

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
 Data File : BG020532.D  
 Acq On : 26 Dec 2015 9:36  
 Operator : UM/SJ  
 Sample : G4802-10  
 Misc :  
 ALS Vial : 69 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 G9D85

## Integration Parameters: LSCINT.P

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

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

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

Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG122415.M  
 Title : SVOA CALIBRATION

Signal : TIC

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 9.927       | 1197          | 1206        | 1241         | rBV      | 306577         | 2044352       | 7.35%           | 0.639%        |
| 2         | 10.891      | 1360          | 1370        | 1374         | rVV2     | 118699         | 293454        | 1.06%           | 0.092%        |
| 3         | 10.944      | 1374          | 1379        | 1387         | rVV      | 164282         | 308483        | 1.11%           | 0.096%        |
| 4         | 11.414      | 1451          | 1459        | 1474         | rBV      | 143161         | 595418        | 2.14%           | 0.186%        |
| 5         | 11.549      | 1476          | 1482        | 1522         | rVB      | 195289         | 1059418       | 3.81%           | 0.331%        |
| 6         | 12.542      | 1644          | 1651        | 1666         | rBV      | 378628         | 747253        | 2.69%           | 0.233%        |
| 7         | 12.759      | 1682          | 1688        | 1700         | rVB      | 398719         | 684718        | 2.46%           | 0.214%        |
| 8         | 13.893      | 1872          | 1881        | 1888         | rBV4     | 219486         | 651720        | 2.34%           | 0.204%        |
| 9         | 14.046      | 1898          | 1907        | 1912         | rBV2     | 718943         | 1858972       | 6.69%           | 0.581%        |
| 10        | 14.157      | 1922          | 1926        | 1935         | rVB3     | 177739         | 319639        | 1.15%           | 0.100%        |
| 11        | 14.269      | 1940          | 1945        | 1949         | rBV      | 189281         | 296572        | 1.07%           | 0.093%        |
| 12        | 14.410      | 1964          | 1969        | 1970         | rVV      | 209551         | 324946        | 1.17%           | 0.102%        |
| 13        | 14.434      | 1970          | 1973        | 1994         | rVB      | 490392         | 971195        | 3.49%           | 0.303%        |
| 14        | 14.774      | 2026          | 2031        | 2038         | rVB2     | 218280         | 400234        | 1.44%           | 0.125%        |
| 15        | 15.703      | 2185          | 2189        | 2193         | rVV      | 343256         | 544755        | 1.96%           | 0.170%        |
| 16        | 15.761      | 2193          | 2199        | 2209         | rVB2     | 1552440        | 2598186       | 9.34%           | 0.812%        |
| 17        | 16.760      | 2365          | 2369        | 2373         | rVV2     | 406863         | 676477        | 2.43%           | 0.211%        |
| 18        | 16.807      | 2373          | 2377        | 2382         | rVB      | 242016         | 359363        | 1.29%           | 0.112%        |
| 19        | 16.907      | 2390          | 2394        | 2400         | rVB      | 232079         | 340638        | 1.23%           | 0.106%        |
| 20        | 17.125      | 2425          | 2431        | 2436         | rVB      | 544767         | 879423        | 3.16%           | 0.275%        |
| 21        | 17.277      | 2452          | 2457        | 2462         | rBV      | 751676         | 1165636       | 4.19%           | 0.364%        |
| 22        | 17.336      | 2462          | 2467        | 2474         | rVB      | 573118         | 959494        | 3.45%           | 0.300%        |
| 23        | 17.548      | 2486          | 2503        | 2507         | rBV      | 6593502        | 18359550      | 66.03%          | 5.737%        |
| 24        | 17.583      | 2507          | 2509        | 2510         | rVV      | 406514         | 410538        | 1.48%           | 0.128%        |
| 25        | 17.612      | 2510          | 2514        | 2519         | rVV      | 1971739        | 3024275       | 10.88%          | 0.945%        |
| 26        | 17.665      | 2519          | 2523        | 2531         | rVB      | 638953         | 948935        | 3.41%           | 0.297%        |
| 27        | 17.865      | 2553          | 2557        | 2564         | rVB      | 758358         | 1078916       | 3.88%           | 0.337%        |
| 28        | 17.982      | 2572          | 2577        | 2582         | rVB      | 1262616        | 1778435       | 6.40%           | 0.556%        |
| 29        | 18.047      | 2583          | 2588        | 2595         | rBV3     | 610789         | 1299839       | 4.67%           | 0.406%        |
| 30        | 18.165      | 2603          | 2608        | 2617         | rVB3     | 692671         | 1483333       | 5.33%           | 0.463%        |
| 31        | 18.270      | 2621          | 2626        | 2632         | rBV3     | 269297         | 509606        | 1.83%           | 0.159%        |
| 32        | 18.347      | 2632          | 2639        | 2643         | rBV2     | 2867282        | 4891945       | 17.59%          | 1.529%        |
| 33        | 18.400      | 2643          | 2648        | 2653         | rVB      | 2767784        | 4430880       | 15.94%          | 1.385%        |
| 34        | 18.476      | 2658          | 2661        | 2666         | rVB      | 299267         | 442912        | 1.59%           | 0.138%        |

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
 Data File : BG020532.D  
 Acq On : 26 Dec 2015 9:36  
 Operator : UM/SJ  
 Sample : G4802-10  
 Misc :  
 ALS Vial : 69 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 G9D85

## Integration Parameters: LSCINT.P

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

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

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

Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG122415.M  
 Title : SVOA CALIBRATION

|    |        |      |      |      |      |         |          |         |        |
|----|--------|------|------|------|------|---------|----------|---------|--------|
| 35 | 18.546 | 2666 | 2673 | 2677 | rBV2 | 4008087 | 7984653  | 28.72%  | 2.495% |
| 36 | 18.588 | 2677 | 2680 | 2683 | rVB  | 1743433 | 2230633  | 8.02%   | 0.697% |
| 37 | 18.734 | 2701 | 2705 | 2708 | rBV3 | 213370  | 318824   | 1.15%   | 0.100% |
| 38 | 18.781 | 2708 | 2713 | 2718 | rVV2 | 442203  | 864802   | 3.11%   | 0.270% |
| 39 | 18.846 | 2718 | 2724 | 2728 | rVV  | 2157839 | 3958532  | 14.24%  | 1.237% |
| 40 | 18.905 | 2728 | 2734 | 2741 | rVB  | 2993865 | 5038325  | 18.12%  | 1.574% |
| 41 | 19.081 | 2761 | 2764 | 2769 | rVV2 | 351468  | 425882   | 1.53%   | 0.133% |
| 42 | 19.134 | 2769 | 2773 | 2777 | rVV  | 508912  | 685385   | 2.46%   | 0.214% |
| 43 | 19.175 | 2777 | 2780 | 2784 | rVB  | 328944  | 382275   | 1.37%   | 0.119% |
| 44 | 19.263 | 2789 | 2795 | 2799 | rBV  | 1187231 | 2024080  | 7.28%   | 0.632% |
| 45 | 19.328 | 2800 | 2806 | 2813 | rVB4 | 667432  | 1802809  | 6.48%   | 0.563% |
| 46 | 19.439 | 2814 | 2825 | 2830 | rBV  | 1614856 | 3539021  | 12.73%  | 1.106% |
| 47 | 19.569 | 2835 | 2847 | 2853 | rVV2 | 6498449 | 18071516 | 64.99%  | 5.647% |
| 48 | 19.622 | 2853 | 2856 | 2862 | rVV3 | 495951  | 924328   | 3.32%   | 0.289% |
| 49 | 19.686 | 2863 | 2867 | 2875 | rVV  | 728312  | 1591264  | 5.72%   | 0.497% |
| 50 | 19.769 | 2876 | 2881 | 2889 | rVB3 | 1093907 | 2096926  | 7.54%   | 0.655% |
| 51 | 19.951 | 2895 | 2912 | 2918 | rVB  | 8044232 | 27804875 | 100.00% | 8.688% |
| 52 | 20.115 | 2936 | 2940 | 2949 | rVB2 | 523386  | 882891   | 3.18%   | 0.276% |
| 53 | 20.227 | 2950 | 2959 | 2964 | rBV3 | 1955433 | 4645459  | 16.71%  | 1.452% |
| 54 | 20.356 | 2974 | 2981 | 2982 | rBV3 | 1795242 | 2956357  | 10.63%  | 0.924% |
| 55 | 20.385 | 2984 | 2986 | 2994 | rVB  | 2624265 | 3296670  | 11.86%  | 1.030% |
| 56 | 20.479 | 2997 | 3002 | 3007 | rVV  | 1626581 | 2611399  | 9.39%   | 0.816% |
| 57 | 20.550 | 3007 | 3014 | 3021 | rVB  | 2865477 | 4723675  | 16.99%  | 1.476% |
| 58 | 20.685 | 3031 | 3037 | 3040 | rBV  | 2561238 | 3905010  | 14.04%  | 1.220% |
| 59 | 20.732 | 3040 | 3045 | 3050 | rVB  | 2695544 | 3861666  | 13.89%  | 1.207% |
| 60 | 20.832 | 3054 | 3062 | 3066 | rBV2 | 373132  | 720833   | 2.59%   | 0.225% |
| 61 | 20.926 | 3074 | 3078 | 3079 | rBV2 | 220130  | 275239   | 0.99%   | 0.086% |
| 62 | 21.149 | 3111 | 3116 | 3122 | rVB  | 1518893 | 2745670  | 9.87%   | 0.858% |
| 63 | 21.243 | 3128 | 3132 | 3138 | rVV  | 268774  | 410424   | 1.48%   | 0.128% |
| 64 | 21.337 | 3139 | 3148 | 3151 | rVV  | 1653275 | 3336586  | 12.00%  | 1.043% |
| 65 | 21.384 | 3151 | 3156 | 3160 | rVV  | 2373558 | 4443732  | 15.98%  | 1.389% |
| 66 | 21.437 | 3160 | 3165 | 3172 | rVV  | 2108825 | 4022895  | 14.47%  | 1.257% |
| 67 | 21.508 | 3172 | 3177 | 3186 | rVB  | 1405876 | 2675103  | 9.62%   | 0.836% |
| 68 | 21.772 | 3209 | 3222 | 3226 | rBV  | 5004558 | 14436749 | 51.92%  | 4.511% |
| 69 | 21.854 | 3226 | 3236 | 3243 | rVV2 | 6020199 | 17028017 | 61.24%  | 5.321% |
| 70 | 21.925 | 3243 | 3248 | 3253 | rVV2 | 387450  | 684293   | 2.46%   | 0.214% |
| 71 | 21.978 | 3253 | 3257 | 3262 | rVV4 | 429222  | 762548   | 2.74%   | 0.238% |

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
 Data File : BG020532.D  
 Acq On : 26 Dec 2015 9:36  
 Operator : UM/SJ  
 Sample : G4802-10  
 Misc :  
 ALS Vial : 69 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 G9D85

## Integration Parameters: LSCINT.P

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

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

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

Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG122415.M  
 Title : SVOA CALIBRATION

|     |        |      |      |      |      |         |          |        |        |
|-----|--------|------|------|------|------|---------|----------|--------|--------|
| 72  | 22.066 | 3262 | 3272 | 3285 | rVB2 | 2600408 | 7092590  | 25.51% | 2.216% |
| 73  | 22.242 | 3297 | 3302 | 3308 | rBV3 | 504251  | 932333   | 3.35%  | 0.291% |
| 74  | 22.360 | 3318 | 3322 | 3327 | rVB2 | 358995  | 658689   | 2.37%  | 0.206% |
| 75  | 22.424 | 3327 | 3333 | 3338 | rBV2 | 557428  | 1052765  | 3.79%  | 0.329% |
| 76  | 22.518 | 3338 | 3349 | 3355 | rVV  | 1934983 | 4963745  | 17.85% | 1.551% |
| 77  | 22.589 | 3355 | 3361 | 3369 | rVB2 | 1088395 | 2481976  | 8.93%  | 0.776% |
| 78  | 22.677 | 3369 | 3376 | 3381 | rBV2 | 909902  | 2020896  | 7.27%  | 0.631% |
| 79  | 22.800 | 3390 | 3397 | 3411 | rVB3 | 1405546 | 5080128  | 18.27% | 1.587% |
| 80  | 22.930 | 3413 | 3419 | 3425 | rVB  | 756421  | 1482189  | 5.33%  | 0.463% |
| 81  | 23.041 | 3434 | 3438 | 3449 | rVB2 | 140655  | 297123   | 1.07%  | 0.093% |
| 82  | 23.212 | 3461 | 3467 | 3475 | rBV3 | 261621  | 750206   | 2.70%  | 0.234% |
| 83  | 23.358 | 3487 | 3492 | 3496 | rBV2 | 197186  | 391846   | 1.41%  | 0.122% |
| 84  | 23.629 | 3531 | 3538 | 3547 | rVB4 | 530172  | 1448626  | 5.21%  | 0.453% |
| 85  | 24.093 | 3593 | 3617 | 3622 | rBV2 | 3558390 | 18903913 | 67.99% | 5.907% |
| 86  | 24.287 | 3642 | 3650 | 3659 | rBV2 | 525677  | 1280396  | 4.60%  | 0.400% |
| 87  | 24.816 | 3720 | 3740 | 3750 | rBV  | 2544749 | 11369990 | 40.89% | 3.553% |
| 88  | 25.004 | 3751 | 3772 | 3782 | rVB3 | 2881537 | 13373991 | 48.10% | 4.179% |
| 89  | 25.180 | 3793 | 3802 | 3812 | rVB3 | 792720  | 2703546  | 9.72%  | 0.845% |
| 90  | 25.503 | 3848 | 3857 | 3864 | rBV2 | 240266  | 854409   | 3.07%  | 0.267% |
| 91  | 25.861 | 3911 | 3918 | 3927 | rVV3 | 280933  | 893332   | 3.21%  | 0.279% |
| 92  | 25.955 | 3928 | 3934 | 3951 | rVB  | 341041  | 1065281  | 3.83%  | 0.333% |
| 93  | 26.390 | 4000 | 4008 | 4015 | rVB  | 236799  | 671856   | 2.42%  | 0.210% |
| 94  | 26.496 | 4016 | 4026 | 4047 | rVB2 | 568881  | 2302983  | 8.28%  | 0.720% |
| 95  | 27.677 | 4219 | 4227 | 4239 | rVB6 | 190258  | 708033   | 2.55%  | 0.221% |
| 96  | 28.353 | 4330 | 4342 | 4348 | rBV2 | 242619  | 1053288  | 3.79%  | 0.329% |
| 97  | 28.958 | 4408 | 4445 | 4455 | rBV3 | 1317842 | 9820585  | 35.32% | 3.069% |
| 98  | 29.340 | 4497 | 4510 | 4521 | rVB2 | 290550  | 1239121  | 4.46%  | 0.387% |
| 99  | 29.498 | 4527 | 4537 | 4552 | rVB  | 370747  | 1612256  | 5.80%  | 0.504% |
| 100 | 30.162 | 4614 | 4650 | 4677 | rVB3 | 1021079 | 8618839  | 31.00% | 2.693% |

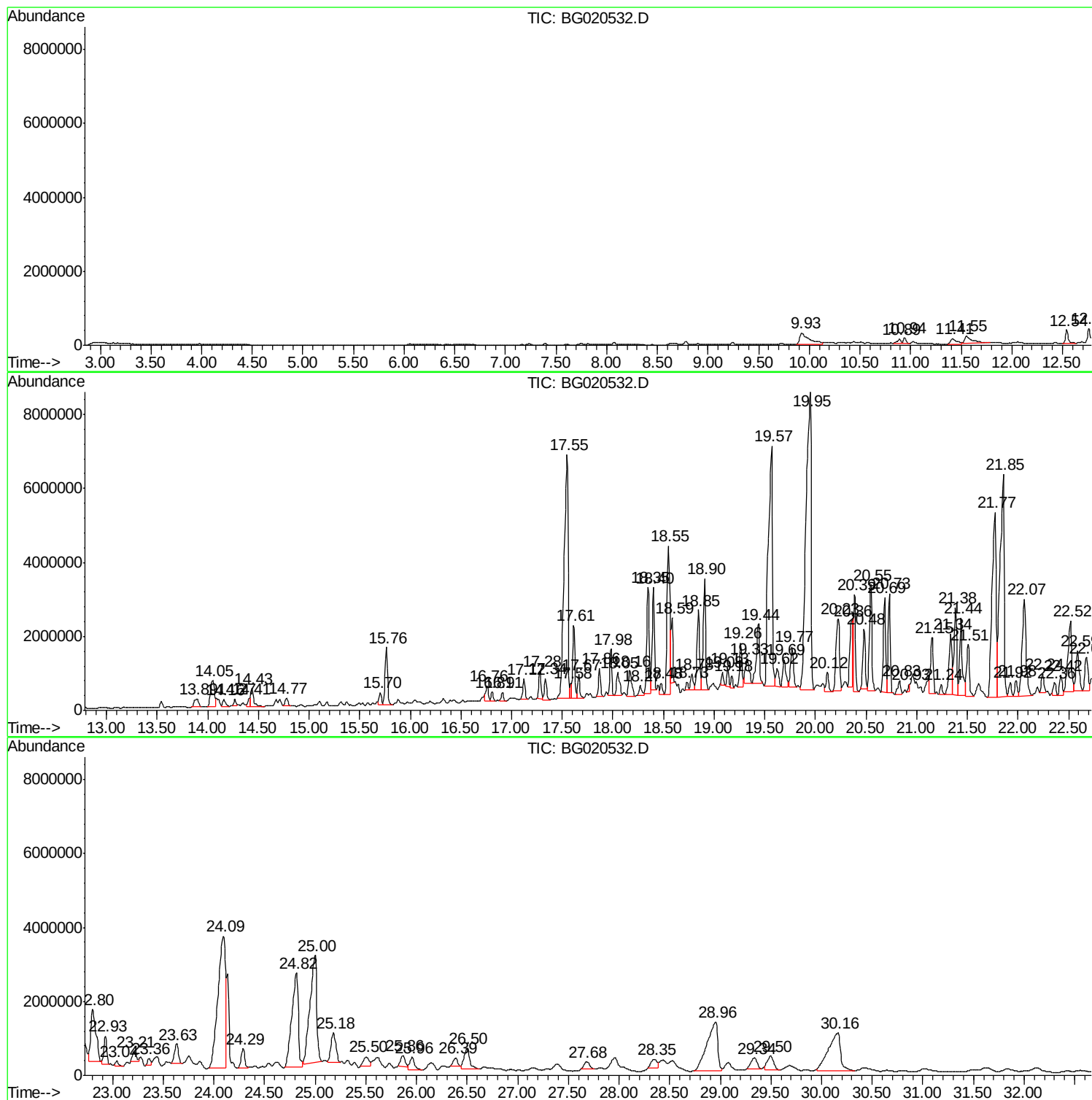
Sum of corrected areas: 320033787

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

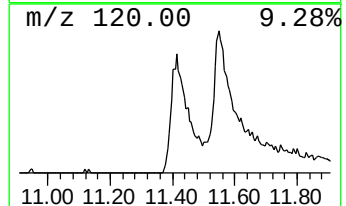
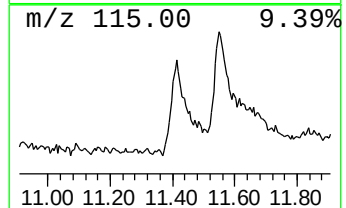
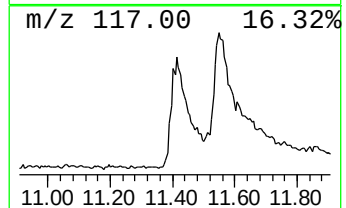
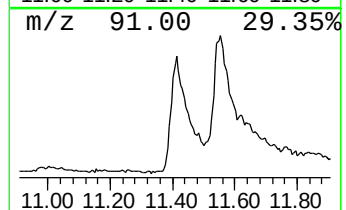
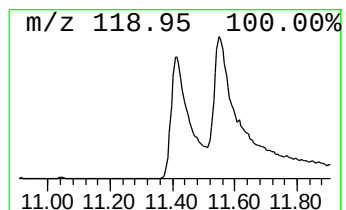
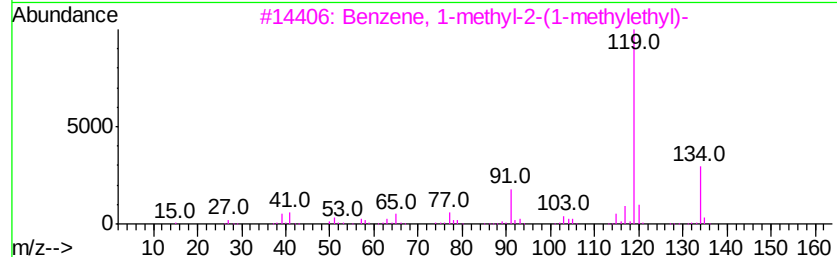
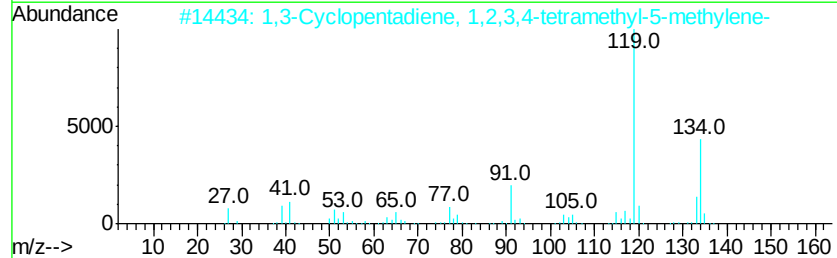
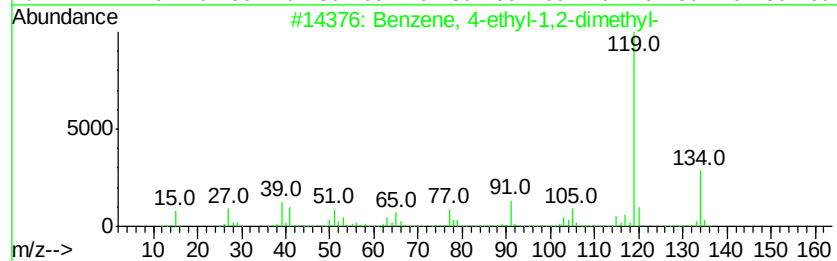
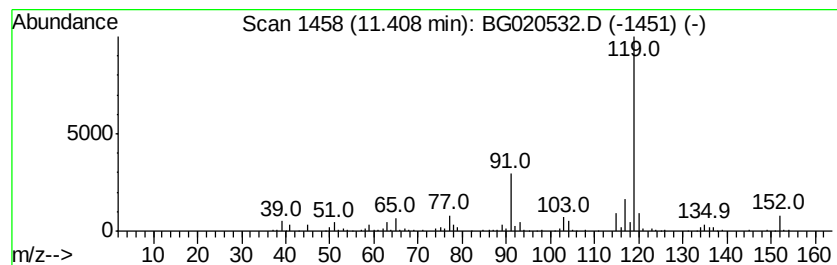
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 1 Benzene, 4-ethyl-1,2-dimethyl- Concentration Rank 4

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 11.41 | 40.58 ng/ul | 595418 | Napthalene-d8    | 10.89 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzene, 4-ethyl-1,2-dimethyl-      | 134 | C10H14  | 000934-80-5 | 72   |
| 2    |    | 1,3-Cyclopentadiene, 1,2,3,4-tet... | 134 | C10H14  | 076089-59-3 | 72   |
| 3    |    | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14  | 000527-84-4 | 68   |
| 4    |    | Benzene, 1,2,3,4-tetramethyl-       | 134 | C10H14  | 000488-23-3 | 64   |
| 5    |    | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14  | 000535-77-3 | 64   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

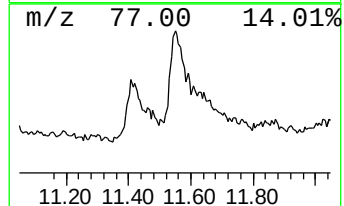
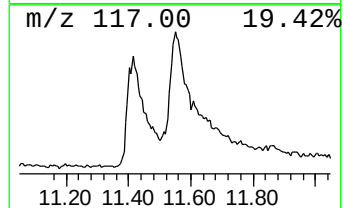
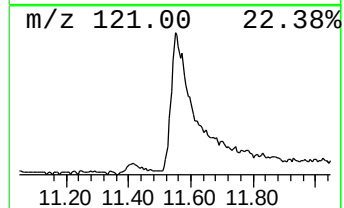
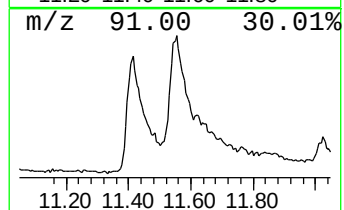
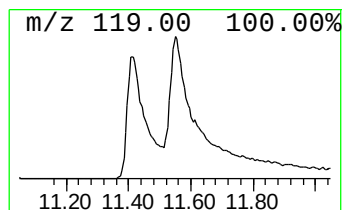
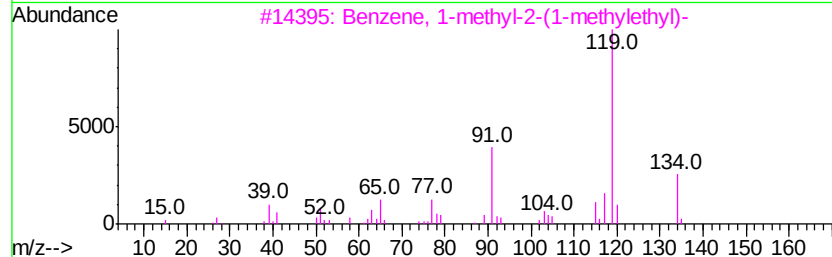
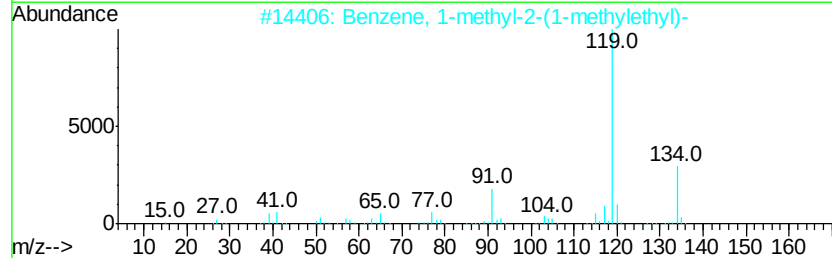
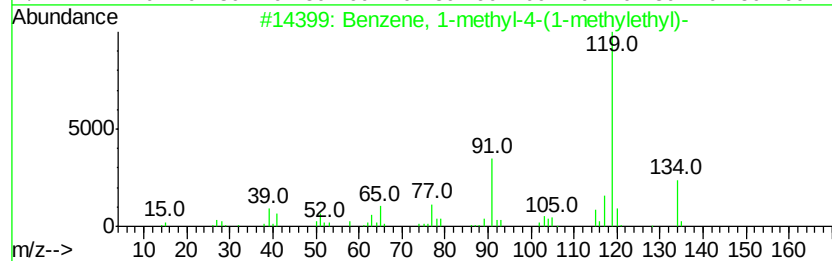
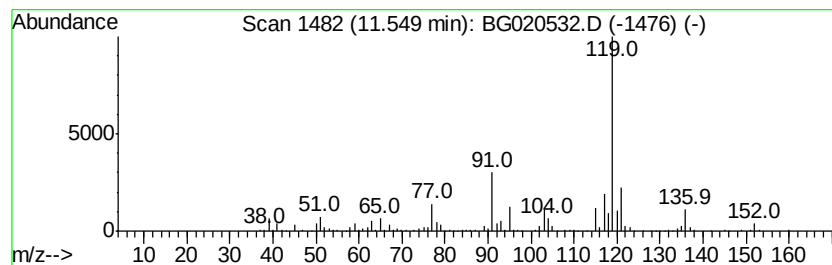
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 2 Benzene, 1-methyl-4-(1-meth... Concentration Rank 2

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 11.55 | 72.20 ng/ul | 1059420 | Napthalene-d8    | 10.89 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14  | 000099-87-6 | 62   |
| 2    |    | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14  | 000527-84-4 | 62   |
| 3    |    | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14  | 000527-84-4 | 59   |
| 4    |    | 2,5-Dimethylbenzyl chloride         | 154 | C9H11Cl | 000824-45-3 | 59   |
| 5    |    | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14  | 000527-84-4 | 58   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

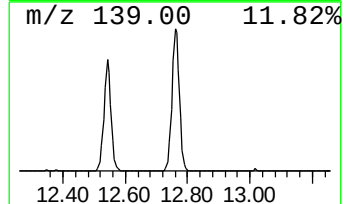
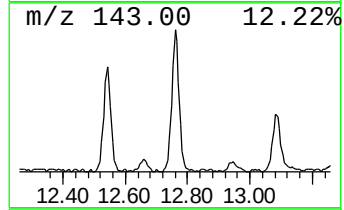
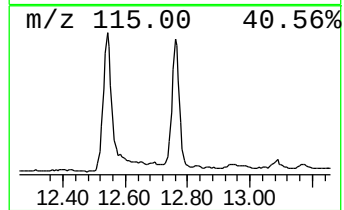
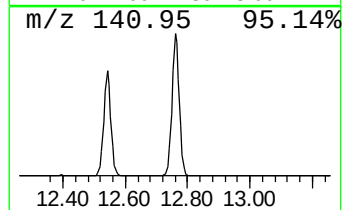
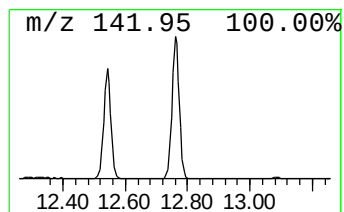
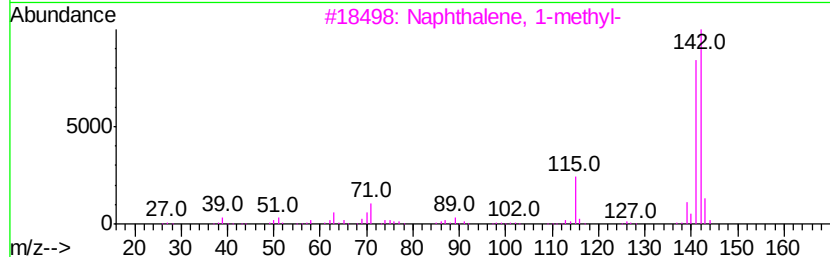
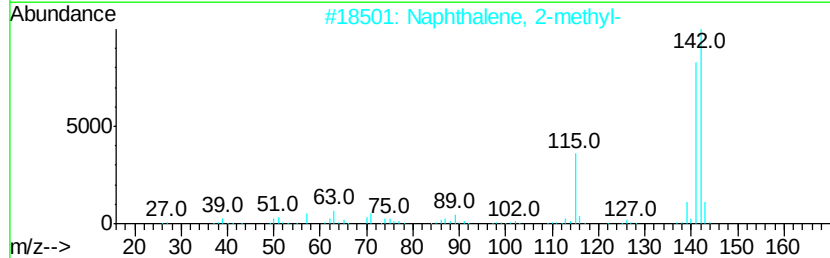
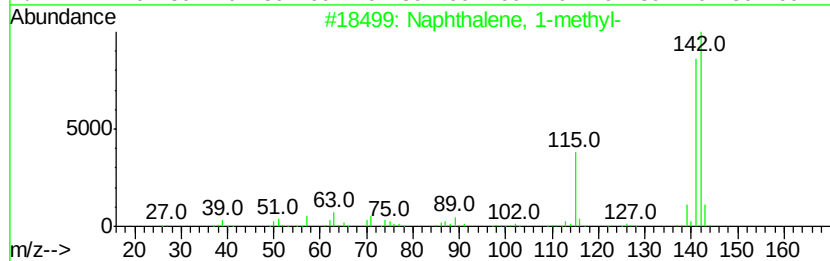
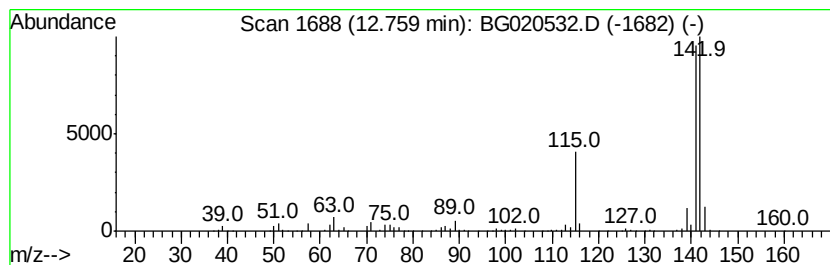
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 3 Naphthalene, 1-methyl- Concentration Rank 3

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 12.76 | 46.67 ng/ul | 684718 | Naphthalene-d8   | 10.89 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, 1-methyl-              | 142 | C11H10  | 000090-12-0 | 96   |
| 2    |    | Naphthalene, 2-methyl-              | 142 | C11H10  | 000091-57-6 | 96   |
| 3    |    | Naphthalene, 1-methyl-              | 142 | C11H10  | 000090-12-0 | 94   |
| 4    |    | 1,4-Methanonaphthalene, 1,4-dihy... | 142 | C11H10  | 004453-90-1 | 94   |
| 5    |    | Benzocycloheptatriene               | 142 | C11H10  | 000264-09-5 | 91   |





Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

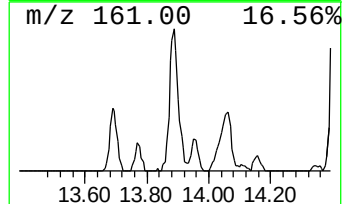
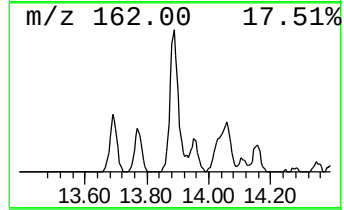
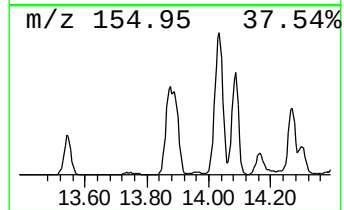
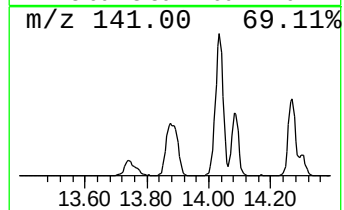
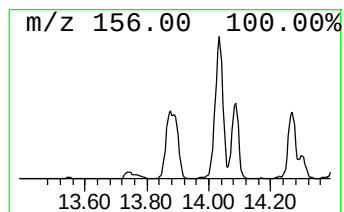
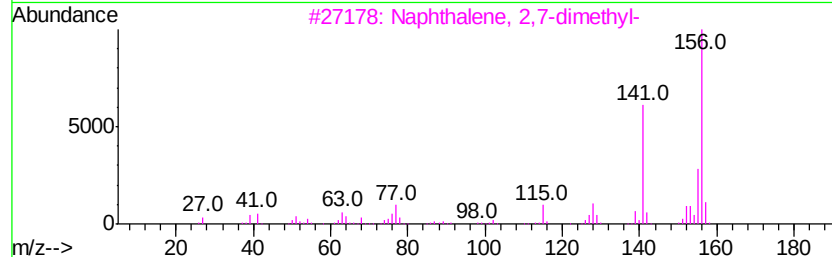
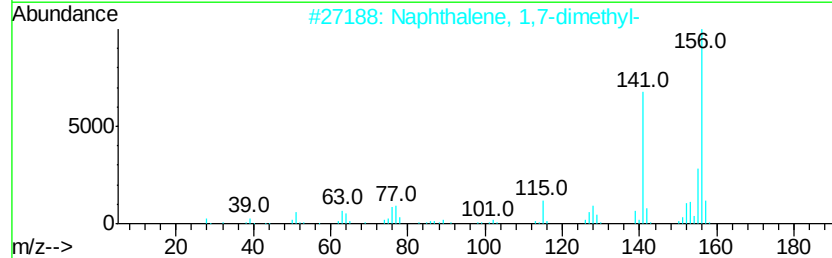
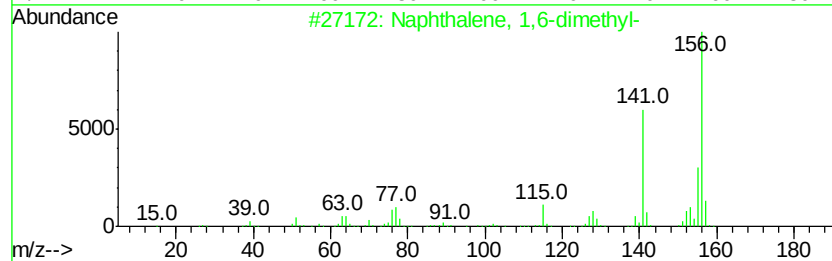
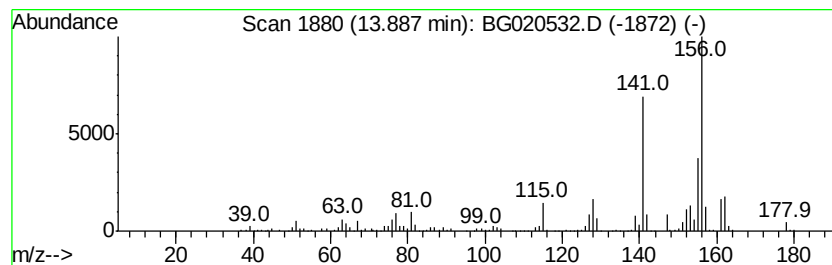
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 4 Naphthalene, 1,6-dimethyl- Concentration Rank 5

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 13.89 | 32.57 ng/ul | 651720 | Acenaphthene-d10 | 14.71 |

| Hit# | of | Tentative ID               | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, 1,6-dimethyl- | 156 | C12H12  | 000575-43-9 | 97   |
| 2    |    | Naphthalene, 1,7-dimethyl- | 156 | C12H12  | 000575-37-1 | 97   |
| 3    |    | Naphthalene, 2,7-dimethyl- | 156 | C12H12  | 000582-16-1 | 97   |
| 4    |    | Naphthalene, 1,6-dimethyl- | 156 | C12H12  | 000575-43-9 | 97   |
| 5    |    | Naphthalene, 1,6-dimethyl- | 156 | C12H12  | 000575-43-9 | 96   |





Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

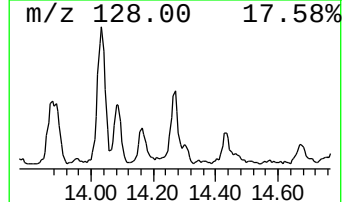
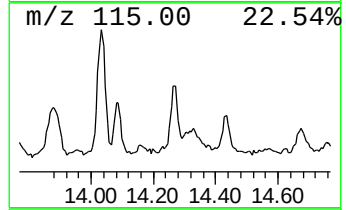
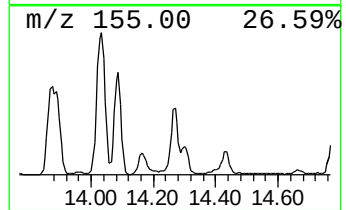
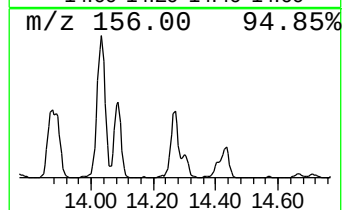
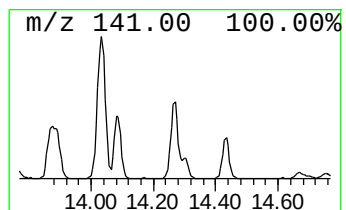
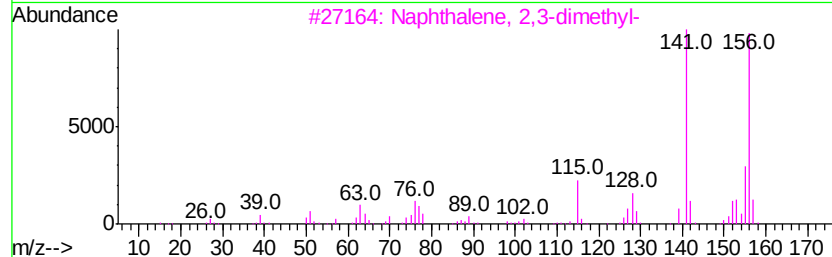
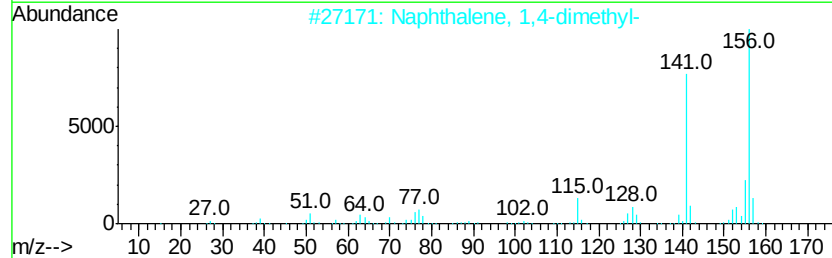
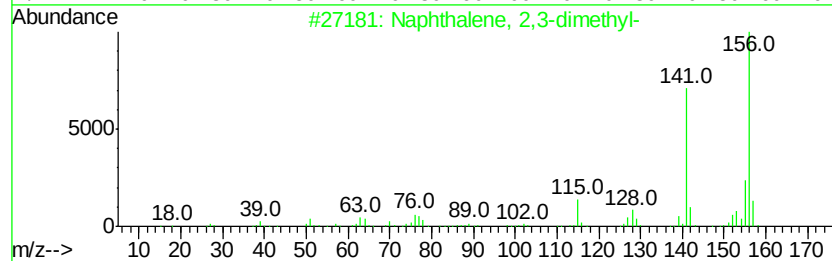
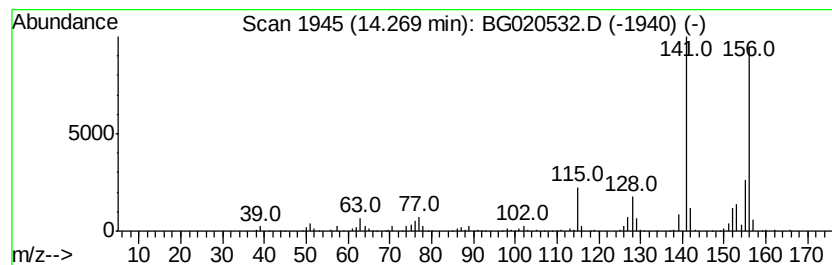
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 6 Naphthalene, 2,3-dimethyl- Concentration Rank 6

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 14.27 | 14.82 ng/ul | 296572 | Acenaphthene-d10 | 14.71 |

| Hit# | of | Tentative ID               | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, 2,3-dimethyl- | 156 | C12H12  | 000581-40-8 | 94   |
| 2    |    | Naphthalene, 1,4-dimethyl- | 156 | C12H12  | 000571-58-4 | 93   |
| 3    |    | Naphthalene, 2,3-dimethyl- | 156 | C12H12  | 000581-40-8 | 93   |
| 4    |    | Naphthalene, 1,6-dimethyl- | 156 | C12H12  | 000575-43-9 | 93   |
| 5    |    | Naphthalene, 2,3-dimethyl- | 156 | C12H12  | 000581-40-8 | 93   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

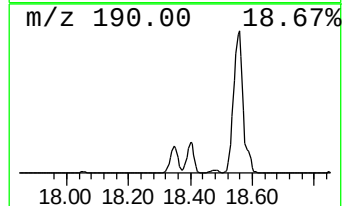
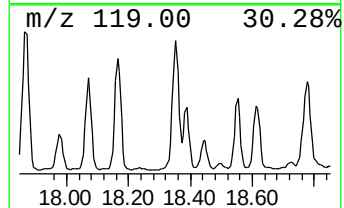
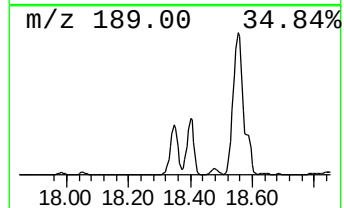
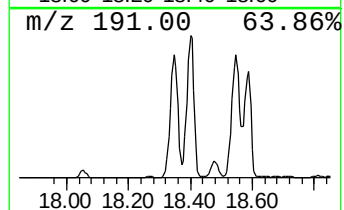
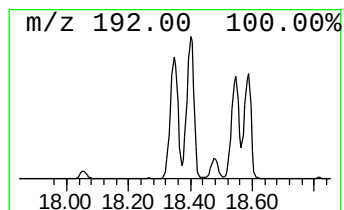
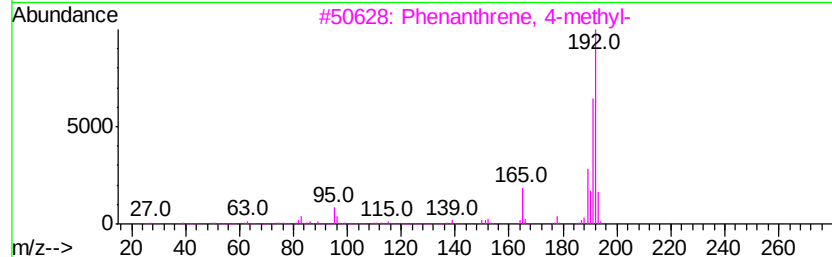
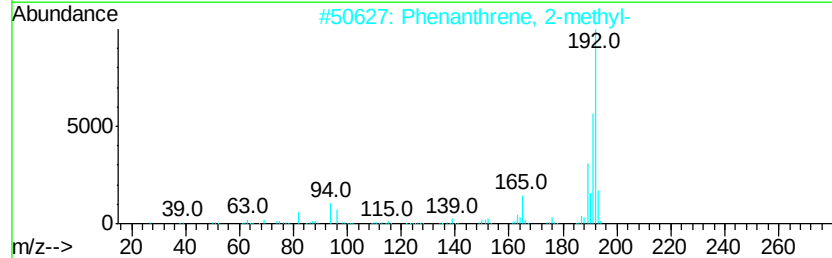
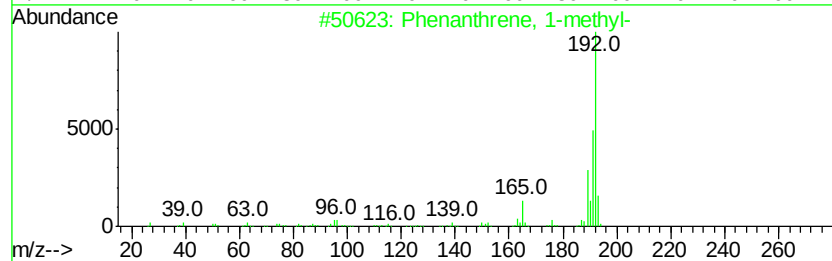
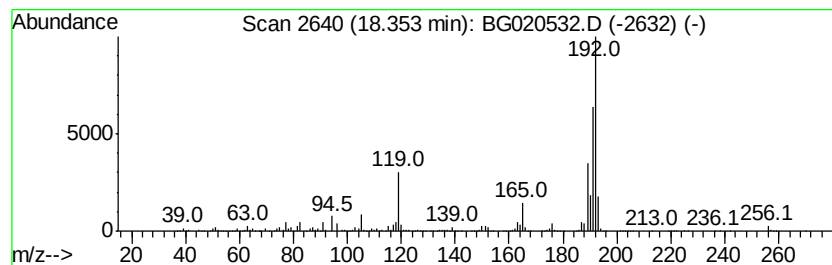
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 7 Phenanthrene, 1-methyl- Concentration Rank 18

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 18.35 | 5.33 ng/ul | 4891950 | Phenanthrene-d10 | 17.47 |

| Hit# of | 5 | Tentative ID                            | MW  | MolForm | CAS#        | Qual |
|---------|---|-----------------------------------------|-----|---------|-------------|------|
| 1       |   | Phenanthrene, 1-methyl-                 | 192 | C15H12  | 000832-69-9 | 96   |
| 2       |   | Phenanthrene, 2-methyl-                 | 192 | C15H12  | 002531-84-2 | 95   |
| 3       |   | Phenanthrene, 4-methyl-                 | 192 | C15H12  | 000832-64-4 | 95   |
| 4       |   | 1H-Cyclopropa[1,1]phenanthrene, 1a, ... | 192 | C15H12  | 000949-41-7 | 94   |
| 5       |   | Phenanthrene, 1-methyl-                 | 192 | C15H12  | 000832-69-9 | 93   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

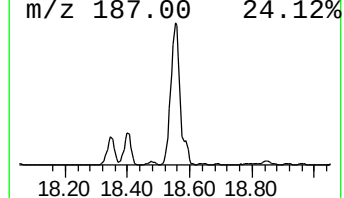
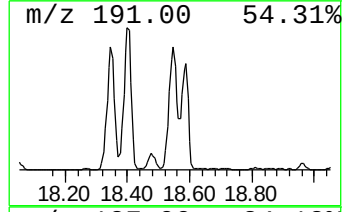
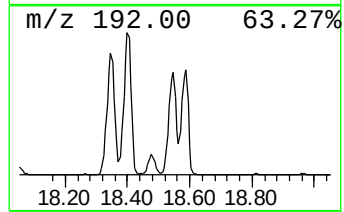
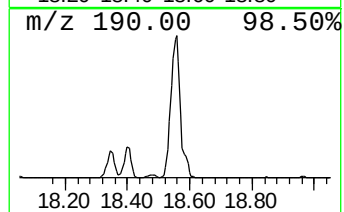
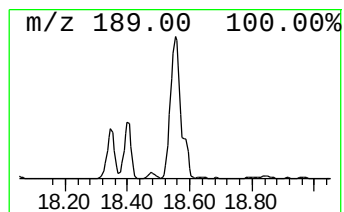
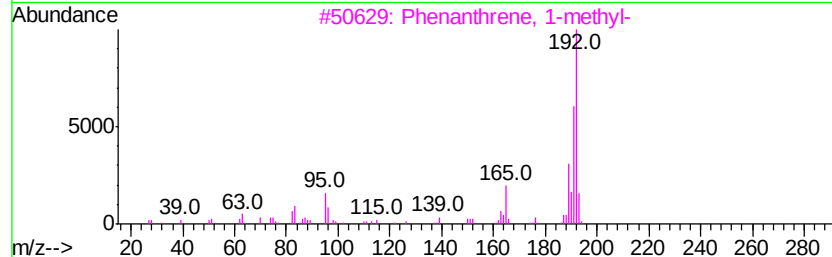
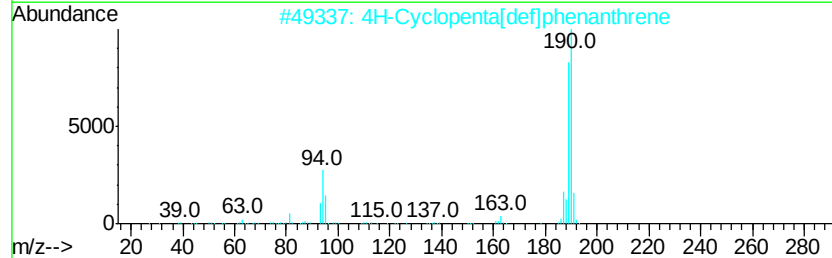
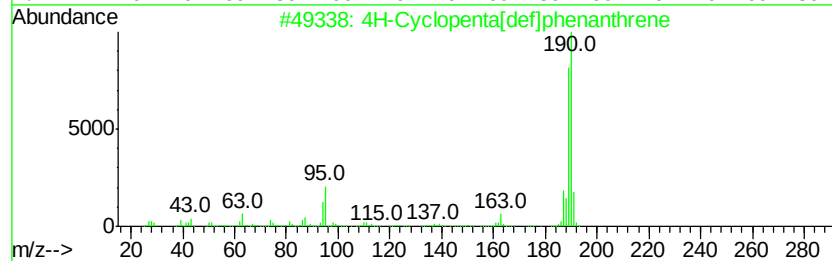
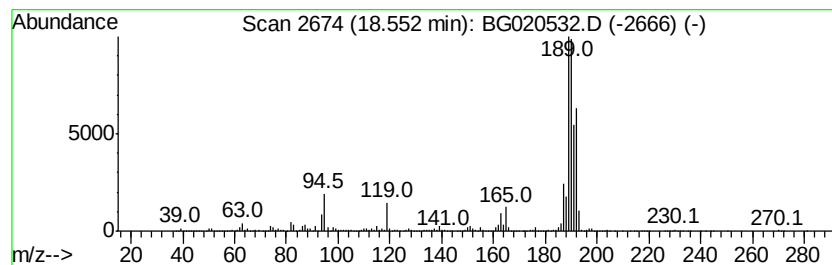
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 9 4H-Cyclopenta[def]phenanthrene Concentration Rank 8

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 18.55 | 8.70 ng/ul | 7984650 | Phenanthrene-d10 | 17.47 |

| Hit# | of | Tentative ID                   | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------------|-----|---------|-------------|------|
| 1    | 5  | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10  | 000203-64-5 | 55   |
| 2    |    | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10  | 000203-64-5 | 46   |
| 3    |    | Phenanthrene, 1-methyl-        | 192 | C15H12  | 000832-69-9 | 42   |
| 4    |    | Phenanthrene, 4-methyl-        | 192 | C15H12  | 000832-64-4 | 42   |
| 5    |    | Anthracene, 1-methyl-          | 192 | C15H12  | 000610-48-0 | 42   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

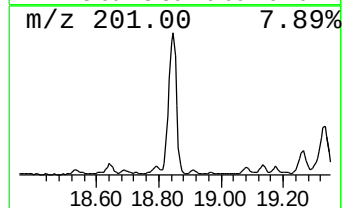
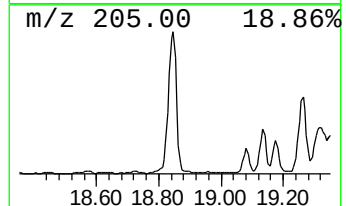
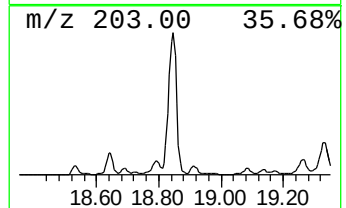
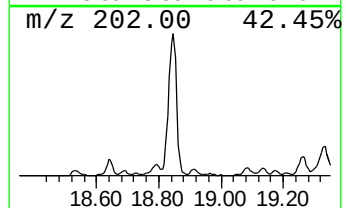
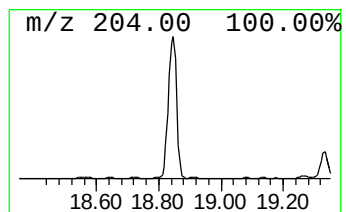
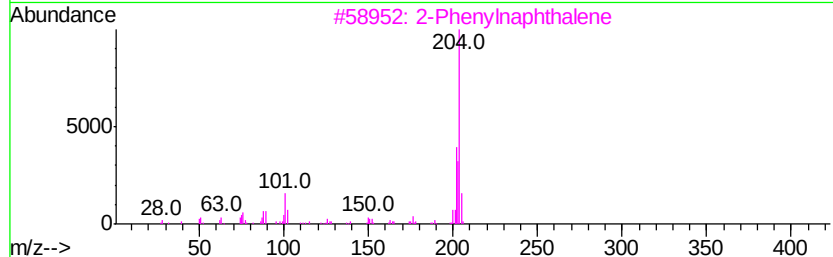
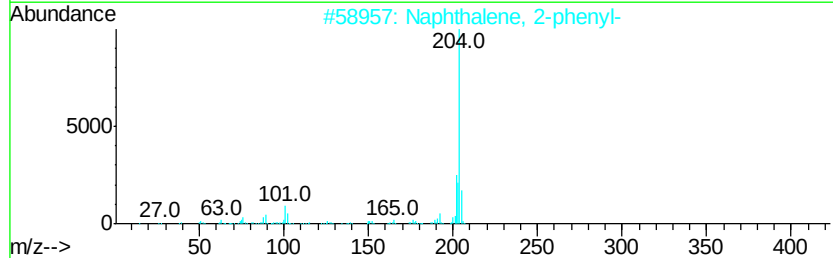
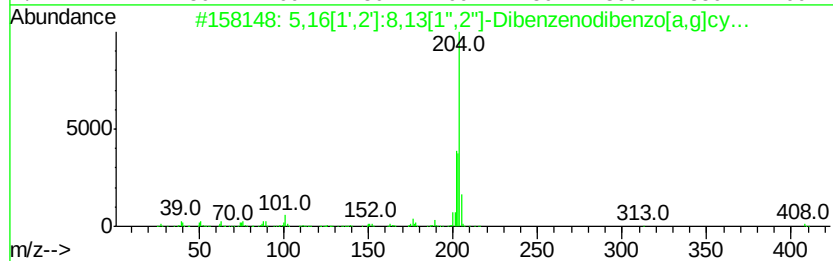
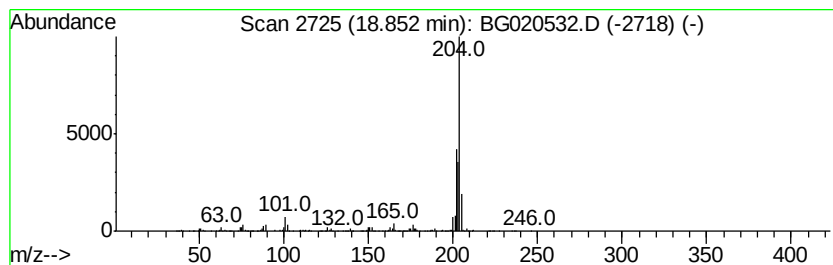
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 11 5,16[1',2']:8,13[1'',2'']-D... Concentration Rank 22

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 18.85 | 4.31 ng/ul | 3958530 | Phenanthrene-d10 | 17.47 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24  | 005672-97-9 | 91   |
| 2    |    |   | Naphthalene, 2-phenyl-              | 204 | C16H12  | 000612-94-2 | 68   |
| 3    |    |   | 2-Phenylnaphthalene                 | 204 | C16H12  | 035465-71-5 | 62   |
| 4    |    |   | Naphthalene, 2-phenyl-              | 204 | C16H12  | 000612-94-2 | 62   |
| 5    |    |   | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12  | 006572-60-7 | 62   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

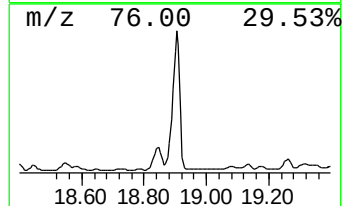
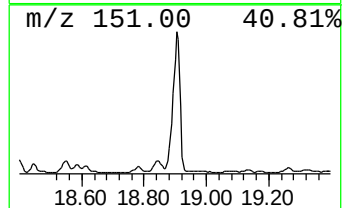
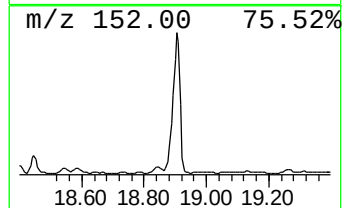
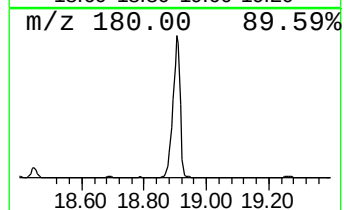
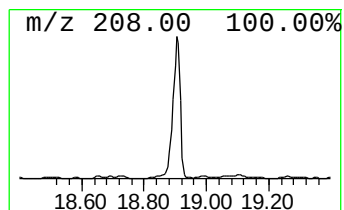
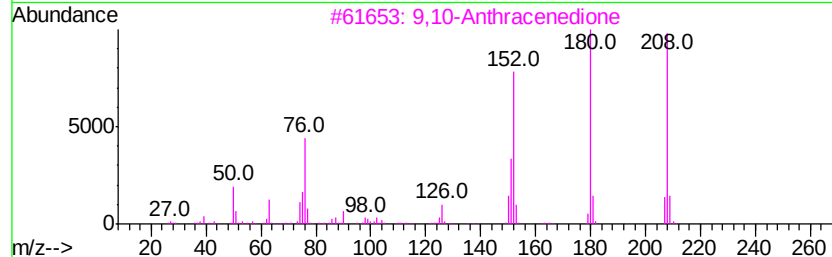
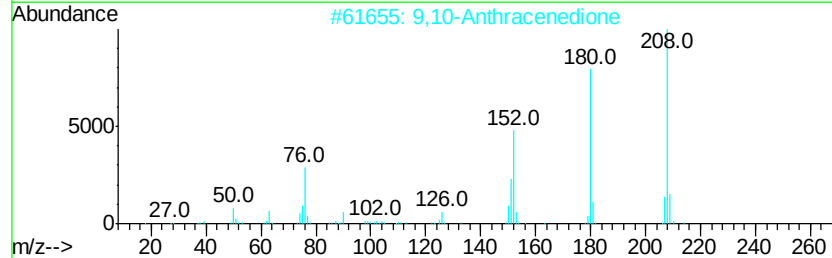
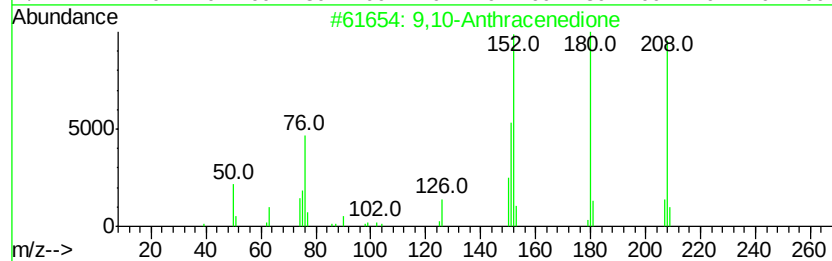
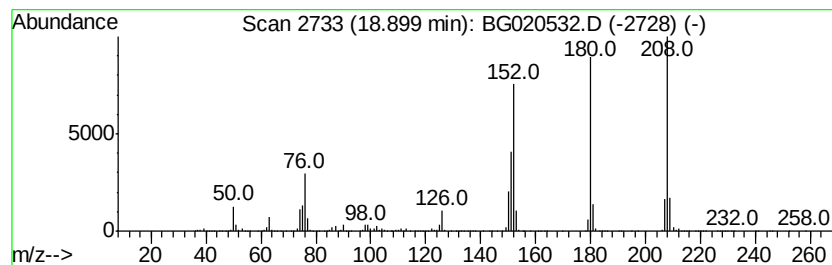
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 12 9,10-Anthracenedione Concentration Rank 15

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 18.90 | 5.49 ng/ul | 5038330 | Phenanthrene-d10 | 17.47 |

| Hit# | of | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------|-----|---------|-------------|------|
| 1    | 5  | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 96   |
| 2    |    | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 93   |
| 3    |    | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 93   |
| 4    |    | Benzo[cl]cinoline    | 180 | C12H8N2 | 000230-17-1 | 70   |
| 5    |    | 1,4-Anthracenedione  | 208 | C14H8O2 | 000635-12-1 | 64   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

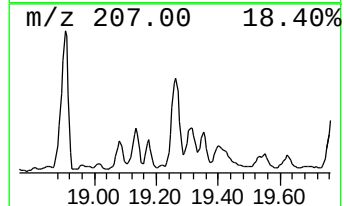
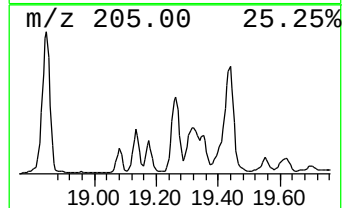
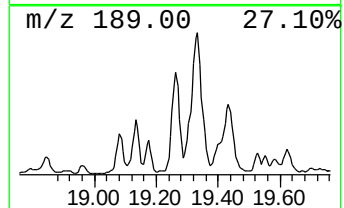
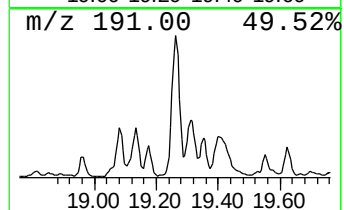
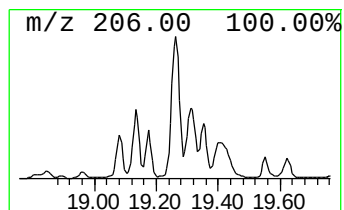
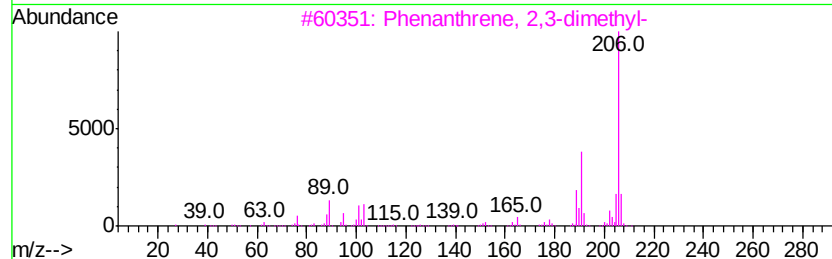
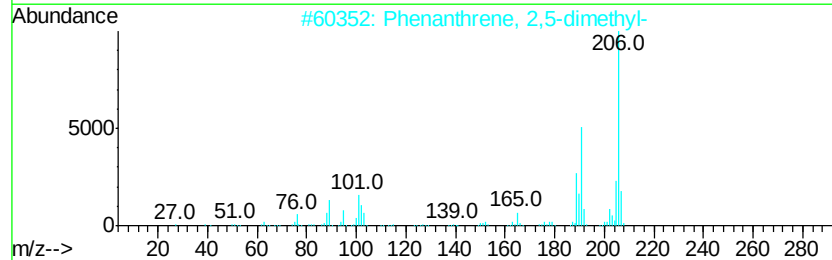
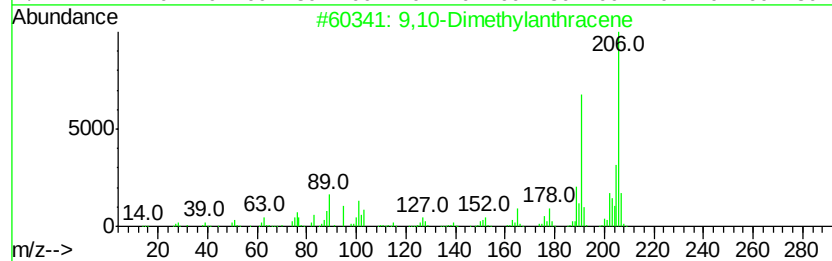
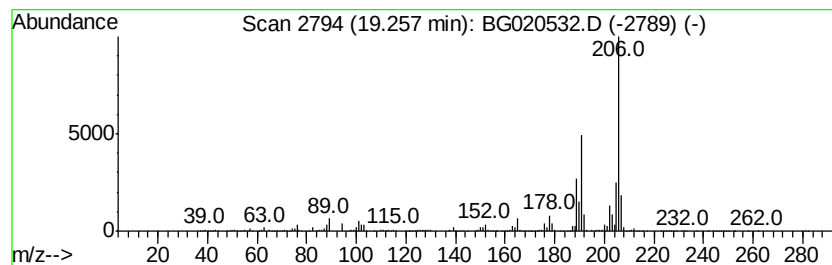
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 13 9,10-Dimethylantracene Concentration Rank 35

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 19.26 | 2.20 ng/ul | 2024080 | Phenanthrene-d10 | 17.47 |

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



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampled :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

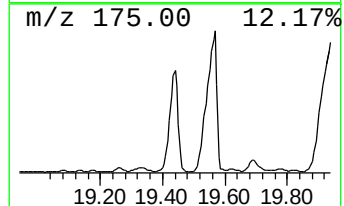
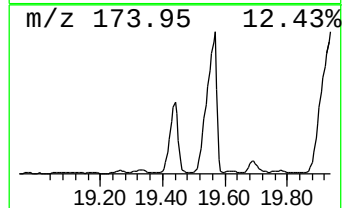
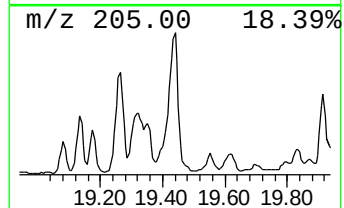
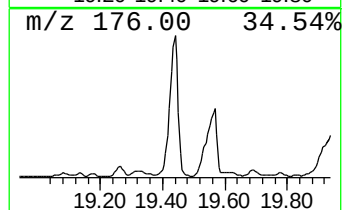
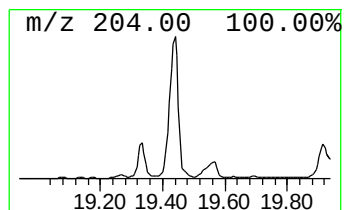
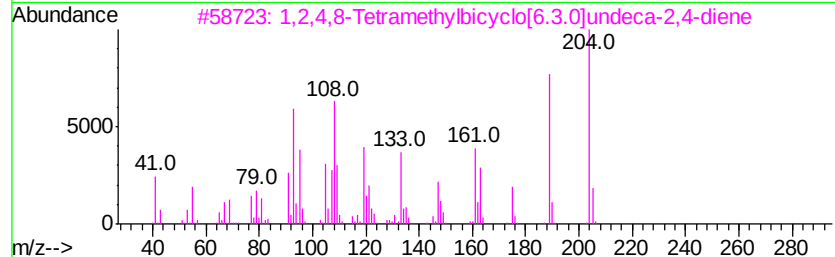
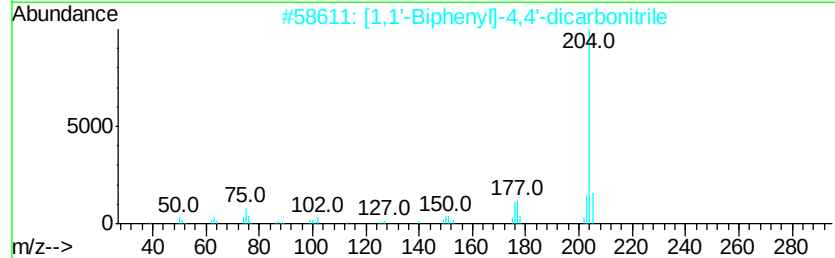
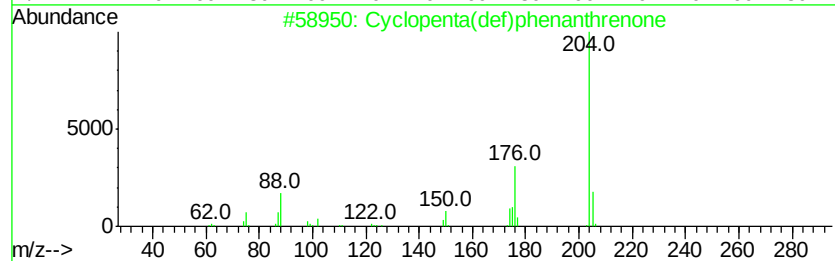
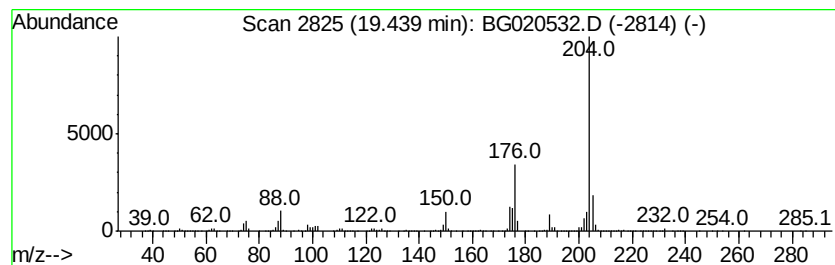
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 14 Cyclopenta(def)phenanthrenone Concentration Rank 25

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 19.44 | 3.86 ng/ul | 3539020 | Phenanthrene-d10 | 17.47 |

| Hit# | of | Tentative ID                                      | MW  | MolForm   | CAS#        | Qual |
|------|----|---------------------------------------------------|-----|-----------|-------------|------|
| 1    | 5  | Cyclopenta(def)phenanthrenone                     | 204 | C15H8O    | 005737-13-3 | 93   |
| 2    |    | [1,1'-Biphenyl]-4,4'-dicarbonitrile               | 204 | C14H8N2   | 001591-30-6 | 53   |
| 3    |    | 1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-2,4-diene | 204 | C15H24    | 137235-51-9 | 49   |
| 4    |    | 2-Methyl-5-nitroindole-3-carboxamide              | 204 | C10H8N2O3 | 003558-17-6 | 47   |
| 5    |    | [1,1'-Biphenyl]-4,4'-dicarbonitrile               | 204 | C14H8N2   | 001591-30-6 | 45   |





Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

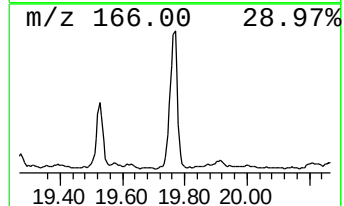
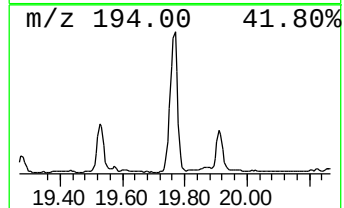
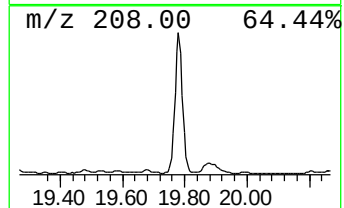
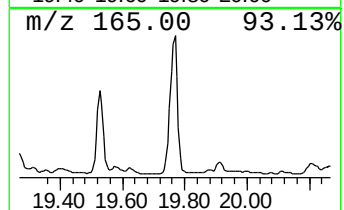
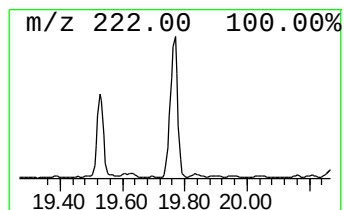
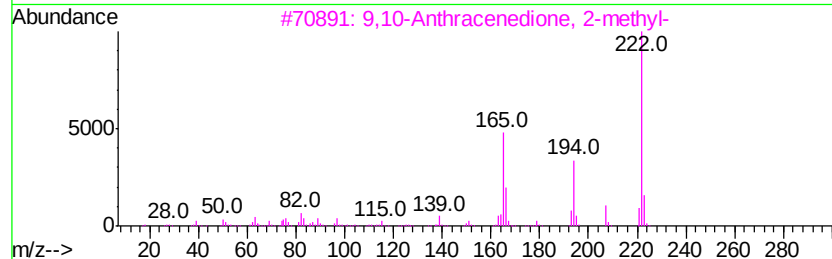
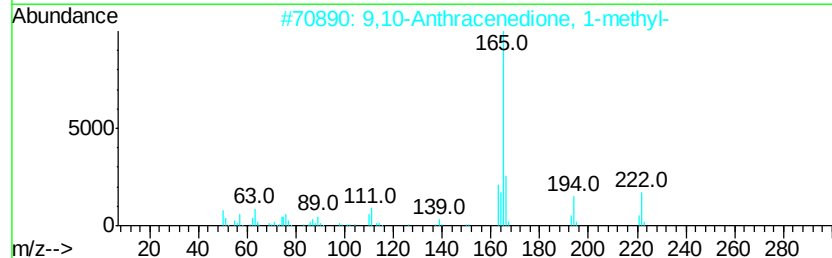
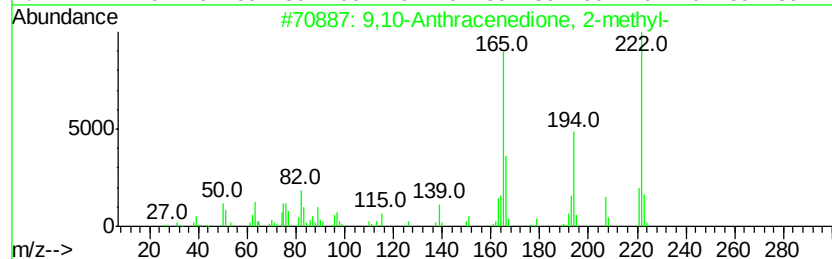
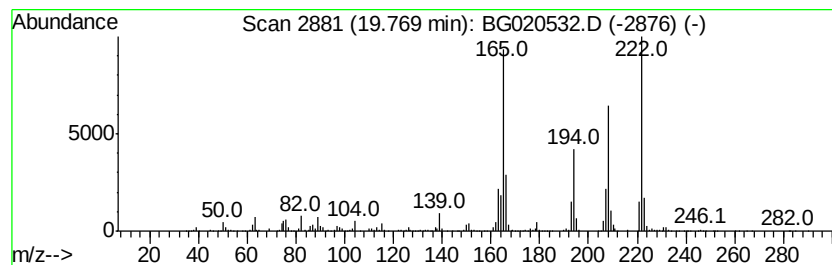
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 16 9,10-Anthracenedione, 2-met... Concentration Rank 31

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 19.77 | 2.90 ng/ul | 2096930 | Chrysene-d12     | 21.79 |

| Hit# | of | Tentative ID                     | MW  | MolForm  | CAS#        | Qual |
|------|----|----------------------------------|-----|----------|-------------|------|
| 1    | 5  | 9,10-Anthracenedione, 2-methyl-  | 222 | C15H10O2 | 000084-54-8 | 95   |
| 2    |    | 9,10-Anthracenedione, 1-methyl-  | 222 | C15H10O2 | 000954-07-4 | 89   |
| 3    |    | 9,10-Anthracenedione, 2-methyl-  | 222 | C15H10O2 | 000084-54-8 | 83   |
| 4    |    | 9,10-Anthracenedione, 1-methyl-  | 222 | C15H10O2 | 000954-07-4 | 83   |
| 5    |    | 9-Keto-4-fluorenylethylene oxide | 222 | C15H10O2 | 053221-10-6 | 53   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

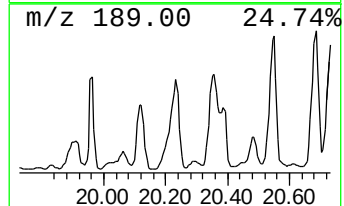
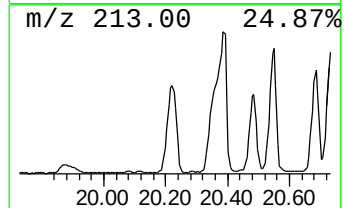
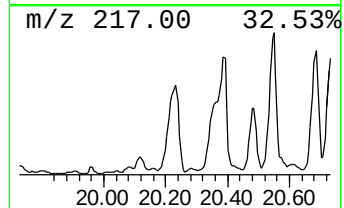
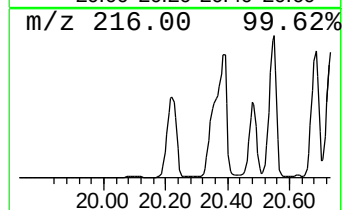
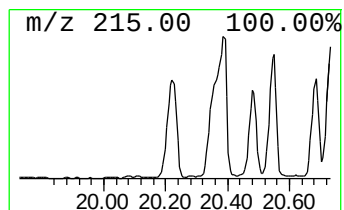
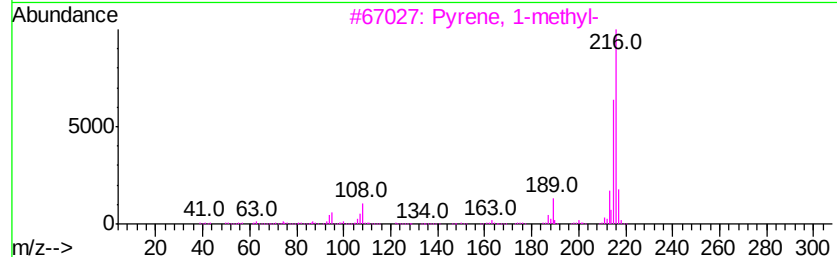
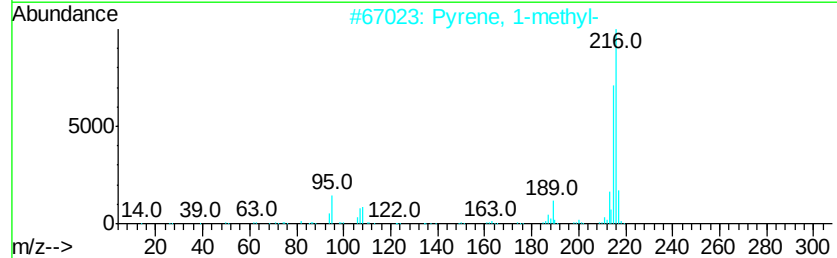
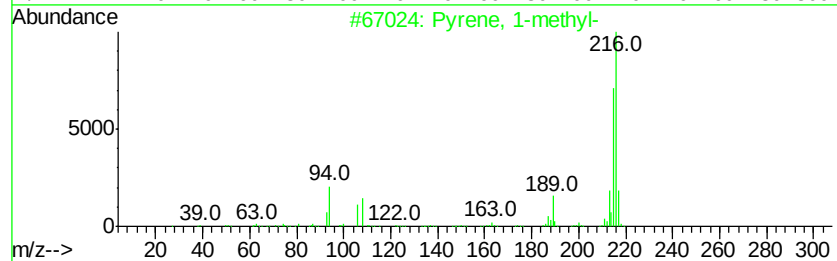
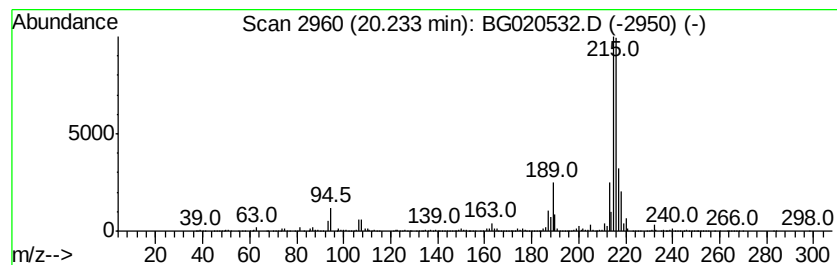
Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 17 Pyrene, 1-methyl- Concentration Rank 12

| R.T.    | EstConc    | Area                    | Relative to ISTD | R.T.           |
|---------|------------|-------------------------|------------------|----------------|
| 20.23   | 6.44 ng/ul | 4645460                 | Chrysene-d12     | 21.79          |
| Hit# of | 5          | Tentative ID            | MW MolForm       | CAS# Qual      |
| 1       |            | Pyrene, 1-methyl-       | 216 C17H12       | 002381-21-7 94 |
| 2       |            | Pyrene, 1-methyl-       | 216 C17H12       | 002381-21-7 93 |
| 3       |            | Pyrene, 1-methyl-       | 216 C17H12       | 002381-21-7 92 |
| 4       |            | 11H-Benzo[blfluorene    | 216 C17H12       | 000243-17-4 91 |
| 5       |            | Fluoranthene, 2-methyl- | 216 C17H12       | 033543-31-6 87 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

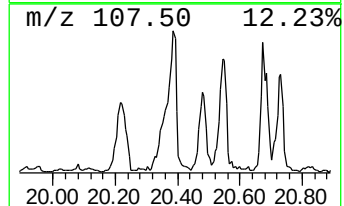
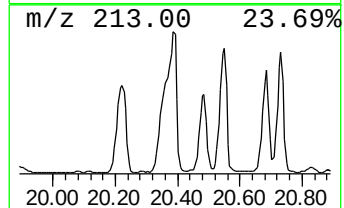
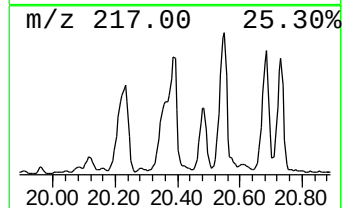
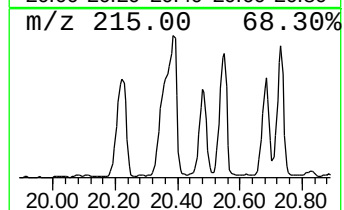
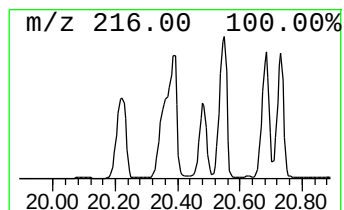
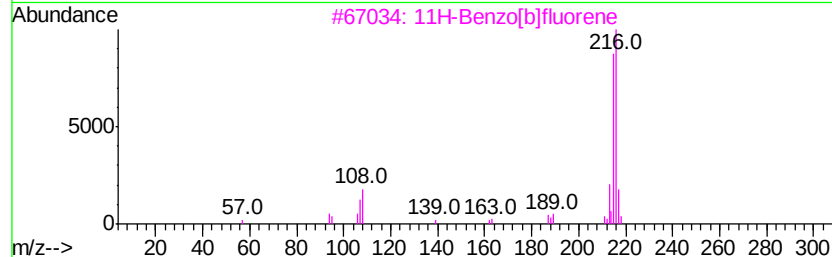
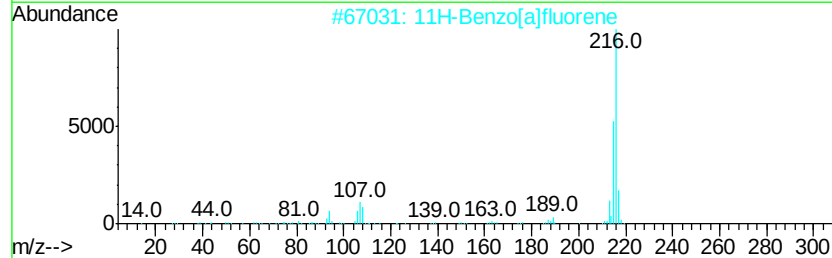
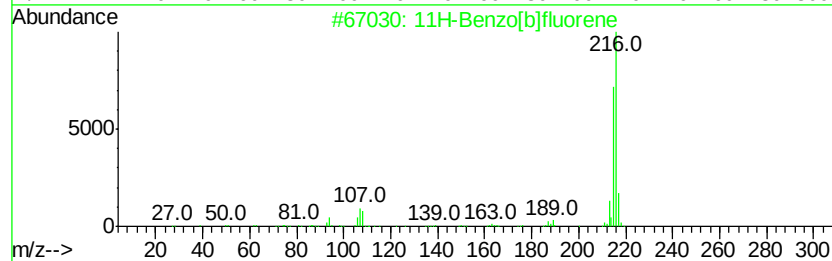
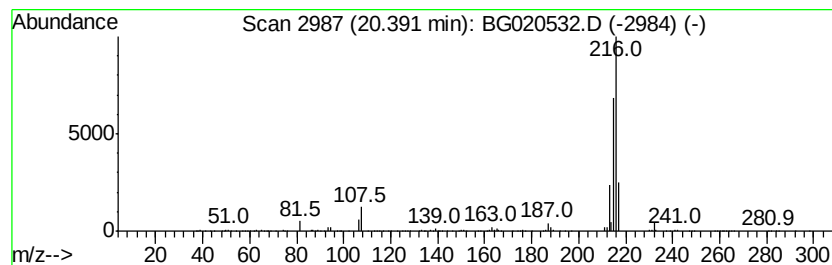
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 19 11H-Benzo[b]fluorene Concentration Rank 21

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 20.39 | 4.57 ng/ul | 3296670 | Chrysene-d12     | 21.79 |

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



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

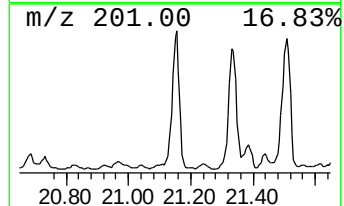
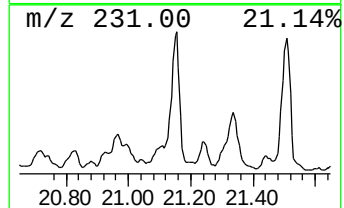
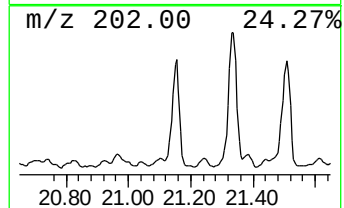
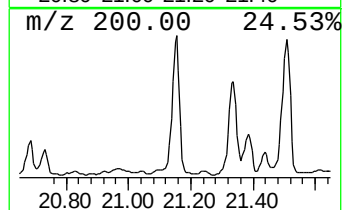
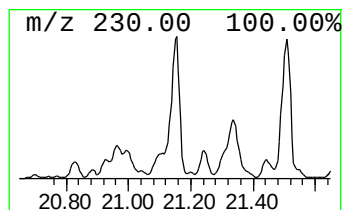
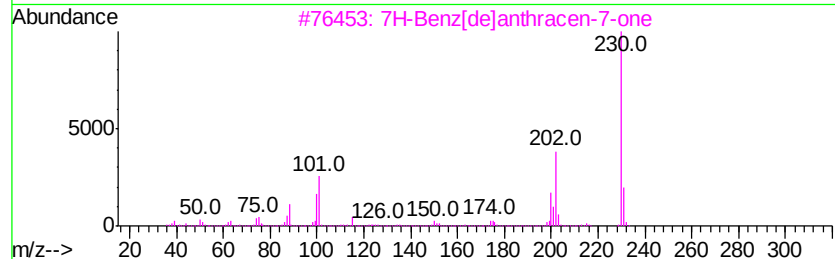
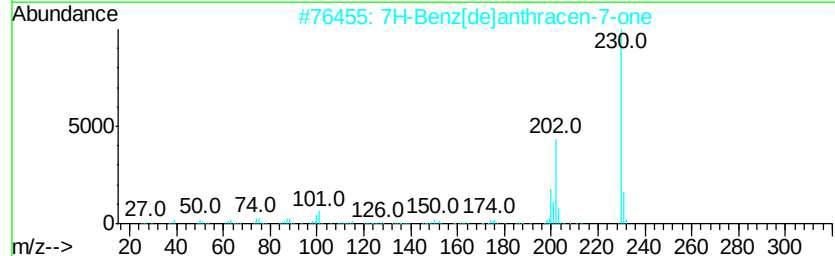
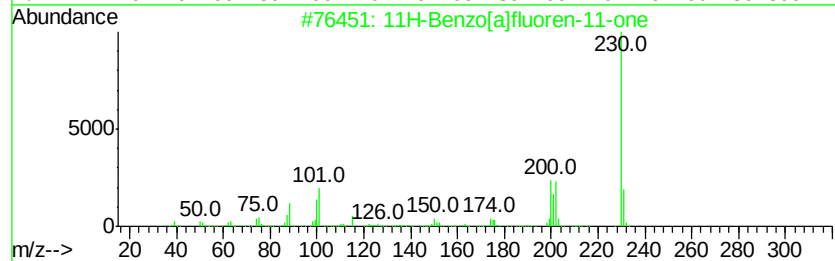
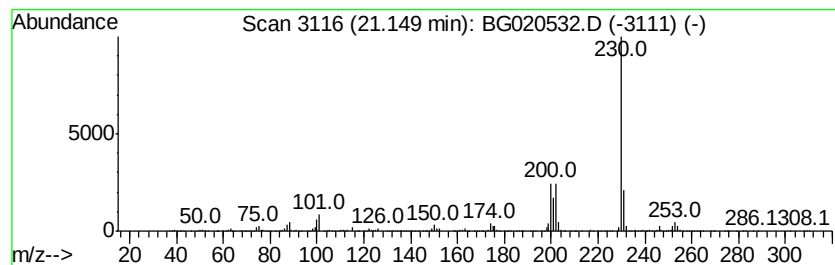
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 24 11H-Benzo[a]fluoren-11-one Concentration Rank 26

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 21.15 | 3.80 ng/ul | 2745670 | Chrysene-d12     | 21.79 |

| Hit# | of | Tentative ID               | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------|-----|---------|-------------|------|
| 1    | 5  | 11H-Benzo[a]fluoren-11-one | 230 | C17H10O | 000479-79-8 | 97   |
| 2    |    | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 90   |
| 3    |    | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 81   |
| 4    |    | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 81   |
| 5    |    | 1-Pyrene-carboxaldehyde    | 230 | C17H10O | 003029-19-4 | 72   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

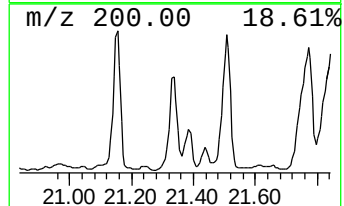
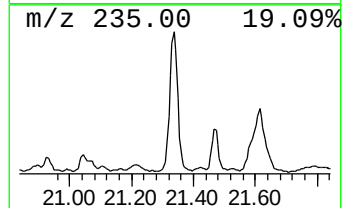
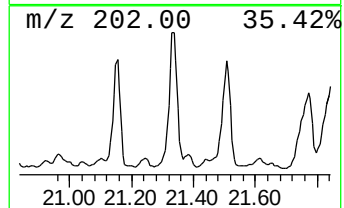
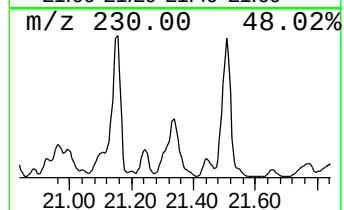
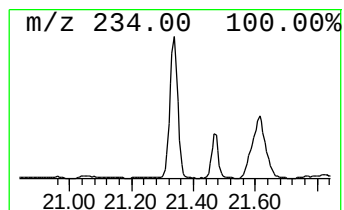
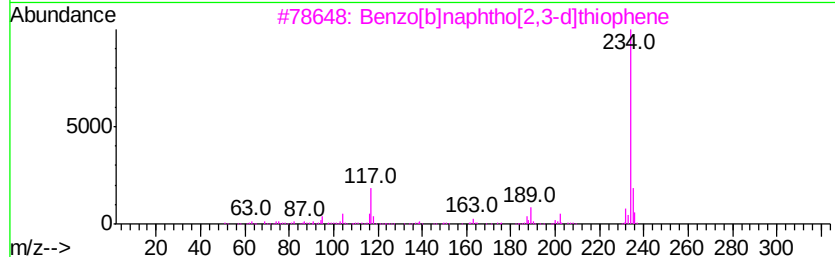
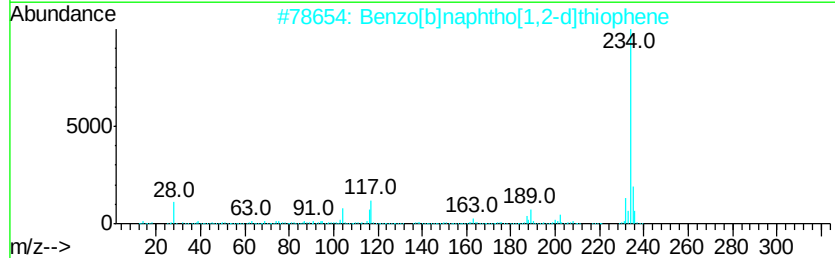
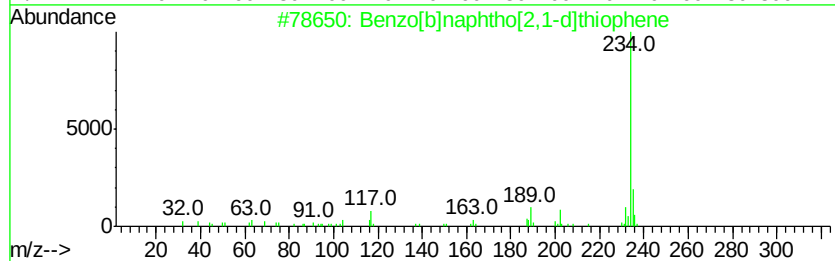
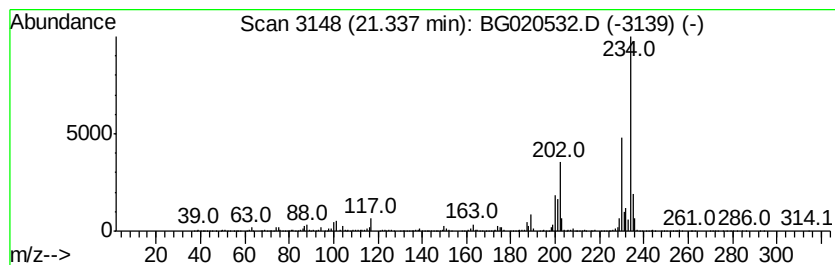
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 25 Benzo[b]naphtho[2,1-d]thiop... Concentration Rank 20

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 21.34 | 4.62 ng/ul | 3336590 | Chrysene-d12     | 21.79 |

| Hit# | of | Tentative ID                    | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[b]naphtho[2,1-d]thiophene | 234 | C16H10S | 000239-35-0 | 91   |
| 2    |    | Benzo[b]naphtho[1,2-d]thiophene | 234 | C16H10S | 000205-43-6 | 55   |
| 3    |    | Benzo[b]naphtho[2,3-d]thiophene | 234 | C16H10S | 000243-46-9 | 53   |
| 4    |    | Benzo[b]naphtho[2,1-d]thiophene | 234 | C16H10S | 000239-35-0 | 53   |
| 5    |    | Benzo[b]naphtho[2,3-d]thiophene | 234 | C16H10S | 000243-46-9 | 49   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

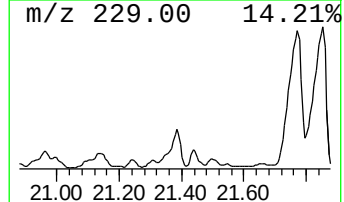
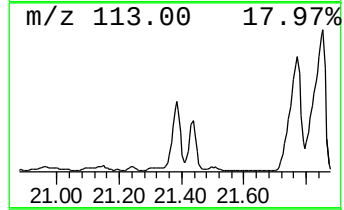
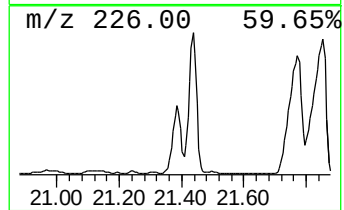
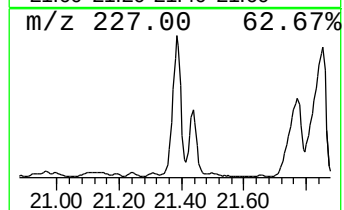
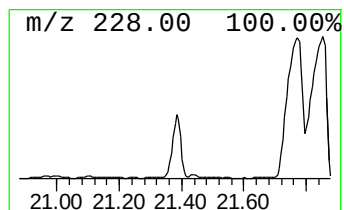
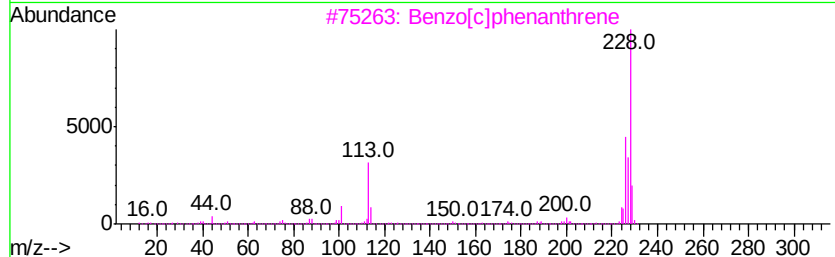
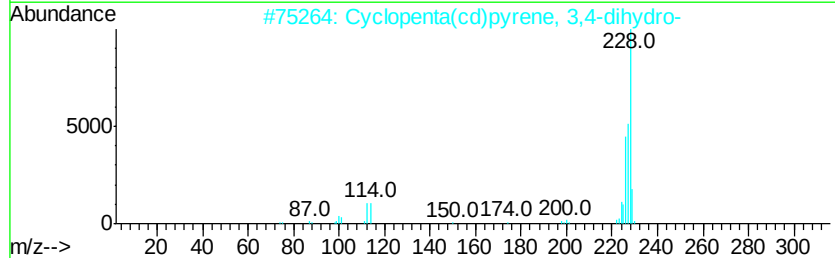
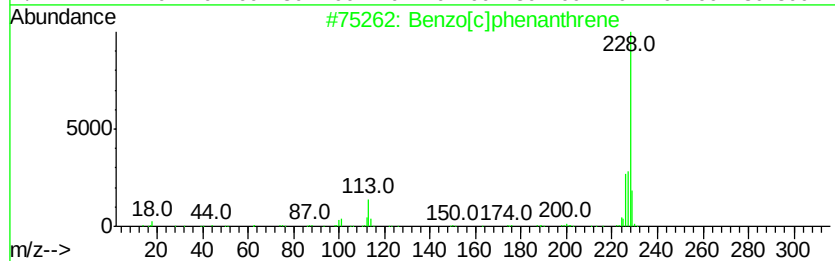
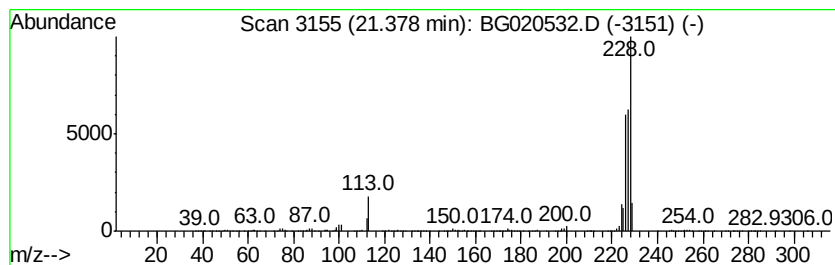
Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 26 Benzo[c]phenanthrene Concentration Rank 13

| R.T.    | EstConc    | Area                                | Relative to ISTD | R.T.       |              |      |
|---------|------------|-------------------------------------|------------------|------------|--------------|------|
| 21.38   | 6.16 ng/ul | 4443730                             | Chrysene-d12     | 21.79      |              |      |
| Hit# of | 5          | Tentative ID                        | MW               | MolForm    | CAS#         | Qual |
| 1       |            | Benzo[c]phenanthrene                | 228              | C18H12     | 000195-19-7  | 52   |
| 2       |            | Cyclopenta(cd)pyrene, 3,4-dihydro-  | 228              | C18H12     | 025732-74-5  | 49   |
| 3       |            | Benzo[c]phenanthrene                | 228              | C18H12     | 000195-19-7  | 47   |
| 4       |            | Pyrazole-4-carboxaldehyde-, 3,5-... | 228              | C14H16N2O  | 1000272-54-8 | 47   |
| 5       |            | 2-Nitrophenyl selenocyanate         | 228              | C7H4N2O2Se | 051694-22-5  | 47   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

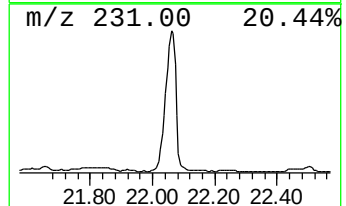
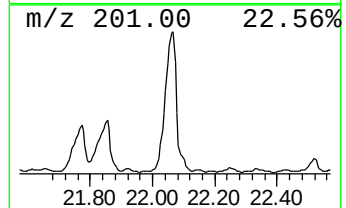
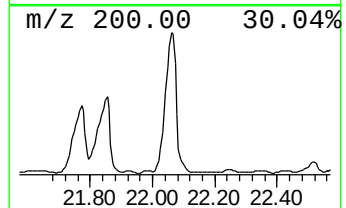
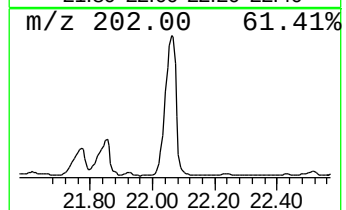
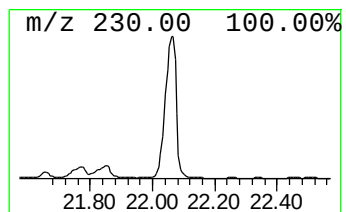
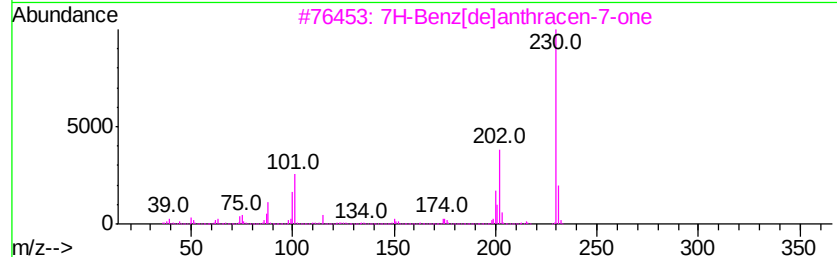
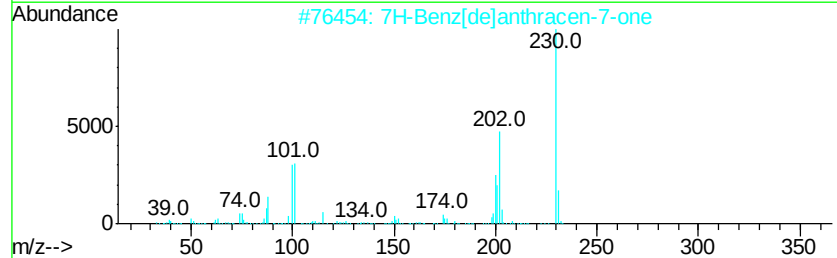
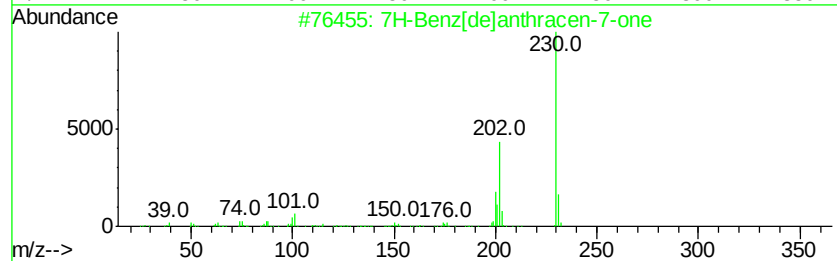
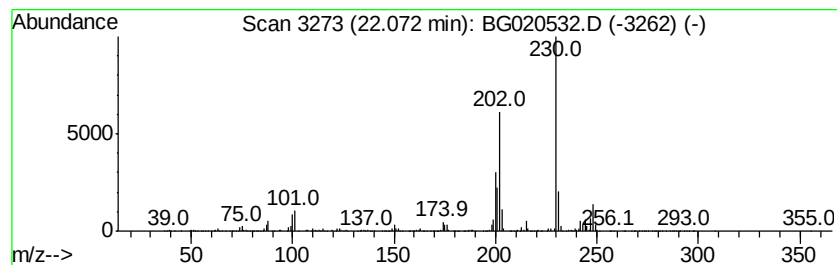
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 29 7H-Benz[de]anthracen-7-one Concentration Rank 7

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 22.07 | 9.83 ng/ul | 7092590 | Chrysene-d12     | 21.79 |

| Hit# | of | Tentative ID               | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------|-----|---------|-------------|------|
| 1    | 5  | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 96   |
| 2    |    | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 94   |
| 3    |    | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 93   |
| 4    |    | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 93   |
| 5    |    | 11H-Benzo[a]fluoren-11-one | 230 | C17H10O | 000479-79-8 | 64   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\  
Data File : BG020532.D  
Acq On : 26 Dec 2015 9:36  
Operator : UM/SJ  
Sample : G4802-10  
Misc :  
ALS Vial : 69 Sample Multiplier: 1

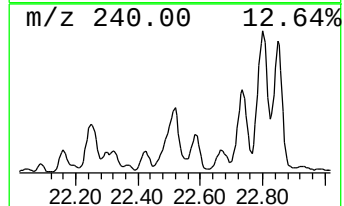
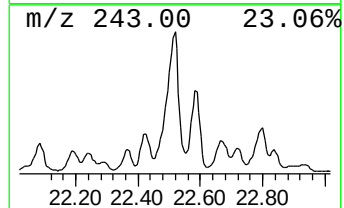
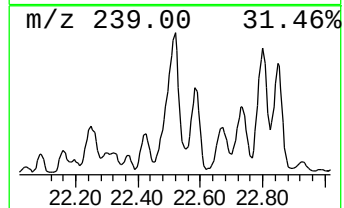
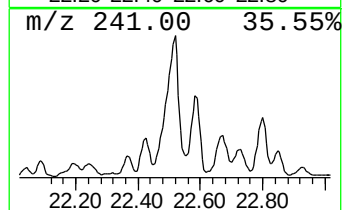
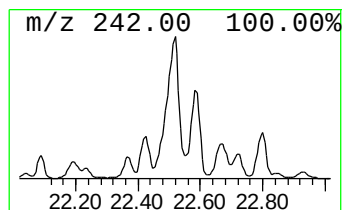
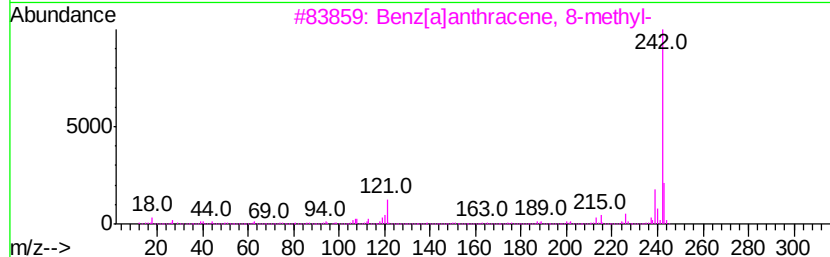
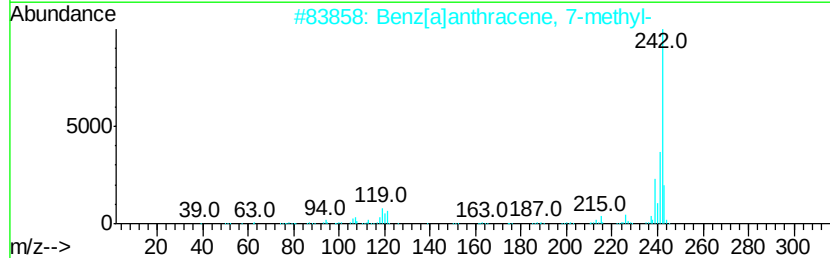
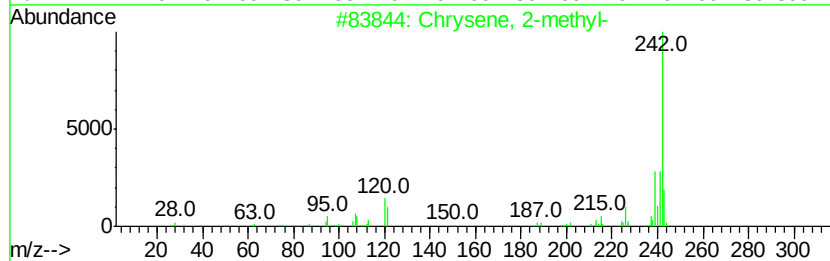
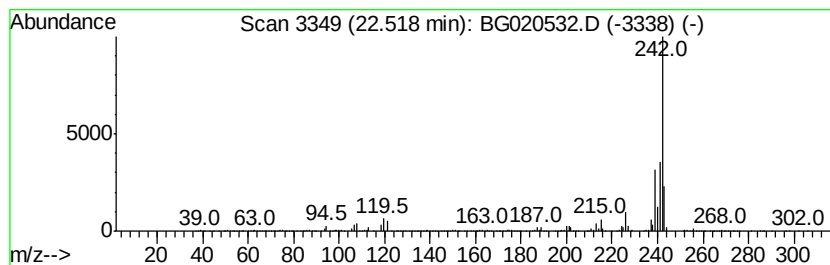
Instrument :  
BNA\_G  
ClientSampleId :  
G9D85

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG122415.M  
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 30 Chrysene, 2-methyl- Concentration Rank 10

| R.T.    | EstConc    | Area                         | Relative to ISTD | R.T.           |
|---------|------------|------------------------------|------------------|----------------|
| 22.52   | 6.88 ng/ul | 4963750                      | Chrysene-d12     | 21.79          |
| Hit# of | 5          | Tentative ID                 | MW MolForm       | CAS# Qual      |
| 1       |            | Chrysene, 2-methyl-          | 242 C19H14       | 003351-32-4 96 |
| 2       |            | Benz[a]anthracene, 7-methyl- | 242 C19H14       | 002541-69-7 94 |
| 3       |            | Benz[a]anthracene, 8-methyl- | 242 C19H14       | 002381-31-9 94 |
| 4       |            | Chrysene, 6-methyl-          | 242 C19H14       | 001705-85-7 93 |
| 5       |            | Chrysene, 1-methyl-          | 242 C19H14       | 003351-28-8 93 |





Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG122515\  
 Data File : BG020532.D  
 Acq On : 26 Dec 2015 9:36  
 Operator : UM/SJ  
 Sample : G4802-10  
 Misc :  
 ALS Vial : 69 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 G9D85

Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG122415.M  
 Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
 TIC Integration Parameters: LSCINT.P

| TIC Top Hit name      | RT    | EstConc | Units | Response | --Internal Standard-- |       |          |      |
|-----------------------|-------|---------|-------|----------|-----------------------|-------|----------|------|
|                       |       |         |       |          | #                     | RT    | Resp     | Conc |
| Benzene, 4-ethyl-...  | 11.41 | 40.6    | ng/ul | 595418   | 2                     | 10.89 | 293454   | 20.0 |
| Benzene, 1-methyl...  | 11.55 | 72.2    | ng/ul | 1059420  | 2                     | 10.89 | 293454   | 20.0 |
| Naphthalene, 1-me...  | 12.76 | 46.7    | ng/ul | 684718   | 2                     | 10.89 | 293454   | 20.0 |
| Naphthalene, 1,6-...  | 13.89 | 32.6    | ng/ul | 651720   | 3                     | 14.71 | 400234   | 20.0 |
| Naphthalene, 2,3-...  | 14.27 | 14.8    | ng/ul | 296572   | 3                     | 14.71 | 400234   | 20.0 |
| Phenanthrene, 1-m...  | 18.35 | 5.3     | ng/ul | 4891950  | 4                     | 17.47 | 18359600 | 20.0 |
| 4H-Cyclopenta[def...  | 18.55 | 8.7     | ng/ul | 7984650  | 4                     | 17.47 | 18359600 | 20.0 |
| 5,16[1',2']:8,13[...  | 18.85 | 4.3     | ng/ul | 3958530  | 4                     | 17.47 | 18359600 | 20.0 |
| 9,10-Anthracenedione  | 18.90 | 5.5     | ng/ul | 5038330  | 4                     | 17.47 | 18359600 | 20.0 |
| 9,10-Dimethylanthe... | 19.26 | 2.2     | ng/ul | 2024080  | 4                     | 17.47 | 18359600 | 20.0 |
| Cyclopenta(def)ph...  | 19.44 | 3.9     | ng/ul | 3539020  | 4                     | 17.47 | 18359600 | 20.0 |
| 9,10-Anthracenedi...  | 19.77 | 2.9     | ng/ul | 2096930  | 5                     | 21.79 | 14436700 | 20.0 |
| Pyrene, 1-methyl-     | 20.23 | 6.4     | ng/ul | 4645460  | 5                     | 21.79 | 14436700 | 20.0 |
| 11H-Benzo[b]fluorene  | 20.39 | 4.6     | ng/ul | 3296670  | 5                     | 21.79 | 14436700 | 20.0 |
| 11H-Benzo[a]fluor...  | 21.15 | 3.8     | ng/ul | 2745670  | 5                     | 21.79 | 14436700 | 20.0 |
| Benzo[b]naphtho[2...  | 21.34 | 4.6     | ng/ul | 3336590  | 5                     | 21.79 | 14436700 | 20.0 |
| Benzo[c]phenanthrene  | 21.38 | 6.2     | ng/ul | 4443730  | 5                     | 21.79 | 14436700 | 20.0 |
| 7H-Benz[de]anthra...  | 22.07 | 9.8     | ng/ul | 7092590  | 5                     | 21.79 | 14436700 | 20.0 |
| Chrysene, 2-methyl-   | 22.52 | 6.9     | ng/ul | 4963750  | 5                     | 21.79 | 14436700 | 20.0 |