LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF081715\
Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

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-BF081715.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 | 4.033 | 176 | 179 | 183 | rBV | 49450 | 67888 | 2.81% | 0.158% |
| 2 | 4.764 | 240 | 243 | 246 | rBV | 845709 | 1619996 | 67.02% | 3.764% |
| 3 | 5.210 | 279 | 282 | 285 | rBV | 1483445 | 1795414 | 74.28% | 4.172% |
| 4 | 5.621 | 316 | 318 | 321 | rVB | 59445 | 56449 | 2.34% | 0.131% |
| 5 | 6.284 | 372 | 376 | 378 | rBV | 1510823 | 2170294 | 89.79% | 5.043% |
| 6 | 6.399 | 383 | 386 | 388 | rBV | 1966669 | 1993456 | 82.47% | 4.632% |
| 7 | 6.627 | 404 | 406 | 408 | rBV | 501138 | 415160 | 17.18% | 0.965% |
| 8 | 6.787 | 417 | 420 | 422 | rBV | 1557411 | 1507394 | 62.36% | 3.502% |
| 9 | 7.199 | 453 | 456 | 458 | rBV | 1309163 | 1277964 | 52.87% | 2.969% |
| 10 | 7.919 | 516 | 519 | 522 | rVB | 412194 | 625523 | 25.88% | 1.453% |
| 11 | 8.627 | 578 | 581 | 583 | rBV | 94763 | 78650 | 3.25% | 0.183% |
| 12 | 8.719 | 587 | 589 | 591 | rVB | 60992 | 64627 | 2.67% | 0.150% |
| 13 | 8.993 | 611 | 613 | 615 | rVB | 1868335 | 1612968 | 66.73% | 3.748% |
| 14 | 9.085 | 619 | 621 | 623 | rVV2 | 55186 | 55663 | 2.30% | 0.129% |
| 15 | 9.245 | 633 | 635 | 639 | rBV | 43666 | 66682 | 2.76% | 0.155% |
| 16 | 9.325 | 639 | 642 | 643 | rBV | 93067 | 93840 | 3.88% | 0.218% |
| 17 | 9.393 | 646 | 648 | 650 | rVV | 573125 | 482663 | 19.97% | 1.121% |
| 18 | 9.439 | 650 | 652 | 655 | rVB2 | 47295 | 60995 | 2.52% | 0.142% |
| 19 | 9.519 | 657 | 659 | 661 | rVB | 174189 | 142150 | 5.88% | 0.330% |
| 20 | 9.656 | 669 | 671 | 673 | rBV2 | 413817 | 493595 | 20.42% | 1.147% |
| 21 | 9.690 | 673 | 674 | 676 | rVB | 319945 | 258277 | 10.69% | 0.600% |
| 22 | 9.862 | 687 | 689 | 691 | rBV | 222143 | 191837 | 7.94% | 0.446% |
| 23 | 9.976 | 697 | 699 | 701 | rBV2 | 44606 | 62496 | 2.59% | 0.145% |
| 24 | 10.068 | 705 | 707 | 710 | rBV2 | 46031 | 102860 | 4.26% | 0.239% |
| 25 | 10.205 | 717 | 719 | 721 | rBV | 307353 | 280710 | 11.61% | 0.652% |
| 26 | 10.285 | 721 | 726 | 728 | rBV3 | 46087 | 86095 | 3.56% | 0.200% |
| 27 | 10.365 | 731 | 733 | 736 | rVB | 115146 | 123318 | 5.10% | 0.287% |
| 28 | 10.445 | 737 | 740 | 742 | rVB | 1039624 | 988826 | 40.91% | 2.298% |
| 29 | 10.582 | 746 | 752 | 755 | rBV3 | 86520 | 154670 | 6.40% | 0.359% |
| 30 | 10.753 | 763 | 767 | 768 | rBV3 | 63959 | 118047 | 4.88% | 0.274% |
| 31 | 10.833 | 771 | 774 | 775 | rVB2 | 41616 | 62215 | 2.57% | 0.145% |
| 32 | 10.879 | 775 | 778 | 782 | rBV2 | 82322 | 188017 | 7.78% | 0.437% |
| 33 | 10.936 | 782 | 783 | 786 | rVB2 | 53853 | 75834 | 3.14% | 0.176% |
| 34 | 10.993 | 786 | 788 | 789 | rBV | 104913 | 119385 | 4.94% | 0.277% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF081715\
Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

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-BF081715.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 11.028 | 789 | 791 | 793 | rVB | 194517 | 150489 | 6.23% | 0.350% |
| 36 | 11.165 | 798 | 803 | 805 | rBV2 | 2095288 | 2417117 | 100.00% | 5.616% |
| 37 | 11.211 | 805 | 807 | 809 | rVV | 677770 | 571337 | 23.64% | 1.328% |
| 38 | 11.245 | 809 | 810 | 812 | rVB2 | 80712 | 65497 | 2.71% | 0.152% |
| 39 | 11.371 | 817 | 821 | 825 | rBV3 | 146033 | 431629 | 17.86% | 1.003% |
| 40 | 11.451 | 825 | 828 | 832 | rVB4 | 58278 | 123657 | 5.12% | 0.287% |
| 41 | 11.633 | 841 | 844 | 845 | rBV | 287697 | 299414 | 12.39% | 0.696% |
| 42 | 11.668 | 845 | 847 | 848 | rVB | 200330 | 265044 | 10.97% | 0.616% |
| 43 | 11.713 | 848 | 851 | 852 | rVB | 148628 | 209796 | 8.68% | 0.487% |
| 44 | 11.748 | 852 | 854 | 858 | rVB2 | 466944 | 685654 | 28.37% | 1.593% |
| 45 | 11.862 | 858 | 864 | 866 | rBV4 | 65035 | 170698 | 7.06% | 0.397% |
| 46 | 11.931 | 868 | 870 | 873 | rVB2 | 246109 | 342303 | 14.16% | 0.795% |
| 47 | 11.999 | 873 | 876 | 880 | rVB3 | 22963 | 62899 | 2.60% | 0.146% |
| 48 | 12.079 | 880 | 883 | 884 | rBV | 94065 | 118552 | 4.90% | 0.275% |
| 49 | 12.182 | 889 | 892 | 893 | rBV | 167584 | 232302 | 9.61% | 0.540% |
| 50 | 12.216 | 893 | 895 | 898 | rVB3 | 96124 | 165005 | 6.83% | 0.383% |
| 51 | 12.262 | 898 | 899 | 903 | rVB2 | 102411 | 161118 | 6.67% | 0.374% |
| 52 | 12.342 | 903 | 906 | 909 | rBV | 1541958 | 2340305 | 96.82% | 5.438% |
| 53 | 12.399 | 909 | 911 | 913 | rBV | 79323 | 120749 | 5.00% | 0.281% |
| 54 | 12.479 | 916 | 918 | 920 | rBV2 | 100939 | 166996 | 6.91% | 0.388% |
| 55 | 12.571 | 923 | 926 | 929 | rBV | 1697460 | 2400817 | 99.33% | 5.578% |
| 56 | 12.616 | 929 | 930 | 933 | rVB2 | 186852 | 191222 | 7.91% | 0.444% |
| 57 | 12.685 | 934 | 936 | 937 | rBV | 165934 | 146397 | 6.06% | 0.340% |
| 58 | 12.719 | 937 | 939 | 942 | rVB | 1233480 | 1197378 | 49.54% | 2.782% |
| 59 | 12.788 | 942 | 945 | 949 | rBV3 | 174512 | 365818 | 15.13% | 0.850% |
| 60 | 12.891 | 949 | 954 | 956 | rVB2 | 272914 | 620877 | 25.69% | 1.443% |
| 61 | 12.936 | 956 | 958 | 959 | rBV2 | 44516 | 81875 | 3.39% | 0.190% |
| 62 | 12.959 | 959 | 960 | 962 | rBV2 | 303236 | 289517 | 11.98% | 0.673% |
| 63 | 12.994 | 962 | 963 | 967 | rVB2 | 270772 | 343613 | 14.22% | 0.798% |
| 64 | 13.085 | 970 | 971 | 973 | rBV | 131005 | 119985 | 4.96% | 0.279% |
| 65 | 13.119 | 973 | 974 | 977 | rVB2 | 150085 | 121437 | 5.02% | 0.282% |
| 66 | 13.188 | 979 | 980 | 986 | rVB6 | 34489 | 67600 | 2.80% | 0.157% |
| 67 | 13.314 | 989 | 991 | 995 | rVB3 | 134193 | 186199 | 7.70% | 0.433% |
| 68 | 13.394 | 995 | 998 | 1001 | rBV2 | 120049 | 232061 | 9.60% | 0.539% |
| 69 | 13.508 | 1005 | 1008 | 1009 | rBV | 176270 | 234422 | 9.70% | 0.545% |
| 70 | 13.542 | 1009 | 1011 | 1015 | rVV3 | 143420 | 387131 | 16.02% | 0.900% |
| 71 | 13.611 | 1015 | 1017 | 1018 | rVB | 73574 | 84823 | 3.51% | 0.197% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF081715\
Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

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-BF081715.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 13.634 | 1018 | 1019 | 1021 | rBV | 95644 | 115114 | 4.76% | 0.267% |
| 73 | 13.759 | 1026 | 1030 | 1031 | rBV2 | 1055546 | 1731493 | 71.63% | 4.023% |
| 74 | 13.794 | 1031 | 1033 | 1036 | rVB | 836909 | 1034689 | 42.81% | 2.404% |
| 75 | 13.862 | 1037 | 1039 | 1041 | rVV | 200475 | 205222 | 8.49% | 0.477% |
| 76 | 13.954 | 1045 | 1047 | 1049 | rVV3 | 101497 | 186882 | 7.73% | 0.434% |
| 77 | 13.988 | 1049 | 1050 | 1054 | rVB | 100139 | 121398 | 5.02% | 0.282% |
| 78 | 14.079 | 1056 | 1058 | 1059 | rBV2 | 42951 | 62001 | 2.57% | 0.144% |
| 79 | 14.148 | 1062 | 1064 | 1065 | rVV | 186027 | 220783 | 9.13% | 0.513% |
| 80 | 14.171 | 1065 | 1066 | 1068 | rVV | 67084 | 92246 | 3.82% | 0.214% |
| 81 | 14.239 | 1069 | 1072 | 1073 | rVV2 | 92121 | 152485 | 6.31% | 0.354% |
| 82 | 14.262 | 1073 | 1074 | 1078 | rVB4 | 135808 | 254625 | 10.53% | 0.592% |
| 83 | 14.445 | 1088 | 1090 | 1091 | rBV | 83060 | 103132 | 4.27% | 0.240% |
| 84 | 14.525 | 1095 | 1097 | 1101 | rVV2 | 160113 | 295029 | 12.21% | 0.686% |
| 85 | 14.617 | 1102 | 1105 | 1108 | rVV2 | 60504 | 156538 | 6.48% | 0.364% |
| 86 | 14.674 | 1108 | 1110 | 1111 | rVV | 47421 | 65185 | 2.70% | 0.151% |
| 87 | 14.754 | 1114 | 1117 | 1121 | rVV | 669400 | 1292649 | 53.48% | 3.003% |
| 88 | 14.845 | 1123 | 1125 | 1126 | rVV | 153886 | 179370 | 7.42% | 0.417% |
| 89 | 15.005 | 1137 | 1139 | 1142 | rVB | 325709 | 471828 | 19.52% | 1.096% |
| 90 | 15.062 | 1142 | 1144 | 1147 | rVV | 555954 | 634074 | 26.23% | 1.473% |
| 91 | 15.119 | 1147 | 1149 | 1156 | rVB2 | 179723 | 466664 | 19.31% | 1.084% |
| 92 | 16.068 | 1230 | 1232 | 1240 | rVB6 | 51924 | 137600 | 5.69% | 0.320% |
| 93 | 16.205 | 1240 | 1244 | 1251 | rBV4 | 40201 | 133882 | 5.54% | 0.311% |
| 94 | 16.354 | 1254 | 1257 | 1260 | rVB2 | 183841 | 335762 | 13.89% | 0.780% |
| 95 | 16.491 | 1267 | 1269 | 1271 | rBV | 39330 | 75594 | 3.13% | 0.176% |
| 96 | 16.548 | 1271 | 1274 | 1284 | rVB3 | 58227 | 196672 | 8.14% | 0.457% |
| 97 | 16.720 | 1285 | 1289 | 1296 | rVB | 153145 | 306758 | 12.69% | 0.713% |
| 98 | 16.914 | 1303 | 1306 | 1311 | rVB | 47155 | 99904 | 4.13% | 0.232% |
| 99 | 18.583 | 1446 | 1452 | 1460 | rVB | 35280 | 149983 | 6.21% | 0.348% |
| 100 | 18.731 | 1460 | 1465 | 1469 | rBV2 | 24224 | 95069 | 3.93% | 0.221% |

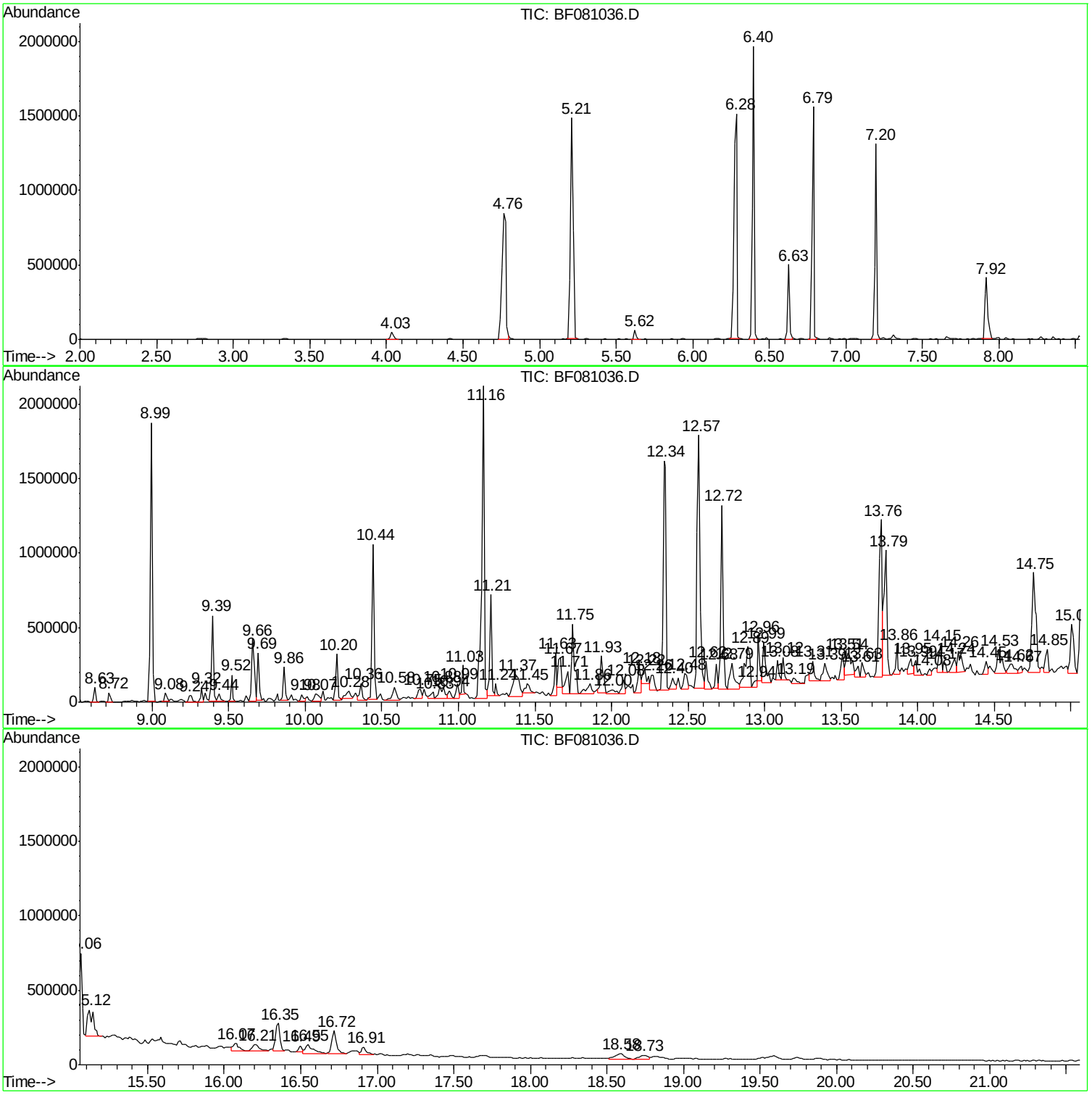
Sum of corrected areas: 43038322

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF081715\
Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.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\BF081715\
Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

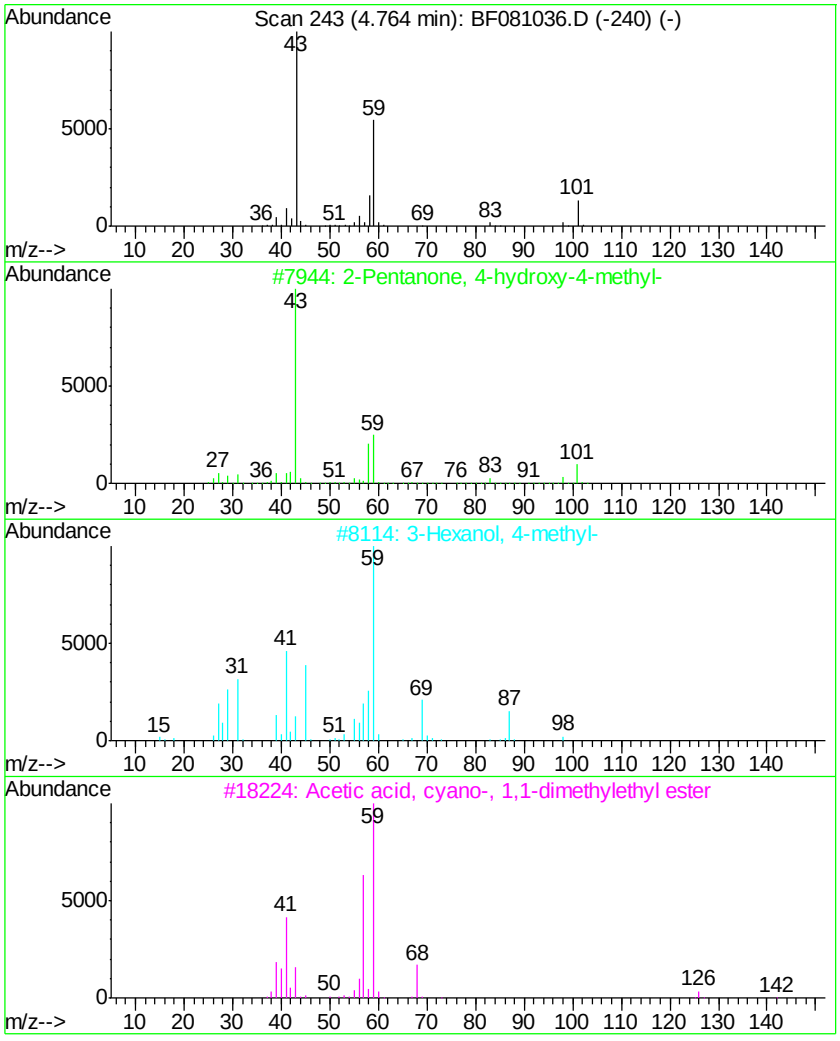
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

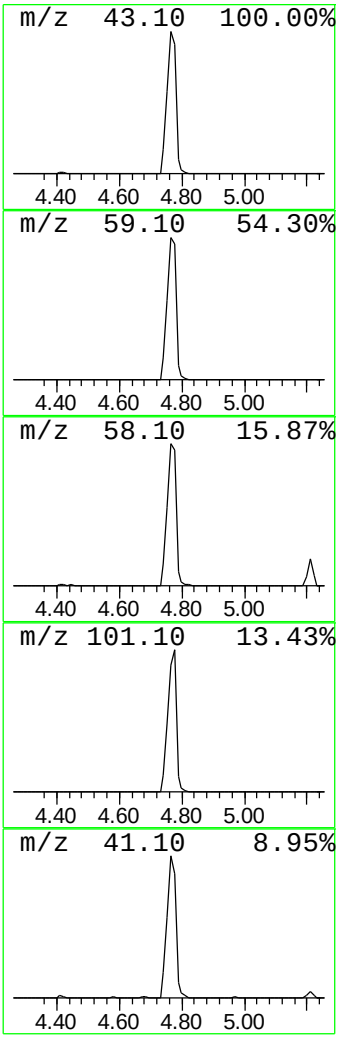
**********

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

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.76 | 78.04 ng | 1620000 | 1,4-Dichlorobenzene-d4 | 6.63 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 59 |
| 2 | 3-Hexanol, 4-methyl- | 116 | C7H16O | 000615-29-2 | 33 |
| 3 | Acetic acid, cyano-, 1,1-dimethy... | 141 | C7H11NO2 | 001116-98-9 | 32 |
| 4 | 2-Hexanol, 2-methyl- | 116 | C7H16O | 000625-23-0 | 28 |
| 5 | 1-Propen-2-ol, acetate | 100 | C5H8O2 | 000108-22-5 | 10 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF081715\
Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

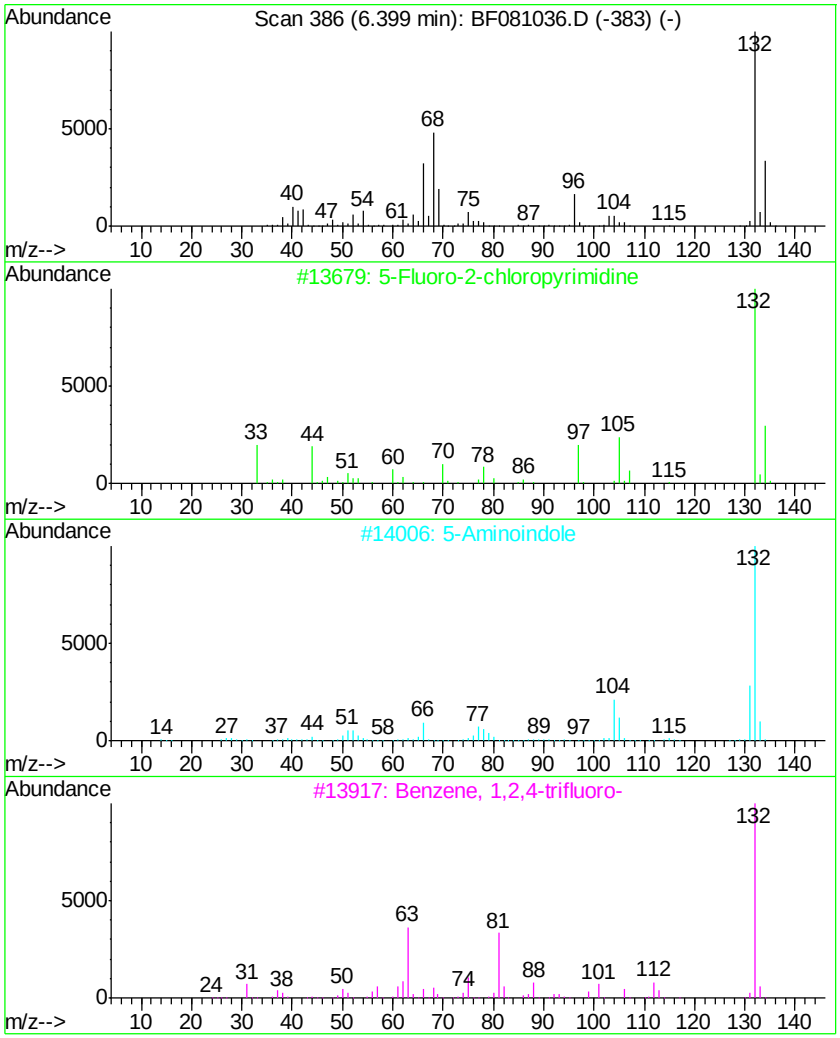
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

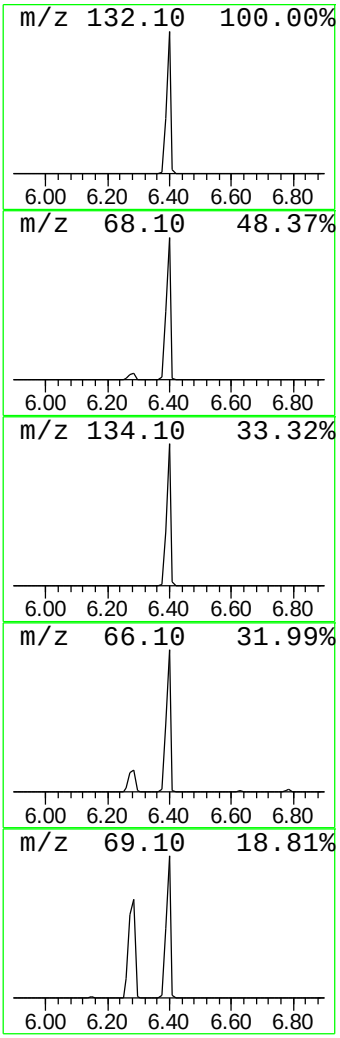
**********

Peak Number 2 unknown6.40 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.40 | 96.03 ng | 1993460 | 1,4-Dichlorobenzene-d4 | 6.63 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 16 |
| 2 | 5-Aminoindole | 132 | C8H8N2 | 005192-03-0 | 9 |
| 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 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF081715\
Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

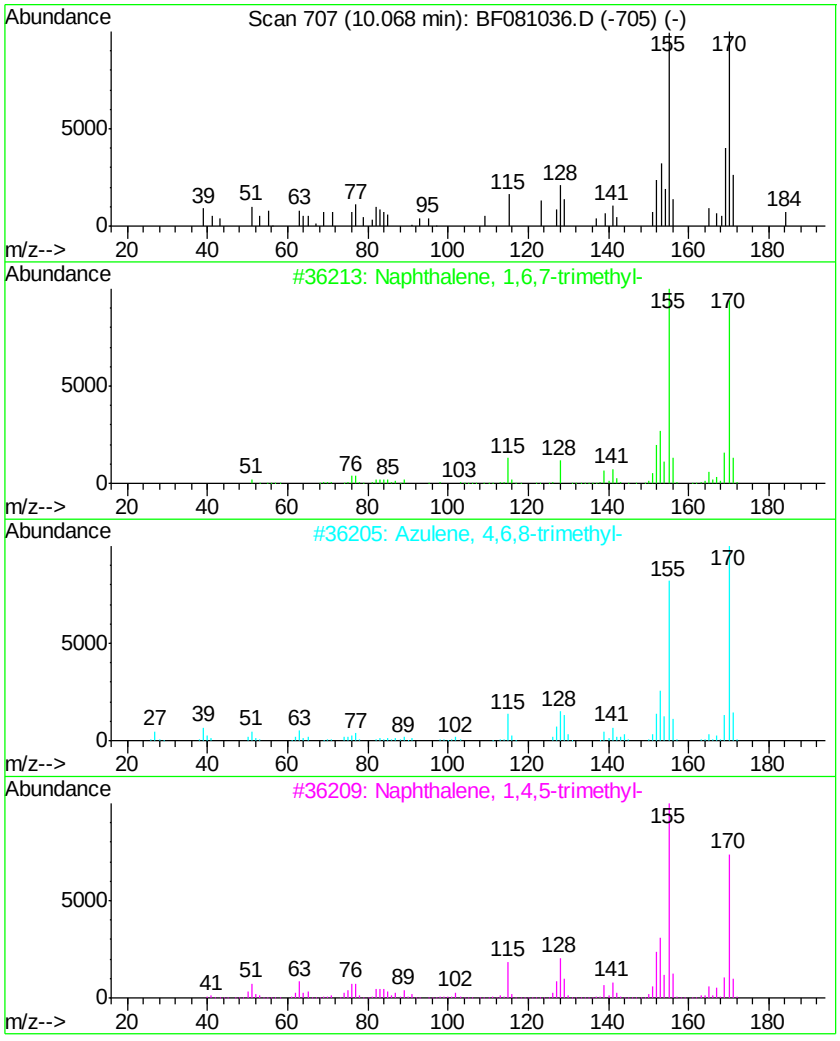
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

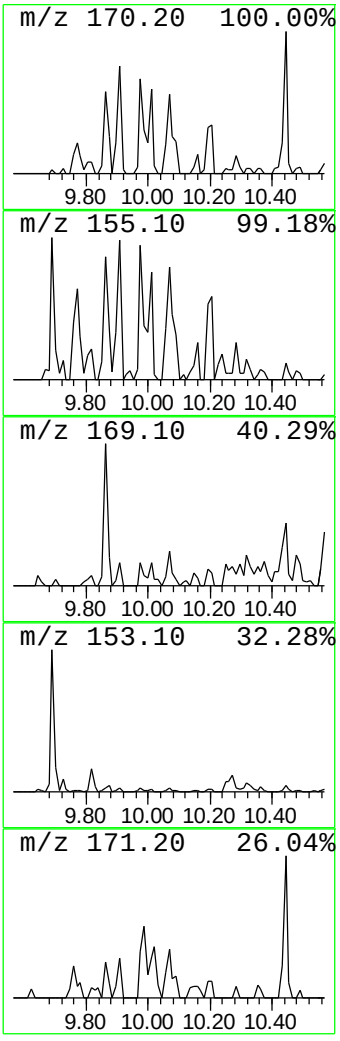
**********

Peak Number 4 Naphthalene, 1,6,7-trimethyl- Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.07 | 4.17 ng | 102860 | Acenaphthene-d10 | 9.66 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 94 |
| 2 | Azulene, 4,6,8-trimethyl- | 170 | C13H14 | 000941-81-1 | 94 |
| 3 | Naphthalene, 1,4,5-trimethyl- | 170 | C13H14 | 002131-41-1 | 89 |
| 4 | 1-(2,2-Dimethylcyclopropyl)-2-ph... | 170 | C13H14 | 1000294-91-1 | 81 |
| 5 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 81 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF081715\
Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

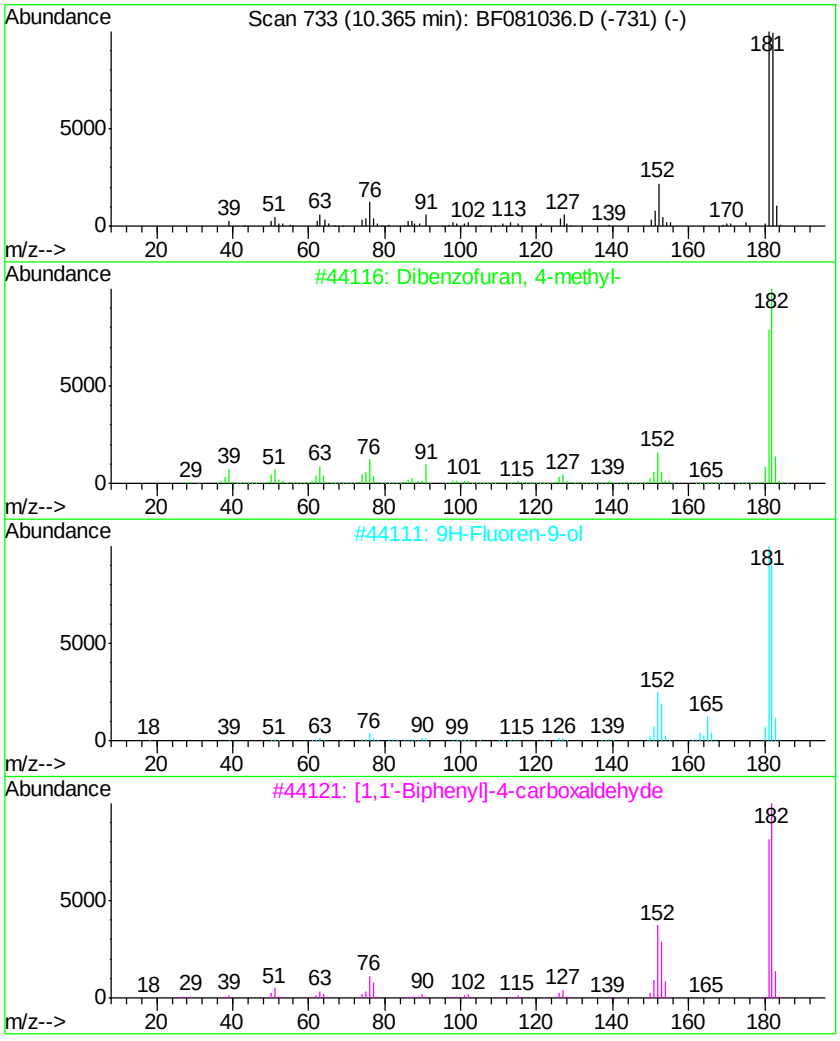
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

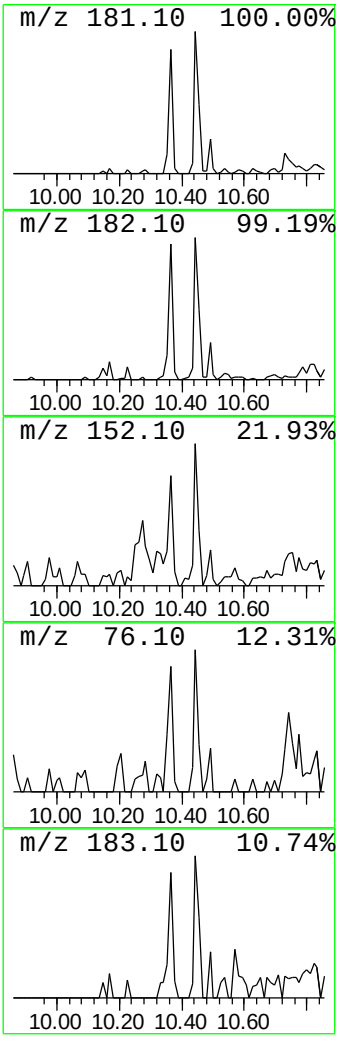
**********

Peak Number 5 Dibenzofuran, 4-methyl- Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.36 | 5.00 ng | 123318 | Acenaphthene-d10 | 9.66 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dibenzofuran, 4-methyl- | 182 | C13H10O | 007320-53-8 | 86 |
| 2 | 9H-Fluoren-9-ol | 182 | C13H10O | 001689-64-1 | 86 |
| 3 | [1,1'-Biphenyl]-4-carboxaldehyde | 182 | C13H10O | 003218-36-8 | 74 |
| 4 | 9H-Xanthene | 182 | C13H10O | 000092-83-1 | 72 |
| 5 | 6H-Dibenzo[b,d]-pyran | 182 | C13H10O | 000229-95-8 | 59 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF081715\
Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

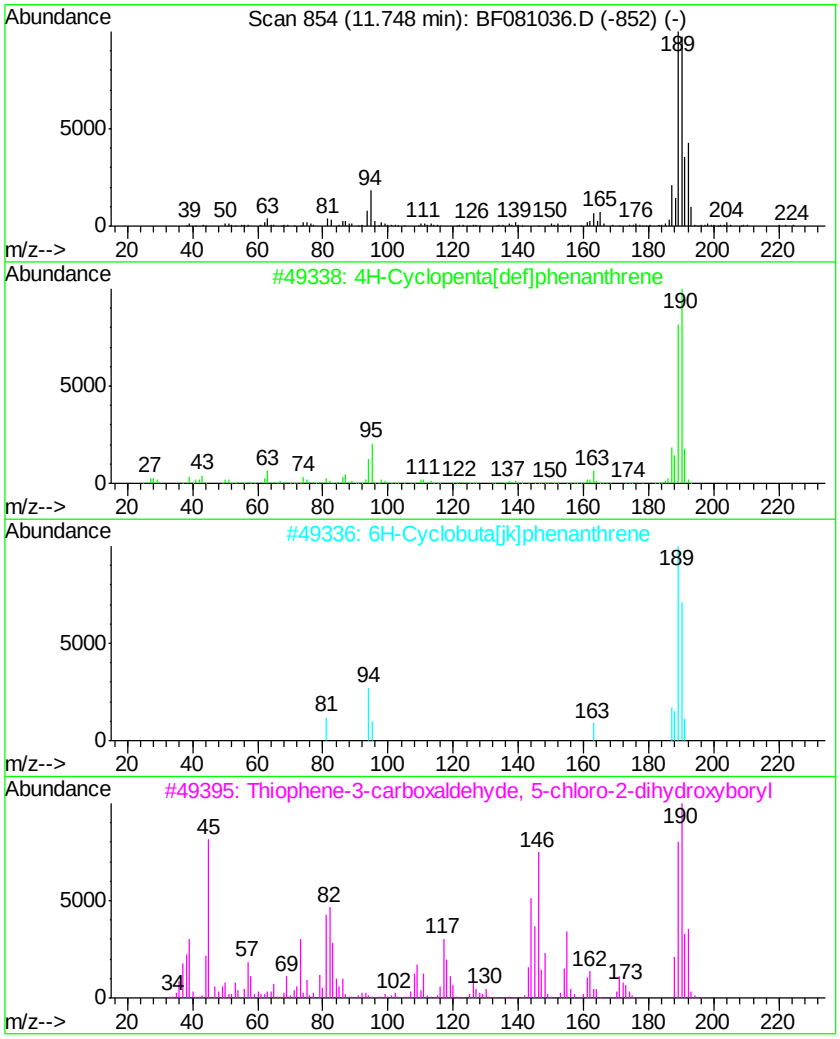
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

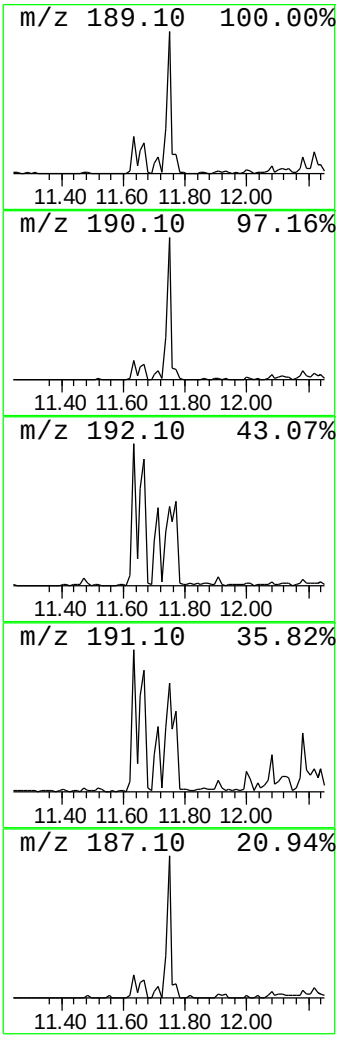
**********

Peak Number 6 4H-Cyclopenta[def]phenanthrene Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.75 | 5.67 ng | 685654 | Phenanthrene-d10 | 11.13 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 70 |
| 2 | 6H-Cyclobuta[jk]phenanthrene | 190 | C15H10 | 083469-43-6 | 59 |
| 3 | Thiophene-3-carboxaldehyde, 5-ch... | 190 | C5H4BClO3S | 036155-87-0 | 53 |
| 4 | 2,3,5,6-Tetramethylterephthalald... | 190 | C12H14O2 | 007072-01-7 | 47 |
| 5 | 2,2'-Bis(4,5-dimethylimidazole) | 190 | C10H14N4 | 069286-06-2 | 40 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF081715\
Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.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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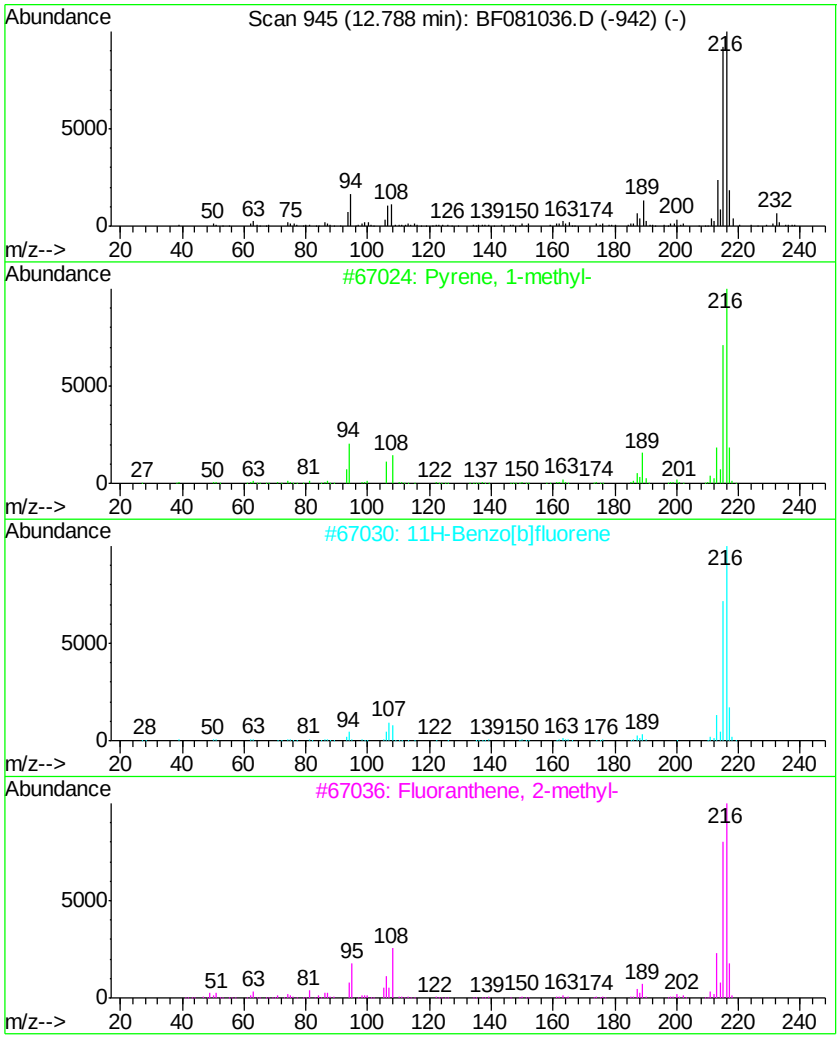
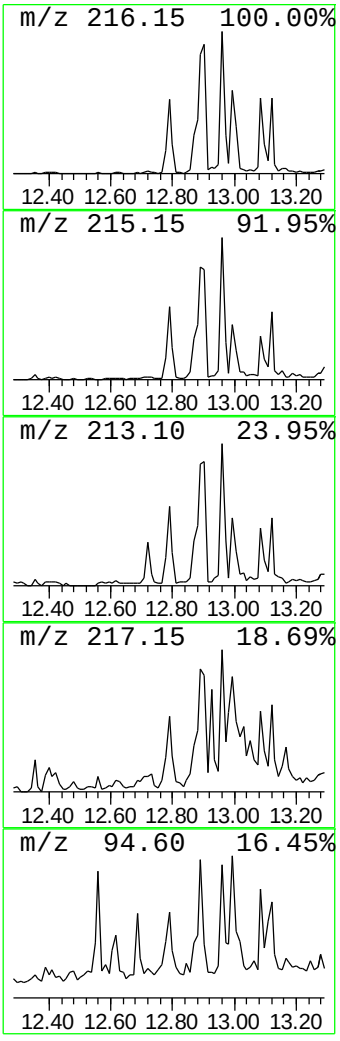
Peak Number 7 Pyrene, 1-methyl- Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.79 | 4.23 ng | 365818 | Chrysene-d12 | 13.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 98 |
| 2 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 94 |
| 3 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 91 |
| 4 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 87 |
| 5 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 86 |



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Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.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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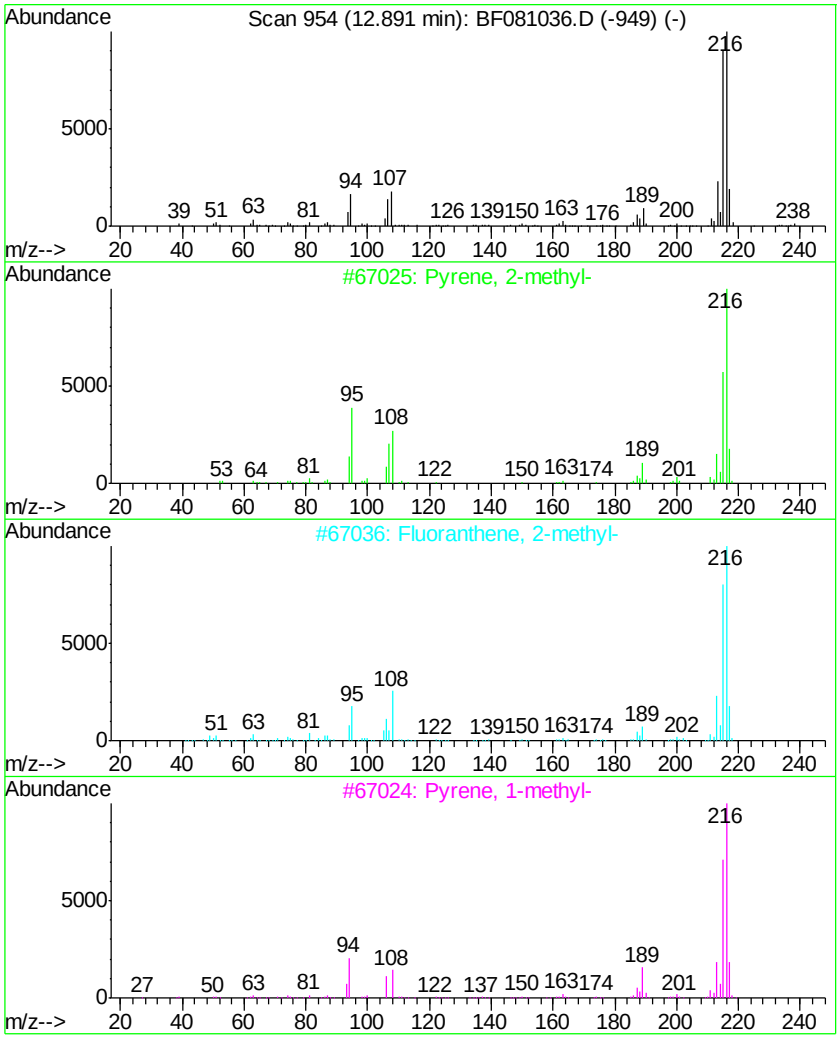
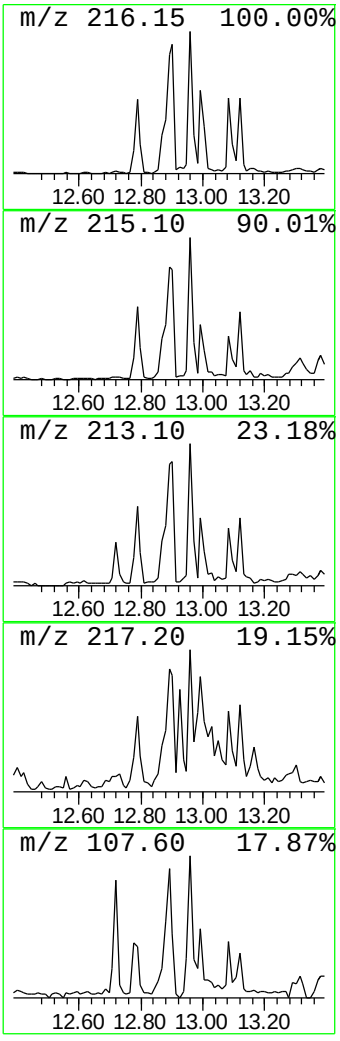
Peak Number 8 Pyrene, 2-methyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.89 | 7.17 ng | 620877 | Chrysene-d12 | 13.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 95 |
| 2 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 94 |
| 3 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 94 |
| 4 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 93 |
| 5 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 87 |



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Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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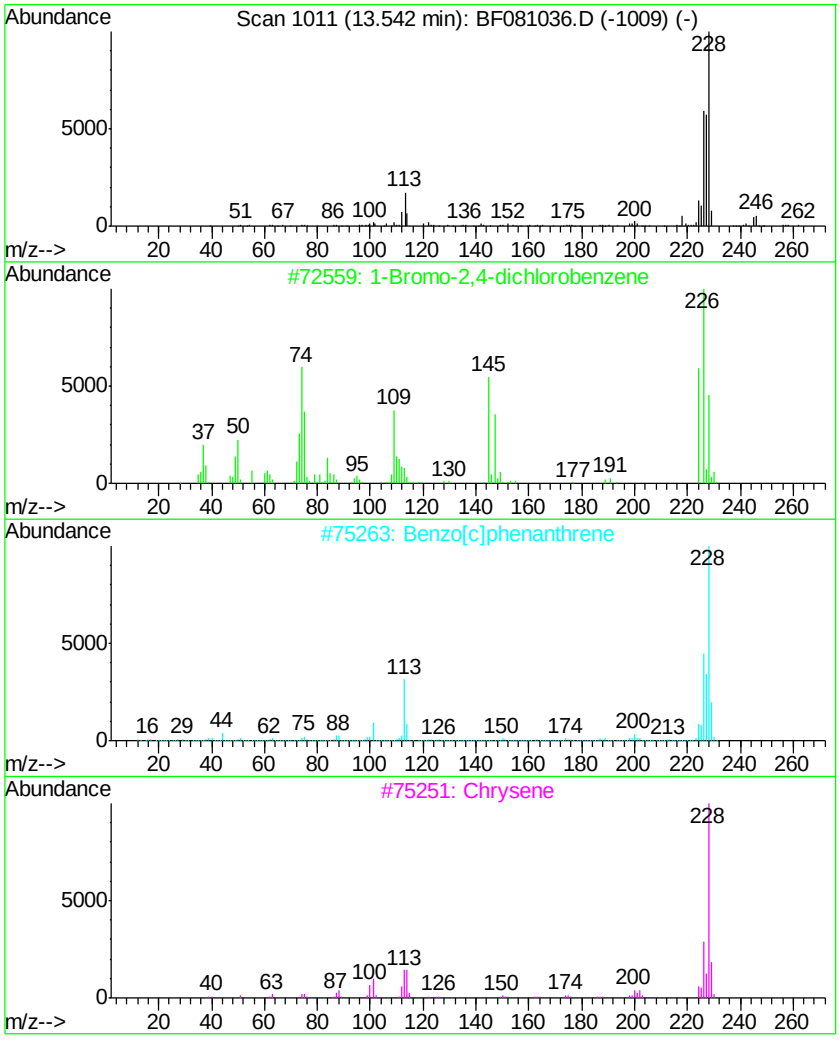
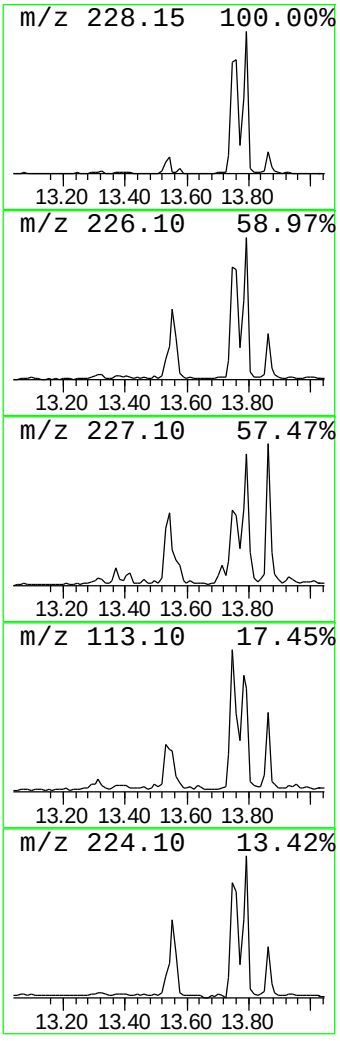
Peak Number 9 unknown13.54 Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.54 | 4.47 ng | 387131 | Chrysene-d12 | 13.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Bromo-2,4-dichlorobenzene | 224 | C6H3BrCl2 | 001193-72-2 | 47 |
| 2 | Benzo[c]phenanthrene | 228 | C18H12 | 000195-19-7 | 38 |
| 3 | Chrysene | 228 | C18H12 | 000218-01-9 | 38 |
| 4 | Triphenylene | 228 | C18H12 | 000217-59-4 | 37 |
| 5 | Benz[a]anthracene | 228 | C18H12 | 000056-55-3 | 25 |



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Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.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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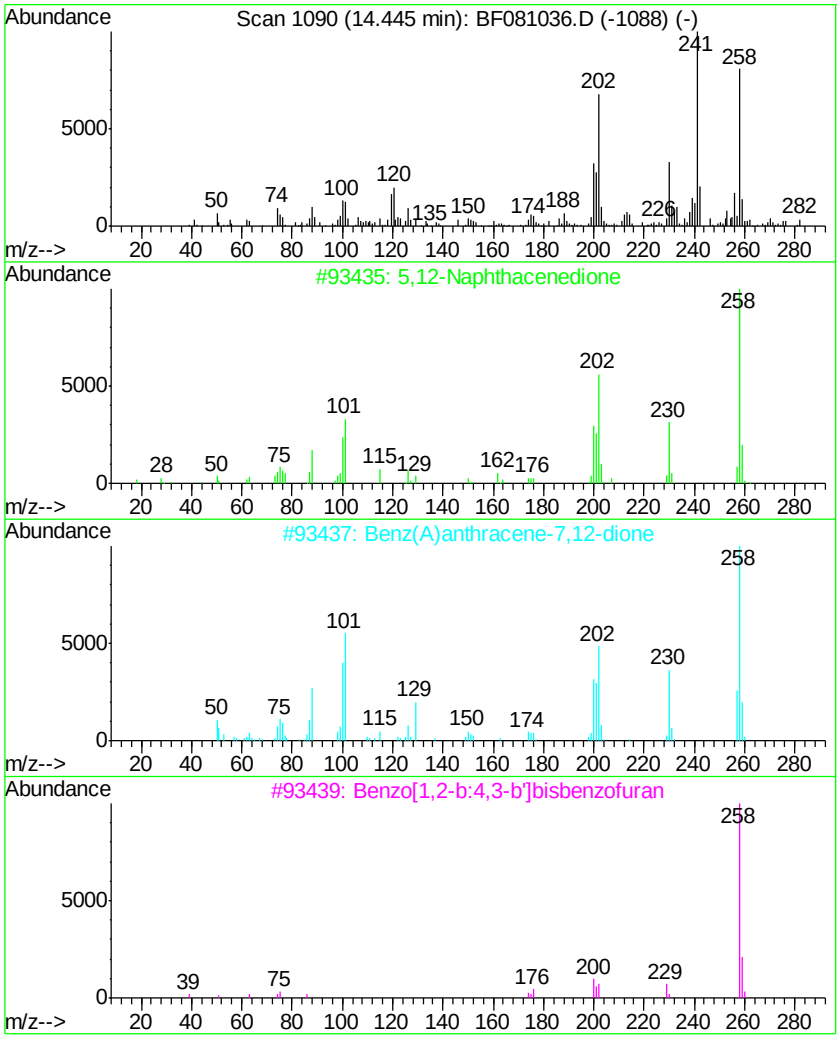
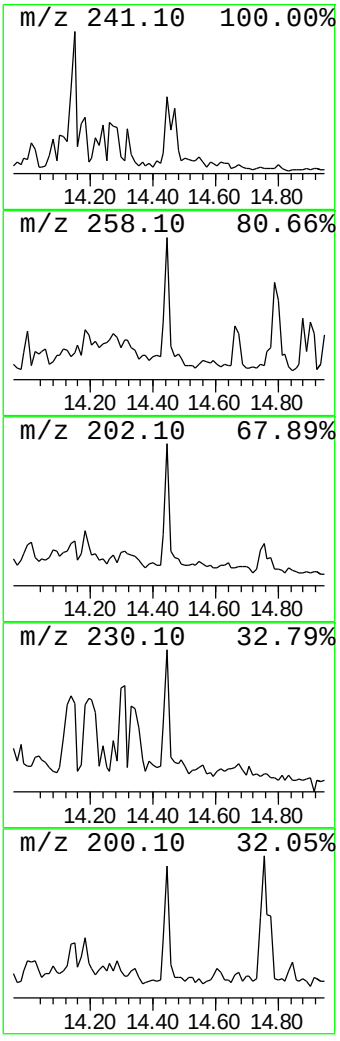
Peak Number 10 5,12-Naphthacenedione Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.45 | 4.42 ng | 103132 | Perylene-d12 | 15.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 5,12-Naphthacenedione | 258 | C18H10O2 | 001090-13-7 | 70 |
| 2 | Benz(A)anthracene-7,12-dione | 258 | C18H10O2 | 002498-66-0 | 64 |
| 3 | Benzo[1,2-b:4,3-b']bisbenzofuran | 258 | C18H10O2 | 000192-93-8 | 35 |
| 4 | 1,8-Anthracenedinitrile, 9,10-di... | 258 | C16H6N2O2 | 090866-50-5 | 30 |
| 5 | Dibenzo(b,def)carbazole | 241 | C18H11N | 104313-09-9 | 25 |



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Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.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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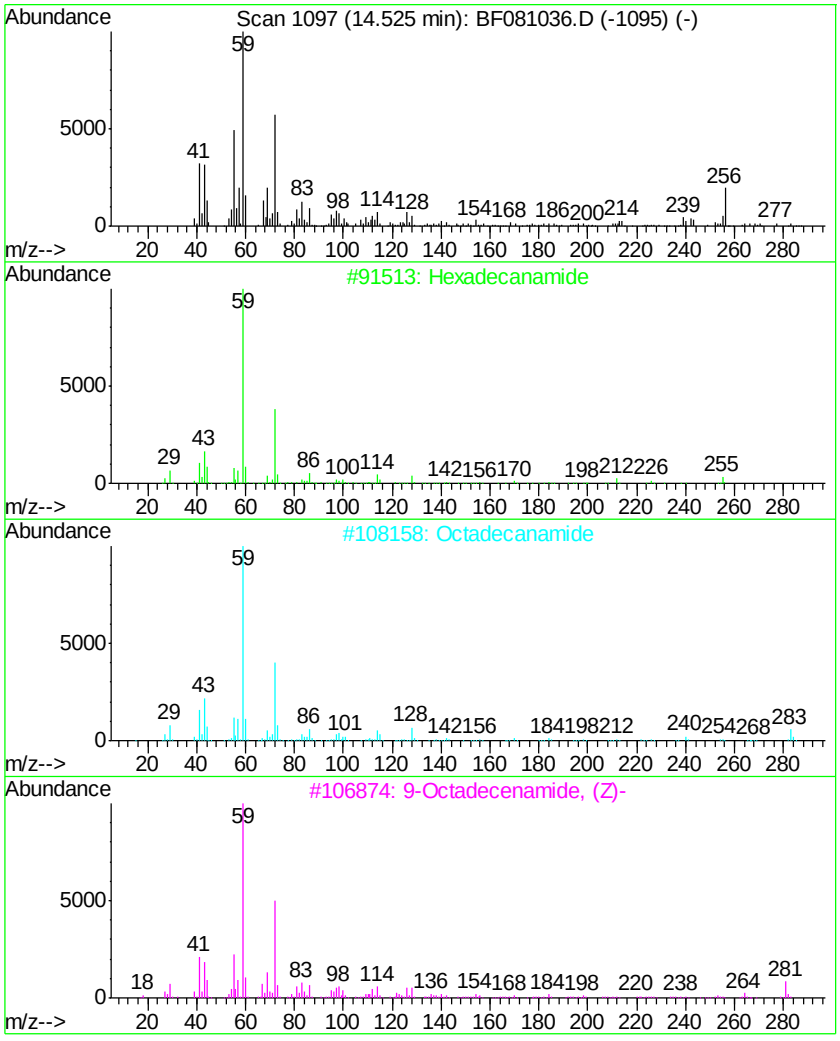
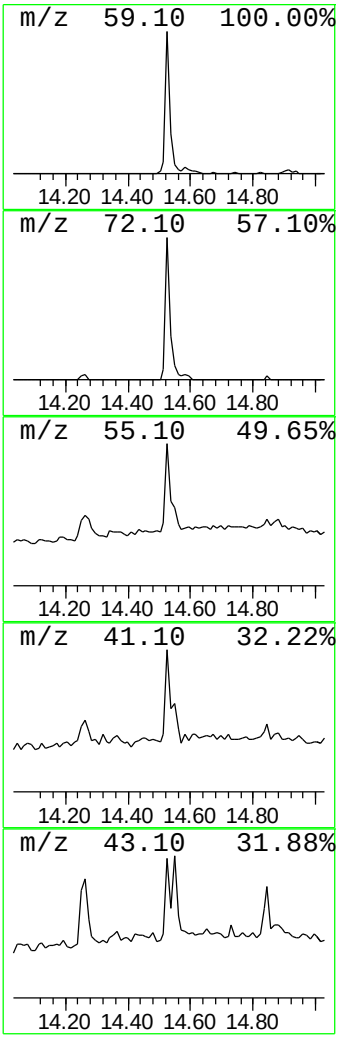
Peak Number 11 Hexadecanamide Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.53 | 12.64 ng | 295029 | Perylene-d12 | 15.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexadecanamide | 255 | C16H33NO | 000629-54-9 | 81 |
| 2 | Octadecanamide | 283 | C18H37NO | 000124-26-5 | 72 |
| 3 | 9-Octadecenamide, (Z)- | 281 | C18H35NO | 000301-02-0 | 72 |
| 4 | d-Glucosamine | 179 | C6H13NO5 | 000090-77-7 | 59 |
| 5 | Decanamide- | 171 | C10H21NO | 002319-29-1 | 50 |



# Library Search Compound Report

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Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.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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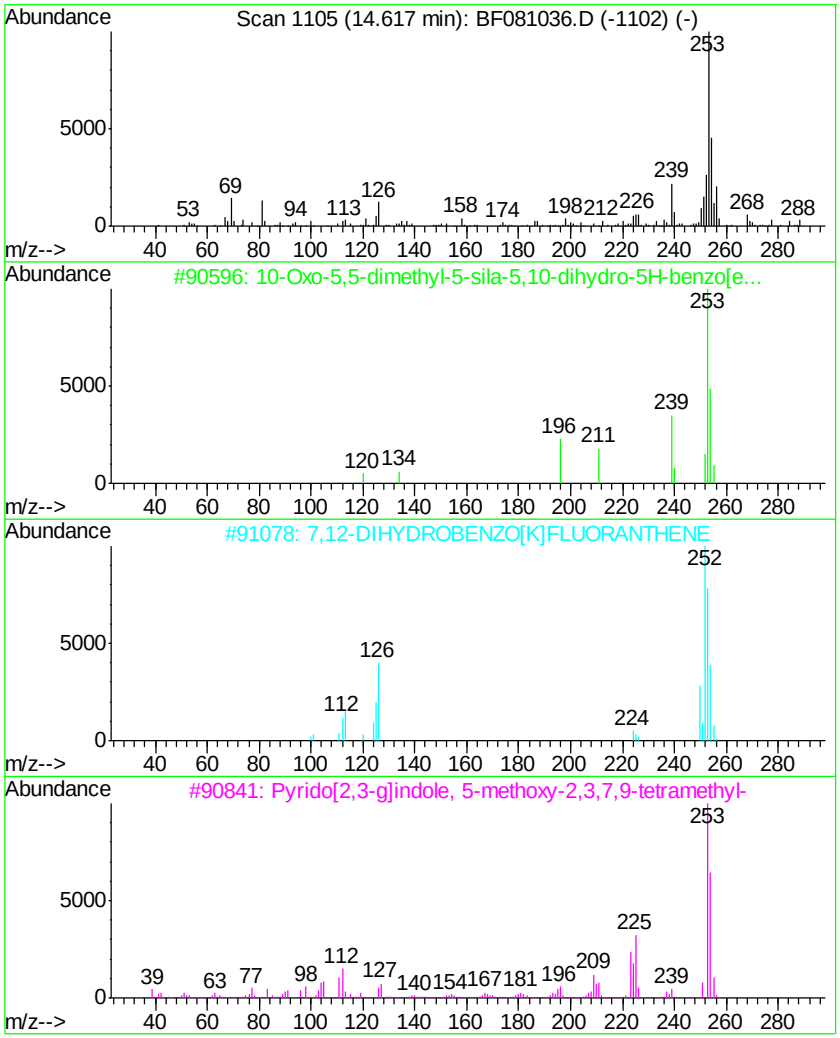
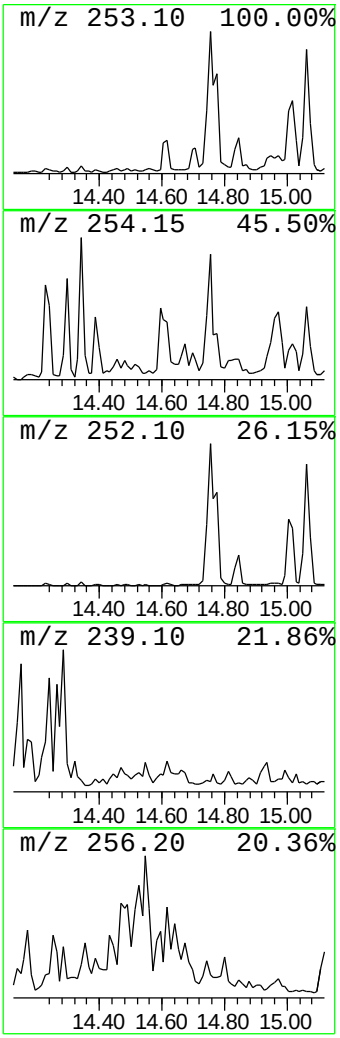
Peak Number 12 10-Oxo-5,5-dimethyl-5-sila-... Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.62 | 6.71 ng | 156538 | Perylene-d12 | 15.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 10-Oxo-5,5-dimethyl-5-sila-5,10-... | 254 | C14H14N2OSi | 089052-45-9 | 59 |
| 2 | 7,12-DIHYDROBENZO[K]FLUORANTHENE | 254 | C20H14 | 1000080-17-7 | 58 |
| 3 | Pyrido[2,3-g]indole, 5-methoxy-2... | 254 | C16H18N2O | 201991-45-9 | 47 |
| 4 | Carbamate, N-(2-naphthyl)-, 3-pe... | 253 | C16H15NO2 | 1000197-96-0 | 46 |
| 5 | Propanephosphonic acid, bis(trim... | 268 | C9H25O3PSi2 | 1000193-07-4 | 43 |



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Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.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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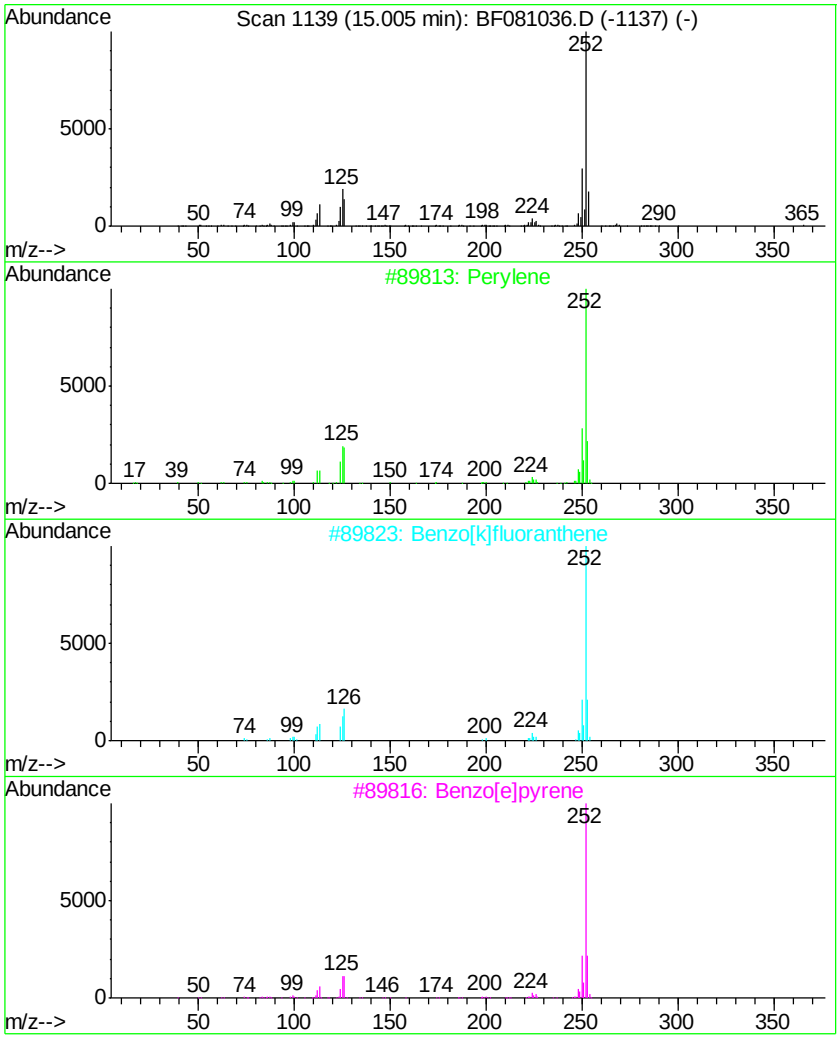
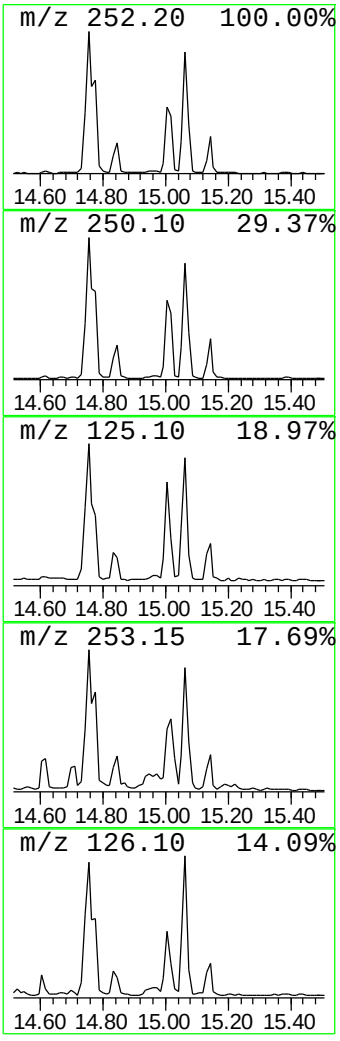
Peak Number 14 Perylene Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.01 | 20.22 ng | 471828 | Perylene-d12 | 15.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Perylene | 252 | C20H12 | 000198-55-0 | 98 |
| 2 | Benzo[k]fluoranthene | 252 | C20H12 | 000207-08-9 | 98 |
| 3 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 97 |
| 4 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 96 |
| 5 | Benzo[j]fluoranthene | 252 | C20H12 | 000205-82-3 | 93 |



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Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.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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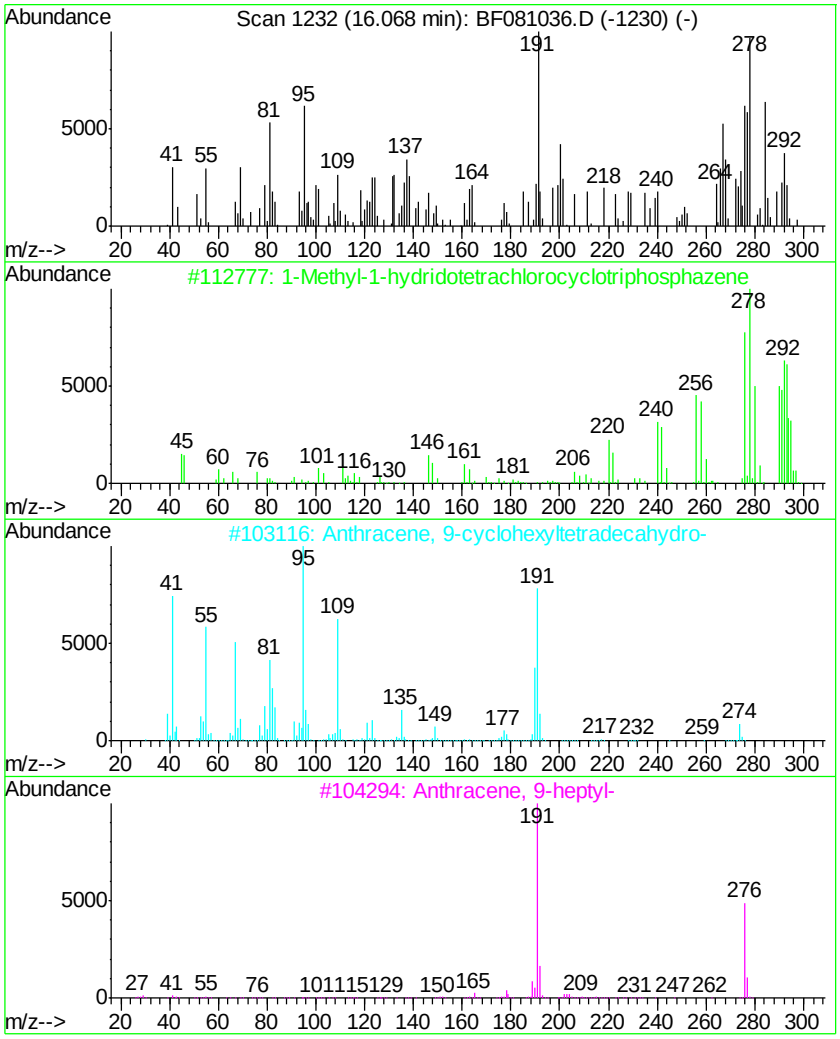
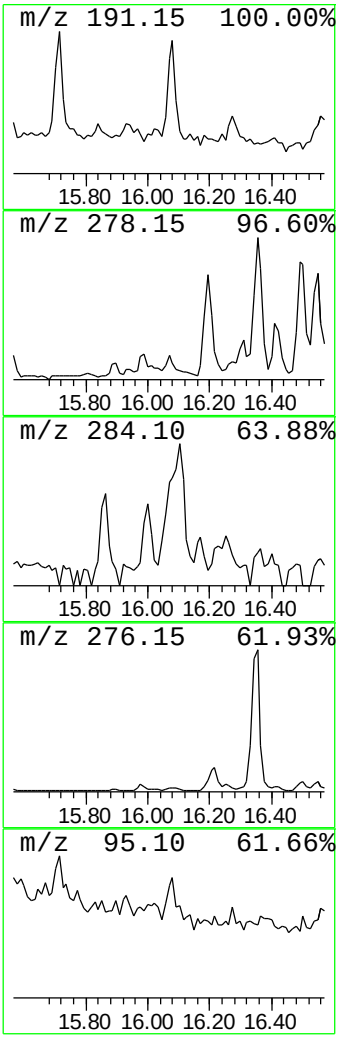
Peak Number 15 unknown16.07 Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.07 | 5.90 ng | 137600 | Perylene-d12 | 15.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Methyl-1-hydridotetrachlorocyc... | 291 | CH4Cl4N3P3 | 068351-74-6 | 27 |
| 2 | Anthracene, 9-cyclohexyltetradec... | 274 | C20H34 | 055255-70-4 | 25 |
| 3 | Anthracene, 9-heptyl- | 276 | C21H24 | 1000157-50-3 | 22 |
| 4 | [4,5'-Bipyrimidine]-2,2',4',6(1H... | 278 | C12H14N4O4 | 062880-87-9 | 22 |
| 5 | 2-Methylsulfanyl-benzoimidazole-... | 284 | C15H12N2O2S | 1000294-32-8 | 18 |



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Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.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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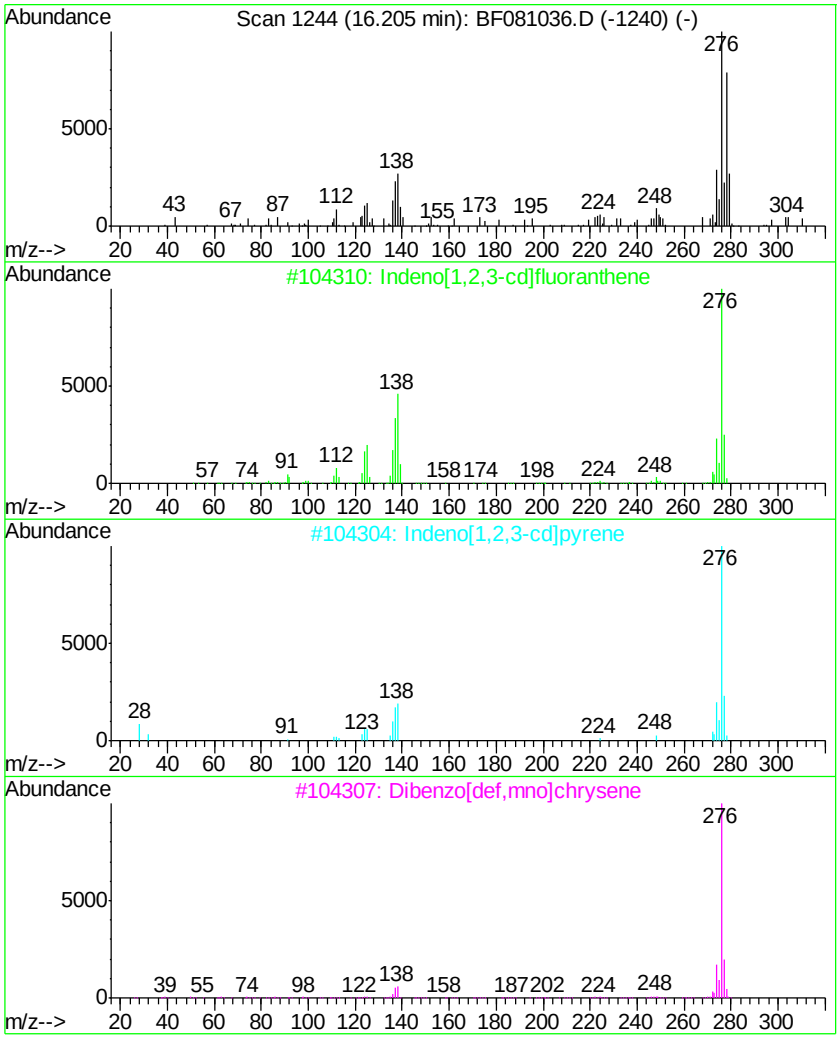
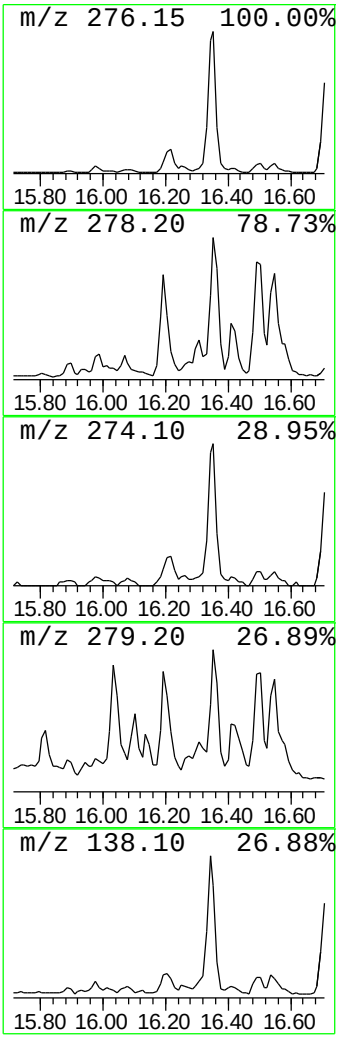
Peak Number 16 Indeno[1,2,3-cd]fluoranthene Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.21 | 5.74 ng | 133882 | Perylene-d12 | 15.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Indeno[1,2,3-cd]fluoranthene | 276 | C22H12 | 000193-43-1 | 70 |
| 2 | Indeno[1,2,3-cd]pyrene | 276 | C22H12 | 000193-39-5 | 70 |
| 3 | Dibenzo[def,mno]chrysene | 276 | C22H12 | 000191-26-4 | 70 |
| 4 | Benzo[ghi]perylene | 276 | C22H12 | 000191-24-2 | 50 |
| 5 | 2-Thiophenecarbaldehyde, 5-[5-(t... | 276 | C13H8OS3 | 1000217-28-5 | 35 |



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Acq On : 18 Aug 2015 8:28
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Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.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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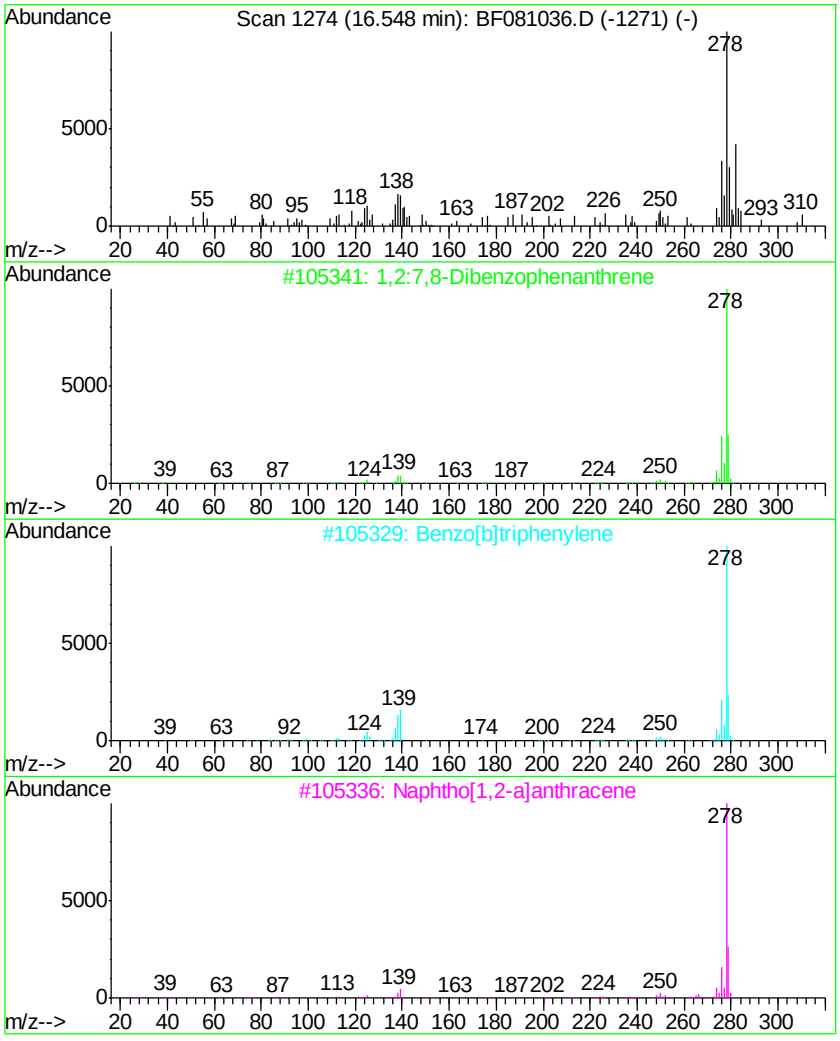
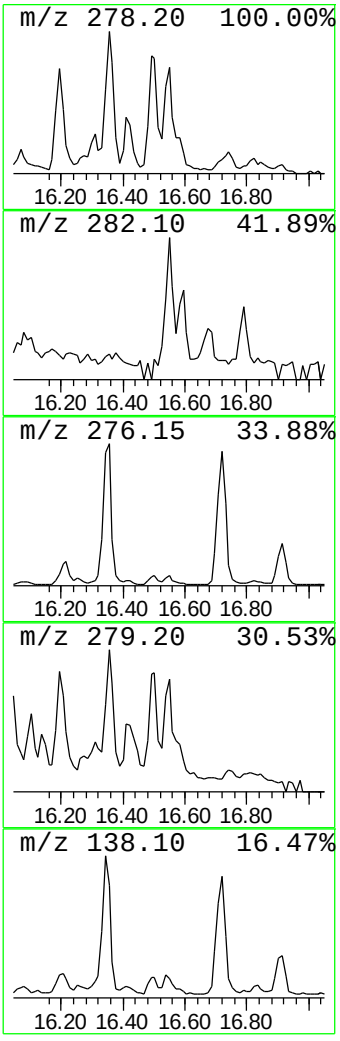
Peak Number 17 1,2:7,8-Dibenzophenanthrene Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.55 | 8.43 ng | 196672 | Perylene-d12 | 15.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,2:7,8-Dibenzophenanthrene | 278 | C22H14 | 000213-46-7 | 64 |
| 2 | Benzo[b]triphenylene | 278 | C22H14 | 000215-58-7 | 50 |
| 3 | Naphtho[1,2-a]anthracene | 278 | C22H14 | 000195-06-2 | 50 |
| 4 | Dibenz[a,h]anthracene | 278 | C22H14 | 000053-70-3 | 49 |
| 5 | Benzo[a]naphthacene | 278 | C22H14 | 000226-88-0 | 46 |



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Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.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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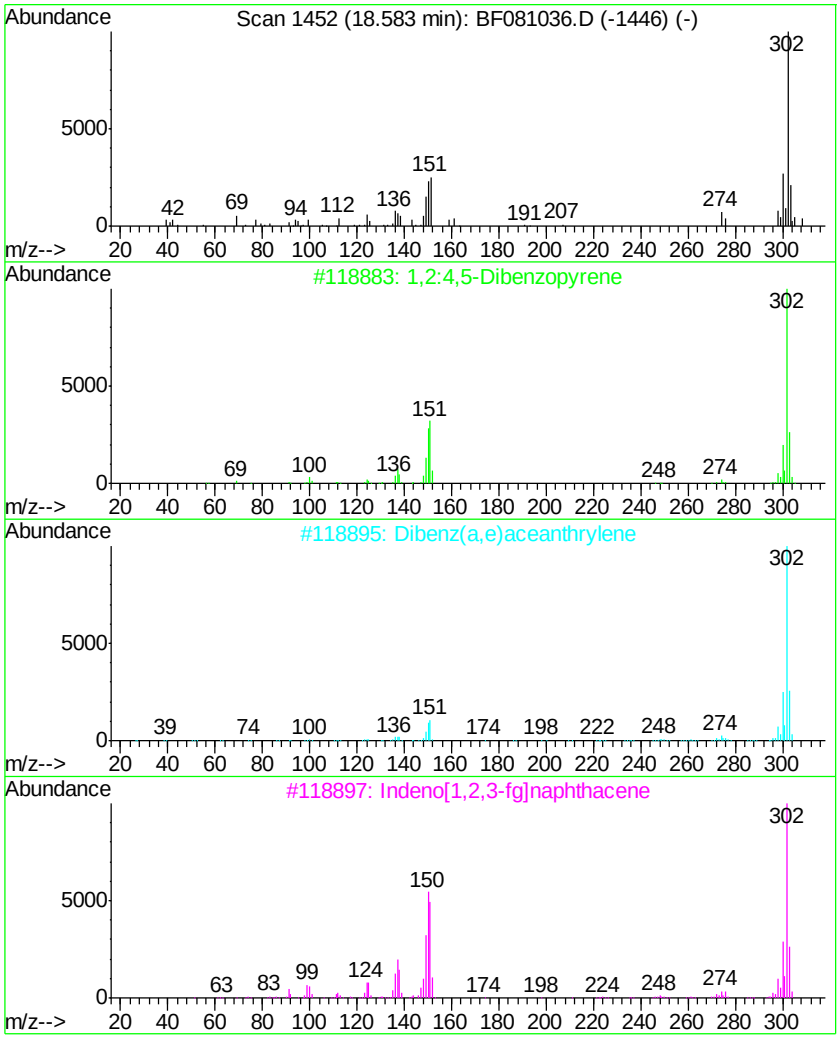
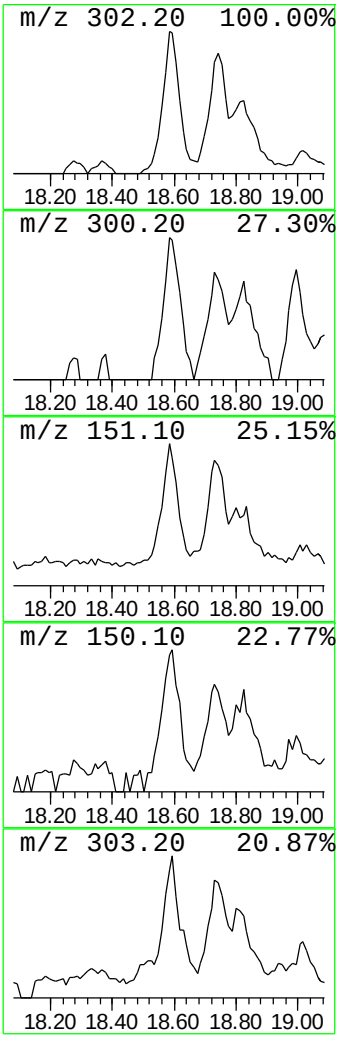
Peak Number 19 1,2:4,5-Dibenzopyrene Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.58 | 6.43 ng | 149983 | Perylene-d12 | 15.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,2:4,5-Dibenzopyrene | 302 | C24H14 | 000192-65-4 | 95 |
| 2 | Dibenz(a,e)aceanthrylene | 302 | C24H14 | 005385-75-1 | 93 |
| 3 | Indeno[1,2,3-fg]naphthacene | 302 | C24H14 | 000203-11-2 | 93 |
| 4 | 3,4:9,10-Dibenzopyrene | 302 | C24H14 | 000189-55-9 | 89 |
| 5 | 3,4:8,9-Dibenzopyrene | 302 | C24H14 | 000189-64-0 | 76 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF081715\
Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

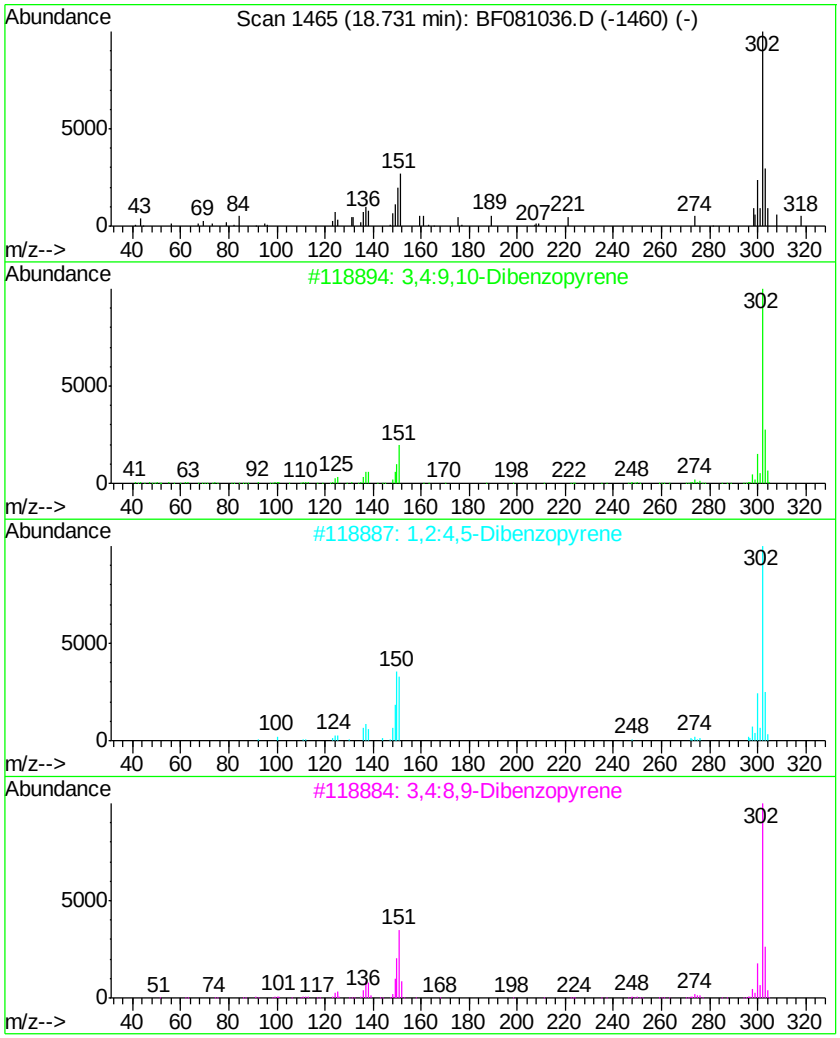
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

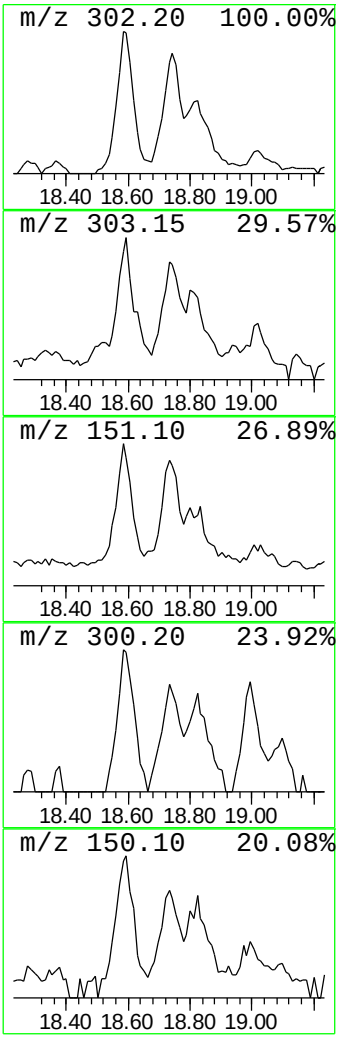
**********

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

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.73 | 4.07 ng | 95069 | Perylene-d12 | 15.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3,4:9,10-Dibenzopyrene | 302 | C24H14 | 000189-55-9 | 91 |
| 2 | 1,2:4,5-Dibenzopyrene | 302 | C24H14 | 000192-65-4 | 86 |
| 3 | 3,4:8,9-Dibenzopyrene | 302 | C24H14 | 000189-64-0 | 81 |
| 4 | Dibenz(a,e)aceanthrylene | 302 | C24H14 | 005385-75-1 | 76 |
| 5 | Dibenzo[fg,op]naphthacene | 302 | C24H14 | 000192-51-8 | 64 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF081715\
Data File : BF081036.D
Acq On : 18 Aug 2015 8:28
Operator : UM/IZ
Sample : G3239-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TEC-COMP

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081715.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... | 4.76 | 78.0 | ng | 1620000 | 1 | 6.63 | 415160 | 20.0 |
| unknown6.40 | 6.40 | 96.0 | ng | 1993460 | 1 | 6.63 | 415160 | 20.0 |
| Naphthalene, 1,6,... | 10.07 | 4.2 | ng | 102860 | 3 | 9.66 | 493595 | 20.0 |
| Dibenzofuran, 4-m... | 10.36 | 5.0 | ng | 123318 | 3 | 9.66 | 493595 | 20.0 |
| 4H-Cyclopenta[def... | 11.75 | 5.7 | ng | 685654 | 4 | 11.13 | 2417120 | 20.0 |
| Pyrene, 1-methyl- | 12.79 | 4.2 | ng | 365818 | 5 | 13.76 | 1731490 | 20.0 |
| Pyrene, 2-methyl- | 12.89 | 7.2 | ng | 620877 | 5 | 13.76 | 1731490 | 20.0 |
| unknown13.54 | 13.54 | 4.5 | ng | 387131 | 5 | 13.76 | 1731490 | 20.0 |
| 5,12-Naphthacened... | 14.45 | 4.4 | ng | 103132 | 6 | 15.12 | 466664 | 20.0 |
| Hexadecanamide | 14.53 | 12.6 | ng | 295029 | 6 | 15.12 | 466664 | 20.0 |
| 10-Oxo-5,5-dimeth... | 14.62 | 6.7 | ng | 156538 | 6 | 15.12 | 466664 | 20.0 |
| Perylene | 15.01 | 20.2 | ng | 471828 | 6 | 15.12 | 466664 | 20.0 |
| unknown16.07 | 16.07 | 5.9 | ng | 137600 | 6 | 15.12 | 466664 | 20.0 |
| Indeno[1,2,3-cd]f... | 16.21 | 5.7 | ng | 133882 | 6 | 15.12 | 466664 | 20.0 |
| 1,2:7,8-Dibenzoph... | 16.55 | 8.4 | ng | 196672 | 6 | 15.12 | 466664 | 20.0 |
| 1,2:4,5-Dibenzopy... | 18.58 | 6.4 | ng | 149983 | 6 | 15.12 | 466664 | 20.0 |
| 3,4:9,10-Dibenzop... | 18.73 | 4.1 | ng | 95069 | 6 | 15.12 | 466664 | 20.0 |