LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF052717\
Data File : BF095523.D
Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

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-BF050217.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 | 2.219 | 44 | 48 | 73 | rBV | 496588 | 952779 | 14.72% | 2.698% |
| 2 | 5.084 | 531 | 535 | 555 | rVV2 | 60101 | 174902 | 2.70% | 0.495% |
| 3 | 5.701 | 637 | 640 | 679 | rBV | 533463 | 1639156 | 25.32% | 4.642% |
| 4 | 7.283 | 906 | 909 | 925 | rBV | 549046 | 1397248 | 21.59% | 3.957% |
| 5 | 7.401 | 925 | 929 | 938 | rVV | 1051484 | 1906585 | 29.46% | 5.399% |
| 6 | 7.472 | 938 | 941 | 947 | rVB | 57155 | 75049 | 1.16% | 0.213% |
| 7 | 7.736 | 982 | 986 | 996 | rBV | 402181 | 511508 | 7.90% | 1.449% |
| 8 | 7.972 | 1022 | 1026 | 1040 | rVB | 1078011 | 1399758 | 21.63% | 3.964% |
| 9 | 8.642 | 1136 | 1140 | 1156 | rBV | 428474 | 927708 | 14.33% | 2.627% |
| 10 | 8.754 | 1156 | 1159 | 1169 | rVB4 | 41591 | 77857 | 1.20% | 0.220% |
| 11 | 9.760 | 1326 | 1330 | 1341 | rBV | 354914 | 702286 | 10.85% | 1.989% |
| 12 | 9.836 | 1341 | 1343 | 1352 | rVB3 | 50833 | 68446 | 1.06% | 0.194% |
| 13 | 10.936 | 1523 | 1530 | 1539 | rBV | 70385 | 128758 | 1.99% | 0.365% |
| 14 | 11.083 | 1547 | 1555 | 1559 | rBV | 58089 | 96978 | 1.50% | 0.275% |
| 15 | 11.530 | 1626 | 1631 | 1647 | rBV | 1276948 | 1975807 | 30.53% | 5.596% |
| 16 | 11.742 | 1664 | 1667 | 1676 | rVB | 52190 | 74061 | 1.14% | 0.210% |
| 17 | 12.065 | 1718 | 1722 | 1727 | rBV | 48380 | 80568 | 1.24% | 0.228% |
| 18 | 12.113 | 1727 | 1730 | 1735 | rVB2 | 50351 | 69302 | 1.07% | 0.196% |
| 19 | 12.230 | 1745 | 1750 | 1753 | rBV | 156872 | 225785 | 3.49% | 0.639% |
| 20 | 12.265 | 1753 | 1756 | 1764 | rVB3 | 96331 | 165283 | 2.55% | 0.468% |
| 21 | 12.383 | 1769 | 1776 | 1782 | rBV4 | 31927 | 67728 | 1.05% | 0.192% |
| 22 | 12.589 | 1807 | 1811 | 1818 | rBV3 | 504952 | 840102 | 12.98% | 2.379% |
| 23 | 12.648 | 1818 | 1821 | 1828 | rVB3 | 51130 | 90372 | 1.40% | 0.256% |
| 24 | 12.960 | 1866 | 1874 | 1880 | rBV2 | 58528 | 119724 | 1.85% | 0.339% |
| 25 | 13.136 | 1899 | 1904 | 1910 | rVB3 | 46102 | 81991 | 1.27% | 0.232% |
| 26 | 13.365 | 1935 | 1943 | 1946 | rBV | 4354383 | 6472496 | 100.00% | 18.330% |
| 27 | 13.418 | 1949 | 1952 | 1956 | rVB | 86390 | 97553 | 1.51% | 0.276% |
| 28 | 13.495 | 1958 | 1965 | 1972 | rVB4 | 67978 | 135631 | 2.10% | 0.384% |
| 29 | 13.777 | 2006 | 2013 | 2023 | rBV3 | 65908 | 154785 | 2.39% | 0.438% |
| 30 | 13.895 | 2028 | 2033 | 2042 | rBV | 562590 | 1003972 | 15.51% | 2.843% |
| 31 | 14.195 | 2080 | 2084 | 2085 | rBV | 93646 | 106326 | 1.64% | 0.301% |
| 32 | 14.218 | 2085 | 2088 | 2093 | rVB2 | 130843 | 186538 | 2.88% | 0.528% |
| 33 | 14.612 | 2151 | 2155 | 2160 | rBV5 | 49242 | 85512 | 1.32% | 0.242% |
| 34 | 14.924 | 2203 | 2208 | 2212 | rBV | 83531 | 98104 | 1.52% | 0.278% |

LSC Area Percent Report

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Data File : BF095523.D
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Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

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-BF050217.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 14.995 | 2212 | 2220 | 2223 | rBV | 510631 | 672353 | 10.39% | 1.904% |
| 36 | 15.030 | 2223 | 2226 | 2233 | rVB | 313718 | 462478 | 7.15% | 1.310% |
| 37 | 15.124 | 2238 | 2242 | 2252 | rVB | 73672 | 135143 | 2.09% | 0.383% |
| 38 | 15.212 | 2252 | 2257 | 2262 | rBV5 | 42688 | 80837 | 1.25% | 0.229% |
| 39 | 15.524 | 2305 | 2310 | 2316 | rVV5 | 33413 | 65308 | 1.01% | 0.185% |
| 40 | 15.583 | 2316 | 2320 | 2327 | rVB | 96581 | 130040 | 2.01% | 0.368% |
| 41 | 15.777 | 2349 | 2353 | 2357 | rBV | 98394 | 117547 | 1.82% | 0.333% |
| 42 | 15.824 | 2357 | 2361 | 2366 | rVB | 130414 | 182855 | 2.83% | 0.518% |
| 43 | 15.930 | 2375 | 2379 | 2381 | rBV2 | 150190 | 182315 | 2.82% | 0.516% |
| 44 | 16.177 | 2418 | 2421 | 2424 | rBV | 83548 | 86991 | 1.34% | 0.246% |
| 45 | 16.218 | 2424 | 2428 | 2431 | rBV | 60803 | 79556 | 1.23% | 0.225% |
| 46 | 16.471 | 2468 | 2471 | 2475 | rBV | 53539 | 68898 | 1.06% | 0.195% |
| 47 | 16.571 | 2484 | 2488 | 2492 | rBV | 170212 | 222140 | 3.43% | 0.629% |
| 48 | 16.618 | 2492 | 2496 | 2499 | rVV3 | 77032 | 139417 | 2.15% | 0.395% |
| 49 | 16.648 | 2499 | 2501 | 2504 | rVV | 60007 | 65271 | 1.01% | 0.185% |
| 50 | 16.689 | 2504 | 2508 | 2511 | rVV3 | 72944 | 121934 | 1.88% | 0.345% |
| 51 | 16.718 | 2511 | 2513 | 2519 | rVV | 97373 | 120967 | 1.87% | 0.343% |
| 52 | 16.777 | 2519 | 2523 | 2535 | rVB | 646174 | 847918 | 13.10% | 2.401% |
| 53 | 16.912 | 2543 | 2546 | 2552 | rVB3 | 43686 | 80510 | 1.24% | 0.228% |
| 54 | 17.042 | 2560 | 2568 | 2570 | rBV8 | 60575 | 128020 | 1.98% | 0.363% |
| 55 | 17.077 | 2570 | 2574 | 2582 | rVB | 704356 | 893671 | 13.81% | 2.531% |
| 56 | 17.224 | 2596 | 2599 | 2603 | rVB | 86453 | 94685 | 1.46% | 0.268% |
| 57 | 17.271 | 2603 | 2607 | 2609 | rBV2 | 61085 | 80599 | 1.25% | 0.228% |
| 58 | 17.312 | 2609 | 2614 | 2622 | rVV | 1355728 | 1617427 | 24.99% | 4.581% |
| 59 | 17.400 | 2623 | 2629 | 2631 | rVV4 | 65321 | 124591 | 1.92% | 0.353% |
| 60 | 17.430 | 2631 | 2634 | 2639 | rVB | 444917 | 472068 | 7.29% | 1.337% |
| 61 | 17.512 | 2645 | 2648 | 2651 | rBV4 | 50894 | 90392 | 1.40% | 0.256% |
| 62 | 17.547 | 2651 | 2654 | 2658 | rVB2 | 109538 | 140212 | 2.17% | 0.397% |
| 63 | 17.630 | 2665 | 2668 | 2672 | rVB2 | 73660 | 88227 | 1.36% | 0.250% |
| 64 | 17.689 | 2672 | 2678 | 2684 | rBV3 | 154323 | 315706 | 4.88% | 0.894% |
| 65 | 17.794 | 2693 | 2696 | 2700 | rVB | 82736 | 91790 | 1.42% | 0.260% |
| 66 | 17.836 | 2700 | 2703 | 2709 | rBV | 56806 | 88642 | 1.37% | 0.251% |
| 67 | 18.077 | 2735 | 2744 | 2748 | rBV9 | 42943 | 120413 | 1.86% | 0.341% |
| 68 | 18.136 | 2748 | 2754 | 2758 | rVB3 | 98646 | 149238 | 2.31% | 0.423% |
| 69 | 18.236 | 2768 | 2771 | 2778 | rVB3 | 64590 | 93652 | 1.45% | 0.265% |
| 70 | 18.377 | 2792 | 2795 | 2798 | rVB | 91600 | 92760 | 1.43% | 0.263% |
| 71 | 18.559 | 2822 | 2826 | 2836 | rBV2 | 93601 | 149848 | 2.32% | 0.424% |

LSC Area Percent Report

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Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

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-BF050217.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 18.665 | 2839 | 2844 | 2848 | rVV2 | 640725 | 1025123 | 15.84% | 2.903% |
| 73 | 18.706 | 2848 | 2851 | 2857 | rVB | 301231 | 432221 | 6.68% | 1.224% |
| 74 | 18.800 | 2864 | 2867 | 2871 | rVB3 | 66340 | 82383 | 1.27% | 0.233% |
| 75 | 18.959 | 2891 | 2894 | 2898 | rBV2 | 96786 | 107505 | 1.66% | 0.304% |
| 76 | 19.177 | 2926 | 2931 | 2935 | rBV | 115266 | 151693 | 2.34% | 0.430% |
| 77 | 19.265 | 2943 | 2946 | 2949 | rBV4 | 45304 | 71343 | 1.10% | 0.202% |
| 78 | 19.341 | 2954 | 2959 | 2969 | rVB4 | 99910 | 193932 | 3.00% | 0.549% |
| 79 | 19.712 | 3019 | 3022 | 3025 | rVB2 | 72568 | 78610 | 1.21% | 0.223% |
| 80 | 19.941 | 3057 | 3061 | 3065 | rBV | 293991 | 440736 | 6.81% | 1.248% |
| 81 | 20.065 | 3078 | 3082 | 3086 | rBV2 | 128453 | 165744 | 2.56% | 0.469% |
| 82 | 20.236 | 3108 | 3111 | 3117 | rBV | 183972 | 197739 | 3.06% | 0.560% |
| 83 | 20.294 | 3118 | 3121 | 3127 | rVV | 243074 | 305393 | 4.72% | 0.865% |
| 84 | 20.347 | 3127 | 3130 | 3135 | rVV | 383791 | 505451 | 7.81% | 1.431% |
| 85 | 20.412 | 3138 | 3141 | 3147 | rVB | 110890 | 157013 | 2.43% | 0.445% |
| 86 | 20.788 | 3202 | 3205 | 3210 | rBV2 | 77954 | 111138 | 1.72% | 0.315% |
| 87 | 21.694 | 3354 | 3359 | 3368 | rVB4 | 95819 | 238214 | 3.68% | 0.675% |
| 88 | 22.082 | 3420 | 3425 | 3433 | rBV | 74264 | 161137 | 2.49% | 0.456% |

Sum of corrected areas: 35310452

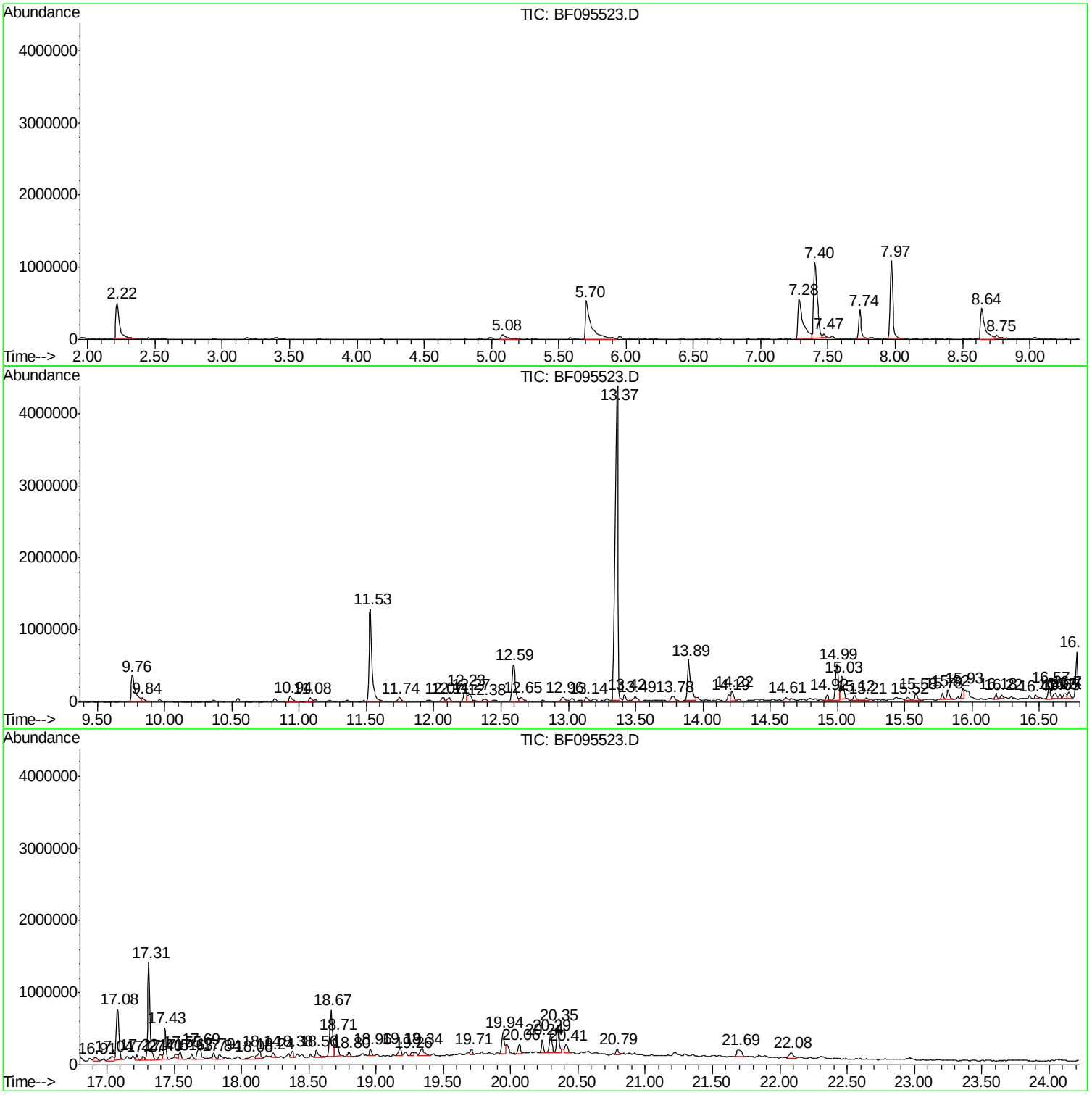
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA F\DATA\BF052717\
Data File : BF095523.D
Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF052717\
Data File : BF095523.D
Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

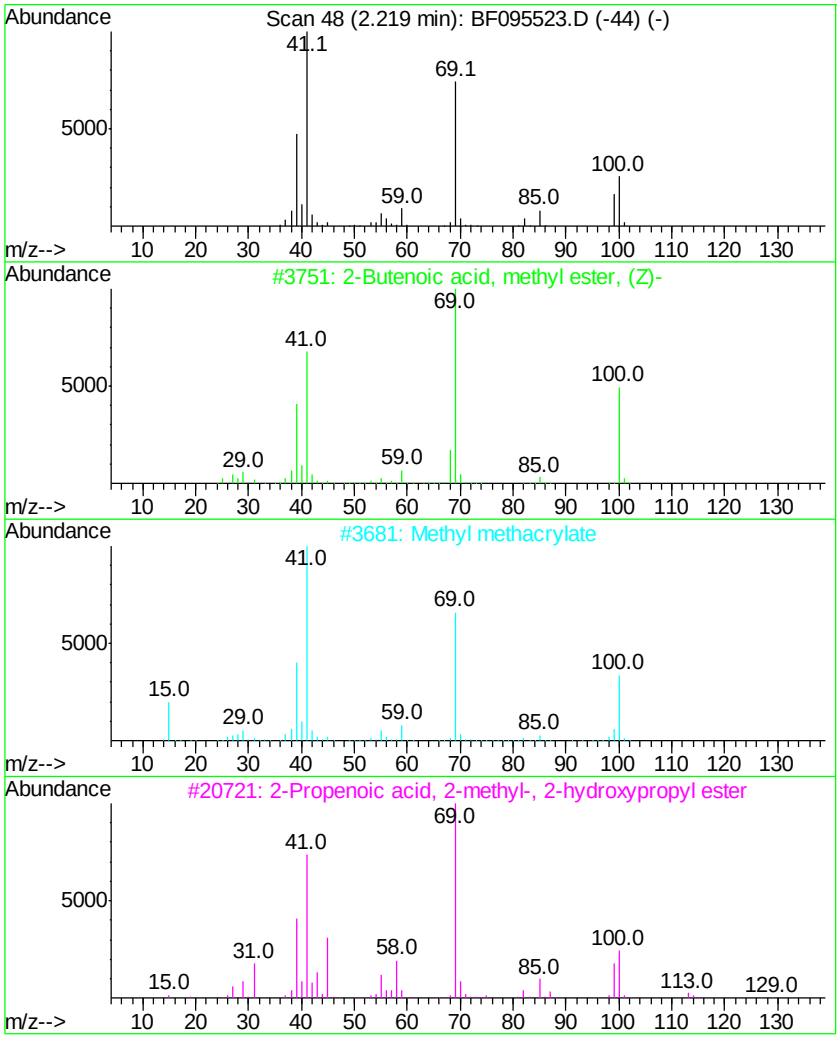
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

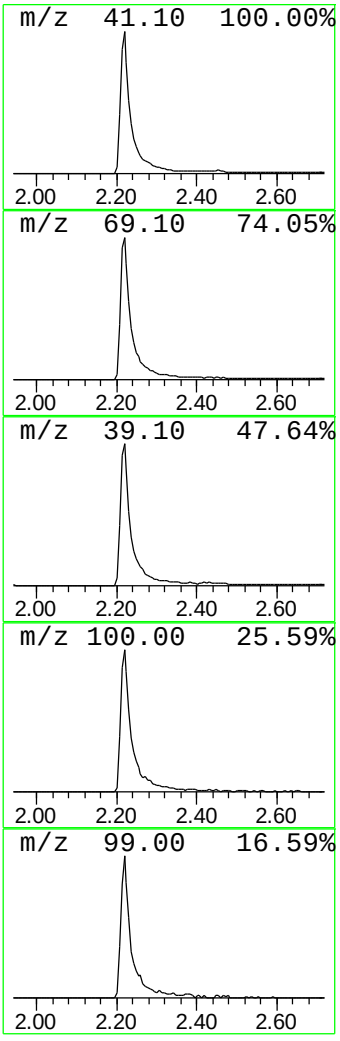
**********

Peak Number 1 2-Butenoic acid, methyl est... Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.22 | 37.25 ng | 952779 | 1,4-Dichlorobenzene-d4 | 7.74 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Butenoic acid, methyl ester, (Z)- | 100 | C5H8O2 | 004358-59-2 | 87 |
| 2 | Methyl methacrylate | 100 | C5H8O2 | 000080-62-6 | 86 |
| 3 | 2-Propenoic acid, 2-methyl-, 2-h... | 144 | C7H12O3 | 000923-26-2 | 64 |
| 4 | Crotonyl isothiocyanate | 127 | C5H5NOS | 060034-28-8 | 45 |
| 5 | 2-Butenoic acid, methyl ester, (E)- | 100 | C5H8O2 | 000623-43-8 | 45 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF052717\
Data File : BF095523.D
Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

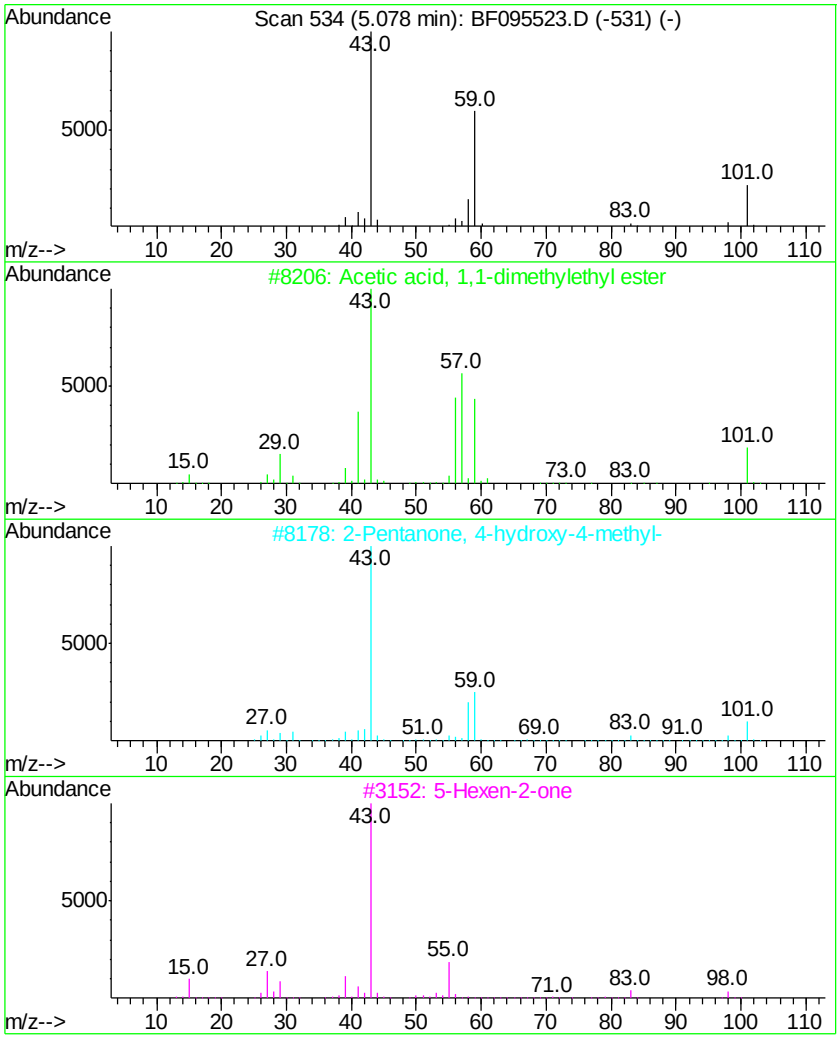
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

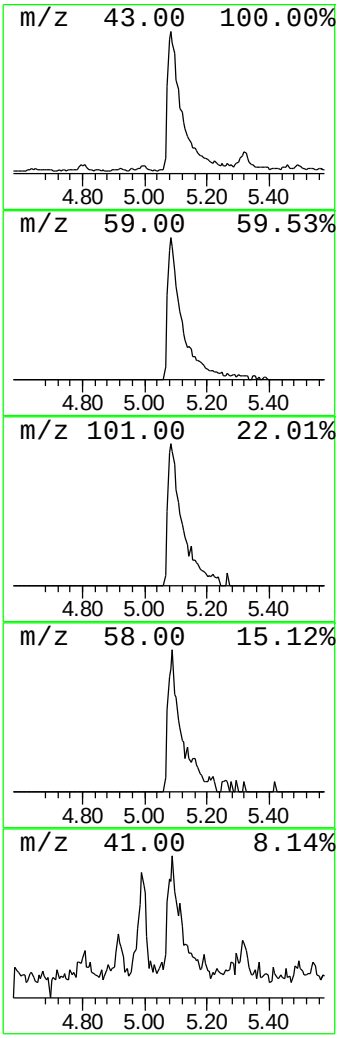
**********

Peak Number 2 Acetic acid, 1,1-dimethylet... Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.08 | 6.84 ng | 174902 | 1,4-Dichlorobenzene-d4 | 7.74 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Acetic acid, 1,1-dimethylethyl e... | 116 | C6H12O2 | 000540-88-5 | 50 |
| 2 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 45 |
| 3 | 5-Hexen-2-one | 98 | C6H10O | 000109-49-9 | 10 |
| 4 | Butane | 58 | C4H10 | 000106-97-8 | 9 |
| 5 | (+-)-4-Amino-4,5-dihydro-2(3H)-f... | 101 | C4H7NO2 | 016504-58-8 | 9 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF052717\
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Sample : I3281-04
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ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

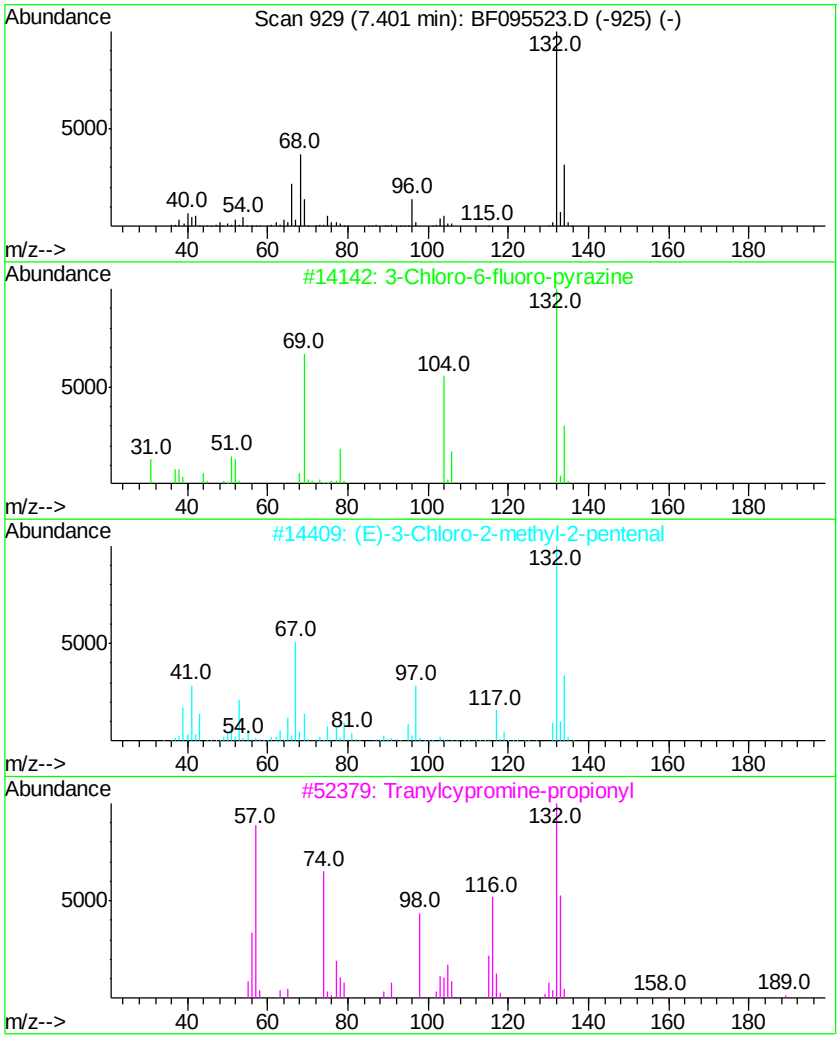
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

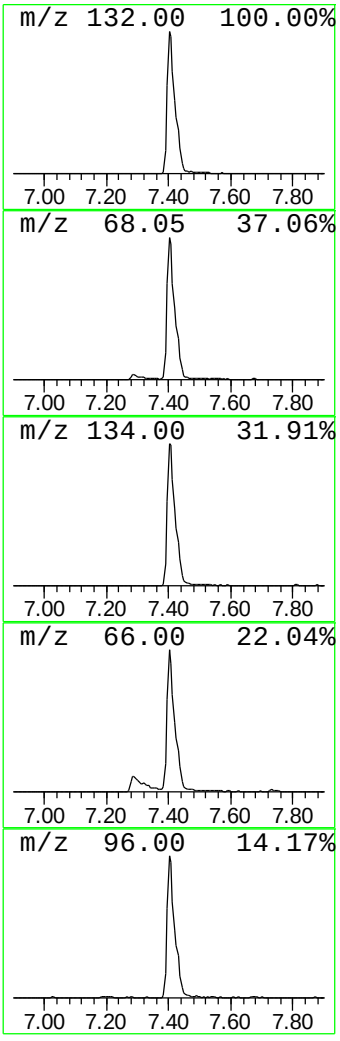
**********

Peak Number 3 unknown7.40 Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.40 | 74.55 ng | 1906590 | 1,4-Dichlorobenzene-d4 | 7.74 |

| 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 | Tranylcypromine-propionyl | 189 | C12H15NO | 1000123-86-3 | 12 |
| 4 | 5-Aminoindole | 132 | C8H8N2 | 005192-03-0 | 12 |
| 5 | 2H-Cyclopenta[d]pyridazine, 2-me... | 132 | C8H8N2 | 022291-85-6 | 9 |



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Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

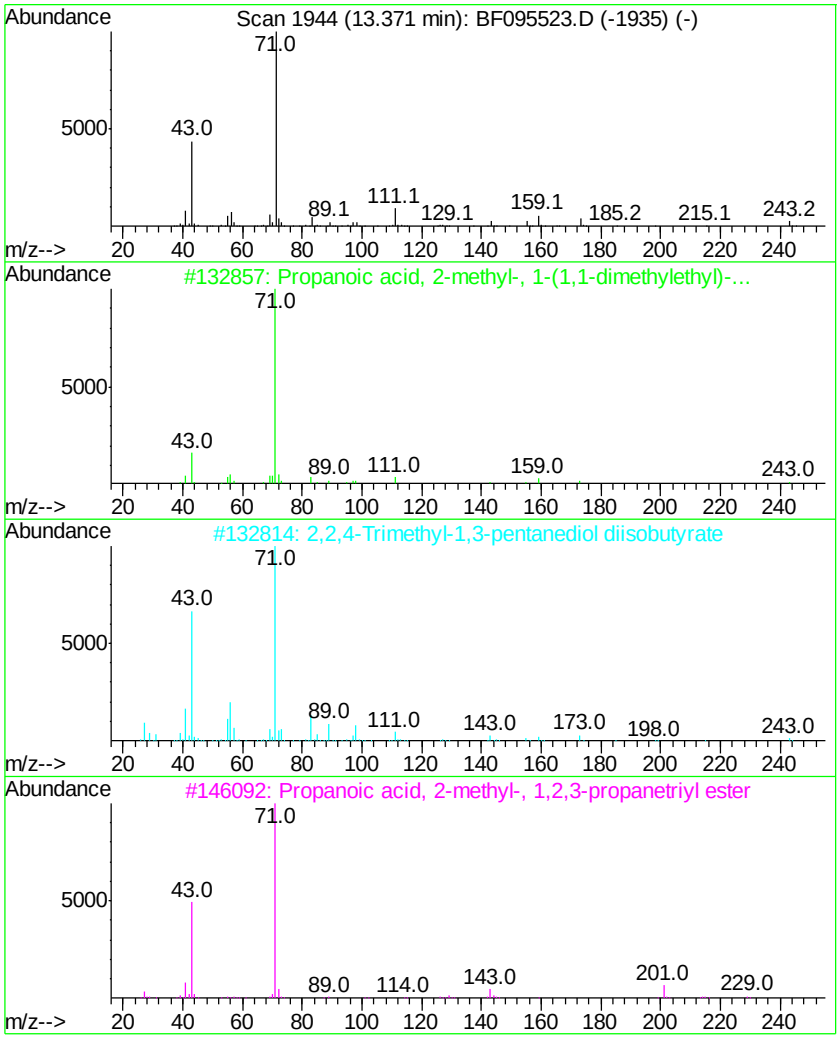
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

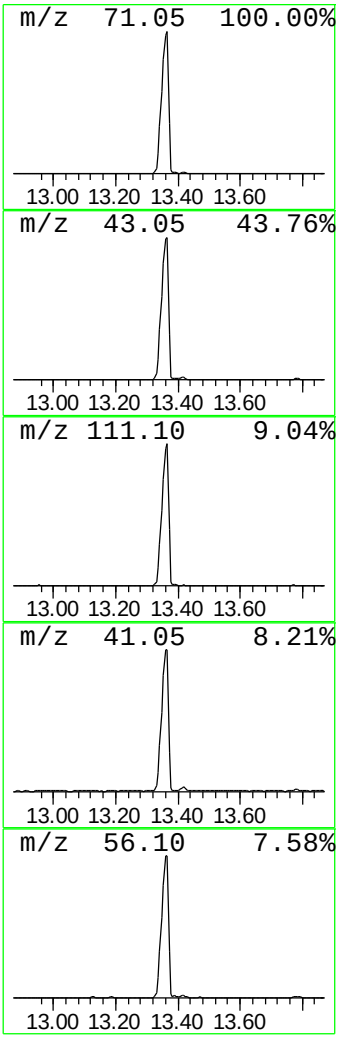
**********

Peak Number 5 Propanoic acid, 2-methyl-, ... Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.37 | 154.09 ng | 6472500 | Acenaphthene-d10 | 12.59 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Propanoic acid, 2-methyl-, 1-(1,... | 286 | C16H30O4 | 074381-40-1 | 78 |
| 2 | 2,2,4-Trimethyl-1,3-pentanediol ... | 286 | C16H30O4 | 006846-50-0 | 64 |
| 3 | Propanoic acid, 2-methyl-, 1,2,3... | 302 | C15H26O6 | 014295-64-8 | 45 |
| 4 | Fumaric acid, nonyl tetrahydrofu... | 326 | C18H30O5 | 1000330-58-3 | 45 |
| 5 | Diethylmalonic acid, monochlorid... | 262 | C12H19ClO4 | 1000370-65-0 | 45 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF052717\
Data File : BF095523.D
Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

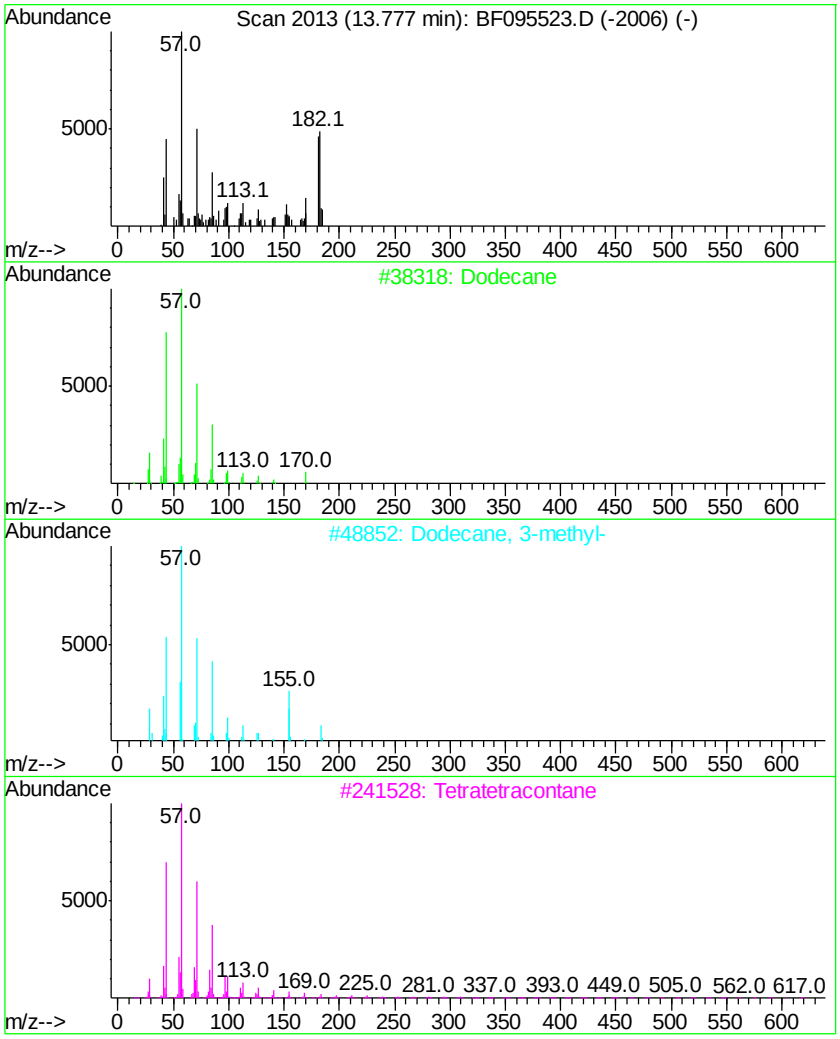
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

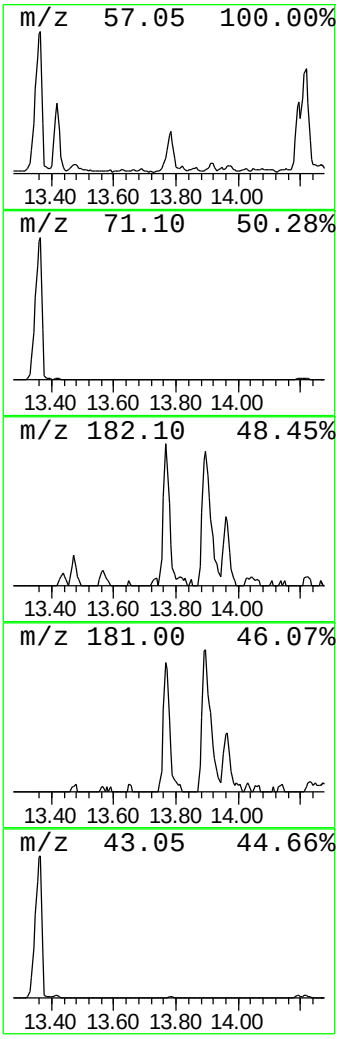
**********

Peak Number 6 unknown13.78 Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.78 | 3.68 ng | 154785 | Acenaphthene-d10 | 12.59 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dodecane | 170 | C12H26 | 000112-40-3 | 38 |
| 2 | Dodecane, 3-methyl- | 184 | C13H28 | 017312-57-1 | 38 |
| 3 | Tetratetracontane | 619 | C44H90 | 007098-22-8 | 27 |
| 4 | Hexacosane | 366 | C26H54 | 000630-01-3 | 27 |
| 5 | Hentriacontane | 437 | C31H64 | 000630-04-6 | 27 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF052717\
Data File : BF095523.D
Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

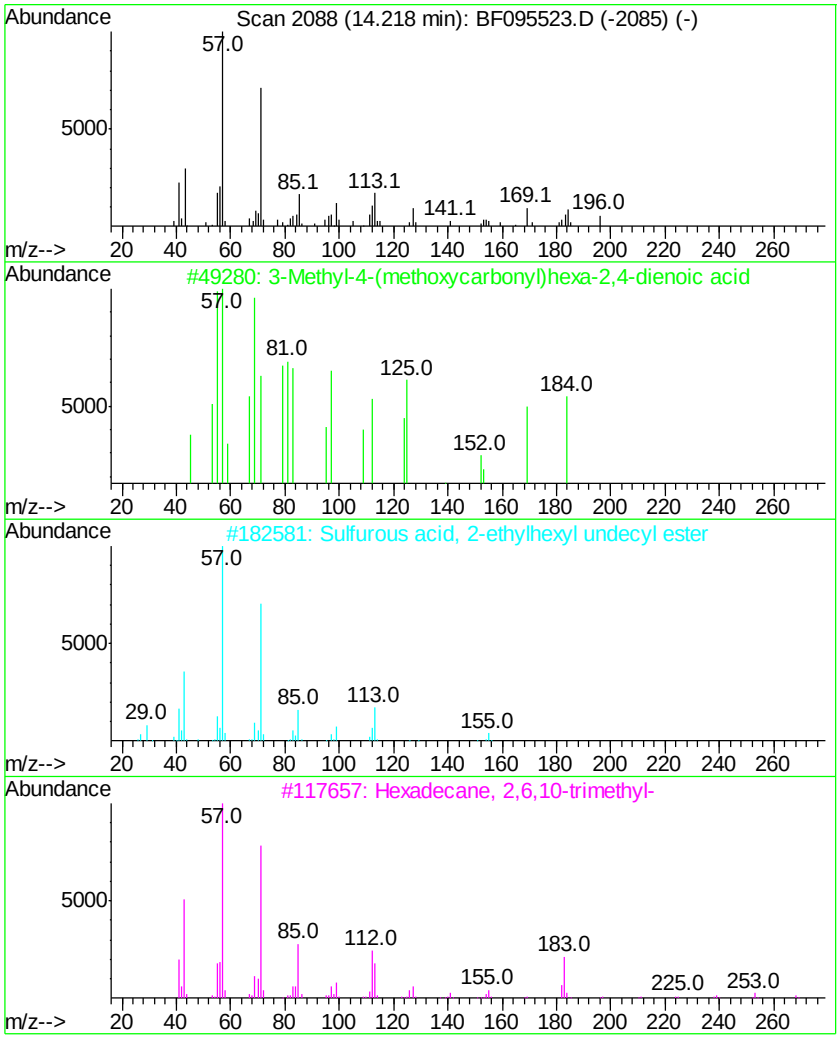
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

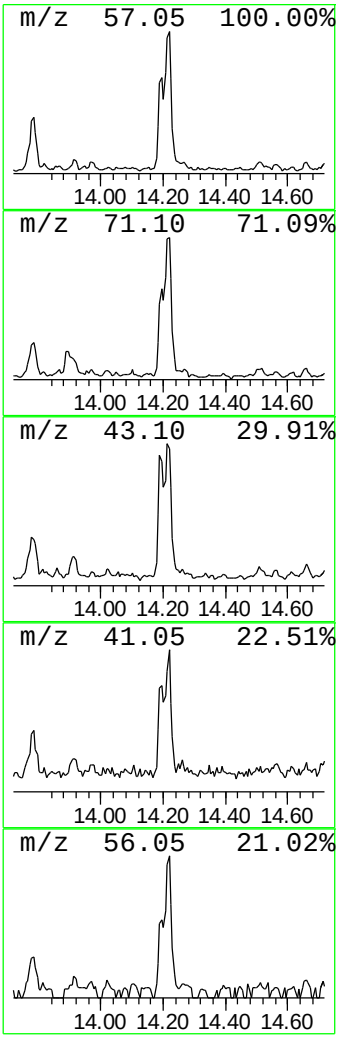
**********

Peak Number 7 3-Methyl-4-(methoxycarbonyl... Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.22 | 5.55 ng | 186538 | Phenanthrene-d10 | 14.99 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Methyl-4-(methoxycarbonyl)hexa... | 184 | C9H12O4 | 1000104-10-8 | 91 |
| 2 | Sulfurous acid, 2-ethylhexyl und... | 348 | C19H40O3S | 1000309-19-4 | 58 |
| 3 | Hexadecane, 2,6,10-trimethyl- | 268 | C19H40 | 055000-52-7 | 53 |
| 4 | Sulfurous acid, 2-ethylhexyl tri... | 376 | C21H44O3S | 1000309-19-6 | 53 |
| 5 | Pentadecane, 2,6,10,14-tetramethyl- | 268 | C19H40 | 001921-70-6 | 53 |



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Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

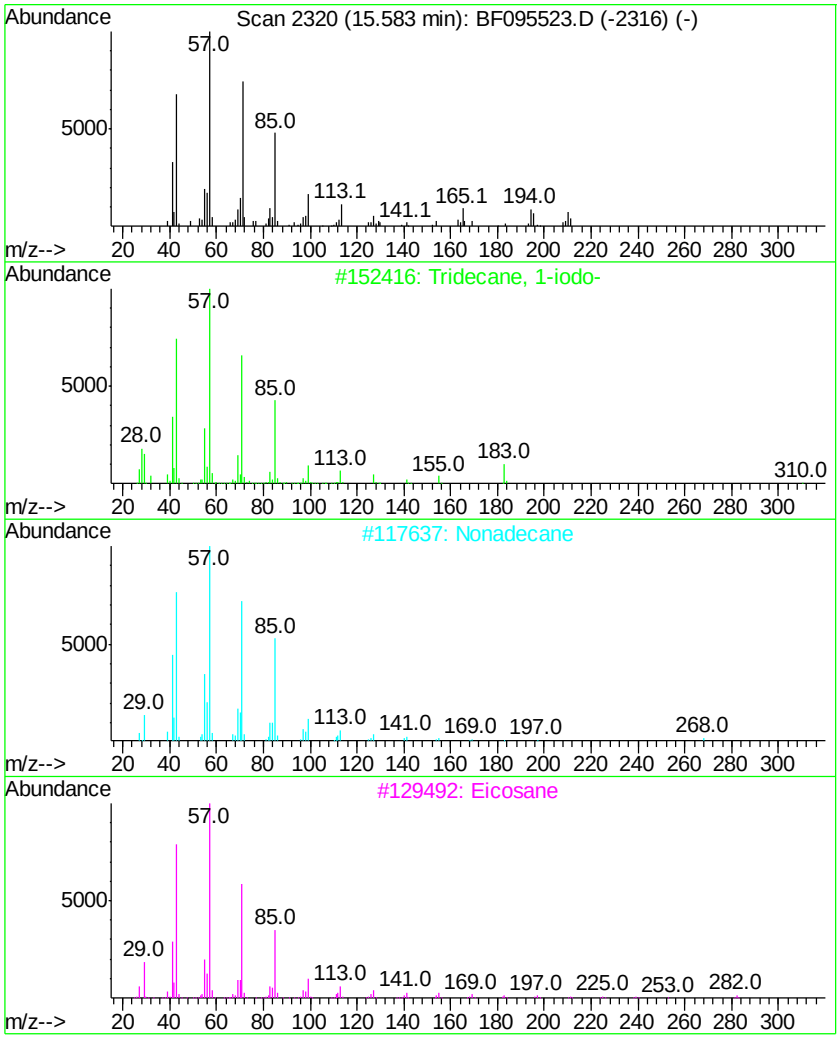
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

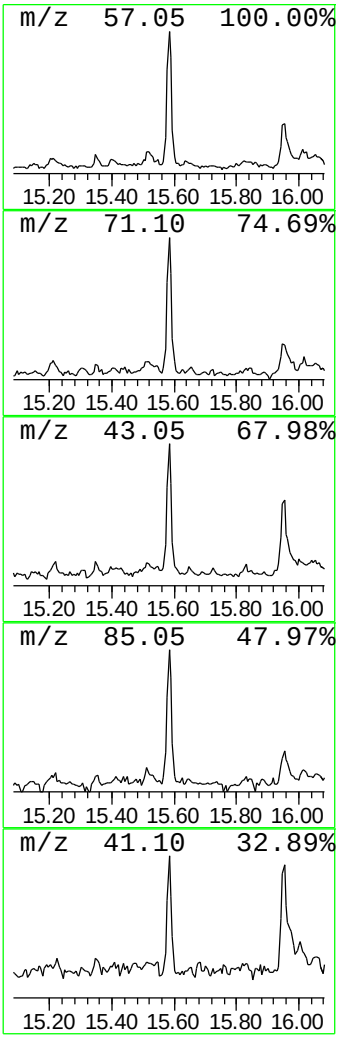
**********

Peak Number 8 Tridecane, 1-iodo- Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.58 | 3.87 ng | 130040 | Phenanthrene-d10 | 14.99 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Tridecane, 1-iodo- | 310 | C13H27I | 035599-77-0 | 80 |
| 2 | Nonadecane | 268 | C19H40 | 000629-92-5 | 72 |
| 3 | Eicosane | 282 | C20H42 | 000112-95-8 | 72 |
| 4 | Undecane, 4,7-dimethyl- | 184 | C13H28 | 017301-32-5 | 59 |
| 5 | Dodecane, 2,7,10-trimethyl- | 212 | C15H32 | 074645-98-0 | 58 |



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Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

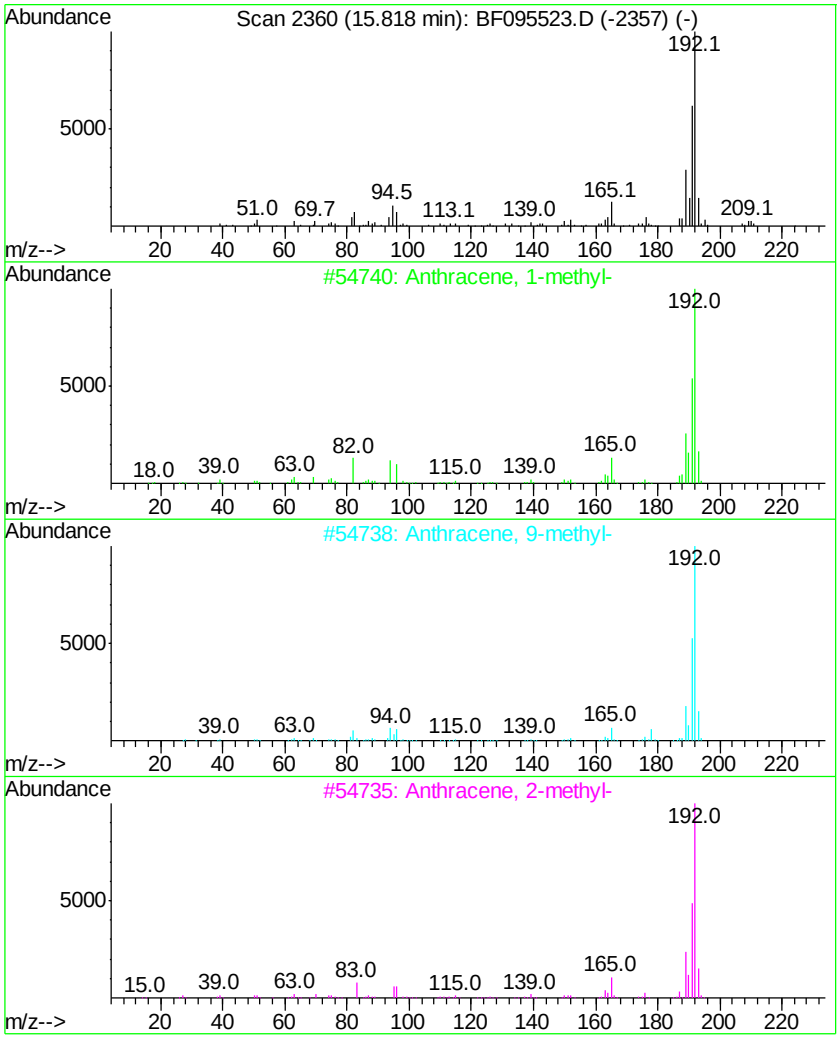
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

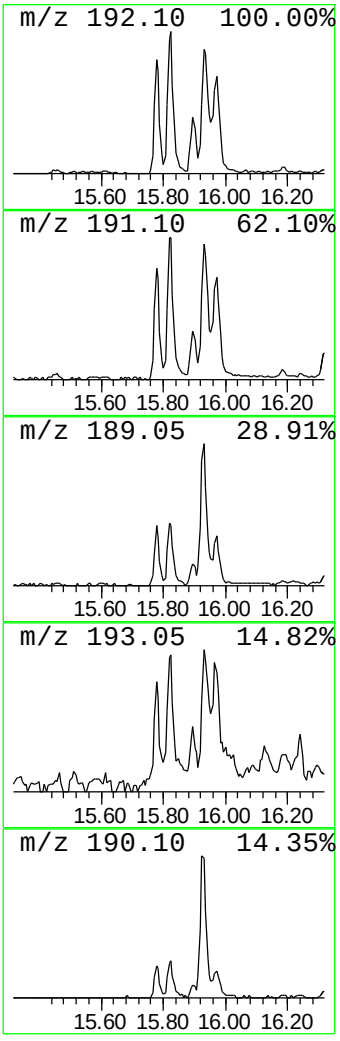
**********

Peak Number 9 Anthracene, 1-methyl- Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.82 | 5.44 ng | 182855 | Phenanthrene-d10 | 14.99 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 93 |
| 2 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 93 |
| 3 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 93 |
| 4 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 91 |
| 5 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 89 |



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Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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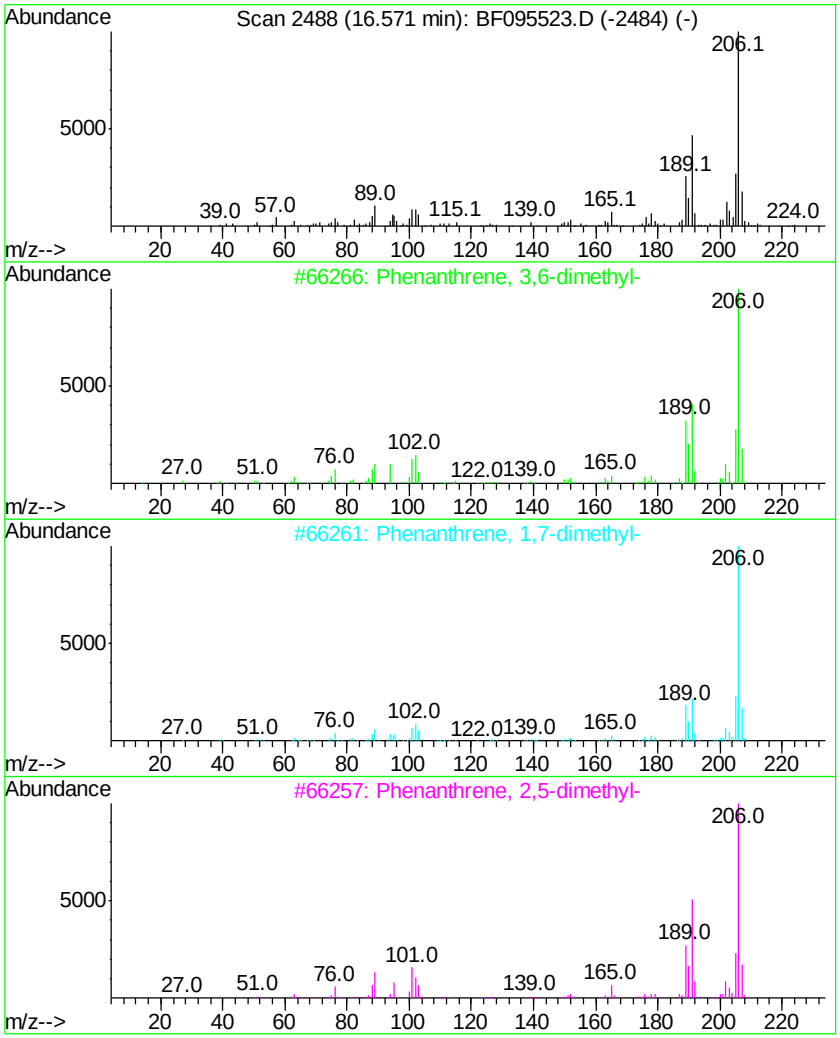
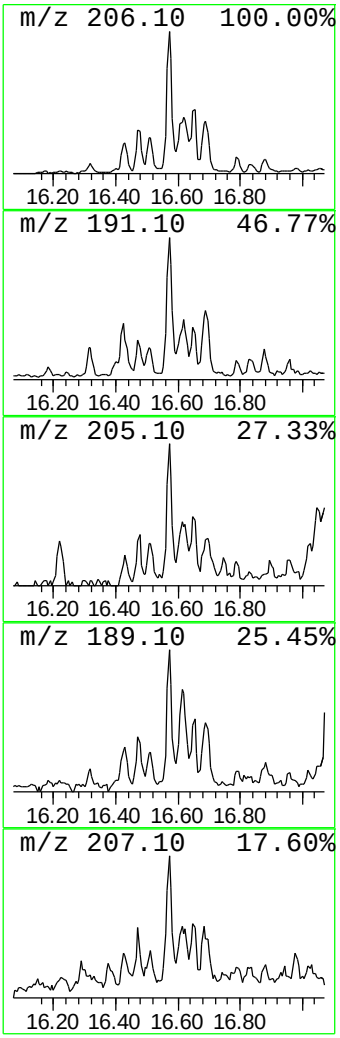
Peak Number 11 Phenanthrene, 3,6-dimethyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.57 | 6.61 ng | 222140 | Phenanthrene-d10 | 14.99 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 96 |
| 2 | Phenanthrene, 1,7-dimethyl- | 206 | C16H14 | 000483-87-4 | 95 |
| 3 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 95 |
| 4 | di-p-Tolylacetylene | 206 | C16H14 | 002789-88-0 | 93 |
| 5 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 93 |



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Data File : BF095523.D
Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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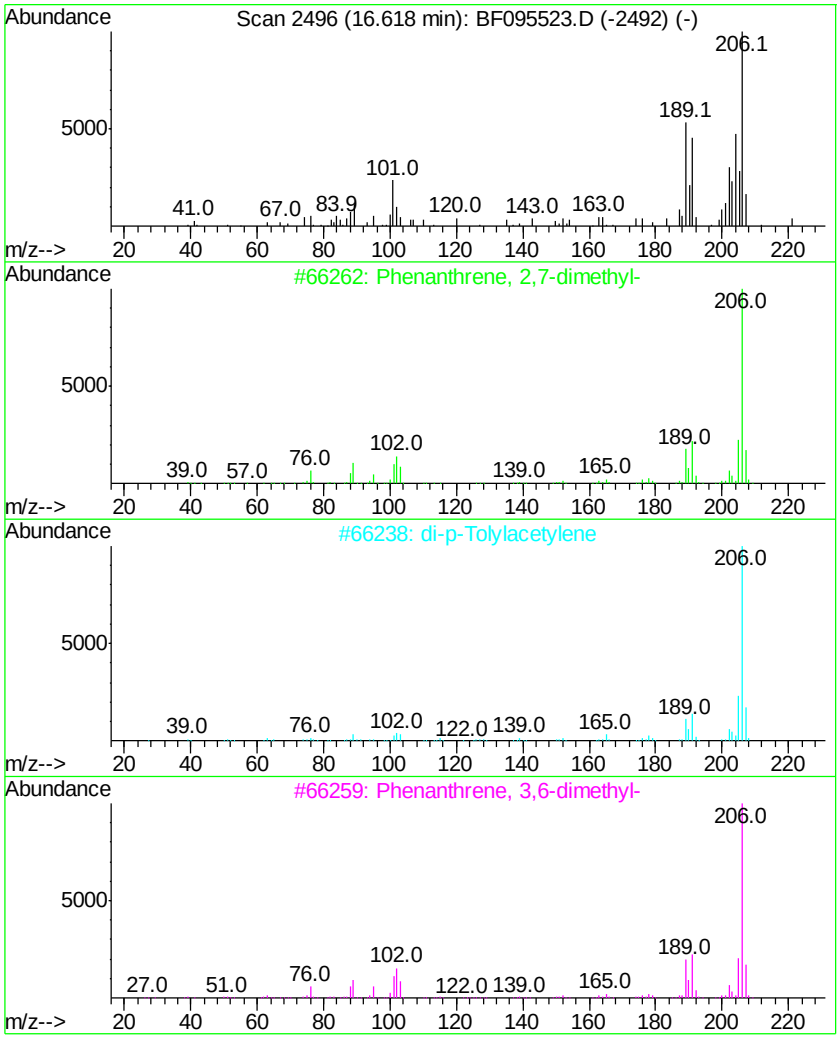
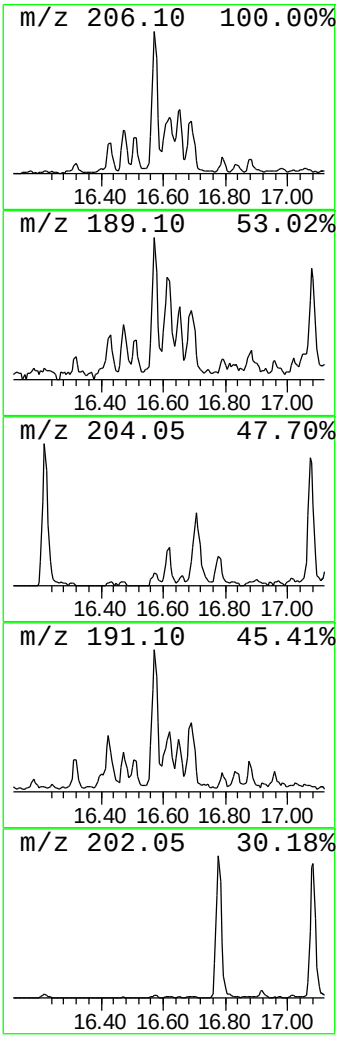
Peak Number 12 Phenanthrene, 2,7-dimethyl- Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.62 | 4.15 ng | 139417 | Phenanthrene-d10 | 14.99 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2,7-dimethyl- | 206 | C16H14 | 001576-69-8 | 89 |
| 2 | di-p-Tolylacetylene | 206 | C16H14 | 002789-88-0 | 64 |
| 3 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 58 |
| 4 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 49 |
| 5 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 49 |



Library Search Compound Report

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Data File : BF095523.D
Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

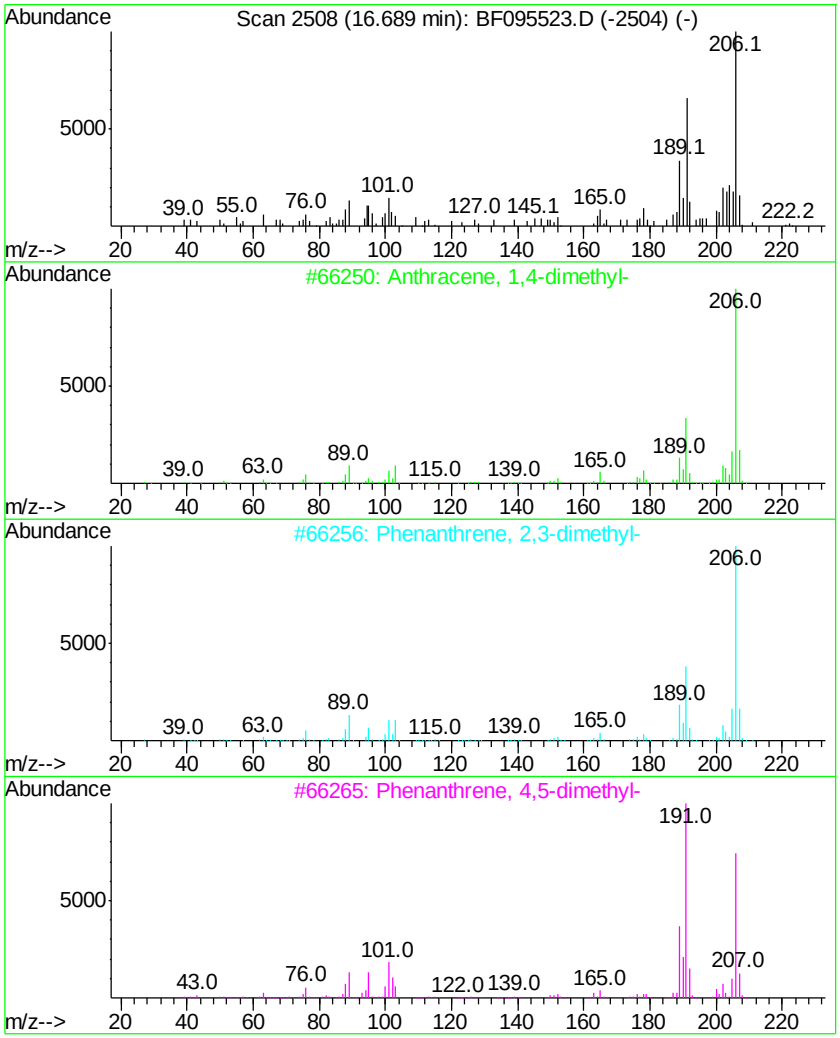
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

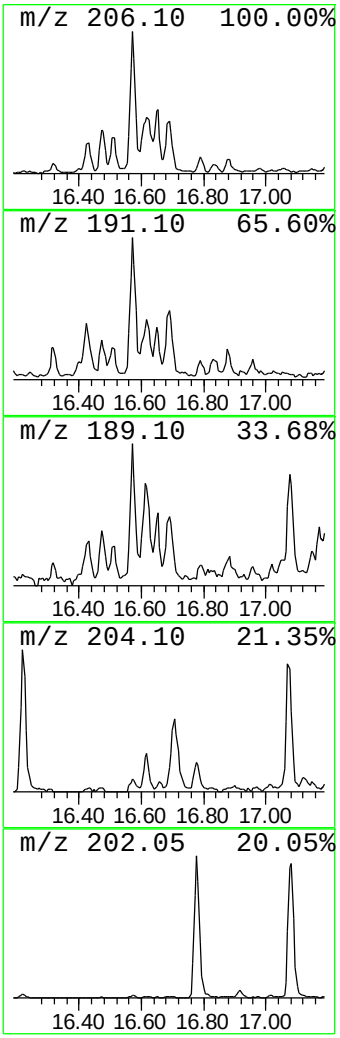
**********

Peak Number 13 Anthracene, 1,4-dimethyl- Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.69 | 3.63 ng | 121934 | Phenanthrene-d10 | 14.99 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Anthracene, 1,4-dimethyl- | 206 | C16H14 | 000781-92-0 | 90 |
| 2 | Phenanthrene, 2,3-dimethyl- | 206 | C16H14 | 003674-65-5 | 89 |
| 3 | Phenanthrene, 4,5-dimethyl- | 206 | C16H14 | 003674-69-9 | 89 |
| 4 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 83 |
| 5 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 83 |



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Data File : BF095523.D
Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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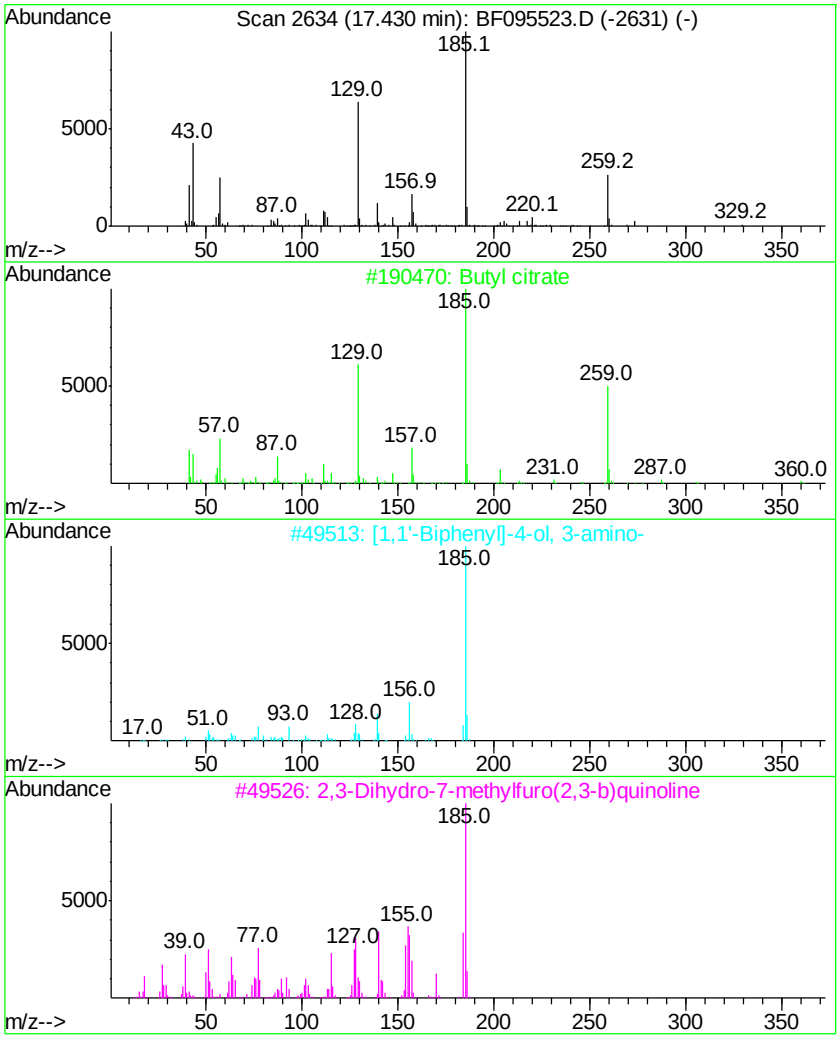
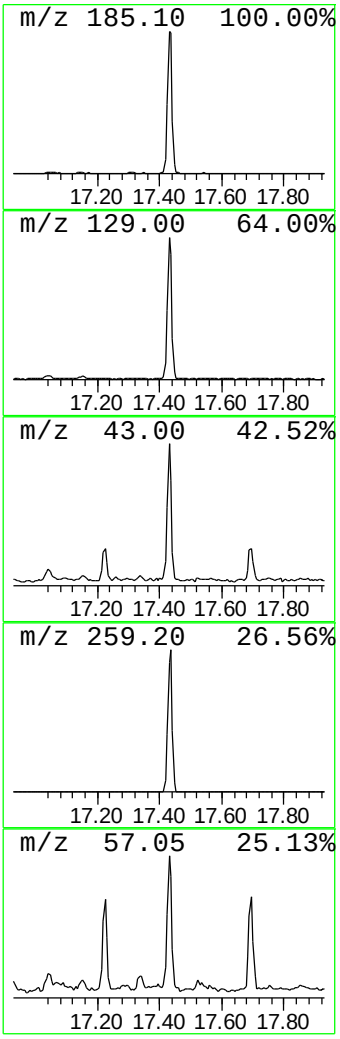
Peak Number 14 Butyl citrate Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.43 | 9.21 ng | 472068 | Chrysene-d12 | 18.67 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Butyl citrate | 360 | C18H32O7 | 000077-94-1 | 78 |
| 2 | [1,1'-Biphenyl]-4-ol, 3-amino- | 185 | C12H11NO | 001134-36-7 | 43 |
| 3 | 2,3-Dihydro-7-methylfuro(2,3-b)q... | 185 | C12H11NO | 073863-57-7 | 43 |
| 4 | Dibutyl adipate | 258 | C14H26O4 | 000105-99-7 | 42 |
| 5 | Adipic acid, butyl isobutyl ester | 258 | C14H26O4 | 1000324-09-3 | 42 |



# Library Search Compound Report

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Data File : BF095523.D
Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

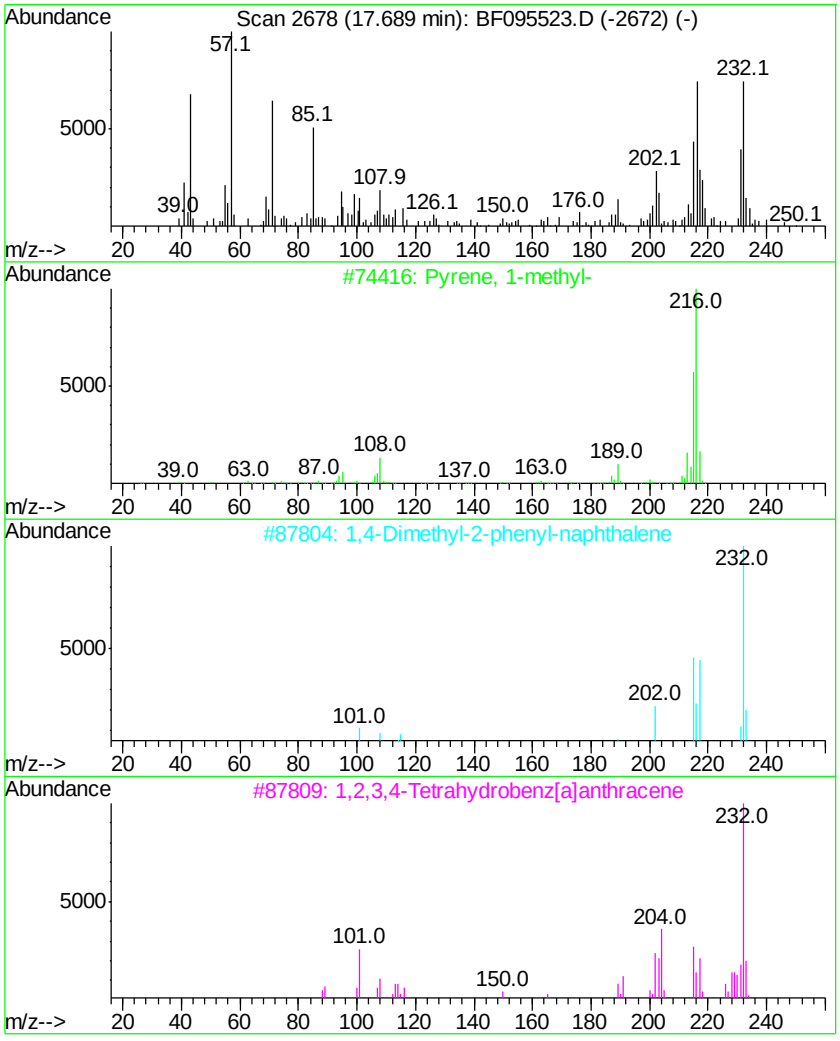
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

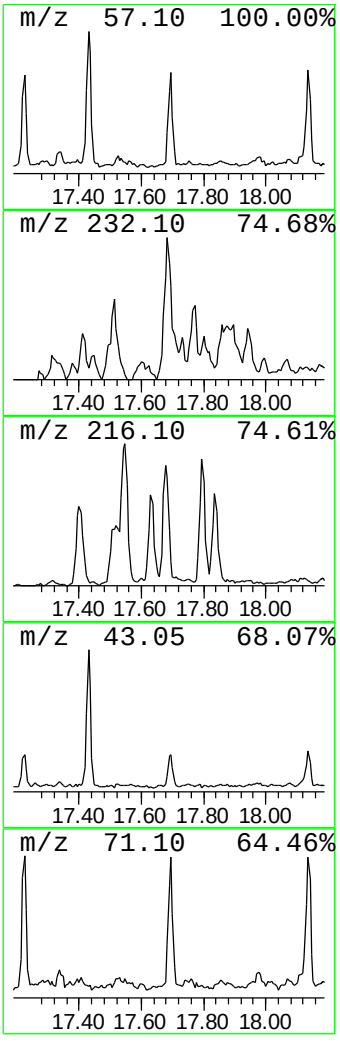
**********

Peak Number 15 Pyrene, 1-methyl- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.69 | 6.16 ng | 315706 | Chrysene-d12 | 18.67 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 76 |
| 2 | 1,4-Dimethyl-2-phenyl-naphthalene | 232 | C18H16 | 051036-91-0 | 46 |
| 3 | 1,2,3,4-Tetrahydrobenz[a]anthracene | 232 | C18H16 | 004483-98-1 | 43 |
| 4 | 1-benzyl-3-methylnaphthalene | 232 | C18H16 | 1000379-93-5 | 43 |
| 5 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 38 |



# Library Search Compound Report

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Data File : BF095523.D
Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

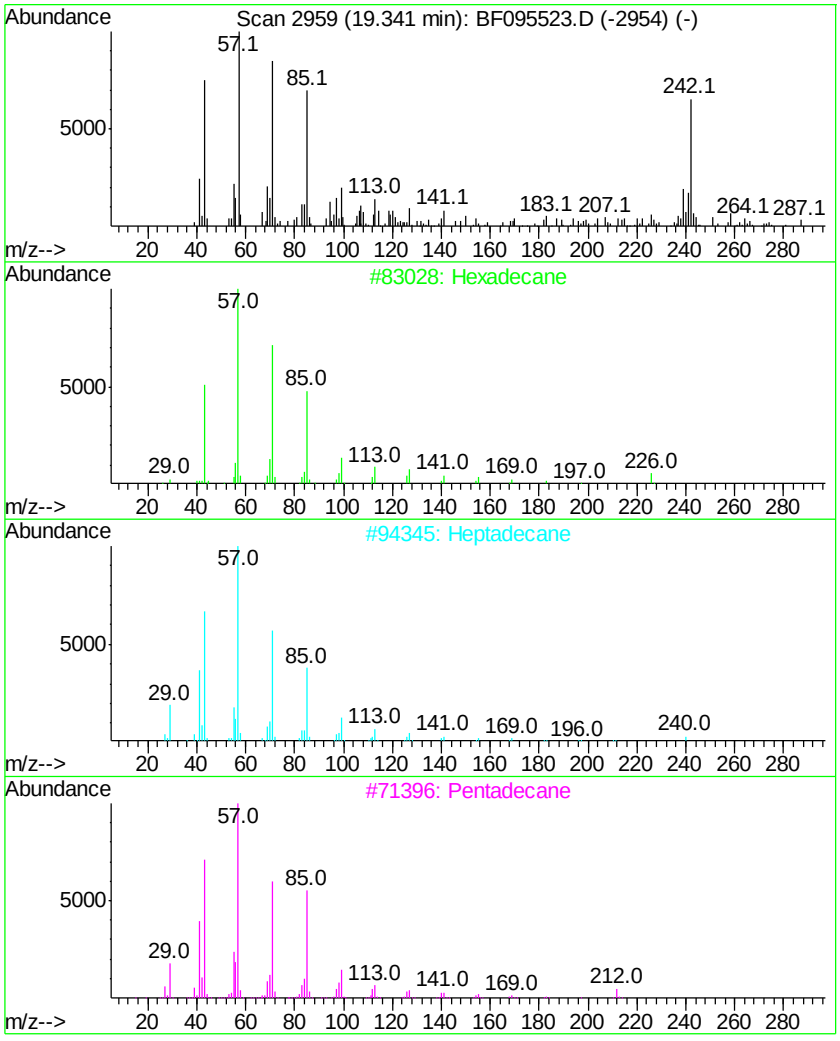
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

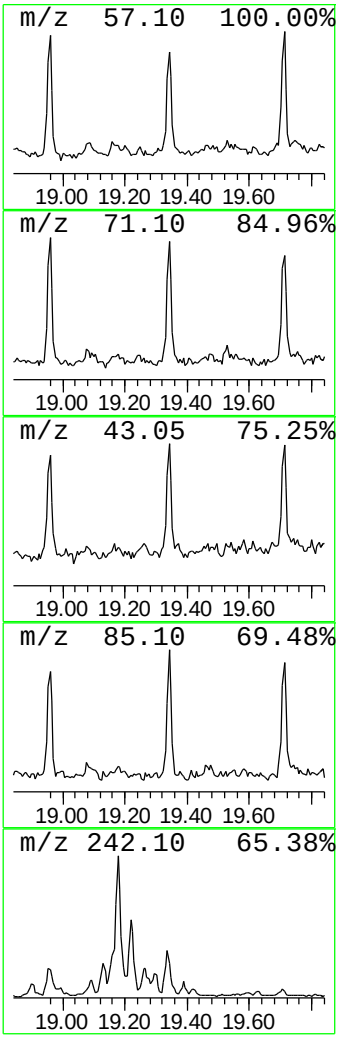
**********

Peak Number 16 Hexadecane Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.34 | 3.78 ng | 193932 | Chrysene-d12 | 18.67 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexadecane | 226 | C16H34 | 000544-76-3 | 91 |
| 2 | Heptadecane | 240 | C17H36 | 000629-78-7 | 83 |
| 3 | Pentadecane | 212 | C15H32 | 000629-62-9 | 64 |
| 4 | Heneicosane | 296 | C21H44 | 000629-94-7 | 58 |
| 5 | 10-Methylnonadecane | 282 | C20H42 | 056862-62-5 | 58 |



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Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

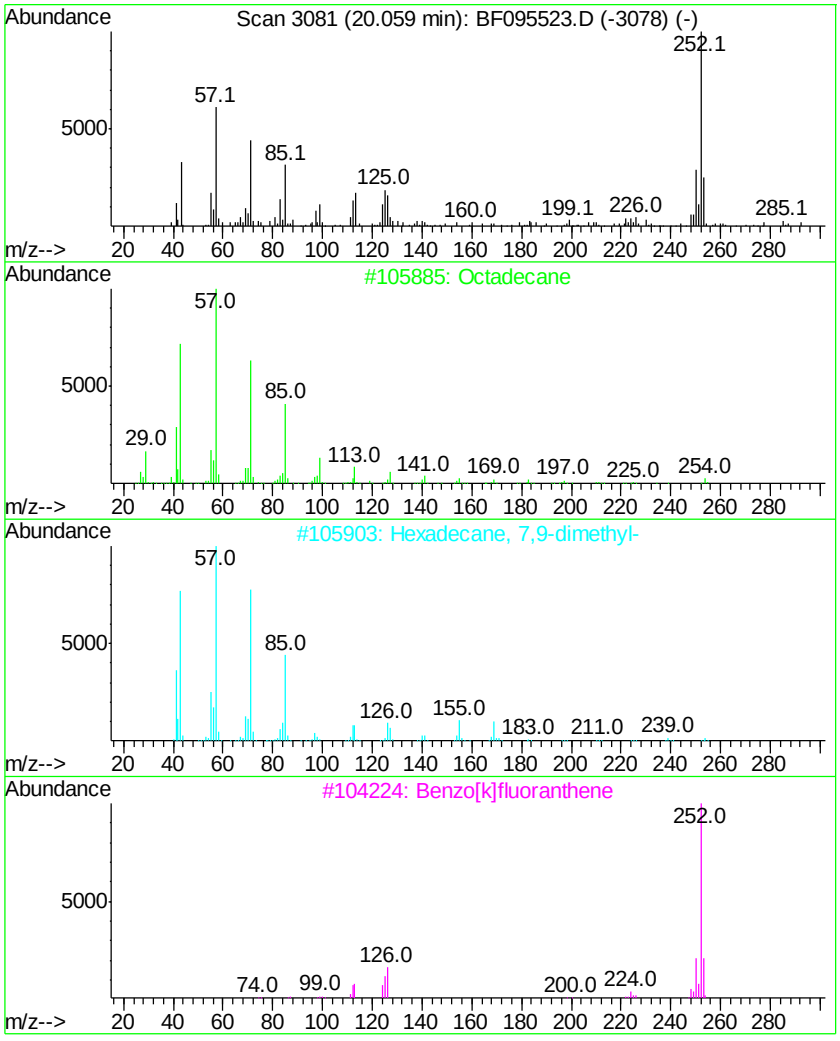
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

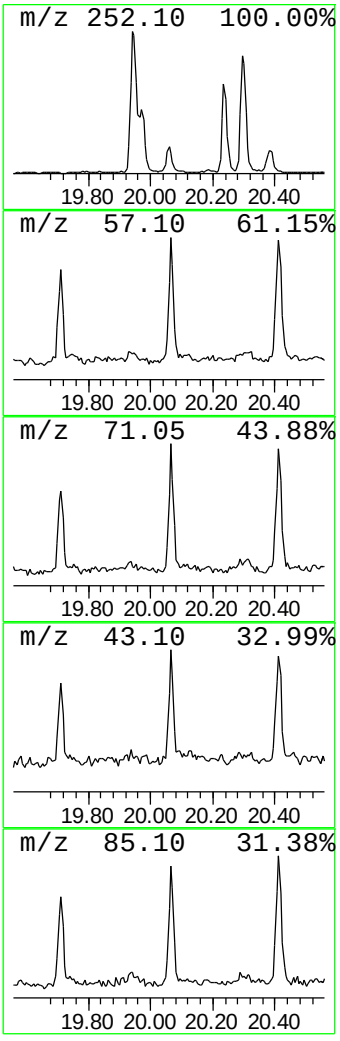
**********

Peak Number 17 Octadecane Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.06 | 6.56 ng | 165744 | Perylene-d12 | 20.35 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Octadecane | 254 | C18H38 | 000593-45-3 | 64 |
| 2 | Hexadecane, 7,9-dimethyl- | 254 | C18H38 | 021164-95-4 | 60 |
| 3 | Benzo[k]fluoranthene | 252 | C20H12 | 000207-08-9 | 55 |
| 4 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 55 |
| 5 | Hexacosane | 366 | C26H54 | 000630-01-3 | 50 |



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Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

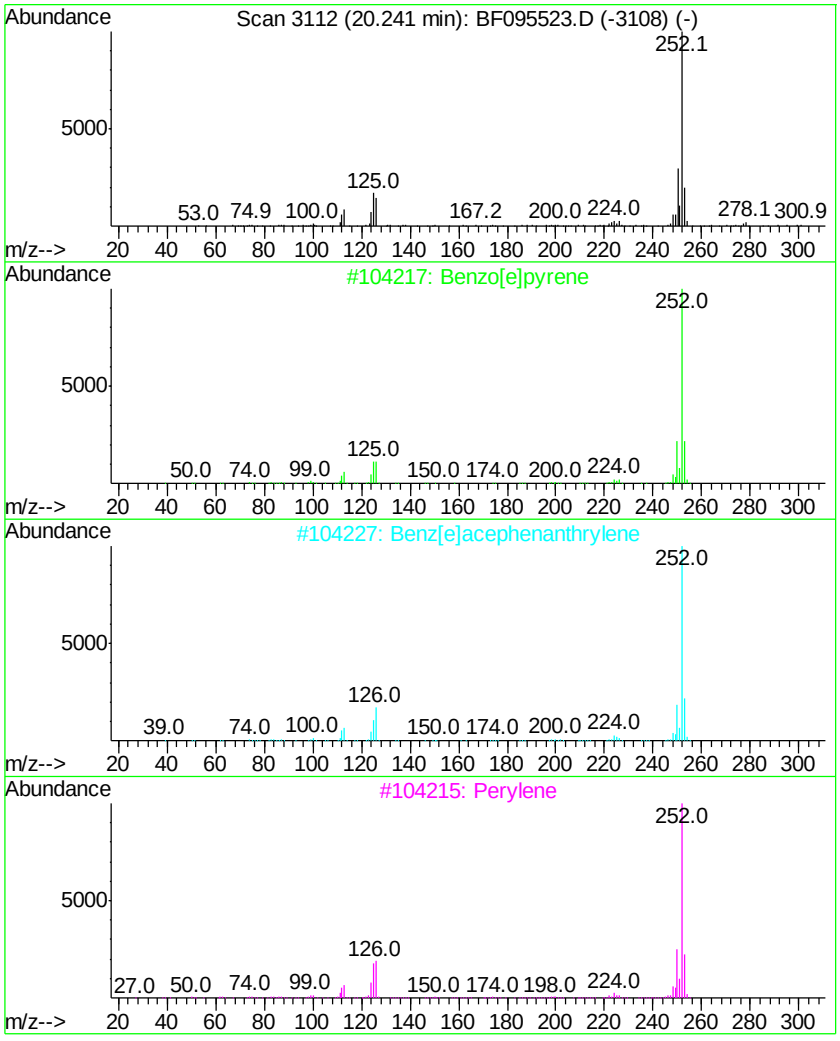
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

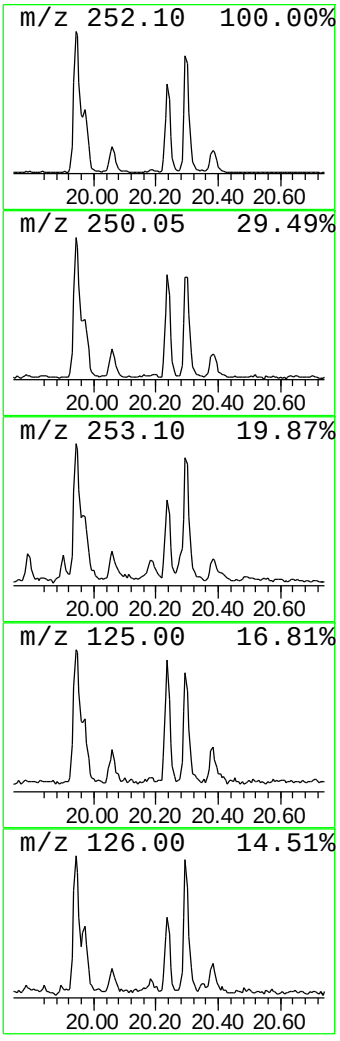
**********

Peak Number 18 Benzo[e]pyrene Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.24 | 7.82 ng | 197739 | Perylene-d12 | 20.35 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 95 |
| 2 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 93 |
| 3 | Perylene | 252 | C20H12 | 000198-55-0 | 90 |
| 4 | Benzo[j]fluoranthene | 252 | C20H12 | 000205-82-3 | 83 |
| 5 | Benzo[k]fluoranthene | 252 | C20H12 | 000207-08-9 | 81 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF052717\
Data File : BF095523.D
Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

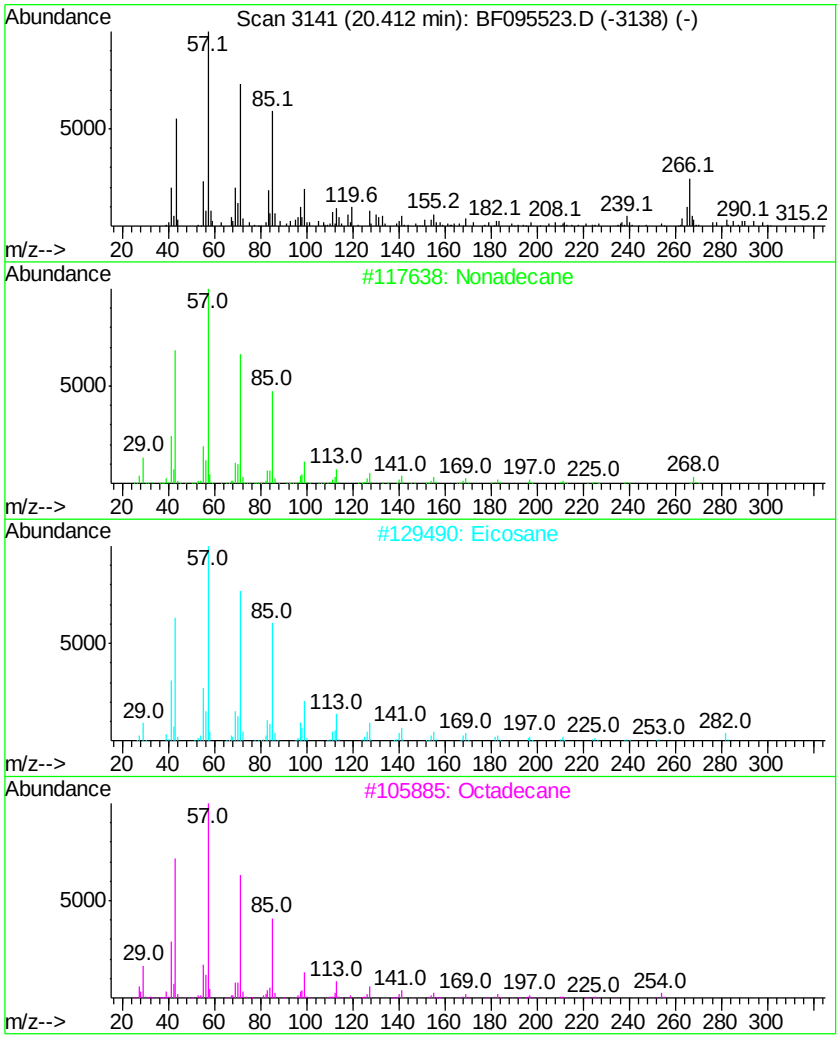
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

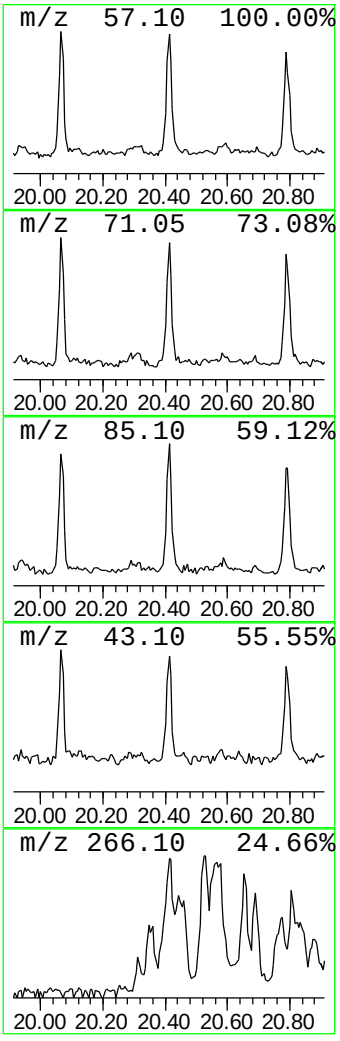
**********

Peak Number 19 Nonadecane Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.41 | 6.21 ng | 157013 | Perylene-d12 | 20.35 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Nonadecane | 268 | C19H40 | 000629-92-5 | 83 |
| 2 | Eicosane | 282 | C20H42 | 000112-95-8 | 83 |
| 3 | Octadecane | 254 | C18H38 | 000593-45-3 | 70 |
| 4 | Heptacosane | 380 | C27H56 | 000593-49-7 | 64 |
| 5 | Heptadecane | 240 | C17H36 | 000629-78-7 | 64 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF052717\
Data File : BF095523.D
Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

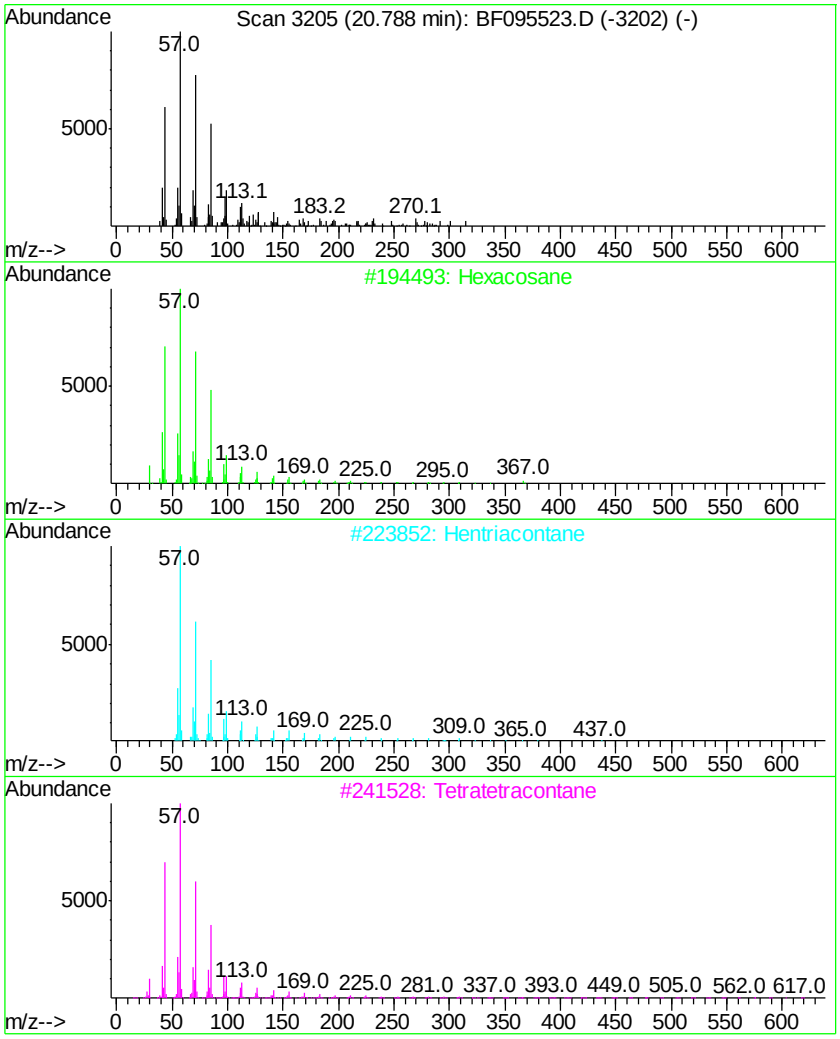
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

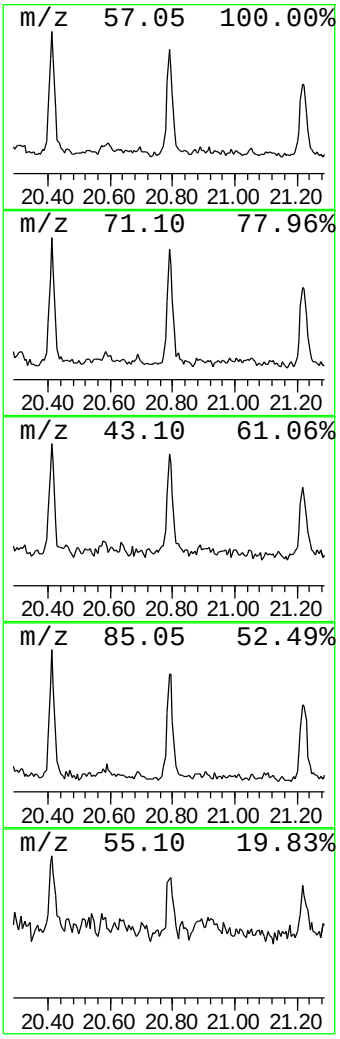
**********

Peak Number 20 Hexacosane Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.79 | 4.40 ng | 111138 | Perylene-d12 | 20.35 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexacosane | 366 | C26H54 | 000630-01-3 | 91 |
| 2 | Hentriacontane | 437 | C31H64 | 000630-04-6 | 90 |
| 3 | Tetratetracontane | 619 | C44H90 | 007098-22-8 | 90 |
| 4 | Eicosane | 282 | C20H42 | 000112-95-8 | 87 |
| 5 | Heptadecane | 240 | C17H36 | 000629-78-7 | 87 |



# Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF052717\
Data File : BF095523.D
Acq On : 28 May 2017 5:19
Operator : SJ/MA
Sample : I3281-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** DUP-1

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF050217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| 2-Butenoic acid, ... | 2.22 | 37.3 | ng | 952779 | 1 | 7.74 | 511508 | 20.0 |
| Acetic acid, 1,1-... | 5.08 | 6.8 | ng | 174902 | 1 | 7.74 | 511508 | 20.0 |
| unknown7.40 | 7.40 | 74.5 | ng | 1906590 | 1 | 7.74 | 511508 | 20.0 |
| Propanoic acid, 2... | 13.37 | 154.1 | ng | 6472500 | 3 | 12.59 | 840102 | 20.0 |
| unknown13.78 | 13.78 | 3.7 | ng | 154785 | 3 | 12.59 | 840102 | 20.0 |
| 3-Methyl-4-(metho... | 14.22 | 5.5 | ng | 186538 | 4 | 14.99 | 672353 | 20.0 |
| Tridecane, 1-iodo- | 15.58 | 3.9 | ng | 130040 | 4 | 14.99 | 672353 | 20.0 |
| Anthracene, 1-met... | 15.82 | 5.4 | ng | 182855 | 4 | 14.99 | 672353 | 20.0 |
| Phenanthrene, 3,6... | 16.57 | 6.6 | ng | 222140 | 4 | 14.99 | 672353 | 20.0 |
| Phenanthrene, 2,7... | 16.62 | 4.2 | ng | 139417 | 4 | 14.99 | 672353 | 20.0 |
| Anthracene, 1,4-d... | 16.69 | 3.6 | ng | 121934 | 4 | 14.99 | 672353 | 20.0 |
| Butyl citrate | 17.43 | 9.2 | ng | 472068 | 5 | 18.67 | 1025120 | 20.0 |
| Pyrene, 1-methyl- | 17.69 | 6.2 | ng | 315706 | 5 | 18.67 | 1025120 | 20.0 |
| Hexadecane | 19.34 | 3.8 | ng | 193932 | 5 | 18.67 | 1025120 | 20.0 |
| Octadecane | 20.06 | 6.6 | ng | 165744 | 6 | 20.35 | 505451 | 20.0 |
| Benzo[e]pyrene | 20.24 | 7.8 | ng | 197739 | 6 | 20.35 | 505451 | 20.0 |
| Nonadecane | 20.41 | 6.2 | ng | 157013 | 6 | 20.35 | 505451 | 20.0 |
| Hexacosane | 20.79 | 4.4 | ng | 111138 | 6 | 20.35 | 505451 | 20.0 |