

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG070116\  
 Data File : BG022765.D  
 Acq On : 1 Jul 2016 19:45  
 Operator : UM/SJ  
 Sample : H3819-01  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 BDHT5

## Integration Parameters: LSCINT.P

Integrator: RTE  
 Smoothing : OFF  
 Sampling : 1  
 Start Thrs: 0.2  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 0.1 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

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

Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG063016.M  
 Title : SVOA CALIBRATION

Signal : TIC

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 2.968       | 21            | 22          | 25           | rBV3     | 10432          | 7669          | 0.14%           | 0.016%        |
| 2         | 3.450       | 102           | 104         | 107          | rBV3     | 5010           | 7555          | 0.14%           | 0.015%        |
| 3         | 4.302       | 246           | 249         | 252          | rBV3     | 9266           | 12986         | 0.23%           | 0.027%        |
| 4         | 4.672       | 308           | 312         | 315          | rVB6     | 9004           | 11932         | 0.22%           | 0.024%        |
| 5         | 5.277       | 412           | 415         | 418          | rBV3     | 9220           | 9009          | 0.16%           | 0.018%        |
| 6         | 6.934       | 692           | 697         | 700          | rVB6     | 7621           | 8475          | 0.15%           | 0.017%        |
| 7         | 7.110       | 725           | 727         | 728          | rBV2     | 10081          | 10043         | 0.18%           | 0.021%        |
| 8         | 7.128       | 728           | 730         | 735          | rVB5     | 17573          | 23116         | 0.42%           | 0.047%        |
| 9         | 7.310       | 754           | 761         | 769          | rBV      | 161770         | 288229        | 5.20%           | 0.590%        |
| 10        | 7.474       | 783           | 789         | 798          | rBV      | 402281         | 686669        | 12.39%          | 1.405%        |
| 11        | 7.692       | 819           | 826         | 835          | rBV      | 463077         | 816521        | 14.73%          | 1.671%        |
| 12        | 8.162       | 895           | 906         | 911          | rBV      | 462880         | 824719        | 14.88%          | 1.688%        |
| 13        | 8.203       | 911           | 913         | 918          | rVB3     | 34674          | 51588         | 0.93%           | 0.106%        |
| 14        | 8.379       | 939           | 943         | 944          | rBV4     | 15419          | 13718         | 0.25%           | 0.028%        |
| 15        | 8.702       | 994           | 998         | 1000         | rBV4     | 7872           | 13342         | 0.24%           | 0.027%        |
| 16        | 8.814       | 1014          | 1017        | 1018         | rBV3     | 6631           | 7621          | 0.14%           | 0.016%        |
| 17        | 8.861       | 1019          | 1025        | 1037         | rVB      | 435619         | 789279        | 14.24%          | 1.615%        |
| 18        | 9.261       | 1089          | 1093        | 1098         | rBV3     | 20590          | 39028         | 0.70%           | 0.080%        |
| 19        | 9.331       | 1098          | 1105        | 1112         | rVV      | 607582         | 1067807       | 19.27%          | 2.185%        |
| 20        | 9.719       | 1167          | 1171        | 1173         | rBV2     | 6118           | 7923          | 0.14%           | 0.016%        |
| 21        | 10.060      | 1220          | 1229        | 1238         | rBV      | 551172         | 1020115       | 18.41%          | 2.088%        |
| 22        | 10.259      | 1261          | 1263        | 1271         | rVB6     | 14049          | 27729         | 0.50%           | 0.057%        |
| 23        | 10.600      | 1313          | 1321        | 1333         | rBV      | 818704         | 1476707       | 26.65%          | 3.022%        |
| 24        | 10.900      | 1371          | 1372        | 1379         | rVB3     | 10177          | 12154         | 0.22%           | 0.025%        |
| 25        | 10.988      | 1379          | 1387        | 1394         | rBV      | 710280         | 1256970       | 22.68%          | 2.572%        |
| 26        | 11.117      | 1403          | 1409        | 1417         | rBV10    | 16886          | 39286         | 0.71%           | 0.080%        |
| 27        | 11.499      | 1470          | 1474        | 1478         | rBV4     | 7833           | 9013          | 0.16%           | 0.018%        |
| 28        | 11.611      | 1491          | 1493        | 1497         | rBV4     | 6954           | 8491          | 0.15%           | 0.017%        |
| 29        | 11.752      | 1512          | 1517        | 1521         | rBV5     | 27503          | 45303         | 0.82%           | 0.093%        |
| 30        | 12.557      | 1649          | 1654        | 1660         | rBV5     | 20212          | 32279         | 0.58%           | 0.066%        |
| 31        | 12.651      | 1668          | 1670        | 1676         | rVB5     | 6282           | 9671          | 0.17%           | 0.020%        |
| 32        | 12.862      | 1704          | 1706        | 1709         | rVB3     | 8174           | 7693          | 0.14%           | 0.016%        |
| 33        | 13.062      | 1735          | 1740        | 1741         | rBV4     | 7266           | 11493         | 0.21%           | 0.024%        |
| 34        | 13.156      | 1753          | 1756        | 1761         | rBV6     | 11778          | 18308         | 0.33%           | 0.037%        |

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 Title : SVOA CALIBRATION

|    |        |      |      |      |      |         |         |        |        |
|----|--------|------|------|------|------|---------|---------|--------|--------|
| 35 | 13.403 | 1794 | 1798 | 1801 | rVB5 | 14091   | 20484   | 0.37%  | 0.042% |
| 36 | 13.720 | 1848 | 1852 | 1857 | rVB5 | 20259   | 27512   | 0.50%  | 0.056% |
| 37 | 14.055 | 1906 | 1909 | 1912 | rBV4 | 4866    | 7647    | 0.14%  | 0.016% |
| 38 | 14.196 | 1925 | 1933 | 1940 | rBV  | 1807174 | 2743536 | 49.50% | 5.615% |
| 39 | 14.249 | 1940 | 1942 | 1946 | rVB5 | 13033   | 12991   | 0.23%  | 0.027% |
| 40 | 14.319 | 1953 | 1954 | 1958 | rVB4 | 7839    | 7581    | 0.14%  | 0.016% |
| 41 | 14.437 | 1970 | 1974 | 1977 | rBV4 | 12093   | 16856   | 0.30%  | 0.034% |
| 42 | 14.496 | 1977 | 1984 | 1991 | rBV  | 1816734 | 2830970 | 51.08% | 5.793% |
| 43 | 14.801 | 2028 | 2036 | 2045 | rBV2 | 1264296 | 2155288 | 38.89% | 4.411% |
| 44 | 14.866 | 2045 | 2047 | 2053 | rVB5 | 16660   | 20841   | 0.38%  | 0.043% |
| 45 | 14.995 | 2064 | 2069 | 2077 | rBV2 | 199719  | 356673  | 6.44%  | 0.730% |
| 46 | 15.201 | 2100 | 2104 | 2107 | rVB5 | 10989   | 15865   | 0.29%  | 0.032% |
| 47 | 15.465 | 2146 | 2149 | 2154 | rVB5 | 10594   | 16664   | 0.30%  | 0.034% |
| 48 | 15.524 | 2154 | 2159 | 2164 | rBV5 | 16426   | 30736   | 0.55%  | 0.063% |
| 49 | 15.583 | 2164 | 2169 | 2170 | rBV2 | 8185    | 8942    | 0.16%  | 0.018% |
| 50 | 15.794 | 2197 | 2205 | 2212 | rBV  | 2870809 | 4126214 | 74.45% | 8.444% |
| 51 | 15.906 | 2215 | 2224 | 2234 | rBV  | 960749  | 1536964 | 27.73% | 3.145% |
| 52 | 16.041 | 2240 | 2247 | 2252 | rVB3 | 34767   | 60052   | 1.08%  | 0.123% |
| 53 | 16.152 | 2261 | 2266 | 2270 | rBV8 | 9254    | 23573   | 0.43%  | 0.048% |
| 54 | 16.470 | 2318 | 2320 | 2323 | rBV3 | 6162    | 8591    | 0.16%  | 0.018% |
| 55 | 16.675 | 2351 | 2355 | 2358 | rVB3 | 22956   | 24693   | 0.45%  | 0.051% |
| 56 | 17.122 | 2428 | 2431 | 2432 | rBV3 | 8983    | 9127    | 0.16%  | 0.019% |
| 57 | 17.339 | 2464 | 2468 | 2469 | rBV4 | 9749    | 11987   | 0.22%  | 0.025% |
| 58 | 17.498 | 2492 | 2495 | 2497 | rVB4 | 10052   | 10613   | 0.19%  | 0.022% |
| 59 | 17.557 | 2497 | 2505 | 2511 | rBV  | 1811164 | 2838164 | 51.21% | 5.808% |
| 60 | 17.651 | 2515 | 2521 | 2532 | rVB  | 3016903 | 4722464 | 85.21% | 9.664% |
| 61 | 17.815 | 2545 | 2549 | 2554 | rBV4 | 18454   | 23454   | 0.42%  | 0.048% |
| 62 | 18.138 | 2600 | 2604 | 2605 | rBV3 | 9709    | 11612   | 0.21%  | 0.024% |
| 63 | 18.209 | 2611 | 2616 | 2621 | rBV2 | 573479  | 750933  | 13.55% | 1.537% |
| 64 | 18.373 | 2641 | 2644 | 2645 | rBV3 | 12498   | 12026   | 0.22%  | 0.025% |
| 65 | 18.420 | 2647 | 2652 | 2660 | rVV2 | 98435   | 160158  | 2.89%  | 0.328% |
| 66 | 18.497 | 2663 | 2665 | 2671 | rVB  | 40254   | 49108   | 0.89%  | 0.100% |
| 67 | 18.579 | 2677 | 2679 | 2681 | rBV3 | 12496   | 9936    | 0.18%  | 0.020% |
| 68 | 18.685 | 2695 | 2697 | 2700 | rVB3 | 16961   | 17103   | 0.31%  | 0.035% |
| 69 | 18.914 | 2734 | 2736 | 2737 | rBV2 | 13322   | 10004   | 0.18%  | 0.020% |
| 70 | 19.061 | 2759 | 2761 | 2763 | rBV3 | 9664    | 9503    | 0.17%  | 0.019% |
| 71 | 19.572 | 2845 | 2848 | 2852 | rVB2 | 52437   | 69965   | 1.26%  | 0.143% |

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|----|--------|------|------|------|------|---------|---------|---------|---------|
| 72 | 19.684 | 2863 | 2867 | 2874 | rBV6 | 83230   | 144733  | 2.61%   | 0.296%  |
| 73 | 19.936 | 2903 | 2910 | 2921 | rBV  | 3800323 | 5542071 | 100.00% | 11.342% |
| 74 | 21.852 | 3230 | 3236 | 3247 | rBV  | 1929878 | 3330865 | 60.10%  | 6.817%  |
| 75 | 24.995 | 3761 | 3771 | 3784 | rVB3 | 1808680 | 5180561 | 93.48%  | 10.602% |
| 76 | 25.224 | 3801 | 3810 | 3821 | rVB2 | 1082436 | 3225140 | 58.19%  | 6.600%  |

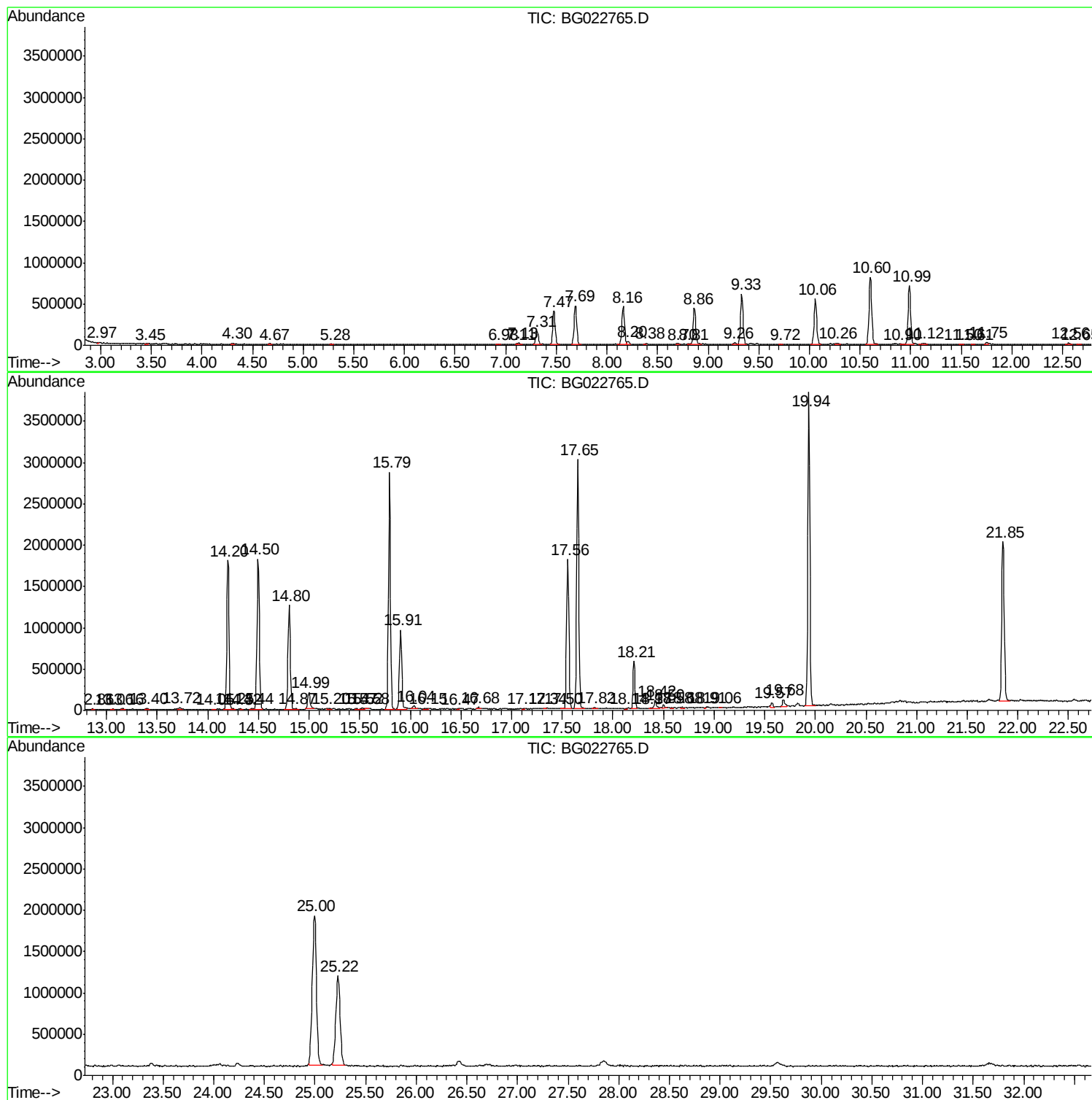
Sum of corrected areas: 48864641

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Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG063016.M  
Quant Title : SVOA CALIBRATION

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



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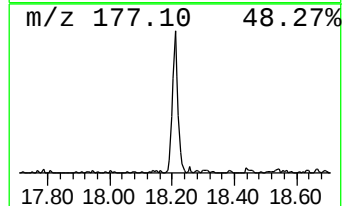
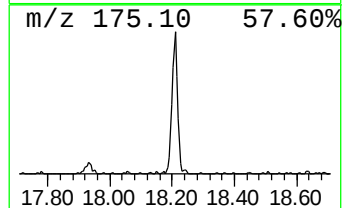
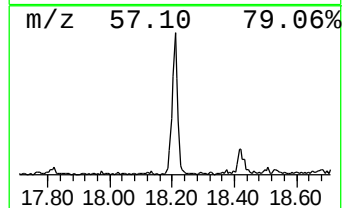
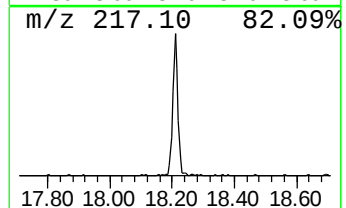
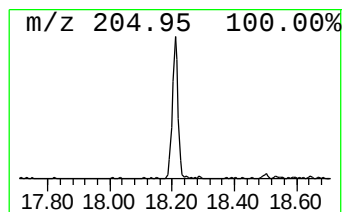
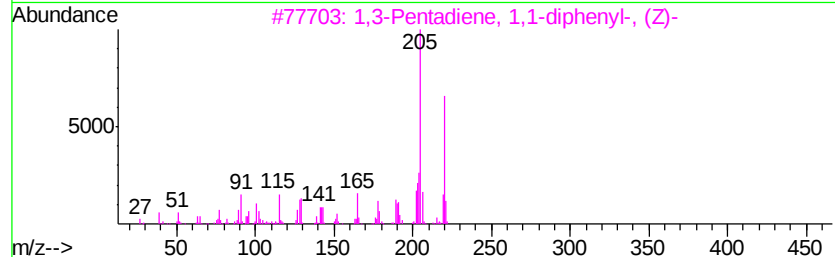
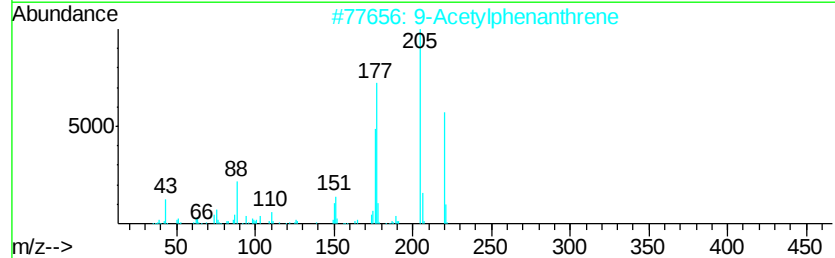
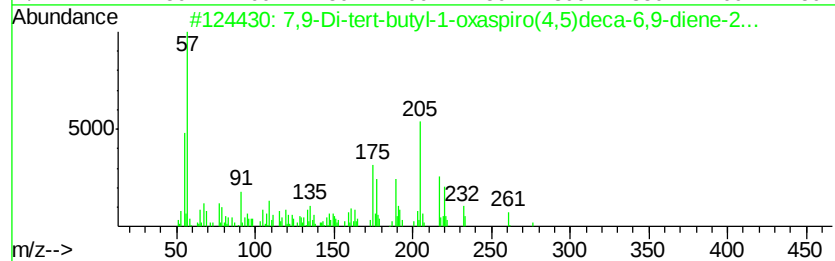
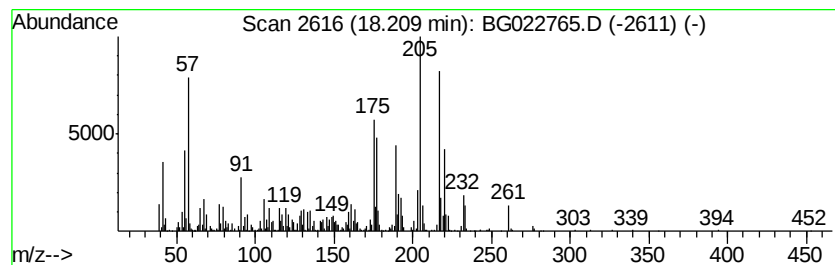
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 1 7,9-Di-tert-butyl-1-oxaspiro... Concentration Rank 1

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.21 | 5.29 ng/ul | 750933 | Phenanthrene-d10 | 17.56 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 7,9-Di-tert-butyl-1-oxaspiro(4,5... | 276 | C17H24O3 | 082304-66-3 | 94   |
| 2    |    | 9-Acetylphenanthrene                | 220 | C16H12O  | 002039-77-2 | 50   |
| 3    |    | 1,3-Pentadiene, 1,1-diphenyl-, (Z)- | 220 | C17H16   | 015295-31-5 | 47   |
| 4    |    | Ethanone, 1-(9-anthracenyl)-        | 220 | C16H12O  | 000784-04-3 | 46   |
| 5    |    | 3-Acetylphenanthrene                | 220 | C16H12O  | 002039-76-1 | 45   |



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| TIC Top Hit name     | RT    | EstConc | Units | Response | --Internal Standard-- |       |         |      |
|----------------------|-------|---------|-------|----------|-----------------------|-------|---------|------|
|                      |       |         |       |          | #                     | RT    | Resp    | Conc |
| 7,9-Di-tert-butyl... | 18.21 | 5.3     | ng/ul | 750933   | 4                     | 17.56 | 2838160 | 20.0 |