

Data Path : Z:\HPCHEM1\BNA M\DATA\BM100917\  
 Data File : BM012035.D  
 Acq On : 10 Oct 2017 04:40  
 Operator : SJ/JU  
 Sample : I5533-07  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 DUP-1

## 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-BM100317.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         | 7.004       | 659           | 666         | 680          | rBV      | 861783         | 1645079       | 11.95%          | 0.958%        |
| 2         | 7.175       | 688           | 695         | 705          | rBV      | 674502         | 1112525       | 8.08%           | 0.648%        |
| 3         | 7.375       | 722           | 729         | 739          | rBV      | 943483         | 1615630       | 11.74%          | 0.941%        |
| 4         | 7.846       | 798           | 809         | 822          | rBV      | 1107196        | 1887611       | 13.71%          | 1.099%        |
| 5         | 8.551       | 922           | 929         | 948          | rBV      | 971688         | 1766006       | 12.83%          | 1.028%        |
| 6         | 9.010       | 1000          | 1007        | 1021         | rBV      | 918672         | 1604189       | 11.65%          | 0.934%        |
| 7         | 9.734       | 1122          | 1130        | 1140         | rBV      | 776045         | 1382794       | 10.04%          | 0.805%        |
| 8         | 10.269      | 1214          | 1221        | 1234         | rBV      | 1216197        | 2200154       | 15.98%          | 1.281%        |
| 9         | 10.645      | 1274          | 1285        | 1291         | rBV      | 1594509        | 2765286       | 20.09%          | 1.610%        |
| 10        | 10.786      | 1299          | 1309        | 1326         | rBV      | 780765         | 1601828       | 11.64%          | 0.933%        |
| 11        | 13.898      | 1828          | 1838        | 1842         | rVV      | 2420039        | 3463041       | 25.16%          | 2.016%        |
| 12        | 13.945      | 1842          | 1846        | 1852         | rVB      | 576822         | 822996        | 5.98%           | 0.479%        |
| 13        | 14.186      | 1880          | 1887        | 1900         | rBV      | 2769881        | 4296573       | 31.21%          | 2.501%        |
| 14        | 14.492      | 1927          | 1939        | 1945         | rBV2     | 2508889        | 3919046       | 28.47%          | 2.281%        |
| 15        | 14.557      | 1945          | 1950        | 1957         | rVB      | 234453         | 391651        | 2.84%           | 0.228%        |
| 16        | 14.692      | 1968          | 1973        | 1985         | rBV      | 519005         | 1089692       | 7.92%           | 0.634%        |
| 17        | 14.798      | 1986          | 1991        | 1998         | rVV5     | 58982          | 148248        | 1.08%           | 0.086%        |
| 18        | 14.892      | 1999          | 2007        | 2016         | rVB      | 156791         | 333108        | 2.42%           | 0.194%        |
| 19        | 15.321      | 2076          | 2080        | 2085         | rVB2     | 92631          | 139098        | 1.01%           | 0.081%        |
| 20        | 15.486      | 2099          | 2108        | 2113         | rBV      | 3519898        | 5265017       | 38.24%          | 3.065%        |
| 21        | 15.539      | 2113          | 2117        | 2124         | rVB      | 240657         | 378729        | 2.75%           | 0.220%        |
| 22        | 15.610      | 2124          | 2129        | 2135         | rBV      | 831593         | 1221554       | 8.87%           | 0.711%        |
| 23        | 15.710      | 2141          | 2146        | 2156         | rVB6     | 58111          | 170084        | 1.24%           | 0.099%        |
| 24        | 15.833      | 2162          | 2167        | 2173         | rVB      | 117707         | 190213        | 1.38%           | 0.111%        |
| 25        | 15.980      | 2188          | 2192        | 2200         | rVB      | 110460         | 210011        | 1.53%           | 0.122%        |
| 26        | 16.186      | 2222          | 2227        | 2229         | rBV      | 124158         | 172814        | 1.26%           | 0.101%        |
| 27        | 16.521      | 2276          | 2284        | 2285         | rBV4     | 87826          | 153420        | 1.11%           | 0.089%        |
| 28        | 16.539      | 2285          | 2287        | 2292         | rVB3     | 100295         | 151547        | 1.10%           | 0.088%        |
| 29        | 16.768      | 2318          | 2326        | 2329         | rBV3     | 138221         | 280861        | 2.04%           | 0.164%        |
| 30        | 16.892      | 2343          | 2347        | 2354         | rVB2     | 134692         | 217192        | 1.58%           | 0.126%        |
| 31        | 16.974      | 2355          | 2361        | 2367         | rVV4     | 182618         | 395909        | 2.88%           | 0.230%        |
| 32        | 17.057      | 2371          | 2375        | 2382         | rVB      | 207472         | 338425        | 2.46%           | 0.197%        |
| 33        | 17.239      | 2399          | 2406        | 2409         | rBV      | 3349890        | 4971246       | 36.11%          | 2.894%        |
| 34        | 17.280      | 2409          | 2413        | 2418         | rVV      | 4543278        | 6153927       | 44.70%          | 3.583%        |

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 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-BM100317.M  
 Title : SVOA CALIBRATION

|    |        |      |      |      |      |         |          |        |        |
|----|--------|------|------|------|------|---------|----------|--------|--------|
| 35 | 17.333 | 2418 | 2422 | 2426 | rVV2 | 3851760 | 5754074  | 41.80% | 3.350% |
| 36 | 17.368 | 2426 | 2428 | 2434 | rVB  | 957783  | 1165132  | 8.46%  | 0.678% |
| 37 | 17.639 | 2468 | 2474 | 2483 | rBV3 | 167492  | 384502   | 2.79%  | 0.224% |
| 38 | 17.751 | 2490 | 2493 | 2500 | rBV4 | 127413  | 205739   | 1.49%  | 0.120% |
| 39 | 17.815 | 2500 | 2504 | 2513 | rVB3 | 94908   | 170100   | 1.24%  | 0.099% |
| 40 | 18.115 | 2549 | 2555 | 2559 | rBV2 | 2177806 | 3264320  | 23.71% | 1.900% |
| 41 | 18.157 | 2559 | 2562 | 2570 | rVV  | 1001254 | 1448781  | 10.52% | 0.843% |
| 42 | 18.239 | 2571 | 2576 | 2581 | rVV  | 337192  | 483127   | 3.51%  | 0.281% |
| 43 | 18.310 | 2581 | 2588 | 2591 | rVV3 | 868669  | 1673132  | 12.15% | 0.974% |
| 44 | 18.339 | 2591 | 2593 | 2599 | rVB  | 517775  | 670456   | 4.87%  | 0.390% |
| 45 | 18.410 | 2601 | 2605 | 2610 | rBV4 | 172926  | 270705   | 1.97%  | 0.158% |
| 46 | 18.610 | 2634 | 2639 | 2643 | rBV  | 573700  | 769781   | 5.59%  | 0.448% |
| 47 | 18.657 | 2643 | 2647 | 2653 | rVV  | 354484  | 495774   | 3.60%  | 0.289% |
| 48 | 18.857 | 2677 | 2681 | 2685 | rVV  | 215506  | 279690   | 2.03%  | 0.163% |
| 49 | 18.904 | 2686 | 2689 | 2692 | rVV  | 181638  | 212967   | 1.55%  | 0.124% |
| 50 | 18.945 | 2692 | 2696 | 2699 | rVB  | 165451  | 189783   | 1.38%  | 0.110% |
| 51 | 19.027 | 2705 | 2710 | 2716 | rBV2 | 488220  | 1041087  | 7.56%  | 0.606% |
| 52 | 19.092 | 2718 | 2721 | 2724 | rVB3 | 119420  | 168378   | 1.22%  | 0.098% |
| 53 | 19.168 | 2729 | 2734 | 2742 | rBV3 | 357176  | 691914   | 5.03%  | 0.403% |
| 54 | 19.292 | 2749 | 2755 | 2761 | rVB  | 8331213 | 11869798 | 86.22% | 6.910% |
| 55 | 19.351 | 2762 | 2765 | 2768 | rVB2 | 161045  | 186761   | 1.36%  | 0.109% |
| 56 | 19.392 | 2768 | 2772 | 2778 | rBV2 | 1954300 | 2423539  | 17.60% | 1.411% |
| 57 | 19.539 | 2794 | 2797 | 2806 | rVB2 | 309129  | 558279   | 4.06%  | 0.325% |
| 58 | 19.627 | 2806 | 2812 | 2815 | rVV3 | 6448647 | 10353322 | 75.21% | 6.027% |
| 59 | 19.657 | 2815 | 2817 | 2824 | rVV  | 7776614 | 9297854  | 67.54% | 5.413% |
| 60 | 19.727 | 2824 | 2829 | 2835 | rVB3 | 454632  | 778970   | 5.66%  | 0.453% |
| 61 | 19.833 | 2844 | 2847 | 2853 | rVB  | 369734  | 505429   | 3.67%  | 0.294% |
| 62 | 19.898 | 2853 | 2858 | 2865 | rVB2 | 250437  | 426592   | 3.10%  | 0.248% |
| 63 | 19.974 | 2866 | 2871 | 2879 | rBV3 | 524151  | 1366349  | 9.93%  | 0.795% |
| 64 | 20.115 | 2889 | 2895 | 2896 | rBV2 | 465271  | 734501   | 5.34%  | 0.428% |
| 65 | 20.145 | 2897 | 2900 | 2905 | rVB  | 995224  | 1415558  | 10.28% | 0.824% |
| 66 | 20.251 | 2914 | 2918 | 2921 | rBV  | 645570  | 1096034  | 7.96%  | 0.638% |
| 67 | 20.304 | 2923 | 2927 | 2931 | rVV2 | 767945  | 1433359  | 10.41% | 0.834% |
| 68 | 20.445 | 2948 | 2951 | 2954 | rBV  | 374519  | 392966   | 2.85%  | 0.229% |
| 69 | 20.492 | 2956 | 2959 | 2962 | rVV  | 422997  | 517030   | 3.76%  | 0.301% |
| 70 | 20.533 | 2963 | 2966 | 2971 | rVB  | 1134507 | 1339909  | 9.73%  | 0.780% |
| 71 | 20.645 | 2982 | 2985 | 2990 | rVB  | 290347  | 352377   | 2.56%  | 0.205% |

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If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
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Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM100317.M  
Title : SVOA CALIBRATION

|    |        |      |      |      |      |         |          |         |        |
|----|--------|------|------|------|------|---------|----------|---------|--------|
| 72 | 20.898 | 3024 | 3028 | 3033 | rBV  | 666589  | 971501   | 7.06%   | 0.566% |
| 73 | 21.098 | 3058 | 3062 | 3066 | rVV3 | 1466946 | 1976855  | 14.36%  | 1.151% |
| 74 | 21.139 | 3066 | 3069 | 3074 | rVV2 | 610876  | 936278   | 6.80%   | 0.545% |
| 75 | 21.192 | 3075 | 3078 | 3084 | rVB  | 718416  | 938758   | 6.82%   | 0.546% |
| 76 | 21.409 | 3109 | 3115 | 3119 | rBV2 | 6800113 | 13766649 | 100.00% | 8.014% |
| 77 | 21.451 | 3119 | 3122 | 3131 | rVB  | 4383635 | 5814104  | 42.23%  | 3.385% |
| 78 | 21.568 | 3139 | 3142 | 3149 | rVB  | 659628  | 852943   | 6.20%   | 0.497% |
| 79 | 21.974 | 3208 | 3211 | 3215 | rBV2 | 591500  | 780074   | 5.67%   | 0.454% |
| 80 | 23.033 | 3385 | 3391 | 3396 | rBV  | 2918379 | 6551939  | 47.59%  | 3.814% |
| 81 | 23.203 | 3417 | 3420 | 3427 | rVB  | 539494  | 895080   | 6.50%   | 0.521% |
| 82 | 23.533 | 3470 | 3476 | 3479 | rBV  | 1457623 | 2860484  | 20.78%  | 1.665% |
| 83 | 23.580 | 3479 | 3484 | 3489 | rVV2 | 3213193 | 6422403  | 46.65%  | 3.739% |
| 84 | 23.633 | 3489 | 3493 | 3500 | rVB  | 2458364 | 4438871  | 32.24%  | 2.584% |
| 85 | 23.733 | 3504 | 3510 | 3515 | rBV  | 2638225 | 4997209  | 36.30%  | 2.909% |
| 86 | 26.097 | 3906 | 3912 | 3922 | rVB  | 1016962 | 2729955  | 19.83%  | 1.589% |

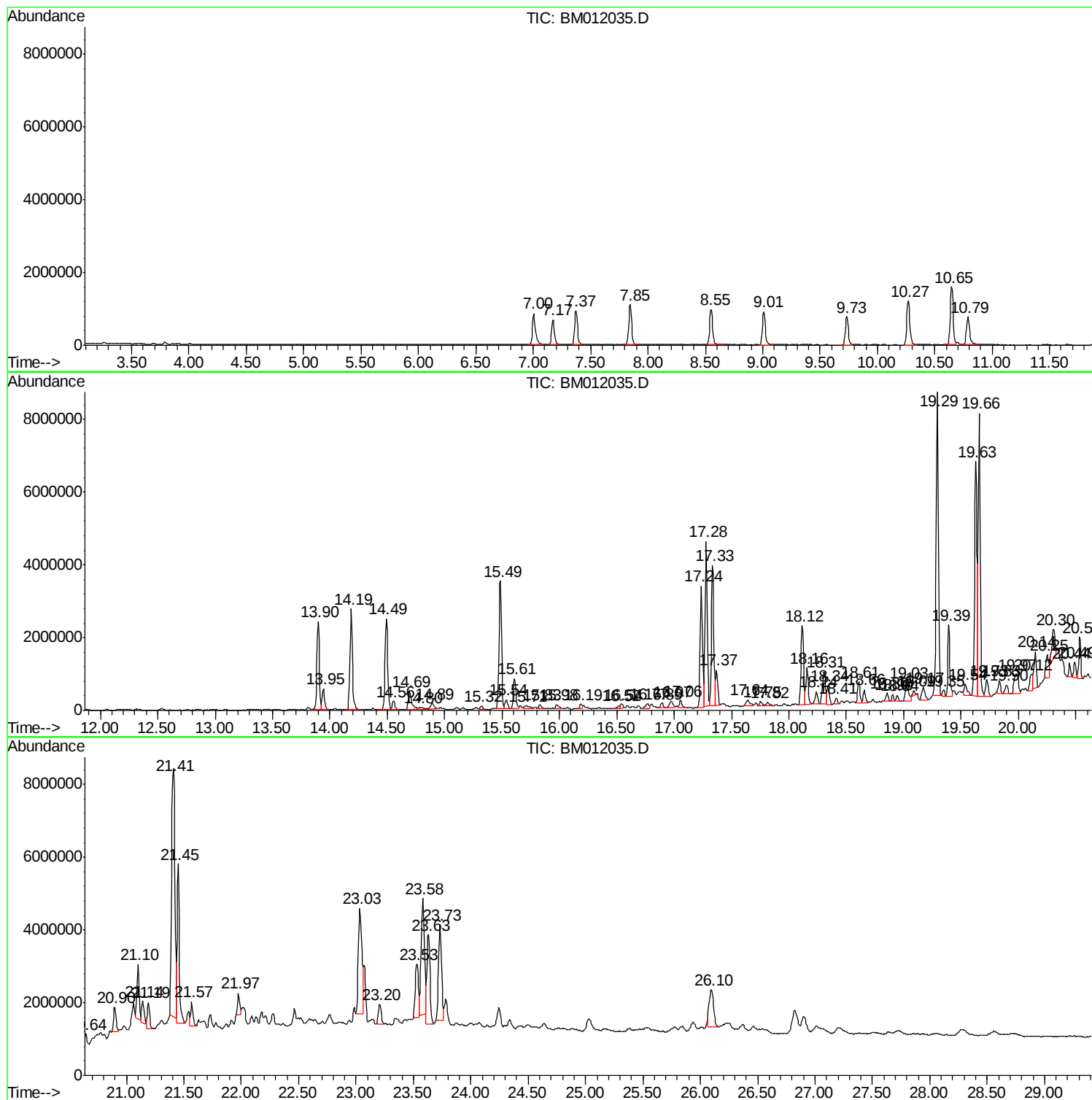
Sum of corrected areas: 171776676

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Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM100317.M  
Quant Title : SVOA CALIBRATION

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



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ClientSampleId :  
DUP-1

Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM100317.M  
Quant Title : SVOA CALIBRATION

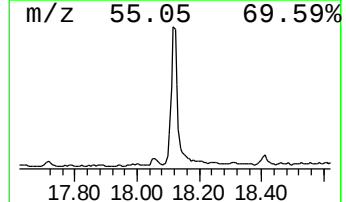
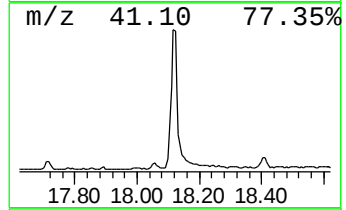
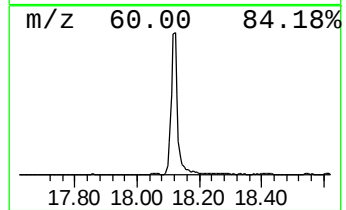
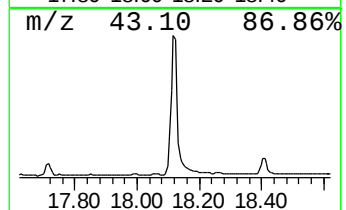
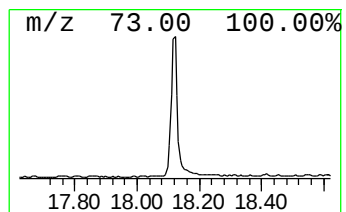
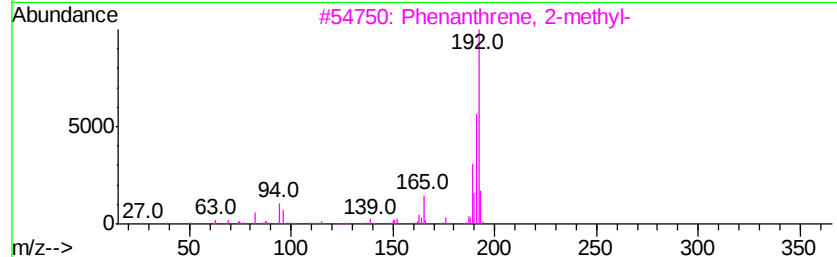
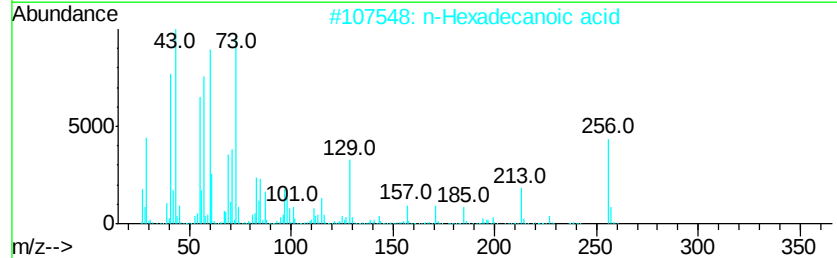
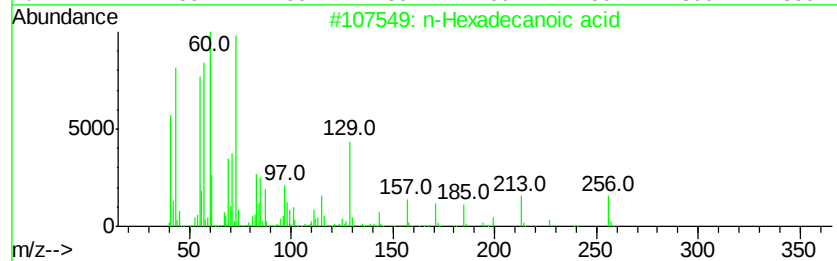
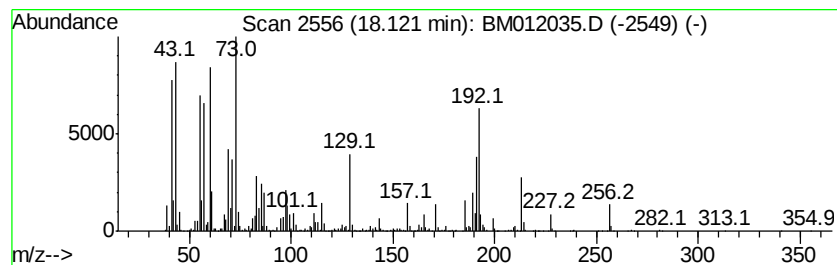
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 18.12 | 13.13 ng/ul | 3264320 | Phenanthrene-d10 | 17.24 |

| Hit# | of | Tentative ID                           | MW  | MolForm  | CAS#        | Qual |
|------|----|----------------------------------------|-----|----------|-------------|------|
| 1    | 5  | n-Hexadecanoic acid                    | 256 | C16H32O2 | 000057-10-3 | 95   |
| 2    |    | n-Hexadecanoic acid                    | 256 | C16H32O2 | 000057-10-3 | 95   |
| 3    |    | Phenanthrene, 2-methyl-                | 192 | C15H12   | 002531-84-2 | 94   |
| 4    |    | 1H-Cyclopropa[1,1]phenanthrene, 1a,... | 192 | C15H12   | 000949-41-7 | 94   |
| 5    |    | Phenanthrene, 1-methyl-                | 192 | C15H12   | 000832-69-9 | 94   |



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Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM100317.M  
Quant Title : SVOA CALIBRATION

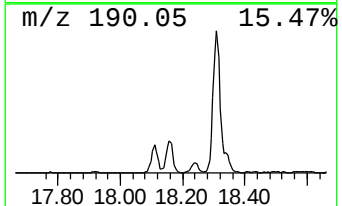
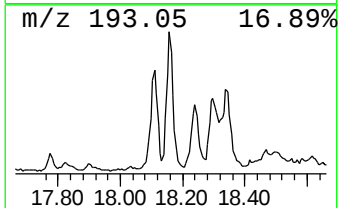
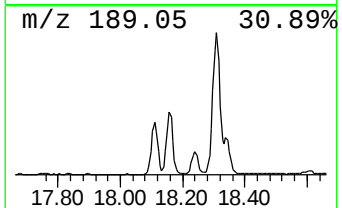
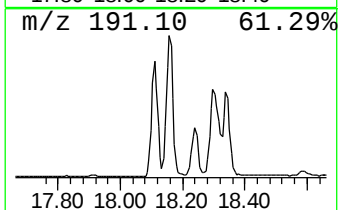
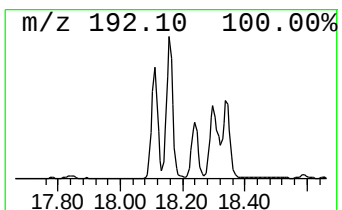
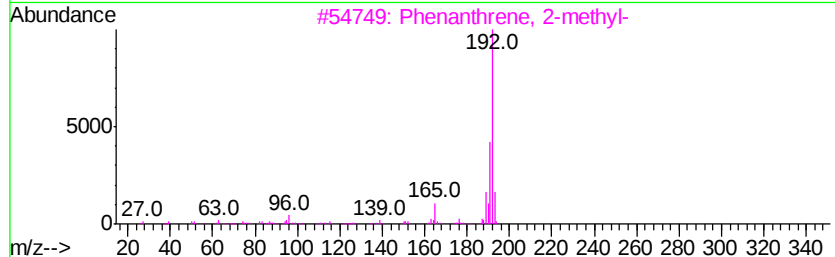
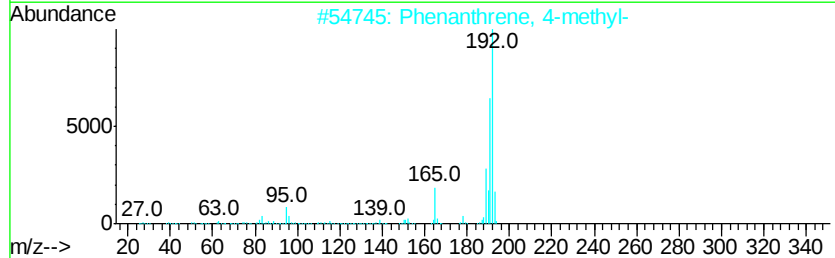
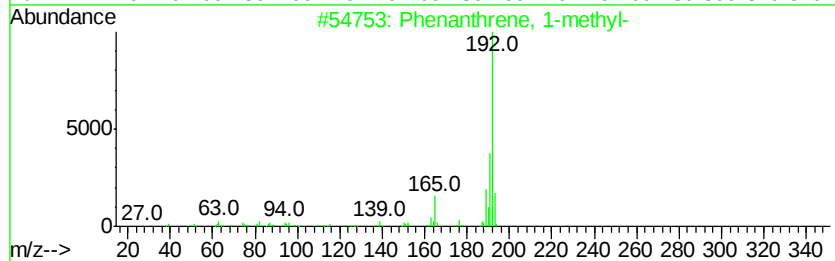
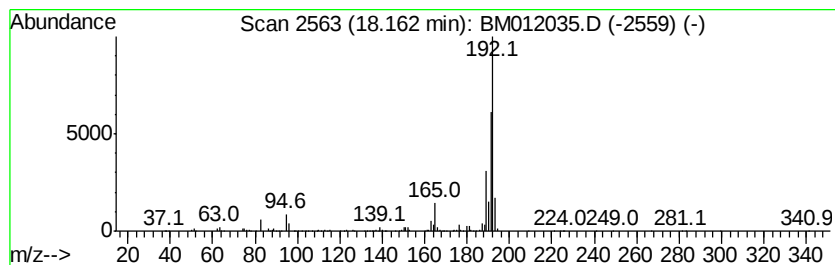
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 2 Phenanthrene, 1-methyl- Concentration Rank 4

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 18.16 | 5.83 ng/ul | 1448780 | Phenanthrene-d10 | 17.24 |

| Hit# of | 5                       | Tentative ID | MW     | MolForm     | CAS# | Qual |
|---------|-------------------------|--------------|--------|-------------|------|------|
| 1       | Phenanthrene, 1-methyl- | 192          | C15H12 | 000832-69-9 | 94   |      |
| 2       | Phenanthrene, 4-methyl- | 192          | C15H12 | 000832-64-4 | 94   |      |
| 3       | Phenanthrene, 2-methyl- | 192          | C15H12 | 002531-84-2 | 93   |      |
| 4       | Phenanthrene, 2-methyl- | 192          | C15H12 | 002531-84-2 | 93   |      |
| 5       | Anthracene, 2-methyl-   | 192          | C15H12 | 000613-12-7 | 93   |      |



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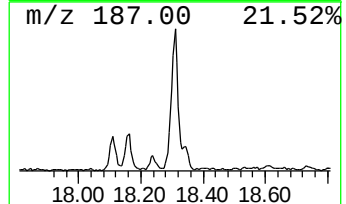
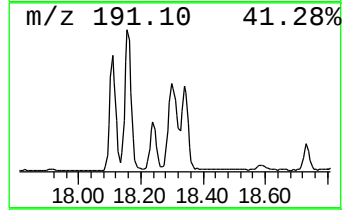
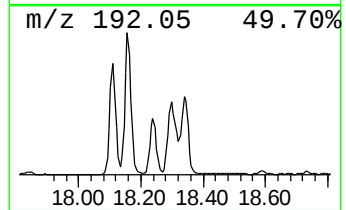
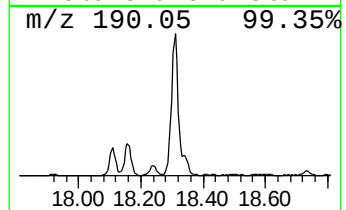
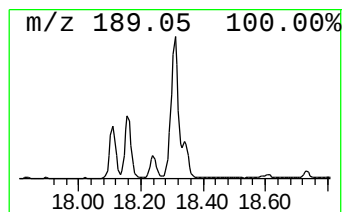
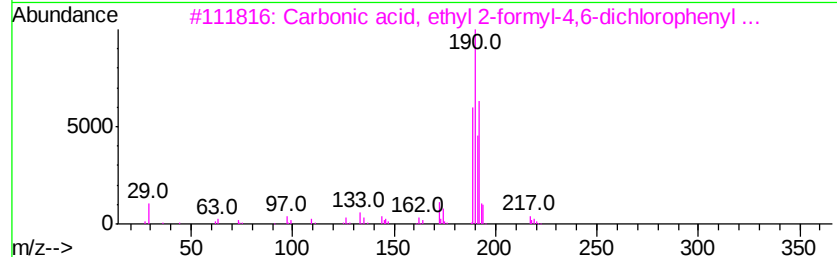
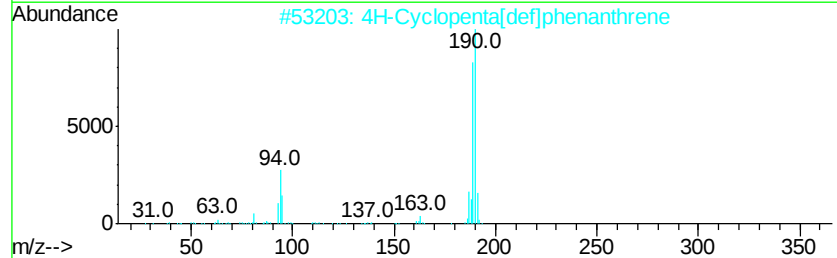
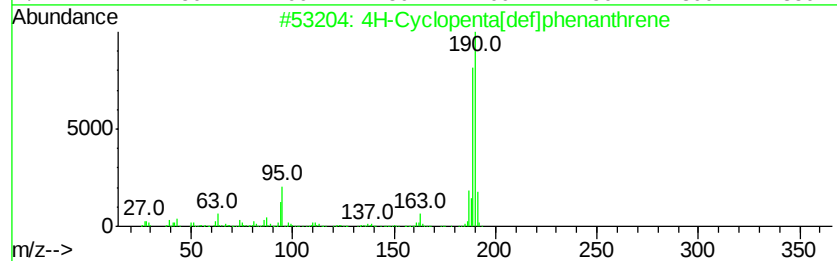
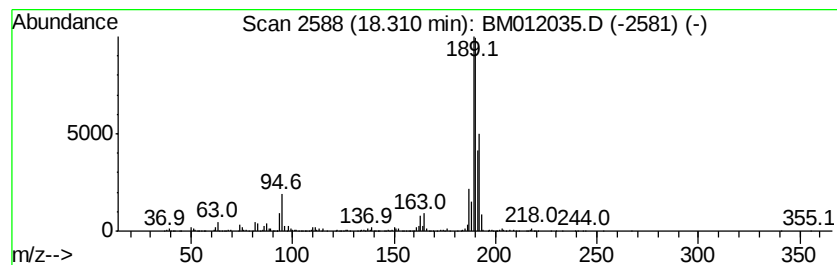
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BNA\_M  
ClientSampleId :  
DUP-1

Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM100317.M  
Quant Title : SVOA CALIBRATION

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

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

| R.T.      | EstConc                             | Area    | Relative to ISTD | R.T.         |      |
|-----------|-------------------------------------|---------|------------------|--------------|------|
| 18.31     | 6.73 ng/ul                          | 1673130 | Phenanthrene-d10 | 17.24        |      |
| Hit# of 5 | Tentative ID                        | MW      | MolForm          | CAS#         | Qual |
| 1         | 4H-Cyclopenta[def]phenanthrene      | 190     | C15H10           | 000203-64-5  | 64   |
| 2         | 4H-Cyclopenta[def]phenanthrene      | 190     | C15H10           | 000203-64-5  | 62   |
| 3         | Carbonic acid, ethyl 2-formyl-4,... | 262     | C10H8Cl2O4       | 1000331-34-4 | 50   |
| 4         | 4H-Cyclopenta[def]phenanthrene      | 190     | C15H10           | 000203-64-5  | 43   |
| 5         | 2,2'-Bis(4,5-dimethylimidazole)     | 190     | C10H14N4         | 069286-06-2  | 38   |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM100917\  
Data File : BM012035.D  
Acq On : 10 Oct 2017 04:40  
Operator : SJ/JU  
Sample : I5533-07  
Misc :  
ALS Vial : 28 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
DUP-1

Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM100317.M  
Quant Title : SVOA CALIBRATION

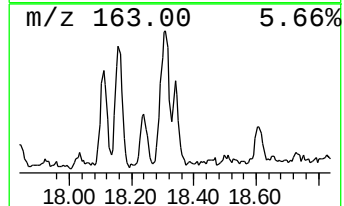
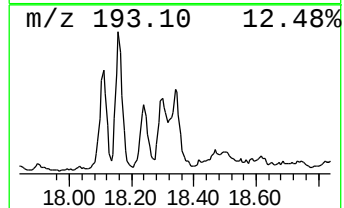
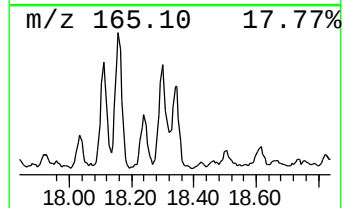
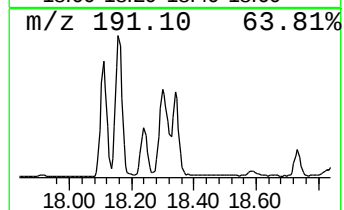
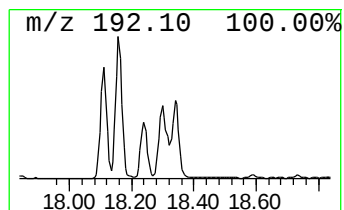
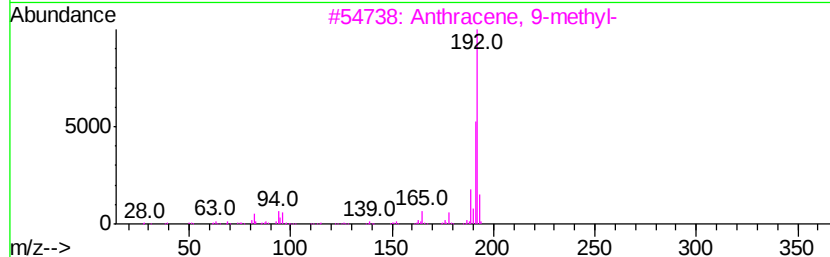
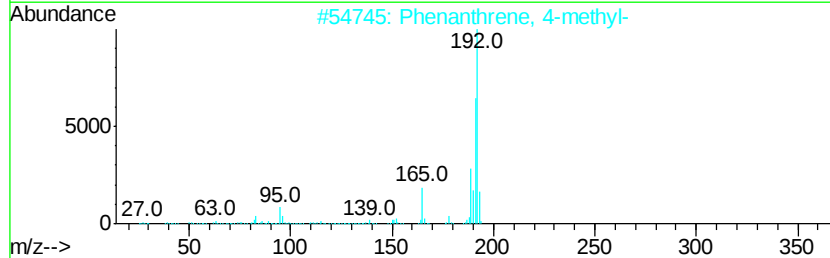
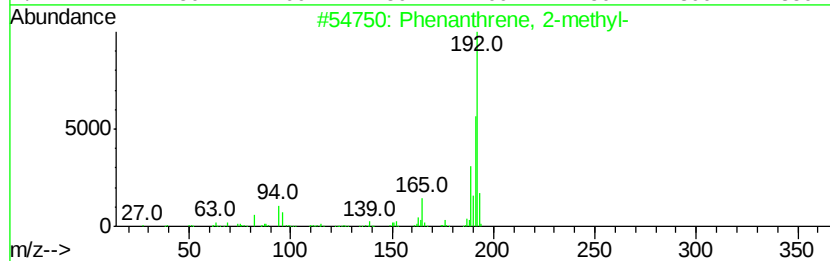
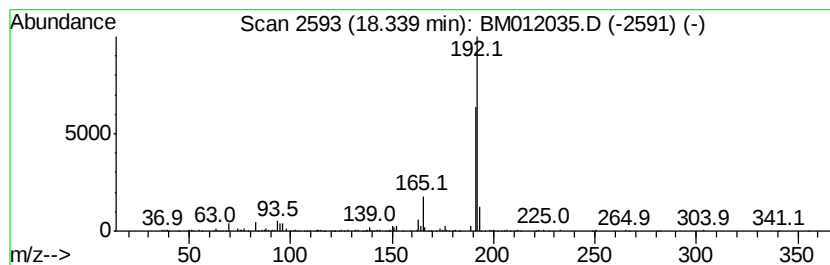
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 4 Phenanthrene, 2-methyl- Concentration Rank 11

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.34 | 2.70 ng/ul | 670456 | Phenanthrene-d10 | 17.24 |

| Hit# of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|---------|---|-------------------------|-----|---------|-------------|------|
| 1       |   | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 91   |
| 2       |   | Phenanthrene, 4-methyl- | 192 | C15H12  | 000832-64-4 | 90   |
| 3       |   | Anthracene, 9-methyl-   | 192 | C15H12  | 000779-02-2 | 90   |
| 4       |   | Anthracene, 1-methyl-   | 192 | C15H12  | 000610-48-0 | 87   |
| 5       |   | Anthracene, 9-methyl-   | 192 | C15H12  | 000779-02-2 | 87   |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM100917\  
Data File : BM012035.D  
Acq On : 10 Oct 2017 04:40  
Operator : SJ/JU  
Sample : I5533-07  
Misc :  
ALS Vial : 28 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
DUP-1

Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM100317.M  
Quant Title : SVOA CALIBRATION

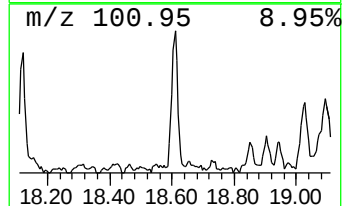
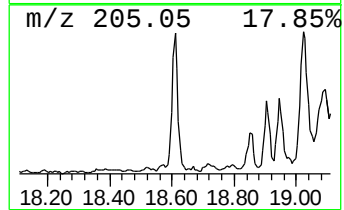
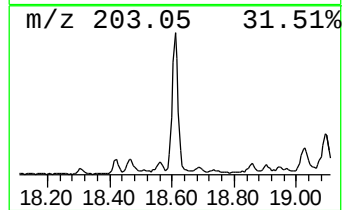
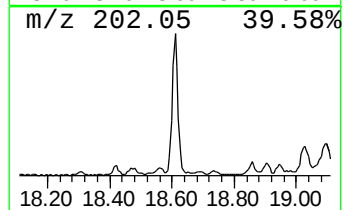
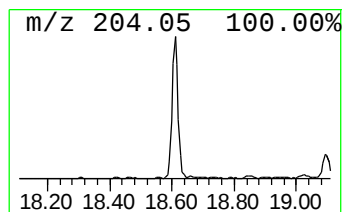
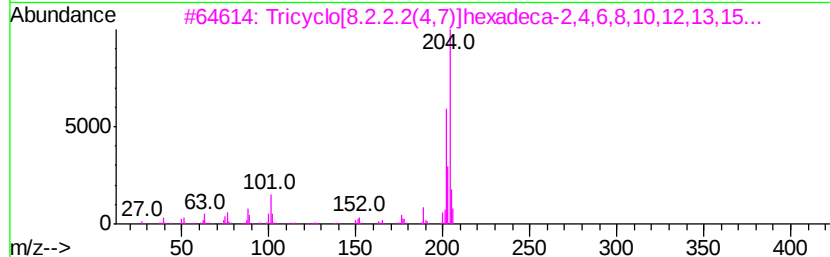
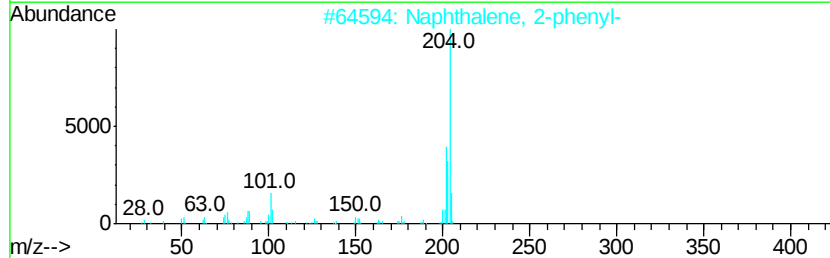
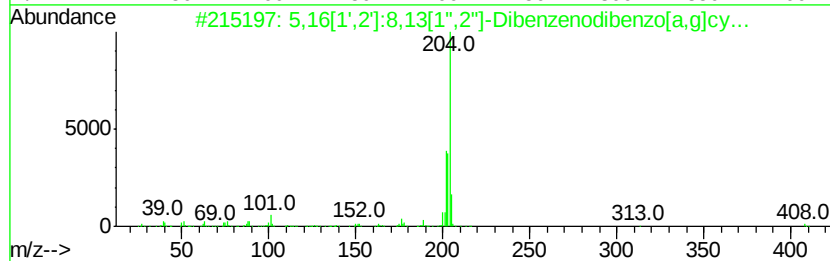
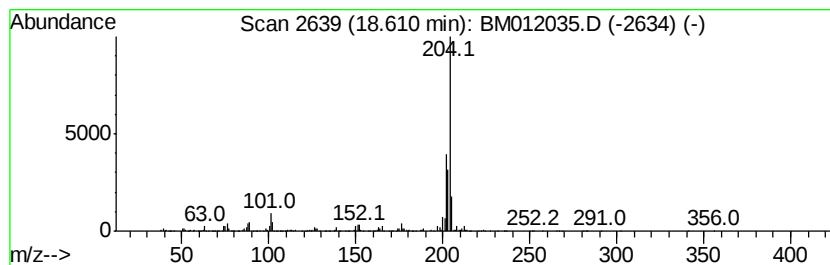
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.61 | 3.10 ng/ul | 769781 | Phenanthrene-d10 | 17.24 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24  | 005672-97-9 | 91   |
| 2    |    | Naphthalene, 2-phenyl-              | 204 | C16H12  | 000612-94-2 | 86   |
| 3    |    | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12  | 006572-60-7 | 70   |
| 4    |    | Naphthalene, 2-phenyl-              | 204 | C16H12  | 000612-94-2 | 70   |
| 5    |    | Naphthalene, 2-phenyl-              | 204 | C16H12  | 000612-94-2 | 70   |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM100917\  
Data File : BM012035.D  
Acq On : 10 Oct 2017 04:40  
Operator : SJ/JU  
Sample : I5533-07  
Misc :  
ALS Vial : 28 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
DUP-1

Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM100317.M  
Quant Title : SVOA CALIBRATION

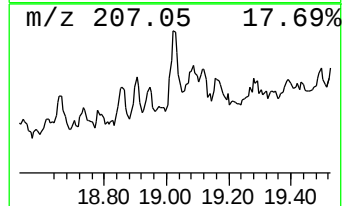
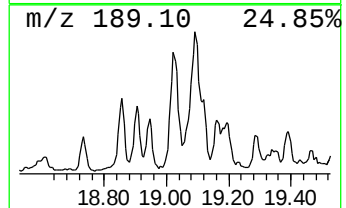
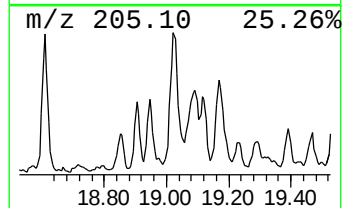
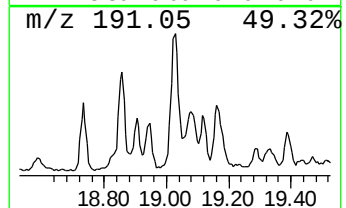
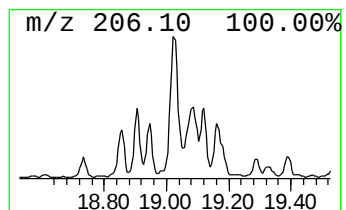
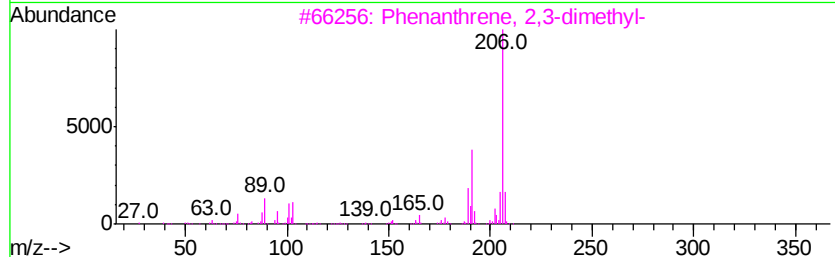
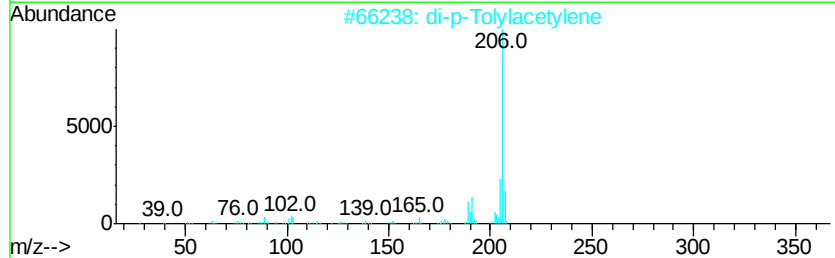
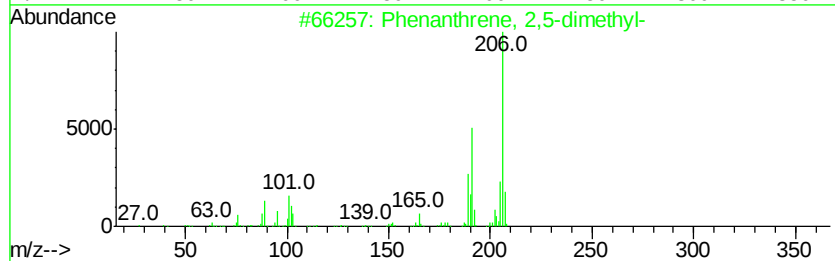
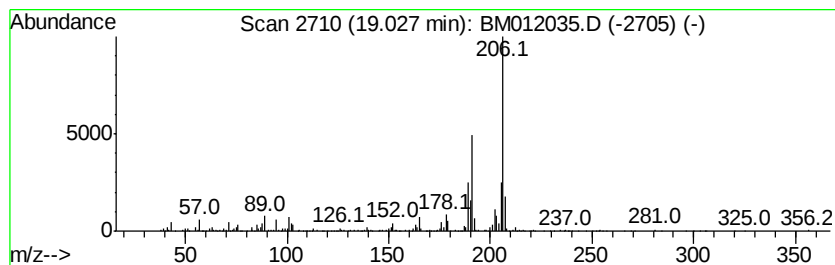
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 6 Phenanthrene, 2,5-dimethyl- Concentration Rank 5

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 19.03 | 4.19 ng/ul | 1041090 | Phenanthrene-d10 | 17.24 |

| Hit# of | 5 | Tentative ID                       | MW  | MolForm | CAS#        | Qual |
|---------|---|------------------------------------|-----|---------|-------------|------|
| 1       |   | Phenanthrene, 2,5-dimethyl-        | 206 | C16H14  | 003674-66-6 | 94   |
| 2       |   | di-p-Tolylacetylene                | 206 | C16H14  | 002789-88-0 | 91   |
| 3       |   | Phenanthrene, 2,3-dimethyl-        | 206 | C16H14  | 003674-65-5 | 87   |
| 4       |   | 9,10-Dimethylantracene             | 206 | C16H14  | 000781-43-1 | 83   |
| 5       |   | Naphthalene, 1,2-dihydro-4-phenyl- | 206 | C16H14  | 007469-40-1 | 83   |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM100917\  
Data File : BM012035.D  
Acq On : 10 Oct 2017 04:40  
Operator : SJ/JU  
Sample : I5533-07  
Misc :  
ALS Vial : 28 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
DUP-1

Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM100317.M  
Quant Title : SVOA CALIBRATION

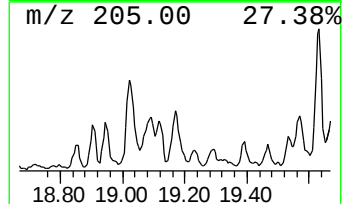
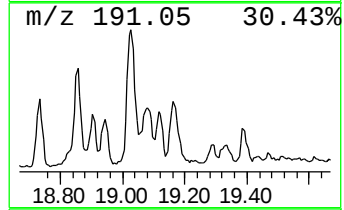
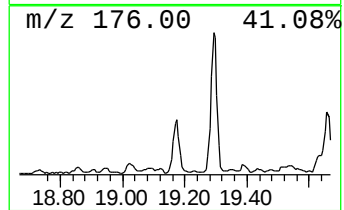
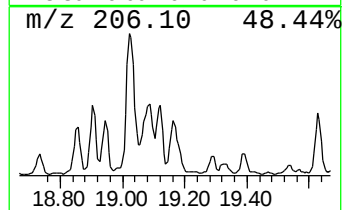
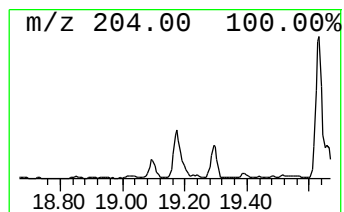
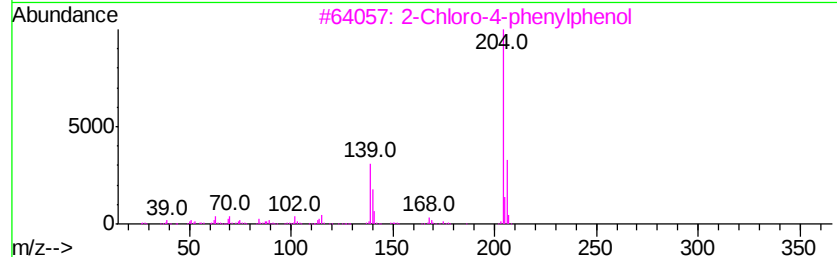
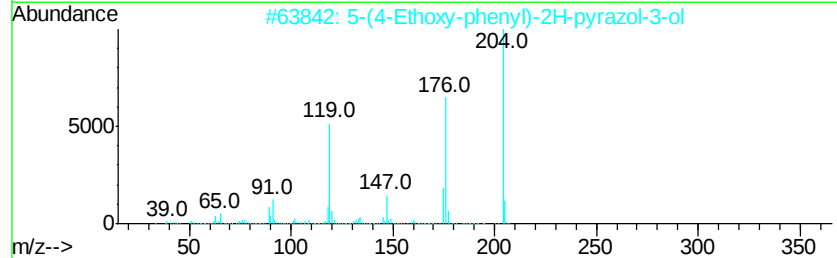
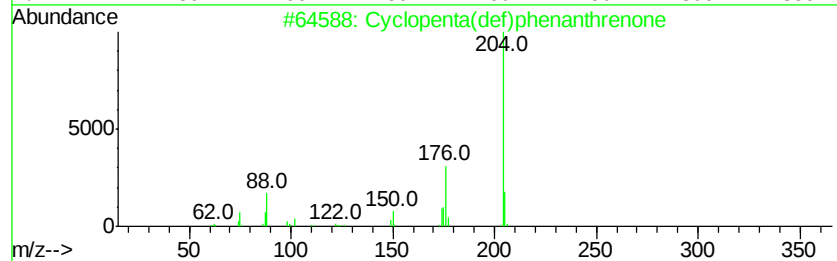
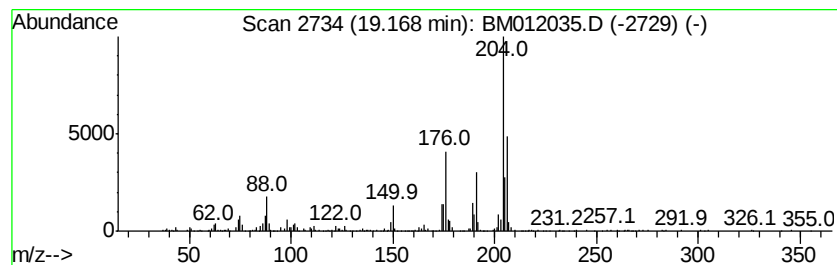
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 7 Cyclopenta(def)phenanthrenone Concentration Rank 10

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 19.17 | 2.78 ng/ul | 691914 | Phenanthrene-d10 | 17.24 |

| Hit# | of | Tentative ID                        | MW  | MolForm     | CAS#         | Qual |
|------|----|-------------------------------------|-----|-------------|--------------|------|
| 1    | 5  | Cyclopenta(def)phenanthrenone       | 204 | C15H8O      | 005737-13-3  | 91   |
| 2    |    | 5-(4-Ethoxy-phenyl)-2H-pyrazol-3-ol | 204 | C11H12N2O2  | 1000278-26-8 | 43   |
| 3    |    | 2-Chloro-4-phenylphenol             | 204 | C12H9ClO    | 000092-04-6  | 43   |
| 4    |    | L-(+)-Rhamnopyranose, tetrakis(t... | 452 | C18H44O5Si4 | 1000380-12-9 | 43   |
| 5    |    | 1,2,4,8-Tetramethylbicyclo[6.3.0... | 204 | C15H24      | 137235-51-9  | 41   |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM100917\  
Data File : BM012035.D  
Acq On : 10 Oct 2017 04:40  
Operator : SJ/JU  
Sample : I5533-07  
Misc :  
ALS Vial : 28 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
DUP-1

Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM100317.M  
Quant Title : SVOA CALIBRATION

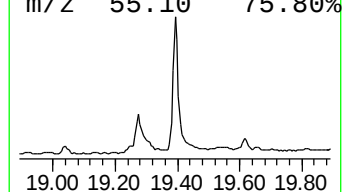
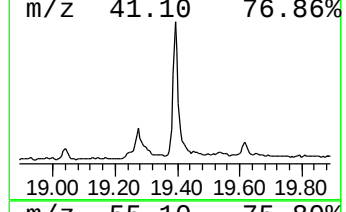
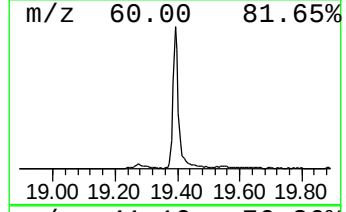
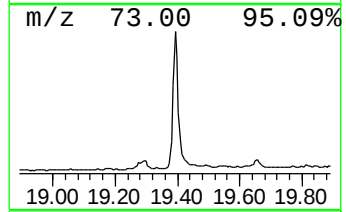
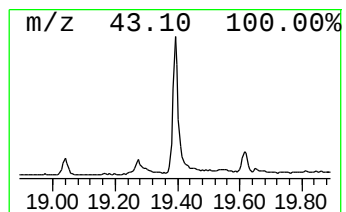
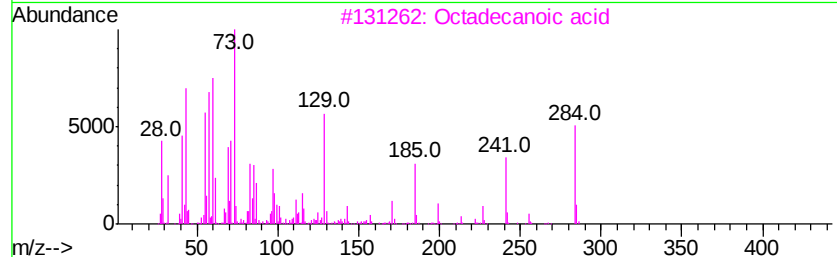
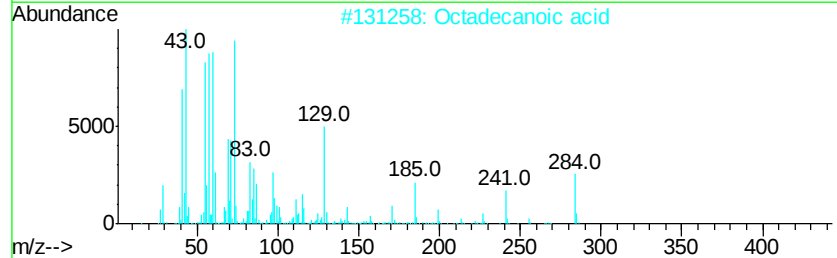
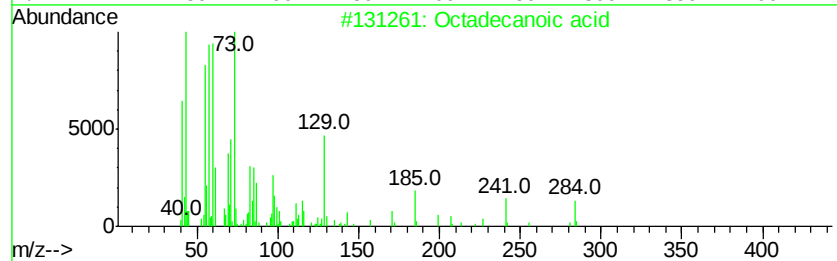
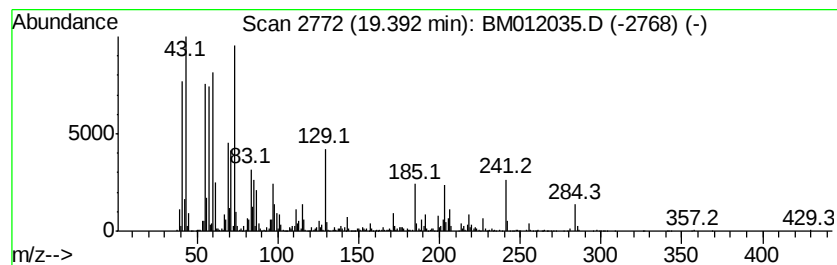
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 8 Octadecanoic acid Concentration Rank 7

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 19.39 | 3.52 ng/ul | 2423540 | Chrysene-d12     | 21.42 |

| Hit# | of | Tentative ID       | MW  | MolForm  | CAS#        | Qual |
|------|----|--------------------|-----|----------|-------------|------|
| 1    | 5  | Octadecanoic acid  | 284 | C18H36O2 | 000057-11-4 | 99   |
| 2    |    | Octadecanoic acid  | 284 | C18H36O2 | 000057-11-4 | 95   |
| 3    |    | Octadecanoic acid  | 284 | C18H36O2 | 000057-11-4 | 95   |
| 4    |    | Pentadecanoic acid | 242 | C15H30O2 | 001002-84-2 | 86   |
| 5    |    | Pentadecanoic acid | 242 | C15H30O2 | 001002-84-2 | 78   |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM100917\  
Data File : BM012035.D  
Acq On : 10 Oct 2017 04:40  
Operator : SJ/JU  
Sample : I5533-07  
Misc :  
ALS Vial : 28 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampled :  
DUP-1

Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM100317.M  
Quant Title : SVOA CALIBRATION

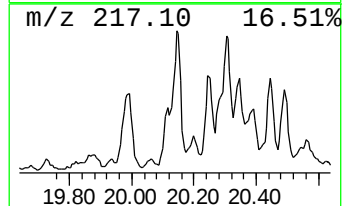
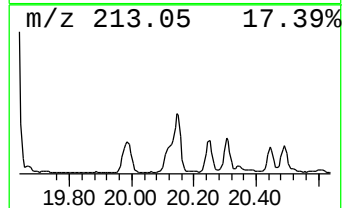
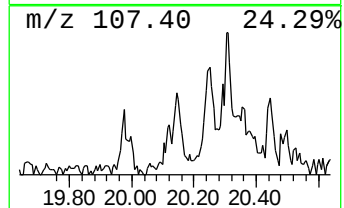
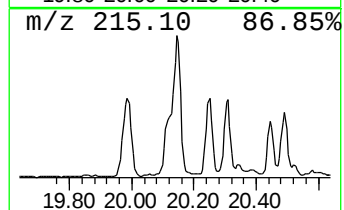
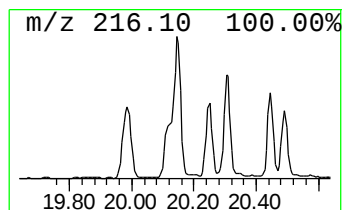
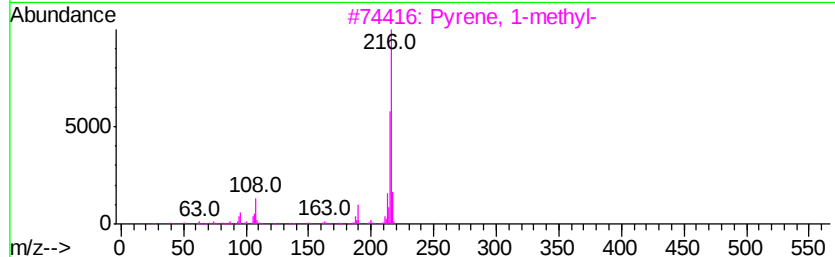
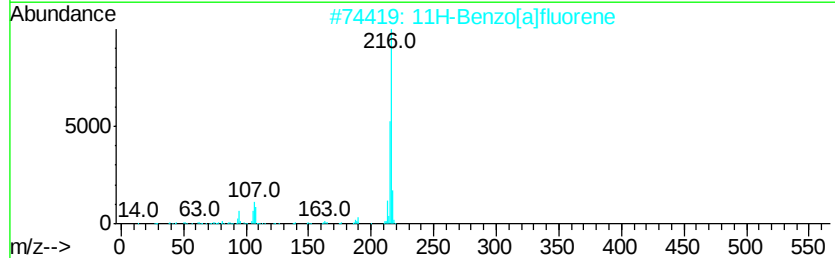
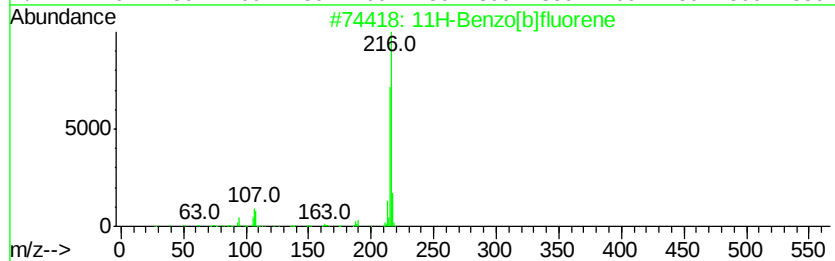
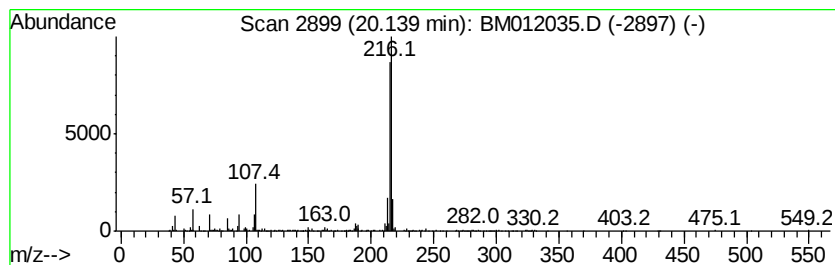
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 11H-Benzo[b]fluorene Concentration Rank 13

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 20.14 | 2.06 ng/ul | 1415560 | Chrysene-d12     | 21.42 |

| Hit# | of | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------|-----|---------|-------------|------|
| 1    | 5  | 11H-Benzo[b]fluorene | 216 | C17H12  | 000243-17-4 | 95   |
| 2    |    | 11H-Benzo[a]fluorene | 216 | C17H12  | 000238-84-6 | 90   |
| 3    |    | Pvrene, 1-methyl-    | 216 | C17H12  | 002381-21-7 | 87   |
| 4    |    | 11H-Benzo[b]fluorene | 216 | C17H12  | 000243-17-4 | 83   |
| 5    |    | 11H-Benzo[a]fluorene | 216 | C17H12  | 000238-84-6 | 83   |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM100917\  
Data File : BM012035.D  
Acq On : 10 Oct 2017 04:40  
Operator : SJ/JU  
Sample : I5533-07  
Misc :  
ALS Vial : 28 Sample Multiplier: 1

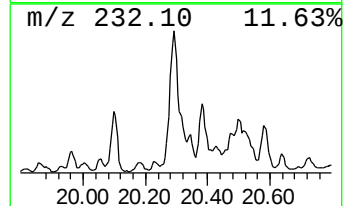
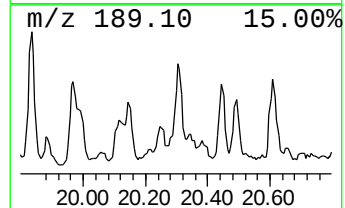
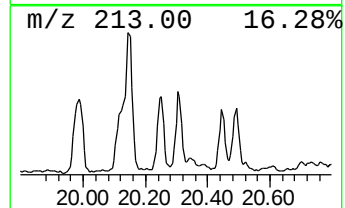
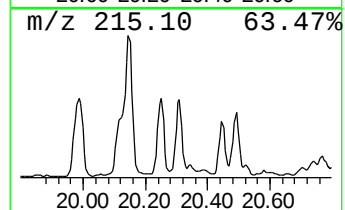
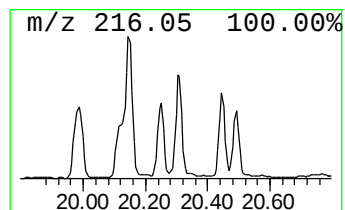
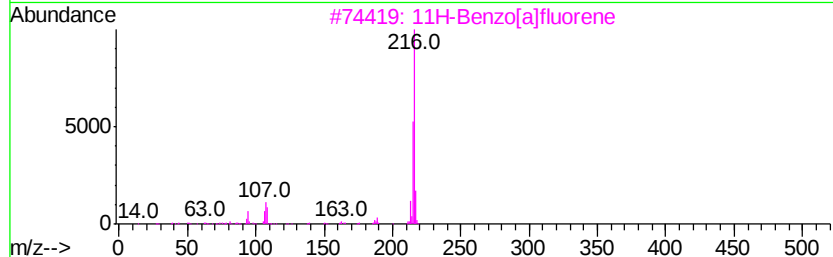
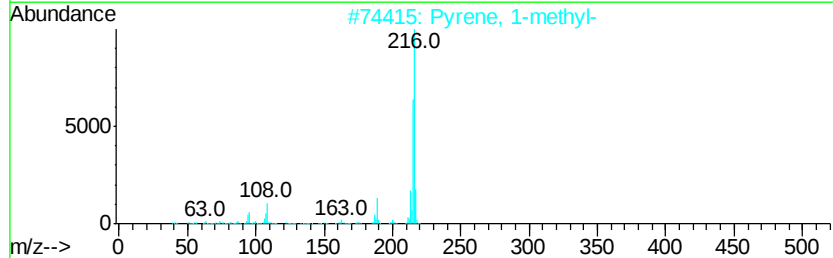
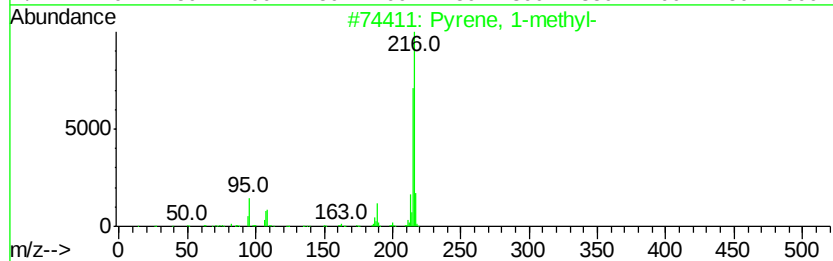
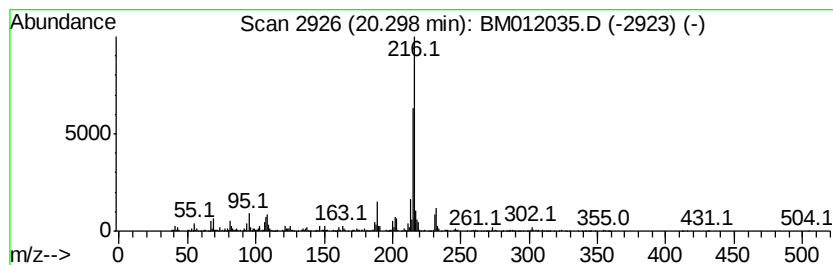
Instrument :  
BNA\_M  
ClientSampleId :  
DUP-1

Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM100317.M  
Quant Title : SVOA CALIBRATION

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

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Peak Number 10 Pyrene, 1-methyl- Concentration Rank 12

| R.T.    | EstConc                       | Area         | Relative to ISTD | R.T.           |
|---------|-------------------------------|--------------|------------------|----------------|
| 20.30   | 2.08 ng/ul                    | 1433360      | Chrysene-d12     | 21.42          |
| Hit# of | 5                             | Tentative ID | MW MolForm       | CAS# Qual      |
| 1       | Pyrene, 1-methyl-             | 216          | C17H12           | 002381-21-7 97 |
| 2       | Pyrene, 1-methyl-             | 216          | C17H12           | 002381-21-7 96 |
| 3       | 11H-Benzo[ <i>a</i> ]fluorene | 216          | C17H12           | 000238-84-6 94 |
| 4       | Fluoranthene, 2-methyl-       | 216          | C17H12           | 033543-31-6 93 |
| 5       | Pyrene, 2-methyl-             | 216          | C17H12           | 003442-78-2 93 |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM100917\  
Data File : BM012035.D  
Acq On : 10 Oct 2017 04:40  
Operator : SJ/JU  
Sample : I5533-07  
Misc :  
ALS Vial : 28 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
DUP-1

Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM100317.M  
Quant Title : SVOA CALIBRATION

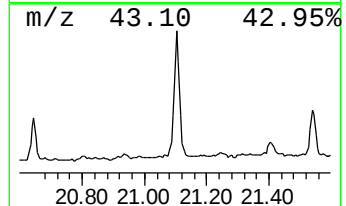
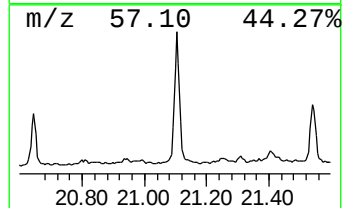
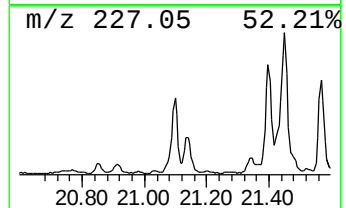
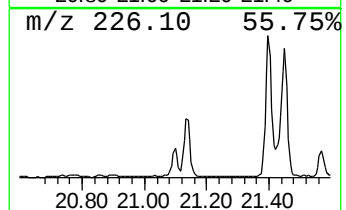
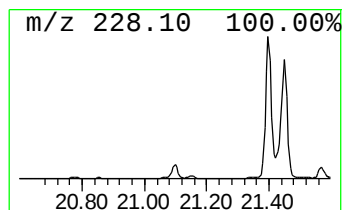
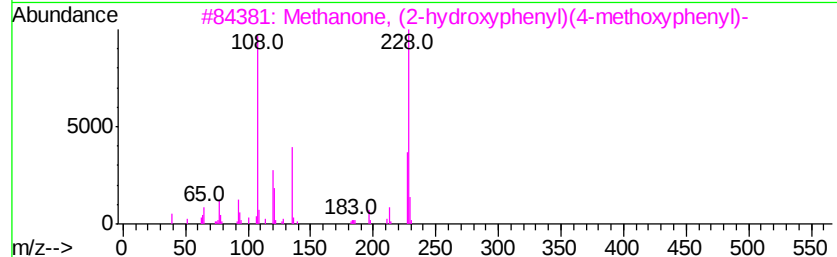
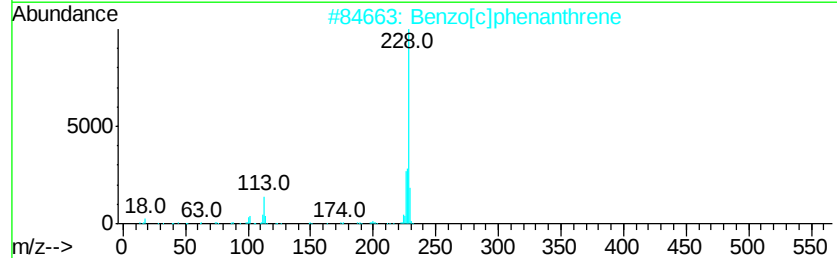
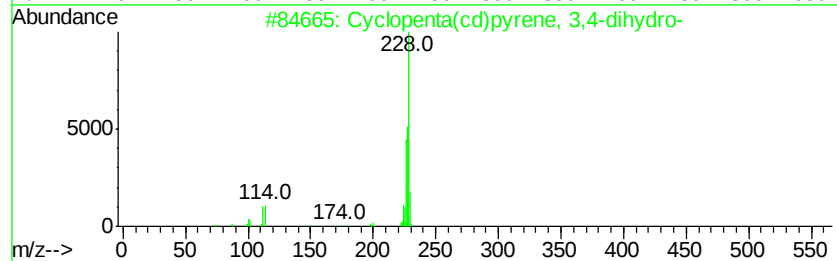
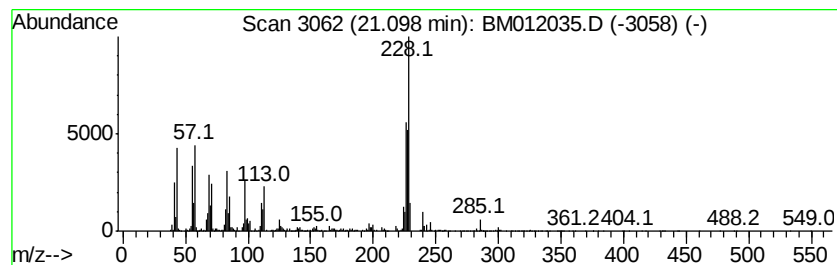
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 11 Cyclopenta(cd)pyrene, 3,4-d... Concentration Rank 9

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 21.10 | 2.87 ng/ul | 1976860 | Chrysene-d12     | 21.42 |

| Hit# | of | Tentative ID                                   | MW  | MolForm  | CAS#        | Qual |
|------|----|------------------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Cyclopenta(cd)pyrene, 3,4-dihydro-             | 228 | C18H12   | 025732-74-5 | 50   |
| 2    |    | Benzo[c]phenanthrene                           | 228 | C18H12   | 000195-19-7 | 49   |
| 3    |    | Methanone, (2-hydroxyphenyl)(4-methoxyphenyl)- | 228 | C14H12O3 | 018733-07-8 | 46   |
| 4    |    | Purine-6(1H)-thione, 3,7-dimethyl-             | 228 | C7H8N4Se | 023663-58-3 | 38   |
| 5    |    | Triphenylene                                   | 228 | C18H12   | 000217-59-4 | 38   |



Data Path : Z:\HPCHEM1\BNA M\DATA\BM100917\  
Data File : BM012035.D  
Acq On : 10 Oct 2017 04:40  
Operator : SJ/JU  
Sample : I5533-07  
Misc :  
ALS Vial : 28 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
DUP-1

Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM100317.M  
Quant Title : SVOA CALIBRATION

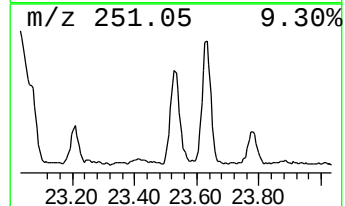
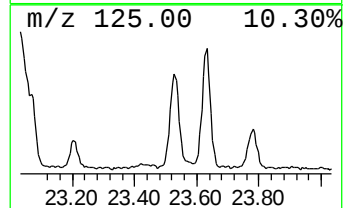
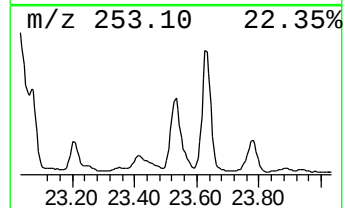
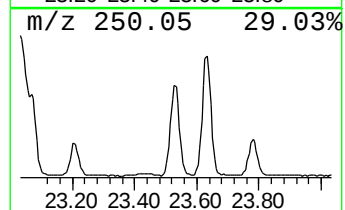
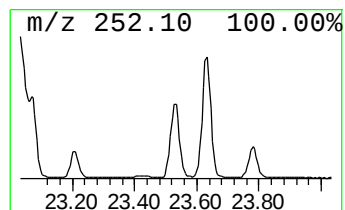
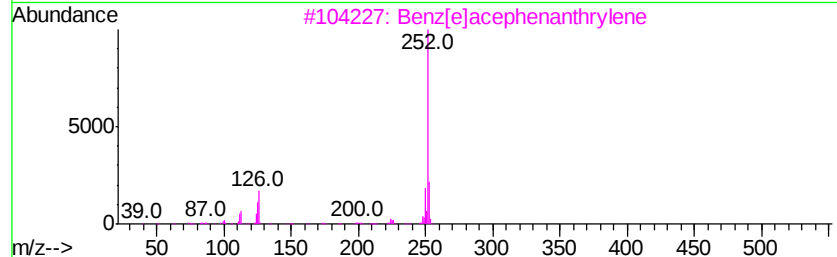
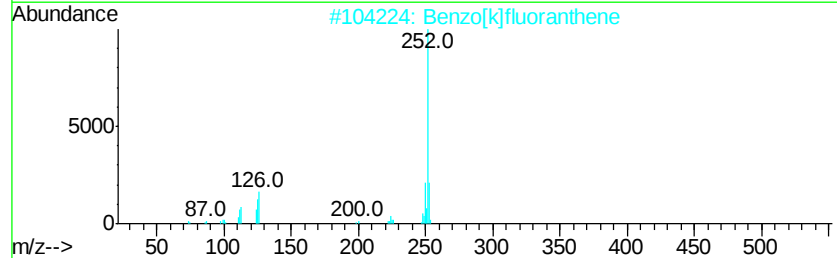
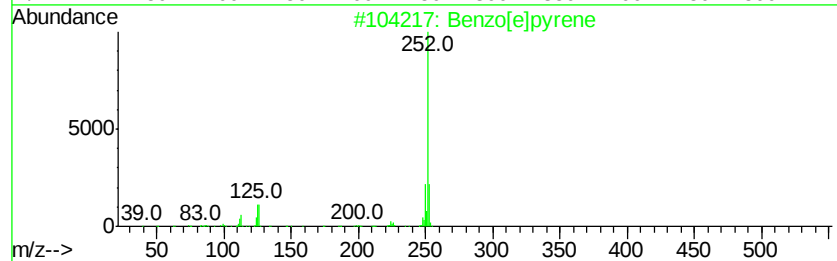
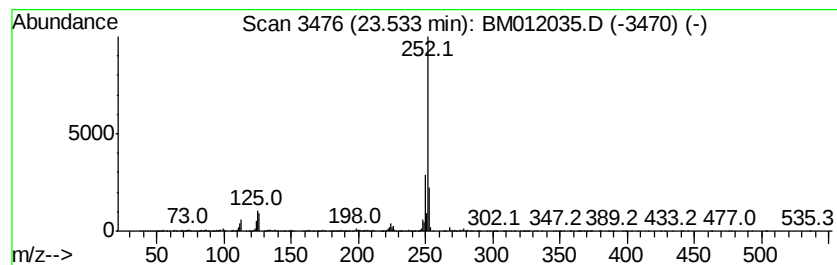
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 13 Benzo[e]pyrene Concentration Rank 2

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 23.53 | 11.45 ng/ul | 2860480 | Perylene-d12     | 23.73 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[e]pyrene            | 252 | C20H12  | 000192-97-2 | 98   |
| 2    |    | Benzo[k]fluoranthene      | 252 | C20H12  | 000207-08-9 | 95   |
| 3    |    | Benzo[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 93   |
| 4    |    | Benzo[a]pyrene            | 252 | C20H12  | 000050-32-8 | 93   |
| 5    |    | Perylene                  | 252 | C20H12  | 000198-55-0 | 90   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM100917\  
 Data File : BM012035.D  
 Acq On : 10 Oct 2017 04:40  
 Operator : SJ/JU  
 Sample : I5533-07  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 DUP-1

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM100317.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 |
| n-Hexadecanoic acid  | 18.12 | 13.1    | ng/ul | 3264320  | 4                     | 17.24 | 4971250  | 20.0 |
| Phenanthrene, 1-m... | 18.16 | 5.8     | ng/ul | 1448780  | 4                     | 17.24 | 4971250  | 20.0 |
| 4H-Cyclopenta[def... | 18.31 | 6.7     | ng/ul | 1673130  | 4                     | 17.24 | 4971250  | 20.0 |
| Phenanthrene, 2-m... | 18.34 | 2.7     | ng/ul | 670456   | 4                     | 17.24 | 4971250  | 20.0 |
| 5,16[1',2']:8,13[... | 18.61 | 3.1     | ng/ul | 769781   | 4                     | 17.24 | 4971250  | 20.0 |
| Phenanthrene, 2,5... | 19.03 | 4.2     | ng/ul | 1041090  | 4                     | 17.24 | 4971250  | 20.0 |
| Cyclopenta(def)ph... | 19.17 | 2.8     | ng/ul | 691914   | 4                     | 17.24 | 4971250  | 20.0 |
| Octadecanoic acid    | 19.39 | 3.5     | ng/ul | 2423540  | 5                     | 21.42 | 13766600 | 20.0 |
| 11H-Benzo[b]fluorene | 20.14 | 2.1     | ng/ul | 1415560  | 5                     | 21.42 | 13766600 | 20.0 |
| Pyrene, 1-methyl-    | 20.30 | 2.1     | ng/ul | 1433360  | 5                     | 21.42 | 13766600 | 20.0 |
| Cyclopenta(cd)pyr... | 21.10 | 2.9     | ng/ul | 1976860  | 5                     | 21.42 | 13766600 | 20.0 |
| Benzo[e]pyrene       | 23.53 | 11.4    | ng/ul | 2860480  | 6                     | 23.73 | 4997210  | 20.0 |