

Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
 Data File : BP003411.D  
 Acq On : 29 Sep 2020 21:54  
 Operator : CG/JU  
 Sample : L4172-04  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 B-6(11-13)

Integration Parameters: rteint.p

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M

Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BP003411.D\data.ms

| 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         | 5.158       | 380           | 386         | 404          | rBV      | 906782         | 1466610       | 17.95%          | 1.422%        |
| 2         | 6.752       | 650           | 657         | 685          | rBV      | 871674         | 1578239       | 19.32%          | 1.530%        |
| 3         | 7.546       | 785           | 792         | 803          | rBV      | 316051         | 514259        | 6.30%           | 0.499%        |
| 4         | 8.693       | 973           | 987         | 1003         | rBV      | 612724         | 1114357       | 13.64%          | 1.080%        |
| 5         | 10.322      | 1256          | 1264        | 1268         | rBV      | 466103         | 772413        | 9.46%           | 0.749%        |
| 6         | 10.369      | 1268          | 1272        | 1288         | rVB      | 422915         | 729426        | 8.93%           | 0.707%        |
| 7         | 11.998      | 1540          | 1549        | 1558         | rBV      | 152063         | 248101        | 3.04%           | 0.241%        |
| 8         | 12.222      | 1577          | 1587        | 1599         | rVB      | 92465          | 162118        | 1.98%           | 0.157%        |
| 9         | 12.816      | 1681          | 1688        | 1706         | rBV      | 1539187        | 2382776       | 29.17%          | 2.310%        |
| 10        | 13.028      | 1719          | 1724        | 1733         | rVB      | 49374          | 81867         | 1.00%           | 0.079%        |
| 11        | 13.522      | 1801          | 1808        | 1813         | rBV      | 74472          | 137439        | 1.68%           | 0.133%        |
| 12        | 13.663      | 1826          | 1832        | 1838         | rBV      | 246170         | 347509        | 4.25%           | 0.337%        |
| 13        | 13.916      | 1870          | 1875        | 1890         | rVB      | 262425         | 429850        | 5.26%           | 0.417%        |
| 14        | 14.198      | 1915          | 1923        | 1929         | rBV2     | 734390         | 1131421       | 13.85%          | 1.097%        |
| 15        | 14.263      | 1929          | 1934        | 1943         | rVB      | 351396         | 509191        | 6.23%           | 0.494%        |
| 16        | 14.604      | 1986          | 1992        | 2001         | rVV      | 300512         | 461921        | 5.65%           | 0.448%        |
| 17        | 15.257      | 2097          | 2103        | 2109         | rBV      | 527785         | 768752        | 9.41%           | 0.745%        |
| 18        | 15.557      | 2149          | 2154        | 2163         | rVB      | 115994         | 196410        | 2.40%           | 0.190%        |
| 19        | 15.704      | 2170          | 2179        | 2187         | rBV      | 1351125        | 2131445       | 26.09%          | 2.067%        |
| 20        | 16.269      | 2264          | 2275        | 2280         | rBV3     | 99790          | 232377        | 2.84%           | 0.225%        |
| 21        | 16.616      | 2329          | 2334        | 2342         | rVB      | 154920         | 239014        | 2.93%           | 0.232%        |
| 22        | 16.698      | 2343          | 2348        | 2354         | rBV3     | 83877          | 176679        | 2.16%           | 0.171%        |
| 23        | 16.775      | 2354          | 2361        | 2372         | rVB      | 234450         | 392162        | 4.80%           | 0.380%        |
| 24        | 16.957      | 2386          | 2392        | 2395         | rBV      | 911505         | 1352409       | 16.56%          | 1.311%        |
| 25        | 17.004      | 2395          | 2400        | 2406         | rVV      | 3744852        | 5479061       | 67.07%          | 5.312%        |
| 26        | 17.092      | 2406          | 2415        | 2421         | rVB      | 1118364        | 1616412       | 19.79%          | 1.567%        |
| 27        | 17.151      | 2421          | 2425        | 2432         | rBV      | 112064         | 179860        | 2.20%           | 0.174%        |
| 28        | 17.369      | 2452          | 2462        | 2466         | rBV2     | 472253         | 772462        | 9.46%           | 0.749%        |
| 29        | 17.480      | 2477          | 2481        | 2488         | rVV3     | 97015          | 141998        | 1.74%           | 0.138%        |
| 30        | 17.545      | 2488          | 2492        | 2501         | rVV5     | 80476          | 151165        | 1.85%           | 0.147%        |
| 31        | 17.833      | 2536          | 2541        | 2545         | rVV      | 486141         | 666132        | 8.15%           | 0.646%        |
| 32        | 17.880      | 2545          | 2549        | 2555         | rVB      | 709172         | 950143        | 11.63%          | 0.921%        |
| 33        | 17.963      | 2558          | 2563        | 2567         | rBV      | 289880         | 404356        | 4.95%           | 0.392%        |
| 34        | 18.022      | 2567          | 2573        | 2577         | rBV2     | 826550         | 1386394       | 16.97%          | 1.344%        |
| 35        | 18.057      | 2577          | 2579        | 2586         | rVB      | 337951         | 436941        | 5.35%           | 0.424%        |
| 36        | 18.133      | 2589          | 2592        | 2596         | rBV4     | 59517          | 96880         | 1.19%           | 0.094%        |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
 Data File : BP003411.D  
 Acq On : 29 Sep 2020 21:54  
 Operator : CG/JU  
 Sample : L4172-04  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 B-6(11-13)

Integration Parameters: rteint.p

Integrator: RTE

Smothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |         |        |
|----|--------|------|------|------|------|---------|---------|---------|--------|
| 37 | 18.174 | 2596 | 2599 | 2603 | rVV3 | 74400   | 101563  | 1.24%   | 0.098% |
| 38 | 18.322 | 2620 | 2624 | 2628 | rBV  | 384275  | 488547  | 5.98%   | 0.474% |
| 39 | 18.369 | 2628 | 2632 | 2639 | rVB  | 273175  | 387392  | 4.74%   | 0.376% |
| 40 | 18.569 | 2662 | 2666 | 2670 | rVB2 | 115557  | 143704  | 1.76%   | 0.139% |
| 41 | 18.616 | 2670 | 2674 | 2677 | rVV  | 128192  | 159627  | 1.95%   | 0.155% |
| 42 | 18.651 | 2677 | 2680 | 2684 | rVB  | 113501  | 145210  | 1.78%   | 0.141% |
| 43 | 18.733 | 2689 | 2694 | 2698 | rBV  | 278696  | 464712  | 5.69%   | 0.451% |
| 44 | 18.792 | 2700 | 2704 | 2707 | rVV3 | 182646  | 336814  | 4.12%   | 0.327% |
| 45 | 18.822 | 2707 | 2709 | 2712 | rVV  | 115772  | 124676  | 1.53%   | 0.121% |
| 46 | 18.869 | 2712 | 2717 | 2725 | rVB  | 277682  | 472517  | 5.78%   | 0.458% |
| 47 | 18.992 | 2731 | 2738 | 2743 | rBV  | 5165860 | 7474471 | 91.50%  | 7.247% |
| 48 | 19.051 | 2745 | 2748 | 2751 | rBV  | 83541   | 99666   | 1.22%   | 0.097% |
| 49 | 19.086 | 2751 | 2754 | 2758 | rVB  | 156302  | 179134  | 2.19%   | 0.174% |
| 50 | 19.133 | 2758 | 2762 | 2765 | rBV  | 172387  | 204654  | 2.51%   | 0.198% |
| 51 | 19.221 | 2767 | 2777 | 2781 | rBV3 | 211640  | 471977  | 5.78%   | 0.458% |
| 52 | 19.339 | 2788 | 2797 | 2806 | rBV2 | 4416006 | 8168676 | 100.00% | 7.920% |
| 53 | 19.410 | 2806 | 2809 | 2817 | rVB2 | 277787  | 460561  | 5.64%   | 0.447% |
| 54 | 19.539 | 2823 | 2831 | 2835 | rBV2 | 2841128 | 3895887 | 47.69%  | 3.777% |
| 55 | 19.574 | 2835 | 2837 | 2842 | rVB  | 384121  | 477277  | 5.84%   | 0.463% |
| 56 | 19.663 | 2846 | 2852 | 2857 | rBV2 | 340234  | 872489  | 10.68%  | 0.846% |
| 57 | 19.710 | 2857 | 2860 | 2864 | rVB  | 146684  | 159852  | 1.96%   | 0.155% |
| 58 | 19.792 | 2869 | 2874 | 2876 | rVV5 | 282960  | 473365  | 5.79%   | 0.459% |
| 59 | 19.827 | 2876 | 2880 | 2884 | rVB  | 942202  | 1276084 | 15.62%  | 1.237% |
| 60 | 19.869 | 2884 | 2887 | 2890 | rBV2 | 76942   | 100979  | 1.24%   | 0.098% |
| 61 | 19.921 | 2892 | 2896 | 2900 | rBV2 | 787717  | 971312  | 11.89%  | 0.942% |
| 62 | 19.980 | 2900 | 2906 | 2910 | rBV3 | 487791  | 769732  | 9.42%   | 0.746% |
| 63 | 20.057 | 2917 | 2919 | 2924 | rVB3 | 115116  | 135625  | 1.66%   | 0.131% |
| 64 | 20.116 | 2925 | 2929 | 2933 | rBV  | 268352  | 331459  | 4.06%   | 0.321% |
| 65 | 20.163 | 2933 | 2937 | 2941 | rVB3 | 300446  | 398176  | 4.87%   | 0.386% |
| 66 | 20.374 | 2970 | 2973 | 2975 | rBV2 | 98859   | 133910  | 1.64%   | 0.130% |
| 67 | 20.410 | 2976 | 2979 | 2981 | rBV2 | 101850  | 125459  | 1.54%   | 0.122% |
| 68 | 20.521 | 2995 | 2998 | 3001 | rBV3 | 110531  | 159468  | 1.95%   | 0.155% |
| 69 | 20.557 | 3001 | 3004 | 3010 | rVB  | 488663  | 661789  | 8.10%   | 0.642% |
| 70 | 20.716 | 3026 | 3031 | 3034 | rBV2 | 581823  | 847719  | 10.38%  | 0.822% |
| 71 | 20.751 | 3034 | 3037 | 3041 | rVV  | 581003  | 739358  | 9.05%   | 0.717% |
| 72 | 20.792 | 3041 | 3044 | 3050 | rVV2 | 719435  | 1320425 | 16.16%  | 1.280% |
| 73 | 20.851 | 3051 | 3054 | 3061 | rVB  | 557278  | 719044  | 8.80%   | 0.697% |
| 74 | 20.951 | 3069 | 3071 | 3078 | rVB  | 133123  | 165978  | 2.03%   | 0.161% |
| 75 | 21.057 | 3080 | 3089 | 3094 | rVV3 | 3968803 | 7736117 | 94.70%  | 7.501% |
| 76 | 21.104 | 3094 | 3097 | 3106 | rVB  | 3016235 | 3963695 | 48.52%  | 3.843% |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
 Data File : BP003411.D  
 Acq On : 29 Sep 2020 21:54  
 Operator : CG/JU  
 Sample : L4172-04  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 B-6(11-13)

Integration Parameters: rteint.p

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |        |        |
|----|--------|------|------|------|------|---------|---------|--------|--------|
| 77 | 21.216 | 3112 | 3116 | 3122 | rBV  | 660698  | 815537  | 9.98%  | 0.791% |
| 78 | 21.268 | 3123 | 3125 | 3128 | rVV3 | 193018  | 260204  | 3.19%  | 0.252% |
| 79 | 21.321 | 3132 | 3134 | 3138 | rVB  | 327697  | 341565  | 4.18%  | 0.331% |
| 80 | 21.368 | 3138 | 3142 | 3147 | rBV2 | 525414  | 760289  | 9.31%  | 0.737% |
| 81 | 21.421 | 3148 | 3151 | 3155 | rVB4 | 129350  | 152229  | 1.86%  | 0.148% |
| 82 | 21.545 | 3169 | 3172 | 3175 | rBV2 | 176571  | 242918  | 2.97%  | 0.236% |
| 83 | 21.604 | 3178 | 3182 | 3186 | rVB  | 572421  | 788519  | 9.65%  | 0.765% |
| 84 | 21.651 | 3187 | 3190 | 3196 | rVV  | 273487  | 392920  | 4.81%  | 0.381% |
| 85 | 21.792 | 3211 | 3214 | 3217 | rBV  | 297242  | 383966  | 4.70%  | 0.372% |
| 86 | 21.892 | 3227 | 3231 | 3235 | rVB2 | 250388  | 366082  | 4.48%  | 0.355% |
| 87 | 22.357 | 3306 | 3310 | 3315 | rVB2 | 245536  | 415480  | 5.09%  | 0.403% |
| 88 | 22.610 | 3346 | 3353 | 3357 | rBV  | 2589165 | 5603748 | 68.60% | 5.433% |
| 89 | 22.768 | 3376 | 3380 | 3386 | rVB  | 555265  | 860919  | 10.54% | 0.835% |
| 90 | 22.898 | 3399 | 3402 | 3404 | rBV2 | 150206  | 211431  | 2.59%  | 0.205% |
| 91 | 23.074 | 3426 | 3432 | 3440 | rVB  | 1468178 | 2857065 | 34.98% | 2.770% |
| 92 | 23.168 | 3441 | 3448 | 3456 | rVV  | 2260377 | 4076751 | 49.91% | 3.953% |
| 93 | 23.262 | 3458 | 3464 | 3468 | rVV2 | 1019076 | 1969541 | 24.11% | 1.910% |
| 94 | 23.310 | 3468 | 3472 | 3480 | rVB2 | 691823  | 1334830 | 16.34% | 1.294% |
| 95 | 25.492 | 3834 | 3843 | 3852 | rVB2 | 1040992 | 2949754 | 36.11% | 2.860% |
| 96 | 26.168 | 3950 | 3958 | 3970 | rVB  | 748595  | 2199011 | 26.92% | 2.132% |

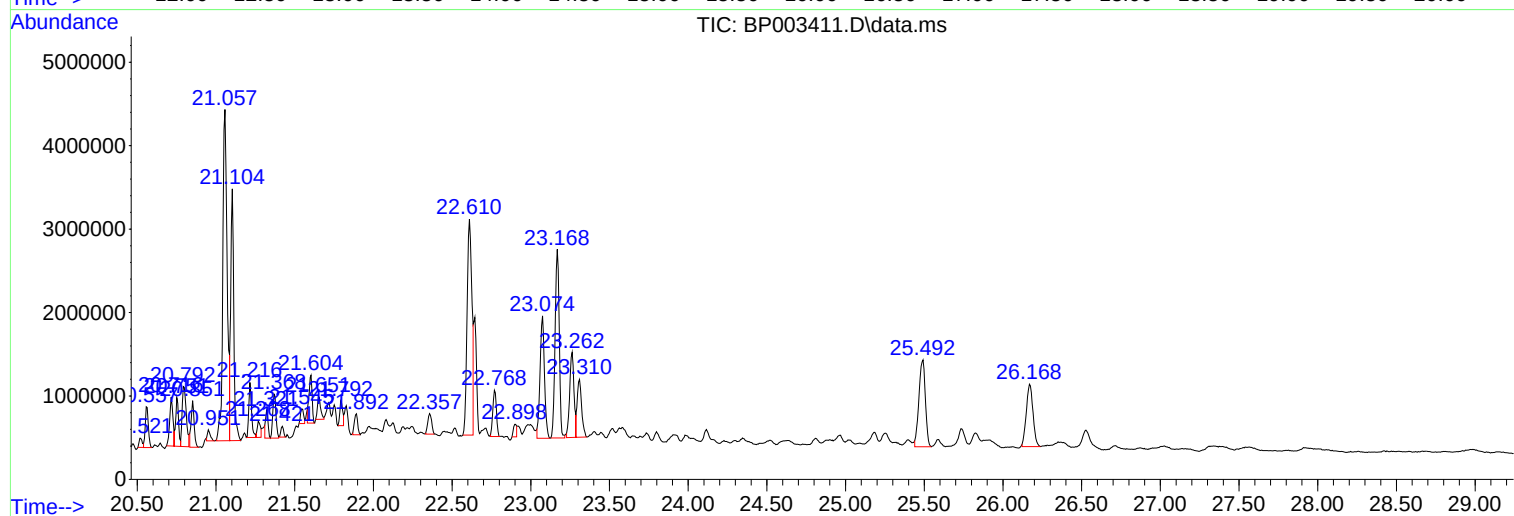
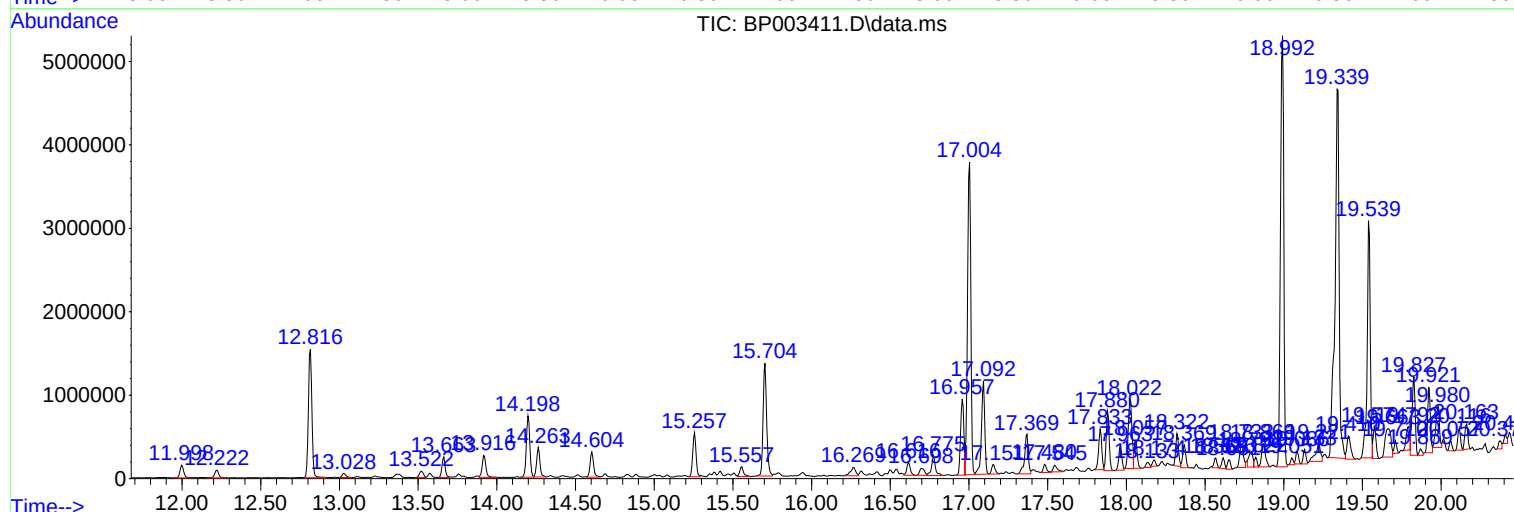
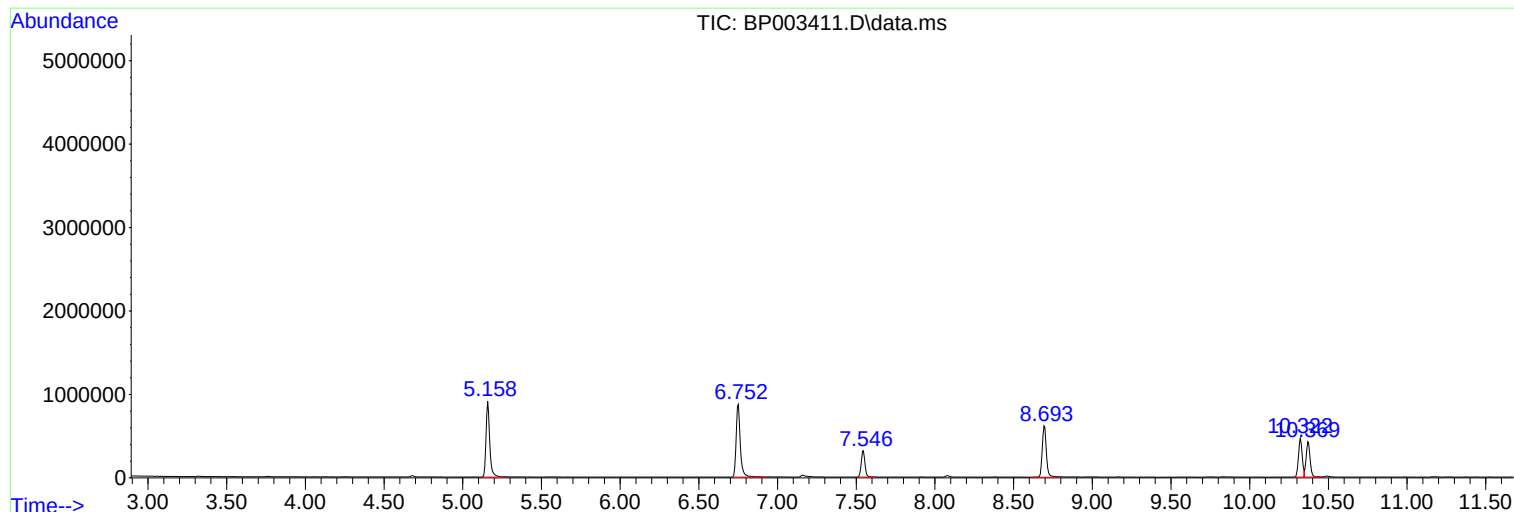
Sum of corrected areas: 103140408

Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

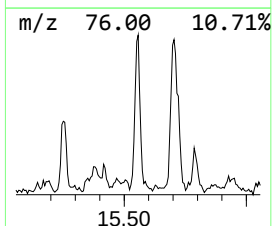
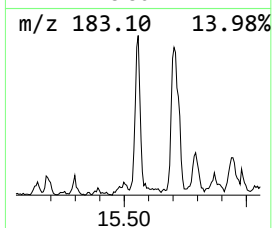
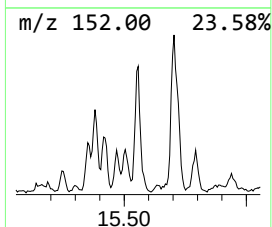
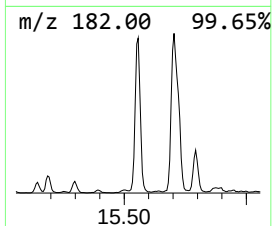
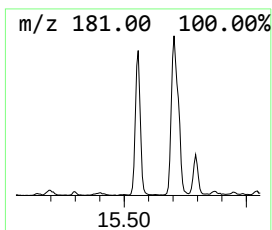
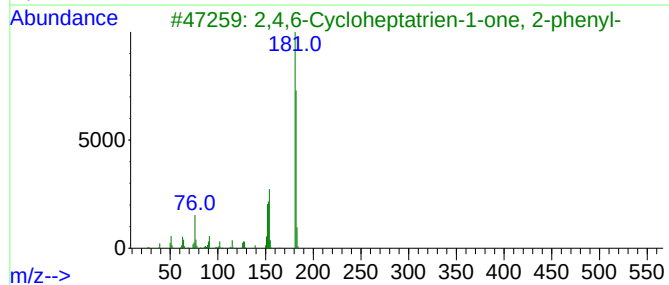
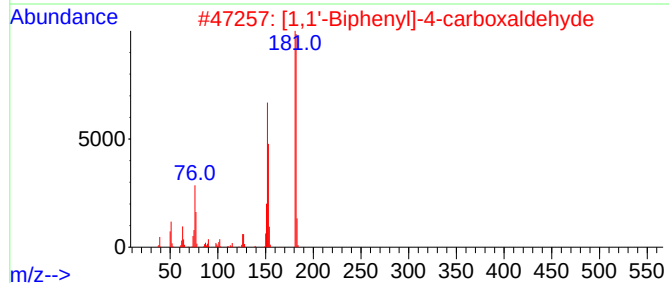
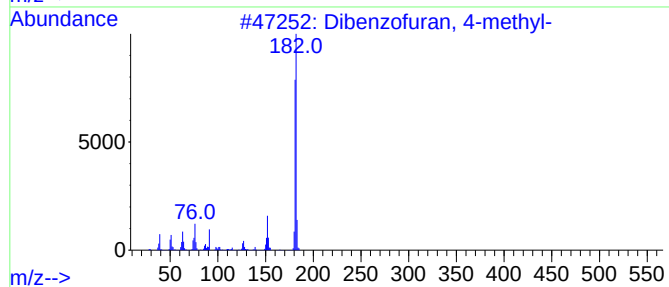
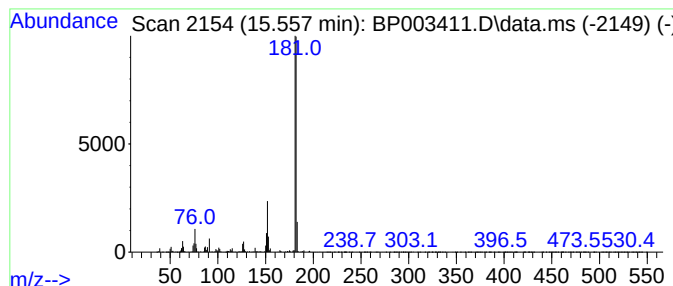
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 1 Dibenzofuran, 4-methyl- Concentration Rank 16

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 15.557 | 3.47 ng | 196410 | Acenaphthene-d10 | 14.198 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|----------|-------------|------|
| 1    |    |   | Dibenzofuran, 4-methyl-             | 182 | C13H10O  | 007320-53-8 | 90   |
| 2    |    |   | [1,1'-Biphenyl]-4-carboxaldehyde    | 182 | C13H10O  | 003218-36-8 | 87   |
| 3    |    |   | 2,4,6-Cycloheptatrien-1-one, 2-p... | 182 | C13H10O  | 014562-09-5 | 86   |
| 4    |    |   | 9H-Fluoren-9-ol                     | 182 | C13H10O  | 001689-64-1 | 78   |
| 5    |    |   | Pyrido[2,3-b]indole, 6-methyl-      | 182 | C12H10N2 | 108349-67-3 | 72   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

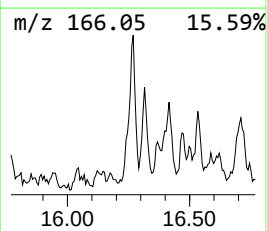
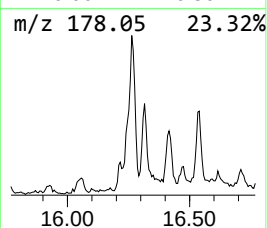
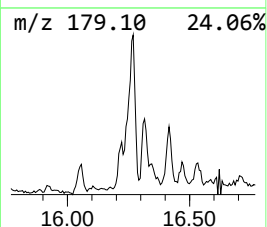
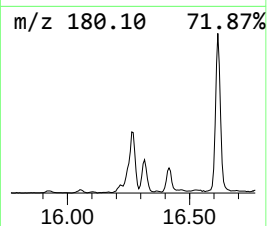
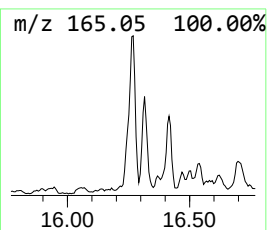
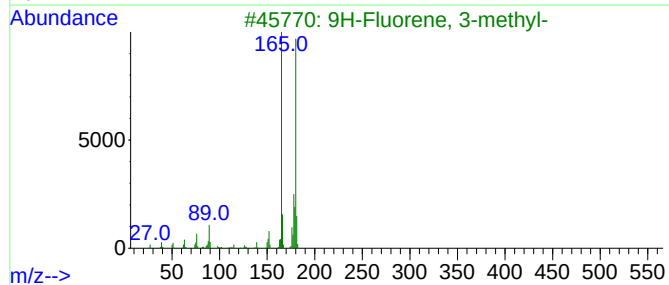
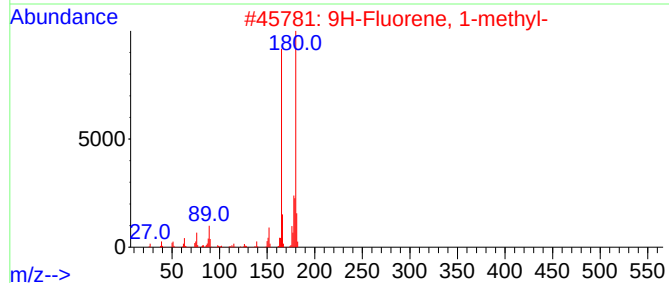
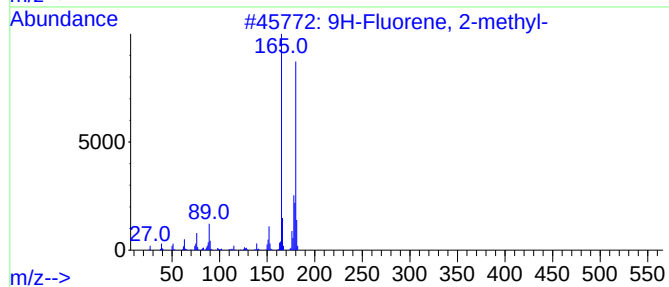
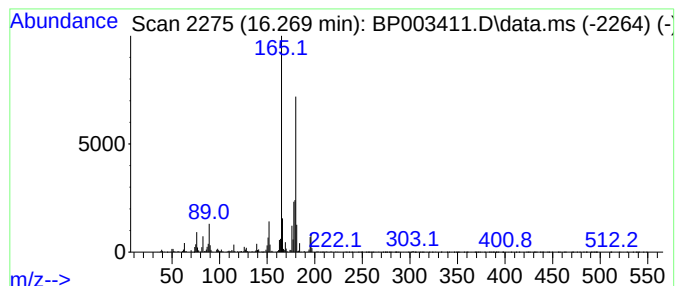
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 2 9H-Fluorene, 2-methyl- Concentration Rank 17

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 16.269 | 3.44 ng | 232377 | Phenanthrene-d10 | 16.957 |

| Hit# | of 5 | Tentative ID           | MW  | MolForm | CAS#        | Qual |
|------|------|------------------------|-----|---------|-------------|------|
| 1    |      | 9H-Fluorene, 2-methyl- | 180 | C14H12  | 001430-97-3 | 95   |
| 2    |      | 9H-Fluorene, 1-methyl- | 180 | C14H12  | 001730-37-6 | 95   |
| 3    |      | 9H-Fluorene, 3-methyl- | 180 | C14H12  | 002523-39-9 | 93   |
| 4    |      | 9H-Fluorene, 9-methyl- | 180 | C14H12  | 002523-37-7 | 86   |
| 5    |      | 9H-Fluorene, 4-methyl- | 180 | C14H12  | 001556-99-6 | 72   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

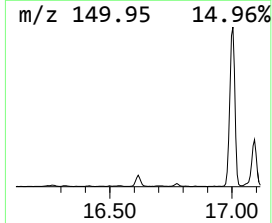
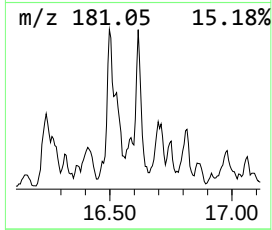
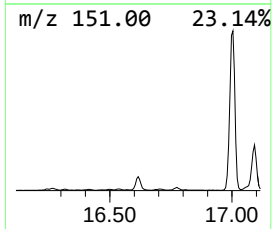
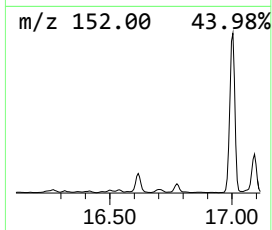
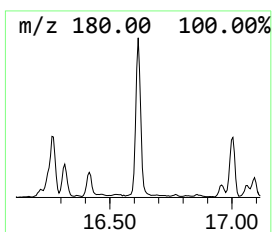
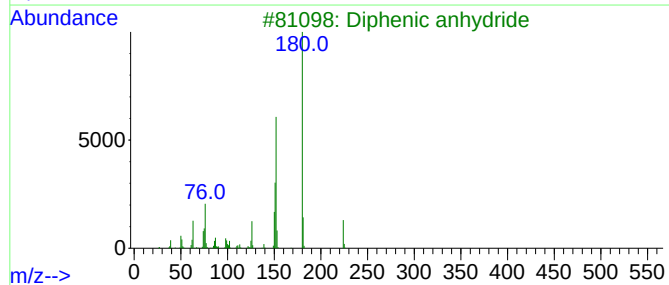
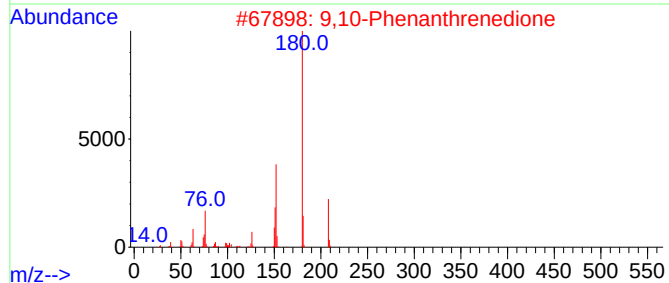
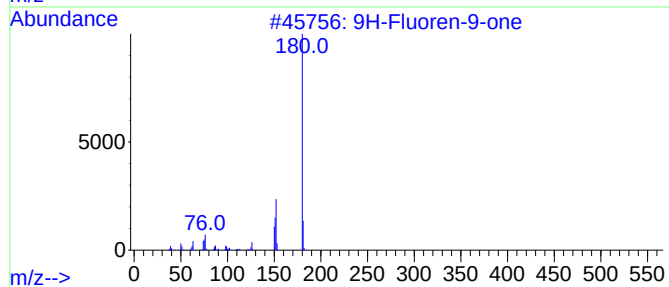
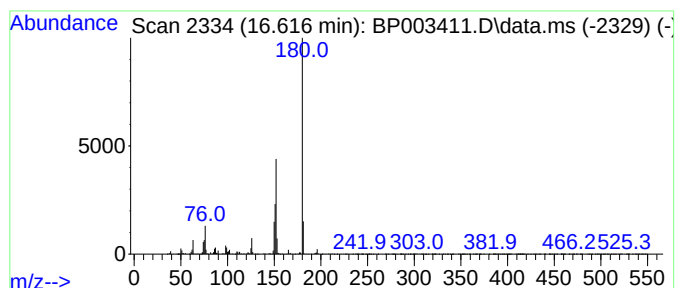
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*

Peak Number 3 9H-Fluoren-9-one Concentration Rank 15

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------|--------|------------------|-------------|------|
| 16.616    | 3.53 ng                             | 239014 | Phenanthrene-d10 | 16.957      |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#        | Qual |
| 1         | 9H-Fluoren-9-one                    | 180    | C13H8O           | 000486-25-9 | 96   |
| 2         | 9,10-Phenanthrenedione              | 208    | C14H8O2          | 000084-11-7 | 86   |
| 3         | Diphenic anhydride                  | 224    | C14H8O3          | 006050-13-1 | 68   |
| 4         | 9,9-Bis[4-aminophenylsulfonyl]fl... | 476    | C25H20N2O4S2     | 081269-16-1 | 64   |
| 5         | 1H-Phenalen-1-one                   | 180    | C13H8O           | 000548-39-0 | 58   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

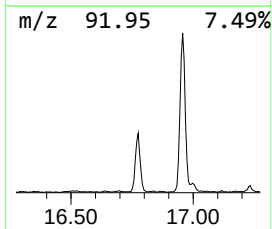
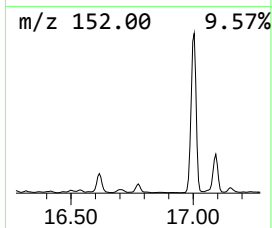
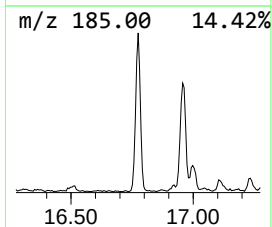
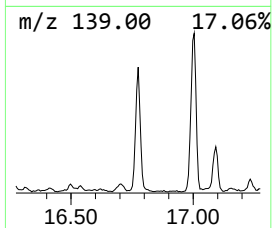
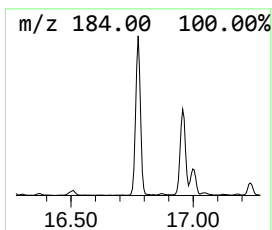
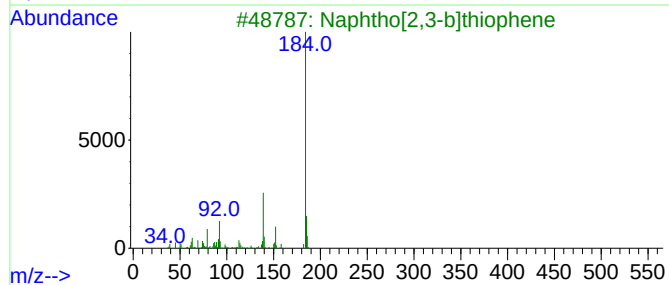
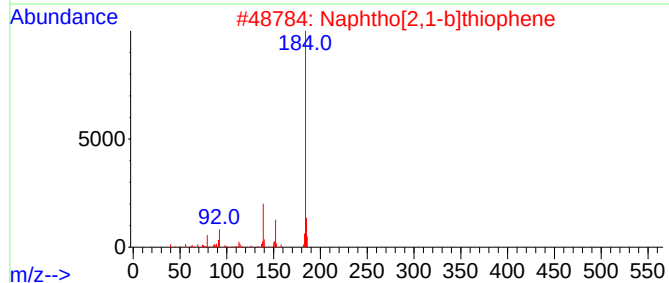
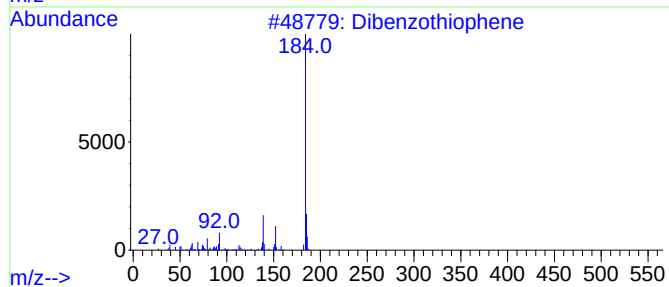
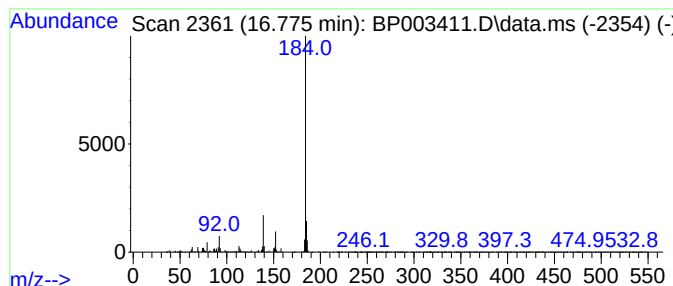
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 4 Dibenzothiophene Concentration Rank 11

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 16.775 | 5.80 ng | 392162 | Phenanthrene-d10 | 16.957 |

| Hit# | of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------|-----|---------|-------------|------|
| 1    |    |   | Dibenzothiophene        | 184 | C12H8S  | 000132-65-0 | 97   |
| 2    |    |   | Naphtho[2,1-b]thiophene | 184 | C12H8S  | 000233-02-3 | 97   |
| 3    |    |   | Naphtho[2,3-b]thiophene | 184 | C12H8S  | 000268-77-9 | 95   |
| 4    |    |   | Naphtho[1,2-b]thiophene | 184 | C12H8S  | 000234-41-3 | 91   |
| 5    |    |   | Azuleno(2,1-b)thiophene | 184 | C12H8S  | 000248-13-5 | 91   |





Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

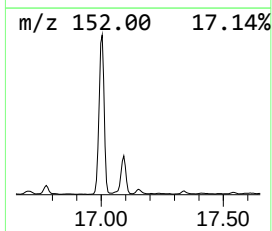
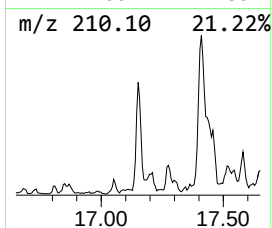
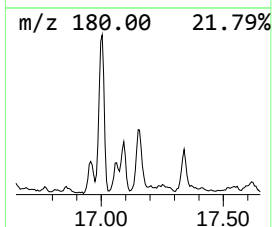
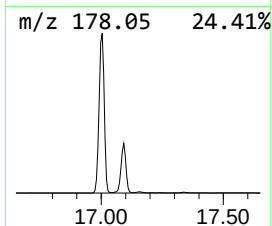
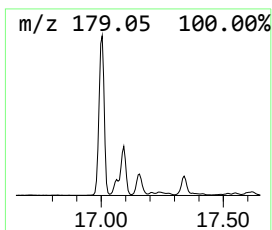
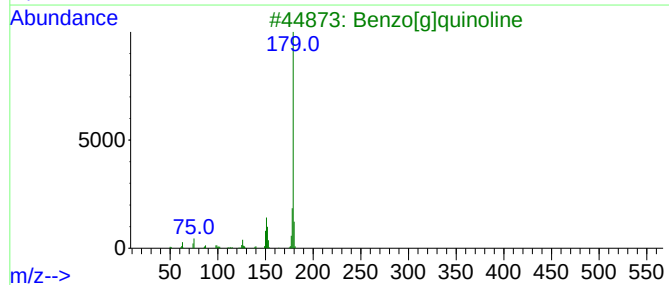
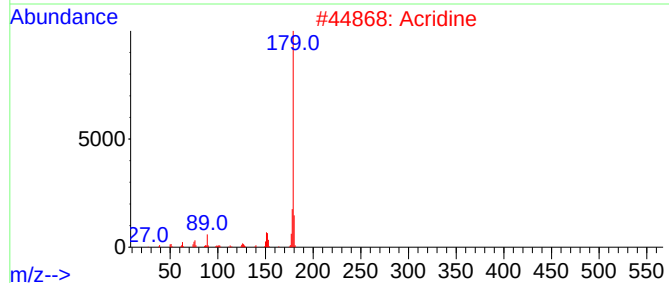
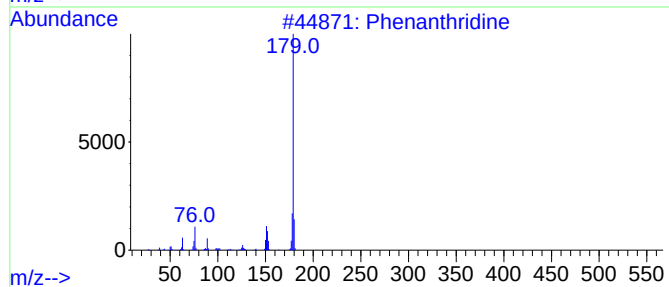
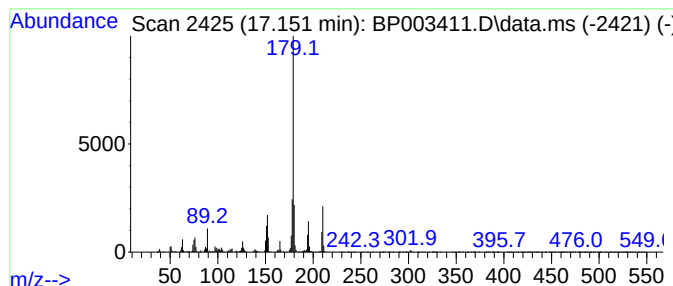
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 5 Phenanthridine Concentration Rank 20

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 17.151 | 2.66 ng | 179860 | Phenanthrene-d10 | 16.957 |

| Hit# | of | 5 | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|---|----------------------|-----|---------|-------------|------|
| 1    |    |   | Phenanthridine       | 179 | C13H9N  | 000229-87-8 | 86   |
| 2    |    |   | Acridine             | 179 | C13H9N  | 000260-94-6 | 76   |
| 3    |    |   | Benzo[g]quinoline    | 179 | C13H9N  | 000260-36-6 | 60   |
| 4    |    |   | Benzo[h]quinoline    | 179 | C13H9N  | 000230-27-3 | 58   |
| 5    |    |   | p-Phenylbenzonitrile | 179 | C13H9N  | 002920-38-9 | 58   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

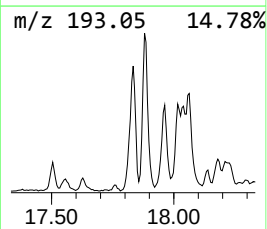
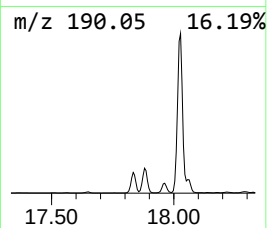
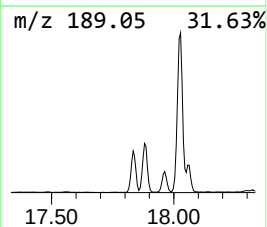
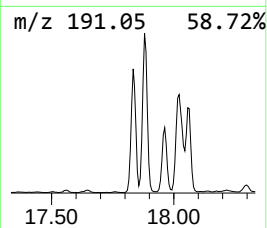
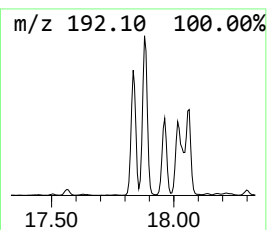
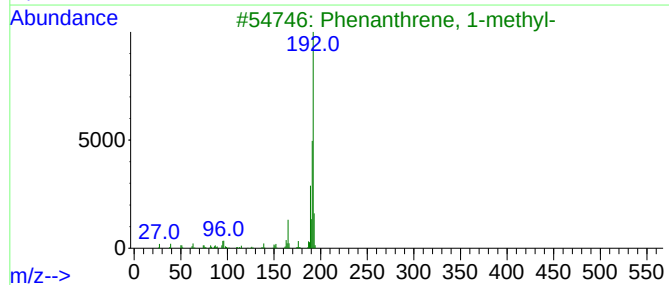
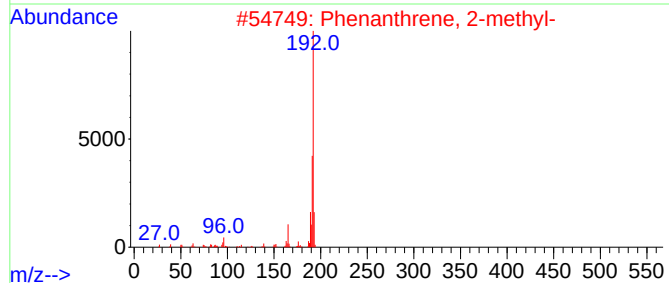
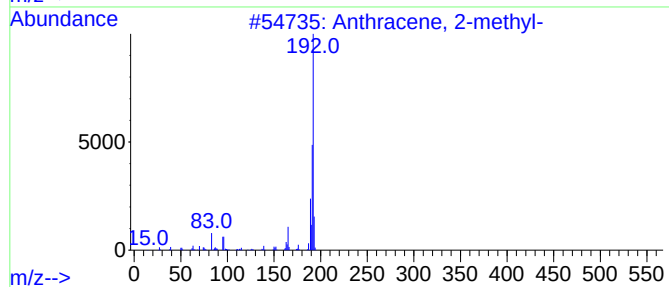
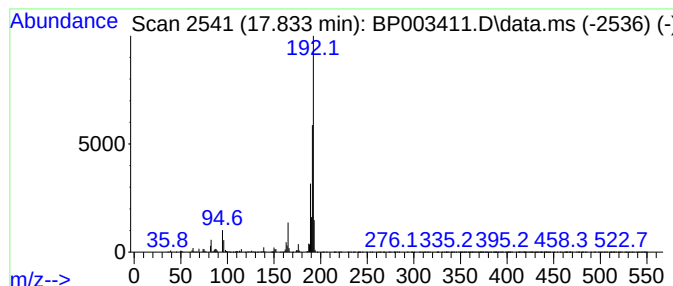
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 6 Anthracene, 2-methyl- Concentration Rank 4

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 17.833 | 9.85 ng | 666132 | Phenanthrene-d10 | 16.957 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Anthracene, 2-methyl-               | 192 | C15H12  | 000613-12-7 | 96   |
| 2    |    |   | Phenanthrene, 2-methyl-             | 192 | C15H12  | 002531-84-2 | 95   |
| 3    |    |   | Phenanthrene, 1-methyl-             | 192 | C15H12  | 000832-69-9 | 94   |
| 4    |    |   | Anthracene, 1-methyl-               | 192 | C15H12  | 000610-48-0 | 94   |
| 5    |    |   | 1H-Cyclopropa[1]phenanthrene,1a,... | 192 | C15H12  | 000949-41-7 | 94   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

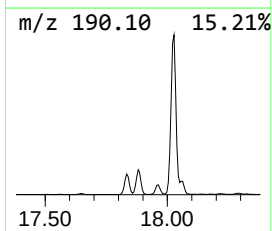
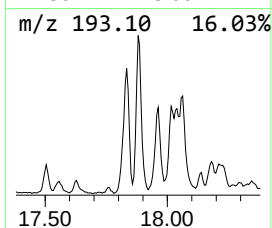
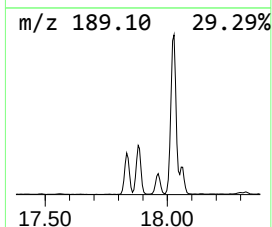
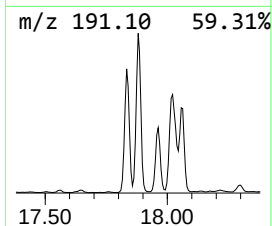
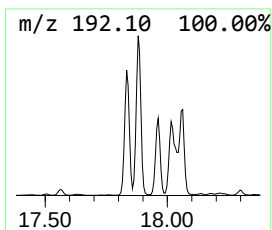
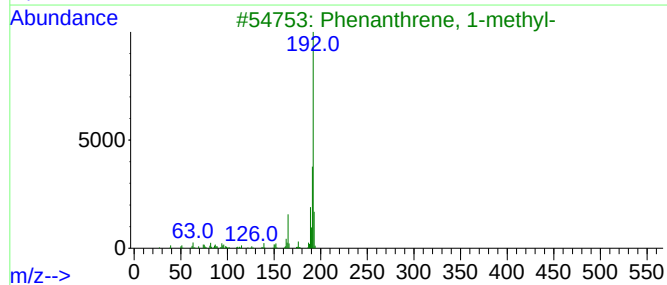
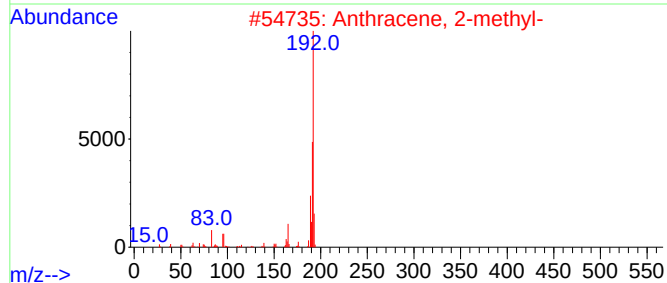
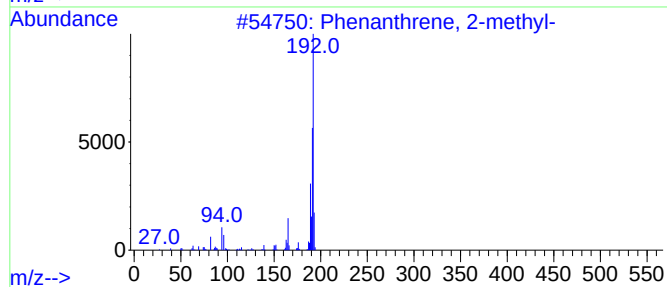
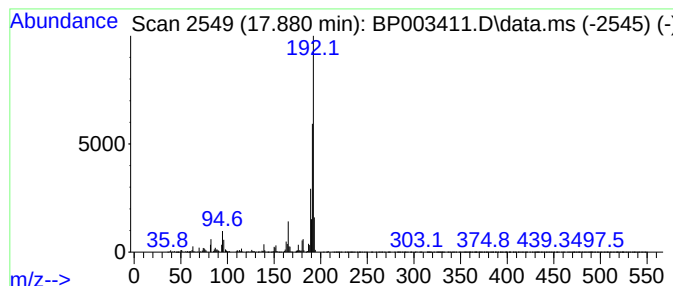
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 7 Phenanthrene, 2-methyl- Concentration Rank 3

| R.T.   | EstConc  | Area   | Relative to ISTD | R.T.   |
|--------|----------|--------|------------------|--------|
| 17.880 | 14.05 ng | 950143 | Phenanthrene-d10 | 16.957 |

| Hit# | of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------|-----|---------|-------------|------|
| 1    |    |   | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 98   |
| 2    |    |   | Anthracene, 2-methyl-   | 192 | C15H12  | 000613-12-7 | 95   |
| 3    |    |   | Phenanthrene, 1-methyl- | 192 | C15H12  | 000832-69-9 | 95   |
| 4    |    |   | Anthracene, 9-methyl-   | 192 | C15H12  | 000779-02-2 | 94   |
| 5    |    |   | Anthracene, 1-methyl-   | 192 | C15H12  | 000610-48-0 | 93   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

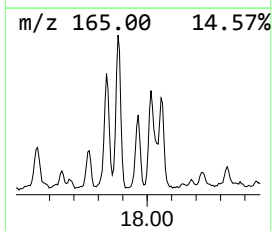
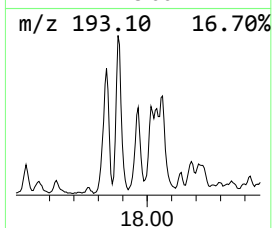
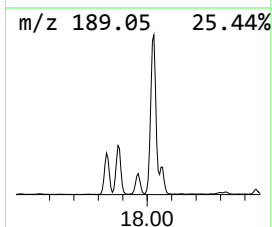
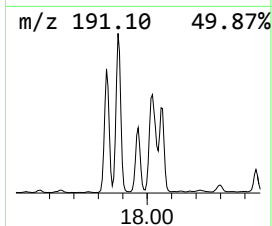
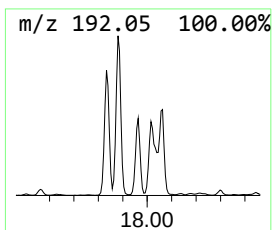
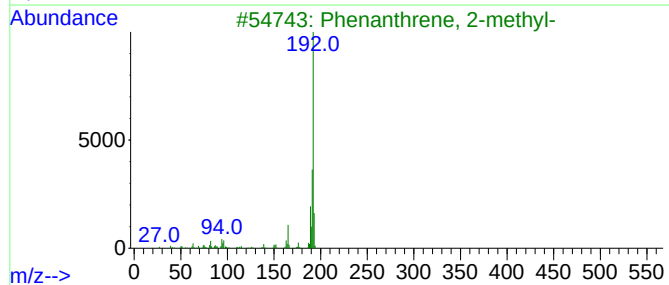
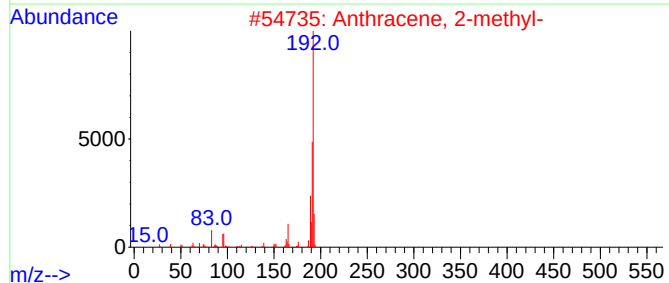
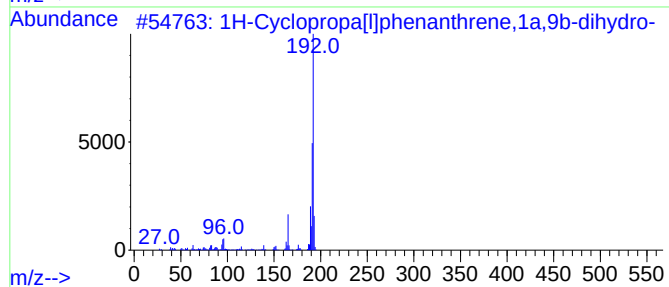
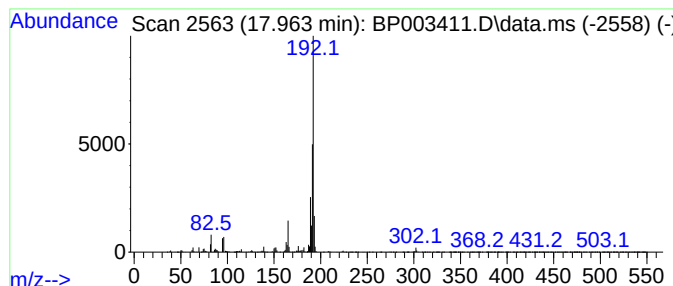
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 8 1H-Cyclopropa[l]phenanthren... Concentration Rank 10

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 17.963 | 5.98 ng | 404356 | Phenanthrene-d10 | 16.957 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12  | 000949-41-7 | 98   |
| 2    |    |   | Anthracene, 2-methyl-               | 192 | C15H12  | 000613-12-7 | 97   |
| 3    |    |   | Phenanthrene, 2-methyl-             | 192 | C15H12  | 002531-84-2 | 96   |
| 4    |    |   | Phenanthrene, 1-methyl-             | 192 | C15H12  | 000832-69-9 | 96   |
| 5    |    |   | Anthracene, 1-methyl-               | 192 | C15H12  | 000610-48-0 | 96   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

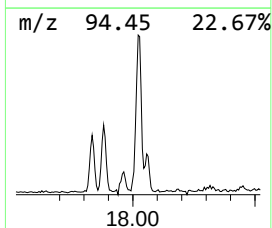
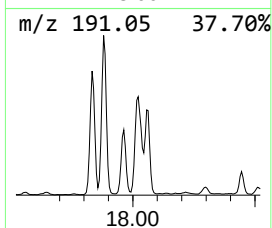
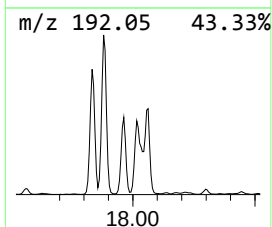
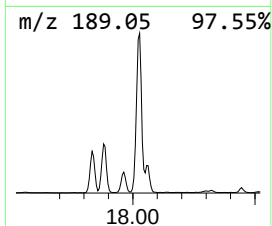
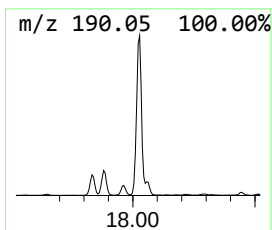
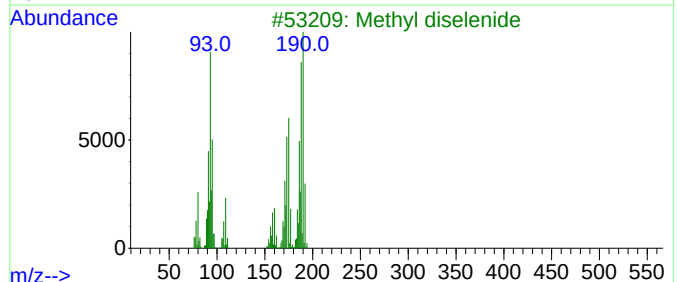
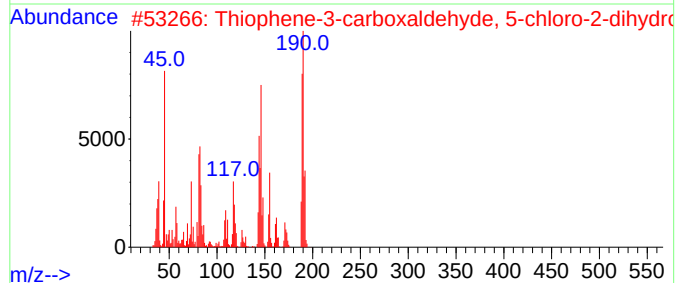
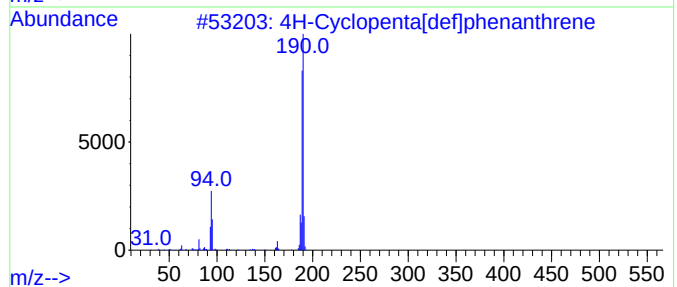
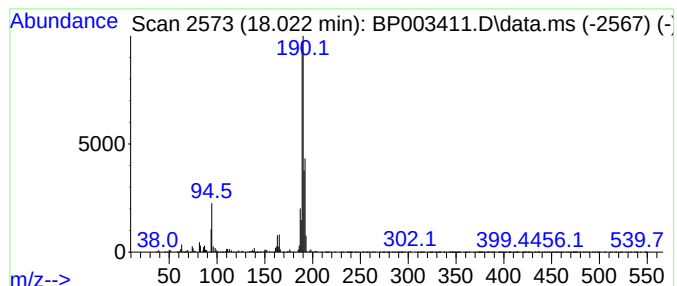
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*

Peak Number 9 4H-Cyclopenta[def]phenanthrene Concentration Rank 2

| R.T.   | EstConc  | Area    | Relative to ISTD | R.T.   |
|--------|----------|---------|------------------|--------|
| 18.022 | 20.50 ng | 1386390 | Phenanthrene-d10 | 16.957 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm    | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|------------|-------------|------|
| 1    |    |   | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10     | 000203-64-5 | 93   |
| 2    |    |   | Thiophene-3-carboxaldehyde, 5-ch... | 190 | C5H4BClO3S | 036155-87-0 | 50   |
| 3    |    |   | Methyl diselenide                   | 190 | C2H6Se2    | 007101-31-7 | 49   |
| 4    |    |   | 2,3,5,6-Tetramethylterephthalald... | 190 | C12H14O2   | 007072-01-7 | 47   |
| 5    |    |   | 6H-Cyclobuta[jk]phenanthrene        | 190 | C15H10     | 083469-43-6 | 45   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

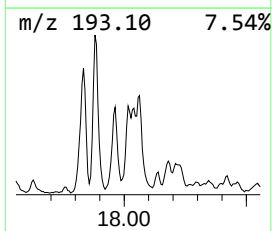
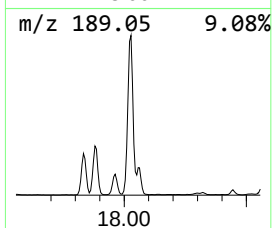
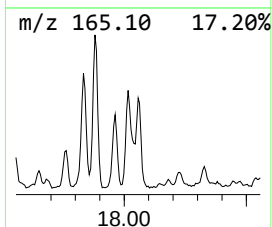
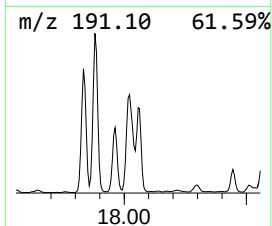
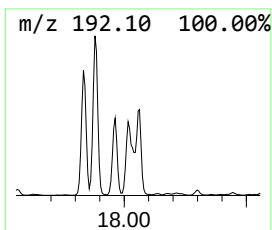
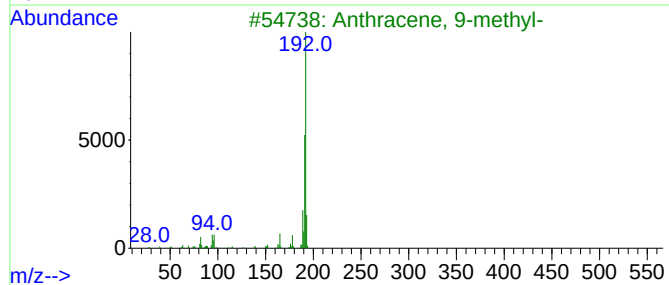
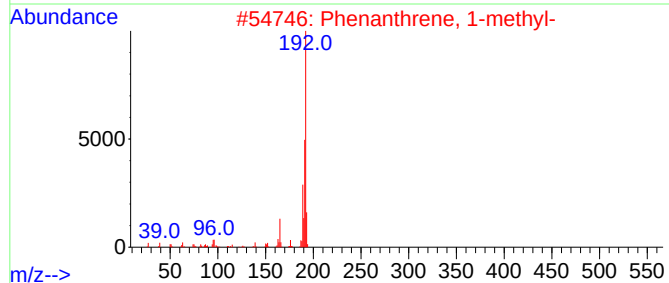
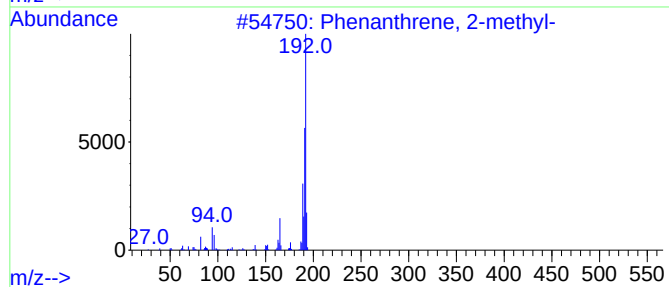
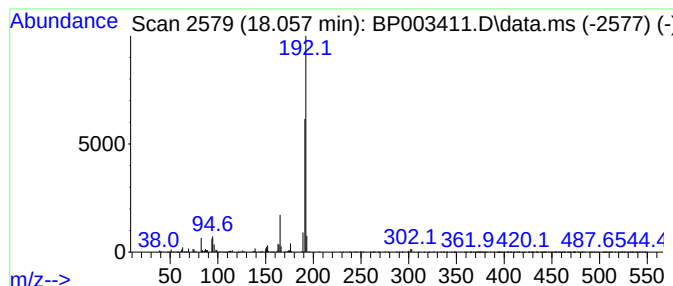
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 10 Phenanthrene, 1-methyl- Concentration Rank 9

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 18.057 | 6.46 ng | 436941 | Phenanthrene-d10 | 16.957 |

| Hit# | of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------|-----|---------|-------------|------|
| 1    |    |   | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 83   |
| 2    |    |   | Phenanthrene, 1-methyl- | 192 | C15H12  | 000832-69-9 | 81   |
| 3    |    |   | Anthracene, 9-methyl-   | 192 | C15H12  | 000779-02-2 | 80   |
| 4    |    |   | Anthracene, 1-methyl-   | 192 | C15H12  | 000610-48-0 | 80   |
| 5    |    |   | Phenanthrene, 4-methyl- | 192 | C15H12  | 000832-64-4 | 76   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

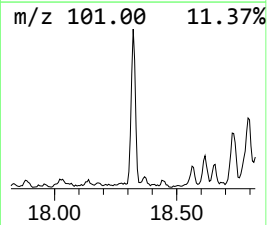
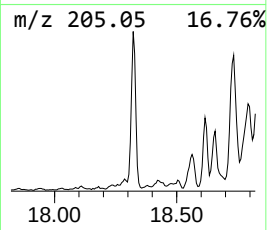
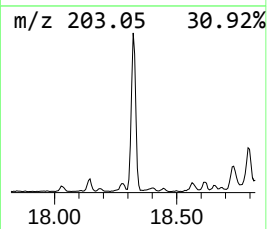
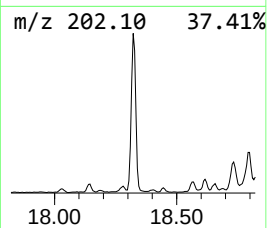
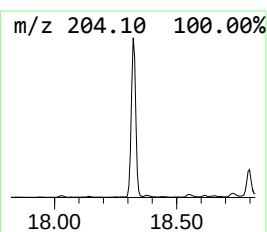
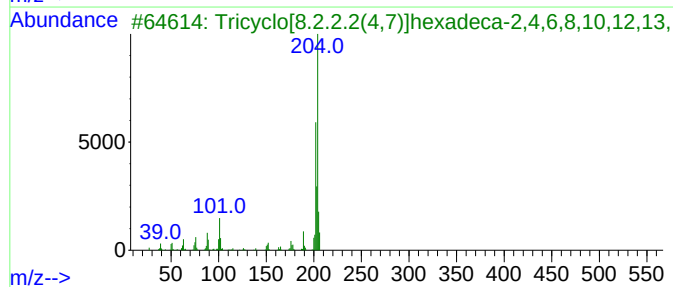
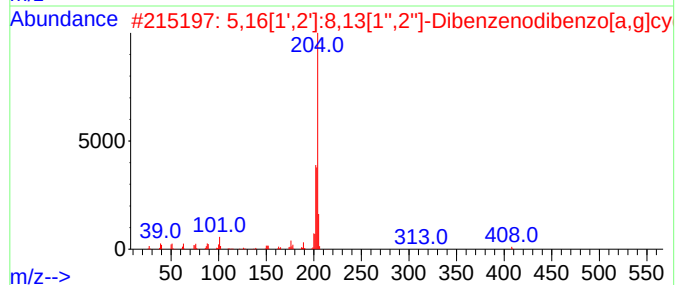
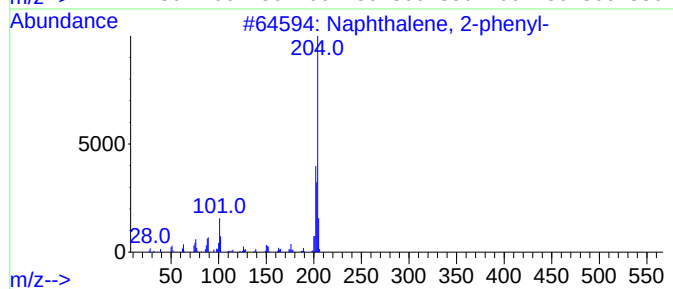
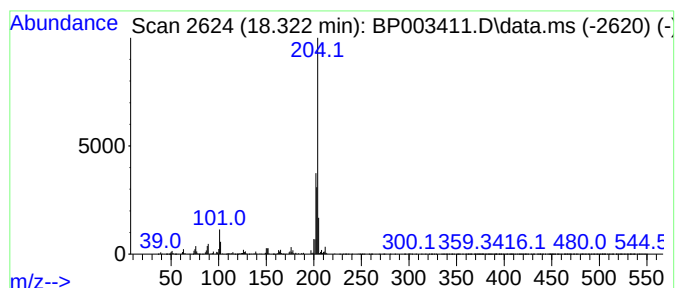
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 11 Naphthalene, 2-phenyl- Concentration Rank 6

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 18.322 | 7.22 ng | 488547 | Phenanthrene-d10 | 16.957 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm   | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|-----------|-------------|------|
| 1    |    |   | Naphthalene, 2-phenyl-              | 204 | C16H12    | 000612-94-2 | 90   |
| 2    |    |   | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24    | 005672-97-9 | 86   |
| 3    |    |   | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12    | 006572-60-7 | 80   |
| 4    |    |   | Naphthalene, 1-phenyl-              | 204 | C16H12    | 000605-02-7 | 64   |
| 5    |    |   | 9,10-Bis(bromomethyl)anthracene     | 362 | C16H12Br2 | 034373-96-1 | 53   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

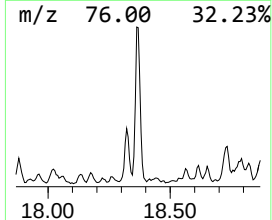
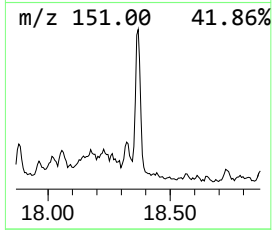
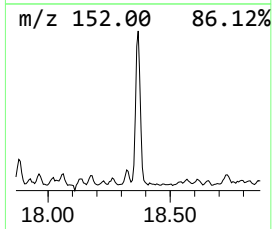
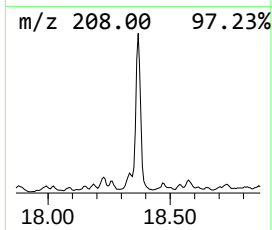
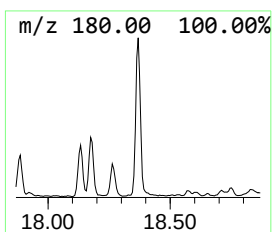
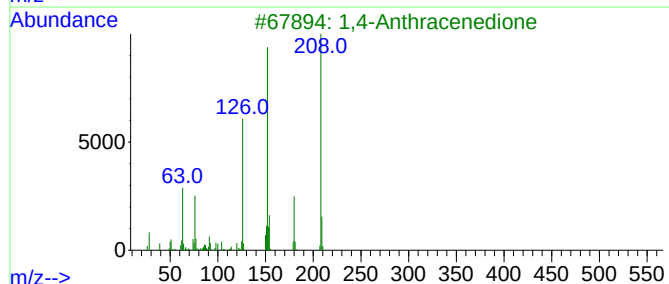
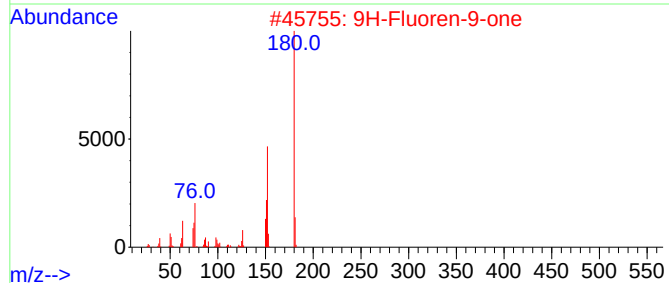
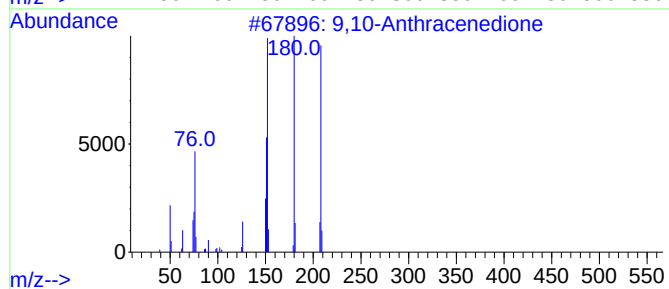
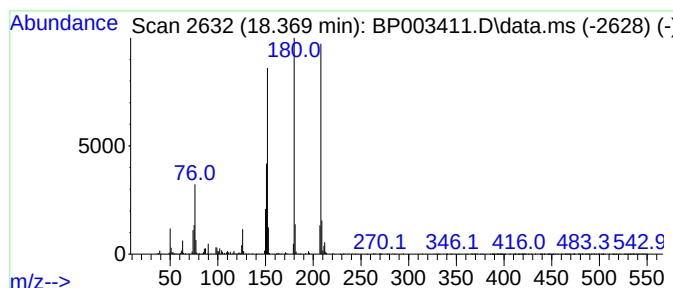
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 12 9,10-Anthracenedione Concentration Rank 12

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 18.369 | 5.73 ng | 387392 | Phenanthrene-d10 | 16.957 |

| Hit# | of 5 | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|------|----------------------|-----|---------|-------------|------|
| 1    |      | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 97   |
| 2    |      | 9H-Fluoren-9-one     | 180 | C13H8O  | 000486-25-9 | 70   |
| 3    |      | 1,4-Anthracenedione  | 208 | C14H8O2 | 000635-12-1 | 64   |
| 4    |      | Benzo[c]cinnoline    | 180 | C12H8N2 | 000230-17-1 | 64   |
| 5    |      | 1H-Phenalen-1-one    | 180 | C13H8O  | 000548-39-0 | 64   |





Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

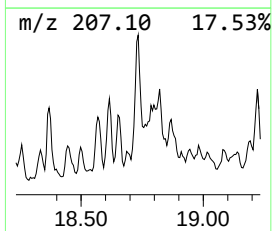
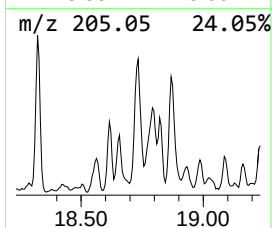
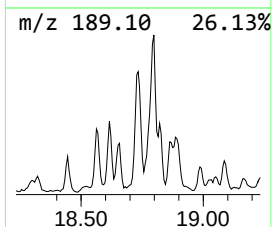
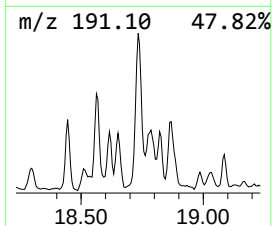
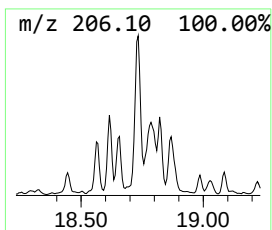
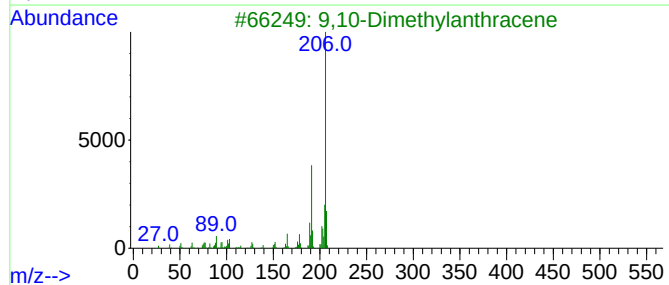
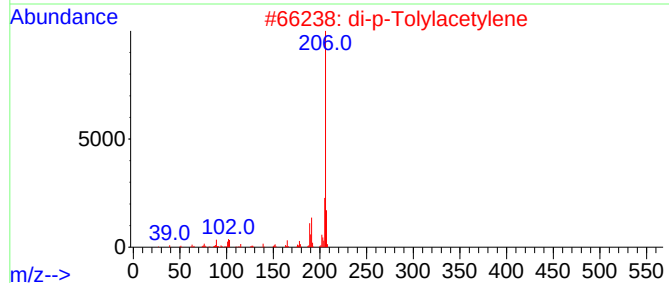
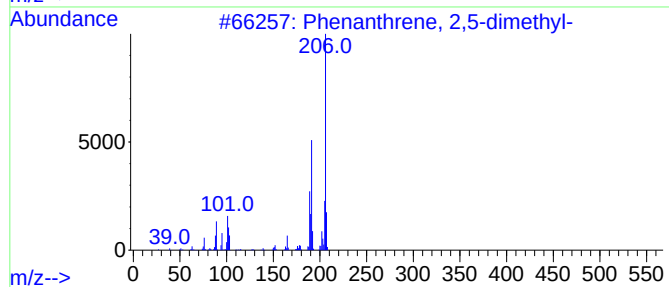
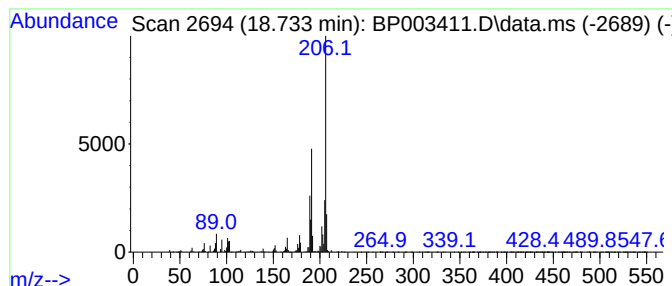
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 13 Phenanthrene, 2,5-dimethyl- Concentration Rank 8

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 18.733 | 6.87 ng | 464712 | Phenanthrene-d10 | 16.957 |

| Hit# | of | 5 | Tentative ID                | MW  | MolForm | CAS#        | Qual |
|------|----|---|-----------------------------|-----|---------|-------------|------|
| 1    |    |   | Phenanthrene, 2,5-dimethyl- | 206 | C16H14  | 003674-66-6 | 93   |
| 2    |    |   | di-p-Tolylacetylene         | 206 | C16H14  | 002789-88-0 | 93   |
| 3    |    |   | 9,10-Dimethylantracene      | 206 | C16H14  | 000781-43-1 | 91   |
| 4    |    |   | Phenanthrene, 1,7-dimethyl- | 206 | C16H14  | 000483-87-4 | 91   |
| 5    |    |   | Phenanthrene, 2,3-dimethyl- | 206 | C16H14  | 003674-65-5 | 91   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

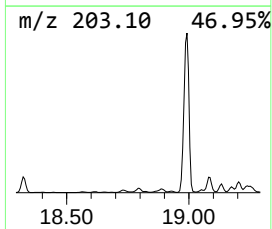
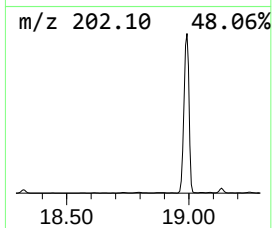
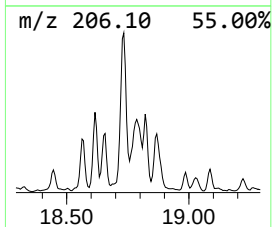
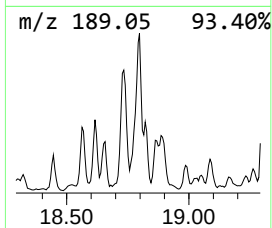
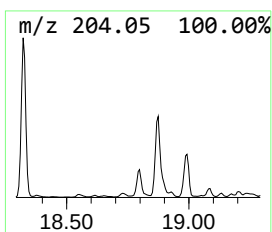
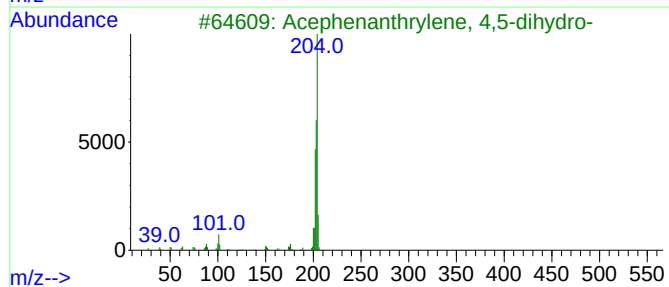
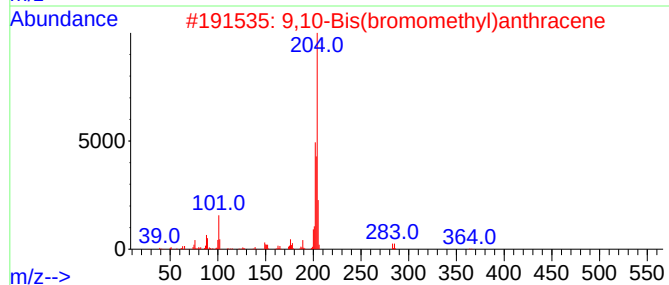
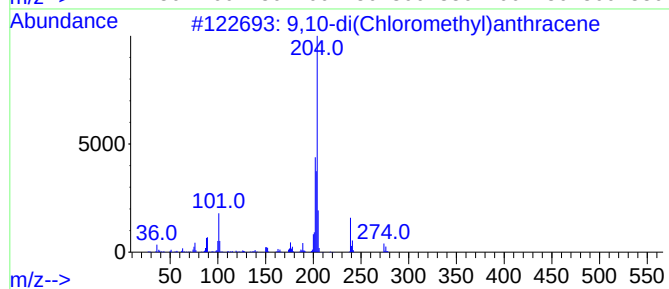
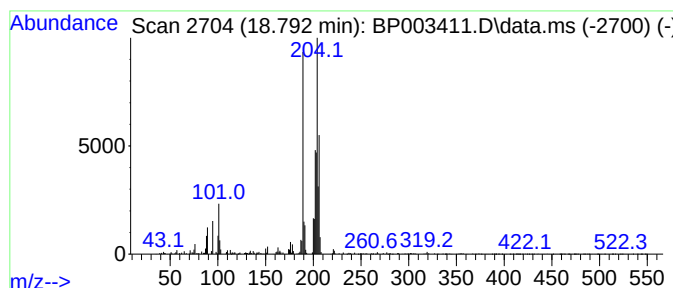
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*

Peak Number 14 9,10-di(Chloromethyl)anthra... Concentration Rank 13

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 18.792 | 4.98 ng | 336814 | Phenanthrene-d10 | 16.957 |

| Hit# | of 5 | Tentative ID                    | MW  | MolForm   | CAS#         | Qual |
|------|------|---------------------------------|-----|-----------|--------------|------|
| 1    |      | 9,10-di(Chloromethyl)anthracene | 274 | C16H12Cl2 | 010387-13-0  | 50   |
| 2    |      | 9,10-Bis(bromomethyl)anthracene | 362 | C16H12Br2 | 034373-96-1  | 49   |
| 3    |      | Acephenanthrylene, 4,5-dihydro- | 204 | C16H12    | 006232-48-0  | 46   |
| 4    |      | Naphthalene, 2-phenyl-          | 204 | C16H12    | 000612-94-2  | 46   |
| 5    |      | Quinoline, 8-methoxy-5-nitro-   | 204 | C10H8N2O3 | 1000298-88-7 | 38   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

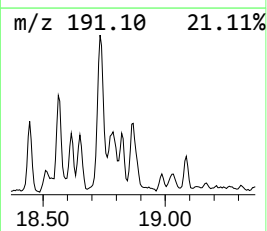
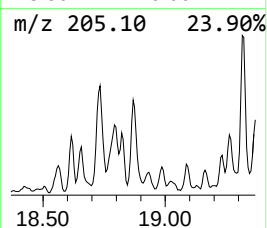
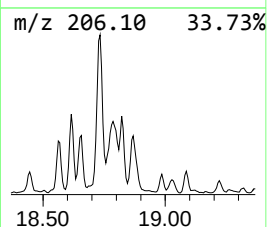
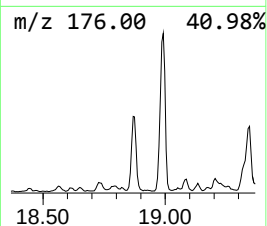
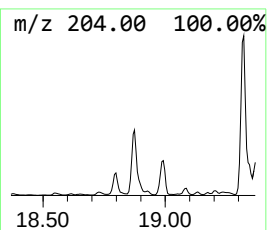
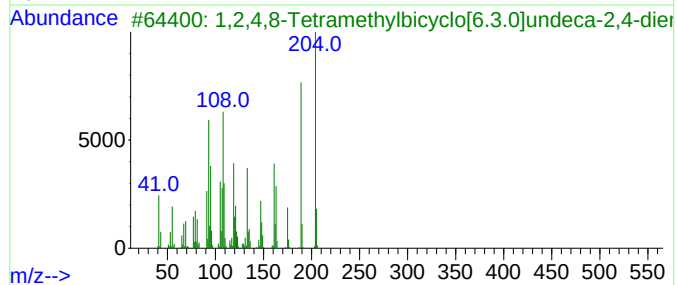
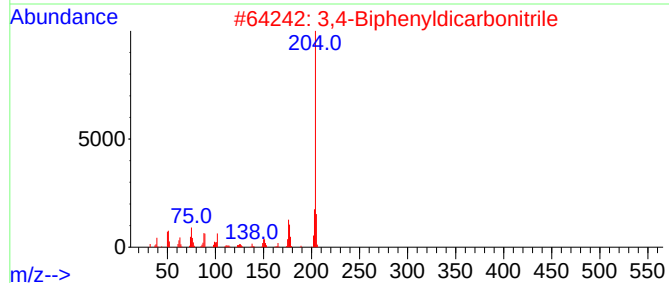
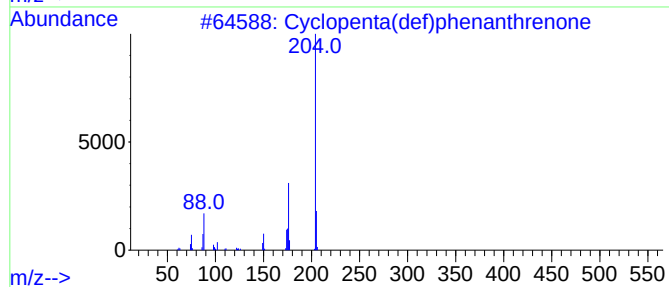
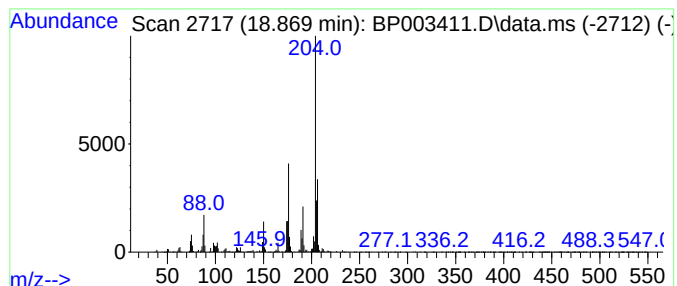
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 15 Cyclopenta(def)phenanthrenone Concentration Rank 7

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 18.869 | 6.99 ng | 472517 | Phenanthrene-d10 | 16.957 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm    | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|------------|-------------|------|
| 1    |    |   | Cyclopenta(def)phenanthrenone       | 204 | C15H8O     | 005737-13-3 | 96   |
| 2    |    |   | 3,4-Biphenyldicarbonitrile          | 204 | C14H8N2    | 004128-63-6 | 47   |
| 3    |    |   | 1,2,4,8-Tetramethylbicyclo[6.3.0... | 204 | C15H24     | 137235-51-9 | 38   |
| 4    |    |   | Pyrimido[5,4-b]benzofurane, 4-ch... | 204 | C10H5ClN2O | 039876-88-5 | 38   |
| 5    |    |   | [1,1'-Biphenyl]-2-ol, 5-chloro-     | 204 | C12H9ClO   | 000607-12-5 | 38   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

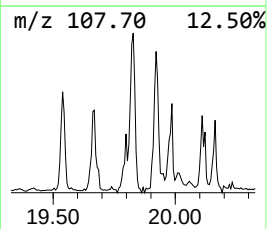
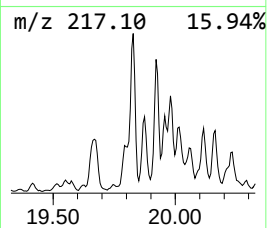
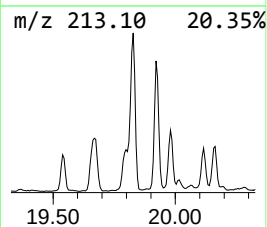
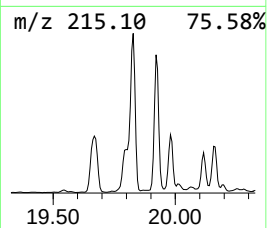
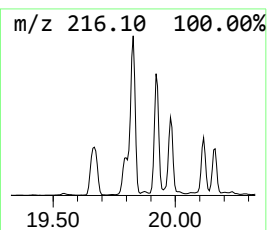
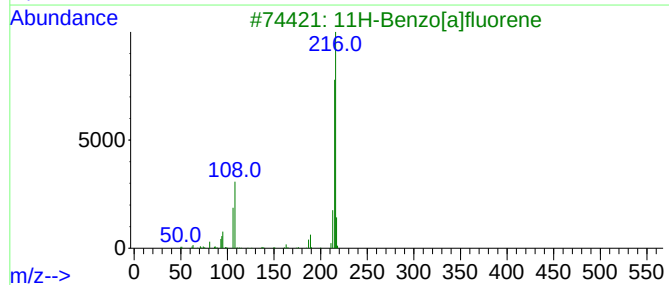
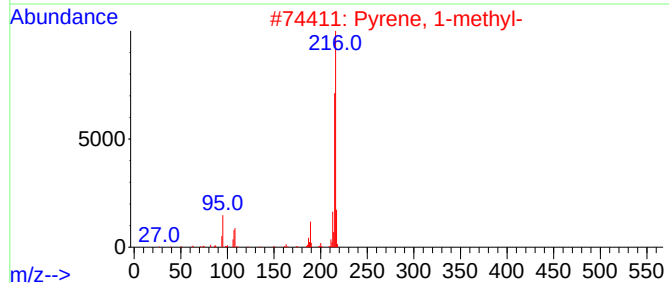
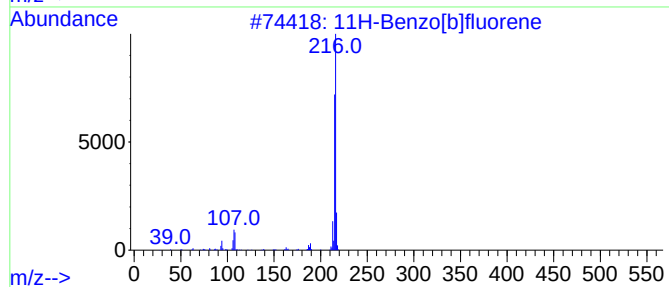
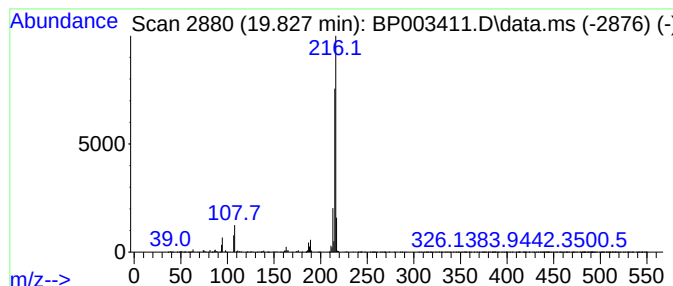
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 16 11H-Benzo[b]fluorene Concentration Rank 19

| R.T.   | EstConc | Area    | Relative to ISTD | R.T.   |
|--------|---------|---------|------------------|--------|
| 19.827 | 3.30 ng | 1276080 | Chrysene-d12     | 21.068 |

| Hit# | of 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|------|-------------------------|-----|---------|-------------|------|
| 1    |      | 11H-Benzo[b]fluorene    | 216 | C17H12  | 000243-17-4 | 94   |
| 2    |      | Pyrene, 1-methyl-       | 216 | C17H12  | 002381-21-7 | 90   |
| 3    |      | 11H-Benzo[a]fluorene    | 216 | C17H12  | 000238-84-6 | 90   |
| 4    |      | Fluoranthene, 2-methyl- | 216 | C17H12  | 033543-31-6 | 87   |
| 5    |      | 7H-Benzo[c]fluorene     | 216 | C17H12  | 000205-12-9 | 72   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

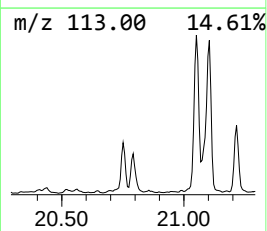
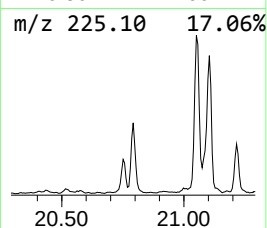
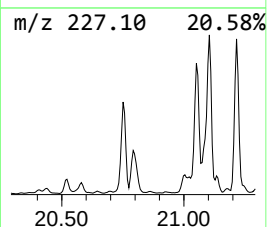
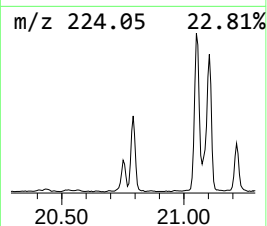
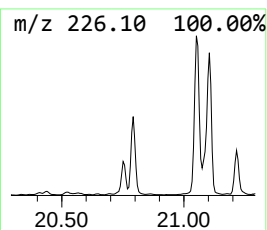
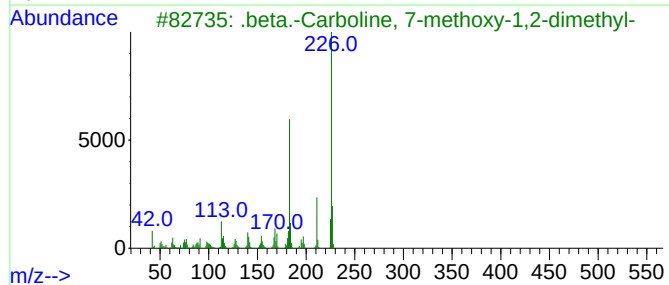
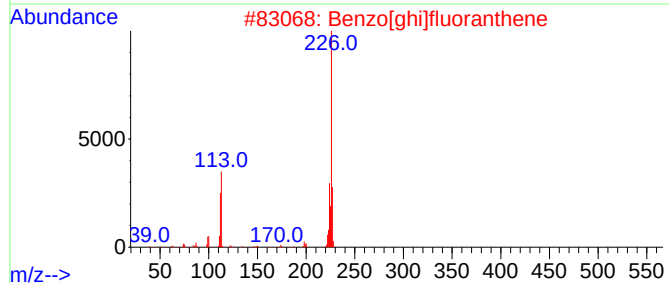
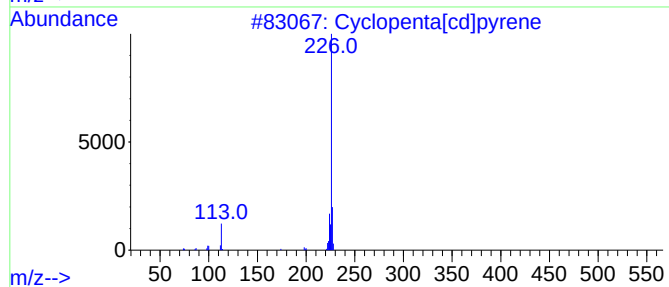
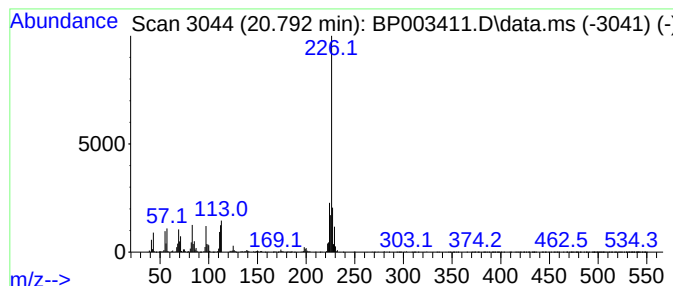
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 17 Cyclopenta[cd]pyrene Concentration Rank 18

| R.T.   | EstConc | Area    | Relative to ISTD | R.T.   |
|--------|---------|---------|------------------|--------|
| 20.792 | 3.41 ng | 1320430 | Chrysene-d12     | 21.068 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm   | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|-----------|-------------|------|
| 1    |    |   | Cyclopenta[cd]pyrene                | 226 | C18H10    | 027208-37-3 | 92   |
| 2    |    |   | Benzo[ghi]fluoranthene              | 226 | C18H10    | 000203-12-3 | 76   |
| 3    |    |   | .beta.-Carboline, 7-methoxy-1,2-... | 226 | C14H14N2O | 006519-18-2 | 52   |
| 4    |    |   | 1,3-Diamino-5,6-dihydro-7-methyl... | 226 | C13H14N4  | 037436-37-6 | 38   |
| 5    |    |   | 2,2'-Oxydibenzaldehyde              | 226 | C14H10O3  | 049590-51-4 | 38   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

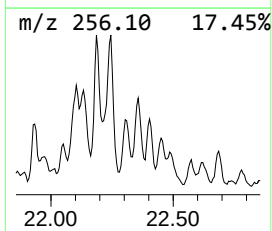
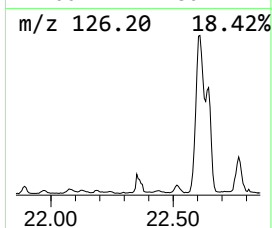
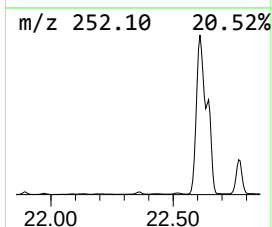
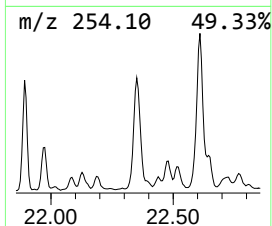
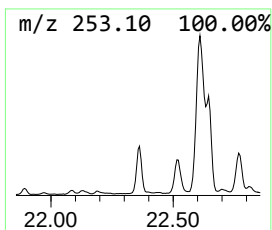
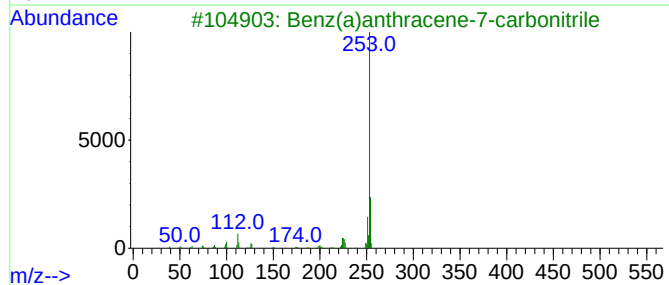
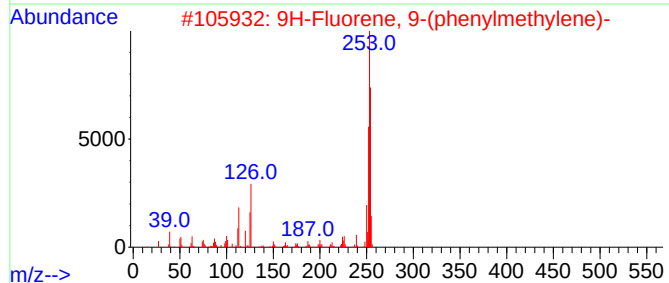
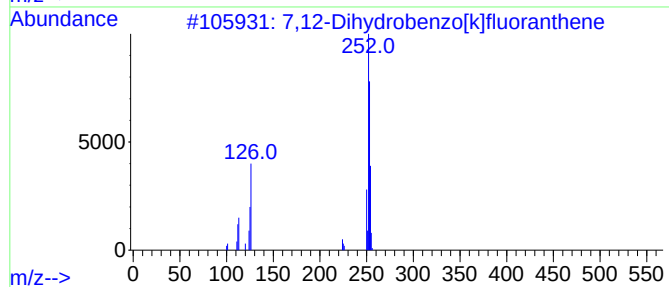
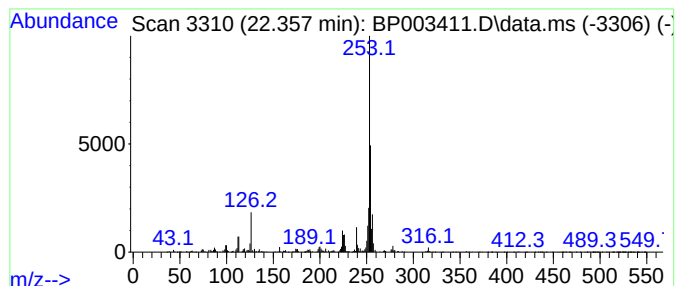
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*

Peak Number 18 7,12-Dihydrobenzo[k]fluoran... Concentration Rank 14

| R.T.      | EstConc                           | Area   | Relative to ISTD | R.T.         |      |
|-----------|-----------------------------------|--------|------------------|--------------|------|
| 22.357    | 4.22 ng                           | 415480 | Perylene-d12     | 23.262       |      |
| Hit# of 5 | Tentative ID                      | MW     | MolForm          | CAS#         | Qual |
| 1         | 7,12-Dihydrobenzo[k]fluoranthene  | 254    | C20H14           | 1000080-17-7 | 74   |
| 2         | 9H-Fluorene, 9-(phenylmethylene)- | 254    | C20H14           | 001836-87-9  | 59   |
| 3         | Benz(a)anthracene-7-carbonitrile  | 253    | C19H11N          | 007476-08-6  | 55   |
| 4         | 1,2-Dihydrobenzo[b]fluoranthene   | 254    | C20H14           | 100516-13-0  | 53   |
| 5         | 4,5-Dihydrobenzo[e]pyrene         | 254    | C20H14           | 095676-42-9  | 49   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

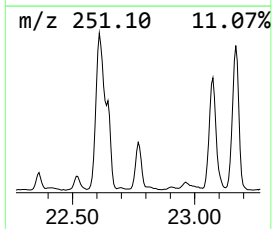
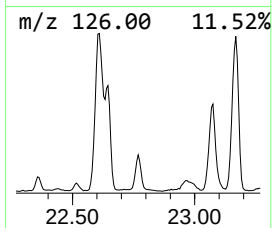
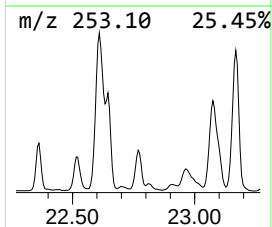
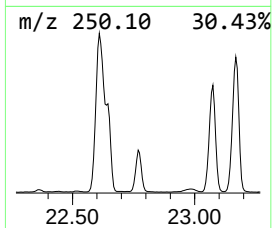
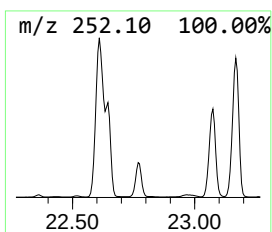
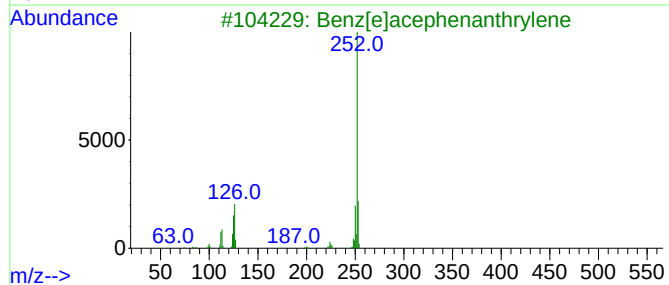
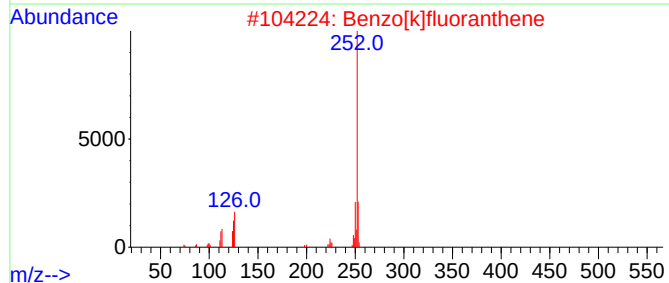
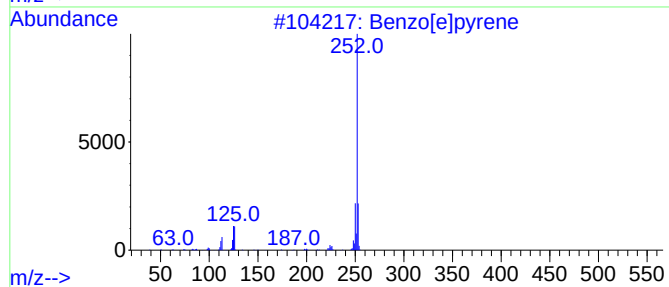
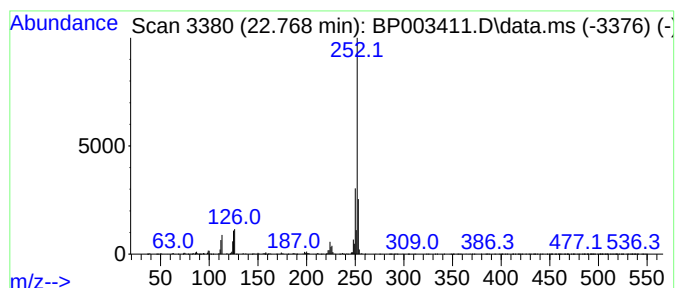
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*

Peak Number 19 Benzo[e]pyrene Concentration Rank 5

| R.T.      | EstConc                  | Area   | Relative to ISTD | R.T.        |      |
|-----------|--------------------------|--------|------------------|-------------|------|
| 22.768    | 8.74 ng                  | 860919 | Perylene-d12     | 23.262      |      |
| Hit# of 5 | Tentative ID             | MW     | MolForm          | CAS#        | Qual |
| 1         | Benzo[e]pyrene           | 252    | C20H12           | 000192-97-2 | 98   |
| 2         | Benzo[k]fluoranthene     | 252    | C20H12           | 000207-08-9 | 95   |
| 3         | Benz[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:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003411.D  
Acq On : 29 Sep 2020 21:54  
Operator : CG/JU  
Sample : L4172-04  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-6(11-13)

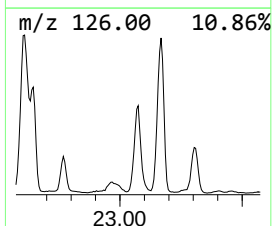
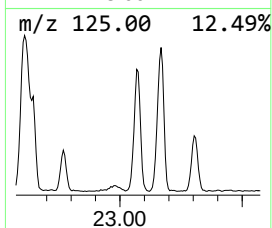
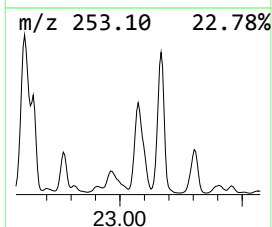
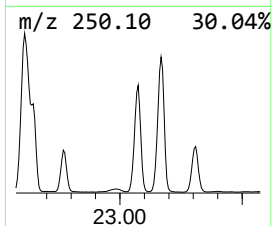
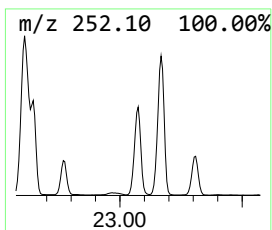
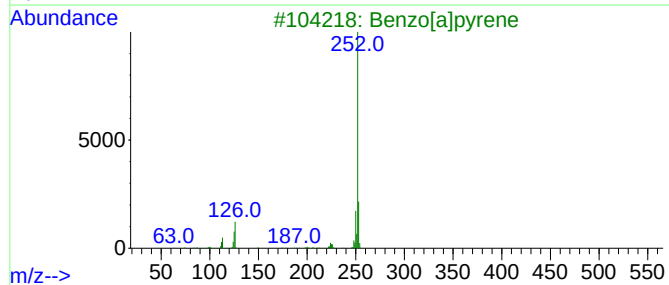
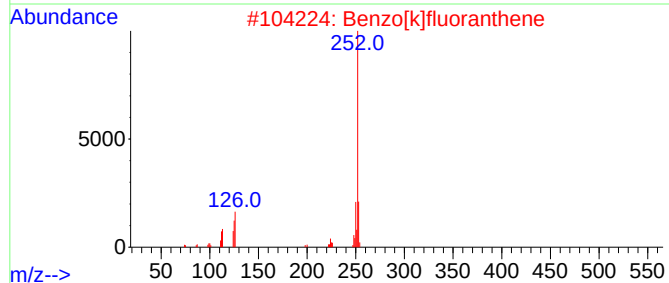
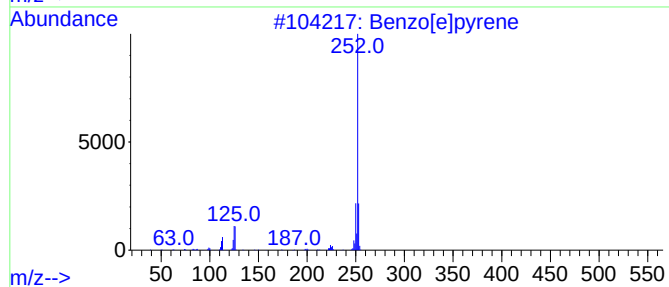
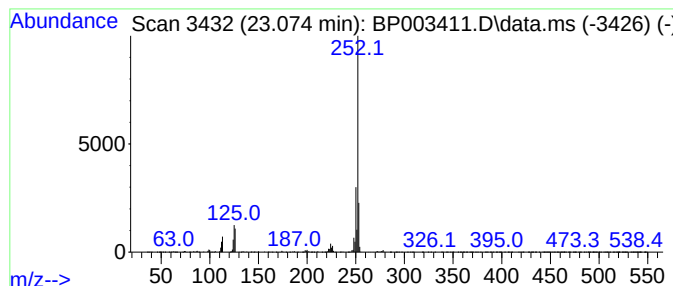
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 20 Perylene Concentration Rank 1

| R.T.   | EstConc  | Area    | Relative to ISTD | R.T.   |
|--------|----------|---------|------------------|--------|
| 23.074 | 29.01 ng | 2857070 | Perylene-d12     | 23.262 |

| Hit# | of | 5 | Tentative ID             | MW  | MolForm | CAS#        | Qual |
|------|----|---|--------------------------|-----|---------|-------------|------|
| 1    |    |   | Benzo[e]pyrene           | 252 | C20H12  | 000192-97-2 | 99   |
| 2    |    |   | Benzo[k]fluoranthene     | 252 | C20H12  | 000207-08-9 | 97   |
| 3    |    |   | Benzo[a]pyrene           | 252 | C20H12  | 000050-32-8 | 96   |
| 4    |    |   | Perylene                 | 252 | C20H12  | 000198-55-0 | 95   |
| 5    |    |   | Benz[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 94   |





Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
 Data File : BP003411.D  
 Acq On : 29 Sep 2020 21:54  
 Operator : CG/JU  
 Sample : L4172-04  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 B-6(11-13)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT 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 |
| Dibenzofuran, 4... | 15.557 | 3.5     | ng    | 196410   | 3                     | 14.198 | 1131420 | 20.0 |
| 9H-Fluorene, 2-... | 16.269 | 3.4     | ng    | 232377   | 4                     | 16.957 | 1352410 | 20.0 |
| 9H-Fluoren-9-one   | 16.616 | 3.5     | ng    | 239014   | 4                     | 16.957 | 1352410 | 20.0 |
| Dibenzothiophene   | 16.775 | 5.8     | ng    | 392162   | 4                     | 16.957 | 1352410 | 20.0 |
| Phenanthridine     | 17.151 | 2.7     | ng    | 179860   | 4                     | 16.957 | 1352410 | 20.0 |
| Anthracene, 2-m... | 17.833 | 9.8     | ng    | 666132   | 4                     | 16.957 | 1352410 | 20.0 |
| Phenanthrene, 2... | 17.880 | 14.1    | ng    | 950143   | 4                     | 16.957 | 1352410 | 20.0 |
| 1H-Cyclopropa[1... | 17.963 | 6.0     | ng    | 404356   | 4                     | 16.957 | 1352410 | 20.0 |
| 4H-Cyclopenta[d... | 18.022 | 20.5    | ng    | 1386390  | 4                     | 16.957 | 1352410 | 20.0 |
| Phenanthrene, 1... | 18.057 | 6.5     | ng    | 436941   | 4                     | 16.957 | 1352410 | 20.0 |
| Naphthalene, 2-... | 18.322 | 7.2     | ng    | 488547   | 4                     | 16.957 | 1352410 | 20.0 |
| 9,10-Anthracene... | 18.369 | 5.7     | ng    | 387392   | 4                     | 16.957 | 1352410 | 20.0 |
| Phenanthrene, 2... | 18.733 | 6.9     | ng    | 464712   | 4                     | 16.957 | 1352410 | 20.0 |
| 9,10-di(Chlorom... | 18.792 | 5.0     | ng    | 336814   | 4                     | 16.957 | 1352410 | 20.0 |
| Cyclopenta(def)... | 18.869 | 7.0     | ng    | 472517   | 4                     | 16.957 | 1352410 | 20.0 |
| 11H-Benzo[b]flu... | 19.827 | 3.3     | ng    | 1276080  | 5                     | 21.068 | 7736120 | 20.0 |
| Cyclopenta[cd]p... | 20.792 | 3.4     | ng    | 1320430  | 5                     | 21.068 | 7736120 | 20.0 |
| 7,12-Dihydroben... | 22.357 | 4.2     | ng    | 415480   | 6                     | 23.262 | 1969540 | 20.0 |
| Benzo[e]pyrene     | 22.768 | 8.7     | ng    | 860919   | 6                     | 23.262 | 1969540 | 20.0 |
| Perylene           | 23.074 | 29.0    | ng    | 2857070  | 6                     | 23.262 | 1969540 | 20.0 |