LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF032516\
Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

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-BF032416.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 | 5.419 | 272 | 274 | 284 | rVB | 74020 | 84416 | 4.12% | 0.413% |
| 2 | 6.459 | 363 | 365 | 374 | rVB | 86494 | 112368 | 5.48% | 0.550% |
| 3 | 6.584 | 374 | 376 | 379 | rBV | 76846 | 109524 | 5.34% | 0.536% |
| 4 | 6.824 | 394 | 397 | 399 | rBV | 815922 | 752351 | 36.69% | 3.682% |
| 5 | 6.973 | 409 | 410 | 413 | rBV2 | 56619 | 71631 | 3.49% | 0.351% |
| 6 | 7.385 | 445 | 446 | 453 | rBV2 | 38427 | 50361 | 2.46% | 0.246% |
| 7 | 7.499 | 453 | 456 | 462 | rVB | 27263 | 46662 | 2.28% | 0.228% |
| 8 | 8.105 | 507 | 509 | 512 | rBV | 861622 | 984072 | 47.99% | 4.816% |
| 9 | 9.179 | 601 | 603 | 606 | rBV2 | 88781 | 108336 | 5.28% | 0.530% |
| 10 | 9.579 | 636 | 638 | 641 | rBV | 377966 | 322655 | 15.74% | 1.579% |
| 11 | 9.728 | 649 | 651 | 653 | rBV | 35529 | 40696 | 1.98% | 0.199% |
| 12 | 9.796 | 655 | 657 | 659 | rVV | 83565 | 66020 | 3.22% | 0.323% |
| 13 | 9.865 | 660 | 663 | 665 | rVV | 1123264 | 1062364 | 51.81% | 5.199% |
| 14 | 10.070 | 679 | 681 | 683 | rVV2 | 16289 | 30757 | 1.50% | 0.151% |
| 15 | 10.299 | 697 | 701 | 702 | rBV | 67678 | 107976 | 5.27% | 0.528% |
| 16 | 10.413 | 709 | 711 | 713 | rVB | 33517 | 45864 | 2.24% | 0.224% |
| 17 | 10.516 | 717 | 720 | 723 | rVV2 | 39566 | 62074 | 3.03% | 0.304% |
| 18 | 10.653 | 729 | 732 | 734 | rBV2 | 55887 | 82235 | 4.01% | 0.402% |
| 19 | 10.768 | 740 | 742 | 746 | rBV2 | 115299 | 139787 | 6.82% | 0.684% |
| 20 | 10.962 | 755 | 759 | 760 | rBV3 | 24169 | 41780 | 2.04% | 0.204% |
| 21 | 11.213 | 778 | 781 | 782 | rBV | 68626 | 66298 | 3.23% | 0.324% |
| 22 | 11.236 | 782 | 783 | 787 | rVB | 39794 | 54037 | 2.64% | 0.264% |
| 23 | 11.339 | 790 | 792 | 794 | rBV | 675748 | 1196708 | 58.36% | 5.857% |
| 24 | 11.419 | 797 | 799 | 801 | rVB | 139700 | 120691 | 5.89% | 0.591% |
| 25 | 11.579 | 809 | 813 | 817 | rBV | 88049 | 121130 | 5.91% | 0.593% |
| 26 | 11.636 | 817 | 818 | 820 | rVB | 46245 | 41433 | 2.02% | 0.203% |
| 27 | 11.842 | 834 | 836 | 837 | rBV | 102216 | 96562 | 4.71% | 0.473% |
| 28 | 11.876 | 837 | 839 | 841 | rVV | 173548 | 163083 | 7.95% | 0.798% |
| 29 | 11.922 | 841 | 843 | 844 | rVV2 | 30180 | 36664 | 1.79% | 0.179% |
| 30 | 11.956 | 844 | 846 | 850 | rVB2 | 217220 | 274303 | 13.38% | 1.342% |
| 31 | 12.048 | 851 | 854 | 855 | rBV | 27992 | 38119 | 1.86% | 0.187% |
| 32 | 12.139 | 860 | 862 | 863 | rVV | 87772 | 79540 | 3.88% | 0.389% |
| 33 | 12.162 | 863 | 864 | 867 | rVB | 102034 | 119019 | 5.80% | 0.582% |
| 34 | 12.288 | 872 | 875 | 876 | rBV2 | 31359 | 35167 | 1.72% | 0.172% |

LSC Area Percent Report

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Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

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-BF032416.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 12.391 | 882 | 884 | 886 | rBV | 78128 | 105824 | 5.16% | 0.518% |
| 36 | 12.425 | 886 | 887 | 890 | rVB | 45812 | 71527 | 3.49% | 0.350% |
| 37 | 12.482 | 890 | 892 | 896 | rVB2 | 70461 | 80331 | 3.92% | 0.393% |
| 38 | 12.562 | 896 | 899 | 901 | rBV | 1027624 | 1391624 | 67.87% | 6.811% |
| 39 | 12.619 | 901 | 904 | 905 | rBV2 | 28107 | 40481 | 1.97% | 0.198% |
| 40 | 12.699 | 908 | 911 | 915 | rVB3 | 37718 | 88048 | 4.29% | 0.431% |
| 41 | 12.779 | 915 | 918 | 921 | rBV | 1023695 | 1381855 | 67.39% | 6.763% |
| 42 | 12.836 | 921 | 923 | 925 | rVB | 53605 | 69217 | 3.38% | 0.339% |
| 43 | 12.928 | 925 | 931 | 934 | rVB3 | 91128 | 218261 | 10.64% | 1.068% |
| 44 | 12.996 | 934 | 937 | 939 | rBV2 | 86071 | 146724 | 7.16% | 0.718% |
| 45 | 13.111 | 943 | 947 | 949 | rVB | 192480 | 269860 | 13.16% | 1.321% |
| 46 | 13.179 | 949 | 953 | 954 | rBV2 | 124295 | 183110 | 8.93% | 0.896% |
| 47 | 13.214 | 954 | 956 | 957 | rBV | 128751 | 133681 | 6.52% | 0.654% |
| 48 | 13.305 | 962 | 964 | 965 | rBV | 61543 | 43887 | 2.14% | 0.215% |
| 49 | 13.339 | 965 | 967 | 969 | rVB2 | 57381 | 53856 | 2.63% | 0.264% |
| 50 | 13.499 | 978 | 981 | 983 | rBV4 | 42698 | 79824 | 3.89% | 0.391% |
| 51 | 13.614 | 988 | 991 | 994 | rBV2 | 87073 | 149113 | 7.27% | 0.730% |
| 52 | 13.728 | 998 | 1001 | 1002 | rBV | 131555 | 153684 | 7.50% | 0.752% |
| 53 | 13.751 | 1002 | 1003 | 1004 | rBV | 51286 | 47629 | 2.32% | 0.233% |
| 54 | 13.774 | 1004 | 1005 | 1008 | rVB2 | 41740 | 71412 | 3.48% | 0.349% |
| 55 | 13.831 | 1008 | 1010 | 1012 | rVB | 126877 | 144474 | 7.05% | 0.707% |
| 56 | 13.899 | 1014 | 1016 | 1019 | rVB | 30225 | 39273 | 1.92% | 0.192% |
| 57 | 13.979 | 1019 | 1023 | 1029 | rBV3 | 1021489 | 2050467 | 100.00% | 10.035% |
| 58 | 14.082 | 1029 | 1032 | 1033 | rBV | 116273 | 127660 | 6.23% | 0.625% |
| 59 | 14.139 | 1033 | 1037 | 1039 | rBV3 | 28918 | 61880 | 3.02% | 0.303% |
| 60 | 14.208 | 1041 | 1043 | 1044 | rVB2 | 49591 | 56845 | 2.77% | 0.278% |
| 61 | 14.242 | 1044 | 1046 | 1049 | rVB4 | 21741 | 43386 | 2.12% | 0.212% |
| 62 | 14.368 | 1054 | 1057 | 1058 | rVB | 79959 | 104737 | 5.11% | 0.513% |
| 63 | 14.402 | 1058 | 1060 | 1062 | rVB3 | 54257 | 70732 | 3.45% | 0.346% |
| 64 | 14.448 | 1062 | 1064 | 1066 | rBV3 | 61135 | 114362 | 5.58% | 0.560% |
| 65 | 14.505 | 1066 | 1069 | 1071 | rVB4 | 62259 | 131989 | 6.44% | 0.646% |
| 66 | 14.562 | 1071 | 1074 | 1077 | rVB3 | 63750 | 96986 | 4.73% | 0.475% |
| 67 | 14.688 | 1081 | 1085 | 1088 | rBV3 | 56996 | 180465 | 8.80% | 0.883% |
| 68 | 14.745 | 1088 | 1090 | 1091 | rBV | 42756 | 44154 | 2.15% | 0.216% |
| 69 | 14.848 | 1097 | 1099 | 1100 | rBV2 | 25944 | 33852 | 1.65% | 0.166% |
| 70 | 14.882 | 1100 | 1102 | 1104 | rBV | 129222 | 140412 | 6.85% | 0.687% |
| 71 | 14.997 | 1109 | 1112 | 1116 | rBV | 548712 | 982817 | 47.93% | 4.810% |

LSC Area Percent Report

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Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

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-BF032416.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 15.065 | 1116 | 1118 | 1119 | rVV | 66545 | 81000 | 3.95% | 0.396% |
| 73 | 15.100 | 1119 | 1121 | 1124 | rVV | 111522 | 162488 | 7.92% | 0.795% |
| 74 | 15.202 | 1126 | 1130 | 1131 | rBV2 | 17347 | 33521 | 1.63% | 0.164% |
| 75 | 15.237 | 1131 | 1133 | 1134 | rBV | 47078 | 63916 | 3.12% | 0.313% |
| 76 | 15.282 | 1134 | 1137 | 1140 | rVB | 295664 | 381539 | 18.61% | 1.867% |
| 77 | 15.340 | 1140 | 1142 | 1144 | rBV | 404031 | 480816 | 23.45% | 2.353% |
| 78 | 15.397 | 1144 | 1147 | 1153 | rVB2 | 453584 | 831957 | 40.57% | 4.072% |
| 79 | 15.602 | 1163 | 1165 | 1169 | rVB | 49923 | 87764 | 4.28% | 0.430% |
| 80 | 15.820 | 1181 | 1184 | 1186 | rBV2 | 71931 | 126619 | 6.18% | 0.620% |
| 81 | 15.900 | 1189 | 1191 | 1192 | rBV2 | 22071 | 34187 | 1.67% | 0.167% |
| 82 | 15.923 | 1192 | 1193 | 1196 | rVV2 | 29985 | 48751 | 2.38% | 0.239% |
| 83 | 16.060 | 1203 | 1205 | 1209 | rVB3 | 19099 | 48879 | 2.38% | 0.239% |
| 84 | 16.243 | 1218 | 1221 | 1222 | rBV2 | 17073 | 38653 | 1.89% | 0.189% |
| 85 | 16.448 | 1237 | 1239 | 1241 | rBV3 | 16482 | 30288 | 1.48% | 0.148% |
| 86 | 16.574 | 1247 | 1250 | 1253 | rBV3 | 45468 | 110366 | 5.38% | 0.540% |
| 87 | 16.780 | 1265 | 1268 | 1272 | rBV2 | 169452 | 329443 | 16.07% | 1.612% |
| 88 | 16.848 | 1272 | 1274 | 1278 | rVB2 | 48695 | 101449 | 4.95% | 0.496% |
| 89 | 16.940 | 1279 | 1282 | 1285 | rBV2 | 36115 | 84370 | 4.11% | 0.413% |
| 90 | 17.031 | 1285 | 1290 | 1292 | rVV4 | 62774 | 195023 | 9.51% | 0.954% |
| 91 | 17.088 | 1292 | 1295 | 1300 | rVB | 127753 | 292365 | 14.26% | 1.431% |
| 92 | 17.203 | 1300 | 1305 | 1312 | rBV | 132296 | 339533 | 16.56% | 1.662% |
| 93 | 17.340 | 1313 | 1317 | 1322 | rVB5 | 44913 | 113880 | 5.55% | 0.557% |
| 94 | 17.420 | 1322 | 1324 | 1328 | rBV | 26793 | 55814 | 2.72% | 0.273% |
| 95 | 17.900 | 1364 | 1366 | 1371 | rVB3 | 17370 | 43282 | 2.11% | 0.212% |
| 96 | 18.071 | 1378 | 1381 | 1390 | rBV3 | 8455 | 35919 | 1.75% | 0.176% |
| 97 | 18.277 | 1395 | 1399 | 1407 | rBV6 | 33390 | 122001 | 5.95% | 0.597% |
| 98 | 19.203 | 1475 | 1480 | 1484 | rBV7 | 9682 | 37118 | 1.81% | 0.182% |
| 99 | 19.317 | 1486 | 1490 | 1499 | rVB2 | 26725 | 108765 | 5.30% | 0.532% |
| 100 | 19.500 | 1502 | 1506 | 1510 | rBV | 14230 | 44068 | 2.15% | 0.216% |

Sum of corrected areas: 20432896

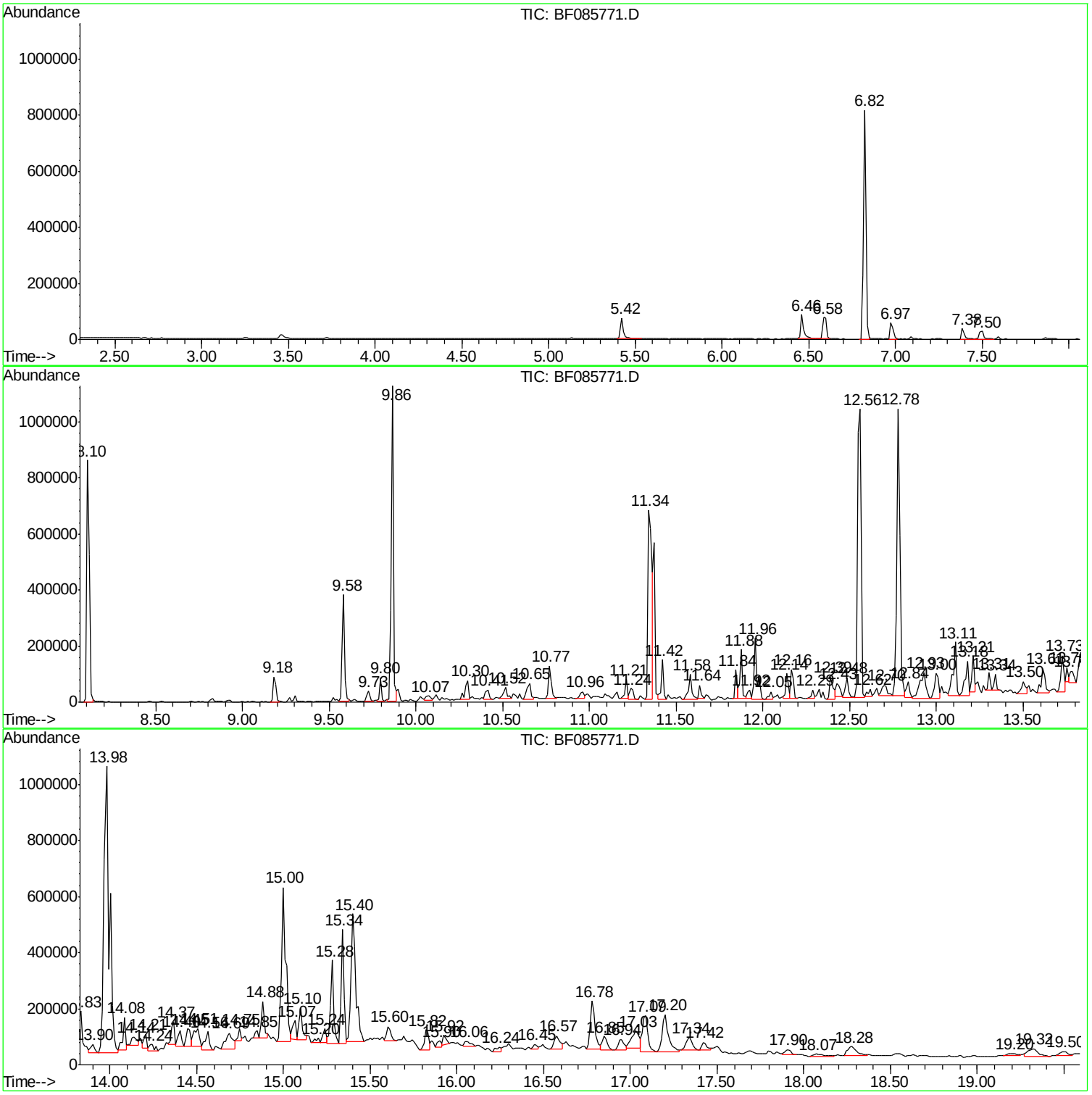
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA F\DATA\BF032516\
Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.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\BF032516\
Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

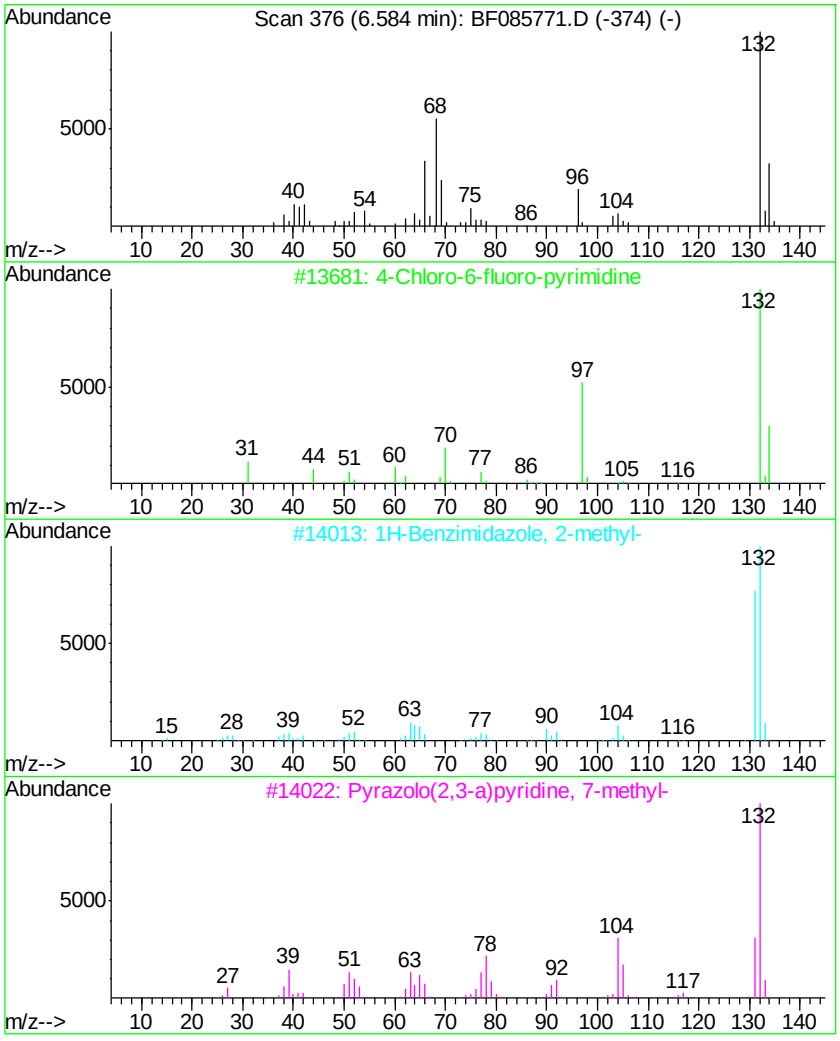
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

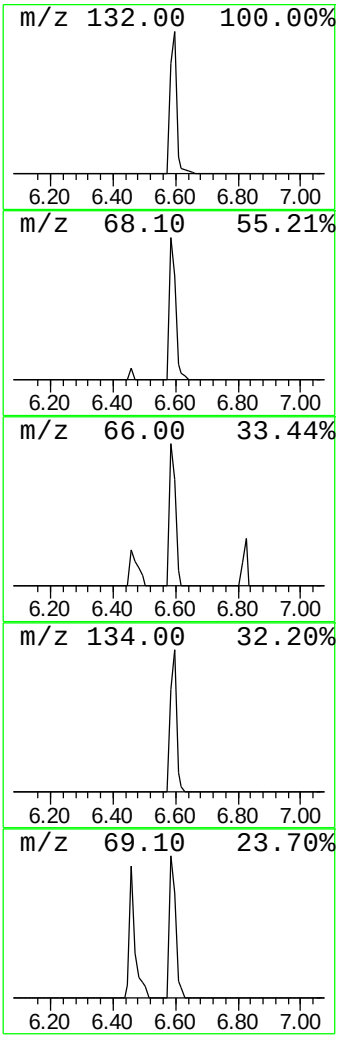
**********

Peak Number 1 unknown6.58 Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.58 | 2.91 ng | 109524 | 1,4-Dichlorobenzene-d4 | 6.82 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4-Chloro-6-fluoro-pyrimidine | 132 | C4H2ClFN2 | 051422-01-6 | 27 |
| 2 | 1H-Benzimidazole, 2-methyl- | 132 | C8H8N2 | 000615-15-6 | 22 |
| 3 | Pyrazolo(2,3-a)pyridine, 7-methyl- | 132 | C8H8N2 | 034760-58-2 | 12 |
| 4 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 12 |
| 5 | 5-Aminoindole | 132 | C8H8N2 | 005192-03-0 | 10 |



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Data File : BF085771.D
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Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

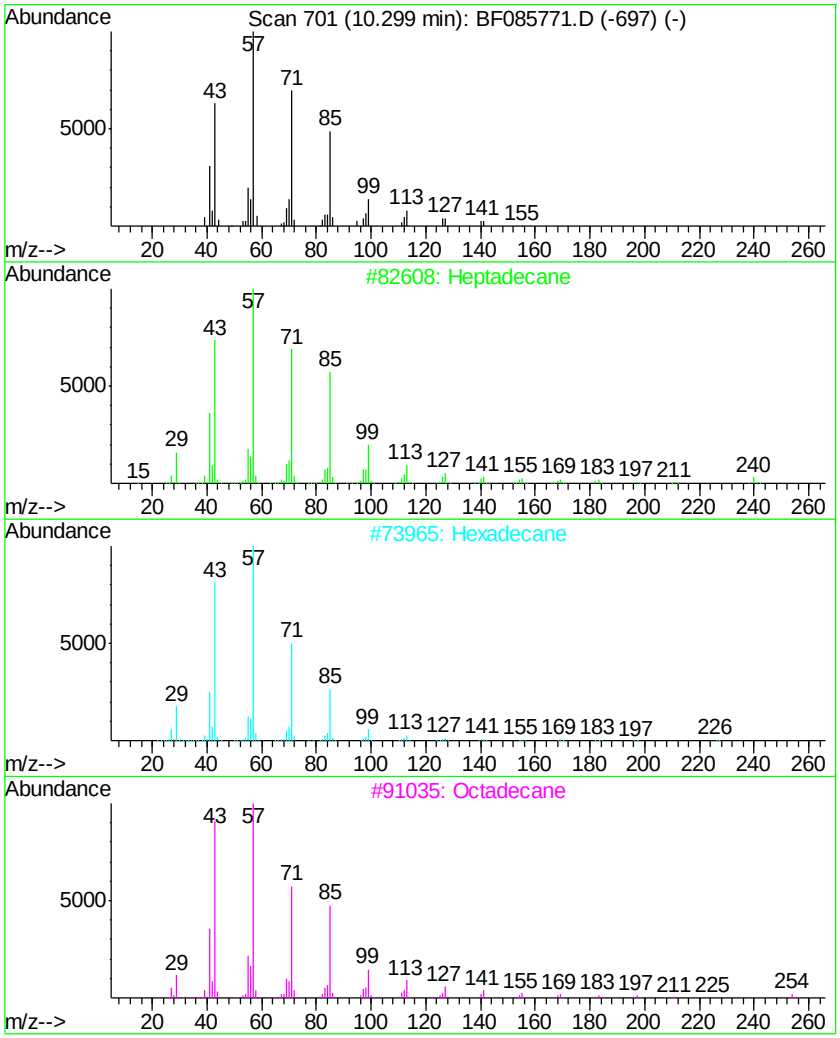
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

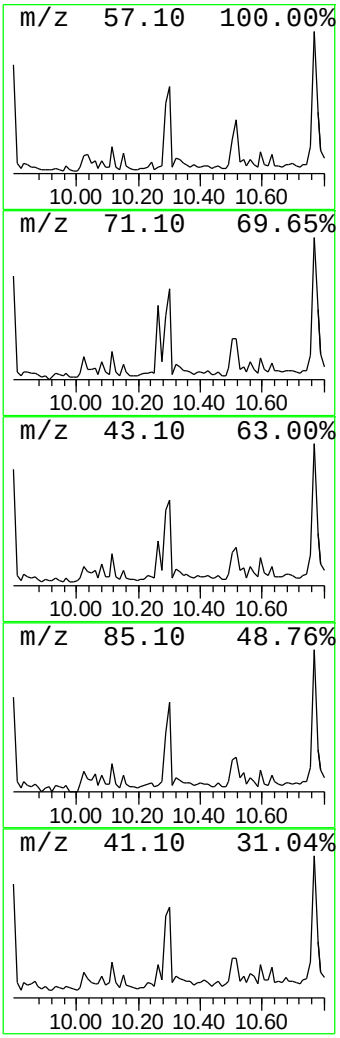
**********

Peak Number 2 Heptadecane Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.30 | 2.03 ng | 107976 | Acenaphthene-d10 | 9.86 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Heptadecane | 240 | C17H36 | 000629-78-7 | 91 |
| 2 | Hexadecane | 226 | C16H34 | 000544-76-3 | 90 |
| 3 | Octadecane | 254 | C18H38 | 000593-45-3 | 90 |
| 4 | Pentadecane | 212 | C15H32 | 000629-62-9 | 90 |
| 5 | Eicosane | 282 | C20H42 | 000112-95-8 | 87 |



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Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

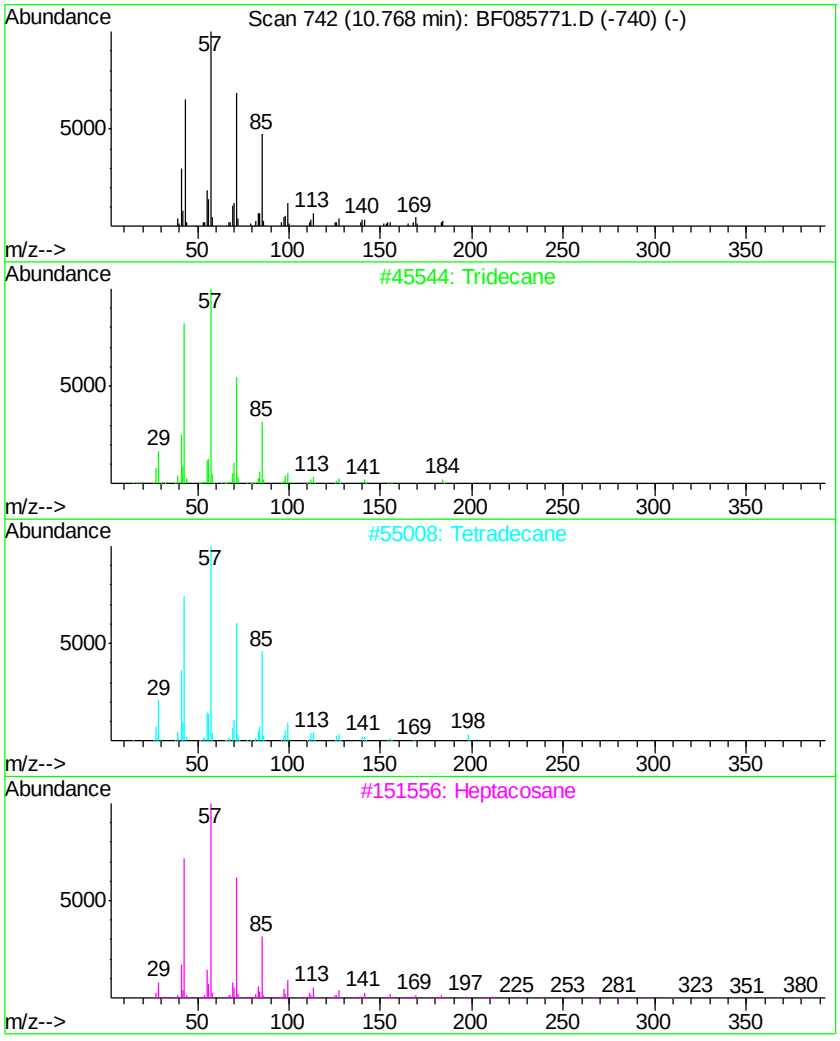
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

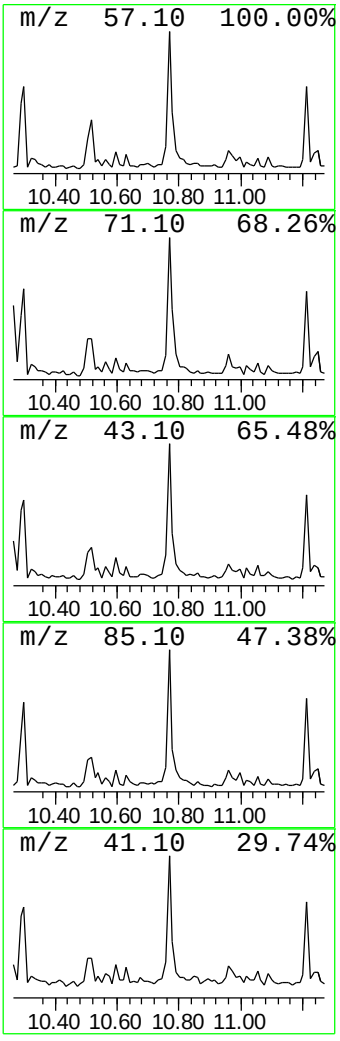
**********

Peak Number 3 Tridecane Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.77 | 2.34 ng | 139787 | Phenanthrene-d10 | 11.35 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Tridecane | 184 | C13H28 | 000629-50-5 | 93 |
| 2 | Tetradecane | 198 | C14H30 | 000629-59-4 | 87 |
| 3 | Heptacosane | 380 | C27H56 | 000593-49-7 | 87 |
| 4 | Dodecane | 170 | C12H26 | 000112-40-3 | 87 |
| 5 | Heptadecane | 240 | C17H36 | 000629-78-7 | 87 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF032516\
Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
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Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

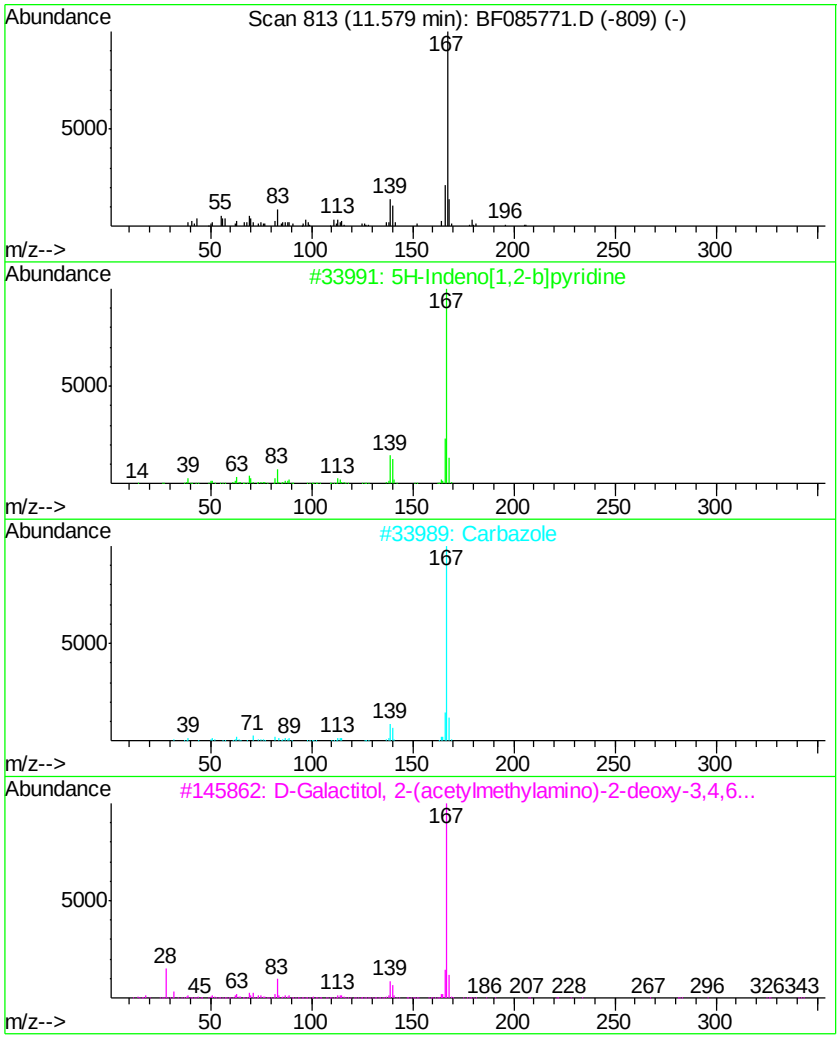
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

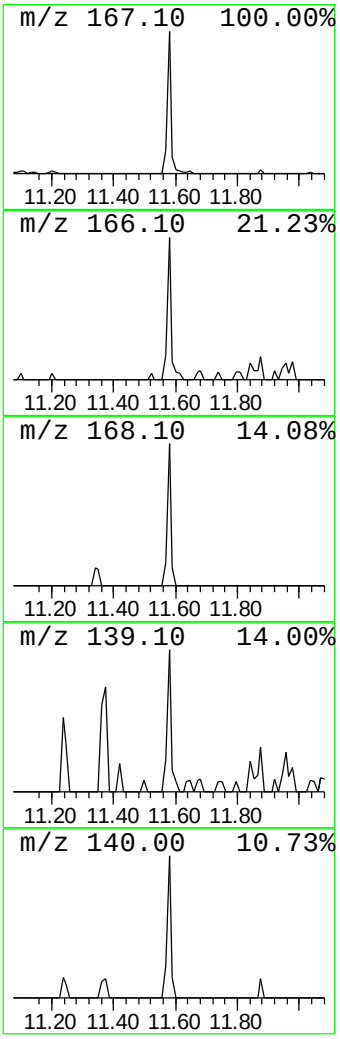
**********

Peak Number 4 5H-Indeno[1,2-b]pyridine Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.58 | 2.02 ng | 121130 | Phenanthrene-d10 | 11.35 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 5H-Indeno[1,2-b]pyridine | 167 | C12H9N | 000244-99-5 | 94 |
| 2 | Carbazole | 167 | C12H9N | 000086-74-8 | 91 |
| 3 | D-Galactitol, 2-(acetylmethylami... | 363 | C16H29NO8 | 074410-42-7 | 91 |
| 4 | 9H-Carbazole-9-methanol | 197 | C13H11NO | 002409-36-1 | 91 |
| 5 | 9H-Carbazole, 9-nitroso- | 196 | C12H8N2O | 002788-23-0 | 91 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF032516\
Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

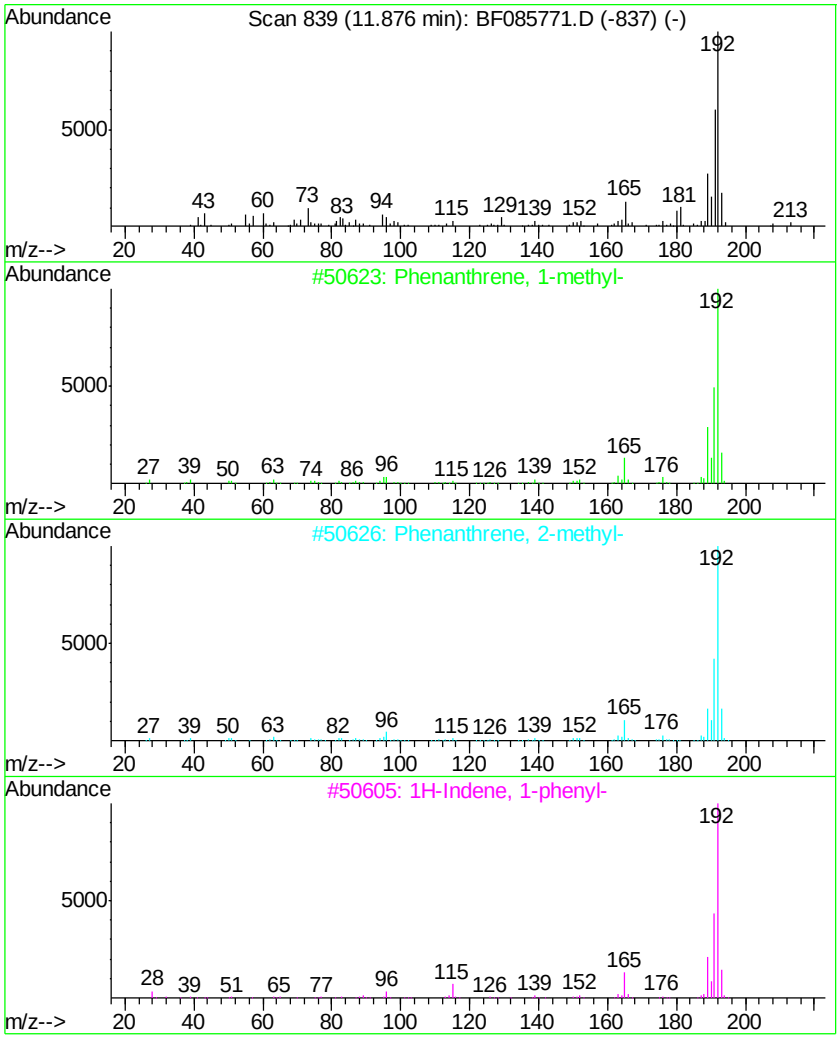
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

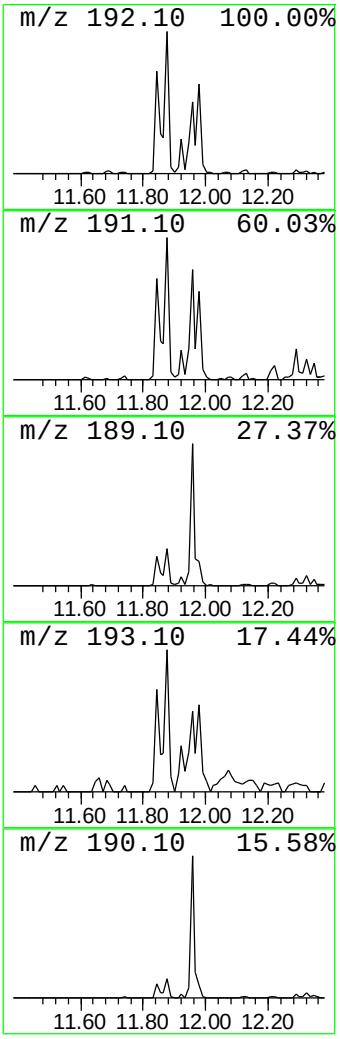
**********

Peak Number 5 Phenanthrene, 1-methyl- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.88 | 2.73 ng | 163083 | Phenanthrene-d10 | 11.35 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 96 |
| 2 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 95 |
| 3 | 1H-Indene, 1-phenyl- | 192 | C15H12 | 001961-96-2 | 94 |
| 4 | 1H-Indene, 3-phenyl- | 192 | C15H12 | 001961-97-3 | 94 |
| 5 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 94 |



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Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

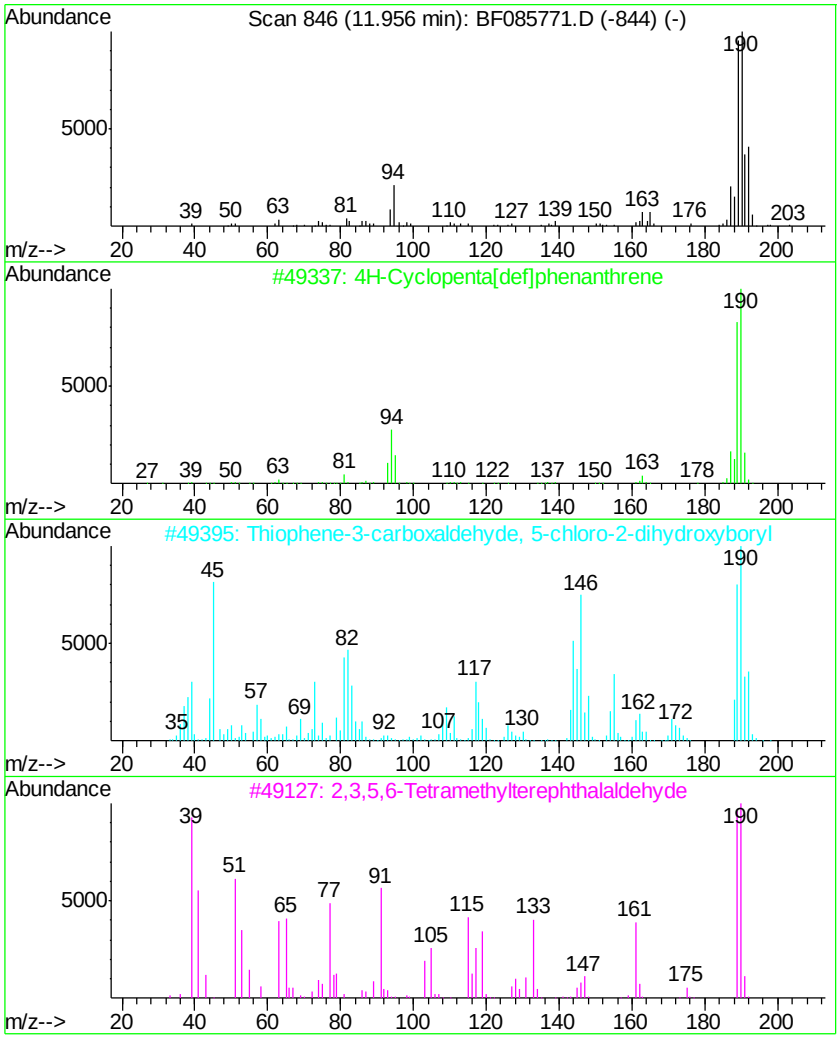
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

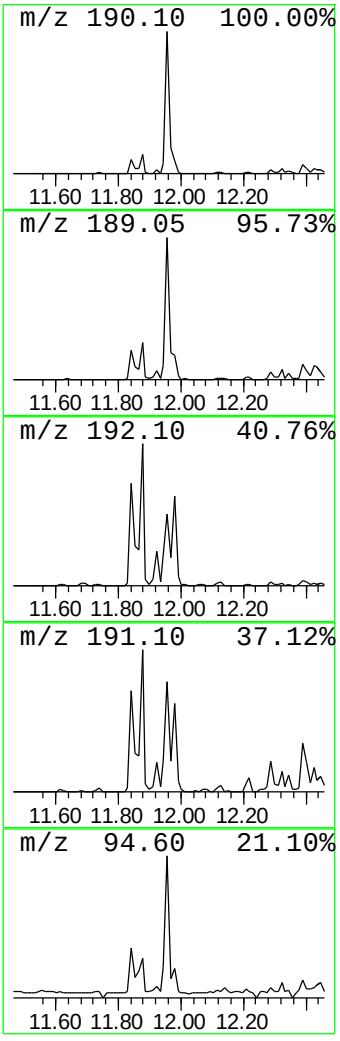
**********

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

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.96 | 4.58 ng | 274303 | Phenanthrene-d10 | 11.35 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 74 |
| 2 | Thiophene-3-carboxaldehyde, 5-ch... | 190 | C5H4BClO3S | 036155-87-0 | 50 |
| 3 | 2,3,5,6-Tetramethylterephthalald... | 190 | C12H14O2 | 007072-01-7 | 47 |
| 4 | Methyl diselenide | 190 | C2H6Se2 | 007101-31-7 | 45 |
| 5 | 6H-Cyclobuta[jk]phenanthrene | 190 | C15H10 | 083469-43-6 | 45 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF032516\
Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

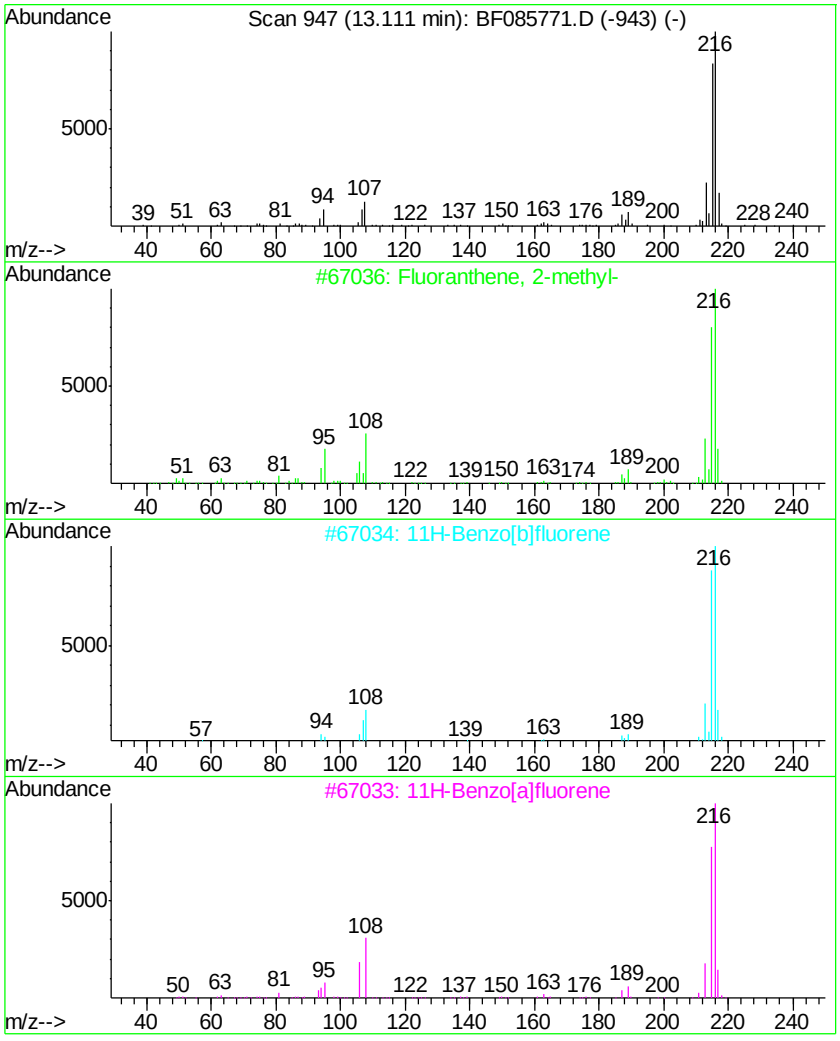
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

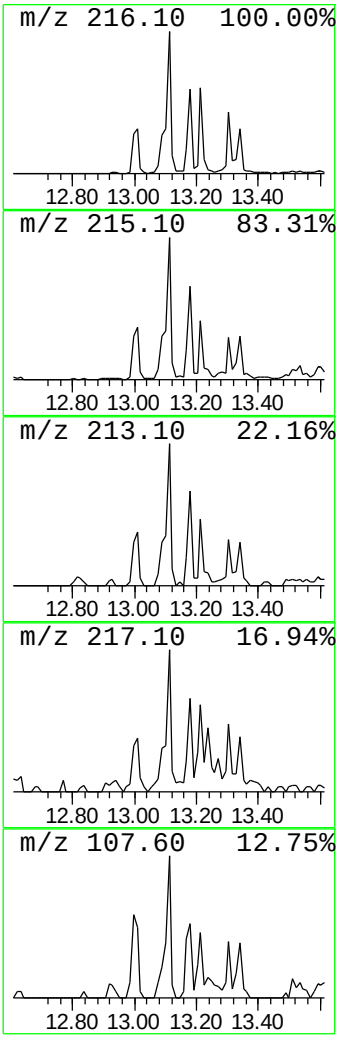
**********

Peak Number 7 Fluoranthene, 2-methyl- Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.11 | 2.63 ng | 269860 | Chrysene-d12 | 13.98 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 95 |
| 2 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 95 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 93 |
| 4 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 93 |
| 5 | 7H-Benzo[c]fluorene | 216 | C17H12 | 000205-12-9 | 87 |



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Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.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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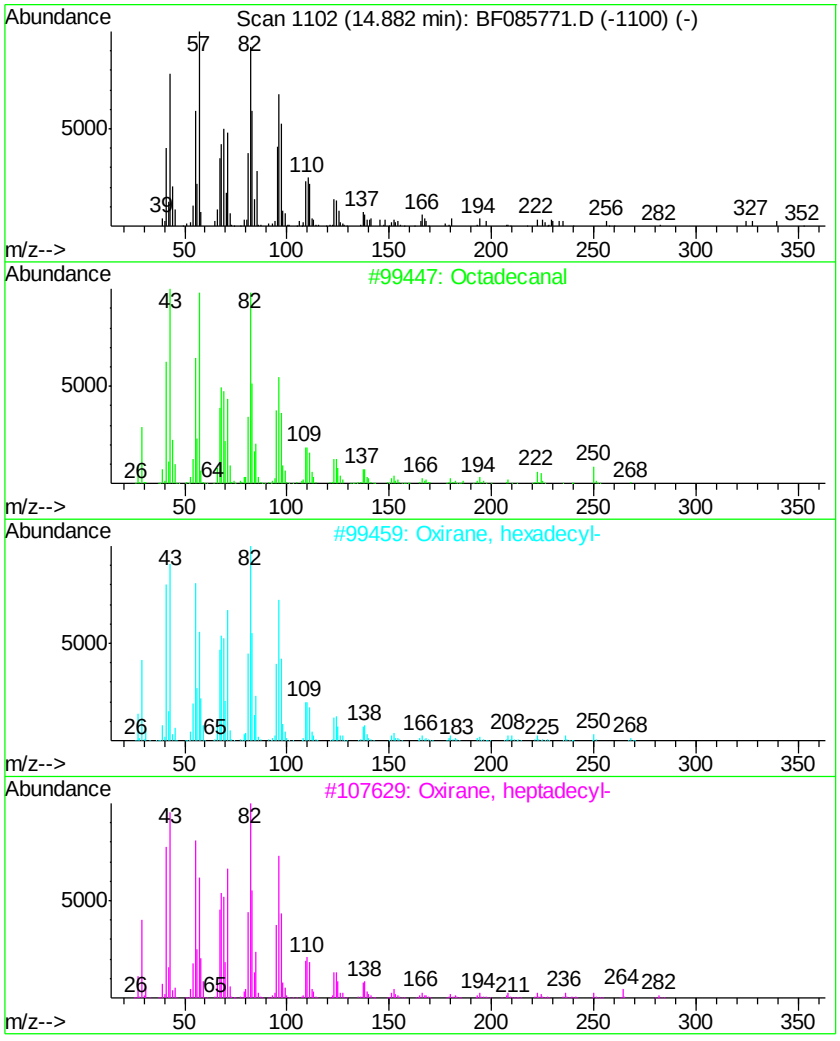
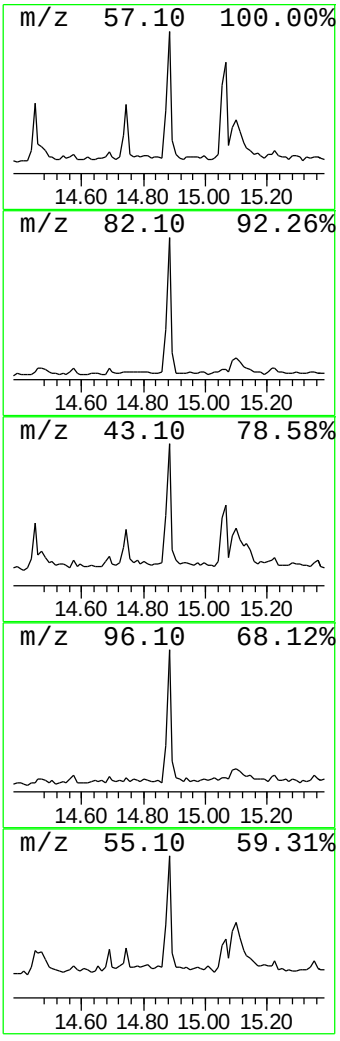
Peak Number 8 Octadecanal Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.88 | 3.38 ng | 140412 | Perylene-d12 | 15.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Octadecanal | 268 | C18H36O | 000638-66-4 | 91 |
| 2 | Oxirane, hexadecyl- | 268 | C18H36O | 007390-81-0 | 91 |
| 3 | Oxirane, heptadecyl- | 282 | C19H38O | 067860-04-2 | 91 |
| 4 | (Z)-14-Tricosenyl formate | 366 | C24H46O2 | 077899-10-6 | 87 |
| 5 | 1,19-Eicosadiene | 278 | C20H38 | 014811-95-1 | 74 |



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Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.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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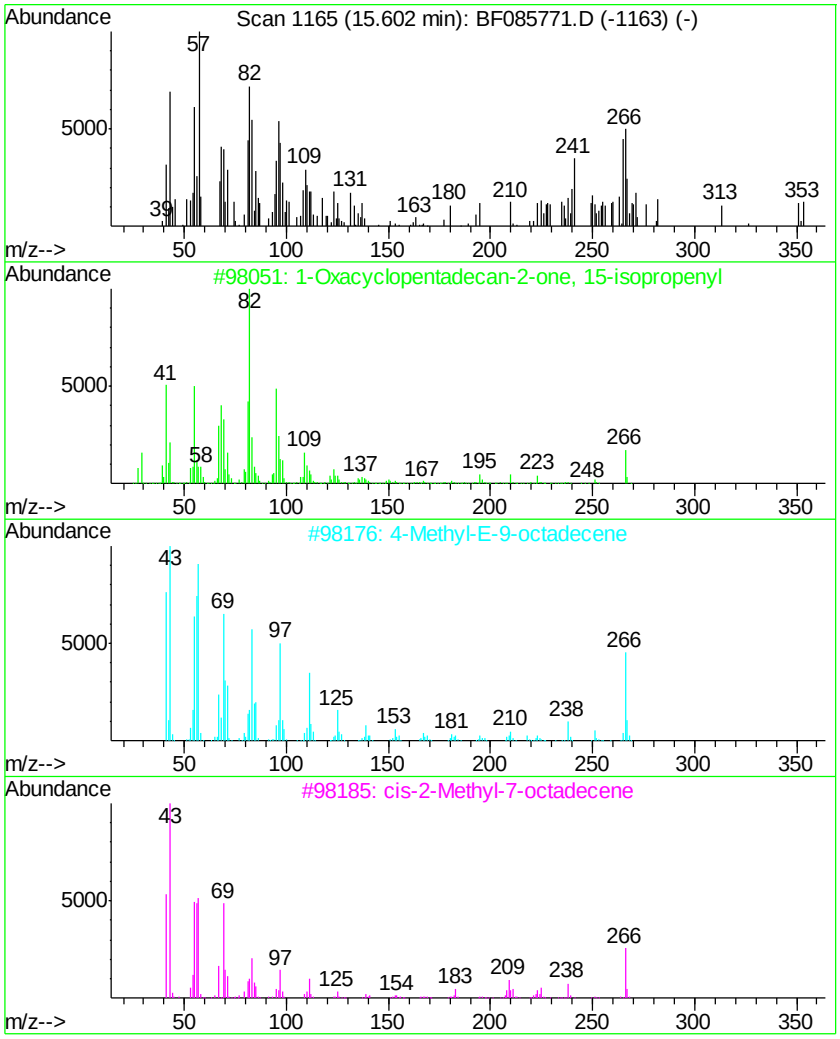
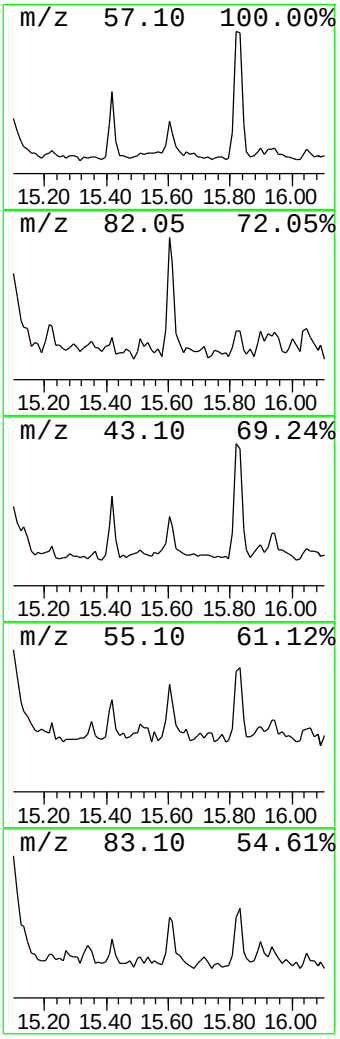
Peak Number 11 unknown15.60 Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.60 | 2.11 ng | 87764 | Perylene-d12 | 15.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Oxacyclopentadecan-2-one, 15-i... | 266 | C17H30O2 | 089328-44-9 | 41 |
| 2 | 4-Methyl-E-9-octadecene | 266 | C19H38 | 1000130-87-1 | 38 |
| 3 | cis-2-Methyl-7-octadecene | 266 | C19H38 | 035354-39-3 | 18 |
| 4 | Diacetyl lycorine lactam | 385 | C20H19NO7 | 006391-78-2 | 16 |
| 5 | Z,Z-3,13-Octadecadien-1-ol | 266 | C18H34O | 1000131-10-9 | 12 |



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Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.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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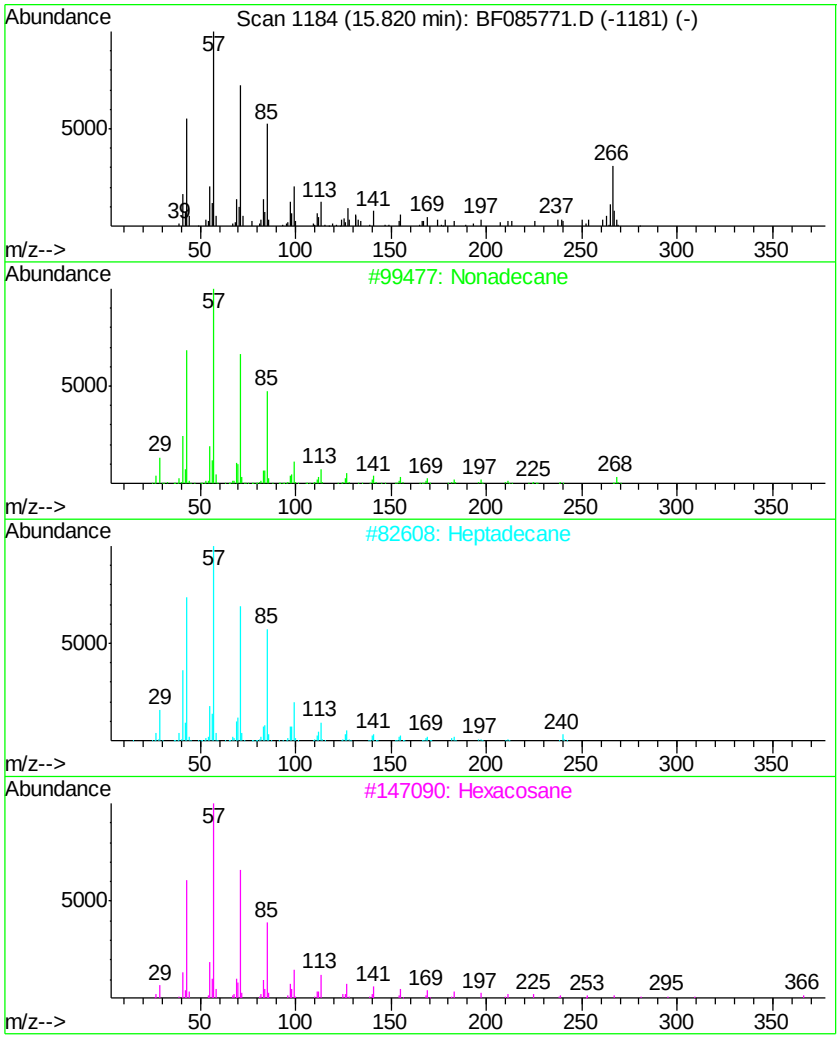
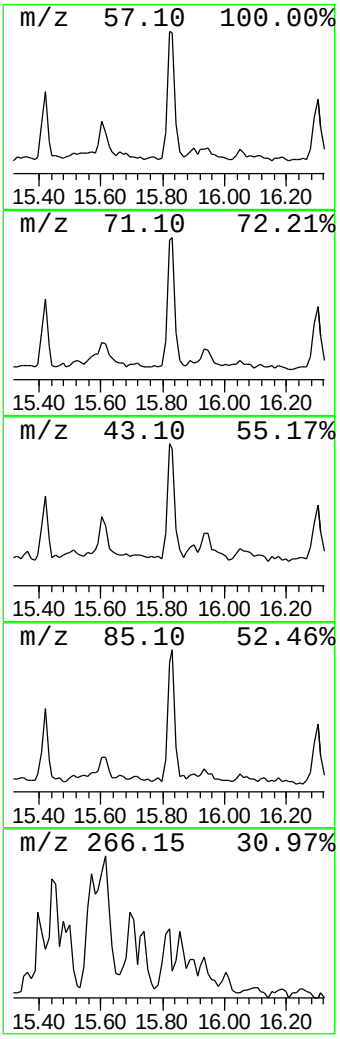
Peak Number 12 Nonadecane Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.82 | 3.04 ng | 126619 | Perylene-d12 | 15.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Nonadecane | 268 | C19H40 | 000629-92-5 | 96 |
| 2 | Heptadecane | 240 | C17H36 | 000629-78-7 | 93 |
| 3 | Hexacosane | 366 | C26H54 | 000630-01-3 | 70 |
| 4 | Octacosane | 394 | C28H58 | 000630-02-4 | 70 |
| 5 | Triacontane | 422 | C30H62 | 000638-68-6 | 70 |



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Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.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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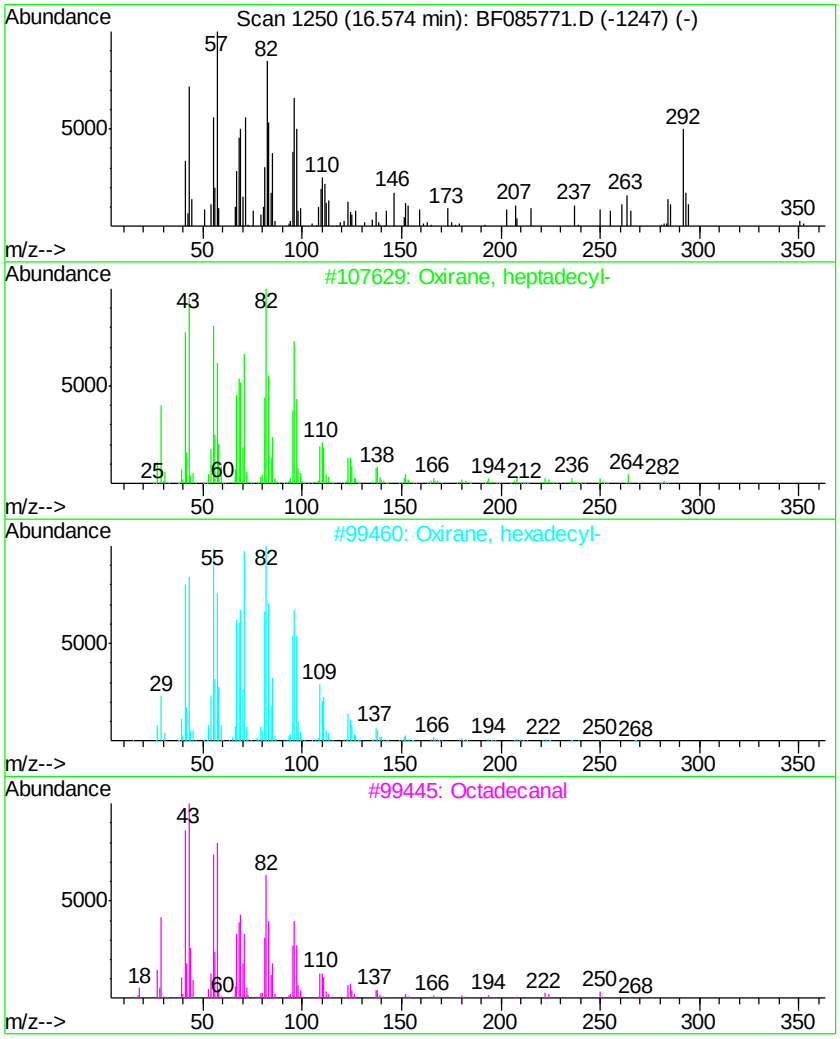
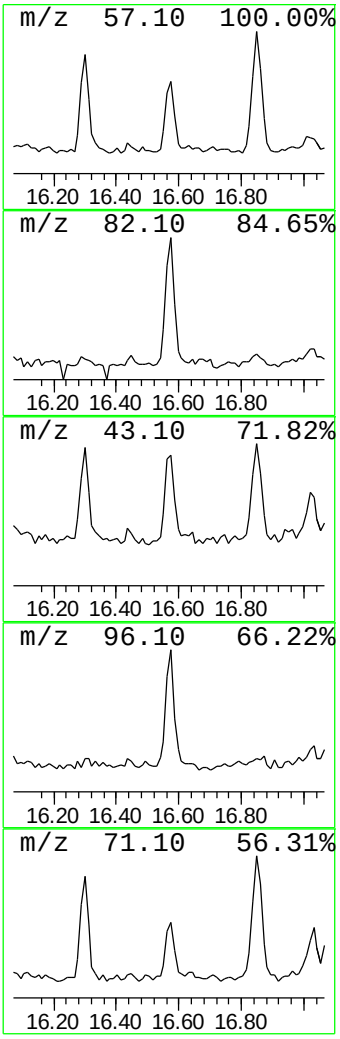
Peak Number 13 Oxirane, heptadecyl- Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.57 | 2.65 ng | 110366 | Perylene-d12 | 15.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Oxirane, heptadecyl- | 282 | C19H38O | 067860-04-2 | 91 |
| 2 | Oxirane, hexadecyl- | 268 | C18H36O | 007390-81-0 | 58 |
| 3 | Octadecanal | 268 | C18H36O | 000638-66-4 | 53 |
| 4 | 1,19-Eicosadiene | 278 | C20H38 | 014811-95-1 | 52 |
| 5 | 16-Octadecenal | 266 | C18H34O | 056554-87-1 | 49 |



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Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.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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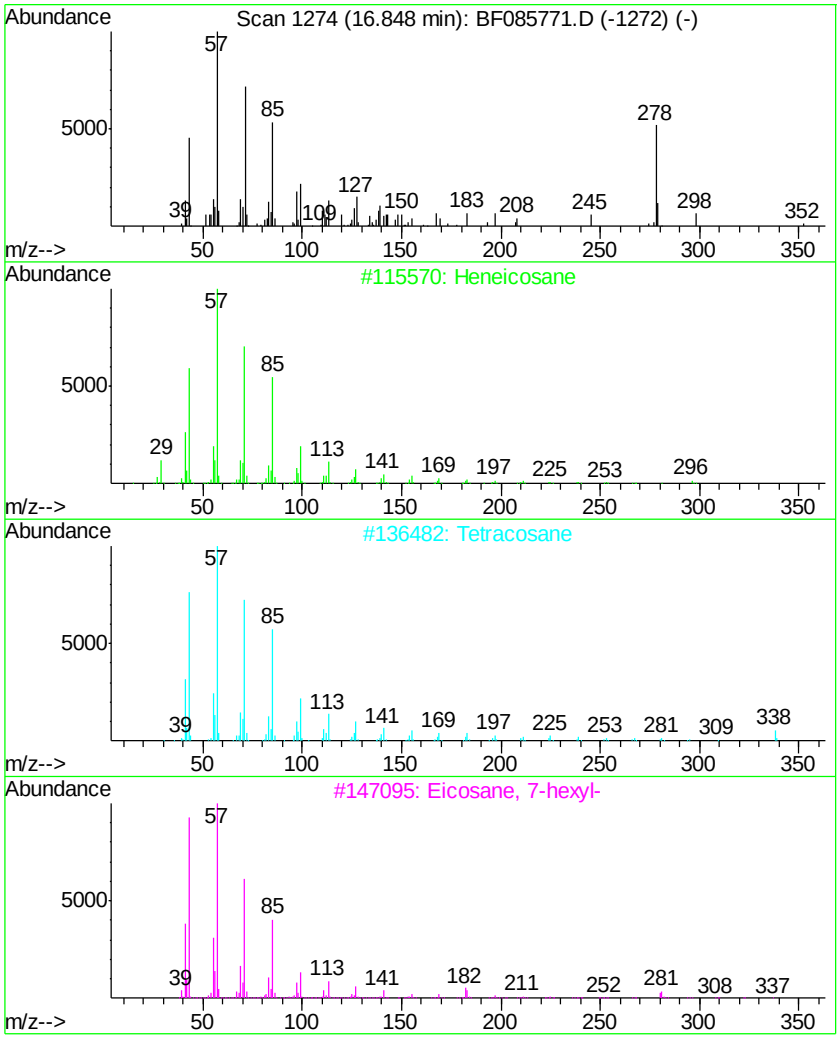
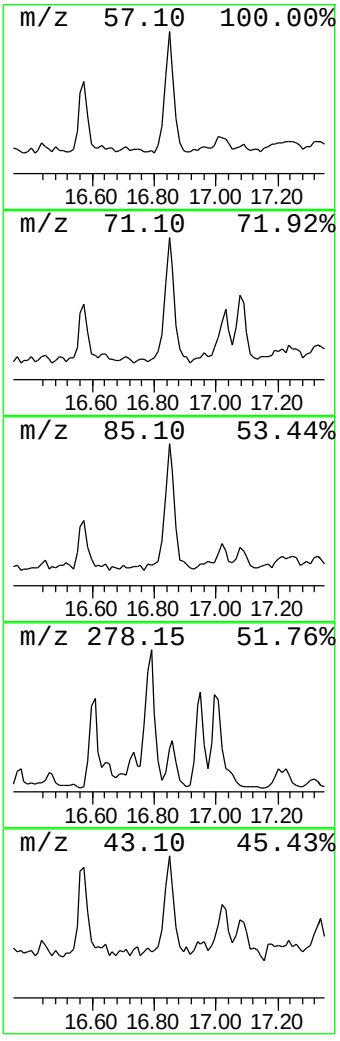
Peak Number 14 Heneicosane Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.85 | 2.44 ng | 101449 | Perylene-d12 | 15.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Heneicosane | 296 | C21H44 | 000629-94-7 | 53 |
| 2 | Tetracosane | 338 | C24H50 | 000646-31-1 | 49 |
| 3 | Eicosane, 7-hexyl- | 366 | C26H54 | 055333-99-8 | 49 |
| 4 | Docosane | 310 | C22H46 | 000629-97-0 | 49 |
| 5 | 1,2:7,8-Dibenzophenanthrene | 278 | C22H14 | 000213-46-7 | 46 |



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Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.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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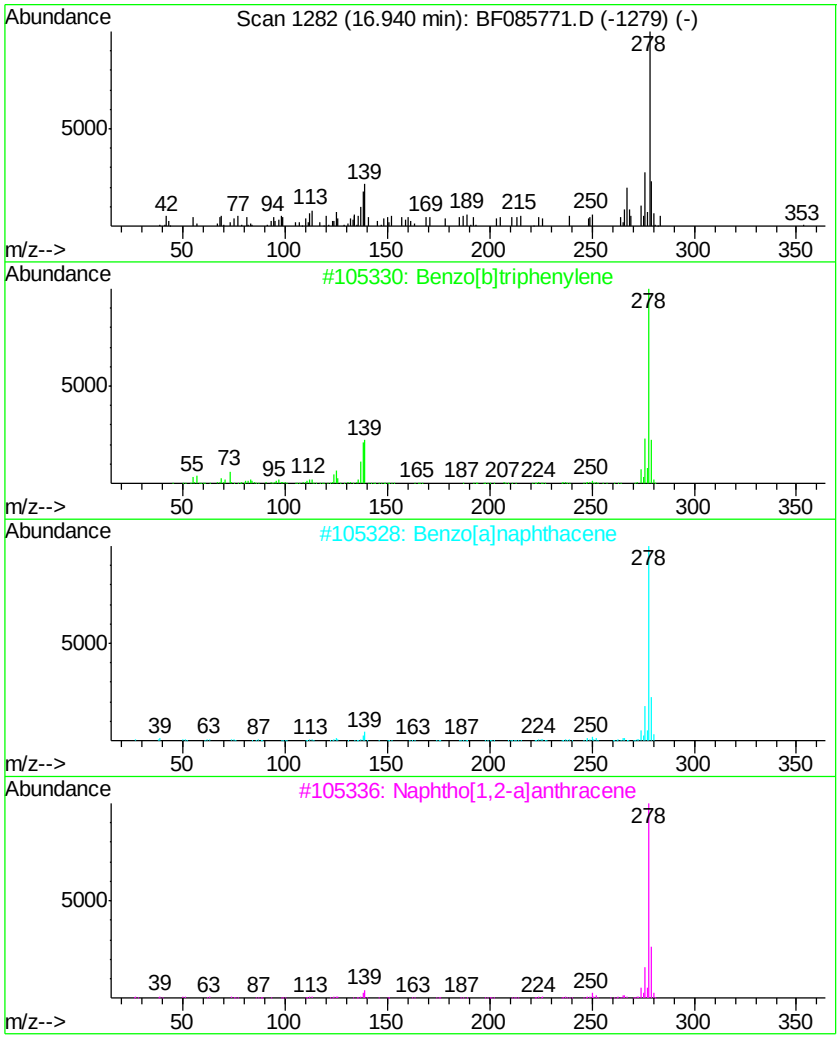
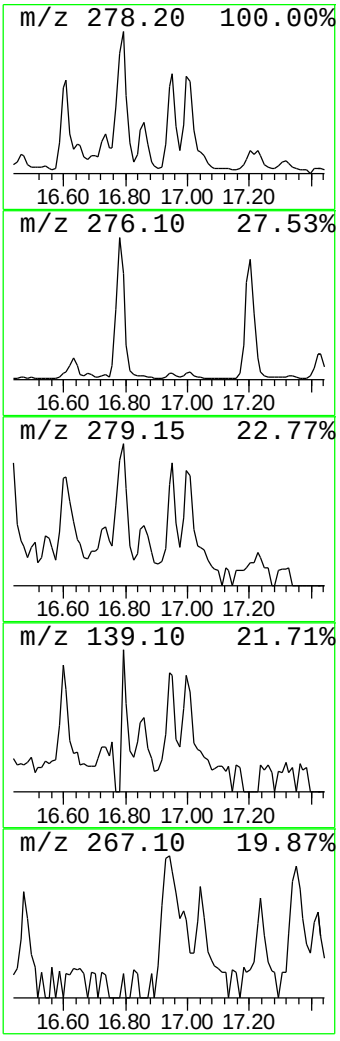
Peak Number 15 Benzo[b]triphenylene Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.94 | 2.03 ng | 84370 | Perylene-d12 | 15.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[b]triphenylene | 278 | C22H14 | 000215-58-7 | 86 |
| 2 | Benzo[a]naphthacene | 278 | C22H14 | 000226-88-0 | 76 |
| 3 | Naphtho[1,2-a]anthracene | 278 | C22H14 | 000195-06-2 | 70 |
| 4 | Pentacene | 278 | C22H14 | 000135-48-8 | 70 |
| 5 | Benzo[b]chrysene | 278 | C22H14 | 000214-17-5 | 70 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF032516\
Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.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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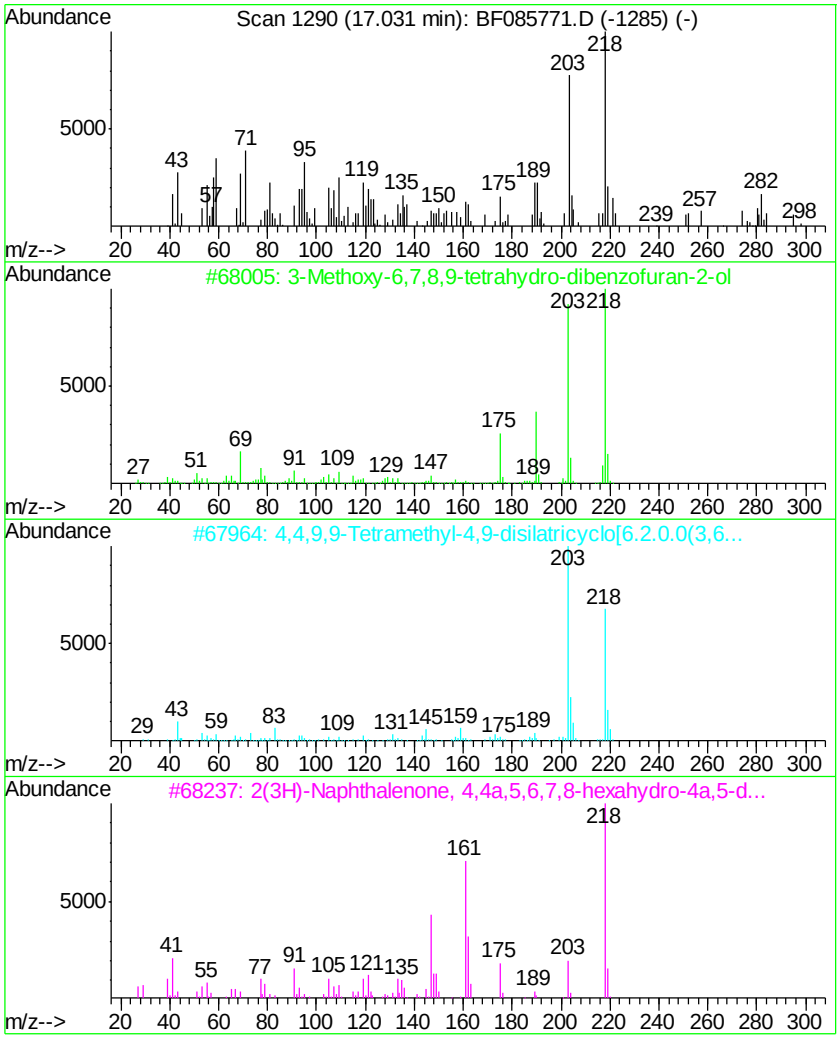
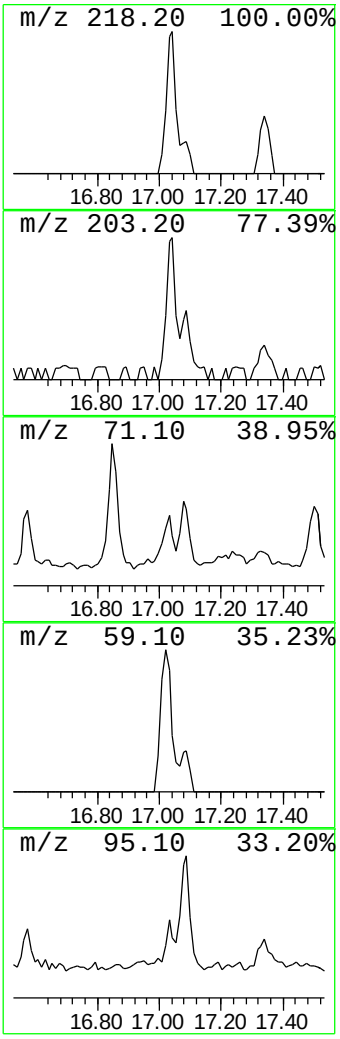
Peak Number 16 3-Methoxy-6,7,8,9-tetrahydr... Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.03 | 4.69 ng | 195023 | Perylene-d12 | 15.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Methoxy-6,7,8,9-tetrahydro-dib... | 218 | C13H14O3 | 1000186-57-9 | 50 |
| 2 | 4,4,9,9-Tetramethyl-4,9-disilatr... | 218 | C12H18Si2 | 1000280-67-7 | 49 |
| 3 | 2(3H)-Naphthalenone, 4,4a,5,6,7,... | 218 | C15H22O | 019598-45-9 | 46 |
| 4 | Acetic acid, 3-hydroxy-7-isoprop... | 278 | C17H26O3 | 1000187-37-6 | 43 |
| 5 | 4-(p-N,N-dimethylaminophenylimin... | 218 | C13H18N2O | 1000100-07-8 | 42 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF032516\
Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.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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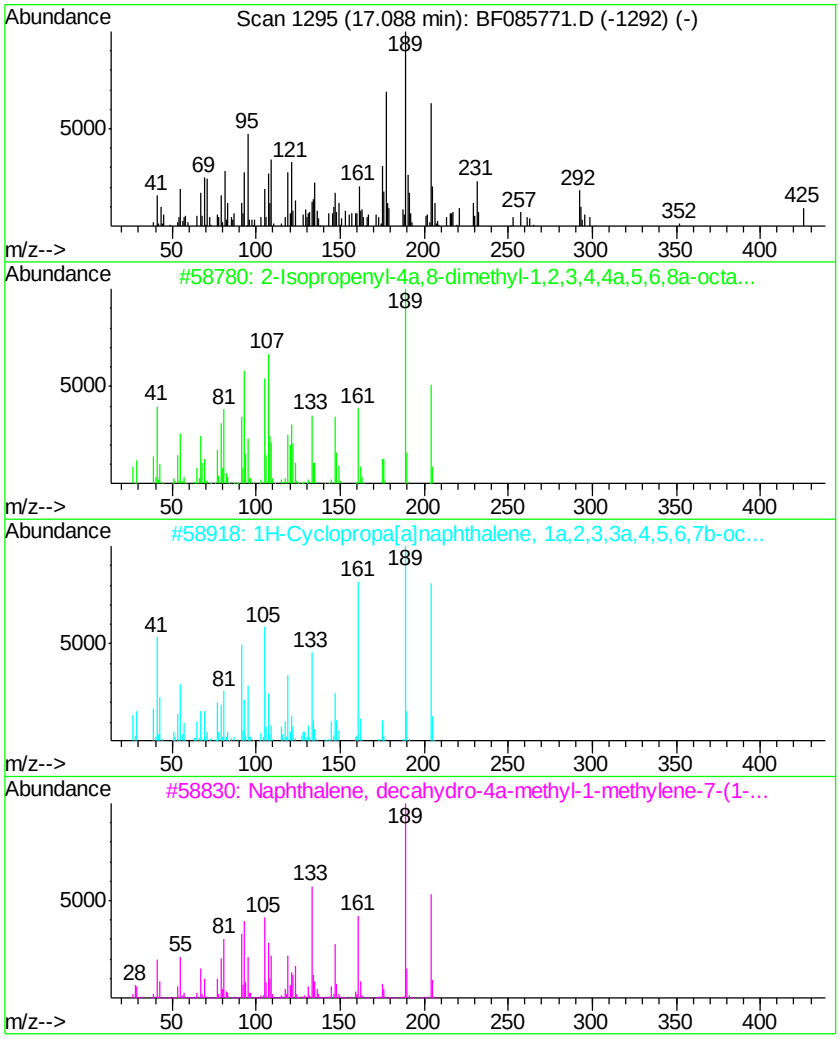
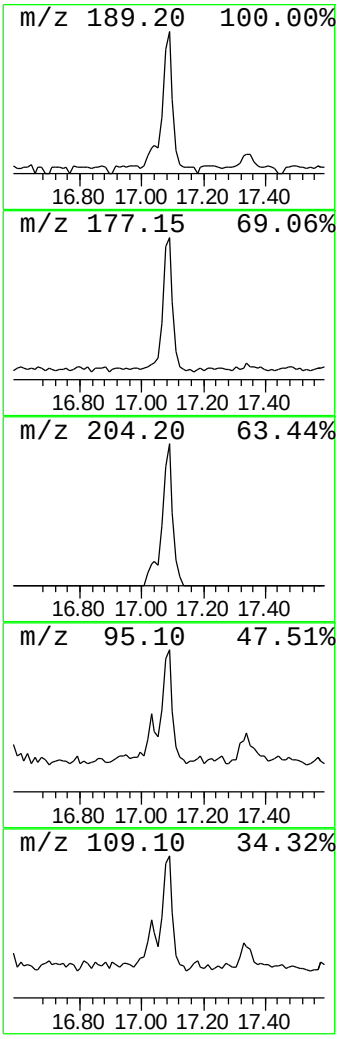
Peak Number 17 2-Isopropenyl-4a,8-dimethyl... Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.09 | 7.03 ng | 292365 | Perylene-d12 | 15.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Isopropenyl-4a,8-dimethyl-1,2,... | 204 | C15H24 | 1000193-57-0 | 52 |
| 2 | 1H-Cyclopropa[a]naphthalene, 1a,... | 204 | C15H24 | 000489-29-2 | 45 |
| 3 | Naphthalene, decahydro-4a-methyl... | 204 | C15H24 | 000515-17-3 | 43 |
| 4 | 2,3-Dimethoxy-5-aminocinnamonitrile | 204 | C11H12N2O2 | 1000214-46-5 | 38 |
| 5 | Ethanone, 1-[4-(trifluoromethoxy... | 204 | C9H7F3O2 | 085013-98-5 | 38 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF032516\
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Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.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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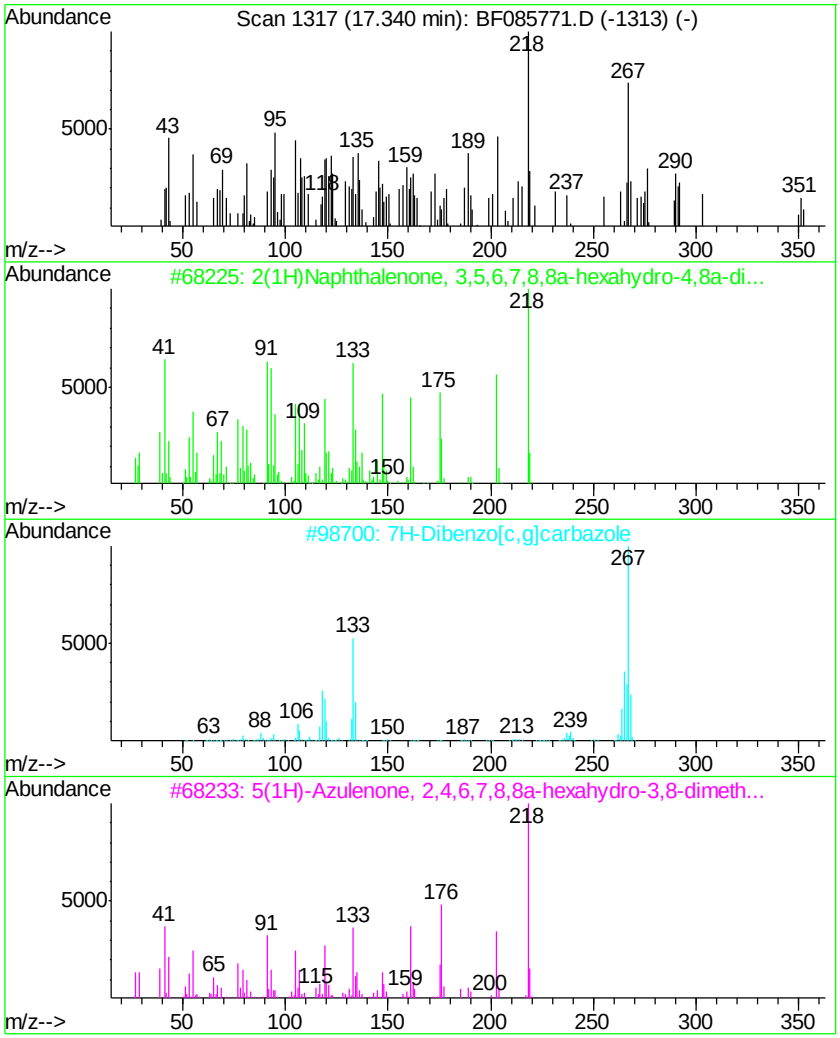
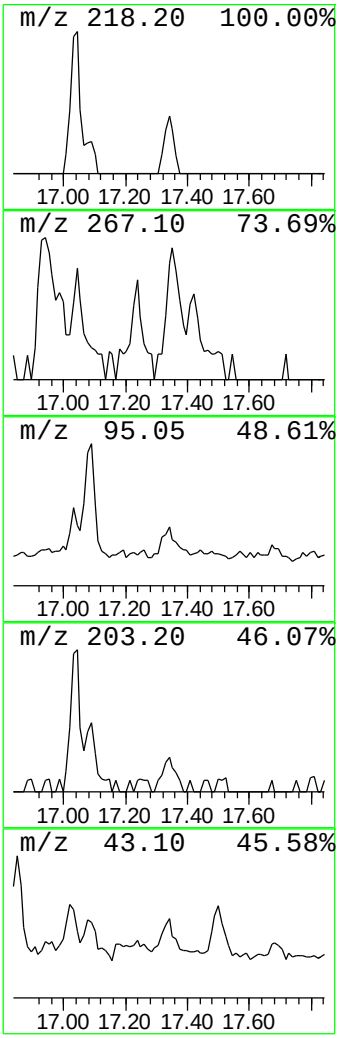
Peak Number 18 unknown17.34 Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.34 | 2.74 ng | 113880 | Perylene-d12 | 15.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2(1H)Naphthalenone, 3,5,6,7,8,8a... | 218 | C15H22O | 1000188-66-5 | 20 |
| 2 | 7H-Dibenzo[c,g]carbazole | 267 | C20H13N | 000194-59-2 | 20 |
| 3 | 5(1H)-Azulenone, 2,4,6,7,8,8a-he... | 218 | C15H22O | 006754-66-1 | 18 |
| 4 | 6-Chloro-2,3-dimethyl-4-phenylqu... | 267 | C17H14ClN | 022609-11-6 | 18 |
| 5 | 1,4-Naphthoquinone, 2-ethyl-5,8-... | 218 | C12H10O4 | 015012-53-0 | 15 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF032516\
Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

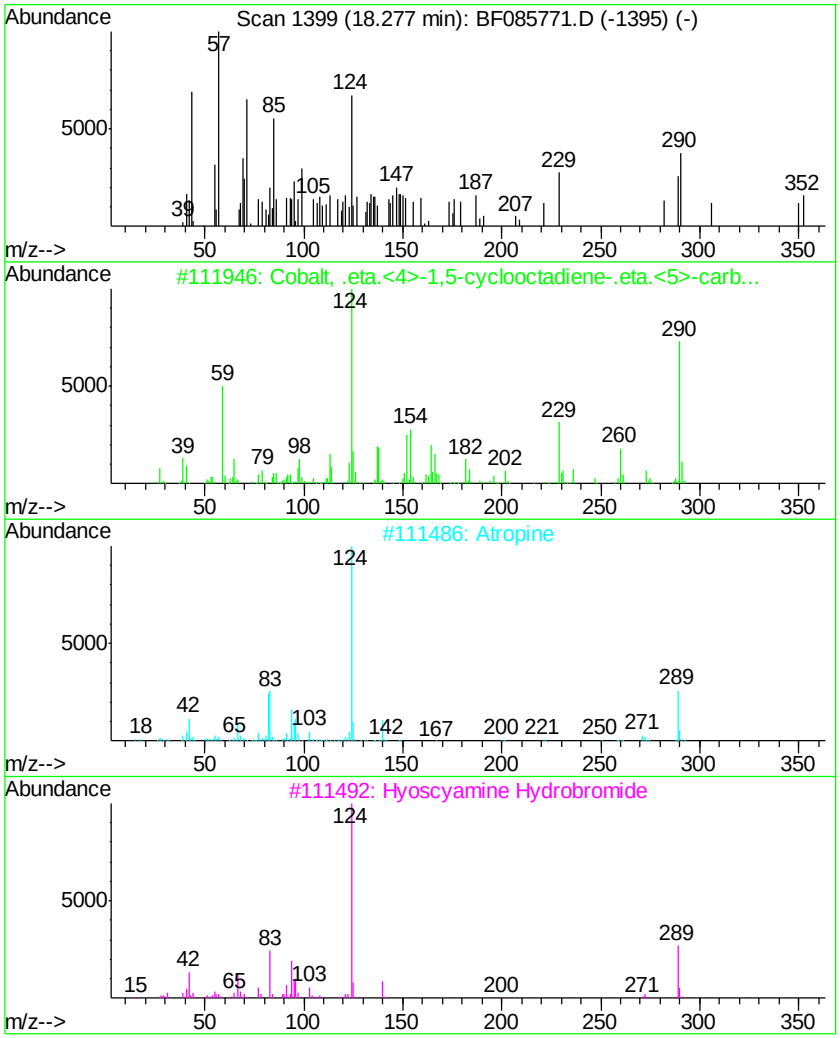
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

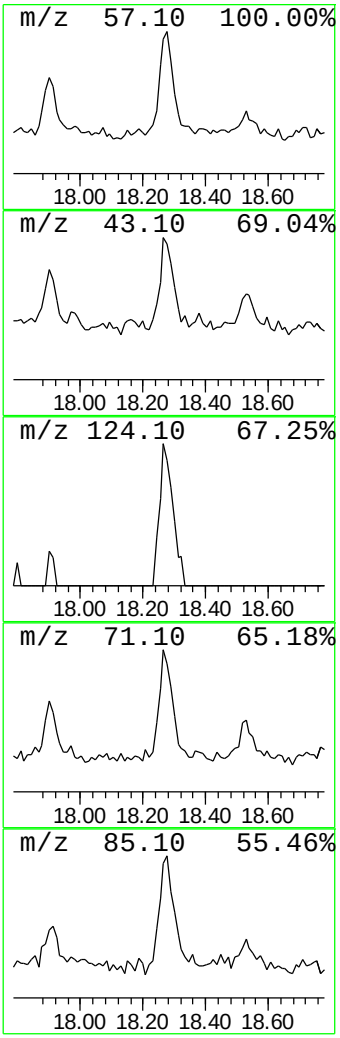
**********

Peak Number 19 unknown18.28 Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.28 | 2.93 ng | 122001 | Perylene-d12 | 15.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cobalt, .eta.<4>-1,5-cyclooctadi... | 290 | C15H19CoO2 | 092468-04-7 | 27 |
| 2 | Atropine | 289 | C17H23NO3 | 000051-55-8 | 18 |
| 3 | Hyoscyamine Hydrobromide | 289 | C17H23NO3 | 000306-03-6 | 18 |
| 4 | 4H-Pyran-4-one, 2,6-dimethyl- | 124 | C7H8O2 | 001004-36-0 | 11 |
| 5 | 4,5-Dimethyl-2-pyrimidone | 124 | C6H8N2O | 034939-17-8 | 11 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF032516\
Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

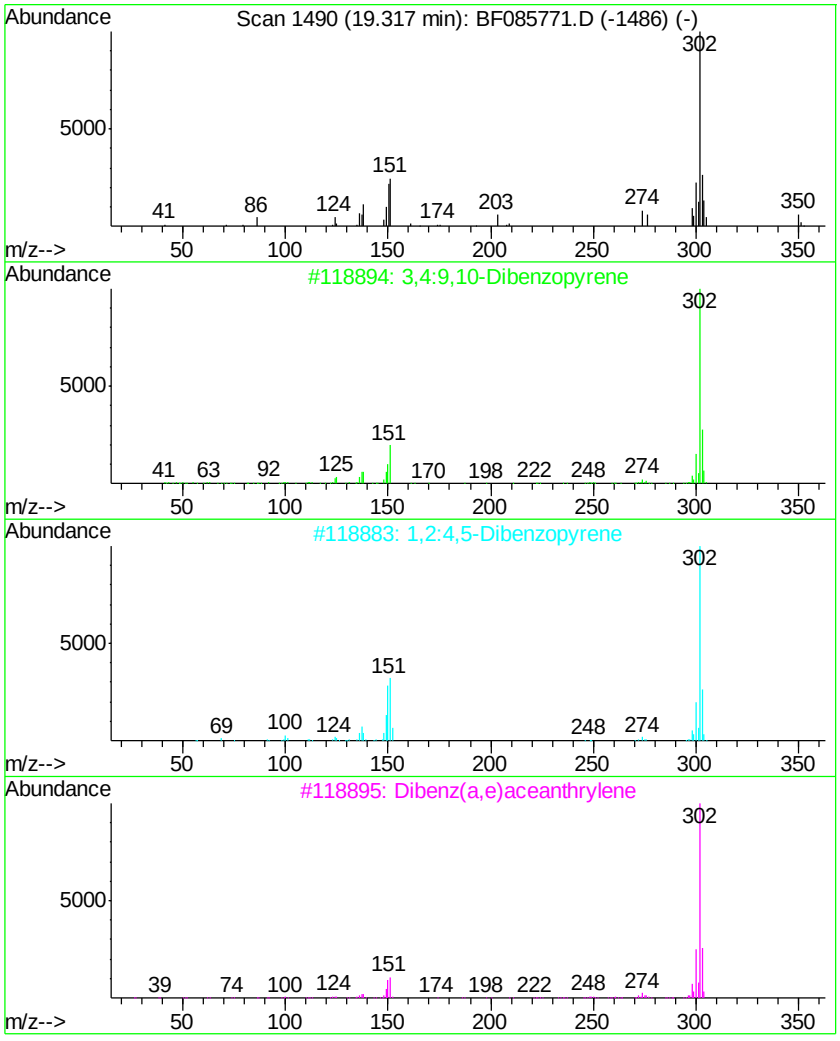
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

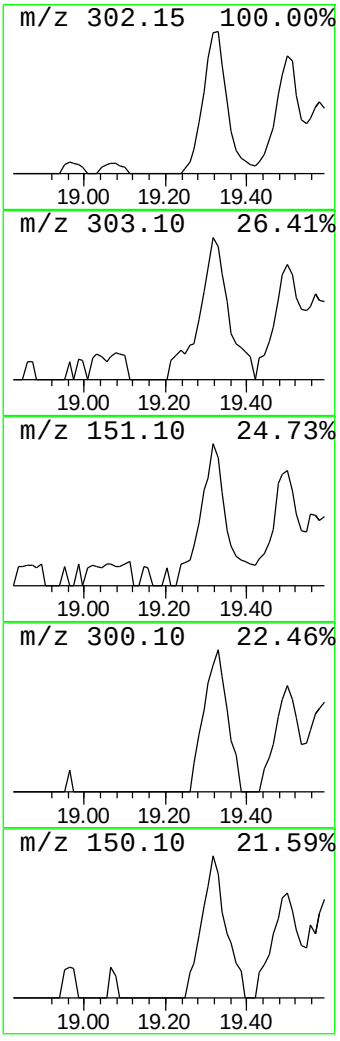
**********

Peak Number 20 3,4:9,10-Dibenzopyrene Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.32 | 2.61 ng | 108765 | Perylene-d12 | 15.40 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3,4:9,10-Dibenzopyrene | 302 | C24H14 | 000189-55-9 | 76 |
| 2 | 1,2:4,5-Dibenzopyrene | 302 | C24H14 | 000192-65-4 | 76 |
| 3 | Dibenz(a,e)aceanthrylene | 302 | C24H14 | 005385-75-1 | 76 |
| 4 | 3,4:8,9-Dibenzopyrene | 302 | C24H14 | 000189-64-0 | 70 |
| 5 | Indeno[1,2,3-fg]naphthacene | 302 | C24H14 | 000203-11-2 | 62 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032516\
Data File : BF085771.D
Acq On : 25 Mar 2016 19:48
Operator : UM/SJ
Sample : H1855-07 2X
Misc :
ALS Vial : 57 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032416.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 |
| unknown6.58 | 6.58 | 2.9 | ng | 109524 | 1 | 6.82 | 752351 | 20.0 |
| Heptadecane | 10.30 | 2.0 | ng | 107976 | 3 | 9.86 | 1062360 | 20.0 |
| Tridecane | 10.77 | 2.3 | ng | 139787 | 4 | 11.35 | 1196710 | 20.0 |
| 5H-Indeno[1,2-b]p... | 11.58 | 2.0 | ng | 121130 | 4 | 11.35 | 1196710 | 20.0 |
| Phenanthrene, 1-m... | 11.88 | 2.7 | ng | 163083 | 4 | 11.35 | 1196710 | 20.0 |
| 4H-Cyclopenta[def... | 11.96 | 4.6 | ng | 274303 | 4 | 11.35 | 1196710 | 20.0 |
| Fluoranthene, 2-m... | 13.11 | 2.6 | ng | 269860 | 5 | 13.98 | 2050470 | 20.0 |
| Octadecanal | 14.88 | 3.4 | ng | 140412 | 6 | 15.40 | 831957 | 20.0 |
| unknown15.60 | 15.60 | 2.1 | ng | 87764 | 6 | 15.40 | 831957 | 20.0 |
| Nonadecane | 15.82 | 3.0 | ng | 126619 | 6 | 15.40 | 831957 | 20.0 |
| Oxirane, heptadecyl- | 16.57 | 2.6 | ng | 110366 | 6 | 15.40 | 831957 | 20.0 |
| Heneicosane | 16.85 | 2.4 | ng | 101449 | 6 | 15.40 | 831957 | 20.0 |
| Benzo[b]triphenylene | 16.94 | 2.0 | ng | 84370 | 6 | 15.40 | 831957 | 20.0 |
| 3-Methoxy-6,7,8,9... | 17.03 | 4.7 | ng | 195023 | 6 | 15.40 | 831957 | 20.0 |
| 2-Isopropenyl-4a,... | 17.09 | 7.0 | ng | 292365 | 6 | 15.40 | 831957 | 20.0 |
| unknown17.34 | 17.34 | 2.7 | ng | 113880 | 6 | 15.40 | 831957 | 20.0 |
| unknown18.28 | 18.28 | 2.9 | ng | 122001 | 6 | 15.40 | 831957 | 20.0 |
| 3,4:9,10-Dibenzop... | 19.32 | 2.6 | ng | 108765 | 6 | 15.40 | 831957 | 20.0 |