

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
 Data File : BG020315.D  
 Acq On : 19 Dec 2015 17:11  
 Operator : UM/SJ  
 Sample : G4849-08  
 Misc :  
 ALS Vial : 46 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N72

## 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-BG121415.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         | 8.633       | 979           | 986         | 996          | rVB      | 267939         | 456953        | 1.25%           | 0.182%        |
| 2         | 11.007      | 1369          | 1390        | 1395         | rVV      | 5066094        | 14933816      | 40.92%          | 5.948%        |
| 3         | 11.089      | 1399          | 1404        | 1412         | rVB      | 281134         | 480968        | 1.32%           | 0.192%        |
| 4         | 12.588      | 1646          | 1659        | 1664         | rBV      | 4328977        | 9276396       | 25.42%          | 3.695%        |
| 5         | 12.799      | 1681          | 1695        | 1701         | rVV      | 2666726        | 4949031       | 13.56%          | 1.971%        |
| 6         | 13.569      | 1814          | 1826        | 1832         | rBV      | 2228046        | 3689110       | 10.11%          | 1.469%        |
| 7         | 13.763      | 1852          | 1859        | 1869         | rVB      | 813019         | 1636938       | 4.49%           | 0.652%        |
| 8         | 13.910      | 1870          | 1884        | 1891         | rVV      | 942278         | 2581949       | 7.08%           | 1.028%        |
| 9         | 14.051      | 1899          | 1908        | 1913         | rVV      | 1255509        | 2462233       | 6.75%           | 0.981%        |
| 10        | 14.103      | 1913          | 1917        | 1927         | rVV2     | 941099         | 1790816       | 4.91%           | 0.713%        |
| 11        | 14.286      | 1941          | 1948        | 1951         | rVV      | 565422         | 896421        | 2.46%           | 0.357%        |
| 12        | 14.421      | 1965          | 1971        | 1972         | rBV2     | 227502         | 316869        | 0.87%           | 0.126%        |
| 13        | 14.450      | 1972          | 1976        | 1981         | rVV      | 417053         | 678105        | 1.86%           | 0.270%        |
| 14        | 14.714      | 2008          | 2021        | 2029         | rVV2     | 1001036        | 1739741       | 4.77%           | 0.693%        |
| 15        | 14.826      | 2029          | 2040        | 2044         | rVV      | 5963053        | 14793893      | 40.54%          | 5.892%        |
| 16        | 14.867      | 2044          | 2047        | 2052         | rVV      | 411855         | 640998        | 1.76%           | 0.255%        |
| 17        | 14.926      | 2052          | 2057        | 2068         | rVV2     | 266939         | 712647        | 1.95%           | 0.284%        |
| 18        | 15.038      | 2068          | 2076        | 2081         | rVV2     | 453197         | 774496        | 2.12%           | 0.308%        |
| 19        | 15.155      | 2086          | 2096        | 2100         | rVV      | 4631167        | 10733691      | 29.41%          | 4.275%        |
| 20        | 15.196      | 2100          | 2103        | 2113         | rVB      | 327313         | 496544        | 1.36%           | 0.198%        |
| 21        | 15.337      | 2119          | 2127        | 2132         | rBV2     | 260116         | 480633        | 1.32%           | 0.191%        |
| 22        | 15.390      | 2132          | 2136        | 2148         | rVB2     | 281974         | 442498        | 1.21%           | 0.176%        |
| 23        | 15.508      | 2148          | 2156        | 2159         | rBV2     | 202582         | 455794        | 1.25%           | 0.182%        |
| 24        | 15.549      | 2159          | 2163        | 2168         | rVB3     | 160765         | 303095        | 0.83%           | 0.121%        |
| 25        | 15.801      | 2196          | 2206        | 2212         | rVB      | 5039616        | 11340233      | 31.08%          | 4.517%        |
| 26        | 15.878      | 2212          | 2219        | 2221         | rBV2     | 449310         | 806625        | 2.21%           | 0.321%        |
| 27        | 15.907      | 2221          | 2224        | 2226         | rVV      | 664836         | 930961        | 2.55%           | 0.371%        |
| 28        | 15.942      | 2226          | 2230        | 2235         | rVV2     | 1180071        | 1911479       | 5.24%           | 0.761%        |
| 29        | 15.989      | 2235          | 2238        | 2241         | rVV2     | 251636         | 370850        | 1.02%           | 0.148%        |
| 30        | 16.031      | 2241          | 2245        | 2247         | rVV      | 566425         | 823896        | 2.26%           | 0.328%        |
| 31        | 16.072      | 2247          | 2252        | 2260         | rVB      | 1365265        | 2197254       | 6.02%           | 0.875%        |
| 32        | 16.219      | 2260          | 2277        | 2284         | rBV      | 1360711        | 3251169       | 8.91%           | 1.295%        |
| 33        | 16.307      | 2288          | 2292        | 2297         | rVB2     | 271520         | 407762        | 1.12%           | 0.162%        |
| 34        | 16.442      | 2312          | 2315        | 2321         | rVB3     | 197815         | 311434        | 0.85%           | 0.124%        |

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
 Data File : BG020315.D  
 Acq On : 19 Dec 2015 17:11  
 Operator : UM/SJ  
 Sample : G4849-08  
 Misc :  
 ALS Vial : 46 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N72

## 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-BG121415.M  
 Title : SVOA CALIBRATION

|    |        |      |      |      |      |         |          |         |         |
|----|--------|------|------|------|------|---------|----------|---------|---------|
| 35 | 16.565 | 2331 | 2336 | 2342 | rVB  | 447758  | 680588   | 1.87%   | 0.271%  |
| 36 | 16.777 | 2359 | 2372 | 2376 | rBV2 | 968789  | 2185354  | 5.99%   | 0.870%  |
| 37 | 16.824 | 2376 | 2380 | 2386 | rBV3 | 341411  | 527327   | 1.45%   | 0.210%  |
| 38 | 16.924 | 2391 | 2397 | 2402 | rVB2 | 418482  | 737610   | 2.02%   | 0.294%  |
| 39 | 17.041 | 2413 | 2417 | 2421 | rVB2 | 289394  | 385102   | 1.06%   | 0.153%  |
| 40 | 17.153 | 2428 | 2436 | 2440 | rVB  | 589586  | 1084219  | 2.97%   | 0.432%  |
| 41 | 17.206 | 2440 | 2445 | 2455 | rVV3 | 423720  | 1123728  | 3.08%   | 0.448%  |
| 42 | 17.306 | 2455 | 2462 | 2472 | rVB  | 2095160 | 3666186  | 10.05%  | 1.460%  |
| 43 | 17.593 | 2481 | 2511 | 2515 | rBV  | 8923041 | 36490830 | 100.00% | 14.533% |
| 44 | 17.646 | 2515 | 2520 | 2524 | rVB  | 2388426 | 3171243  | 8.69%   | 1.263%  |
| 45 | 17.881 | 2554 | 2560 | 2568 | rBV  | 1007088 | 1780253  | 4.88%   | 0.709%  |
| 46 | 17.993 | 2574 | 2579 | 2584 | rVV  | 571330  | 783756   | 2.15%   | 0.312%  |
| 47 | 18.058 | 2585 | 2590 | 2599 | rVB3 | 279670  | 545150   | 1.49%   | 0.217%  |
| 48 | 18.199 | 2609 | 2614 | 2622 | rVB  | 217676  | 448240   | 1.23%   | 0.179%  |
| 49 | 18.357 | 2630 | 2641 | 2645 | rVV  | 1819828 | 3070323  | 8.41%   | 1.223%  |
| 50 | 18.410 | 2645 | 2650 | 2655 | rVB  | 2381091 | 3588575  | 9.83%   | 1.429%  |
| 51 | 18.486 | 2655 | 2663 | 2669 | rBV  | 766563  | 1380249  | 3.78%   | 0.550%  |
| 52 | 18.563 | 2669 | 2676 | 2685 | rVV2 | 3365975 | 7624645  | 20.89%  | 3.037%  |
| 53 | 18.845 | 2718 | 2724 | 2729 | rVV  | 1750043 | 2531479  | 6.94%   | 1.008%  |
| 54 | 18.898 | 2729 | 2733 | 2740 | rVB4 | 217979  | 337773   | 0.93%   | 0.135%  |
| 55 | 19.080 | 2756 | 2764 | 2769 | rBV  | 335806  | 528481   | 1.45%   | 0.210%  |
| 56 | 19.133 | 2769 | 2773 | 2776 | rVV  | 237980  | 295840   | 0.81%   | 0.118%  |
| 57 | 19.256 | 2788 | 2794 | 2799 | rBV  | 490439  | 952199   | 2.61%   | 0.379%  |
| 58 | 19.321 | 2799 | 2805 | 2814 | rVB3 | 326496  | 802178   | 2.20%   | 0.319%  |
| 59 | 19.427 | 2814 | 2823 | 2827 | rBV3 | 165462  | 425935   | 1.17%   | 0.170%  |
| 60 | 19.573 | 2833 | 2848 | 2852 | rBV  | 7476696 | 22082264 | 60.51%  | 8.795%  |
| 61 | 19.773 | 2878 | 2882 | 2893 | rVB  | 576153  | 958027   | 2.63%   | 0.382%  |
| 62 | 19.902 | 2893 | 2904 | 2906 | rBV2 | 5765662 | 12813148 | 35.11%  | 5.103%  |
| 63 | 19.955 | 2912 | 2913 | 2918 | rVB  | 550777  | 509568   | 1.40%   | 0.203%  |
| 64 | 20.067 | 2926 | 2932 | 2936 | rVB  | 761261  | 1110232  | 3.04%   | 0.442%  |
| 65 | 20.208 | 2948 | 2956 | 2962 | rBV2 | 653760  | 1715053  | 4.70%   | 0.683%  |
| 66 | 20.378 | 2980 | 2985 | 2990 | rVB  | 1922244 | 2975564  | 8.15%   | 1.185%  |
| 67 | 20.484 | 2995 | 3003 | 3006 | rBV  | 2188710 | 3419144  | 9.37%   | 1.362%  |
| 68 | 20.537 | 3006 | 3012 | 3015 | rVV2 | 653342  | 1179027  | 3.23%   | 0.470%  |
| 69 | 20.572 | 3015 | 3018 | 3021 | rVV  | 408519  | 482367   | 1.32%   | 0.192%  |
| 70 | 20.608 | 3021 | 3024 | 3030 | rVB3 | 233565  | 366114   | 1.00%   | 0.146%  |
| 71 | 20.672 | 3030 | 3035 | 3039 | rBV  | 368247  | 564973   | 1.55%   | 0.225%  |

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
 Data File : BG020315.D  
 Acq On : 19 Dec 2015 17:11  
 Operator : UM/SJ  
 Sample : G4849-08  
 Misc :  
 ALS Vial : 46 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N72

## 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-BG121415.M  
 Title : SVOA CALIBRATION

|     |        |      |      |      |      |         |         |        |        |
|-----|--------|------|------|------|------|---------|---------|--------|--------|
| 72  | 20.719 | 3039 | 3043 | 3046 | rBV2 | 300662  | 356473  | 0.98%  | 0.142% |
| 73  | 20.895 | 3068 | 3073 | 3077 | rBV  | 293018  | 413140  | 1.13%  | 0.165% |
| 74  | 21.089 | 3101 | 3106 | 3111 | rBV  | 237227  | 474144  | 1.30%  | 0.189% |
| 75  | 21.142 | 3111 | 3115 | 3121 | rVV3 | 147893  | 293660  | 0.80%  | 0.117% |
| 76  | 21.324 | 3138 | 3146 | 3150 | rBV  | 638995  | 1109722 | 3.04%  | 0.442% |
| 77  | 21.371 | 3150 | 3154 | 3158 | rVV  | 641902  | 1048317 | 2.87%  | 0.418% |
| 78  | 21.418 | 3158 | 3162 | 3166 | rVV2 | 518139  | 855690  | 2.34%  | 0.341% |
| 79  | 21.459 | 3166 | 3169 | 3181 | rVB2 | 168737  | 317611  | 0.87%  | 0.126% |
| 80  | 21.606 | 3185 | 3194 | 3202 | rBV  | 195286  | 500319  | 1.37%  | 0.199% |
| 81  | 21.747 | 3207 | 3218 | 3223 | rBV2 | 2963374 | 6444359 | 17.66% | 2.567% |
| 82  | 21.812 | 3224 | 3229 | 3235 | rVB  | 2213828 | 4100712 | 11.24% | 1.633% |
| 83  | 21.959 | 3248 | 3254 | 3261 | rVV  | 746962  | 1332085 | 3.65%  | 0.531% |
| 84  | 22.094 | 3271 | 3277 | 3282 | rVB2 | 130218  | 291885  | 0.80%  | 0.116% |
| 85  | 22.159 | 3282 | 3288 | 3295 | rBV2 | 339483  | 665768  | 1.82%  | 0.265% |
| 86  | 22.488 | 3335 | 3344 | 3350 | rVV  | 284821  | 763082  | 2.09%  | 0.304% |
| 87  | 22.558 | 3350 | 3356 | 3363 | rVV2 | 157479  | 368259  | 1.01%  | 0.147% |
| 88  | 22.705 | 3376 | 3381 | 3386 | rVV3 | 177686  | 388212  | 1.06%  | 0.155% |
| 89  | 22.770 | 3386 | 3392 | 3395 | rVV2 | 181434  | 394667  | 1.08%  | 0.157% |
| 90  | 22.817 | 3395 | 3400 | 3408 | rVV3 | 262616  | 573380  | 1.57%  | 0.228% |
| 91  | 22.905 | 3408 | 3415 | 3427 | rVB2 | 138272  | 374894  | 1.03%  | 0.149% |
| 92  | 23.998 | 3588 | 3601 | 3607 | rBV  | 779566  | 2734956 | 7.49%  | 1.089% |
| 93  | 24.244 | 3635 | 3643 | 3651 | rVB  | 148711  | 368573  | 1.01%  | 0.147% |
| 94  | 24.726 | 3715 | 3725 | 3732 | rVV  | 367026  | 1089175 | 2.98%  | 0.434% |
| 95  | 24.803 | 3732 | 3738 | 3743 | rVV  | 184796  | 501935  | 1.38%  | 0.200% |
| 96  | 24.879 | 3743 | 3751 | 3764 | rVV  | 597399  | 1735072 | 4.75%  | 0.691% |
| 97  | 25.020 | 3765 | 3775 | 3782 | rVV2 | 201548  | 716546  | 1.96%  | 0.285% |
| 98  | 25.102 | 3783 | 3789 | 3802 | rVB2 | 159209  | 501728  | 1.37%  | 0.200% |
| 99  | 28.757 | 4396 | 4411 | 4433 | rVB2 | 115708  | 600824  | 1.65%  | 0.239% |
| 100 | 29.920 | 4590 | 4609 | 4623 | rBV3 | 70298   | 369091  | 1.01%  | 0.147% |

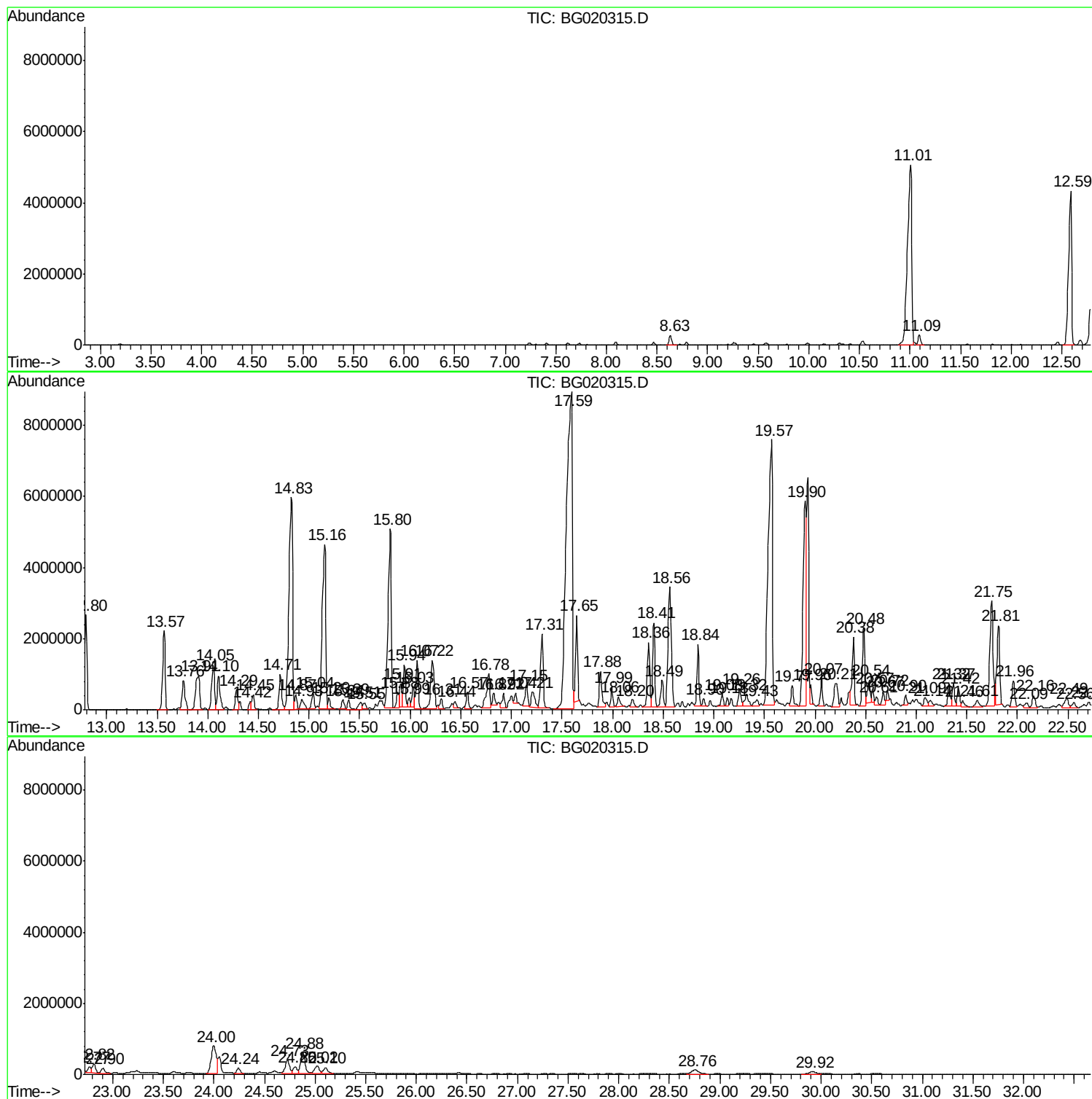
Sum of corrected areas: 251082321

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

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



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

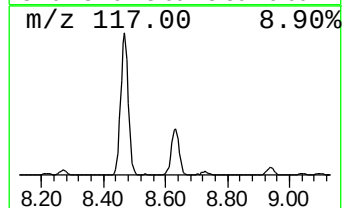
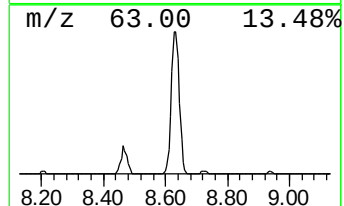
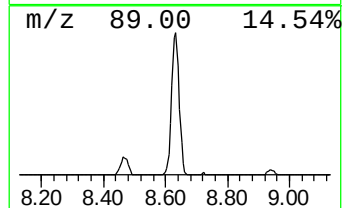
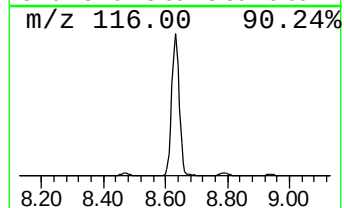
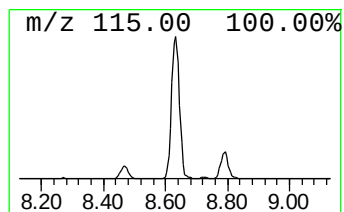
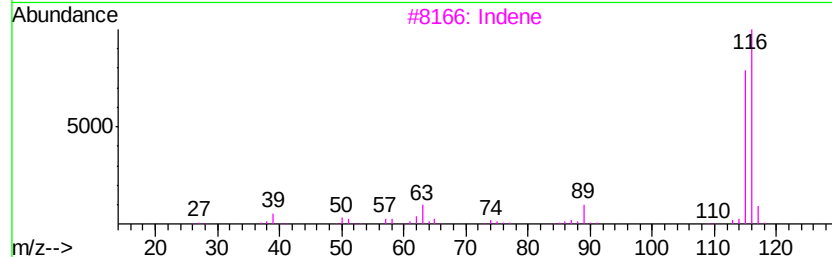
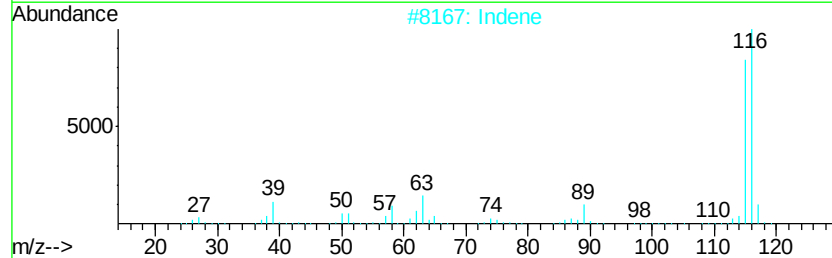
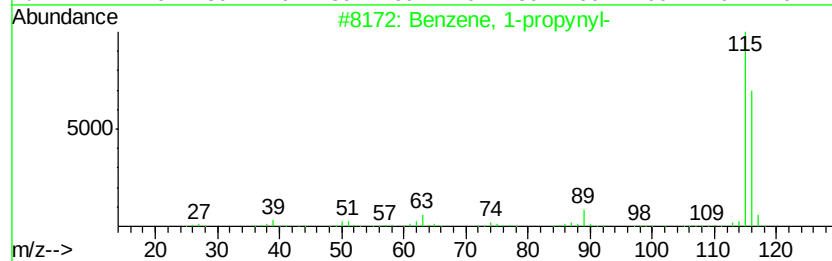
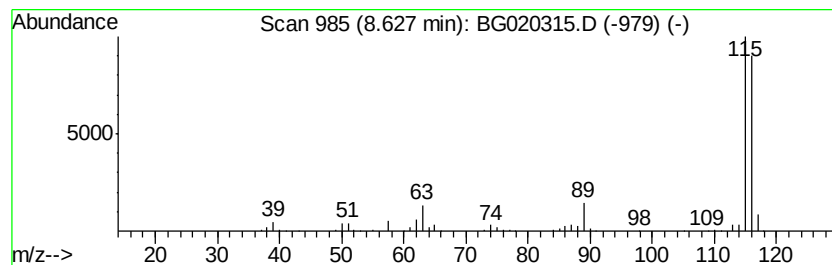
Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 1 Benzene, 1-propynyl- Concentration Rank 6

| R.T.      | EstConc              | Area   | Relative to ISTD       | R.T.        |      |
|-----------|----------------------|--------|------------------------|-------------|------|
| 8.63      | 20.00 ng/ul          | 456953 | 1,4-Dichlorobenzene-d4 | 8.09        |      |
| Hit# of 5 | Tentative ID         | MW     | MolForm                | CAS#        | Qual |
| 1         | Benzene, 1-propynyl- | 116    | C9H8                   | 000673-32-5 | 95   |
| 2         | Indene               | 116    | C9H8                   | 000095-13-6 | 95   |
| 3         | Indene               | 116    | C9H8                   | 000095-13-6 | 95   |
| 4         | Indene               | 116    | C9H8                   | 000095-13-6 | 95   |
| 5         | Benzene, 1-propynyl- | 116    | C9H8                   | 000673-32-5 | 91   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

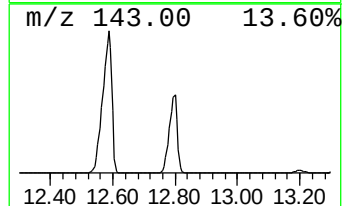
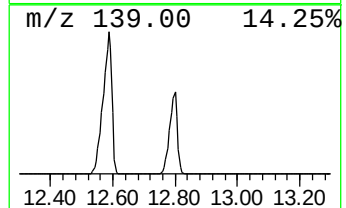
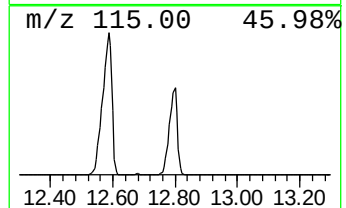
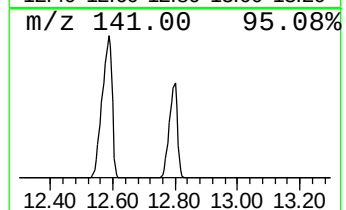
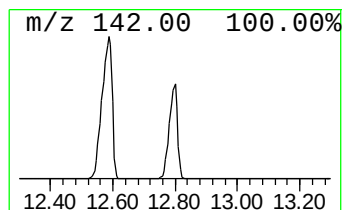
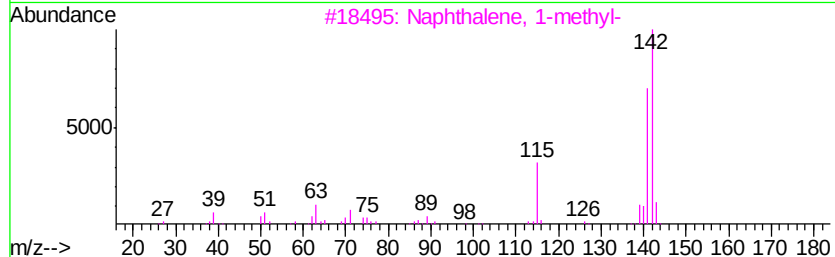
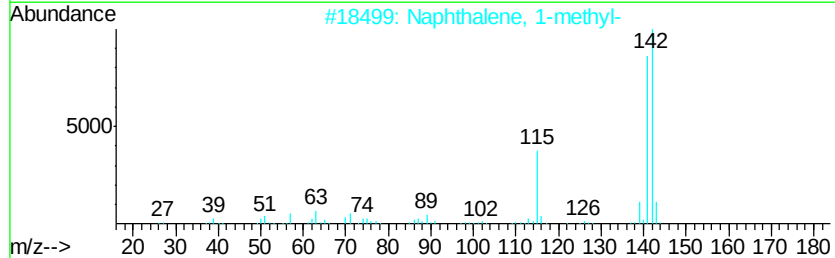
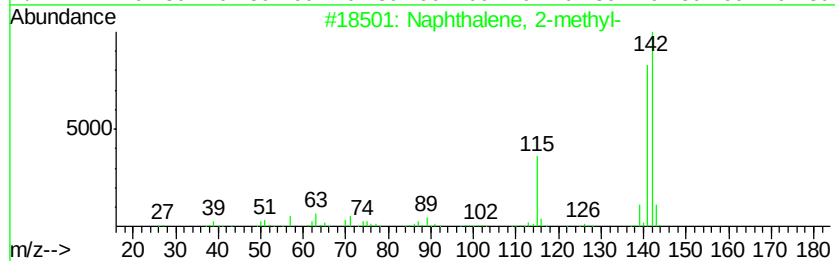
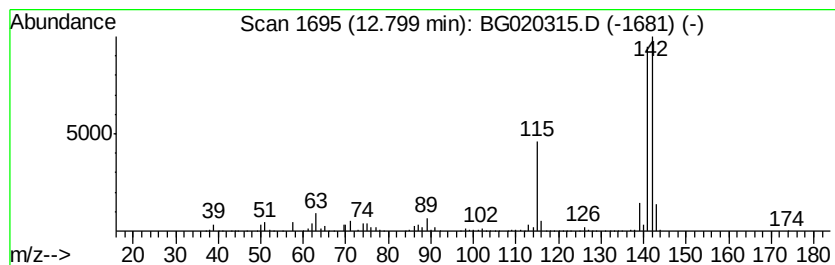
Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

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

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

| R.T.    | EstConc    | Area                                | Relative to ISTD | R.T.           |
|---------|------------|-------------------------------------|------------------|----------------|
| 12.80   | 6.63 ng/ul | 4949030                             | Naphthalene-d8   | 10.92          |
| Hit# of | 5          | Tentative ID                        | MW MolForm       | CAS# Qual      |
| 1       |            | Naphthalene, 2-methyl-              | 142 C11H10       | 000091-57-6 96 |
| 2       |            | Naphthalene, 1-methyl-              | 142 C11H10       | 000090-12-0 96 |
| 3       |            | Naphthalene, 1-methyl-              | 142 C11H10       | 000090-12-0 94 |
| 4       |            | Naphthalene, 1-methyl-              | 142 C11H10       | 000090-12-0 94 |
| 5       |            | 1,4-Methanonaphthalene, 1,4-dihy... | 142 C11H10       | 004453-90-1 94 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

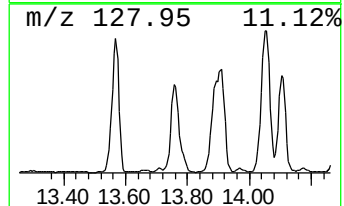
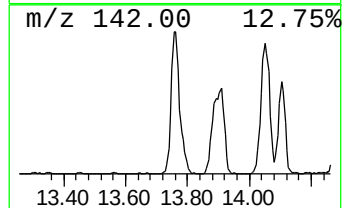
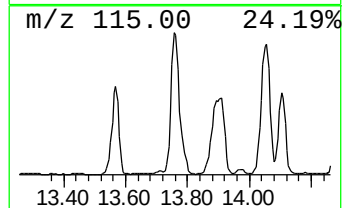
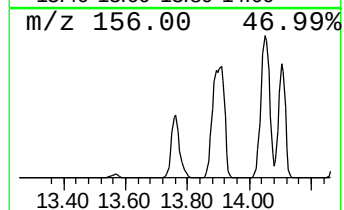
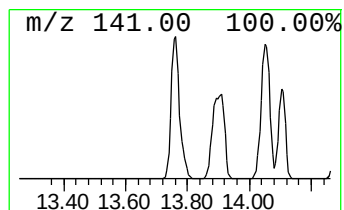
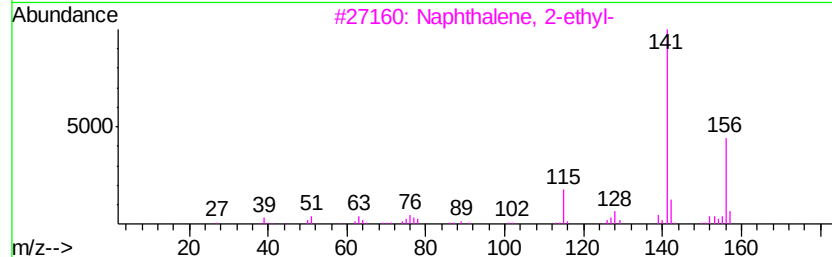
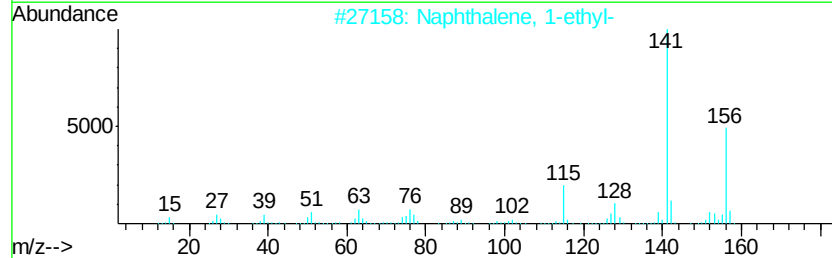
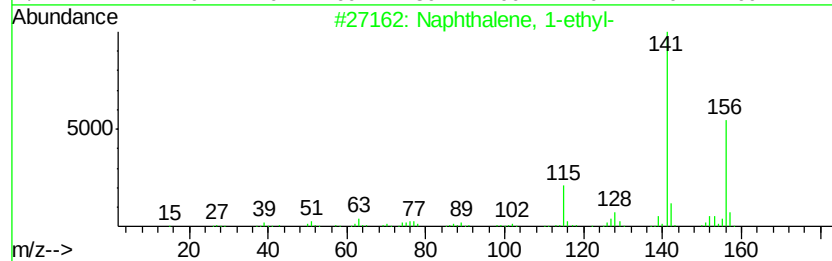
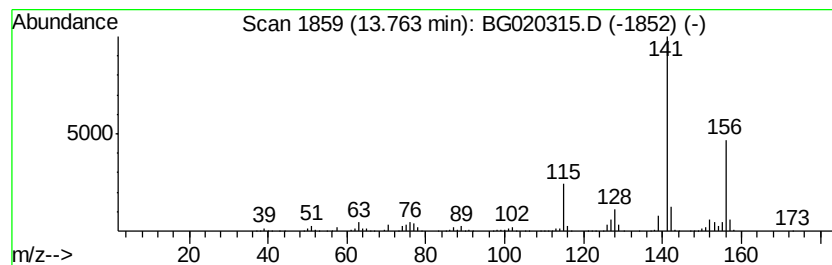
Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 3 Naphthalene, 1-ethyl- Concentration Rank 7

| R.T.    | EstConc     | Area                  | Relative to ISTD | R.T.           |
|---------|-------------|-----------------------|------------------|----------------|
| 13.76   | 18.82 ng/ul | 1636940               | Acenaphthene-d10 | 14.73          |
| Hit# of | 5           | Tentative ID          | MW MolForm       | CAS# Qual      |
| 1       |             | Naphthalene, 1-ethyl- | 156 C12H12       | 001127-76-0 97 |
| 2       |             | Naphthalene, 1-ethyl- | 156 C12H12       | 001127-76-0 94 |
| 3       |             | Naphthalene, 2-ethyl- | 156 C12H12       | 000939-27-5 93 |
| 4       |             | Naphthalene, 2-ethyl- | 156 C12H12       | 000939-27-5 93 |
| 5       |             | Naphthalene, 1-ethyl- | 156 C12H12       | 001127-76-0 91 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

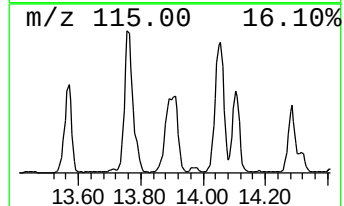
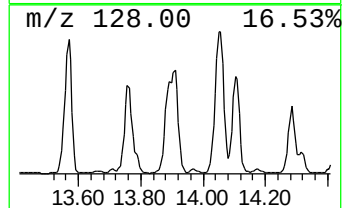
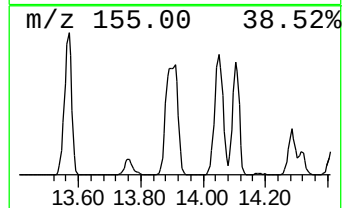
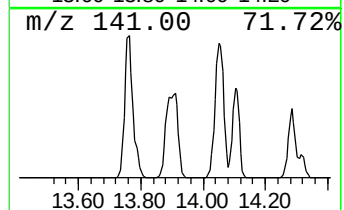
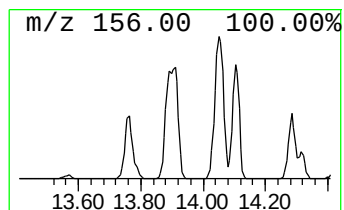
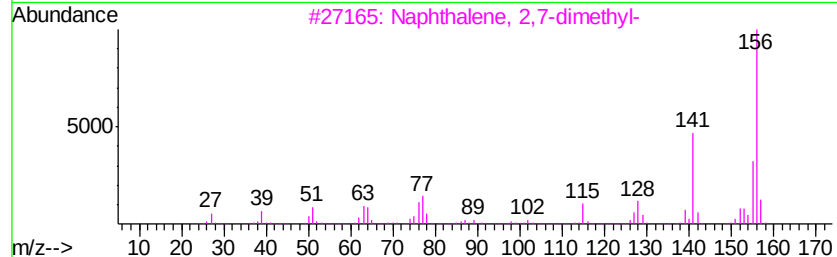
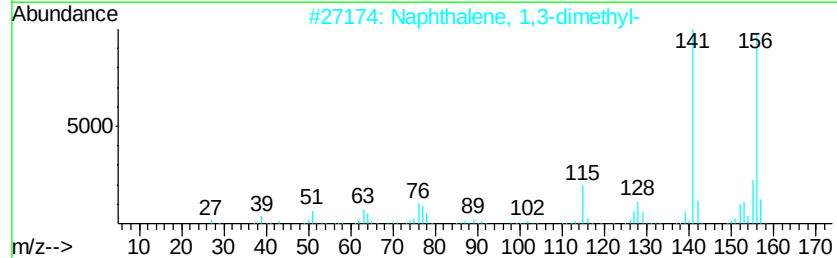
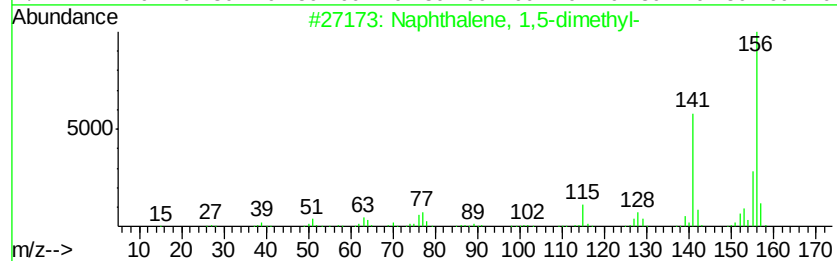
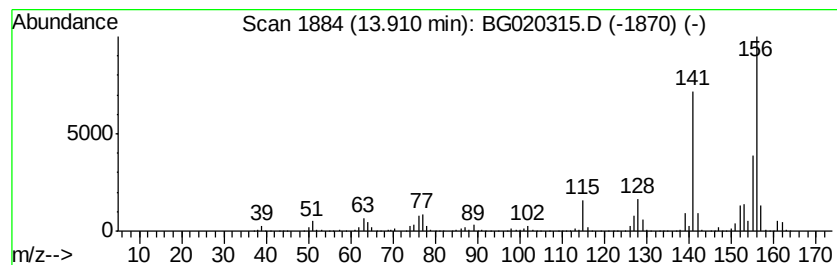
Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 4 Naphthalene, 1,5-dimethyl- Concentration Rank 2

| R.T.    | EstConc     | Area                       | Relative to ISTD | R.T.           |
|---------|-------------|----------------------------|------------------|----------------|
| 13.91   | 29.68 ng/ul | 2581950                    | Acenaphthene-d10 | 14.73          |
| Hit# of | 5           | Tentative ID               | MW MolForm       | CAS# Qual      |
| 1       |             | Naphthalene, 1,5-dimethyl- | 156 C12H12       | 000571-61-9 96 |
| 2       |             | Naphthalene, 1,3-dimethyl- | 156 C12H12       | 000575-41-7 96 |
| 3       |             | Naphthalene, 2,7-dimethyl- | 156 C12H12       | 000582-16-1 96 |
| 4       |             | Naphthalene, 2,6-dimethyl- | 156 C12H12       | 000581-42-0 96 |
| 5       |             | Naphthalene, 1,6-dimethyl- | 156 C12H12       | 000575-43-9 96 |





Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

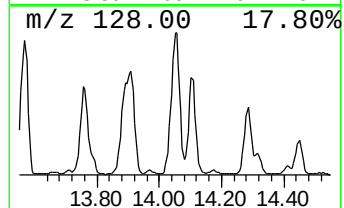
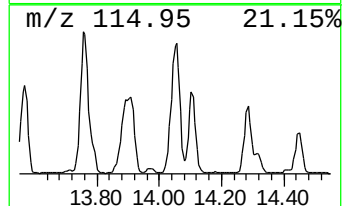
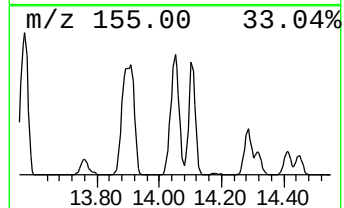
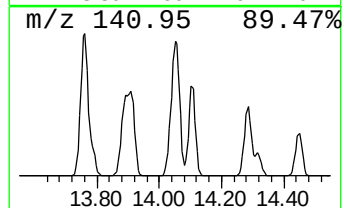
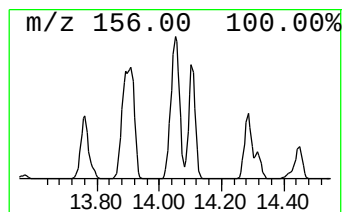
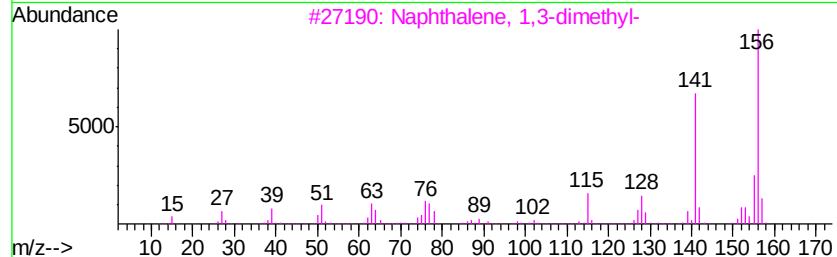
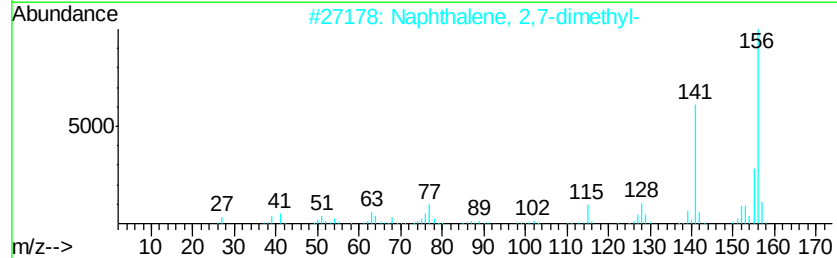
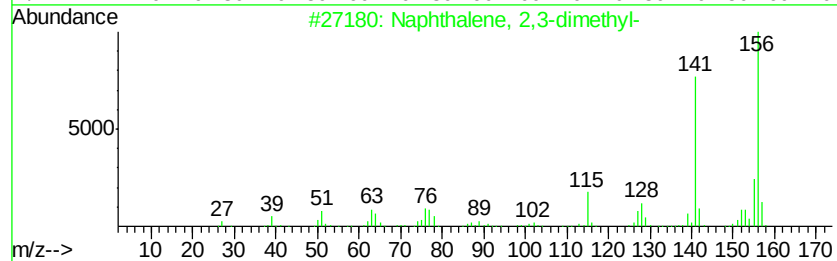
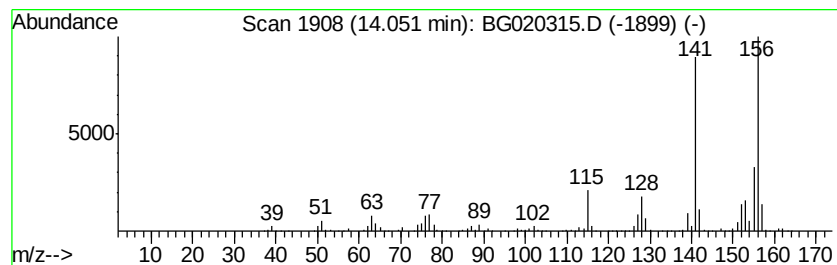
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 5 Naphthalene, 2,3-dimethyl- Concentration Rank 3

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 14.05 | 28.31 ng/ul | 2462230 | Acenaphthene-d10 | 14.73 |

| Hit# | of | Tentative ID               | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, 2,3-dimethyl- | 156 | C12H12  | 000581-40-8 | 97   |
| 2    |    | Naphthalene, 2,7-dimethyl- | 156 | C12H12  | 000582-16-1 | 97   |
| 3    |    | Naphthalene, 1,3-dimethyl- | 156 | C12H12  | 000575-41-7 | 97   |
| 4    |    | Naphthalene, 1,7-dimethyl- | 156 | C12H12  | 000575-37-1 | 97   |
| 5    |    | Naphthalene, 2,3-dimethyl- | 156 | C12H12  | 000581-40-8 | 97   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

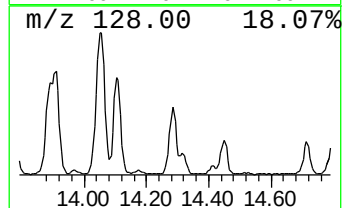
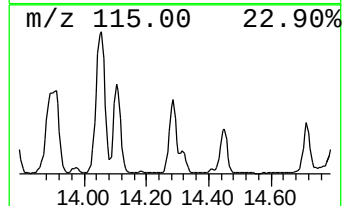
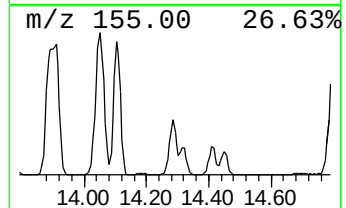
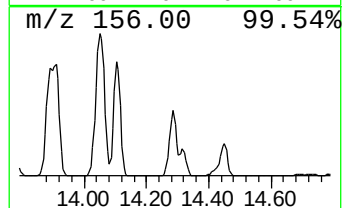
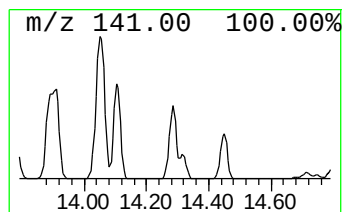
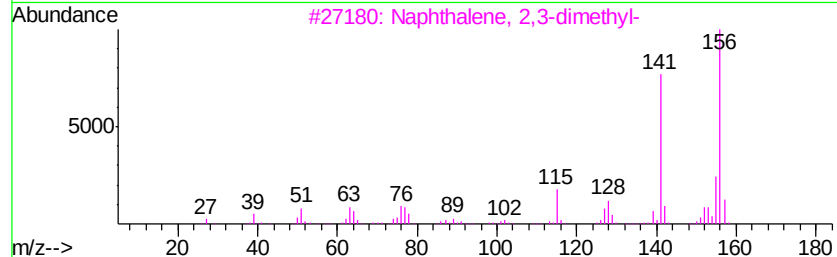
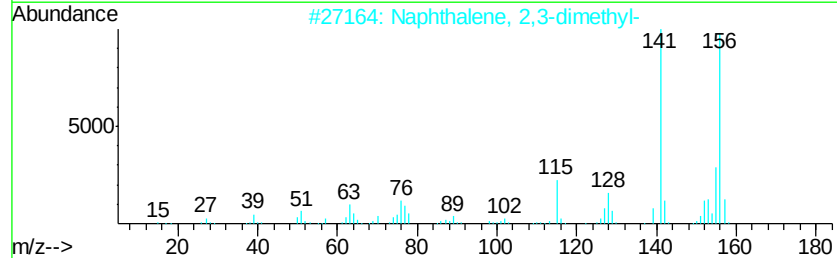
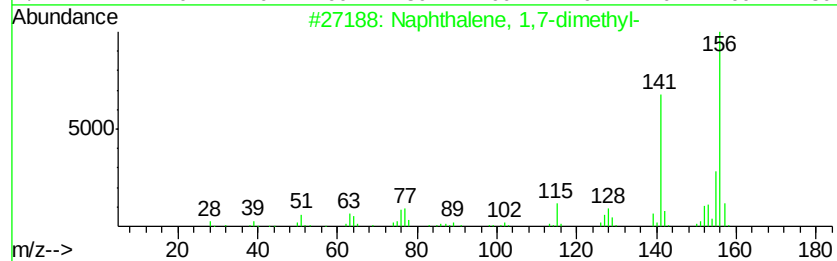
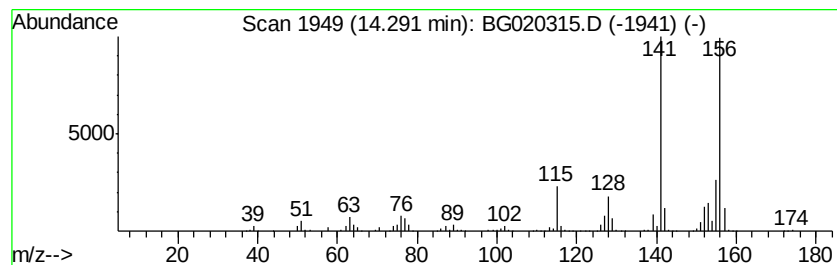
Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 6 Naphthalene, 1,7-dimethyl- Concentration Rank 11

| R.T.    | EstConc     | Area                       | Relative to ISTD | R.T.           |
|---------|-------------|----------------------------|------------------|----------------|
| 14.29   | 10.31 ng/ul | 896421                     | Acenaphthene-d10 | 14.73          |
| Hit# of | 5           | Tentative ID               | MW MolForm       | CAS# Qual      |
| 1       |             | Naphthalene, 1,7-dimethyl- | 156 C12H12       | 000575-37-1 97 |
| 2       |             | Naphthalene, 2,3-dimethyl- | 156 C12H12       | 000581-40-8 97 |
| 3       |             | Naphthalene, 2,3-dimethyl- | 156 C12H12       | 000581-40-8 97 |
| 4       |             | Naphthalene, 2,3-dimethyl- | 156 C12H12       | 000581-40-8 97 |
| 5       |             | Naphthalene, 1,3-dimethyl- | 156 C12H12       | 000575-41-7 97 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

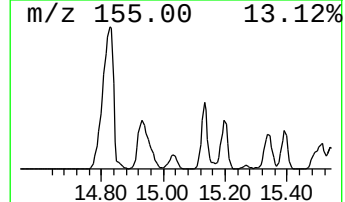
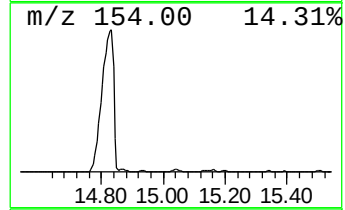
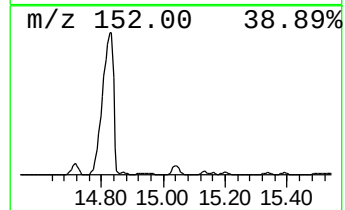
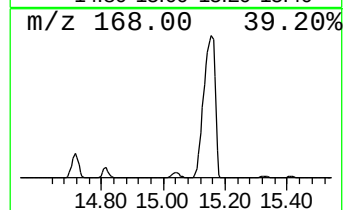
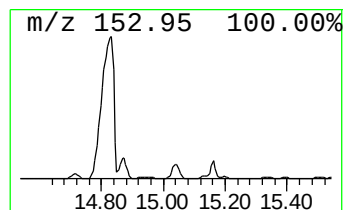
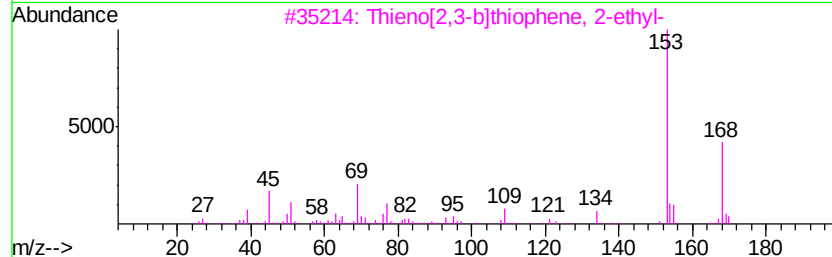
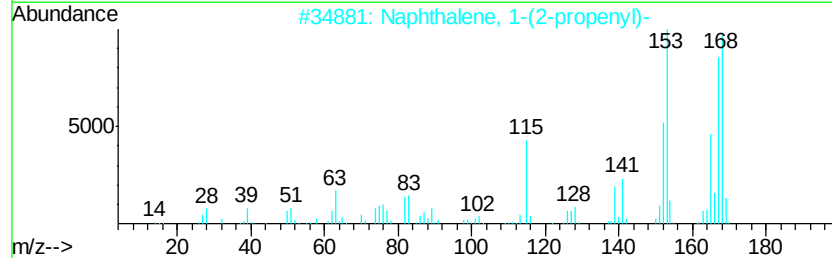
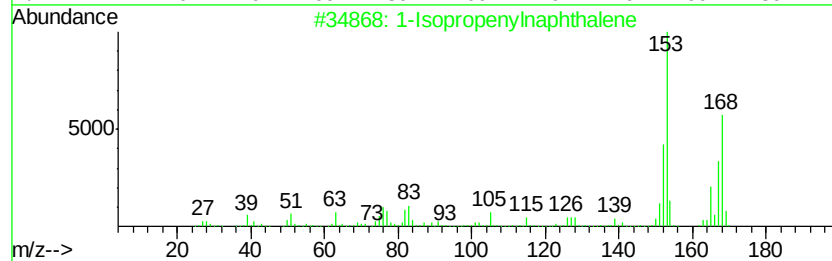
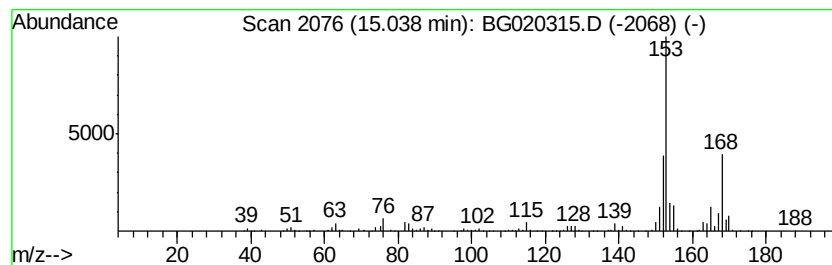
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 7 1-Isopropenylnaphthalene Concentration Rank 16

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 15.04 | 8.90 ng/ul | 774496 | Acenaphthene-d10 | 14.73 |

| Hit# of | 5                                      | Tentative ID | MW  | MolForm | CAS#        | Qual |
|---------|----------------------------------------|--------------|-----|---------|-------------|------|
| 1       | 1-Isopropenyl                          | naphthalene  | 168 | C13H12  | 001855-47-6 | 83   |
| 2       | Naphthalene, 1-(2-propenyl)-           |              | 168 | C13H12  | 002489-86-3 | 72   |
| 3       | Thieno[2,3-b]thiophene, 2-ethyl-       |              | 168 | C8H8S2  | 005912-01-6 | 50   |
| 4       | Ethanone, 1-(2,4,6-trihydroxyphenoxy)- |              | 168 | C8H8O4  | 000480-66-0 | 47   |
| 5       | Acetophenone, 3'-fluoro-4'-methoxy-    |              | 168 | C9H9FO2 | 000455-91-4 | 47   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

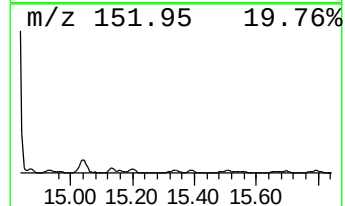
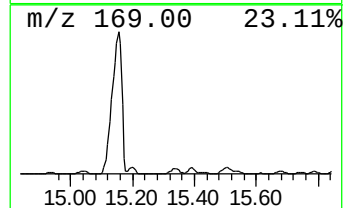
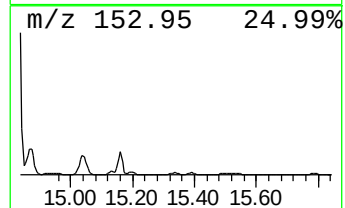
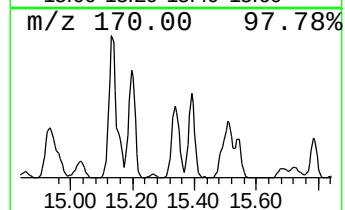
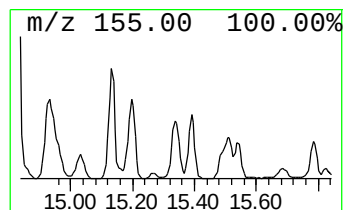
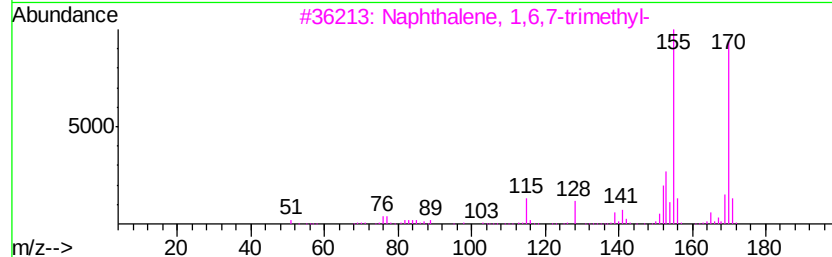
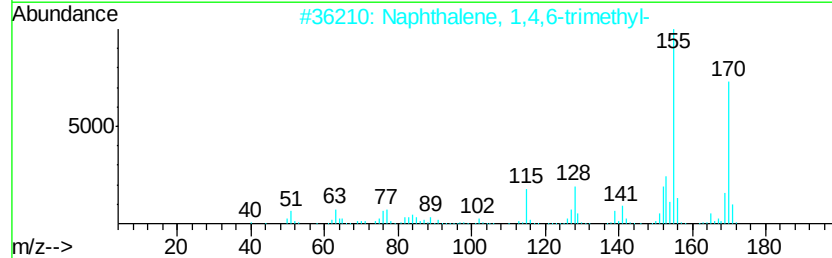
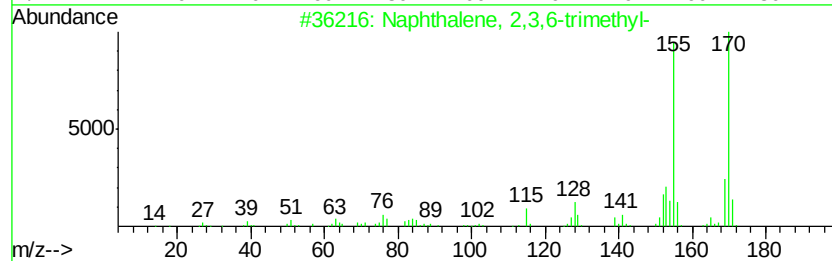
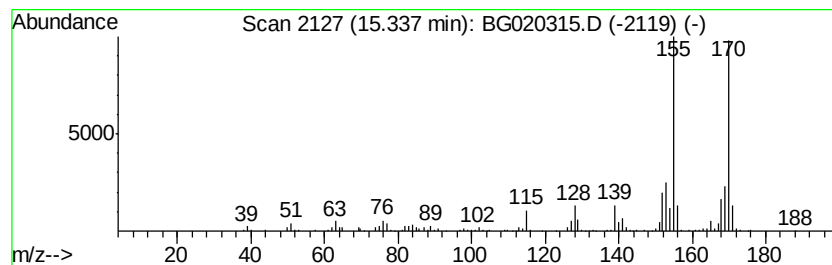
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 8 Naphthalene, 2,3,6-trimethyl- Concentration Rank 18

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 15.34 | 5.53 ng/ul | 480633 | Acenaphthene-d10 | 14.73 |

| Hit# | of | Tentative ID                  | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14  | 000829-26-5 | 98   |
| 2    |    | Naphthalene, 1,4,6-trimethyl- | 170 | C13H14  | 002131-42-2 | 97   |
| 3    |    | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14  | 002245-38-7 | 96   |
| 4    |    | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14  | 002245-38-7 | 96   |
| 5    |    | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14  | 000829-26-5 | 95   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

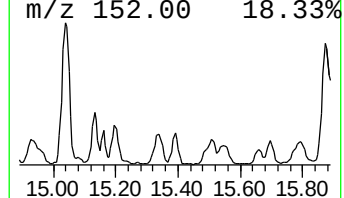
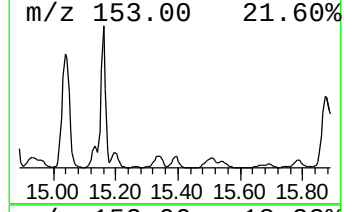
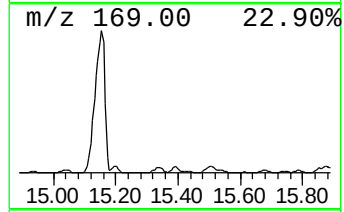
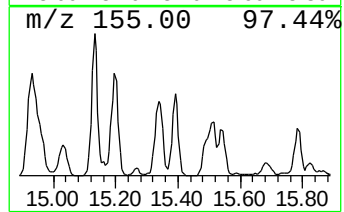
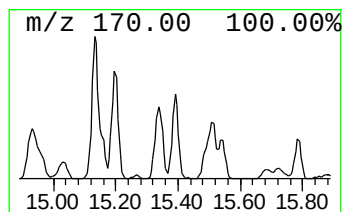
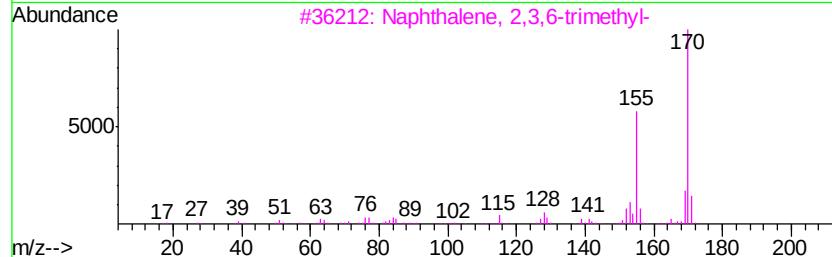
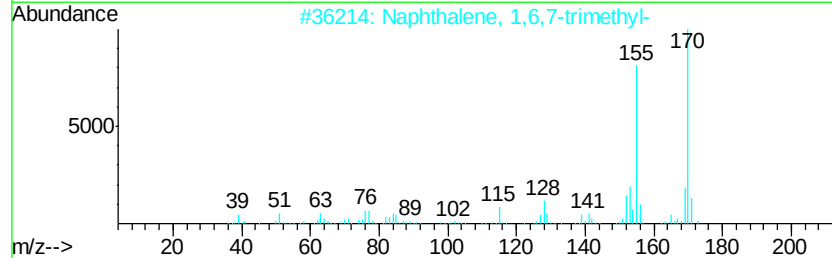
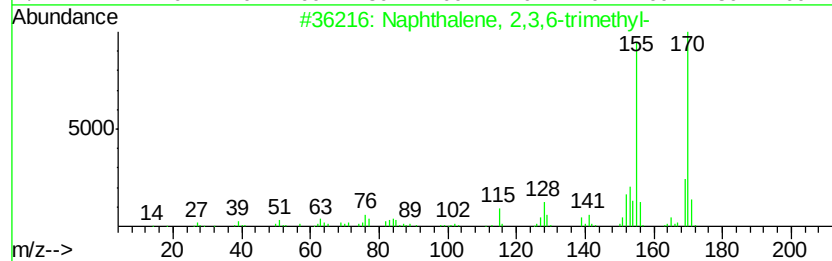
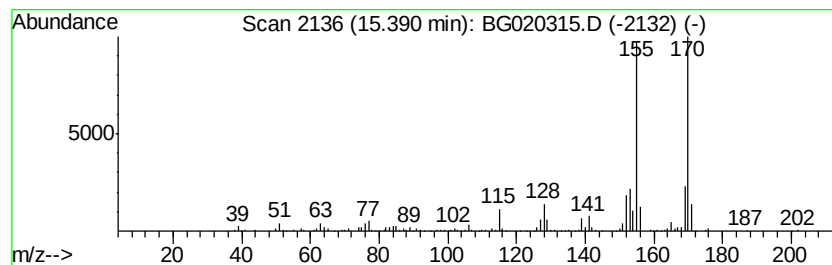
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 9 Naphthalene, 1,6,7-trimethyl- Concentration Rank 21

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 15.39 | 5.09 ng/ul | 442498 | Acenaphthene-d10 | 14.73 |

| Hit# | of | Tentative ID                  | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14  | 000829-26-5 | 98   |
| 2    |    | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14  | 002245-38-7 | 97   |
| 3    |    | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14  | 000829-26-5 | 96   |
| 4    |    | Naphthalene, 1,4,6-trimethyl- | 170 | C13H14  | 002131-42-2 | 96   |
| 5    |    | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14  | 000829-26-5 | 96   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

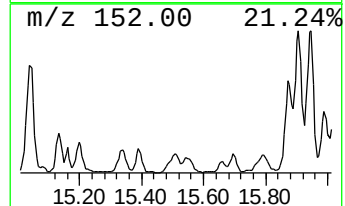
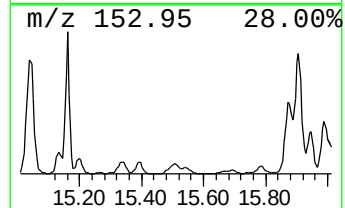
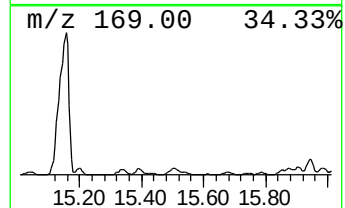
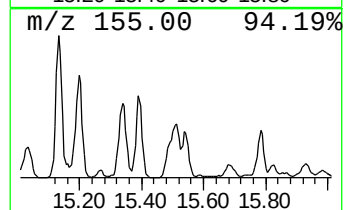
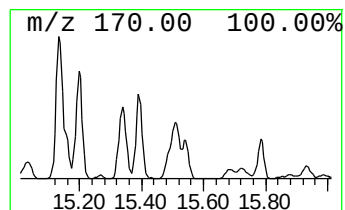
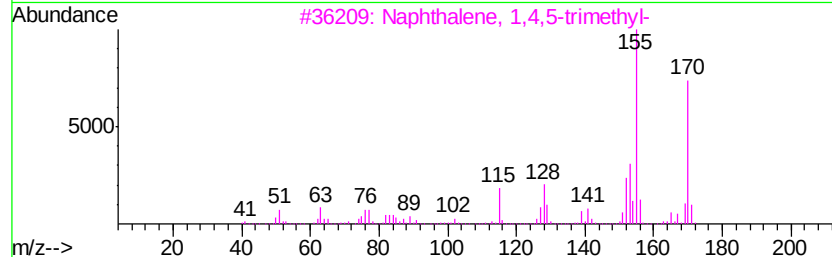
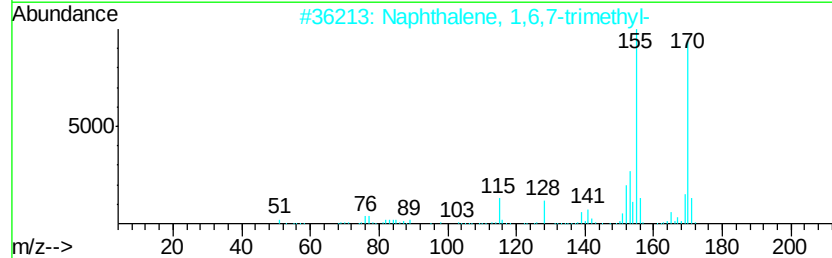
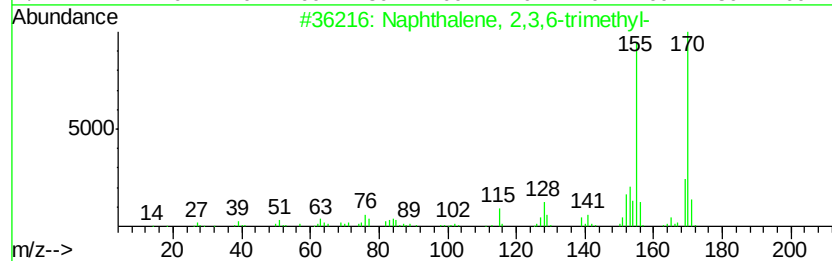
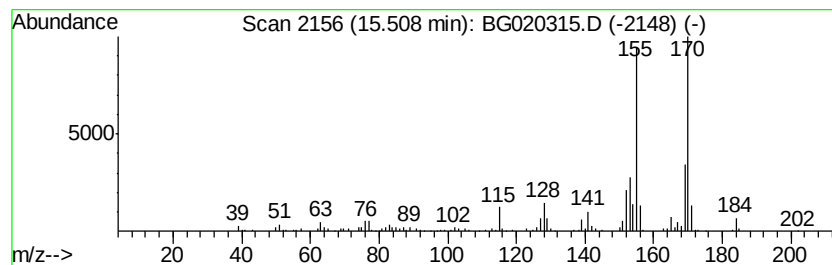
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 10 Naphthalene, 1,4,5-trimethyl- Concentration Rank 20

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 15.51 | 5.24 ng/ul | 455794 | Acenaphthene-d10 | 14.73 |

| Hit# | of | 5 | Tentative ID                  | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------|-----|---------|-------------|------|
| 1    |    |   | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14  | 000829-26-5 | 98   |
| 2    |    |   | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14  | 002245-38-7 | 98   |
| 3    |    |   | Naphthalene, 1,4,5-trimethyl- | 170 | C13H14  | 002131-41-1 | 96   |
| 4    |    |   | Naphthalene, 1,4,6-trimethyl- | 170 | C13H14  | 002131-42-2 | 95   |
| 5    |    |   | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14  | 002245-38-7 | 95   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

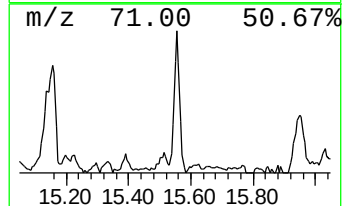
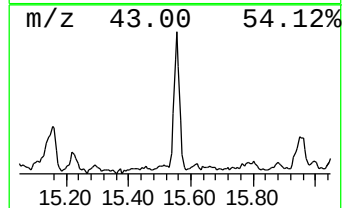
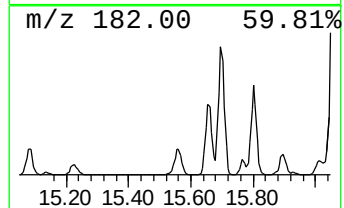
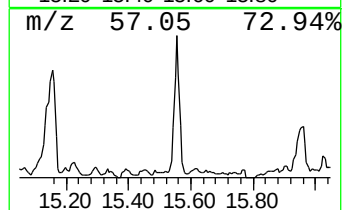
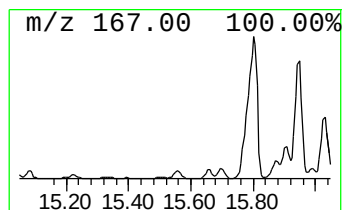
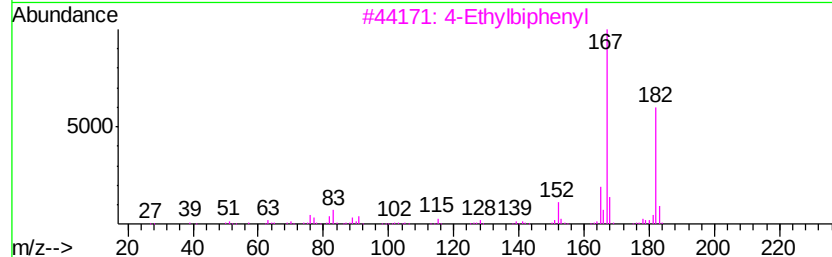
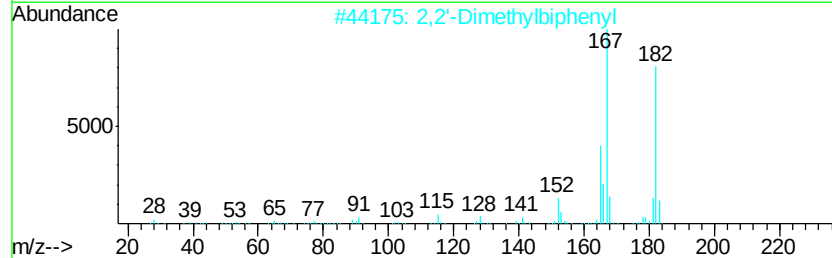
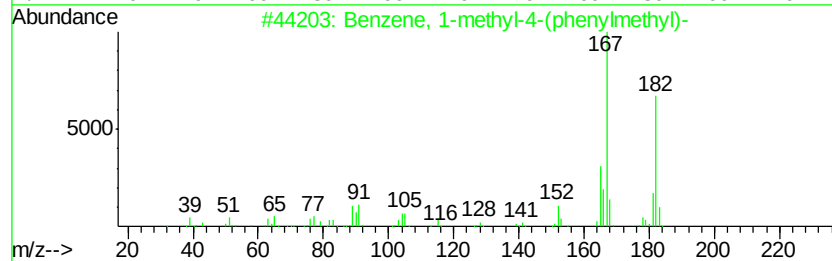
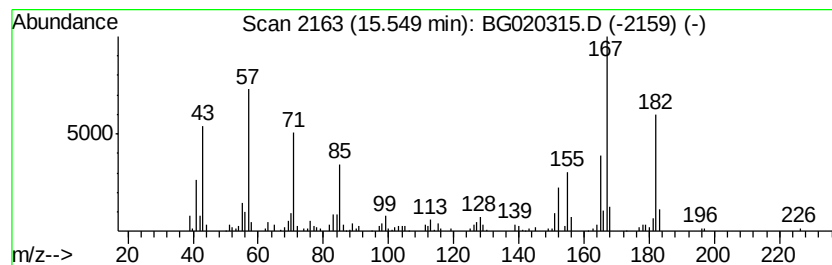
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 11 Benzene, 1-methyl-4-(phenyl... Concentration Rank 26

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 15.55 | 3.48 ng/ul | 303095 | Acenaphthene-d10 | 14.73 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Benzene, 1-methyl-4-(phenylmethyl)- | 182 | C14H14  | 000620-83-7 | 64   |
| 2    |    |   | 2,2'-Dimethylbiphenyl               | 182 | C14H14  | 000605-39-0 | 58   |
| 3    |    |   | 4-Ethylbiphenyl                     | 182 | C14H14  | 005707-44-8 | 55   |
| 4    |    |   | Benzene, 1-methyl-3-(phenylmethyl)- | 182 | C14H14  | 000620-47-3 | 52   |
| 5    |    |   | 1,1'-Biphenyl, 2,3'-dimethyl-       | 182 | C14H14  | 000611-43-8 | 52   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

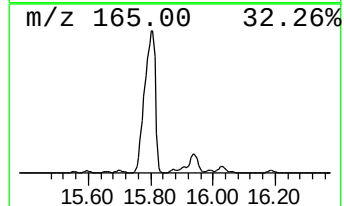
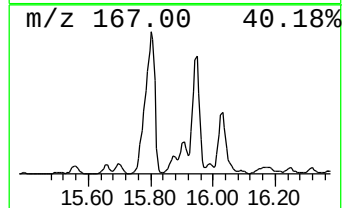
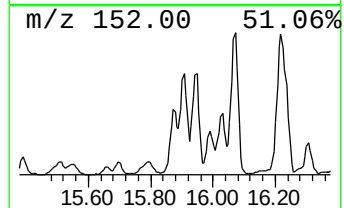
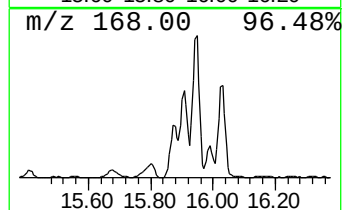
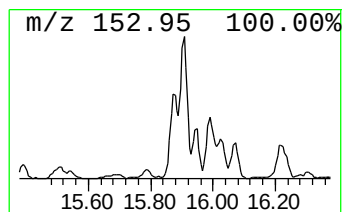
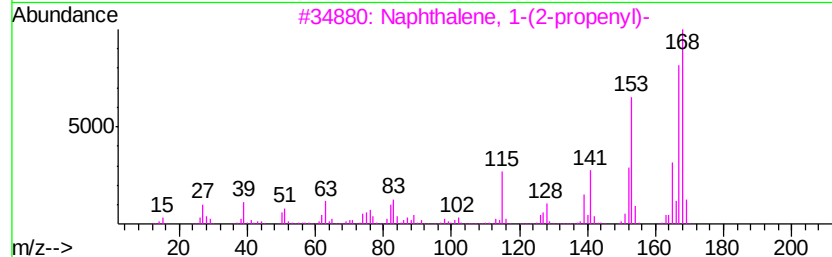
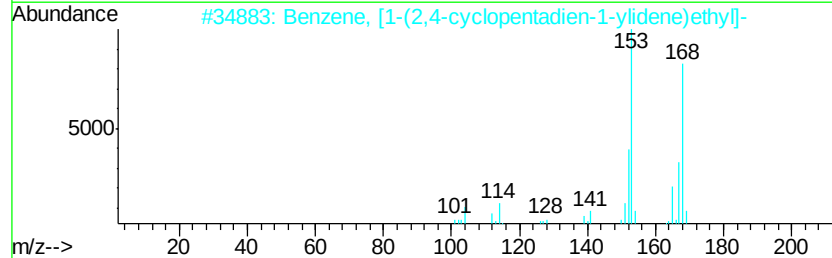
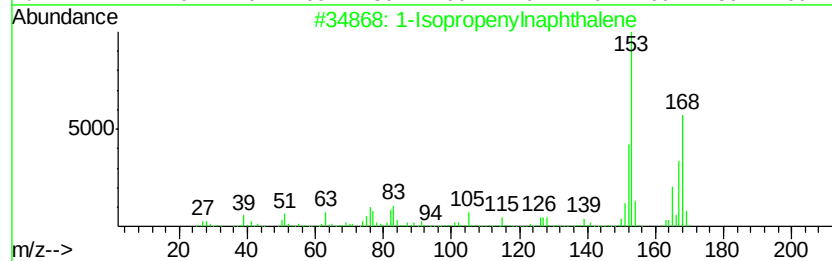
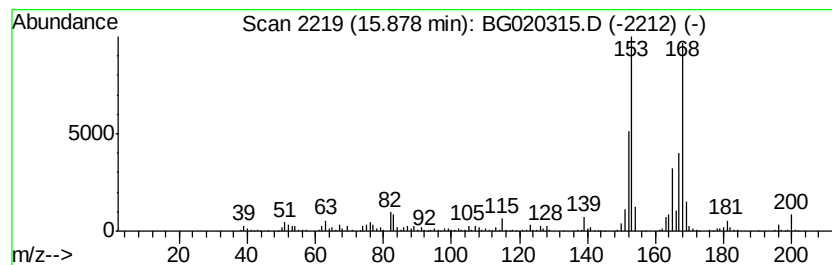
Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 12 1-Isopropenylnaphthalene Concentration Rank 14

| R.T.    | EstConc    | Area                                | Relative to ISTD | R.T.           |
|---------|------------|-------------------------------------|------------------|----------------|
| 15.88   | 9.27 ng/ul | 806625                              | Acenaphthene-d10 | 14.73          |
| Hit# of | 5          | Tentative ID                        | MW MolForm       | CAS# Qual      |
| 1       |            | 1-Isopropenylnaphthalene            | 168 C13H12       | 001855-47-6 87 |
| 2       |            | Benzene, [1-(2,4-cyclopentadien-... | 168 C13H12       | 002320-32-3 87 |
| 3       |            | Naphthalene, 1-(2-propenyl)-        | 168 C13H12       | 002489-86-3 64 |
| 4       |            | Naphthalene, 1-(2-propenyl)-        | 168 C13H12       | 002489-86-3 64 |
| 5       |            | 3-Hydroxy-4-methoxybenzoic acid     | 168 C8H8O4       | 000645-08-9 49 |





Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

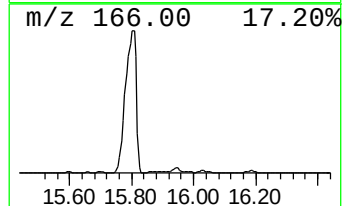
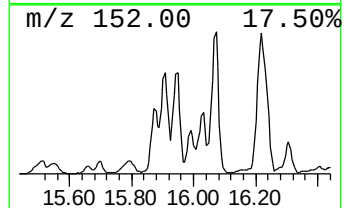
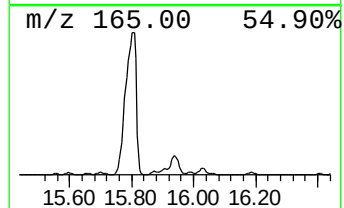
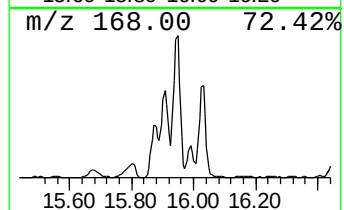
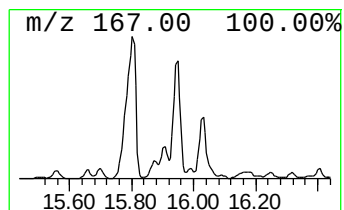
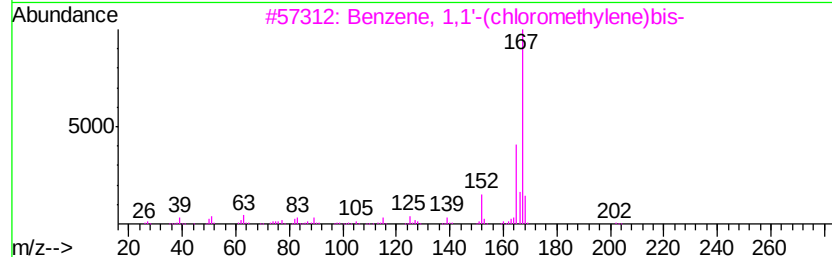
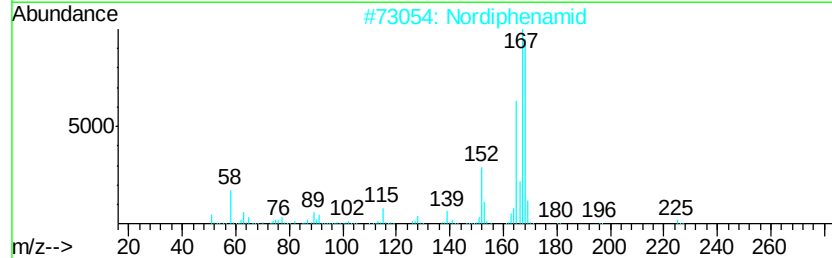
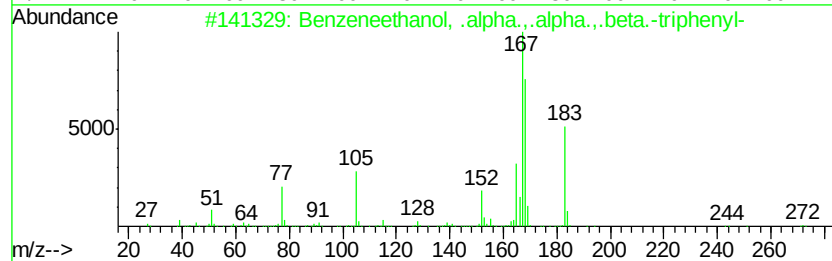
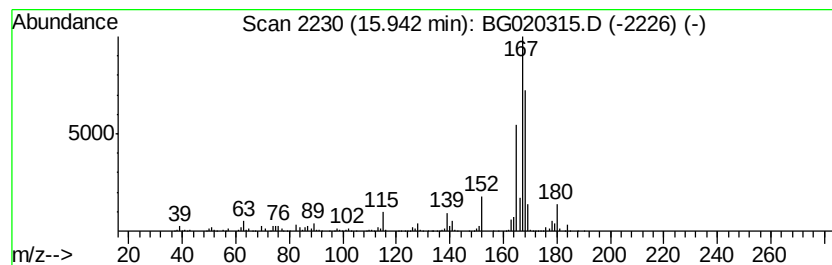
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 14 Benzeneethanol, .alpha.,.al... Concentration Rank 5

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 15.94 | 21.97 ng/ul | 1911480 | Acenaphthene-d10 | 14.73 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Benzeneethanol, .alpha.,.alpha.,... | 350 | C26H22O  | 000981-24-8 | 64   |
| 2    |    | Nordiphenamid                       | 225 | C15H15NO | 000954-21-2 | 58   |
| 3    |    | Benzene, 1,1'-(chloromethylene)bis- | 202 | C13H11Cl | 000090-99-3 | 53   |
| 4    |    | Fluorene, 2,4a-dihydro-             | 168 | C13H12   | 059247-36-8 | 52   |
| 5    |    | 1,1'-Biphenyl, 2-methyl-            | 168 | C13H12   | 000643-58-3 | 50   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

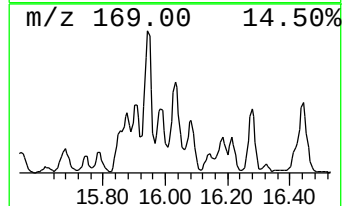
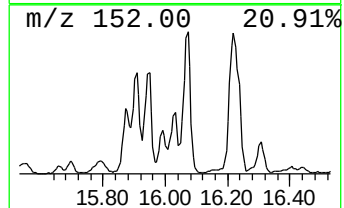
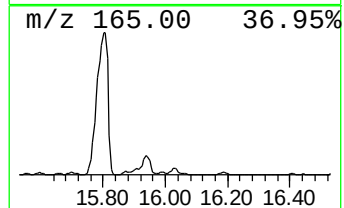
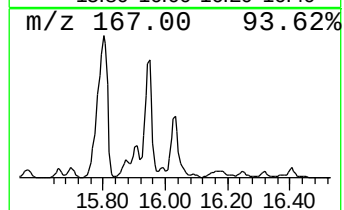
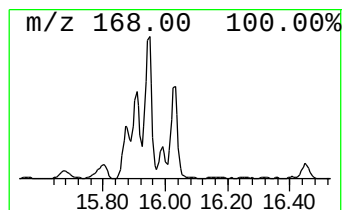
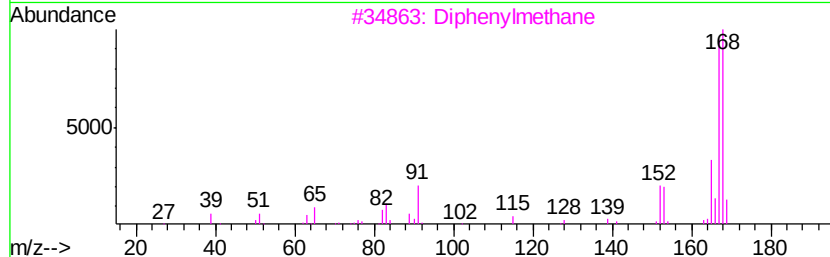
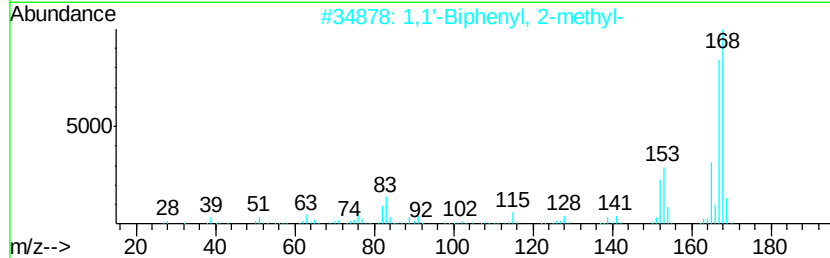
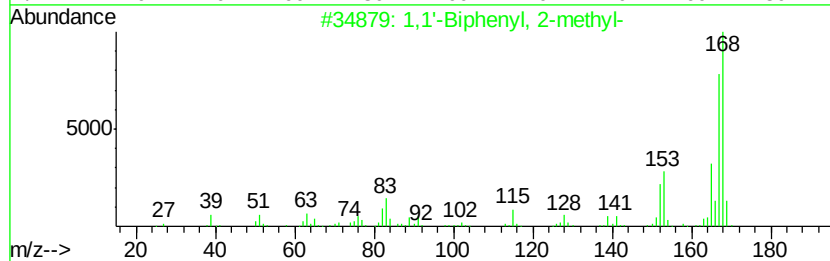
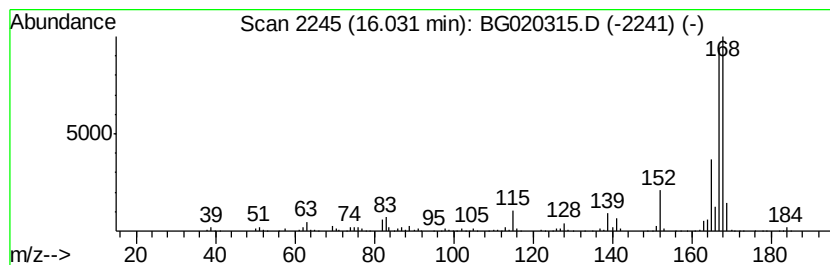
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 16 1,1'-Biphenyl, 2-methyl- Concentration Rank 13

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 16.03 | 9.47 ng/ul | 823896 | Acenaphthene-d10 | 14.73 |

| Hit# | of | Tentative ID             | MW  | MolForm  | CAS#        | Qual |
|------|----|--------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2-methyl- | 168 | C13H12   | 000643-58-3 | 90   |
| 2    |    | 1,1'-Biphenyl, 2-methyl- | 168 | C13H12   | 000643-58-3 | 87   |
| 3    |    | Diphenylmethane          | 168 | C13H12   | 000101-81-5 | 83   |
| 4    |    | Nordiphenamid            | 225 | C15H15NO | 000954-21-2 | 83   |
| 5    |    | 1,1'-Biphenyl, 2-methyl- | 168 | C13H12   | 000643-58-3 | 83   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

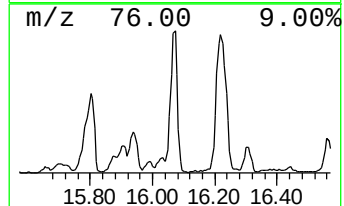
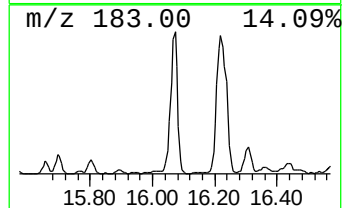
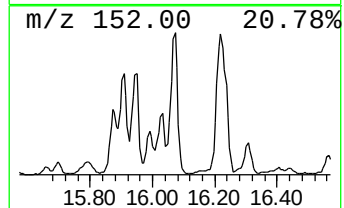
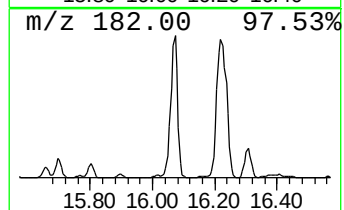
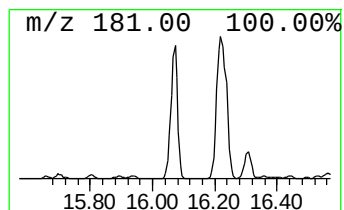
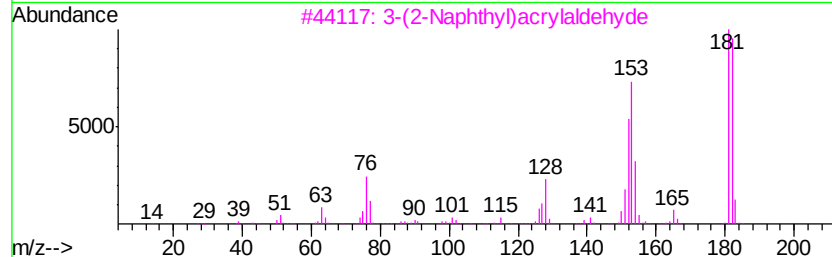
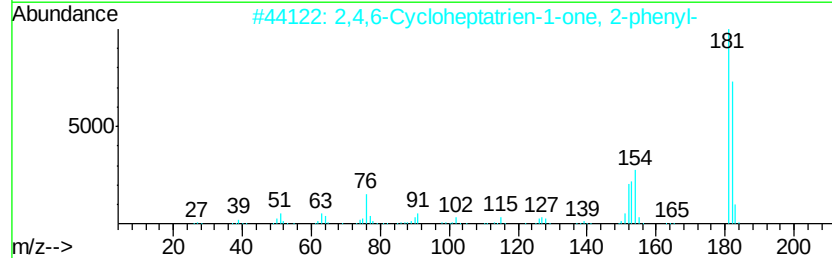
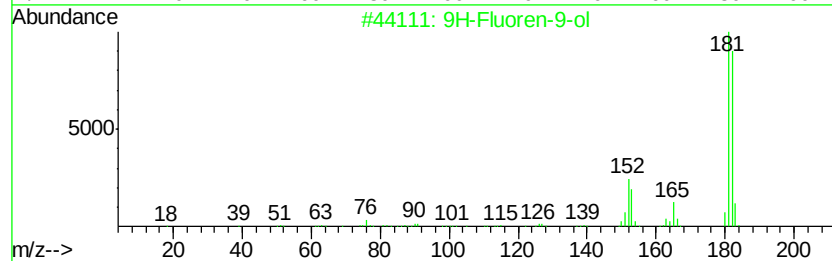
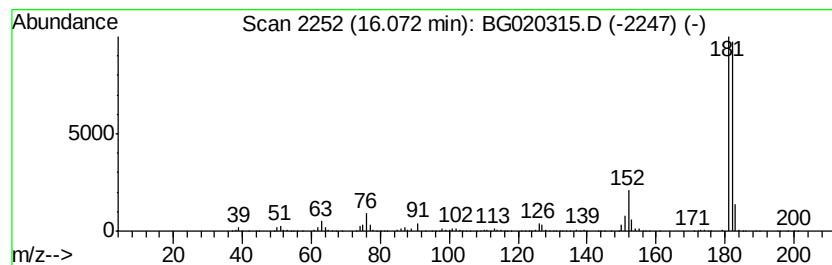
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 17 9H-Fluoren-9-ol Concentration Rank 4

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 16.07 | 25.26 ng/ul | 2197250 | Acenaphthene-d10 | 14.73 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 9H-Fluoren-9-ol                     | 182 | C13H10O | 001689-64-1 | 86   |
| 2    |    | 2,4,6-Cycloheptatrien-1-one, 2-p... | 182 | C13H10O | 014562-09-5 | 83   |
| 3    |    | 3-(2-Naphthyl)acrylaldehyde         | 182 | C13H10O | 020884-05-3 | 72   |
| 4    |    | Dibenzofuran, 4-methyl-             | 182 | C13H10O | 007320-53-8 | 64   |
| 5    |    | [1,1'-Biphenyl]-4-carboxaldehyde    | 182 | C13H10O | 003218-36-8 | 64   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

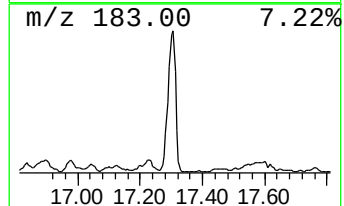
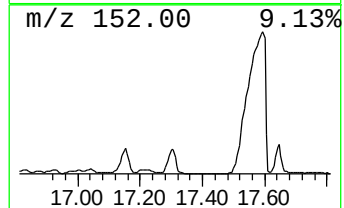
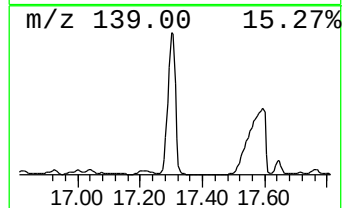
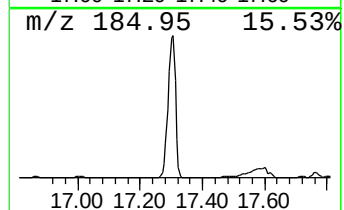
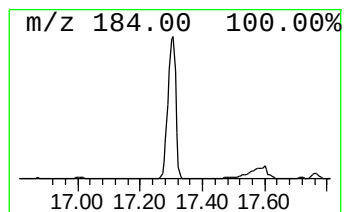
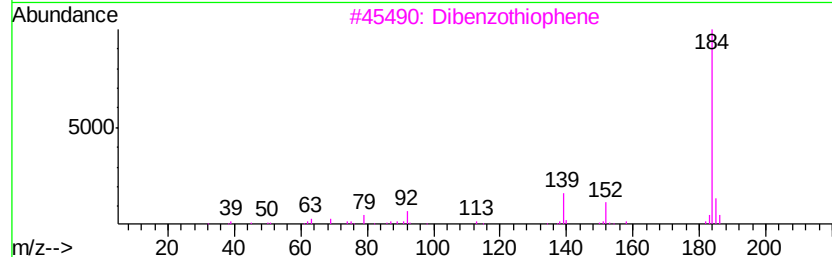
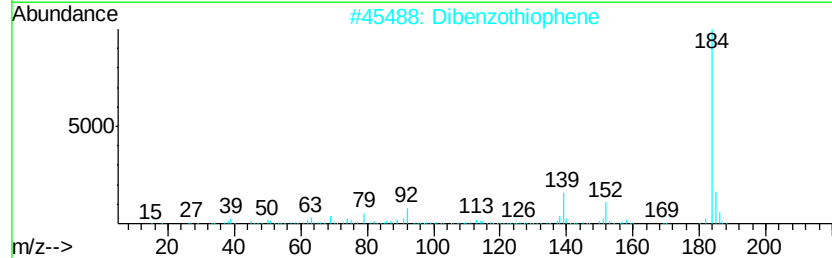
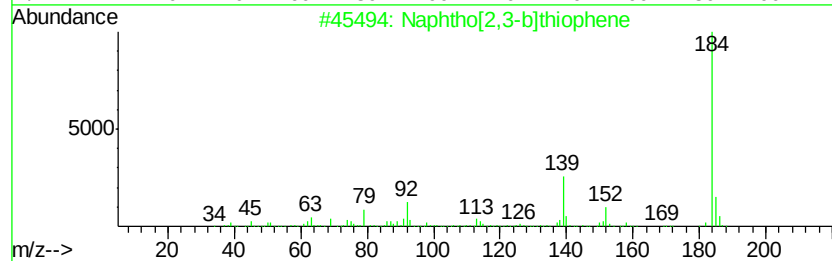
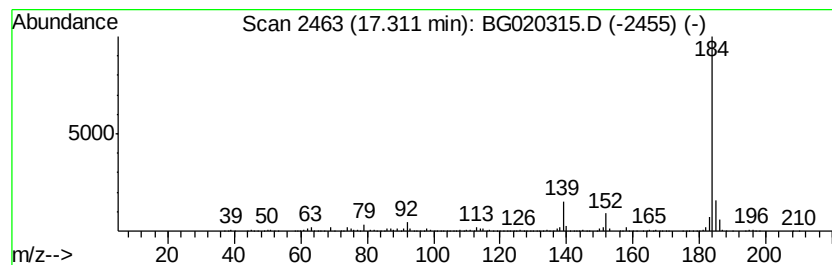
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 18 Naphtho[2,3-b]thiophene Concentration Rank 34

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 17.31 | 2.01 ng/ul | 3666190 | Phenanthrene-d10 | 17.49 |

| Hit# | of | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphtho[2,3-b]thiophene | 184 | C12H8S  | 000268-77-9 | 97   |
| 2    |    | Dibenzothiophene        | 184 | C12H8S  | 000132-65-0 | 95   |
| 3    |    | Dibenzothiophene        | 184 | C12H8S  | 000132-65-0 | 94   |
| 4    |    | Dibenzothiophene        | 184 | C12H8S  | 000132-65-0 | 94   |
| 5    |    | Dibenzothiophene        | 184 | C12H8S  | 000132-65-0 | 94   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

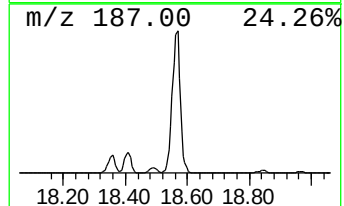
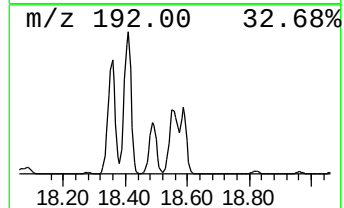
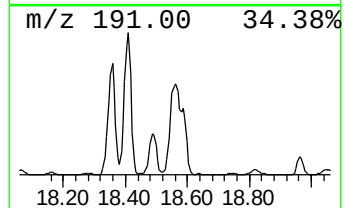
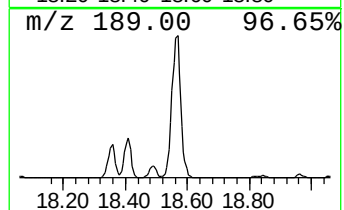
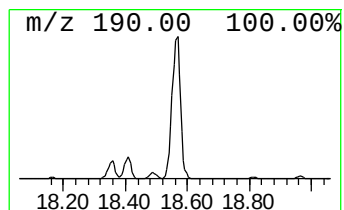
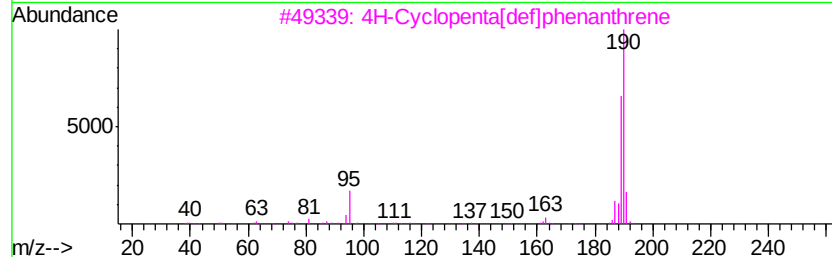
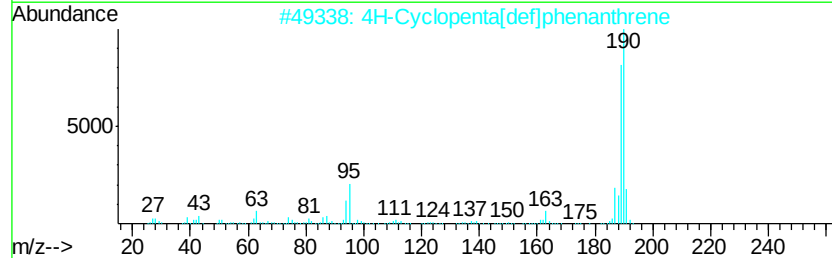
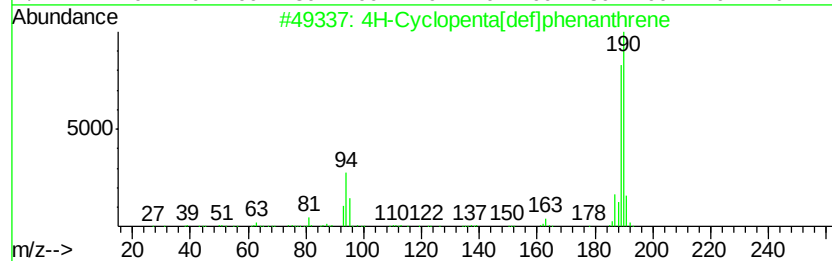
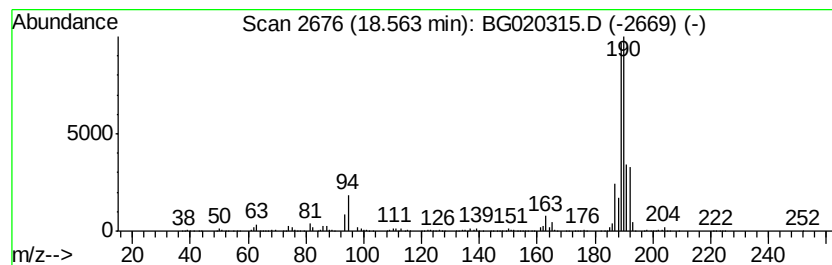
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 19 4H-Cyclopenta[def]phenanthrene Concentration Rank 23

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 18.56 | 4.18 ng/ul | 7624650 | Phenanthrene-d10 | 17.49 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#        | Qual |
|------|----|-------------------------------------|-----|------------|-------------|------|
| 1    | 5  | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10     | 000203-64-5 | 83   |
| 2    |    | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10     | 000203-64-5 | 76   |
| 3    |    | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10     | 000203-64-5 | 64   |
| 4    |    | Thiophene-3-carboxaldehyde, 5-ch... | 190 | C5H4BClO3S | 036155-87-0 | 64   |
| 5    |    | 2,3,5,6-Tetramethylterephthalald... | 190 | C12H14O2   | 007072-01-7 | 50   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

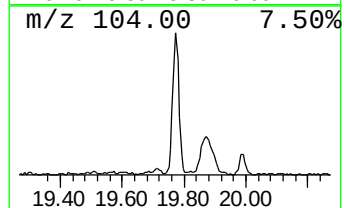
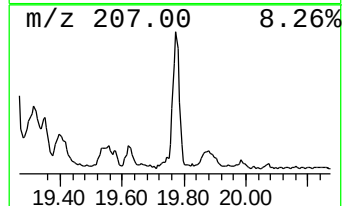
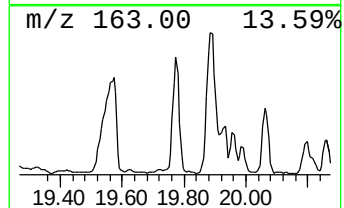
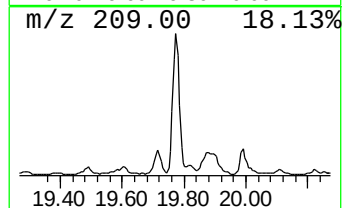
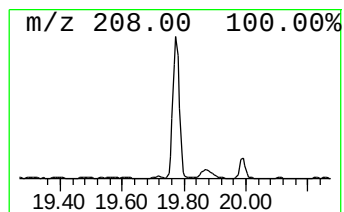
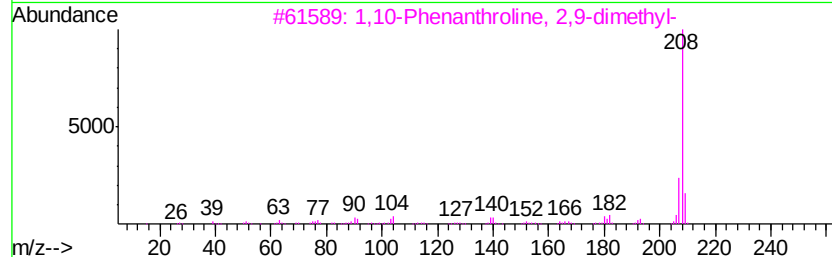
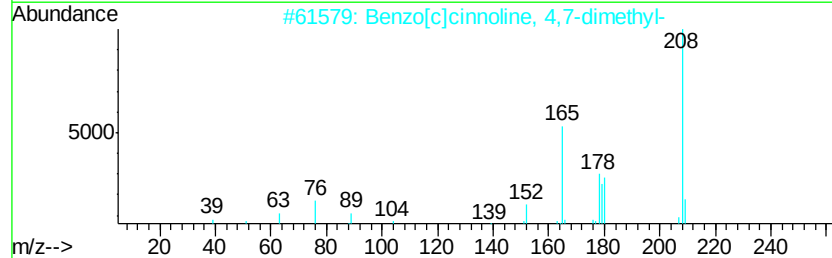
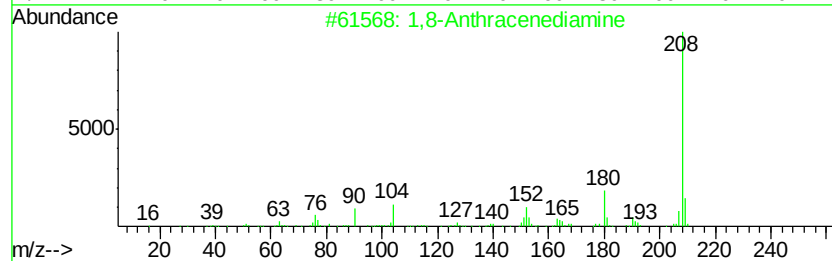
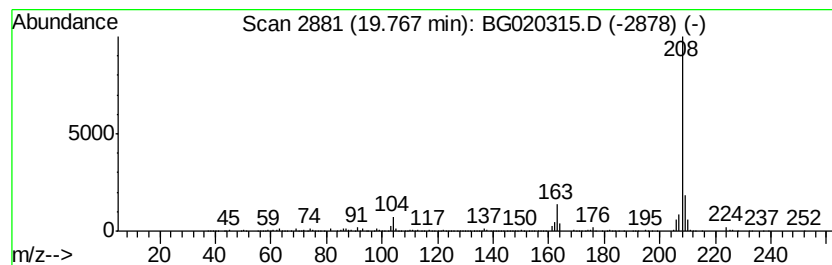
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 20 1,8-Anthracenediamine Concentration Rank 30

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 19.77 | 2.97 ng/ul | 958027 | Chrysene-d12     | 21.77 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,8-Anthracenediamine               | 208 | C14H12N2 | 139312-39-3 | 64   |
| 2    |    | Benzo[c]cinnoline, 4,7-dimethyl-    | 208 | C14H12N2 | 020684-54-2 | 64   |
| 3    |    | 1,10-Phenanthroline, 2,9-dimethyl-  | 208 | C14H12N2 | 000484-11-7 | 64   |
| 4    |    | Benzene, 1,1'-(2-methyl-2-propen... | 208 | C16H16   | 070813-56-8 | 59   |
| 5    |    | 1,10-Phenanthroline, 2,9-dimethyl-  | 208 | C14H12N2 | 000484-11-7 | 59   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

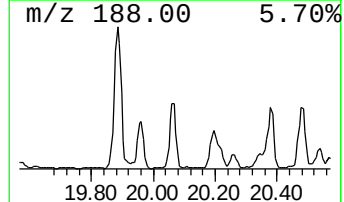
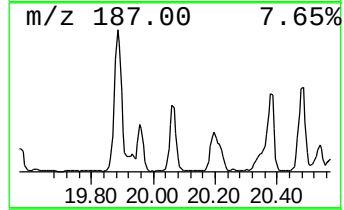
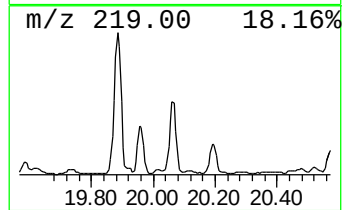
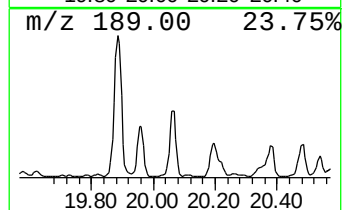
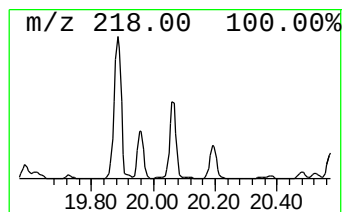
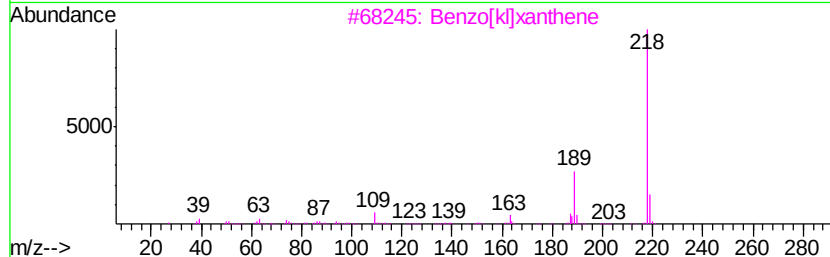
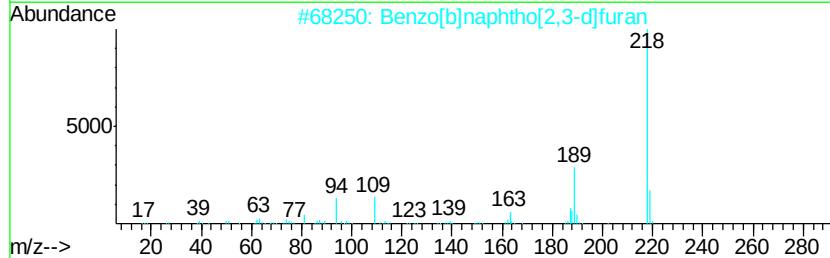
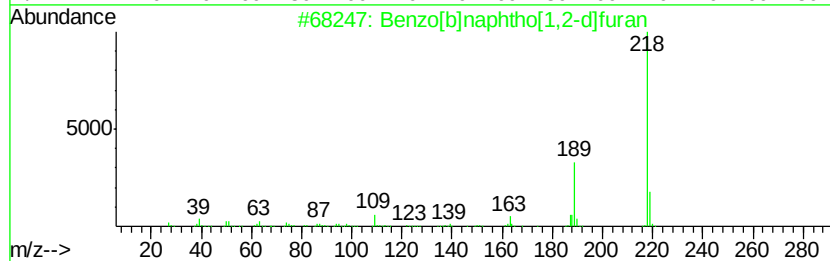
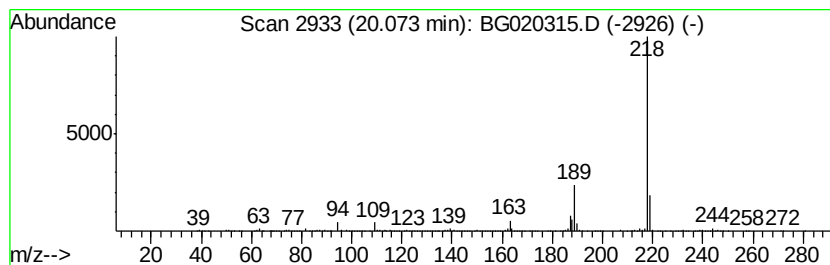
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 21 Benzo[b]naphtho[1,2-d]furan Concentration Rank 27

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 20.07 | 3.45 ng/ul | 1110230 | Chrysene-d12     | 21.77 |

| Hit# | of | Tentative ID                | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[b]naphtho[1,2-d]furan | 218 | C16H10O | 000239-30-5 | 97   |
| 2    |    | Benzo[b]naphtho[2,3-d]furan | 218 | C16H10O | 000243-42-5 | 95   |
| 3    |    | Benzo[k]l[xanthene          | 218 | C16H10O | 000200-23-7 | 94   |
| 4    |    | Benzo[b]naphtho[2,3-d]furan | 218 | C16H10O | 000243-42-5 | 94   |
| 5    |    | Indeno[2,1-b]chromene,      | 218 | C16H10O | 000243-24-3 | 91   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

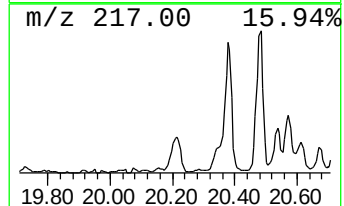
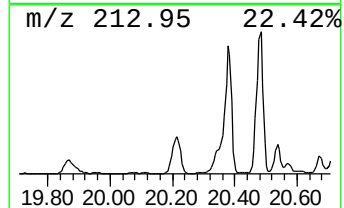
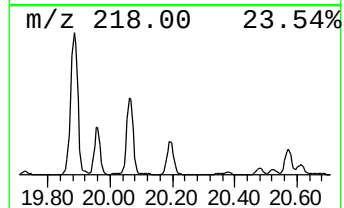
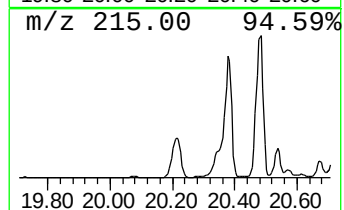
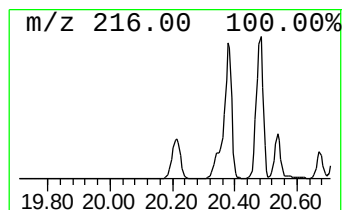
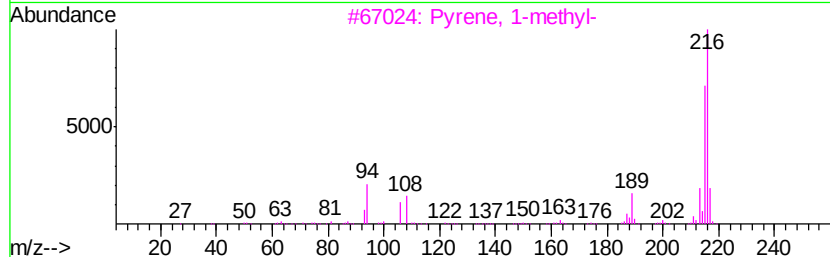
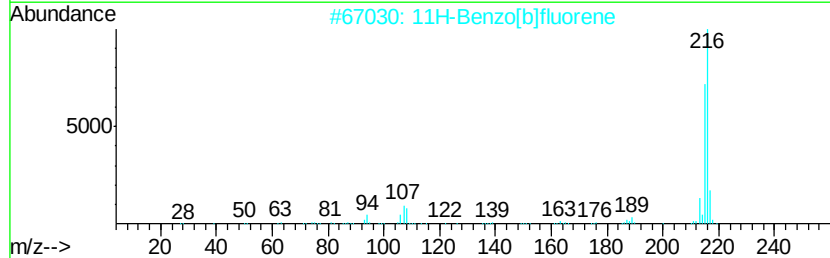
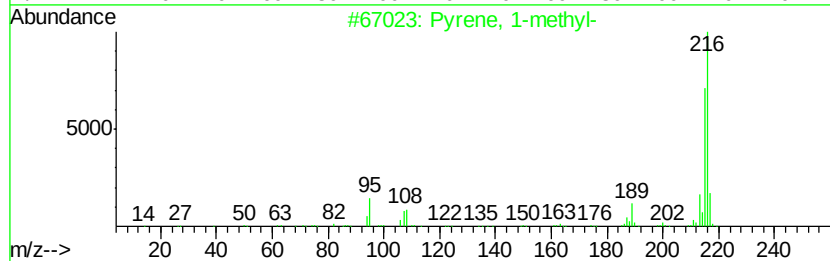
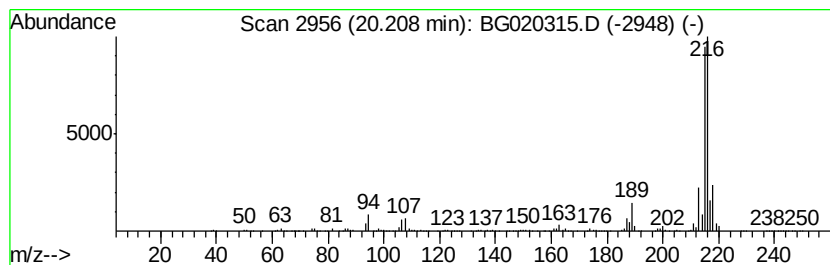
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 22 Pyrene, 1-methyl- Concentration Rank 19

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 20.21 | 5.32 ng/ul | 1715050 | Chrysene-d12     | 21.77 |

| Hit# | of | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------|-----|---------|-------------|------|
| 1    | 5  | Pyrene, 1-methyl-    | 216 | C17H12  | 002381-21-7 | 93   |
| 2    |    | 11H-Benzo[b]fluorene | 216 | C17H12  | 000243-17-4 | 90   |
| 3    |    | Pyrene, 1-methyl-    | 216 | C17H12  | 002381-21-7 | 83   |
| 4    |    | 11H-Benzo[a]fluorene | 216 | C17H12  | 000238-84-6 | 81   |
| 5    |    | 11H-Benzo[b]fluorene | 216 | C17H12  | 000243-17-4 | 81   |





Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

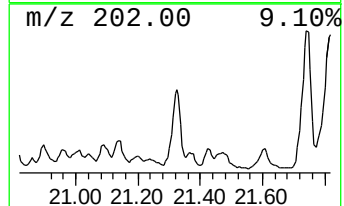
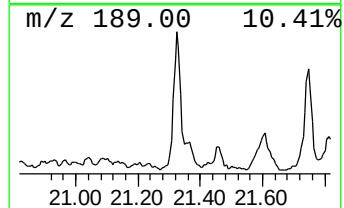
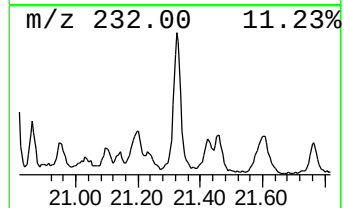
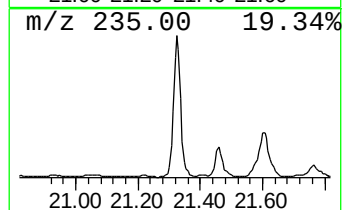
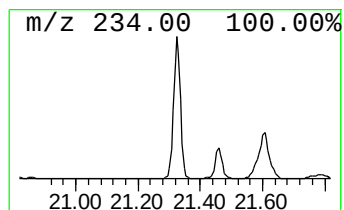
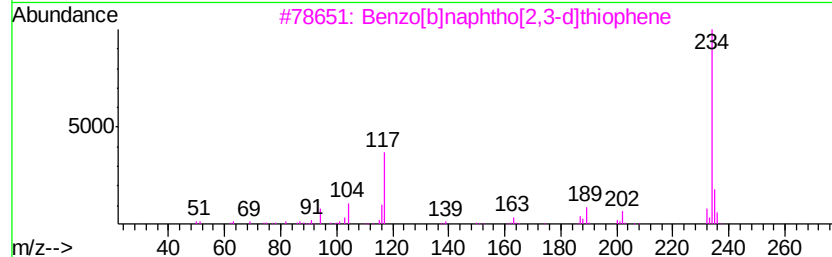
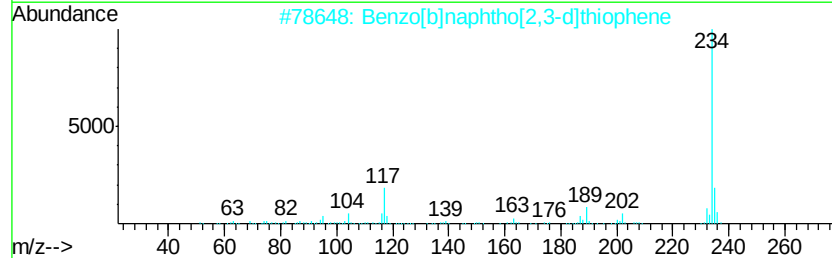
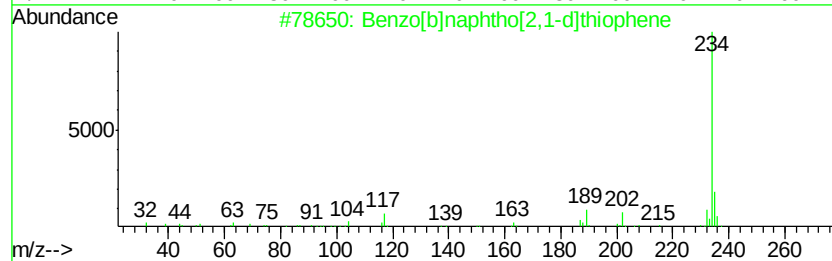
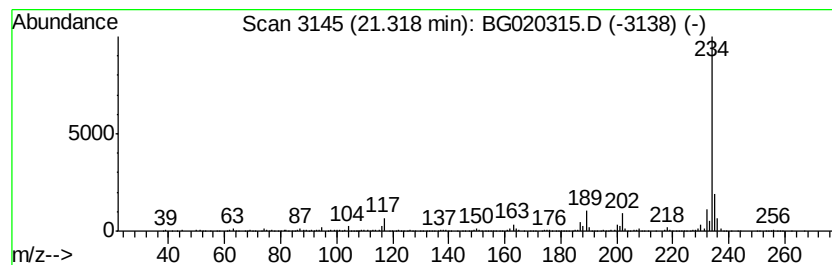
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 26 Benzo[b]naphtho[2,1-d]thioph... Concentration Rank 28

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 21.32 | 3.44 ng/ul | 1109720 | Chrysene-d12     | 21.77 |

| Hit# | of | 5 | Tentative ID                    | MW  | MolForm | CAS#        | Qual |
|------|----|---|---------------------------------|-----|---------|-------------|------|
| 1    |    |   | Benzo[b]naphtho[2,1-d]thiophene | 234 | C16H10S | 000239-35-0 | 98   |
| 2    |    |   | Benzo[b]naphtho[2,3-d]thiophene | 234 | C16H10S | 000243-46-9 | 94   |
| 3    |    |   | Benzo[b]naphtho[2,3-d]thiophene | 234 | C16H10S | 000243-46-9 | 94   |
| 4    |    |   | Benzo[b]naphtho[2,1-d]thiophene | 234 | C16H10S | 000239-35-0 | 94   |
| 5    |    |   | Benzo[b]naphtho[1,2-d]thiophene | 234 | C16H10S | 000205-43-6 | 91   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

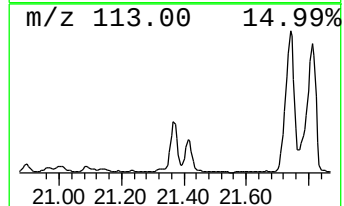
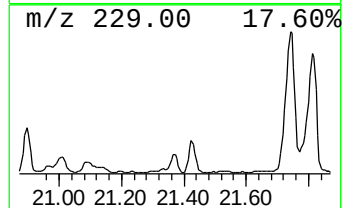
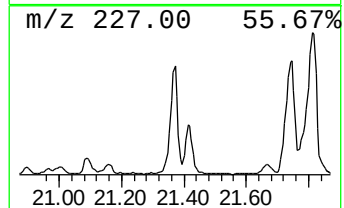
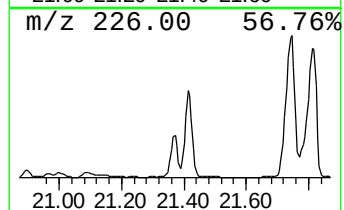
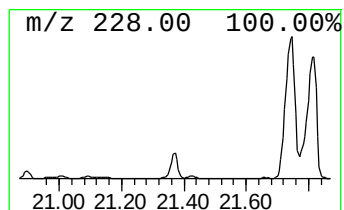
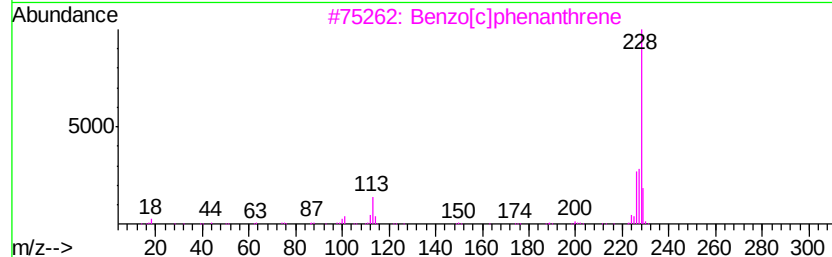
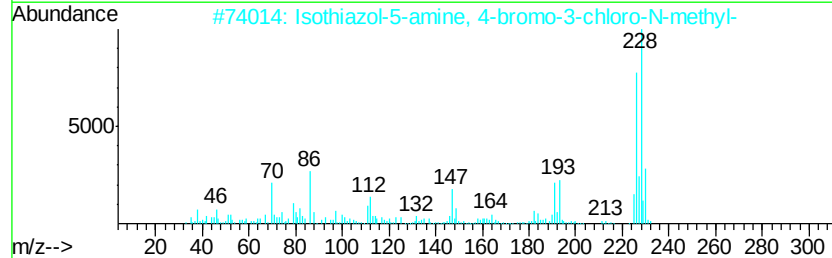
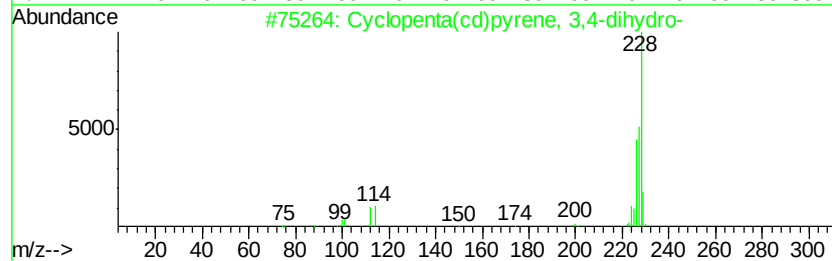
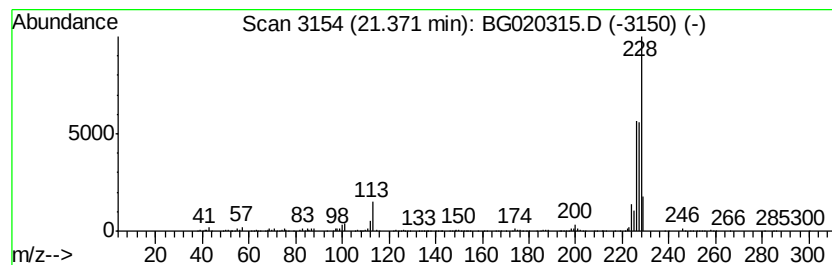
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 27 Cyclopenta(cd)pyrene, 3,4-d... Concentration Rank 29

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 21.37 | 3.25 ng/ul | 1048320 | Chrysene-d12     | 21.77 |

| Hit# | of | Tentative ID                        | MW  | MolForm     | CAS#         | Qual |
|------|----|-------------------------------------|-----|-------------|--------------|------|
| 1    | 5  | Cyclopenta(cd)pyrene, 3,4-dihydro-  | 228 | C18H12      | 025732-74-5  | 86   |
| 2    |    | Isothiazol-5-amine, 4-bromo-3-ch... | 226 | C4H4BrClN2S | 1000272-59-9 | 53   |
| 3    |    | Benzo[c]phenanthrene                | 228 | C18H12      | 000195-19-7  | 52   |
| 4    |    | Triphenylene                        | 228 | C18H12      | 000217-59-4  | 49   |
| 5    |    | Chrysene                            | 228 | C18H12      | 000218-01-9  | 49   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

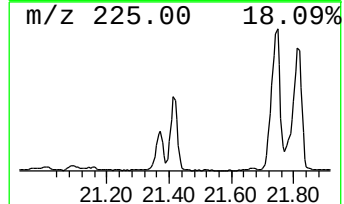
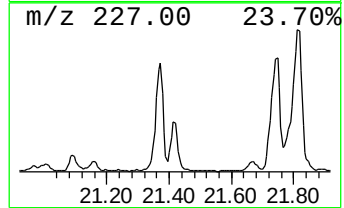
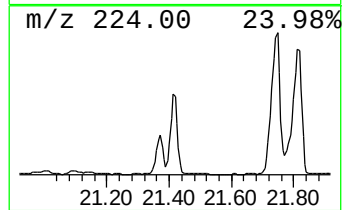
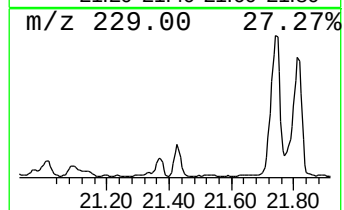
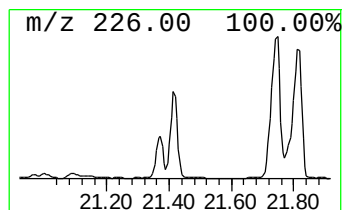
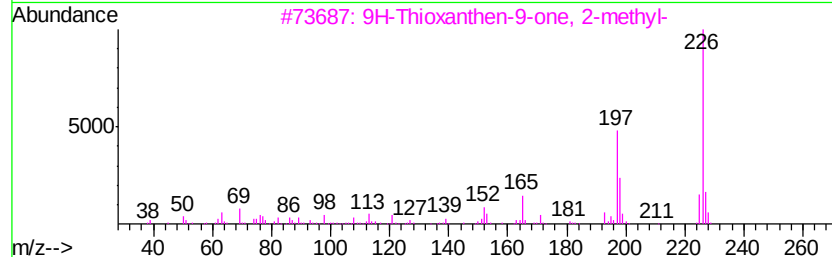
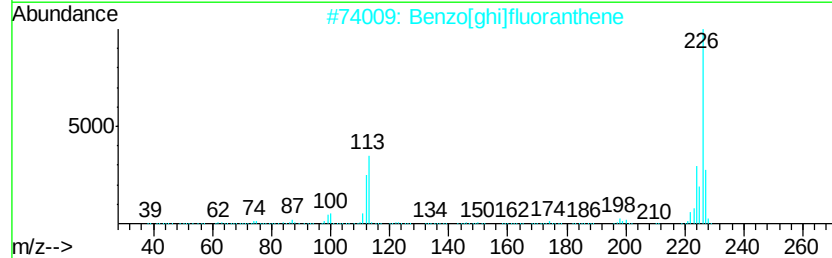
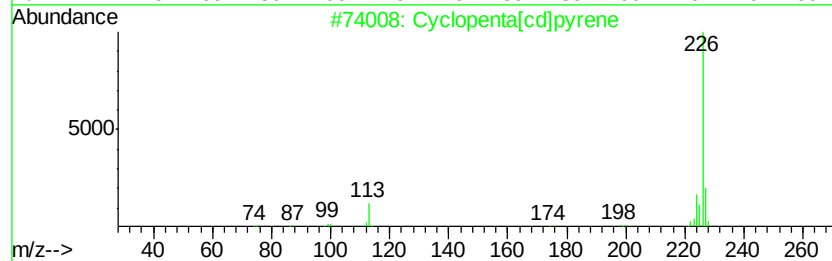
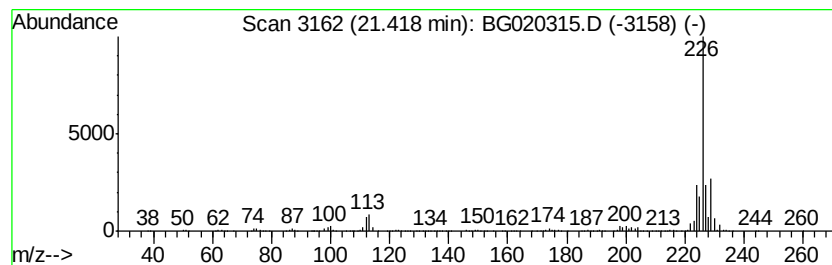
Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 28 Cyclopenta[cd]pyrene Concentration Rank 31

| R.T.    | EstConc    | Area                                | Relative to ISTD | R.T.      |             |      |
|---------|------------|-------------------------------------|------------------|-----------|-------------|------|
| 21.42   | 2.66 ng/ul | 855690                              | Chrysene-d12     | 21.77     |             |      |
| Hit# of | 5          | Tentative ID                        | MW               | MolForm   | CAS#        | Qual |
| 1       |            | Cvclopenta[cd]pvrene                | 226              | C18H10    | 027208-37-3 | 58   |
| 2       |            | Benzo[ghi]fluoranthene              | 226              | C18H10    | 000203-12-3 | 53   |
| 3       |            | 9H-Thioxanthen-9-one, 2-methyl-     | 226              | C14H10OS  | 015774-82-0 | 50   |
| 4       |            | 1,3-Diamino-5,6-dihydro-7-methyl... | 226              | C13H14N4  | 037436-37-6 | 38   |
| 5       |            | 6-Methyl-4-phenyl-3-cyanopyridin... | 226              | C13H10N2S | 078564-23-5 | 38   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

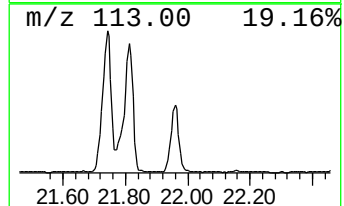
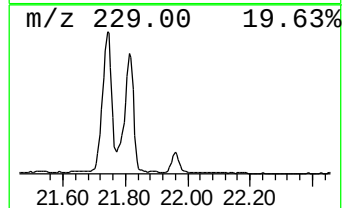
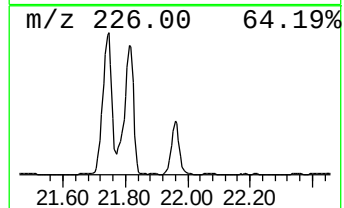
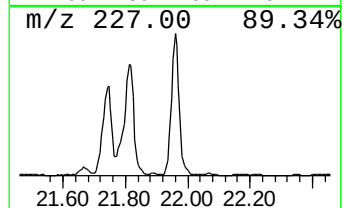
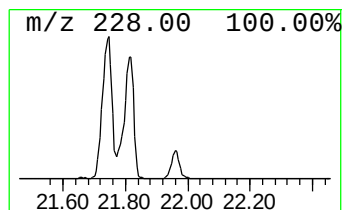
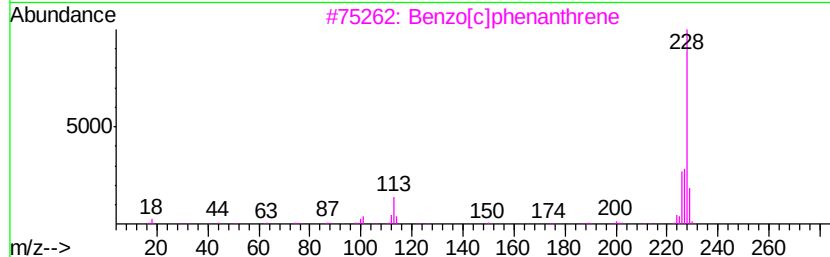
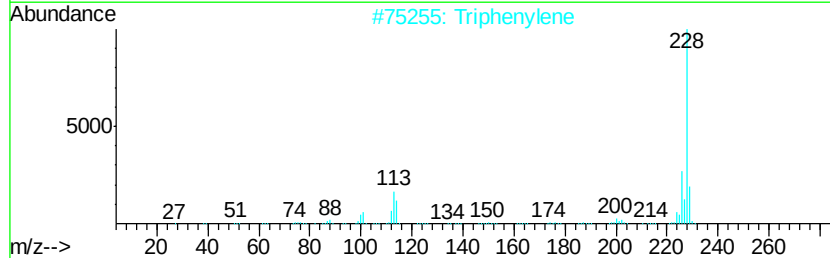
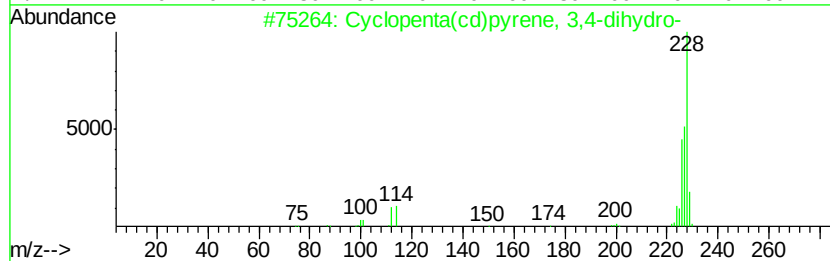
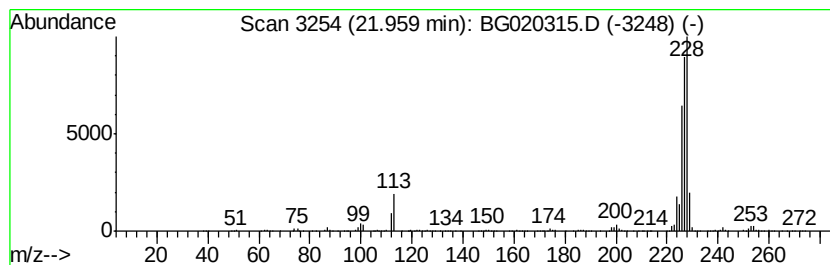
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 29 Cyclopenta(cd)pyrene, 3,4-d... Concentration Rank 24

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 21.96 | 4.13 ng/ul | 1332090 | Chrysene-d12     | 21.77 |

| Hit# | of | Tentative ID                       | MW  | MolForm | CAS#        | Qual |
|------|----|------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclopenta(cd)pyrene, 3,4-dihydro- | 228 | C18H12  | 025732-74-5 | 87   |
| 2    |    | Triphenylene                       | 228 | C18H12  | 000217-59-4 | 50   |
| 3    |    | Benzo[cl]phenanthrene              | 228 | C18H12  | 000195-19-7 | 46   |
| 4    |    | Benzo[cl]phenanthrene              | 228 | C18H12  | 000195-19-7 | 43   |
| 5    |    | Triphenylene                       | 228 | C18H12  | 000217-59-4 | 43   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020315.D  
Acq On : 19 Dec 2015 17:11  
Operator : UM/SJ  
Sample : G4849-08  
Misc :  
ALS Vial : 46 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION

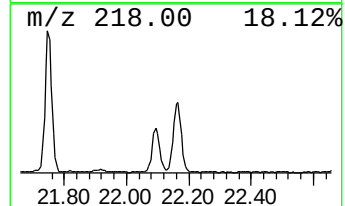
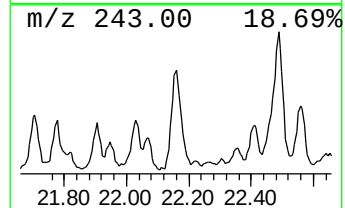
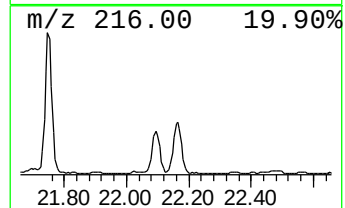
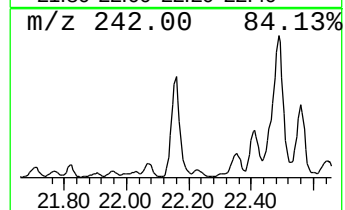
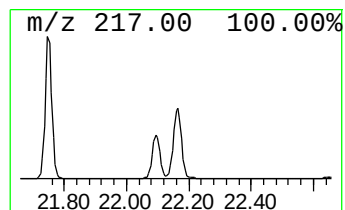
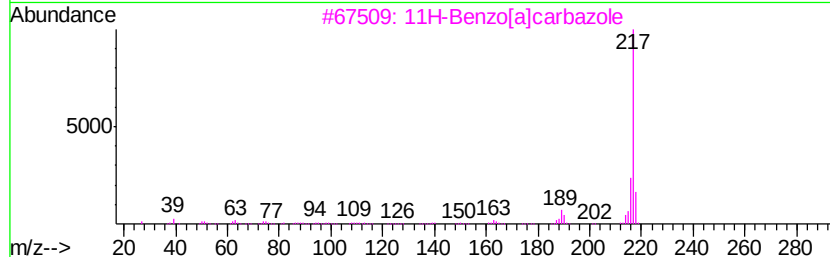
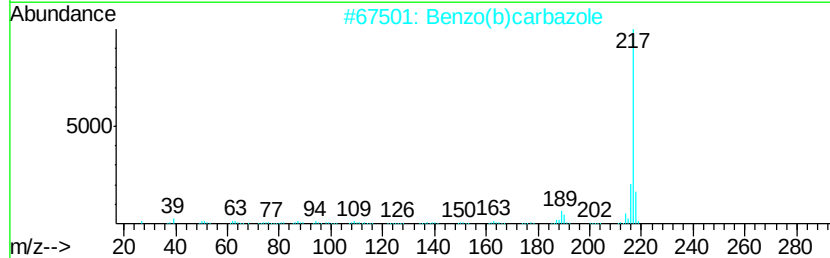
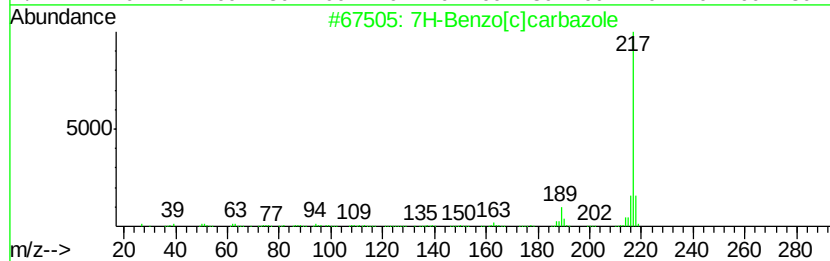
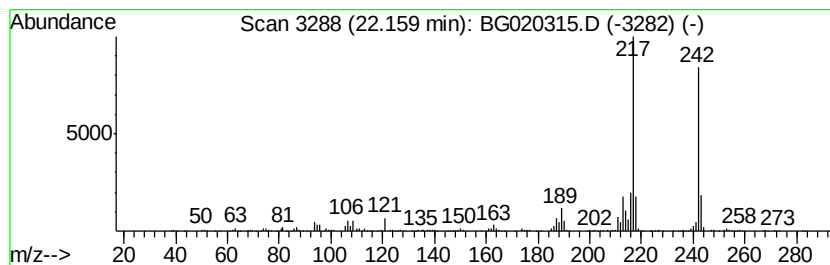
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 30 7H-Benzo[c]carbazole Concentration Rank 33

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 22.16 | 2.07 ng/ul | 665768 | Chrysene-d12     | 21.77 |

| Hit# | of | Tentative ID          | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------|-----|---------|-------------|------|
| 1    | 5  | 7H-Benzo[c]carbazole  | 217 | C16H11N | 000205-25-4 | 55   |
| 2    |    | Benzo(b)carbazole     | 217 | C16H11N | 000243-28-7 | 55   |
| 3    |    | 11H-Benzo[a]carbazole | 217 | C16H11N | 000239-01-0 | 50   |
| 4    |    | 11H-Benzo[a]carbazole | 217 | C16H11N | 000239-01-0 | 50   |
| 5    |    | 7H-Benzo[c]carbazole  | 217 | C16H11N | 000205-25-4 | 46   |



Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG121915\  
 Data File : BG020315.D  
 Acq On : 19 Dec 2015 17:11  
 Operator : UM/SJ  
 Sample : G4849-08  
 Misc :  
 ALS Vial : 46 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N72

Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG121415.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, 1-propynyl-  | 8.63  | 20.0    | ng/ul | 456953   | 1                     | 8.09  | 456953   | 20.0 |
| Naphthalene, 1-me...  | 12.80 | 6.6     | ng/ul | 4949030  | 2                     | 10.92 | 14933800 | 20.0 |
| Naphthalene, 1-et...  | 13.76 | 18.8    | ng/ul | 1636940  | 3                     | 14.73 | 1739740  | 20.0 |
| Naphthalene, 1,5-...  | 13.91 | 29.7    | ng/ul | 2581950  | 3                     | 14.73 | 1739740  | 20.0 |
| Naphthalene, 2,3-...  | 14.05 | 28.3    | ng/ul | 2462230  | 3                     | 14.73 | 1739740  | 20.0 |
| Naphthalene, 1,7-...  | 14.29 | 10.3    | ng/ul | 896421   | 3                     | 14.73 | 1739740  | 20.0 |
| 1-Isopropenyl naph... | 15.04 | 8.9     | ng/ul | 774496   | 3                     | 14.73 | 1739740  | 20.0 |
| Naphthalene, 2,3,...  | 15.34 | 5.5     | ng/ul | 480633   | 3                     | 14.73 | 1739740  | 20.0 |
| Naphthalene, 1,6,...  | 15.39 | 5.1     | ng/ul | 442498   | 3                     | 14.73 | 1739740  | 20.0 |
| Naphthalene, 1,4,...  | 15.51 | 5.2     | ng/ul | 455794   | 3                     | 14.73 | 1739740  | 20.0 |
| Benzene, 1-methyl...  | 15.55 | 3.5     | ng/ul | 303095   | 3                     | 14.73 | 1739740  | 20.0 |
| 1-Isopropenyl naph... | 15.88 | 9.3     | ng/ul | 806625   | 3                     | 14.73 | 1739740  | 20.0 |
| Benzeneethanol, ...   | 15.94 | 22.0    | ng/ul | 1911480  | 3                     | 14.73 | 1739740  | 20.0 |
| 1,1'-Biphenyl, 2-...  | 16.03 | 9.5     | ng/ul | 823896   | 3                     | 14.73 | 1739740  | 20.0 |
| 9H-Fluoren-9-ol       | 16.07 | 25.3    | ng/ul | 2197250  | 3                     | 14.73 | 1739740  | 20.0 |
| Naphtho[2,3-b]thi...  | 17.31 | 2.0     | ng/ul | 3666190  | 4                     | 17.49 | 36490800 | 20.0 |
| 4H-Cyclopenta[def...  | 18.56 | 4.2     | ng/ul | 7624650  | 4                     | 17.49 | 36490800 | 20.0 |
| 1,8-Anthracenedia...  | 19.77 | 3.0     | ng/ul | 958027   | 5                     | 21.77 | 6444360  | 20.0 |
| Benzo[b]naphtho[1...  | 20.07 | 3.5     | ng/ul | 1110230  | 5                     | 21.77 | 6444360  | 20.0 |
| Pyrene, 1-methyl-     | 20.21 | 5.3     | ng/ul | 1715050  | 5                     | 21.77 | 6444360  | 20.0 |
| Benzo[b]naphtho[2...  | 21.32 | 3.4     | ng/ul | 1109720  | 5                     | 21.77 | 6444360  | 20.0 |
| Cyclopenta(cd)pyr...  | 21.37 | 3.3     | ng/ul | 1048320  | 5                     | 21.77 | 6444360  | 20.0 |
| Cyclopenta[cd]pyrene  | 21.42 | 2.7     | ng/ul | 855690   | 5                     | 21.77 | 6444360  | 20.0 |
| Cyclopenta(cd)pyr...  | 21.96 | 4.1     | ng/ul | 1332090  | 5                     | 21.77 | 6444360  | 20.0 |
| 7H-Benzo[c]carbazole  | 22.16 | 2.1     | ng/ul | 665768   | 5                     | 21.77 | 6444360  | 20.0 |