LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

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-BF060416.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 | 1.724 | 8 | 12 | 14 | rVV | 4064747 | 7985372 | 100.00% | 13.676% |
| 2 | 1.770 | 14 | 16 | 25 | rVB | 144102 | 303163 | 3.80% | 0.519% |
| 3 | 1.895 | 25 | 27 | 45 | rVB | 1047331 | 1615979 | 20.24% | 2.768% |
| 4 | 2.124 | 45 | 47 | 64 | rVB | 134197 | 215371 | 2.70% | 0.369% |
| 5 | 5.039 | 300 | 302 | 309 | rVB | 387093 | 628236 | 7.87% | 1.076% |
| 6 | 5.461 | 335 | 339 | 341 | rVB | 2368671 | 3348095 | 41.93% | 5.734% |
| 7 | 6.490 | 425 | 429 | 431 | rBV | 2562422 | 3128492 | 39.18% | 5.358% |
| 8 | 6.616 | 437 | 440 | 443 | rBV | 2285634 | 3160621 | 39.58% | 5.413% |
| 9 | 6.844 | 458 | 460 | 463 | rBV | 504798 | 680006 | 8.52% | 1.165% |
| 10 | 7.004 | 472 | 474 | 477 | rVB | 2181907 | 2389630 | 29.93% | 4.092% |
| 11 | 7.416 | 507 | 510 | 512 | rBV | 1707850 | 1807462 | 22.63% | 3.095% |
| 12 | 8.136 | 570 | 573 | 574 | rBV | 1098544 | 948229 | 11.87% | 1.624% |
| 13 | 9.210 | 664 | 667 | 670 | rVB | 2258727 | 3234195 | 40.50% | 5.539% |
| 14 | 9.542 | 692 | 696 | 698 | rBV | 47668 | 81625 | 1.02% | 0.140% |
| 15 | 9.610 | 698 | 702 | 704 | rVB | 346386 | 388829 | 4.87% | 0.666% |
| 16 | 9.748 | 712 | 714 | 716 | rBV | 144029 | 116726 | 1.46% | 0.200% |
| 17 | 9.885 | 724 | 726 | 728 | rVV2 | 790743 | 874240 | 10.95% | 1.497% |
| 18 | 9.919 | 728 | 729 | 731 | rVB | 248398 | 190643 | 2.39% | 0.326% |
| 19 | 10.091 | 742 | 744 | 746 | rBV | 170326 | 132225 | 1.66% | 0.226% |
| 20 | 10.296 | 760 | 762 | 763 | rBV | 94437 | 97705 | 1.22% | 0.167% |
| 21 | 10.399 | 769 | 771 | 772 | rVV | 95078 | 93198 | 1.17% | 0.160% |
| 22 | 10.433 | 772 | 774 | 776 | rVB | 186495 | 164534 | 2.06% | 0.282% |
| 23 | 10.593 | 785 | 788 | 790 | rVV2 | 64873 | 86802 | 1.09% | 0.149% |
| 24 | 10.673 | 790 | 795 | 797 | rVV2 | 1642798 | 1819308 | 22.78% | 3.116% |
| 25 | 10.799 | 801 | 806 | 809 | rBV2 | 145459 | 196176 | 2.46% | 0.336% |
| 26 | 10.993 | 818 | 823 | 825 | rBV3 | 117635 | 203341 | 2.55% | 0.348% |
| 27 | 11.096 | 830 | 832 | 837 | rBV3 | 122235 | 211816 | 2.65% | 0.363% |
| 28 | 11.176 | 837 | 839 | 841 | rVB | 87432 | 111871 | 1.40% | 0.192% |
| 29 | 11.268 | 841 | 847 | 849 | rBV4 | 168382 | 368679 | 4.62% | 0.631% |
| 30 | 11.313 | 849 | 851 | 854 | rVB | 148489 | 196792 | 2.46% | 0.337% |
| 31 | 11.371 | 854 | 856 | 857 | rBV | 817094 | 864793 | 10.83% | 1.481% |
| 32 | 11.394 | 857 | 858 | 860 | rVV | 1551073 | 1200287 | 15.03% | 2.056% |
| 33 | 11.439 | 860 | 862 | 864 | rVV | 321806 | 335420 | 4.20% | 0.574% |
| 34 | 11.599 | 873 | 876 | 877 | rBV | 189950 | 203605 | 2.55% | 0.349% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

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-BF060416.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 11.622 | 877 | 878 | 881 | rVV | 95706 | 96842 | 1.21% | 0.166% |
| 36 | 11.714 | 883 | 886 | 888 | rVB2 | 106384 | 152985 | 1.92% | 0.262% |
| 37 | 11.874 | 897 | 900 | 901 | rBV | 141857 | 223074 | 2.79% | 0.382% |
| 38 | 11.896 | 901 | 902 | 905 | rVV2 | 371068 | 405684 | 5.08% | 0.695% |
| 39 | 11.976 | 907 | 909 | 913 | rVB | 256893 | 397504 | 4.98% | 0.681% |
| 40 | 12.079 | 913 | 918 | 919 | rBV4 | 38176 | 83343 | 1.04% | 0.143% |
| 41 | 12.182 | 924 | 927 | 931 | rVB3 | 178066 | 332815 | 4.17% | 0.570% |
| 42 | 12.285 | 934 | 936 | 937 | rBV | 81728 | 117150 | 1.47% | 0.201% |
| 43 | 12.422 | 945 | 948 | 949 | rBV | 97848 | 132501 | 1.66% | 0.227% |
| 44 | 12.456 | 949 | 951 | 953 | rBV2 | 118546 | 179523 | 2.25% | 0.307% |
| 45 | 12.502 | 953 | 955 | 958 | rVB | 128999 | 146370 | 1.83% | 0.251% |
| 46 | 12.582 | 959 | 962 | 964 | rVB | 1997643 | 1841480 | 23.06% | 3.154% |
| 47 | 12.628 | 964 | 966 | 968 | rBV2 | 44353 | 83663 | 1.05% | 0.143% |
| 48 | 12.731 | 971 | 975 | 978 | rBV3 | 104824 | 204550 | 2.56% | 0.350% |
| 49 | 12.811 | 978 | 982 | 984 | rBV | 1682596 | 2057827 | 25.77% | 3.524% |
| 50 | 12.857 | 984 | 986 | 988 | rVB2 | 78217 | 106129 | 1.33% | 0.182% |
| 51 | 12.925 | 990 | 992 | 993 | rBV | 120764 | 146715 | 1.84% | 0.251% |
| 52 | 12.959 | 993 | 995 | 997 | rVB | 2110834 | 2297075 | 28.77% | 3.934% |
| 53 | 13.028 | 997 | 1001 | 1002 | rVB2 | 114284 | 94245 | 1.18% | 0.161% |
| 54 | 13.131 | 1005 | 1010 | 1012 | rVB2 | 222383 | 400103 | 5.01% | 0.685% |
| 55 | 13.199 | 1014 | 1016 | 1017 | rBV | 128077 | 99562 | 1.25% | 0.171% |
| 56 | 13.234 | 1017 | 1019 | 1023 | rVB3 | 227333 | 409835 | 5.13% | 0.702% |
| 57 | 13.451 | 1035 | 1038 | 1041 | rVB5 | 44950 | 92926 | 1.16% | 0.159% |
| 58 | 13.531 | 1041 | 1045 | 1049 | rBV5 | 67527 | 202584 | 2.54% | 0.347% |
| 59 | 13.634 | 1051 | 1054 | 1057 | rBV | 222490 | 259680 | 3.25% | 0.445% |
| 60 | 13.691 | 1057 | 1059 | 1061 | rVB2 | 100779 | 130636 | 1.64% | 0.224% |
| 61 | 13.748 | 1061 | 1064 | 1065 | rBV | 186809 | 238446 | 2.99% | 0.408% |
| 62 | 13.782 | 1065 | 1067 | 1068 | rVV | 108151 | 139441 | 1.75% | 0.239% |
| 63 | 13.851 | 1071 | 1073 | 1076 | rVB2 | 191352 | 343730 | 4.30% | 0.589% |
| 64 | 13.999 | 1082 | 1086 | 1087 | rBV2 | 1138061 | 1810359 | 22.67% | 3.100% |
| 65 | 14.022 | 1087 | 1088 | 1092 | rVB | 597703 | 854671 | 10.70% | 1.464% |
| 66 | 14.102 | 1093 | 1095 | 1097 | rBV3 | 155517 | 212892 | 2.67% | 0.365% |
| 67 | 14.388 | 1115 | 1120 | 1121 | rBV | 175853 | 226925 | 2.84% | 0.389% |
| 68 | 14.422 | 1121 | 1123 | 1125 | rVV | 119842 | 113984 | 1.43% | 0.195% |
| 69 | 14.502 | 1125 | 1130 | 1134 | rVV5 | 159021 | 455803 | 5.71% | 0.781% |
| 70 | 14.582 | 1135 | 1137 | 1140 | rVB3 | 62444 | 84537 | 1.06% | 0.145% |
| 71 | 14.685 | 1144 | 1146 | 1147 | rBV | 66591 | 89122 | 1.12% | 0.153% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

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-BF060416.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 14.868 | 1158 | 1162 | 1166 | rVV3 | 143096 | 257436 | 3.22% | 0.441% |
| 73 | 15.017 | 1172 | 1175 | 1180 | rBV | 633885 | 1468318 | 18.39% | 2.515% |
| 74 | 15.120 | 1180 | 1184 | 1187 | rVB2 | 171848 | 325319 | 4.07% | 0.557% |
| 75 | 15.302 | 1195 | 1200 | 1203 | rVB | 319663 | 670195 | 8.39% | 1.148% |
| 76 | 15.371 | 1203 | 1206 | 1208 | rBV | 465782 | 590826 | 7.40% | 1.012% |
| 77 | 15.428 | 1208 | 1211 | 1212 | rBV | 444419 | 521621 | 6.53% | 0.893% |
| 78 | 15.760 | 1238 | 1240 | 1244 | rVB | 85926 | 172069 | 2.15% | 0.295% |
| 79 | 15.885 | 1249 | 1251 | 1254 | rBV | 119129 | 198882 | 2.49% | 0.341% |
| 80 | 16.651 | 1314 | 1318 | 1323 | rVB4 | 64445 | 172453 | 2.16% | 0.295% |
| 81 | 16.811 | 1329 | 1332 | 1336 | rVB2 | 217235 | 407289 | 5.10% | 0.698% |
| 82 | 16.983 | 1344 | 1347 | 1349 | rBV | 48407 | 102260 | 1.28% | 0.175% |
| 83 | 17.040 | 1349 | 1352 | 1359 | rVB2 | 60240 | 194873 | 2.44% | 0.334% |
| 84 | 17.223 | 1365 | 1368 | 1374 | rVB | 149528 | 331554 | 4.15% | 0.568% |
| 85 | 17.440 | 1385 | 1387 | 1396 | rVB2 | 37964 | 115162 | 1.44% | 0.197% |
| 86 | 19.349 | 1551 | 1554 | 1562 | rVB | 38016 | 125281 | 1.57% | 0.215% |
| 87 | 19.509 | 1564 | 1568 | 1571 | rBV | 26267 | 89216 | 1.12% | 0.153% |

Sum of corrected areas: 58390931

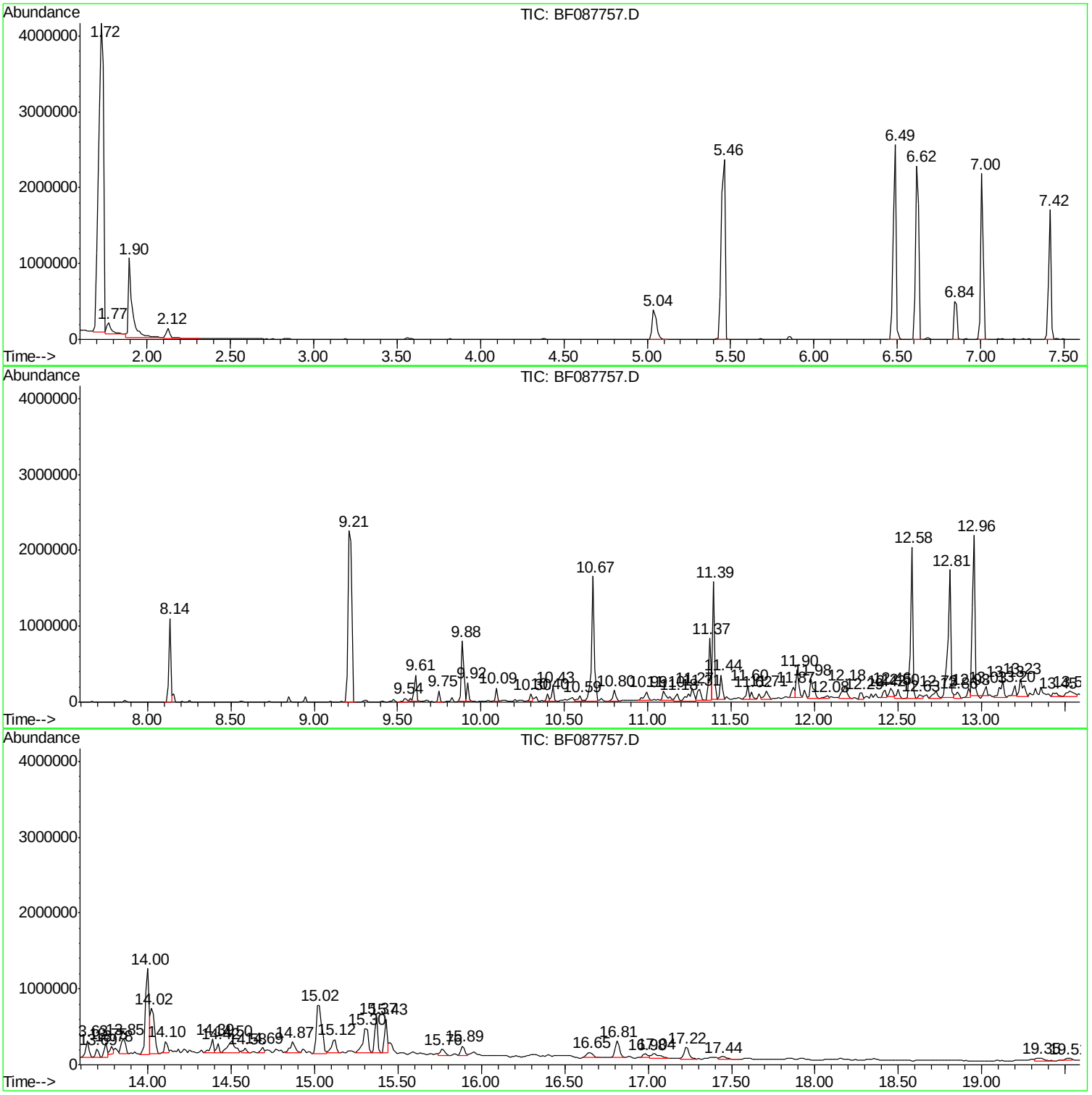
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

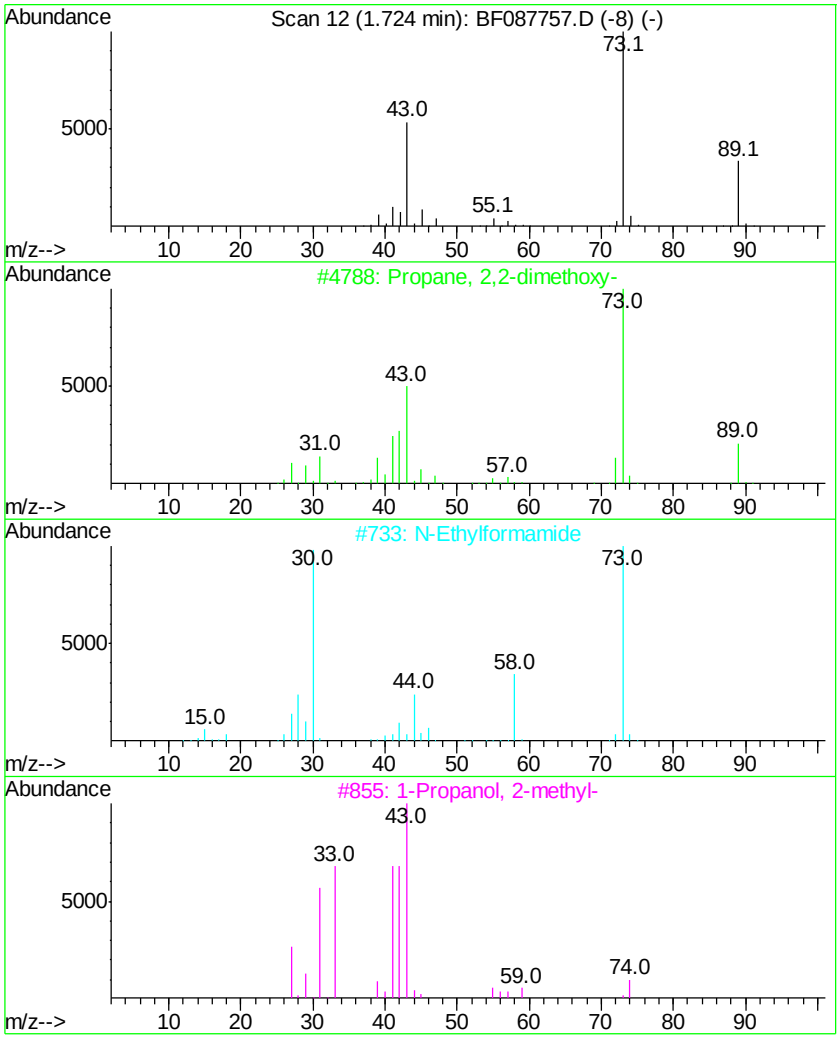
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

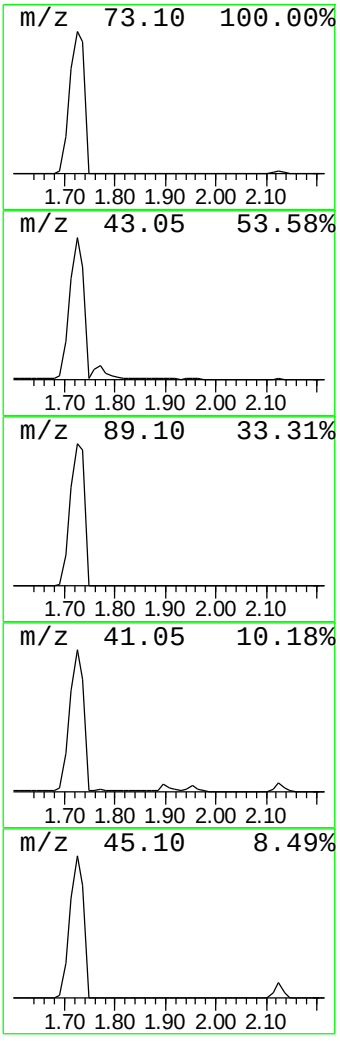
**********

Peak Number 1 Propane, 2,2-dimethoxy- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.72 | 234.86 ng | 7985370 | 1,4-Dichlorobenzene-d4 | 6.86 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Propane, 2,2-dimethoxy- | 104 | C5H12O2 | 000077-76-9 | 56 |
| 2 | N-Ethylformamide | 73 | C3H7NO | 000627-45-2 | 9 |
| 3 | 1-Propanol, 2-methyl- | 74 | C4H10O | 000078-83-1 | 9 |
| 4 | 1,3-Diaminoguanidine | 89 | CH7N5 | 004364-78-7 | 9 |
| 5 | 2-Hydroxy-2-methylbutyric acid | 118 | C5H10O3 | 003739-30-8 | 9 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

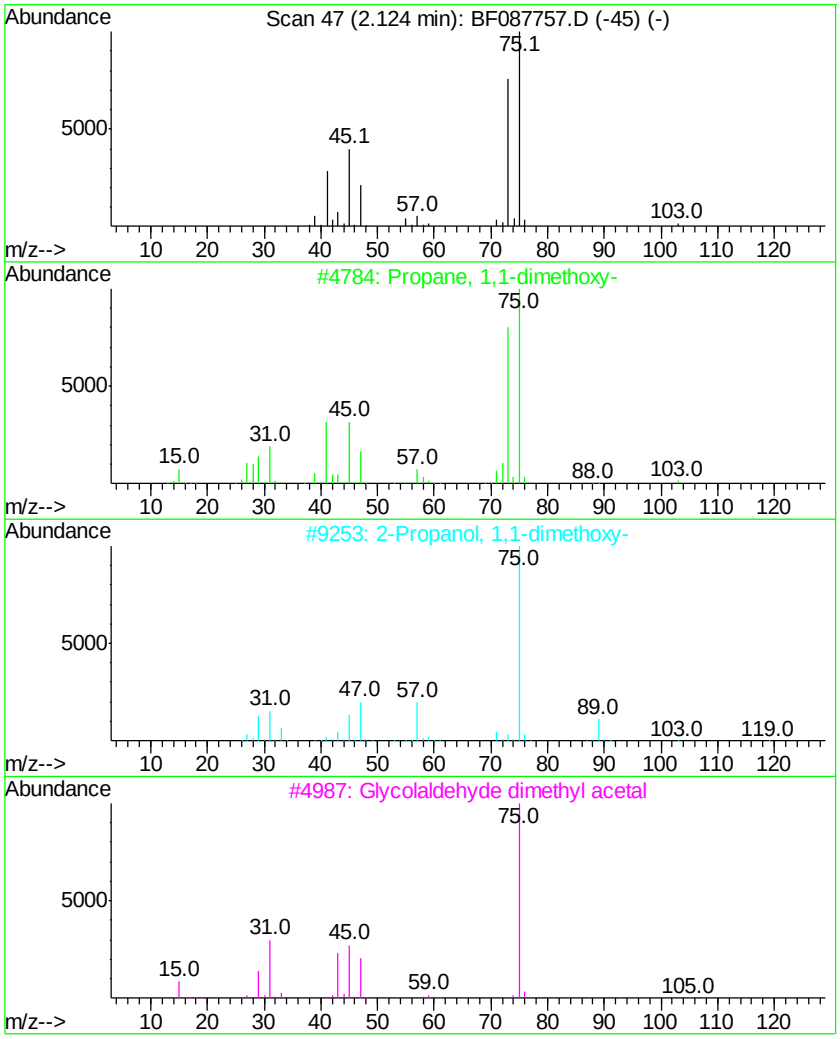
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

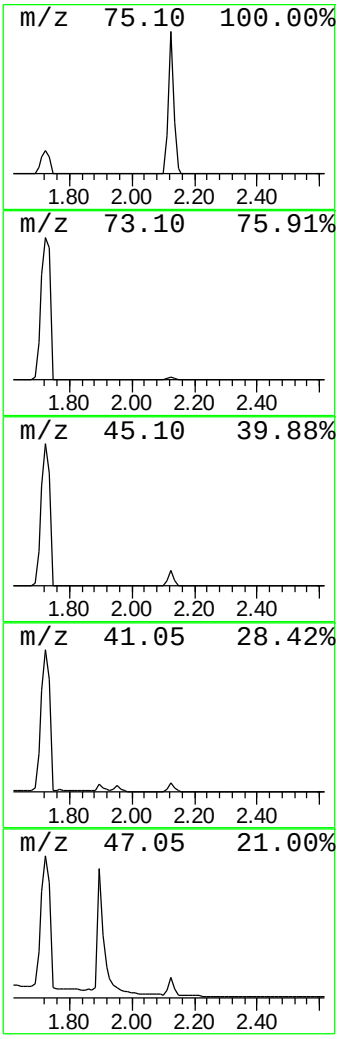
**********

Peak Number 4 Propane, 1,1-dimethoxy- Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.12 | 6.33 ng | 215371 | 1,4-Dichlorobenzene-d4 | 6.86 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Propane, 1,1-dimethoxy- | 104 | C5H12O2 | 004744-10-9 | 74 |
| 2 | 2-Propanol, 1,1-dimethoxy- | 120 | C5H12O3 | 042919-42-6 | 50 |
| 3 | Glycolaldehyde dimethyl acetal | 106 | C4H10O3 | 030934-97-5 | 28 |
| 4 | 1,3-Dioxolane, 2-(1-bromoethyl)- | 180 | C5H9BrO2 | 005267-73-2 | 16 |
| 5 | Pentane, 3-methoxy- | 102 | C6H14O | 036839-67-5 | 10 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

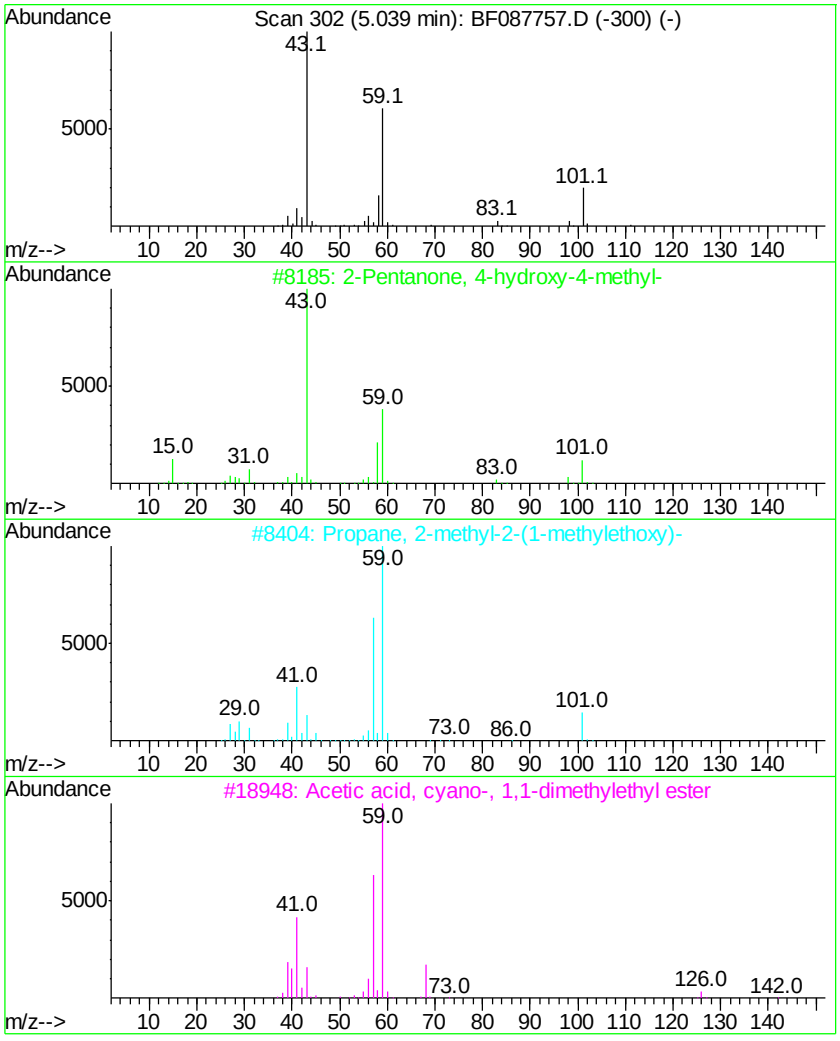
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

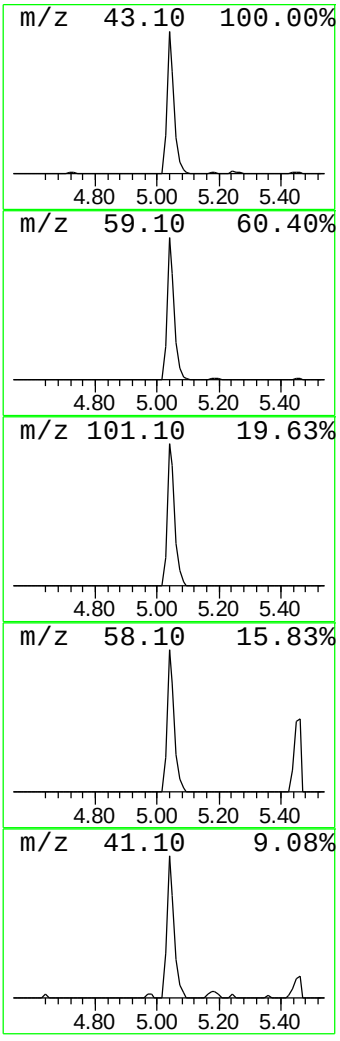
**********

Peak Number 5 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.04 | 18.48 ng | 628236 | 1,4-Dichlorobenzene-d4 | 6.86 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 56 |
| 2 | Propane, 2-methyl-2-(1-methyleth... | 116 | C7H16O | 017348-59-3 | 28 |
| 3 | Acetic acid, cyano-, 1,1-dimethy... | 141 | C7H11NO2 | 001116-98-9 | 23 |
| 4 | 2,3-Butanedione, monooxime | 101 | C4H7NO2 | 000057-71-6 | 9 |
| 5 | Morpholine, 4-methyl- | 101 | C5H11NO | 000109-02-4 | 9 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

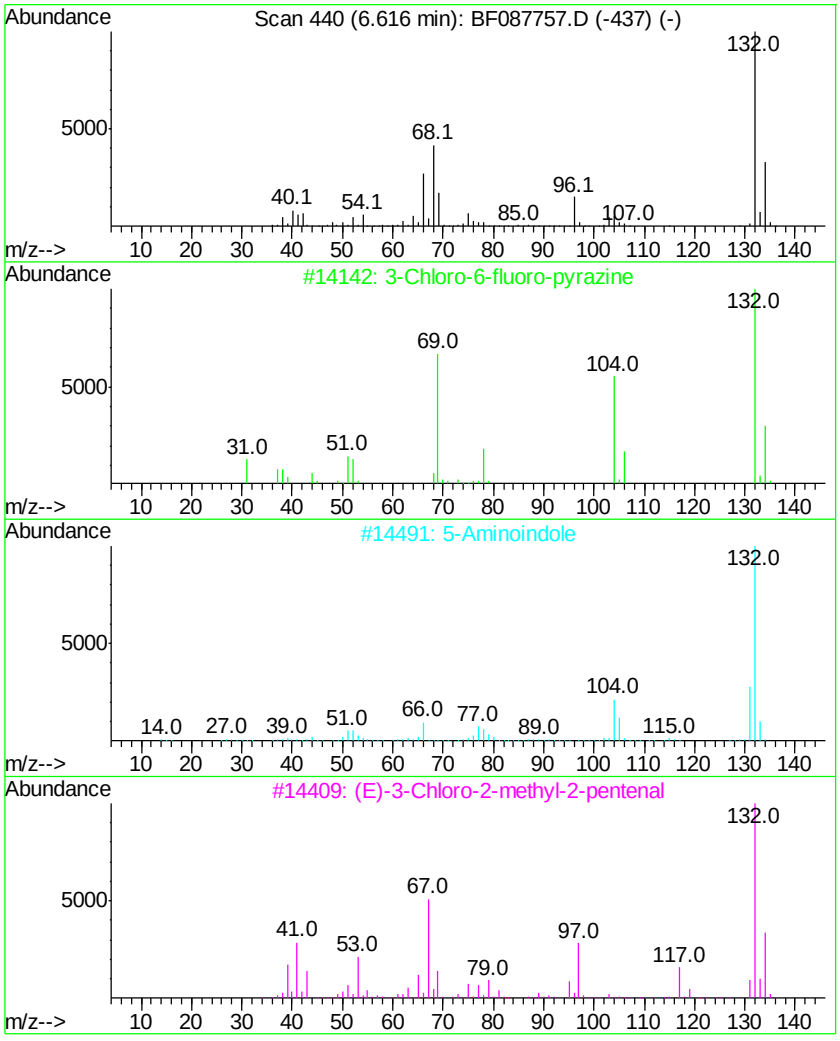
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

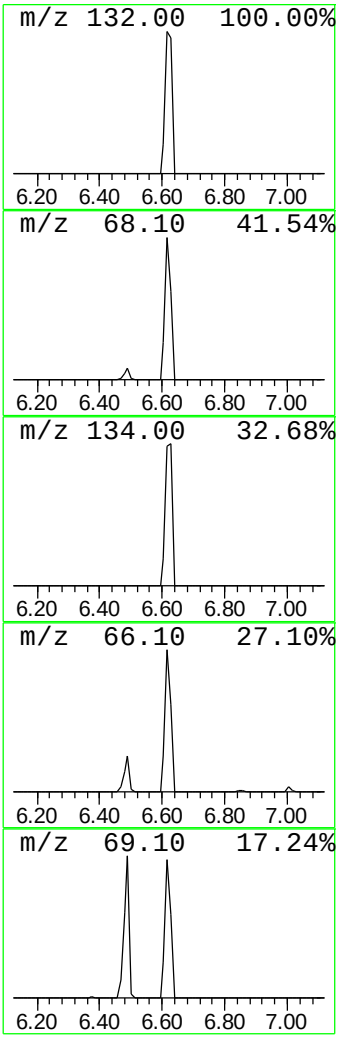
**********

Peak Number 6 unknown6.62 Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.62 | 92.96 ng | 3160620 | 1,4-Dichlorobenzene-d4 | 6.86 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 35 |
| 2 | 5-Aminoindole | 132 | C8H8N2 | 005192-03-0 | 12 |
| 3 | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO | 031357-76-3 | 9 |
| 4 | 4-Chloro-2-fluoro-pyrimidine | 132 | C4H2ClFN2 | 051422-00-5 | 9 |
| 5 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 9 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

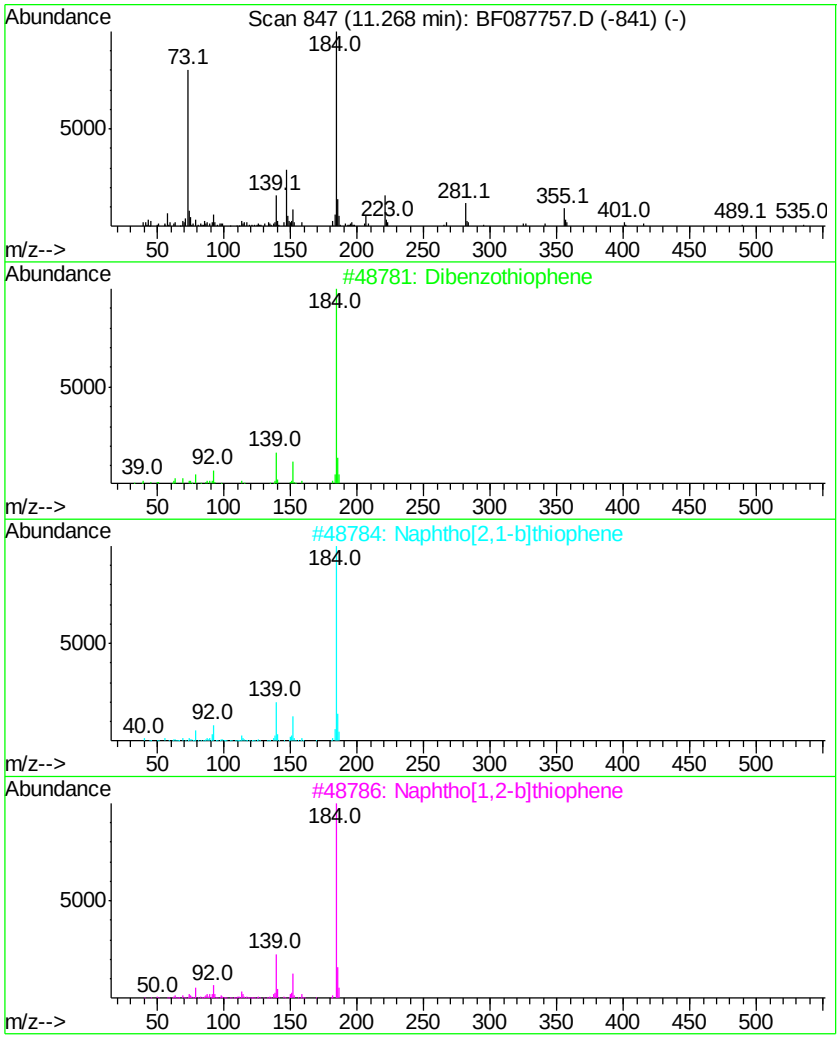
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

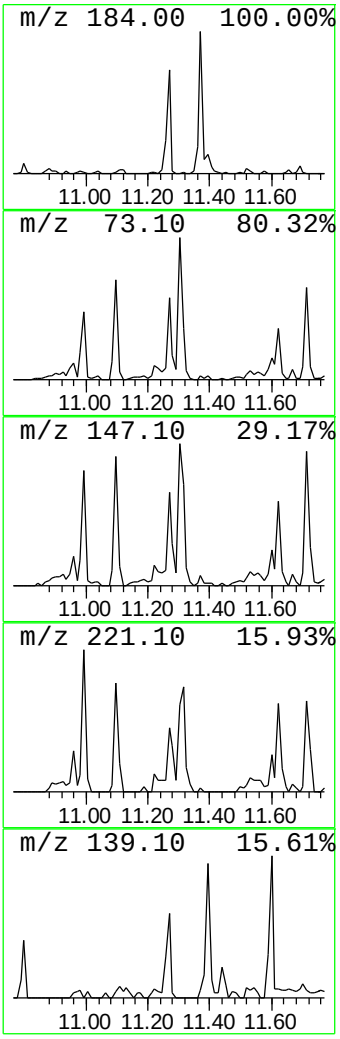
**********

Peak Number 8 Dibenzothiophene Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.27 | 8.53 ng | 368679 | Phenanthrene-d10 | 11.37 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 95 |
| 2 | Naphtho[2,1-b]thiophene | 184 | C12H8S | 000233-02-3 | 95 |
| 3 | Naphtho[1,2-b]thiophene | 184 | C12H8S | 000234-41-3 | 89 |
| 4 | Naphtho[2,3-b]thiophene | 184 | C12H8S | 000268-77-9 | 64 |
| 5 | L-Proline, 1-(tert-butyldimethyl... | 343 | C17H37NO2Si2 | 107715-91-3 | 59 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

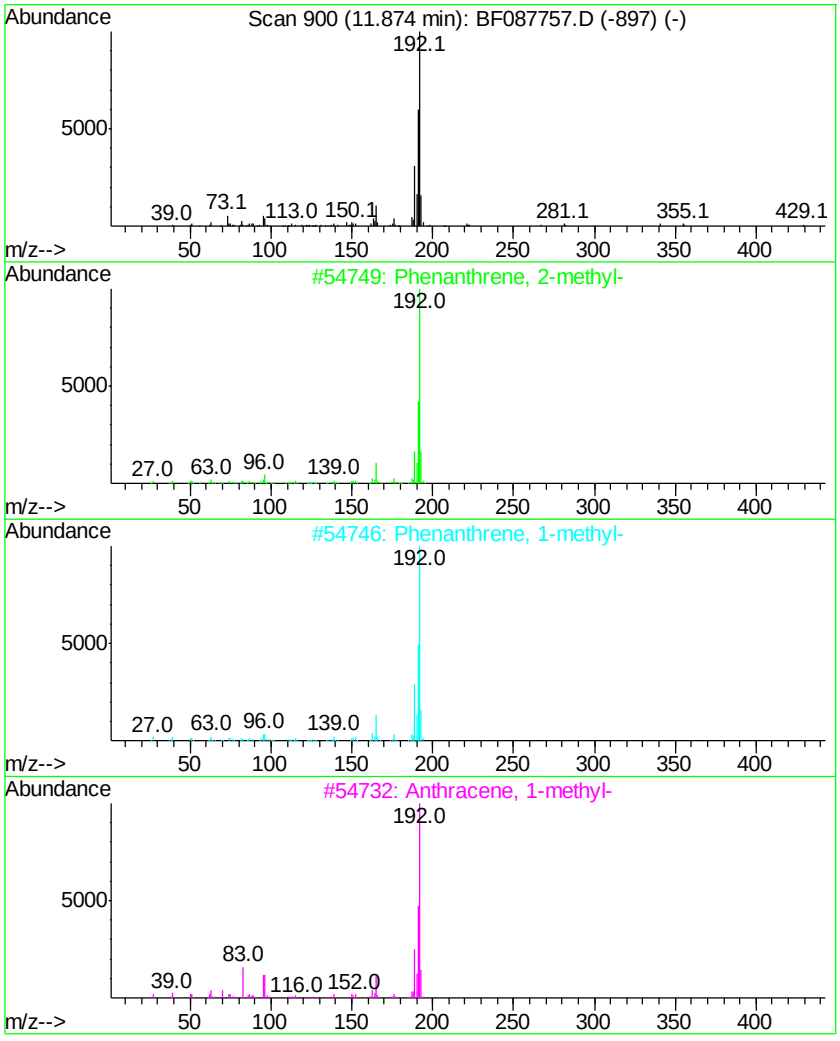
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

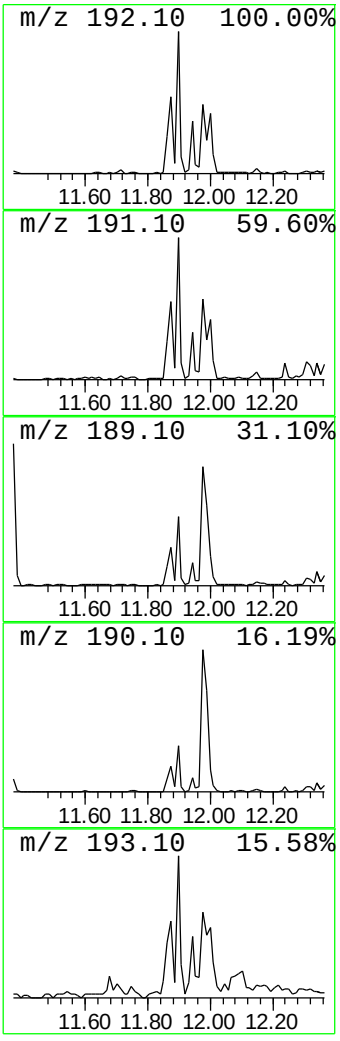
**********

Peak Number 9 Phenanthrene, 2-methyl- Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.87 | 5.16 ng | 223074 | Phenanthrene-d10 | 11.37 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 95 |
| 2 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 95 |
| 3 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 94 |
| 4 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 93 |
| 5 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 93 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

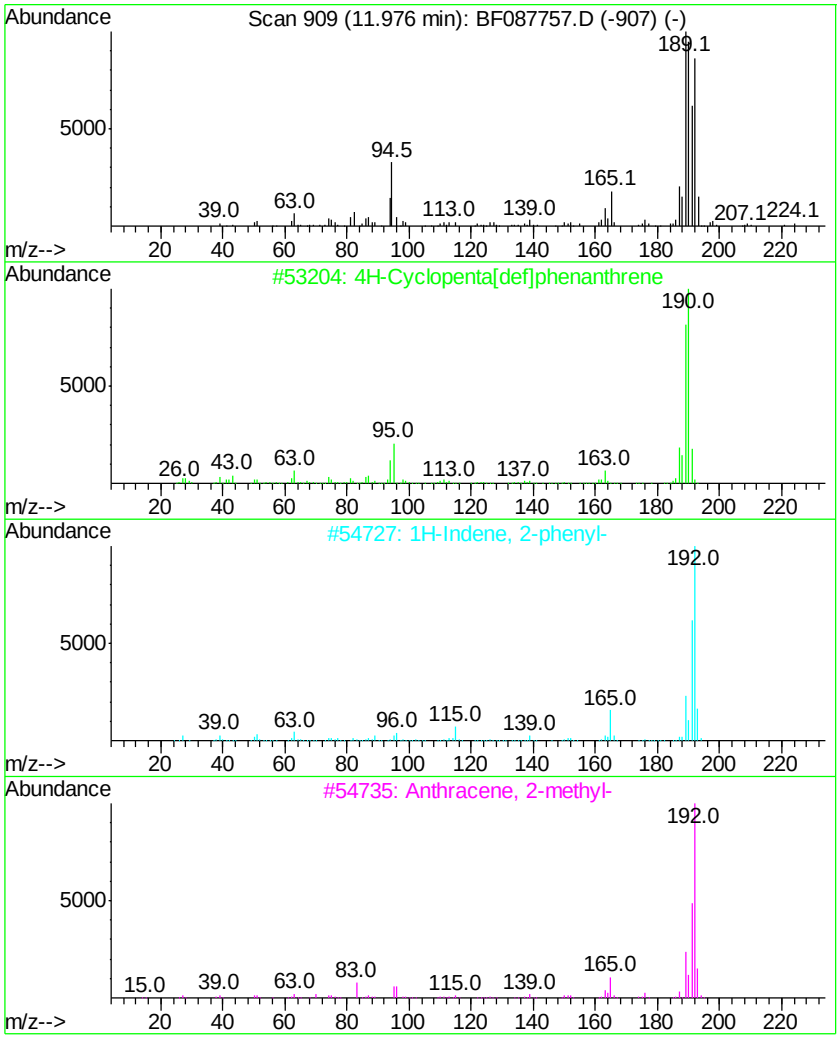
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

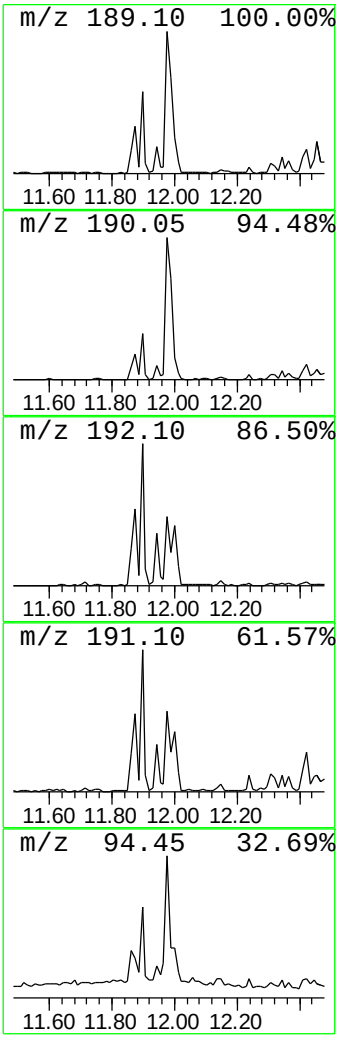
**********

Peak Number 11 4H-Cyclopenta[def]phenanthrene Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.98 | 9.19 ng | 397504 | Phenanthrene-d10 | 11.37 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 50 |
| 2 | 1H-Indene, 2-phenyl- | 192 | C15H12 | 004505-48-0 | 42 |
| 3 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 42 |
| 4 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 42 |
| 5 | 5H-Dibenzo[a,d]cycloheptene | 192 | C15H12 | 000256-81-5 | 42 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

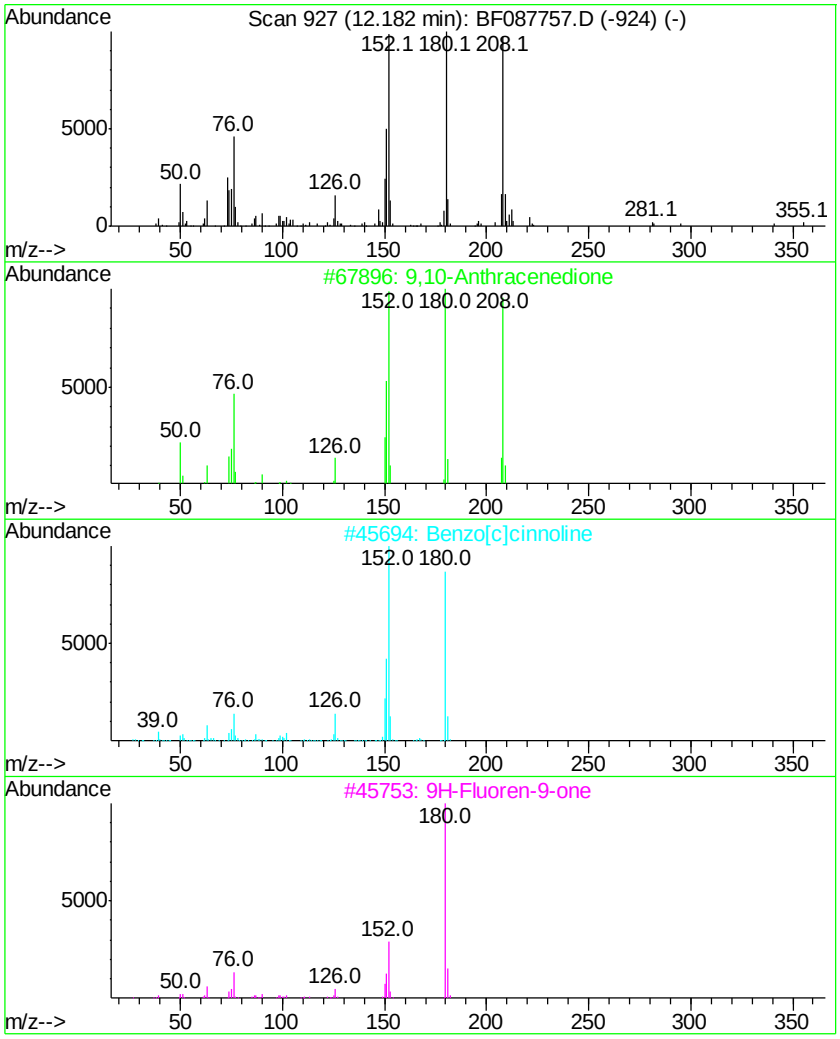
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

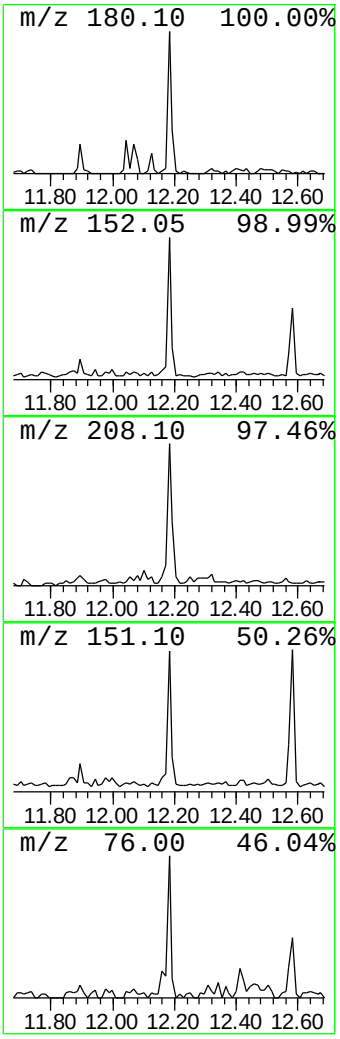
**********

Peak Number 12 9,10-Anthracenedione Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.18 | 7.70 ng | 332815 | Phenanthrene-d10 | 11.37 |

| 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 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 90 |
| 4 | 1H-Phenalen-1-one | 180 | C13H8O | 000548-39-0 | 78 |
| 5 | 5,6-Dimethyl-1,10-phenanthroline | 208 | C14H12N2 | 003002-81-1 | 53 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

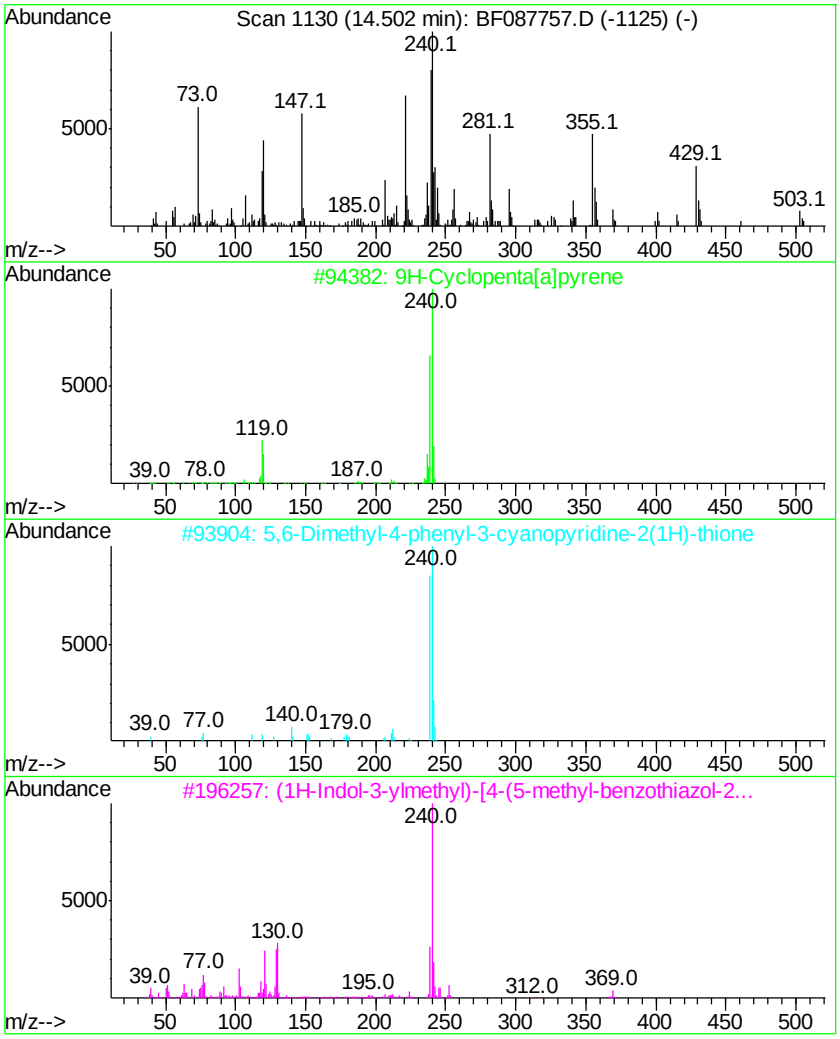
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

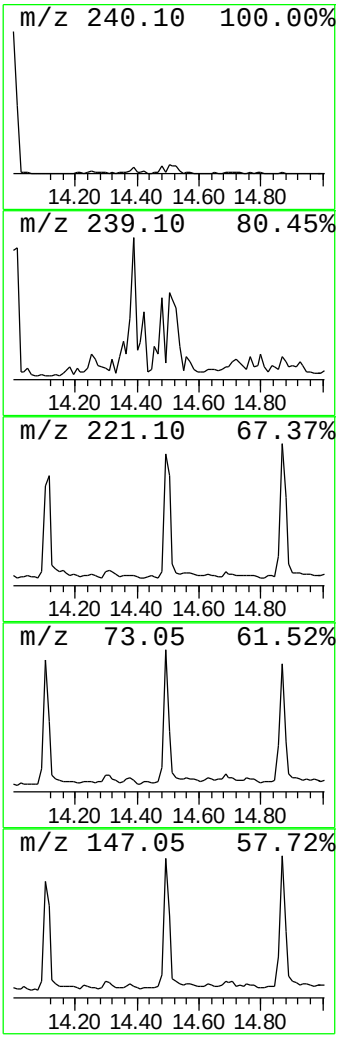
**********

Peak Number 13 9H-Cyclopenta[a]pyrene Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.50 | 5.04 ng | 455803 | Chrysene-d12 | 14.00 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Cyclopenta[a]pyrene | 240 | C19H12 | 050861-05-7 | 50 |
| 2 | 5,6-Dimethyl-4-phenyl-3-cyanopyr... | 240 | C14H12N2S | 094639-18-6 | 38 |
| 3 | (1H-Indol-3-ylmethyl)-[4-(5-meth... | 369 | C23H19N3S | 1000295-86-8 | 14 |
| 4 | 4,6-Dimethyl-2-oxo-1-p-tolyl-1,2... | 256 | C15H16N2O2 | 024518-23-8 | 11 |
| 5 | (3H,6H)Thieno[3,4-c]isoxazole, 6... | 239 | C11H10ClNOS | 1000115-55-6 | 11 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

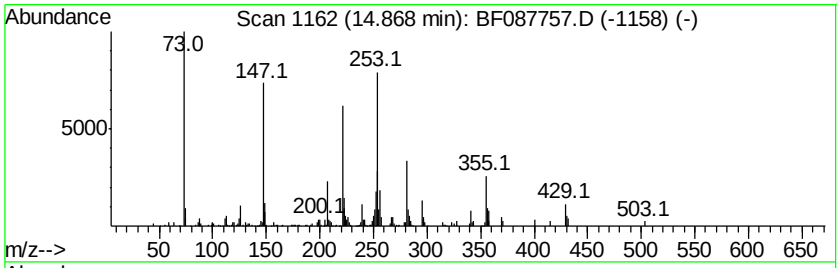
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

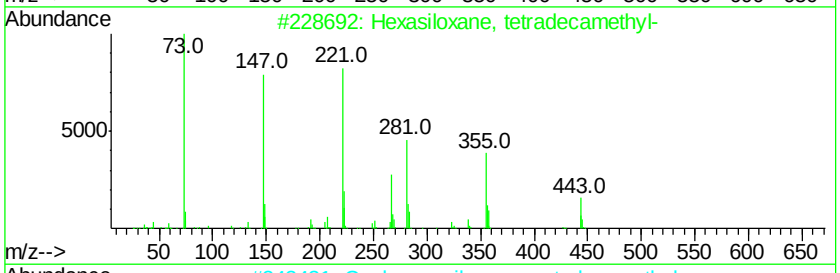
**********

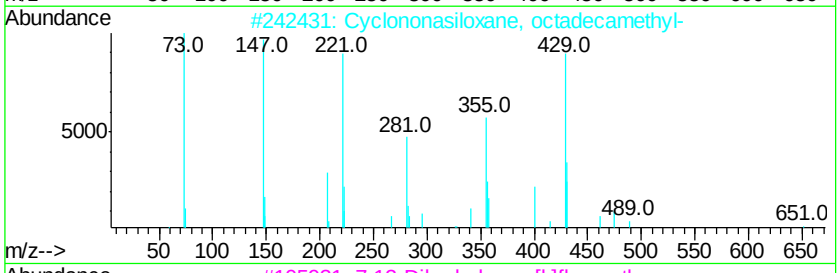
Peak Number 14 unknown14.87 Concentration Rank 8

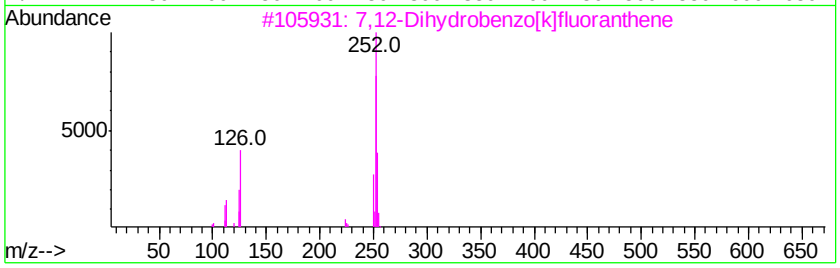
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.87 | 9.87 ng | 257436 | Perylene-d12 | 15.43 |

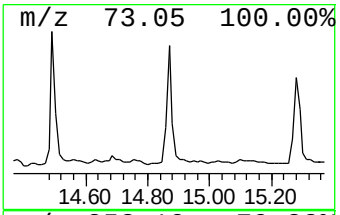
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexasiloxane, tetradecamethyl- | 458 | C14H42O5Si6 | 000107-52-8 | 43 |
| 2 | Cyclononasiloxane, octadecamethyl- | 666 | C18H54O9Si9 | 000556-71-8 | 43 |
| 3 | 7,12-Dihydrobenzo[k]fluoranthene | 254 | C20H14 | 1000080-17-7 | 30 |
| 4 | N-Benzyl-N-ethyl-p-isopropylbenz... | 281 | C19H23NO | 015089-22-2 | 25 |
| 5 | 6-(2-Formylhydrazino)-N,N'-bis(i... | 253 | C10H19N7O | 084305-82-8 | 25 |

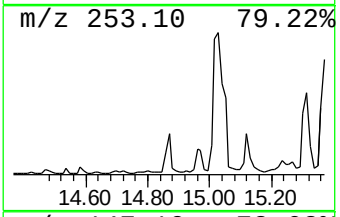


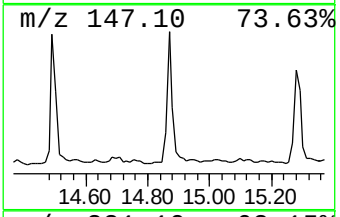



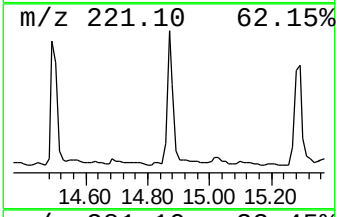



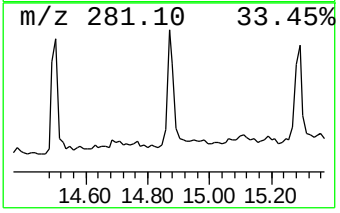



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

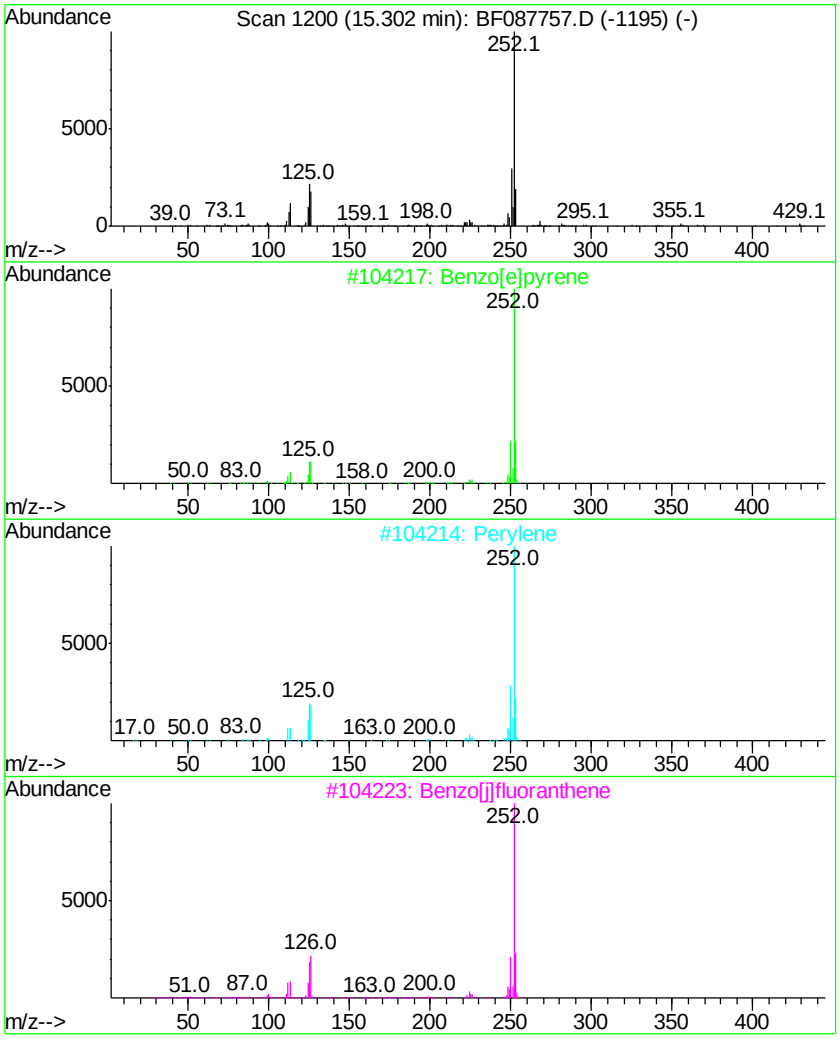
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

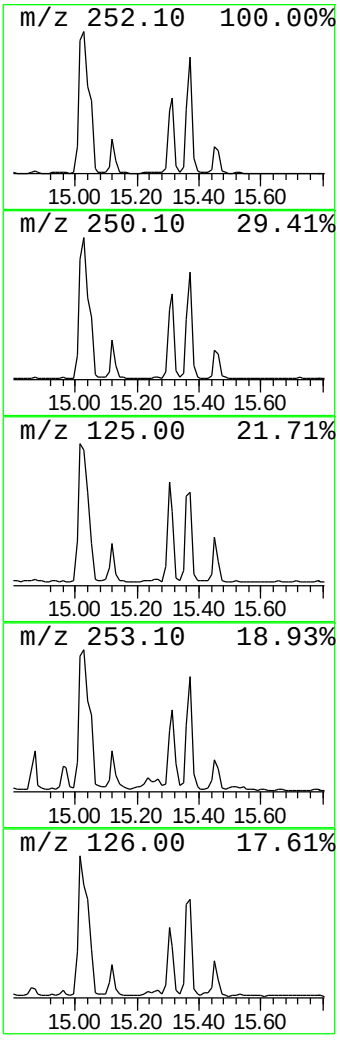
**********

Peak Number 16 Benzo[e]pyrene Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.30 | 25.70 ng | 670195 | Perylene-d12 | 15.43 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 97 |
| 2 | Perylene | 252 | C20H12 | 000198-55-0 | 97 |
| 3 | Benzo[j]fluoranthene | 252 | C20H12 | 000205-82-3 | 96 |
| 4 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 96 |
| 5 | Benzo[a]pyrene | 252 | C20H12 | 000050-32-8 | 95 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

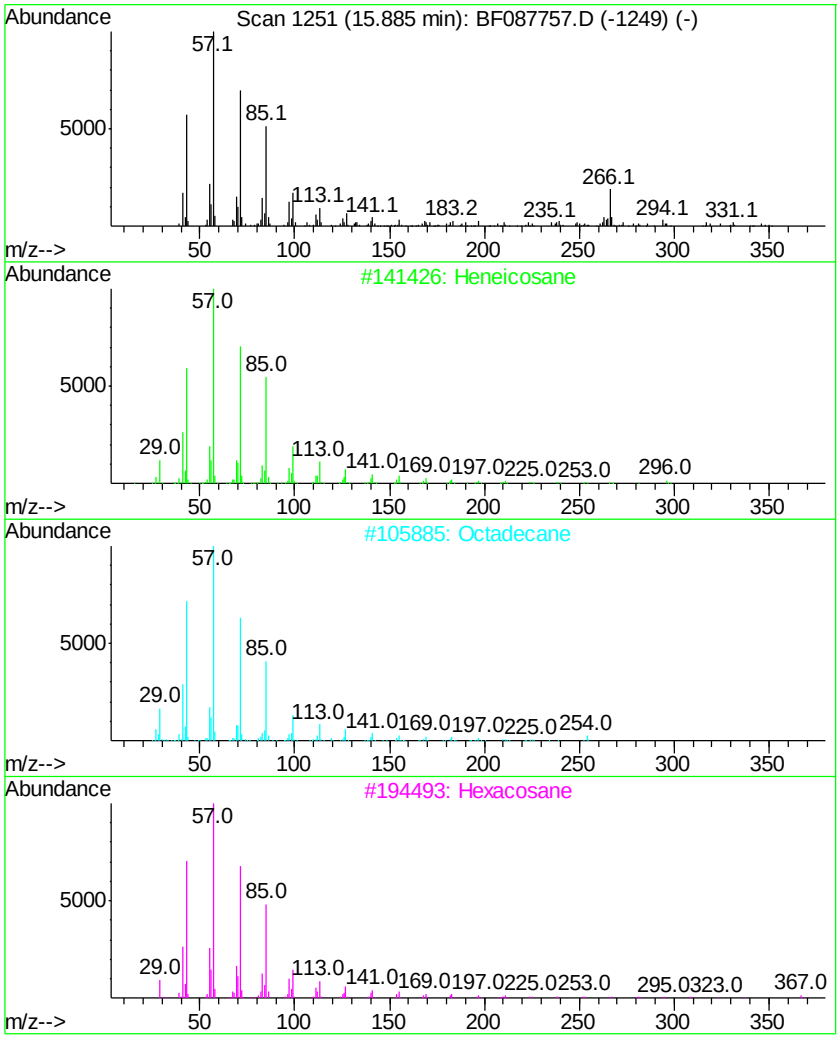
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

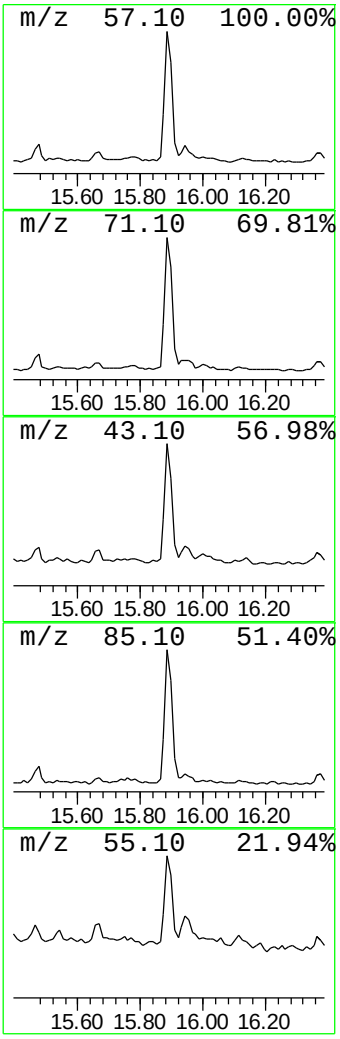
**********

Peak Number 18 Heneicosane Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.89 | 7.63 ng | 198882 | Perylene-d12 | 15.43 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Heneicosane | 296 | C21H44 | 000629-94-7 | 99 |
| 2 | Octadecane | 254 | C18H38 | 000593-45-3 | 89 |
| 3 | Hexacosane | 366 | C26H54 | 000630-01-3 | 87 |
| 4 | Octacosane | 394 | C28H58 | 000630-02-4 | 83 |
| 5 | Tetracosane | 338 | C24H50 | 000646-31-1 | 83 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

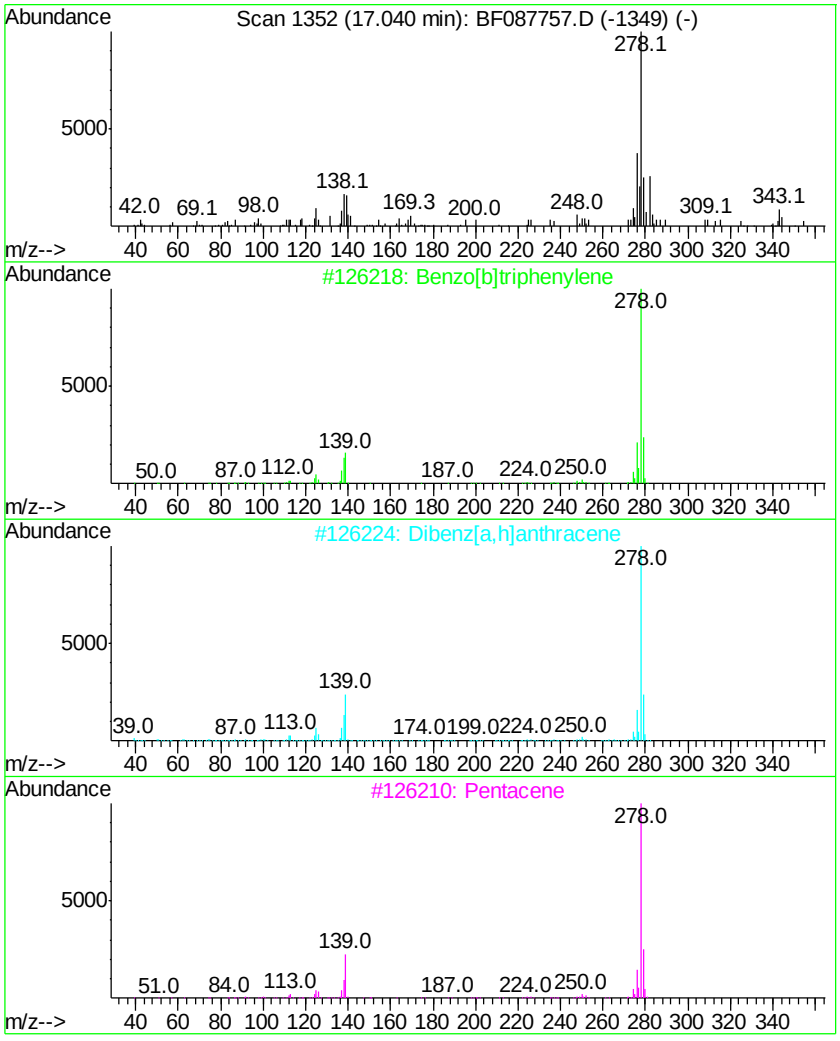
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

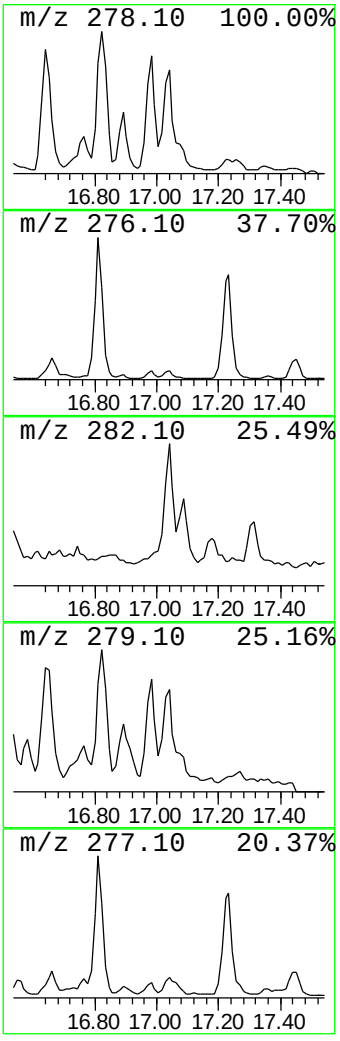
**********

Peak Number 20 Benzo[b]triphenylene Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.04 | 7.47 ng | 194873 | Perylene-d12 | 15.43 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[b]triphenylene | 278 | C22H14 | 000215-58-7 | 91 |
| 2 | Dibenz[a,h]anthracene | 278 | C22H14 | 000053-70-3 | 78 |
| 3 | Pentacene | 278 | C22H14 | 000135-48-8 | 60 |
| 4 | Picene | 278 | C22H14 | 000213-46-7 | 55 |
| 5 | Curan, 16,17,19,20-tetradehydro- | 278 | C19H22N2 | 056053-17-9 | 52 |



# Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF060616\
Data File : BF087757.D
Acq On : 6 Jun 2016 17:45
Operator : UM/SJ
Sample : H3267-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** STA-TA-1280(0-4)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF060416.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Propane, 2,2-dime... | 1.72 | 234.9 | ng | 7985370 | 1 | 6.86 | 680006 | 20.0 |
| Propane, 1,1-dime... | 2.12 | 6.3 | ng | 215371 | 1 | 6.86 | 680006 | 20.0 |
| 2-Pentanone, 4-hy... | 5.04 | 18.5 | ng | 628236 | 1 | 6.86 | 680006 | 20.0 |
| unknown6.62 | 6.62 | 93.0 | ng | 3160620 | 1 | 6.86 | 680006 | 20.0 |
| Dibenzothiophene | 11.27 | 8.5 | ng | 368679 | 4 | 11.37 | 864793 | 20.0 |
| Phenanthrene, 2-m... | 11.87 | 5.2 | ng | 223074 | 4 | 11.37 | 864793 | 20.0 |
| 4H-Cyclopenta[def... | 11.98 | 9.2 | ng | 397504 | 4 | 11.37 | 864793 | 20.0 |
| 9,10-Anthracenedione | 12.18 | 7.7 | ng | 332815 | 4 | 11.37 | 864793 | 20.0 |
| 9H-Cyclopenta[a]p... | 14.50 | 5.0 | ng | 455803 | 5 | 14.00 | 1810360 | 20.0 |
| unknown14.87 | 14.87 | 9.9 | ng | 257436 | 6 | 15.43 | 521621 | 20.0 |
| Benzo[e]pyrene | 15.30 | 25.7 | ng | 670195 | 6 | 15.43 | 521621 | 20.0 |
| Heneicosane | 15.89 | 7.6 | ng | 198882 | 6 | 15.43 | 521621 | 20.0 |
| Benzo[b]triphenylene | 17.04 | 7.5 | ng | 194873 | 6 | 15.43 | 521621 | 20.0 |