LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM121517\
Data File : BM013484.D
Acq On : 16 Dec 2017 19:33
Operator : SJ/JU
Sample : I6776-17DL 25X
Misc :
ALS Vial : 41 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F9A46DL

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-BM113017.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 | 6.857 | 637 | 641 | 648 | rBV3 | 31019 | 60055 | 1.12% | 0.133% |
| 2 | 7.210 | 694 | 701 | 706 | rBV4 | 34339 | 64174 | 1.20% | 0.142% |
| 3 | 7.675 | 773 | 780 | 788 | rBV | 775808 | 1250956 | 23.42% | 2.761% |
| 4 | 8.204 | 864 | 870 | 876 | rBV3 | 34064 | 65833 | 1.23% | 0.145% |
| 5 | 8.392 | 896 | 902 | 908 | rBV4 | 40052 | 71600 | 1.34% | 0.158% |
| 6 | 8.834 | 972 | 977 | 982 | rVB3 | 32129 | 53942 | 1.01% | 0.119% |
| 7 | 10.098 | 1185 | 1192 | 1200 | rBV5 | 31144 | 72323 | 1.35% | 0.160% |
| 8 | 10.451 | 1244 | 1252 | 1266 | rBV | 1150414 | 1913306 | 35.83% | 4.223% |
| 9 | 13.733 | 1802 | 1810 | 1814 | rBV | 87440 | 131144 | 2.46% | 0.289% |
| 10 | 14.004 | 1851 | 1856 | 1858 | rBV | 107539 | 147132 | 2.76% | 0.325% |
| 11 | 14.039 | 1858 | 1862 | 1871 | rVB | 169176 | 289588 | 5.42% | 0.639% |
| 12 | 14.316 | 1902 | 1909 | 1919 | rBV2 | 1610357 | 2471105 | 46.27% | 5.454% |
| 13 | 15.315 | 2071 | 2079 | 2083 | rBV | 131655 | 197347 | 3.70% | 0.436% |
| 14 | 16.051 | 2194 | 2204 | 2211 | rBV2 | 77299 | 150618 | 2.82% | 0.332% |
| 15 | 17.068 | 2370 | 2377 | 2388 | rBV | 1978481 | 2975254 | 55.71% | 6.567% |
| 16 | 17.162 | 2388 | 2393 | 2396 | rVV | 149294 | 228704 | 4.28% | 0.505% |
| 17 | 17.198 | 2396 | 2399 | 2406 | rVB | 307219 | 429691 | 8.05% | 0.948% |
| 18 | 18.068 | 2542 | 2547 | 2551 | rBV2 | 47318 | 61684 | 1.16% | 0.136% |
| 19 | 18.139 | 2554 | 2559 | 2566 | rVB6 | 36866 | 75886 | 1.42% | 0.167% |
| 20 | 18.339 | 2590 | 2593 | 2600 | rVB3 | 46499 | 70708 | 1.32% | 0.156% |
| 21 | 19.003 | 2701 | 2706 | 2715 | rBV | 334457 | 523759 | 9.81% | 1.156% |
| 22 | 19.127 | 2721 | 2727 | 2734 | rBV | 1098688 | 1432256 | 26.82% | 3.161% |
| 23 | 19.227 | 2740 | 2744 | 2748 | rVB | 54296 | 73508 | 1.38% | 0.162% |
| 24 | 19.280 | 2749 | 2753 | 2757 | rVB2 | 51067 | 60225 | 1.13% | 0.133% |
| 25 | 19.374 | 2762 | 2769 | 2772 | rBV3 | 67911 | 135086 | 2.53% | 0.298% |
| 26 | 19.492 | 2779 | 2789 | 2797 | rBV | 3778618 | 5340538 | 100.00% | 11.787% |
| 27 | 19.568 | 2797 | 2802 | 2807 | rVB5 | 54045 | 99551 | 1.86% | 0.220% |
| 28 | 19.674 | 2815 | 2820 | 2825 | rBV4 | 79999 | 158933 | 2.98% | 0.351% |
| 29 | 19.727 | 2825 | 2829 | 2833 | rVB2 | 85456 | 116029 | 2.17% | 0.256% |
| 30 | 19.827 | 2839 | 2846 | 2852 | rBV2 | 233462 | 533488 | 9.99% | 1.177% |
| 31 | 19.968 | 2863 | 2870 | 2880 | rBV | 551174 | 1299364 | 24.33% | 2.868% |
| 32 | 20.086 | 2887 | 2890 | 2894 | rBV | 124154 | 152730 | 2.86% | 0.337% |
| 33 | 20.145 | 2894 | 2900 | 2904 | rBV2 | 431125 | 650325 | 12.18% | 1.435% |
| 34 | 20.186 | 2904 | 2907 | 2910 | rVB | 85845 | 97752 | 1.83% | 0.216% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM121517\
Data File : BM013484.D
Acq On : 16 Dec 2017 19:33
Operator : SJ/JU
Sample : I6776-17DL 25X
Misc :
ALS Vial : 41 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F9A46DL

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-BM113017.M
Title : SVOA CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 20.286 | 2920 | 2924 | 2928 | rBV | 457593 | 630772 | 11.81% | 1.392% |
| 36 | 20.333 | 2928 | 2932 | 2936 | rVB | 252412 | 339382 | 6.35% | 0.749% |
| 37 | 20.409 | 2941 | 2945 | 2949 | rVV | 146378 | 188908 | 3.54% | 0.417% |
| 38 | 20.545 | 2964 | 2968 | 2969 | rBV3 | 67566 | 96580 | 1.81% | 0.213% |
| 39 | 20.650 | 2983 | 2986 | 2990 | rVB6 | 88935 | 100179 | 1.88% | 0.221% |
| 40 | 20.739 | 2998 | 3001 | 3006 | rBV4 | 119525 | 203680 | 3.81% | 0.450% |
| 41 | 20.903 | 3023 | 3029 | 3032 | rBV3 | 201147 | 348248 | 6.52% | 0.769% |
| 42 | 20.939 | 3032 | 3035 | 3038 | rVV | 193705 | 245839 | 4.60% | 0.543% |
| 43 | 20.980 | 3038 | 3042 | 3048 | rVB2 | 781333 | 1120778 | 20.99% | 2.474% |
| 44 | 21.256 | 3079 | 3089 | 3093 | rBV | 2504803 | 5294915 | 99.15% | 11.687% |
| 45 | 21.292 | 3093 | 3095 | 3102 | rVB | 1891489 | 2437460 | 45.64% | 5.380% |
| 46 | 21.427 | 3112 | 3118 | 3123 | rBV5 | 150682 | 323324 | 6.05% | 0.714% |
| 47 | 21.562 | 3137 | 3141 | 3147 | rBV | 318189 | 482134 | 9.03% | 1.064% |
| 48 | 21.615 | 3147 | 3150 | 3158 | rVB3 | 183531 | 272369 | 5.10% | 0.601% |
| 49 | 21.750 | 3169 | 3173 | 3176 | rBV5 | 139103 | 221573 | 4.15% | 0.489% |
| 50 | 22.556 | 3306 | 3310 | 3315 | rBV4 | 160036 | 321800 | 6.03% | 0.710% |
| 51 | 22.815 | 3348 | 3354 | 3359 | rBV2 | 2290443 | 4767258 | 89.27% | 10.522% |
| 52 | 22.980 | 3379 | 3382 | 3390 | rVB | 195485 | 312850 | 5.86% | 0.691% |
| 53 | 23.286 | 3429 | 3434 | 3440 | rVB | 953292 | 1655116 | 30.99% | 3.653% |
| 54 | 23.386 | 3445 | 3451 | 3457 | rVB | 876489 | 1602146 | 30.00% | 3.536% |
| 55 | 23.480 | 3461 | 3467 | 3472 | rBV | 1074082 | 1834986 | 34.36% | 4.050% |
| 56 | 25.703 | 3838 | 3845 | 3856 | rVB3 | 346730 | 1052315 | 19.70% | 2.323% |

Sum of corrected areas: 45307206

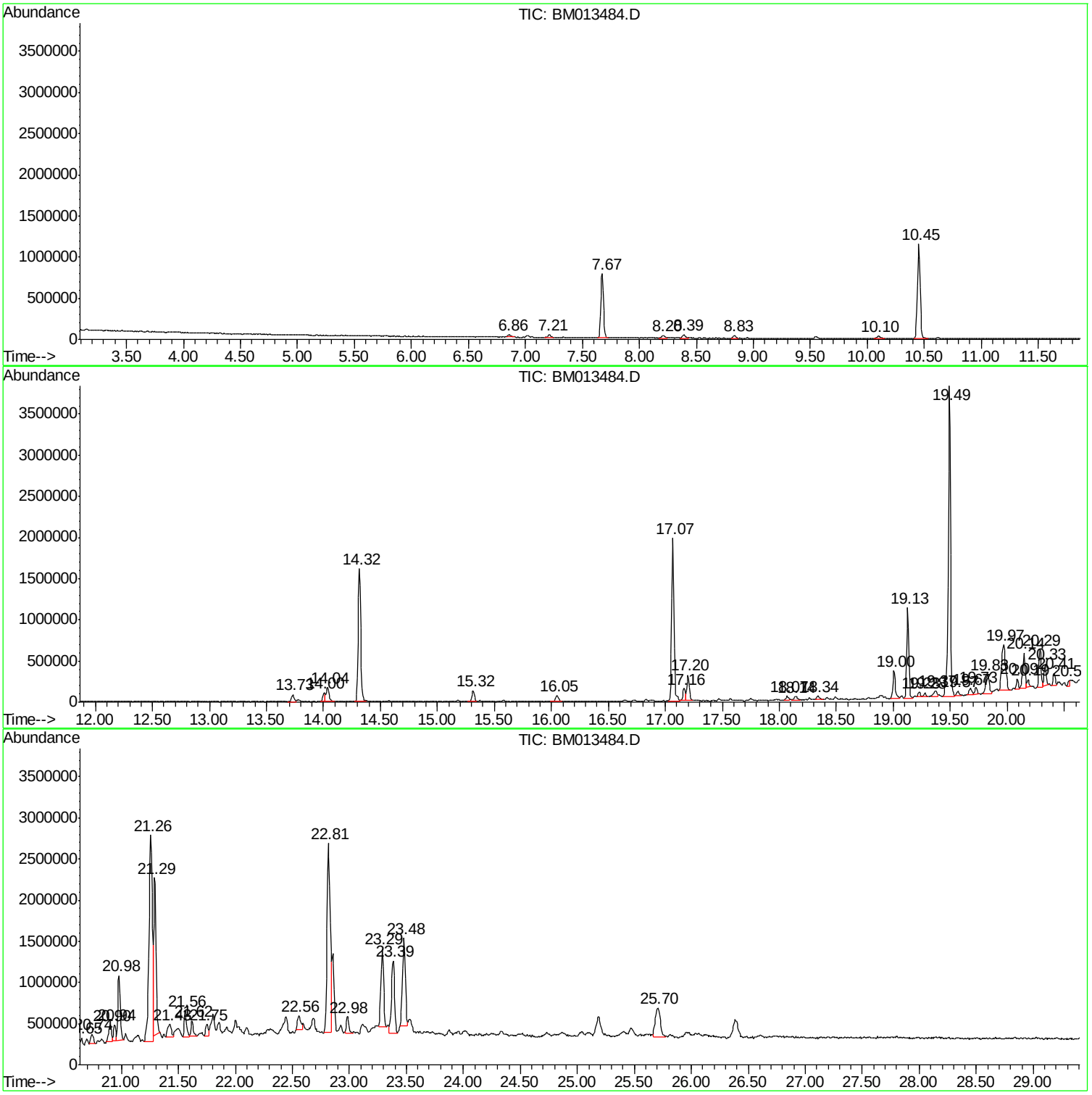
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM121517\
Data File : BM013484.D
Acq On : 16 Dec 2017 19:33
Operator : SJ/JU
Sample : I6776-17DL 25X
Misc :
ALS Vial : 41 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F9A46DL

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM113017.M
Quant Title : SVOA CALIBRATION

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



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM121517\
Data File : BM013484.D
Acq On : 16 Dec 2017 19:33
Operator : SJ/JU
Sample : I6776-17DL 25X
Misc :
ALS Vial : 41 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F9A46DL

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM113017.M
Quant Title : SVOA CALIBRATION

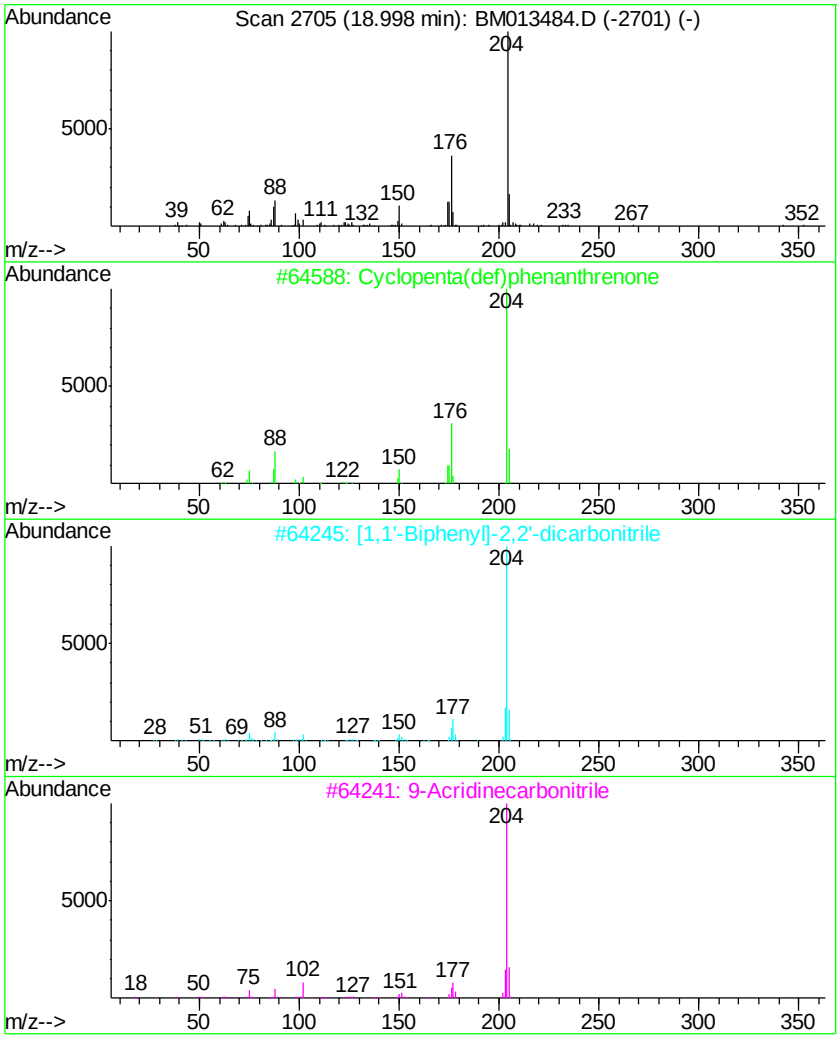
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

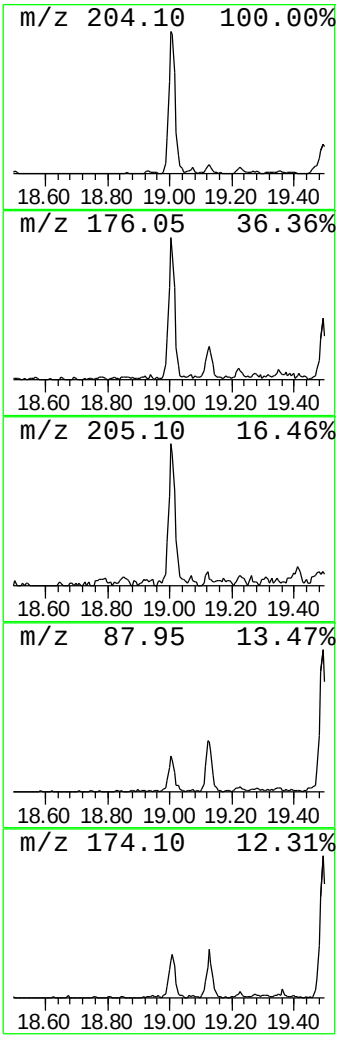
**********

Peak Number 1 Cyclopenta(def)phenanthrenone Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.00 | 3.52 ng/ul | 523759 | Phenanthrene-d10 | 17.07 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(def)phenanthrenone | 204 | C15H8O | 005737-13-3 | 93 |
| 2 | [1,1'-Biphenyl]-2,2'-dicarbonitrile | 204 | C14H8N2 | 004341-02-0 | 59 |
| 3 | 9-Acridinecarbonitrile | 204 | C14H8N2 | 005326-19-2 | 50 |
| 4 | Quinoline, 8-methoxy-5-nitro- | 204 | C10H8N2O3 | 1000298-88-7 | 47 |
| 5 | 1,2,4,8-Tetramethylbicyclo[6.3.0... | 204 | C15H24 | 137235-51-9 | 46 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM121517\
Data File : BM013484.D
Acq On : 16 Dec 2017 19:33
Operator : SJ/JU
Sample : I6776-17DL 25X
Misc :
ALS Vial : 41 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F9A46DL

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM113017.M
Quant Title : SVOA CALIBRATION

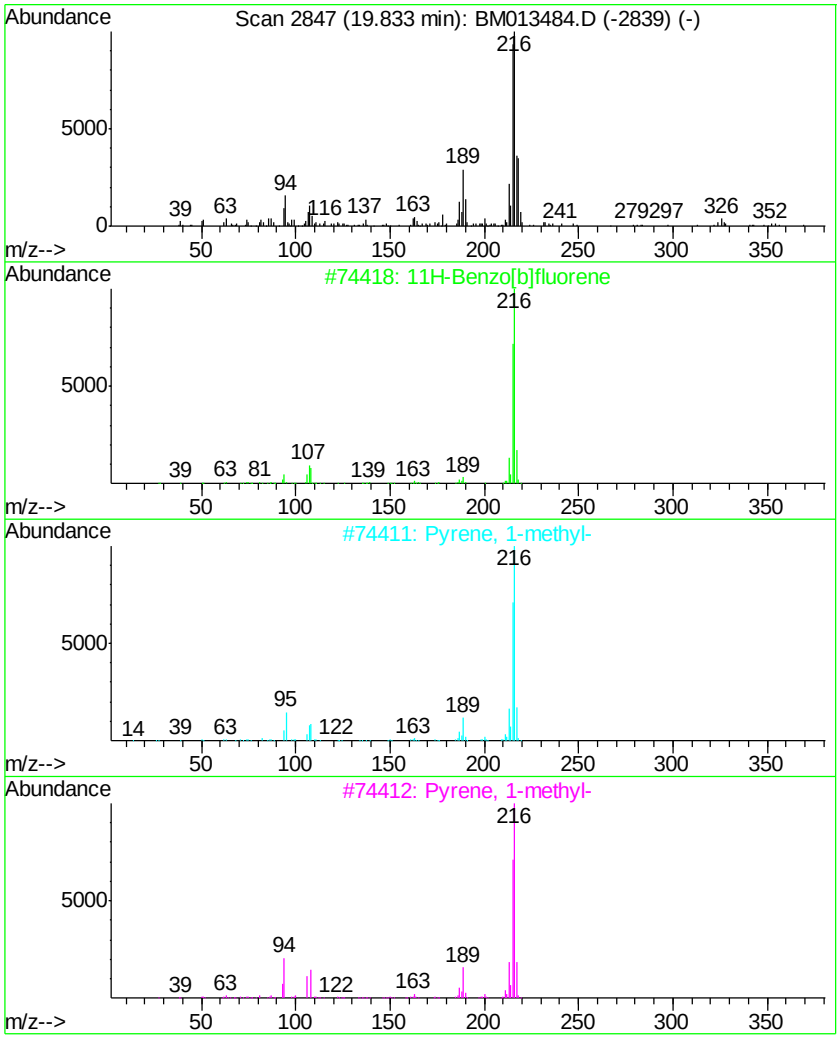
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

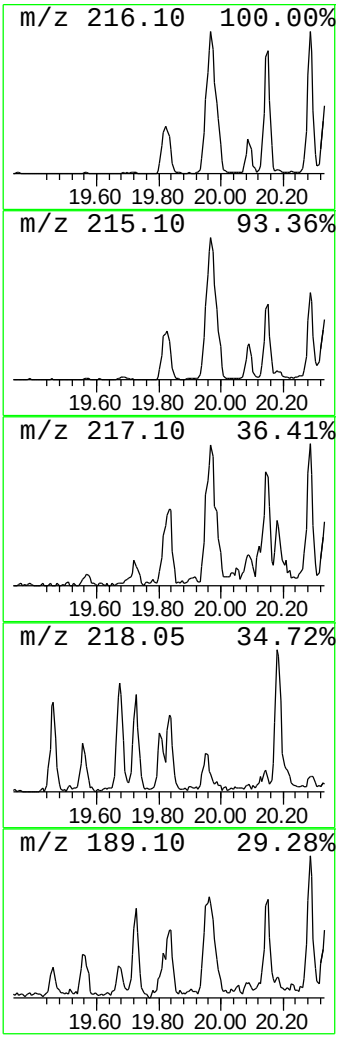
**********

Peak Number 2 11H-Benzo[b]fluorene Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.83 | 2.02 ng/ul | 533488 | Chrysene-d12 | 21.26 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 87 |
| 2 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 81 |
| 3 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 81 |
| 4 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 70 |
| 5 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 64 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM121517\
Data File : BM013484.D
Acq On : 16 Dec 2017 19:33
Operator : SJ/JU
Sample : I6776-17DL 25X
Misc :
ALS Vial : 41 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F9A46DL

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM113017.M
Quant Title : SVOA CALIBRATION

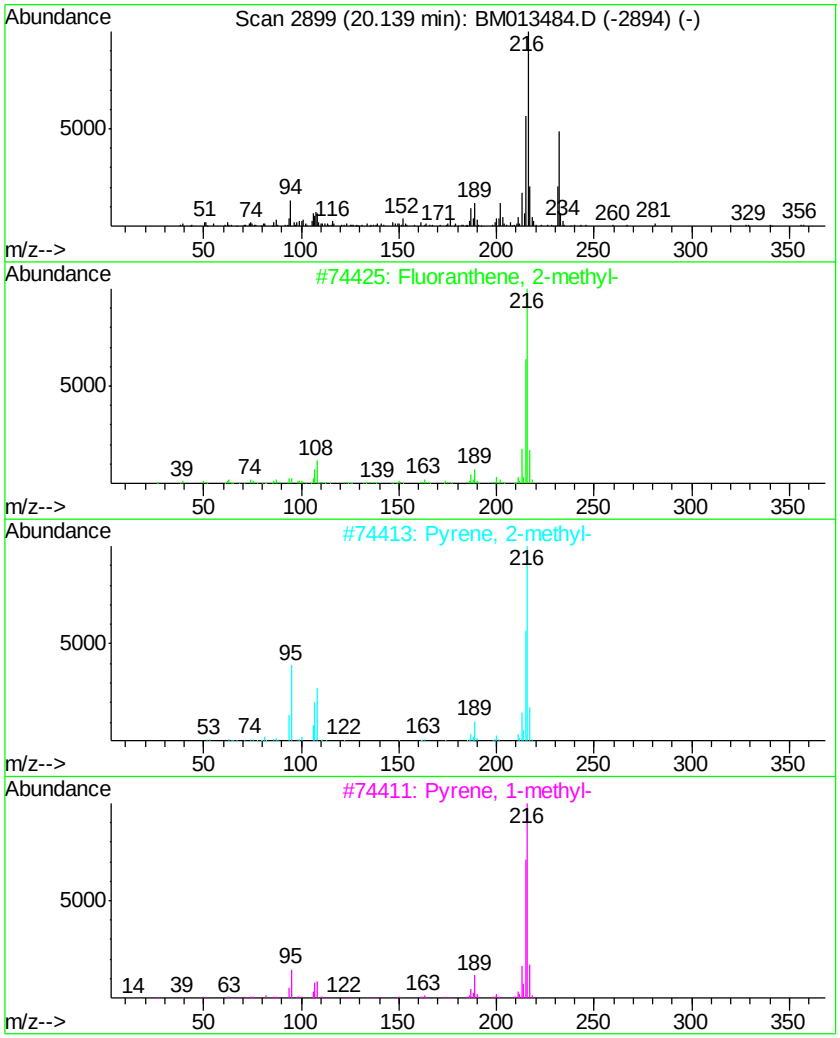
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

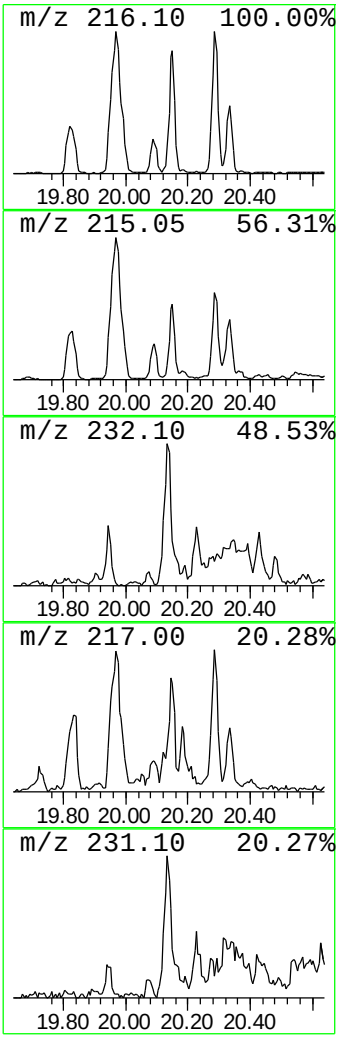
**********

Peak Number 4 Fluoranthene, 2-methyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.14 | 2.46 ng/ul | 650325 | Chrysene-d12 | 21.26 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 94 |
| 2 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 93 |
| 3 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 93 |
| 4 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 91 |
| 5 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 90 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM121517\
Data File : BM013484.D
Acq On : 16 Dec 2017 19:33
Operator : SJ/JU
Sample : I6776-17DL 25X
Misc :
ALS Vial : 41 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F9A46DL

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM113017.M
Quant Title : SVOA CALIBRATION

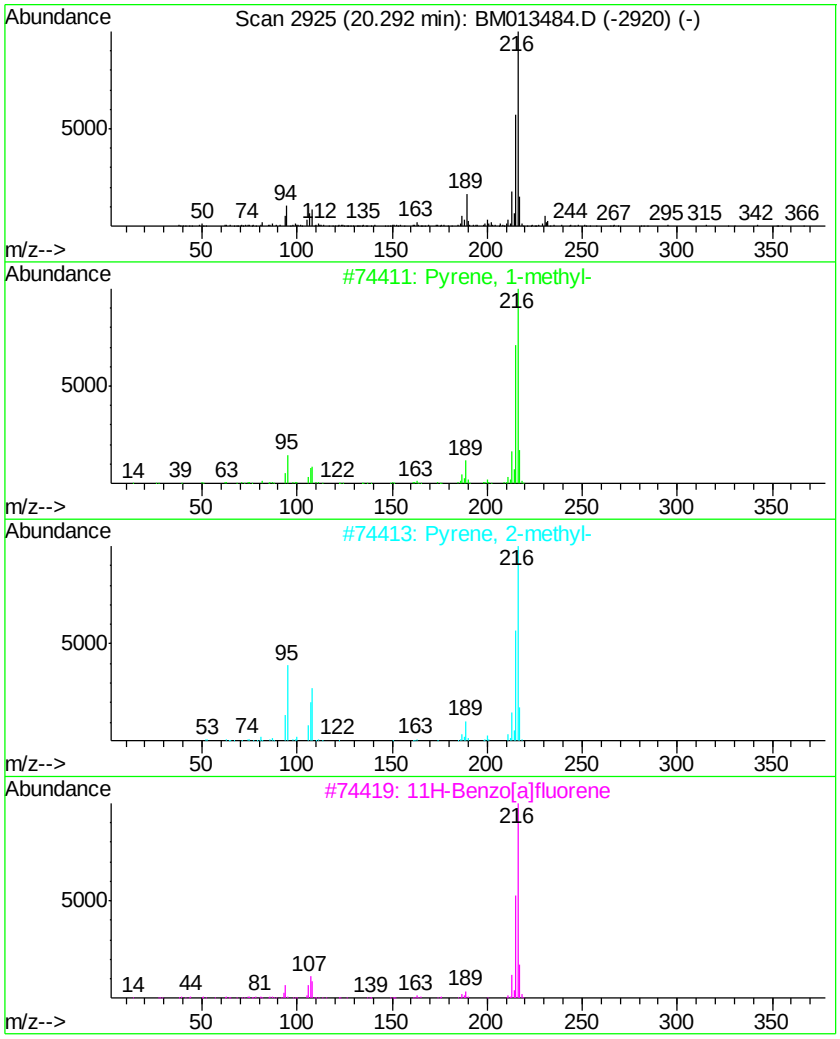
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

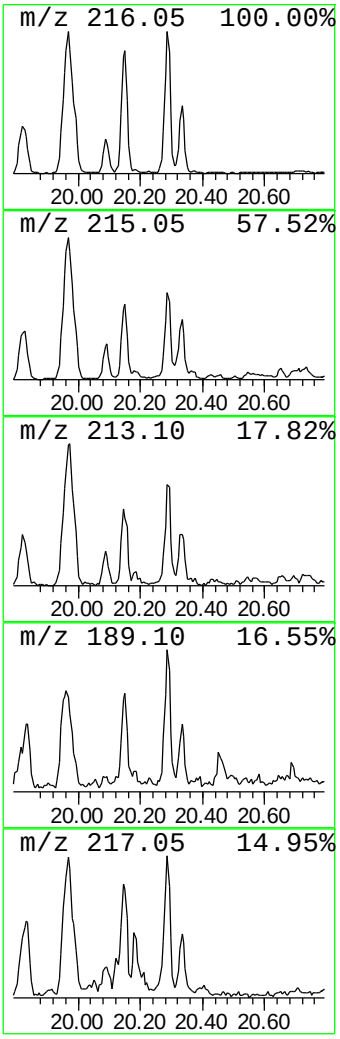
**********

Peak Number 5 Pyrene, 1-methyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.29 | 2.38 ng/ul | 630772 | Chrysene-d12 | 21.26 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 95 |
| 2 | Pyrene, 2-methyl- | 216 | C17H12 | 003442-78-2 | 95 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 91 |
| 4 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 87 |
| 5 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 87 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM121517\
Data File : BM013484.D
Acq On : 16 Dec 2017 19:33
Operator : SJ/JU
Sample : I6776-17DL 25X
Misc :
ALS Vial : 41 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F9A46DL

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM113017.M
Quant Title : SVOA CALIBRATION

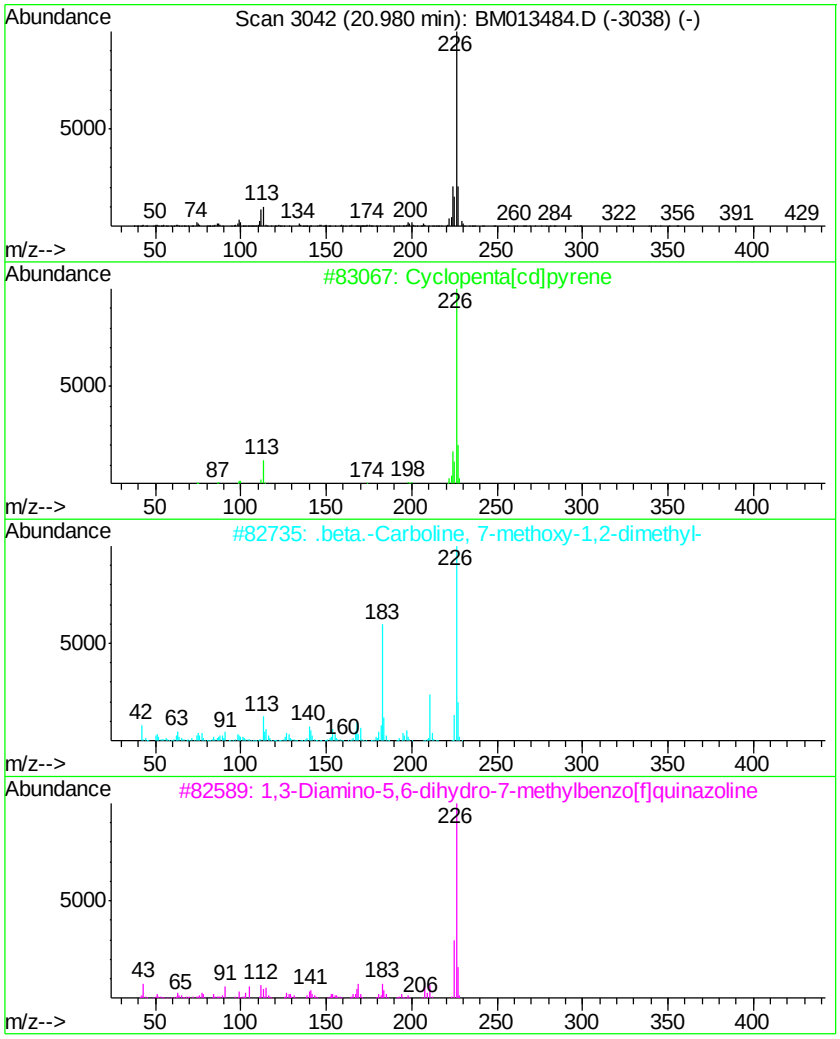
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

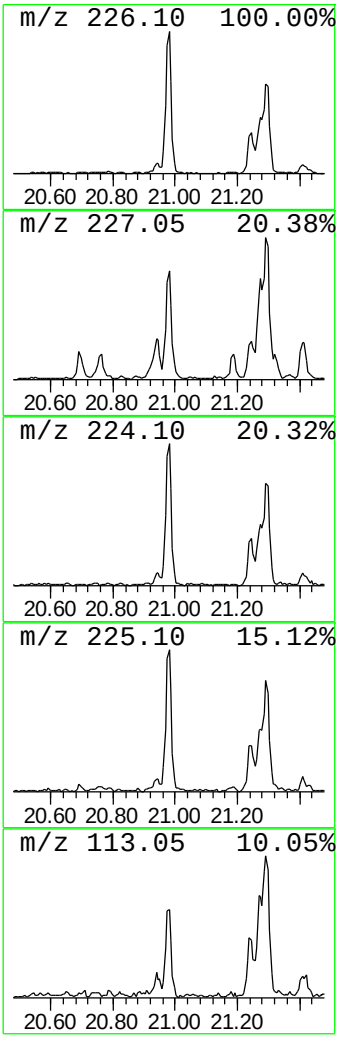
**********

Peak Number 6 Cyclopenta[cd]pyrene Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.98 | 4.23 ng/ul | 1120780 | Chrysene-d12 | 21.26 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta[cd]pyrene | 226 | C18H10 | 027208-37-3 | 76 |
| 2 | .beta.-Carboline, 7-methoxy-1,2-... | 226 | C14H14N2O | 006519-18-2 | 64 |
| 3 | 1,3-Diamino-5,6-dihydro-7-methyl... | 226 | C13H14N4 | 037436-37-6 | 53 |
| 4 | 9H-Thioxanthen-9-one, 2-methyl- | 226 | C14H10OS | 015774-82-0 | 53 |
| 5 | 1,8-Diazacyclotetradecane-2,7-dione | 226 | C12H22N2O2 | 004266-66-4 | 40 |



Data Path : Z:\HPCHEM1\BNA_M\DATA\BM121517\
Data File : BM013484.D
Acq On : 16 Dec 2017 19:33
Operator : SJ/JU
Sample : I6776-17DL 25X
Misc :
ALS Vial : 41 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F9A46DL

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM113017.M
Quant Title : SVOA CALIBRATION

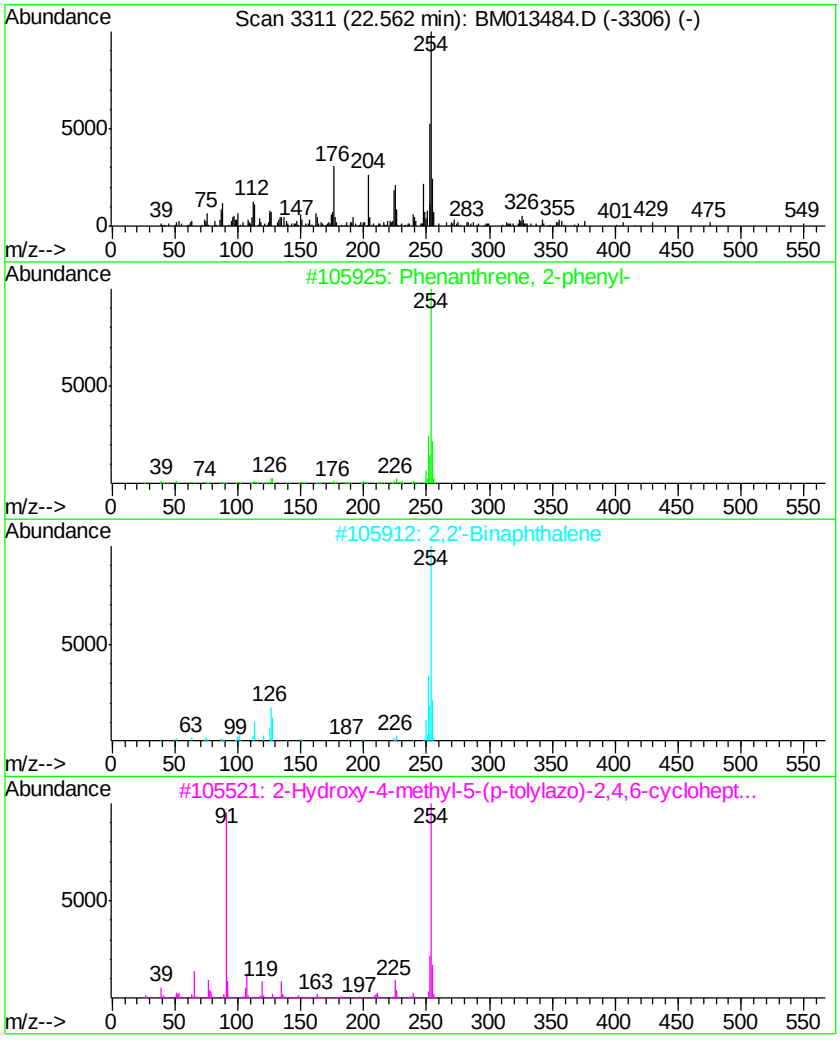
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

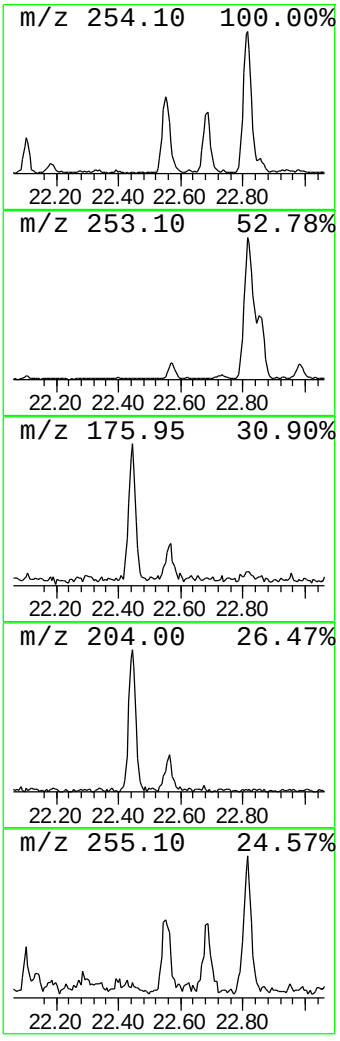
**********

Peak Number 7 Phenanthrene, 2-phenyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 22.56 | 3.51 ng/ul | 321800 | Perylene-d12 | 23.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-phenyl- | 254 | C20H14 | 004325-77-3 | 59 |
| 2 | 2,2'-Binaphthalene | 254 | C20H14 | 000612-78-2 | 58 |
| 3 | 2-Hydroxy-4-methyl-5-(p-tolylazo... | 254 | C15H14N2O2 | 066777-90-0 | 58 |
| 4 | Benzo(e)pyrene, 9,10-dihydro- | 254 | C20H14 | 066788-01-0 | 53 |
| 5 | Benzo[a]pyrene, 4,5-dihydro- | 254 | C20H14 | 057652-66-1 | 52 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM121517\
Data File : BM013484.D
Acq On : 16 Dec 2017 19:33
Operator : SJ/JU
Sample : I6776-17DL 25X
Misc :
ALS Vial : 41 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** F9A46DL

Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM113017.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 |
| Cyclopenta(def)ph... | 19.00 | 3.5 | ng/ul | 523759 | 4 | 17.07 | 2975250 | 20.0 |
| 11H-Benzo[b]fluorene | 19.83 | 2.0 | ng/ul | 533488 | 5 | 21.26 | 5294920 | 20.0 |
| Fluoranthene, 2-m... | 20.14 | 2.5 | ng/ul | 650325 | 5 | 21.26 | 5294920 | 20.0 |
| Pyrene, 1-methyl- | 20.29 | 2.4 | ng/ul | 630772 | 5 | 21.26 | 5294920 | 20.0 |
| Cyclopenta[cd]pyrene | 20.98 | 4.2 | ng/ul | 1120780 | 5 | 21.26 | 5294920 | 20.0 |
| Phenanthrene, 2-p... | 22.56 | 3.5 | ng/ul | 321800 | 6 | 23.48 | 1834990 | 20.0 |