LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % 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_M\METHODS\SOM-EPA-BM021418.M
Title : SVOA CALIBRATION

Signal : TIC

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.557 | 108 | 114 | 119 | rBV2 | 42808 | 66989 | 2.28% | 0.123% |
| 2 | 4.634 | 294 | 297 | 300 | rBV2 | 25238 | 32933 | 1.12% | 0.060% |
| 3 | 6.704 | 642 | 649 | 665 | rBV | 543419 | 1138868 | 38.81% | 2.089% |
| 4 | 6.834 | 665 | 671 | 682 | rVB | 463924 | 724925 | 24.70% | 1.329% |
| 5 | 7.028 | 697 | 704 | 712 | rBV | 743639 | 1211825 | 41.29% | 2.222% |
| 6 | 7.475 | 774 | 780 | 789 | rBV | 583687 | 982359 | 33.47% | 1.802% |
| 7 | 8.222 | 901 | 907 | 923 | rBV | 714960 | 1381914 | 47.09% | 2.534% |
| 8 | 8.645 | 971 | 979 | 989 | rBV | 729375 | 1234124 | 42.05% | 2.263% |
| 9 | 8.998 | 1034 | 1039 | 1045 | rVB2 | 23131 | 34471 | 1.17% | 0.063% |
| 10 | 9.357 | 1094 | 1100 | 1116 | rVB | 635157 | 1151364 | 39.23% | 2.112% |
| 11 | 9.916 | 1188 | 1195 | 1216 | rBV | 715616 | 1650528 | 56.24% | 3.027% |
| 12 | 10.251 | 1241 | 1252 | 1256 | rBV | 798282 | 1338676 | 45.62% | 2.455% |
| 13 | 10.298 | 1256 | 1260 | 1268 | rVB2 | 190472 | 343712 | 11.71% | 0.630% |
| 14 | 10.428 | 1273 | 1282 | 1297 | rBV | 279575 | 695032 | 23.68% | 1.275% |
| 15 | 11.927 | 1531 | 1537 | 1548 | rBV | 88466 | 158904 | 5.41% | 0.291% |
| 16 | 12.151 | 1568 | 1575 | 1584 | rBV3 | 61047 | 110614 | 3.77% | 0.203% |
| 17 | 12.951 | 1705 | 1711 | 1720 | rBV7 | 37365 | 93197 | 3.18% | 0.171% |
| 18 | 13.163 | 1743 | 1747 | 1751 | rBV4 | 33217 | 57013 | 1.94% | 0.105% |
| 19 | 13.321 | 1765 | 1774 | 1779 | rBV10 | 26169 | 71659 | 2.44% | 0.131% |
| 20 | 13.374 | 1779 | 1783 | 1789 | rBV9 | 28978 | 48823 | 1.66% | 0.090% |
| 21 | 13.463 | 1792 | 1798 | 1803 | rBV4 | 44043 | 82764 | 2.82% | 0.152% |
| 22 | 13.516 | 1803 | 1807 | 1810 | rBV4 | 28123 | 41193 | 1.40% | 0.076% |
| 23 | 13.569 | 1810 | 1816 | 1821 | rVV | 1604800 | 2150016 | 73.26% | 3.943% |
| 24 | 13.616 | 1821 | 1824 | 1829 | rVB | 236993 | 307818 | 10.49% | 0.565% |
| 25 | 13.839 | 1854 | 1862 | 1873 | rBV | 1602574 | 2488218 | 84.79% | 4.563% |
| 26 | 14.039 | 1890 | 1896 | 1900 | rBV | 91981 | 125434 | 4.27% | 0.230% |
| 27 | 14.145 | 1903 | 1914 | 1920 | rVV2 | 982669 | 1545509 | 52.66% | 2.834% |
| 28 | 14.210 | 1920 | 1925 | 1935 | rVB | 403844 | 589939 | 20.10% | 1.082% |
| 29 | 14.463 | 1961 | 1968 | 1979 | rBV3 | 311273 | 817344 | 27.85% | 1.499% |
| 30 | 14.557 | 1979 | 1984 | 1989 | rVV | 142254 | 258279 | 8.80% | 0.474% |
| 31 | 14.598 | 1989 | 1991 | 1995 | rVB4 | 36582 | 50238 | 1.71% | 0.092% |
| 32 | 14.663 | 2000 | 2002 | 2008 | rVB6 | 33550 | 44396 | 1.51% | 0.081% |
| 33 | 14.998 | 2055 | 2059 | 2065 | rVB3 | 100309 | 132452 | 4.51% | 0.243% |
| 34 | 15.151 | 2079 | 2085 | 2091 | rVV | 1857077 | 2600556 | 88.62% | 4.769% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % 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_M\METHODS\SOM-EPA-BM021418.M
Title : SVOA CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 15.210 | 2091 | 2095 | 2104 | rVB | 255118 | 396926 | 13.53% | 0.728% |
| 36 | 15.304 | 2107 | 2111 | 2113 | rVV4 | 36340 | 58034 | 1.98% | 0.106% |
| 37 | 15.339 | 2113 | 2117 | 2127 | rVV6 | 186011 | 462829 | 15.77% | 0.849% |
| 38 | 15.410 | 2127 | 2129 | 2134 | rVV6 | 57399 | 97643 | 3.33% | 0.179% |
| 39 | 15.457 | 2134 | 2137 | 2141 | rVV3 | 48569 | 78213 | 2.67% | 0.143% |
| 40 | 15.504 | 2141 | 2145 | 2151 | rVB2 | 54319 | 97157 | 3.31% | 0.178% |
| 41 | 15.663 | 2167 | 2172 | 2177 | rVB4 | 46195 | 88172 | 3.00% | 0.162% |
| 42 | 15.739 | 2183 | 2185 | 2191 | rVB6 | 26347 | 35460 | 1.21% | 0.065% |
| 43 | 15.868 | 2201 | 2207 | 2210 | rBV6 | 69562 | 131886 | 4.49% | 0.242% |
| 44 | 16.215 | 2260 | 2266 | 2272 | rBV6 | 46586 | 100589 | 3.43% | 0.184% |
| 45 | 16.268 | 2272 | 2275 | 2280 | rVB5 | 38815 | 47933 | 1.63% | 0.088% |
| 46 | 16.492 | 2310 | 2313 | 2319 | rVB8 | 34485 | 48918 | 1.67% | 0.090% |
| 47 | 16.586 | 2324 | 2329 | 2335 | rVB2 | 101234 | 149488 | 5.09% | 0.274% |
| 48 | 16.686 | 2335 | 2346 | 2349 | rBV7 | 87315 | 237354 | 8.09% | 0.435% |
| 49 | 16.727 | 2349 | 2353 | 2359 | rVB | 167024 | 247047 | 8.42% | 0.453% |
| 50 | 16.827 | 2367 | 2370 | 2375 | rVB7 | 39996 | 57025 | 1.94% | 0.105% |
| 51 | 16.915 | 2379 | 2385 | 2388 | rVV | 995558 | 1433009 | 48.83% | 2.628% |
| 52 | 16.957 | 2388 | 2392 | 2397 | rVV | 1929936 | 2658488 | 90.59% | 4.875% |
| 53 | 17.015 | 2397 | 2402 | 2405 | rVV | 1720945 | 2394885 | 81.61% | 4.392% |
| 54 | 17.051 | 2405 | 2408 | 2413 | rVB | 456534 | 610176 | 20.79% | 1.119% |
| 55 | 17.121 | 2413 | 2420 | 2427 | rBV | 80890 | 160489 | 5.47% | 0.294% |
| 56 | 17.339 | 2448 | 2457 | 2463 | rBV | 263199 | 501717 | 17.10% | 0.920% |
| 57 | 17.492 | 2480 | 2483 | 2486 | rBV3 | 57189 | 73735 | 2.51% | 0.135% |
| 58 | 17.627 | 2503 | 2506 | 2509 | rBV4 | 57380 | 95965 | 3.27% | 0.176% |
| 59 | 17.698 | 2516 | 2518 | 2523 | rBV6 | 35427 | 57628 | 1.96% | 0.106% |
| 60 | 17.762 | 2525 | 2529 | 2531 | rVV3 | 173509 | 246074 | 8.39% | 0.451% |
| 61 | 17.792 | 2531 | 2534 | 2536 | rVV | 218843 | 307475 | 10.48% | 0.564% |
| 62 | 17.827 | 2536 | 2540 | 2549 | rVV2 | 483839 | 1051089 | 35.82% | 1.928% |
| 63 | 17.927 | 2553 | 2557 | 2561 | rVV | 108065 | 166045 | 5.66% | 0.305% |
| 64 | 17.986 | 2562 | 2567 | 2571 | rVV3 | 307861 | 529854 | 18.06% | 0.972% |
| 65 | 18.021 | 2571 | 2573 | 2578 | rVB | 130864 | 165358 | 5.63% | 0.303% |
| 66 | 18.115 | 2583 | 2589 | 2593 | rBV8 | 61289 | 151758 | 5.17% | 0.278% |
| 67 | 18.298 | 2616 | 2620 | 2625 | rBV | 139987 | 225540 | 7.69% | 0.414% |
| 68 | 18.362 | 2627 | 2631 | 2638 | rVB5 | 149020 | 214964 | 7.33% | 0.394% |
| 69 | 18.721 | 2688 | 2692 | 2695 | rBV2 | 115382 | 158794 | 5.41% | 0.291% |
| 70 | 18.992 | 2732 | 2738 | 2746 | rVB | 2248849 | 2934605 | 100.00% | 5.382% |
| 71 | 19.115 | 2756 | 2759 | 2765 | rVB3 | 181304 | 217366 | 7.41% | 0.399% |

LSC Area Percent Report

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Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % 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_M\METHODS\SOM-EPA-BM021418.M
Title : SVOA CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 19.327 | 2790 | 2795 | 2798 | rBV2 | 1773482 | 2505824 | 85.39% | 4.595% |
| 73 | 19.356 | 2798 | 2800 | 2809 | rVB | 1578272 | 1865915 | 63.58% | 3.422% |
| 74 | 19.674 | 2852 | 2854 | 2856 | rBV3 | 88258 | 106925 | 3.64% | 0.196% |
| 75 | 19.862 | 2883 | 2886 | 2890 | rVB | 323555 | 429812 | 14.65% | 0.788% |
| 76 | 19.962 | 2900 | 2903 | 2907 | rVB | 226336 | 268897 | 9.16% | 0.493% |
| 77 | 20.203 | 2941 | 2944 | 2948 | rVB | 272758 | 318503 | 10.85% | 0.584% |
| 78 | 20.780 | 3039 | 3042 | 3045 | rBV | 322745 | 356679 | 12.15% | 0.654% |
| 79 | 20.839 | 3049 | 3052 | 3057 | rVB2 | 302231 | 370679 | 12.63% | 0.680% |
| 80 | 21.127 | 3096 | 3101 | 3106 | rBV3 | 1238105 | 2686569 | 91.55% | 4.927% |
| 81 | 21.174 | 3106 | 3109 | 3113 | rVB | 957862 | 1138840 | 38.81% | 2.089% |
| 82 | 22.674 | 3359 | 3364 | 3368 | rBV | 839565 | 1689229 | 57.56% | 3.098% |
| 83 | 23.180 | 3446 | 3450 | 3453 | rBV | 665247 | 1034446 | 35.25% | 1.897% |
| 84 | 23.221 | 3454 | 3457 | 3463 | rVB | 827656 | 1303938 | 44.43% | 2.391% |

Sum of corrected areas: 54528030

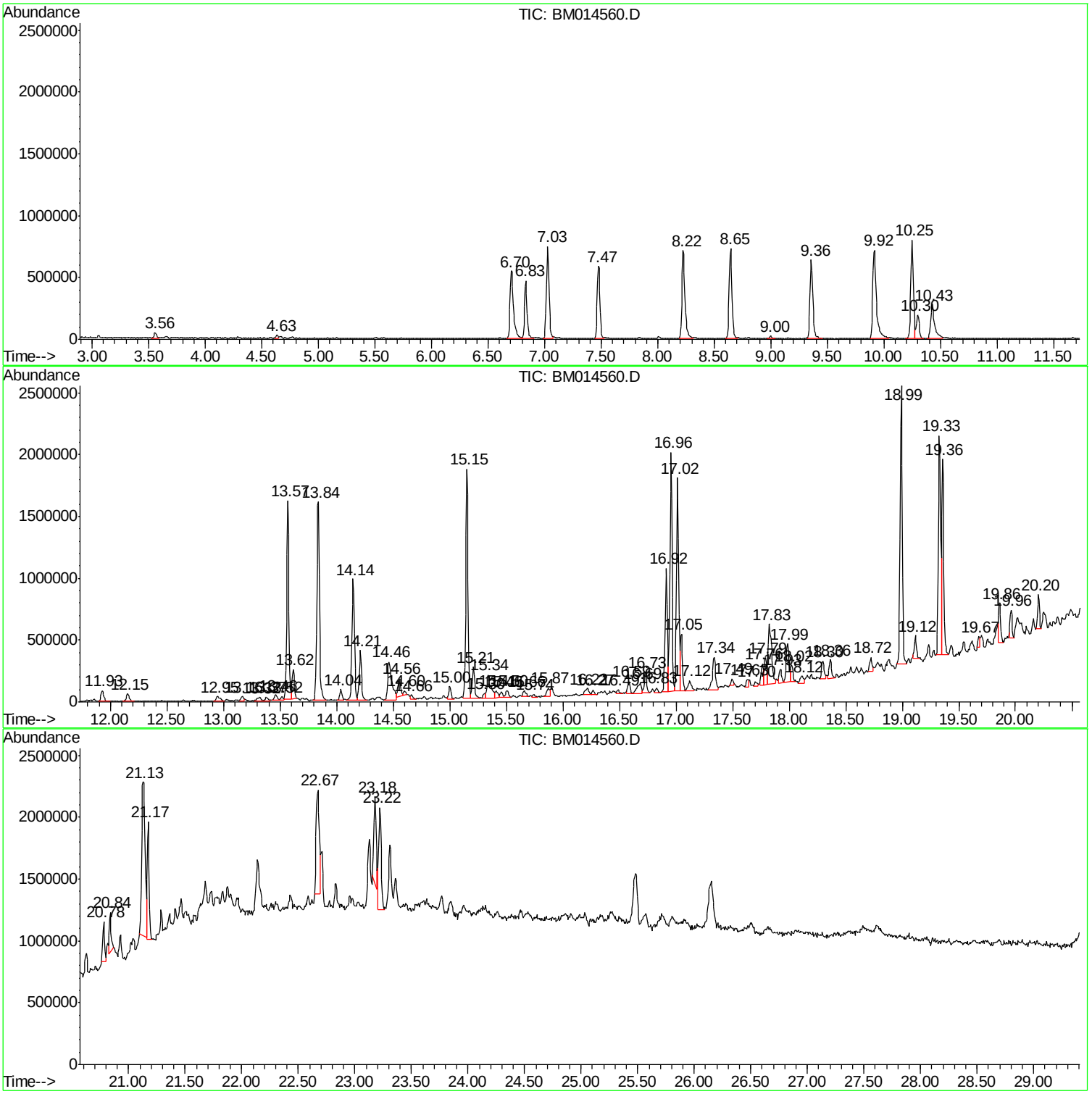
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

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



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

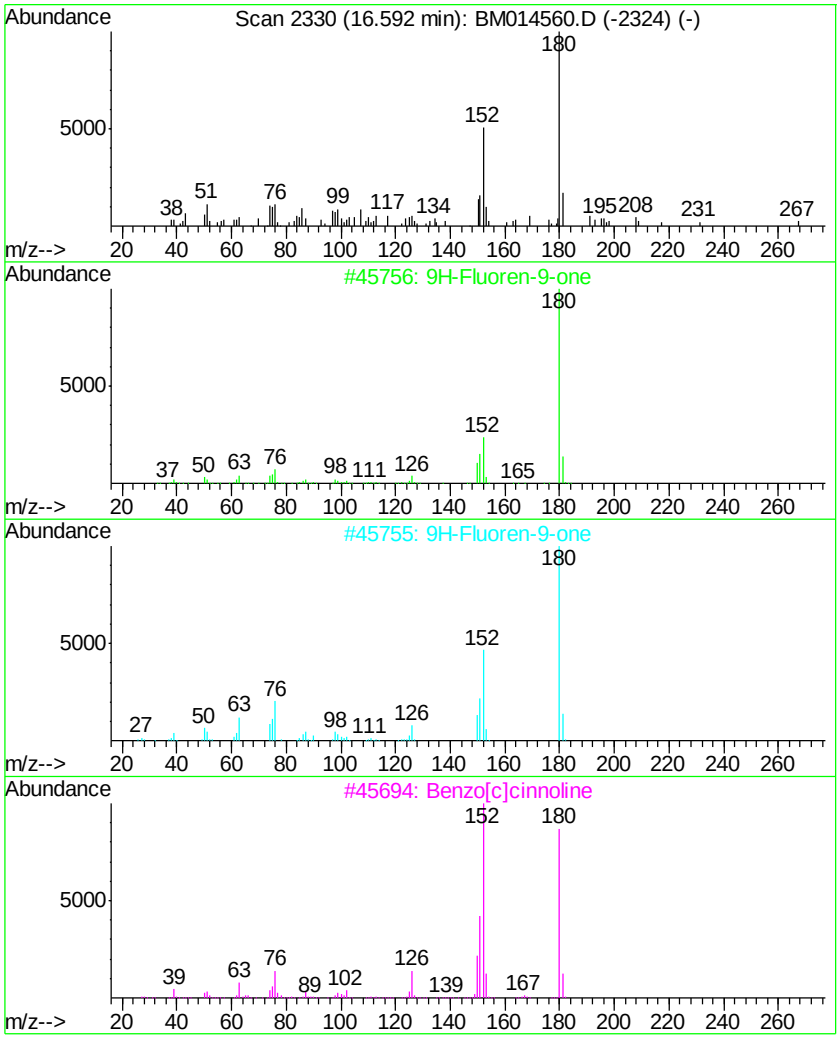
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

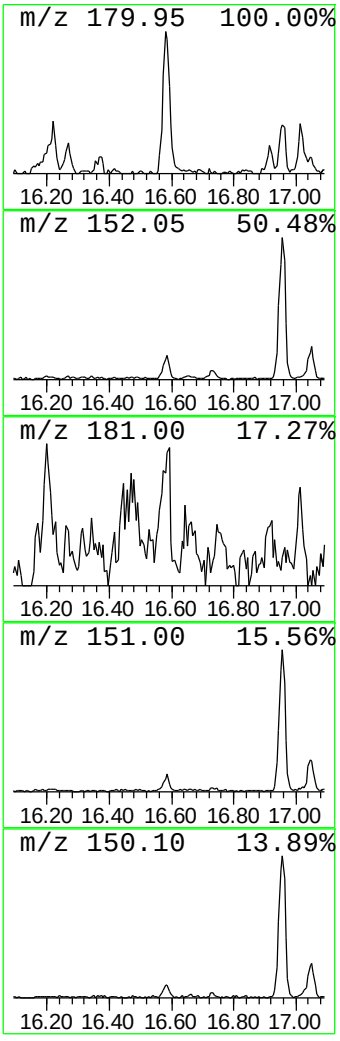
**********

Peak Number 1 9H-Fluoren-9-one Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.59 | 2.09 ng/ul | 149488 | Phenanthrene-d10 | 16.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 94 |
| 2 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 90 |
| 3 | Benzo[c]cinnoline | 180 | C12H8N2 | 000230-17-1 | 87 |
| 4 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 83 |
| 5 | 9,10-Phenanthrenedione | 208 | C14H8O2 | 000084-11-7 | 72 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

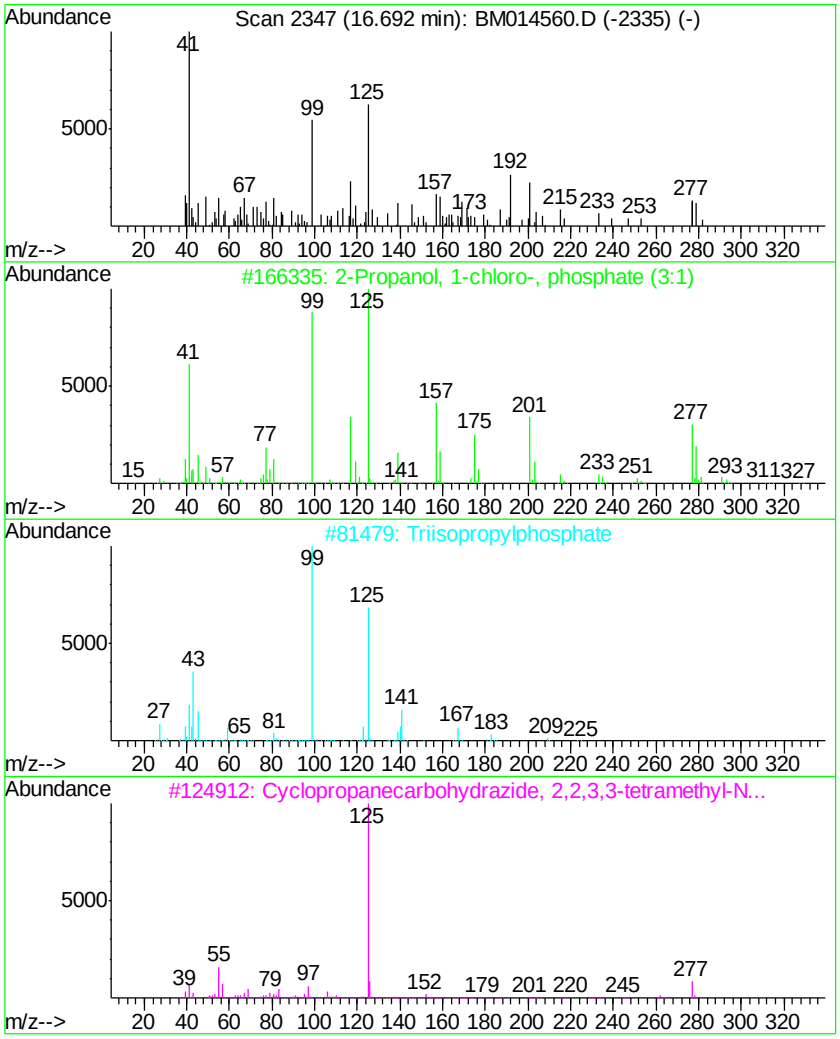
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

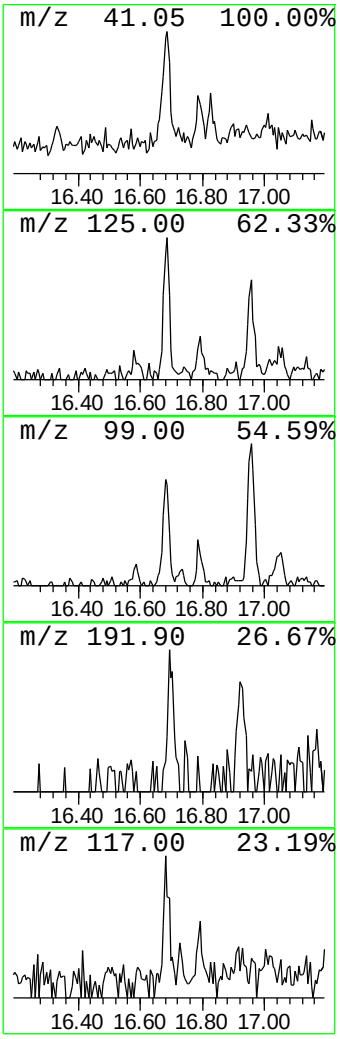
**********

Peak Number 2 2-Propanol, 1-chloro-, phos... Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.69 | 3.31 ng/ul | 237354 | Phenanthrene-d10 | 16.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Propanol, 1-chloro-, phosphate... | 326 | C9H18Cl3O4P | 013674-84-5 | 78 |
| 2 | Triisopropylphosphate | 224 | C9H21O4P | 000513-02-0 | 38 |
| 3 | Cyclopropanecarbohydrazide, 2,2,... | 277 | C14H19N3O3 | 329069-29-6 | 22 |
| 4 | Pyridinium, 3-mercapto-1-methyl-... | 125 | C6H7NS | 036880-58-7 | 18 |
| 5 | 3-Picoline, 2-(tert-butylthio)- | 181 | C10H15NS | 018833-87-9 | 18 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

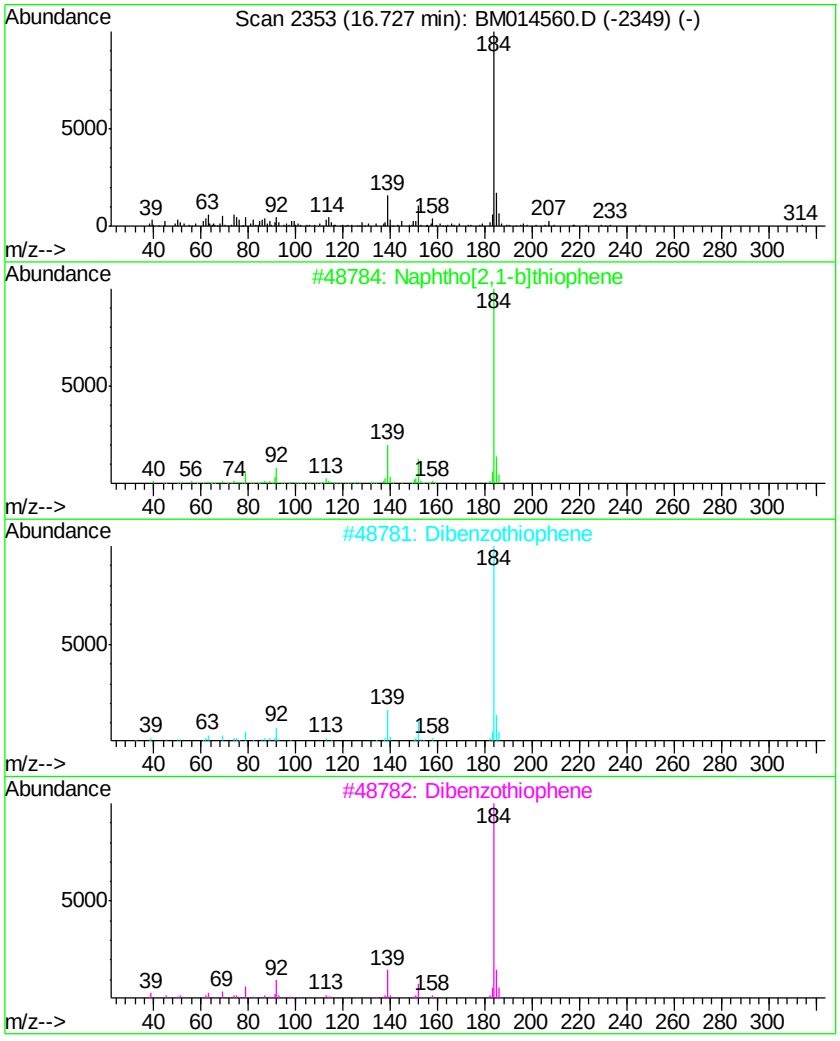
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

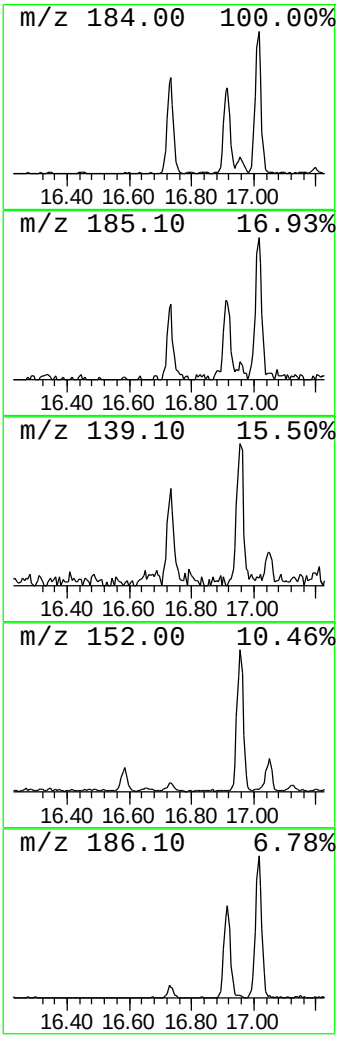
**********

Peak Number 3 Naphtho[2,1-b]thiophene Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.73 | 3.45 ng/ul | 247047 | Phenanthrene-d10 | 16.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphtho[2,1-b]thiophene | 184 | C12H8S | 000233-02-3 | 93 |
| 2 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 93 |
| 3 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 93 |
| 4 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 90 |
| 5 | Azuleno(2,1-b)thiophene | 184 | C12H8S | 000248-13-5 | 90 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

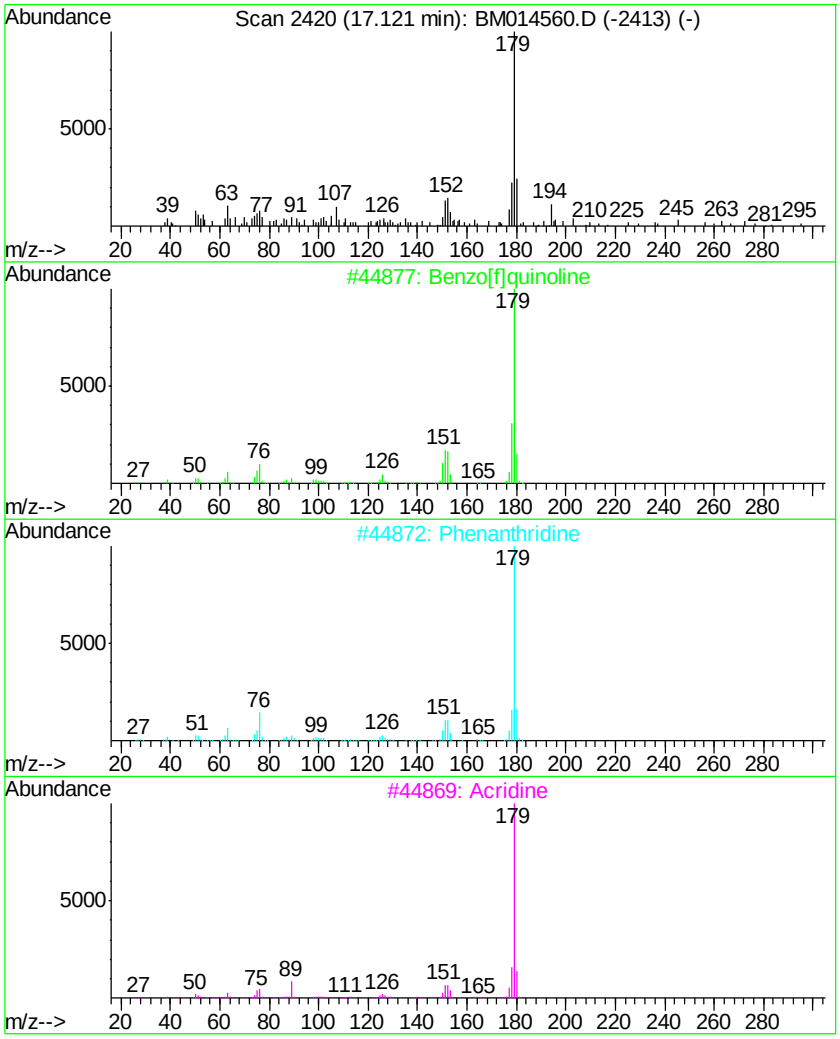
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

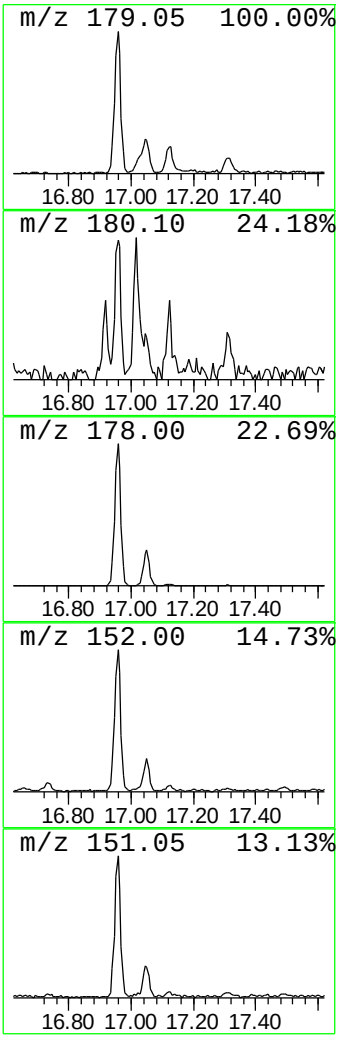
**********

Peak Number 4 Benzo[f]quinoline Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.12 | 2.24 ng/ul | 160489 | Phenanthrene-d10 | 16.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[f]quinoline | 179 | C13H9N | 000085-02-9 | 76 |
| 2 | Phenanthridine | 179 | C13H9N | 000229-87-8 | 76 |
| 3 | Acridine | 179 | C13H9N | 000260-94-6 | 76 |
| 4 | Acridine | 179 | C13H9N | 000260-94-6 | 76 |
| 5 | Phenanthridine | 179 | C13H9N | 000229-87-8 | 68 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

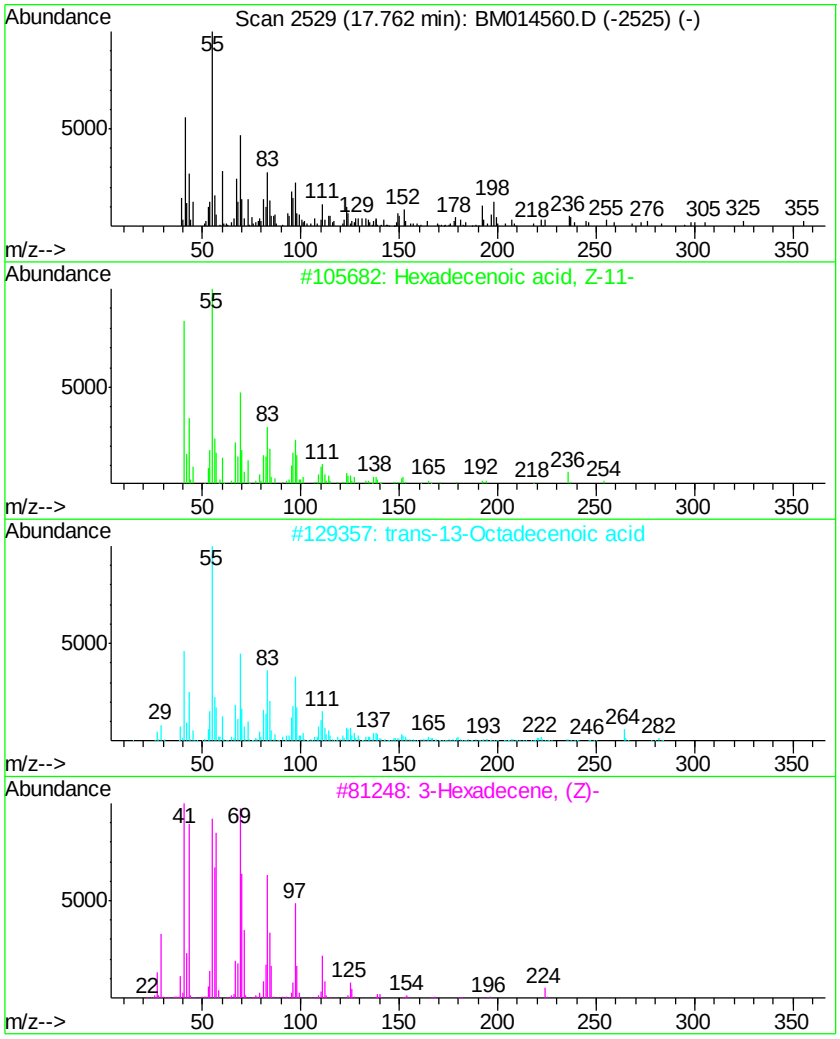
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

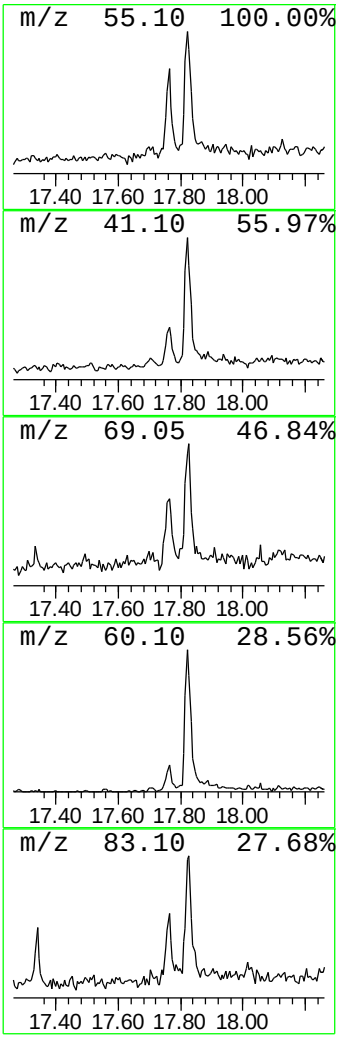
**********

Peak Number 5 unknown-01 Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.76 | 3.43 ng/ul | 246074 | Phenanthrene-d10 | 16.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexadecenoic acid, Z-11- | 254 | C16H30O2 | 002416-20-8 | 43 |
| 2 | trans-13-Octadecenoic acid | 282 | C18H34O2 | 000693-71-0 | 27 |
| 3 | 3-Hexadecene, (Z)- | 224 | C16H32 | 034303-81-6 | 25 |
| 4 | 7-Hexadecene, (Z)- | 224 | C16H32 | 035507-09-6 | 22 |
| 5 | Tetradecanenitrile | 209 | C14H27N | 000629-63-0 | 18 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

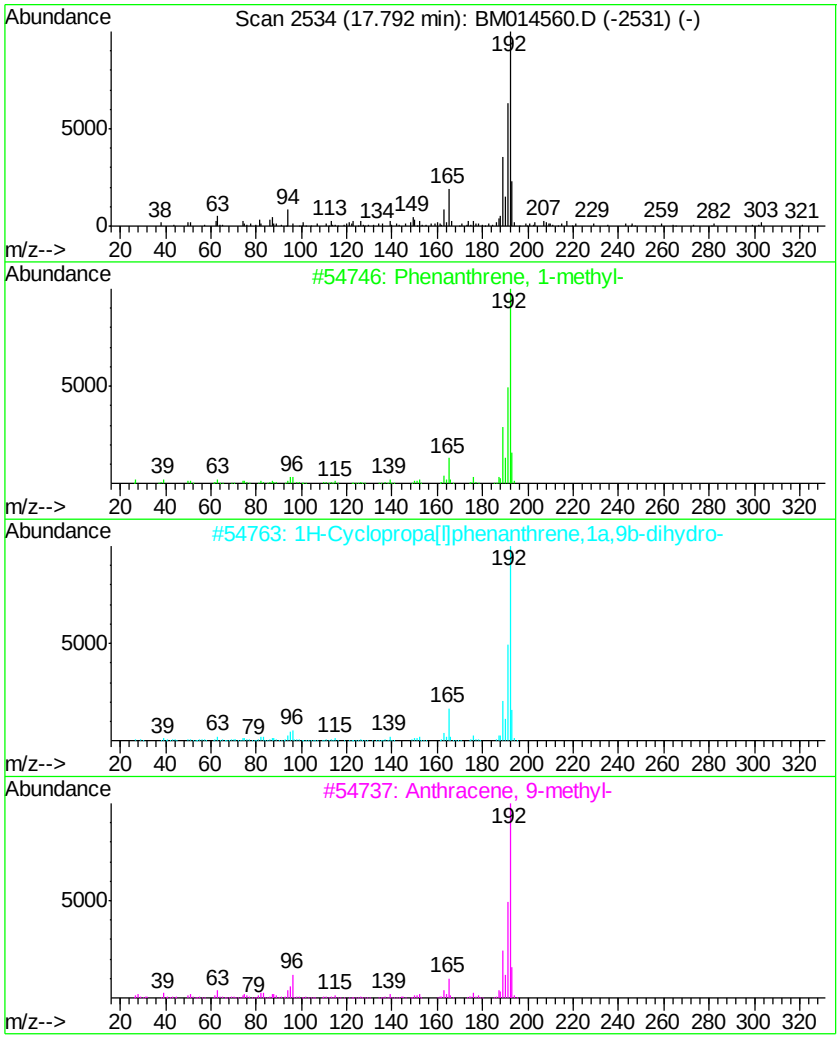
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

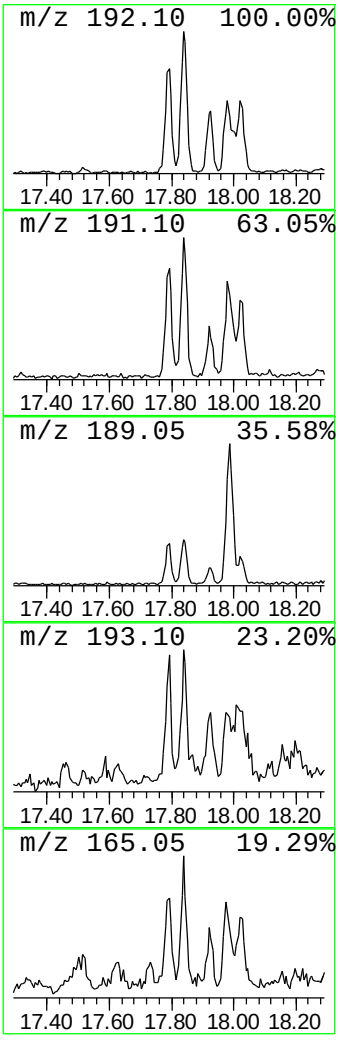
**********

Peak Number 6 Phenanthrene, 1-methyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.79 | 4.29 ng/ul | 307475 | Phenanthrene-d10 | 16.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 94 |
| 2 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 91 |
| 3 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 90 |
| 4 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 87 |
| 5 | 1H-Indene, 2-phenyl- | 192 | C15H12 | 004505-48-0 | 87 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

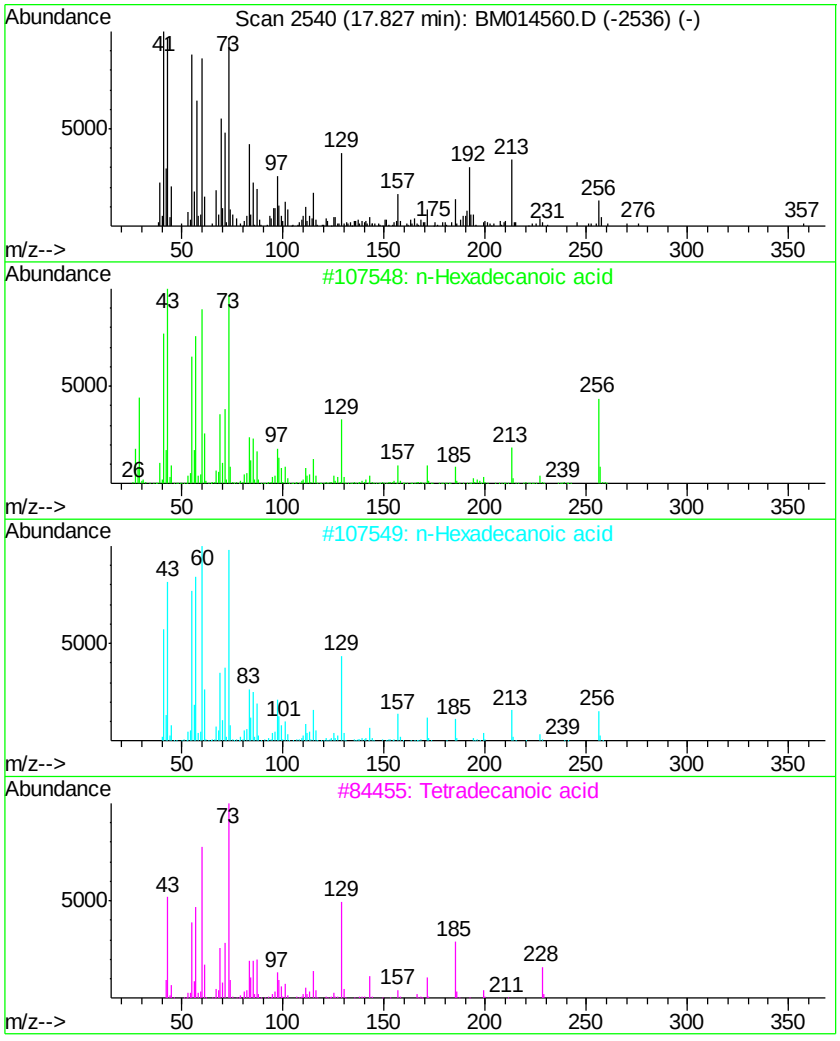
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

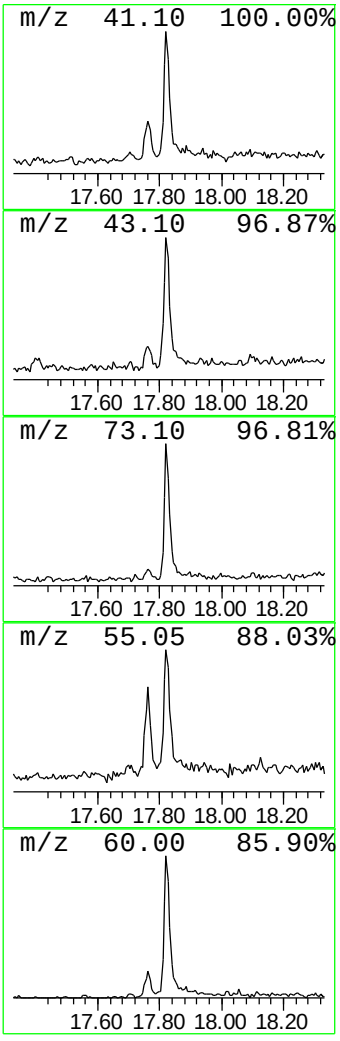
**********

Peak Number 7 n-Hexadecanoic acid Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.83 | 14.67 ng/ul | 1051090 | Phenanthrene-d10 | 16.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | n-Hexadecanoic acid | 256 | C16H32O2 | 000057-10-3 | 90 |
| 2 | n-Hexadecanoic acid | 256 | C16H32O2 | 000057-10-3 | 86 |
| 3 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 83 |
| 4 | Heptadecanoic acid | 270 | C17H34O2 | 000506-12-7 | 62 |
| 5 | Tridecanoic acid | 214 | C13H26O2 | 000638-53-9 | 58 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

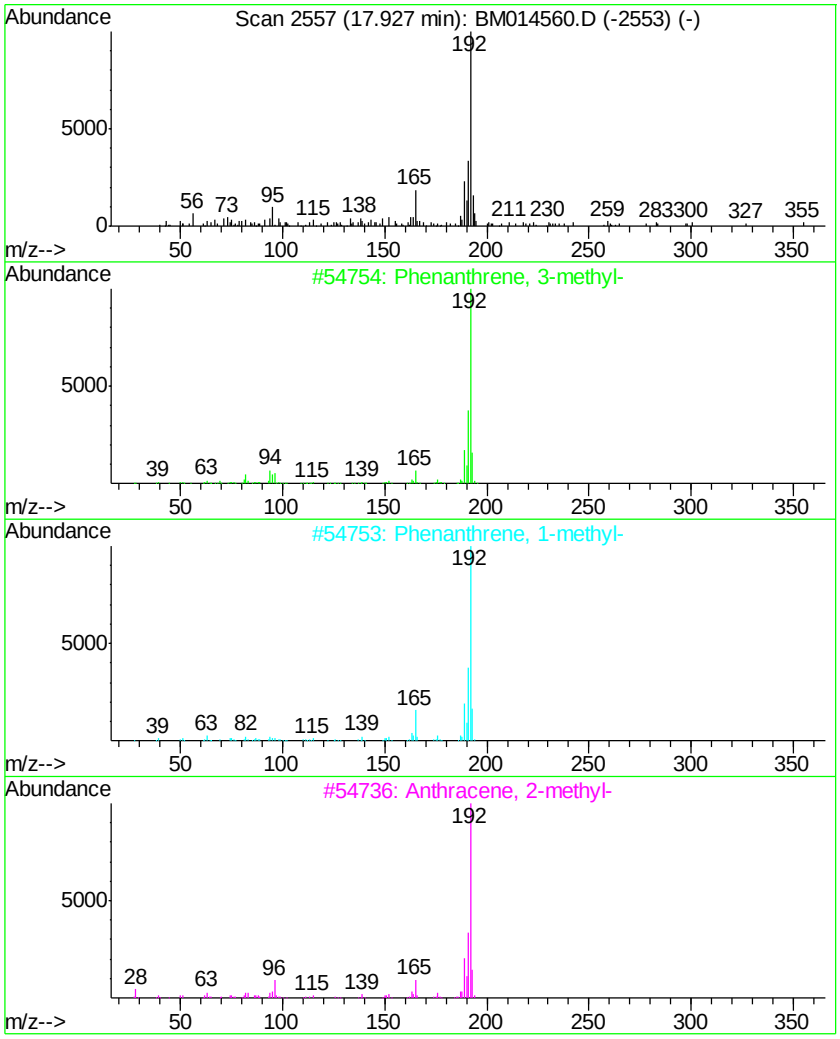
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

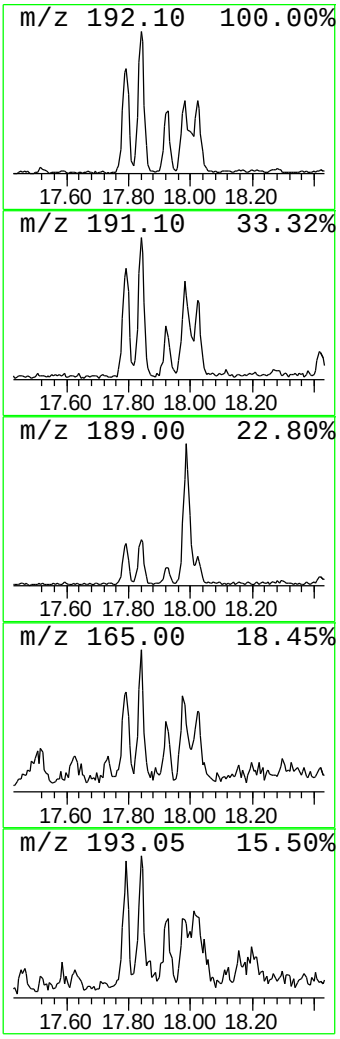
**********

Peak Number 8 Phenanthrene, 3-methyl- Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.93 | 2.32 ng/ul | 166045 | Phenanthrene-d10 | 16.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 3-methyl- | 192 | C15H12 | 000832-71-3 | 83 |
| 2 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 81 |
| 3 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 76 |
| 4 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 76 |
| 5 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 76 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

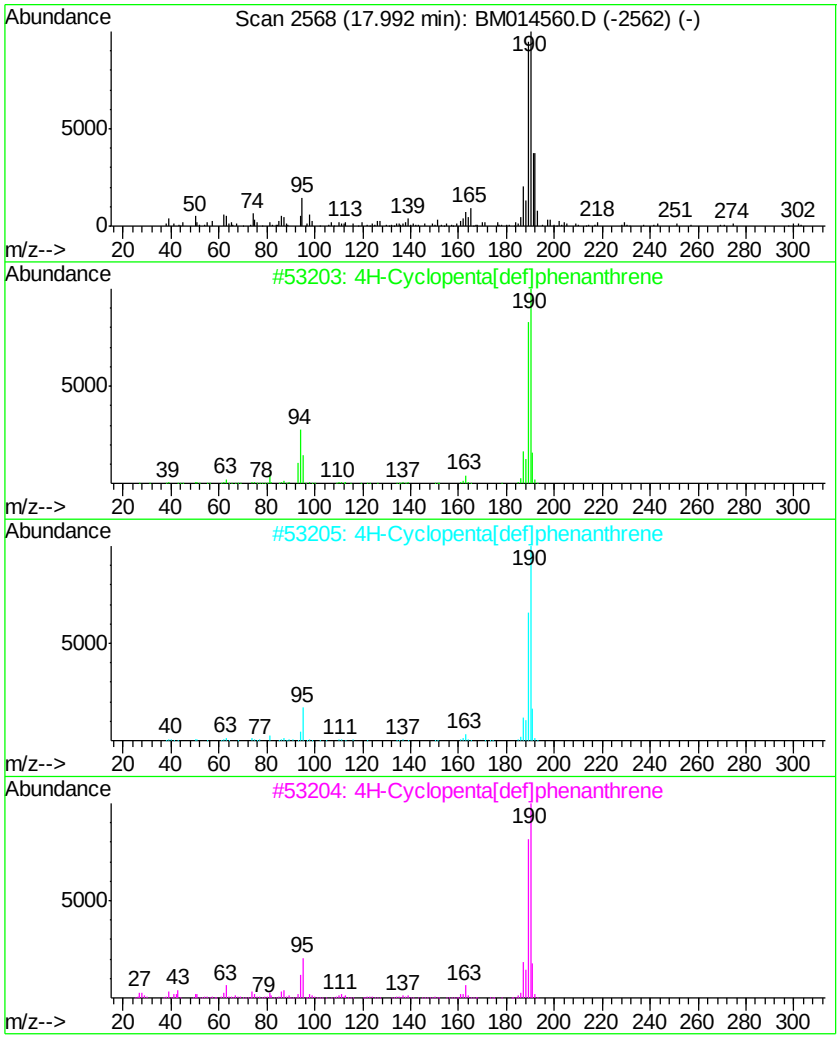
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

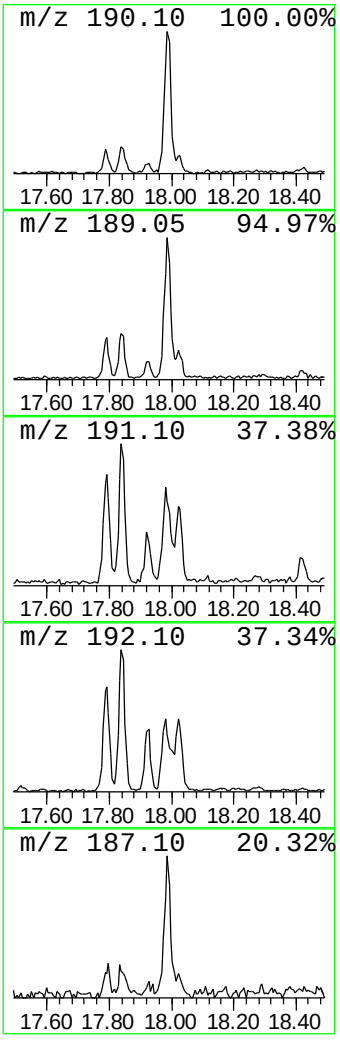
**********

Peak Number 9 4H-Cyclopenta[def]phenanthrene Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.99 | 7.39 ng/ul | 529854 | Phenanthrene-d10 | 16.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 64 |
| 2 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 64 |
| 3 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 58 |
| 4 | Carbonic acid, ethyl 2-formyl-4,... | 262 | C10H8Cl2O4 | 1000331-34-4 | 47 |
| 5 | Pyrazole-4-carboxaldehyde, 3-(4-... | 190 | C10H7FN2O | 306936-57-2 | 43 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

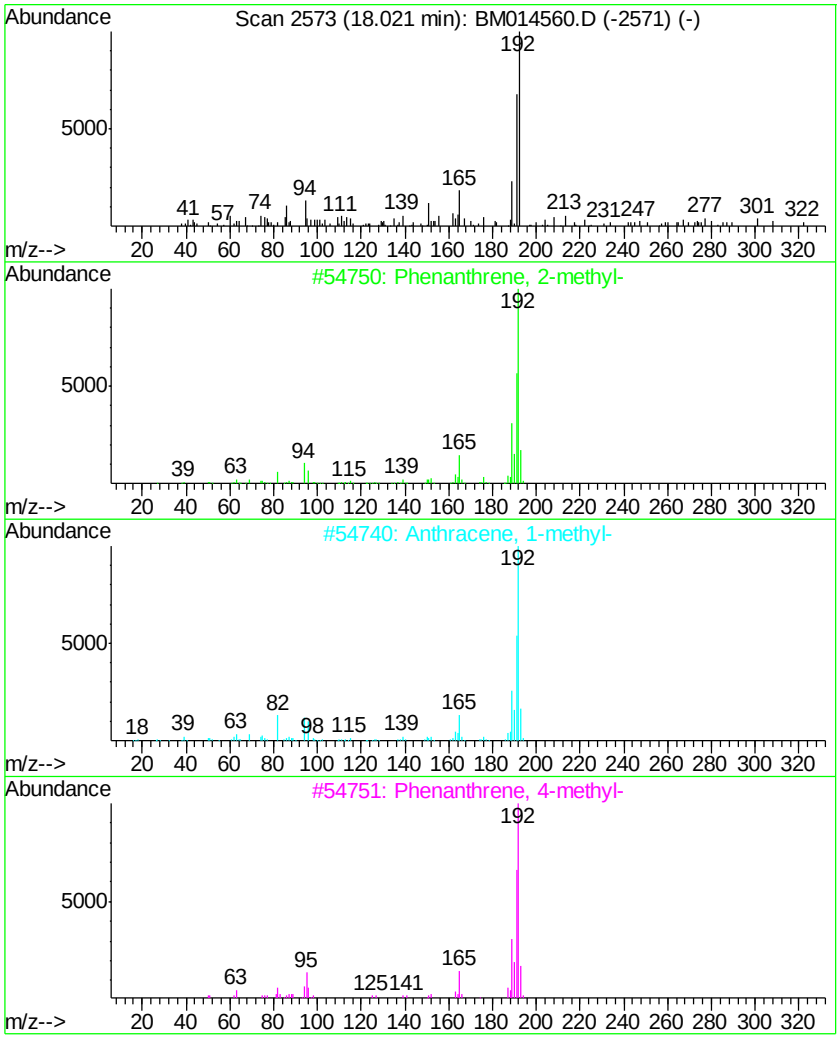
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

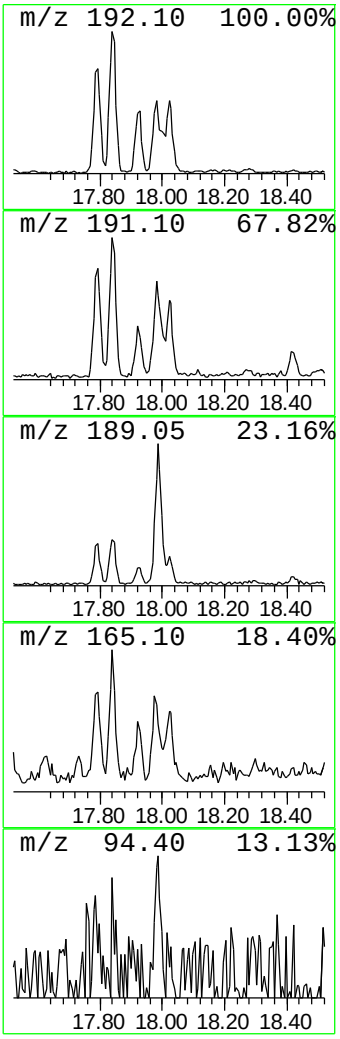
**********

Peak Number 10 Phenanthrene, 2-methyl- Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.02 | 2.31 ng/ul | 165358 | Phenanthrene-d10 | 16.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 76 |
| 2 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 64 |
| 3 | Phenanthrene, 4-methyl- | 192 | C15H12 | 000832-64-4 | 59 |
| 4 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 58 |
| 5 | 1H-Indene, 2-phenyl- | 192 | C15H12 | 004505-48-0 | 58 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

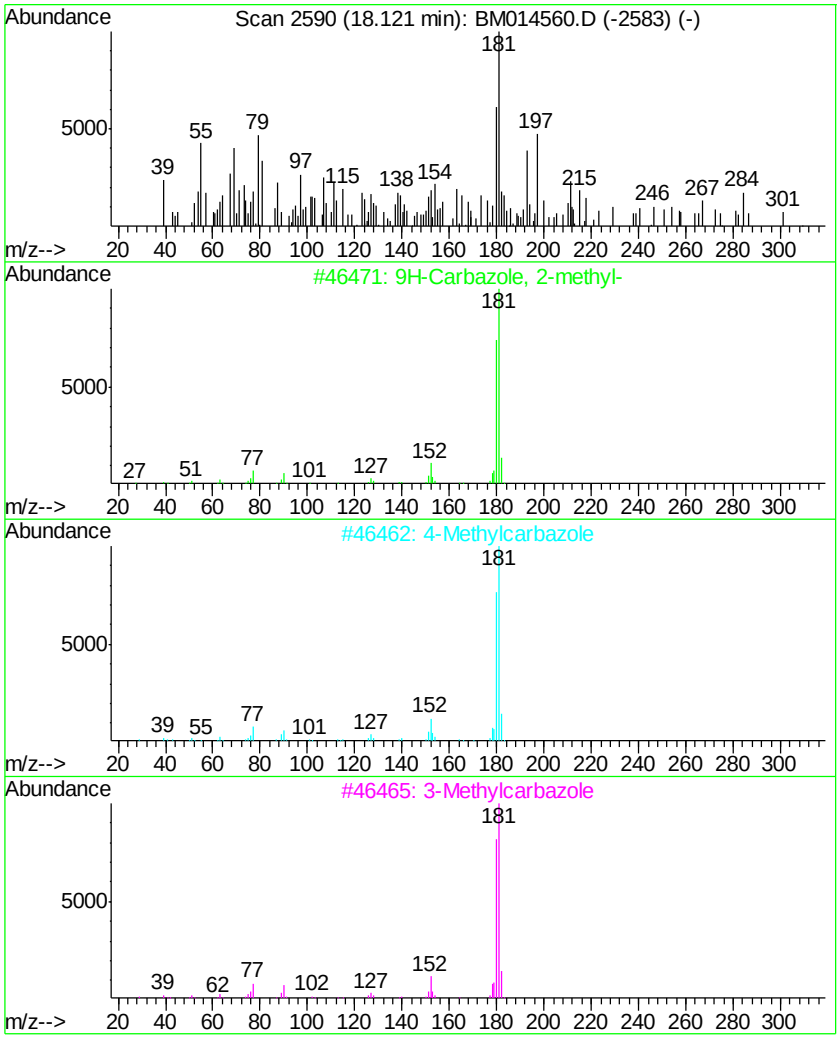
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

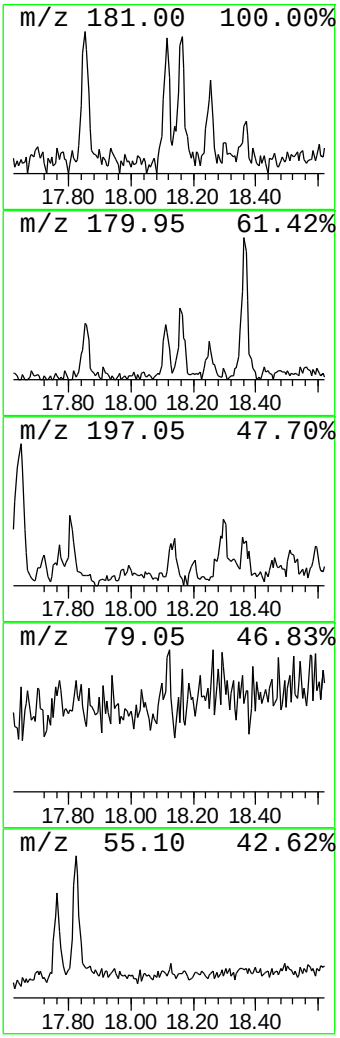
**********

Peak Number 11 9H-Carbazole, 2-methyl- Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.12 | 2.12 ng/ul | 151758 | Phenanthrene-d10 | 16.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Carbazole, 2-methyl- | 181 | C13H11N | 003652-91-3 | 55 |
| 2 | 4-Methylcarbazole | 181 | C13H11N | 003770-48-7 | 55 |
| 3 | 3-Methylcarbazole | 181 | C13H11N | 004630-20-0 | 55 |
| 4 | 5H-Indeno[1,2-b]pyridine, 4-methyl- | 181 | C13H11N | 064292-01-9 | 53 |
| 5 | 9H-Carbazole, 9-methyl- | 181 | C13H11N | 001484-12-4 | 52 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

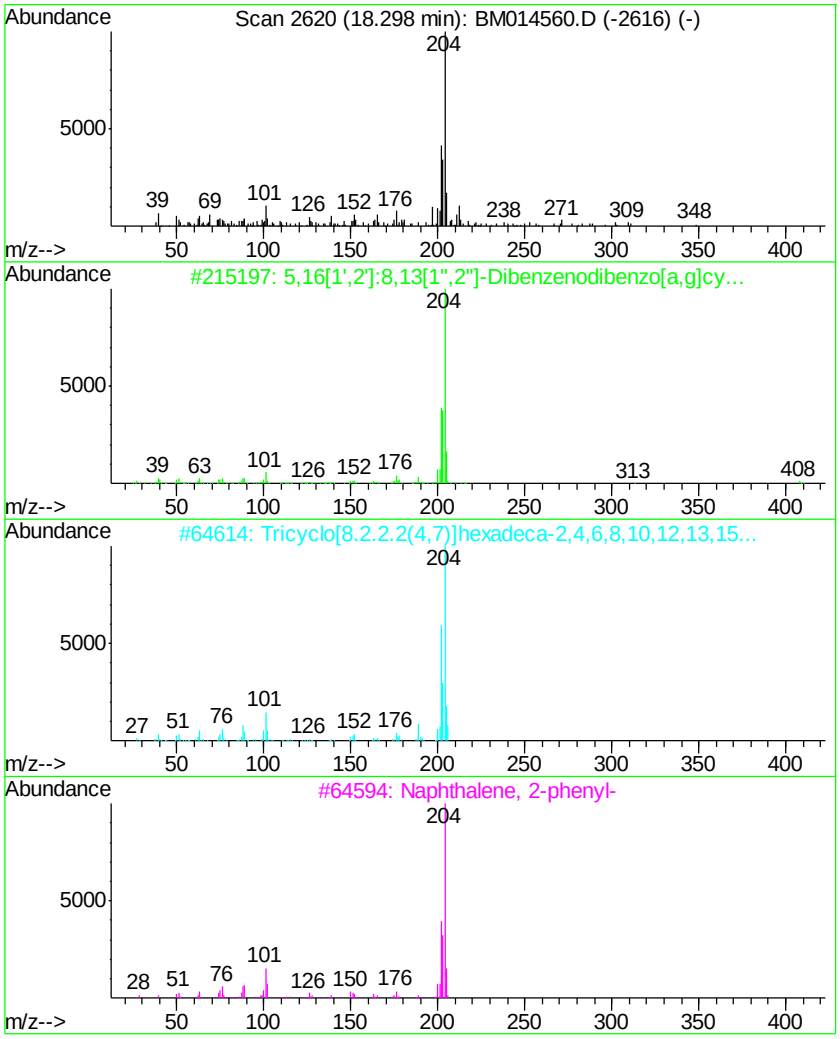
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

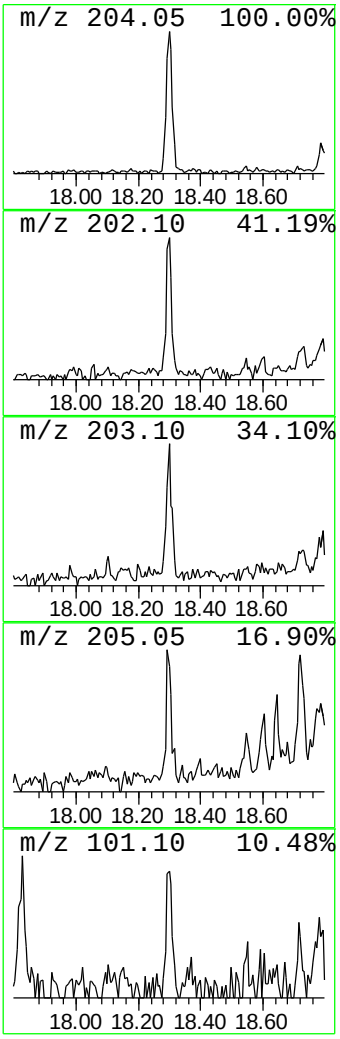
**********

Peak Number 12 5,16[1',2']:8,13[1'',2'']-D... Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.30 | 3.15 ng/ul | 225540 | Phenanthrene-d10 | 16.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24 | 005672-97-9 | 72 |
| 2 | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12 | 006572-60-7 | 64 |
| 3 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 60 |
| 4 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 55 |
| 5 | 9,10-Bis(bromomethyl)anthracene | 362 | C16H12Br2 | 034373-96-1 | 52 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

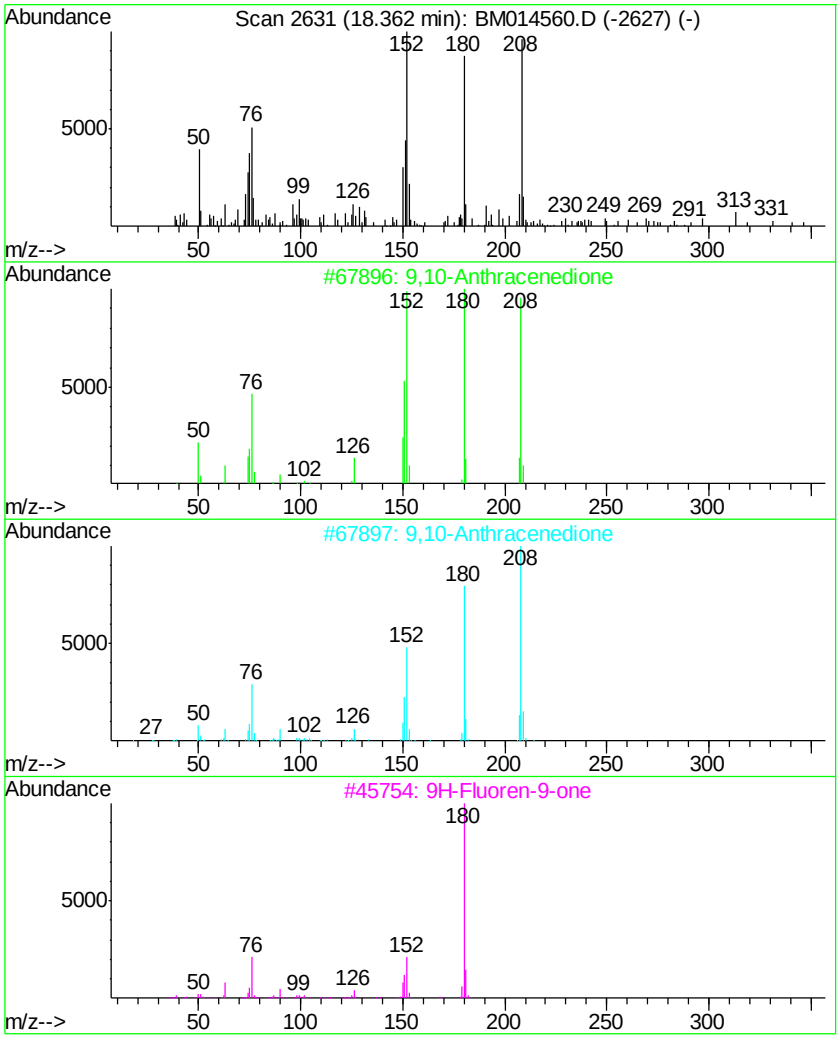
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

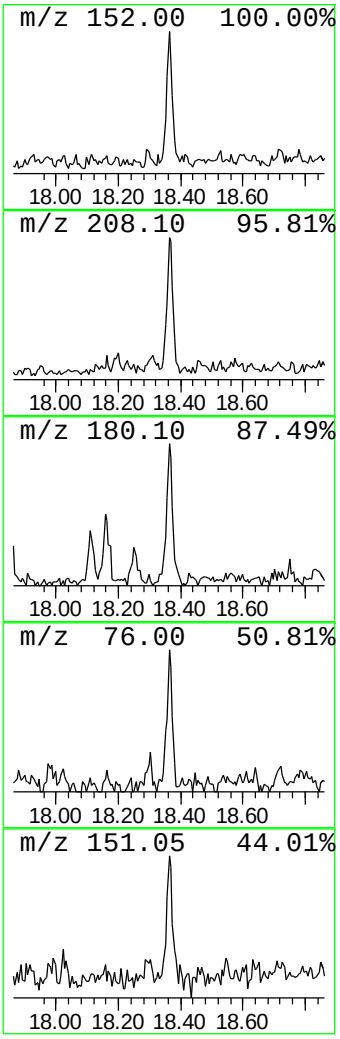
**********

Peak Number 13 9,10-Anthracenedione Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.36 | 3.00 ng/ul | 214964 | Phenanthrene-d10 | 16.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 83 |
| 2 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 45 |
| 3 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 45 |
| 4 | Benzo[c]cinnoline | 180 | C12H8N2 | 000230-17-1 | 45 |
| 5 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 43 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

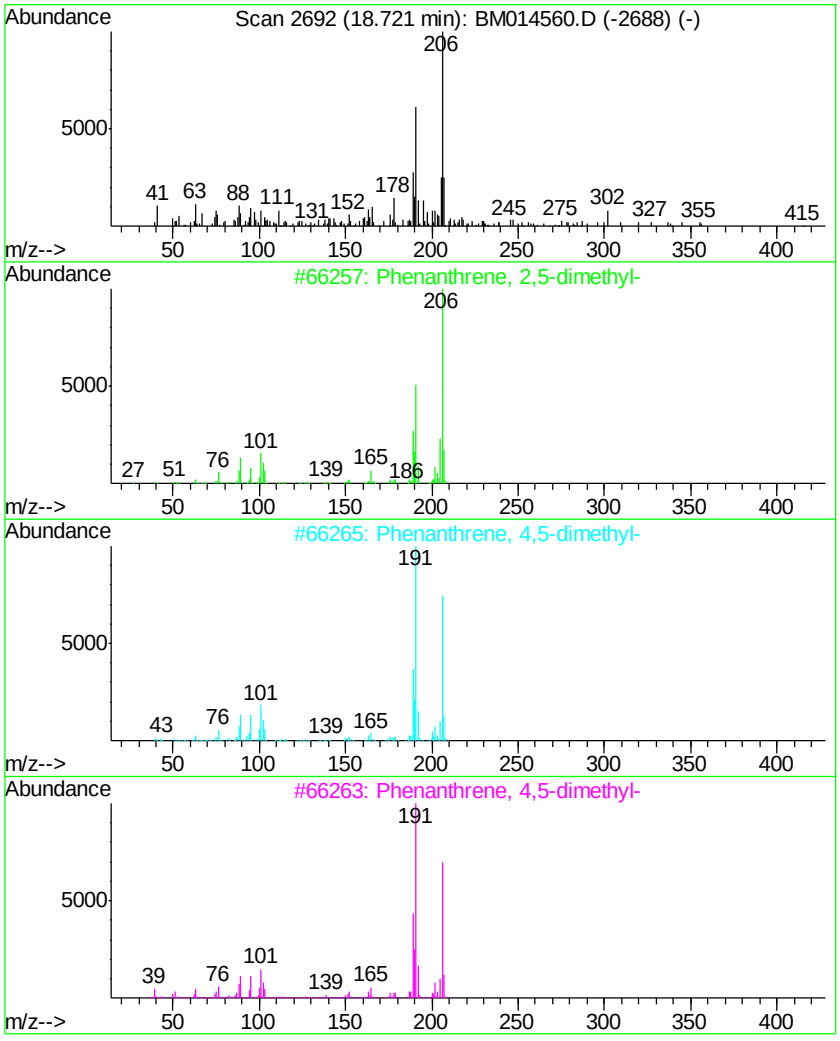
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

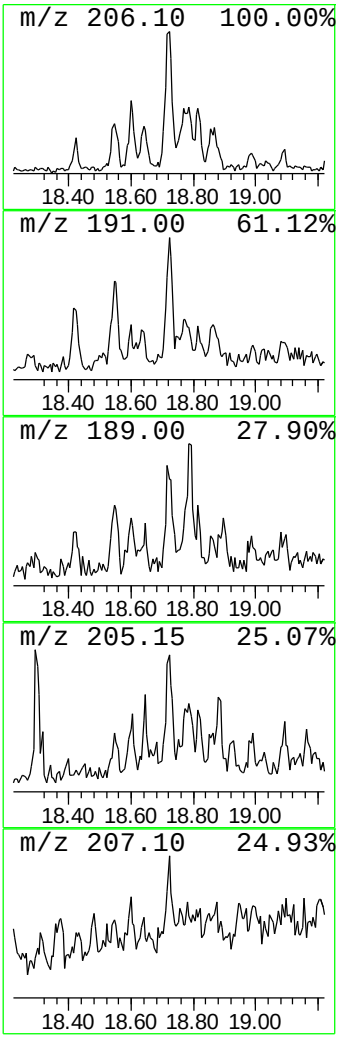
**********

Peak Number 14 Phenanthrene, 2,5-dimethyl- Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.72 | 2.22 ng/ul | 158794 | Phenanthrene-d10 | 16.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 91 |
| 2 | Phenanthrene, 4,5-dimethyl- | 206 | C16H14 | 003674-69-9 | 87 |
| 3 | Phenanthrene, 4,5-dimethyl- | 206 | C16H14 | 003674-69-9 | 83 |
| 4 | Anthracene, 2-ethyl- | 206 | C16H14 | 052251-71-5 | 81 |
| 5 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 81 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

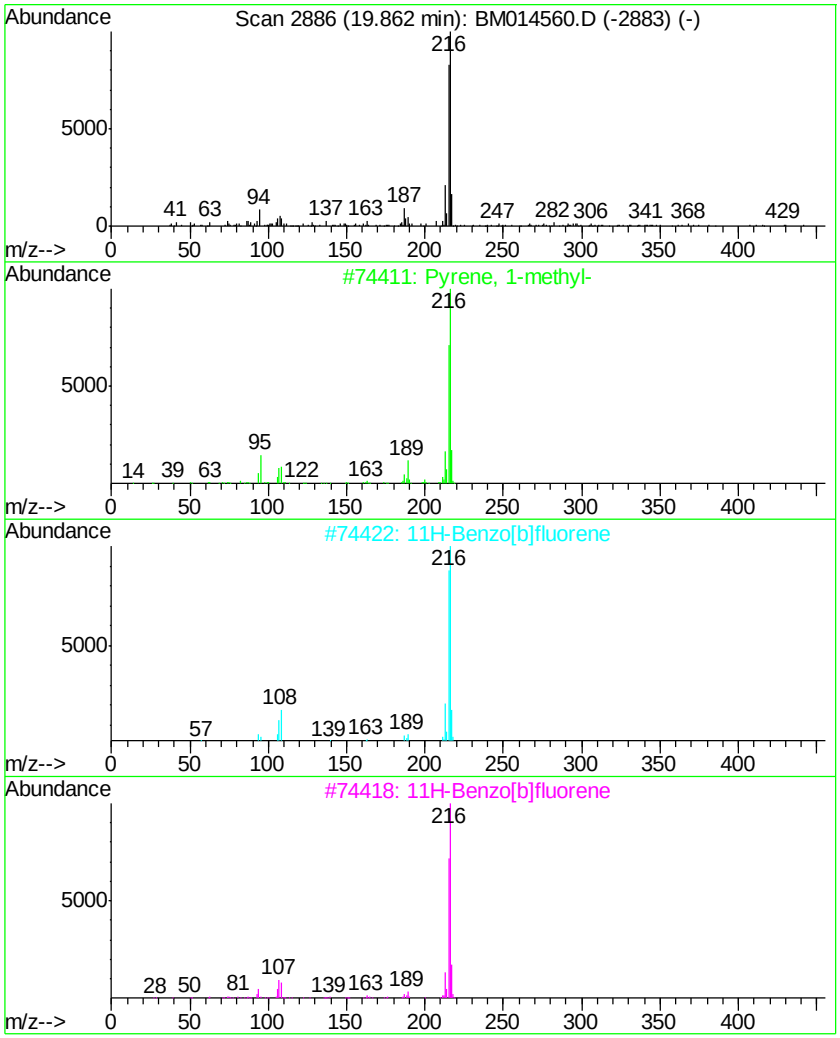
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

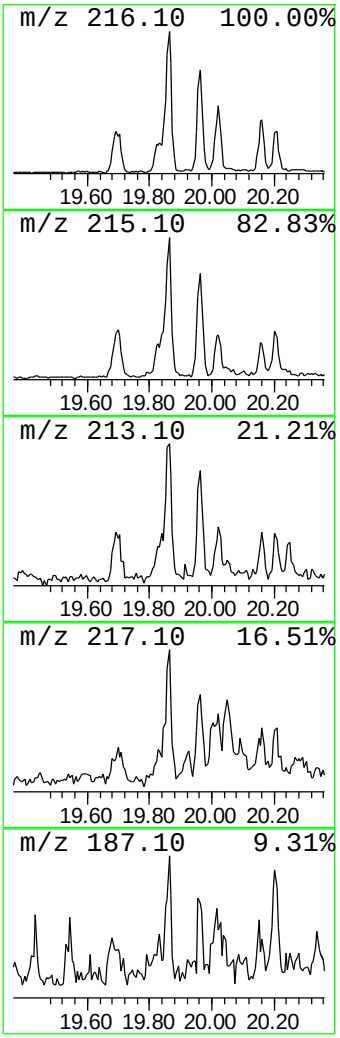
**********

Peak Number 15 Pyrene, 1-methyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.86 | 3.20 ng/ul | 429812 | Chrysene-d12 | 21.14 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 90 |
| 2 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 81 |
| 3 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 80 |
| 4 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 80 |
| 5 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 72 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

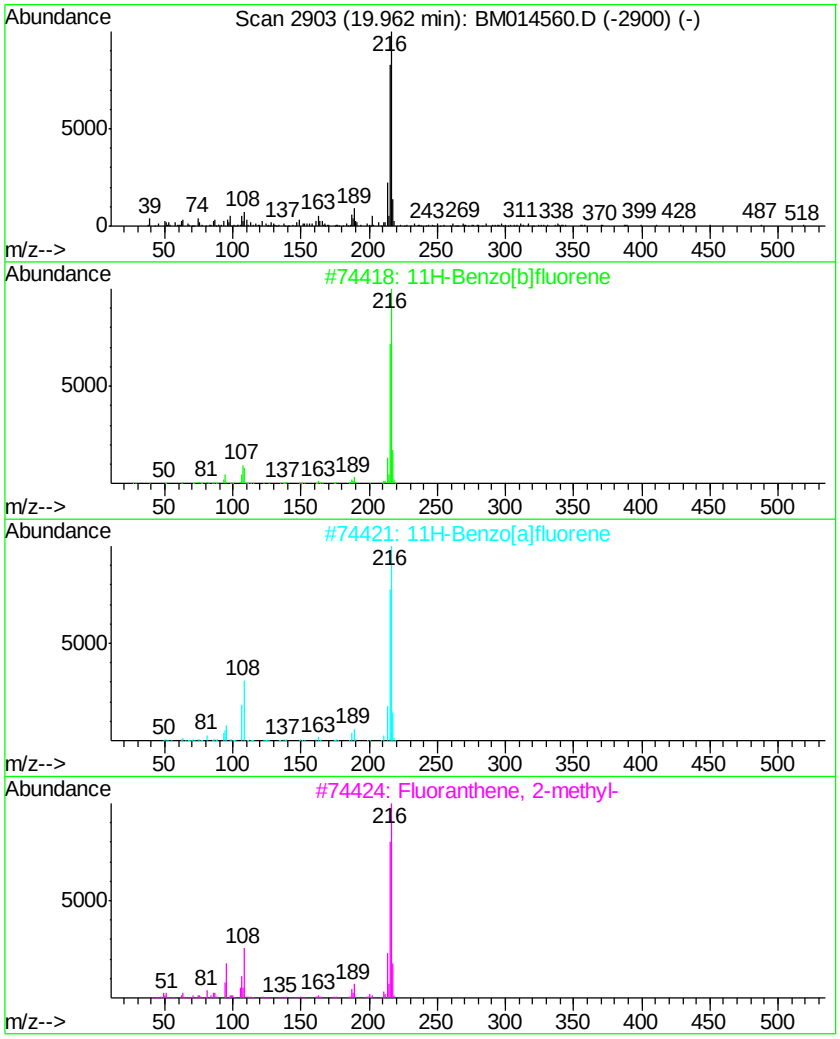
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

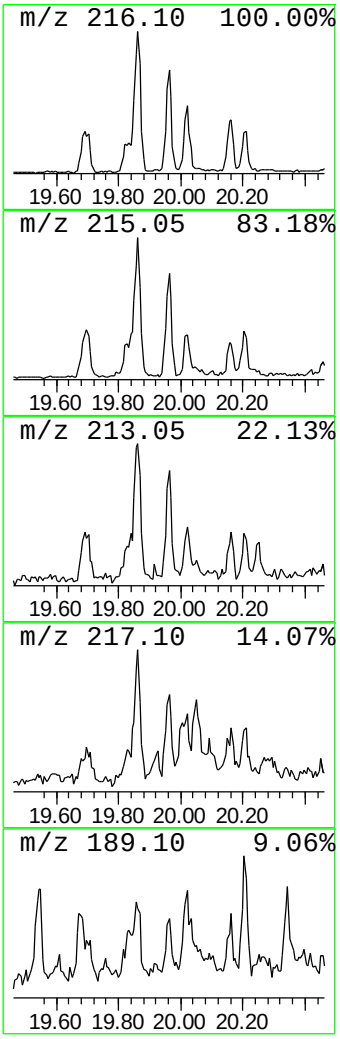
**********

Peak Number 16 11H-Benzo[b]fluorene Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.96 | 2.00 ng/ul | 268897 | Chrysene-d12 | 21.14 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 90 |
| 2 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 86 |
| 3 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 83 |
| 4 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 74 |
| 5 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 72 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

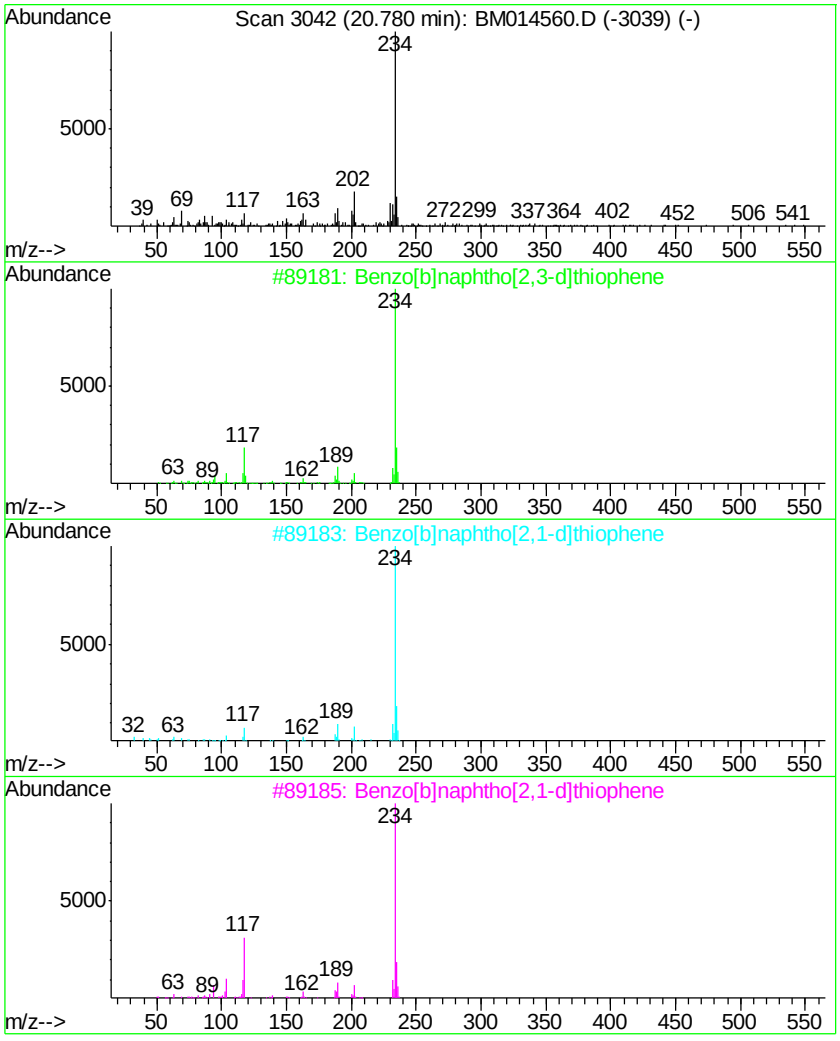
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

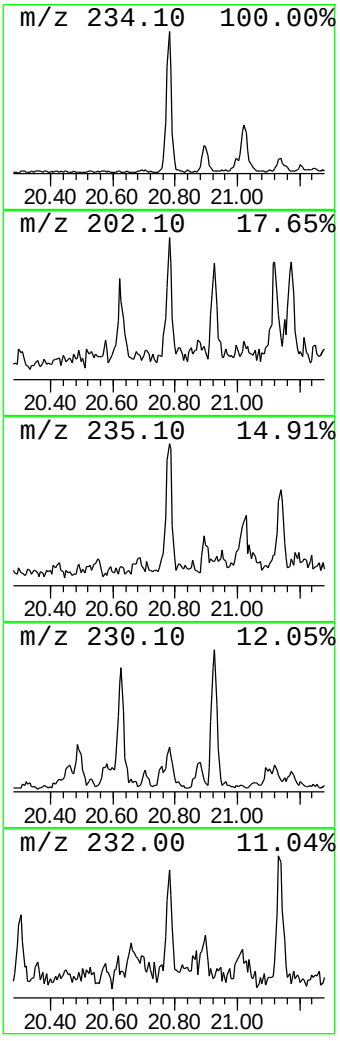
**********

Peak Number 18 Benzo[b]naphtho[2,3-d]thiop... Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.78 | 2.66 ng/ul | 356679 | Chrysene-d12 | 21.14 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[b]naphtho[2,3-d]thiophene | 234 | C16H10S | 000243-46-9 | 83 |
| 2 | Benzo[b]naphtho[2,1-d]thiophene | 234 | C16H10S | 000239-35-0 | 80 |
| 3 | Benzo[b]naphtho[2,1-d]thiophene | 234 | C16H10S | 000239-35-0 | 72 |
| 4 | Benzo[b]naphtho[2,1-d]thiophene | 234 | C16H10S | 000239-35-0 | 72 |
| 5 | Benzo[b]naphtho[1,2-d]thiophene | 234 | C16H10S | 000205-43-6 | 64 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA CALIBRATION

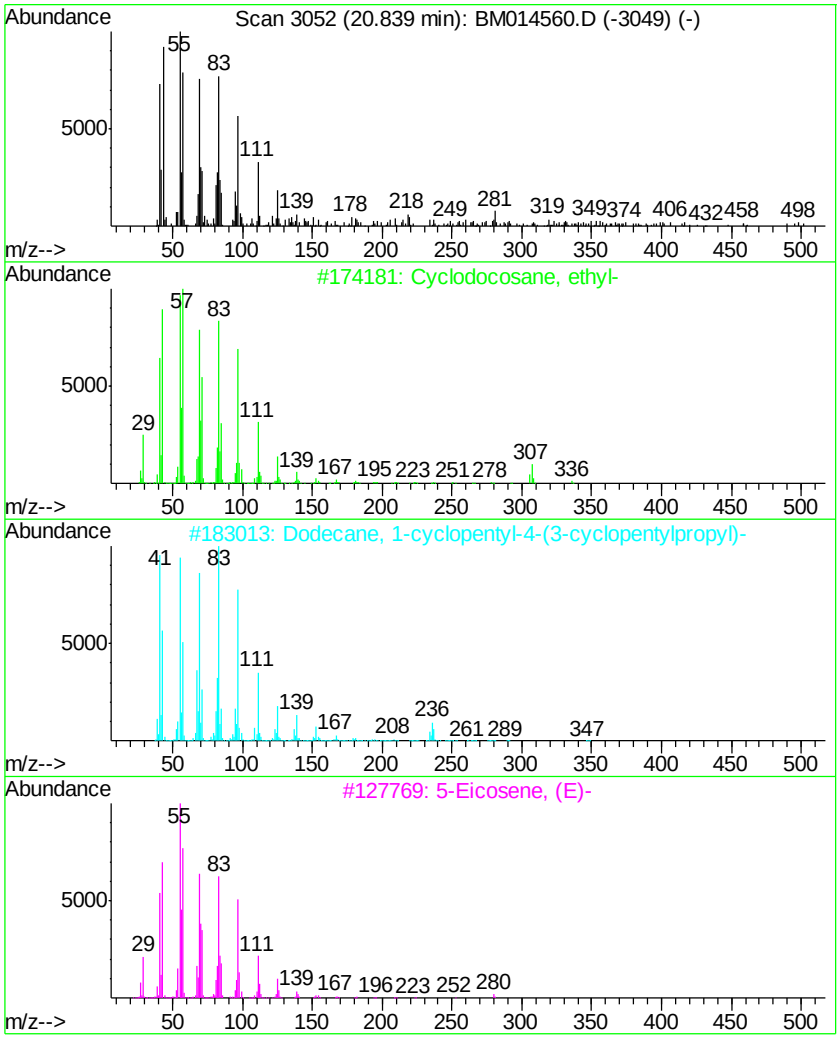
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

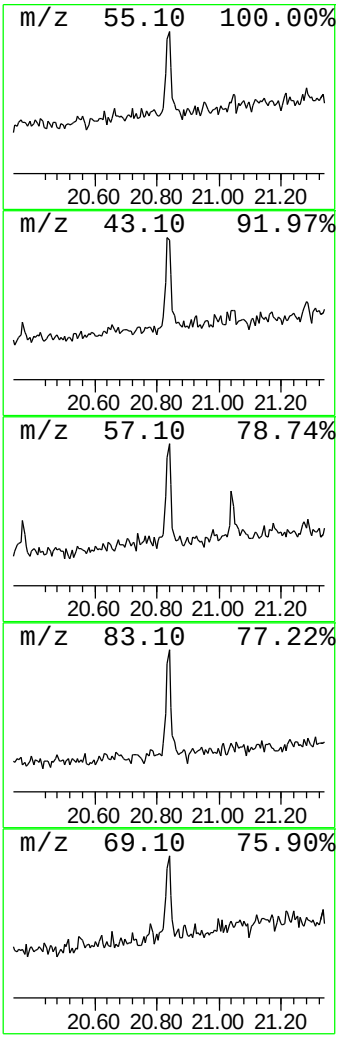
**********

Peak Number 19 (DEL) Alkane: Cyclic20.84 Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.84 | 2.76 ng/ul | 370679 | Chrysene-d12 | 21.14 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclodocosane, ethyl- | 336 | C24H48 | 1000151-22-6 | 87 |
| 2 | Dodecane, 1-cyclopentyl-4-(3-cyc... | 348 | C25H48 | 007225-68-5 | 83 |
| 3 | 5-Eicosene, (E)- | 280 | C20H40 | 074685-30-6 | 78 |
| 4 | 3-Hexene, 2,2,5,5-tetramethyl-, ... | 140 | C10H20 | 000692-47-7 | 64 |
| 5 | Cyclohexane, 1-(1,5-dimethylhexy... | 280 | C20H40 | 056009-20-2 | 62 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM031318\
Data File : BM014560.D
Acq On : 14 Mar 2018 01:29
Operator : SJ/JU
Sample : J1813-05
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F6F21

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM021418.M
Quant Title : SVOA 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 |
| 9H-Fluoren-9-one | 16.59 | 2.1 | ng/ul | 149488 | 4 | 16.92 | 1433010 | 20.0 |
| 2-Propanol, 1-chl... | 16.69 | 3.3 | ng/ul | 237354 | 4 | 16.92 | 1433010 | 20.0 |
| Naphtho[2,1-b]thi... | 16.73 | 3.5 | ng/ul | 247047 | 4 | 16.92 | 1433010 | 20.0 |
| Benzo[f]quinoline | 17.12 | 2.2 | ng/ul | 160489 | 4 | 16.92 | 1433010 | 20.0 |
| unknown-01 | 17.76 | 3.4 | ng/ul | 246074 | 4 | 16.92 | 1433010 | 20.0 |
| Phenanthrene, 1-m... | 17.79 | 4.3 | ng/ul | 307475 | 4 | 16.92 | 1433010 | 20.0 |
| n-Hexadecanoic acid | 17.83 | 14.7 | ng/ul | 1051090 | 4 | 16.92 | 1433010 | 20.0 |
| Phenanthrene, 3-m... | 17.93 | 2.3 | ng/ul | 166045 | 4 | 16.92 | 1433010 | 20.0 |
| 4H-Cyclopenta[def... | 17.99 | 7.4 | ng/ul | 529854 | 4 | 16.92 | 1433010 | 20.0 |
| Phenanthrene, 2-m... | 18.02 | 2.3 | ng/ul | 165358 | 4 | 16.92 | 1433010 | 20.0 |
| 9H-Carbazole, 2-m... | 18.12 | 2.1 | ng/ul | 151758 | 4 | 16.92 | 1433010 | 20.0 |
| 5,16[1',2']:8,13[... | 18.30 | 3.1 | ng/ul | 225540 | 4 | 16.92 | 1433010 | 20.0 |
| 9,10-Anthracenedione | 18.36 | 3.0 | ng/ul | 214964 | 4 | 16.92 | 1433010 | 20.0 |
| Phenanthrene, 2,5... | 18.72 | 2.2 | ng/ul | 158794 | 4 | 16.92 | 1433010 | 20.0 |
| Pyrene, 1-methyl- | 19.86 | 3.2 | ng/ul | 429812 | 5 | 21.14 | 2686570 | 20.0 |
| 11H-Benzo[b]fluorene | 19.96 | 2.0 | ng/ul | 268897 | 5 | 21.14 | 2686570 | 20.0 |
| Benzo[b]naphtho[2... | 20.78 | 2.7 | ng/ul | 356679 | 5 | 21.14 | 2686570 | 20.0 |
| (DEL) Alkane: Cyc... | 20.84 | 2.8 | ng/ul | 370679 | 5 | 21.14 | 2686570 | 20.0 |