

Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
 Data File : BP003400.D  
 Acq On : 29 Sep 2020 15:39  
 Operator : CG/JU  
 Sample : L4172-14  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 B-8(13-14)

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: BP003400.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         | 406          | rBV      | 639763         | 1083758       | 29.35%          | 3.650%        |
| 2         | 6.746       | 648           | 656         | 679          | rBV      | 622178         | 1198002       | 32.45%          | 4.035%        |
| 3         | 7.546       | 784           | 792         | 804          | rBV      | 177378         | 286448        | 7.76%           | 0.965%        |
| 4         | 8.699       | 980           | 988         | 1013         | rBV      | 428586         | 818796        | 22.18%          | 2.758%        |
| 5         | 10.328      | 1257          | 1265        | 1281         | rBV      | 226219         | 455500        | 12.34%          | 1.534%        |
| 6         | 12.816      | 1681          | 1688        | 1715         | rBV      | 1314612        | 2068670       | 56.03%          | 6.967%        |
| 7         | 13.669      | 1825          | 1833        | 1845         | rBV      | 156899         | 258113        | 6.99%           | 0.869%        |
| 8         | 13.922      | 1872          | 1876        | 1884         | rVB      | 30212          | 48315         | 1.31%           | 0.163%        |
| 9         | 14.198      | 1916          | 1923        | 1931         | rBV      | 457274         | 716069        | 19.39%          | 2.412%        |
| 10        | 14.263      | 1931          | 1934        | 1945         | rVB      | 32082          | 52547         | 1.42%           | 0.177%        |
| 11        | 15.263      | 2098          | 2104        | 2116         | rBV      | 39197          | 66864         | 1.81%           | 0.225%        |
| 12        | 15.704      | 2169          | 2179        | 2192         | rBV      | 1065937        | 1758538       | 47.63%          | 5.923%        |
| 13        | 16.775      | 2358          | 2361        | 2372         | rVB      | 26366          | 46593         | 1.26%           | 0.157%        |
| 14        | 16.957      | 2386          | 2392        | 2396         | rBV      | 680252         | 978483        | 26.50%          | 3.295%        |
| 15        | 16.998      | 2396          | 2399        | 2407         | rVV      | 602438         | 811900        | 21.99%          | 2.734%        |
| 16        | 17.092      | 2407          | 2415        | 2423         | rVB      | 147601         | 235669        | 6.38%           | 0.794%        |
| 17        | 17.375      | 2455          | 2463        | 2475         | rBV2     | 40523          | 88574         | 2.40%           | 0.298%        |
| 18        | 17.833      | 2536          | 2541        | 2546         | rBV      | 70608          | 106206        | 2.88%           | 0.358%        |
| 19        | 17.886      | 2546          | 2550        | 2556         | rVV      | 106369         | 153606        | 4.16%           | 0.517%        |
| 20        | 17.963      | 2556          | 2563        | 2568         | rVV2     | 44631          | 76241         | 2.06%           | 0.257%        |
| 21        | 18.022      | 2568          | 2573        | 2578         | rVV      | 127986         | 226417        | 6.13%           | 0.763%        |
| 22        | 18.063      | 2578          | 2580        | 2589         | rVB2     | 51474          | 65883         | 1.78%           | 0.222%        |
| 23        | 18.327      | 2620          | 2625        | 2629         | rBV      | 52419          | 68812         | 1.86%           | 0.232%        |
| 24        | 18.727      | 2689          | 2693        | 2698         | rBV      | 40986          | 66639         | 1.80%           | 0.224%        |
| 25        | 18.792      | 2698          | 2704        | 2707         | rBV3     | 24898          | 44453         | 1.20%           | 0.150%        |
| 26        | 18.869      | 2713          | 2717        | 2725         | rVB3     | 40434          | 71390         | 1.93%           | 0.240%        |
| 27        | 18.986      | 2731          | 2737        | 2745         | rBV      | 1202032        | 1566659       | 42.43%          | 5.276%        |
| 28        | 19.221      | 2773          | 2777        | 2781         | rVB2     | 28608          | 37600         | 1.02%           | 0.127%        |
| 29        | 19.333      | 2787          | 2796        | 2801         | rBV      | 963597         | 1546633       | 41.89%          | 5.209%        |
| 30        | 19.416      | 2806          | 2810        | 2817         | rVB2     | 44228          | 66842         | 1.81%           | 0.225%        |
| 31        | 19.539      | 2823          | 2831        | 2836         | rBV      | 3005453        | 3692254       | 100.00%         | 12.435%       |
| 32        | 19.574      | 2836          | 2837        | 2844         | rVB      | 53143          | 61917         | 1.68%           | 0.209%        |
| 33        | 19.657      | 2845          | 2851        | 2852         | rBV      | 55042          | 81126         | 2.20%           | 0.273%        |
| 34        | 19.786      | 2869          | 2873        | 2875         | rBV3     | 46849          | 65377         | 1.77%           | 0.220%        |
| 35        | 19.827      | 2875          | 2880        | 2884         | rVB      | 147822         | 214197        | 5.80%           | 0.721%        |
| 36        | 19.921      | 2892          | 2896        | 2900         | rBV      | 122344         | 144711        | 3.92%           | 0.487%        |

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 ALS Vial : 5 Sample Multiplier: 1

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 BNA\_P  
 ClientSampleId :  
 B-8(13-14)

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

|    |        |      |      |      |      |         |         |        |        |
|----|--------|------|------|------|------|---------|---------|--------|--------|
| 37 | 19.980 | 2900 | 2906 | 2909 | rBV2 | 82740   | 140532  | 3.81%  | 0.473% |
| 38 | 20.116 | 2925 | 2929 | 2933 | rBV  | 40852   | 55088   | 1.49%  | 0.186% |
| 39 | 20.163 | 2933 | 2937 | 2941 | rVV2 | 45762   | 66263   | 1.79%  | 0.223% |
| 40 | 20.563 | 3001 | 3005 | 3010 | rVB  | 75368   | 99481   | 2.69%  | 0.335% |
| 41 | 20.716 | 3027 | 3031 | 3034 | rBV2 | 97581   | 133290  | 3.61%  | 0.449% |
| 42 | 20.751 | 3034 | 3037 | 3040 | rVV  | 96344   | 113372  | 3.07%  | 0.382% |
| 43 | 20.792 | 3040 | 3044 | 3050 | rVV2 | 348193  | 562747  | 15.24% | 1.895% |
| 44 | 20.851 | 3051 | 3054 | 3060 | rVB  | 97595   | 132089  | 3.58%  | 0.445% |
| 45 | 20.957 | 3069 | 3072 | 3079 | rVB2 | 42989   | 79479   | 2.15%  | 0.268% |
| 46 | 21.057 | 3080 | 3089 | 3093 | rVV2 | 1349463 | 2424243 | 65.66% | 8.165% |
| 47 | 21.098 | 3093 | 3096 | 3105 | rVB  | 549132  | 702672  | 19.03% | 2.367% |
| 48 | 21.210 | 3112 | 3115 | 3122 | rBV  | 119515  | 196852  | 5.33%  | 0.663% |
| 49 | 21.368 | 3139 | 3142 | 3147 | rVB2 | 85426   | 123258  | 3.34%  | 0.415% |
| 50 | 21.598 | 3179 | 3181 | 3185 | rVB  | 89482   | 101524  | 2.75%  | 0.342% |
| 51 | 21.651 | 3187 | 3190 | 3197 | rVB2 | 56163   | 92747   | 2.51%  | 0.312% |
| 52 | 21.792 | 3212 | 3214 | 3217 | rBV  | 43122   | 43855   | 1.19%  | 0.148% |
| 53 | 22.598 | 3345 | 3351 | 3356 | rBV  | 542731  | 1183225 | 32.05% | 3.985% |
| 54 | 22.762 | 3376 | 3379 | 3385 | rVB  | 98242   | 148572  | 4.02%  | 0.500% |
| 55 | 23.062 | 3425 | 3430 | 3439 | rVB  | 281779  | 529439  | 14.34% | 1.783% |
| 56 | 23.157 | 3440 | 3446 | 3454 | rBV  | 473799  | 833852  | 22.58% | 2.808% |
| 57 | 23.251 | 3456 | 3462 | 3467 | rBV2 | 831421  | 1512368 | 40.96% | 5.093% |
| 58 | 25.468 | 3834 | 3839 | 3851 | rVB2 | 220863  | 600085  | 16.25% | 2.021% |
| 59 | 26.151 | 3949 | 3955 | 3968 | rVB  | 166669  | 487381  | 13.20% | 1.641% |

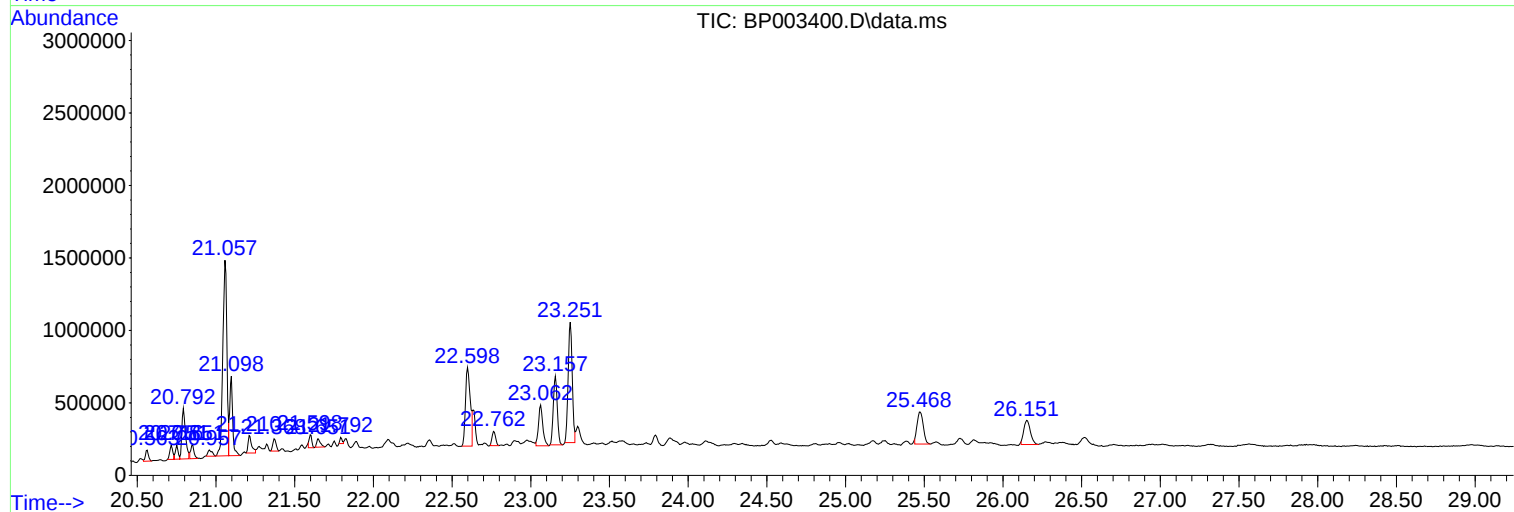
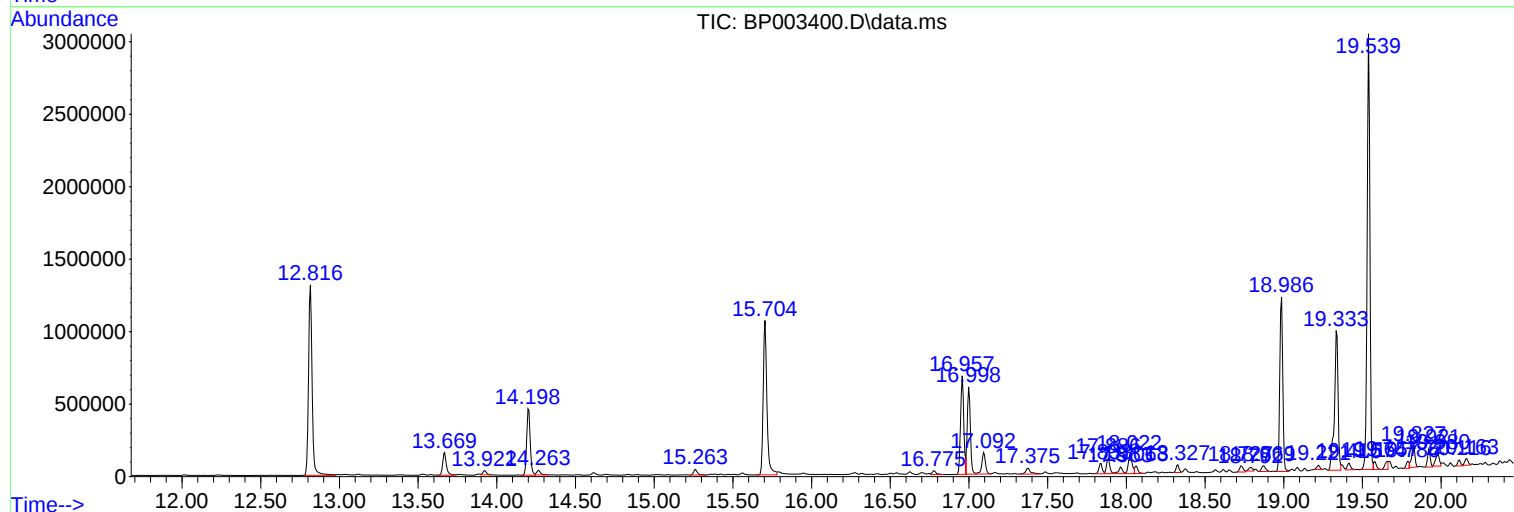
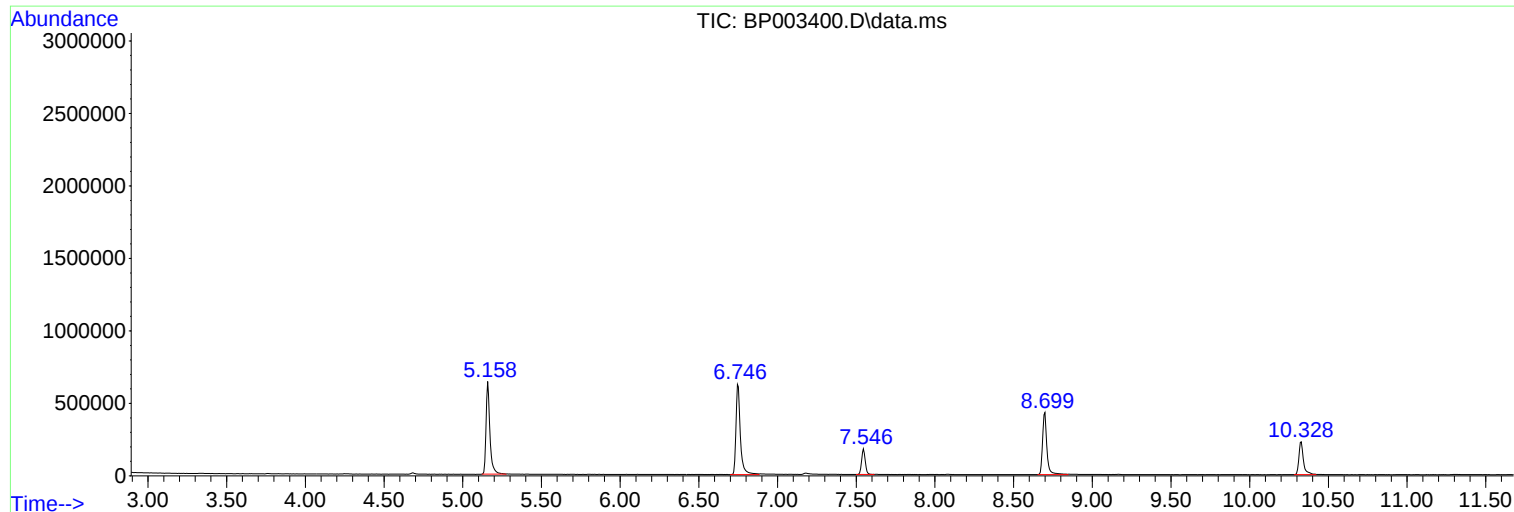
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Misc :  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-8(13-14)

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 : BP003400.D  
Acq On : 29 Sep 2020 15:39  
Operator : CG/JU  
Sample : L4172-14  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

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

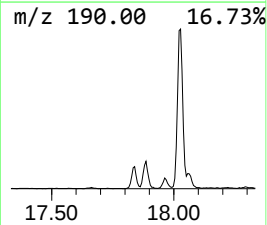
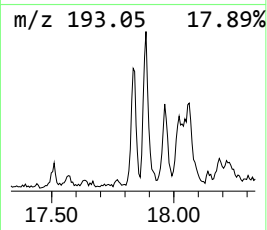
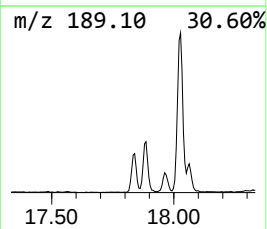
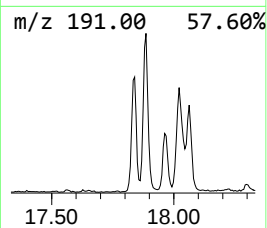
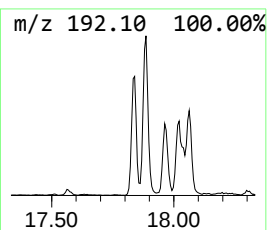
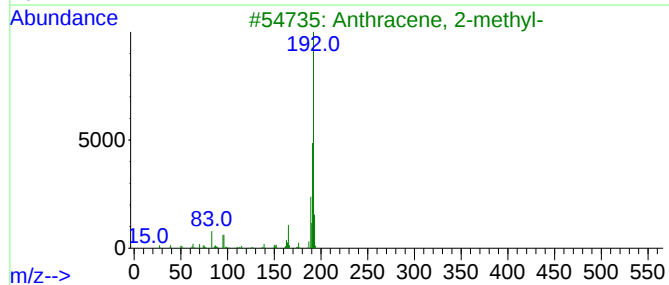
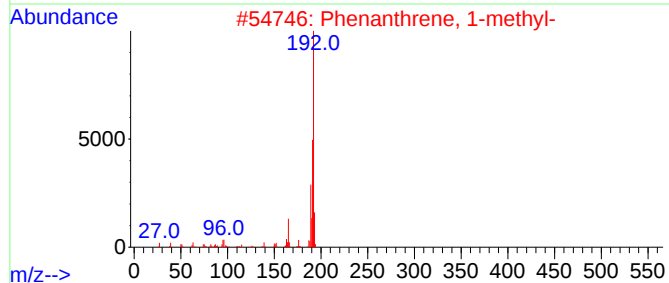
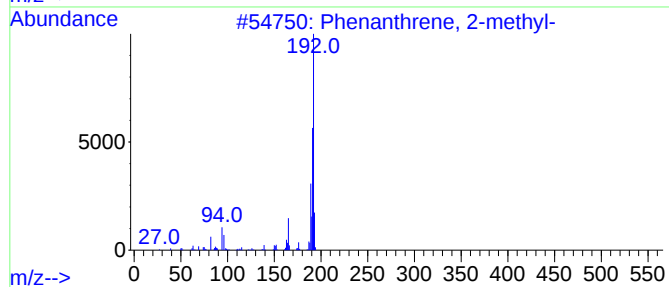
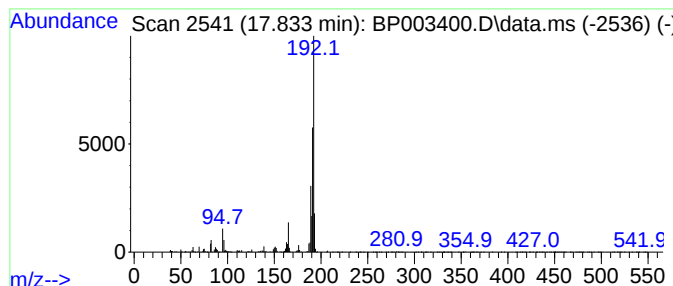
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 1 Phenanthrene, 1-methyl- Concentration Rank 5

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 17.833 | 2.17 ng | 106206 | Phenanthrene-d10 | 16.957 |

| Hit# | of 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|------|-------------------------------------|-----|---------|-------------|------|
| 1    |      | Phenanthrene, 2-methyl-             | 192 | C15H12  | 002531-84-2 | 97   |
| 2    |      | Phenanthrene, 1-methyl-             | 192 | C15H12  | 000832-69-9 | 96   |
| 3    |      | Anthracene, 2-methyl-               | 192 | C15H12  | 000613-12-7 | 96   |
| 4    |      | 1H-Cyclopropa[1]phenanthrene,1a,... | 192 | C15H12  | 000949-41-7 | 96   |
| 5    |      | Anthracene, 1-methyl-               | 192 | C15H12  | 000610-48-0 | 95   |



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ALS Vial : 5 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-8(13-14)

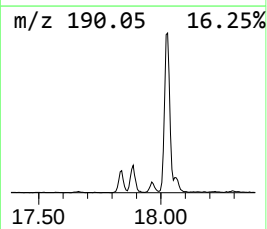
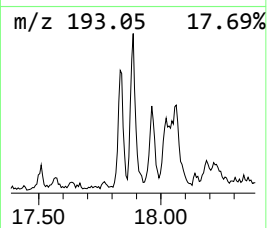
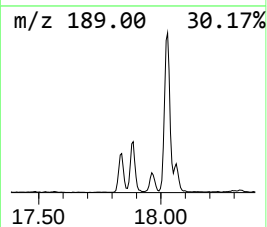
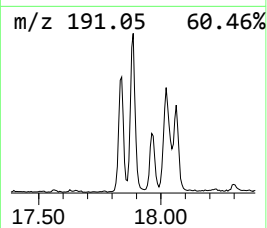
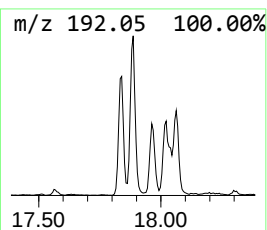
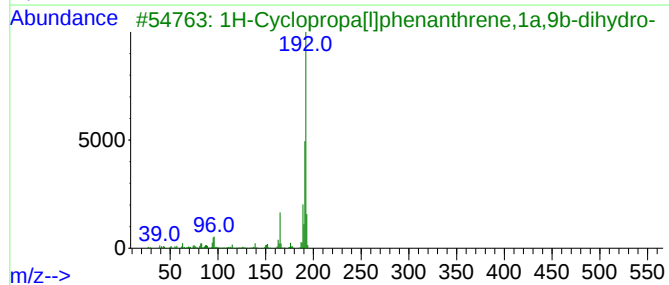
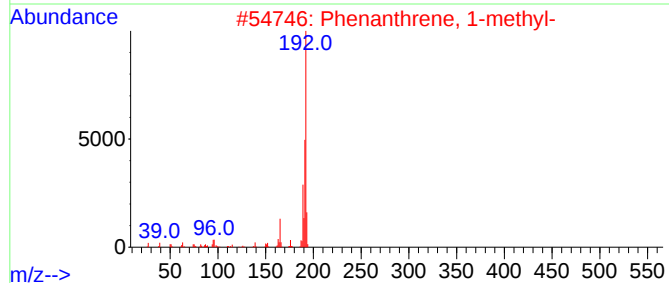
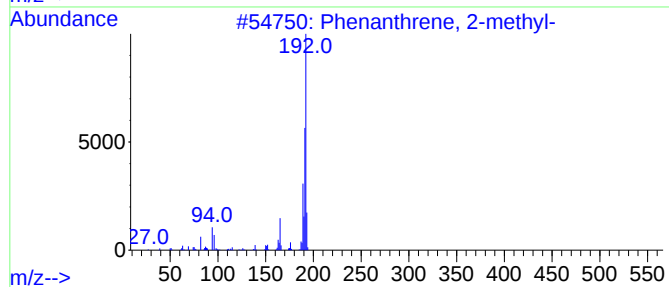
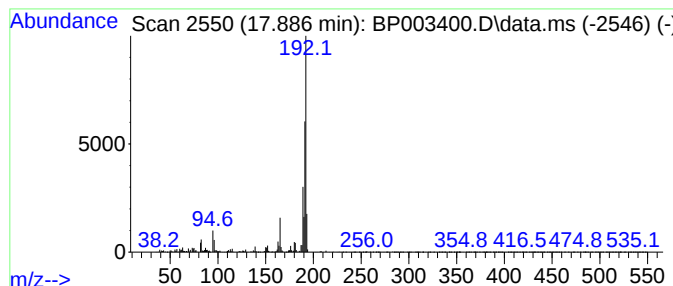
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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Peak Number 2 Phenanthrene, 2-methyl- Concentration Rank 4

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 17.886 | 3.14 ng | 153606 | Phenanthrene-d10 | 16.957 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Phenanthrene, 2-methyl-             | 192 | C15H12  | 002531-84-2 | 98   |
| 2    |    |   | Phenanthrene, 1-methyl-             | 192 | C15H12  | 000832-69-9 | 97   |
| 3    |    |   | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12  | 000949-41-7 | 96   |
| 4    |    |   | Phenanthrene, 4-methyl-             | 192 | C15H12  | 000832-64-4 | 96   |
| 5    |    |   | 1H-Indene, 1-phenyl-                | 192 | C15H12  | 001961-96-2 | 94   |



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Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
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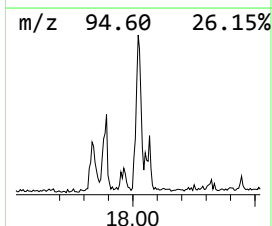
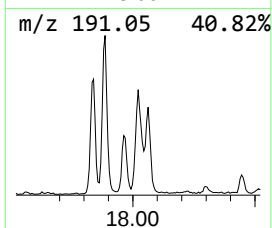
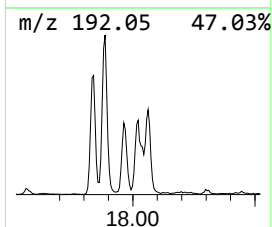
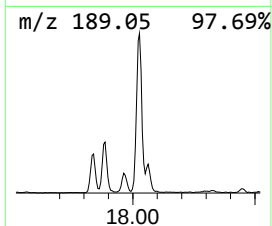
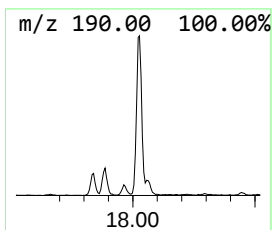
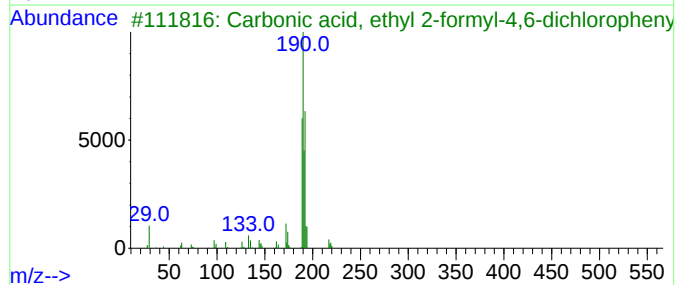
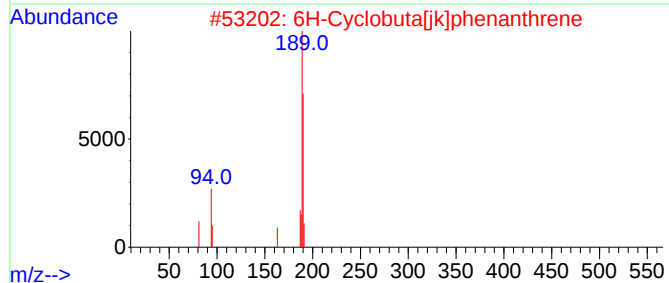
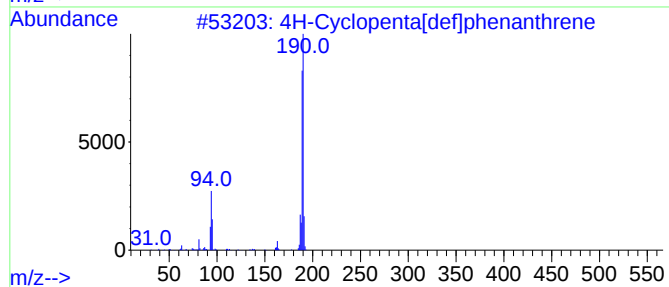
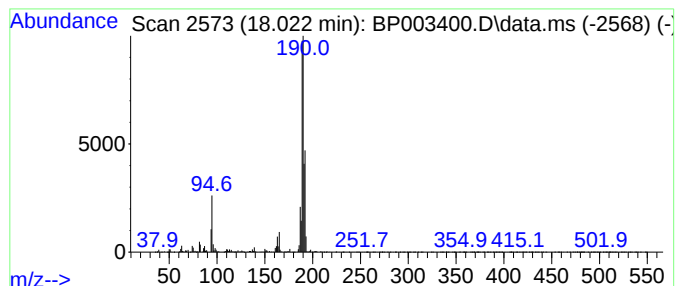
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 18.022 | 4.63 ng | 226417 | Phenanthrene-d10 | 16.957 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|------------|--------------|------|
| 1    |    |   | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10     | 000203-64-5  | 92   |
| 2    |    |   | 6H-Cyclobuta[jk]phenanthrene        | 190 | C15H10     | 083469-43-6  | 53   |
| 3    |    |   | Carbonic acid, ethyl 2-formyl-4,... | 262 | C10H8Cl2O4 | 1000331-34-4 | 50   |
| 4    |    |   | Thiophene-3-carboxaldehyde, 5-ch... | 190 | C5H4BClO3S | 036155-87-0  | 50   |
| 5    |    |   | 2,3,5,6-Tetramethylterephthalald... | 190 | C12H14O2   | 007072-01-7  | 38   |



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

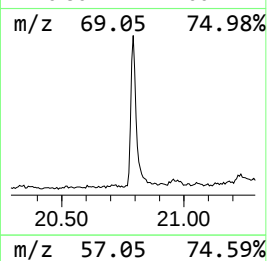
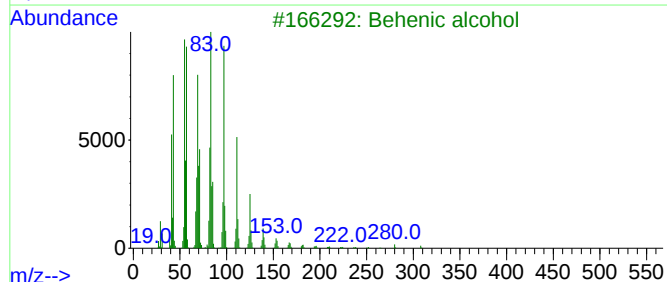
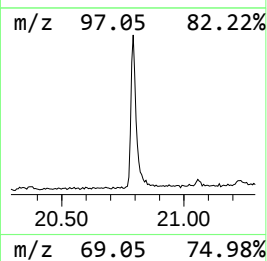
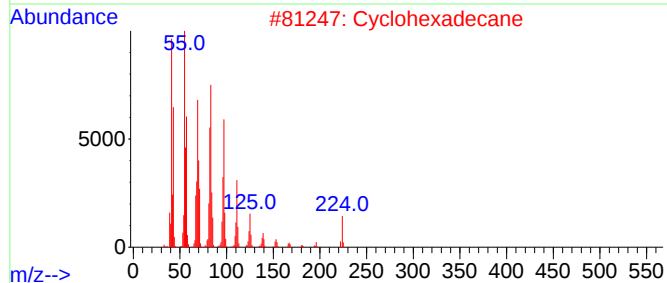
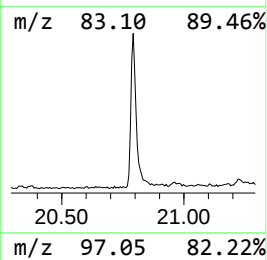
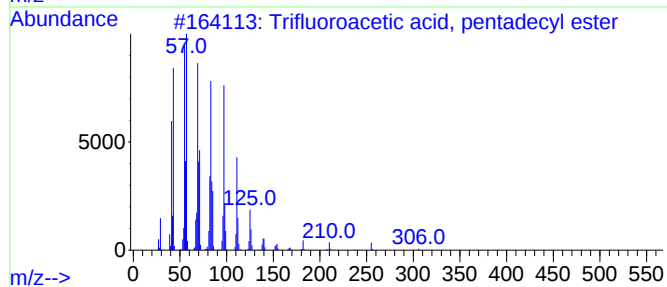
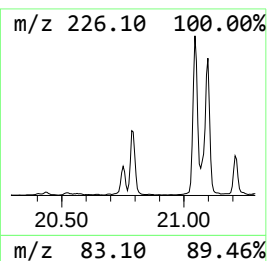
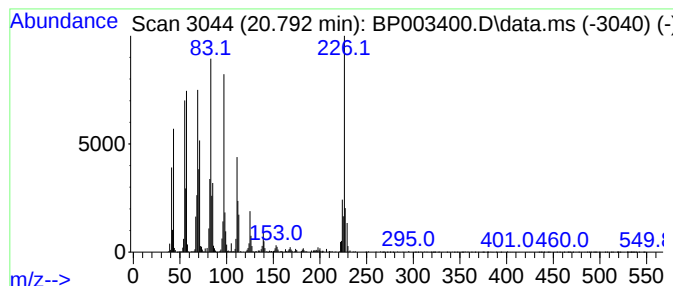
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 4 Trifluoroacetic acid, penta... Concentration Rank 2

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 20.792 | 4.64 ng | 562747 | Chrysene-d12     | 21.063 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm     | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|-------------|-------------|------|
| 1    |    |   | Trifluoroacetic acid, pentadecyl... | 324 | C17H31F3O2  | 959010-23-2 | 70   |
| 2    |    |   | Cyclohexadecane                     | 224 | C16H32      | 000295-65-8 | 70   |
| 3    |    |   | Behenic alcohol                     | 326 | C22H46O     | 000661-19-8 | 70   |
| 4    |    |   | Trichloroacetic acid, hexadecyl ... | 386 | C18H33Cl3O2 | 074339-54-1 | 70   |
| 5    |    |   | n-Nonadecanol-1                     | 284 | C19H40O     | 001454-84-8 | 70   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003400.D  
Acq On : 29 Sep 2020 15:39  
Operator : CG/JU  
Sample : L4172-14  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-8(13-14)

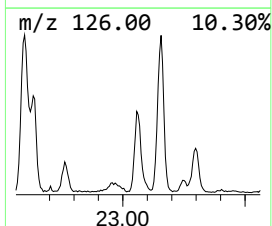
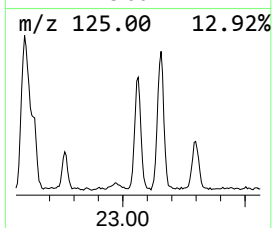
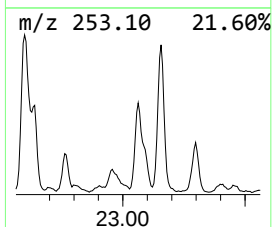
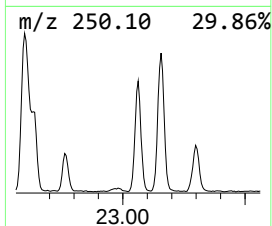
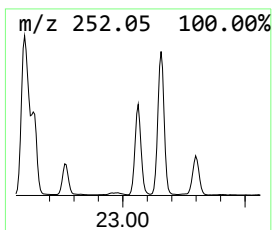
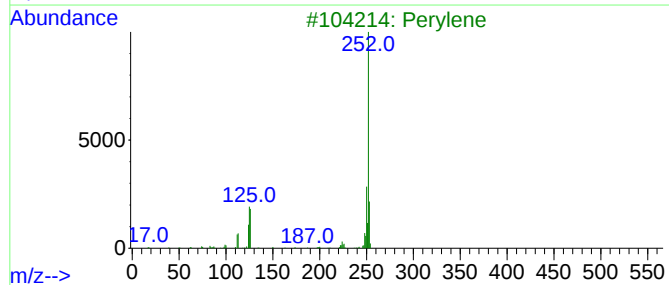
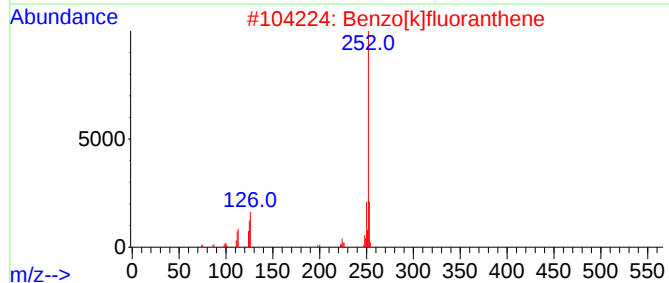
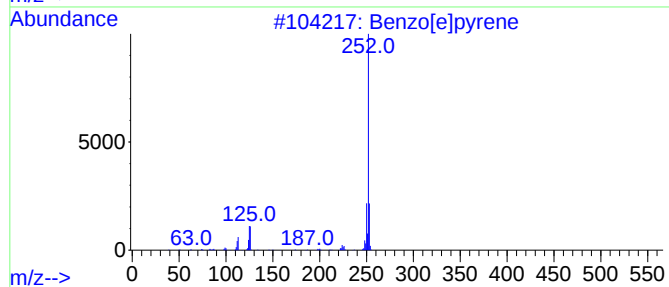
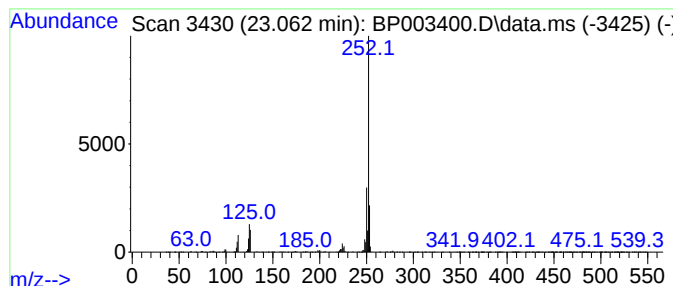
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP091520.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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Peak Number 5 Benzo[e]pyrene Concentration Rank 1

| R.T.   | EstConc | Area   | Relative to ISTD | R.T.   |
|--------|---------|--------|------------------|--------|
| 23.063 | 7.00 ng | 529439 | Perylene-d12     | 23.251 |

| 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 | 98   |
| 3    |    |   | Perylene                 | 252 | C20H12  | 000198-55-0 | 95   |
| 4    |    |   | Benzo[a]pyrene           | 252 | C20H12  | 000050-32-8 | 93   |
| 5    |    |   | Benz[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 93   |



Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP092920\  
Data File : BP003400.D  
Acq On : 29 Sep 2020 15:39  
Operator : CG/JU  
Sample : L4172-14  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-8(13-14)

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 |
| Phenanthrene, 1... | 17.833 | 2.2     | ng    | 106206   | 4                     | 16.957 | 978483  | 20.0 |
| Phenanthrene, 2... | 17.886 | 3.1     | ng    | 153606   | 4                     | 16.957 | 978483  | 20.0 |
| 4H-Cyclopenta[d... | 18.022 | 4.6     | ng    | 226417   | 4                     | 16.957 | 978483  | 20.0 |
| Trifluoroacetic... | 20.792 | 4.6     | ng    | 562747   | 5                     | 21.063 | 2424240 | 20.0 |
| Benzo[e]pyrene     | 23.063 | 7.0     | ng    | 529439   | 6                     | 23.251 | 1512370 | 20.0 |