

Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
 Data File : BM014363.D  
 Acq On : 26 Feb 2018 19:12  
 Operator : SJ/JU  
 Sample : J1631-04  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 BE5Y7

## Integration Parameters: LSCINT.P

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

Filtering: 5  
 Min Area: 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\_M\METHODS\SOM-EPA-BM021418.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         | 6.722       | 629           | 635         | 644          | rBV      | 450125         | 883477        | 5.65%           | 0.540%        |
| 2         | 6.875       | 655           | 661         | 669          | rVB      | 374707         | 609940        | 3.90%           | 0.373%        |
| 3         | 7.063       | 687           | 693         | 701          | rBV      | 545256         | 922483        | 5.90%           | 0.564%        |
| 4         | 7.522       | 765           | 771         | 778          | rBV      | 554585         | 859115        | 5.50%           | 0.525%        |
| 5         | 8.246       | 886           | 894         | 902          | rBV      | 576950         | 1067717       | 6.83%           | 0.653%        |
| 6         | 8.351       | 908           | 912         | 921          | rVB4     | 120521         | 252937        | 1.62%           | 0.155%        |
| 7         | 8.681       | 961           | 968         | 975          | rBV      | 567802         | 1000554       | 6.40%           | 0.612%        |
| 8         | 9.398       | 1085          | 1090        | 1096         | rVB      | 473055         | 810062        | 5.18%           | 0.495%        |
| 9         | 9.463       | 1096          | 1101        | 1108         | rBV4     | 96508          | 172310        | 1.10%           | 0.105%        |
| 10        | 9.934       | 1175          | 1181        | 1192         | rBV      | 610528         | 1186985       | 7.59%           | 0.726%        |
| 11        | 10.292      | 1228          | 1242        | 1247         | rBV      | 907975         | 1542802       | 9.87%           | 0.944%        |
| 12        | 10.339      | 1247          | 1250        | 1257         | rVB      | 278993         | 443317        | 2.84%           | 0.271%        |
| 13        | 10.457      | 1265          | 1270        | 1281         | rBV3     | 240527         | 603219        | 3.86%           | 0.369%        |
| 14        | 11.563      | 1452          | 1458        | 1464         | rBV3     | 102726         | 167207        | 1.07%           | 0.102%        |
| 15        | 11.969      | 1522          | 1527        | 1532         | rVB      | 162074         | 260242        | 1.66%           | 0.159%        |
| 16        | 12.186      | 1557          | 1564        | 1571         | rBV      | 126120         | 231031        | 1.48%           | 0.141%        |
| 17        | 13.498      | 1781          | 1787        | 1792         | rBV2     | 147771         | 281495        | 1.80%           | 0.172%        |
| 18        | 13.604      | 1798          | 1805        | 1809         | rVV      | 1374931        | 2022062       | 12.93%          | 1.237%        |
| 19        | 13.651      | 1809          | 1813        | 1818         | rVB      | 602435         | 806142        | 5.16%           | 0.493%        |
| 20        | 13.869      | 1844          | 1850        | 1854         | rBV      | 1602099        | 2481004       | 15.87%          | 1.517%        |
| 21        | 14.180      | 1896          | 1903        | 1909         | rVV2     | 1204995        | 1805474       | 11.55%          | 1.104%        |
| 22        | 14.245      | 1909          | 1914        | 1923         | rVB      | 461527         | 710340        | 4.54%           | 0.434%        |
| 23        | 14.445      | 1943          | 1948        | 1953         | rBV2     | 192850         | 399805        | 2.56%           | 0.245%        |
| 24        | 14.586      | 1967          | 1972        | 1976         | rBV      | 384027         | 537277        | 3.44%           | 0.329%        |
| 25        | 14.810      | 2000          | 2010        | 2015         | rBV4     | 85272          | 222256        | 1.42%           | 0.136%        |
| 26        | 14.863      | 2015          | 2019        | 2030         | rVB      | 77801          | 168364        | 1.08%           | 0.103%        |
| 27        | 15.045      | 2046          | 2050        | 2057         | rVB2     | 121881         | 182484        | 1.17%           | 0.112%        |
| 28        | 15.180      | 2068          | 2073        | 2078         | rBV      | 1912617        | 2692545       | 17.22%          | 1.647%        |
| 29        | 15.239      | 2078          | 2083        | 2088         | rVB      | 543492         | 815877        | 5.22%           | 0.499%        |
| 30        | 15.339      | 2095          | 2100        | 2107         | rBV4     | 316539         | 637938        | 4.08%           | 0.390%        |
| 31        | 15.533      | 2129          | 2133        | 2141         | rVB      | 199730         | 321956        | 2.06%           | 0.197%        |
| 32        | 15.686      | 2154          | 2159        | 2167         | rVB      | 184886         | 387839        | 2.48%           | 0.237%        |
| 33        | 15.774      | 2167          | 2174        | 2179         | rVB4     | 88875          | 187937        | 1.20%           | 0.115%        |
| 34        | 15.916      | 2193          | 2198        | 2204         | rBV5     | 157352         | 329559        | 2.11%           | 0.202%        |

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 Sampling : 1  
 Start Thrs: 0.2  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 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\_M\METHODS\SOM-EPA-BM021418.M  
 Title : SVOA CALIBRATION

|    |        |      |      |      |      |          |          |         |        |
|----|--------|------|------|------|------|----------|----------|---------|--------|
| 35 | 16.245 | 2247 | 2254 | 2258 | rBV4 | 139832   | 340248   | 2.18%   | 0.208% |
| 36 | 16.292 | 2259 | 2262 | 2268 | rVB2 | 110666   | 182567   | 1.17%   | 0.112% |
| 37 | 16.516 | 2296 | 2300 | 2303 | rVB4 | 123639   | 162080   | 1.04%   | 0.099% |
| 38 | 16.604 | 2310 | 2315 | 2320 | rVB  | 388426   | 554674   | 3.55%   | 0.339% |
| 39 | 16.674 | 2322 | 2327 | 2328 | rBV2 | 127298   | 164831   | 1.05%   | 0.101% |
| 40 | 16.757 | 2336 | 2341 | 2351 | rVB  | 442859   | 714319   | 4.57%   | 0.437% |
| 41 | 16.939 | 2366 | 2372 | 2375 | rBV  | 1426837  | 1998650  | 12.78%  | 1.222% |
| 42 | 16.986 | 2375 | 2380 | 2385 | rVV  | 7934815  | 10698602 | 68.43%  | 6.543% |
| 43 | 17.039 | 2385 | 2389 | 2392 | rVV2 | 2195096  | 3051442  | 19.52%  | 1.866% |
| 44 | 17.074 | 2392 | 2395 | 2401 | rVV  | 1367151  | 1774514  | 11.35%  | 1.085% |
| 45 | 17.145 | 2401 | 2407 | 2410 | rVV2 | 154977   | 288602   | 1.85%   | 0.177% |
| 46 | 17.357 | 2435 | 2443 | 2451 | rBV2 | 637675   | 1173724  | 7.51%   | 0.718% |
| 47 | 17.463 | 2456 | 2461 | 2464 | rVV2 | 156575   | 261333   | 1.67%   | 0.160% |
| 48 | 17.521 | 2467 | 2471 | 2479 | rVB4 | 192876   | 394477   | 2.52%   | 0.241% |
| 49 | 17.663 | 2491 | 2495 | 2500 | rVB2 | 127388   | 210213   | 1.34%   | 0.129% |
| 50 | 17.815 | 2515 | 2521 | 2524 | rBV  | 990757   | 1363423  | 8.72%   | 0.834% |
| 51 | 17.863 | 2524 | 2529 | 2535 | rVV2 | 1763493  | 2980928  | 19.07%  | 1.823% |
| 52 | 17.945 | 2539 | 2543 | 2548 | rVV  | 425713   | 587447   | 3.76%   | 0.359% |
| 53 | 18.010 | 2548 | 2554 | 2558 | rVV2 | 1203002  | 2226432  | 14.24%  | 1.362% |
| 54 | 18.045 | 2558 | 2560 | 2567 | rVB  | 691036   | 863975   | 5.53%   | 0.528% |
| 55 | 18.133 | 2571 | 2575 | 2579 | rBV3 | 139657   | 242806   | 1.55%   | 0.149% |
| 56 | 18.321 | 2603 | 2607 | 2612 | rBV  | 602813   | 798379   | 5.11%   | 0.488% |
| 57 | 18.374 | 2612 | 2616 | 2622 | rVB  | 704771   | 983026   | 6.29%   | 0.601% |
| 58 | 18.568 | 2642 | 2649 | 2654 | rBV4 | 252218   | 528519   | 3.38%   | 0.323% |
| 59 | 18.621 | 2655 | 2658 | 2661 | rVV  | 255245   | 321571   | 2.06%   | 0.197% |
| 60 | 18.663 | 2661 | 2665 | 2669 | rVB2 | 242714   | 316608   | 2.03%   | 0.194% |
| 61 | 18.745 | 2674 | 2679 | 2683 | rBV  | 580574   | 949963   | 6.08%   | 0.581% |
| 62 | 18.786 | 2683 | 2686 | 2687 | rBV2 | 197568   | 223336   | 1.43%   | 0.137% |
| 63 | 18.839 | 2693 | 2695 | 2698 | rVB  | 205693   | 206650   | 1.32%   | 0.126% |
| 64 | 18.898 | 2699 | 2705 | 2711 | rBV4 | 514245   | 1021658  | 6.53%   | 0.625% |
| 65 | 19.015 | 2718 | 2725 | 2731 | rBV  | 11518526 | 15634240 | 100.00% | 9.562% |
| 66 | 19.115 | 2739 | 2742 | 2744 | rBV2 | 212078   | 254525   | 1.63%   | 0.156% |
| 67 | 19.145 | 2744 | 2747 | 2753 | rVB3 | 592243   | 1020620  | 6.53%   | 0.624% |
| 68 | 19.251 | 2763 | 2765 | 2770 | rVB  | 290413   | 377703   | 2.42%   | 0.231% |
| 69 | 19.351 | 2777 | 2782 | 2784 | rBV2 | 3544917  | 5199874  | 33.26%  | 3.180% |
| 70 | 19.386 | 2784 | 2788 | 2795 | rVB  | 9418159  | 12668302 | 81.03%  | 7.748% |
| 71 | 19.451 | 2795 | 2799 | 2804 | rBV2 | 455962   | 620293   | 3.97%   | 0.379% |

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## Integration Parameters: LSCINT.P

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 Sampling : 1  
 Start Thrs: 0.2  
 Stop Thrs : 0

Filtering: 5  
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 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
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Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM021418.M  
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|    |        |      |      |      |      |         |          |        |        |
|----|--------|------|------|------|------|---------|----------|--------|--------|
| 72 | 19.562 | 2814 | 2818 | 2824 | rVB  | 417916  | 572450   | 3.66%  | 0.350% |
| 73 | 19.627 | 2825 | 2829 | 2834 | rVB  | 453656  | 656141   | 4.20%  | 0.401% |
| 74 | 19.704 | 2837 | 2842 | 2849 | rBV3 | 577863  | 1412503  | 9.03%  | 0.864% |
| 75 | 19.792 | 2855 | 2857 | 2861 | rVB  | 212088  | 242719   | 1.55%  | 0.148% |
| 76 | 19.880 | 2861 | 2872 | 2878 | rBV  | 1219251 | 2736536  | 17.50% | 1.674% |
| 77 | 19.980 | 2885 | 2889 | 2892 | rBV  | 718862  | 884370   | 5.66%  | 0.541% |
| 78 | 20.039 | 2892 | 2899 | 2903 | rVV2 | 825185  | 1441830  | 9.22%  | 0.882% |
| 79 | 20.174 | 2919 | 2922 | 2926 | rBV  | 467517  | 598465   | 3.83%  | 0.366% |
| 80 | 20.221 | 2926 | 2930 | 2935 | rBV  | 534698  | 821299   | 5.25%  | 0.502% |
| 81 | 20.445 | 2965 | 2968 | 2970 | rBV  | 271060  | 306711   | 1.96%  | 0.188% |
| 82 | 20.639 | 2997 | 3001 | 3005 | rVB  | 847463  | 1079454  | 6.90%  | 0.660% |
| 83 | 20.792 | 3024 | 3027 | 3031 | rBV2 | 906787  | 1233053  | 7.89%  | 0.754% |
| 84 | 20.833 | 3031 | 3034 | 3038 | rVV  | 913636  | 1159608  | 7.42%  | 0.709% |
| 85 | 20.874 | 3038 | 3041 | 3047 | rVV2 | 1029902 | 1873562  | 11.98% | 1.146% |
| 86 | 20.933 | 3049 | 3051 | 3061 | rVB  | 957054  | 1278401  | 8.18%  | 0.782% |
| 87 | 21.145 | 3081 | 3087 | 3092 | rBV2 | 6120764 | 10818865 | 69.20% | 6.617% |
| 88 | 21.192 | 3092 | 3095 | 3104 | rVB  | 5716270 | 7174368  | 45.89% | 4.388% |
| 89 | 21.304 | 3111 | 3114 | 3121 | rBV  | 757948  | 984387   | 6.30%  | 0.602% |
| 90 | 21.645 | 3169 | 3172 | 3174 | rBV2 | 340376  | 399557   | 2.56%  | 0.244% |
| 91 | 21.692 | 3178 | 3180 | 3184 | rVB  | 879875  | 1032408  | 6.60%  | 0.631% |
| 92 | 21.886 | 3210 | 3213 | 3216 | rBV3 | 401494  | 567245   | 3.63%  | 0.347% |
| 93 | 22.692 | 3343 | 3350 | 3354 | rBV  | 4293559 | 9326339  | 59.65% | 5.704% |
| 94 | 22.850 | 3373 | 3377 | 3382 | rVB  | 768949  | 1182956  | 7.57%  | 0.723% |
| 95 | 23.145 | 3422 | 3427 | 3432 | rBV  | 2130011 | 4025990  | 25.75% | 2.462% |
| 96 | 23.198 | 3433 | 3436 | 3438 | rVV  | 1244273 | 1811453  | 11.59% | 1.108% |
| 97 | 23.245 | 3439 | 3444 | 3453 | rVB  | 3659959 | 6342758  | 40.57% | 3.879% |
| 98 | 23.374 | 3463 | 3466 | 3474 | rVB2 | 1033547 | 1876983  | 12.01% | 1.148% |
| 99 | 25.497 | 3820 | 3827 | 3836 | rVB  | 1623076 | 4300948  | 27.51% | 2.630% |

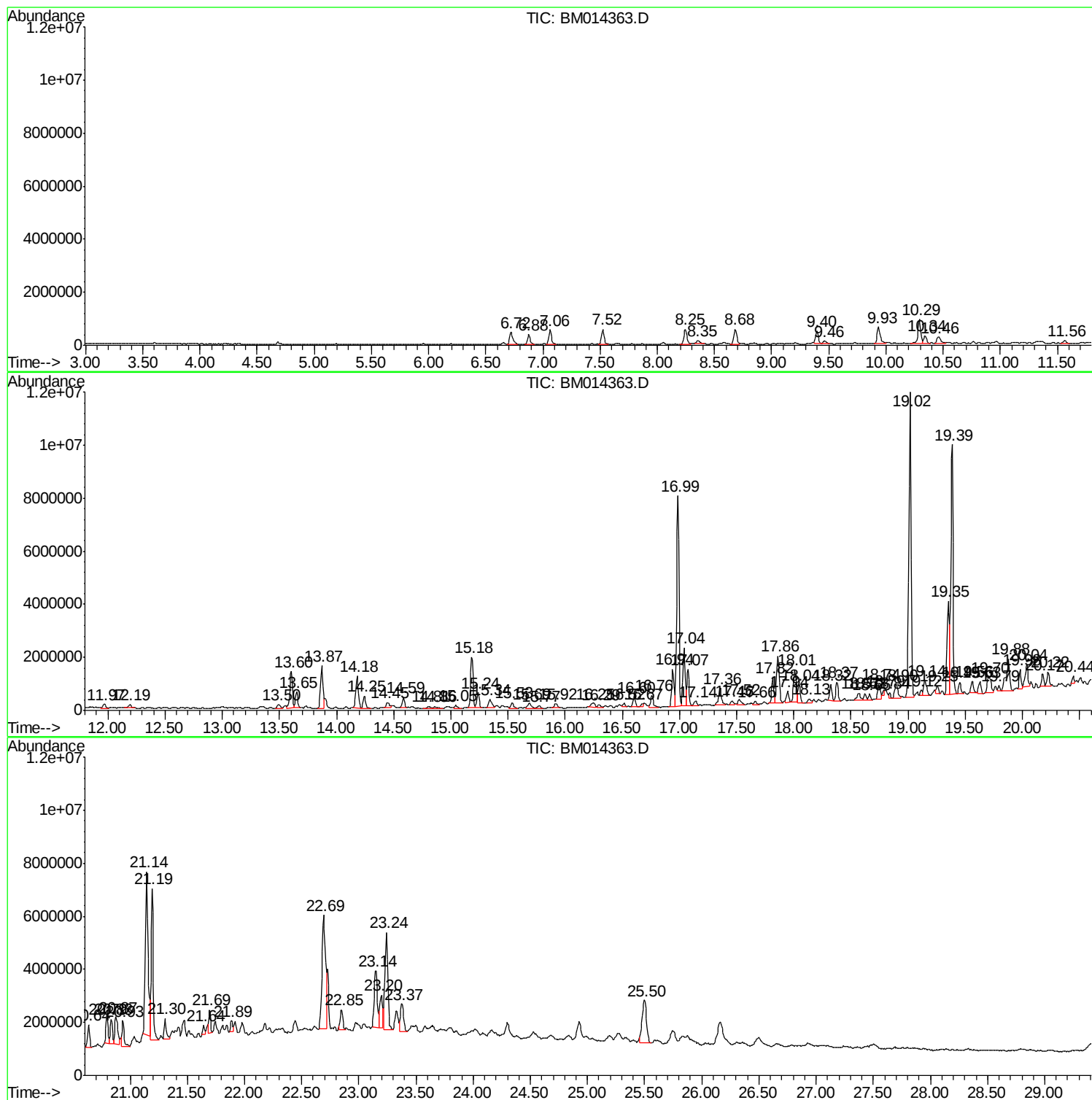
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Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM021418.M  
Quant Title : SVOA CALIBRATION

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



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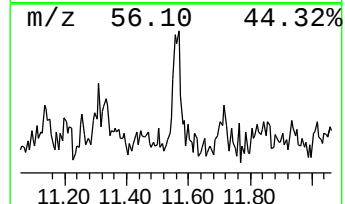
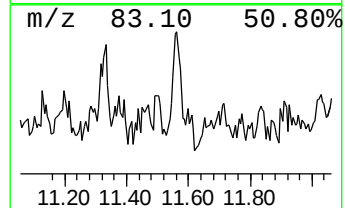
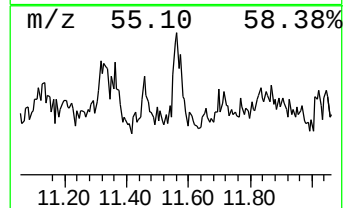
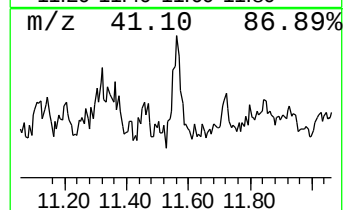
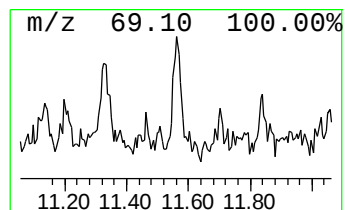
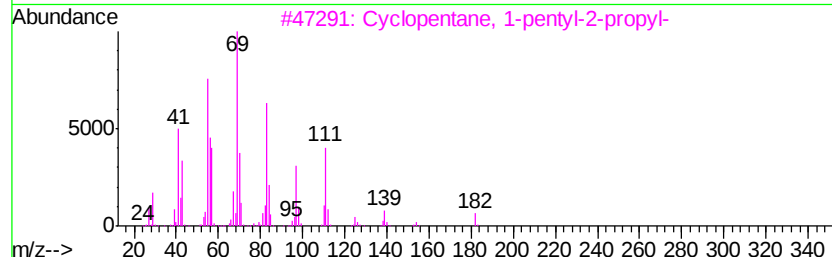
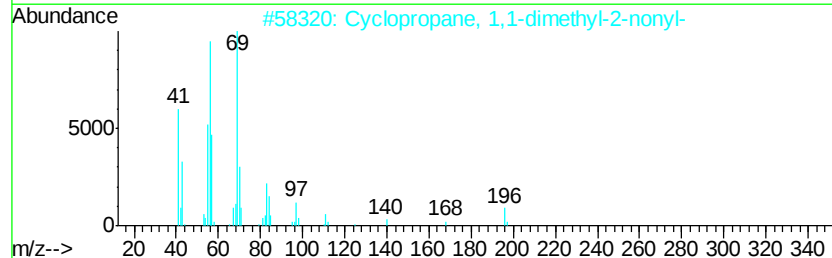
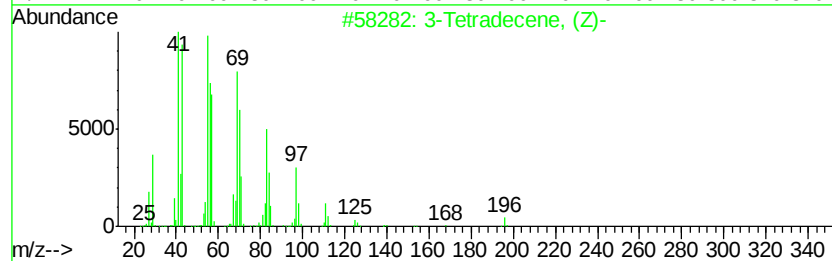
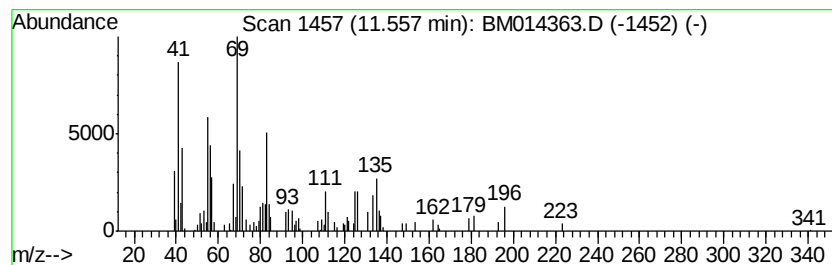
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 1 3-Tetradecene, (Z)- Concentration Rank 35

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 11.56 | 2.17 ng/ul | 167207 | Naphthalene-d8   | 10.29 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 3-Tetradecene, (Z)-                 | 196 | C14H28  | 041446-67-7 | 62   |
| 2    |    | Cyclopropane, 1,1-dimethyl-2-nonyl- | 196 | C14H28  | 041977-38-2 | 62   |
| 3    |    | Cyclopentane, 1-pentyl-2-propyl-    | 182 | C13H26  | 062199-51-3 | 58   |
| 4    |    | 7-Tetradecene                       | 196 | C14H28  | 010374-74-0 | 42   |
| 5    |    | Cyclotetradecane                    | 196 | C14H28  | 000295-17-0 | 41   |



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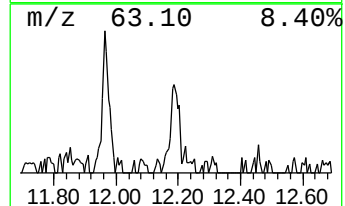
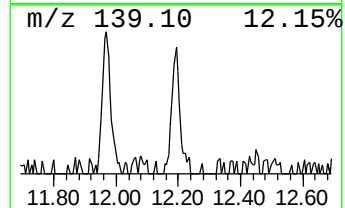
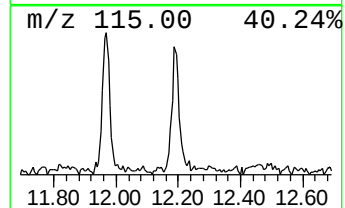
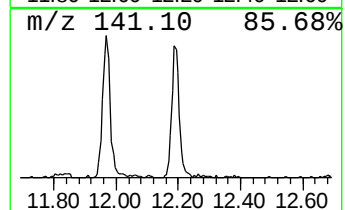
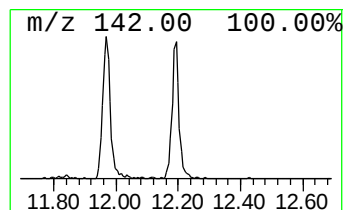
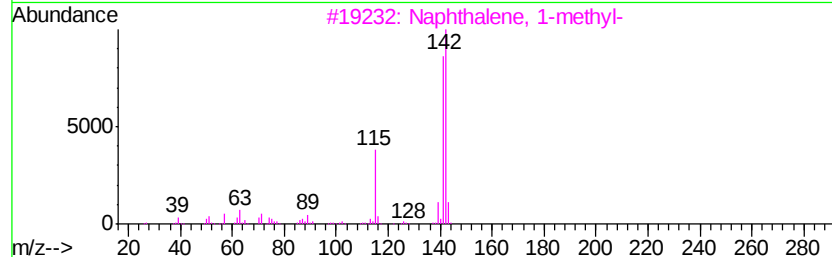
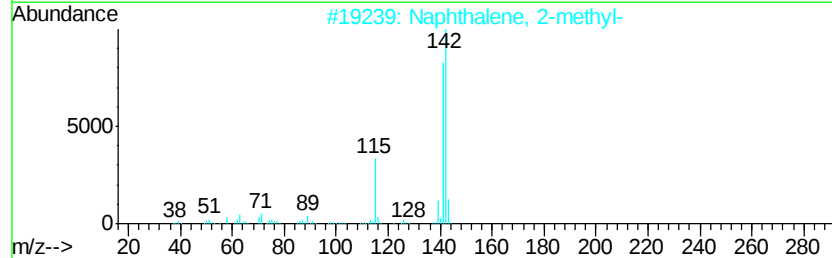
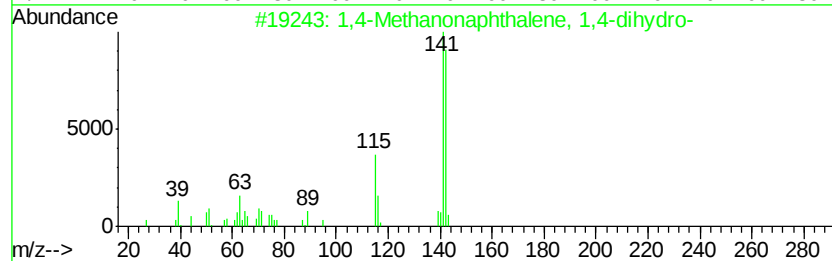
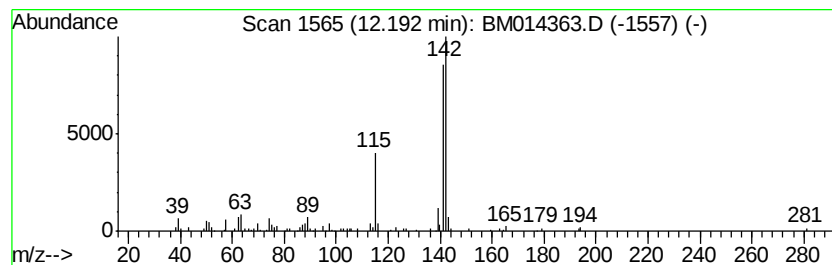
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 2 1,4-Methanonaphthalene, 1,4... Concentration Rank 25

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 12.19 | 2.99 ng/ul | 231031 | Naphthalene-d8   | 10.29 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 1,4-Methanonaphthalene, 1,4-dihy... | 142 | C11H10  | 004453-90-1 | 90   |
| 2    |    | Naphthalene, 2-methyl-              | 142 | C11H10  | 000091-57-6 | 90   |
| 3    |    | Naphthalene, 1-methyl-              | 142 | C11H10  | 000090-12-0 | 87   |
| 4    |    | Benzocycloheptatriene               | 142 | C11H10  | 000264-09-5 | 87   |
| 5    |    | Benzocycloheptatriene               | 142 | C11H10  | 000264-09-5 | 87   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

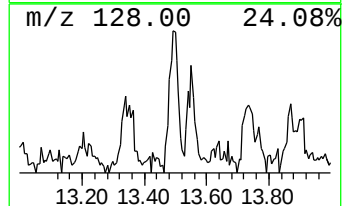
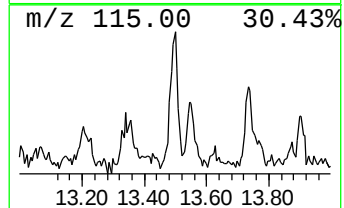
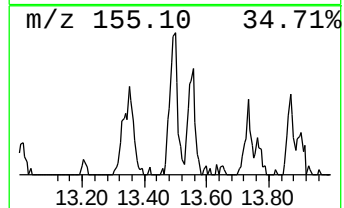
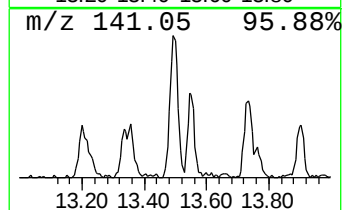
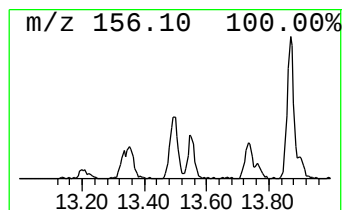
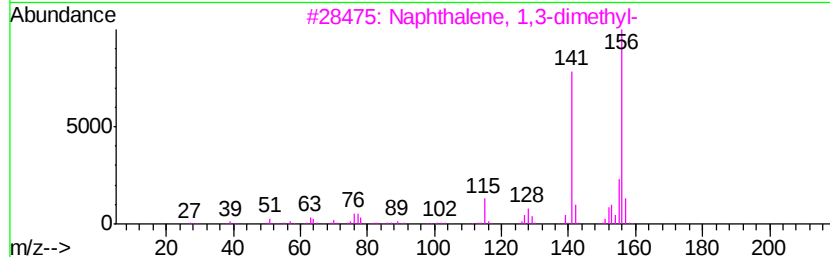
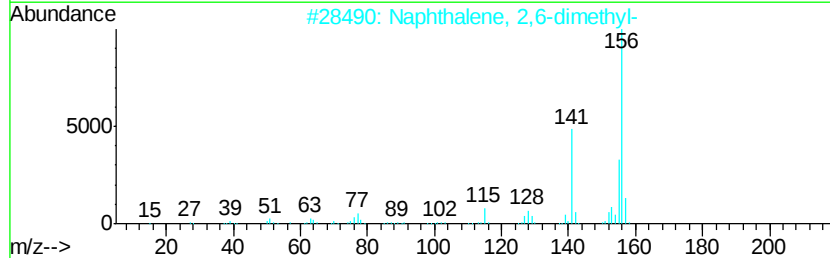
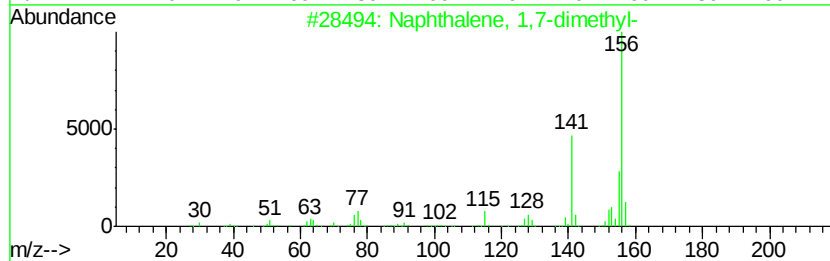
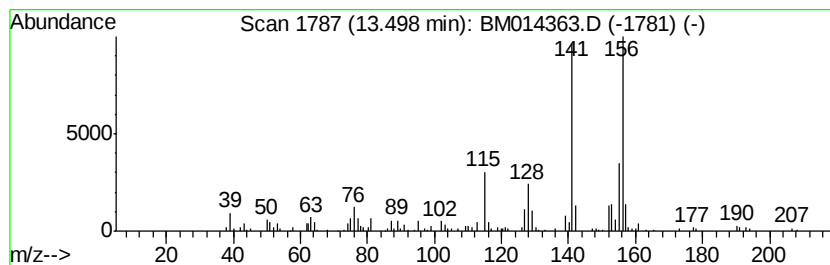
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TIC Integration Parameters: LSCINT.P

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Peak Number 3 Naphthalene, 1,7-dimethyl- Concentration Rank 24

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 13.50 | 3.12 ng/ul | 281495 | Acenaphthene-d10 | 14.18 |

| Hit# | of | Tentative ID               | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, 1,7-dimethyl- | 156 | C12H12  | 000575-37-1 | 95   |
| 2    |    | Naphthalene, 2,6-dimethyl- | 156 | C12H12  | 000581-42-0 | 95   |
| 3    |    | Naphthalene, 1,3-dimethyl- | 156 | C12H12  | 000575-41-7 | 94   |
| 4    |    | Naphthalene, 2,3-dimethyl- | 156 | C12H12  | 000581-40-8 | 94   |
| 5    |    | Naphthalene, 2,3-dimethyl- | 156 | C12H12  | 000581-40-8 | 94   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

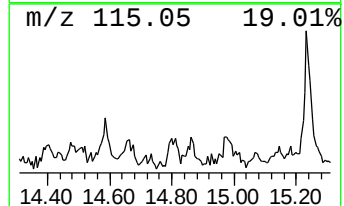
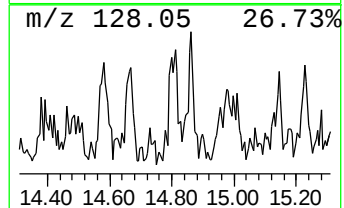
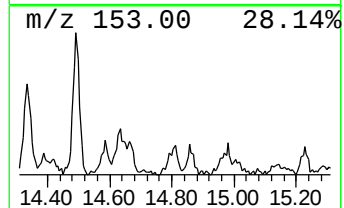
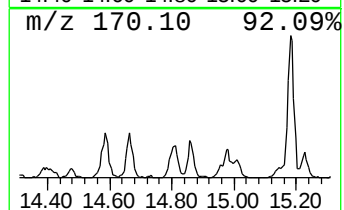
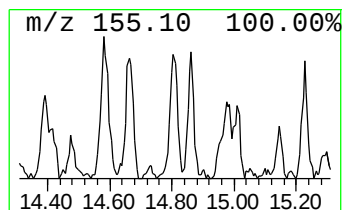
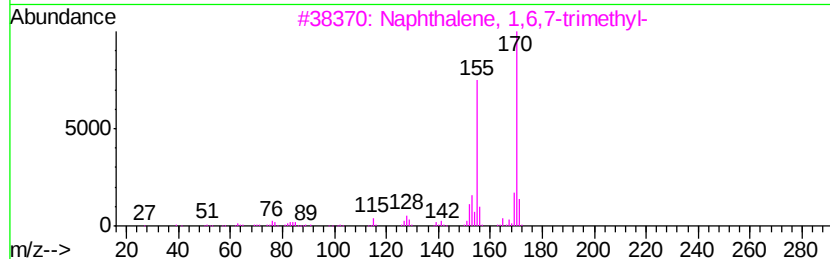
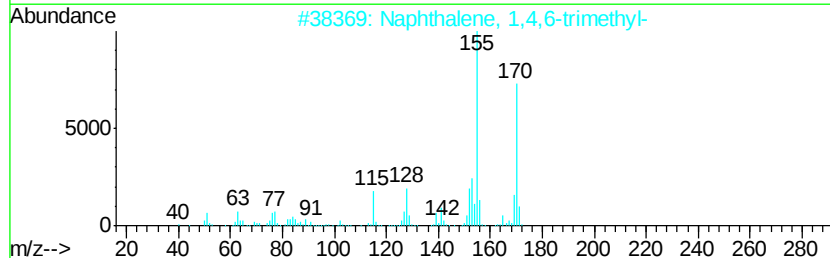
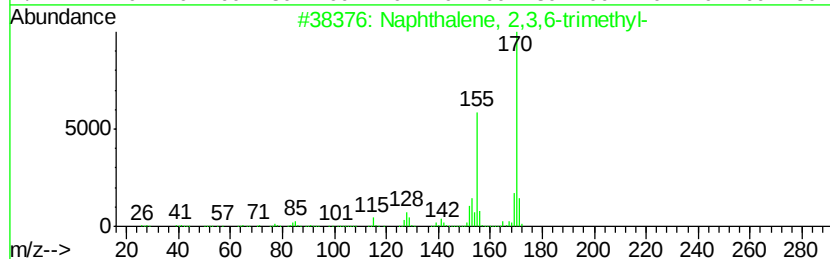
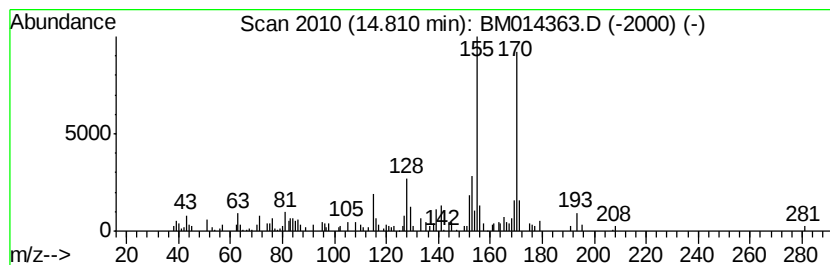
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TIC Integration Parameters: LSCINT.P

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Peak Number 4 Naphthalene, 2,3,6-trimethyl- Concentration Rank 30

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 14.81 | 2.46 ng/ul | 222256 | Acenaphthene-d10 | 14.18 |

| Hit# | of | Tentative ID                    | MW  | MolForm | CAS#         | Qual |
|------|----|---------------------------------|-----|---------|--------------|------|
| 1    | 5  | Naphthalene, 2,3,6-trimethyl-   | 170 | C13H14  | 000829-26-5  | 95   |
| 2    |    | Naphthalene, 1,4,6-trimethyl-   | 170 | C13H14  | 002131-42-2  | 94   |
| 3    |    | Naphthalene, 1,6,7-trimethyl-   | 170 | C13H14  | 002245-38-7  | 94   |
| 4    |    | 4,6,8-Trimethylazulene          | 170 | C13H14  | 000941-81-1  | 93   |
| 5    |    | 3-(2-Methyl-propenyl)-1H-indene | 170 | C13H14  | 1000187-78-5 | 93   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

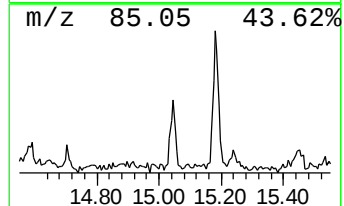
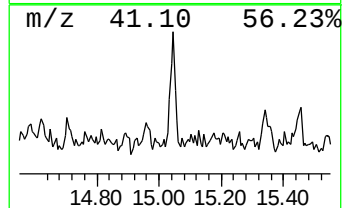
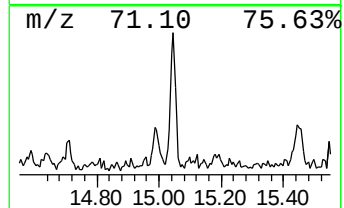
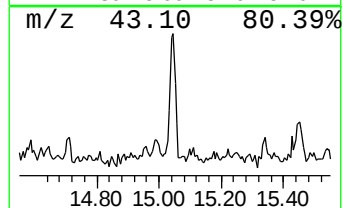
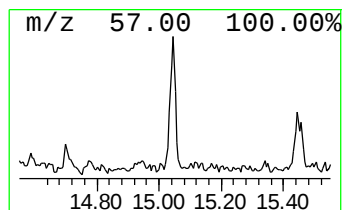
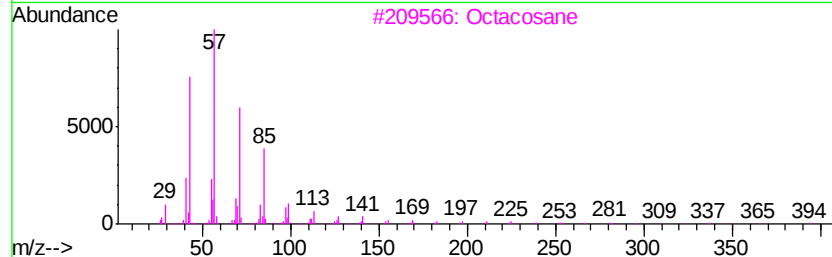
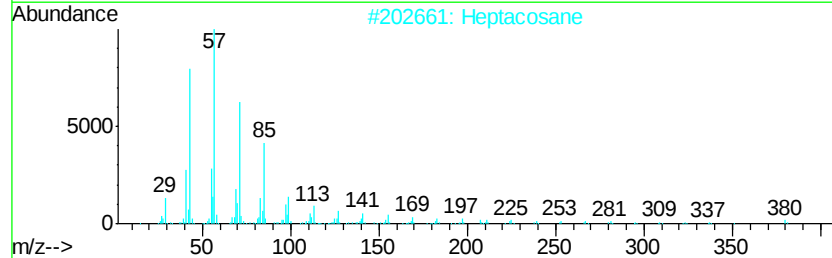
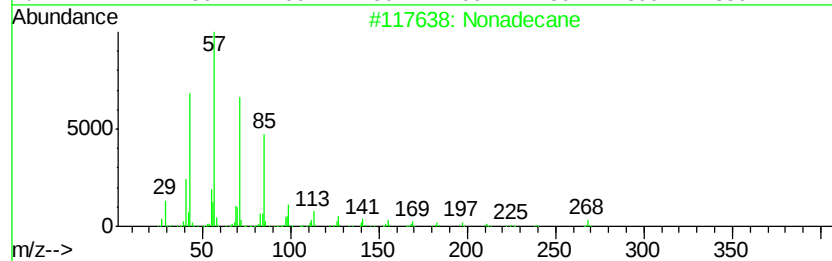
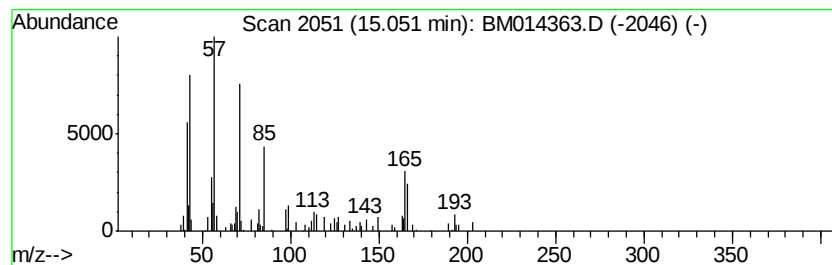
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 5 (DEL) Alkane: Straight-Chai... Concentration Rank 39

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 15.05 | 2.02 ng/ul | 182484 | Acenaphthene-d10 | 14.18 |

| Hit# | of | Tentative ID | MW  | MolForm | CAS#        | Qual |
|------|----|--------------|-----|---------|-------------|------|
| 1    | 5  | Nonadecane   | 268 | C19H40  | 000629-92-5 | 86   |
| 2    |    | Heptacosane  | 380 | C27H56  | 000593-49-7 | 86   |
| 3    |    | Octacosane   | 394 | C28H58  | 000630-02-4 | 86   |
| 4    |    | Tetracosane  | 338 | C24H50  | 000646-31-1 | 86   |
| 5    |    | Hexacosane   | 366 | C26H54  | 000630-01-3 | 80   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

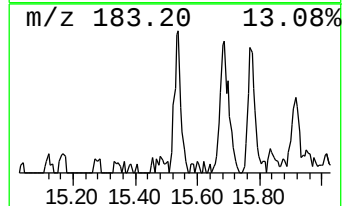
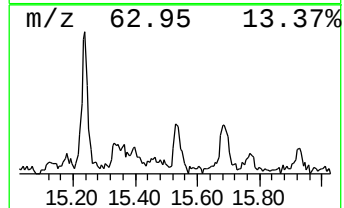
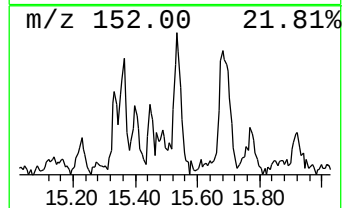
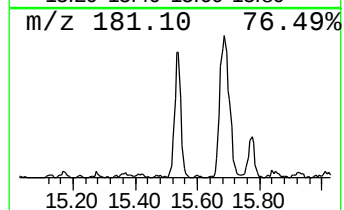
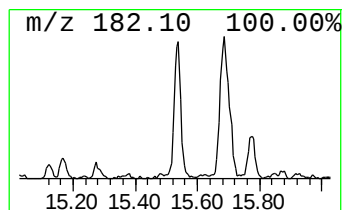
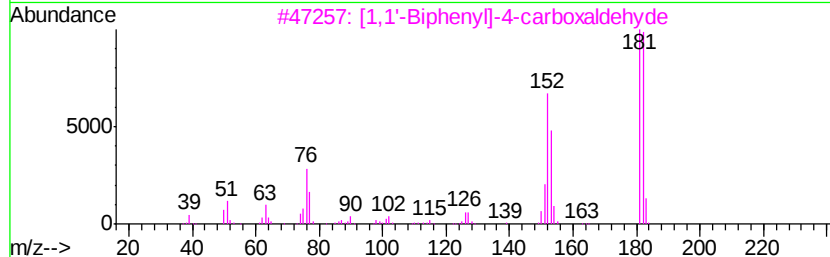
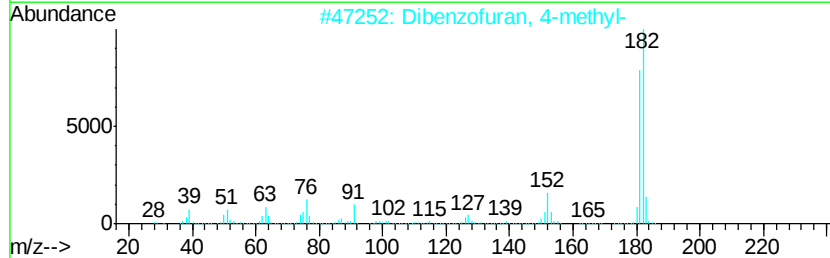
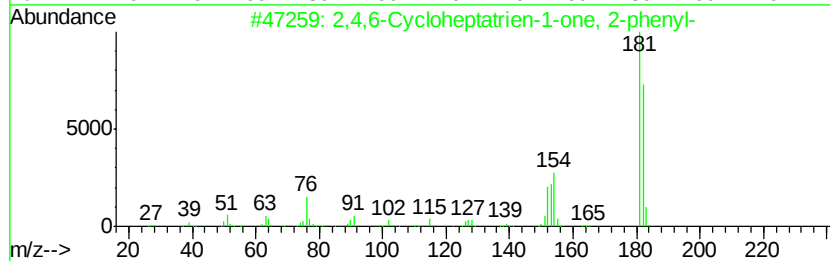
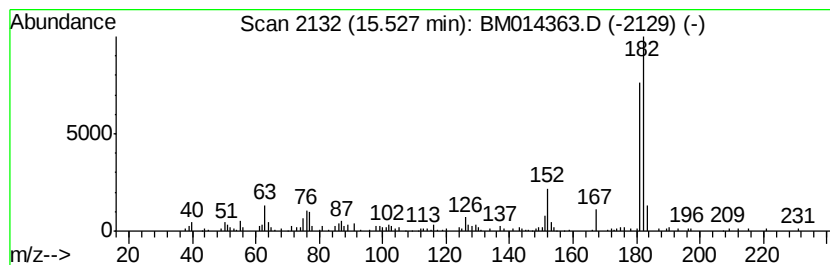
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 6 2,4,6-Cycloheptatrien-1-one... Concentration Rank 18

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 15.53 | 3.57 ng/ul | 321956 | Acenaphthene-d10 | 14.18 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 2,4,6-Cycloheptatrien-1-one, 2-p... | 182 | C13H10O | 014562-09-5 | 91   |
| 2    |    | Dibenzofuran, 4-methyl-             | 182 | C13H10O | 007320-53-8 | 87   |
| 3    |    | [1,1'-Biphenyl]-4-carboxaldehyde    | 182 | C13H10O | 003218-36-8 | 87   |
| 4    |    | 9H-Fluoren-9-ol                     | 182 | C13H10O | 001689-64-1 | 86   |
| 5    |    | [1,1'-Biphenyl]-4-carboxaldehyde    | 182 | C13H10O | 003218-36-8 | 81   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
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Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM021418.M  
Quant Title : SVOA CALIBRATION

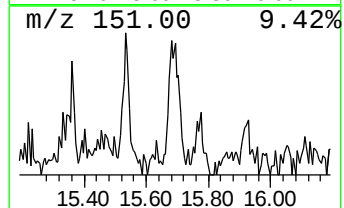
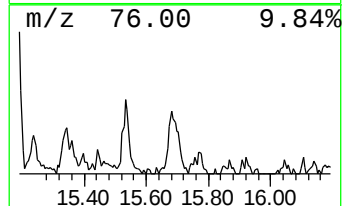
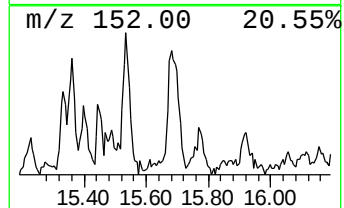
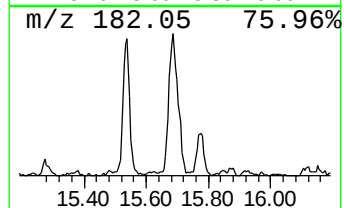
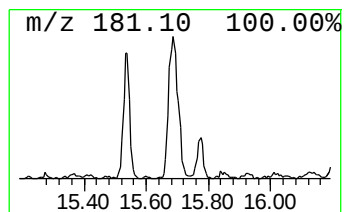
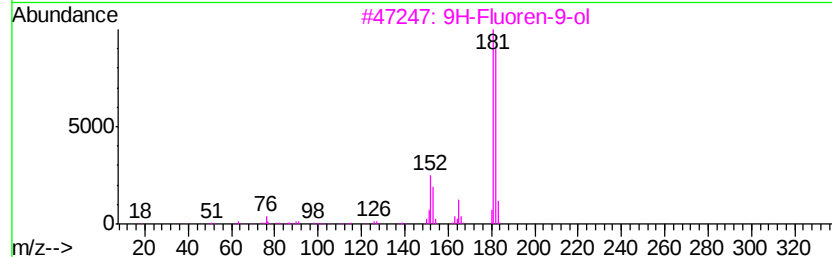
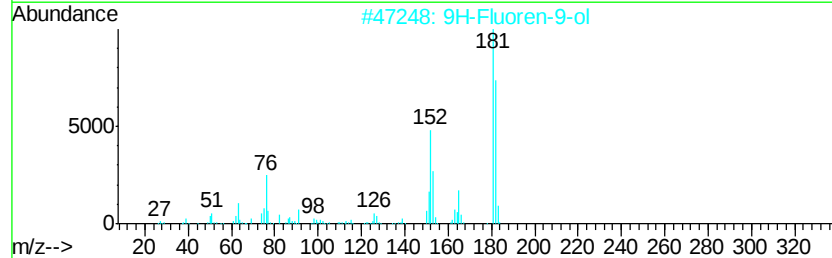
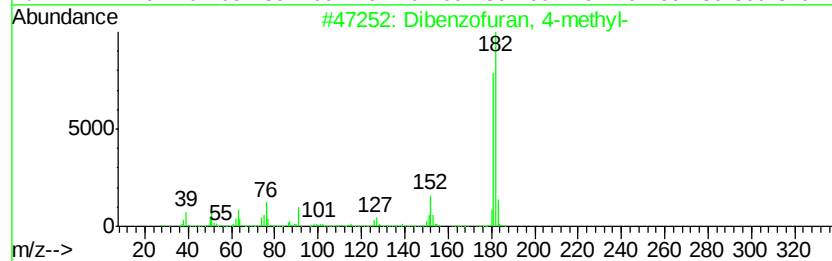
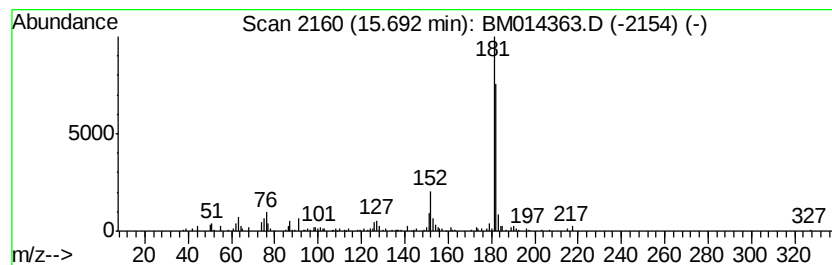
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 7 Dibenzofuran, 4-methyl- Concentration Rank 17

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 15.69 | 3.88 ng/ul | 387839 | Phenanthrene-d10 | 16.94 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Dibenzofuran, 4-methyl-             | 182 | C13H10O | 007320-53-8 | 93   |
| 2    |    |   | 9H-Fluoren-9-ol                     | 182 | C13H10O | 001689-64-1 | 91   |
| 3    |    |   | 9H-Fluoren-9-ol                     | 182 | C13H10O | 001689-64-1 | 80   |
| 4    |    |   | 2,4,6-Cycloheptatrien-1-one, 2-p... | 182 | C13H10O | 014562-09-5 | 80   |
| 5    |    |   | 9H-Fluoren-9-ol                     | 182 | C13H10O | 001689-64-1 | 78   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

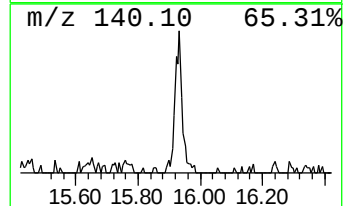
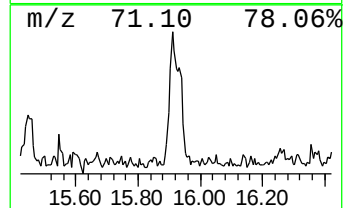
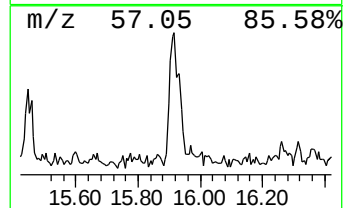
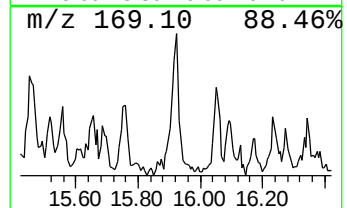
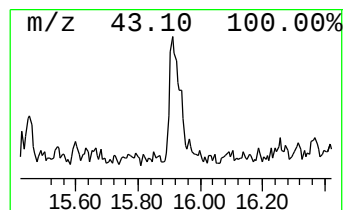
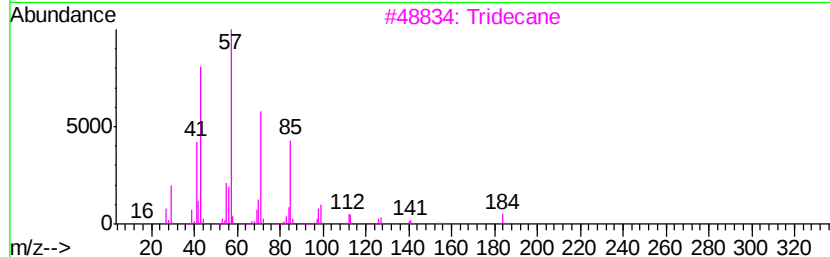
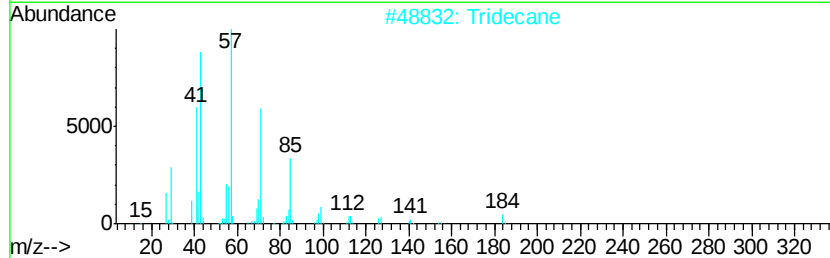
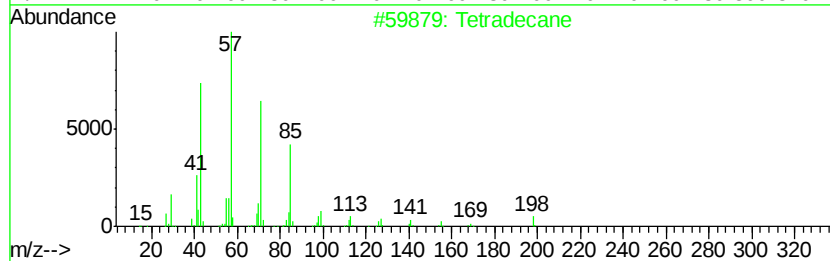
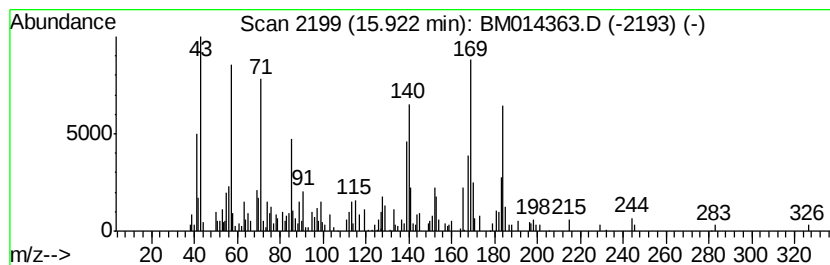
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 8 (DEL) Alkane: Straight-Chai... Concentration Rank 21

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 15.92 | 3.30 ng/ul | 329559 | Phenanthrene-d10 | 16.94 |

| Hit# | of | 5 | Tentative ID | MW  | MolForm | CAS#        | Qual |
|------|----|---|--------------|-----|---------|-------------|------|
| 1    |    |   | Tetradecane  | 198 | C14H30  | 000629-59-4 | 70   |
| 2    |    |   | Tridecane    | 184 | C13H28  | 000629-50-5 | 45   |
| 3    |    |   | Tridecane    | 184 | C13H28  | 000629-50-5 | 45   |
| 4    |    |   | Tetradecane  | 198 | C14H30  | 000629-59-4 | 38   |
| 5    |    |   | Dodecane     | 170 | C12H26  | 000112-40-3 | 38   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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Quant Title : SVOA CALIBRATION

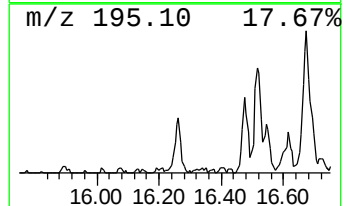
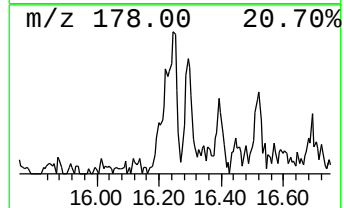
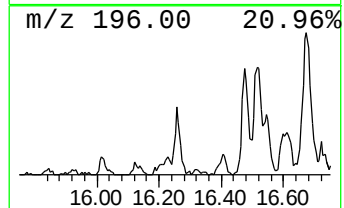
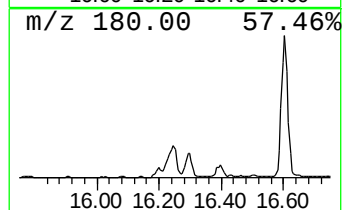
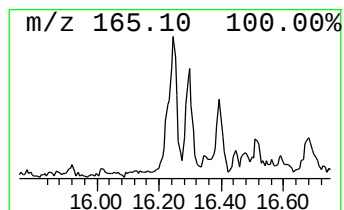
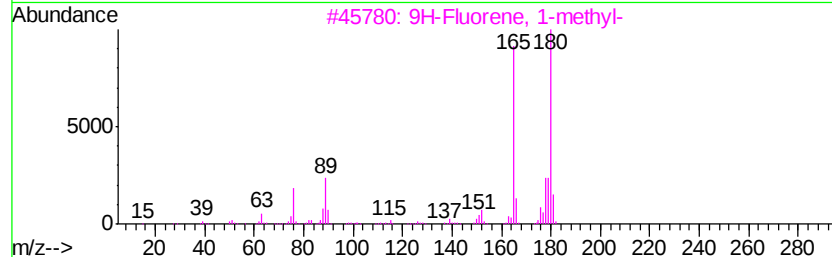
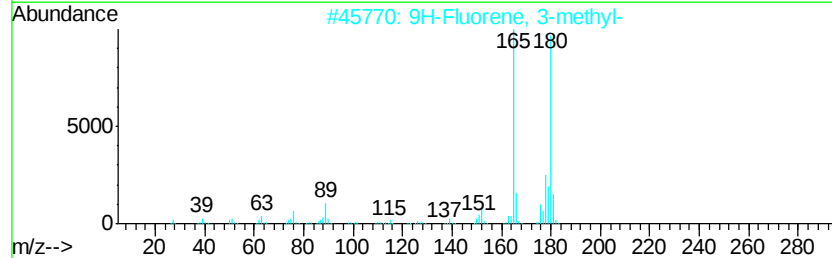
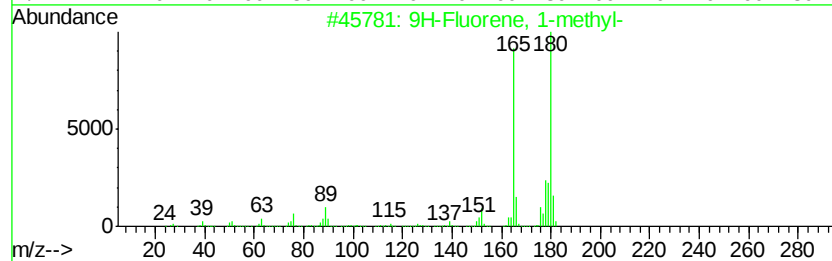
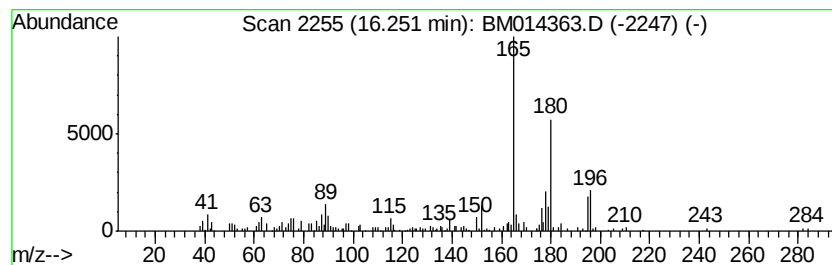
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 9H-Fluorene, 1-methyl- Concentration Rank 20

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 16.25 | 3.40 ng/ul | 340248 | Phenanthrene-d10 | 16.94 |

| Hit# | of | Tentative ID           | MW  | MolForm | CAS#        | Qual |
|------|----|------------------------|-----|---------|-------------|------|
| 1    | 5  | 9H-Fluorene, 1-methyl- | 180 | C14H12  | 001730-37-6 | 95   |
| 2    |    | 9H-Fluorene, 3-methyl- | 180 | C14H12  | 002523-39-9 | 95   |
| 3    |    | 9H-Fluorene, 1-methyl- | 180 | C14H12  | 001730-37-6 | 95   |
| 4    |    | 9H-Fluorene, 9-methyl- | 180 | C14H12  | 002523-37-7 | 93   |
| 5    |    | 9H-Fluorene, 1-methyl- | 180 | C14H12  | 001730-37-6 | 90   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

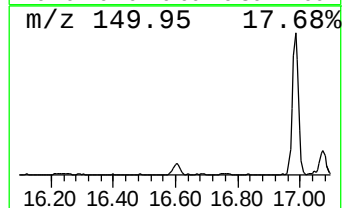
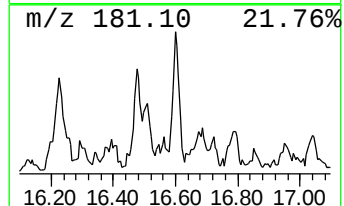
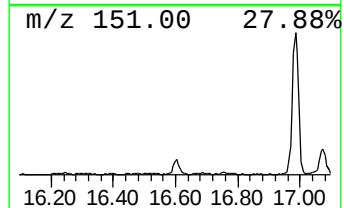
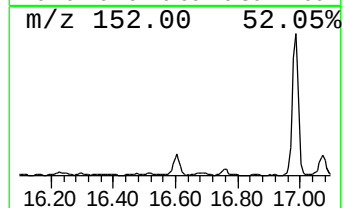
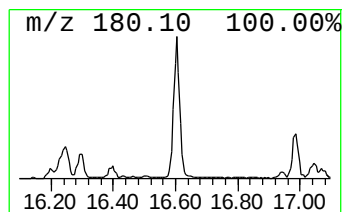
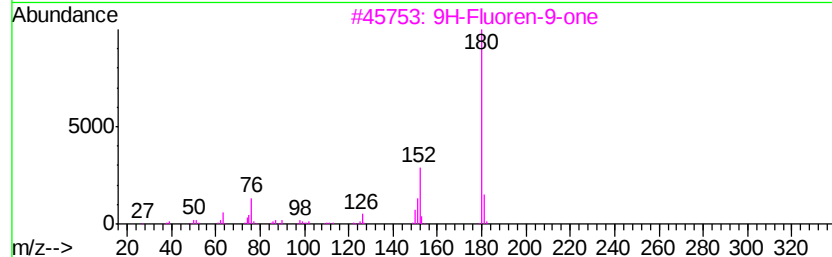
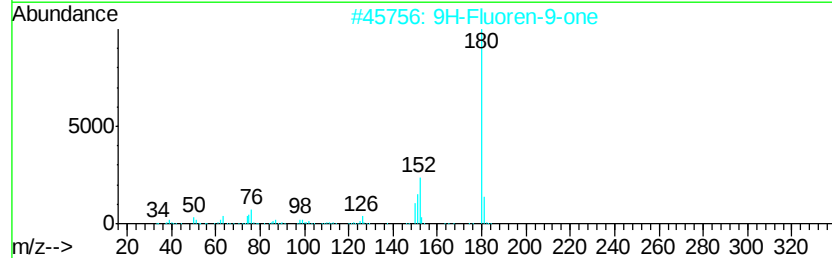
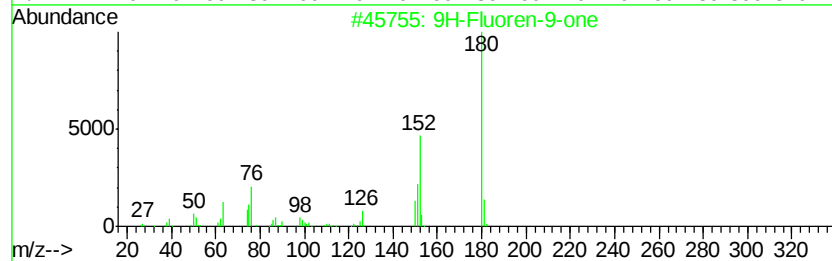
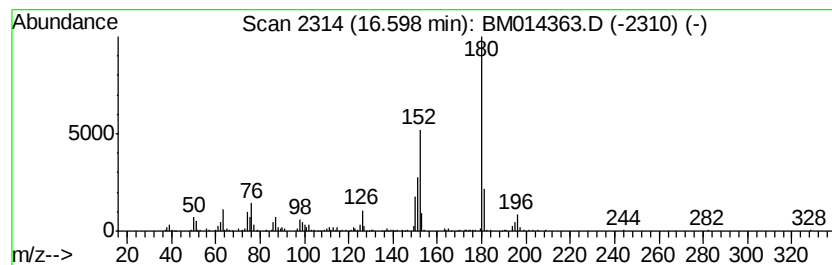
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TIC Integration Parameters: LSCINT.P

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Peak Number 10 9H-Fluoren-9-one Concentration Rank 13

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 16.60 | 5.55 ng/ul | 554674 | Phenanthrene-d10 | 16.94 |

| Hit# | of | 5 | Tentative ID      | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------|-----|---------|-------------|------|
| 1    |    |   | 9H-Fluoren-9-one  | 180 | C13H8O  | 000486-25-9 | 96   |
| 2    |    |   | 9H-Fluoren-9-one  | 180 | C13H8O  | 000486-25-9 | 96   |
| 3    |    |   | 9H-Fluoren-9-one  | 180 | C13H8O  | 000486-25-9 | 95   |
| 4    |    |   | Benzo[c]cinnoline | 180 | C12H8N2 | 000230-17-1 | 86   |
| 5    |    |   | Benzo[h]cinnoline | 180 | C12H8N2 | 000230-31-9 | 86   |



Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

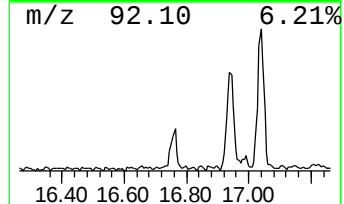
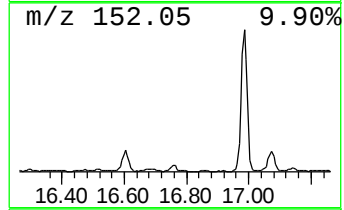
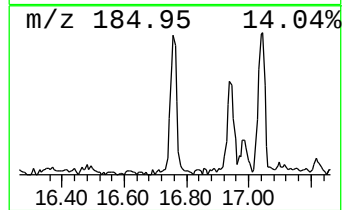
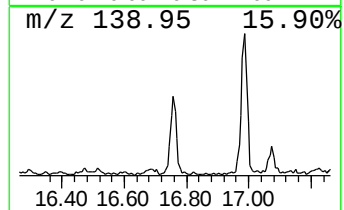
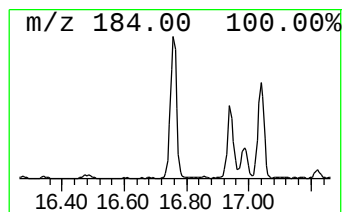
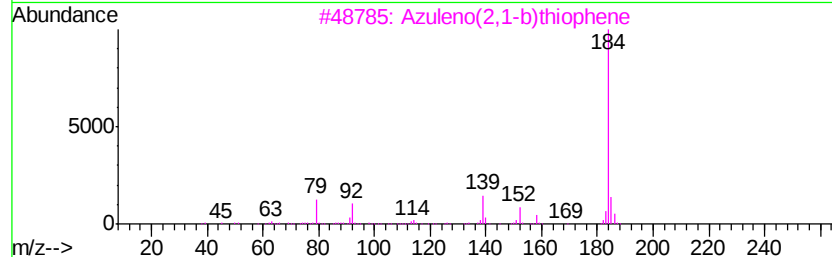
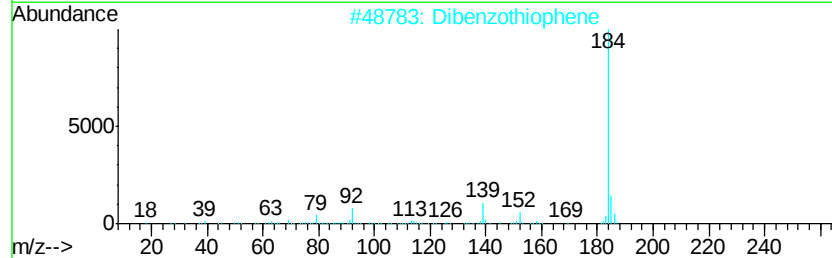
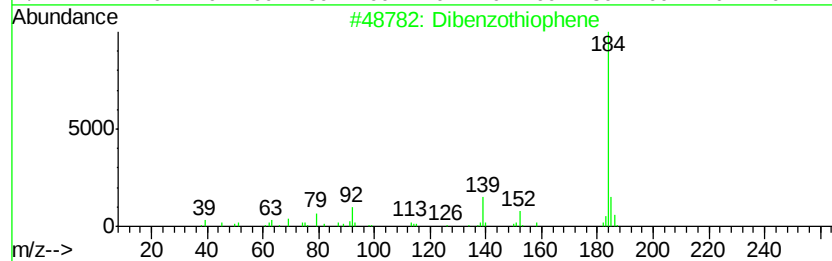
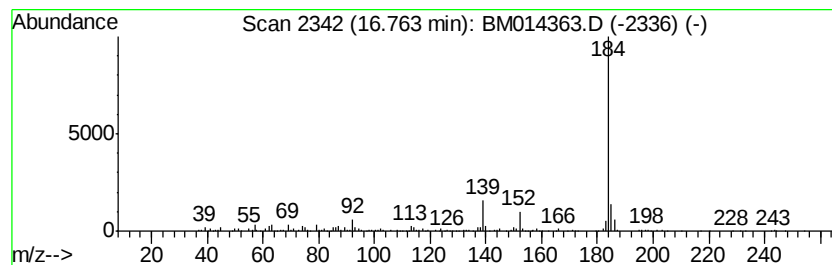
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 11 Dibenzothiophene Concentration Rank 11

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 16.76 | 7.15 ng/ul | 714319 | Phenanthrene-d10 | 16.94 |

| Hit# | of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------|-----|---------|-------------|------|
| 1    |    |   | Dibenzothiophene        | 184 | C12H8S  | 000132-65-0 | 94   |
| 2    |    |   | Dibenzothiophene        | 184 | C12H8S  | 000132-65-0 | 90   |
| 3    |    |   | Azuleno(2,1-b)thiophene | 184 | C12H8S  | 000248-13-5 | 90   |
| 4    |    |   | Naphtho[2,3-b]thiophene | 184 | C12H8S  | 000268-77-9 | 90   |
| 5    |    |   | Naphtho[1,2-b]thiophene | 184 | C12H8S  | 000234-41-3 | 90   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

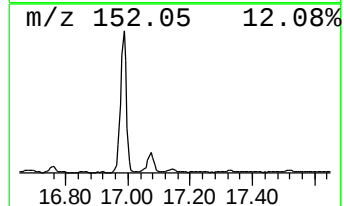
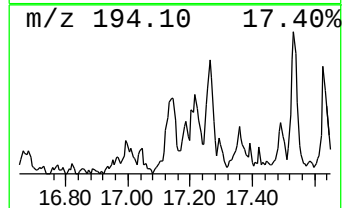
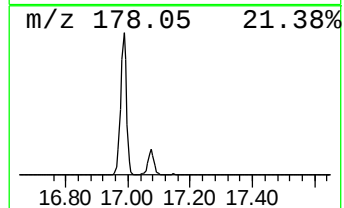
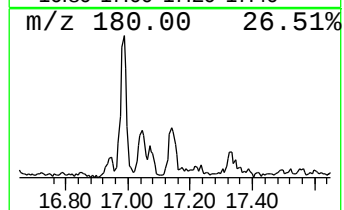
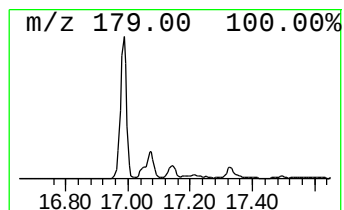
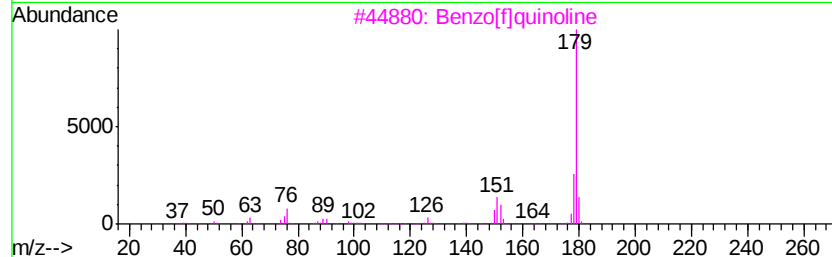
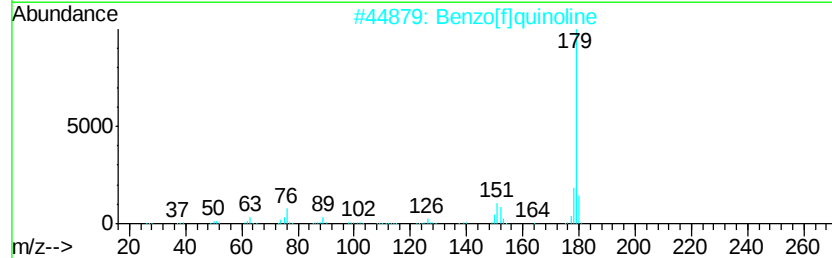
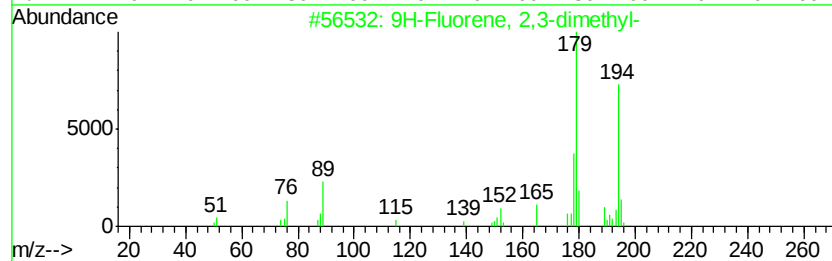
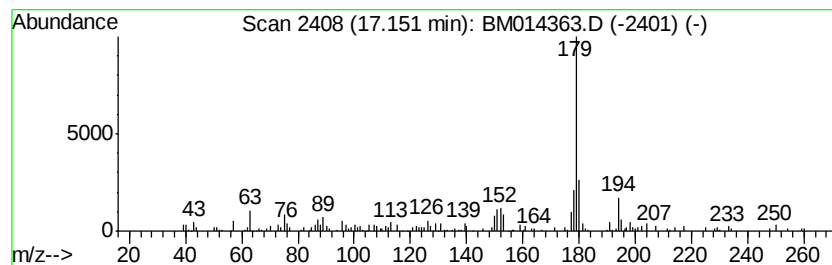
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 12 9H-Fluorene, 2,3-dimethyl- Concentration Rank 26

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 17.15 | 2.89 ng/ul | 288602 | Phenanthrene-d10 | 16.94 |

| Hit# | of | Tentative ID               | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------|-----|---------|-------------|------|
| 1    | 5  | 9H-Fluorene, 2,3-dimethyl- | 194 | C15H14  | 004612-63-9 | 83   |
| 2    |    | Benzo[f]quinoline          | 179 | C13H9N  | 000085-02-9 | 81   |
| 3    |    | Benzo[f]quinoline          | 179 | C13H9N  | 000085-02-9 | 74   |
| 4    |    | Acridine                   | 179 | C13H9N  | 000260-94-6 | 72   |
| 5    |    | Benzo[f]isoquinoline       | 179 | C13H9N  | 000229-67-4 | 72   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

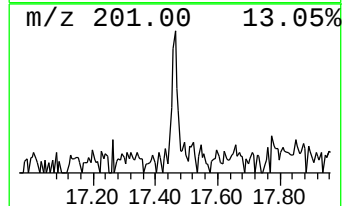
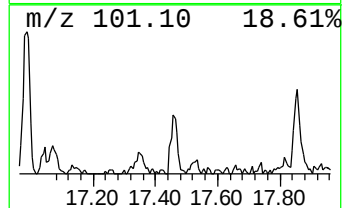
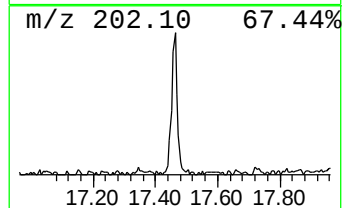
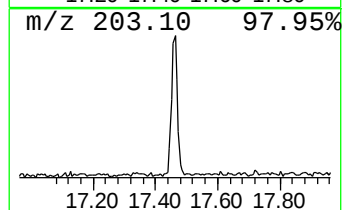
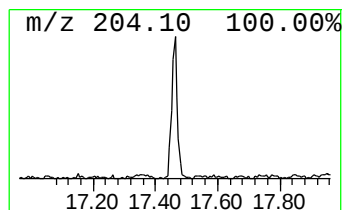
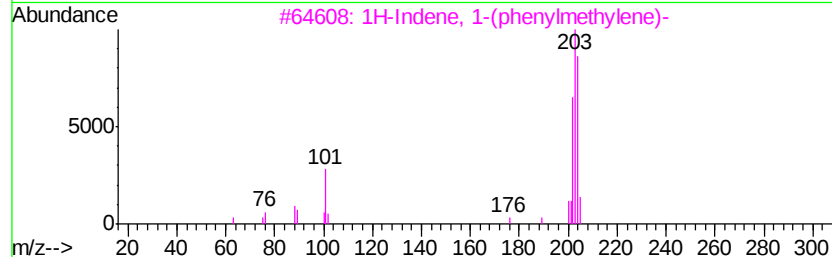
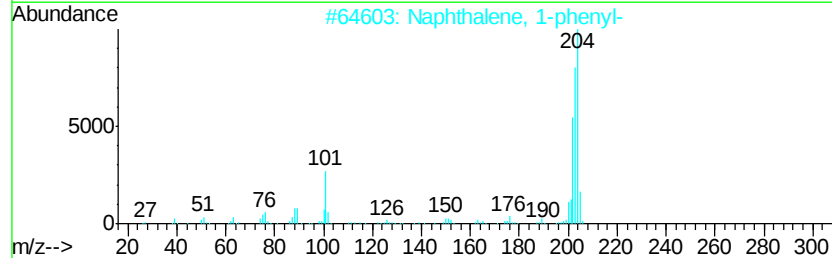
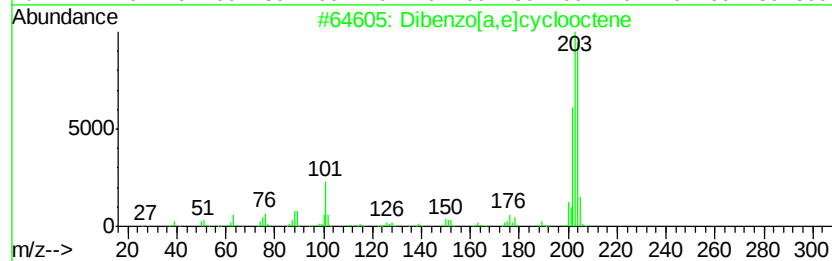
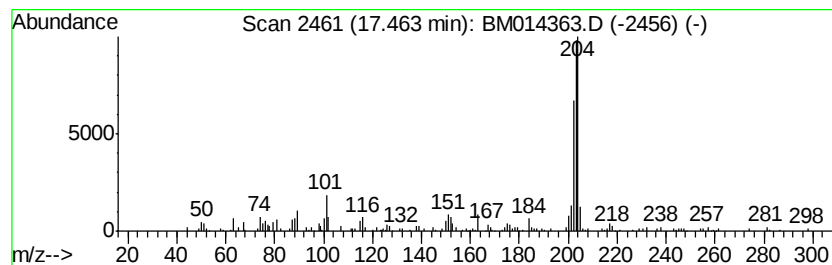
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 13 Dibenzo[a,e]cyclooctene Concentration Rank 28

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 17.46 | 2.62 ng/ul | 261333 | Phenanthrene-d10 | 16.94 |

| Hit# | of | Tentative ID                    | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------------|-----|---------|-------------|------|
| 1    | 5  | Dibenzo[a,e]cyclooctene         | 204 | C16H12  | 000262-89-5 | 93   |
| 2    |    | Naphthalene, 1-phenyl-          | 204 | C16H12  | 000605-02-7 | 91   |
| 3    |    | 1H-Indene, 1-(phenylmethylene)- | 204 | C16H12  | 005394-86-5 | 76   |
| 4    |    | Anthracene, 9-ethenyl-          | 204 | C16H12  | 002444-68-0 | 76   |
| 5    |    | Naphthalene, 1-phenyl-          | 204 | C16H12  | 000605-02-7 | 76   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

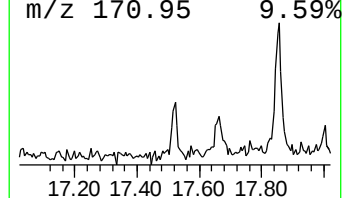
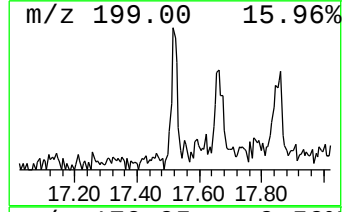
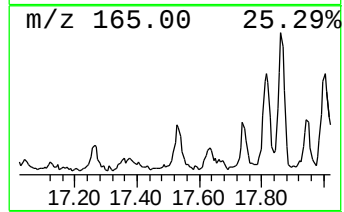
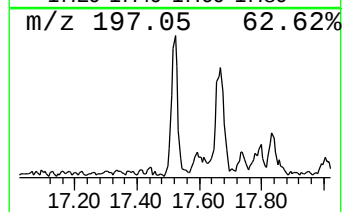
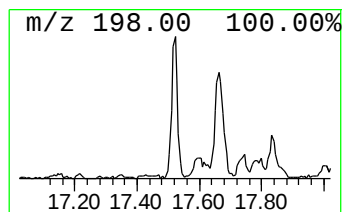
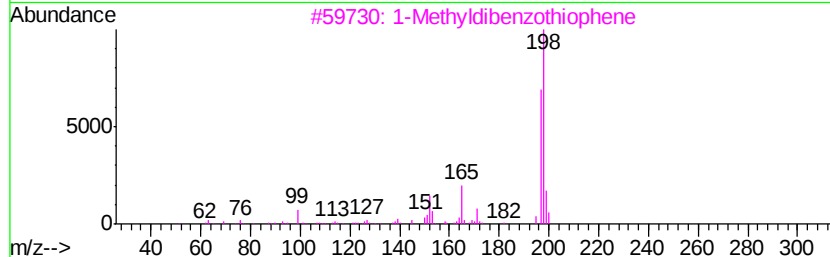
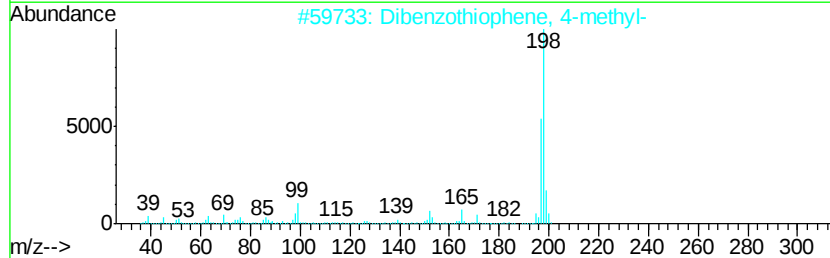
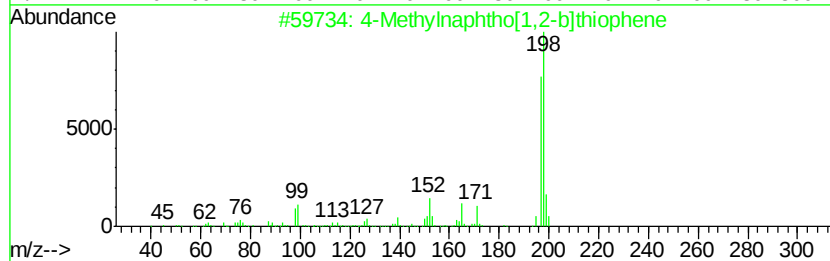
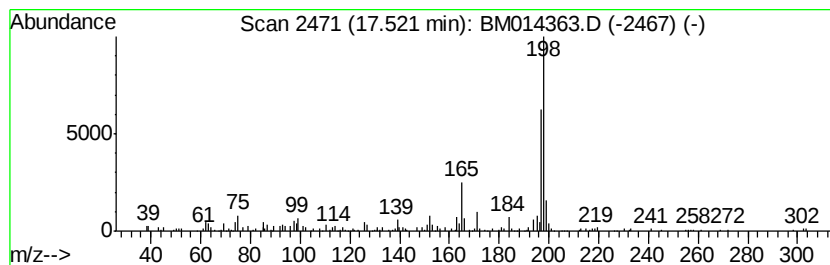
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TIC Integration Parameters: LSCINT.P

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Peak Number 14 4-Methylnaphtho[1,2-b]thiop... Concentration Rank 16

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 17.52 | 3.95 ng/ul | 394477 | Phenanthrene-d10 | 16.94 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | 4-Methylnaphtho[1,2-b]thiophene     | 198 | C13H10S | 067388-11-8 | 93   |
| 2    |    |   | Dibenzothiophene, 4-methyl-         | 198 | C13H10S | 007372-88-5 | 83   |
| 3    |    |   | 1-Methyldibenzothiophene            | 198 | C13H10S | 031317-07-4 | 80   |
| 4    |    |   | Thioxanthene                        | 198 | C13H10S | 000261-31-4 | 78   |
| 5    |    |   | Benzene, 1-fluoro-4-(2-phenyleth... | 198 | C14H11F | 017404-69-2 | 72   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

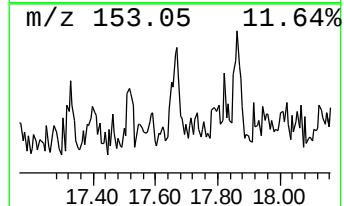
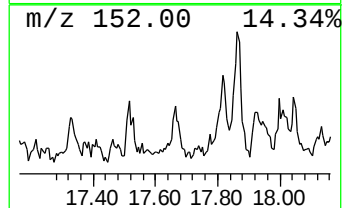
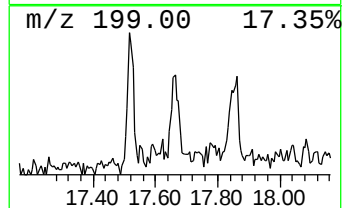
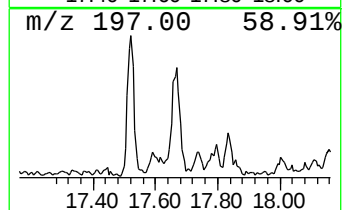
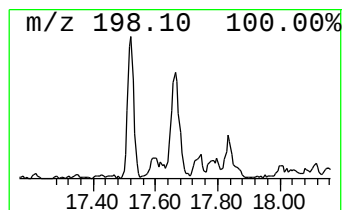
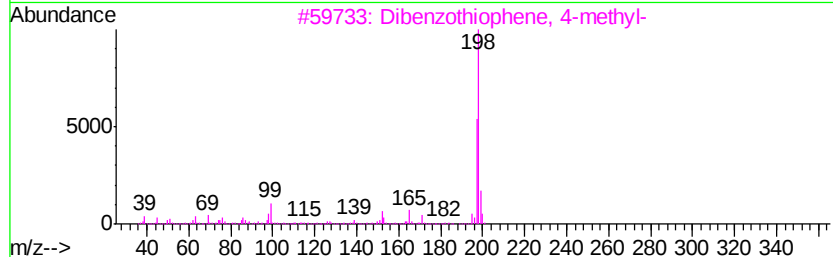
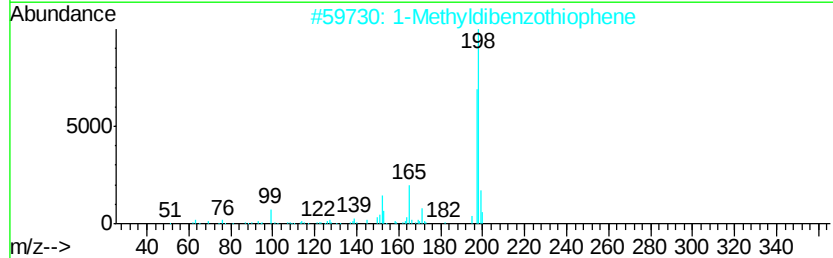
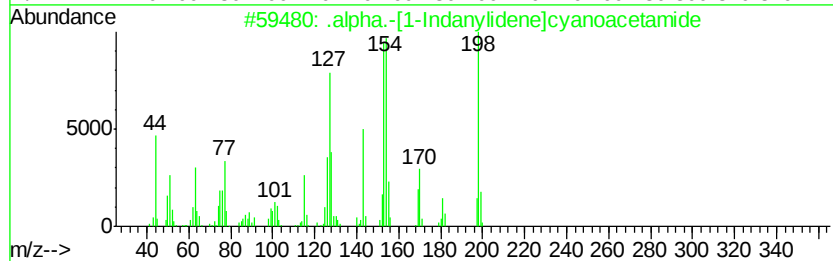
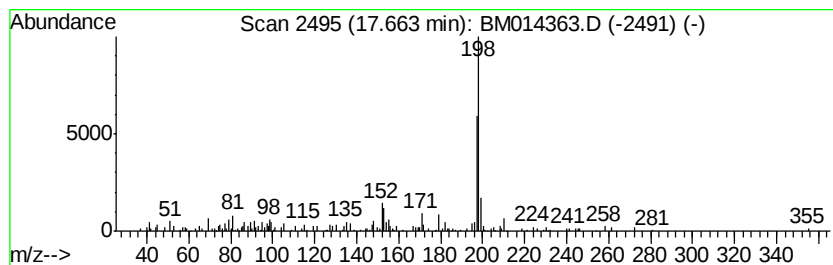
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TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 15 .alpha.-[1-Indanylidene]cya... Concentration Rank 37

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 17.66 | 2.10 ng/ul | 210213 | Phenanthrene-d10 | 16.94 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm   | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|-----------|-------------|------|
| 1    |    |   | .alpha.-[1-Indanylidene]cyanoace... | 198 | C12H10N2O | 058787-18-1 | 91   |
| 2    |    |   | 1-Methyldibenzothiophene            | 198 | C13H10S   | 031317-07-4 | 90   |
| 3    |    |   | Dibenzothiophene, 4-methyl-         | 198 | C13H10S   | 007372-88-5 | 86   |
| 4    |    |   | Dibenzothiophene, 3-methyl-         | 198 | C13H10S   | 016587-52-3 | 86   |
| 5    |    |   | 4-Methylnaphtho[1,2-b]thiophene     | 198 | C13H10S   | 067388-11-8 | 80   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

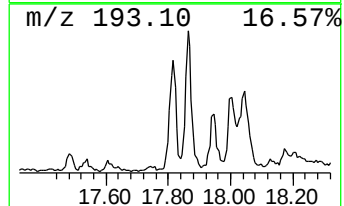
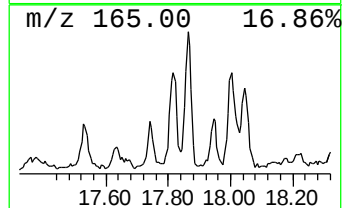
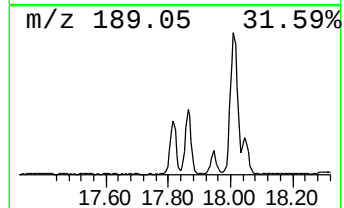
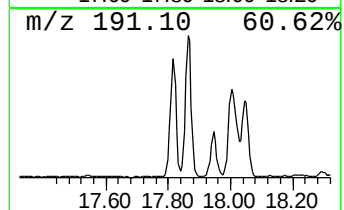
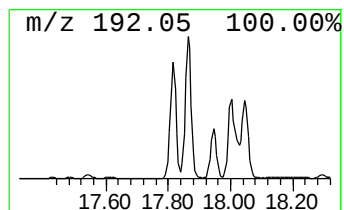
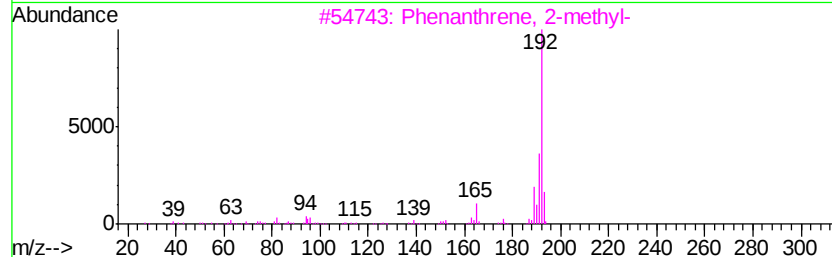
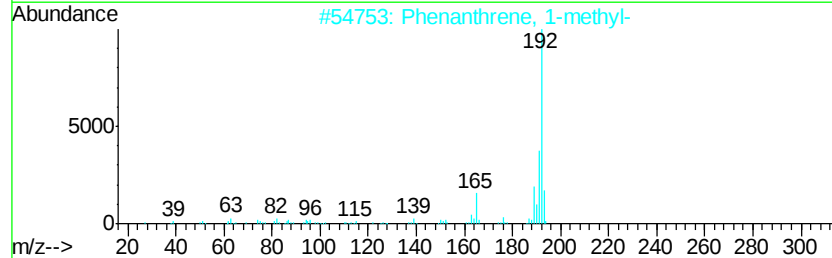
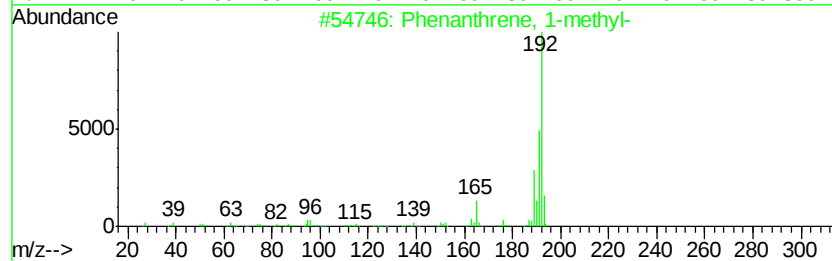
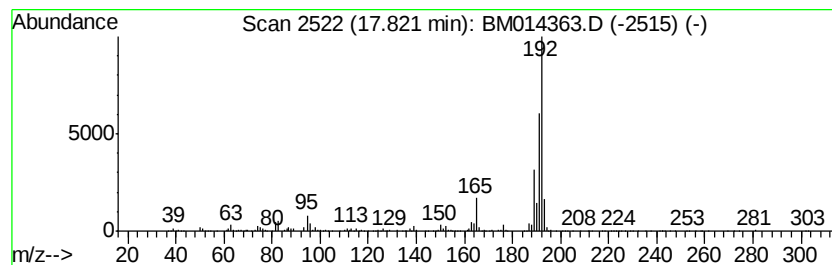
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 16 Phenanthrene, 1-methyl- Concentration Rank 4

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 17.82 | 13.64 ng/ul | 1363420 | Phenanthrene-d10 | 16.94 |

| Hit# | of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------|-----|---------|-------------|------|
| 1    |    |   | Phenanthrene, 1-methyl- | 192 | C15H12  | 000832-69-9 | 97   |
| 2    |    |   | Phenanthrene, 1-methyl- | 192 | C15H12  | 000832-69-9 | 96   |
| 3    |    |   | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 95   |
| 4    |    |   | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 95   |
| 5    |    |   | Anthracene, 2-methyl-   | 192 | C15H12  | 000613-12-7 | 94   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

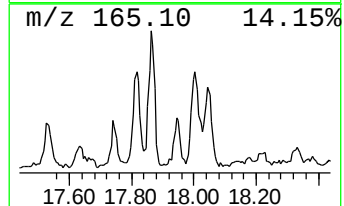
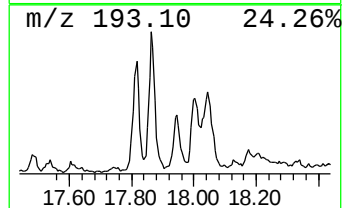
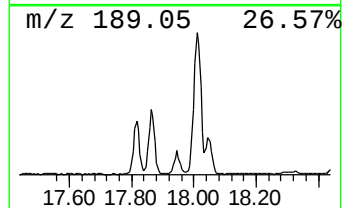
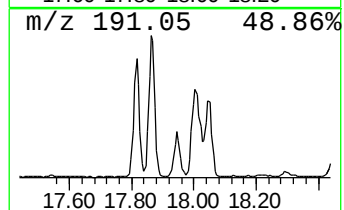
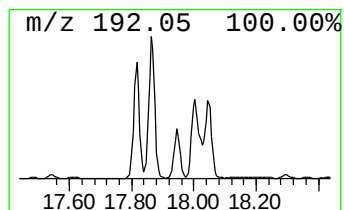
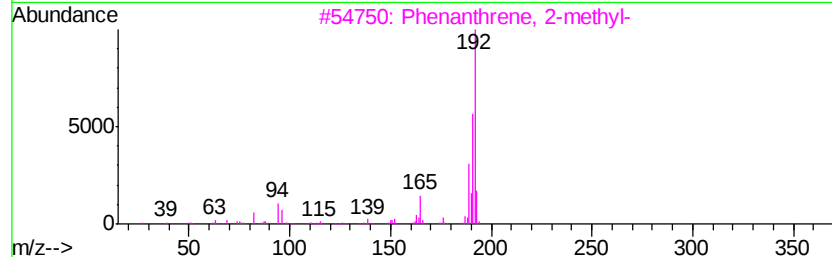
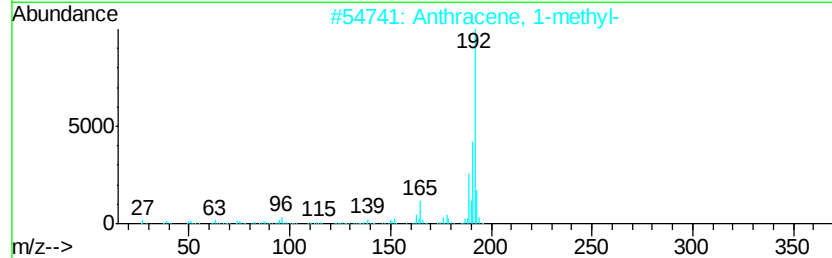
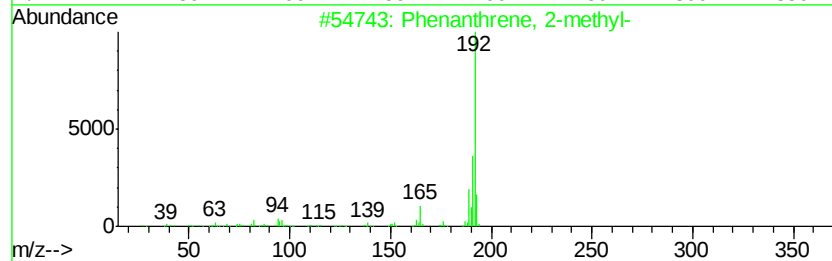
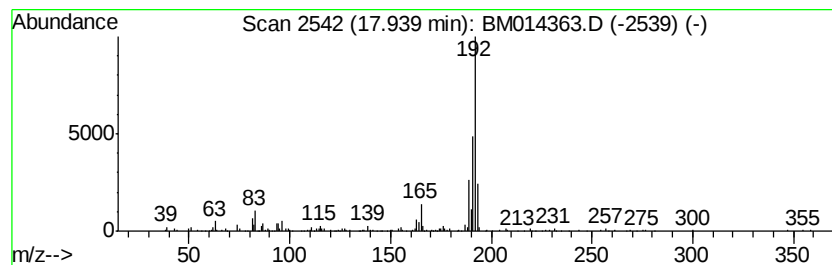
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 18 Phenanthrene, 2-methyl- Concentration Rank 12

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 17.94 | 5.88 ng/ul | 587447 | Phenanthrene-d10 | 16.94 |

| Hit# | of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------|-----|---------|-------------|------|
| 1    |    |   | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 95   |
| 2    |    |   | Anthracene, 1-methyl-   | 192 | C15H12  | 000610-48-0 | 95   |
| 3    |    |   | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 93   |
| 4    |    |   | Anthracene, 2-methyl-   | 192 | C15H12  | 000613-12-7 | 91   |
| 5    |    |   | Anthracene, 9-methyl-   | 192 | C15H12  | 000779-02-2 | 91   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

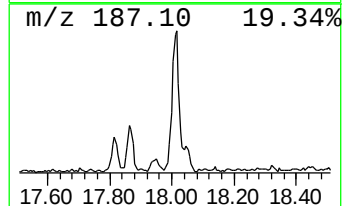
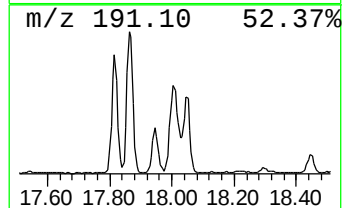
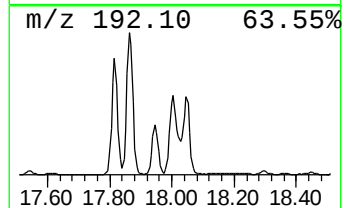
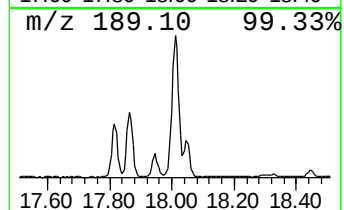
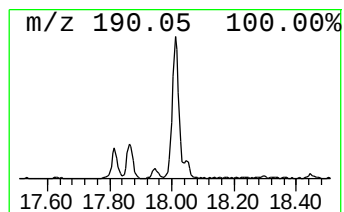
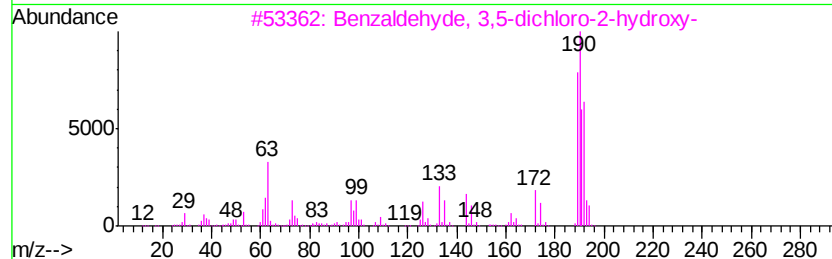
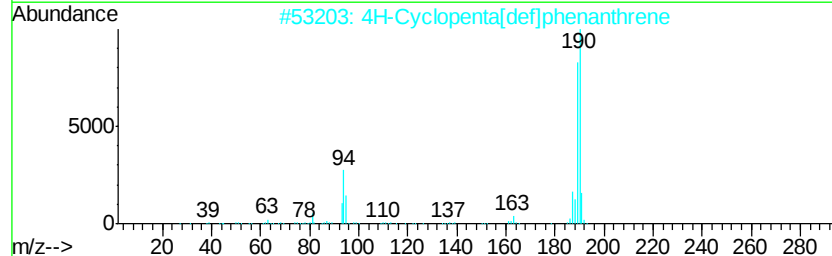
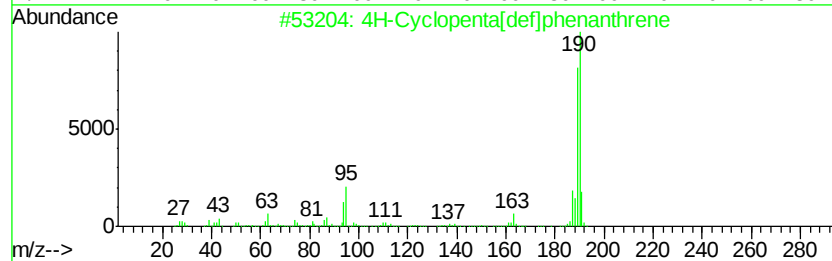
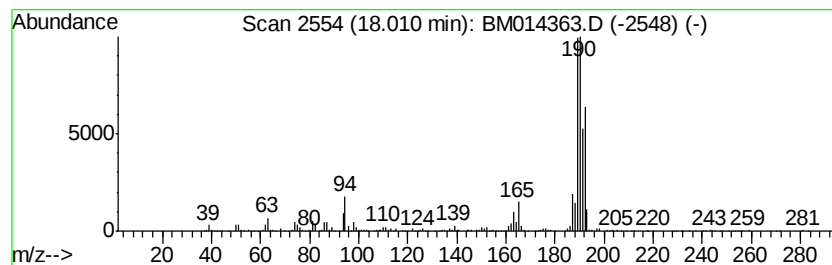
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 19 4H-Cyclopenta[def]phenanthrene Concentration Rank 3

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 18.01 | 22.28 ng/ul | 2226430 | Phenanthrene-d10 | 16.94 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#        | Qual |
|------|----|-------------------------------------|-----|-----------|-------------|------|
| 1    | 5  | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10    | 000203-64-5 | 64   |
| 2    |    | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10    | 000203-64-5 | 58   |
| 3    |    | Benzaldehyde, 3,5-dichloro-2-hyd... | 190 | C7H4Cl2O2 | 000090-60-8 | 50   |
| 4    |    | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10    | 000203-64-5 | 50   |
| 5    |    | 9-(Chloromethyl)anthracene          | 226 | C15H11Cl  | 024463-19-2 | 47   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

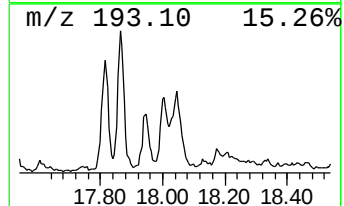
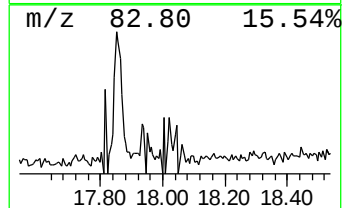
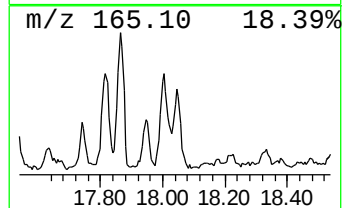
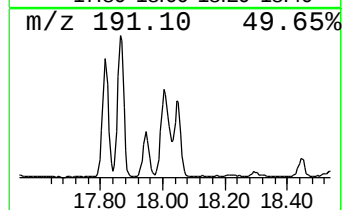
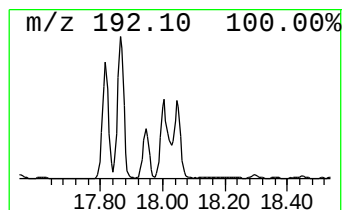
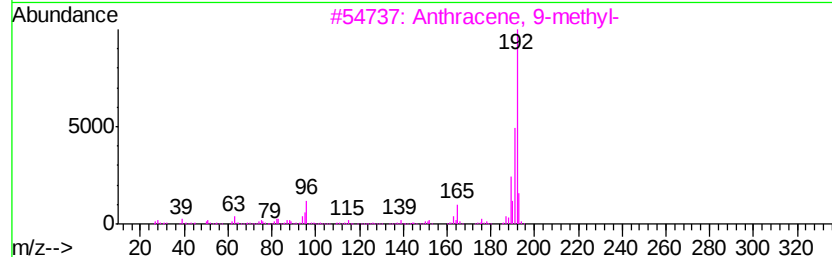
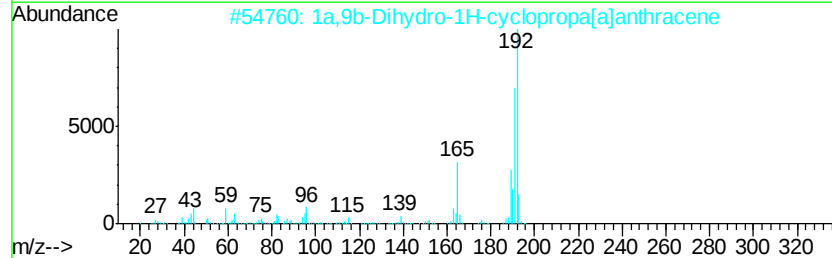
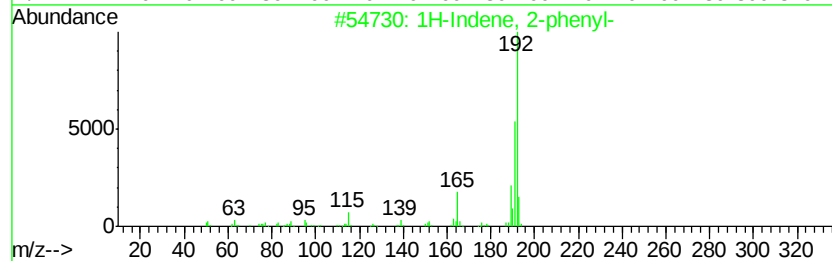
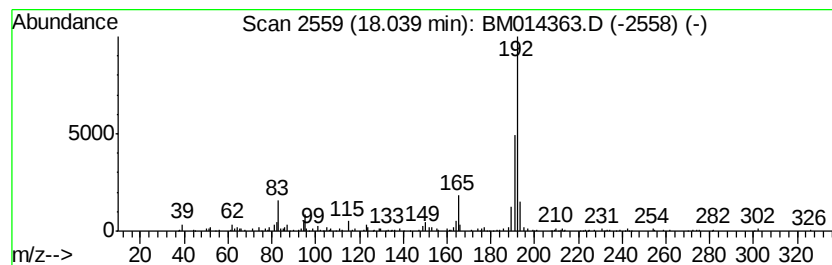
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 20 1H-Indene, 2-phenyl- Concentration Rank 9

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.04 | 8.65 ng/ul | 863975 | Phenanthrene-d10 | 16.94 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 1H-Indene, 2-phenyl-                | 192 | C15H12  | 004505-48-0 | 87   |
| 2    |    | 1a,9b-Dihydro-1H-cyclopropa[a]an... | 192 | C15H12  | 006109-24-6 | 87   |
| 3    |    | Anthracene, 9-methyl-               | 192 | C15H12  | 000779-02-2 | 87   |
| 4    |    | Anthracene, 2-methyl-               | 192 | C15H12  | 000613-12-7 | 87   |
| 5    |    | Anthracene, 1-methyl-               | 192 | C15H12  | 000610-48-0 | 87   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

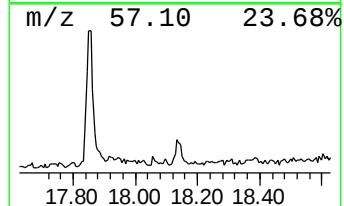
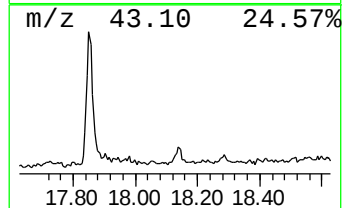
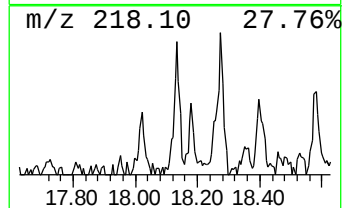
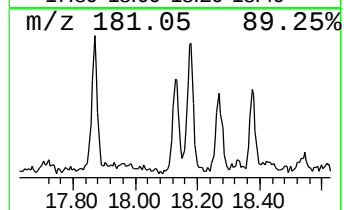
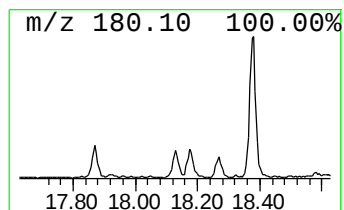
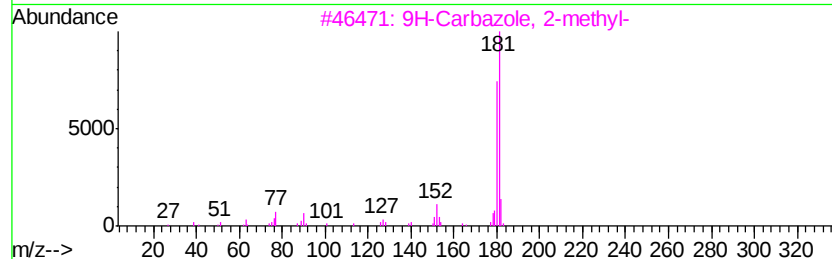
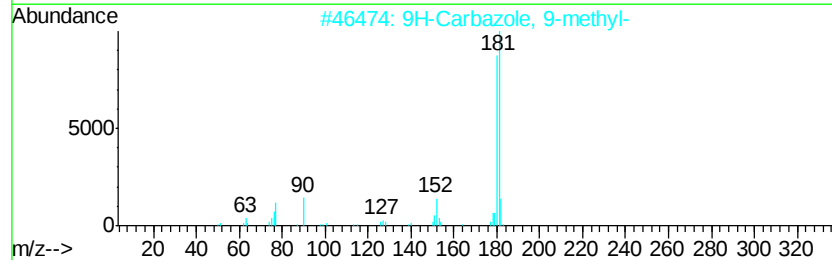
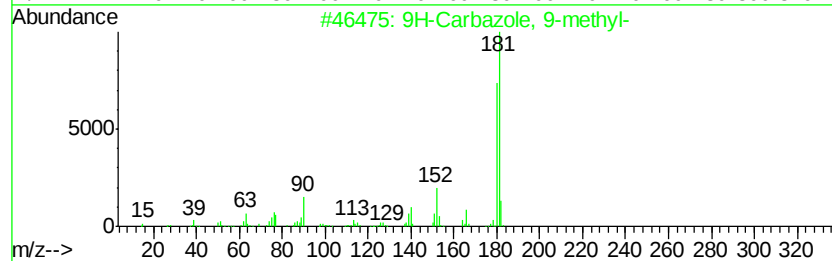
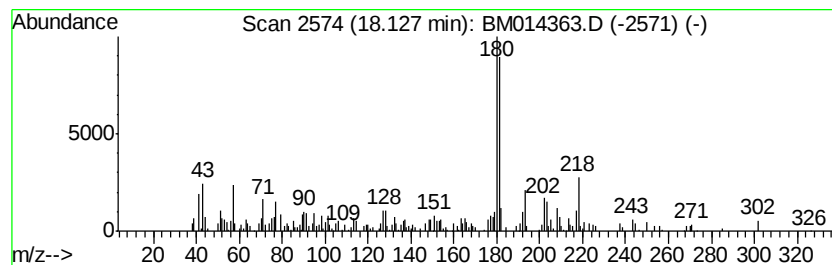
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 21 9H-Carbazole, 9-methyl- Concentration Rank 31

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.13 | 2.43 ng/ul | 242806 | Phenanthrene-d10 | 16.94 |

| Hit# | of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------|-----|---------|-------------|------|
| 1    |    |   | 9H-Carbazole, 9-methyl- | 181 | C13H11N | 001484-12-4 | 70   |
| 2    |    |   | 9H-Carbazole, 9-methyl- | 181 | C13H11N | 001484-12-4 | 70   |
| 3    |    |   | 9H-Carbazole, 2-methyl- | 181 | C13H11N | 003652-91-3 | 55   |
| 4    |    |   | 9H-Carbazole, 2-methyl- | 181 | C13H11N | 003652-91-3 | 55   |
| 5    |    |   | 3-Methylcarbazole       | 181 | C13H11N | 004630-20-0 | 55   |



Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

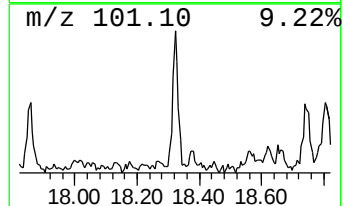
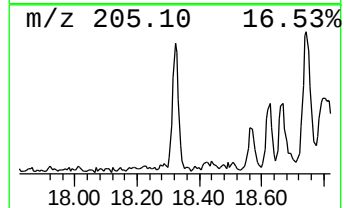
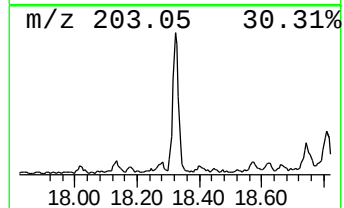
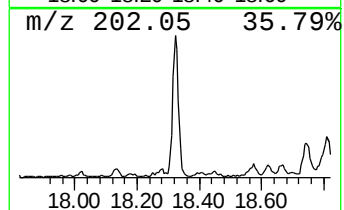
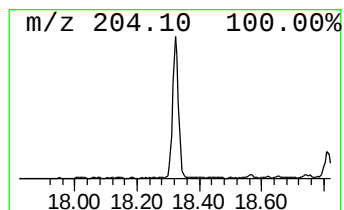
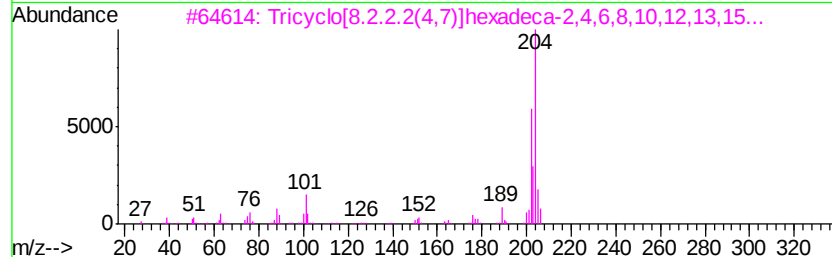
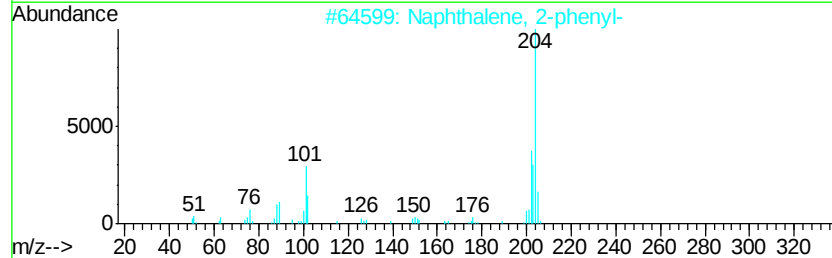
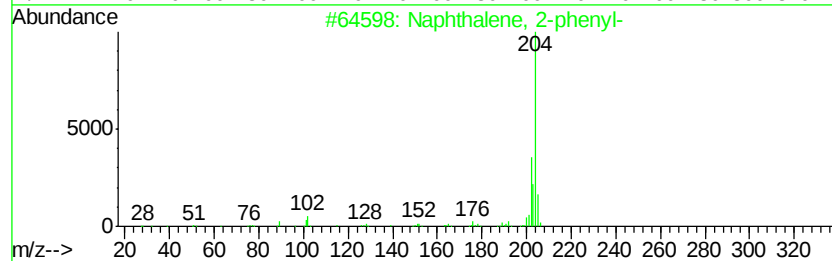
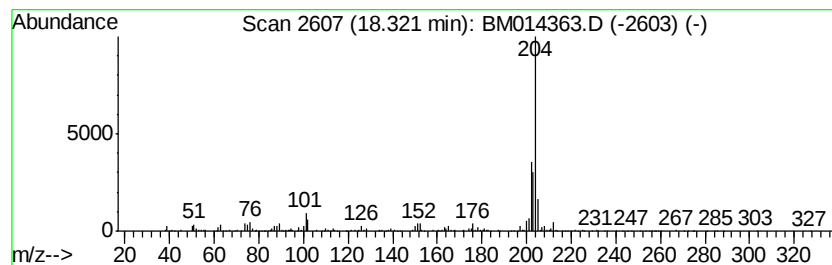
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TIC Integration Parameters: LSCINT.P

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Peak Number 22 Naphthalene, 2-phenyl- Concentration Rank 10

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.32 | 7.99 ng/ul | 798379 | Phenanthrene-d10 | 16.94 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, 2-phenyl-              | 204 | C16H12  | 000612-94-2 | 81   |
| 2    |    | Naphthalene, 2-phenyl-              | 204 | C16H12  | 000612-94-2 | 81   |
| 3    |    | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12  | 006572-60-7 | 81   |
| 4    |    | Naphthalene, 2-phenyl-              | 204 | C16H12  | 000612-94-2 | 81   |
| 5    |    | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24  | 005672-97-9 | 78   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

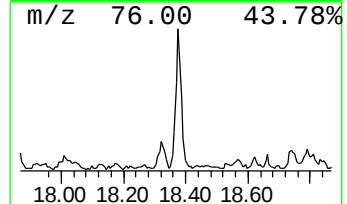
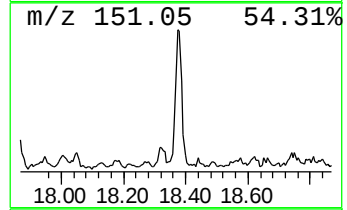
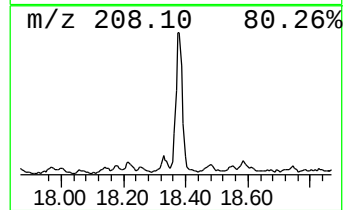
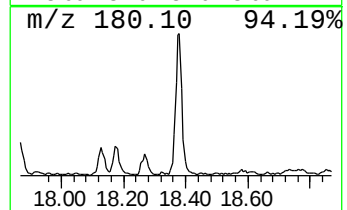
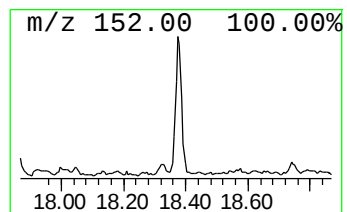
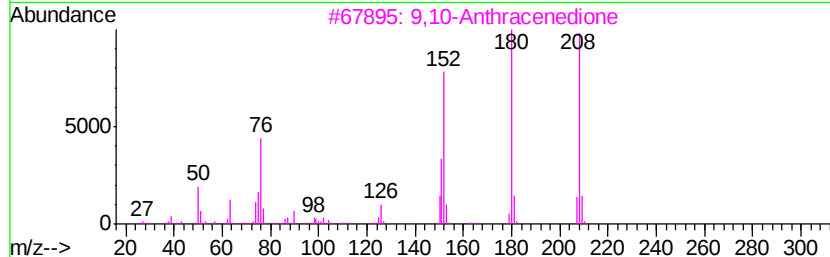
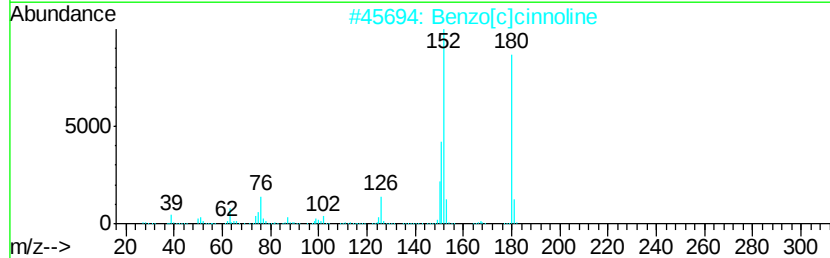
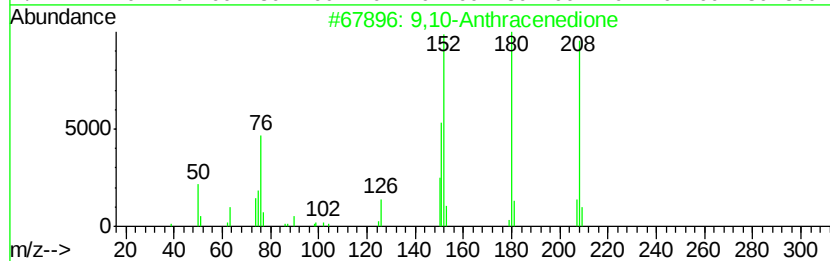
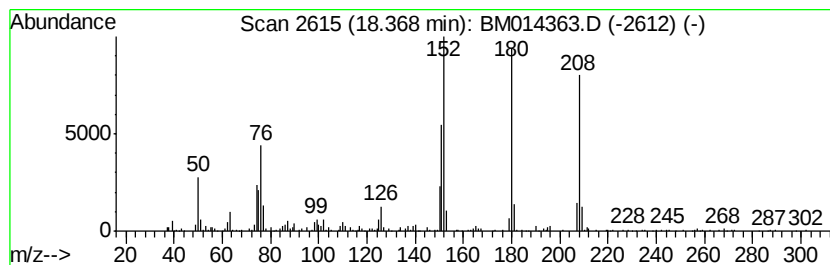
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 23 9,10-Anthracenedione Concentration Rank 7

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.37 | 9.84 ng/ul | 983026 | Phenanthrene-d10 | 16.94 |

| Hit# | of | 5 | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|---|----------------------|-----|---------|-------------|------|
| 1    |    |   | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 95   |
| 2    |    |   | Benzo[c]cinnoline    | 180 | C12H8N2 | 000230-17-1 | 95   |
| 3    |    |   | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 93   |
| 4    |    |   | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 90   |
| 5    |    |   | 9H-Fluoren-9-one     | 180 | C13H8O  | 000486-25-9 | 86   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

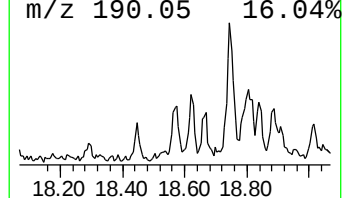
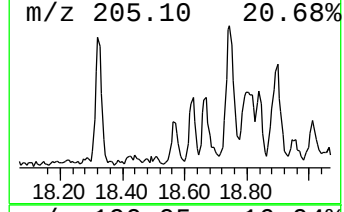
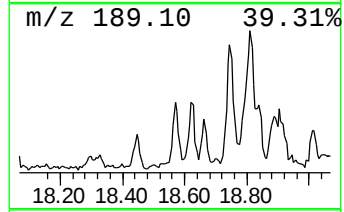
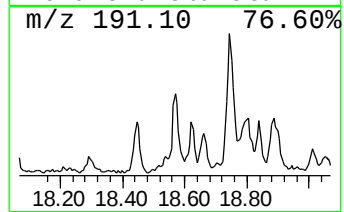
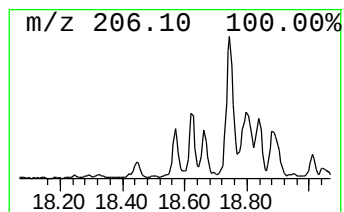
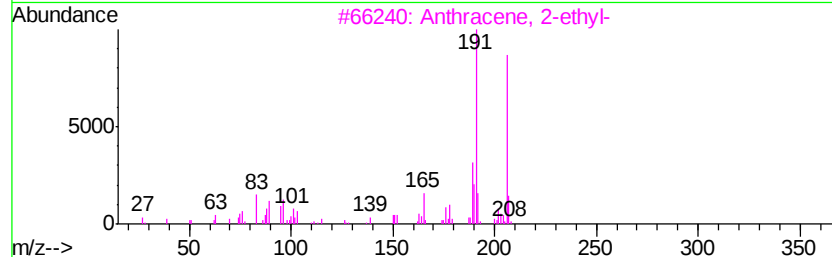
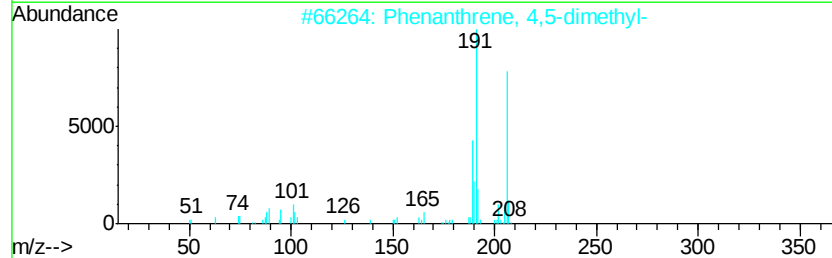
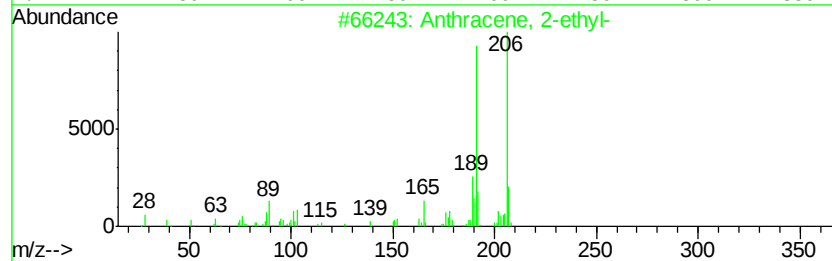
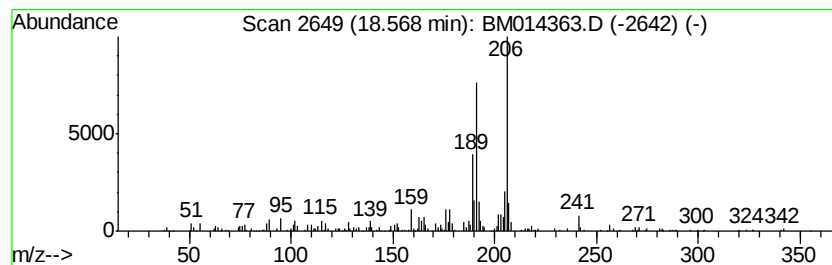
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 24 Anthracene, 2-ethyl- Concentration Rank 14

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.57 | 5.29 ng/ul | 528519 | Phenanthrene-d10 | 16.94 |

| Hit# | of | Tentative ID                  | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------|-----|---------|-------------|------|
| 1    | 5  | Anthracene, 2-ethyl-          | 206 | C16H14  | 052251-71-5 | 90   |
| 2    |    | Phenanthrene, 4,5-dimethyl-   | 206 | C16H14  | 003674-69-9 | 90   |
| 3    |    | Anthracene, 2-ethyl-          | 206 | C16H14  | 052251-71-5 | 87   |
| 4    |    | Phenanthrene, 2,3-dimethyl-   | 206 | C16H14  | 003674-65-5 | 87   |
| 5    |    | 1H-Indene, 2-methyl-3-phenyl- | 206 | C16H14  | 035099-60-6 | 87   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

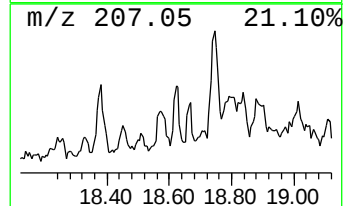
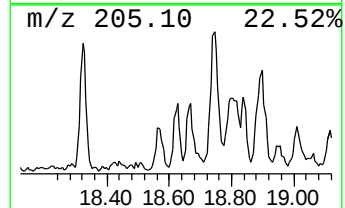
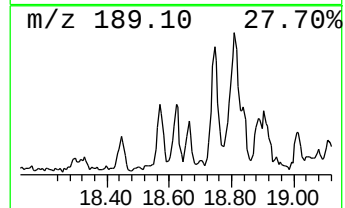
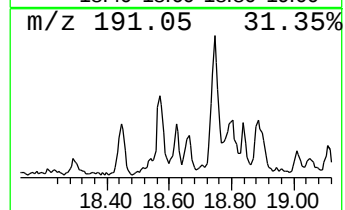
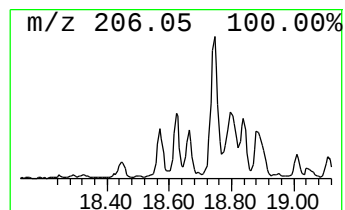
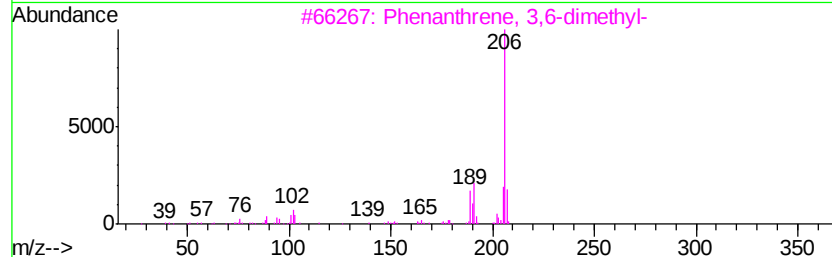
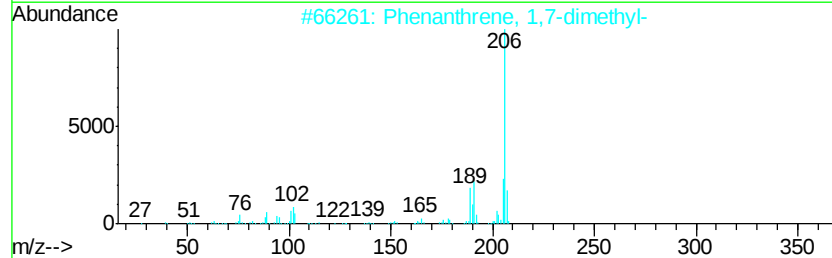
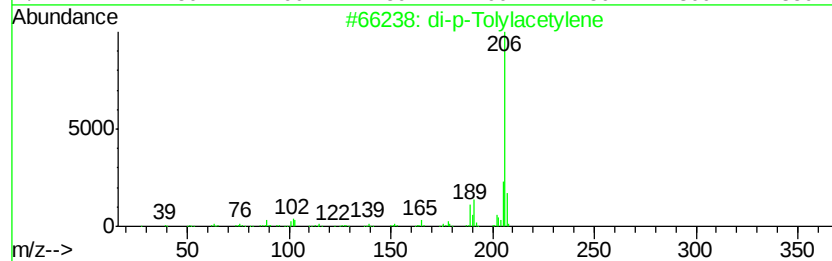
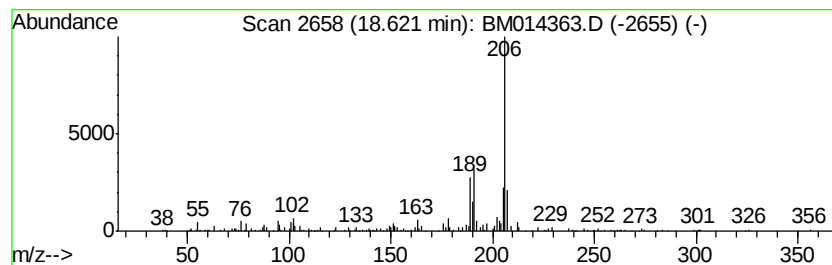
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 25 di-p-Tolylacetylene Concentration Rank 22

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.62 | 3.22 ng/ul | 321571 | Phenanthrene-d10 | 16.94 |

| Hit# | of | Tentative ID                | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------------|-----|---------|-------------|------|
| 1    | 5  | di-p-Tolylacetylene         | 206 | C16H14  | 002789-88-0 | 95   |
| 2    |    | Phenanthrene, 1,7-dimethyl- | 206 | C16H14  | 000483-87-4 | 94   |
| 3    |    | Phenanthrene, 3,6-dimethyl- | 206 | C16H14  | 001576-67-6 | 94   |
| 4    |    | Phenanthrene, 2,7-dimethyl- | 206 | C16H14  | 001576-69-8 | 94   |
| 5    |    | Phenanthrene, 3,6-dimethyl- | 206 | C16H14  | 001576-67-6 | 93   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

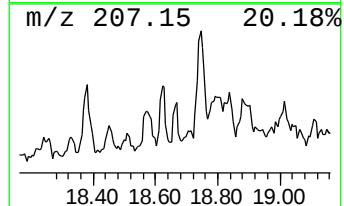
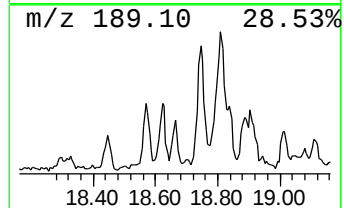
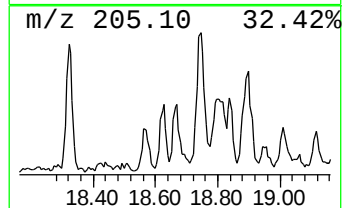
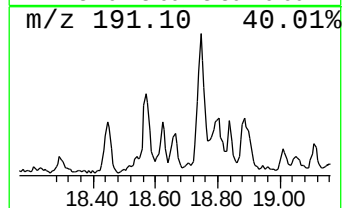
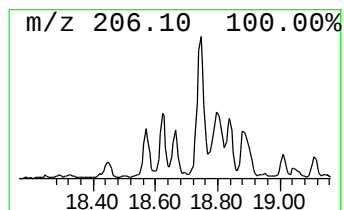
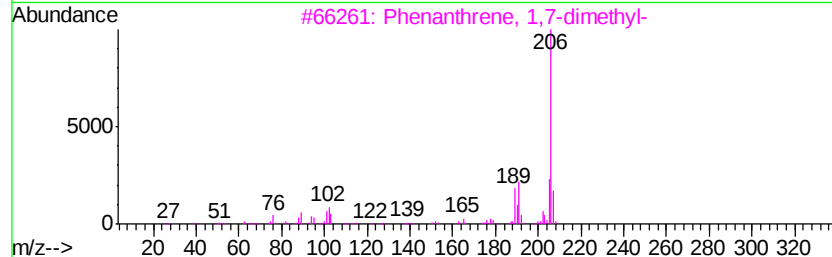
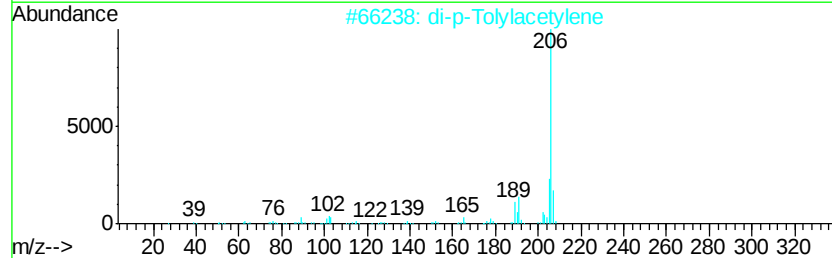
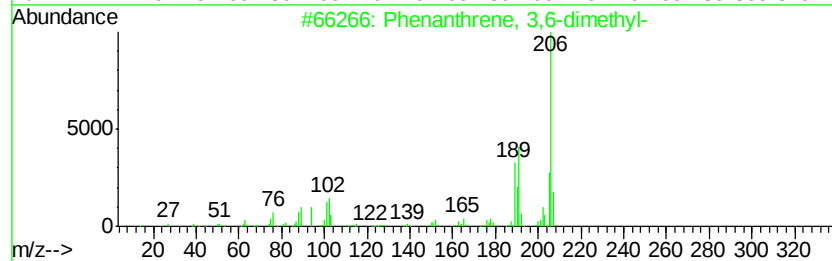
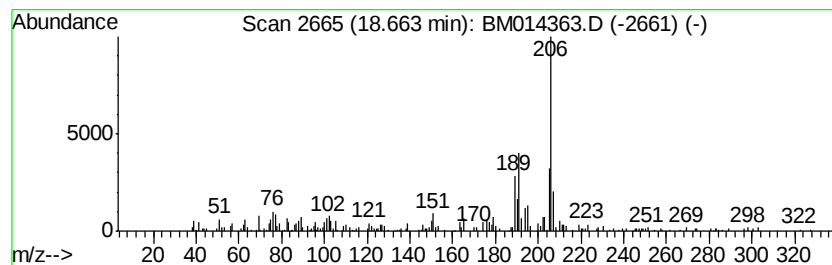
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 26 Phenanthrene, 3,6-dimethyl- Concentration Rank 23

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.66 | 3.17 ng/ul | 316608 | Phenanthrene-d10 | 16.94 |

| Hit# | of | Tentative ID                       | MW  | MolForm | CAS#        | Qual |
|------|----|------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Phenanthrene, 3,6-dimethyl-        | 206 | C16H14  | 001576-67-6 | 91   |
| 2    |    | di-p-Tolylacetylene                | 206 | C16H14  | 002789-88-0 | 91   |
| 3    |    | Phenanthrene, 1,7-dimethyl-        | 206 | C16H14  | 000483-87-4 | 89   |
| 4    |    | Naphthalene, 1,2-dihydro-4-phenyl- | 206 | C16H14  | 007469-40-1 | 87   |
| 5    |    | Phenanthrene, 3,6-dimethyl-        | 206 | C16H14  | 001576-67-6 | 83   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

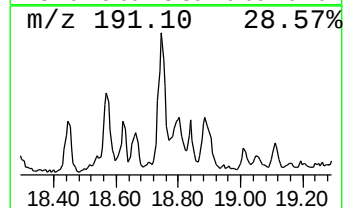
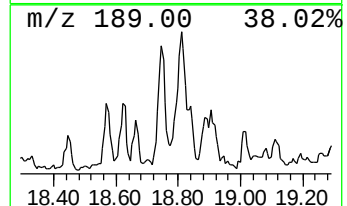
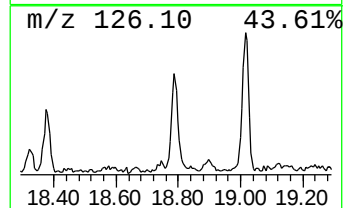
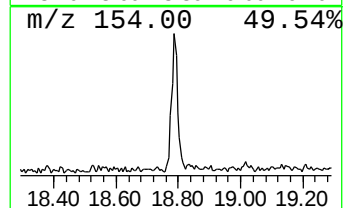
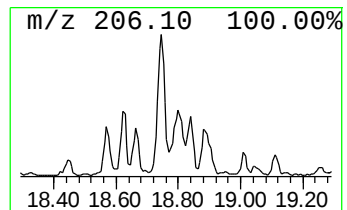
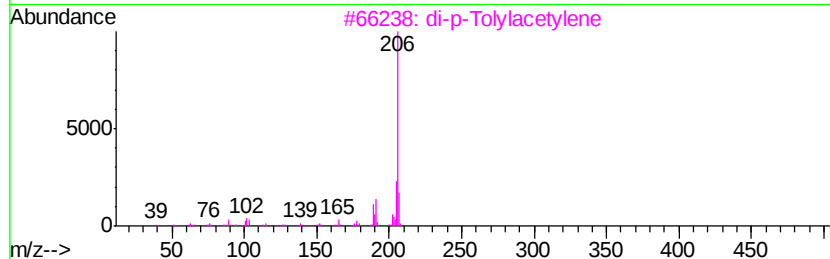
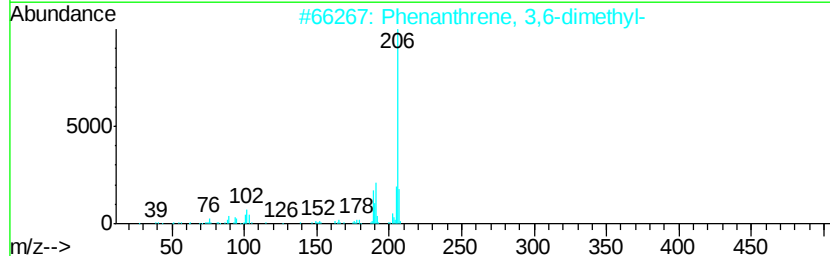
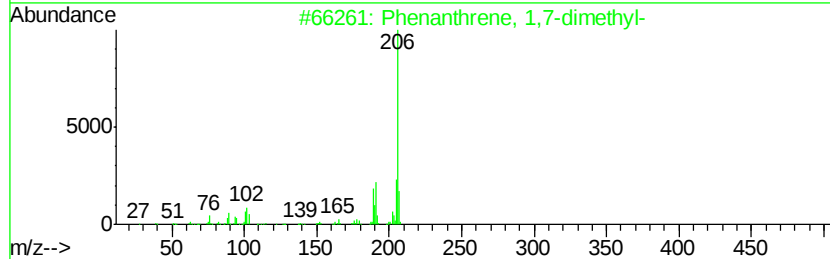
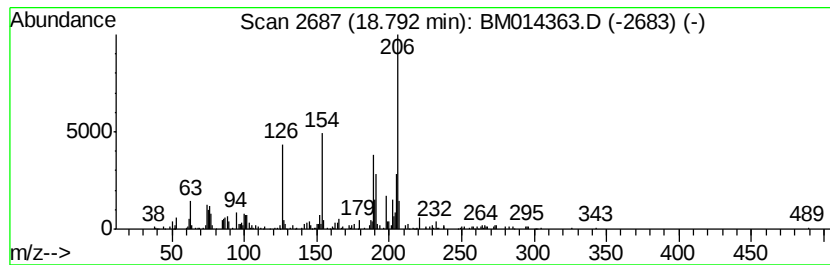
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 28 Phenanthrene, 1,7-dimethyl- Concentration Rank 34

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.79 | 2.23 ng/ul | 223336 | Phenanthrene-d10 | 16.94 |

| Hit# | of | Tentative ID                | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------------|-----|---------|-------------|------|
| 1    | 5  | Phenanthrene, 1,7-dimethyl- | 206 | C16H14  | 000483-87-4 | 70   |
| 2    |    | Phenanthrene, 3,6-dimethyl- | 206 | C16H14  | 001576-67-6 | 51   |
| 3    |    | di-p-Tolylacetylene         | 206 | C16H14  | 002789-88-0 | 51   |
| 4    |    | Naphthalic anhydride        | 198 | C12H6O3 | 000081-84-5 | 50   |
| 5    |    | Naphthalic anhydride        | 198 | C12H6O3 | 000081-84-5 | 38   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

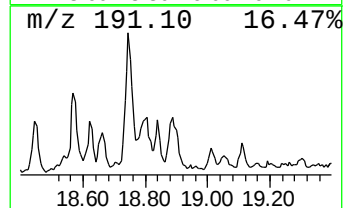
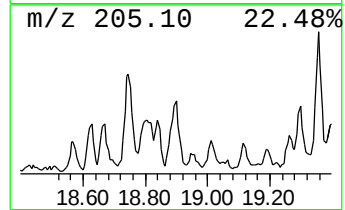
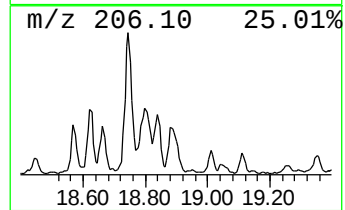
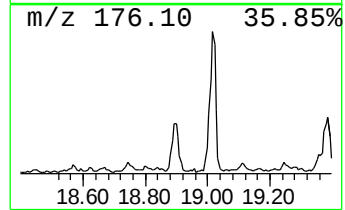
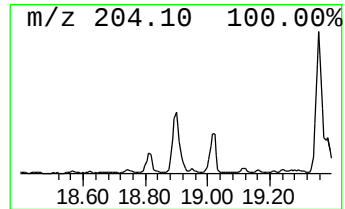
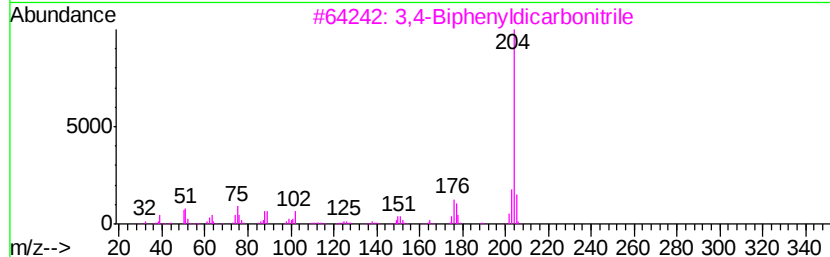
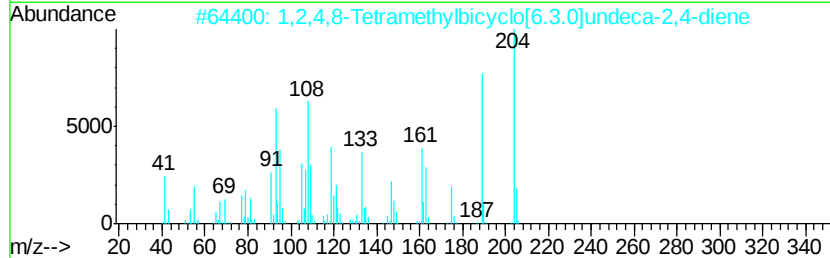
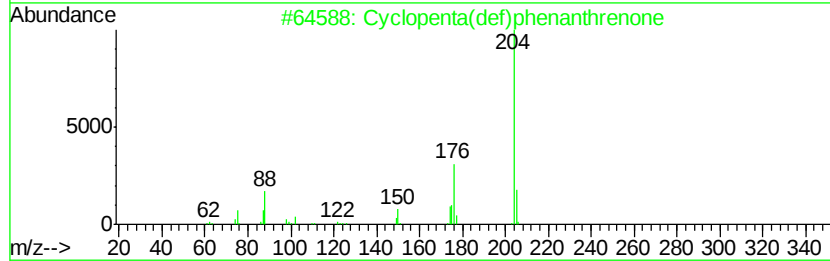
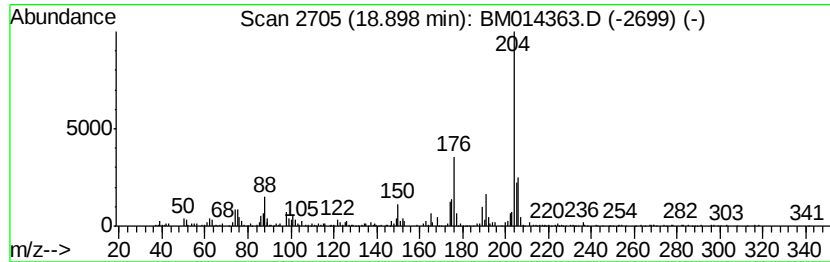
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 30 Cyclopenta(def)phenanthrenone Concentration Rank 6

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 18.90 | 10.22 ng/ul | 1021660 | Phenanthrene-d10 | 16.94 |

| Hit# | of | Tentative ID                         | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclopenta(def)phenanthrenone        | 204 | C15H8O  | 005737-13-3 | 93   |
| 2    |    | 1,2,4,8-Tetramethylbicyclo[6.3.0...] | 204 | C15H24  | 137235-51-9 | 55   |
| 3    |    | 3,4-Biphenyldicarbonitrile           | 204 | C14H8N2 | 004128-63-6 | 50   |
| 4    |    | [1,1'-Biphenyl]-4,4'-dicarbonitrile  | 204 | C14H8N2 | 001591-30-6 | 47   |
| 5    |    | [1,1'-Biphenyl]-2,2'-dicarbonitrile  | 204 | C14H8N2 | 004341-02-0 | 47   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

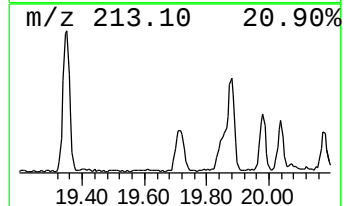
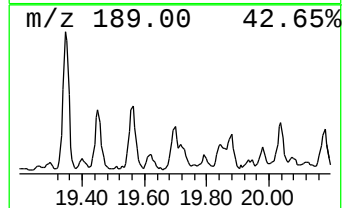
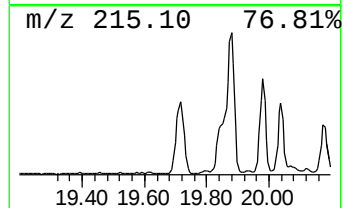
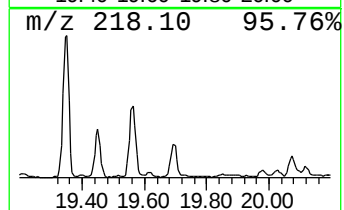
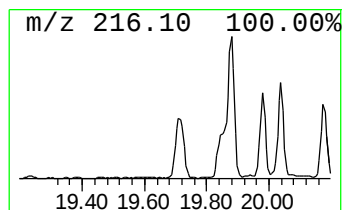
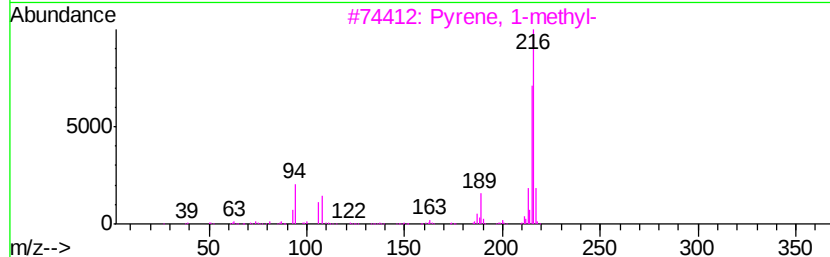
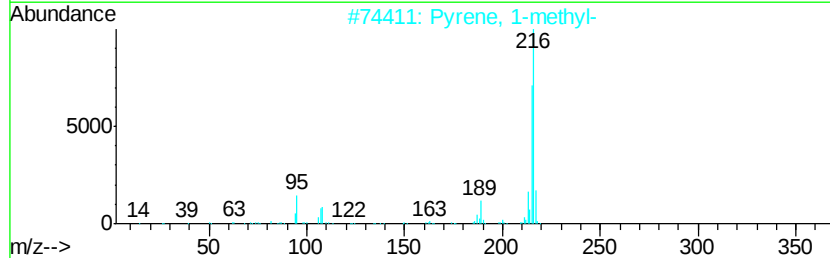
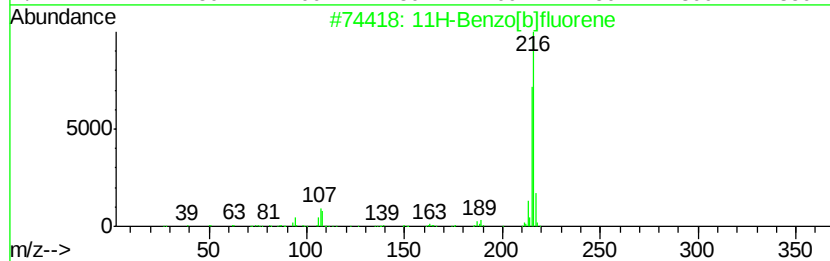
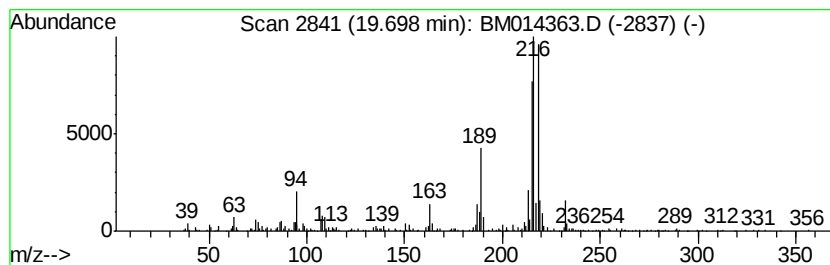
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 31 11H-Benzo[b]fluorene Concentration Rank 29

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 19.70 | 2.61 ng/ul | 1412500 | Chrysene-d12     | 21.16 |

| Hit# | of | 5 | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|---|----------------------|-----|---------|-------------|------|
| 1    |    |   | 11H-Benzo[b]fluorene | 216 | C17H12  | 000243-17-4 | 91   |
| 2    |    |   | Pyrene, 1-methyl-    | 216 | C17H12  | 002381-21-7 | 91   |
| 3    |    |   | Pyrene, 1-methyl-    | 216 | C17H12  | 002381-21-7 | 89   |
| 4    |    |   | Pyrene, 1-methyl-    | 216 | C17H12  | 002381-21-7 | 81   |
| 5    |    |   | Pyrene, 1-methyl-    | 216 | C17H12  | 002381-21-7 | 78   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

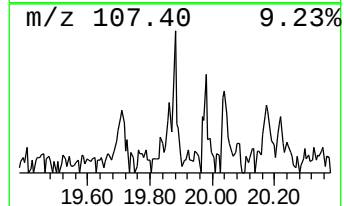
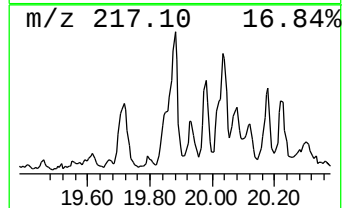
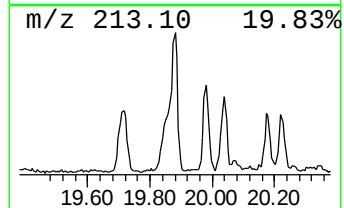
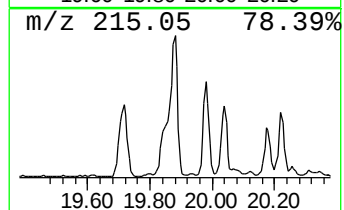
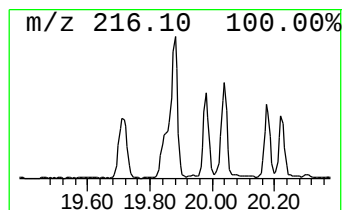
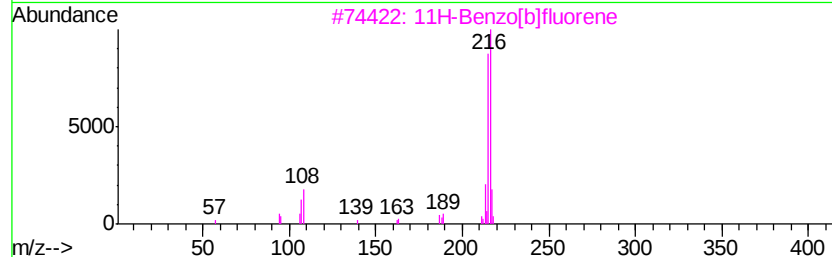
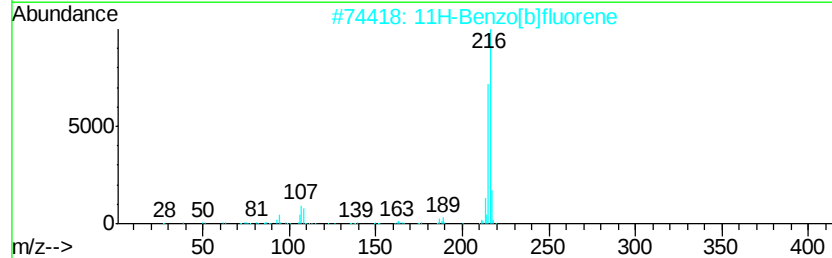
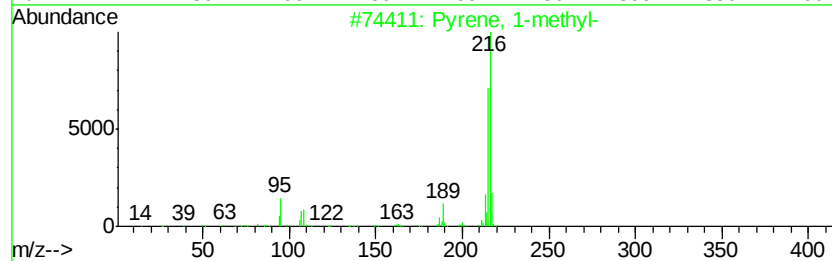
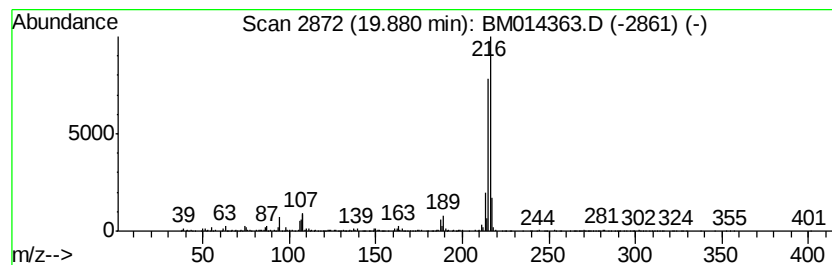
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 32 Pyrene, 1-methyl- Concentration Rank 15

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 19.88 | 5.06 ng/ul | 2736540 | Chrysene-d12     | 21.16 |

| Hit# | of | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------|-----|---------|-------------|------|
| 1    | 5  | Pyrene, 1-methyl-       | 216 | C17H12  | 002381-21-7 | 95   |
| 2    |    | 11H-Benzo[b]fluorene    | 216 | C17H12  | 000243-17-4 | 94   |
| 3    |    | 11H-Benzo[b]fluorene    | 216 | C17H12  | 000243-17-4 | 93   |
| 4    |    | Fluoranthene, 2-methyl- | 216 | C17H12  | 033543-31-6 | 93   |
| 5    |    | Pyrene, 1-methyl-       | 216 | C17H12  | 002381-21-7 | 91   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

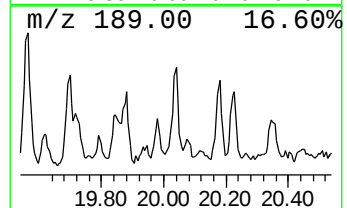
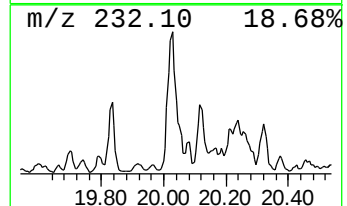
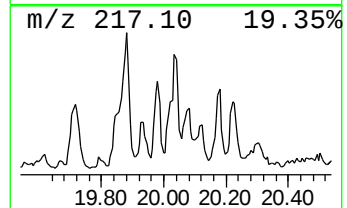
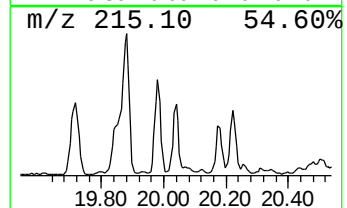
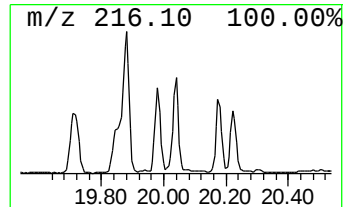
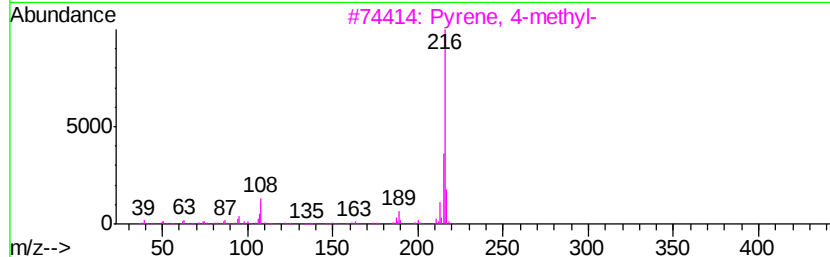
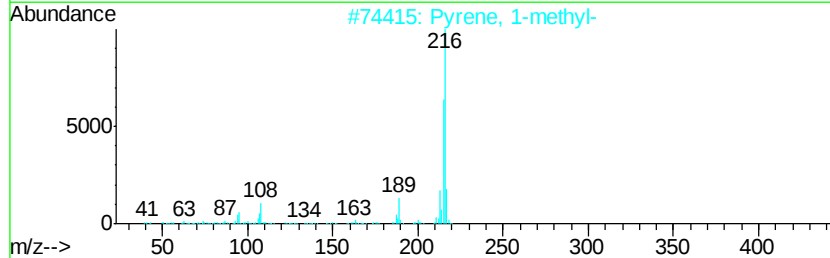
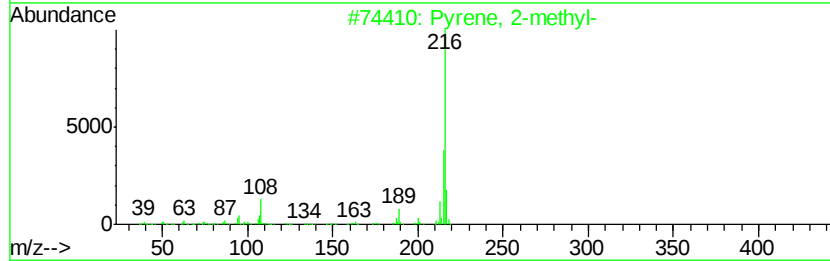
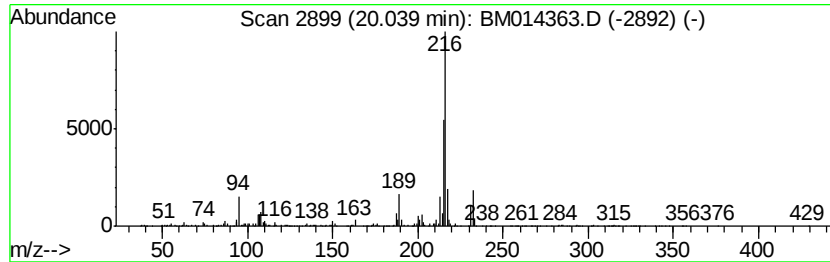
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 33 Pyrene, 2-methyl- Concentration Rank 27

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 20.04 | 2.67 ng/ul | 1441830 | Chrysene-d12     | 21.16 |

| Hit# | of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------|-----|---------|-------------|------|
| 1    |    |   | Pyrene, 2-methyl-       | 216 | C17H12  | 003442-78-2 | 90   |
| 2    |    |   | Pyrene, 1-methyl-       | 216 | C17H12  | 002381-21-7 | 90   |
| 3    |    |   | Pyrene, 4-methyl-       | 216 | C17H12  | 003353-12-6 | 86   |
| 4    |    |   | Pyrene, 4-methyl-       | 216 | C17H12  | 003353-12-6 | 86   |
| 5    |    |   | Fluoranthene, 2-methyl- | 216 | C17H12  | 033543-31-6 | 86   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

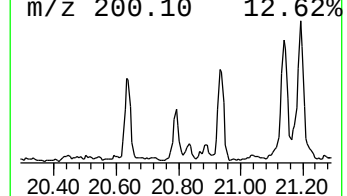
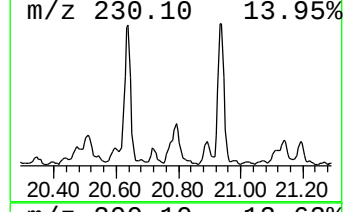
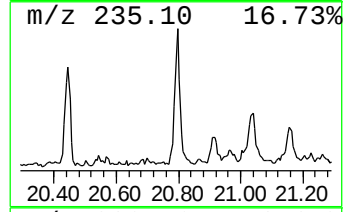
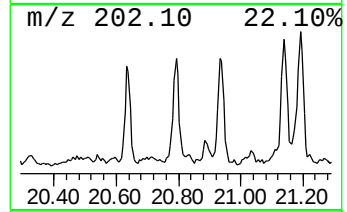
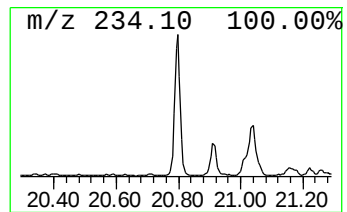
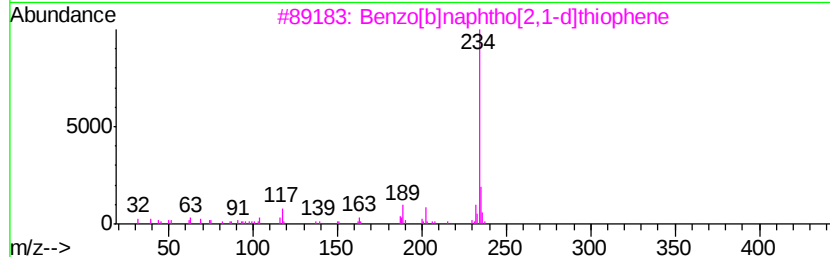
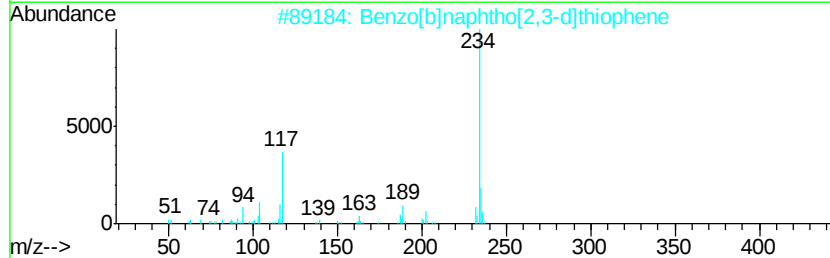
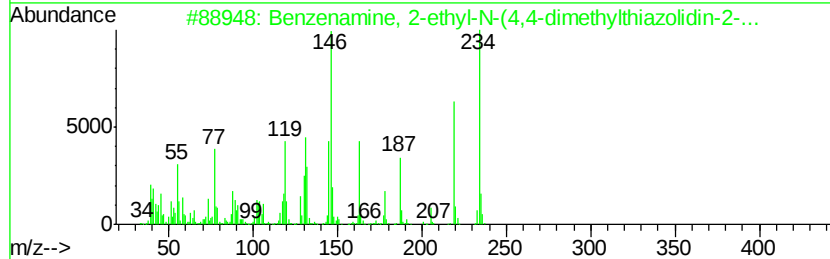
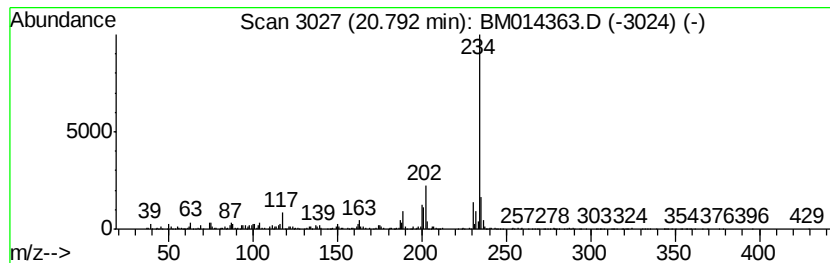
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 34 Benzenamine, 2-ethyl-N-(4,4... Concentration Rank 33

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 20.79 | 2.28 ng/ul | 1233050 | Chrysene-d12     | 21.16 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Benzenamine, 2-ethyl-N-(4,4-dime... | 234 | C13H18N2S | 1000272-26-2 | 87   |
| 2    |    | Benzo[b]naphtho[2,3-d]thiophene     | 234 | C16H10S   | 000243-46-9  | 76   |
| 3    |    | Benzo[b]naphtho[2,1-d]thiophene     | 234 | C16H10S   | 000239-35-0  | 76   |
| 4    |    | Benzo[b]naphtho[2,1-d]thiophene     | 234 | C16H10S   | 000239-35-0  | 70   |
| 5    |    | Anthra(1,2-b)thiophene              | 234 | C16H10S   | 000227-86-1  | 62   |



Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
Data File : BM014363.D  
Acq On : 26 Feb 2018 19:12  
Operator : SJ/JU  
Sample : J1631-04  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BE5Y7

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

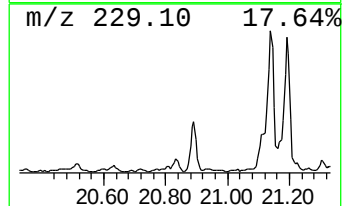
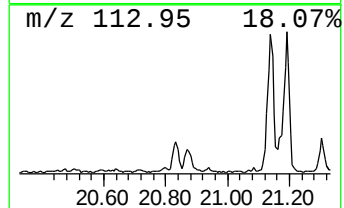
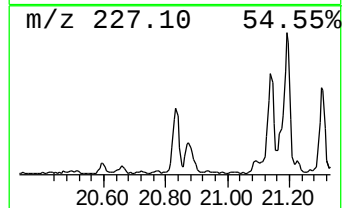
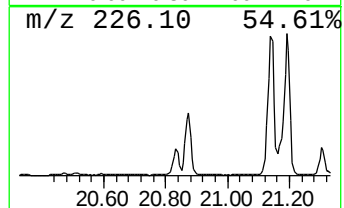
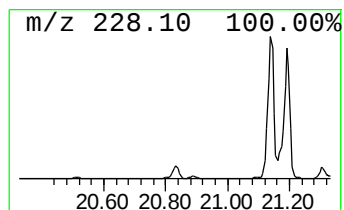
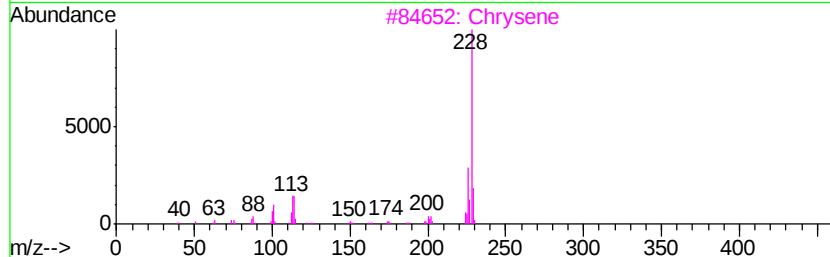
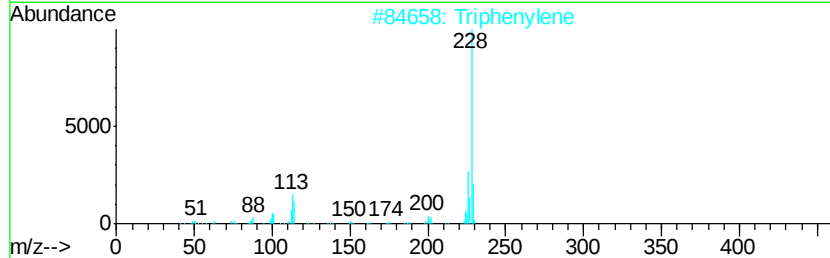
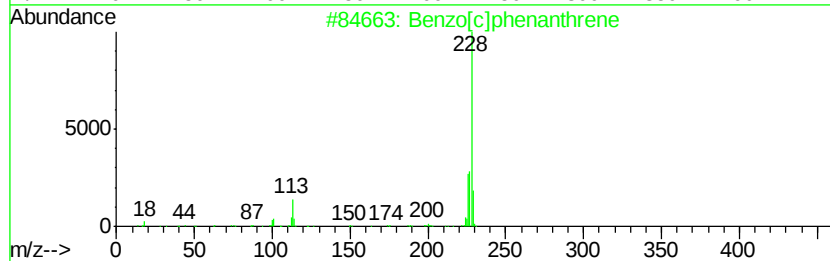
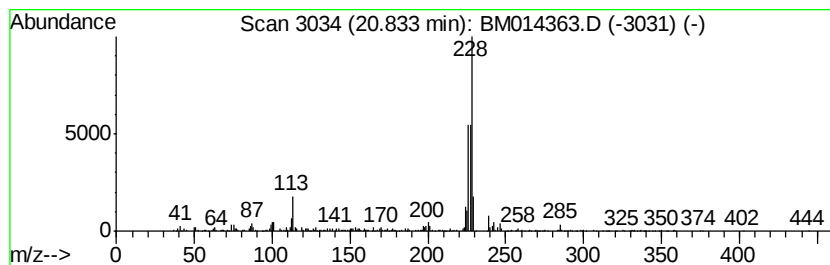
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 35 Benzo[c]phenanthrene Concentration Rank 36

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 20.83 | 2.14 ng/ul | 1159610 | Chrysene-d12     | 21.16 |

| Hit# | of | Tentative ID                       | MW  | MolForm | CAS#        | Qual |
|------|----|------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[c]phenanthrene               | 228 | C18H12  | 000195-19-7 | 64   |
| 2    |    | Triphenylene                       | 228 | C18H12  | 000217-59-4 | 55   |
| 3    |    | Chrysene                           | 228 | C18H12  | 000218-01-9 | 55   |
| 4    |    | Cyclopenta(cd)pyrene, 3,4-dihydro- | 228 | C18H12  | 025732-74-5 | 52   |
| 5    |    | Triphenylene                       | 228 | C18H12  | 000217-59-4 | 46   |



Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA\_M\DATA\BM022618\  
 Data File : BM014363.D  
 Acq On : 26 Feb 2018 19:12  
 Operator : SJ/JU  
 Sample : J1631-04  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 BE5Y7

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

| TIC Top Hit name     | RT    | EstConc | Units | Response | --Internal Standard-- |       |          |      |
|----------------------|-------|---------|-------|----------|-----------------------|-------|----------|------|
|                      |       |         |       |          | #                     | RT    | Resp     | Conc |
| 3-Tetradecene, (Z)-  | 11.56 | 2.2     | ng/ul | 167207   | 2                     | 10.29 | 1542800  | 20.0 |
| 1,4-Methanonaphth... | 12.19 | 3.0     | ng/ul | 231031   | 2                     | 10.29 | 1542800  | 20.0 |
| Naphthalene, 1,7-... | 13.50 | 3.1     | ng/ul | 281495   | 3                     | 14.18 | 1805470  | 20.0 |
| Naphthalene, 2,3,... | 14.81 | 2.5     | ng/ul | 222256   | 3                     | 14.18 | 1805470  | 20.0 |
| (DEL) Alkane: Str... | 15.05 | 2.0     | ng/ul | 182484   | 3                     | 14.18 | 1805470  | 20.0 |
| 2,4,6-Cycloheptat... | 15.53 | 3.6     | ng/ul | 321956   | 3                     | 14.18 | 1805470  | 20.0 |
| Dibenzofuran, 4-m... | 15.69 | 3.9     | ng/ul | 387839   | 4                     | 16.94 | 1998650  | 20.0 |
| (DEL) Alkane: Str... | 15.92 | 3.3     | ng/ul | 329559   | 4                     | 16.94 | 1998650  | 20.0 |
| 9H-Fluorene, 1-me... | 16.25 | 3.4     | ng/ul | 340248   | 4                     | 16.94 | 1998650  | 20.0 |
| 9H-Fluoren-9-one     | 16.60 | 5.5     | ng/ul | 554674   | 4                     | 16.94 | 1998650  | 20.0 |
| Dibenzothiophene     | 16.76 | 7.2     | ng/ul | 714319   | 4                     | 16.94 | 1998650  | 20.0 |
| 9H-Fluorene, 2,3-... | 17.15 | 2.9     | ng/ul | 288602   | 4                     | 16.94 | 1998650  | 20.0 |
| Dibenzo[a,e]cyclo... | 17.46 | 2.6     | ng/ul | 261333   | 4                     | 16.94 | 1998650  | 20.0 |
| 4-Methylnaphtho[1... | 17.52 | 4.0     | ng/ul | 394477   | 4                     | 16.94 | 1998650  | 20.0 |
| .alpha.-[1-Indany... | 17.66 | 2.1     | ng/ul | 210213   | 4                     | 16.94 | 1998650  | 20.0 |
| Phenanthrene, 1-m... | 17.82 | 13.6    | ng/ul | 1363420  | 4                     | 16.94 | 1998650  | 20.0 |
| Phenanthrene, 2-m... | 17.94 | 5.9     | ng/ul | 587447   | 4                     | 16.94 | 1998650  | 20.0 |
| 4H-Cyclopenta[def... | 18.01 | 22.3    | ng/ul | 2226430  | 4                     | 16.94 | 1998650  | 20.0 |
| 1H-Indene, 2-phenyl- | 18.04 | 8.7     | ng/ul | 863975   | 4                     | 16.94 | 1998650  | 20.0 |
| 9H-Carbazole, 9-m... | 18.13 | 2.4     | ng/ul | 242806   | 4                     | 16.94 | 1998650  | 20.0 |
| Naphthalene, 2-ph... | 18.32 | 8.0     | ng/ul | 798379   | 4                     | 16.94 | 1998650  | 20.0 |
| 9,10-Anthracenedione | 18.37 | 9.8     | ng/ul | 983026   | 4                     | 16.94 | 1998650  | 20.0 |
| Anthracene, 2-ethyl- | 18.57 | 5.3     | ng/ul | 528519   | 4                     | 16.94 | 1998650  | 20.0 |
| di-p-Tolylacetylene  | 18.62 | 3.2     | ng/ul | 321571   | 4                     | 16.94 | 1998650  | 20.0 |
| Phenanthrene, 3,6... | 18.66 | 3.2     | ng/ul | 316608   | 4                     | 16.94 | 1998650  | 20.0 |
| Phenanthrene, 1,7... | 18.79 | 2.2     | ng/ul | 223336   | 4                     | 16.94 | 1998650  | 20.0 |
| Cyclopenta(def)ph... | 18.90 | 10.2    | ng/ul | 1021660  | 4                     | 16.94 | 1998650  | 20.0 |
| 11H-Benzo[b]fluorene | 19.70 | 2.6     | ng/ul | 1412500  | 5                     | 21.16 | 10818900 | 20.0 |
| Pyrene, 1-methyl-    | 19.88 | 5.1     | ng/ul | 2736540  | 5                     | 21.16 | 10818900 | 20.0 |
| Pyrene, 2-methyl-    | 20.04 | 2.7     | ng/ul | 1441830  | 5                     | 21.16 | 10818900 | 20.0 |
| Benzenamine, 2-et... | 20.79 | 2.3     | ng/ul | 1233050  | 5                     | 21.16 | 10818900 | 20.0 |
| Benzo[c]phenanthrene | 20.83 | 2.1     | ng/ul | 1159610  | 5                     | 21.16 | 10818900 | 20.0 |