LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG060916\
Data File : BG022271.D
Acq On : 9 Jun 2016 16:32
Operator : UM/SJ
Sample : H3402-04 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SS-40

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_G\METHODS\8270-BG060616.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 | 2.985 | 19 | 25 | 39 | rVB | 492924 | 813896 | 58.32% | 4.789% |
| 2 | 5.189 | 394 | 400 | 407 | rVB | 18427 | 32693 | 2.34% | 0.192% |
| 3 | 5.670 | 473 | 482 | 490 | rBV | 174519 | 337830 | 24.21% | 1.988% |
| 4 | 7.280 | 746 | 756 | 769 | rBV | 201447 | 397349 | 28.47% | 2.338% |
| 5 | 7.650 | 811 | 819 | 829 | rBV | 224417 | 438002 | 31.38% | 2.577% |
| 6 | 8.120 | 891 | 899 | 913 | rBV | 151327 | 300453 | 21.53% | 1.768% |
| 7 | 8.444 | 945 | 954 | 969 | rBV | 180775 | 356632 | 25.55% | 2.098% |
| 8 | 9.290 | 1089 | 1098 | 1115 | rBV | 118344 | 251443 | 18.02% | 1.479% |
| 9 | 10.941 | 1371 | 1379 | 1385 | rBV | 253667 | 524938 | 37.61% | 3.089% |
| 10 | 12.592 | 1653 | 1660 | 1666 | rBV | 11575 | 20344 | 1.46% | 0.120% |
| 11 | 12.803 | 1690 | 1696 | 1704 | rBV | 8851 | 16348 | 1.17% | 0.096% |
| 12 | 13.367 | 1785 | 1792 | 1801 | rBV | 427814 | 746850 | 53.51% | 4.394% |
| 13 | 14.072 | 1906 | 1912 | 1916 | rBV3 | 9639 | 18991 | 1.36% | 0.112% |
| 14 | 14.190 | 1927 | 1932 | 1941 | rVB | 18291 | 32066 | 2.30% | 0.189% |
| 15 | 14.478 | 1976 | 1981 | 1989 | rBV6 | 6337 | 14394 | 1.03% | 0.085% |
| 16 | 14.748 | 2016 | 2027 | 2033 | rBV2 | 398669 | 719924 | 51.58% | 4.236% |
| 17 | 14.813 | 2033 | 2038 | 2046 | rVB | 61818 | 105888 | 7.59% | 0.623% |
| 18 | 15.147 | 2086 | 2095 | 2102 | rVV | 26881 | 51044 | 3.66% | 0.300% |
| 19 | 15.794 | 2199 | 2205 | 2215 | rVB2 | 57288 | 105009 | 7.52% | 0.618% |
| 20 | 15.958 | 2229 | 2233 | 2238 | rVB5 | 8732 | 14339 | 1.03% | 0.084% |
| 21 | 16.082 | 2249 | 2254 | 2263 | rVB2 | 12542 | 26403 | 1.89% | 0.155% |
| 22 | 16.234 | 2274 | 2280 | 2290 | rBV3 | 264003 | 455461 | 32.64% | 2.680% |
| 23 | 16.428 | 2306 | 2313 | 2315 | rBV4 | 11560 | 20025 | 1.43% | 0.118% |
| 24 | 16.793 | 2365 | 2375 | 2380 | rBV4 | 12901 | 33673 | 2.41% | 0.198% |
| 25 | 17.016 | 2407 | 2413 | 2415 | rBV6 | 9032 | 16106 | 1.15% | 0.095% |
| 26 | 17.145 | 2430 | 2435 | 2443 | rBV2 | 18435 | 31579 | 2.26% | 0.186% |
| 27 | 17.216 | 2443 | 2447 | 2452 | rBV5 | 18008 | 33724 | 2.42% | 0.198% |
| 28 | 17.316 | 2458 | 2464 | 2470 | rVB | 27604 | 49078 | 3.52% | 0.289% |
| 29 | 17.492 | 2487 | 2494 | 2498 | rBV | 437949 | 781233 | 55.98% | 4.597% |
| 30 | 17.533 | 2498 | 2501 | 2508 | rVV | 541700 | 863265 | 61.86% | 5.079% |
| 31 | 17.627 | 2508 | 2517 | 2523 | rVV | 136587 | 250023 | 17.91% | 1.471% |
| 32 | 17.686 | 2523 | 2527 | 2534 | rVB4 | 14894 | 28888 | 2.07% | 0.170% |
| 33 | 17.897 | 2555 | 2563 | 2568 | rBV3 | 47370 | 102019 | 7.31% | 0.600% |
| 34 | 18.009 | 2577 | 2582 | 2586 | rBV5 | 11005 | 19611 | 1.41% | 0.115% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG060916\
Data File : BG022271.D
Acq On : 9 Jun 2016 16:32
Operator : UM/SJ
Sample : H3402-04 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SS-40

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_G\METHODS\8270-BG060616.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 18.068 | 2589 | 2592 | 2598 | rVV7 | 12647 | 20207 | 1.45% | 0.119% |
| 36 | 18.367 | 2634 | 2643 | 2647 | rBV | 63119 | 120454 | 8.63% | 0.709% |
| 37 | 18.414 | 2647 | 2651 | 2658 | rVB2 | 85202 | 160505 | 11.50% | 0.944% |
| 38 | 18.491 | 2660 | 2664 | 2670 | rVB | 32750 | 51124 | 3.66% | 0.301% |
| 39 | 18.561 | 2670 | 2676 | 2680 | rBV2 | 113040 | 225425 | 16.15% | 1.326% |
| 40 | 18.855 | 2721 | 2726 | 2730 | rVV | 50257 | 75822 | 5.43% | 0.446% |
| 41 | 18.902 | 2730 | 2734 | 2742 | rVB3 | 29359 | 49961 | 3.58% | 0.294% |
| 42 | 19.096 | 2764 | 2767 | 2772 | rVB4 | 19063 | 29702 | 2.13% | 0.175% |
| 43 | 19.149 | 2772 | 2776 | 2780 | rBV | 16508 | 25293 | 1.81% | 0.149% |
| 44 | 19.272 | 2791 | 2797 | 2802 | rBV | 44024 | 94030 | 6.74% | 0.553% |
| 45 | 19.419 | 2816 | 2822 | 2828 | rBV2 | 38050 | 75213 | 5.39% | 0.443% |
| 46 | 19.536 | 2835 | 2842 | 2849 | rBV | 805016 | 1315881 | 94.29% | 7.743% |
| 47 | 19.783 | 2880 | 2884 | 2892 | rVB | 26617 | 55878 | 4.00% | 0.329% |
| 48 | 19.901 | 2892 | 2904 | 2911 | rBV | 734926 | 1361298 | 97.54% | 8.010% |
| 49 | 19.965 | 2911 | 2915 | 2921 | rVB2 | 41113 | 75146 | 5.38% | 0.442% |
| 50 | 20.083 | 2929 | 2935 | 2941 | rBV | 567754 | 848148 | 60.77% | 4.990% |
| 51 | 20.218 | 2952 | 2958 | 2964 | rBV5 | 47321 | 113167 | 8.11% | 0.666% |
| 52 | 20.388 | 2983 | 2987 | 2992 | rVB | 98541 | 154659 | 11.08% | 0.910% |
| 53 | 20.482 | 2999 | 3003 | 3007 | rBV2 | 78634 | 116267 | 8.33% | 0.684% |
| 54 | 20.682 | 3034 | 3037 | 3040 | rBV3 | 36317 | 49355 | 3.54% | 0.290% |
| 55 | 20.723 | 3042 | 3044 | 3055 | rVB3 | 43695 | 79416 | 5.69% | 0.467% |
| 56 | 21.152 | 3114 | 3117 | 3124 | rVB | 43823 | 74523 | 5.34% | 0.438% |
| 57 | 21.381 | 3153 | 3156 | 3161 | rVB | 50693 | 76323 | 5.47% | 0.449% |
| 58 | 21.440 | 3162 | 3166 | 3171 | rVB3 | 45136 | 74034 | 5.30% | 0.436% |
| 59 | 21.763 | 3213 | 3221 | 3227 | rBV3 | 527595 | 1395613 | 100.00% | 8.212% |
| 60 | 21.816 | 3227 | 3230 | 3241 | rVB | 273758 | 498268 | 35.70% | 2.932% |
| 61 | 21.975 | 3252 | 3257 | 3265 | rBV | 57210 | 105947 | 7.59% | 0.623% |
| 62 | 24.025 | 3598 | 3606 | 3613 | rBV2 | 161057 | 574060 | 41.13% | 3.378% |
| 63 | 24.766 | 3725 | 3732 | 3744 | rVB2 | 80985 | 248806 | 17.83% | 1.464% |
| 64 | 24.918 | 3750 | 3758 | 3772 | rVB | 119029 | 388685 | 27.85% | 2.287% |
| 65 | 25.071 | 3776 | 3784 | 3793 | rBV2 | 141956 | 452528 | 32.43% | 2.663% |

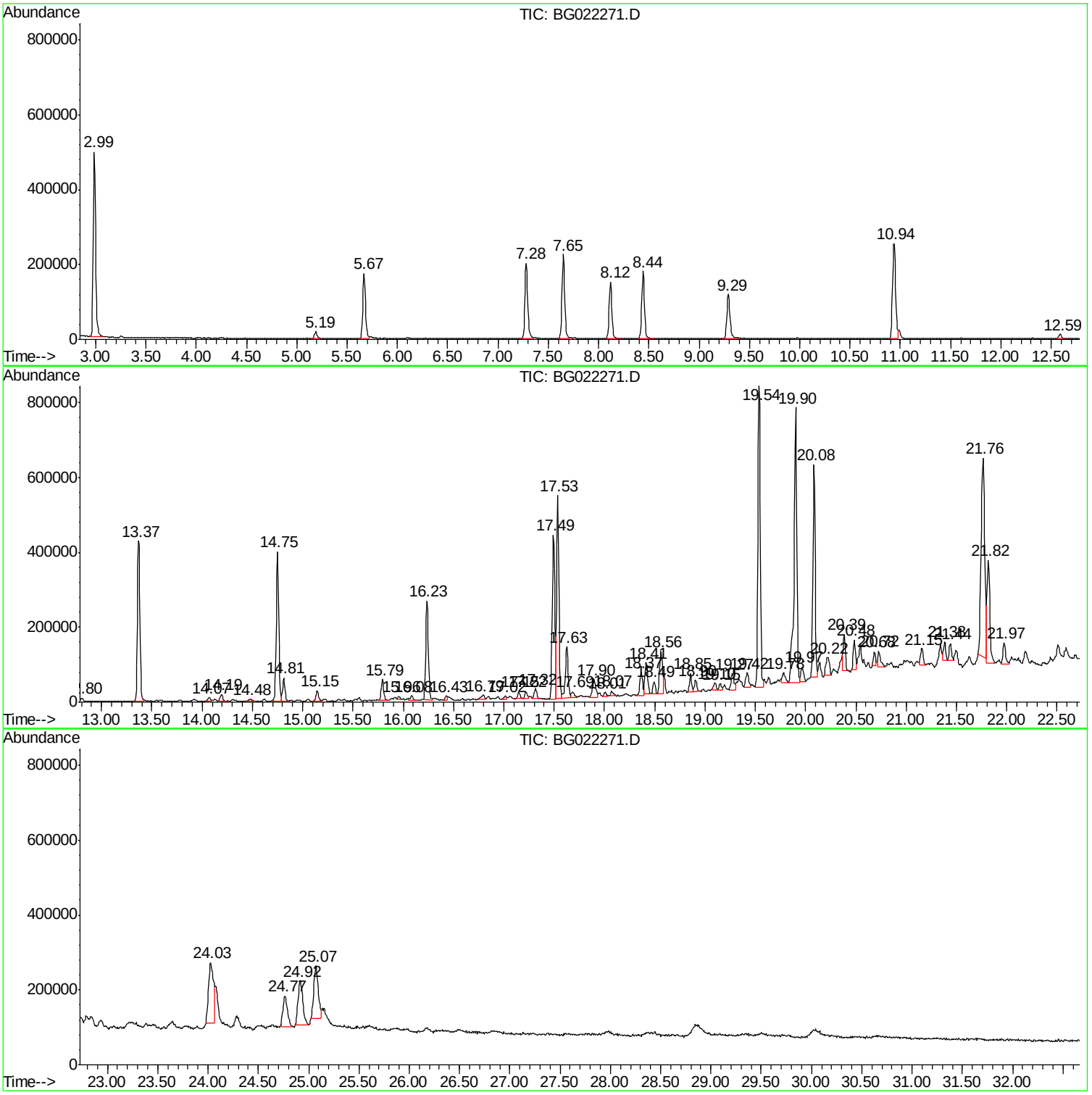
Sum of corrected areas: 16995259

Data Path : Z:\HPCHEM1\BNA G\DATA\BG060916\
Data File : BG022271.D
Acq On : 9 Jun 2016 16:32
Operator : UM/SJ
Sample : H3402-04 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SS-40

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG060616.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 G\DATA\BG060916\
Data File : BG022271.D
Acq On : 9 Jun 2016 16:32
Operator : UM/SJ
Sample : H3402-04 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SS-40

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG060616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

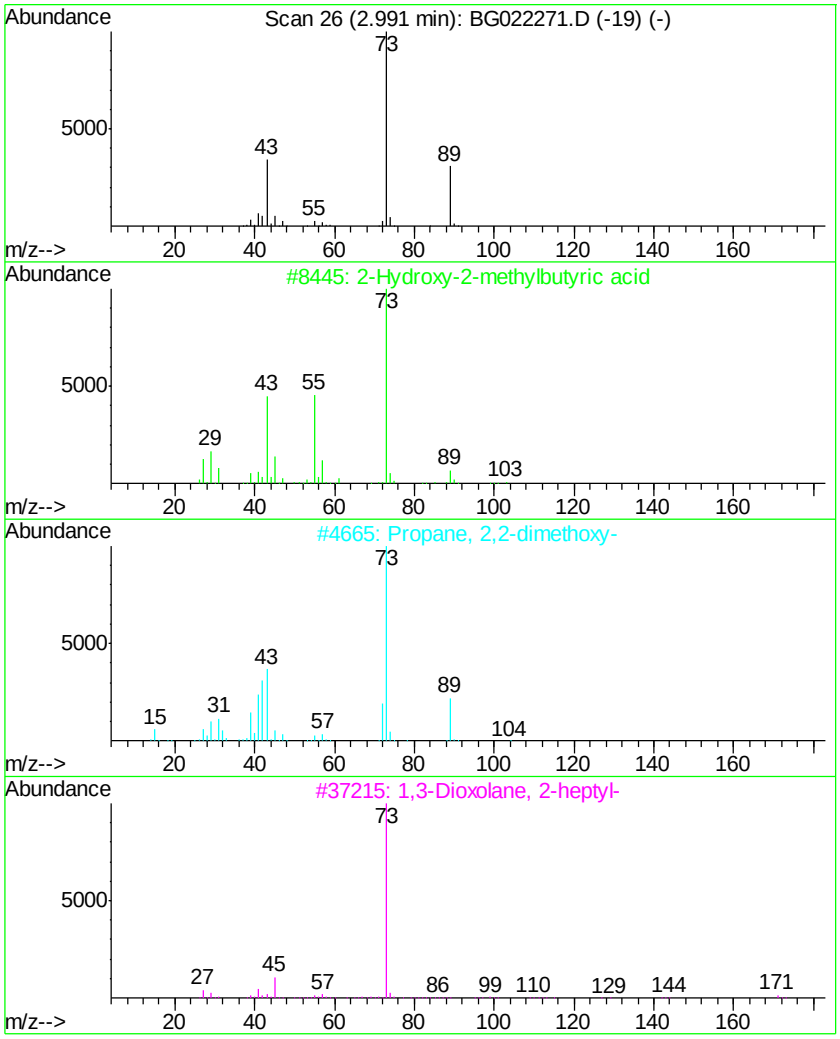
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

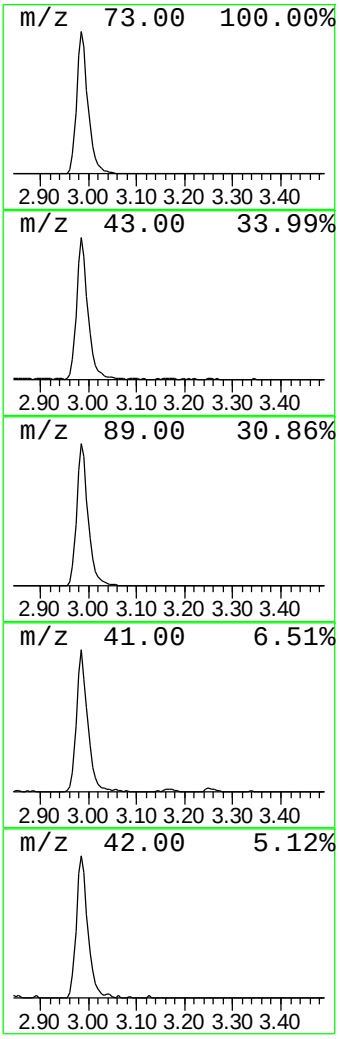
**********

Peak Number 1 unknown2.99 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.99 | 54.18 ng | 813896 | 1,4-Dichlorobenzene-d4 | 8.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Hydroxy-2-methylbutyric acid | 118 | C5H10O3 | 003739-30-8 | 28 |
| 2 | Propane, 2,2-dimethoxy- | 104 | C5H12O2 | 000077-76-9 | 9 |
| 3 | 1,3-Dioxolane, 2-heptyl- | 172 | C10H20O2 | 004359-57-3 | 9 |
| 4 | N-Ethylformamide | 73 | C3H7NO | 000627-45-2 | 7 |
| 5 | Methane, isothiocyanato- | 73 | C2H3NS | 000556-61-6 | 7 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG060916\
Data File : BG022271.D
Acq On : 9 Jun 2016 16:32
Operator : UM/SJ
Sample : H3402-04 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SS-40

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG060616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

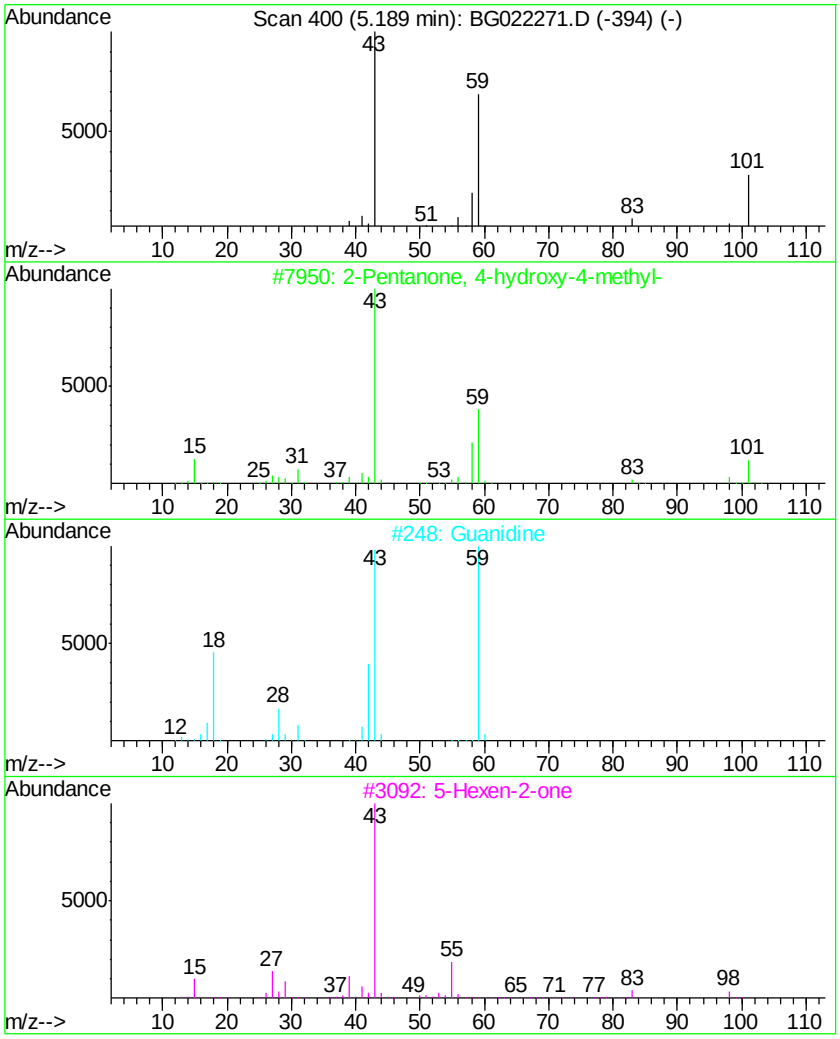
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

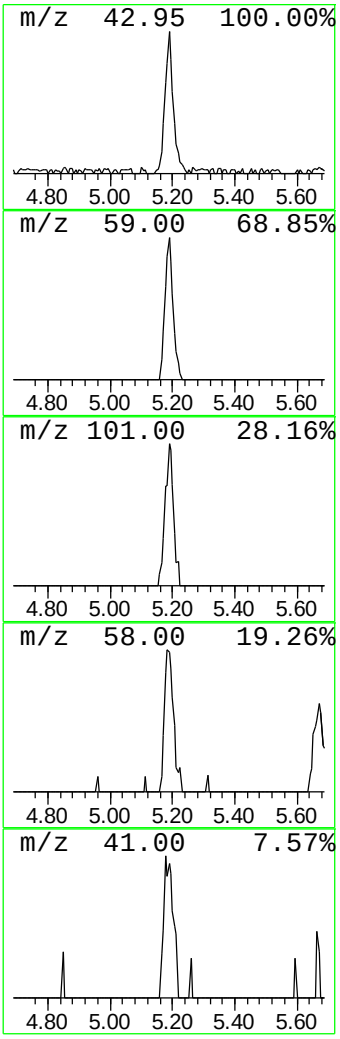
**********

Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.19 | 2.18 ng | 32693 | 1,4-Dichlorobenzene-d4 | 8.12 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 45 |
| 2 | Guanidine | 59 | CH5N3 | 000113-00-8 | 38 |
| 3 | 5-Hexen-2-one | 98 | C6H10O | 000109-49-9 | 10 |
| 4 | 2-Propanone, 1-cyclopropyl- | 98 | C6H10O | 004160-75-2 | 9 |
| 5 | (+-)-4-Amino-4,5-dihydro-2(3H)-f... | 101 | C4H7NO2 | 016504-58-8 | 9 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG060916\
Data File : BG022271.D
Acq On : 9 Jun 2016 16:32
Operator : UM/SJ
Sample : H3402-04 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SS-40

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG060616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

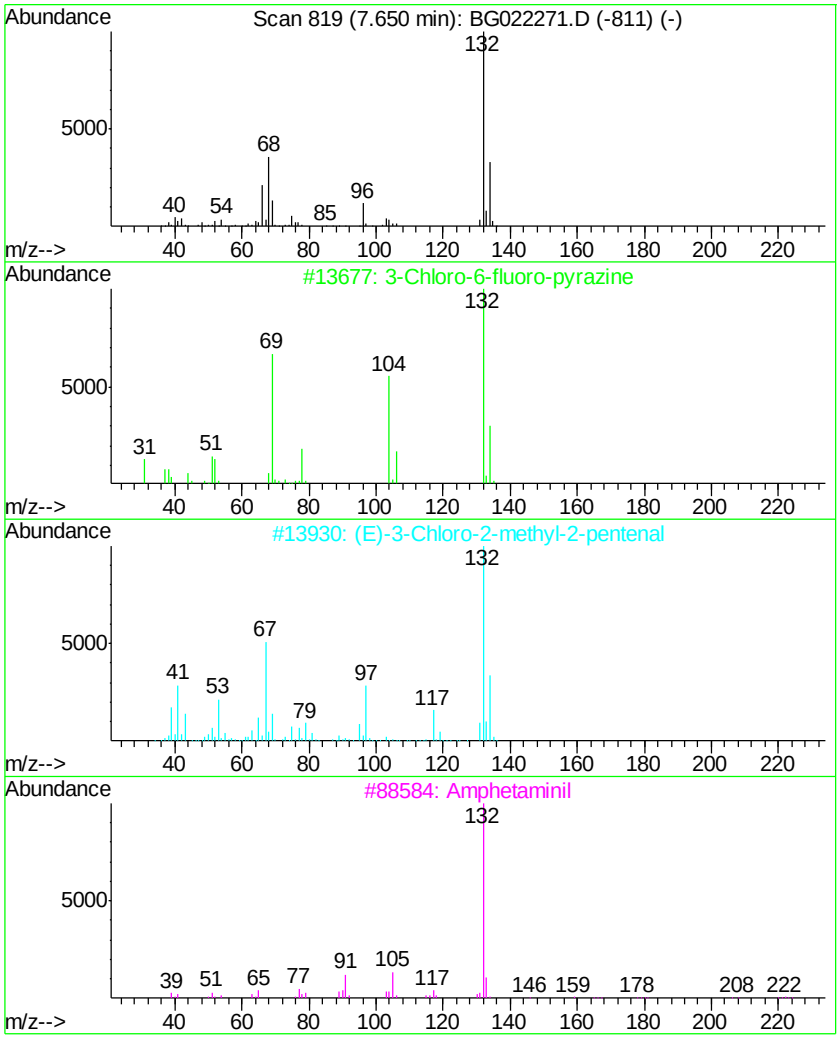
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

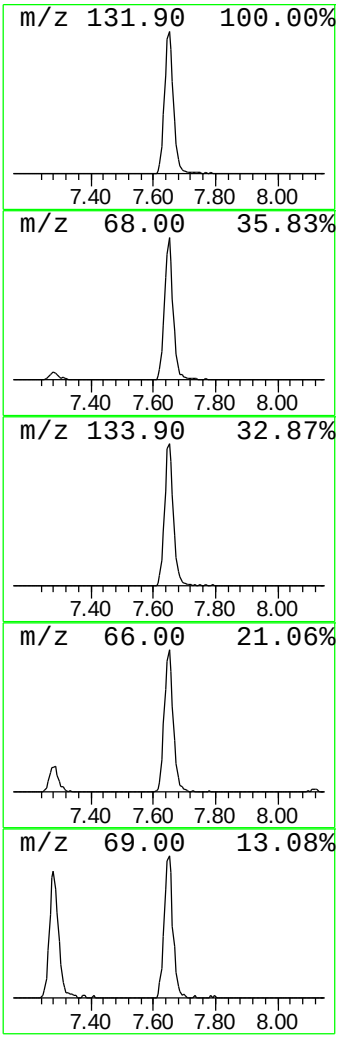
**********

Peak Number 3 unknown7.65 Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.65 | 29.16 ng | 438002 | 1,4-Dichlorobenzene-d4 | 8.12 |

| 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 | Amphetaminil | 250 | C17H18N2 | 017590-01-1 | 12 |
| 4 | Xenon | 132 | Xe | 007440-63-3 | 9 |
| 5 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 9 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG060916\
Data File : BG022271.D
Acq On : 9 Jun 2016 16:32
Operator : UM/SJ
Sample : H3402-04 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SS-40

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG060616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

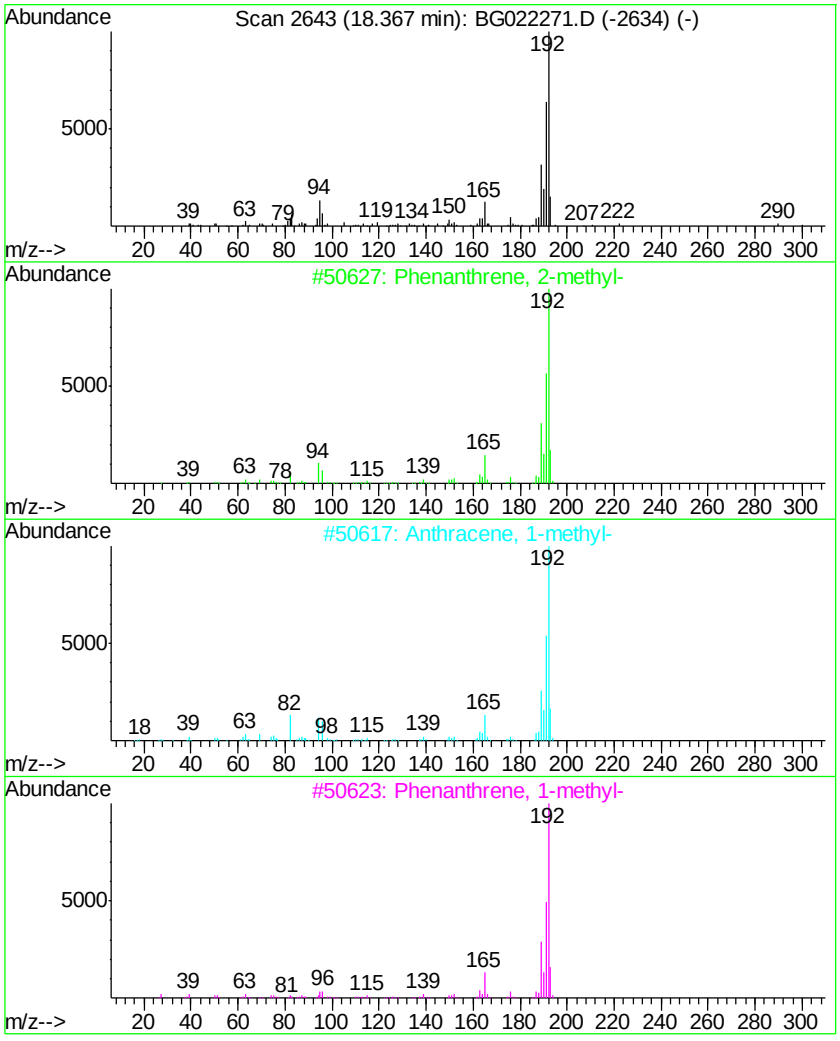
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

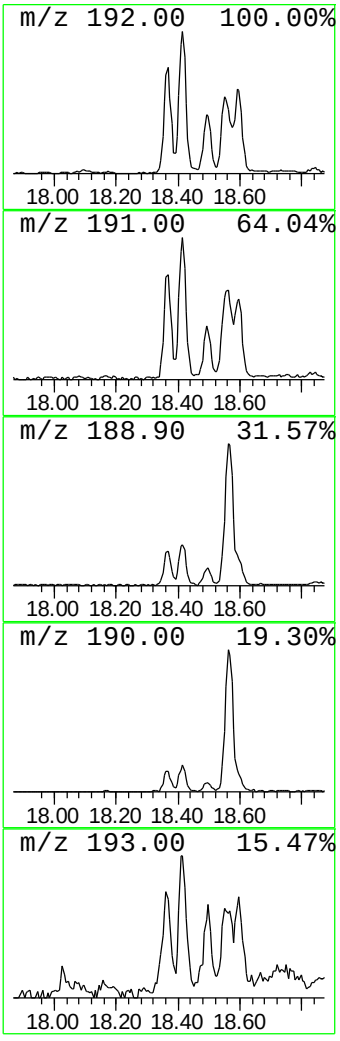
**********

Peak Number 5 Phenanthrene, 2-methyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.37 | 3.08 ng | 120454 | Phenanthrene-d10 | 17.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 91 |
| 2 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 89 |
| 3 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 89 |
| 4 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 81 |
| 5 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 76 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG060916\
Data File : BG022271.D
Acq On : 9 Jun 2016 16:32
Operator : UM/SJ
Sample : H3402-04 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SS-40

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG060616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

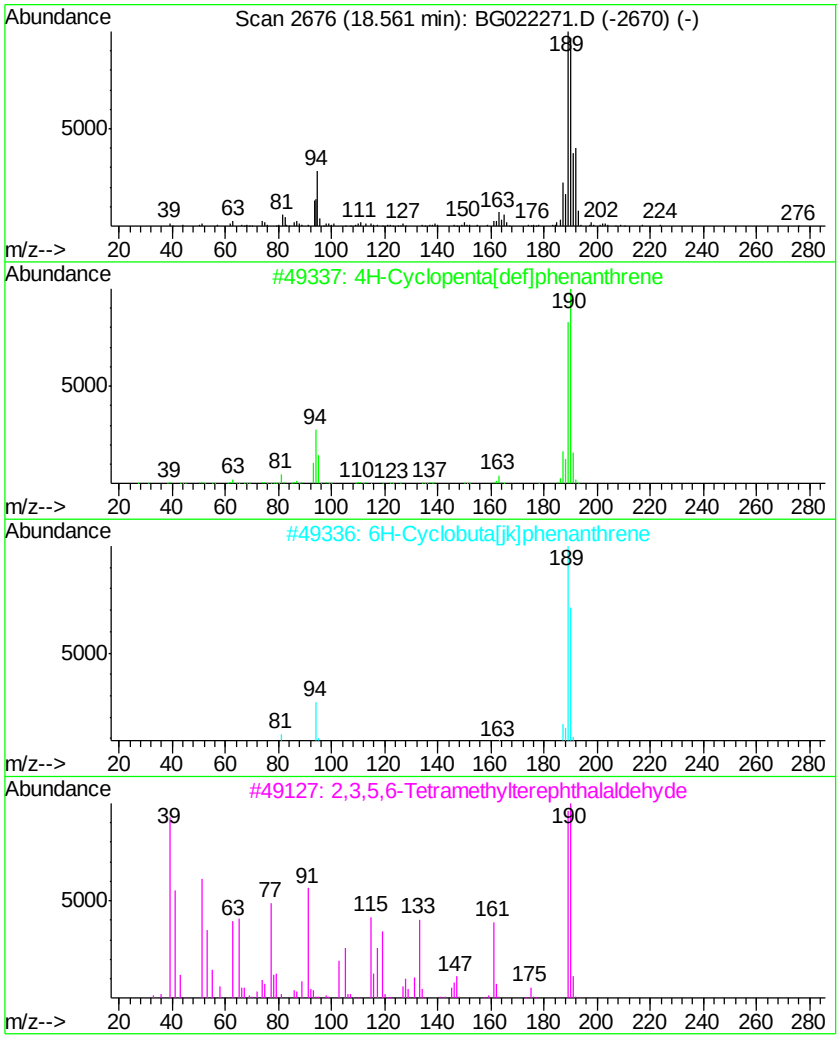
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

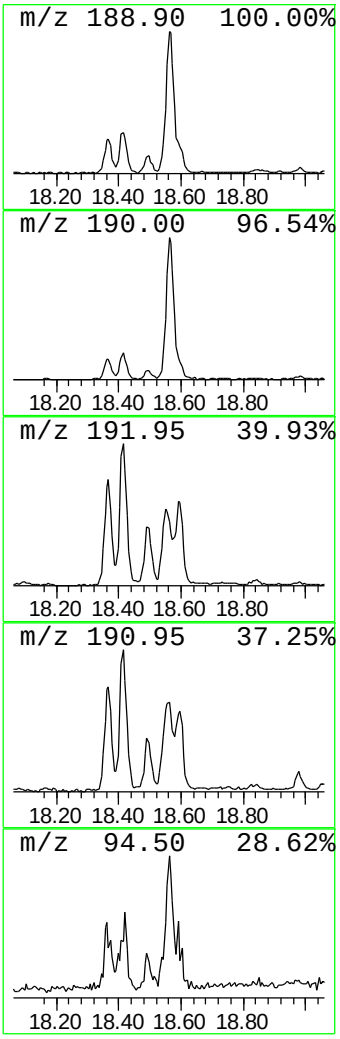
**********

Peak Number 7 4H-Cyclopenta[def]phenanthrene Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.56 | 5.77 ng | 225425 | Phenanthrene-d10 | 17.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 89 |
| 2 | 6H-Cyclobuta[jk]phenanthrene | 190 | C15H10 | 083469-43-6 | 53 |
| 3 | 2,3,5,6-Tetramethylterephthalald... | 190 | C12H14O2 | 007072-01-7 | 43 |
| 4 | Hydrazinecarboxaldehyde, 2-[3-(m... | 190 | C4H6N4OS2 | 038362-25-3 | 10 |
| 5 | 2,2'-Difluorobiphenyl | 190 | C12H8F2 | 000388-82-9 | 10 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG060916\
Data File : BG022271.D
Acq On : 9 Jun 2016 16:32
Operator : UM/SJ
Sample : H3402-04 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SS-40

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG060616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

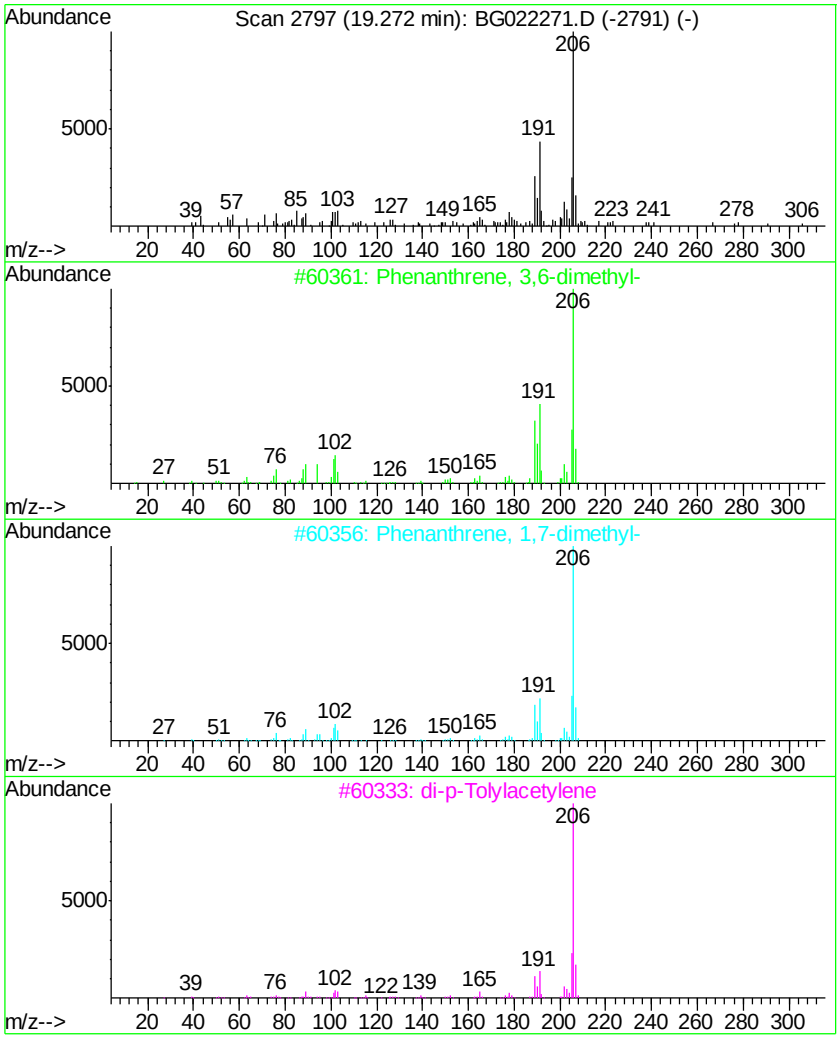
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

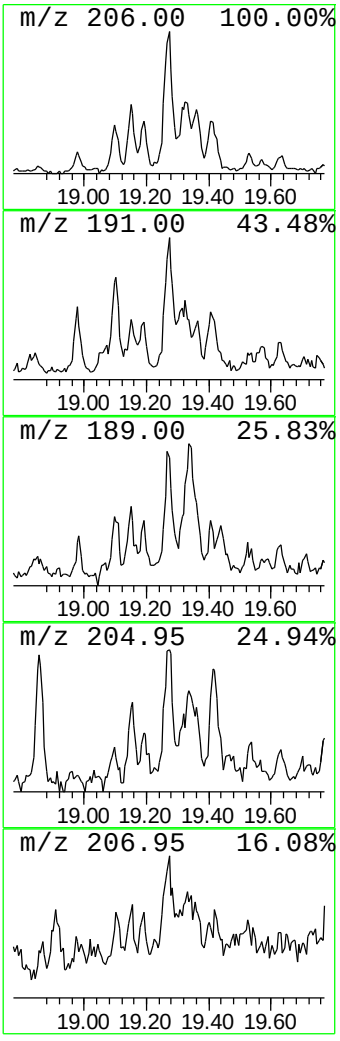
**********

Peak Number 8 Phenanthrene, 3,6-dimethyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.27 | 2.41 ng | 94030 | Phenanthrene-d10 | 17.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 95 |
| 2 | Phenanthrene, 1,7-dimethyl- | 206 | C16H14 | 000483-87-4 | 95 |
| 3 | di-p-Tolylacetylene | 206 | C16H14 | 002789-88-0 | 93 |
| 4 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 93 |
| 5 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 91 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG060916\
Data File : BG022271.D
Acq On : 9 Jun 2016 16:32
Operator : UM/SJ
Sample : H3402-04 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SS-40

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG060616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

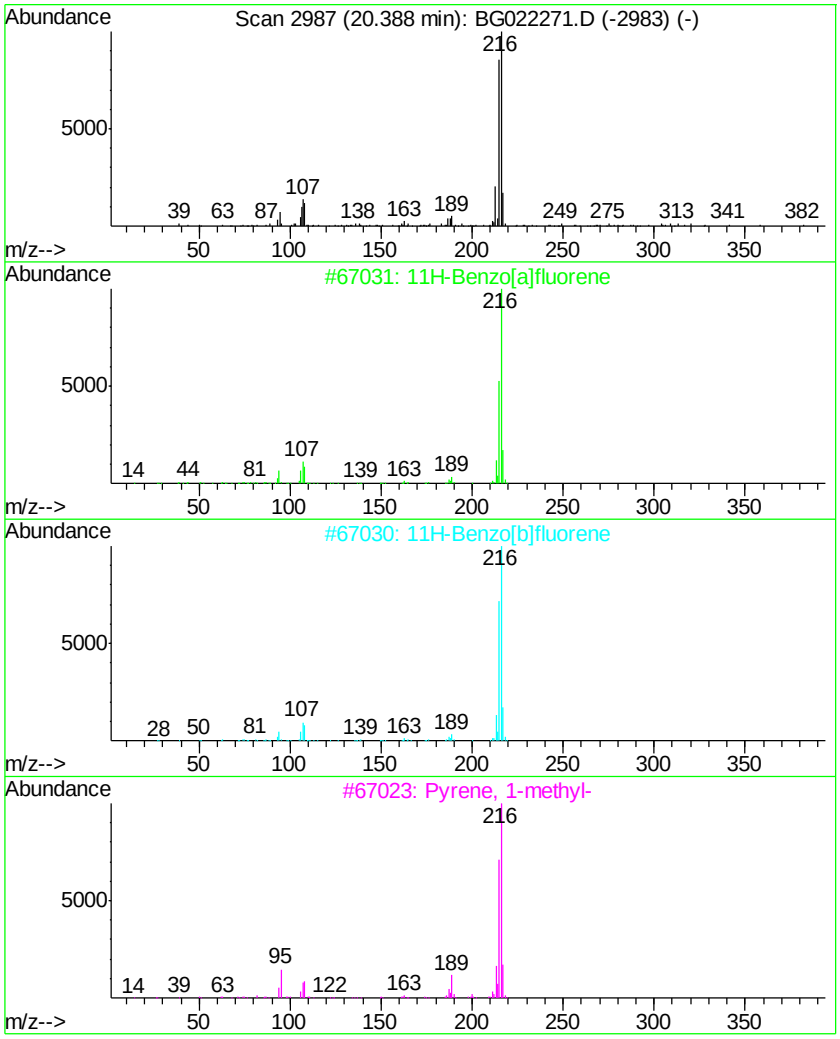
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

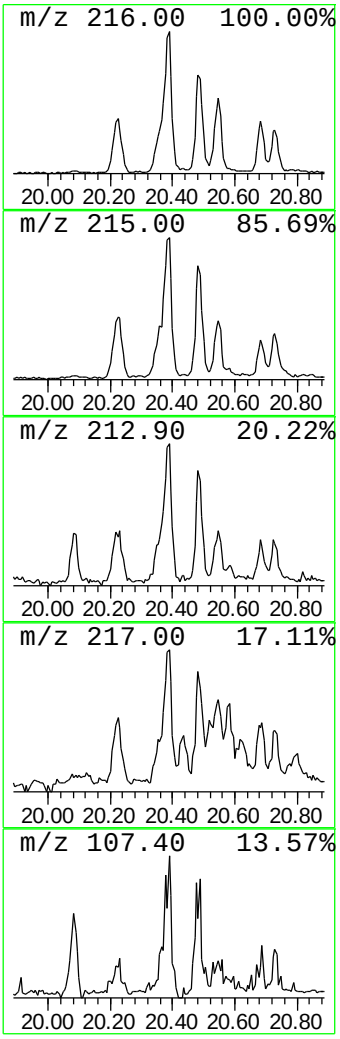
**********

Peak Number 9 11H-Benzo[a]fluorene Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.39 | 2.22 ng | 154659 | Chrysene-d12 | 21.77 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 94 |
| 2 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 93 |
| 3 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 91 |
| 4 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 81 |
| 5 | Benzoic acid, 3-(3,5-dimethyl-1-... | 216 | C12H12N2O2 | 312531-88-7 | 58 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_G\DATA\BG060916\
Data File : BG022271.D
Acq On : 9 Jun 2016 16:32
Operator : UM/SJ
Sample : H3402-04 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SS-40

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG060616.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 |
| unknown2.99 | 2.99 | 54.2 | ng | 813896 | 1 | 8.12 | 300453 | 20.0 |
| 2-Pentanone, 4-hy... | 5.19 | 2.2 | ng | 32693 | 1 | 8.12 | 300453 | 20.0 |
| unknown7.65 | 7.65 | 29.2 | ng | 438002 | 1 | 8.12 | 300453 | 20.0 |
| Phenanthrene, 2-m... | 18.37 | 3.1 | ng | 120454 | 4 | 17.49 | 781233 | 20.0 |
| 4H-Cyclopenta[def... | 18.56 | 5.8 | ng | 225425 | 4 | 17.49 | 781233 | 20.0 |
| Phenanthrene, 3,6... | 19.27 | 2.4 | ng | 94030 | 4 | 17.49 | 781233 | 20.0 |
| 11H-Benzo[a]fluorene | 20.39 | 2.2 | ng | 154659 | 5 | 21.77 | 1395610 | 20.0 |