LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF051316\
Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

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-BF050916.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 | 1.736 | 12 | 13 | 62 | rVB | 4153255 | 8501478 | 100.00% | 15.153% |
| 2 | 4.753 | 275 | 277 | 285 | rBV | 44591 | 96908 | 1.14% | 0.173% |
| 3 | 5.199 | 314 | 316 | 325 | rBV | 1633907 | 1885547 | 22.18% | 3.361% |
| 4 | 5.839 | 370 | 372 | 375 | rVV | 69033 | 94593 | 1.11% | 0.169% |
| 5 | 6.113 | 393 | 396 | 402 | rBV3 | 61003 | 122029 | 1.44% | 0.218% |
| 6 | 6.273 | 408 | 410 | 415 | rBV | 735895 | 1176775 | 13.84% | 2.098% |
| 7 | 6.387 | 417 | 420 | 422 | rVV | 3182148 | 3533027 | 41.56% | 6.297% |
| 8 | 6.547 | 432 | 434 | 438 | rBV4 | 56385 | 175776 | 2.07% | 0.313% |
| 9 | 6.605 | 438 | 439 | 443 | rVB | 712885 | 946030 | 11.13% | 1.686% |
| 10 | 6.765 | 451 | 453 | 456 | rBV | 3222775 | 3166022 | 37.24% | 5.643% |
| 11 | 6.867 | 460 | 462 | 467 | rVB3 | 151338 | 229018 | 2.69% | 0.408% |
| 12 | 6.959 | 467 | 470 | 472 | rBV2 | 179236 | 244240 | 2.87% | 0.435% |
| 13 | 7.005 | 472 | 474 | 475 | rVB | 95231 | 120336 | 1.42% | 0.214% |
| 14 | 7.027 | 475 | 476 | 480 | rBV3 | 60391 | 117831 | 1.39% | 0.210% |
| 15 | 7.153 | 483 | 487 | 488 | rBV2 | 223877 | 345791 | 4.07% | 0.616% |
| 16 | 7.188 | 488 | 490 | 492 | rVV | 2909017 | 2969430 | 34.93% | 5.293% |
| 17 | 7.268 | 494 | 497 | 499 | rVB3 | 169837 | 289757 | 3.41% | 0.516% |
| 18 | 7.302 | 499 | 500 | 502 | rBV2 | 107693 | 141685 | 1.67% | 0.253% |
| 19 | 7.393 | 504 | 508 | 509 | rBV3 | 351074 | 456211 | 5.37% | 0.813% |
| 20 | 7.416 | 509 | 510 | 512 | rVB2 | 191710 | 175191 | 2.06% | 0.312% |
| 21 | 7.473 | 512 | 515 | 517 | rVB3 | 58775 | 112294 | 1.32% | 0.200% |
| 22 | 7.530 | 517 | 520 | 521 | rBV2 | 219850 | 386837 | 4.55% | 0.690% |
| 23 | 7.553 | 521 | 522 | 525 | rVB2 | 144914 | 176780 | 2.08% | 0.315% |
| 24 | 7.645 | 528 | 530 | 531 | rBV | 52465 | 86639 | 1.02% | 0.154% |
| 25 | 7.725 | 535 | 537 | 539 | rBV2 | 132914 | 210333 | 2.47% | 0.375% |
| 26 | 7.793 | 539 | 543 | 545 | rBV3 | 90389 | 239840 | 2.82% | 0.427% |
| 27 | 7.839 | 545 | 547 | 549 | rBV2 | 133931 | 241738 | 2.84% | 0.431% |
| 28 | 7.896 | 550 | 552 | 558 | rVB | 1159306 | 1473410 | 17.33% | 2.626% |
| 29 | 8.022 | 562 | 563 | 565 | rVB2 | 91169 | 121800 | 1.43% | 0.217% |
| 30 | 8.102 | 565 | 570 | 572 | rBV6 | 203059 | 539885 | 6.35% | 0.962% |
| 31 | 8.148 | 572 | 574 | 575 | rVB | 129776 | 164123 | 1.93% | 0.293% |
| 32 | 8.193 | 575 | 578 | 580 | rVB4 | 146401 | 240629 | 2.83% | 0.429% |
| 33 | 8.285 | 580 | 586 | 588 | rBV7 | 144747 | 475031 | 5.59% | 0.847% |
| 34 | 8.330 | 588 | 590 | 597 | rBV | 378064 | 885120 | 10.41% | 1.578% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF051316\
Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

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-BF050916.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 8.433 | 597 | 599 | 601 | rBV2 | 164841 | 210627 | 2.48% | 0.375% |
| 36 | 8.513 | 603 | 606 | 608 | rBV3 | 114294 | 292623 | 3.44% | 0.522% |
| 37 | 8.559 | 608 | 610 | 611 | rBV2 | 76493 | 115344 | 1.36% | 0.206% |
| 38 | 8.593 | 611 | 613 | 616 | rVB4 | 204746 | 272154 | 3.20% | 0.485% |
| 39 | 8.708 | 616 | 623 | 626 | rBV6 | 350590 | 1010980 | 11.89% | 1.802% |
| 40 | 8.788 | 628 | 630 | 631 | rBV2 | 95588 | 152258 | 1.79% | 0.271% |
| 41 | 8.936 | 639 | 643 | 644 | rBV | 450165 | 617460 | 7.26% | 1.101% |
| 42 | 8.982 | 644 | 647 | 649 | rVV | 4463802 | 4510734 | 53.06% | 8.040% |
| 43 | 9.062 | 651 | 654 | 656 | rBV4 | 102893 | 249644 | 2.94% | 0.445% |
| 44 | 9.108 | 656 | 658 | 662 | rBV4 | 141331 | 354885 | 4.17% | 0.633% |
| 45 | 9.313 | 674 | 676 | 678 | rBV3 | 150142 | 269091 | 3.17% | 0.480% |
| 46 | 9.348 | 678 | 679 | 680 | rVV | 146404 | 104912 | 1.23% | 0.187% |
| 47 | 9.382 | 680 | 682 | 686 | rVV | 444372 | 498312 | 5.86% | 0.888% |
| 48 | 9.508 | 692 | 693 | 696 | rVB3 | 144328 | 163791 | 1.93% | 0.292% |
| 49 | 9.599 | 699 | 701 | 702 | rBV | 85164 | 115277 | 1.36% | 0.205% |
| 50 | 9.645 | 703 | 705 | 707 | rVB | 1228212 | 1200827 | 14.12% | 2.140% |
| 51 | 9.988 | 731 | 735 | 736 | rBV2 | 273282 | 481508 | 5.66% | 0.858% |
| 52 | 10.079 | 741 | 743 | 745 | rVB3 | 186239 | 298477 | 3.51% | 0.532% |
| 53 | 10.194 | 751 | 753 | 754 | rBV2 | 62090 | 91170 | 1.07% | 0.163% |
| 54 | 10.308 | 761 | 763 | 765 | rVV | 108514 | 93784 | 1.10% | 0.167% |
| 55 | 10.399 | 769 | 771 | 772 | rBV | 246795 | 291715 | 3.43% | 0.520% |
| 56 | 10.434 | 772 | 774 | 776 | rVV2 | 2055593 | 2652890 | 31.21% | 4.729% |
| 57 | 10.468 | 776 | 777 | 781 | rVB2 | 138402 | 195510 | 2.30% | 0.348% |
| 58 | 10.571 | 783 | 786 | 789 | rVB3 | 161228 | 354477 | 4.17% | 0.632% |
| 59 | 10.628 | 789 | 791 | 793 | rBV | 252983 | 261850 | 3.08% | 0.467% |
| 60 | 10.662 | 793 | 794 | 796 | rVV2 | 212278 | 260898 | 3.07% | 0.465% |
| 61 | 10.696 | 796 | 797 | 800 | rVV2 | 191129 | 258266 | 3.04% | 0.460% |
| 62 | 10.765 | 800 | 803 | 805 | rVV2 | 122838 | 263633 | 3.10% | 0.470% |
| 63 | 10.799 | 805 | 806 | 808 | rVV2 | 148184 | 211152 | 2.48% | 0.376% |
| 64 | 10.845 | 808 | 810 | 812 | rVV | 247805 | 280359 | 3.30% | 0.500% |
| 65 | 10.879 | 812 | 813 | 815 | rVB | 95540 | 114313 | 1.34% | 0.204% |
| 66 | 10.994 | 822 | 823 | 825 | rVB2 | 90917 | 124674 | 1.47% | 0.222% |
| 67 | 11.119 | 832 | 834 | 837 | rBV2 | 943324 | 1174640 | 13.82% | 2.094% |
| 68 | 11.256 | 844 | 846 | 848 | rVB | 92828 | 116406 | 1.37% | 0.207% |
| 69 | 11.325 | 850 | 852 | 853 | rVV | 230222 | 213619 | 2.51% | 0.381% |
| 70 | 11.359 | 853 | 855 | 858 | rVV2 | 244513 | 513176 | 6.04% | 0.915% |
| 71 | 11.405 | 858 | 859 | 860 | rVV | 286273 | 220549 | 2.59% | 0.393% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF051316\
Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

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-BF050916.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 11.451 | 860 | 863 | 864 | rVV2 | 228976 | 277435 | 3.26% | 0.495% |
| 73 | 11.474 | 864 | 865 | 869 | rVV2 | 186545 | 361273 | 4.25% | 0.644% |
| 74 | 11.542 | 869 | 871 | 872 | rVV | 331884 | 315035 | 3.71% | 0.562% |
| 75 | 11.577 | 872 | 874 | 876 | rVV | 161789 | 187919 | 2.21% | 0.335% |
| 76 | 11.679 | 880 | 883 | 888 | rVB2 | 220849 | 307440 | 3.62% | 0.548% |
| 77 | 12.457 | 949 | 951 | 957 | rBV | 83923 | 119425 | 1.40% | 0.213% |
| 78 | 12.708 | 970 | 973 | 976 | rBV | 3516088 | 3923991 | 46.16% | 6.994% |
| 79 | 13.611 | 1050 | 1052 | 1057 | rBV | 88148 | 110005 | 1.29% | 0.196% |
| 80 | 13.748 | 1062 | 1064 | 1067 | rBV | 1010248 | 960585 | 11.30% | 1.712% |
| 81 | 15.108 | 1181 | 1183 | 1186 | rBV | 689291 | 786351 | 9.25% | 1.402% |

Sum of corrected areas: 56103578

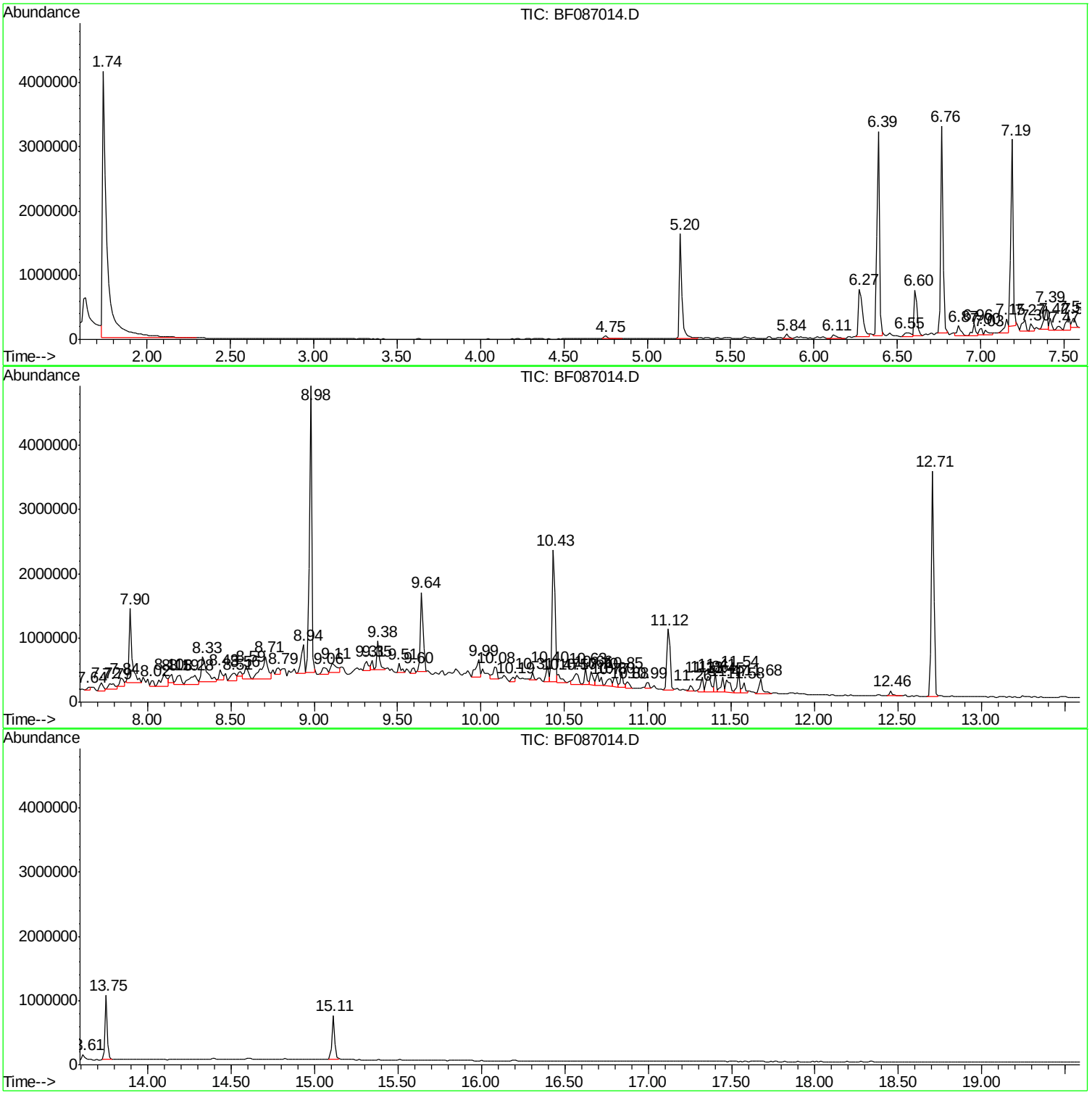
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA F\DATA\BF051316\
Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.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\BF051316\
Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

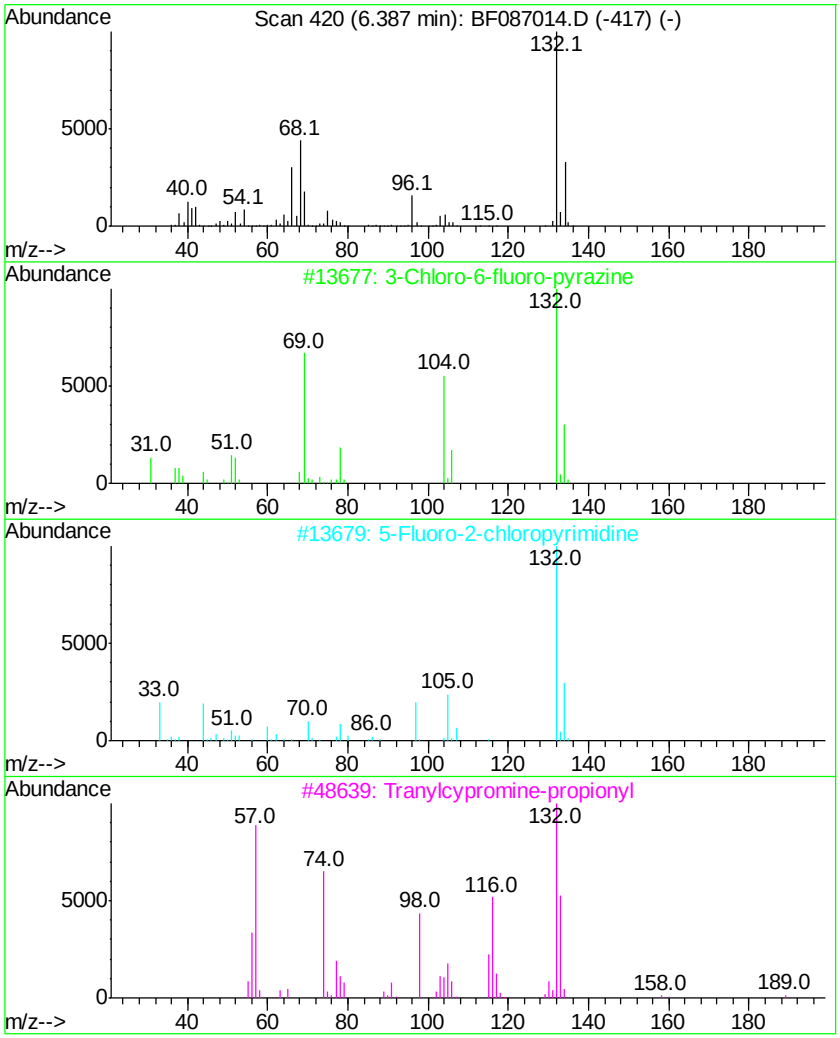
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

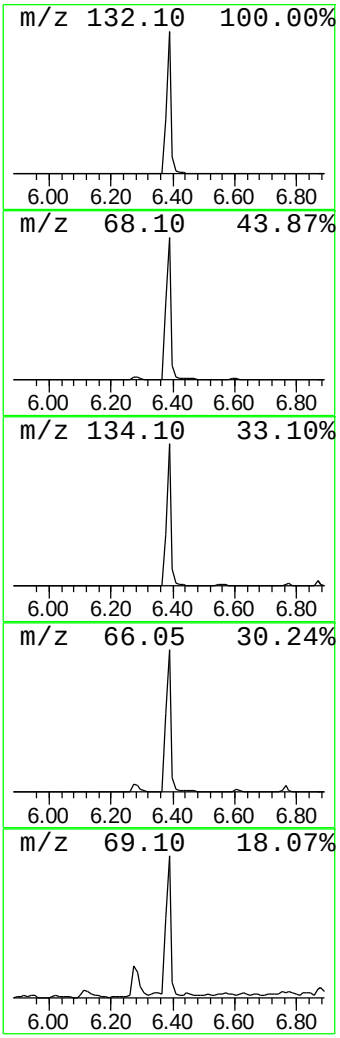
**********

Peak Number 2 unknown6.39 Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.39 | 74.69 ng | 3533030 | 1,4-Dichlorobenzene-d4 | 6.60 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 27 |
| 2 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 12 |
| 3 | Tranylcypromine-propionyl | 189 | C12H15NO | 1000123-86-3 | 10 |
| 4 | (5-METHYL-2-PYRIDYL)ACETONITRILE | 132 | C8H8N2 | 1000241-93-9 | 10 |
| 5 | Benzene, 1,3,5-trifluoro- | 132 | C6H3F3 | 000372-38-3 | 9 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF051316\
Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

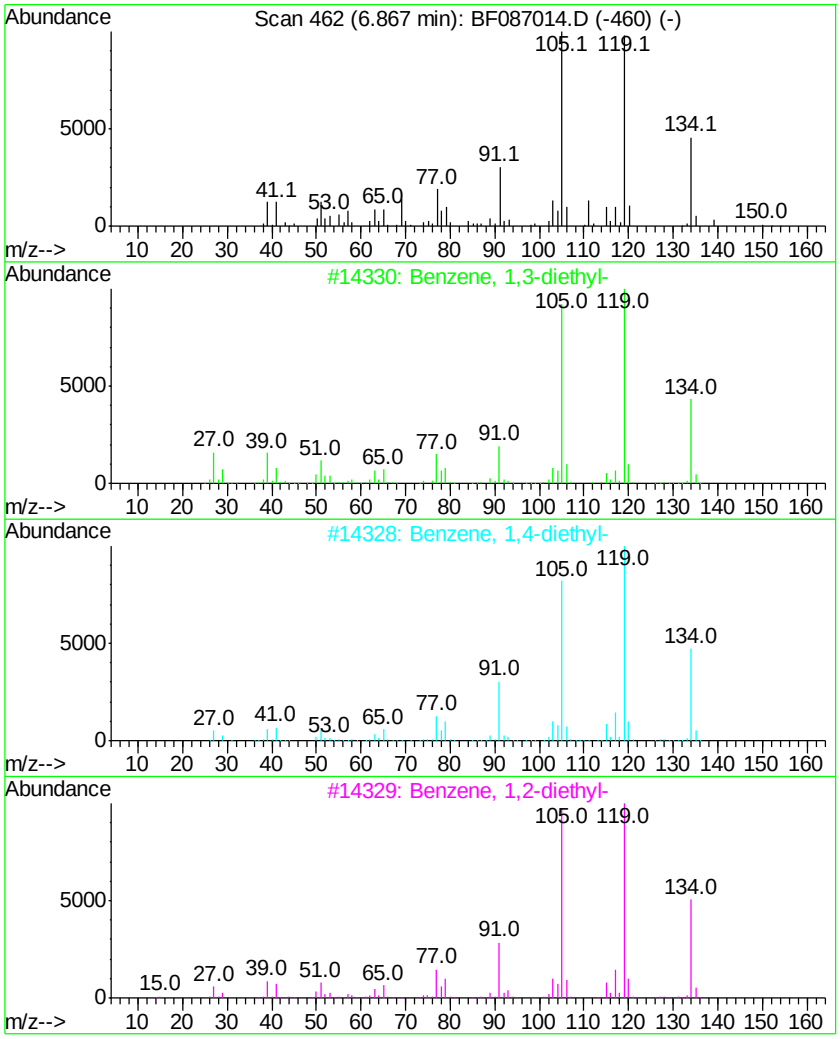
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

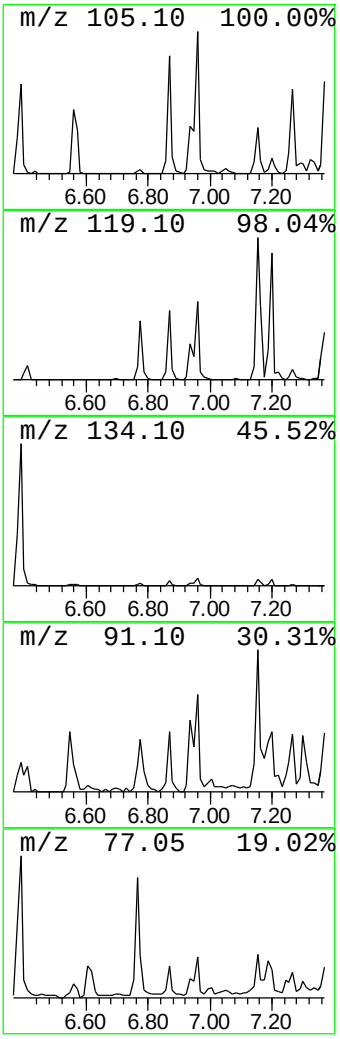
**********

Peak Number 4 Benzene, 1,3-diethyl- Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.87 | 4.84 ng | 229018 | 1,4-Dichlorobenzene-d4 | 6.60 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 96 |
| 2 | Benzene, 1,4-diethyl- | 134 | C10H14 | 000105-05-5 | 95 |
| 3 | Benzene, 1,2-diethyl- | 134 | C10H14 | 000135-01-3 | 94 |
| 4 | Benzene, 1-ethyl-3,5-dimethyl- | 134 | C10H14 | 000934-74-7 | 87 |
| 5 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 83 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF051316\
Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

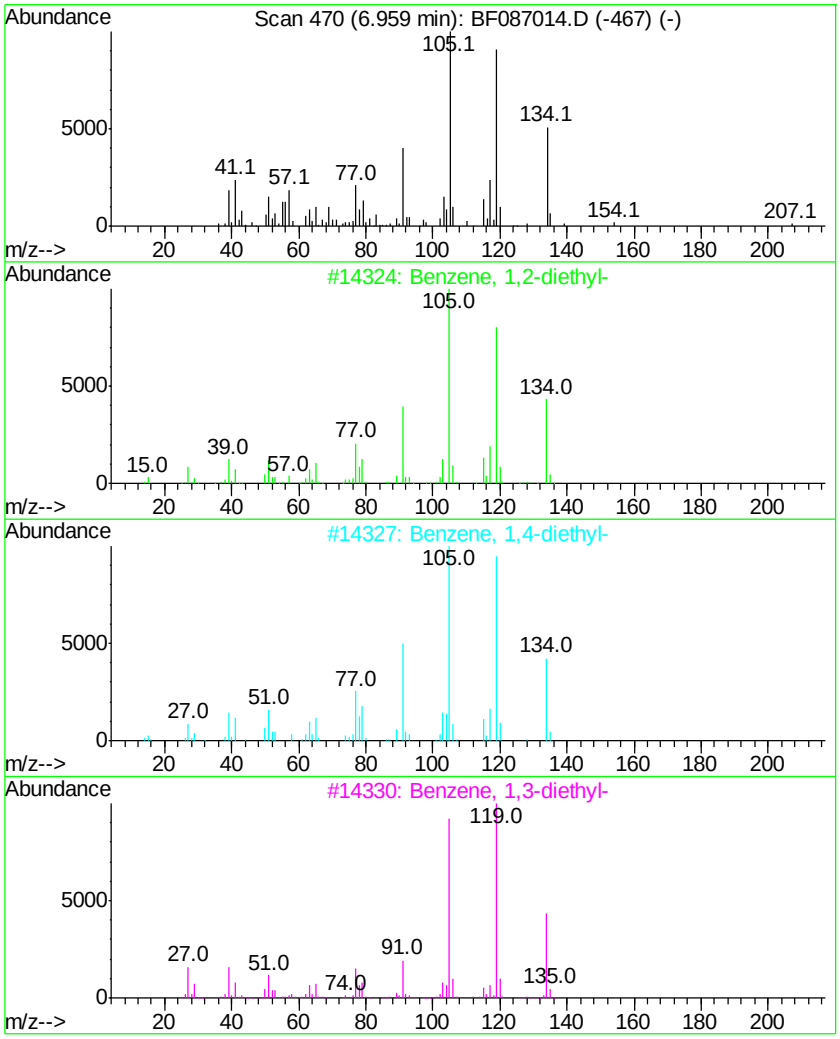
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

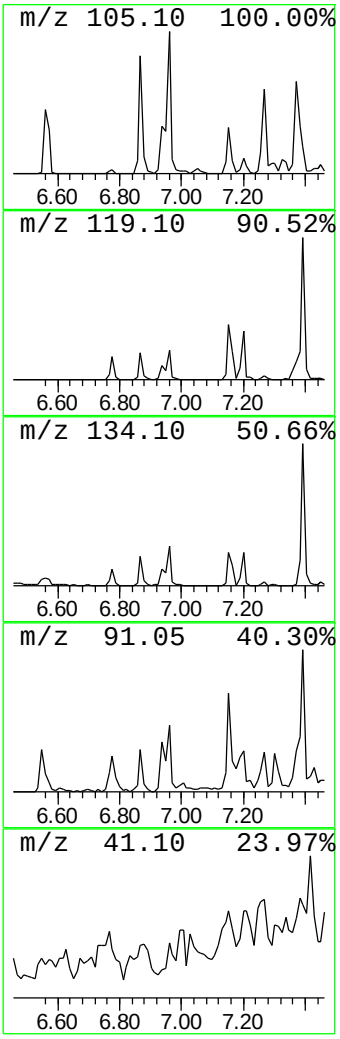
**********

Peak Number 5 Benzene, 1,2-diethyl- Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.96 | 5.16 ng | 244240 | 1,4-Dichlorobenzene-d4 | 6.60 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2-diethyl- | 134 | C10H14 | 000135-01-3 | 98 |
| 2 | Benzene, 1,4-diethyl- | 134 | C10H14 | 000105-05-5 | 93 |
| 3 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 87 |
| 4 | Benzene, 1-ethyl-3,5-dimethyl- | 134 | C10H14 | 000934-74-7 | 87 |
| 5 | Cyclobutene, bis(1-methylethylid... | 134 | C10H14 | 003642-14-6 | 87 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF051316\
Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

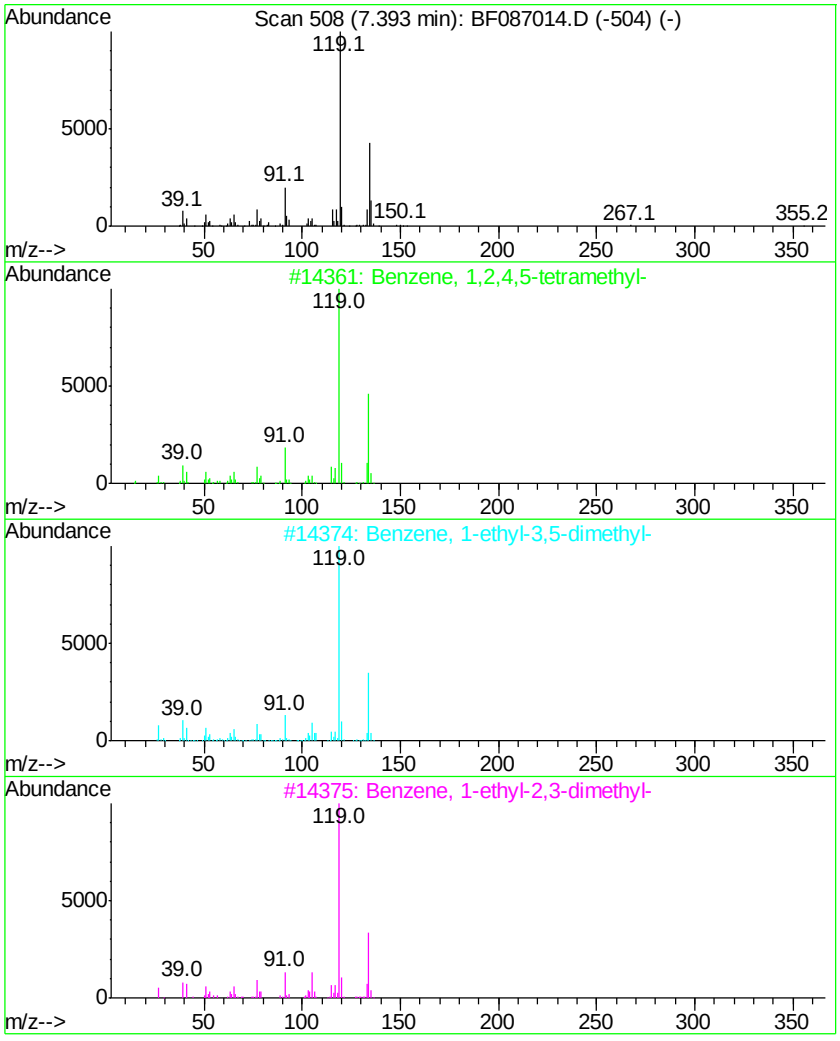
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

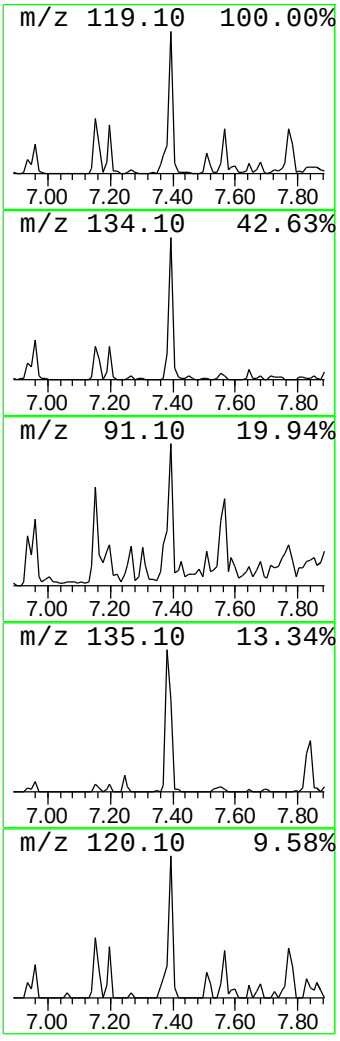
**********

Peak Number 6 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.39 | 6.19 ng | 456211 | Naphthalene-d8 | 7.90 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 93 |
| 2 | Benzene, 1-ethyl-3,5-dimethyl- | 134 | C10H14 | 000934-74-7 | 90 |
| 3 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 90 |
| 4 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 90 |
| 5 | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14 | 000099-87-6 | 90 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF051316\
Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

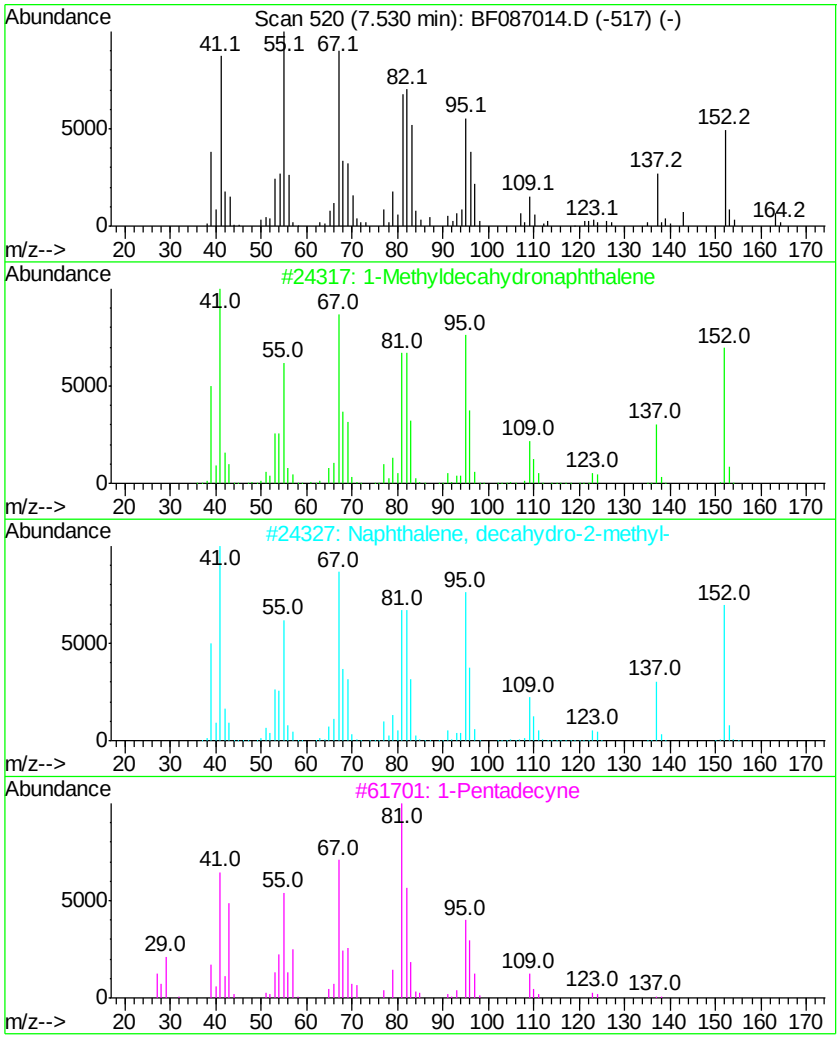
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

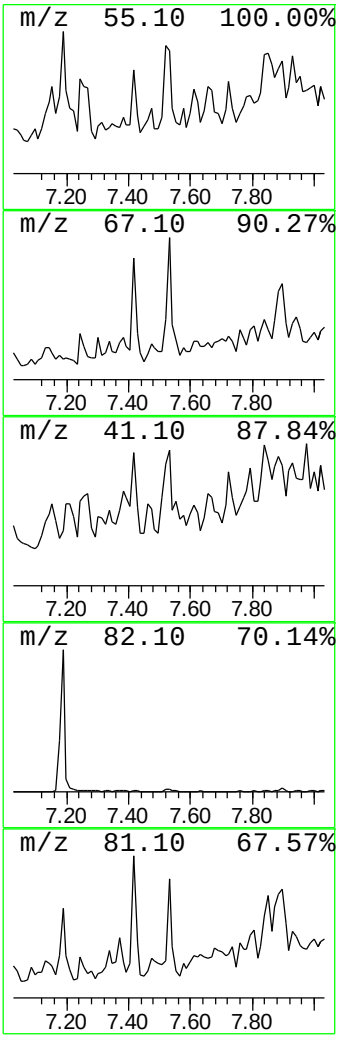
**********

Peak Number 7 1-Methyldecahydronaphthalene Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.53 | 5.25 ng | 386837 | Naphthalene-d8 | 7.90 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Methyldecahydronaphthalene | 152 | C11H20 | 002958-75-0 | 91 |
| 2 | Naphthalene, decahydro-2-methyl- | 152 | C11H20 | 002958-76-1 | 68 |
| 3 | 1-Pentadecyne | 208 | C15H28 | 000765-13-9 | 68 |
| 4 | 1-Hexadecyne | 222 | C16H30 | 000629-74-3 | 64 |
| 5 | Bicyclo[3.1.1]heptane, 2,6,6-tri... | 138 | C10H18 | 004795-86-2 | 58 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF051316\
Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

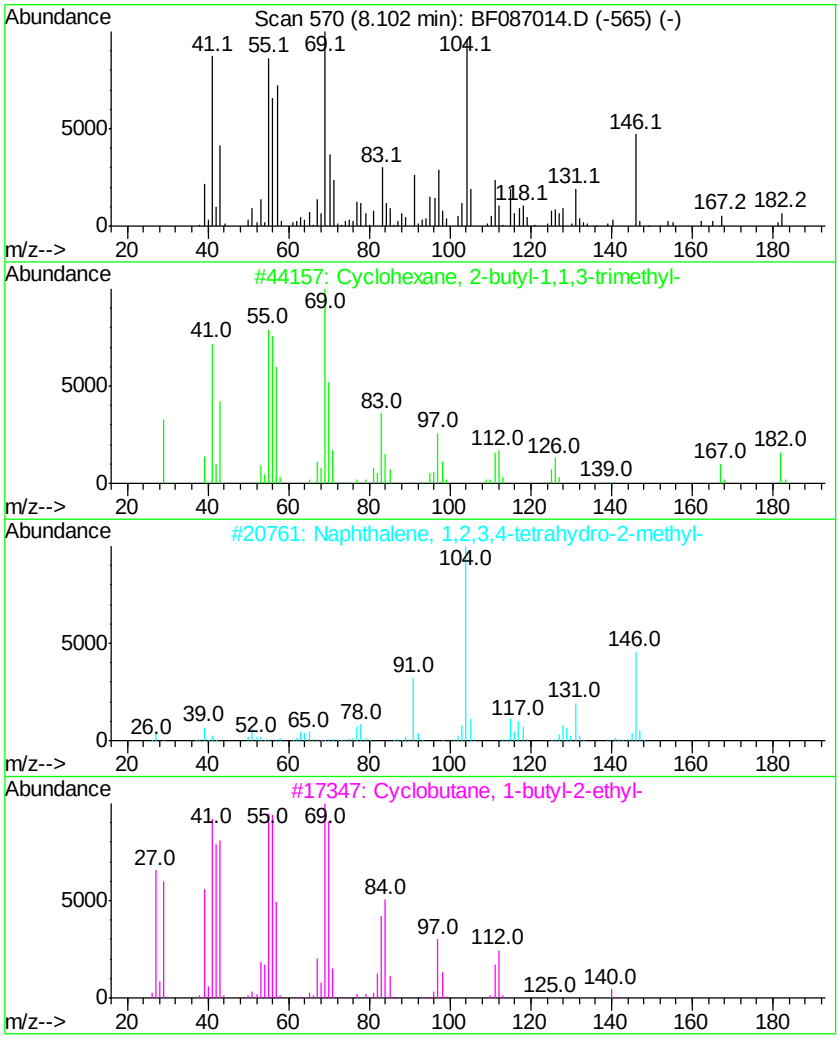
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

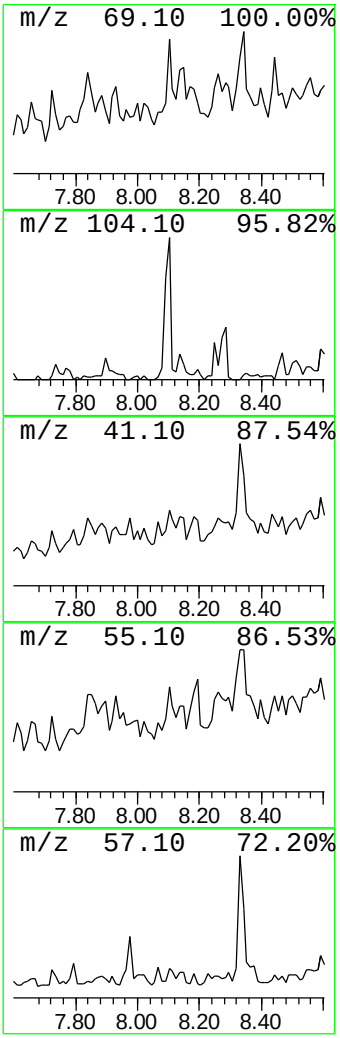
**********

Peak Number 8 Cyclohexane, 2-butyl-1,1,3-... Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.10 | 7.33 ng | 539885 | Naphthalene-d8 | 7.90 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexane, 2-butyl-1,1,3-trime... | 182 | C13H26 | 054676-39-0 | 83 |
| 2 | Naphthalene, 1,2,3,4-tetrahydro-... | 146 | C11H14 | 003877-19-8 | 41 |
| 3 | Cyclobutane, 1-butyl-2-ethyl- | 140 | C10H20 | 1000150-67-3 | 38 |
| 4 | Cyclohexane, 1,1,2-trimethyl- | 126 | C9H18 | 007094-26-0 | 30 |
| 5 | Cyclohexane, 1,2,3-trimethyl- | 126 | C9H18 | 001678-97-3 | 30 |



Library Search Compound Report

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Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.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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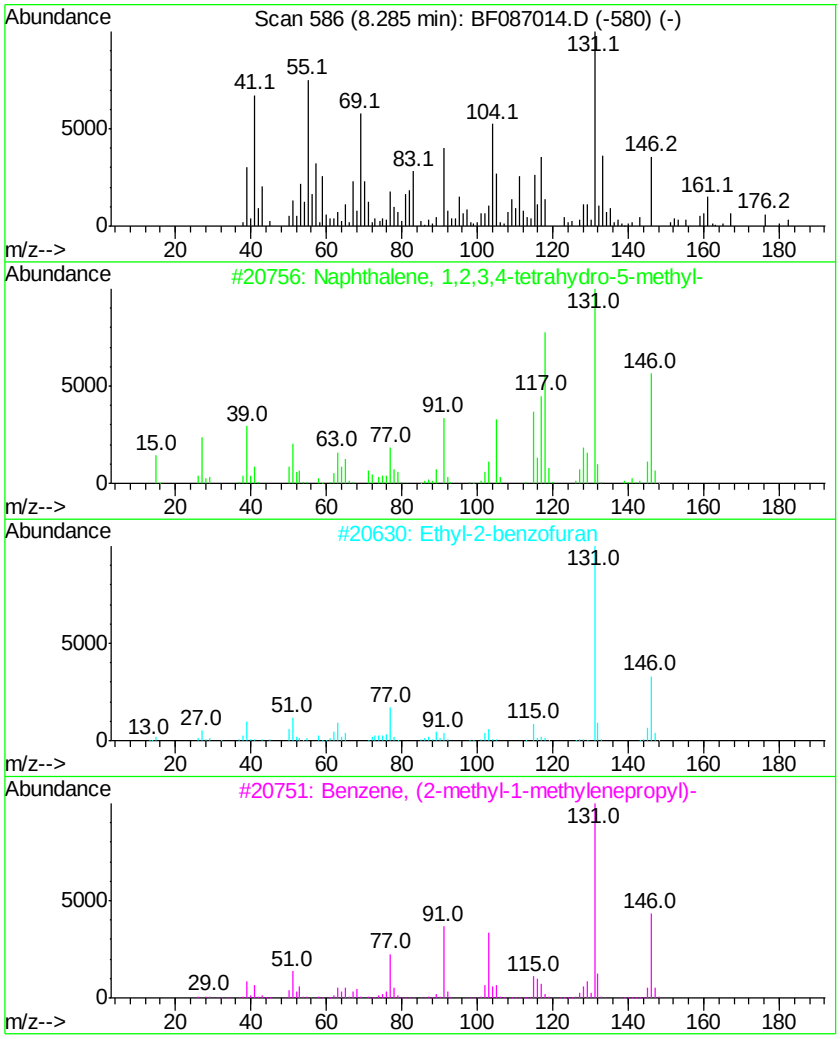
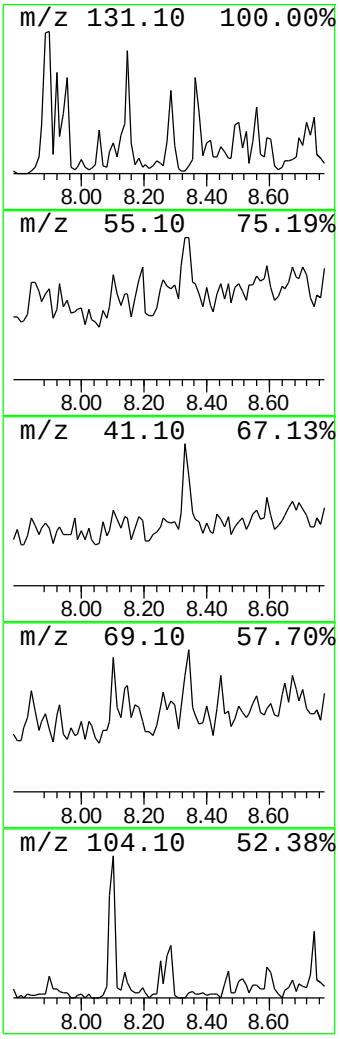
Peak Number 9 Naphthalene, 1,2,3,4-tetrah... Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.28 | 6.45 ng | 475031 | Naphthalene-d8 | 7.90 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,2,3,4-tetrahydro-... | 146 | C11H14 | 002809-64-5 | 55 |
| 2 | Ethyl-2-benzofuran | 146 | C10H10O | 003131-63-3 | 46 |
| 3 | Benzene, (2-methyl-1-methylenepr... | 146 | C11H14 | 017498-71-4 | 45 |
| 4 | Naphthalene, 1,2,3,4-tetrahydro-... | 146 | C11H14 | 001559-81-5 | 43 |
| 5 | Benzene, 1-methyl-3-(1-methyl-2-... | 146 | C11H14 | 052161-57-6 | 43 |



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Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.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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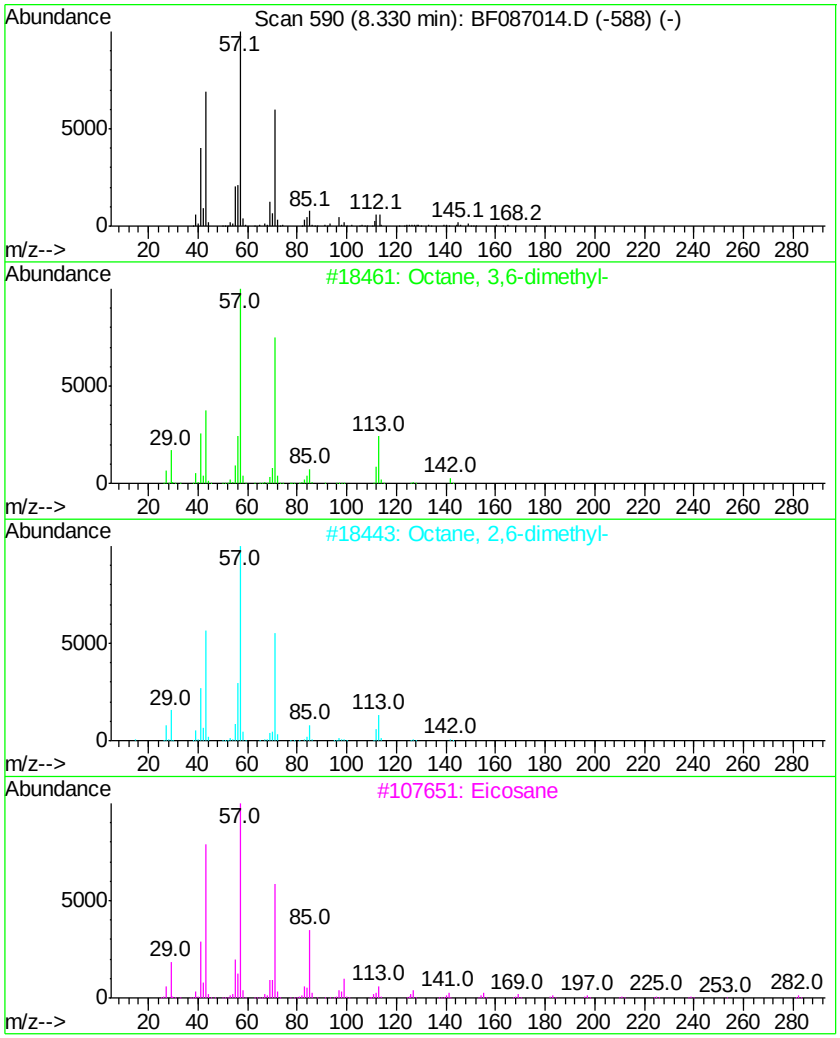
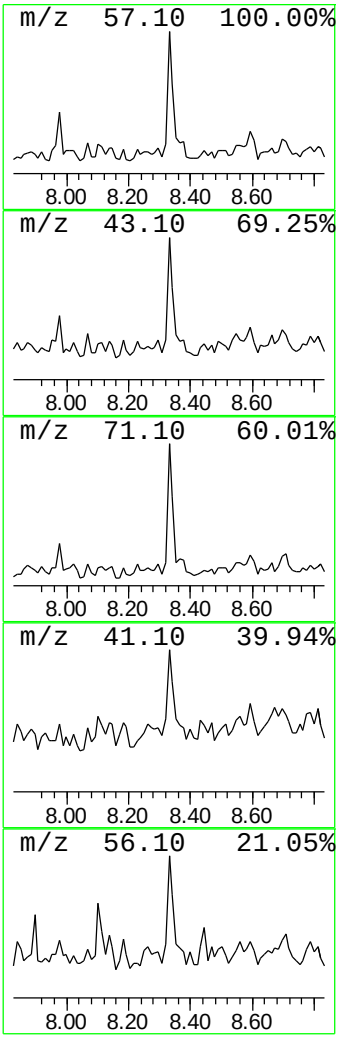
Peak Number 10 Octane, 3,6-dimethyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.33 | 12.01 ng | 885120 | Naphthalene-d8 | 7.90 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Octane, 3,6-dimethyl- | 142 | C10H22 | 015869-94-0 | 64 |
| 2 | Octane, 2,6-dimethyl- | 142 | C10H22 | 002051-30-1 | 59 |
| 3 | Eicosane | 282 | C20H42 | 000112-95-8 | 59 |
| 4 | Hexane, 2,3,4-trimethyl- | 128 | C9H20 | 000921-47-1 | 53 |
| 5 | Octane, 3,4,5,6-tetramethyl- | 170 | C12H26 | 062185-21-1 | 53 |



Library Search Compound Report

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Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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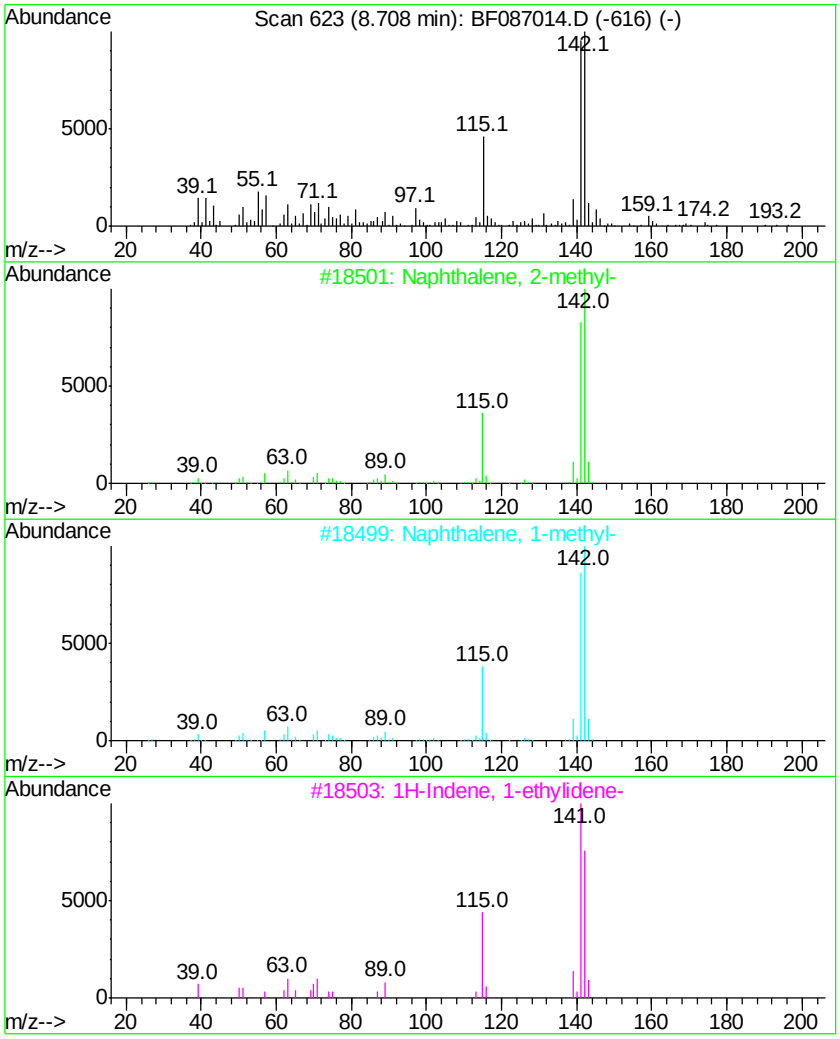
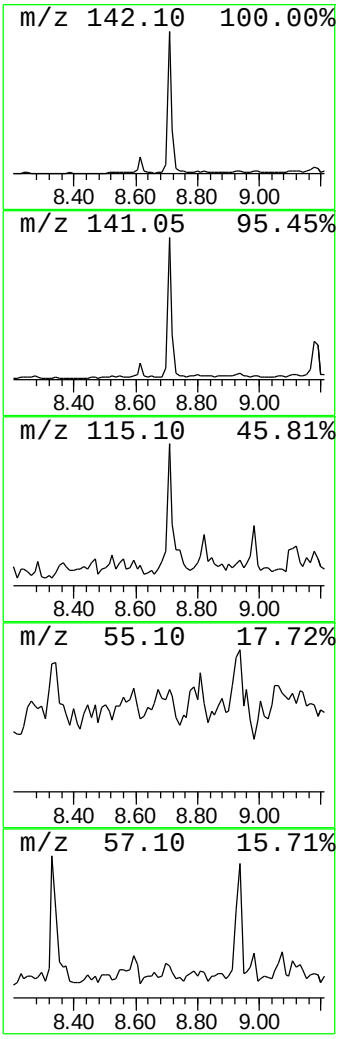
Peak Number 11 Naphthalene, 2-methyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.71 | 13.72 ng | 1010980 | Naphthalene-d8 | 7.90 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2-methyl- | 142 | C11H10 | 000091-57-6 | 95 |
| 2 | Naphthalene, 1-methyl- | 142 | C11H10 | 000090-12-0 | 95 |
| 3 | 1H-Indene, 1-ethylidene- | 142 | C11H10 | 002471-83-2 | 93 |
| 4 | 1,4-Methanonaphthalene, 1,4-dihy... | 142 | C11H10 | 004453-90-1 | 91 |
| 5 | Benzocycloheptatriene | 142 | C11H10 | 000264-09-5 | 91 |



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Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.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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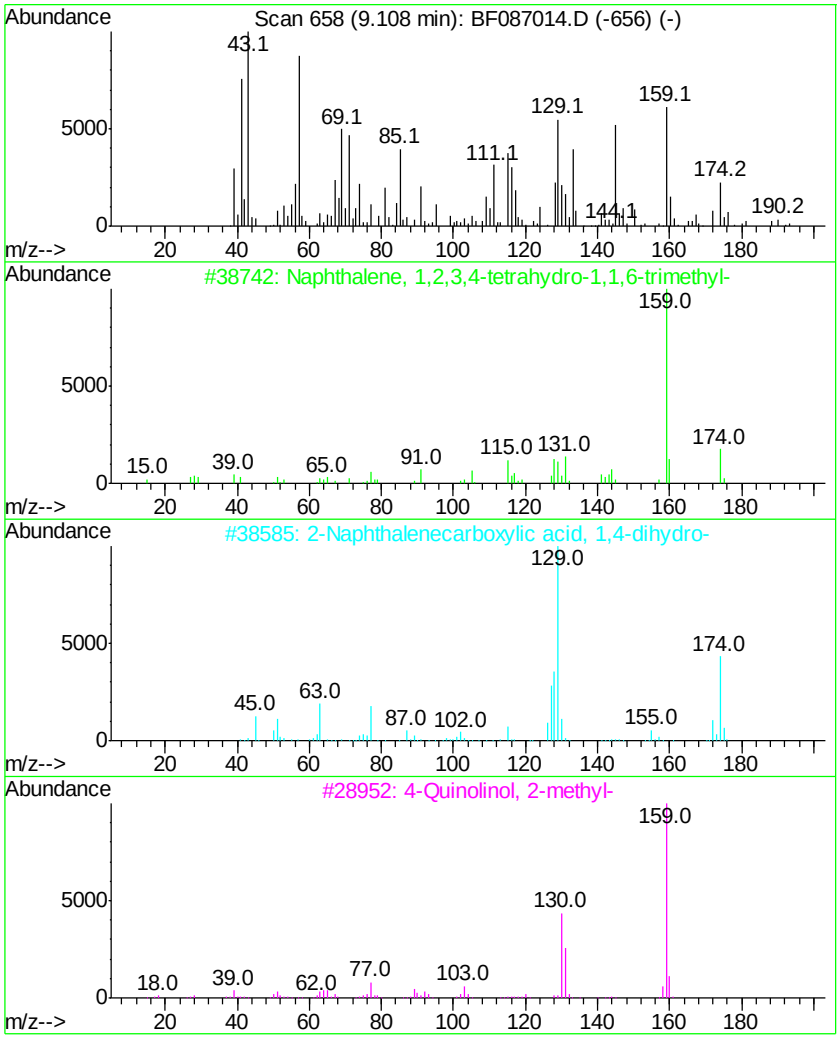
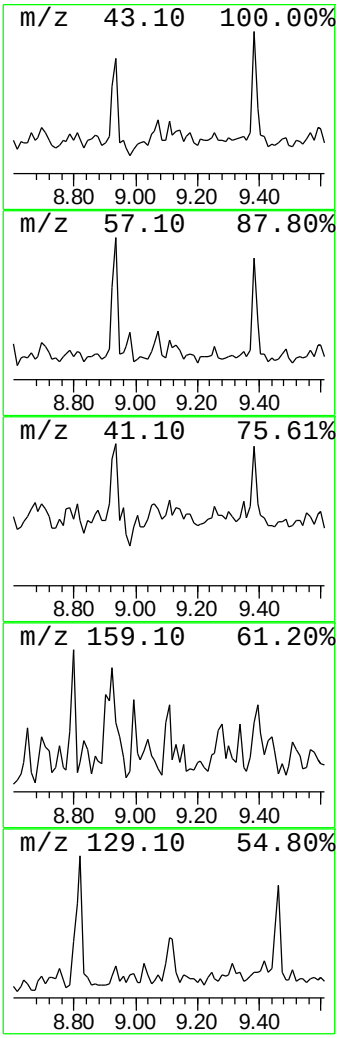
Peak Number 12 unknown9.11 Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.11 | 5.91 ng | 354885 | Acenaphthene-d10 | 9.64 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,2,3,4-tetrahydro-... | 174 | C13H18 | 000475-03-6 | 47 |
| 2 | 2-Naphthalenecarboxylic acid, 1,... | 174 | C11H10O2 | 003299-82-9 | 15 |
| 3 | 4-Quinolinol, 2-methyl- | 159 | C10H9NO | 000607-67-0 | 11 |
| 4 | 1-Methyl-2-formylindole | 159 | C10H9NO | 027421-51-8 | 11 |
| 5 | 2H-Isoindole, 5,6-dimethyl- | 145 | C10H11N | 070187-63-2 | 11 |



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Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.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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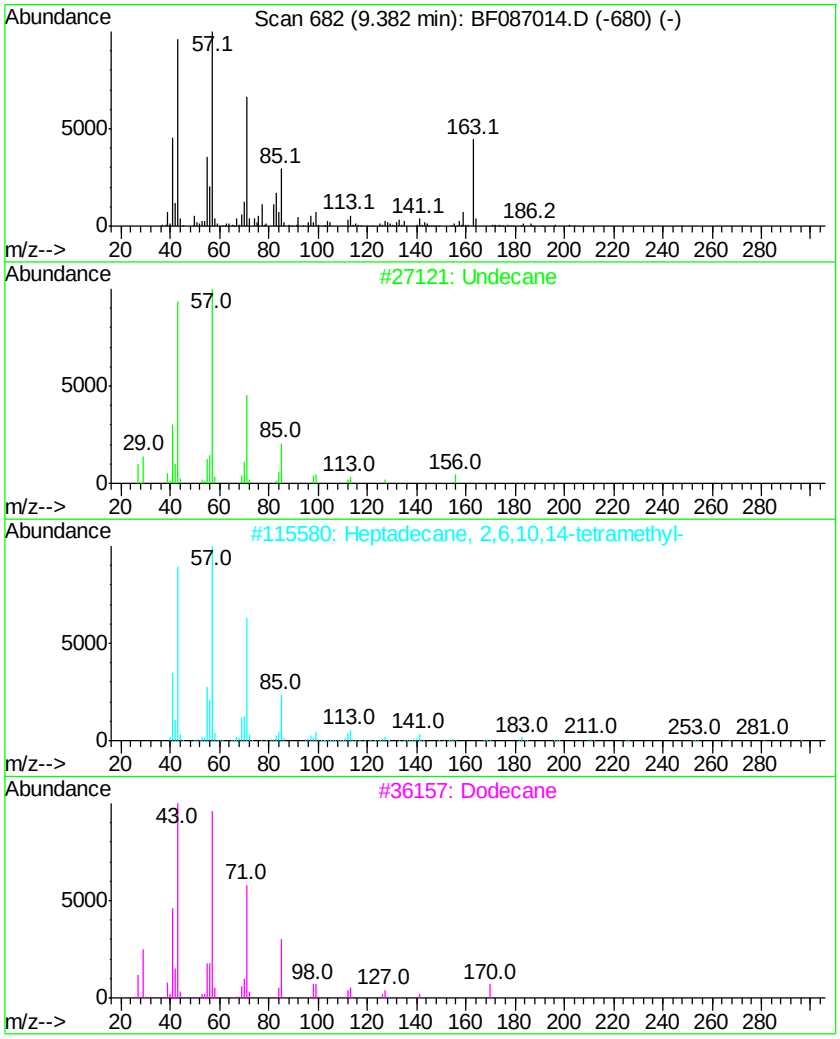
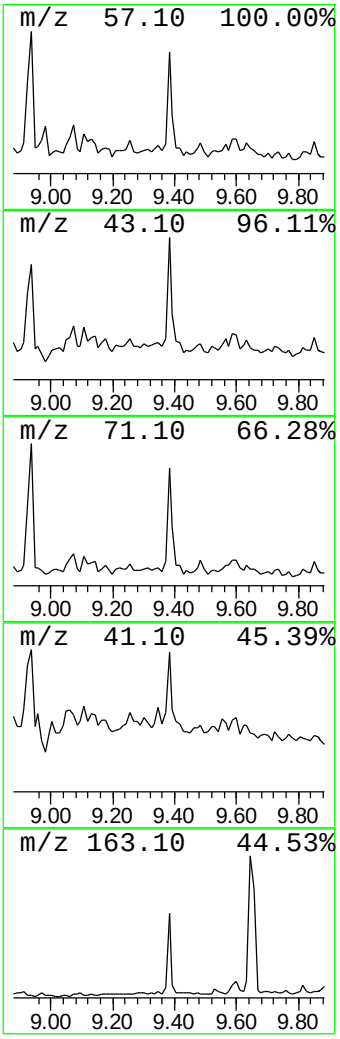
Peak Number 13 Undecane Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.38 | 8.30 ng | 498312 | Acenaphthene-d10 | 9.64 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Undecane | 156 | C11H24 | 001120-21-4 | 52 |
| 2 | Heptadecane, 2,6,10,14-tetramethyl- | 296 | C21H44 | 018344-37-1 | 52 |
| 3 | Dodecane | 170 | C12H26 | 000112-40-3 | 50 |
| 4 | Tridecane | 184 | C13H28 | 000629-50-5 | 50 |
| 5 | Dotriacontane | 451 | C32H66 | 000544-85-4 | 50 |



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Data File : BF087014.D
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Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.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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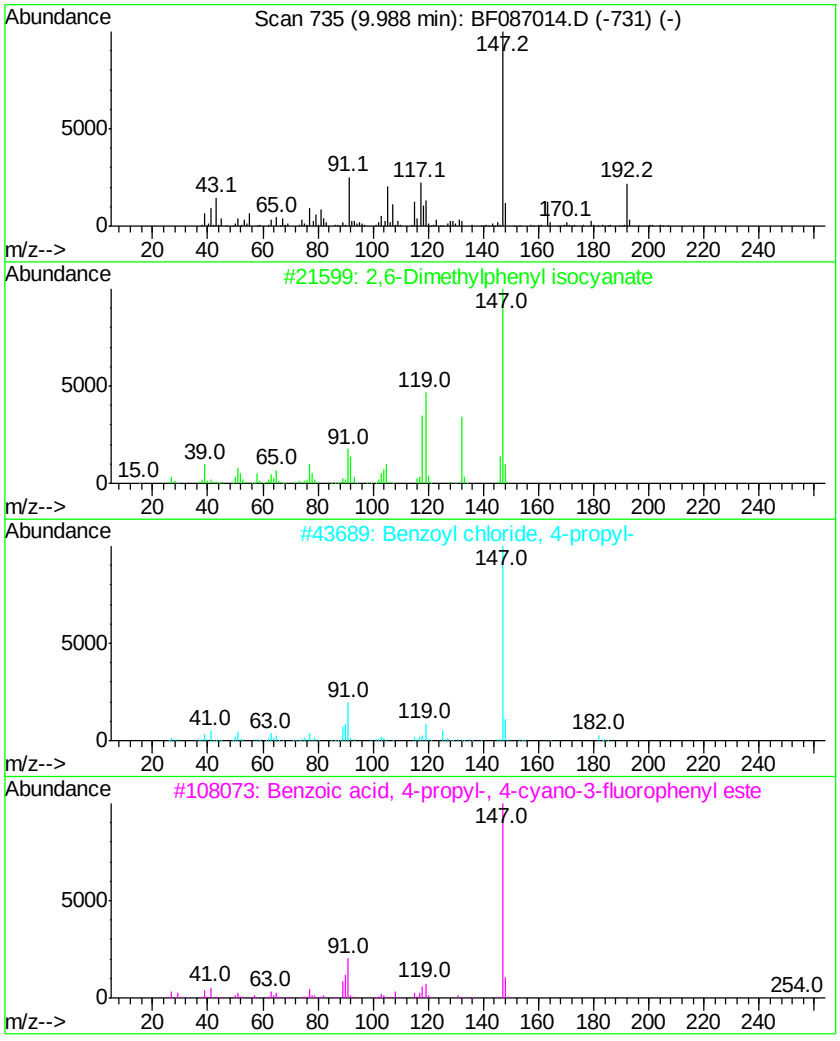
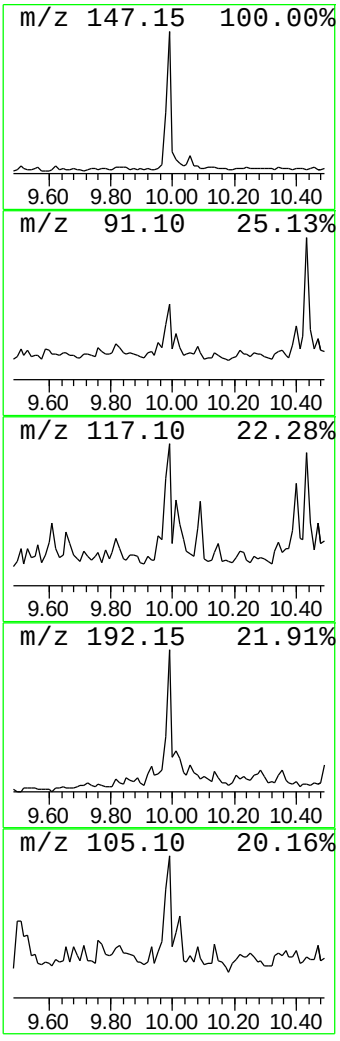
Peak Number 14 unknown9.99 Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.99 | 8.02 ng | 481508 | Acenaphthene-d10 | 9.64 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2,6-Dimethylphenyl isocyanate | 147 | C9H9NO | 028556-81-2 | 43 |
| 2 | Benzoyl chloride, 4-propyl- | 182 | C10H11ClO | 052710-27-7 | 43 |
| 3 | Benzoic acid, 4-propyl-, 4-cyano... | 283 | C17H14FNO2 | 086776-51-4 | 43 |
| 4 | Benzene, 1,2,4-trimethyl-5-(1-me... | 162 | C12H18 | 010222-95-4 | 43 |
| 5 | (Benzo(b)thien-6-yl)acetic acid | 192 | C10H8O2S | 006177-87-3 | 43 |



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Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.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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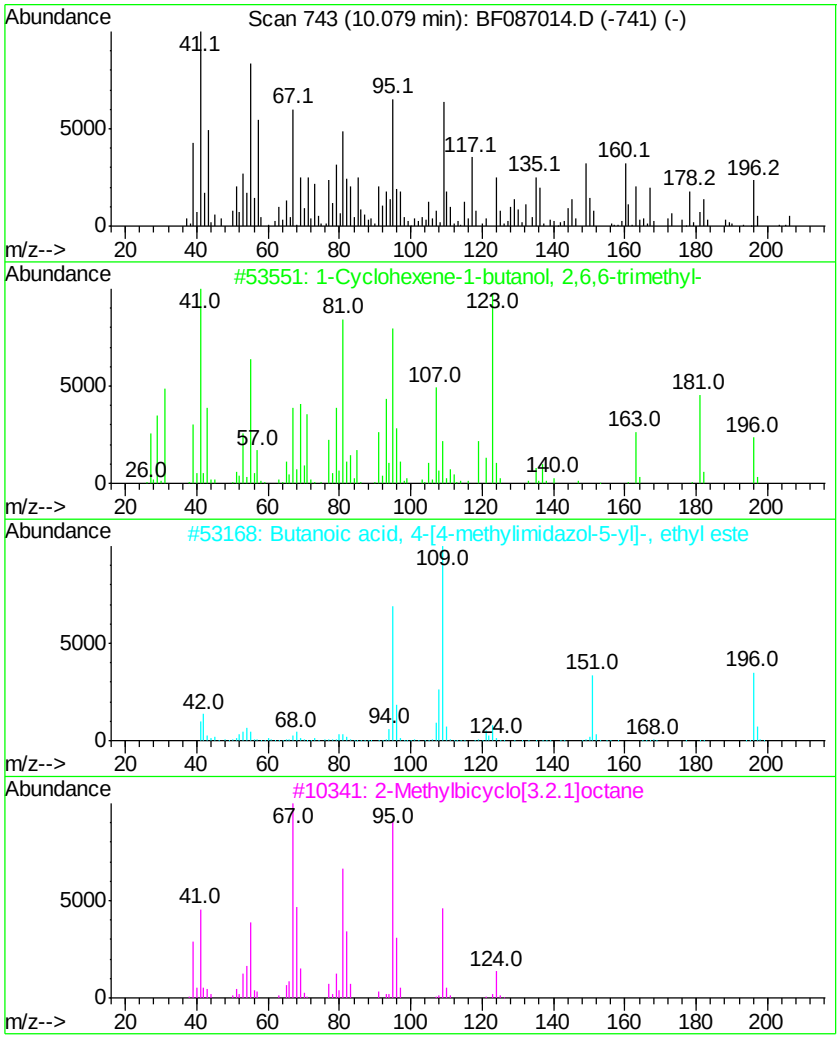
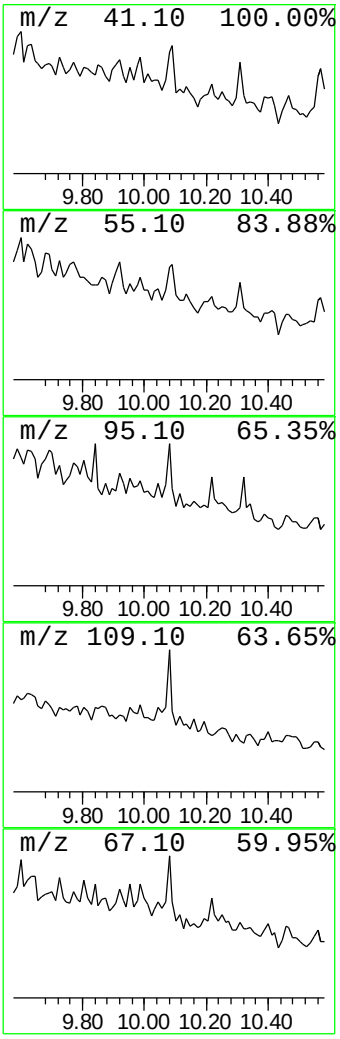
Peak Number 15 unknown10.08 Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.08 | 4.97 ng | 298477 | Acenaphthene-d10 | 9.64 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Cyclohexene-1-butanol, 2,6,6-t... | 196 | C13H24O | 054344-91-1 | 30 |
| 2 | Butanoic acid, 4-[4-methylimidaz... | 196 | C10H16N2O2 | 1000116-74-5 | 30 |
| 3 | 2-Methylbicyclo[3.2.1]octane | 124 | C9H16 | 1000215-28-0 | 27 |
| 4 | 2-Bornanone oxime | 167 | C10H17NO | 013559-66-5 | 25 |
| 5 | 1,10-Dimethyl-2-methylene-trans-... | 178 | C13H22 | 1000103-97-8 | 22 |



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Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.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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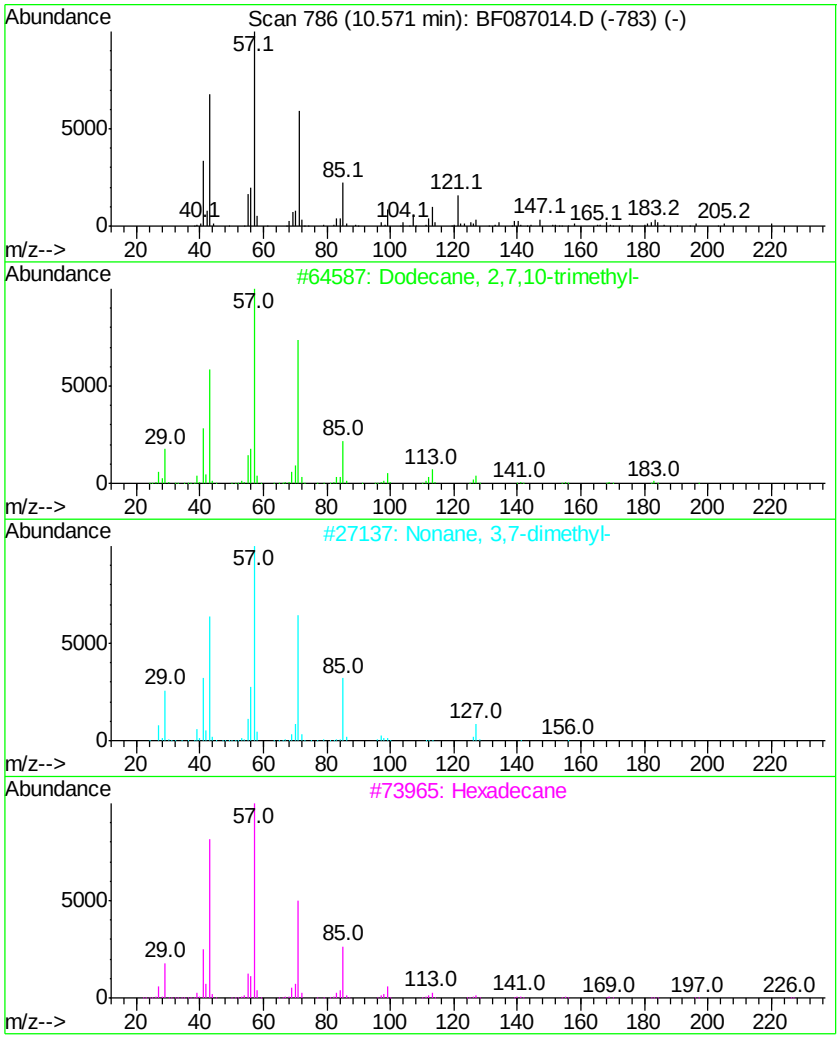
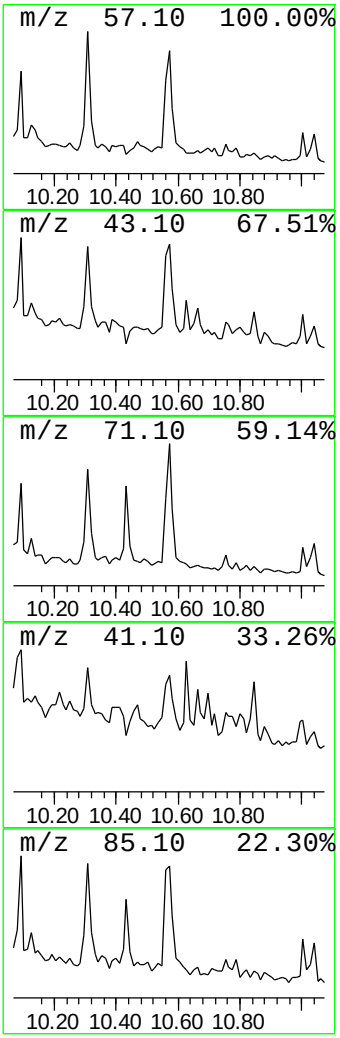
Peak Number 16 Dodecane, 2,7,10-trimethyl- Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.57 | 6.04 ng | 354477 | Phenanthrene-d10 | 11.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dodecane, 2,7,10-trimethyl- | 212 | C15H32 | 074645-98-0 | 72 |
| 2 | Nonane, 3,7-dimethyl- | 156 | C11H24 | 017302-32-8 | 59 |
| 3 | Hexadecane | 226 | C16H34 | 000544-76-3 | 58 |
| 4 | Octane, 3,6-dimethyl- | 142 | C10H22 | 015869-94-0 | 53 |
| 5 | Nonane, 3-methyl- | 142 | C10H22 | 005911-04-6 | 53 |



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Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.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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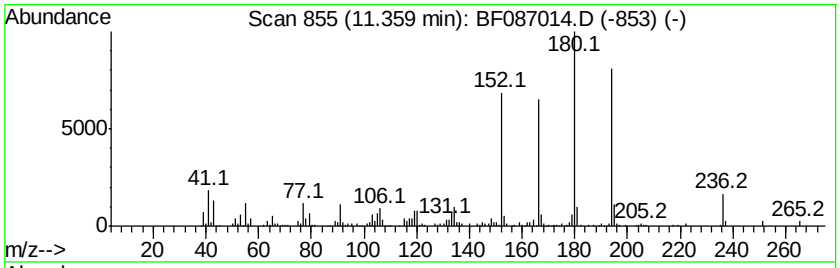
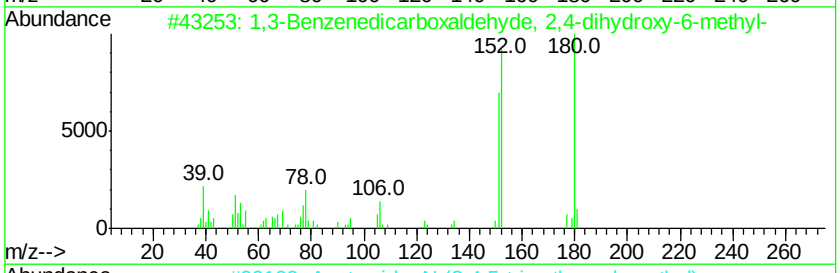
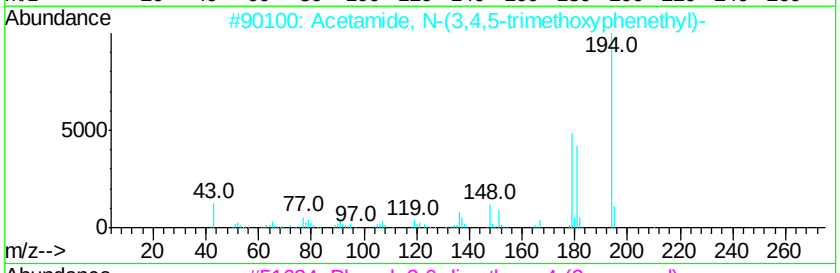
Peak Number 17 unknown11.36 Concentration Rank 6

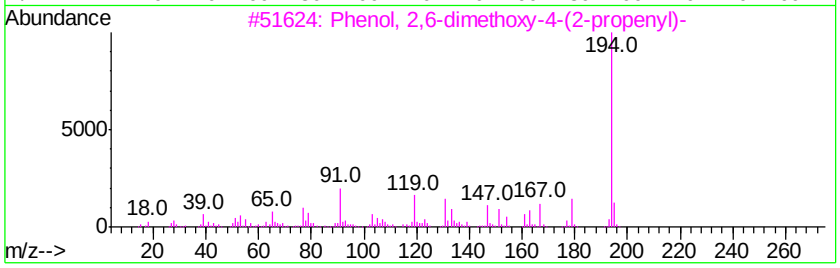
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.36 | 8.74 ng | 513176 | Phenanthrene-d10 | 11.12 |

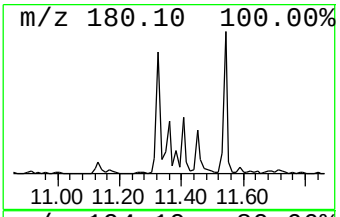
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Benzenedicarboxaldehyde, 2,4... | 180 | C9H8O4 | 010209-57-1 | 35 |
| 2 | Acetamide, N-(3,4,5-trimethoxyph... | 253 | C13H19NO4 | 004593-89-9 | 22 |
| 3 | Phenol, 2,6-dimethoxy-4-(2-prope... | 194 | C11H14O3 | 006627-88-9 | 18 |
| 4 | 2-Hydroxy-4-isopropyl-7-methoxyt... | 194 | C11H14O3 | 089647-85-8 | 18 |
| 5 | 5-[5-Ethyl-2-furyl]hydantoin | 194 | C9H10N2O3 | 1000214-65-8 | 18 |

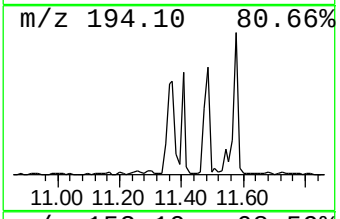


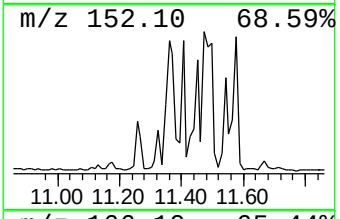



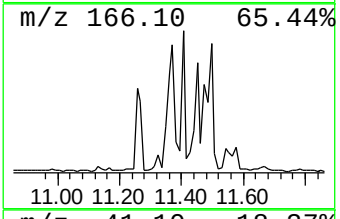



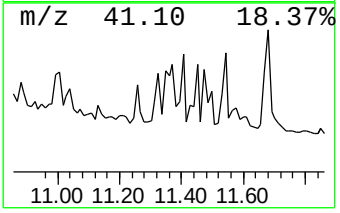



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Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

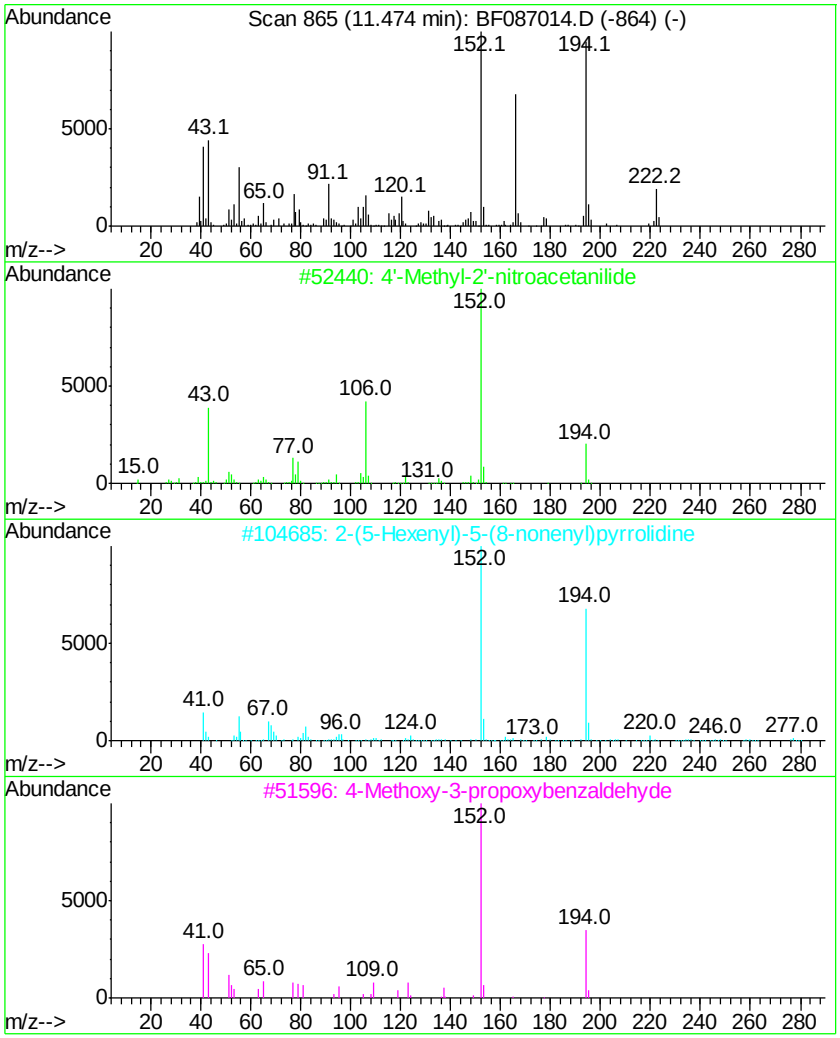
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

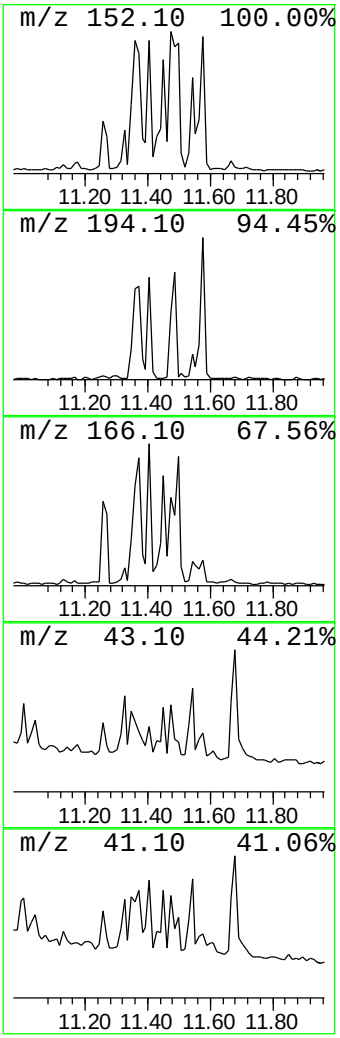
**********

Peak Number 18 4'-Methyl-2'-nitroacetanilide Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.47 | 6.15 ng | 361273 | Phenanthrene-d10 | 11.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4'-Methyl-2'-nitroacetanilide | 194 | C9H10N2O3 | 000612-45-3 | 53 |
| 2 | 2-(5-Hexenyl)-5-(8-nonenyl)pyrro... | 277 | C19H35N | 100594-86-3 | 50 |
| 3 | 4-Methoxy-3-propoxybenzaldehyde | 194 | C11H14O3 | 005922-56-5 | 50 |
| 4 | Phenylamine, N-formyl-4,5-dimeth... | 194 | C9H10N2O3 | 171182-96-0 | 43 |
| 5 | Benzoic acid, 3,5-diamino- | 152 | C7H8N2O2 | 000535-87-5 | 22 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF051316\
Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.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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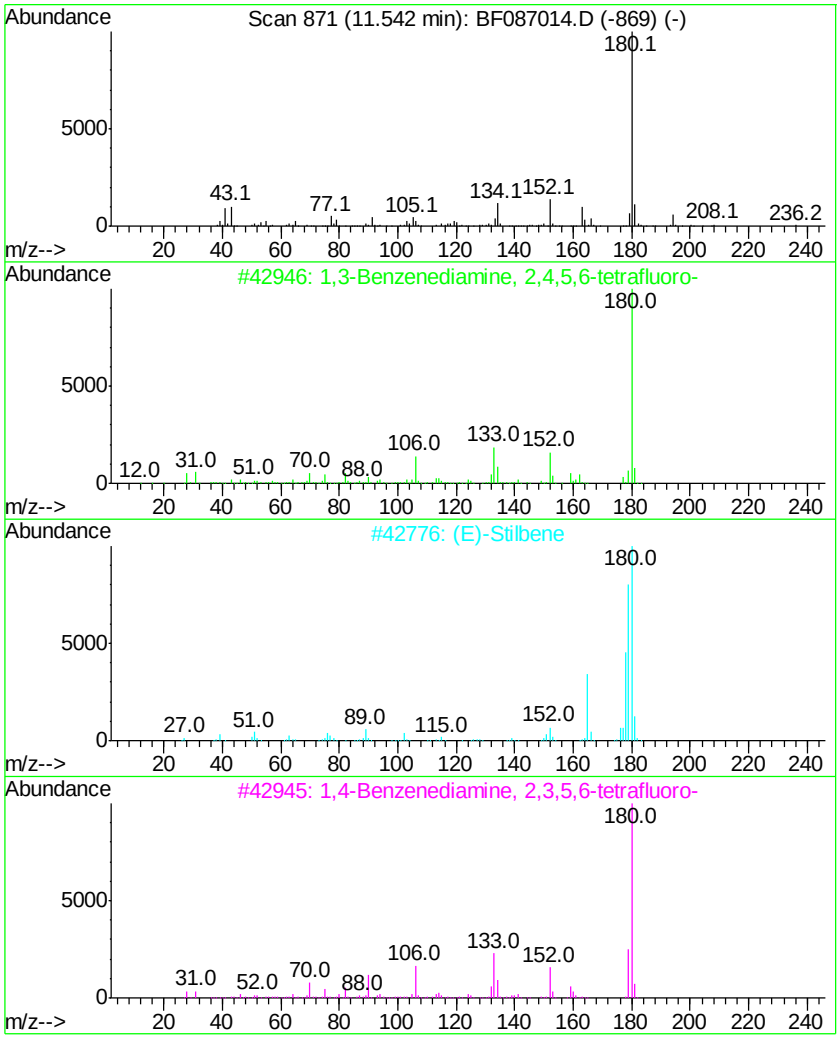
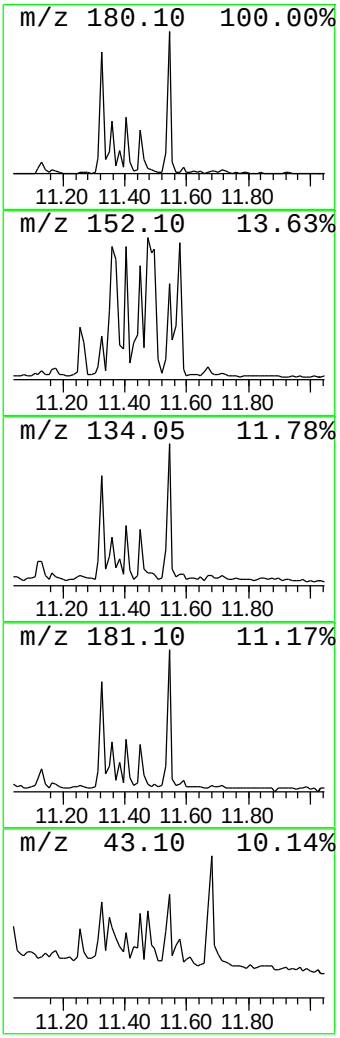
Peak Number 19 1,3-Benzenediamine, 2,4,5,6... Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.54 | 5.36 ng | 315035 | Phenanthrene-d10 | 11.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Benzenediamine, 2,4,5,6-tetr... | 180 | C6H4F4N2 | 001198-63-6 | 64 |
| 2 | (E)-Stilbene | 180 | C14H12 | 000103-30-0 | 53 |
| 3 | 1,4-Benzenediamine, 2,3,5,6-tetr... | 180 | C6H4F4N2 | 001198-64-7 | 53 |
| 4 | Guanidine, (4-nitrophenyl)- | 180 | C7H8N4O2 | 005901-56-4 | 53 |
| 5 | 3-Ethyl-4-hydroxybicyclo[3.3.1]n... | 180 | C11H16O2 | 108162-57-8 | 47 |



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Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.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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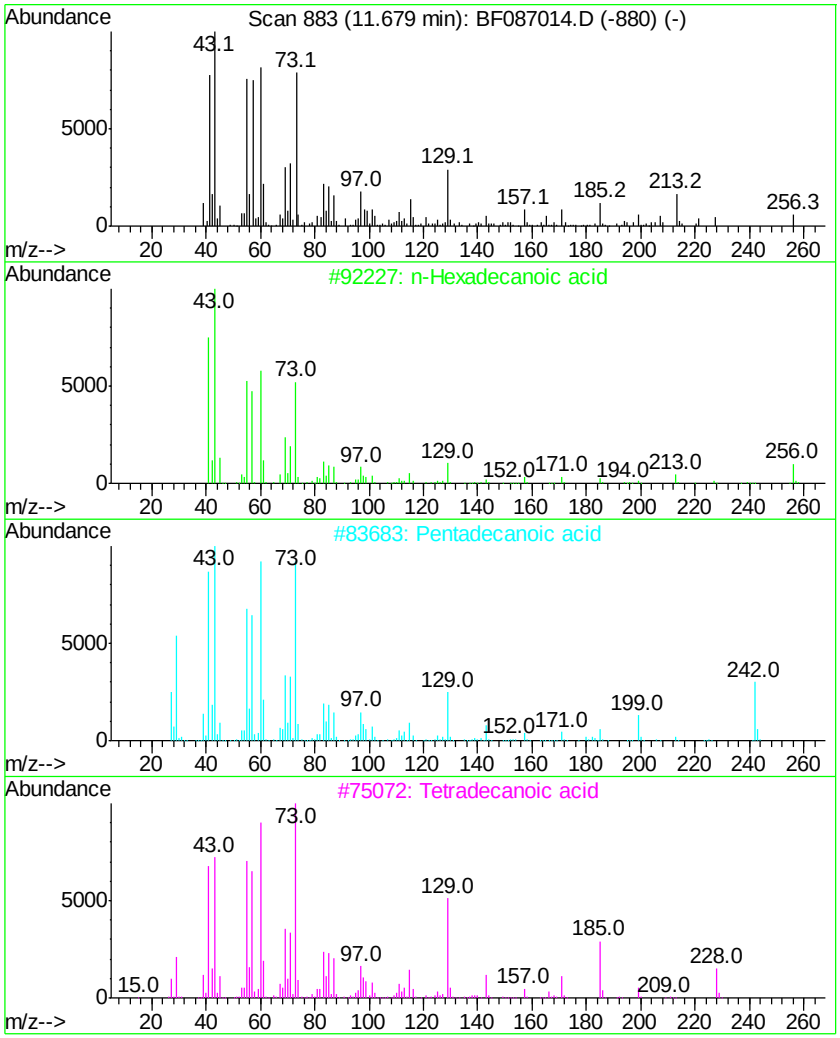
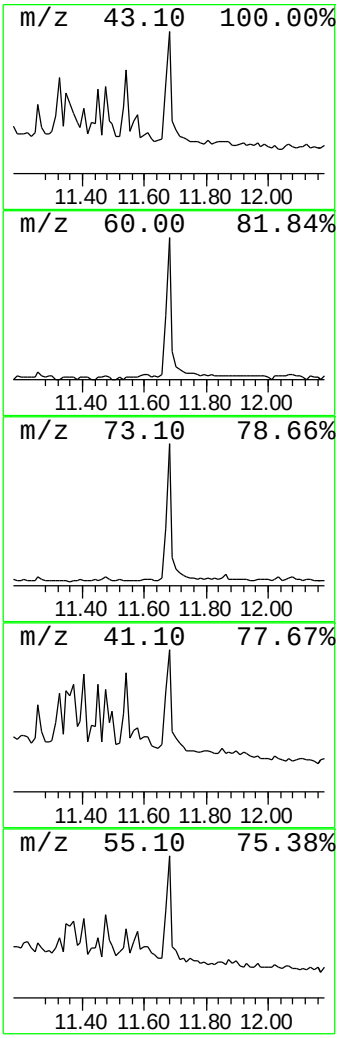
Peak Number 20 n-Hexadecanoic acid Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.68 | 5.23 ng | 307440 | Phenanthrene-d10 | 11.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | n-Hexadecanoic acid | 256 | C16H32O2 | 000057-10-3 | 94 |
| 2 | Pentadecanoic acid | 242 | C15H30O2 | 001002-84-2 | 86 |
| 3 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 86 |
| 4 | Undecanoic acid | 186 | C11H22O2 | 000112-37-8 | 64 |
| 5 | Dodecanoic acid | 200 | C12H24O2 | 000143-07-7 | 59 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF051316\
Data File : BF087014.D
Acq On : 14 May 2016 12:20
Operator : UM/SJ
Sample : H2947-12
Misc :
ALS Vial : 38 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-04

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050916.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 |
| unknown6.39 | 6.39 | 74.7 | ng | 3533030 | 1 | 6.60 | 946030 | 20.0 |
| Benzene, 1,3-diet... | 6.87 | 4.8 | ng | 229018 | 1 | 6.60 | 946030 | 20.0 |
| Benzene, 1,2-diet... | 6.96 | 5.2 | ng | 244240 | 1 | 6.60 | 946030 | 20.0 |
| Benzene, 1,2,4,5-... | 7.39 | 6.2 | ng | 456211 | 2 | 7.90 | 1473410 | 20.0 |
| 1-Methyldecahydro... | 7.53 | 5.3 | ng | 386837 | 2 | 7.90 | 1473410 | 20.0 |
| Cyclohexane, 2-bu... | 8.10 | 7.3 | ng | 539885 | 2 | 7.90 | 1473410 | 20.0 |
| Naphthalene, 1,2,... | 8.28 | 6.5 | ng | 475031 | 2 | 7.90 | 1473410 | 20.0 |
| Octane, 3,6-dimet... | 8.33 | 12.0 | ng | 885120 | 2 | 7.90 | 1473410 | 20.0 |
| Naphthalene, 2-me... | 8.71 | 13.7 | ng | 1010980 | 2 | 7.90 | 1473410 | 20.0 |
| unknown9.11 | 9.11 | 5.9 | ng | 354885 | 3 | 9.64 | 1200830 | 20.0 |
| Undecane | 9.38 | 8.3 | ng | 498312 | 3 | 9.64 | 1200830 | 20.0 |
| unknown9.99 | 9.99 | 8.0 | ng | 481508 | 3 | 9.64 | 1200830 | 20.0 |
| unknown10.08 | 10.08 | 5.0 | ng | 298477 | 3 | 9.64 | 1200830 | 20.0 |
| Dodecane, 2,7,10-... | 10.57 | 6.0 | ng | 354477 | 4 | 11.12 | 1174640 | 20.0 |
| unknown11.36 | 11.36 | 8.7 | ng | 513176 | 4 | 11.12 | 1174640 | 20.0 |
| 4'-Methyl-2'-nitr... | 11.47 | 6.2 | ng | 361273 | 4 | 11.12 | 1174640 | 20.0 |
| 1,3-Benzenediamin... | 11.54 | 5.4 | ng | 315035 | 4 | 11.12 | 1174640 | 20.0 |
| n-Hexadecanoic acid | 11.68 | 5.2 | ng | 307440 | 4 | 11.12 | 1174640 | 20.0 |