

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
 Data File : BM023351.D  
 Acq On : 23 Oct 2019 20:47  
 Operator : JU  
 Sample : K5346-08  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 ETOM1

## Integration Parameters: LSCINT.P

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

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

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

Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
 Title : SVOA CALIBRATION

Signal : TIC

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 3.663       | 112           | 115         | 122          | rVB      | 231996         | 323448        | 0.50%           | 0.056%        |
| 2         | 6.816       | 643           | 651         | 666          | rBV2     | 2088266        | 3751491       | 5.77%           | 0.650%        |
| 3         | 6.981       | 672           | 679         | 688          | rBV      | 1679692        | 2673697       | 4.11%           | 0.463%        |
| 4         | 7.175       | 705           | 712         | 722          | rVB      | 2267590        | 3517161       | 5.41%           | 0.609%        |
| 5         | 7.639       | 784           | 791         | 800          | rBV      | 2211559        | 3506300       | 5.39%           | 0.608%        |
| 6         | 8.175       | 877           | 882         | 893          | rBV      | 133651         | 250523        | 0.39%           | 0.043%        |
| 7         | 8.345       | 904           | 911         | 925          | rBV      | 2496755        | 4062198       | 6.25%           | 0.704%        |
| 8         | 8.786       | 975           | 986         | 997          | rBV      | 2236516        | 3654275       | 5.62%           | 0.633%        |
| 9         | 9.504       | 1099          | 1108        | 1117         | rBV      | 1841524        | 3043941       | 4.68%           | 0.527%        |
| 10        | 10.045      | 1191          | 1200        | 1209         | rBV      | 3043766        | 5013373       | 7.71%           | 0.869%        |
| 11        | 10.422      | 1254          | 1264        | 1268         | rBV      | 3303776        | 5580731       | 8.58%           | 0.967%        |
| 12        | 10.469      | 1268          | 1272        | 1279         | rVB      | 913484         | 1475290       | 2.27%           | 0.256%        |
| 13        | 10.551      | 1279          | 1286        | 1302         | rBV      | 1872923        | 3391811       | 5.22%           | 0.588%        |
| 14        | 12.092      | 1541          | 1548        | 1556         | rVB      | 296655         | 494764        | 0.76%           | 0.086%        |
| 15        | 13.704      | 1816          | 1822        | 1826         | rVV      | 5667732        | 7832997       | 12.04%          | 1.357%        |
| 16        | 13.751      | 1826          | 1830        | 1836         | rVB      | 1749357        | 2349303       | 3.61%           | 0.407%        |
| 17        | 13.974      | 1861          | 1868        | 1881         | rBV2     | 6152506        | 11951843      | 18.38%          | 2.071%        |
| 18        | 14.286      | 1913          | 1921        | 1927         | rBV      | 5232712        | 7583478       | 11.66%          | 1.314%        |
| 19        | 14.351      | 1927          | 1932        | 1940         | rVB      | 294580         | 455607        | 0.70%           | 0.079%        |
| 20        | 14.486      | 1948          | 1955        | 1963         | rBV      | 1259709        | 1880937       | 2.89%           | 0.326%        |
| 21        | 14.633      | 1976          | 1980        | 1985         | rBV      | 144040         | 213285        | 0.33%           | 0.037%        |
| 22        | 14.686      | 1985          | 1989        | 1990         | rVV      | 360771         | 430736        | 0.66%           | 0.075%        |
| 23        | 14.710      | 1990          | 1993        | 2000         | rVV      | 549687         | 817838        | 1.26%           | 0.142%        |
| 24        | 15.174      | 2066          | 2072        | 2077         | rVV4     | 132222         | 239041        | 0.37%           | 0.041%        |
| 25        | 15.280      | 2084          | 2090        | 2096         | rBV      | 7882924        | 11620194      | 17.87%          | 2.013%        |
| 26        | 15.339      | 2096          | 2100        | 2106         | rVB      | 747160         | 1062430       | 1.63%           | 0.184%        |
| 27        | 15.404      | 2106          | 2111        | 2118         | rBV      | 1919334        | 2550749       | 3.92%           | 0.442%        |
| 28        | 15.780      | 2172          | 2175        | 2183         | rVB2     | 121248         | 274052        | 0.42%           | 0.047%        |
| 29        | 16.009      | 2208          | 2214        | 2220         | rBV2     | 342773         | 598559        | 0.92%           | 0.104%        |
| 30        | 16.345      | 2267          | 2271        | 2276         | rVV      | 185958         | 286527        | 0.44%           | 0.050%        |
| 31        | 16.686      | 2324          | 2329        | 2337         | rVB2     | 264863         | 440690        | 0.68%           | 0.076%        |
| 32        | 16.780      | 2339          | 2345        | 2348         | rBV4     | 98029          | 225512        | 0.35%           | 0.039%        |
| 33        | 17.033      | 2382          | 2388        | 2392         | rBV2     | 5445881        | 8032033       | 12.35%          | 1.392%        |
| 34        | 17.074      | 2392          | 2395        | 2399         | rVV      | 3147346        | 4082078       | 6.28%           | 0.707%        |

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

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

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

Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
 Title : SVOA CALIBRATION

|    |        |      |      |      |      |          |          |        |        |
|----|--------|------|------|------|------|----------|----------|--------|--------|
| 35 | 17.133 | 2399 | 2405 | 2408 | rVV2 | 7783649  | 12599463 | 19.37% | 2.183% |
| 36 | 17.162 | 2408 | 2410 | 2416 | rVV  | 7255866  | 9157881  | 14.08% | 1.587% |
| 37 | 17.227 | 2417 | 2421 | 2427 | rVV3 | 178653   | 327649   | 0.50%  | 0.057% |
| 38 | 17.433 | 2452 | 2456 | 2461 | rVB  | 653472   | 890031   | 1.37%  | 0.154% |
| 39 | 17.692 | 2497 | 2500 | 2507 | rVB4 | 158864   | 227118   | 0.35%  | 0.039% |
| 40 | 17.956 | 2540 | 2545 | 2553 | rVB  | 848286   | 1197472  | 1.84%  | 0.207% |
| 41 | 18.039 | 2553 | 2559 | 2564 | rVV  | 1778232  | 2617846  | 4.03%  | 0.454% |
| 42 | 18.103 | 2564 | 2570 | 2574 | rVV  | 607550   | 1169739  | 1.80%  | 0.203% |
| 43 | 18.139 | 2574 | 2576 | 2584 | rVB  | 314885   | 350546   | 0.54%  | 0.061% |
| 44 | 18.303 | 2600 | 2604 | 2609 | rVB3 | 135516   | 213217   | 0.33%  | 0.037% |
| 45 | 18.415 | 2619 | 2623 | 2626 | rBV  | 337423   | 418387   | 0.64%  | 0.072% |
| 46 | 18.450 | 2626 | 2629 | 2635 | rVB2 | 395227   | 545726   | 0.84%  | 0.095% |
| 47 | 18.709 | 2669 | 2673 | 2677 | rBV3 | 544000   | 695495   | 1.07%  | 0.121% |
| 48 | 18.750 | 2677 | 2680 | 2684 | rVB  | 265580   | 346065   | 0.53%  | 0.060% |
| 49 | 18.827 | 2688 | 2693 | 2699 | rBV  | 801445   | 1346248  | 2.07%  | 0.233% |
| 50 | 18.898 | 2701 | 2705 | 2708 | rBV2 | 316908   | 474082   | 0.73%  | 0.082% |
| 51 | 18.968 | 2713 | 2717 | 2725 | rBV  | 982680   | 1758971  | 2.70%  | 0.305% |
| 52 | 19.098 | 2733 | 2739 | 2744 | rVB  | 9269034  | 12259427 | 18.85% | 2.124% |
| 53 | 19.245 | 2760 | 2764 | 2768 | rVB  | 742123   | 1065954  | 1.64%  | 0.185% |
| 54 | 19.433 | 2790 | 2796 | 2798 | rBV2 | 9635949  | 14813299 | 22.78% | 2.567% |
| 55 | 19.462 | 2798 | 2801 | 2809 | rVV  | 12835650 | 16808329 | 25.85% | 2.912% |
| 56 | 19.539 | 2809 | 2814 | 2821 | rVB3 | 490531   | 1132833  | 1.74%  | 0.196% |
| 57 | 19.639 | 2827 | 2831 | 2837 | rBV  | 1358346  | 1866953  | 2.87%  | 0.323% |
| 58 | 19.697 | 2838 | 2841 | 2847 | rVB2 | 1046066  | 1556209  | 2.39%  | 0.270% |
| 59 | 19.792 | 2851 | 2857 | 2867 | rVB4 | 1877010  | 4198808  | 6.46%  | 0.728% |
| 60 | 19.956 | 2875 | 2885 | 2890 | rVB  | 4615839  | 10404656 | 16.00% | 1.803% |
| 61 | 20.009 | 2891 | 2894 | 2897 | rBV2 | 330069   | 407869   | 0.63%  | 0.071% |
| 62 | 20.056 | 2898 | 2902 | 2906 | rBV  | 4760841  | 6031439  | 9.27%  | 1.045% |
| 63 | 20.115 | 2906 | 2912 | 2916 | rBV2 | 2952107  | 4660663  | 7.17%  | 0.808% |
| 64 | 20.156 | 2916 | 2919 | 2923 | rVB2 | 692707   | 801030   | 1.23%  | 0.139% |
| 65 | 20.197 | 2923 | 2926 | 2931 | rVB  | 465339   | 660255   | 1.02%  | 0.114% |
| 66 | 20.256 | 2932 | 2936 | 2940 | rBV  | 2530562  | 3462532  | 5.32%  | 0.600% |
| 67 | 20.297 | 2940 | 2943 | 2948 | rVB2 | 1605826  | 2493594  | 3.83%  | 0.432% |
| 68 | 20.515 | 2977 | 2980 | 2983 | rBV3 | 762244   | 1129503  | 1.74%  | 0.196% |
| 69 | 20.621 | 2996 | 2998 | 3002 | rVB3 | 585631   | 629460   | 0.97%  | 0.109% |
| 70 | 20.674 | 3002 | 3007 | 3009 | rBV3 | 1063429  | 1776348  | 2.73%  | 0.308% |
| 71 | 20.709 | 3009 | 3013 | 3019 | rVB2 | 1754770  | 3180267  | 4.89%  | 0.551% |

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Instrument :  
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## Integration Parameters: LSCINT.P

Integrator: RTE  
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Start Thrs: 0.2  
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Min Area: 0.1 % of largest Peak  
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Peak Location: TOP

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

Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Title : SVOA CALIBRATION

|     |        |      |      |      |      |          |          |         |         |
|-----|--------|------|------|------|------|----------|----------|---------|---------|
| 72  | 20.874 | 3035 | 3041 | 3044 | rBV2 | 2349641  | 3714492  | 5.71%   | 0.644%  |
| 73  | 20.909 | 3044 | 3047 | 3050 | rVB  | 1480919  | 1518054  | 2.33%   | 0.263%  |
| 74  | 20.944 | 3050 | 3053 | 3060 | rBV  | 2852216  | 5244537  | 8.06%   | 0.909%  |
| 75  | 21.215 | 3091 | 3099 | 3103 | rBV2 | 16058719 | 28274126 | 43.48%  | 4.899%  |
| 76  | 21.268 | 3104 | 3108 | 3114 | rVB  | 23718264 | 32923462 | 50.62%  | 5.704%  |
| 77  | 21.380 | 3123 | 3127 | 3136 | rBV  | 3055726  | 5046341  | 7.76%   | 0.874%  |
| 78  | 21.486 | 3141 | 3145 | 3149 | rVB3 | 2042131  | 2668113  | 4.10%   | 0.462%  |
| 79  | 21.527 | 3149 | 3152 | 3159 | rBV  | 2561653  | 4346502  | 6.68%   | 0.753%  |
| 80  | 21.586 | 3159 | 3162 | 3170 | rVB3 | 1439825  | 2473413  | 3.80%   | 0.429%  |
| 81  | 21.721 | 3182 | 3185 | 3187 | rBV  | 1116586  | 1528418  | 2.35%   | 0.265%  |
| 82  | 21.774 | 3188 | 3194 | 3198 | rVV  | 4381256  | 7799865  | 11.99%  | 1.351%  |
| 83  | 21.827 | 3199 | 3203 | 3209 | rVB  | 2546187  | 4041716  | 6.21%   | 0.700%  |
| 84  | 21.968 | 3223 | 3227 | 3229 | rBV  | 2452381  | 3635326  | 5.59%   | 0.630%  |
| 85  | 21.997 | 3229 | 3232 | 3238 | rVV5 | 2646759  | 4230829  | 6.51%   | 0.733%  |
| 86  | 22.062 | 3239 | 3243 | 3253 | rVB3 | 1892225  | 3774199  | 5.80%   | 0.654%  |
| 87  | 22.238 | 3270 | 3273 | 3278 | rBV2 | 826553   | 1314722  | 2.02%   | 0.228%  |
| 88  | 22.533 | 3317 | 3323 | 3333 | rVB3 | 1974192  | 5038127  | 7.75%   | 0.873%  |
| 89  | 22.785 | 3358 | 3366 | 3371 | rBV2 | 26321217 | 65034071 | 100.00% | 11.268% |
| 90  | 22.944 | 3388 | 3393 | 3399 | rBV  | 4575063  | 7161817  | 11.01%  | 1.241%  |
| 91  | 23.074 | 3410 | 3415 | 3425 | rBV2 | 1620692  | 4561458  | 7.01%   | 0.790%  |
| 92  | 23.250 | 3438 | 3445 | 3450 | rBV  | 13998073 | 27149866 | 41.75%  | 4.704%  |
| 93  | 23.297 | 3450 | 3453 | 3456 | rVV  | 4242163  | 7119272  | 10.95%  | 1.234%  |
| 94  | 23.344 | 3456 | 3461 | 3468 | rVB  | 19232831 | 35568460 | 54.69%  | 6.163%  |
| 95  | 23.433 | 3470 | 3476 | 3479 | rVV  | 2999235  | 5802689  | 8.92%   | 1.005%  |
| 96  | 23.480 | 3480 | 3484 | 3493 | rVB2 | 6711971  | 13353183 | 20.53%  | 2.314%  |
| 97  | 25.403 | 3807 | 3811 | 3820 | rVB2 | 1763980  | 4104150  | 6.31%   | 0.711%  |
| 98  | 25.650 | 3843 | 3853 | 3863 | rVB  | 11799757 | 35571070 | 54.70%  | 6.163%  |
| 99  | 25.985 | 3905 | 3910 | 3929 | rVB2 | 1743052  | 5467874  | 8.41%   | 0.947%  |
| 100 | 26.321 | 3957 | 3967 | 3983 | rVB  | 6887513  | 21343137 | 32.82%  | 3.698%  |

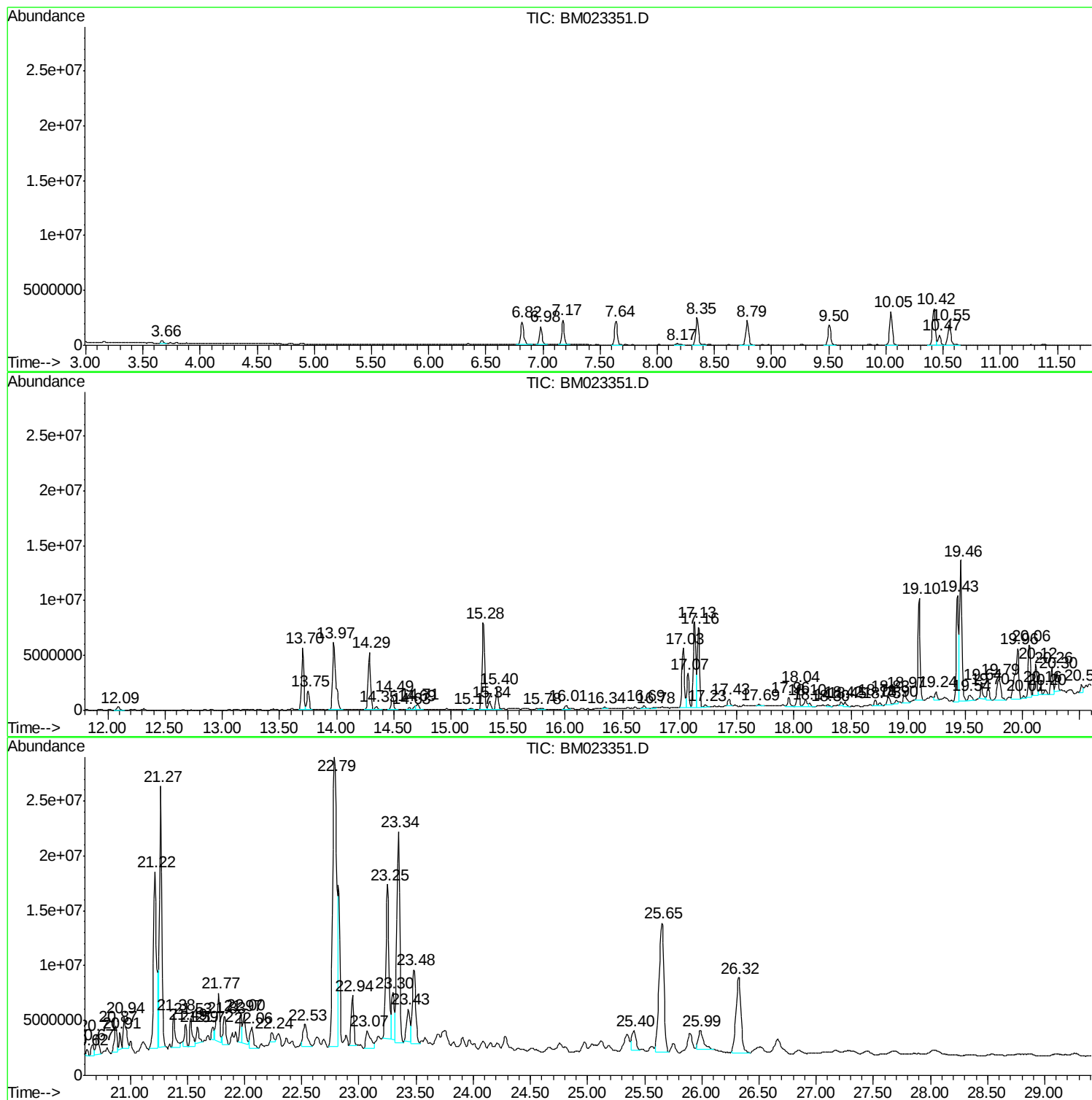
Sum of corrected areas: 577151545

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Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

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



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
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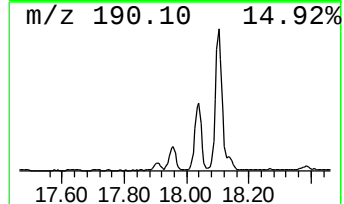
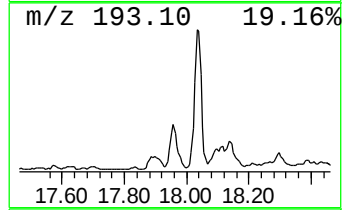
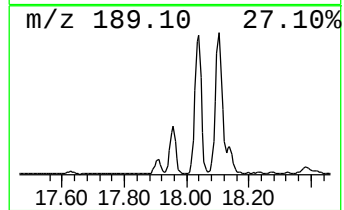
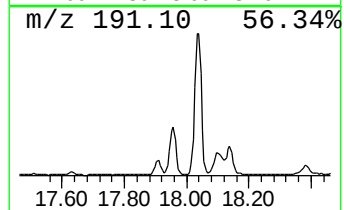
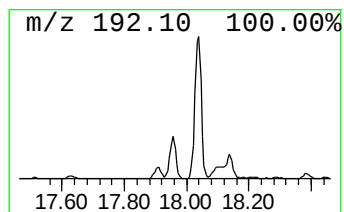
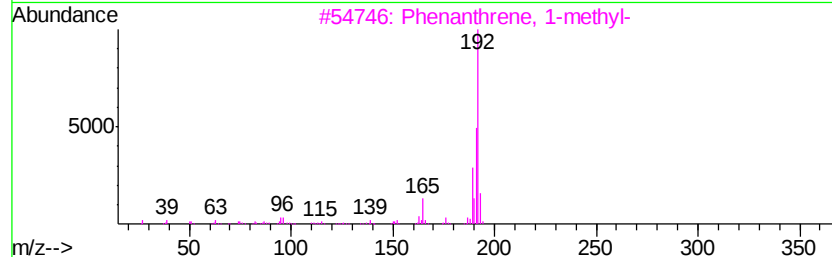
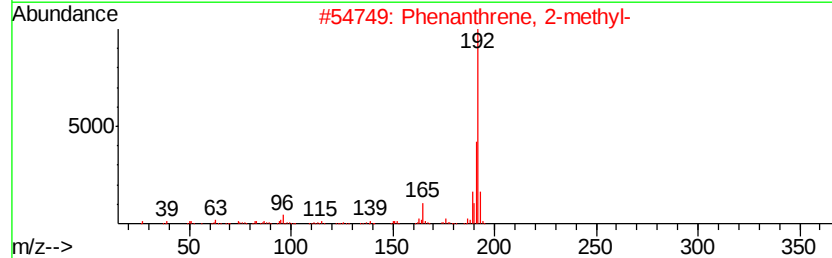
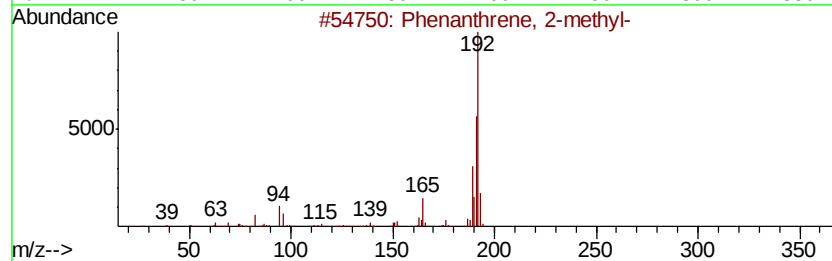
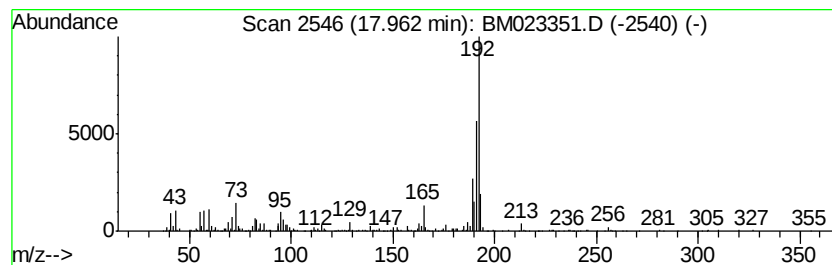
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 1 Phenanthrene, 2-methyl- Concentration Rank 17

| R.T.    | EstConc                               | Area         | Relative to ISTD | R.T.        |      |      |
|---------|---------------------------------------|--------------|------------------|-------------|------|------|
| 17.96   | 2.98 ng/ul                            | 1197470      | Phenanthrene-d10 | 17.03       |      |      |
| Hit# of | 5                                     | Tentative ID | MW               | MolForm     | CAS# | Qual |
| 1       | Phenanthrene, 2-methyl-               | 192          | C15H12           | 002531-84-2 | 98   |      |
| 2       | Phenanthrene, 2-methyl-               | 192          | C15H12           | 002531-84-2 | 97   |      |
| 3       | Phenanthrene, 1-methyl-               | 192          | C15H12           | 000832-69-9 | 97   |      |
| 4       | Anthracene, 2-methyl-                 | 192          | C15H12           | 000613-12-7 | 96   |      |
| 5       | 1H-Cyclopropa[1]phenanthrene, 1a, ... | 192          | C15H12           | 000949-41-7 | 96   |      |



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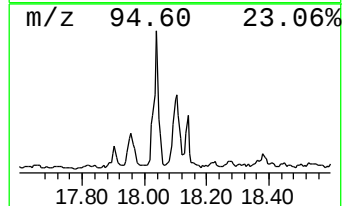
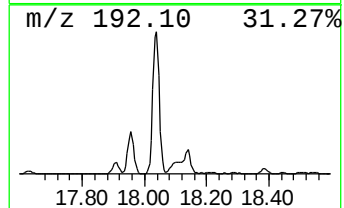
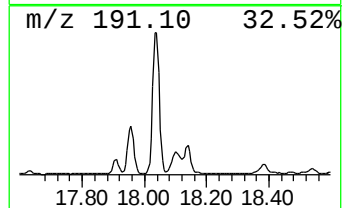
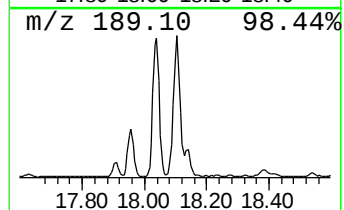
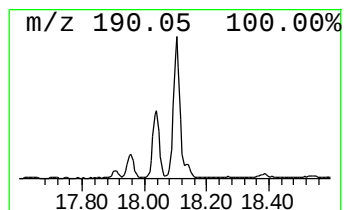
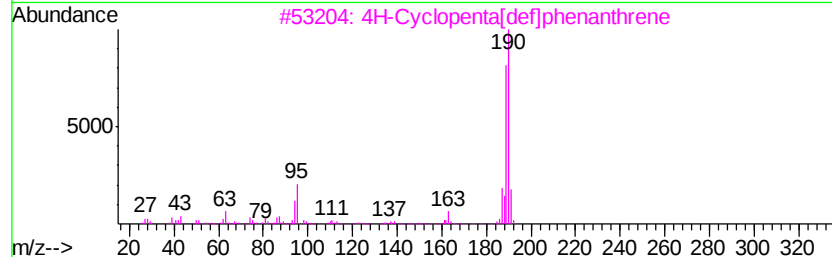
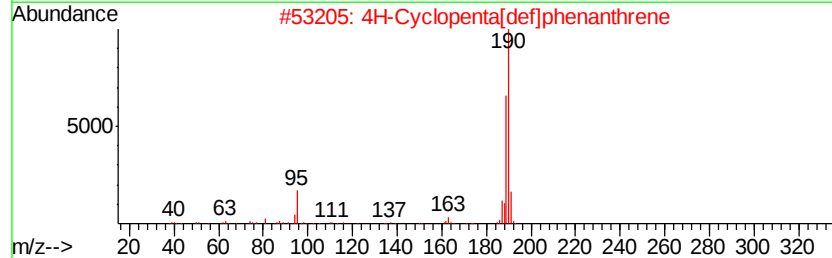
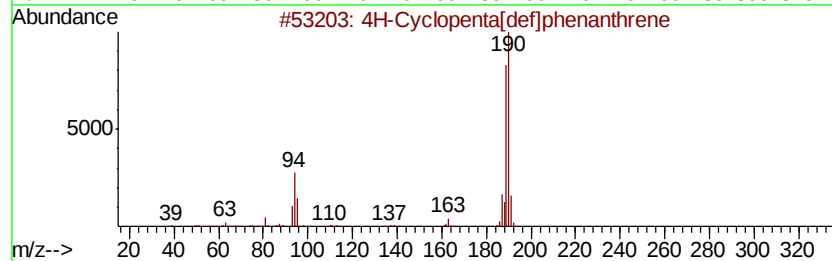
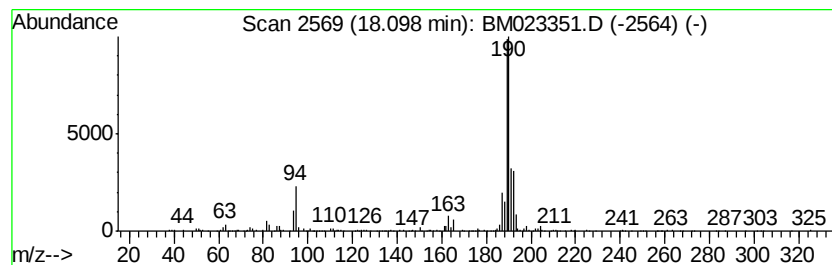
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

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

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

| R.T.    | EstConc                             | Area         | Relative to ISTD | R.T.        |      |      |
|---------|-------------------------------------|--------------|------------------|-------------|------|------|
| 18.10   | 2.91 ng/ul                          | 1169740      | Phenanthrene-d10 | 17.03       |      |      |
| Hit# of | 5                                   | Tentative ID | MW               | MolForm     | CAS# | Qual |
| 1       | 4H-Cyclopenta[def]phenanthrene      | 190          | C15H10           | 000203-64-5 | 76   |      |
| 2       | 4H-Cyclopenta[def]phenanthrene      | 190          | C15H10           | 000203-64-5 | 64   |      |
| 3       | 4H-Cyclopenta[def]phenanthrene      | 190          | C15H10           | 000203-64-5 | 62   |      |
| 4       | Methyl diselenide                   | 190          | C2H6Se2          | 007101-31-7 | 55   |      |
| 5       | 2,3,5,6-Tetramethylterephthalald... | 190          | C12H14O2         | 007072-01-7 | 47   |      |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

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Quant Title : SVOA CALIBRATION

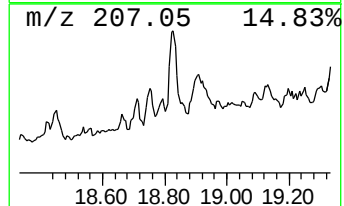
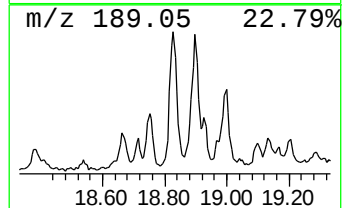
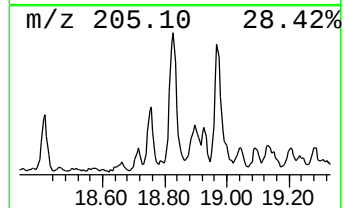
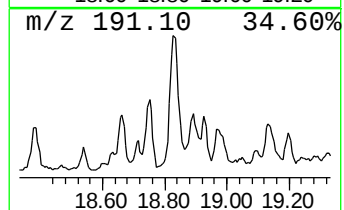
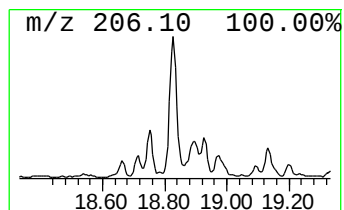
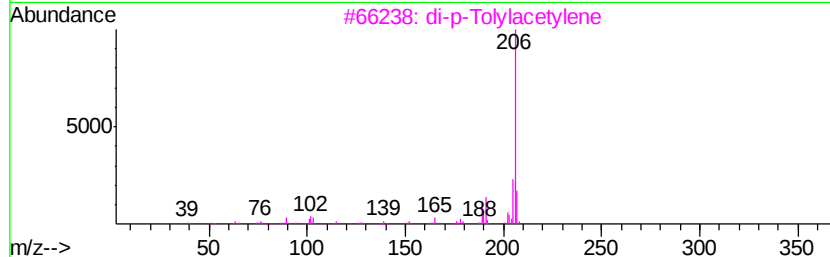
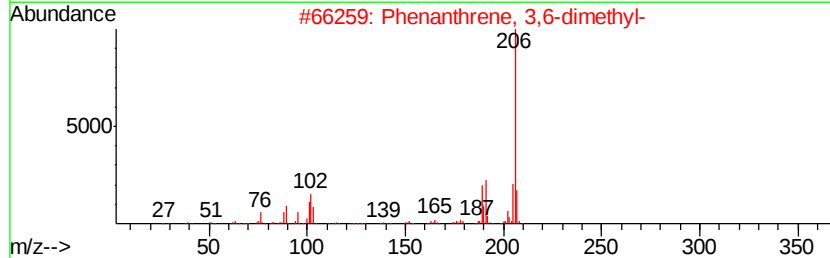
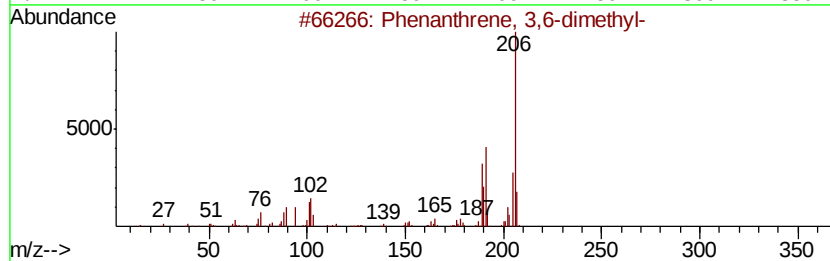
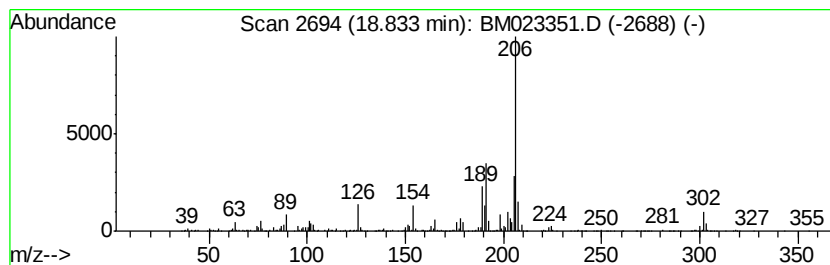
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TIC Integration Parameters: LSCINT.P

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Peak Number 4 Phenanthrene, 3,6-dimethyl- Concentration Rank 13

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 18.83 | 3.35 ng/ul | 1346250 | Phenanthrene-d10 | 17.03 |

| Hit# | of | Tentative ID                | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------------|-----|---------|-------------|------|
| 1    | 5  | Phenanthrene, 3,6-dimethyl- | 206 | C16H14  | 001576-67-6 | 93   |
| 2    |    | Phenanthrene, 3,6-dimethyl- | 206 | C16H14  | 001576-67-6 | 90   |
| 3    |    | di-p-Tolylacetvlene         | 206 | C16H14  | 002789-88-0 | 90   |
| 4    |    | Phenanthrene, 3,6-dimethyl- | 206 | C16H14  | 001576-67-6 | 90   |
| 5    |    | Anthracene, 1,4-dimethyl-   | 206 | C16H14  | 000781-92-0 | 89   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
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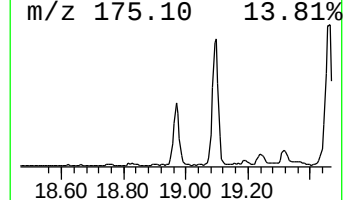
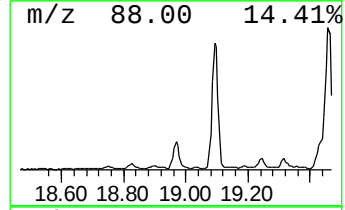
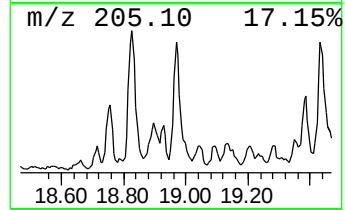
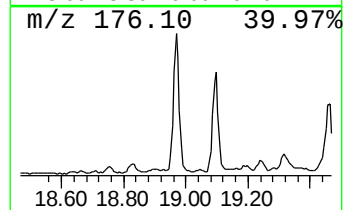
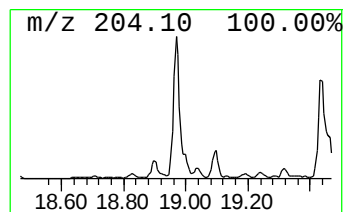
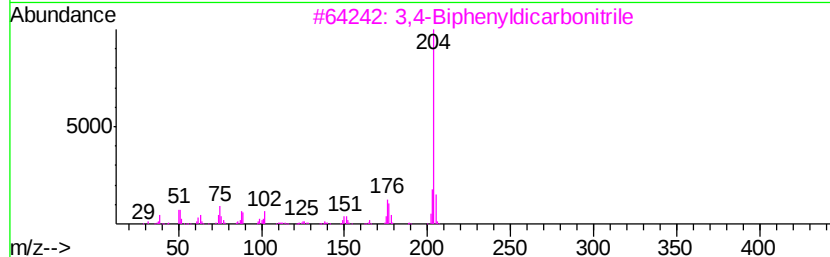
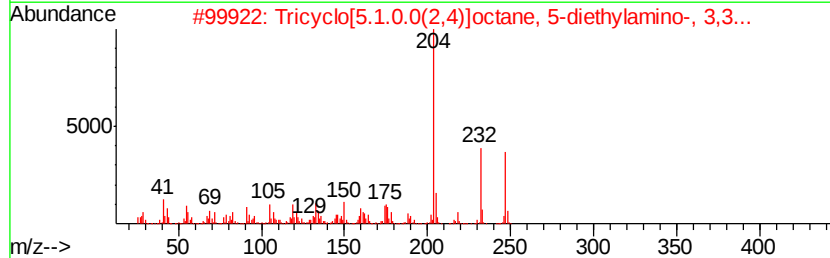
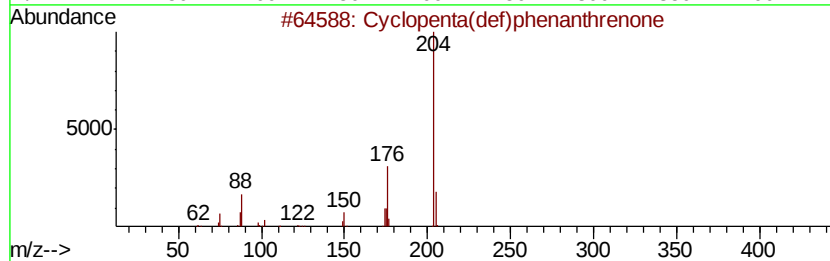
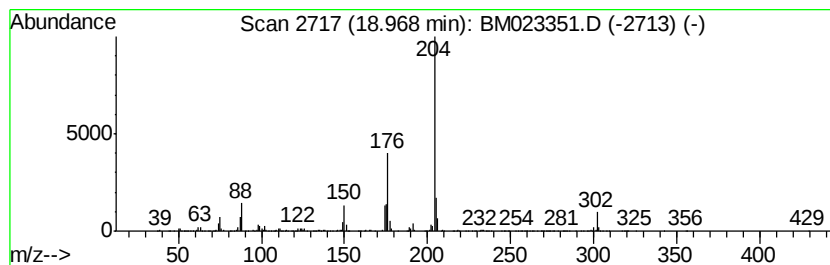
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 5 Cyclopenta(def)phenanthrenone Concentration Rank 9

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 18.97 | 4.38 ng/ul | 1758970 | Phenanthrene-d10 | 17.03 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Cyclopenta(def)phenanthrenone       | 204 | C15H8O    | 005737-13-3  | 93   |
| 2    |    | Tricyclo[5.1.0.0(2,4)]octane, 5-... | 247 | C17H29N   | 1000063-59-3 | 50   |
| 3    |    | 3,4-Biphenyldicarbonitrile          | 204 | C14H8N2   | 004128-63-6  | 45   |
| 4    |    | (E)-Ethyl 3-oxo-2-(pyrid-2-yl)me... | 219 | C12H13NO3 | 1000147-59-7 | 45   |
| 5    |    | [1,1'-Biphenyl]-4,4'-dicarbonitrile | 204 | C14H8N2   | 001591-30-6  | 43   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

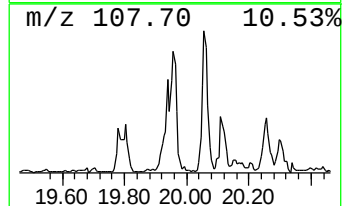
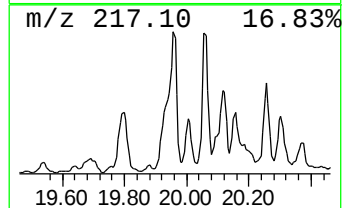
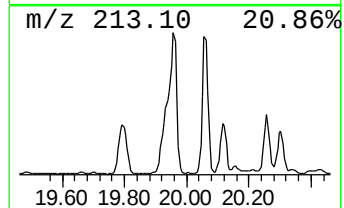
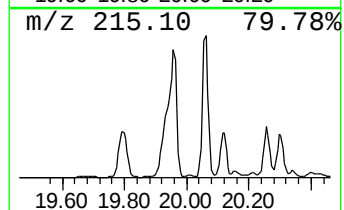
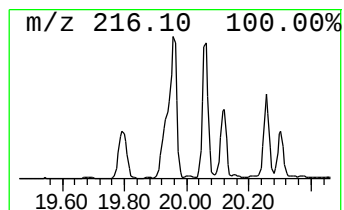
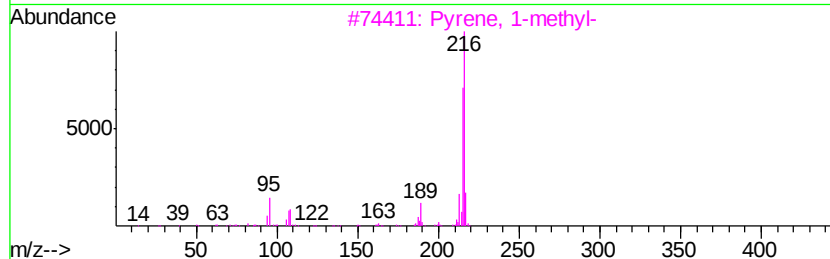
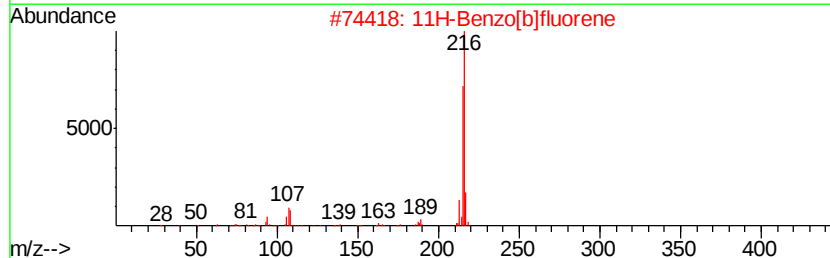
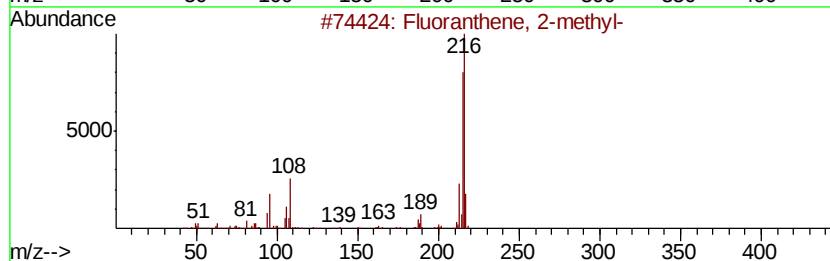
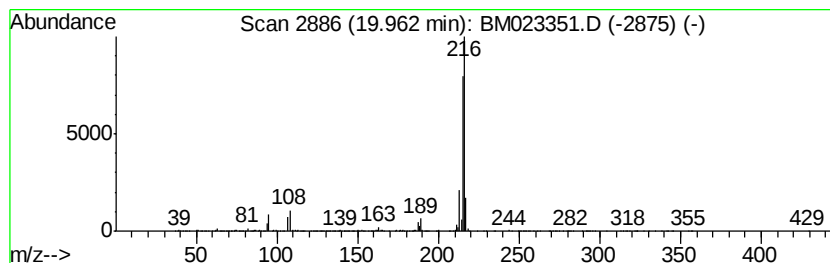
Instrument :  
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ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

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

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Peak Number 7 Fluoranthene, 2-methyl- Concentration Rank 6

| R.T.    | EstConc    | Area                    | Relative to ISTD | R.T.           |
|---------|------------|-------------------------|------------------|----------------|
| 19.96   | 7.36 ng/ul | 10404700                | Chrysene-d12     | 21.23          |
| Hit# of | 5          | Tentative ID            | MW MolForm       | CAS# Qual      |
| 1       |            | Fluoranthene, 2-methyl- | 216 C17H12       | 033543-31-6 95 |
| 2       |            | 11H-Benzo[b]fluorene    | 216 C17H12       | 000243-17-4 94 |
| 3       |            | Pyrene, 1-methyl-       | 216 C17H12       | 002381-21-7 94 |
| 4       |            | 11H-Benzo[b]fluorene    | 216 C17H12       | 000243-17-4 93 |
| 5       |            | 11H-Benzo[a]fluorene    | 216 C17H12       | 000238-84-6 93 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

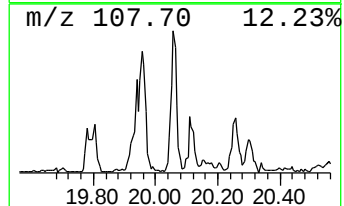
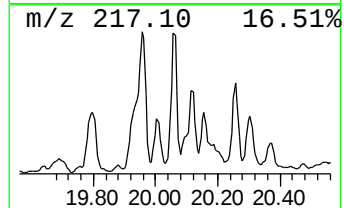
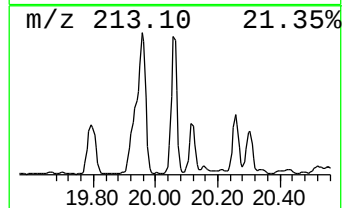
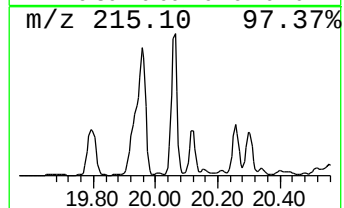
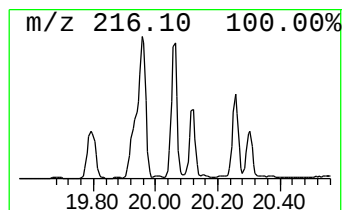
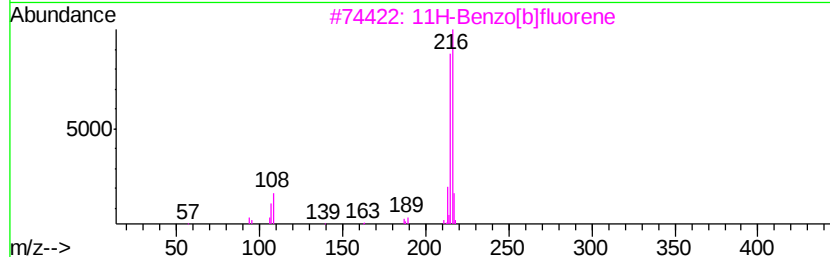
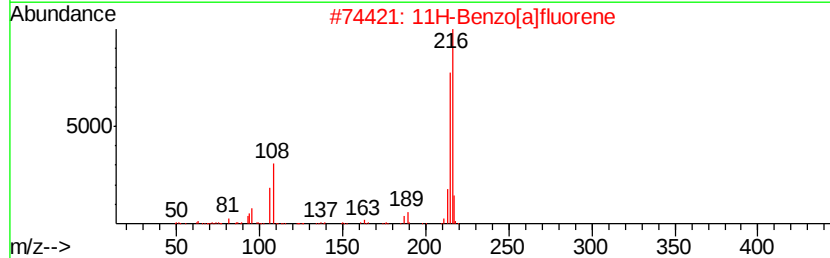
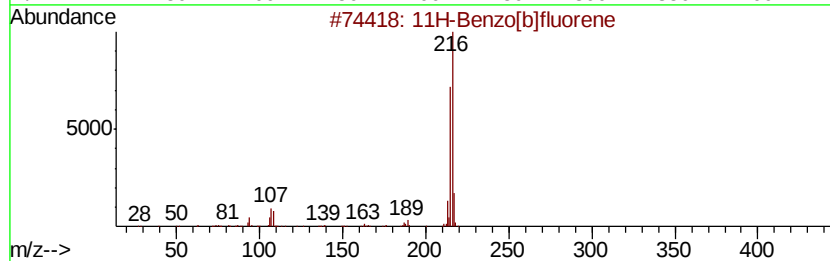
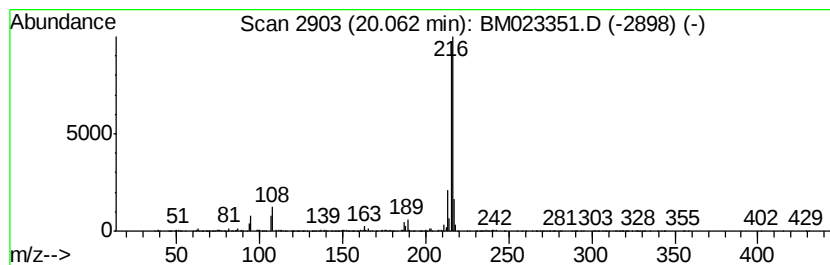
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Quant Title : SVOA CALIBRATION

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

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Peak Number 8 11H-Benzo[b]fluorene Concentration Rank 10

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 20.06 | 4.27 ng/ul | 6031440 | Chrysene-d12     | 21.23 |

| Hit# | of | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------|-----|---------|-------------|------|
| 1    | 5  | 11H-Benzo[b]fluorene | 216 | C17H12  | 000243-17-4 | 96   |
| 2    |    | 11H-Benzo[a]fluorene | 216 | C17H12  | 000238-84-6 | 93   |
| 3    |    | 11H-Benzo[b]fluorene | 216 | C17H12  | 000243-17-4 | 91   |
| 4    |    | 11H-Benzo[a]fluorene | 216 | C17H12  | 000238-84-6 | 91   |
| 5    |    | 11H-Benzo[b]fluorene | 216 | C17H12  | 000243-17-4 | 87   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

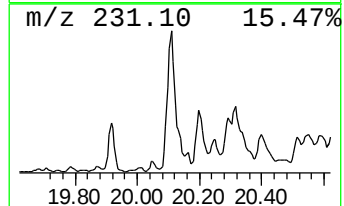
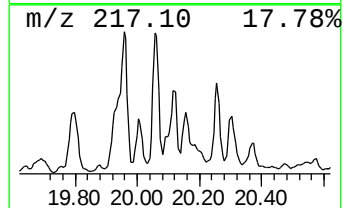
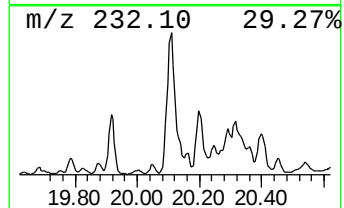
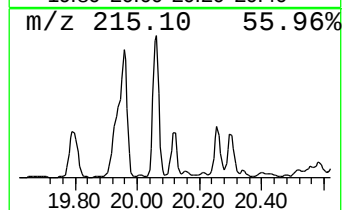
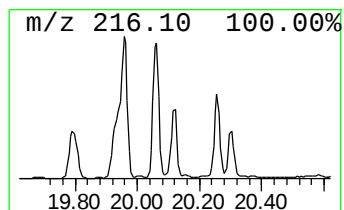
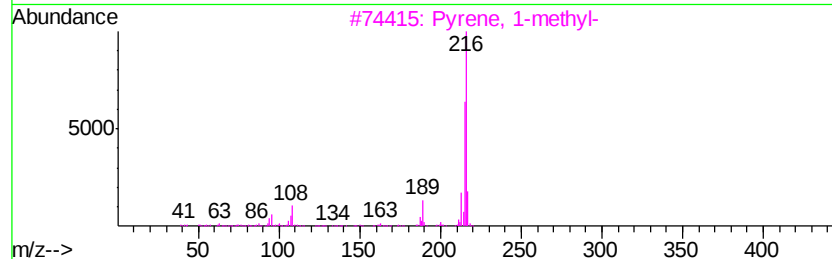
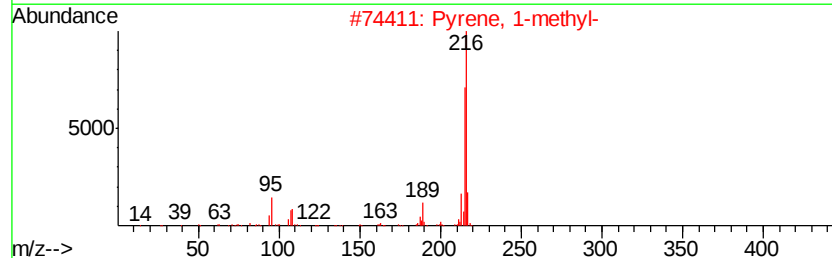
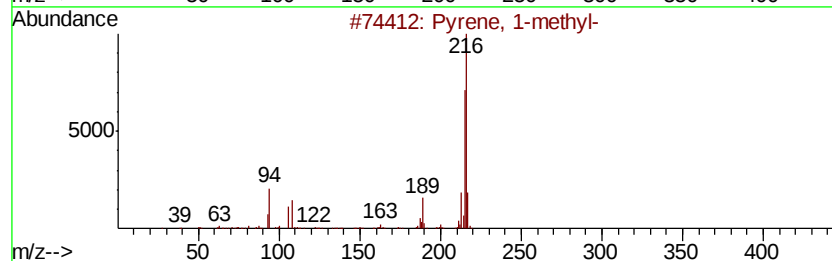
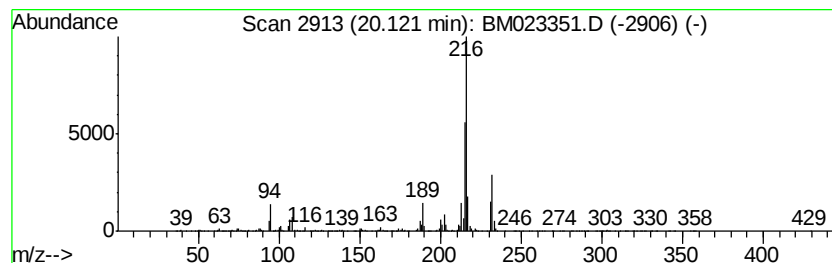
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 Pyrene, 1-methyl- Concentration Rank 14

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 20.12 | 3.30 ng/ul | 4660660 | Chrysene-d12     | 21.23 |

| Hit# | of | Tentative ID      | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------|-----|---------|-------------|------|
| 1    | 5  | Pyrene, 1-methyl- | 216 | C17H12  | 002381-21-7 | 92   |
| 2    |    | Pyrene, 1-methyl- | 216 | C17H12  | 002381-21-7 | 92   |
| 3    |    | Pyrene, 1-methyl- | 216 | C17H12  | 002381-21-7 | 91   |
| 4    |    | Pyrene, 2-methyl- | 216 | C17H12  | 003442-78-2 | 91   |
| 5    |    | Pyrene, 2-methyl- | 216 | C17H12  | 003442-78-2 | 87   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

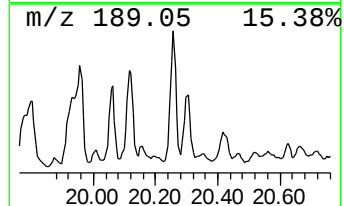
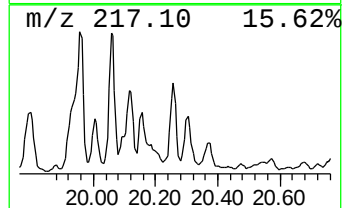
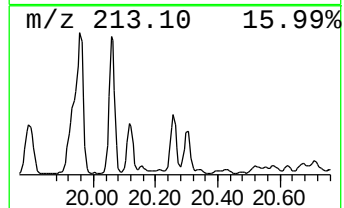
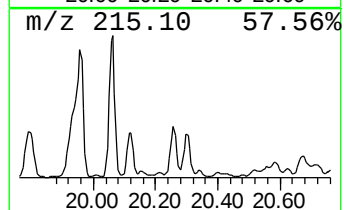
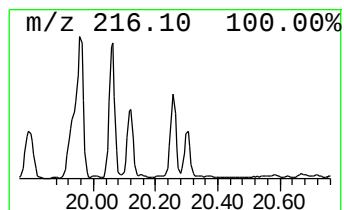
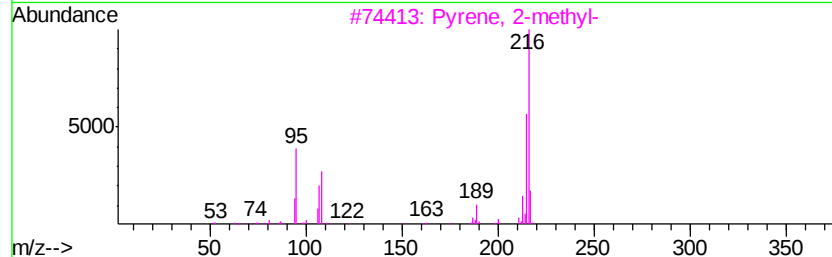
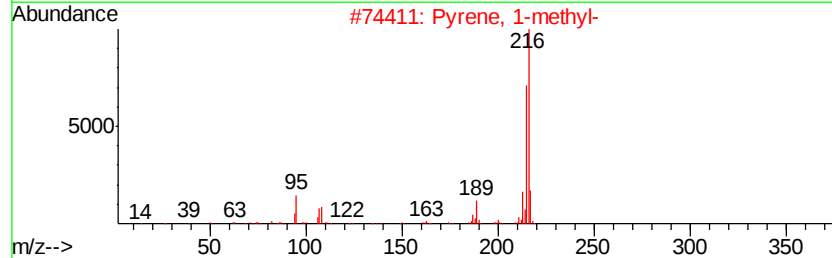
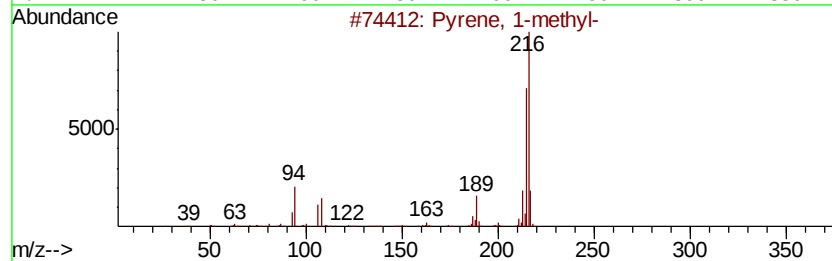
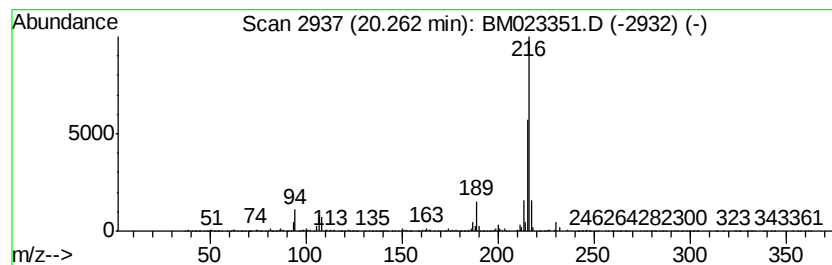
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 10 Pyrene, 2-methyl- Concentration Rank 24

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 20.26 | 2.45 ng/ul | 3462530 | Chrysene-d12     | 21.23 |

| Hit# | of | Tentative ID      | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------|-----|---------|-------------|------|
| 1    | 5  | Pyrene, 1-methyl- | 216 | C17H12  | 002381-21-7 | 97   |
| 2    |    | Pyrene, 1-methyl- | 216 | C17H12  | 002381-21-7 | 96   |
| 3    |    | Pyrene, 2-methyl- | 216 | C17H12  | 003442-78-2 | 95   |
| 4    |    | Pyrene, 1-methyl- | 216 | C17H12  | 002381-21-7 | 95   |
| 5    |    | Pyrene, 4-methyl- | 216 | C17H12  | 003353-12-6 | 94   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

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Quant Title : SVOA CALIBRATION

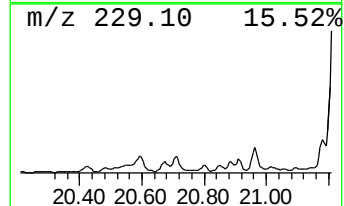
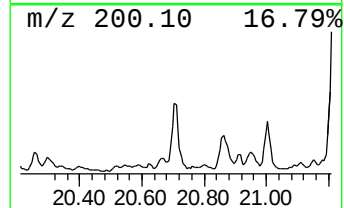
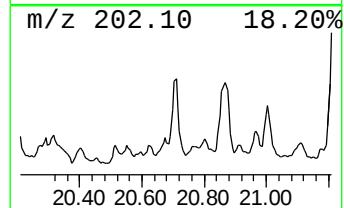
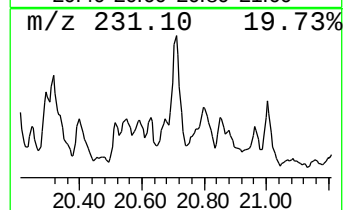
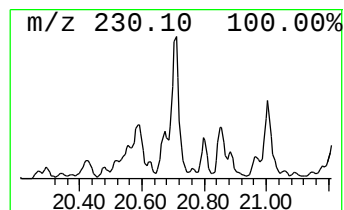
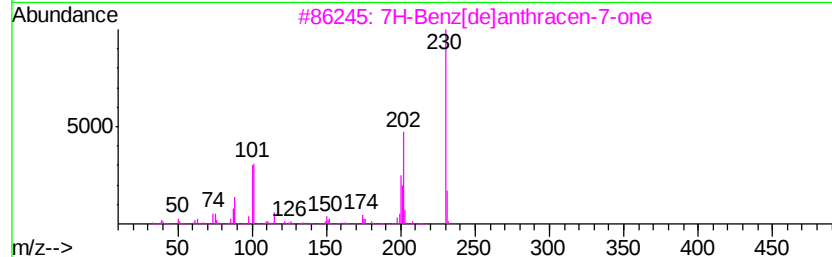
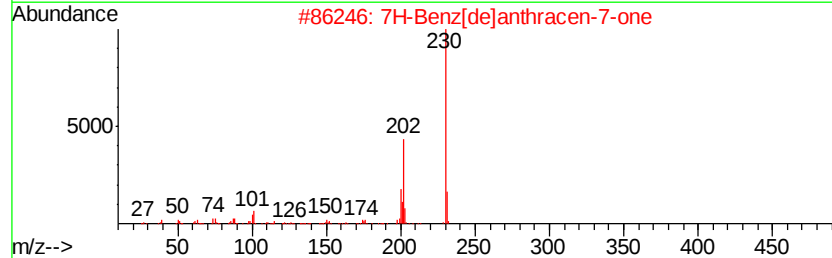
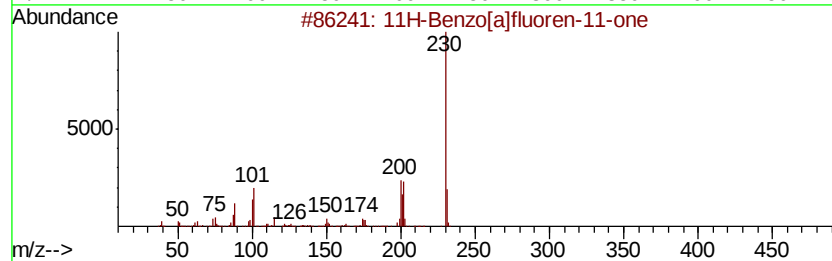
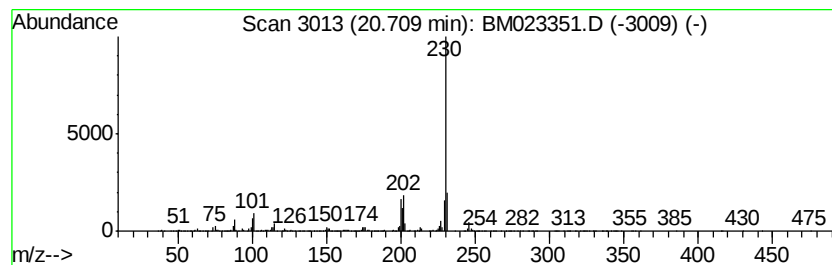
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 11 11H-Benzo[a]fluoren-11-one Concentration Rank 25

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 20.71 | 2.25 ng/ul | 3180270 | Chrysene-d12     | 21.23 |

| Hit# | of | Tentative ID               | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------|-----|---------|-------------|------|
| 1    | 5  | 11H-Benzo[a]fluoren-11-one | 230 | C17H10O | 000479-79-8 | 95   |
| 2    |    | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 90   |
| 3    |    | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 87   |
| 4    |    | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 76   |
| 5    |    | m-Terphenyl                | 230 | C18H14  | 000092-06-8 | 72   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

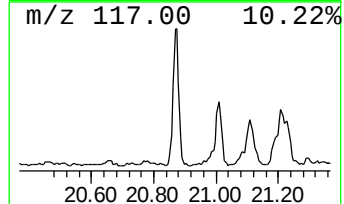
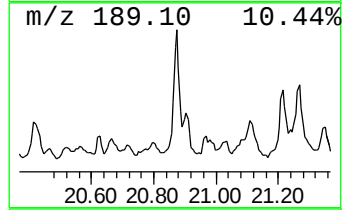
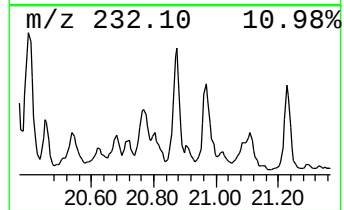
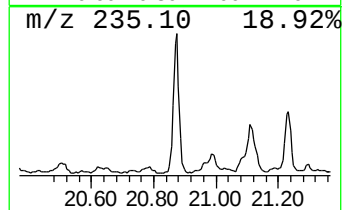
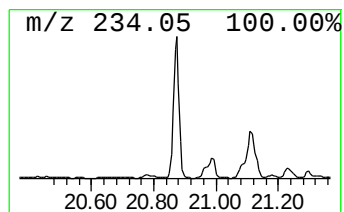
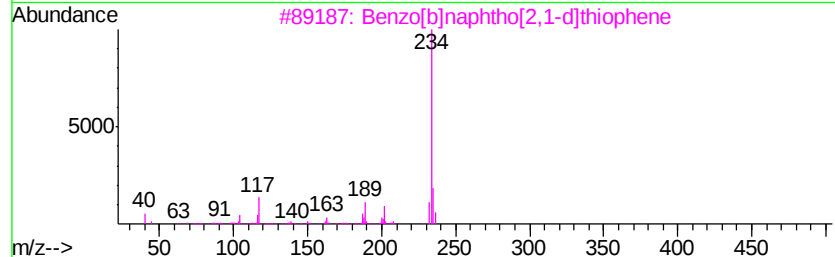
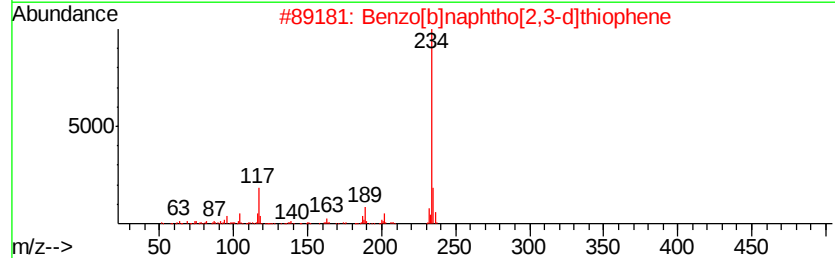
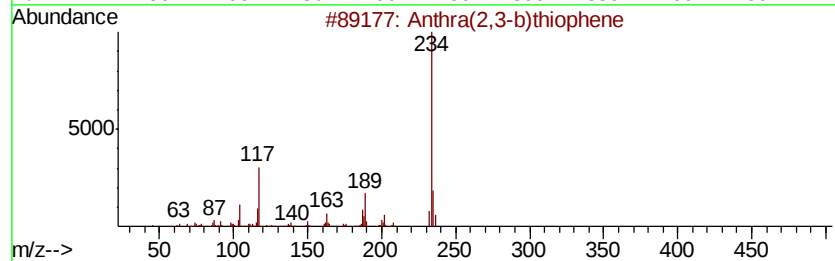
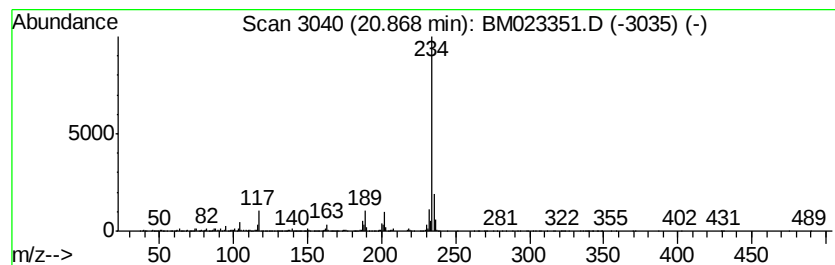
Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 12 Anthra(2,3-b)thiophene Concentration Rank 22

| R.T.    | EstConc    | Area                            | Relative to ISTD | R.T.    |             |      |
|---------|------------|---------------------------------|------------------|---------|-------------|------|
| 20.87   | 2.63 ng/ul | 3714490                         | Chrysene-d12     | 21.23   |             |      |
| Hit# of | 5          | Tentative ID                    | MW               | MolForm | CAS#        | Qual |
| 1       |            | Anthra(2,3-b)thiophene          | 234              | C16H10S | 022108-55-0 | 97   |
| 2       |            | Benzo[b]naphtho[2,3-d]thiophene | 234              | C16H10S | 000243-46-9 | 95   |
| 3       |            | Benzo[b]naphtho[2,1-d]thiophene | 234              | C16H10S | 000239-35-0 | 95   |
| 4       |            | Benzo[b]naphtho[2,1-d]thiophene | 234              | C16H10S | 000239-35-0 | 95   |
| 5       |            | Benzo[b]naphtho[2,1-d]thiophene | 234              | C16H10S | 000239-35-0 | 95   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

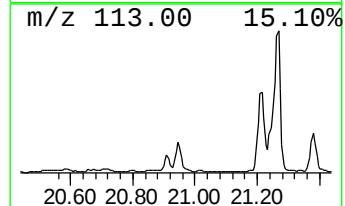
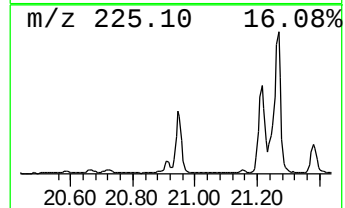
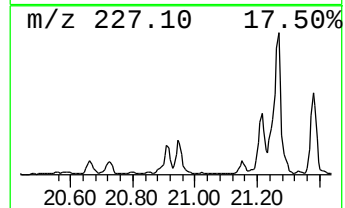
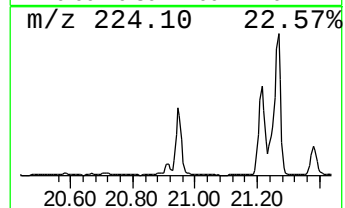
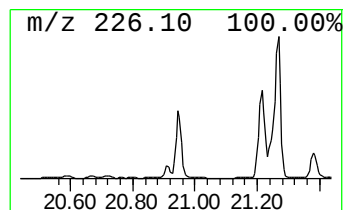
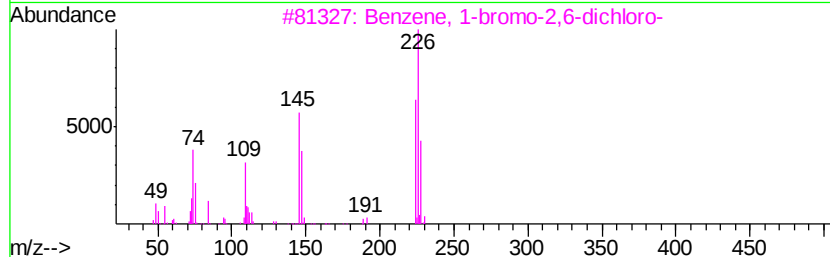
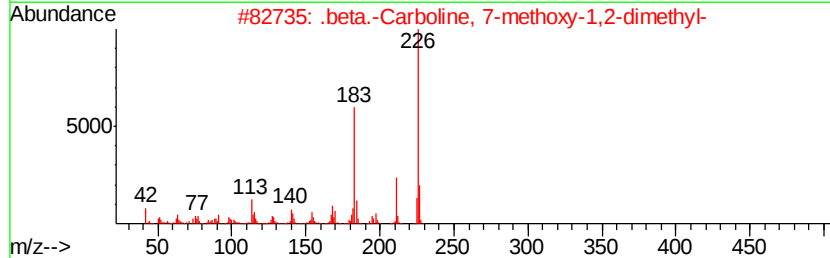
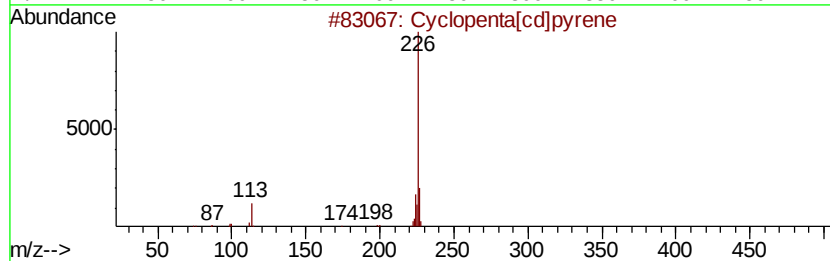
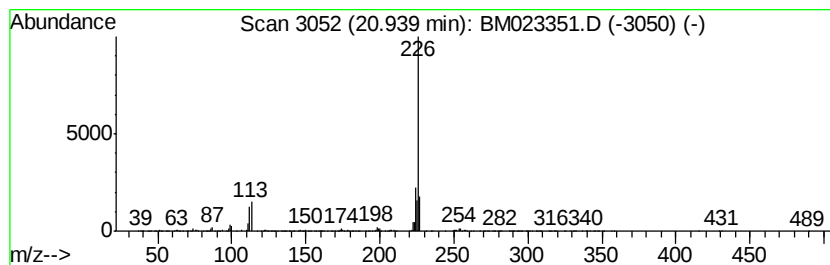
Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 13 Cyclopenta[cd]pyrene Concentration Rank 11

| R.T.    | EstConc    | Area                                | Relative to ISTD | R.T.      |             |      |
|---------|------------|-------------------------------------|------------------|-----------|-------------|------|
| 20.94   | 3.71 ng/ul | 5244540                             | Chrysene-d12     | 21.23     |             |      |
| Hit# of | 5          | Tentative ID                        | MW               | MolForm   | CAS#        | Qual |
| 1       |            | Cyclopenta[cd]pvrene                | 226              | C18H10    | 027208-37-3 | 94   |
| 2       |            | .beta.-Carboline, 7-methoxy-1,2-... | 226              | C14H14N2O | 006519-18-2 | 58   |
| 3       |            | Benzene, 1-bromo-2,6-dichloro-      | 224              | C6H3BrCl2 | 019393-92-1 | 45   |
| 4       |            | Benzo[ghi]fluoranthene              | 226              | C18H10    | 000203-12-3 | 40   |
| 5       |            | 9H-Xanthen-9-one, 3-methoxy-        | 226              | C14H10O3  | 003722-52-9 | 40   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

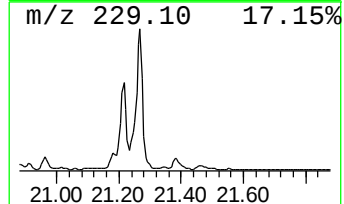
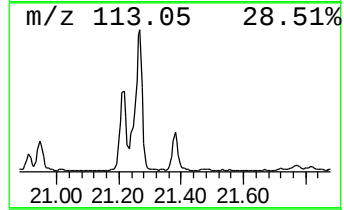
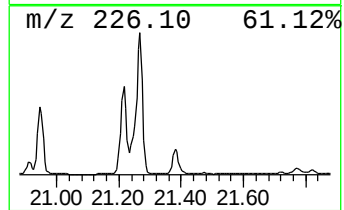
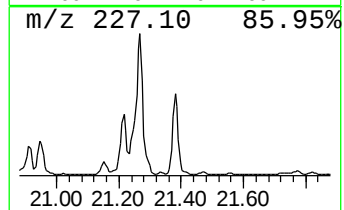
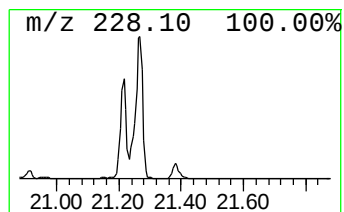
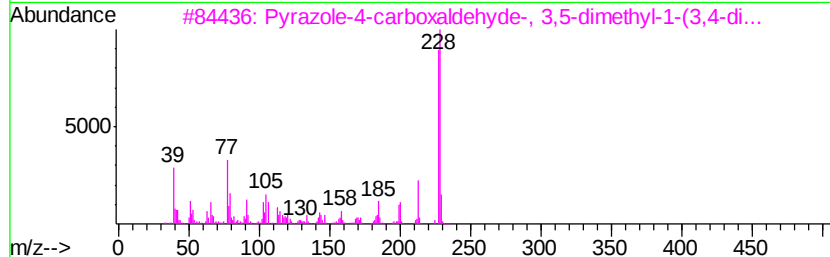
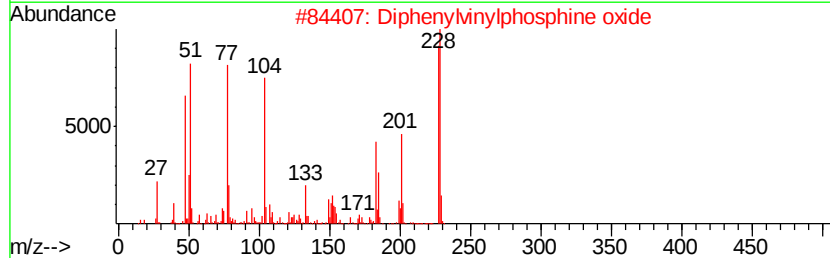
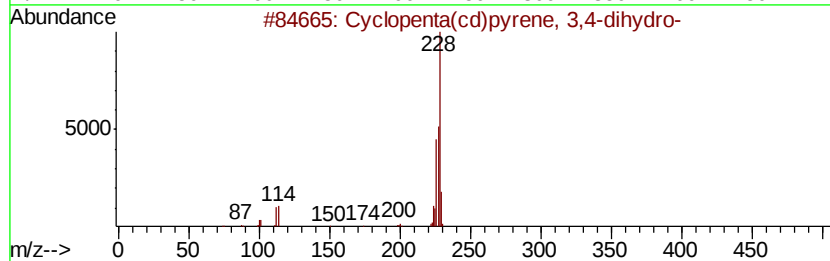
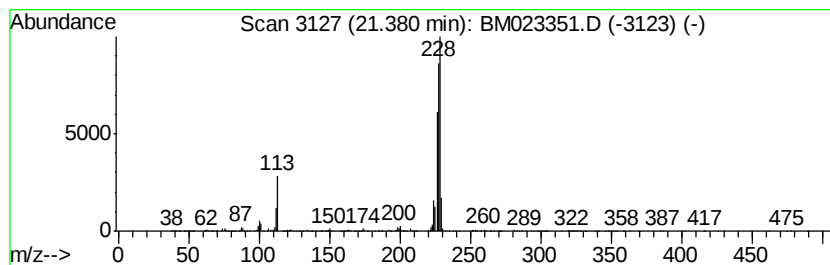
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 14 Cyclopenta(cd)pyrene, 3,4-d... Concentration Rank 12

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 21.38 | 3.57 ng/ul | 5046340 | Chrysene-d12     | 21.23 |

| Hit# | of | Tentative ID                        | MW  | MolForm     | CAS#         | Qual |
|------|----|-------------------------------------|-----|-------------|--------------|------|
| 1    | 5  | Cyclopenta(cd)pyrene, 3,4-dihydro-  | 228 | C18H12      | 025732-74-5  | 95   |
| 2    |    | Diphenylvinylphosphine oxide        | 228 | C14H13OP    | 002096-78-8  | 50   |
| 3    |    | Pyrazole-4-carboxaldehyde-, 3,5-... | 228 | C14H16N2O   | 1000272-54-8 | 50   |
| 4    |    | Isothiazol-5-amine, 4-bromo-3-ch... | 226 | C4H4BrClN2S | 1000272-59-9 | 50   |
| 5    |    | Dimethyl-[4-[2-(3-methylisoxazol... | 228 | C14H16N2O   | 1000306-39-6 | 50   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

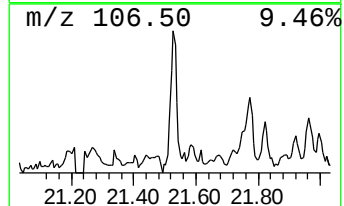
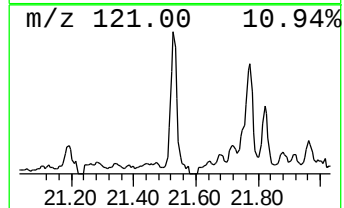
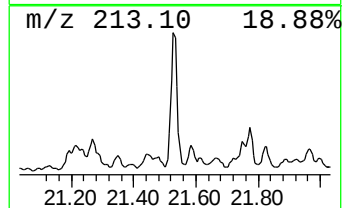
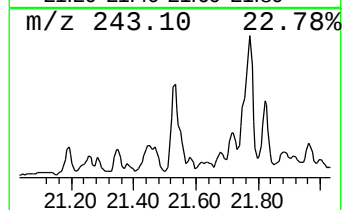
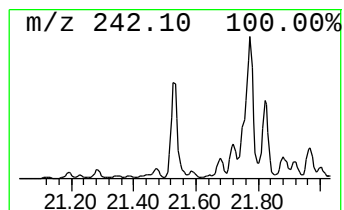
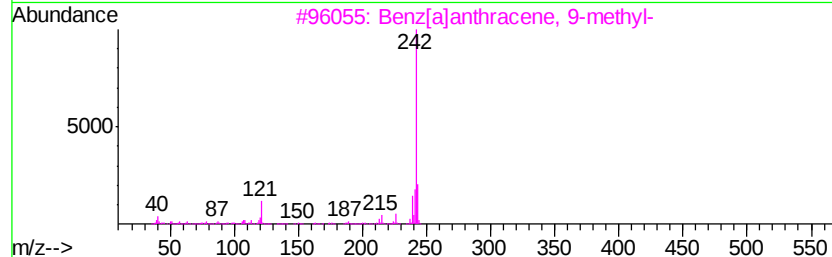
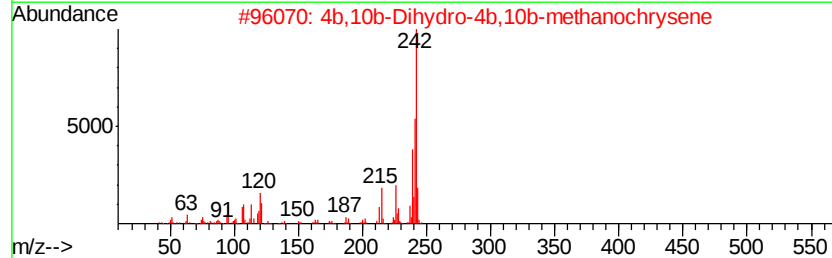
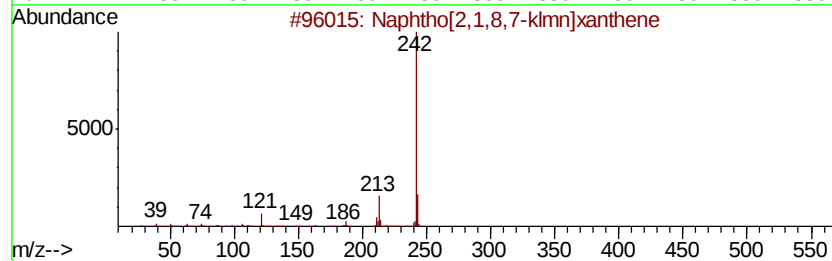
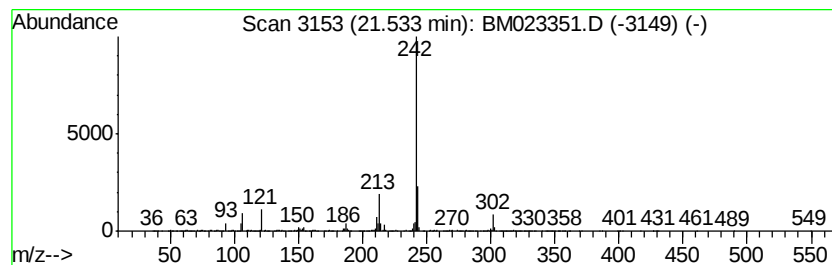
Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 15 Naphtho[2,1,8,7-klmn]xanthene Concentration Rank 15

| R.T.    | EstConc    | Area                                | Relative to ISTD | R.T.           |
|---------|------------|-------------------------------------|------------------|----------------|
| 21.53   | 3.07 ng/ul | 4346500                             | Chrysene-d12     | 21.23          |
| Hit# of | 5          | Tentative ID                        | MW MolForm       | CAS# Qual      |
| 1       |            | Naphtho[2,1,8,7-klmn]xanthene       | 242 C18H10O      | 000191-37-7 93 |
| 2       |            | 4b,10b-Dihydro-4b,10b-methanochr... | 242 C19H14       | 071949-03-6 59 |
| 3       |            | Benz[alanthracene, 9-methyl-        | 242 C19H14       | 002381-16-0 53 |
| 4       |            | Benz[alanthracene, 10-methyl-       | 242 C19H14       | 002381-15-9 53 |
| 5       |            | 2,2'-(m-Phenylene)dithiophene       | 242 C14H10S2     | 104500-00-7 53 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

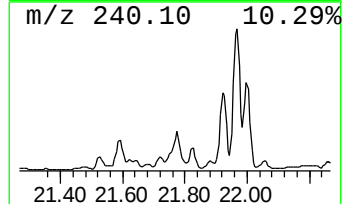
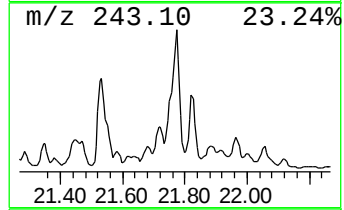
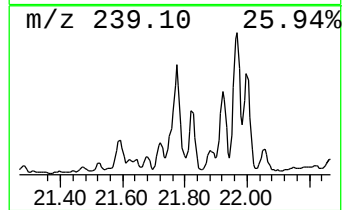
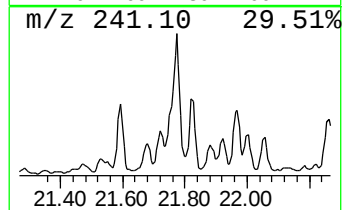
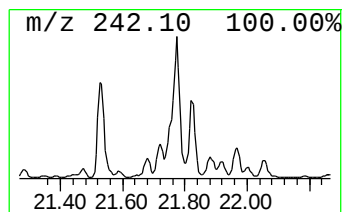
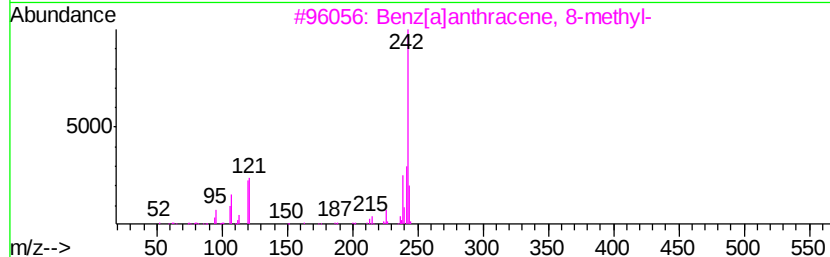
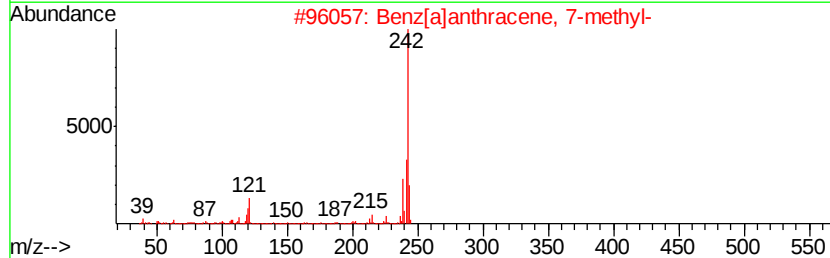
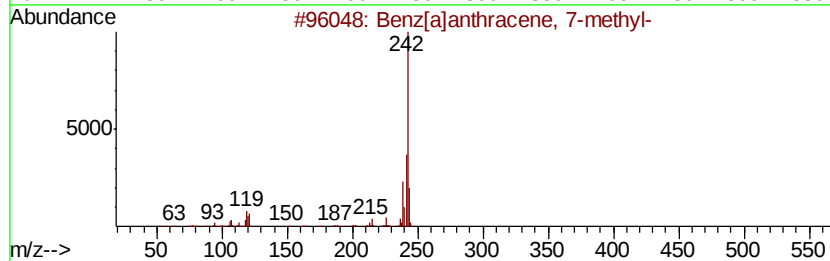
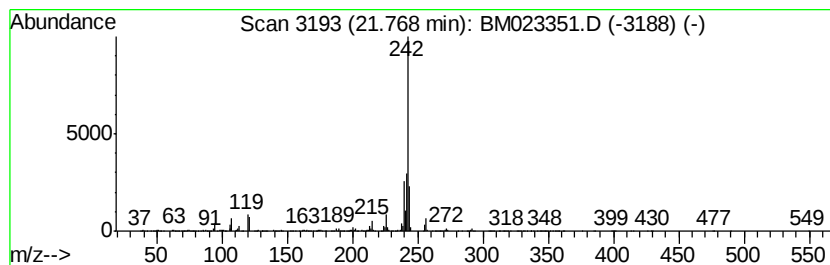
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 16 Benz[a]anthracene, 7-methyl- Concentration Rank 8

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 21.77 | 5.52 ng/ul | 7799870 | Chrysene-d12     | 21.23 |

| Hit# | of | 5 | Tentative ID                 | MW  | MolForm | CAS#        | Qual |
|------|----|---|------------------------------|-----|---------|-------------|------|
| 1    |    |   | Benz[a]anthracene, 7-methyl- | 242 | C19H14  | 002541-69-7 | 96   |
| 2    |    |   | Benz[a]anthracene, 7-methyl- | 242 | C19H14  | 002541-69-7 | 93   |
| 3    |    |   | Benz[a]anthracene, 8-methyl- | 242 | C19H14  | 002381-31-9 | 93   |
| 4    |    |   | Triphenylene, 2-methyl-      | 242 | C19H14  | 001705-84-6 | 91   |
| 5    |    |   | Chrysene, 1-methyl-          | 242 | C19H14  | 003351-28-8 | 90   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

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Quant Title : SVOA CALIBRATION

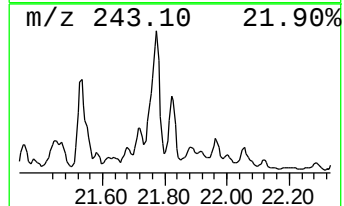
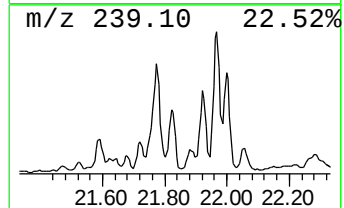
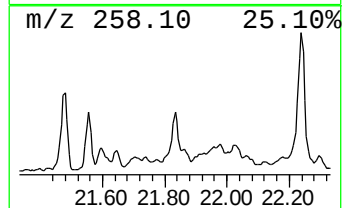
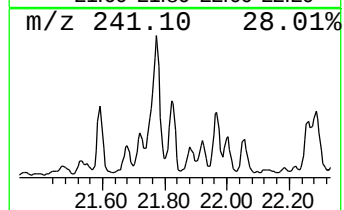
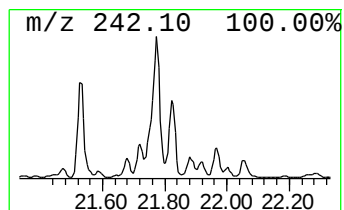
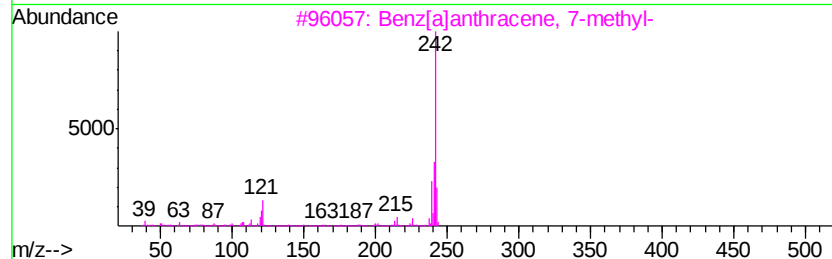
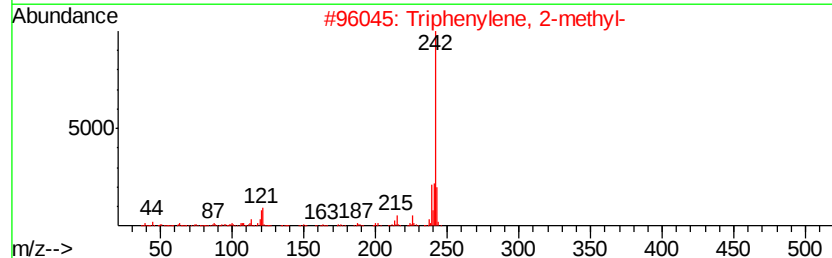
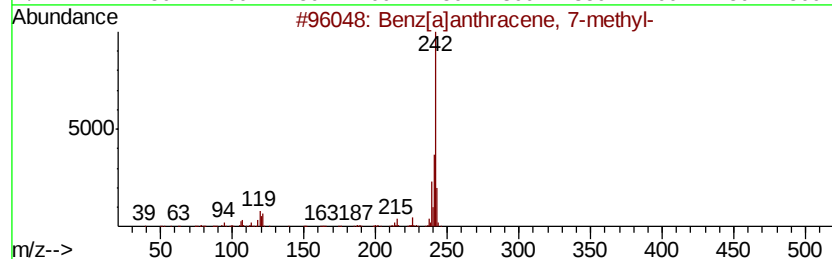
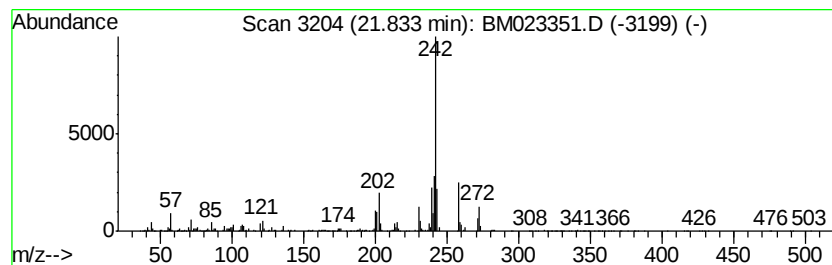
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 17 Triphenylene, 2-methyl- Concentration Rank 20

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 21.83 | 2.86 ng/ul | 4041720 | Chrysene-d12     | 21.23 |

| Hit# | of | Tentative ID                 | MW  | MolForm | CAS#         | Qual |
|------|----|------------------------------|-----|---------|--------------|------|
| 1    | 5  | Benz[a]anthracene, 7-methyl- | 242 | C19H14  | 002541-69-7  | 95   |
| 2    |    | Triphenylene, 2-methyl-      | 242 | C19H14  | 001705-84-6  | 89   |
| 3    |    | Benz[a]anthracene, 7-methyl- | 242 | C19H14  | 002541-69-7  | 89   |
| 4    |    | 1H-Benz[flindene, 2-phenyl-  | 242 | C19H14  | 1000305-22-4 | 70   |
| 5    |    | Benz[a]anthracene, 7-methyl- | 242 | C19H14  | 002541-69-7  | 70   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

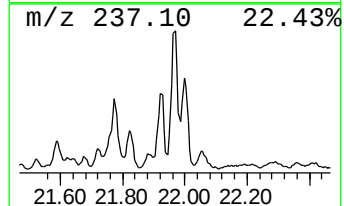
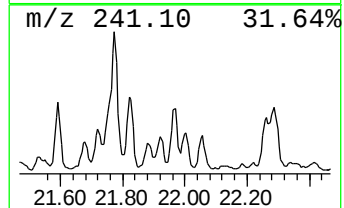
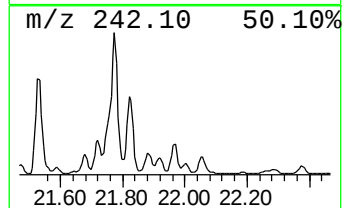
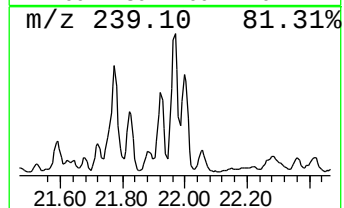
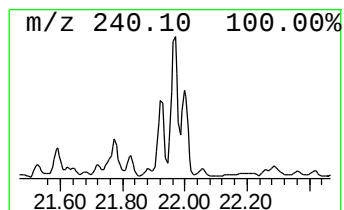
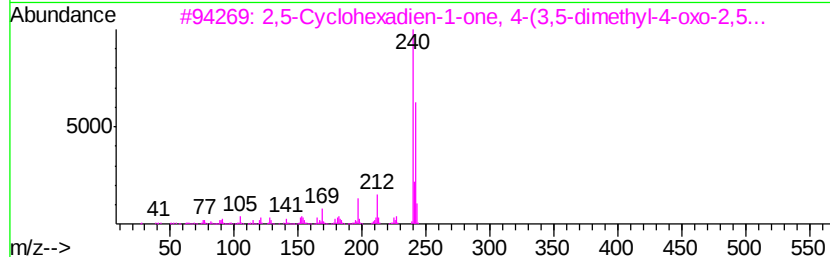
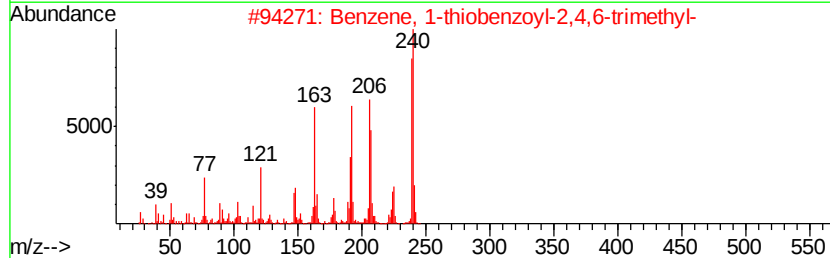
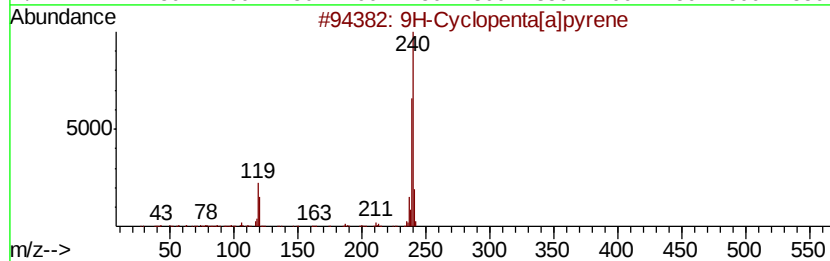
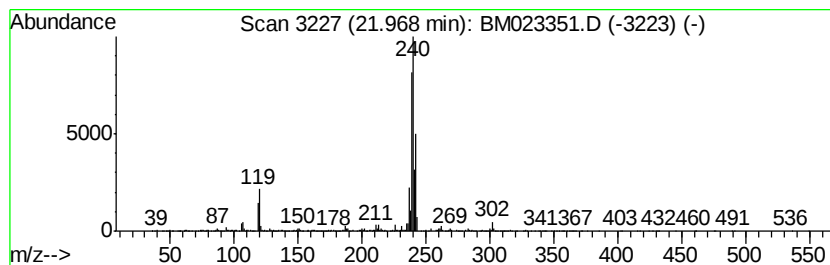
Instrument :  
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ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 18 9H-Cyclopenta[a]pyrene Concentration Rank 23

| R.T.    | EstConc                             | Area          | Relative to ISTD | R.T.      |
|---------|-------------------------------------|---------------|------------------|-----------|
| 21.97   | 2.57 ng/ul                          | 3635330       | Chrysene-d12     | 21.23     |
| Hit# of | 5                                   | Tentative ID  | MW MolForm       | CAS# Qual |
| 1       | 9H-Cyclopenta[a]pyrene              | 240 C19H12    | 050861-05-7      | 87        |
| 2       | Benzene, 1-thiobenzoyl-2,4,6-tri... | 240 C16H16S   | 001143-29-9      | 46        |
| 3       | 2,5-Cyclohexadien-1-one, 4-(3,5-... | 240 C16H16O2  | 004906-22-3      | 35        |
| 4       | o-(p-(Dimethylamino)benzylidene...  | 240 C15H16N2O | 023837-35-6      | 33        |
| 5       | 5-Methyl-4-(1-naphthyl)-2-thiazo... | 240 C14H12N2S | 107411-05-2      | 28        |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

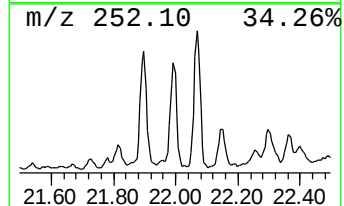
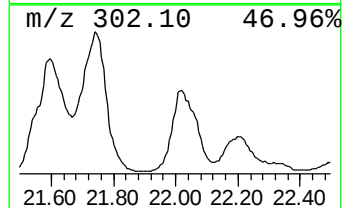
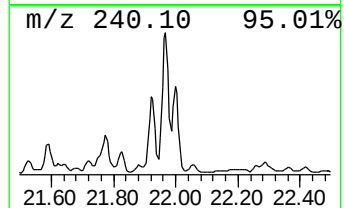
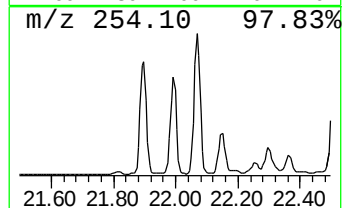
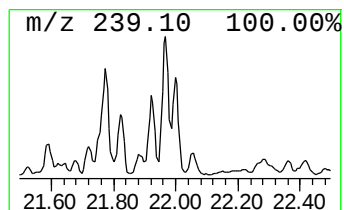
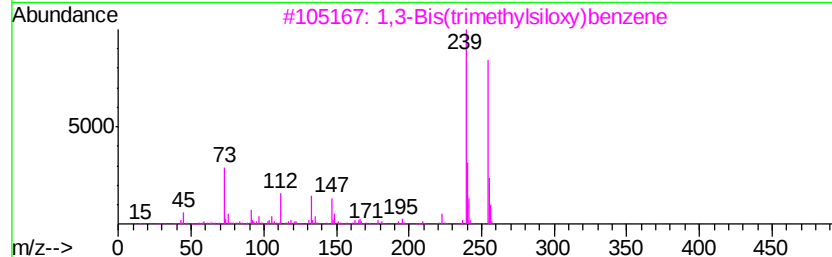
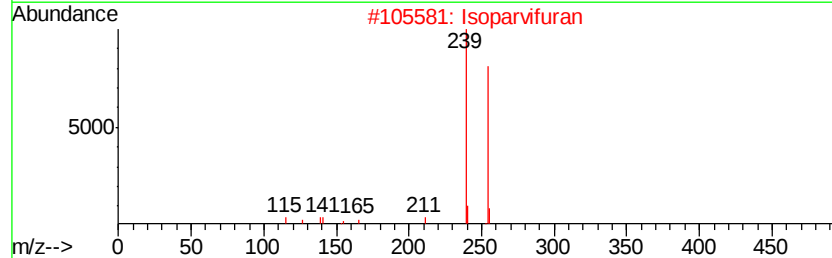
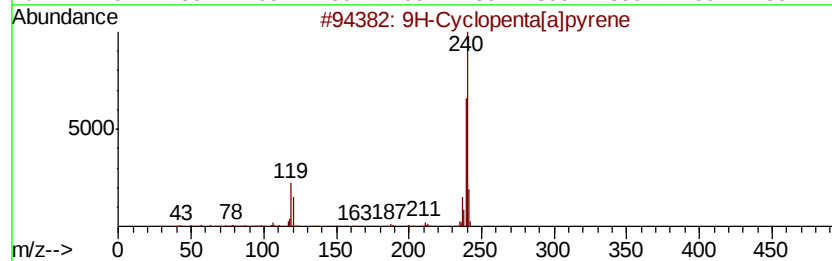
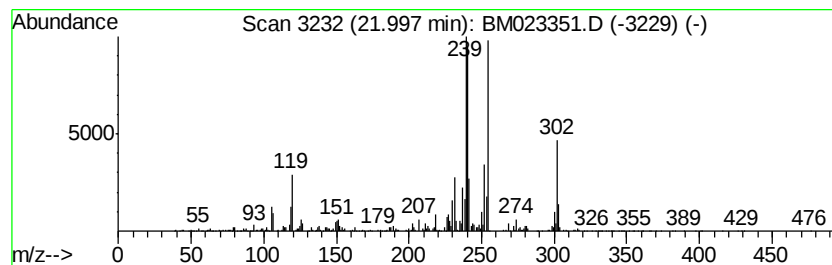
Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 19 unknown-01 Concentration Rank 16

| R.T.    | EstConc                             | Area         | Relative to ISTD | R.T.           |
|---------|-------------------------------------|--------------|------------------|----------------|
| 22.00   | 2.99 ng/ul                          | 4230830      | Chrysene-d12     | 21.23          |
| Hit# of | 5                                   | Tentative ID | MW MolForm       | CAS# Qual      |
| 1       | 9H-Cyclopenta[ <i>a</i> ]pyrene     | 240          | C19H12           | 050861-05-7 30 |
| 2       | Isoparvifuran                       | 254          | C16H14O3         | 078134-83-5 27 |
| 3       | 1,3-Bis(trimethylsiloxy)benzene     | 254          | C12H22O2Si2      | 004520-29-0 25 |
| 4       | Lorazepam                           | 320          | C15H10Cl2N2O2    | 000846-49-1 22 |
| 5       | 5,6-Dimethyl-4-phenyl-3-cyanopyr... | 240          | C14H12N2S        | 094639-18-6 16 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

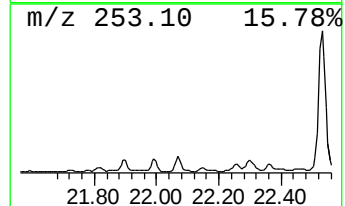
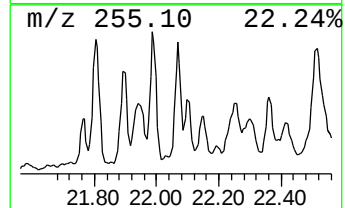
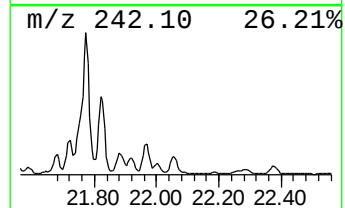
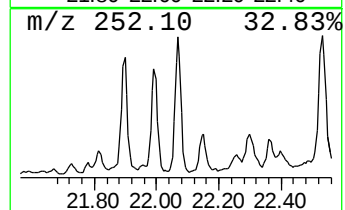
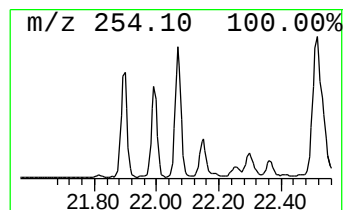
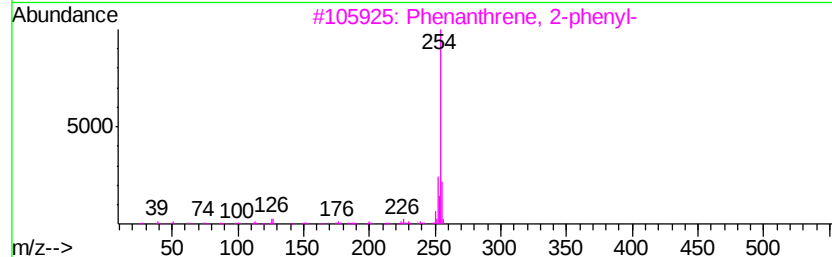
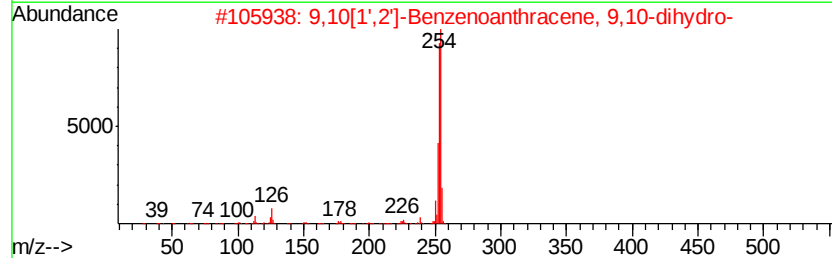
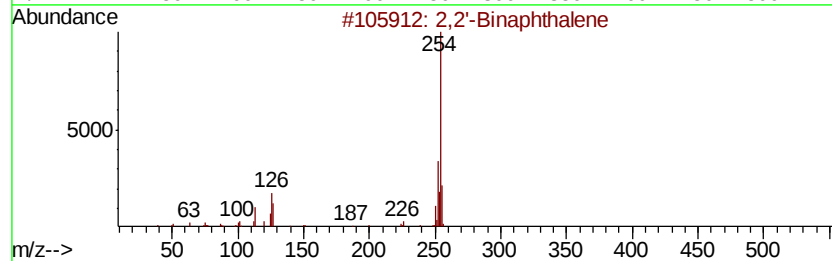
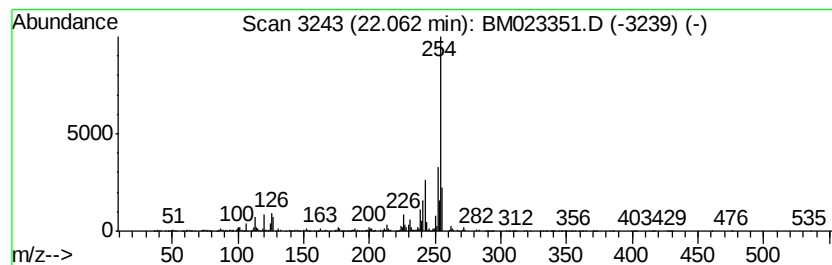
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 20 2,2'-Binaphthalene Concentration Rank 21

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 22.06 | 2.67 ng/ul | 3774200 | Chrysene-d12     | 21.23 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#         | Qual |
|------|----|-------------------------------------|-----|----------|--------------|------|
| 1    | 5  | 2,2'-Binaphthalene                  | 254 | C20H14   | 000612-78-2  | 64   |
| 2    |    | 9,10[1',2']-Benzenoanthracene, 9... | 254 | C20H14   | 000477-75-8  | 60   |
| 3    |    | Phenanthrene, 2-phenyl-             | 254 | C20H14   | 004325-77-3  | 60   |
| 4    |    | Benzene, 1,1'-(1-propene-1,3-div... | 254 | C17H18O2 | 1000362-20-9 | 47   |
| 5    |    | 1-Propene, 1,2-bis(4-methoxyphen... | 254 | C17H18O2 | 020802-02-2  | 47   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

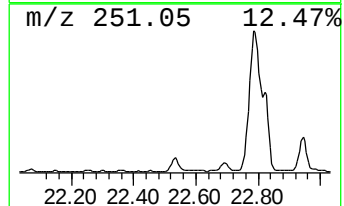
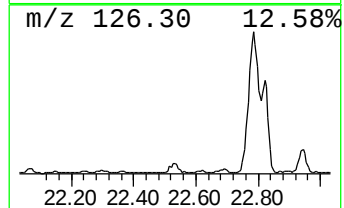
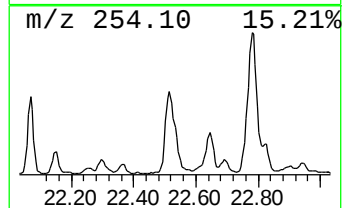
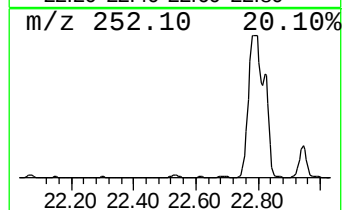
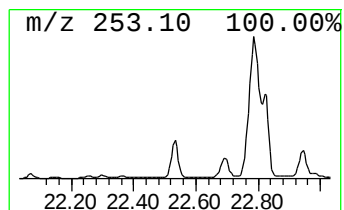
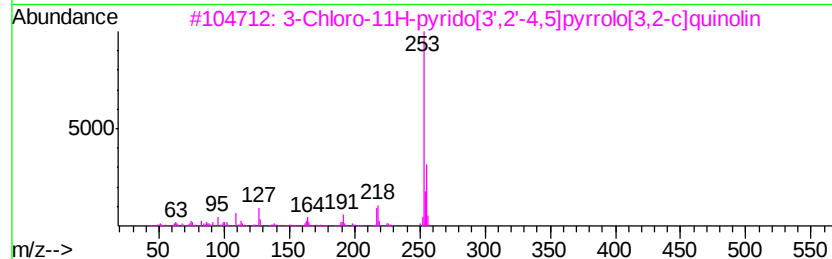
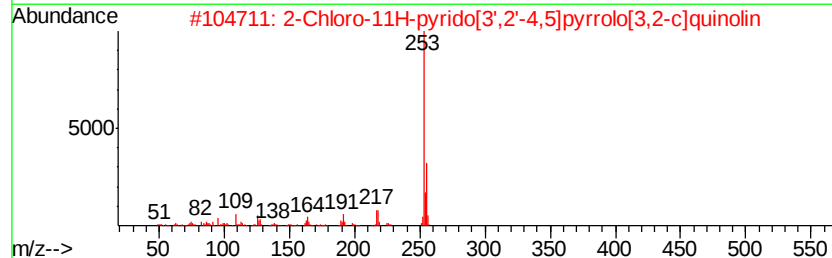
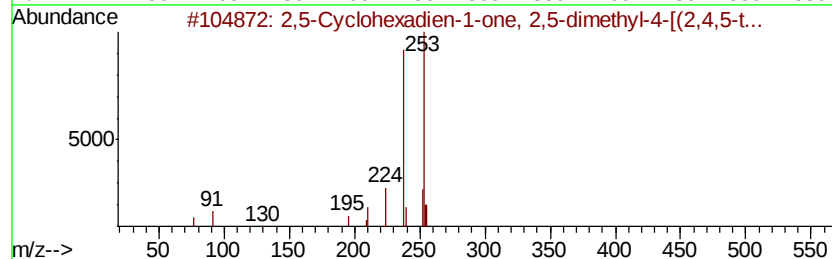
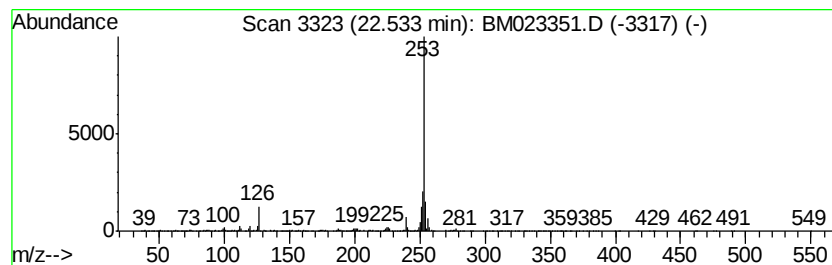
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 21 2,5-Cyclohexadien-1-one, 2,... Concentration Rank 3

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 22.53 | 17.36 ng/ul | 5038130 | Perylene-d12     | 23.43 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|-------------------------------------|-----|------------|--------------|------|
| 1    | 5  | 2,5-Cyclohexadien-1-one, 2,5-dim... | 253 | C17H19NO   | 054245-93-1  | 59   |
| 2    |    | 2-Chloro-11H-pyrido[3',2'-4,5]py... | 253 | C14H8ClN3  | 1000212-59-3 | 53   |
| 3    |    | 3-Chloro-11H-pyrido[3',2'-4,5]py... | 253 | C14H8ClN3  | 1000212-59-4 | 50   |
| 4    |    | 6-Methyl-2-(3-nitrophenyl)imidaz... | 253 | C14H11N3O2 | 1000224-30-4 | 40   |
| 5    |    | 1'-Acetylferrocenecarbonitrile      | 253 | C13H11FeNO | 012276-85-6  | 40   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

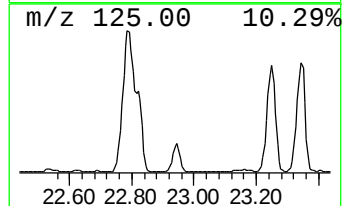
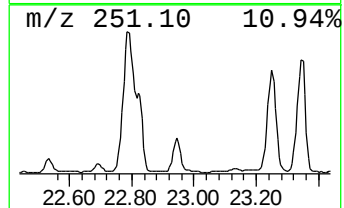
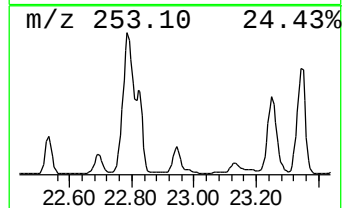
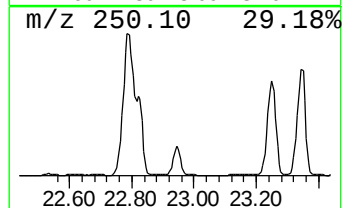
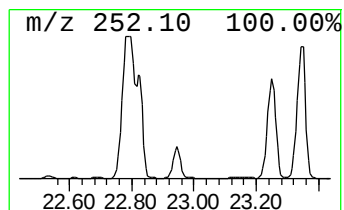
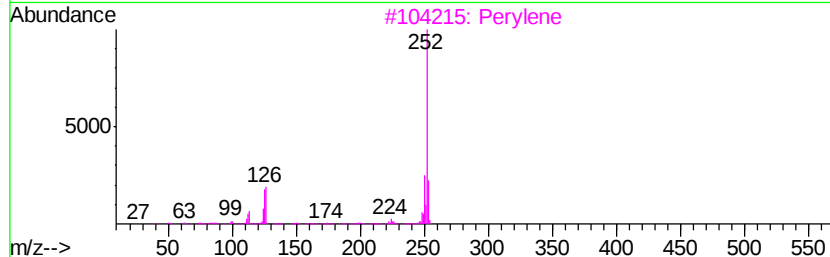
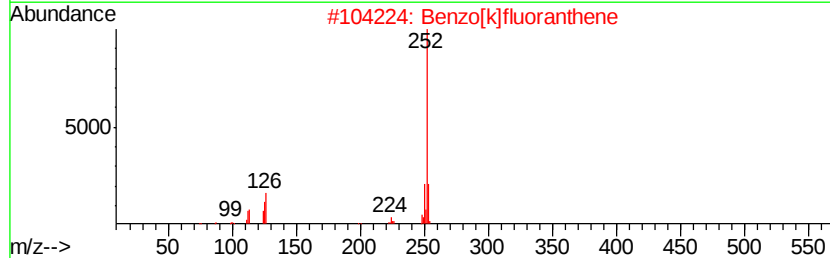
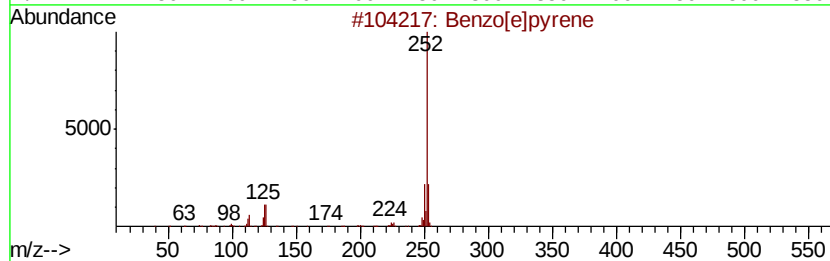
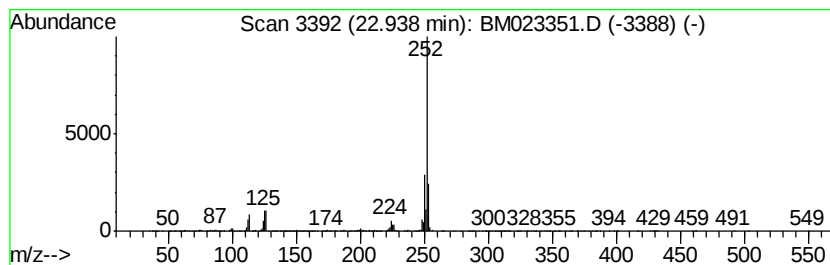
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 22 Benzo[e]pyrene Concentration Rank 1

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 22.94 | 24.68 ng/ul | 7161820 | Perylene-d12     | 23.43 |

| 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    |    | Perylene                  | 252 | C20H12  | 000198-55-0 | 94   |
| 4    |    | Benzo[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 90   |
| 5    |    | Benzo[a]pyrene            | 252 | C20H12  | 000050-32-8 | 90   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

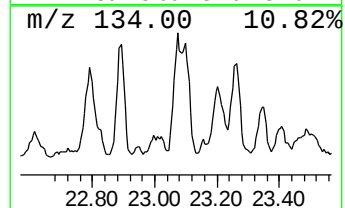
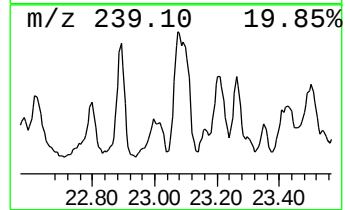
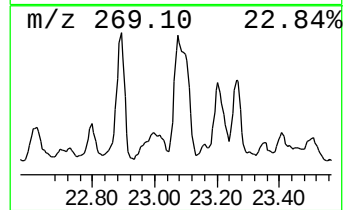
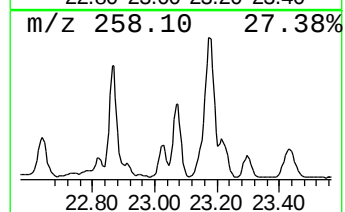
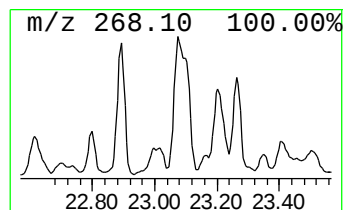
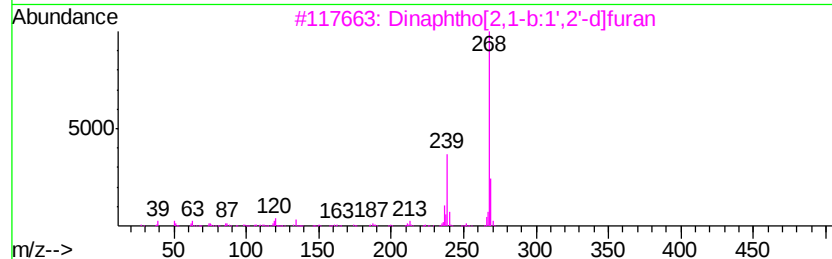
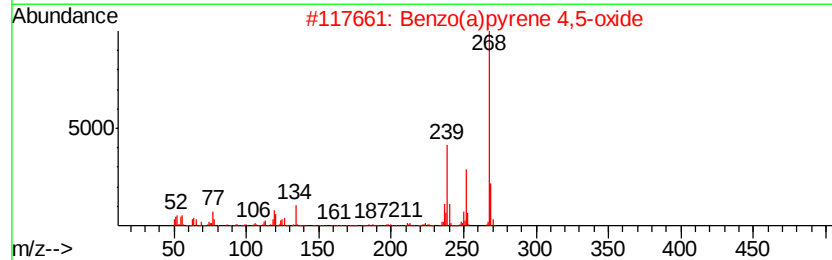
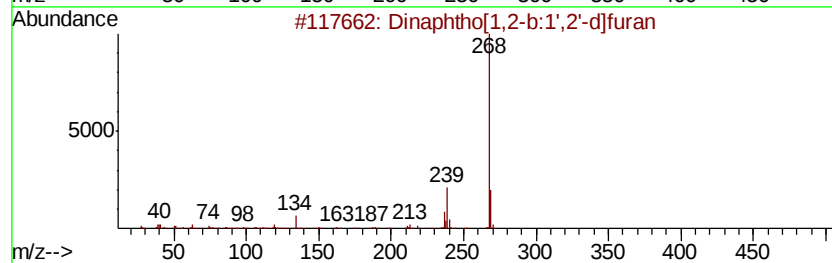
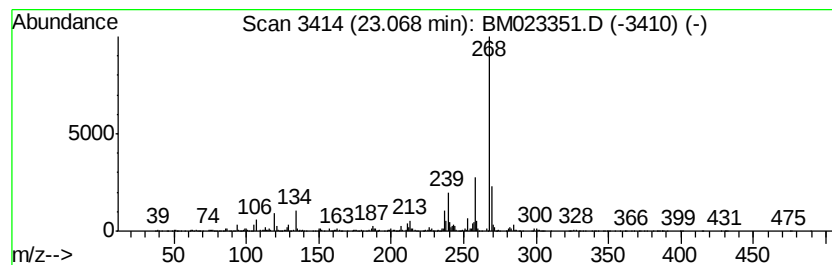
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 23 Dinaphtho[1,2-b:1',2'-d]furan Concentration Rank 4

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 23.07 | 15.72 ng/ul | 4561460 | Perylene-d12     | 23.43 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Dinaphtho[1,2-b:1',2'-d]furan       | 268 | C20H12O  | 000207-93-2 | 90   |
| 2    |    | Benzo(a)pyrene 4,5-oxide            | 268 | C20H12O  | 037574-47-3 | 74   |
| 3    |    | Dinaphtho[2,1-b:1',2'-d]furan       | 268 | C20H12O  | 000194-63-8 | 68   |
| 4    |    | Dinaphtho[1,2-b:1',2'-d]furan       | 268 | C20H12O  | 000207-93-2 | 58   |
| 5    |    | 9,10-Anthracenedione, 1,5-dimeth... | 268 | C16H12O4 | 006448-90-4 | 53   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

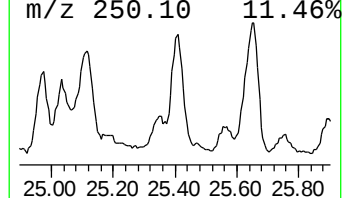
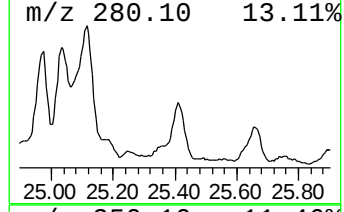
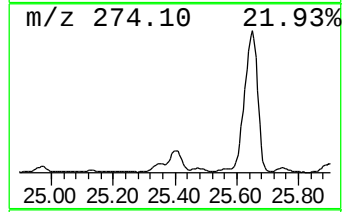
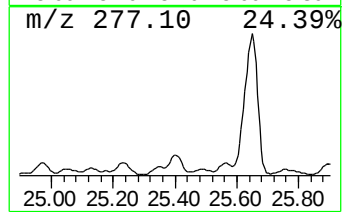
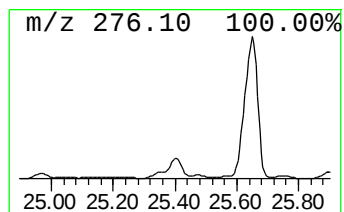
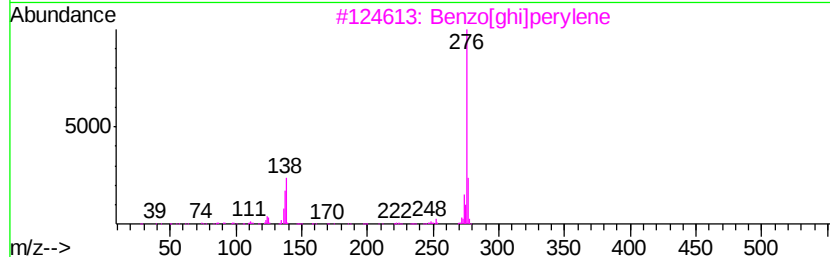
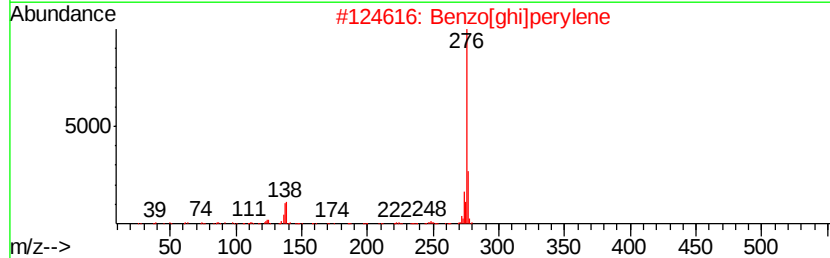
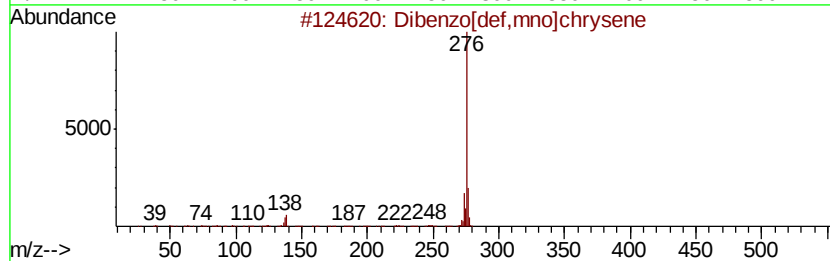
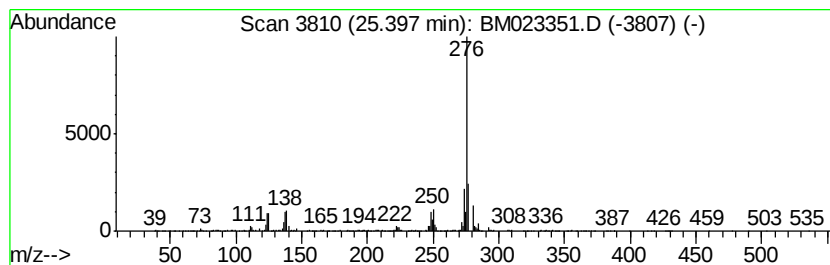
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 24 Dibenzo[def,mno]chrysene Concentration Rank 5

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 25.40 | 14.15 ng/ul | 4104150 | Perylene-d12     | 23.43 |

| Hit# | of | Tentative ID                 | MW  | MolForm | CAS#        | Qual |
|------|----|------------------------------|-----|---------|-------------|------|
| 1    | 5  | Dibenzo[def,mno]chrysene     | 276 | C22H12  | 000191-26-4 | 78   |
| 2    |    | Benzo[ghi]perylene           | 276 | C22H12  | 000191-24-2 | 64   |
| 3    |    | Benzo[ghi]perylene           | 276 | C22H12  | 000191-24-2 | 64   |
| 4    |    | Indeno[1,2,3-cd]pyrene       | 276 | C22H12  | 000193-39-5 | 64   |
| 5    |    | Indeno[1,2,3-cd]fluoranthene | 276 | C22H12  | 000193-43-1 | 60   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM102319\  
Data File : BM023351.D  
Acq On : 23 Oct 2019 20:47  
Operator : JU  
Sample : K5346-08  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

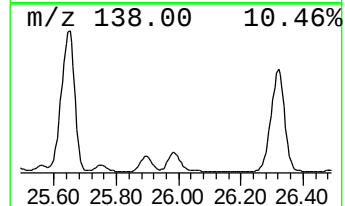
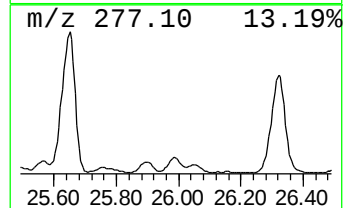
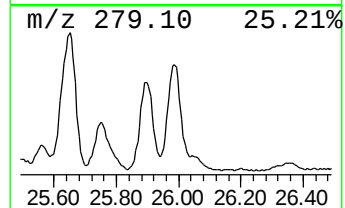
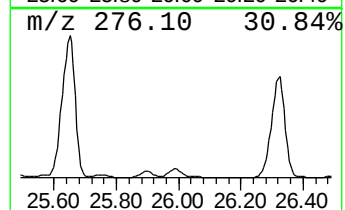
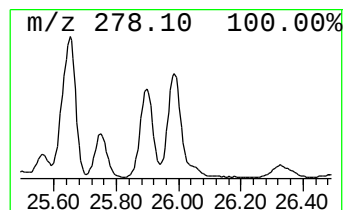
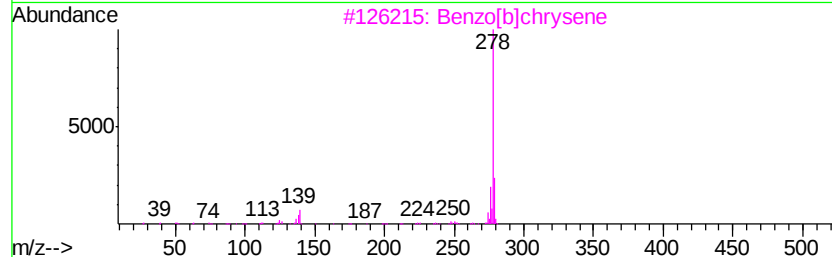
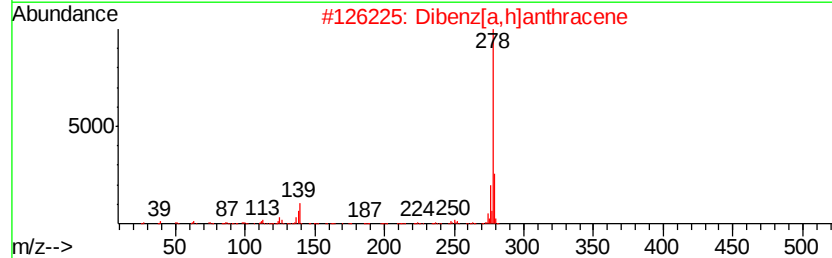
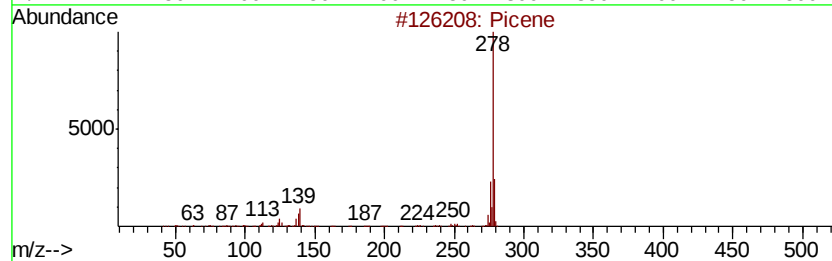
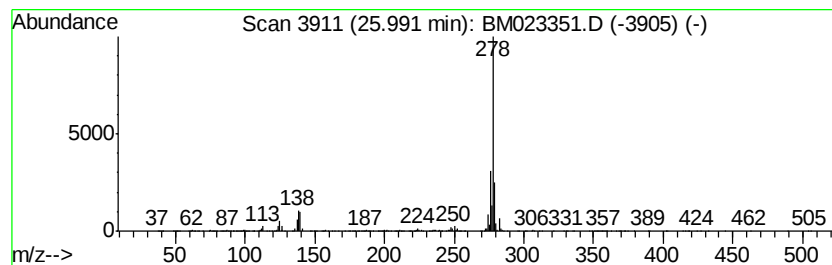
Instrument :  
BNA\_M  
ClientSampleId :  
ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.M  
Quant Title : SVOA CALIBRATION

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

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Peak Number 25 Picene Concentration Rank 2

| R.T.    | EstConc               | Area         | Relative to ISTD | R.T.           |
|---------|-----------------------|--------------|------------------|----------------|
| 25.99   | 18.85 ng/ul           | 5467870      | Perylene-d12     | 23.43          |
| Hit# of | 5                     | Tentative ID | MW MolForm       | CAS# Qual      |
| 1       | Picene                |              | 278 C22H14       | 000213-46-7 99 |
| 2       | Dibenz[a,h]anthracene |              | 278 C22H14       | 000053-70-3 98 |
| 3       | Benzo[b]chrysene      |              | 278 C22H14       | 000214-17-5 98 |
| 4       | Dibenz[a,h]anthracene |              | 278 C22H14       | 000053-70-3 97 |
| 5       | Pentaphene            |              | 278 C22H14       | 000222-93-5 95 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA\_M\DATA\BM102319\  
 Data File : BM023351.D  
 Acq On : 23 Oct 2019 20:47  
 Operator : JU  
 Sample : K5346-08  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 ETOM1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM102319MA.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 |
| Phenanthrene, 2-m... | 17.96 | 3.0     | ng/ul | 1197470  | 4                     | 17.03 | 8032030  | 20.0 |
| 4H-Cyclopenta[def... | 18.10 | 2.9     | ng/ul | 1169740  | 4                     | 17.03 | 8032030  | 20.0 |
| Phenanthrene, 3,6... | 18.83 | 3.4     | ng/ul | 1346250  | 4                     | 17.03 | 8032030  | 20.0 |
| Cyclopenta(def)ph... | 18.97 | 4.4     | ng/ul | 1758970  | 4                     | 17.03 | 8032030  | 20.0 |
| Fluoranthene, 2-m... | 19.96 | 7.4     | ng/ul | 10404700 | 5                     | 21.23 | 28274100 | 20.0 |
| 11H-Benzo[b]fluorene | 20.06 | 4.3     | ng/ul | 6031440  | 5                     | 21.23 | 28274100 | 20.0 |
| Pyrene, 1-methyl-    | 20.12 | 3.3     | ng/ul | 4660660  | 5                     | 21.23 | 28274100 | 20.0 |
| Pyrene, 2-methyl-    | 20.26 | 2.5     | ng/ul | 3462530  | 5                     | 21.23 | 28274100 | 20.0 |
| 11H-Benzo[a]fluor... | 20.71 | 2.3     | ng/ul | 3180270  | 5                     | 21.23 | 28274100 | 20.0 |
| Anthra(2,3-b)thio... | 20.87 | 2.6     | ng/ul | 3714490  | 5                     | 21.23 | 28274100 | 20.0 |
| Cyclopenta[cd]pyrene | 20.94 | 3.7     | ng/ul | 5244540  | 5                     | 21.23 | 28274100 | 20.0 |
| Cyclopenta(cd)pyr... | 21.38 | 3.6     | ng/ul | 5046340  | 5                     | 21.23 | 28274100 | 20.0 |
| Naphtho[2,1,8,7-k... | 21.53 | 3.1     | ng/ul | 4346500  | 5                     | 21.23 | 28274100 | 20.0 |
| Benz[a]anthracene... | 21.77 | 5.5     | ng/ul | 7799870  | 5                     | 21.23 | 28274100 | 20.0 |
| Triphenylene, 2-m... | 21.83 | 2.9     | ng/ul | 4041720  | 5                     | 21.23 | 28274100 | 20.0 |
| 9H-Cyclopenta[a]p... | 21.97 | 2.6     | ng/ul | 3635330  | 5                     | 21.23 | 28274100 | 20.0 |
| unknown-01           | 22.00 | 3.0     | ng/ul | 4230830  | 5                     | 21.23 | 28274100 | 20.0 |
| 2,2'-Binaphthalene   | 22.06 | 2.7     | ng/ul | 3774200  | 5                     | 21.23 | 28274100 | 20.0 |
| 2,5-Cyclohexadien... | 22.53 | 17.4    | ng/ul | 5038130  | 6                     | 23.43 | 5802690  | 20.0 |
| Benzo[e]pyrene       | 22.94 | 24.7    | ng/ul | 7161820  | 6                     | 23.43 | 5802690  | 20.0 |
| Dinaphtho[1,2-b:1... | 23.07 | 15.7    | ng/ul | 4561460  | 6                     | 23.43 | 5802690  | 20.0 |
| Dibenzo[def,mno]c... | 25.40 | 14.2    | ng/ul | 4104150  | 6                     | 23.43 | 5802690  | 20.0 |
| Picene               | 25.99 | 18.9    | ng/ul | 5467870  | 6                     | 23.43 | 5802690  | 20.0 |