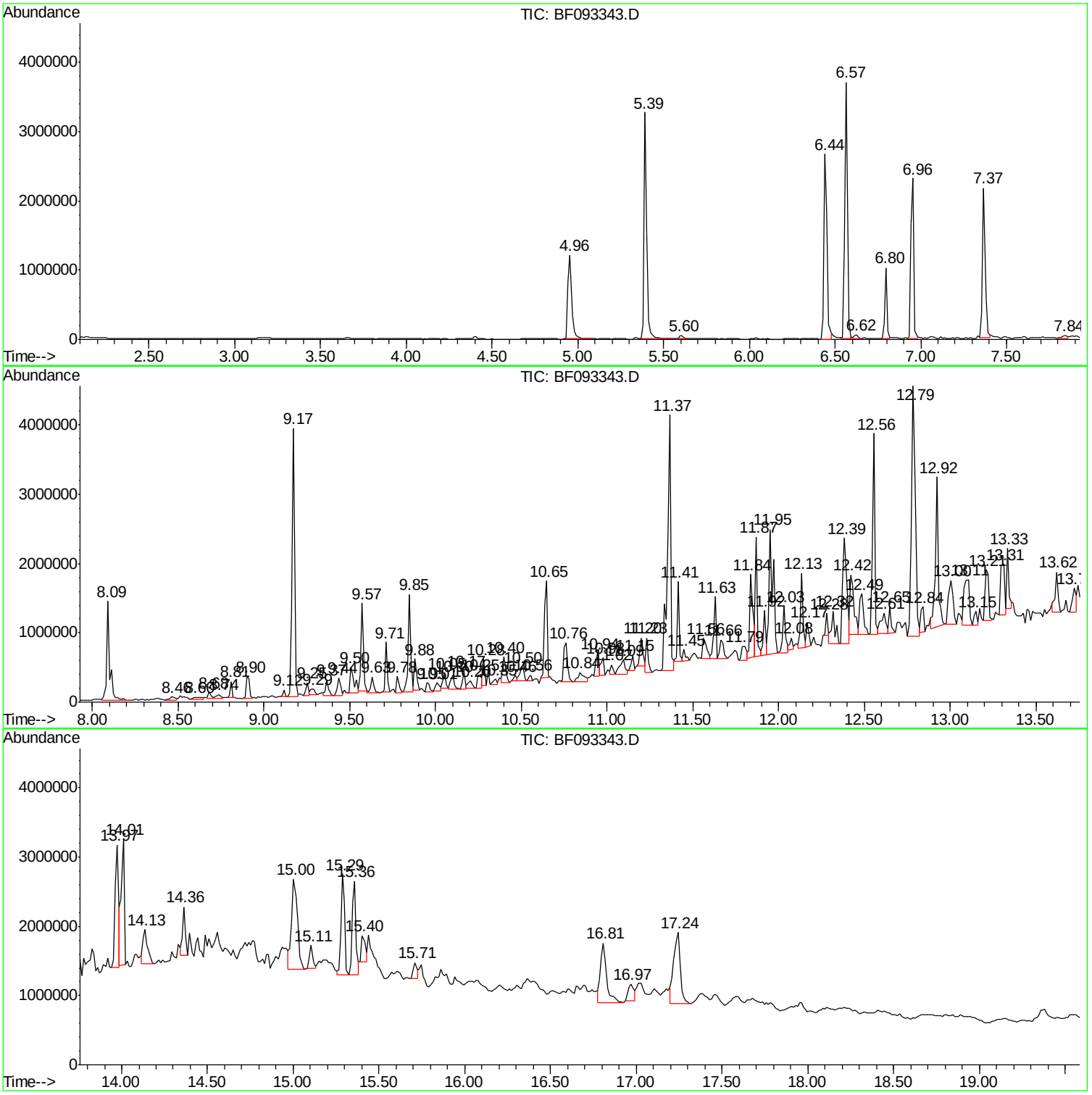
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF030217\
Data File : BF093343.D
Acq On : 3 Mar 2017 1:34
Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF030217\
Data File : BF093343.D
Acq On : 3 Mar 2017 1:34
Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

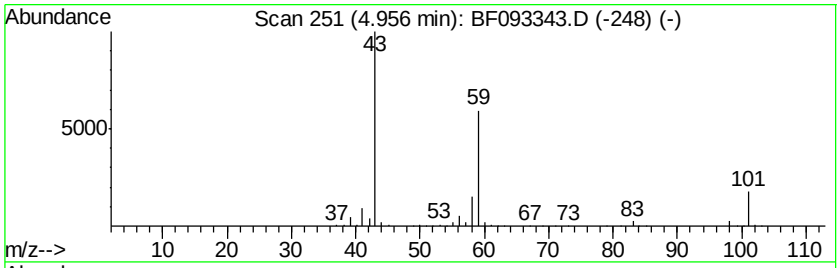
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

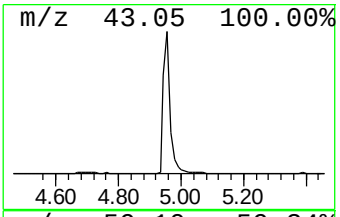
**********

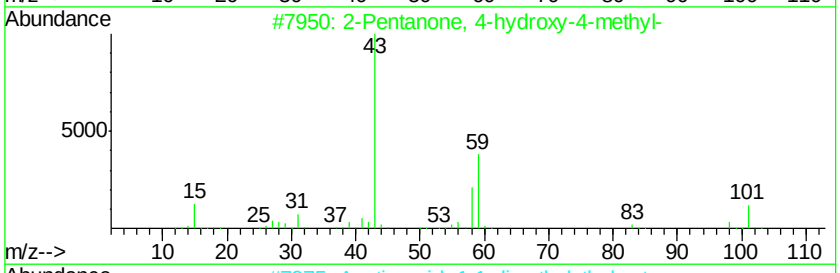
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 4

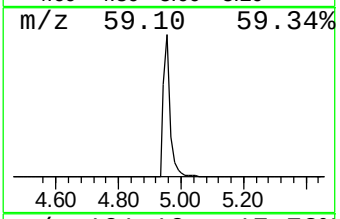
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.96 | 38.11 ng | 1791570 | 1,4-Dichlorobenzene-d4 | 6.80 |

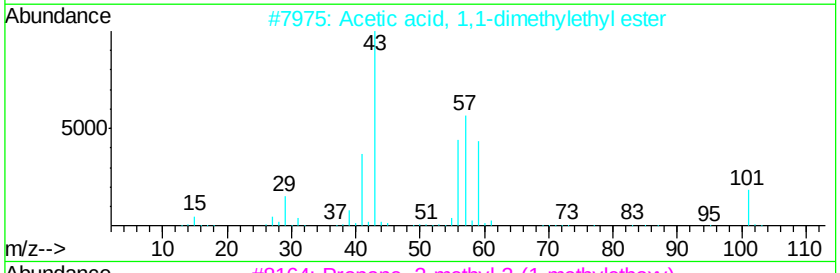
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 59 |
| 2 | Acetic acid, 1,1-dimethylethyl e... | 116 | C6H12O2 | 000540-88-5 | 39 |
| 3 | Propane, 2-methyl-2-(1-methyleth... | 116 | C7H16O | 017348-59-3 | 33 |
| 4 | 3-Hexanol, 4-methyl- | 116 | C7H16O | 000615-29-2 | 33 |
| 5 | 2-Hexanol, 2-methyl- | 116 | C7H16O | 000625-23-0 | 28 |

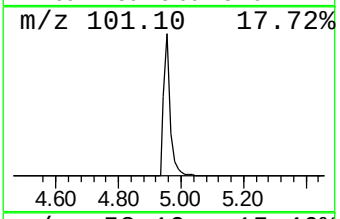


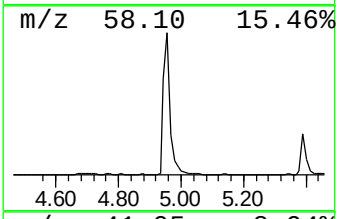



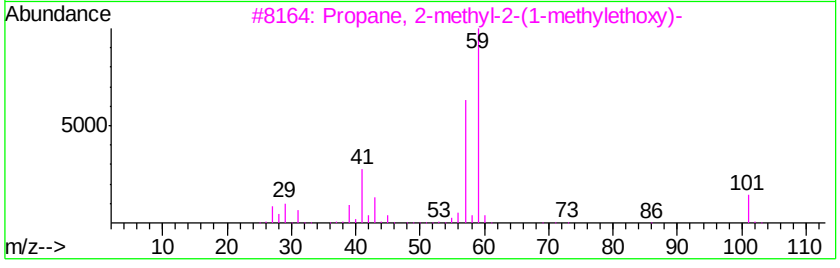



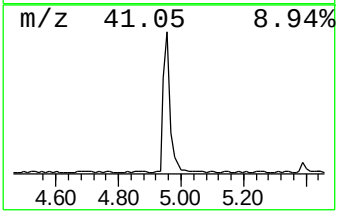



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**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

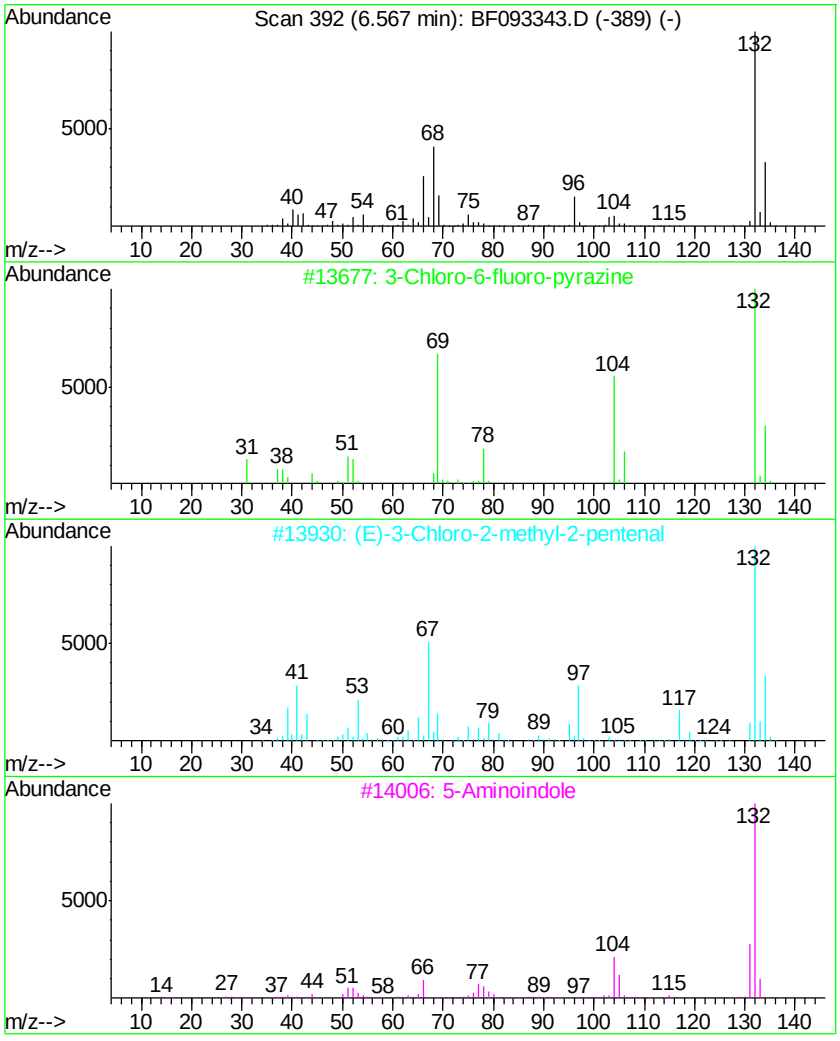
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

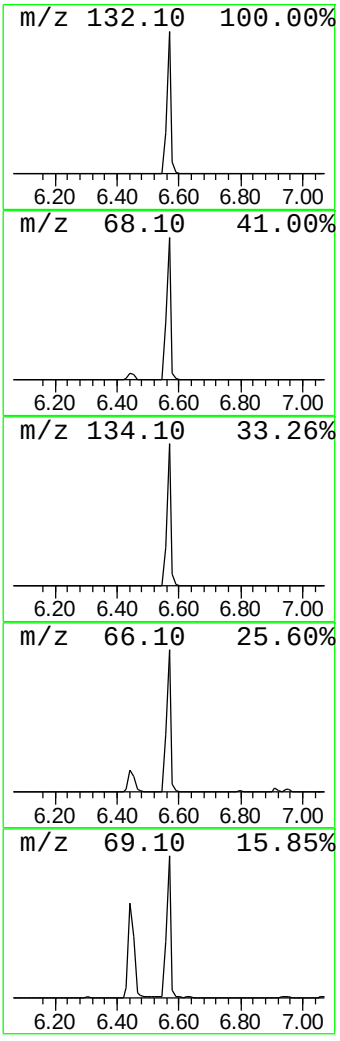
**********

Peak Number 2 unknown6.57 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.57 | 77.01 ng | 3620660 | 1,4-Dichlorobenzene-d4 | 6.80 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 27 |
| 2 | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO | 031357-76-3 | 16 |
| 3 | 5-Aminoindole | 132 | C8H8N2 | 005192-03-0 | 12 |
| 4 | Tranylcypromine-propionyl | 189 | C12H15NO | 1000123-86-3 | 10 |
| 5 | Benzene, 1,3,5-trifluoro- | 132 | C6H3F3 | 000372-38-3 | 9 |



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Data File : BF093343.D
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Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

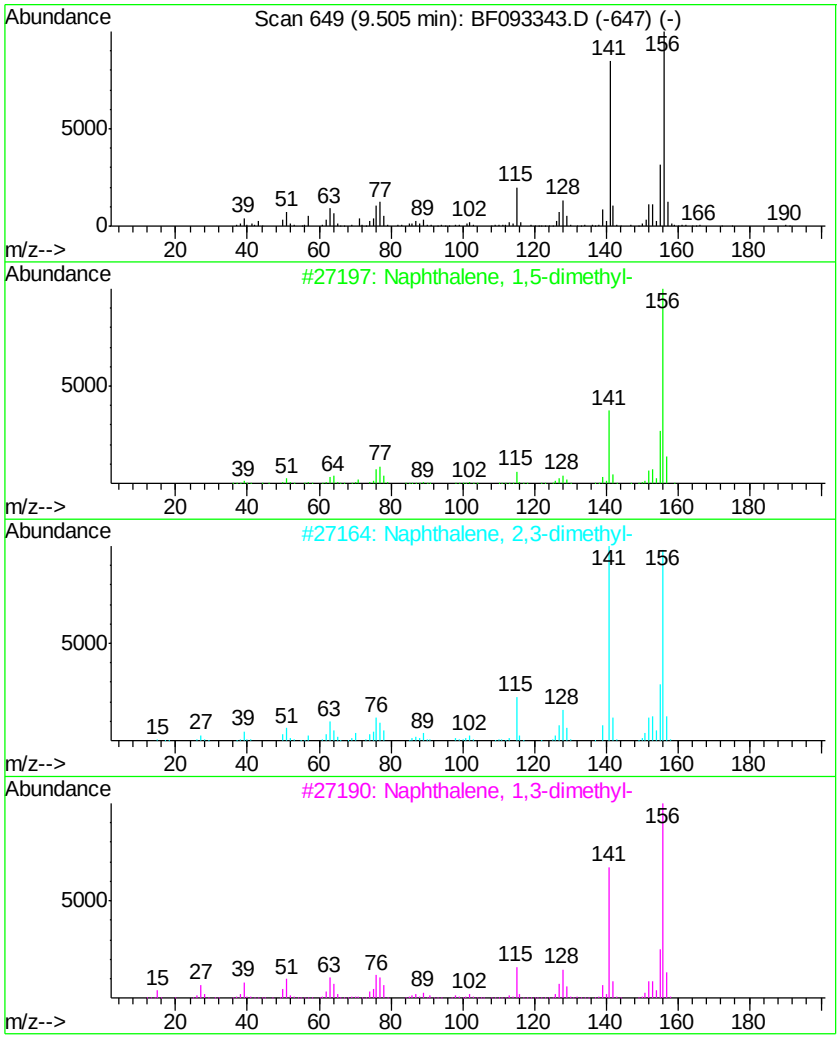
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

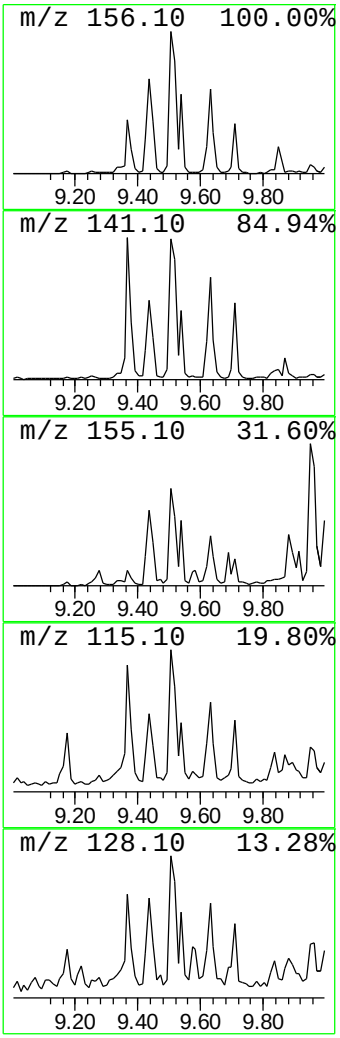
**********

Peak Number 4 Naphthalene, 1,5-dimethyl- Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.50 | 8.26 ng | 658331 | Acenaphthene-d10 | 9.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,5-dimethyl- | 156 | C12H12 | 000571-61-9 | 95 |
| 2 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 95 |
| 3 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 95 |
| 4 | Naphthalene, 1,6-dimethyl- | 156 | C12H12 | 000575-43-9 | 94 |
| 5 | Naphthalene, 1,8-dimethyl- | 156 | C12H12 | 000569-41-5 | 93 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF030217\
Data File : BF093343.D
Acq On : 3 Mar 2017 1:34
Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

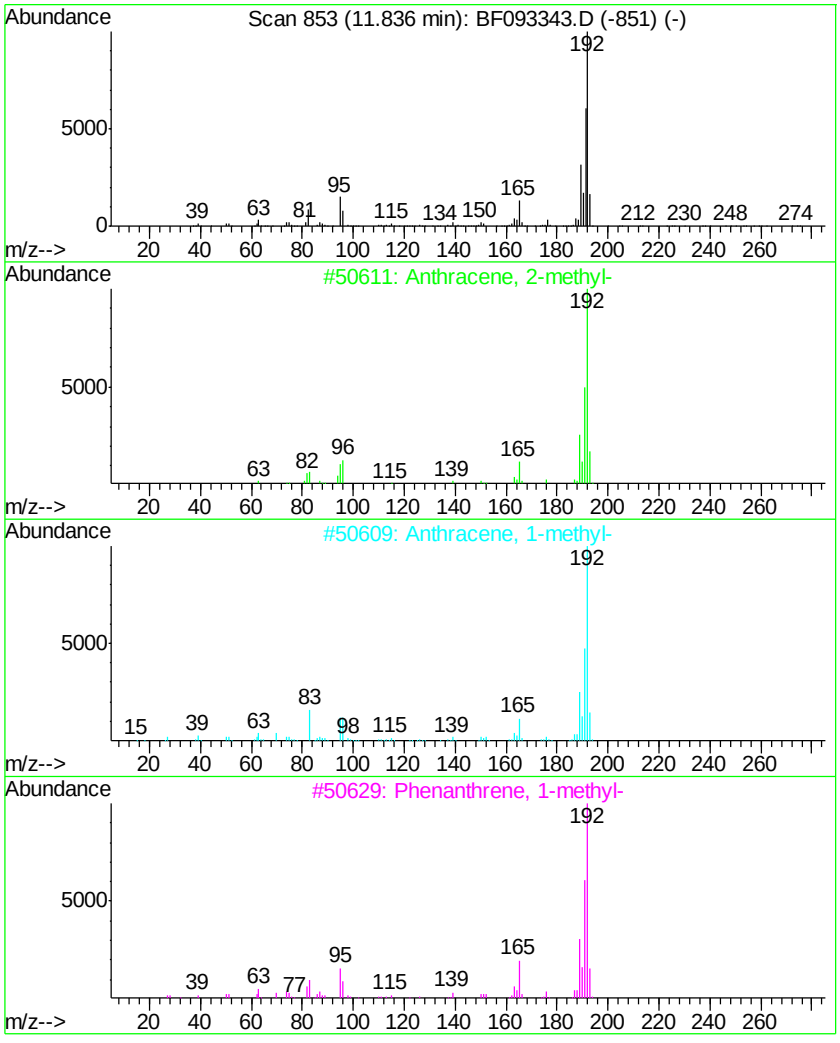
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

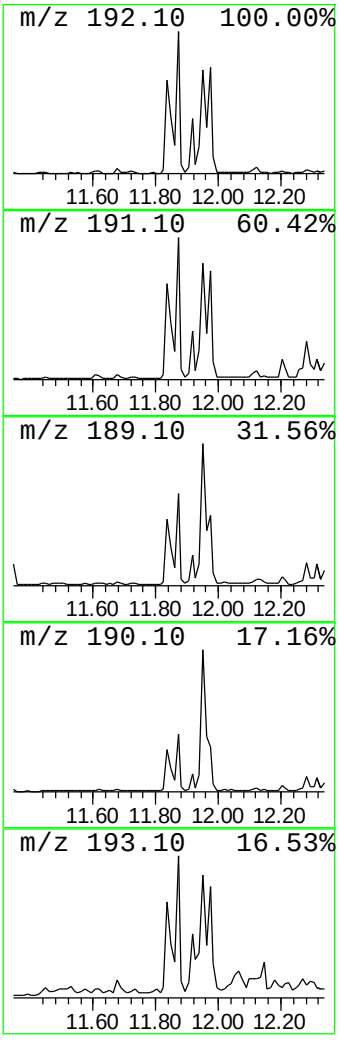
**********

Peak Number 5 Anthracene, 2-methyl- Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.84 | 6.47 ng | 1723580 | Phenanthrene-d10 | 11.33 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 93 |
| 2 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 93 |
| 3 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 91 |
| 4 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 91 |
| 5 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 90 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF030217\
Data File : BF093343.D
Acq On : 3 Mar 2017 1:34
Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

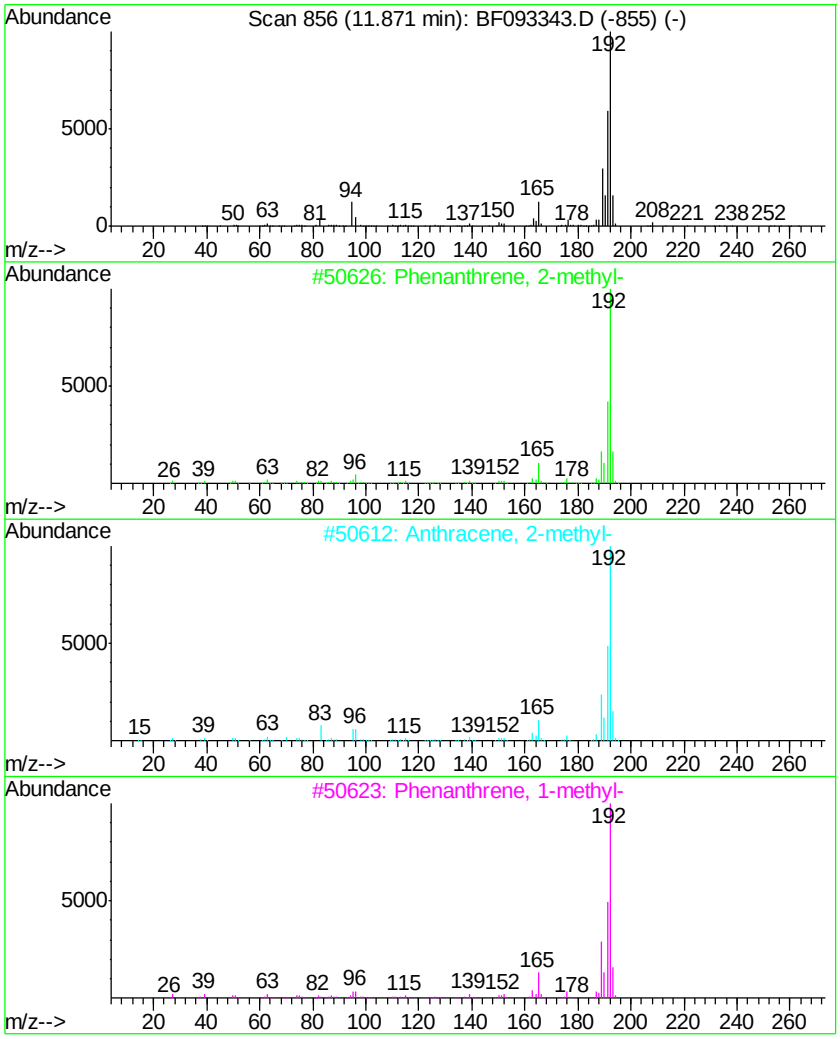
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

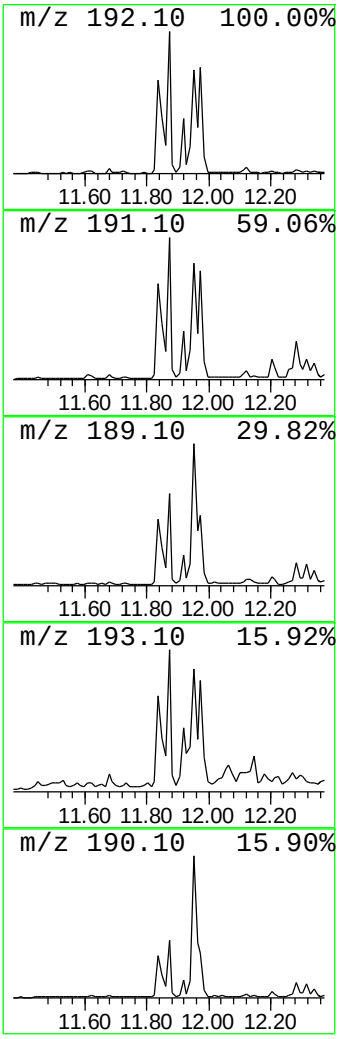
**********

Peak Number 6 Phenanthrene, 2-methyl- Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.87 | 5.05 ng | 1347290 | Phenanthrene-d10 | 11.33 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 95 |
| 2 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 95 |
| 3 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 95 |
| 4 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 95 |
| 5 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 94 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF030217\
Data File : BF093343.D
Acq On : 3 Mar 2017 1:34
Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

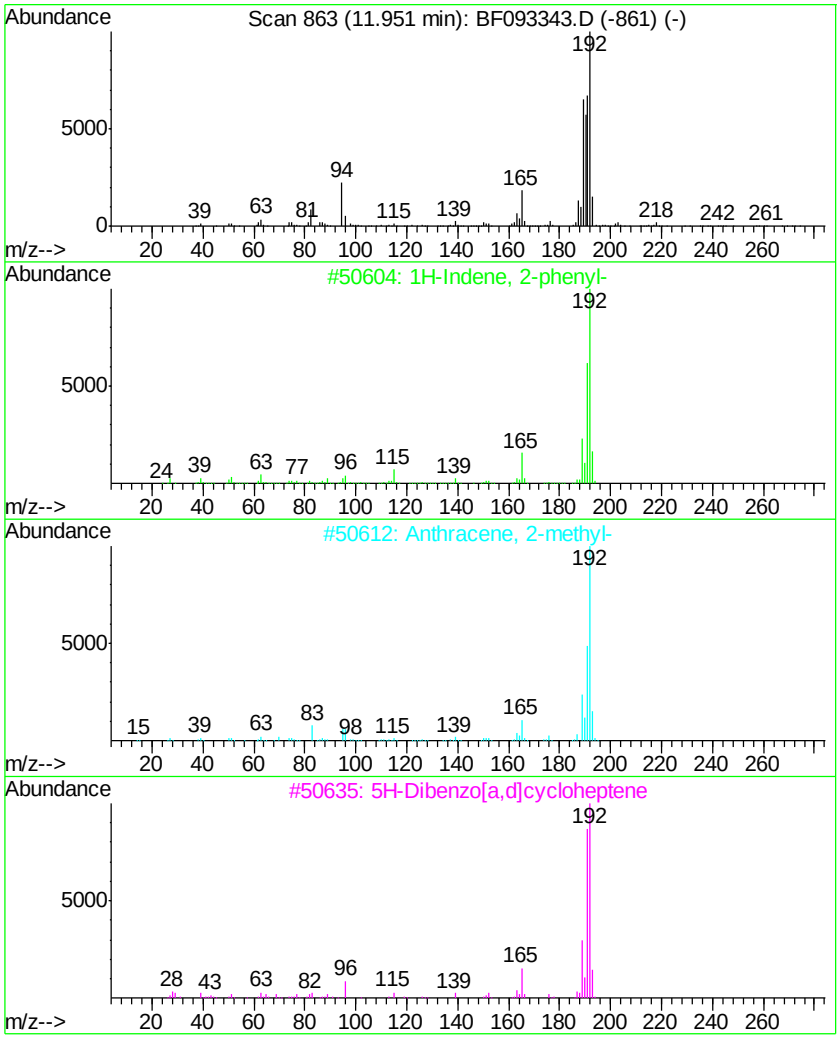
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

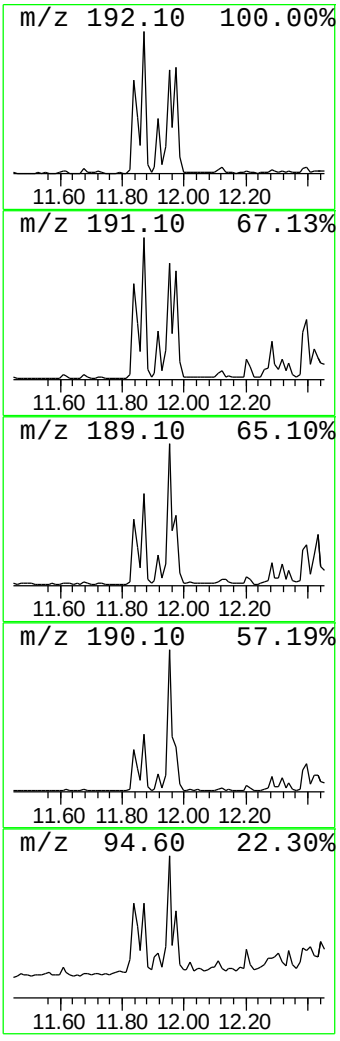
**********

Peak Number 7 1H-Indene, 2-phenyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.95 | 11.73 ng | 3126800 | Phenanthrene-d10 | 11.33 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1H-Indene, 2-phenyl- | 192 | C15H12 | 004505-48-0 | 60 |
| 2 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 55 |
| 3 | 5H-Dibenzo[a,d]cycloheptene | 192 | C15H12 | 000256-81-5 | 55 |
| 4 | Naphtho[2,3-b]norbornadiene | 192 | C15H12 | 107426-38-0 | 53 |
| 5 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 53 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF030217\
Data File : BF093343.D
Acq On : 3 Mar 2017 1:34
Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

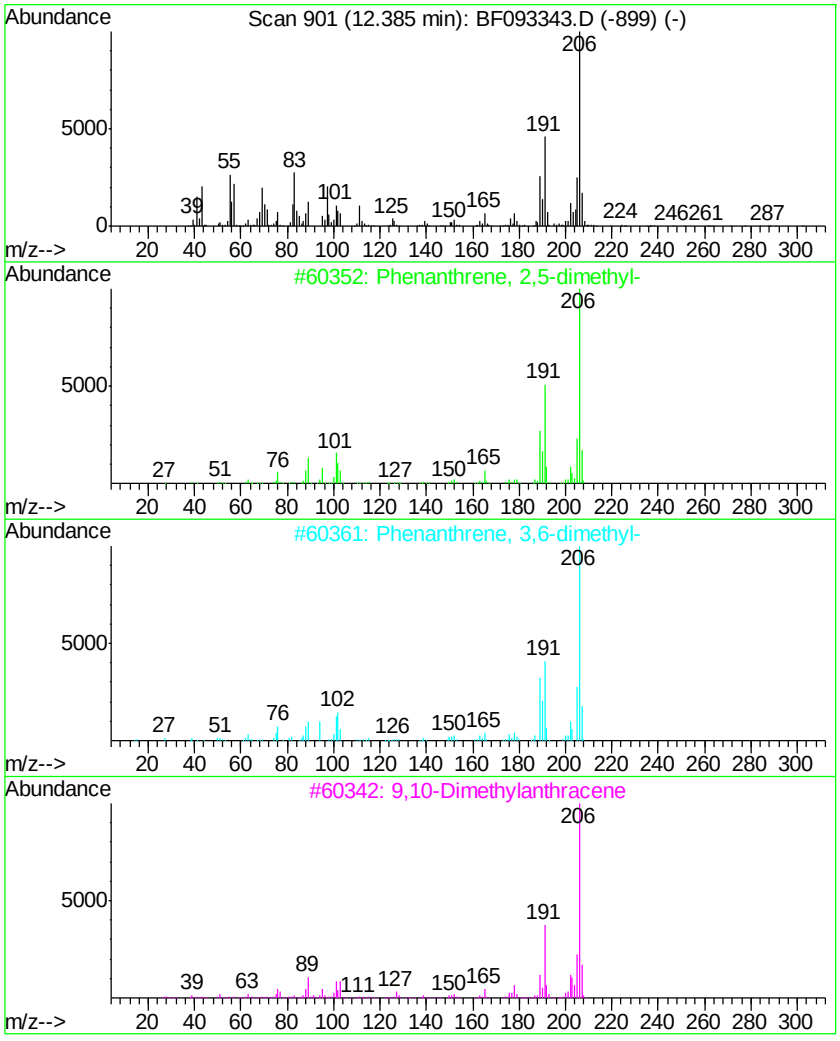
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

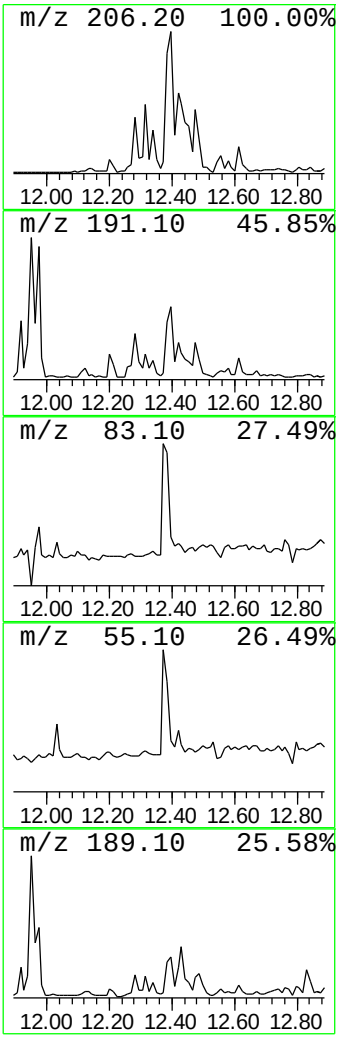
**********

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

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.39 | 9.78 ng | 2607750 | Phenanthrene-d10 | 11.33 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 98 |
| 2 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 94 |
| 3 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 93 |
| 4 | Phenanthrene, 2,3-dimethyl- | 206 | C16H14 | 003674-65-5 | 93 |
| 5 | Phenanthrene, 2,7-dimethyl- | 206 | C16H14 | 001576-69-8 | 92 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF030217\
Data File : BF093343.D
Acq On : 3 Mar 2017 1:34
Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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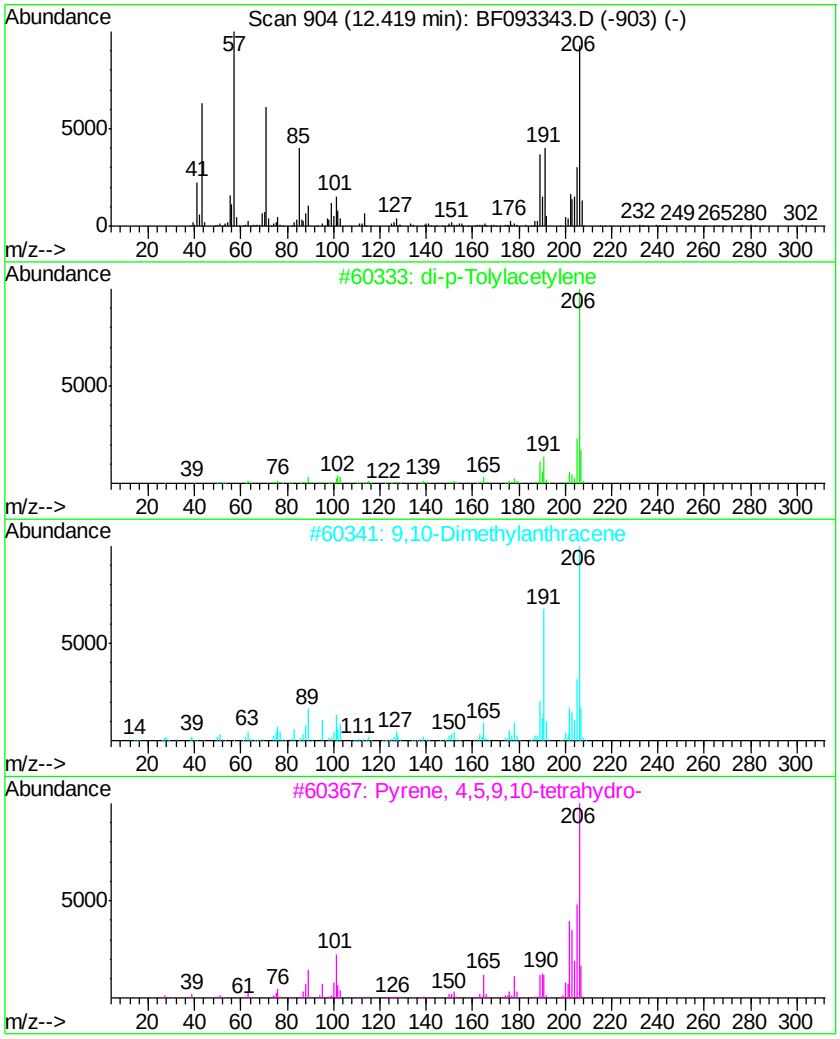
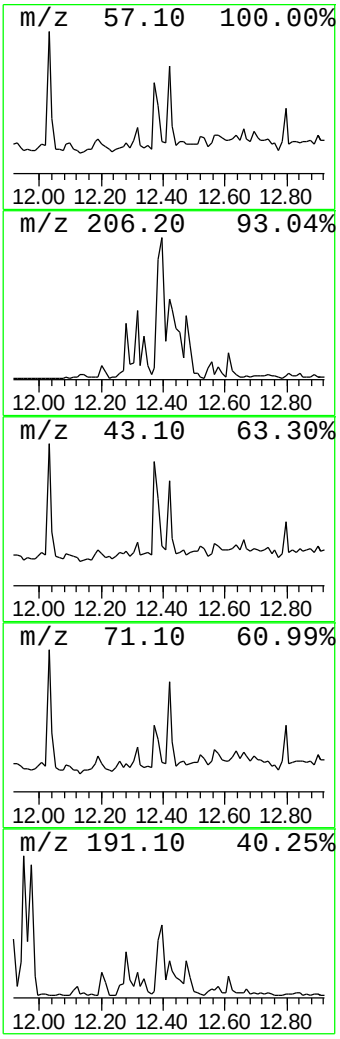
Peak Number 9 di-p-Tolylacetylene Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.42 | 5.56 ng | 1481110 | Phenanthrene-d10 | 11.33 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | di-p-Tolylacetylene | 206 | C16H14 | 002789-88-0 | 64 |
| 2 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 60 |
| 3 | Pyrene, 4,5,9,10-tetrahydro- | 206 | C16H14 | 000781-17-9 | 55 |
| 4 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 55 |
| 5 | Phenanthrene, 2,3-dimethyl- | 206 | C16H14 | 003674-65-5 | 55 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF030217\
Data File : BF093343.D
Acq On : 3 Mar 2017 1:34
Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

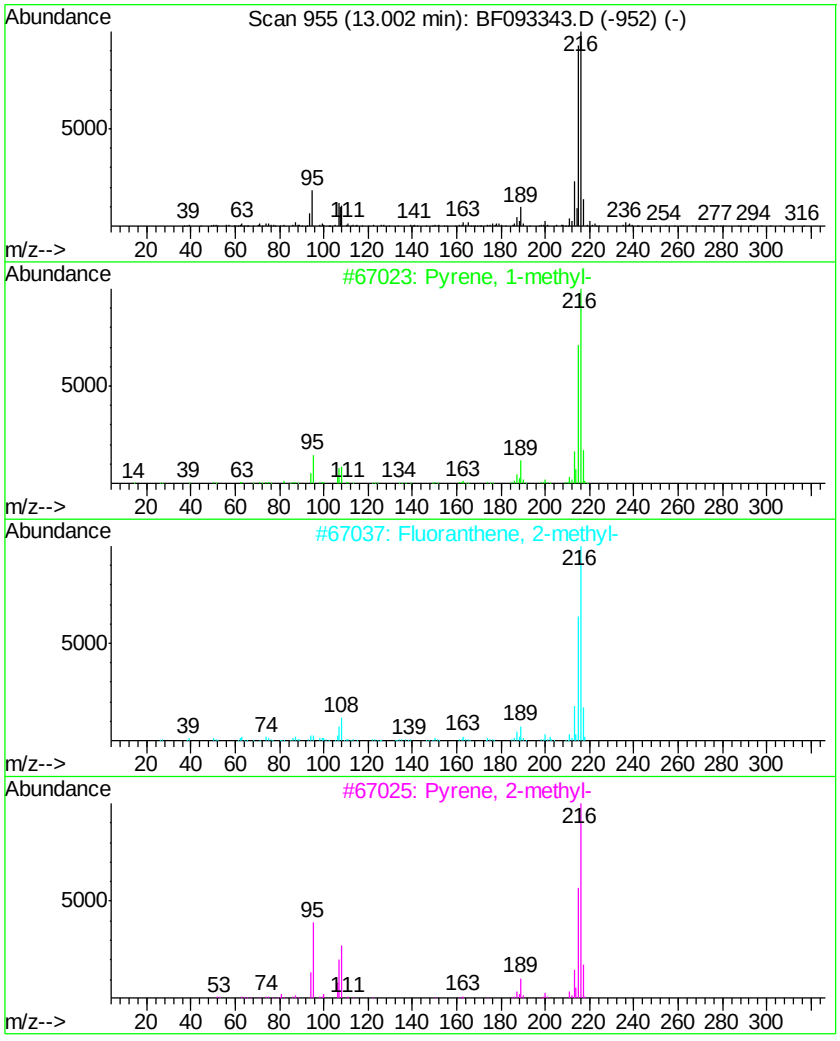
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

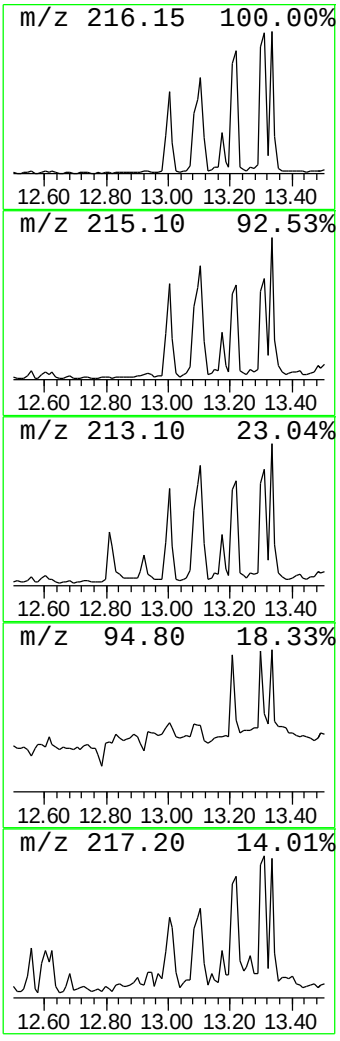
**********

Peak Number 10 Pyrene, 1-methyl- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.00 | 8.28 ng | 1117520 | Chrysene-d12 | 13.99 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 94 |
| 2 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 92 |
| 3 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 89 |
| 4 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 81 |
| 5 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 81 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF030217\
Data File : BF093343.D
Acq On : 3 Mar 2017 1:34
Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

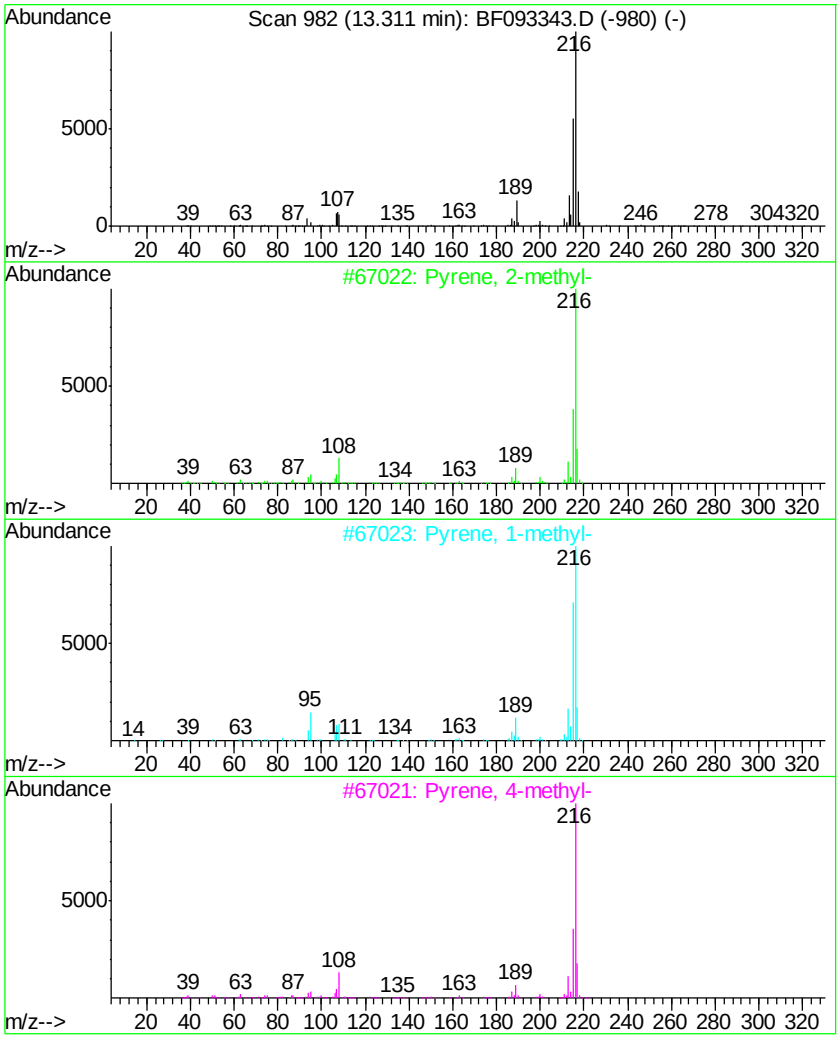
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

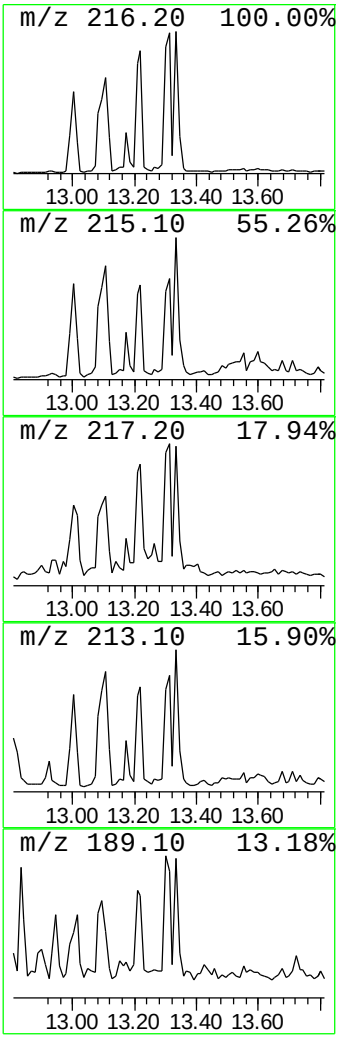
**********

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

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.31 | 7.72 ng | 1042480 | Chrysene-d12 | 13.99 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 94 |
| 2 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 94 |
| 3 | Pyrene, 4-methyl- | 216 | C17H12 | 003353-12-6 | 93 |
| 4 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 91 |
| 5 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 91 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF030217\
Data File : BF093343.D
Acq On : 3 Mar 2017 1:34
Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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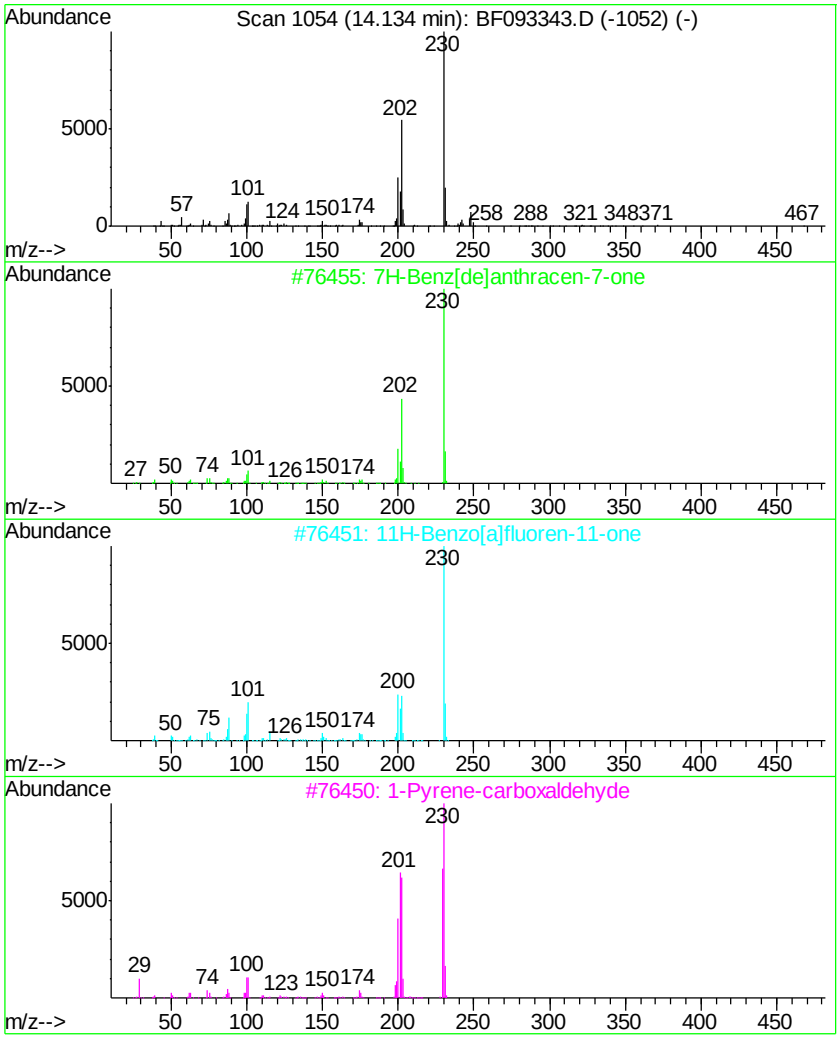
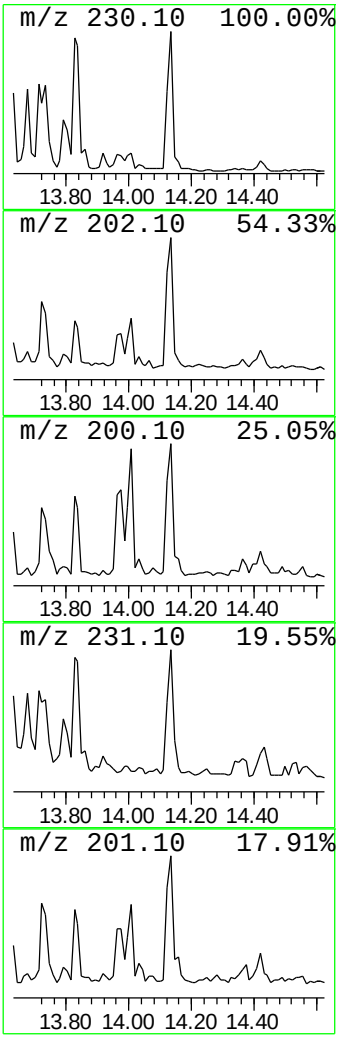
Peak Number 15 7H-Benz[de]anthracen-7-one Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.13 | 7.02 ng | 947073 | Chrysene-d12 | 13.99 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 95 |
| 2 | 11H-Benzo[a]fluoren-11-one | 230 | C17H10O | 000479-79-8 | 80 |
| 3 | 1-Pyrene-carboxaldehyde | 230 | C17H10O | 003029-19-4 | 59 |
| 4 | 1,4-Pentadiyn-3-one, 1,5-diphenyl- | 230 | C17H10O | 015814-30-9 | 53 |
| 5 | o-Terphenyl | 230 | C18H14 | 000084-15-1 | 52 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF030217\
Data File : BF093343.D
Acq On : 3 Mar 2017 1:34
Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

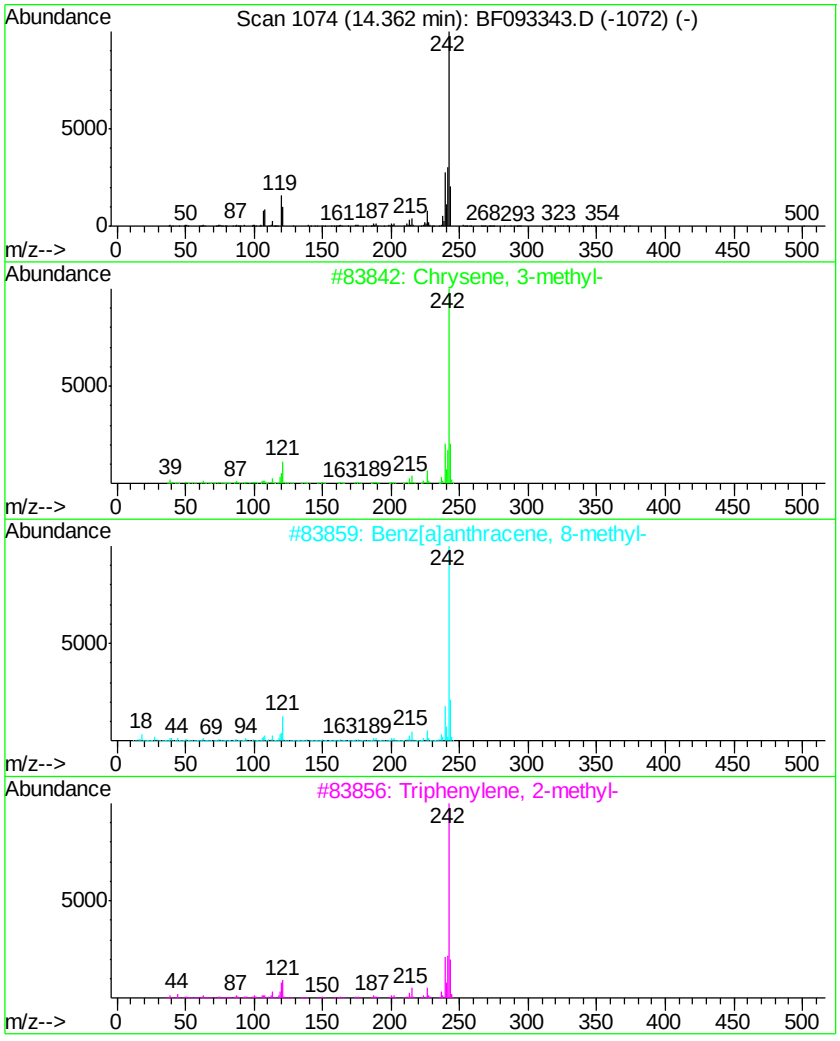
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

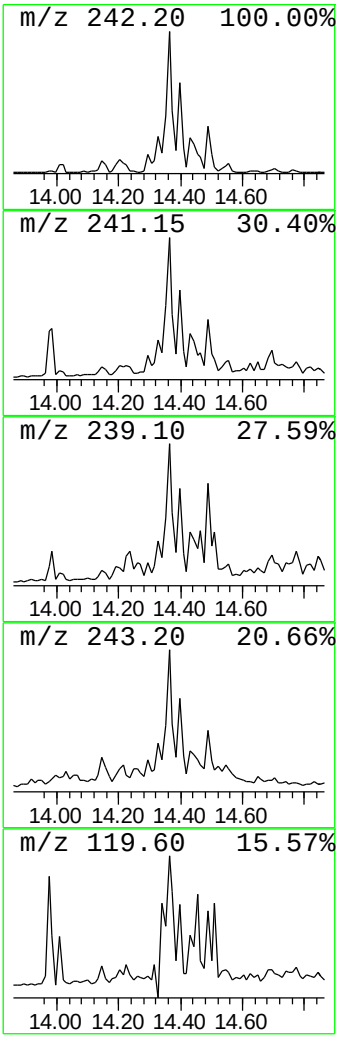
**********

Peak Number 16 Chrysene, 3-methyl- Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.36 | 6.01 ng | 811089 | Chrysene-d12 | 13.99 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Chrysene, 3-methyl- | 242 | C19H14 | 003351-31-3 | 94 |
| 2 | Benz[a]anthracene, 8-methyl- | 242 | C19H14 | 002381-31-9 | 92 |
| 3 | Triphenylene, 2-methyl- | 242 | C19H14 | 001705-84-6 | 91 |
| 4 | Chrysene, 6-methyl- | 242 | C19H14 | 003697-24-3 | 90 |
| 5 | Benz[a]anthracene, 12-methyl- | 242 | C19H14 | 002422-79-9 | 89 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF030217\
Data File : BF093343.D
Acq On : 3 Mar 2017 1:34
Operator : SJ/MA
Sample : I2003-05
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HY-SB436A

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT 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 |
| 2-Pentanone, 4-hy... | 4.96 | 38.1 | ng | 1791570 | 1 | 6.80 | 940328 | 20.0 |
| unknown6.57 | 6.57 | 77.0 | ng | 3620660 | 1 | 6.80 | 940328 | 20.0 |
| Naphthalene, 1,5-... | 9.50 | 8.3 | ng | 658331 | 3 | 9.85 | 1594070 | 20.0 |
| Anthracene, 2-met... | 11.84 | 6.5 | ng | 1723580 | 4 | 11.33 | 5331190 | 20.0 |
| Phenanthrene, 2-m... | 11.87 | 5.0 | ng | 1347290 | 4 | 11.33 | 5331190 | 20.0 |
| 1H-Indene, 2-phenyl- | 11.95 | 11.7 | ng | 3126800 | 4 | 11.33 | 5331190 | 20.0 |
| Phenanthrene, 2,5... | 12.39 | 9.8 | ng | 2607750 | 4 | 11.33 | 5331190 | 20.0 |
| di-p-Tolylacetylene | 12.42 | 5.6 | ng | 1481110 | 4 | 11.33 | 5331190 | 20.0 |
| Pyrene, 1-methyl- | 13.00 | 8.3 | ng | 1117520 | 5 | 13.99 | 2699900 | 20.0 |
| Pyrene, 2-methyl- | 13.31 | 7.7 | ng | 1042480 | 5 | 13.99 | 2699900 | 20.0 |
| 7H-Benz[de]anthra... | 14.13 | 7.0 | ng | 947073 | 5 | 13.99 | 2699900 | 20.0 |
| Chrysene, 3-methyl- | 14.36 | 6.0 | ng | 811089 | 5 | 13.99 | 2699900 | 20.0 |