

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG051216\  
 Data File : BG021879.D  
 Acq On : 12 May 2016 21:56  
 Operator : UM/SJ  
 Sample : H2936-17  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9WK6

## 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-BG050916.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         | 3.241       | 65            | 68          | 73           | rVB3     | 10970          | 13552         | 0.71%           | 0.060%        |
| 2         | 3.329       | 80            | 83          | 90           | rVB3     | 4490           | 7693          | 0.40%           | 0.034%        |
| 3         | 3.558       | 117           | 122         | 128          | rVB2     | 7870           | 13269         | 0.69%           | 0.059%        |
| 4         | 3.987       | 192           | 195         | 203          | rVB5     | 3148           | 4975          | 0.26%           | 0.022%        |
| 5         | 4.087       | 206           | 212         | 217          | rVV      | 13374          | 21047         | 1.10%           | 0.094%        |
| 6         | 7.324       | 755           | 763         | 772          | rBV      | 144836         | 297086        | 15.49%          | 1.325%        |
| 7         | 7.489       | 782           | 791         | 804          | rBV      | 125471         | 250451        | 13.06%          | 1.117%        |
| 8         | 7.700       | 820           | 827         | 837          | rBV      | 172209         | 337632        | 17.60%          | 1.506%        |
| 9         | 8.176       | 896           | 908         | 923          | rVV      | 173849         | 350236        | 18.26%          | 1.562%        |
| 10        | 8.875       | 1019          | 1027        | 1039         | rVV      | 197804         | 394538        | 20.57%          | 1.759%        |
| 11        | 9.345       | 1097          | 1107        | 1119         | rBV      | 140214         | 308287        | 16.07%          | 1.375%        |
| 12        | 10.068      | 1220          | 1230        | 1242         | rBV      | 120953         | 264555        | 13.79%          | 1.180%        |
| 13        | 10.391      | 1282          | 1285        | 1293         | rBV4     | 2319           | 5163          | 0.27%           | 0.023%        |
| 14        | 10.608      | 1314          | 1322        | 1334         | rBV      | 236748         | 495238        | 25.82%          | 2.208%        |
| 15        | 10.937      | 1370          | 1378        | 1379         | rBV2     | 4271           | 6076          | 0.32%           | 0.027%        |
| 16        | 10.996      | 1379          | 1388        | 1402         | rVB      | 330344         | 698107        | 36.40%          | 3.113%        |
| 17        | 11.125      | 1402          | 1410        | 1429         | rBV      | 106981         | 260810        | 13.60%          | 1.163%        |
| 18        | 11.983      | 1549          | 1556        | 1561         | rBV7     | 6081           | 12836         | 0.67%           | 0.057%        |
| 19        | 12.383      | 1619          | 1624        | 1628         | rVB2     | 5146           | 8703          | 0.45%           | 0.039%        |
| 20        | 12.571      | 1648          | 1656        | 1660         | rVB3     | 4875           | 9176          | 0.48%           | 0.041%        |
| 21        | 12.635      | 1662          | 1667        | 1675         | rVB2     | 10548          | 20445         | 1.07%           | 0.091%        |
| 22        | 12.853      | 1698          | 1704        | 1712         | rVB2     | 9514           | 18343         | 0.96%           | 0.082%        |
| 23        | 13.311      | 1780          | 1782        | 1791         | rVB6     | 4717           | 9076          | 0.47%           | 0.040%        |
| 24        | 13.405      | 1791          | 1798        | 1801         | rBV4     | 3099           | 5384          | 0.28%           | 0.024%        |
| 25        | 13.605      | 1825          | 1832        | 1837         | rVV2     | 11231          | 20372         | 1.06%           | 0.091%        |
| 26        | 13.681      | 1840          | 1845        | 1849         | rVB3     | 4730           | 7345          | 0.38%           | 0.033%        |
| 27        | 13.963      | 1889          | 1893        | 1894         | rBV2     | 3923           | 4937          | 0.26%           | 0.022%        |
| 28        | 14.116      | 1912          | 1919        | 1924         | rBV6     | 10367          | 22218         | 1.16%           | 0.099%        |
| 29        | 14.192      | 1924          | 1932        | 1937         | rVV      | 489896         | 806040        | 42.02%          | 3.595%        |
| 30        | 14.239      | 1937          | 1940        | 1947         | rVV      | 100932         | 161183        | 8.40%           | 0.719%        |
| 31        | 14.304      | 1947          | 1951        | 1955         | rVB4     | 3663           | 5968          | 0.31%           | 0.027%        |
| 32        | 14.357      | 1955          | 1960        | 1968         | rBV4     | 4995           | 13612         | 0.71%           | 0.061%        |
| 33        | 14.492      | 1975          | 1983        | 1998         | rBV      | 647522         | 1136187       | 59.23%          | 5.067%        |
| 34        | 14.668      | 2008          | 2013        | 2021         | rVB2     | 30306          | 42076         | 2.19%           | 0.188%        |

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 Title : SVOA CALIBRATION

|    |        |      |      |      |      |        |         |        |        |
|----|--------|------|------|------|------|--------|---------|--------|--------|
| 35 | 14.798 | 2023 | 2035 | 2042 | rBV2 | 598056 | 1063852 | 55.46% | 4.744% |
| 36 | 14.862 | 2042 | 2046 | 2053 | rVB  | 18282  | 33895   | 1.77%  | 0.151% |
| 37 | 14.986 | 2061 | 2067 | 2083 | rBV  | 89291  | 242153  | 12.62% | 1.080% |
| 38 | 15.185 | 2098 | 2101 | 2106 | rVB4 | 8048   | 14271   | 0.74%  | 0.064% |
| 39 | 15.279 | 2112 | 2117 | 2124 | rVB8 | 8224   | 17877   | 0.93%  | 0.080% |
| 40 | 15.350 | 2126 | 2129 | 2133 | rVB4 | 4505   | 5816    | 0.30%  | 0.026% |
| 41 | 15.415 | 2133 | 2140 | 2144 | rBV8 | 4745   | 8066    | 0.42%  | 0.036% |
| 42 | 15.462 | 2144 | 2148 | 2150 | rBV5 | 3623   | 4881    | 0.25%  | 0.022% |
| 43 | 15.579 | 2162 | 2168 | 2170 | rBV5 | 11077  | 20094   | 1.05%  | 0.090% |
| 44 | 15.614 | 2170 | 2174 | 2181 | rVB2 | 47698  | 70585   | 3.68%  | 0.315% |
| 45 | 15.679 | 2181 | 2185 | 2188 | rBV4 | 3724   | 5608    | 0.29%  | 0.025% |
| 46 | 15.785 | 2191 | 2203 | 2209 | rBV  | 825481 | 1404637 | 73.23% | 6.264% |
| 47 | 15.832 | 2209 | 2211 | 2217 | rVB4 | 30585  | 43375   | 2.26%  | 0.193% |
| 48 | 15.902 | 2217 | 2223 | 2230 | rBV  | 86340  | 158558  | 8.27%  | 0.707% |
| 49 | 16.020 | 2235 | 2243 | 2248 | rBV7 | 22704  | 48040   | 2.50%  | 0.214% |
| 50 | 16.125 | 2257 | 2261 | 2266 | rVB6 | 9692   | 16089   | 0.84%  | 0.072% |
| 51 | 16.167 | 2266 | 2268 | 2275 | rVB6 | 4565   | 6038    | 0.31%  | 0.027% |
| 52 | 16.237 | 2277 | 2280 | 2284 | rBV4 | 5883   | 7423    | 0.39%  | 0.033% |
| 53 | 16.278 | 2284 | 2287 | 2296 | rVB7 | 7344   | 13375   | 0.70%  | 0.060% |
| 54 | 16.478 | 2316 | 2321 | 2324 | rBV  | 47072  | 80742   | 4.21%  | 0.360% |
| 55 | 16.654 | 2345 | 2351 | 2356 | rVB7 | 4257   | 8698    | 0.45%  | 0.039% |
| 56 | 16.831 | 2373 | 2381 | 2388 | rBV7 | 10181  | 36349   | 1.90%  | 0.162% |
| 57 | 16.883 | 2388 | 2390 | 2394 | rVB6 | 5949   | 8098    | 0.42%  | 0.036% |
| 58 | 16.983 | 2404 | 2407 | 2414 | rVB5 | 8195   | 13874   | 0.72%  | 0.062% |
| 59 | 17.066 | 2414 | 2421 | 2426 | rBV5 | 12766  | 32708   | 1.71%  | 0.146% |
| 60 | 17.189 | 2436 | 2442 | 2449 | rBV2 | 14041  | 26123   | 1.36%  | 0.116% |
| 61 | 17.271 | 2451 | 2456 | 2461 | rBV4 | 31573  | 54957   | 2.87%  | 0.245% |
| 62 | 17.324 | 2462 | 2465 | 2468 | rVV5 | 8970   | 12466   | 0.65%  | 0.056% |
| 63 | 17.359 | 2468 | 2471 | 2476 | rVB2 | 10640  | 15357   | 0.80%  | 0.068% |
| 64 | 17.541 | 2494 | 2502 | 2506 | rBV  | 671856 | 1167142 | 60.85% | 5.205% |
| 65 | 17.583 | 2506 | 2509 | 2513 | rVV  | 262715 | 398981  | 20.80% | 1.779% |
| 66 | 17.641 | 2513 | 2519 | 2532 | rVV2 | 762633 | 1429817 | 74.54% | 6.376% |
| 67 | 17.729 | 2532 | 2534 | 2544 | rVB6 | 10600  | 19355   | 1.01%  | 0.086% |
| 68 | 17.812 | 2544 | 2548 | 2551 | rVB6 | 3886   | 6242    | 0.33%  | 0.028% |
| 69 | 17.941 | 2563 | 2570 | 2578 | rBV3 | 28643  | 60300   | 3.14%  | 0.269% |
| 70 | 18.006 | 2578 | 2581 | 2586 | rVB3 | 15848  | 21757   | 1.13%  | 0.097% |
| 71 | 18.053 | 2587 | 2589 | 2595 | rVB7 | 8119   | 9359    | 0.49%  | 0.042% |

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Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG050916.M  
 Title : SVOA CALIBRATION

|     |        |      |      |      |      |         |         |         |        |
|-----|--------|------|------|------|------|---------|---------|---------|--------|
| 72  | 18.111 | 2597 | 2599 | 2608 | rVV4 | 6263    | 11193   | 0.58%   | 0.050% |
| 73  | 18.352 | 2635 | 2640 | 2643 | rBV7 | 8077    | 15418   | 0.80%   | 0.069% |
| 74  | 18.411 | 2645 | 2650 | 2654 | rVV  | 43450   | 76573   | 3.99%   | 0.341% |
| 75  | 18.458 | 2654 | 2658 | 2666 | rVB2 | 46853   | 87086   | 4.54%   | 0.388% |
| 76  | 18.540 | 2669 | 2672 | 2677 | rVB3 | 11772   | 18032   | 0.94%   | 0.080% |
| 77  | 18.611 | 2677 | 2684 | 2687 | rBV3 | 55177   | 117262  | 6.11%   | 0.523% |
| 78  | 18.699 | 2695 | 2699 | 2705 | rBV6 | 18589   | 31727   | 1.65%   | 0.141% |
| 79  | 18.764 | 2705 | 2710 | 2712 | rVB6 | 6499    | 10105   | 0.53%   | 0.045% |
| 80  | 18.805 | 2712 | 2717 | 2718 | rBV4 | 6541    | 8466    | 0.44%   | 0.038% |
| 81  | 18.905 | 2729 | 2734 | 2738 | rVV  | 28622   | 50119   | 2.61%   | 0.224% |
| 82  | 18.946 | 2738 | 2741 | 2746 | rVB3 | 20452   | 35318   | 1.84%   | 0.157% |
| 83  | 19.198 | 2780 | 2784 | 2786 | rBV4 | 11878   | 16643   | 0.87%   | 0.074% |
| 84  | 19.228 | 2787 | 2789 | 2793 | rVB3 | 9541    | 12077   | 0.63%   | 0.054% |
| 85  | 19.316 | 2799 | 2804 | 2809 | rBV  | 49538   | 84581   | 4.41%   | 0.377% |
| 86  | 19.463 | 2824 | 2829 | 2834 | rBV3 | 19157   | 40584   | 2.12%   | 0.181% |
| 87  | 19.580 | 2842 | 2849 | 2855 | rBV  | 601971  | 960590  | 50.08%  | 4.284% |
| 88  | 19.915 | 2899 | 2906 | 2909 | rBV2 | 1020617 | 1793808 | 93.52%  | 7.999% |
| 89  | 20.009 | 2918 | 2922 | 2933 | rVB3 | 26531   | 51525   | 2.69%   | 0.230% |
| 90  | 20.256 | 2961 | 2964 | 2965 | rBV3 | 23351   | 24950   | 1.30%   | 0.111% |
| 91  | 20.426 | 2989 | 2993 | 2998 | rVB2 | 85799   | 141008  | 7.35%   | 0.629% |
| 92  | 20.526 | 3007 | 3010 | 3014 | rBV  | 42531   | 53662   | 2.80%   | 0.239% |
| 93  | 21.437 | 3161 | 3165 | 3169 | rVB2 | 81194   | 115877  | 6.04%   | 0.517% |
| 94  | 21.690 | 3203 | 3208 | 3214 | rVB  | 191906  | 305574  | 15.93%  | 1.363% |
| 95  | 21.825 | 3222 | 3231 | 3236 | rBV2 | 786476  | 1918133 | 100.00% | 8.554% |
| 96  | 21.872 | 3236 | 3239 | 3250 | rVB  | 280303  | 503791  | 26.26%  | 2.247% |
| 97  | 24.104 | 3611 | 3619 | 3626 | rBV2 | 229862  | 750375  | 39.12%  | 3.346% |
| 98  | 24.856 | 3741 | 3747 | 3752 | rBV4 | 106682  | 278082  | 14.50%  | 1.240% |
| 99  | 24.933 | 3753 | 3760 | 3768 | rVV2 | 367861  | 1014231 | 52.88%  | 4.523% |
| 100 | 25.168 | 3791 | 3800 | 3809 | rBV  | 419132  | 1277889 | 66.62%  | 5.699% |

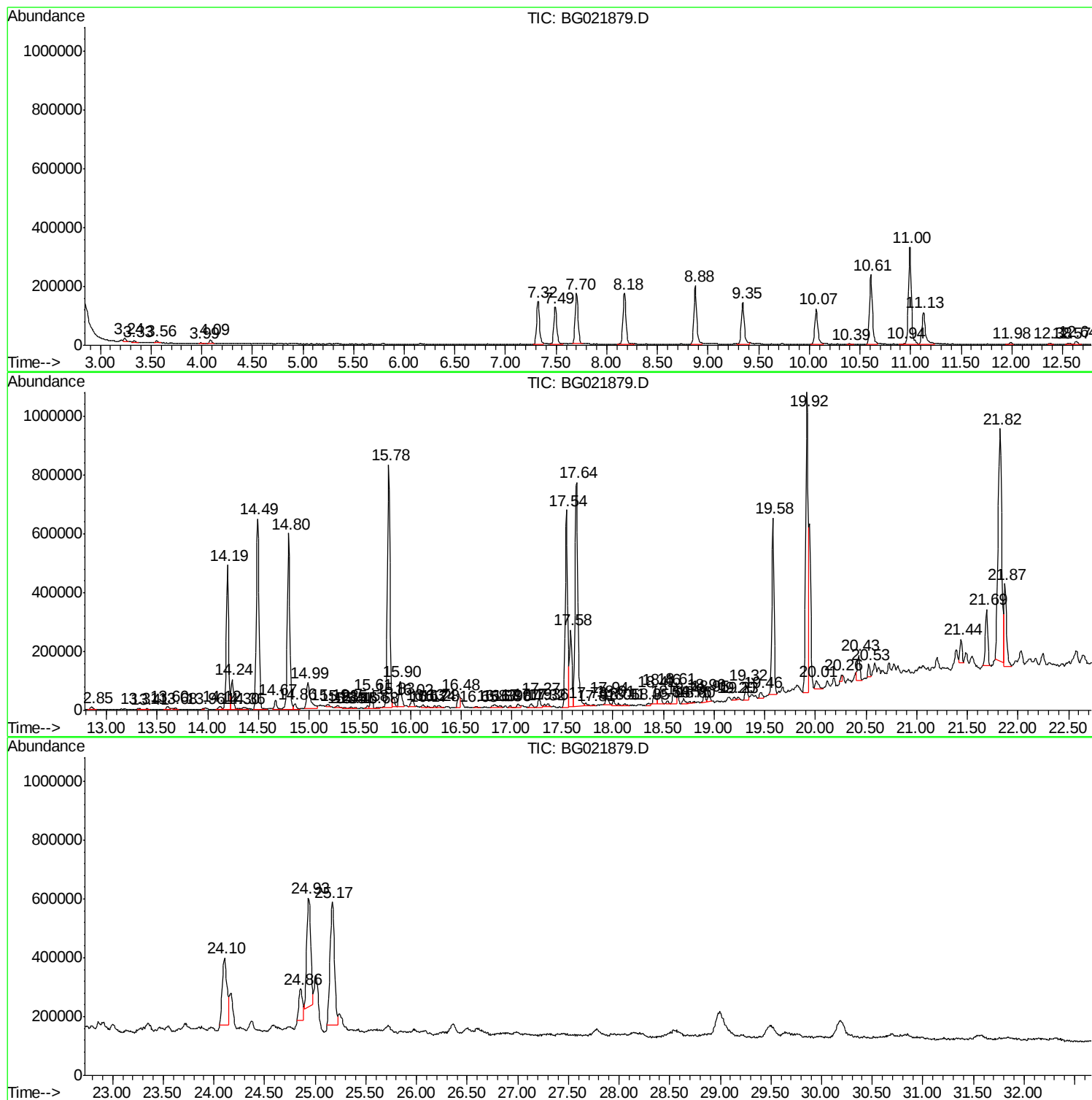
Sum of corrected areas: 22424253

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Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG050916.M  
Quant Title : SVOA CALIBRATION

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



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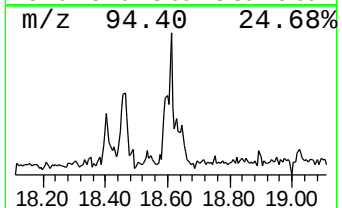
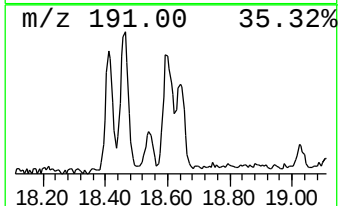
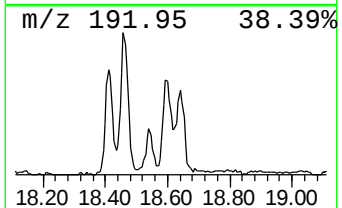
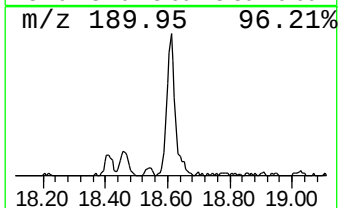
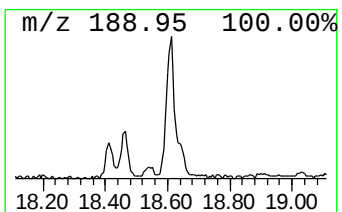
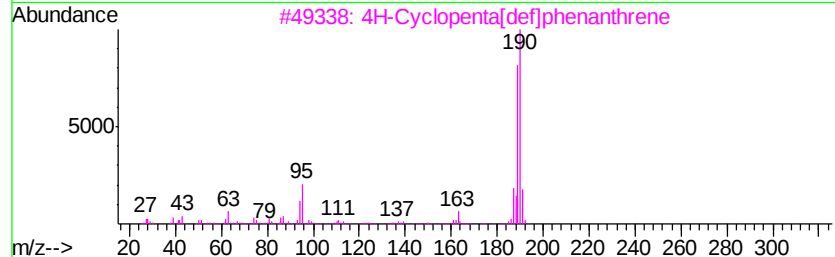
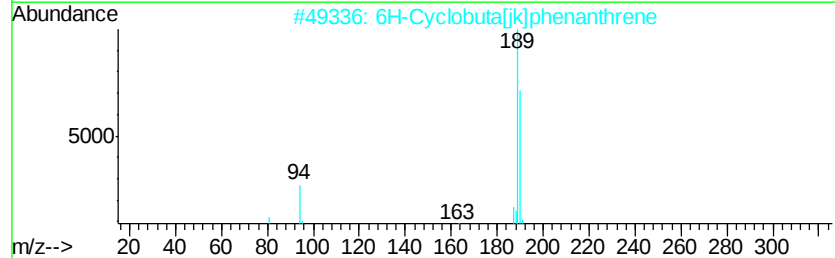
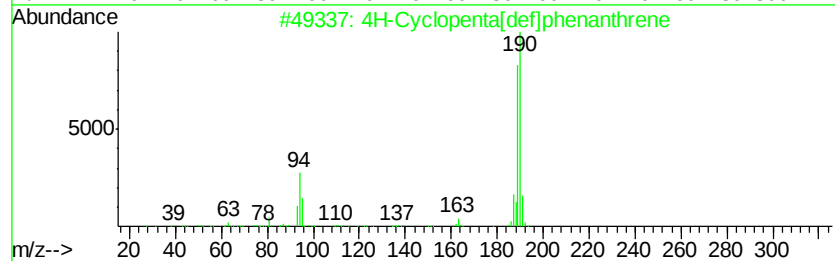
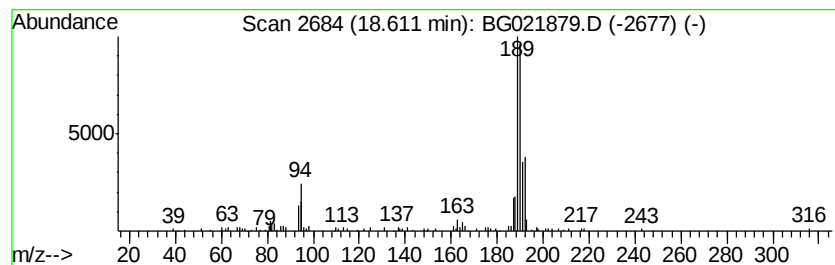
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Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 1 4H-Cyclopenta[def]phenanthrene Concentration Rank 2

| R.T.    | EstConc    | Area                                | Relative to ISTD | R.T.     |             |      |
|---------|------------|-------------------------------------|------------------|----------|-------------|------|
| 18.61   | 2.01 ng/ul | 117262                              | Phenanthrene-d10 | 17.54    |             |      |
| Hit# of | 5          | Tentative ID                        | MW               | MolForm  | CAS#        | Qual |
| 1       |            | 4H-Cyclopenta[def]phenanthrene      | 190              | C15H10   | 000203-64-5 | 81   |
| 2       |            | 6H-Cyclobuta[jk]phenanthrene        | 190              | C15H10   | 083469-43-6 | 64   |
| 3       |            | 4H-Cyclopenta[def]phenanthrene      | 190              | C15H10   | 000203-64-5 | 58   |
| 4       |            | 2,3,5,6-Tetramethylterephthalald... | 190              | C12H14O2 | 007072-01-7 | 53   |
| 5       |            | 4H-Cyclopenta[def]phenanthrene      | 190              | C15H10   | 000203-64-5 | 47   |



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| TIC Top Hit name     | RT    | EstConc | Units | Response | --Internal Standard-- |       |         |      |
|----------------------|-------|---------|-------|----------|-----------------------|-------|---------|------|
|                      |       |         |       |          | #                     | RT    | Resp    | Conc |
| 4H-Cyclopenta[def... | 18.61 | 2.0     | ng/ul | 117262   | 4                     | 17.54 | 1167140 | 20.0 |