LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

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

Signal : TIC

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.076 | 65 | 69 | 80 | rVB | 447612 | 794874 | 27.07% | 2.196% |
| 2 | 3.624 | 113 | 117 | 123 | rBV | 359023 | 615316 | 20.95% | 1.700% |
| 3 | 3.750 | 125 | 128 | 133 | rVB | 19507 | 36381 | 1.24% | 0.101% |
| 4 | 4.344 | 177 | 180 | 182 | rBV | 36439 | 59891 | 2.04% | 0.165% |
| 5 | 4.630 | 202 | 205 | 210 | rVB | 83103 | 123724 | 4.21% | 0.342% |
| 6 | 4.916 | 228 | 230 | 234 | rBV2 | 20258 | 32391 | 1.10% | 0.089% |
| 7 | 5.007 | 234 | 238 | 243 | rBV | 693170 | 1066201 | 36.31% | 2.946% |
| 8 | 5.384 | 267 | 271 | 272 | rBV | 32041 | 36229 | 1.23% | 0.100% |
| 9 | 5.430 | 272 | 275 | 277 | rVV | 2360745 | 2842465 | 96.79% | 7.854% |
| 10 | 5.487 | 279 | 280 | 282 | rVB | 22603 | 31164 | 1.06% | 0.086% |
| 11 | 5.670 | 293 | 296 | 298 | rVB | 356594 | 505603 | 17.22% | 1.397% |
| 12 | 5.830 | 307 | 310 | 312 | rBV | 93782 | 104060 | 3.54% | 0.288% |
| 13 | 6.059 | 327 | 330 | 334 | rVB4 | 14646 | 30093 | 1.02% | 0.083% |
| 14 | 6.459 | 363 | 365 | 368 | rBV | 1883406 | 2870369 | 97.74% | 7.931% |
| 15 | 6.596 | 374 | 377 | 379 | rBV | 2790019 | 2936685 | 100.00% | 8.114% |
| 16 | 6.653 | 379 | 382 | 385 | rVB | 24833 | 48081 | 1.64% | 0.133% |
| 17 | 6.825 | 395 | 397 | 399 | rBV | 786332 | 692578 | 23.58% | 1.914% |
| 18 | 6.882 | 400 | 402 | 406 | rBV2 | 18097 | 38221 | 1.30% | 0.106% |
| 19 | 6.985 | 408 | 411 | 413 | rBV | 2115818 | 2287997 | 77.91% | 6.322% |
| 20 | 7.099 | 419 | 421 | 423 | rVB2 | 28147 | 36513 | 1.24% | 0.101% |
| 21 | 7.213 | 430 | 431 | 435 | rBV3 | 21987 | 44558 | 1.52% | 0.123% |
| 22 | 7.396 | 444 | 447 | 449 | rBV | 1705667 | 1987143 | 67.67% | 5.490% |
| 23 | 7.487 | 451 | 455 | 457 | rBV3 | 19242 | 40481 | 1.38% | 0.112% |
| 24 | 7.750 | 472 | 478 | 480 | rBV5 | 12762 | 34290 | 1.17% | 0.095% |
| 25 | 7.853 | 486 | 487 | 491 | rVB3 | 27141 | 36933 | 1.26% | 0.102% |
| 26 | 8.105 | 507 | 509 | 513 | rBV | 805074 | 965474 | 32.88% | 2.668% |
| 27 | 8.173 | 513 | 515 | 519 | rVB2 | 35994 | 49792 | 1.70% | 0.138% |
| 28 | 8.402 | 531 | 535 | 538 | rBV4 | 31627 | 73746 | 2.51% | 0.204% |
| 29 | 8.539 | 544 | 547 | 549 | rBV2 | 34556 | 65216 | 2.22% | 0.180% |
| 30 | 8.699 | 559 | 561 | 563 | rBV2 | 34252 | 52443 | 1.79% | 0.145% |
| 31 | 8.825 | 571 | 572 | 573 | rVB | 115902 | 79509 | 2.71% | 0.220% |
| 32 | 8.916 | 578 | 580 | 585 | rVB4 | 45863 | 89074 | 3.03% | 0.246% |
| 33 | 8.985 | 585 | 586 | 588 | rBV2 | 31462 | 46317 | 1.58% | 0.128% |
| 34 | 9.065 | 591 | 593 | 595 | rBV3 | 22421 | 36118 | 1.23% | 0.100% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

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

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 9.133 | 598 | 599 | 601 | rVB2 | 41671 | 33235 | 1.13% | 0.092% |
| 36 | 9.190 | 601 | 604 | 606 | rBV | 2936813 | 2906558 | 98.97% | 8.031% |
| 37 | 9.270 | 608 | 611 | 613 | rBV | 105762 | 164167 | 5.59% | 0.454% |
| 38 | 9.385 | 619 | 621 | 623 | rVB | 37968 | 38235 | 1.30% | 0.106% |
| 39 | 9.453 | 624 | 627 | 629 | rBV2 | 67147 | 104124 | 3.55% | 0.288% |
| 40 | 9.522 | 629 | 633 | 636 | rBV2 | 121779 | 245423 | 8.36% | 0.678% |
| 41 | 9.579 | 636 | 638 | 640 | rVB | 554775 | 581327 | 19.80% | 1.606% |
| 42 | 9.613 | 640 | 641 | 642 | rBV | 40197 | 42056 | 1.43% | 0.116% |
| 43 | 9.728 | 648 | 651 | 653 | rBV2 | 101742 | 151921 | 5.17% | 0.420% |
| 44 | 9.773 | 653 | 655 | 656 | rVV | 114602 | 106297 | 3.62% | 0.294% |
| 45 | 9.796 | 656 | 657 | 659 | rVV | 154340 | 136492 | 4.65% | 0.377% |
| 46 | 9.865 | 659 | 663 | 665 | rVV | 973538 | 1027457 | 34.99% | 2.839% |
| 47 | 9.899 | 665 | 666 | 668 | rVV2 | 74537 | 73203 | 2.49% | 0.202% |
| 48 | 9.968 | 671 | 672 | 674 | rVB | 72716 | 70169 | 2.39% | 0.194% |
| 49 | 10.025 | 674 | 677 | 679 | rBV3 | 61176 | 141188 | 4.81% | 0.390% |
| 50 | 10.071 | 679 | 681 | 683 | rVB | 60849 | 91235 | 3.11% | 0.252% |
| 51 | 10.128 | 683 | 686 | 689 | rVB4 | 52872 | 123803 | 4.22% | 0.342% |
| 52 | 10.185 | 689 | 691 | 692 | rBV2 | 54440 | 99464 | 3.39% | 0.275% |
| 53 | 10.265 | 697 | 698 | 699 | rBV | 80215 | 82490 | 2.81% | 0.228% |
| 54 | 10.299 | 699 | 701 | 702 | rVB | 129009 | 138665 | 4.72% | 0.383% |
| 55 | 10.402 | 708 | 710 | 714 | rBV4 | 68852 | 148608 | 5.06% | 0.411% |
| 56 | 10.516 | 717 | 720 | 723 | rBV | 87066 | 144939 | 4.94% | 0.400% |
| 57 | 10.562 | 723 | 724 | 726 | rVB | 56685 | 54986 | 1.87% | 0.152% |
| 58 | 10.653 | 729 | 732 | 734 | rBV | 1596260 | 1630520 | 55.52% | 4.505% |
| 59 | 10.768 | 741 | 742 | 746 | rVB | 218462 | 292824 | 9.97% | 0.809% |
| 60 | 10.836 | 746 | 748 | 749 | rBV2 | 30343 | 57307 | 1.95% | 0.158% |
| 61 | 10.985 | 759 | 761 | 763 | rVB2 | 58966 | 64833 | 2.21% | 0.179% |
| 62 | 11.065 | 767 | 768 | 769 | rBV | 57505 | 45557 | 1.55% | 0.126% |
| 63 | 11.156 | 774 | 776 | 777 | rBV2 | 44397 | 50337 | 1.71% | 0.139% |
| 64 | 11.214 | 779 | 781 | 782 | rVV | 86683 | 78512 | 2.67% | 0.217% |
| 65 | 11.248 | 782 | 784 | 786 | rVB2 | 76107 | 105206 | 3.58% | 0.291% |
| 66 | 11.339 | 790 | 792 | 796 | rBV | 504892 | 943842 | 32.14% | 2.608% |
| 67 | 11.419 | 798 | 799 | 801 | rVB | 65619 | 49739 | 1.69% | 0.137% |
| 68 | 11.454 | 801 | 802 | 804 | rBV2 | 46803 | 63145 | 2.15% | 0.174% |
| 69 | 11.579 | 811 | 813 | 816 | rBV2 | 55076 | 100777 | 3.43% | 0.278% |
| 70 | 11.842 | 834 | 836 | 837 | rBV | 81977 | 93595 | 3.19% | 0.259% |
| 71 | 11.876 | 837 | 839 | 841 | rVV | 260363 | 247380 | 8.42% | 0.684% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

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

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 11.956 | 844 | 846 | 847 | rVV | 93762 | 88821 | 3.02% | 0.245% |
| 73 | 12.139 | 860 | 862 | 863 | rBV | 64670 | 63595 | 2.17% | 0.176% |
| 74 | 12.322 | 877 | 878 | 883 | rVB | 67457 | 96874 | 3.30% | 0.268% |
| 75 | 12.402 | 883 | 885 | 886 | rBV | 85009 | 103696 | 3.53% | 0.287% |
| 76 | 12.562 | 896 | 899 | 901 | rBV | 275371 | 378494 | 12.89% | 1.046% |
| 77 | 12.654 | 905 | 907 | 908 | rBV | 63208 | 80838 | 2.75% | 0.223% |
| 78 | 12.779 | 916 | 918 | 922 | rVB | 299472 | 379470 | 12.92% | 1.048% |
| 79 | 12.928 | 928 | 931 | 933 | rBV | 1721254 | 1550732 | 52.81% | 4.285% |
| 80 | 13.831 | 1008 | 1010 | 1012 | rBV | 245902 | 277395 | 9.45% | 0.766% |
| 81 | 13.980 | 1020 | 1023 | 1028 | rBV2 | 676896 | 1078417 | 36.72% | 2.980% |
| 82 | 14.997 | 1110 | 1112 | 1116 | rBV | 266581 | 445242 | 15.16% | 1.230% |
| 83 | 15.351 | 1141 | 1143 | 1145 | rVV2 | 182582 | 250941 | 8.55% | 0.693% |
| 84 | 15.408 | 1145 | 1148 | 1157 | rVB | 500005 | 1003620 | 34.18% | 2.773% |
| 85 | 16.060 | 1203 | 1205 | 1212 | rVB | 258071 | 586170 | 19.96% | 1.620% |
| 86 | 16.471 | 1238 | 1241 | 1246 | rVB | 200568 | 488643 | 16.64% | 1.350% |

Sum of corrected areas: 36192494

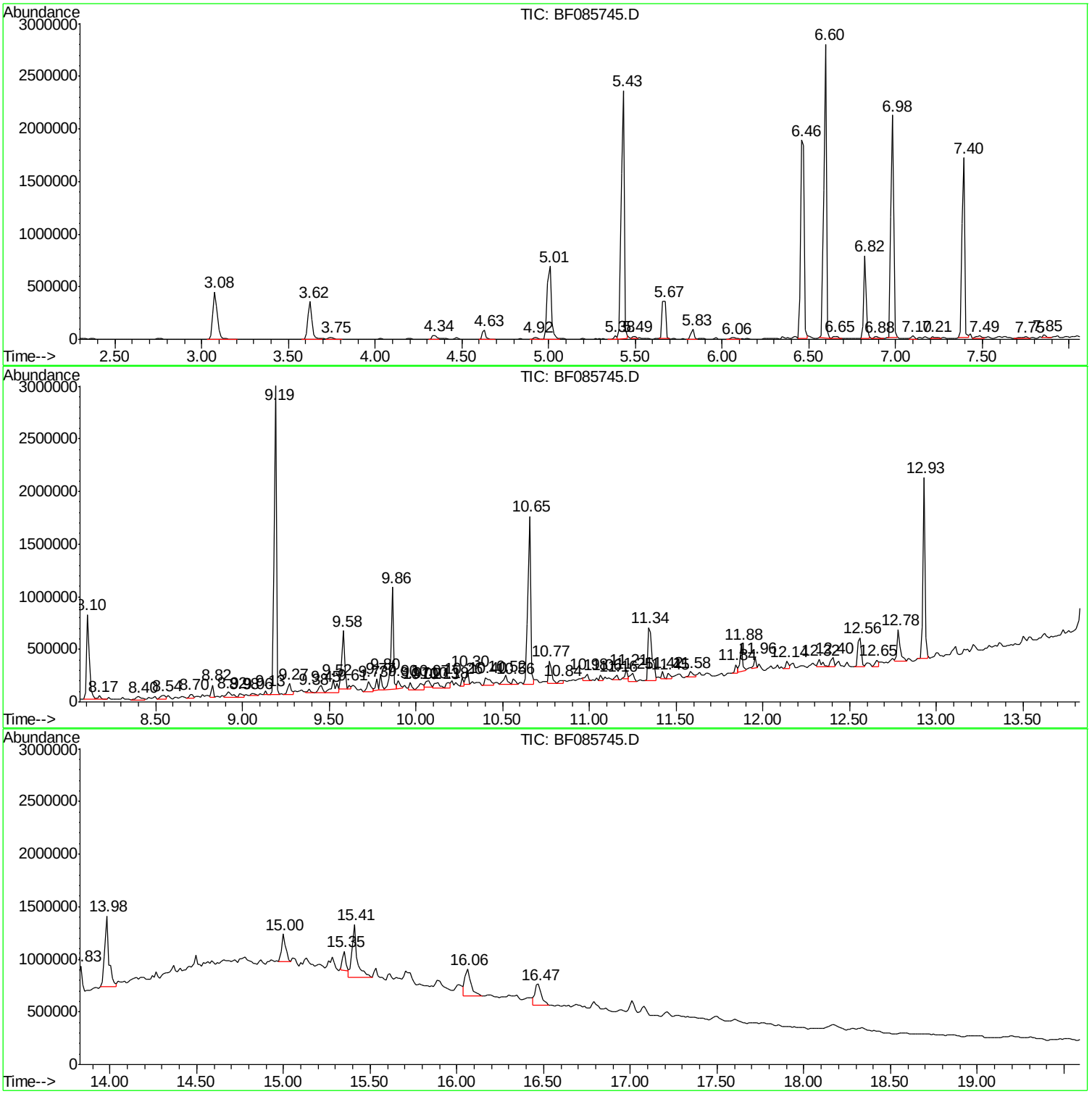
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
GW-01(4-5)

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

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



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

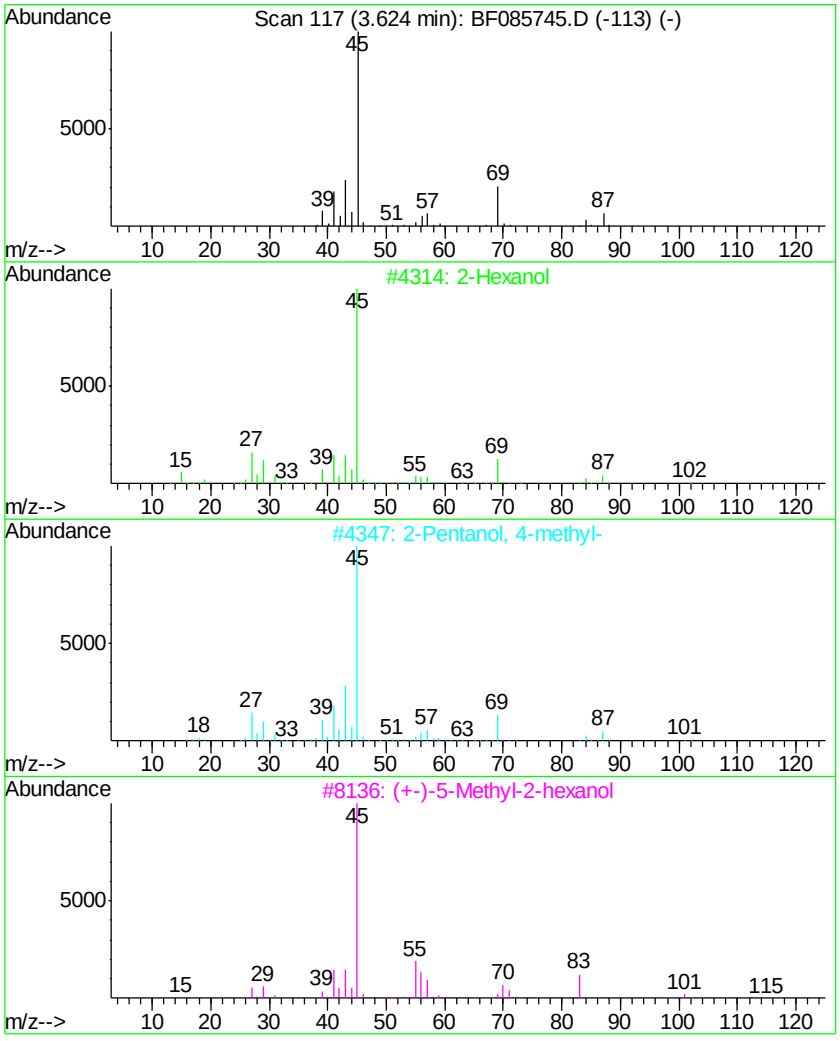
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

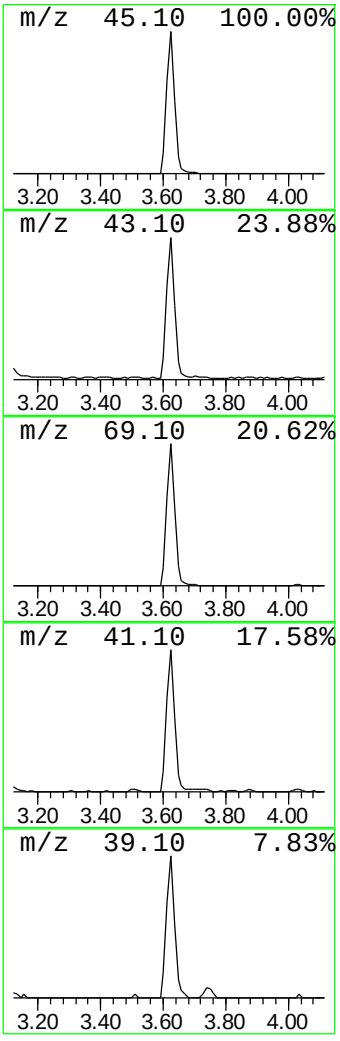
**********

Peak Number 2 2-Hexanol Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.62 | 17.77 ng | 615316 | 1,4-Dichlorobenzene-d4 | 6.82 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Hexanol | 102 | C6H14O | 000626-93-7 | 83 |
| 2 | 2-Pentanol, 4-methyl- | 102 | C6H14O | 000108-11-2 | 83 |
| 3 | (+-)-5-Methyl-2-hexanol | 116 | C7H16O | 111768-09-3 | 64 |
| 4 | 2-Nonanol | 144 | C9H20O | 000628-99-9 | 43 |
| 5 | 2-Heptanol | 116 | C7H16O | 000543-49-7 | 40 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

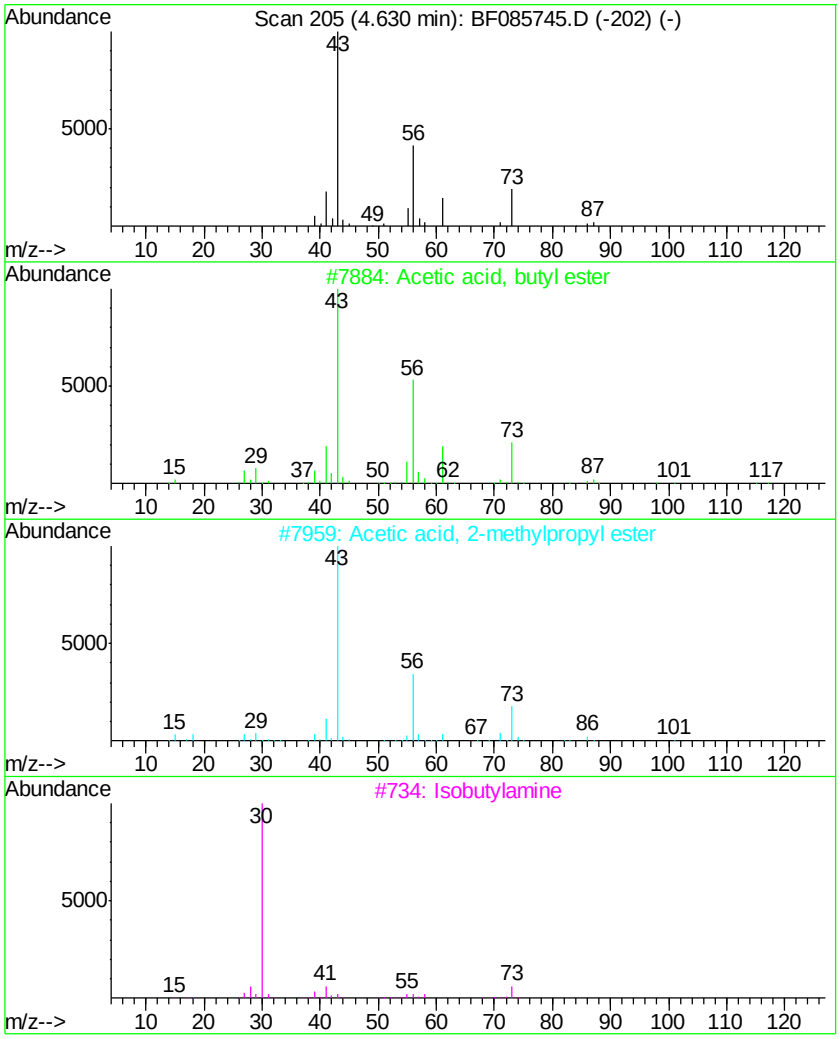
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

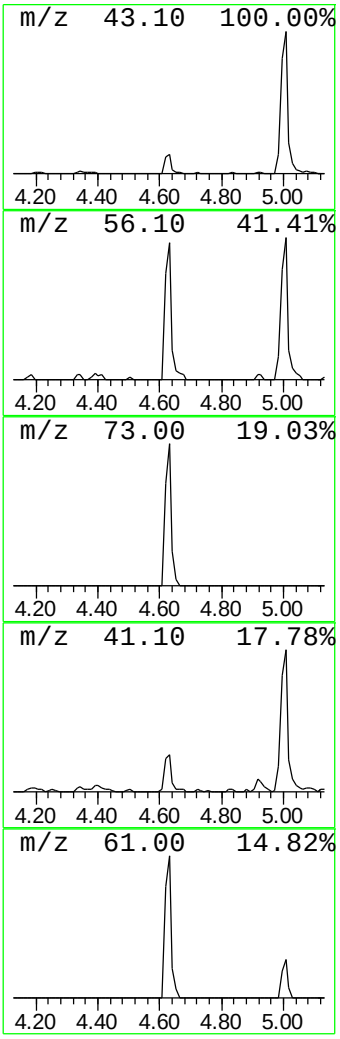
**********

Peak Number 3 Acetic acid, butyl ester Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.63 | 3.57 ng | 123724 | 1,4-Dichlorobenzene-d4 | 6.82 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Acetic acid, butyl ester | 116 | C6H12O2 | 000123-86-4 | 90 |
| 2 | Acetic acid, 2-methylpropyl ester | 116 | C6H12O2 | 000110-19-0 | 40 |
| 3 | Isobutylamine | 73 | C4H11N | 000078-81-9 | 9 |
| 4 | Acetic acid, hexyl ester | 144 | C8H16O2 | 000142-92-7 | 9 |
| 5 | 2-Butanone, 3-methyl- | 86 | C5H10O | 000563-80-4 | 9 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

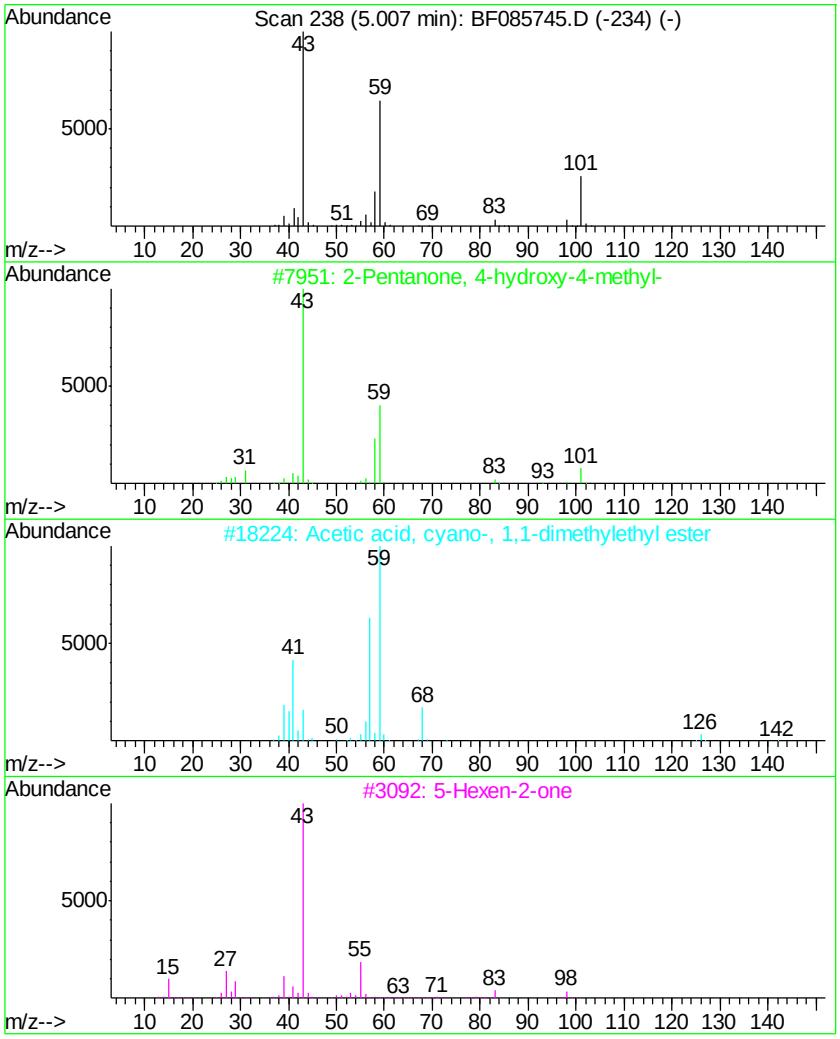
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

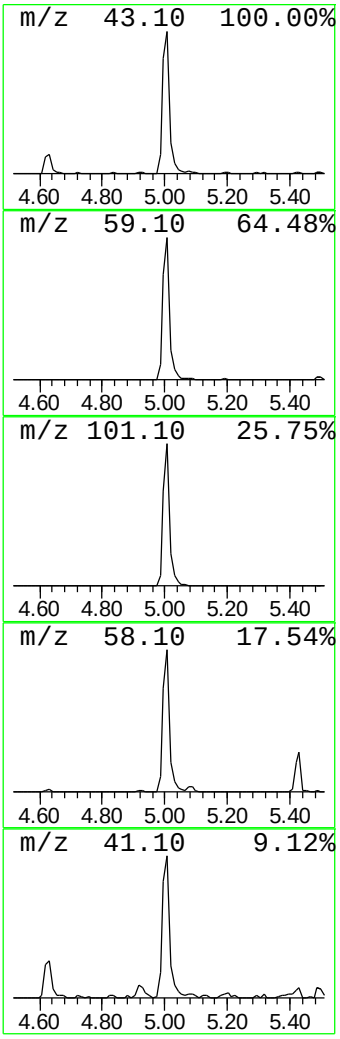
**********

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

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.01 | 30.79 ng | 1066200 | 1,4-Dichlorobenzene-d4 | 6.82 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 56 |
| 2 | Acetic acid, cyano-, 1,1-dimethy... | 141 | C7H11NO2 | 001116-98-9 | 17 |
| 3 | 5-Hexen-2-one | 98 | C6H10O | 000109-49-9 | 9 |
| 4 | (+-)-4-Amino-4,5-dihydro-2(3H)-f... | 101 | C4H7NO2 | 016504-58-8 | 9 |
| 5 | Butane, 1-ethoxy- | 102 | C6H14O | 000628-81-9 | 9 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

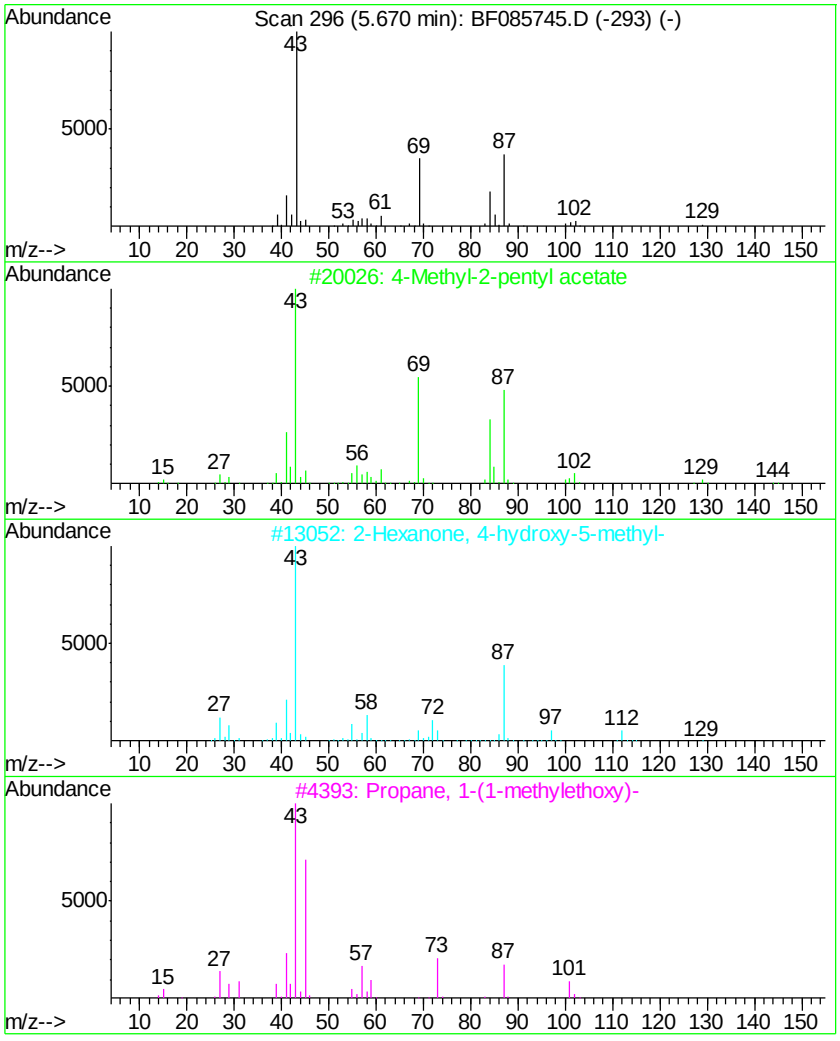
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

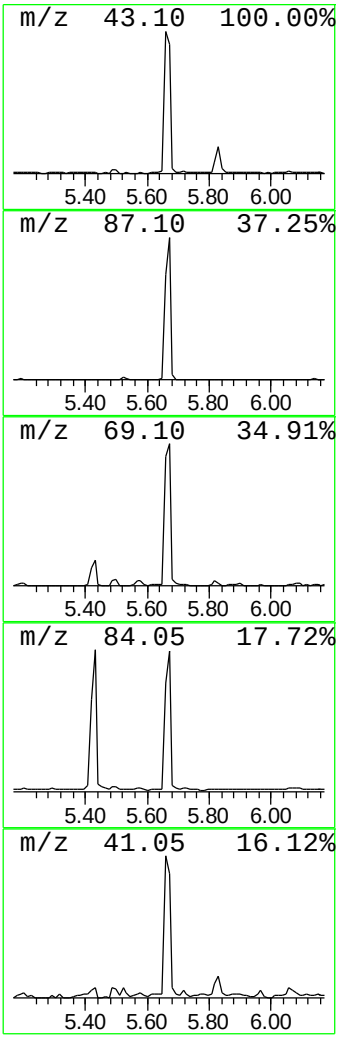
**********

Peak Number 5 4-Methyl-2-pentyl acetate Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.67 | 14.60 ng | 505603 | 1,4-Dichlorobenzene-d4 | 6.82 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4-Methyl-2-pentyl acetate | 144 | C8H16O2 | 000108-84-9 | 72 |
| 2 | 2-Hexanone, 4-hydroxy-5-methyl- | 130 | C7H14O2 | 038836-21-4 | 25 |
| 3 | Propane, 1-(1-methylethoxy)- | 102 | C6H14O | 000627-08-7 | 25 |
| 4 | 2-Octanone | 128 | C8H16O | 000111-13-7 | 10 |
| 5 | 2-Hexanone | 100 | C6H12O | 000591-78-6 | 10 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

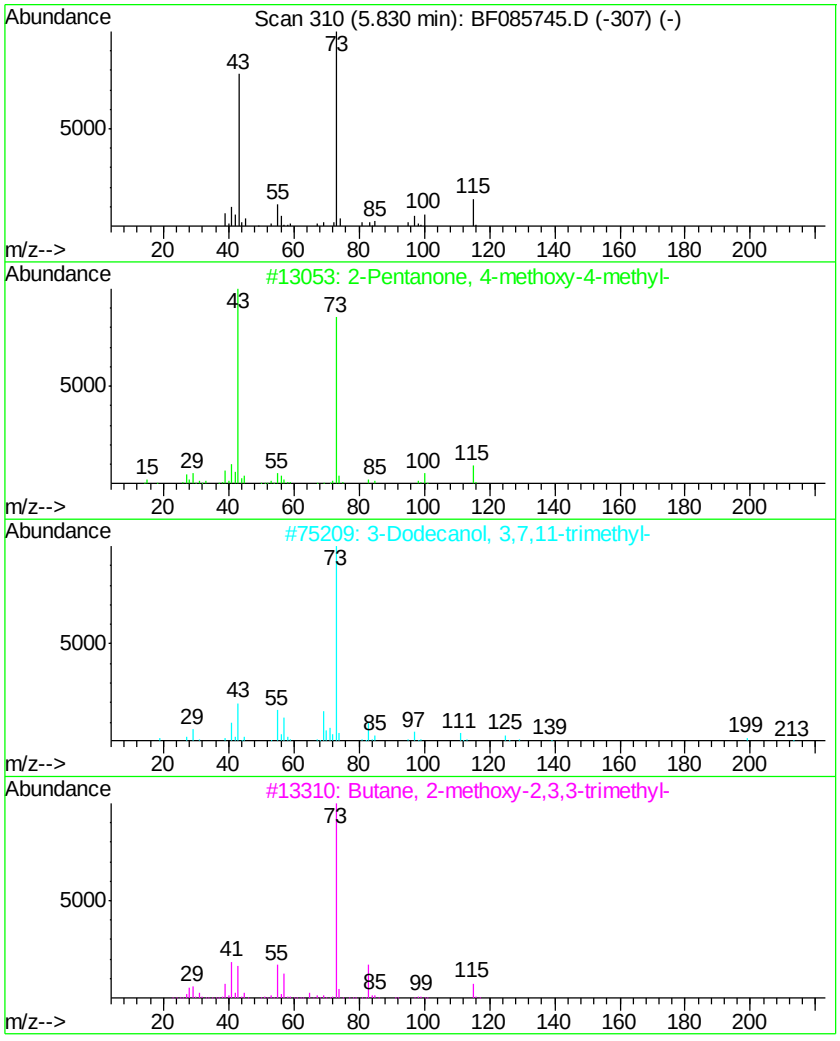
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

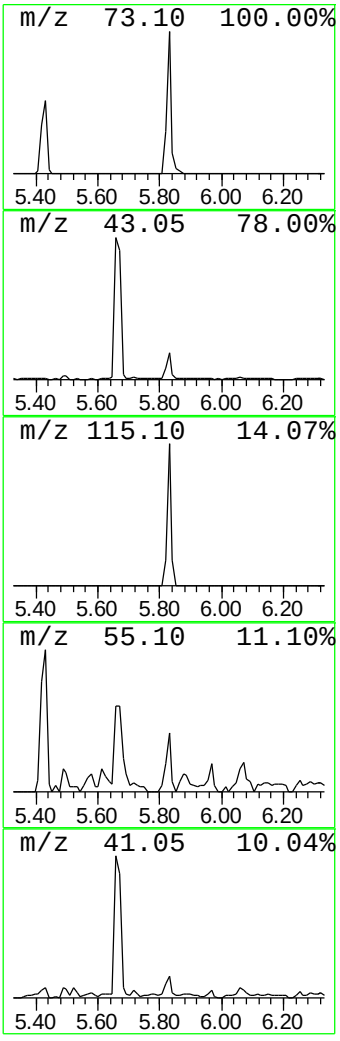
**********

Peak Number 6 2-Pentanone, 4-methoxy-4-me... Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.83 | 3.01 ng | 104060 | 1,4-Dichlorobenzene-d4 | 6.82 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-methoxy-4-methyl- | 130 | C7H14O2 | 000107-70-0 | 72 |
| 2 | 3-Dodecanol, 3,7,11-trimethyl- | 228 | C15H32O | 007278-65-1 | 23 |
| 3 | Butane, 2-methoxy-2,3,3-trimethyl- | 130 | C8H18O | 027705-21-1 | 23 |
| 4 | 2-Pentanone, 3-methyl- | 100 | C6H12O | 000565-61-7 | 22 |
| 5 | Hexane, 2-bromo- | 164 | C6H13Br | 003377-86-4 | 10 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

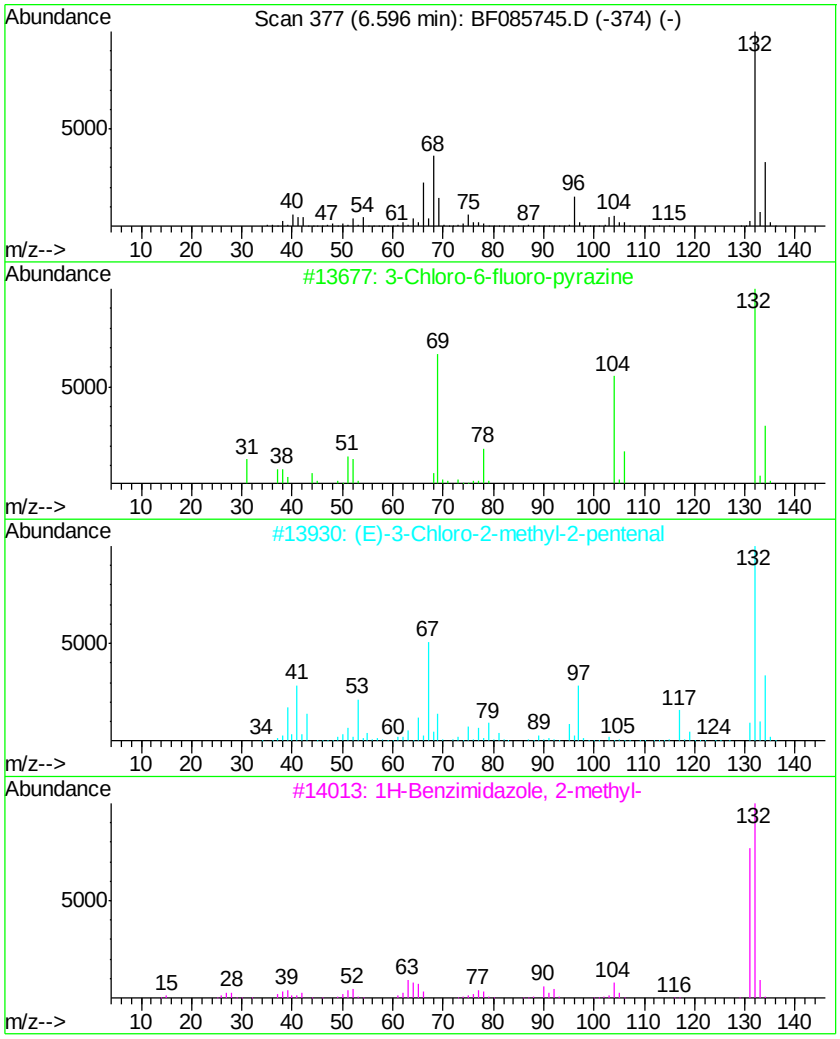
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

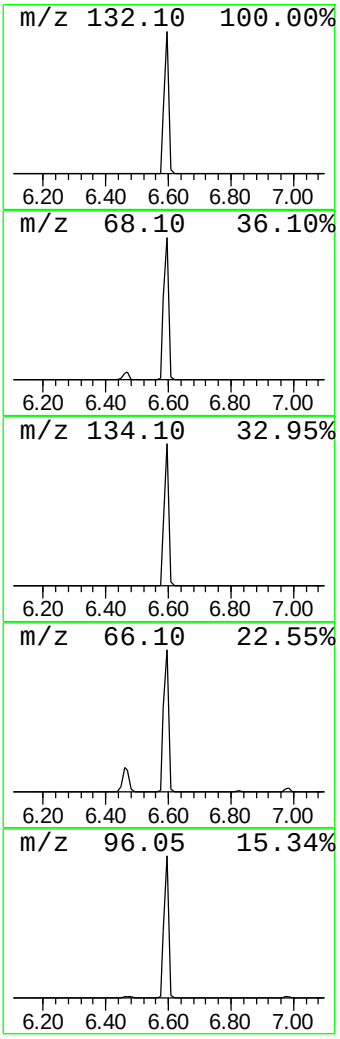
**********

Peak Number 7 unknown6.60 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.60 | 84.80 ng | 2936690 | 1,4-Dichlorobenzene-d4 | 6.82 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 25 |
| 2 | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO | 031357-76-3 | 17 |
| 3 | 1H-Benzimidazole, 2-methyl- | 132 | C8H8N2 | 000615-15-6 | 10 |
| 4 | 2H-Cyclopenta[d]pyridazine, 2-me... | 132 | C8H8N2 | 022291-85-6 | 9 |
| 5 | 4-Chloro-6-fluoro-pyrimidine | 132 | C4H2ClFN2 | 051422-01-6 | 9 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

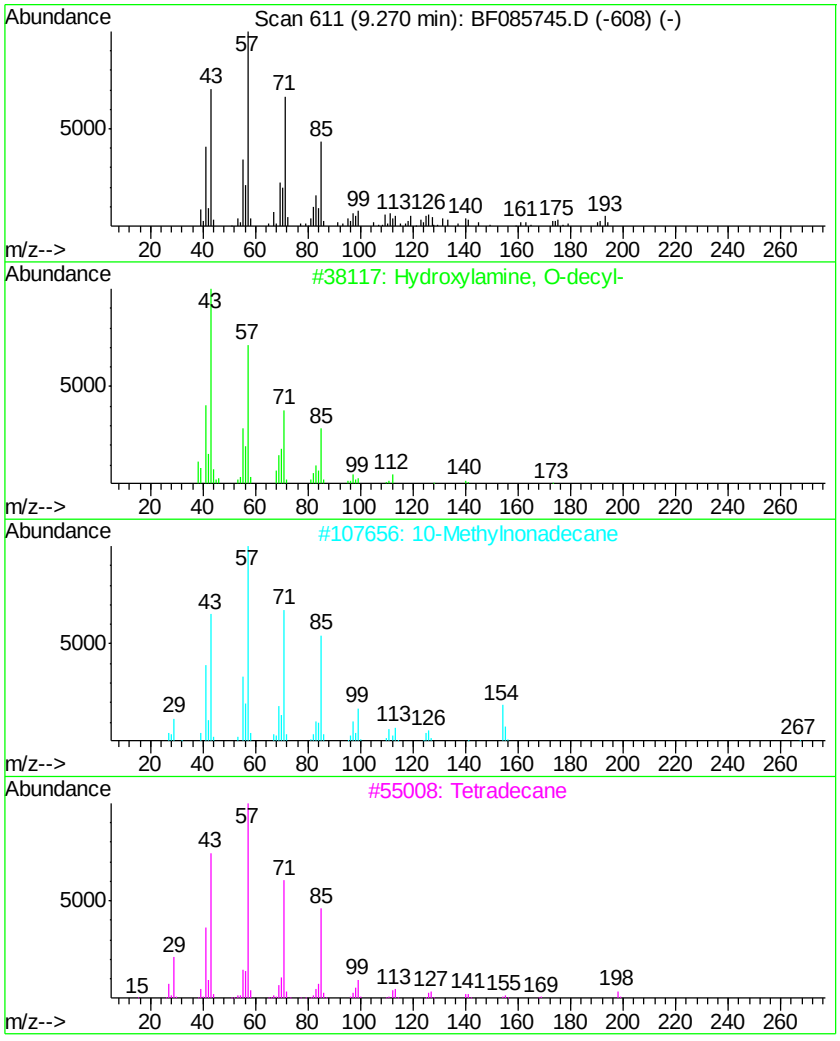
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

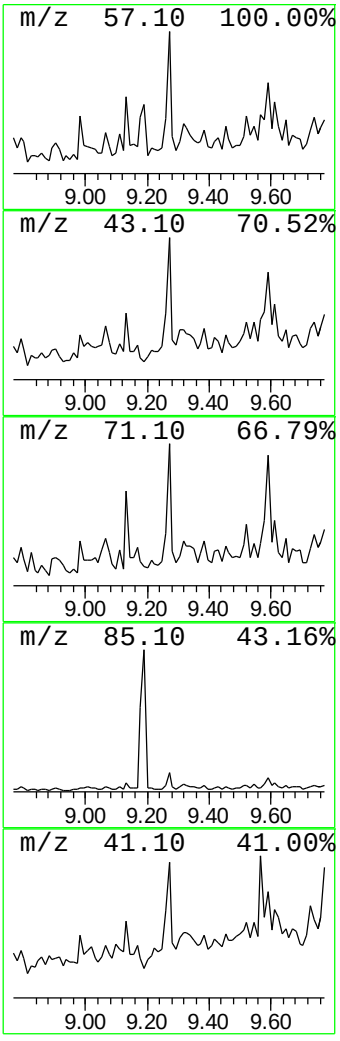
**********

Peak Number 9 Hydroxylamine, O-decyl- Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.27 | 3.20 ng | 164167 | Acenaphthene-d10 | 9.86 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hydroxylamine, O-decyl- | 173 | C10H23NO | 029812-79-1 | 72 |
| 2 | 10-Methylnonadecane | 282 | C20H42 | 056862-62-5 | 72 |
| 3 | Tetradecane | 198 | C14H30 | 000629-59-4 | 72 |
| 4 | Tritetracontane | 605 | C43H88 | 007098-21-7 | 72 |
| 5 | Pentadecane | 212 | C15H32 | 000629-62-9 | 64 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

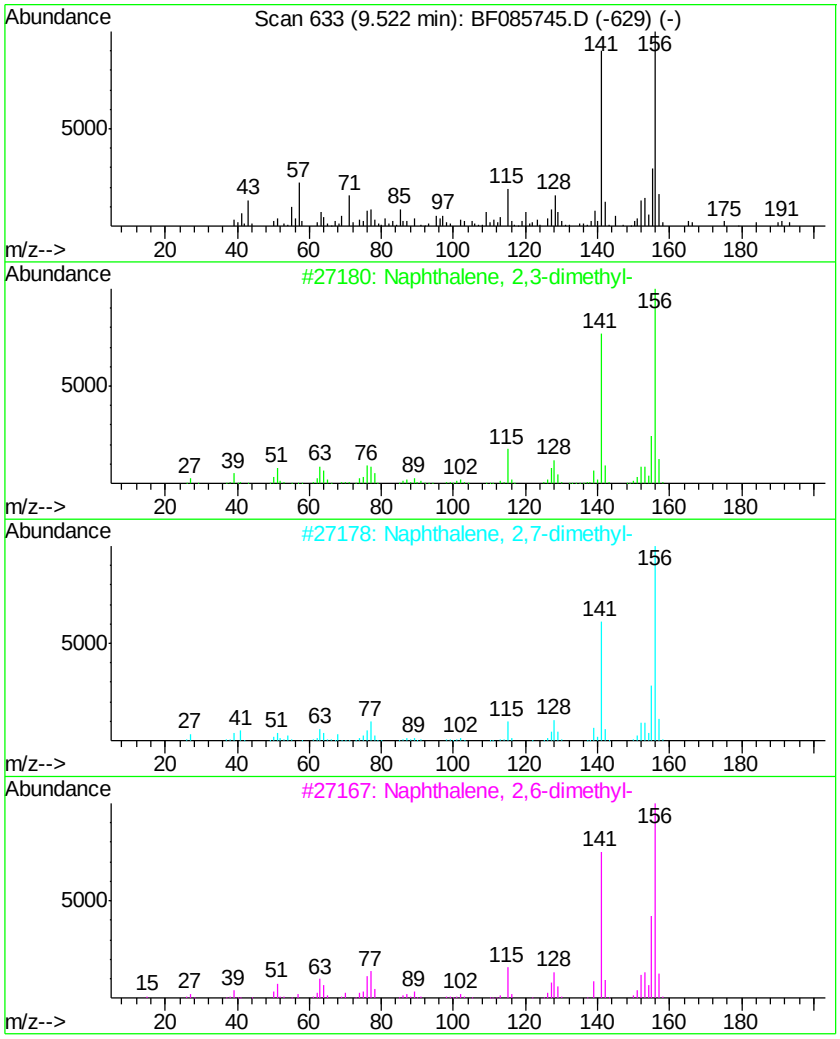
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

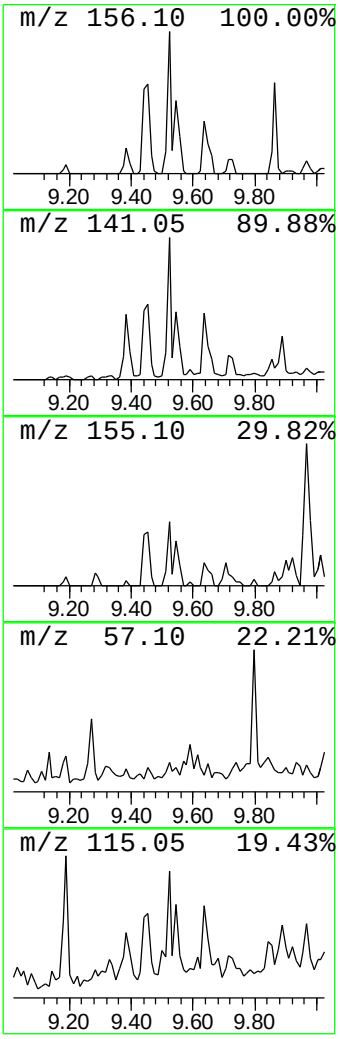
**********

Peak Number 10 Naphthalene, 2,3-dimethyl- Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.52 | 4.78 ng | 245423 | Acenaphthene-d10 | 9.86 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 97 |
| 2 | Naphthalene, 2,7-dimethyl- | 156 | C12H12 | 000582-16-1 | 97 |
| 3 | Naphthalene, 2,6-dimethyl- | 156 | C12H12 | 000581-42-0 | 97 |
| 4 | Naphthalene, 1,7-dimethyl- | 156 | C12H12 | 000575-37-1 | 96 |
| 5 | Naphthalene, 1,4-dimethyl- | 156 | C12H12 | 000571-58-4 | 96 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

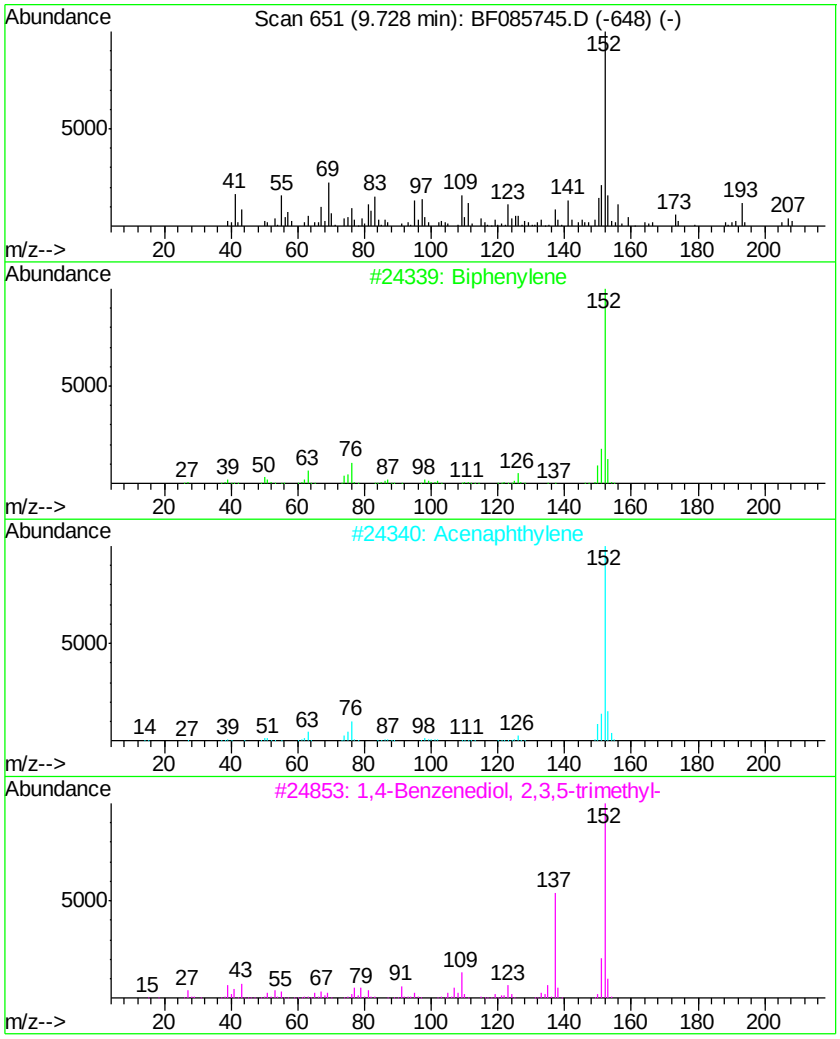
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

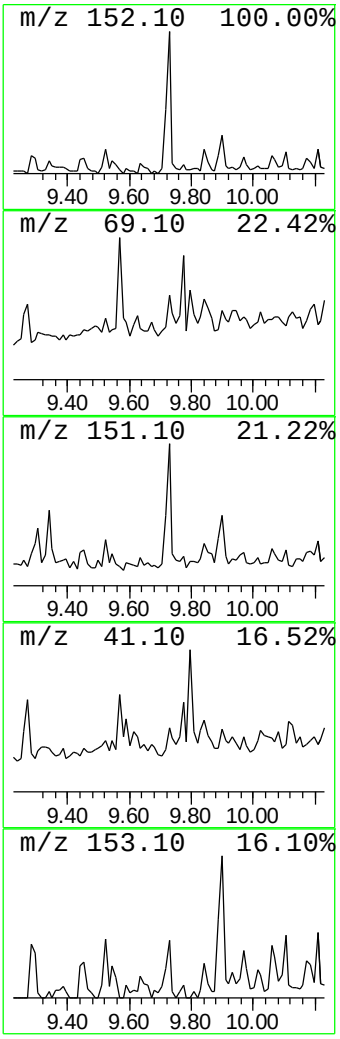
**********

Peak Number 11 Biphenylene Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.73 | 2.96 ng | 151921 | Acenaphthene-d10 | 9.86 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Biphenylene | 152 | C12H8 | 000259-79-0 | 58 |
| 2 | Acenaphthylene | 152 | C12H8 | 000208-96-8 | 53 |
| 3 | 1,4-Benzenediol, 2,3,5-trimethyl- | 152 | C9H12O2 | 000700-13-0 | 53 |
| 4 | 2H-Pyrrol-2-one, 1,5-dihydro-4-(... | 152 | C8H12N2O | 105776-93-0 | 50 |
| 5 | Benzaldehyde, 4-(acetyloxy)-3-me... | 194 | C10H10O4 | 000881-68-5 | 47 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

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

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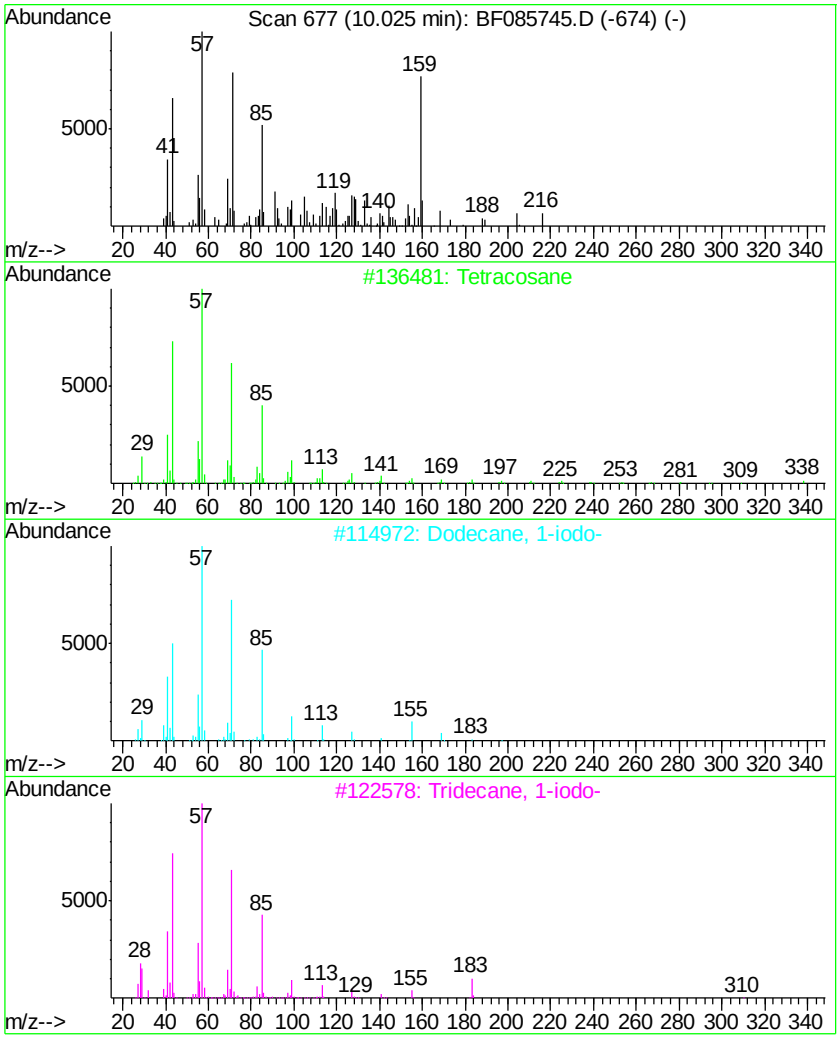
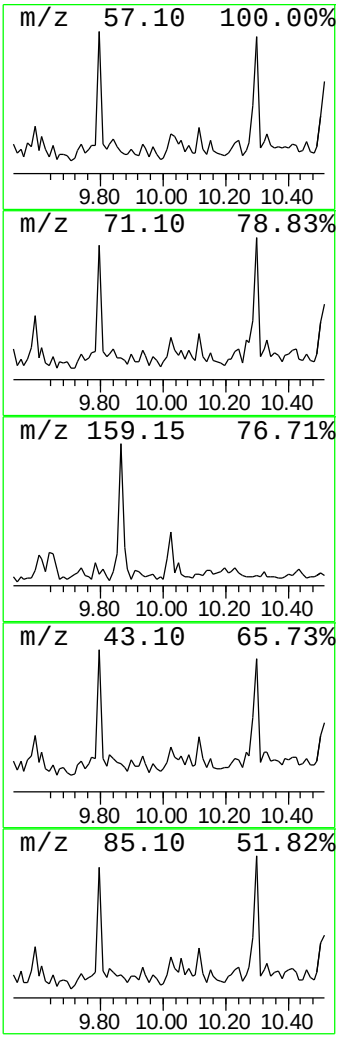
Peak Number 12 unknown10.02 Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.02 | 2.75 ng | 141188 | Acenaphthene-d10 | 9.86 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Tetracosane | 338 | C24H50 | 000646-31-1 | 38 |
| 2 | Dodecane, 1-iodo- | 296 | C12H25I | 004292-19-7 | 38 |
| 3 | Tridecane, 1-iodo- | 310 | C13H27I | 035599-77-0 | 35 |
| 4 | Docosane | 310 | C22H46 | 000629-97-0 | 35 |
| 5 | Pentadecane, 8-heptyl- | 310 | C22H46 | 071005-15-7 | 35 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

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

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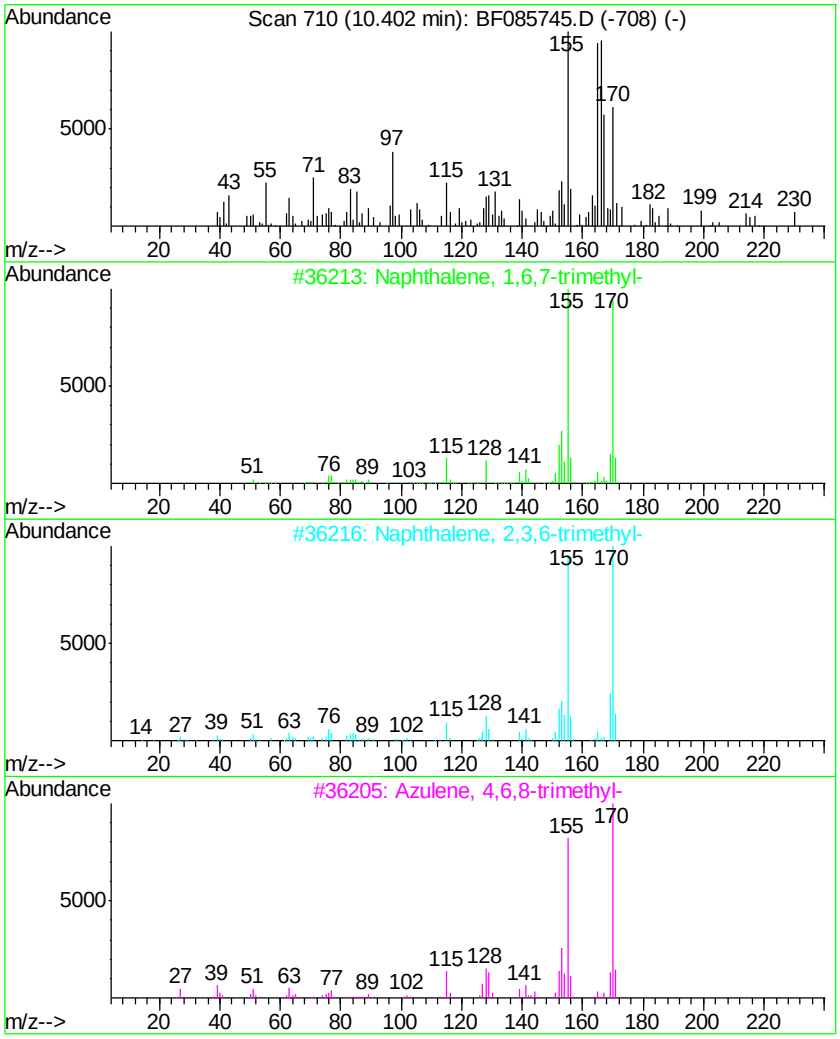
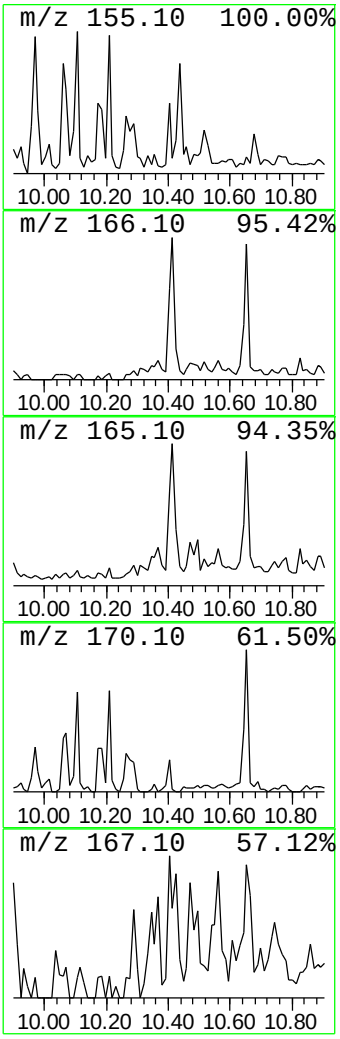
Peak Number 14 Naphthalene, 1,6,7-trimethyl- Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.40 | 2.89 ng | 148608 | Acenaphthene-d10 | 9.86 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 51 |
| 2 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 38 |
| 3 | Azulene, 4,6,8-trimethyl- | 170 | C13H14 | 000941-81-1 | 38 |
| 4 | 1,3-Benzodioxole-5-carboxylic acid | 166 | C8H6O4 | 000094-53-1 | 30 |
| 5 | Naphthalene, 1,4,6-trimethyl- | 170 | C13H14 | 002131-42-2 | 30 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

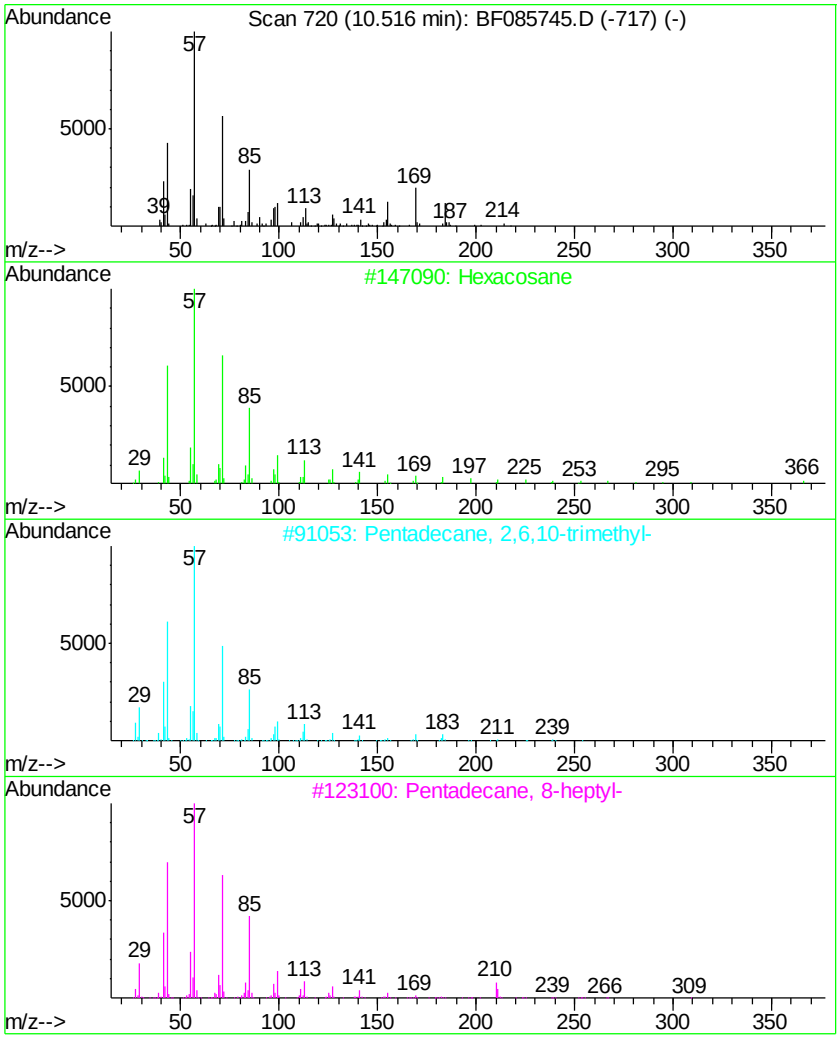
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

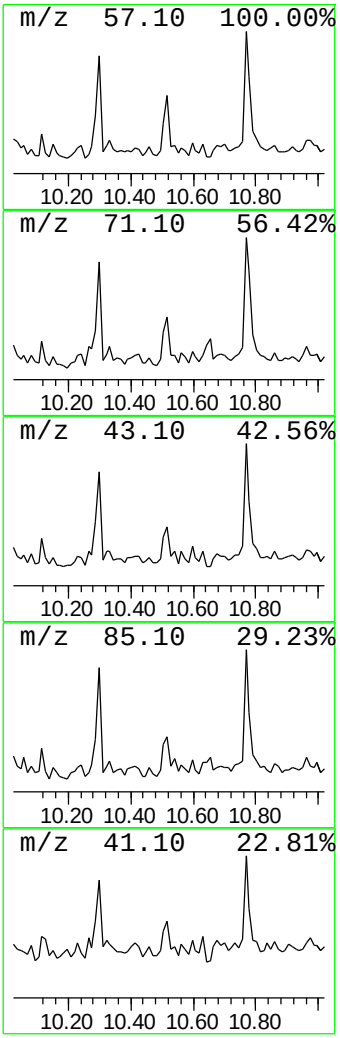
**********

Peak Number 15 Hexacosane Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.52 | 2.82 ng | 144939 | Acenaphthene-d10 | 9.86 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexacosane | 366 | C26H54 | 000630-01-3 | 59 |
| 2 | Pentadecane, 2,6,10-trimethyl- | 254 | C18H38 | 003892-00-0 | 58 |
| 3 | Pentadecane, 8-heptyl- | 310 | C22H46 | 071005-15-7 | 53 |
| 4 | Tridecane, 2-methyl- | 198 | C14H30 | 001560-96-9 | 53 |
| 5 | Dodecane, 3-methyl- | 184 | C13H28 | 017312-57-1 | 53 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

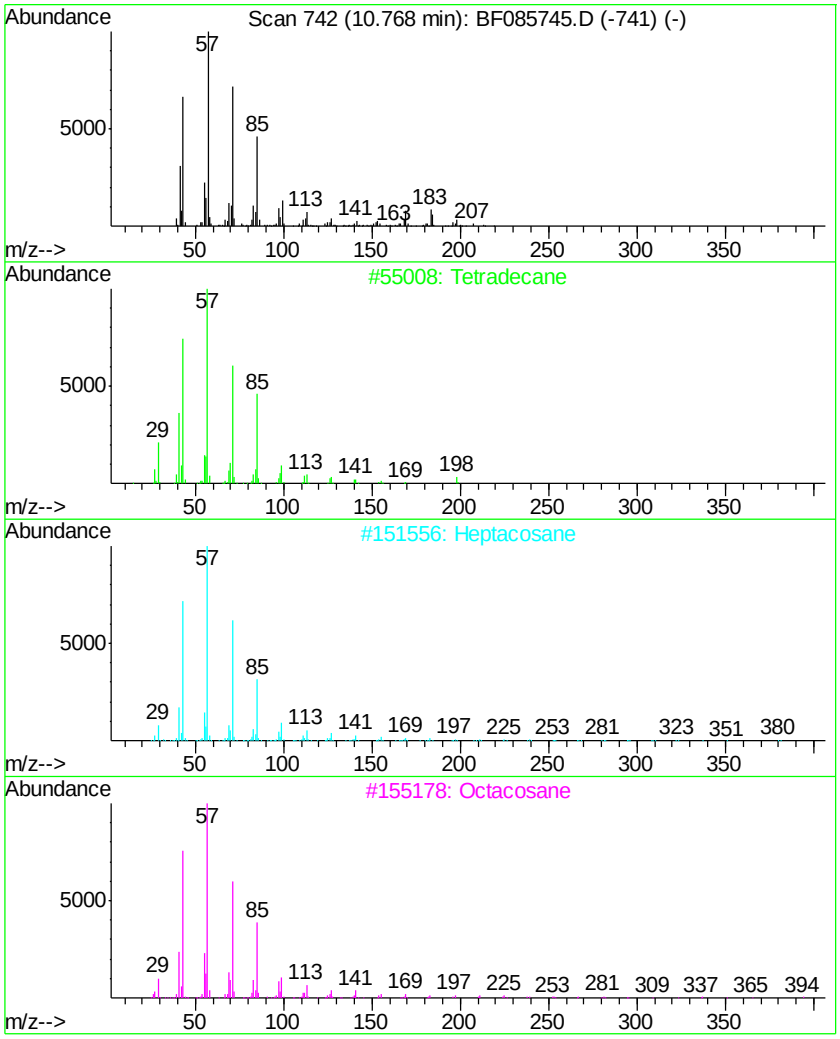
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

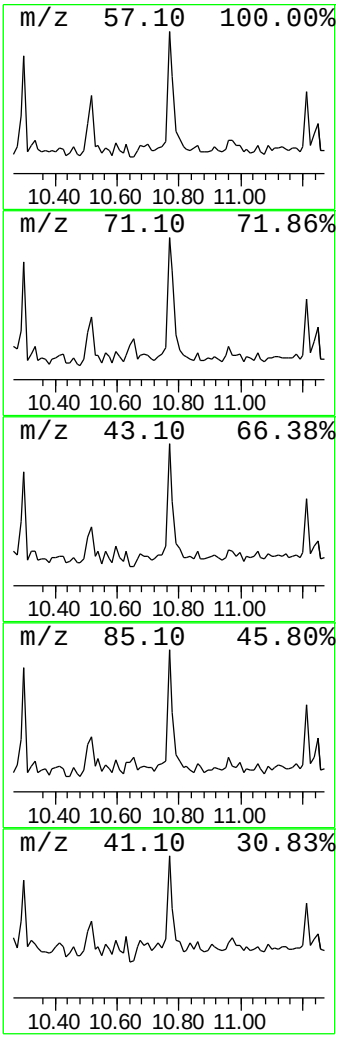
**********

Peak Number 16 Tetradecane Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.77 | 6.20 ng | 292824 | Phenanthrene-d10 | 11.35 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Tetradecane | 198 | C14H30 | 000629-59-4 | 96 |
| 2 | Heptacosane | 380 | C27H56 | 000593-49-7 | 87 |
| 3 | Octacosane | 394 | C28H58 | 000630-02-4 | 86 |
| 4 | Heneicosane | 296 | C21H44 | 000629-94-7 | 83 |
| 5 | Heptadecane | 240 | C17H36 | 000629-78-7 | 83 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

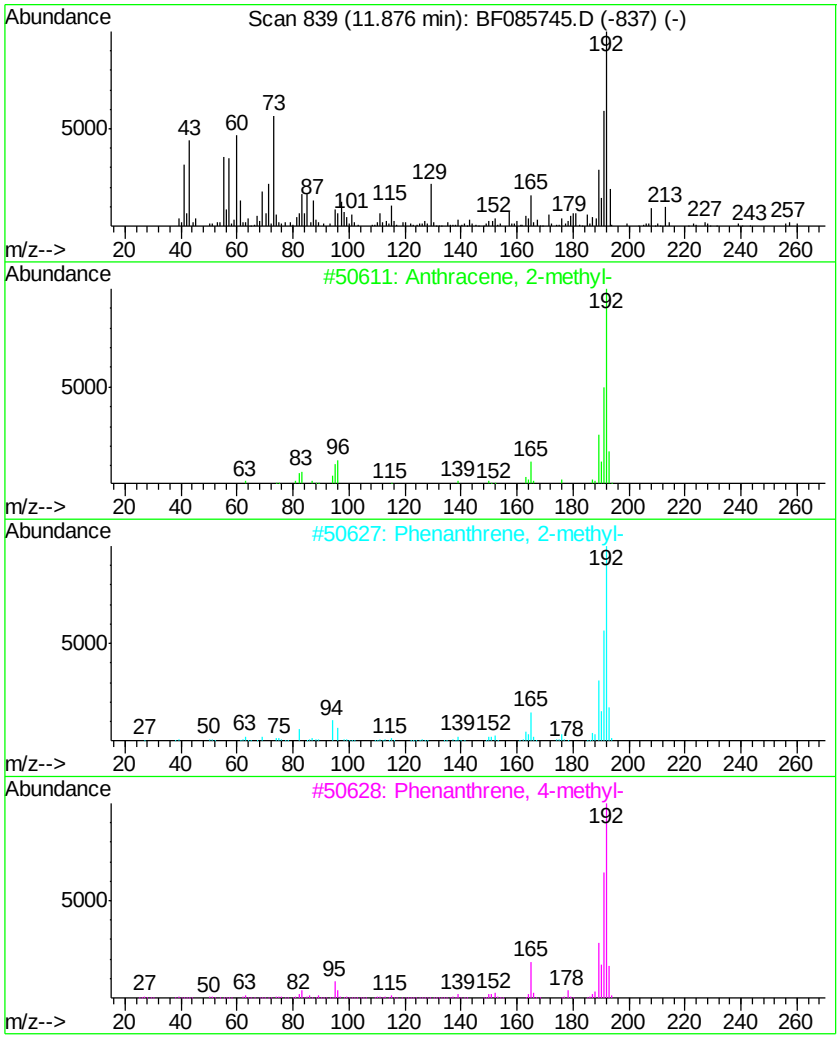
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

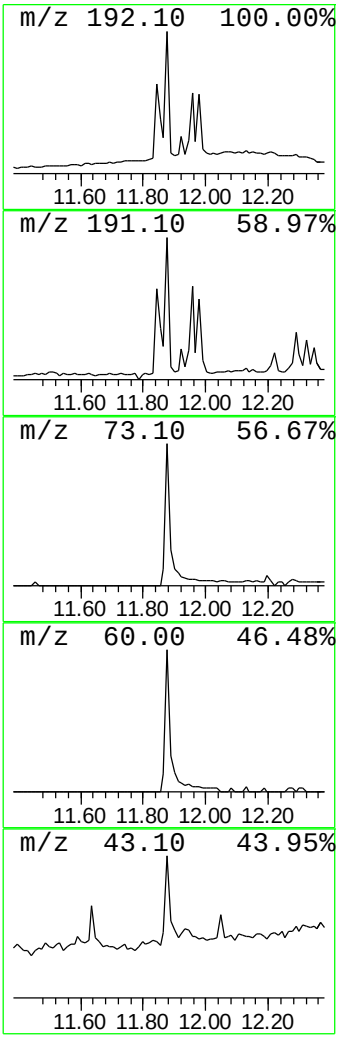
**********

Peak Number 17 Anthracene, 2-methyl- Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.88 | 5.24 ng | 247380 | Phenanthrene-d10 | 11.35 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 96 |
| 2 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 95 |
| 3 | Phenanthrene, 4-methyl- | 192 | C15H12 | 000832-64-4 | 91 |
| 4 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 90 |
| 5 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 90 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

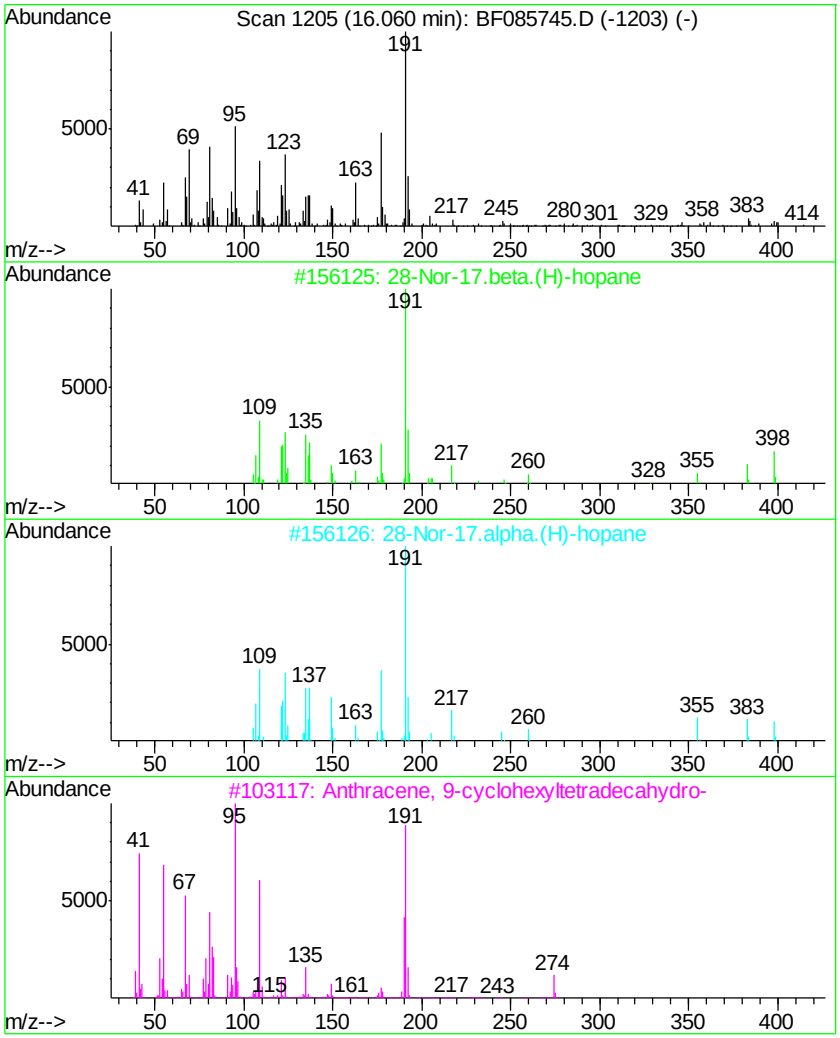
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

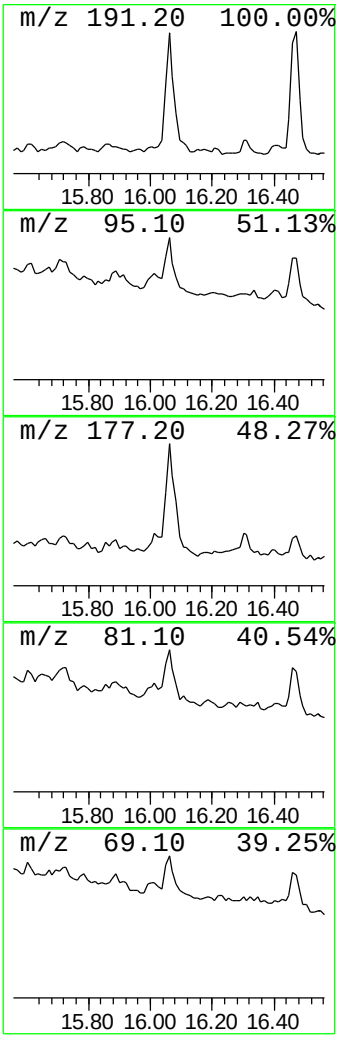
**********

Peak Number 19 28-Nor-17.beta.(H)-hopane Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.06 | 11.68 ng | 586170 | Perylene-d12 | 15.41 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 28-Nor-17.beta.(H)-hopane | 398 | C29H50 | 036728-72-0 | 59 |
| 2 | 28-Nor-17.alpha.(H)-hopane | 398 | C29H50 | 053584-60-4 | 56 |
| 3 | Anthracene, 9-cyclohexyltetradec... | 274 | C20H34 | 055255-70-4 | 38 |
| 4 | Anthracene, 9-dodecyltetradecahy... | 360 | C26H48 | 055401-75-7 | 38 |
| 5 | 2H-1,2,3-Triazole-4-carboxaldehy... | 191 | C9H6FN3O | 051306-43-5 | 32 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF032416\
Data File : BF085745.D
Acq On : 25 Mar 2016 6:35
Operator : UM/SJ
Sample : H1884-16
Misc :
ALS Vial : 29 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GW-01(4-5)

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

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

| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| 2-Hexanol | 3.62 | 17.8 | ng | 615316 | 1 | 6.82 | 692578 | 20.0 |
| Acetic acid, buty... | 4.63 | 3.6 | ng | 123724 | 1 | 6.82 | 692578 | 20.0 |
| 2-Pentanone, 4-hy... | 5.01 | 30.8 | ng | 1066200 | 1 | 6.82 | 692578 | 20.0 |
| 4-Methyl-2-pentyl... | 5.67 | 14.6 | ng | 505603 | 1 | 6.82 | 692578 | 20.0 |
| 2-Pentanone, 4-me... | 5.83 | 3.0 | ng | 104060 | 1 | 6.82 | 692578 | 20.0 |
| unknown6.60 | 6.60 | 84.8 | ng | 2936690 | 1 | 6.82 | 692578 | 20.0 |
| Hydroxylamine, O-... | 9.27 | 3.2 | ng | 164167 | 3 | 9.86 | 1027460 | 20.0 |
| Naphthalene, 2,3-... | 9.52 | 4.8 | ng | 245423 | 3 | 9.86 | 1027460 | 20.0 |
| Biphenylene | 9.73 | 3.0 | ng | 151921 | 3 | 9.86 | 1027460 | 20.0 |
| unknown10.02 | 10.02 | 2.8 | ng | 141188 | 3 | 9.86 | 1027460 | 20.0 |
| Naphthalene, 1,6,... | 10.40 | 2.9 | ng | 148608 | 3 | 9.86 | 1027460 | 20.0 |
| Hexacosane | 10.52 | 2.8 | ng | 144939 | 3 | 9.86 | 1027460 | 20.0 |
| Tetradecane | 10.77 | 6.2 | ng | 292824 | 4 | 11.35 | 943842 | 20.0 |
| Anthracene, 2-met... | 11.88 | 5.2 | ng | 247380 | 4 | 11.35 | 943842 | 20.0 |
| 28-Nor-17.beta.(H... | 16.06 | 11.7 | ng | 586170 | 6 | 15.41 | 1003620 | 20.0 |