LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF111815\
Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

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-BF110715.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 | 4.898 | 242 | 246 | 254 | rVB | 1344360 | 1997615 | 43.15% | 3.177% |
| 2 | 5.344 | 282 | 285 | 287 | rBV | 3796765 | 3899432 | 84.23% | 6.202% |
| 3 | 6.396 | 373 | 377 | 379 | rBV | 3254644 | 4629450 | 100.00% | 7.363% |
| 4 | 6.510 | 384 | 387 | 389 | rBV | 4074612 | 4195089 | 90.62% | 6.672% |
| 5 | 6.727 | 404 | 406 | 409 | rBV | 597650 | 738231 | 15.95% | 1.174% |
| 6 | 6.887 | 418 | 420 | 423 | rBV | 2647457 | 2672955 | 57.74% | 4.251% |
| 7 | 7.299 | 453 | 456 | 458 | rBV | 2316724 | 2214206 | 47.83% | 3.521% |
| 8 | 7.424 | 462 | 467 | 473 | rVB | 82520 | 109955 | 2.38% | 0.175% |
| 9 | 8.019 | 517 | 519 | 523 | rBV2 | 1118892 | 1232283 | 26.62% | 1.960% |
| 10 | 8.739 | 580 | 582 | 584 | rBV | 70981 | 97630 | 2.11% | 0.155% |
| 11 | 8.830 | 588 | 590 | 592 | rVB | 108275 | 85283 | 1.84% | 0.136% |
| 12 | 9.105 | 611 | 614 | 616 | rBV | 3633003 | 3804954 | 82.19% | 6.051% |
| 13 | 9.356 | 633 | 636 | 639 | rBV | 43951 | 61932 | 1.34% | 0.098% |
| 14 | 9.436 | 640 | 643 | 644 | rBV | 75438 | 82099 | 1.77% | 0.131% |
| 15 | 9.493 | 646 | 648 | 651 | rVV | 977528 | 852099 | 18.41% | 1.355% |
| 16 | 9.722 | 666 | 668 | 670 | rBV | 89756 | 67452 | 1.46% | 0.107% |
| 17 | 9.768 | 670 | 672 | 674 | rBV2 | 846080 | 947752 | 20.47% | 1.507% |
| 18 | 9.802 | 674 | 675 | 677 | rVB | 348139 | 271082 | 5.86% | 0.431% |
| 19 | 9.973 | 688 | 690 | 692 | rVB | 240674 | 216980 | 4.69% | 0.345% |
| 20 | 10.190 | 705 | 709 | 710 | rBV2 | 66155 | 82504 | 1.78% | 0.131% |
| 21 | 10.225 | 710 | 712 | 713 | rVB | 89763 | 104605 | 2.26% | 0.166% |
| 22 | 10.316 | 718 | 720 | 722 | rVV | 324985 | 265440 | 5.73% | 0.422% |
| 23 | 10.385 | 722 | 726 | 729 | rVB2 | 34304 | 58387 | 1.26% | 0.093% |
| 24 | 10.442 | 729 | 731 | 733 | rBV3 | 60086 | 99080 | 2.14% | 0.158% |
| 25 | 10.476 | 733 | 734 | 737 | rVB | 87773 | 82485 | 1.78% | 0.131% |
| 26 | 10.556 | 739 | 741 | 743 | rVB | 1801064 | 1805794 | 39.01% | 2.872% |
| 27 | 10.693 | 748 | 753 | 757 | rBV2 | 152600 | 238350 | 5.15% | 0.379% |
| 28 | 10.865 | 765 | 768 | 769 | rBV3 | 46625 | 83283 | 1.80% | 0.132% |
| 29 | 10.990 | 776 | 779 | 780 | rVV3 | 26789 | 62932 | 1.36% | 0.100% |
| 30 | 11.059 | 783 | 785 | 787 | rVB | 139682 | 147028 | 3.18% | 0.234% |
| 31 | 11.105 | 787 | 789 | 791 | rBV2 | 45550 | 71608 | 1.55% | 0.114% |
| 32 | 11.139 | 791 | 792 | 796 | rVB2 | 162598 | 232274 | 5.02% | 0.369% |
| 33 | 11.253 | 799 | 802 | 803 | rBV | 872340 | 1020223 | 22.04% | 1.623% |
| 34 | 11.276 | 803 | 804 | 806 | rVV | 2445906 | 1870132 | 40.40% | 2.974% |

LSC Area Percent Report

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Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

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-BF110715.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 11.322 | 806 | 808 | 810 | rVV | 507721 | 540093 | 11.67% | 0.859% |
| 36 | 11.356 | 810 | 811 | 813 | rVB | 57260 | 55792 | 1.21% | 0.089% |
| 37 | 11.482 | 819 | 822 | 824 | rBV | 391928 | 368084 | 7.95% | 0.585% |
| 38 | 11.551 | 826 | 828 | 830 | rBV2 | 41555 | 85425 | 1.85% | 0.136% |
| 39 | 11.756 | 843 | 846 | 847 | rBV | 184284 | 226249 | 4.89% | 0.360% |
| 40 | 11.779 | 847 | 848 | 850 | rVB | 369612 | 291488 | 6.30% | 0.464% |
| 41 | 11.825 | 850 | 852 | 853 | rBV | 145911 | 122218 | 2.64% | 0.194% |
| 42 | 11.859 | 853 | 855 | 860 | rVB2 | 368337 | 542453 | 11.72% | 0.863% |
| 43 | 11.951 | 862 | 863 | 867 | rVB3 | 32220 | 66368 | 1.43% | 0.106% |
| 44 | 12.065 | 870 | 873 | 877 | rVB2 | 186087 | 351889 | 7.60% | 0.560% |
| 45 | 12.248 | 886 | 889 | 891 | rBV3 | 54808 | 111881 | 2.42% | 0.178% |
| 46 | 12.305 | 891 | 894 | 895 | rBV | 155692 | 191879 | 4.14% | 0.305% |
| 47 | 12.339 | 895 | 897 | 900 | rVV2 | 82762 | 132387 | 2.86% | 0.211% |
| 48 | 12.385 | 900 | 901 | 905 | rVB | 146998 | 136360 | 2.95% | 0.217% |
| 49 | 12.465 | 905 | 908 | 910 | rBV | 2943734 | 2690484 | 58.12% | 4.279% |
| 50 | 12.522 | 910 | 913 | 915 | rVV2 | 47245 | 70261 | 1.52% | 0.112% |
| 51 | 12.602 | 917 | 920 | 922 | rBV3 | 108934 | 217173 | 4.69% | 0.345% |
| 52 | 12.694 | 925 | 928 | 930 | rBV | 2308928 | 2891443 | 62.46% | 4.599% |
| 53 | 12.739 | 930 | 932 | 935 | rVB2 | 110386 | 153759 | 3.32% | 0.245% |
| 54 | 12.808 | 935 | 938 | 939 | rBV | 191759 | 193571 | 4.18% | 0.308% |
| 55 | 12.842 | 939 | 941 | 943 | rVB | 2414141 | 2472033 | 53.40% | 3.931% |
| 56 | 12.911 | 943 | 947 | 948 | rBV2 | 165121 | 251508 | 5.43% | 0.400% |
| 57 | 13.014 | 951 | 956 | 958 | rBV2 | 332030 | 553415 | 11.95% | 0.880% |
| 58 | 13.082 | 960 | 962 | 963 | rVV | 263384 | 217923 | 4.71% | 0.347% |
| 59 | 13.116 | 963 | 965 | 969 | rVV2 | 251819 | 384041 | 8.30% | 0.611% |
| 60 | 13.174 | 969 | 970 | 972 | rVV | 47184 | 60013 | 1.30% | 0.095% |
| 61 | 13.208 | 972 | 973 | 975 | rVV | 119499 | 116709 | 2.52% | 0.186% |
| 62 | 13.242 | 975 | 976 | 979 | rVV2 | 143367 | 159429 | 3.44% | 0.254% |
| 63 | 13.322 | 981 | 983 | 985 | rVB3 | 83749 | 96387 | 2.08% | 0.153% |
| 64 | 13.425 | 988 | 992 | 994 | rBV4 | 65044 | 176069 | 3.80% | 0.280% |
| 65 | 13.516 | 997 | 1000 | 1003 | rVV2 | 230544 | 388405 | 8.39% | 0.618% |
| 66 | 13.631 | 1008 | 1010 | 1011 | rBV | 284899 | 328622 | 7.10% | 0.523% |
| 67 | 13.665 | 1011 | 1013 | 1014 | rVV | 146145 | 264303 | 5.71% | 0.420% |
| 68 | 13.699 | 1014 | 1016 | 1017 | rVV2 | 152494 | 227606 | 4.92% | 0.362% |
| 69 | 13.722 | 1017 | 1018 | 1020 | rVV | 200129 | 248998 | 5.38% | 0.396% |
| 70 | 13.802 | 1023 | 1025 | 1028 | rVB2 | 78919 | 103100 | 2.23% | 0.164% |
| 71 | 13.882 | 1028 | 1032 | 1033 | rBV2 | 1689564 | 2573172 | 55.58% | 4.092% |

LSC Area Percent Report

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Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

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-BF110715.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 13.916 | 1033 | 1035 | 1038 | rVB | 884526 | 1283001 | 27.71% | 2.040% |
| 73 | 13.985 | 1039 | 1041 | 1043 | rBV2 | 228911 | 269018 | 5.81% | 0.428% |
| 74 | 14.076 | 1047 | 1049 | 1050 | rVV2 | 121298 | 182664 | 3.95% | 0.291% |
| 75 | 14.111 | 1050 | 1052 | 1053 | rVV2 | 160907 | 205084 | 4.43% | 0.326% |
| 76 | 14.145 | 1053 | 1055 | 1058 | rVB2 | 48457 | 83246 | 1.80% | 0.132% |
| 77 | 14.202 | 1058 | 1060 | 1062 | rBV3 | 83864 | 129702 | 2.80% | 0.206% |
| 78 | 14.271 | 1062 | 1066 | 1067 | rVV | 282580 | 370837 | 8.01% | 0.590% |
| 79 | 14.305 | 1067 | 1069 | 1071 | rVV2 | 160122 | 173407 | 3.75% | 0.276% |
| 80 | 14.362 | 1071 | 1074 | 1075 | rVV2 | 122019 | 190128 | 4.11% | 0.302% |
| 81 | 14.397 | 1075 | 1077 | 1080 | rVV4 | 127633 | 321521 | 6.95% | 0.511% |
| 82 | 14.465 | 1081 | 1083 | 1085 | rVB2 | 83802 | 110439 | 2.39% | 0.176% |
| 83 | 14.568 | 1090 | 1092 | 1093 | rBV2 | 98699 | 112364 | 2.43% | 0.179% |
| 84 | 14.648 | 1097 | 1099 | 1100 | rBV | 49647 | 57458 | 1.24% | 0.091% |
| 85 | 14.739 | 1104 | 1107 | 1111 | rBV3 | 96066 | 192766 | 4.16% | 0.307% |
| 86 | 14.797 | 1111 | 1112 | 1114 | rBV2 | 132490 | 186373 | 4.03% | 0.296% |
| 87 | 14.888 | 1117 | 1120 | 1125 | rBV | 957482 | 2063818 | 44.58% | 3.282% |
| 88 | 14.979 | 1127 | 1128 | 1130 | rBV | 161741 | 206102 | 4.45% | 0.328% |
| 89 | 15.082 | 1134 | 1137 | 1139 | rBV2 | 60008 | 152082 | 3.29% | 0.242% |
| 90 | 15.162 | 1142 | 1144 | 1147 | rVB | 573344 | 709756 | 15.33% | 1.129% |
| 91 | 15.219 | 1147 | 1149 | 1152 | rBV | 828059 | 967335 | 20.90% | 1.538% |
| 92 | 15.277 | 1152 | 1154 | 1155 | rBV | 462135 | 533270 | 11.52% | 0.848% |
| 93 | 15.722 | 1190 | 1193 | 1196 | rBV | 80821 | 154509 | 3.34% | 0.246% |
| 94 | 15.780 | 1196 | 1198 | 1201 | rVV | 51060 | 66271 | 1.43% | 0.105% |
| 95 | 16.431 | 1251 | 1255 | 1260 | rBV4 | 87235 | 308902 | 6.67% | 0.491% |
| 96 | 16.591 | 1266 | 1269 | 1273 | rVB2 | 320931 | 551100 | 11.90% | 0.876% |
| 97 | 16.751 | 1280 | 1283 | 1285 | rVB | 55020 | 83456 | 1.80% | 0.133% |
| 98 | 16.797 | 1285 | 1287 | 1289 | rBV2 | 56342 | 93525 | 2.02% | 0.149% |
| 99 | 16.991 | 1300 | 1304 | 1311 | rVB | 218260 | 480798 | 10.39% | 0.765% |
| 100 | 17.197 | 1319 | 1322 | 1330 | rVB2 | 65841 | 177295 | 3.83% | 0.282% |

Sum of corrected areas: 62877821

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Data File : BF083034.D
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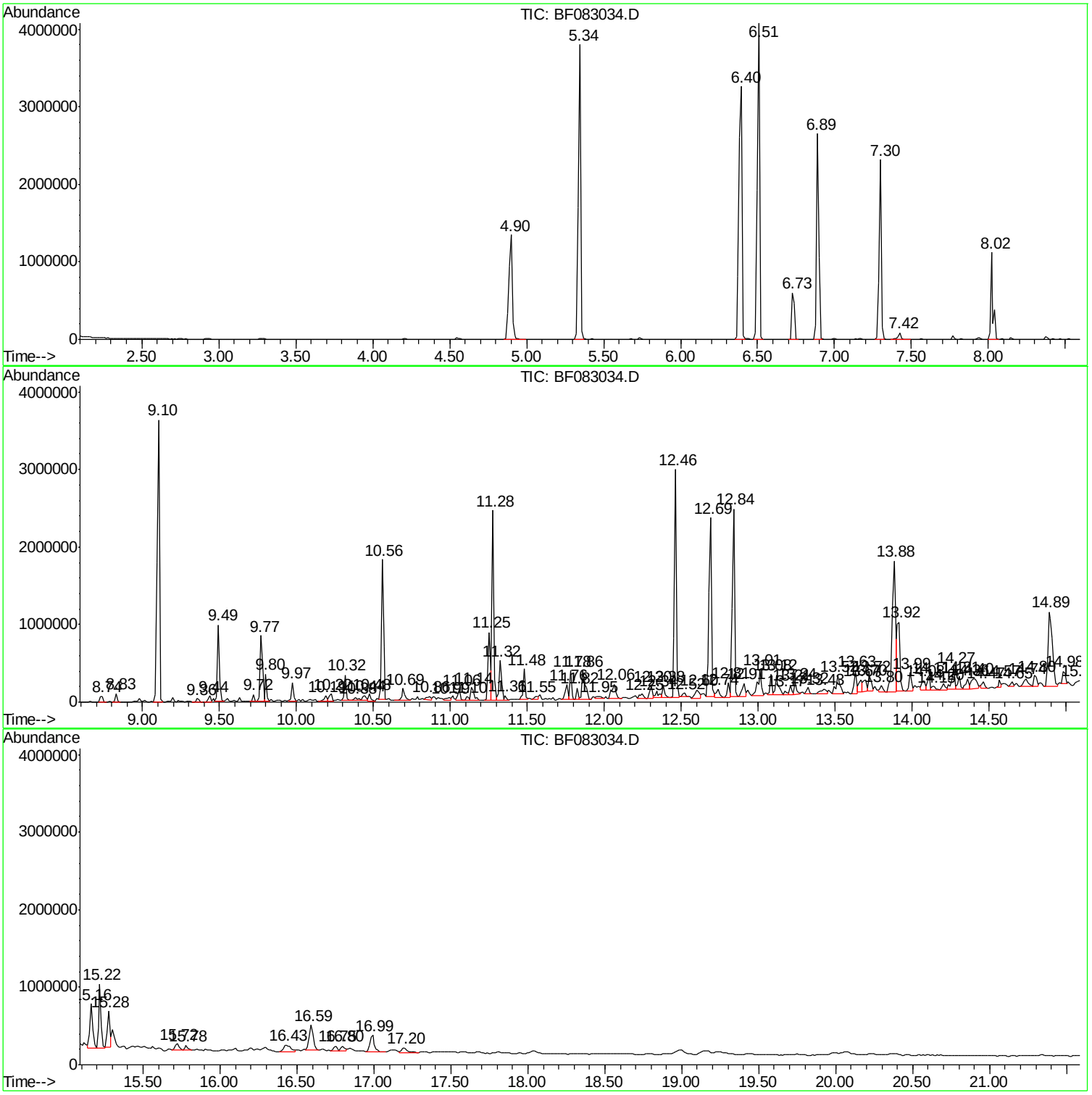
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
SB-7

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF111815\
Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
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Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

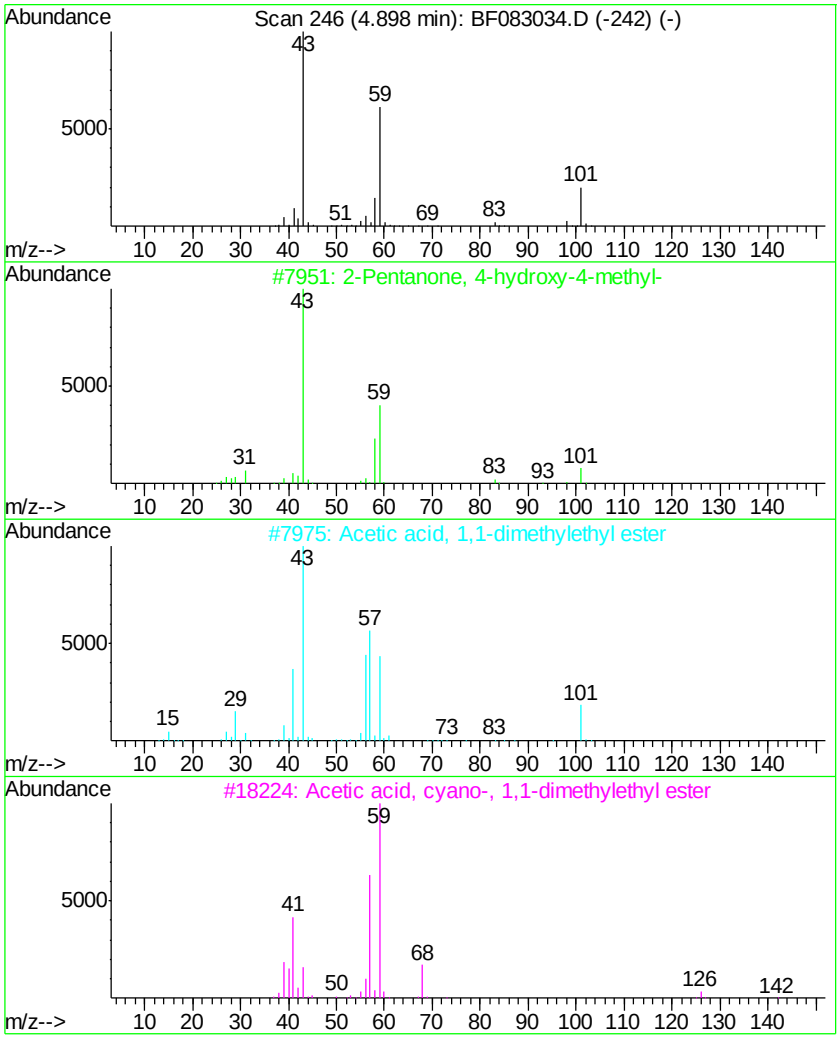
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

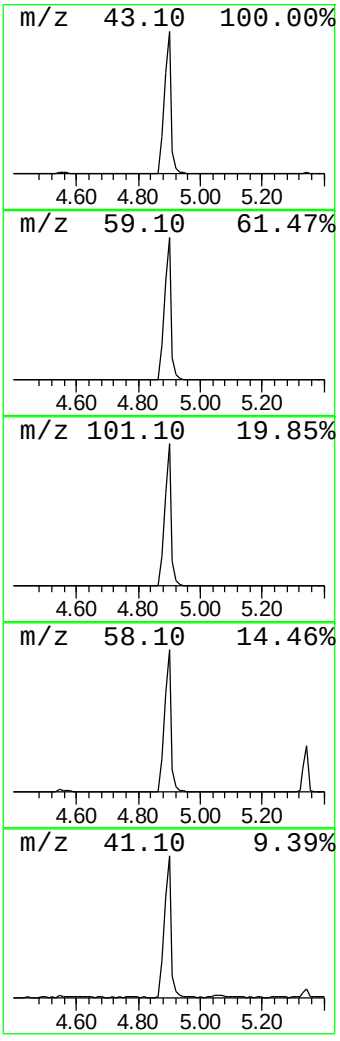
**********

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.90 | 54.12 ng | 1997620 | 1,4-Dichlorobenzene-d4 | 6.74 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 56 |
| 2 | Acetic acid, 1,1-dimethylethyl e... | 116 | C6H12O2 | 000540-88-5 | 39 |
| 3 | Acetic acid, cyano-, 1,1-dimethy... | 141 | C7H11NO2 | 001116-98-9 | 23 |
| 4 | Morpholine, 4-methyl- | 101 | C5H11NO | 000109-02-4 | 9 |
| 5 | 2,3-Butanedione, monooxime | 101 | C4H7NO2 | 000057-71-6 | 9 |



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Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

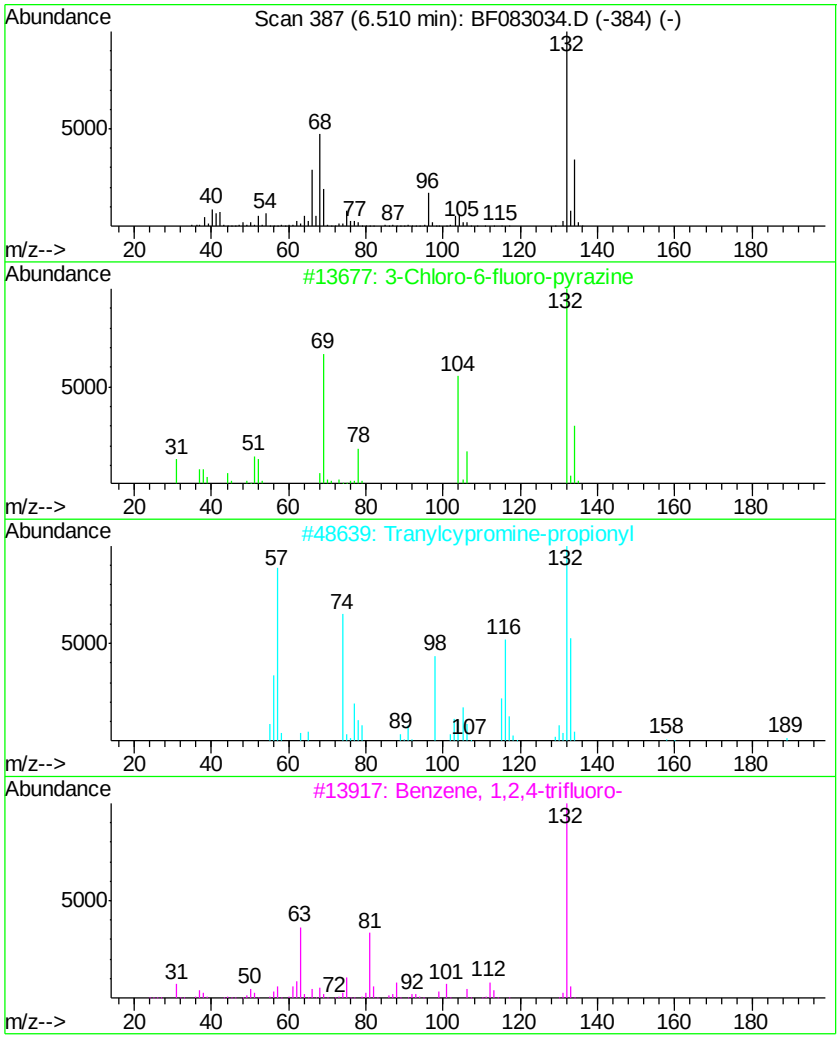
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

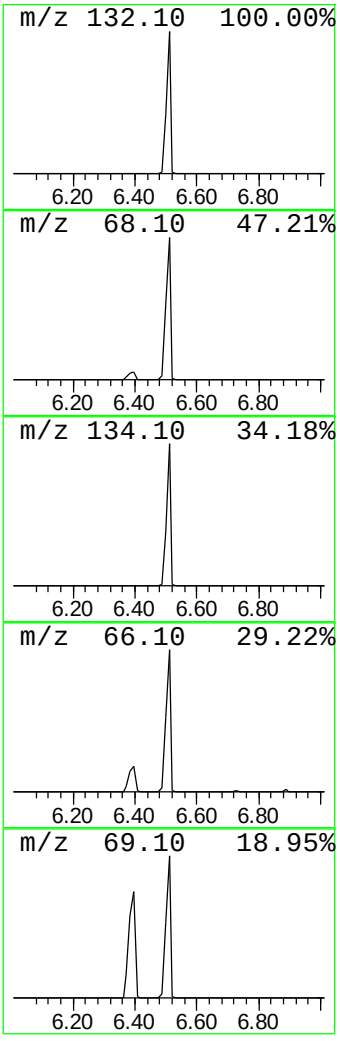
**********

Peak Number 2 unknown6.51 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.51 | 113.65 ng | 4195090 | 1,4-Dichlorobenzene-d4 | 6.74 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 27 |
| 2 | Tranylcypromine-propionyl | 189 | C12H15NO | 1000123-86-3 | 10 |
| 3 | Benzene, 1,2,4-trifluoro- | 132 | C6H3F3 | 000367-23-7 | 9 |
| 4 | Benzene, 1,3,5-trifluoro- | 132 | C6H3F3 | 000372-38-3 | 9 |
| 5 | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO | 031357-76-3 | 9 |



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Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
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Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

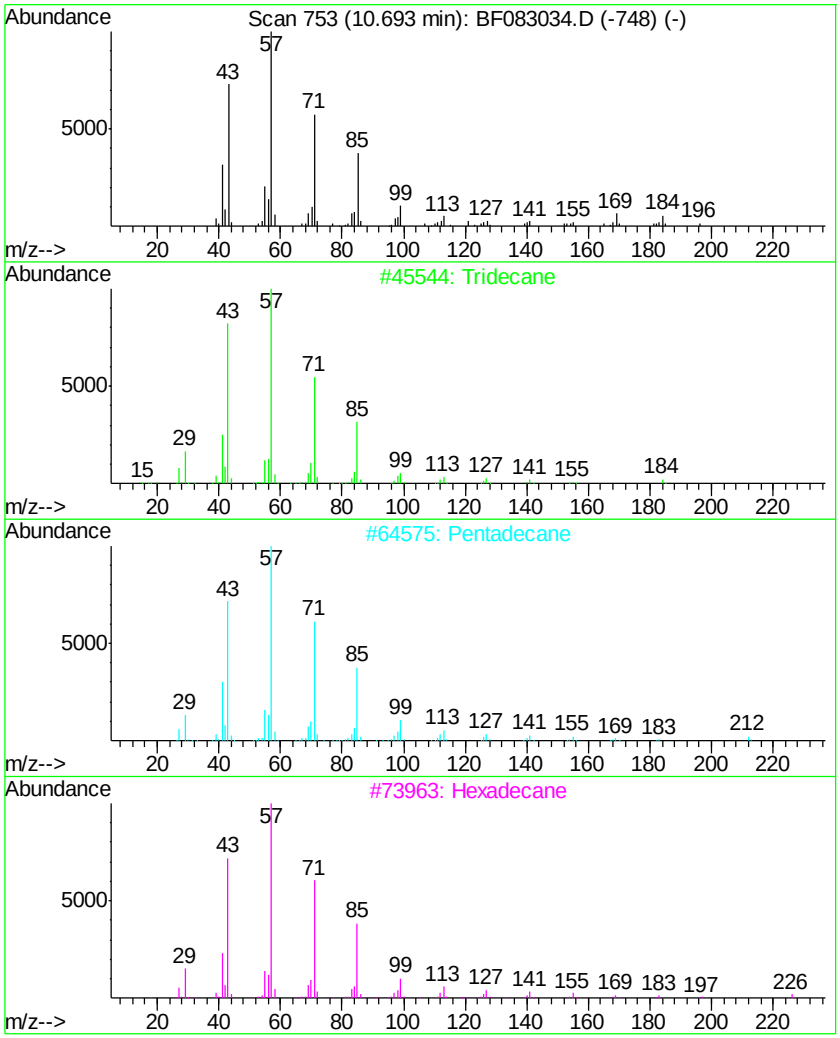
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

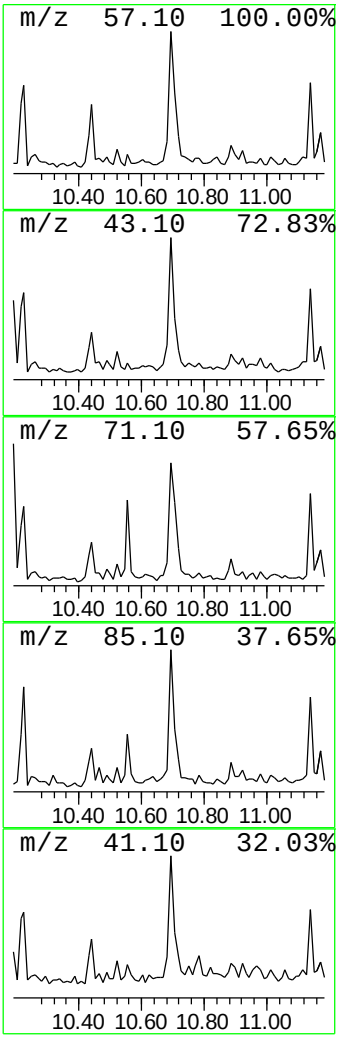
**********

Peak Number 4 Tridecane Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.69 | 4.67 ng | 238350 | Phenanthrene-d10 | 11.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Tridecane | 184 | C13H28 | 000629-50-5 | 90 |
| 2 | Pentadecane | 212 | C15H32 | 000629-62-9 | 86 |
| 3 | Hexadecane | 226 | C16H34 | 000544-76-3 | 86 |
| 4 | Undecane, 2-methyl- | 170 | C12H26 | 007045-71-8 | 86 |
| 5 | Octacosane | 394 | C28H58 | 000630-02-4 | 86 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF111815\
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Acq On : 19 Nov 2015 3:46
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Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

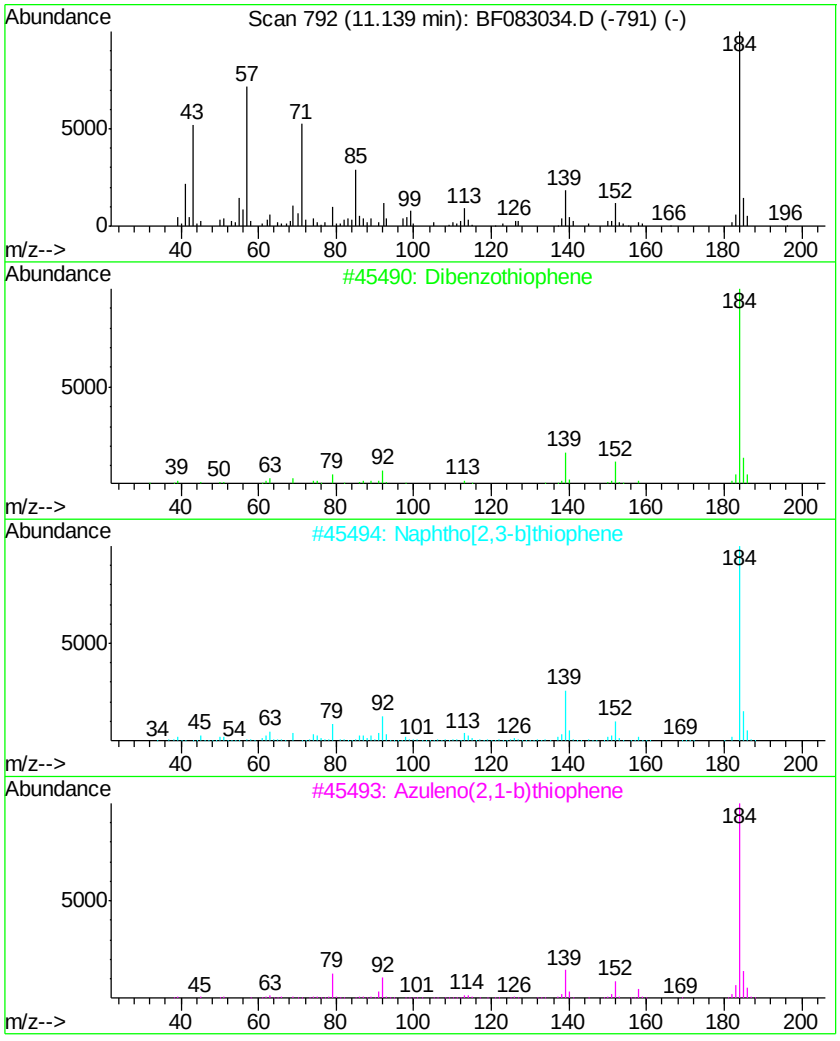
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

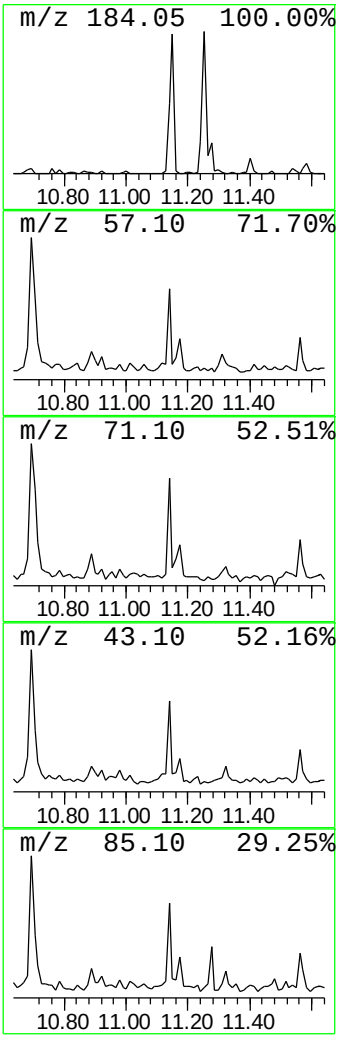
**********

Peak Number 5 Dibenzothiophene Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.14 | 4.55 ng | 232274 | Phenanthrene-d10 | 11.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 93 |
| 2 | Naphtho[2,3-b]thiophene | 184 | C12H8S | 000268-77-9 | 92 |
| 3 | Azuleno(2,1-b)thiophene | 184 | C12H8S | 000248-13-5 | 64 |
| 4 | 2,2'-Bipyridine, 6,6'-dimethyl- | 184 | C12H12N2 | 004411-80-7 | 38 |
| 5 | 6-Methoxy-5-quinolinecarbonitrile | 184 | C11H8N2O | 087299-97-6 | 38 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF111815\
Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

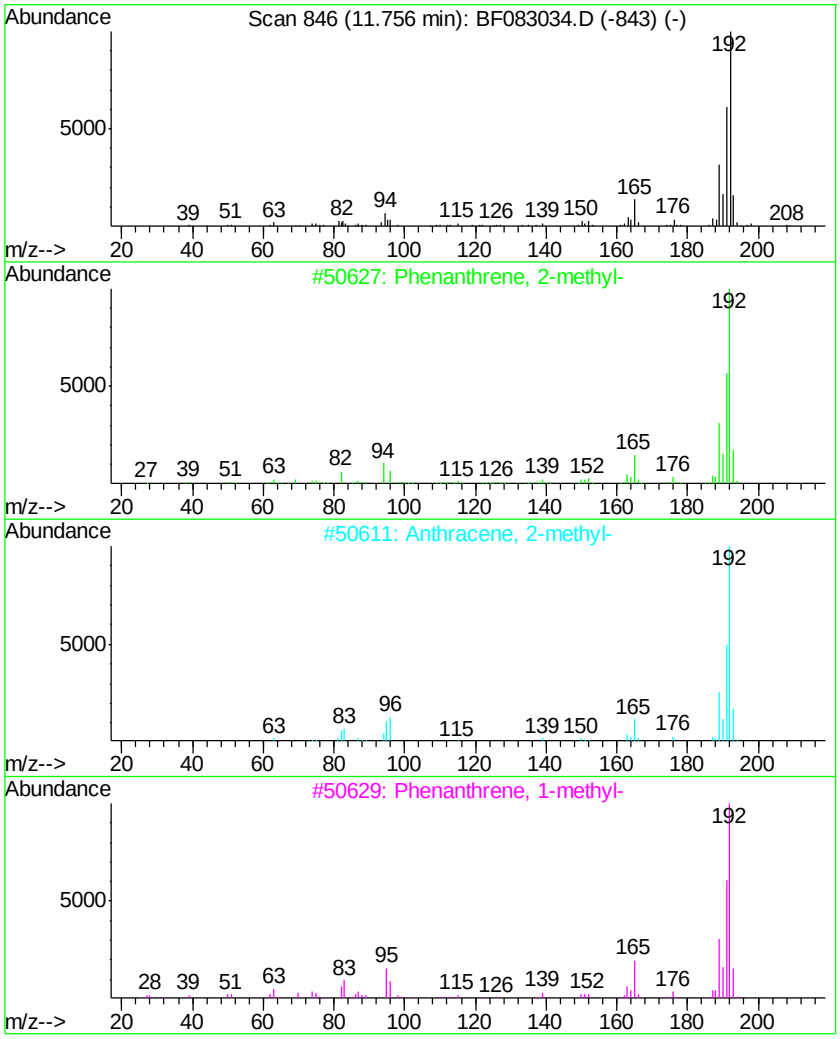
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

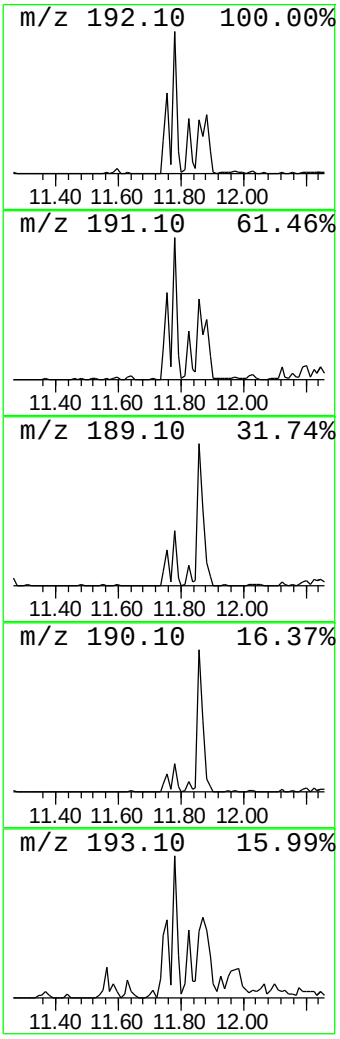
**********

Peak Number 6 Phenanthrene, 2-methyl- Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.76 | 4.44 ng | 226249 | Phenanthrene-d10 | 11.25 |

| 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 | 94 |
| 4 | 1H-Indene, 1-phenyl- | 192 | C15H12 | 001961-96-2 | 94 |
| 5 | 1H-Indene, 3-phenyl- | 192 | C15H12 | 001961-97-3 | 94 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF111815\
Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

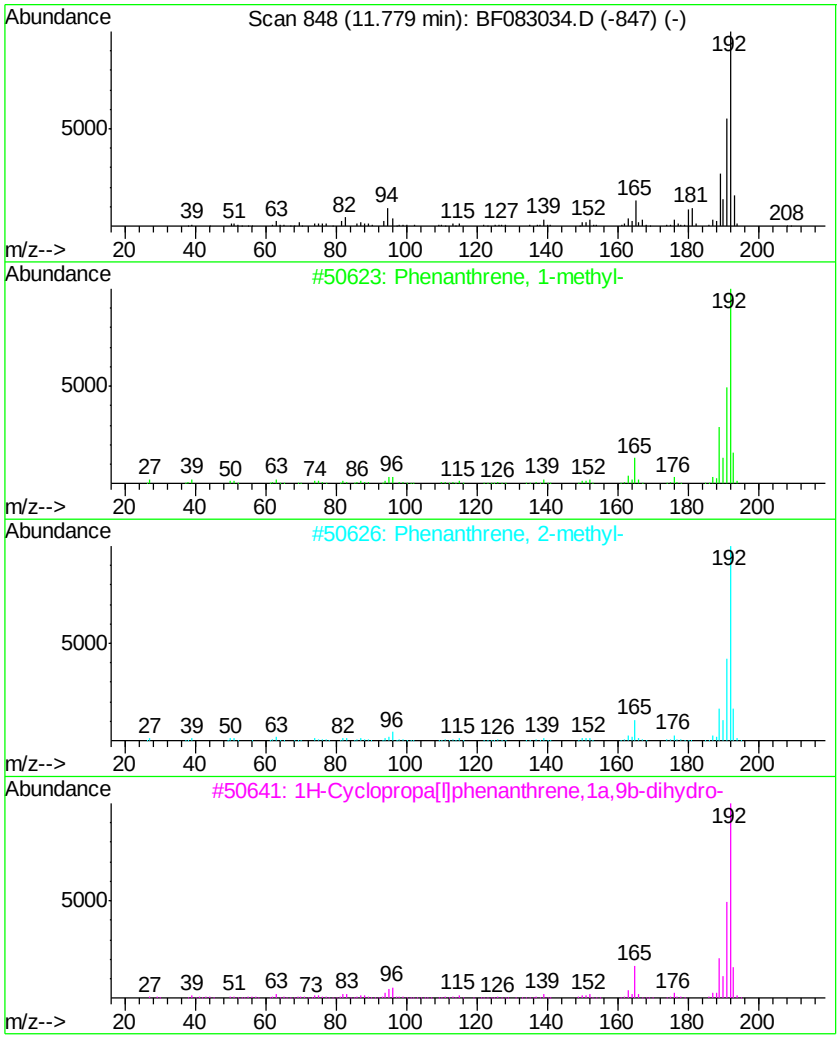
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

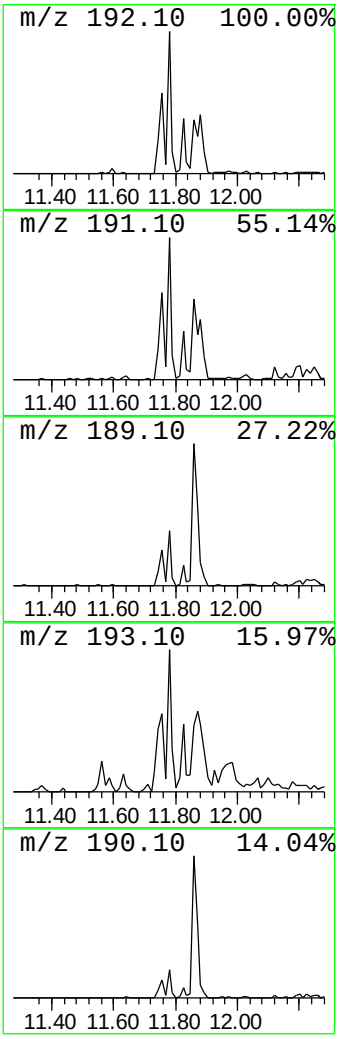
**********

Peak Number 7 Phenanthrene, 1-methyl- Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.78 | 5.71 ng | 291488 | Phenanthrene-d10 | 11.25 |

| 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 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 96 |
| 4 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 95 |
| 5 | 1H-Indene, 1-phenyl- | 192 | C15H12 | 001961-96-2 | 93 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF111815\
Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

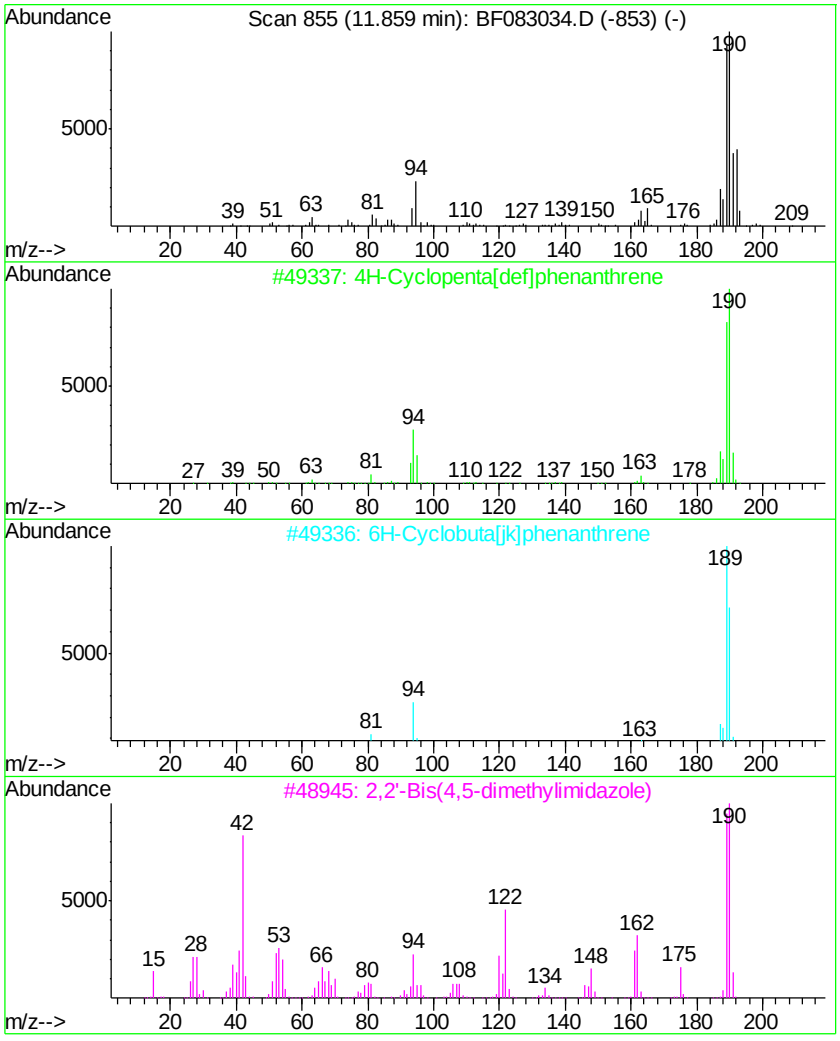
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

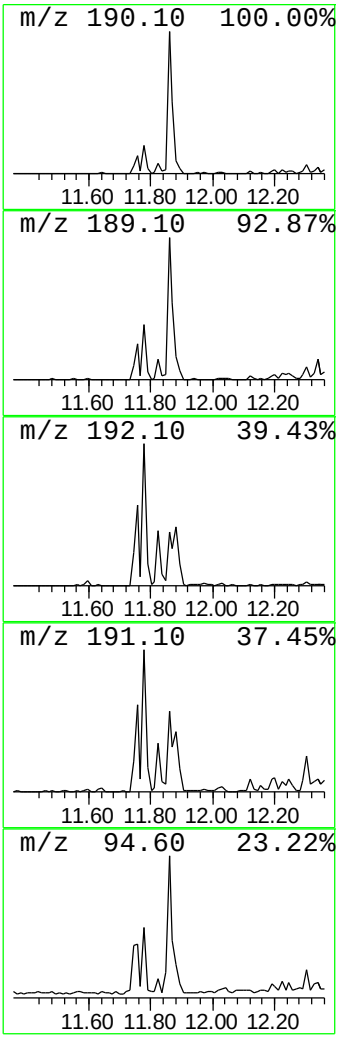
**********

Peak Number 8 4H-Cyclopenta[def]phenanthrene Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.86 | 10.63 ng | 542453 | Phenanthrene-d10 | 11.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 76 |
| 2 | 6H-Cyclobuta[jk]phenanthrene | 190 | C15H10 | 083469-43-6 | 42 |
| 3 | 2,2'-Bis(4,5-dimethylimidazole) | 190 | C10H14N4 | 069286-06-2 | 40 |
| 4 | 1,4-Naphthalenedione, 2,5-dihydr... | 190 | C10H6O4 | 004923-55-1 | 16 |
| 5 | Hydrazinecarboxaldehyde, 2-[3-(m... | 190 | C4H6N4OS2 | 038362-25-3 | 14 |



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Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

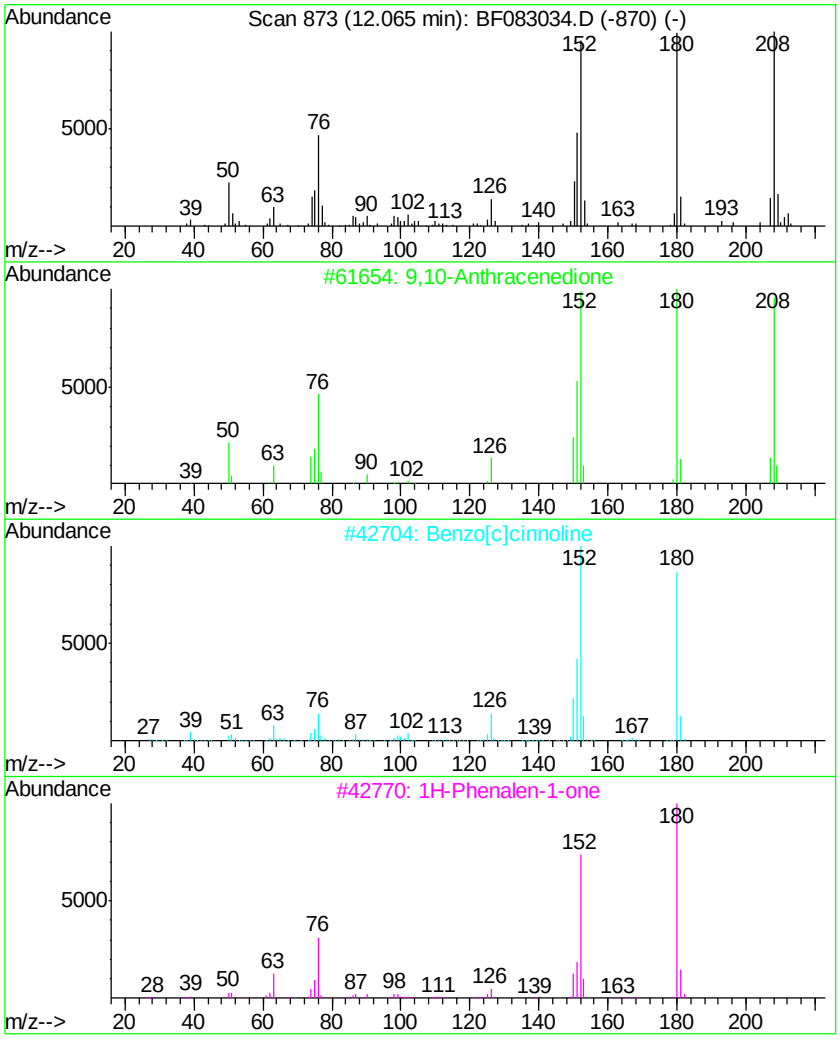
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

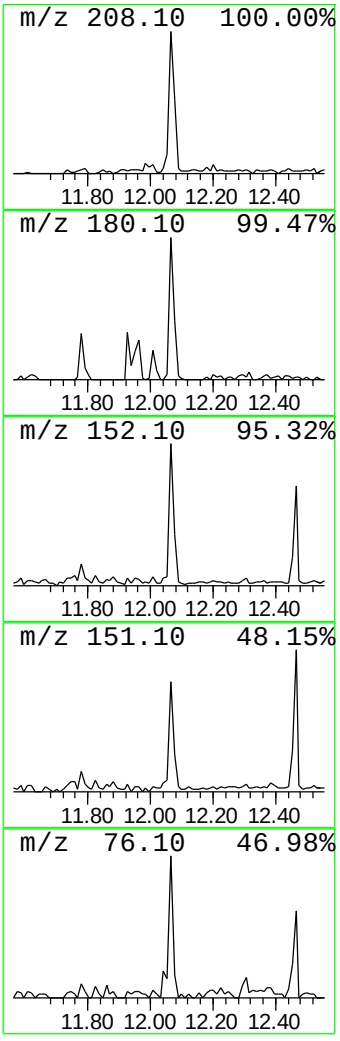
**********

Peak Number 9 9,10-Anthracenedione Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.06 | 6.90 ng | 351889 | Phenanthrene-d10 | 11.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 99 |
| 2 | Benzo[c]cinnoline | 180 | C12H8N2 | 000230-17-1 | 95 |
| 3 | 1H-Phenalen-1-one | 180 | C13H8O | 000548-39-0 | 83 |
| 4 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 78 |
| 5 | Benzo[h]cinnoline | 180 | C12H8N2 | 000230-31-9 | 55 |



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Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.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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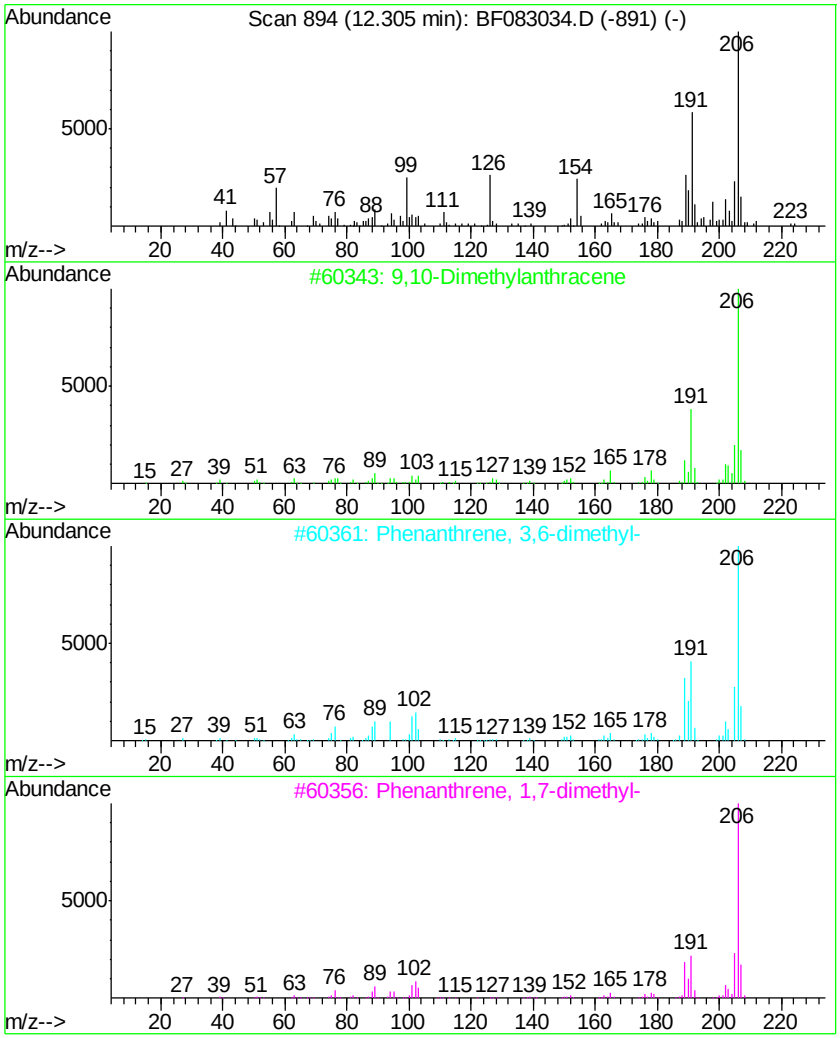
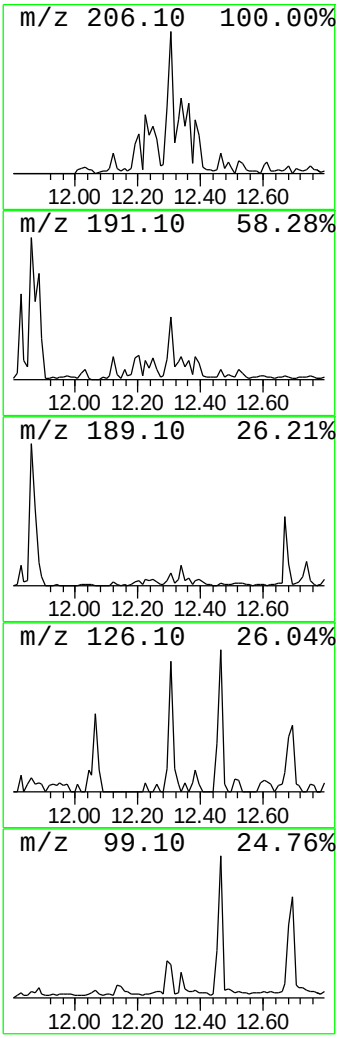
Peak Number 10 9,10-Dimethylanthracene Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.30 | 3.76 ng | 191879 | Phenanthrene-d10 | 11.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 83 |
| 2 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 78 |
| 3 | Phenanthrene, 1,7-dimethyl- | 206 | C16H14 | 000483-87-4 | 70 |
| 4 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 64 |
| 5 | Phenanthrene, 2,3-dimethyl- | 206 | C16H14 | 003674-65-5 | 64 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF111815\
Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

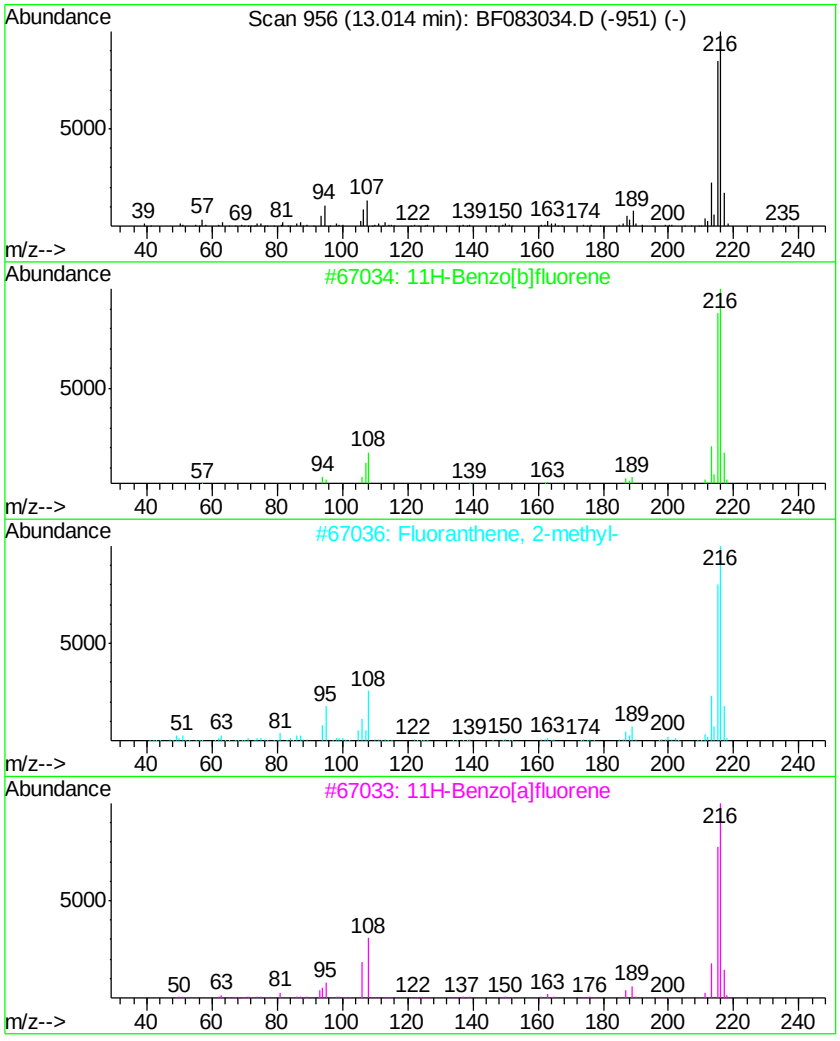
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

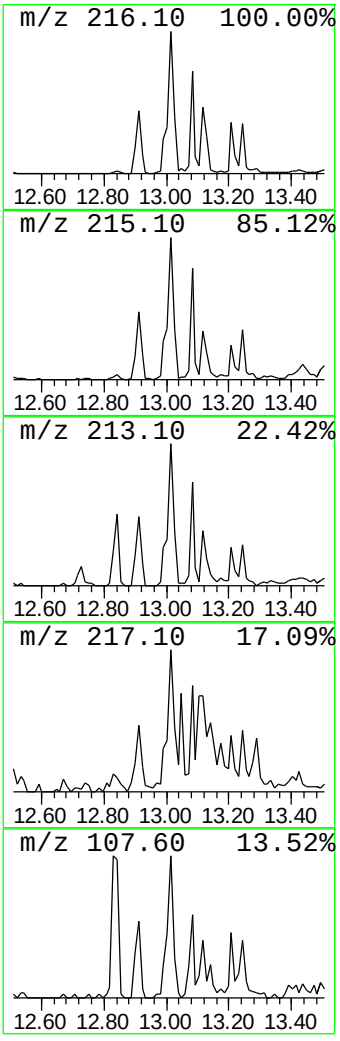
**********

Peak Number 11 11H-Benzo[b]fluorene Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.01 | 4.30 ng | 553415 | Chrysene-d12 | 13.88 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 96 |
| 2 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 95 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 94 |
| 4 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 90 |
| 5 | 7H-Benzo[c]fluorene | 216 | C17H12 | 000205-12-9 | 87 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF111815\
Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

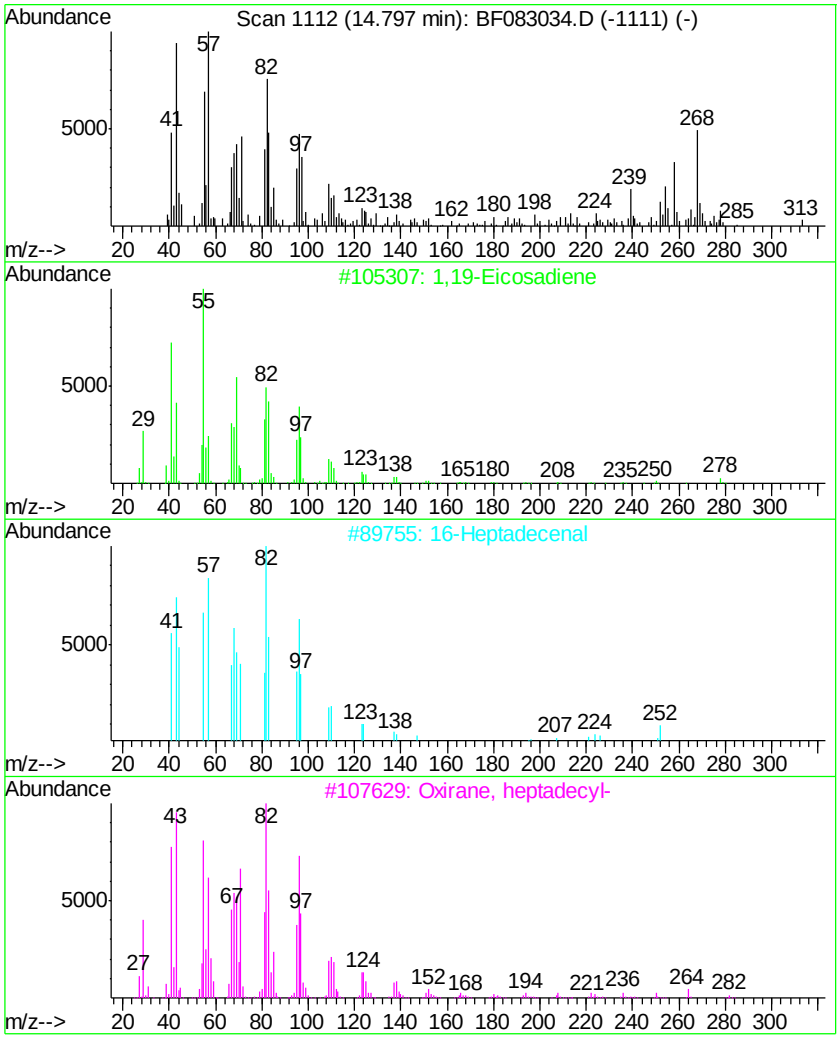
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

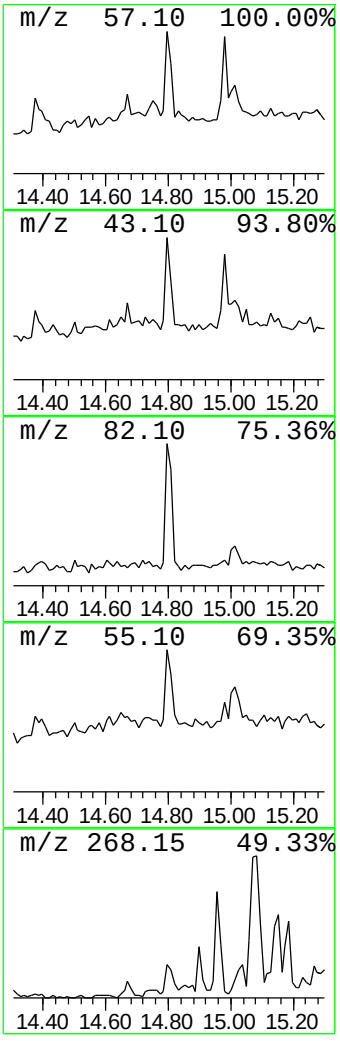
**********

Peak Number 13 1,19-Eicosadiene Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.80 | 6.99 ng | 186373 | Perylene-d12 | 15.28 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,19-Eicosadiene | 278 | C20H38 | 014811-95-1 | 95 |
| 2 | 16-Heptadecenal | 252 | C17H32O | 1000144-57-9 | 90 |
| 3 | Oxirane, heptadecyl- | 282 | C19H38O | 067860-04-2 | 83 |
| 4 | Oxirane, hexadecyl- | 268 | C18H36O | 007390-81-0 | 83 |
| 5 | Tetradecanal | 212 | C14H28O | 000124-25-4 | 83 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF111815\
Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.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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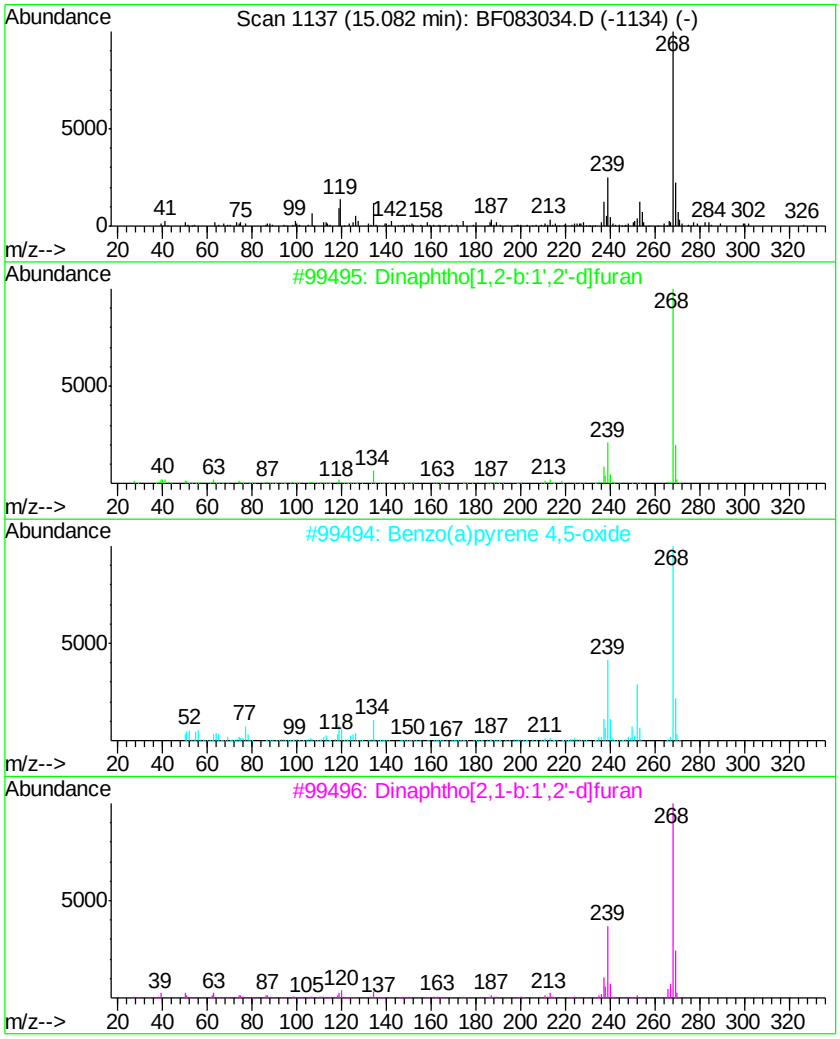
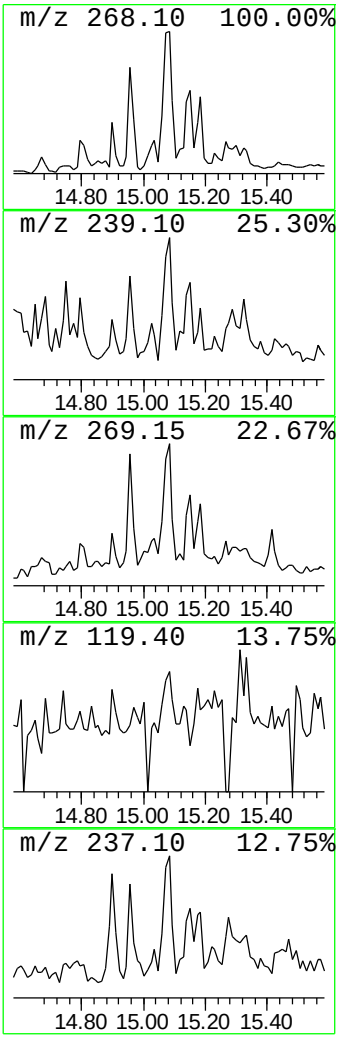
Peak Number 15 Dinaphtho[1,2-b:1',2'-d]furan Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.08 | 5.70 ng | 152082 | Perylene-d12 | 15.28 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dinaphtho[1,2-b:1',2'-d]furan | 268 | C20H12O | 000207-93-2 | 93 |
| 2 | Benzo(a)pyrene 4,5-oxide | 268 | C20H12O | 037574-47-3 | 74 |
| 3 | Dinaphtho[2,1-b:1',2'-d]furan | 268 | C20H12O | 000194-63-8 | 64 |
| 4 | 3,4-Epoxy-4a-ethyl-2,3,4,4a,5,6-... | 268 | C17H20N2O | 080249-75-8 | 60 |
| 5 | Phenol, 2,2'-[1,2-ethanediylbis(... | 268 | C16H16N2O2 | 000094-93-9 | 55 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF111815\
Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.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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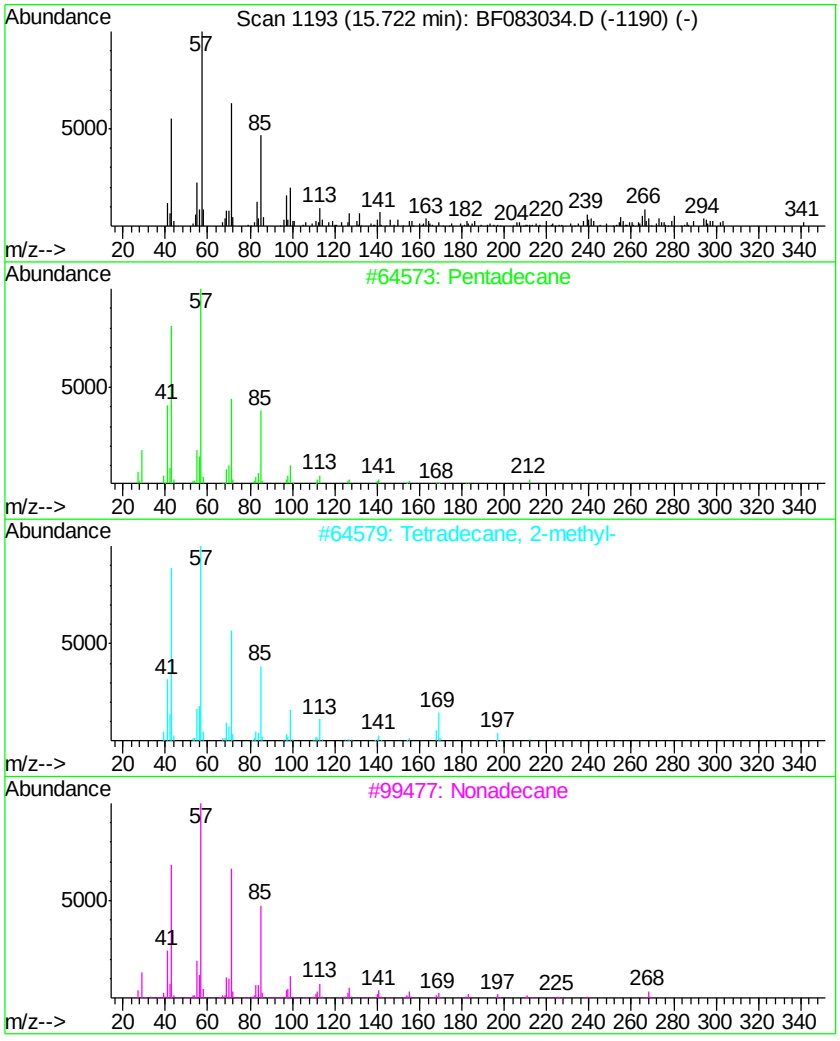
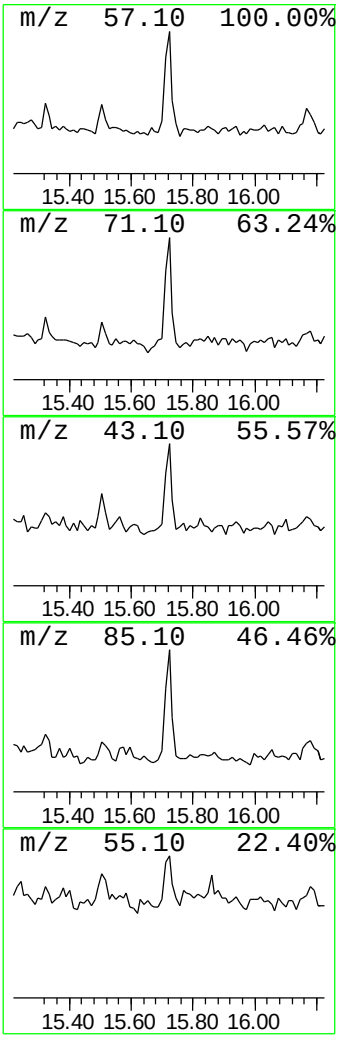
Peak Number 17 Pentadecane Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.72 | 5.79 ng | 154509 | Perylene-d12 | 15.28 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pentadecane | 212 | C15H32 | 000629-62-9 | 68 |
| 2 | Tetradecane, 2-methyl- | 212 | C15H32 | 001560-95-8 | 64 |
| 3 | Nonadecane | 268 | C19H40 | 000629-92-5 | 64 |
| 4 | Heptadecane | 240 | C17H36 | 000629-78-7 | 64 |
| 5 | 3,5-Dimethyldodecane | 198 | C14H30 | 107770-99-0 | 64 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF111815\
Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.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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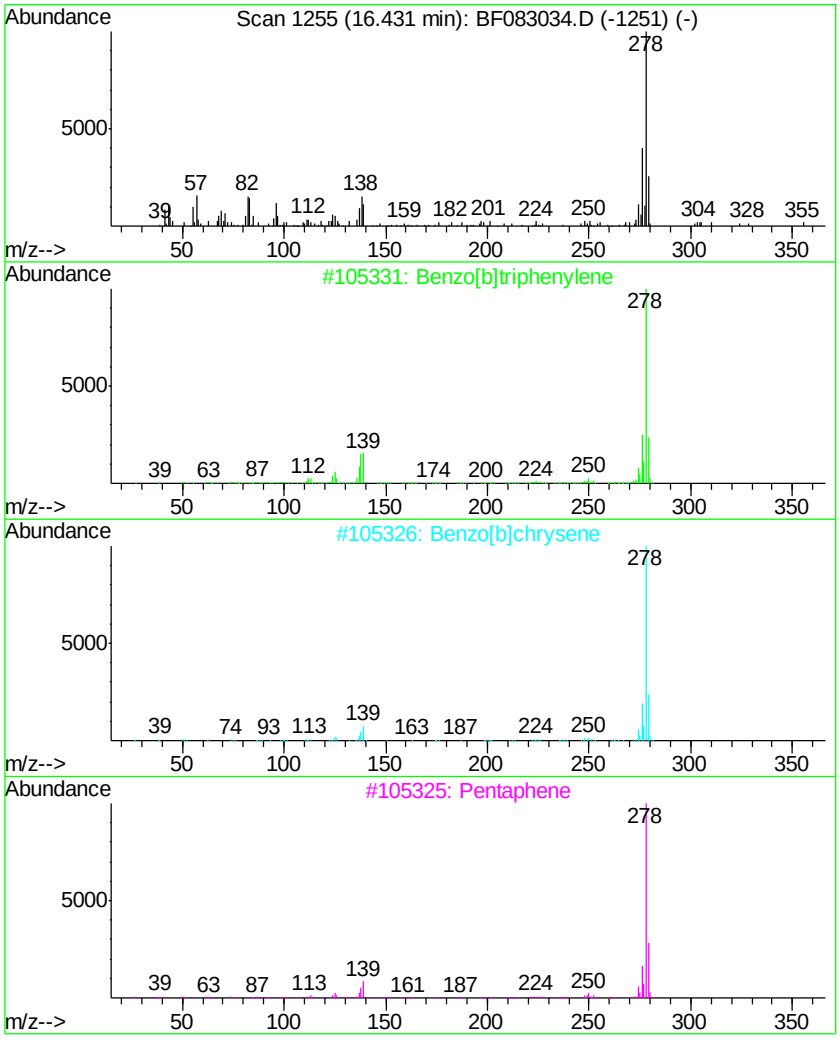
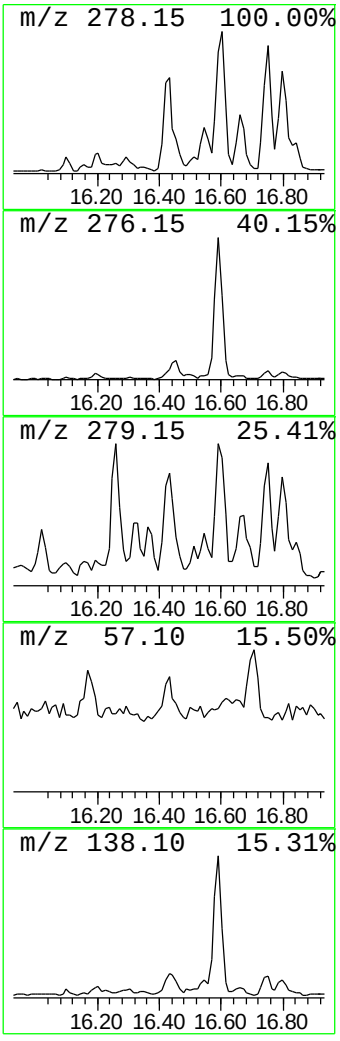
Peak Number 18 Benzo[b]triphenylene Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.43 | 11.59 ng | 308902 | Perylene-d12 | 15.28 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[b]triphenylene | 278 | C22H14 | 000215-58-7 | 92 |
| 2 | Benzo[b]chrysene | 278 | C22H14 | 000214-17-5 | 83 |
| 3 | Pentaphene | 278 | C22H14 | 000222-93-5 | 83 |
| 4 | Pyrene, 1-phenyl- | 278 | C22H14 | 005101-27-9 | 78 |
| 5 | 1,2:7,8-Dibenzophenanthrene | 278 | C22H14 | 000213-46-7 | 70 |



# Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF111815\
Data File : BF083034.D
Acq On : 19 Nov 2015 3:46
Operator : UM/IZ
Sample : G4426-07
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-7

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF110715.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... | 4.90 | 54.1 | ng | 1997620 | 1 | 6.74 | 738231 | 20.0 |
| unknown6.51 | 6.51 | 113.7 | ng | 4195090 | 1 | 6.74 | 738231 | 20.0 |
| Tridecane | 10.69 | 4.7 | ng | 238350 | 4 | 11.25 | 1020220 | 20.0 |
| Dibenzothiophene | 11.14 | 4.5 | ng | 232274 | 4 | 11.25 | 1020220 | 20.0 |
| Phenanthrene, 2-m... | 11.76 | 4.4 | ng | 226249 | 4 | 11.25 | 1020220 | 20.0 |
| Phenanthrene, 1-m... | 11.78 | 5.7 | ng | 291488 | 4 | 11.25 | 1020220 | 20.0 |
| 4H-Cyclopenta[def... | 11.86 | 10.6 | ng | 542453 | 4 | 11.25 | 1020220 | 20.0 |
| 9,10-Anthracenedione | 12.06 | 6.9 | ng | 351889 | 4 | 11.25 | 1020220 | 20.0 |
| 9,10-Dimethylanth... | 12.30 | 3.8 | ng | 191879 | 4 | 11.25 | 1020220 | 20.0 |
| 11H-Benzo[b]fluorene | 13.01 | 4.3 | ng | 553415 | 5 | 13.88 | 2573170 | 20.0 |
| 1,19-Eicosadiene | 14.80 | 7.0 | ng | 186373 | 6 | 15.28 | 533270 | 20.0 |
| Dinaphtho[1,2-b:1... | 15.08 | 5.7 | ng | 152082 | 6 | 15.28 | 533270 | 20.0 |
| Pentadecane | 15.72 | 5.8 | ng | 154509 | 6 | 15.28 | 533270 | 20.0 |
| Benzo[b]triphenylene | 16.43 | 11.6 | ng | 308902 | 6 | 15.28 | 533270 | 20.0 |