

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
 Data File : BG020416.D  
 Acq On : 22 Dec 2015 19:33  
 Operator : UM/SJ  
 Sample : G4849-09  
 Misc : med level RX  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N73ME

## 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         | 7.244       | 743           | 750         | 757          | rBV      | 79425          | 139709        | 1.16%           | 0.173%        |
| 2         | 7.403       | 770           | 777         | 787          | rBV      | 67840          | 110934        | 0.92%           | 0.137%        |
| 3         | 7.614       | 806           | 813         | 825          | rBB      | 84789          | 142348        | 1.18%           | 0.176%        |
| 4         | 8.084       | 886           | 893         | 900          | rBB      | 67044          | 112392        | 0.93%           | 0.139%        |
| 5         | 8.789       | 1007          | 1013        | 1022         | rBV      | 114306         | 196488        | 1.63%           | 0.243%        |
| 6         | 9.254       | 1085          | 1092        | 1100         | rBV      | 90933          | 163318        | 1.36%           | 0.202%        |
| 7         | 9.976       | 1208          | 1215        | 1222         | rBV2     | 81554          | 147534        | 1.22%           | 0.183%        |
| 8         | 10.523      | 1300          | 1308        | 1318         | rBV2     | 136128         | 242852        | 2.02%           | 0.301%        |
| 9         | 10.905      | 1366          | 1373        | 1376         | rBV      | 93561          | 180792        | 1.50%           | 0.224%        |
| 10        | 10.963      | 1376          | 1383        | 1390         | rVV      | 1749865        | 3371366       | 27.98%          | 4.178%        |
| 11        | 11.034      | 1390          | 1395        | 1399         | rVV      | 99493          | 188386        | 1.56%           | 0.233%        |
| 12        | 12.556      | 1646          | 1654        | 1661         | rBV      | 1245333        | 2122454       | 17.61%          | 2.630%        |
| 13        | 12.773      | 1679          | 1691        | 1700         | rVB      | 630454         | 1063574       | 8.83%           | 1.318%        |
| 14        | 13.554      | 1816          | 1824        | 1835         | rVB      | 485242         | 762166        | 6.33%           | 0.944%        |
| 15        | 13.748      | 1851          | 1857        | 1868         | rVB      | 174015         | 319153        | 2.65%           | 0.395%        |
| 16        | 14.036      | 1897          | 1906        | 1911         | rBV      | 321690         | 584753        | 4.85%           | 0.725%        |
| 17        | 14.095      | 1911          | 1916        | 1918         | rVV      | 220338         | 372563        | 3.09%           | 0.462%        |
| 18        | 14.118      | 1918          | 1920        | 1925         | rVV      | 278131         | 365376        | 3.03%           | 0.453%        |
| 19        | 14.277      | 1934          | 1947        | 1950         | rBV      | 131916         | 228416        | 1.90%           | 0.283%        |
| 20        | 14.412      | 1963          | 1970        | 1973         | rBV      | 300146         | 505445        | 4.19%           | 0.626%        |
| 21        | 14.688      | 2012          | 2017        | 2020         | rVV      | 224270         | 350119        | 2.91%           | 0.434%        |
| 22        | 14.718      | 2020          | 2022        | 2027         | rVV2     | 177184         | 265346        | 2.20%           | 0.329%        |
| 23        | 14.794      | 2027          | 2035        | 2041         | rVV      | 2504486        | 4319663       | 35.85%          | 5.353%        |
| 24        | 14.853      | 2041          | 2045        | 2050         | rVV      | 119572         | 182943        | 1.52%           | 0.227%        |
| 25        | 14.923      | 2050          | 2057        | 2066         | rVV2     | 141749         | 290793        | 2.41%           | 0.360%        |
| 26        | 15.023      | 2066          | 2074        | 2079         | rVV2     | 108158         | 204176        | 1.69%           | 0.253%        |
| 27        | 15.123      | 2084          | 2091        | 2097         | rVV      | 1725299        | 2883870       | 23.93%          | 3.574%        |
| 28        | 15.188      | 2097          | 2102        | 2111         | rVB      | 74530          | 127175        | 1.06%           | 0.158%        |
| 29        | 15.329      | 2119          | 2126        | 2131         | rBV4     | 61071          | 120091        | 1.00%           | 0.149%        |
| 30        | 15.711      | 2181          | 2191        | 2195         | rVV      | 383885         | 701653        | 5.82%           | 0.869%        |
| 31        | 15.775      | 2195          | 2202        | 2209         | rVV      | 2289466        | 3900271       | 32.37%          | 4.833%        |
| 32        | 15.846      | 2209          | 2214        | 2218         | rVV2     | 151305         | 337056        | 2.80%           | 0.418%        |
| 33        | 15.887      | 2218          | 2221        | 2224         | rVV      | 188356         | 305657        | 2.54%           | 0.379%        |
| 34        | 15.928      | 2224          | 2228        | 2233         | rVV3     | 336494         | 562343        | 4.67%           | 0.697%        |

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 Max Peaks: 100  
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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 | 15.975 | 2233 | 2236 | 2239 | rVV2 | 81238   | 131144   | 1.09%   | 0.163%  |
| 36 | 16.016 | 2239 | 2243 | 2246 | rVV  | 169030  | 285240   | 2.37%   | 0.353%  |
| 37 | 16.057 | 2246 | 2250 | 2259 | rVV  | 377373  | 570133   | 4.73%   | 0.707%  |
| 38 | 16.204 | 2265 | 2275 | 2282 | rVV  | 395497  | 891656   | 7.40%   | 1.105%  |
| 39 | 16.292 | 2287 | 2290 | 2295 | rVV  | 73057   | 109730   | 0.91%   | 0.136%  |
| 40 | 16.557 | 2330 | 2335 | 2341 | rVB  | 213400  | 317600   | 2.64%   | 0.394%  |
| 41 | 16.762 | 2359 | 2370 | 2375 | rBV2 | 297489  | 683285   | 5.67%   | 0.847%  |
| 42 | 16.815 | 2375 | 2379 | 2384 | rVB2 | 100769  | 144904   | 1.20%   | 0.180%  |
| 43 | 16.915 | 2390 | 2396 | 2400 | rVB4 | 127053  | 218034   | 1.81%   | 0.270%  |
| 44 | 16.992 | 2400 | 2409 | 2412 | rBV2 | 104507  | 250579   | 2.08%   | 0.311%  |
| 45 | 17.033 | 2412 | 2416 | 2419 | rVB  | 86190   | 114562   | 0.95%   | 0.142%  |
| 46 | 17.191 | 2437 | 2443 | 2453 | rBV4 | 144650  | 403615   | 3.35%   | 0.500%  |
| 47 | 17.285 | 2453 | 2459 | 2468 | rVB  | 619952  | 987620   | 8.20%   | 1.224%  |
| 48 | 17.544 | 2479 | 2503 | 2506 | rBV  | 5029416 | 12049585 | 100.00% | 14.932% |
| 49 | 17.579 | 2506 | 2509 | 2511 | rVV  | 662284  | 868108   | 7.20%   | 1.076%  |
| 50 | 17.609 | 2511 | 2514 | 2519 | rVV  | 770857  | 1089254  | 9.04%   | 1.350%  |
| 51 | 17.656 | 2519 | 2522 | 2527 | rVB  | 105628  | 161796   | 1.34%   | 0.200%  |
| 52 | 17.873 | 2546 | 2559 | 2566 | rVV2 | 499391  | 993181   | 8.24%   | 1.231%  |
| 53 | 17.979 | 2573 | 2577 | 2584 | rVV2 | 156718  | 266130   | 2.21%   | 0.330%  |
| 54 | 18.043 | 2584 | 2588 | 2596 | rVV5 | 73294   | 167686   | 1.39%   | 0.208%  |
| 55 | 18.184 | 2607 | 2612 | 2621 | rVB  | 63574   | 142248   | 1.18%   | 0.176%  |
| 56 | 18.337 | 2628 | 2638 | 2642 | rBV  | 577334  | 928860   | 7.71%   | 1.151%  |
| 57 | 18.390 | 2642 | 2647 | 2653 | rVB  | 814122  | 1185575  | 9.84%   | 1.469%  |
| 58 | 18.472 | 2653 | 2661 | 2666 | rBV  | 249881  | 436025   | 3.62%   | 0.540%  |
| 59 | 18.543 | 2666 | 2673 | 2683 | rVV3 | 1070492 | 2224019  | 18.46%  | 2.756%  |
| 60 | 18.831 | 2717 | 2722 | 2727 | rVV  | 502679  | 680898   | 5.65%   | 0.844%  |
| 61 | 19.072 | 2759 | 2763 | 2768 | rVB3 | 105909  | 145774   | 1.21%   | 0.181%  |
| 62 | 19.248 | 2787 | 2793 | 2799 | rBV3 | 153052  | 321167   | 2.67%   | 0.398%  |
| 63 | 19.312 | 2800 | 2804 | 2812 | rVB4 | 99581   | 221057   | 1.83%   | 0.274%  |
| 64 | 19.530 | 2832 | 2841 | 2846 | rBV  | 3701869 | 6943808  | 57.63%  | 8.605%  |
| 65 | 19.612 | 2851 | 2855 | 2858 | rVV  | 109656  | 148836   | 1.24%   | 0.184%  |
| 66 | 19.759 | 2874 | 2880 | 2889 | rVB2 | 174930  | 352143   | 2.92%   | 0.436%  |
| 67 | 19.853 | 2889 | 2896 | 2898 | rBV3 | 1349774 | 2294540  | 19.04%  | 2.843%  |
| 68 | 19.888 | 2898 | 2902 | 2908 | rVV  | 2729319 | 4684129  | 38.87%  | 5.805%  |
| 69 | 19.941 | 2908 | 2911 | 2918 | rVB2 | 193012  | 275313   | 2.28%   | 0.341%  |
| 70 | 20.047 | 2923 | 2929 | 2935 | rVB  | 212001  | 321286   | 2.67%   | 0.398%  |
| 71 | 20.111 | 2935 | 2940 | 2947 | rVB  | 122839  | 193844   | 1.61%   | 0.240%  |

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

|     |        |      |      |      |      |        |         |        |        |
|-----|--------|------|------|------|------|--------|---------|--------|--------|
| 72  | 20.188 | 2947 | 2953 | 2960 | rBV3 | 187239 | 488119  | 4.05%  | 0.605% |
| 73  | 20.247 | 2960 | 2963 | 2969 | rBV  | 101672 | 139752  | 1.16%  | 0.173% |
| 74  | 20.317 | 2969 | 2975 | 2978 | rBV2 | 142679 | 295337  | 2.45%  | 0.366% |
| 75  | 20.364 | 2978 | 2983 | 2988 | rVB  | 626138 | 904706  | 7.51%  | 1.121% |
| 76  | 20.464 | 2994 | 3000 | 3004 | rBV  | 705384 | 1043693 | 8.66%  | 1.293% |
| 77  | 20.523 | 3004 | 3010 | 3013 | rVV2 | 177647 | 349571  | 2.90%  | 0.433% |
| 78  | 20.558 | 3013 | 3016 | 3020 | rVB  | 118137 | 131966  | 1.10%  | 0.164% |
| 79  | 20.664 | 3029 | 3034 | 3037 | rBV  | 95314  | 139118  | 1.15%  | 0.172% |
| 80  | 20.705 | 3037 | 3041 | 3045 | rBV  | 84853  | 108121  | 0.90%  | 0.134% |
| 81  | 20.887 | 3067 | 3072 | 3075 | rBV  | 88929  | 131613  | 1.09%  | 0.163% |
| 82  | 21.075 | 3099 | 3104 | 3110 | rBV  | 70936  | 147732  | 1.23%  | 0.183% |
| 83  | 21.316 | 3135 | 3145 | 3148 | rBV  | 181387 | 321043  | 2.66%  | 0.398% |
| 84  | 21.357 | 3148 | 3152 | 3156 | rVV  | 192653 | 310180  | 2.57%  | 0.384% |
| 85  | 21.404 | 3156 | 3160 | 3165 | rVV2 | 165642 | 316639  | 2.63%  | 0.392% |
| 86  | 21.592 | 3183 | 3192 | 3199 | rBV  | 58933  | 148894  | 1.24%  | 0.185% |
| 87  | 21.721 | 3202 | 3214 | 3221 | rVV3 | 962923 | 2381316 | 19.76% | 2.951% |
| 88  | 21.786 | 3221 | 3225 | 3237 | rVB  | 665805 | 1211106 | 10.05% | 1.501% |
| 89  | 21.939 | 3246 | 3251 | 3260 | rBV  | 172191 | 310228  | 2.57%  | 0.384% |
| 90  | 22.150 | 3280 | 3287 | 3294 | rBV3 | 92978  | 197493  | 1.64%  | 0.245% |
| 91  | 22.473 | 3334 | 3342 | 3347 | rVV  | 77332  | 167334  | 1.39%  | 0.207% |
| 92  | 22.802 | 3393 | 3398 | 3406 | rVB4 | 67442  | 149813  | 1.24%  | 0.186% |
| 93  | 23.966 | 3585 | 3596 | 3604 | rBV  | 209611 | 746893  | 6.20%  | 0.926% |
| 94  | 24.700 | 3712 | 3721 | 3727 | rBV  | 89704  | 247813  | 2.06%  | 0.307% |
| 95  | 24.782 | 3727 | 3735 | 3742 | rVV  | 298755 | 875122  | 7.26%  | 1.084% |
| 96  | 24.853 | 3742 | 3747 | 3760 | rVV  | 148390 | 391148  | 3.25%  | 0.485% |
| 97  | 25.006 | 3762 | 3773 | 3781 | rVV  | 183864 | 556891  | 4.62%  | 0.690% |
| 98  | 25.076 | 3781 | 3785 | 3799 | rVB3 | 41855  | 121126  | 1.01%  | 0.150% |
| 99  | 28.725 | 4394 | 4406 | 4426 | rVB4 | 29849  | 148977  | 1.24%  | 0.185% |
| 100 | 28.942 | 4432 | 4443 | 4458 | rVB4 | 32194  | 140345  | 1.16%  | 0.174% |

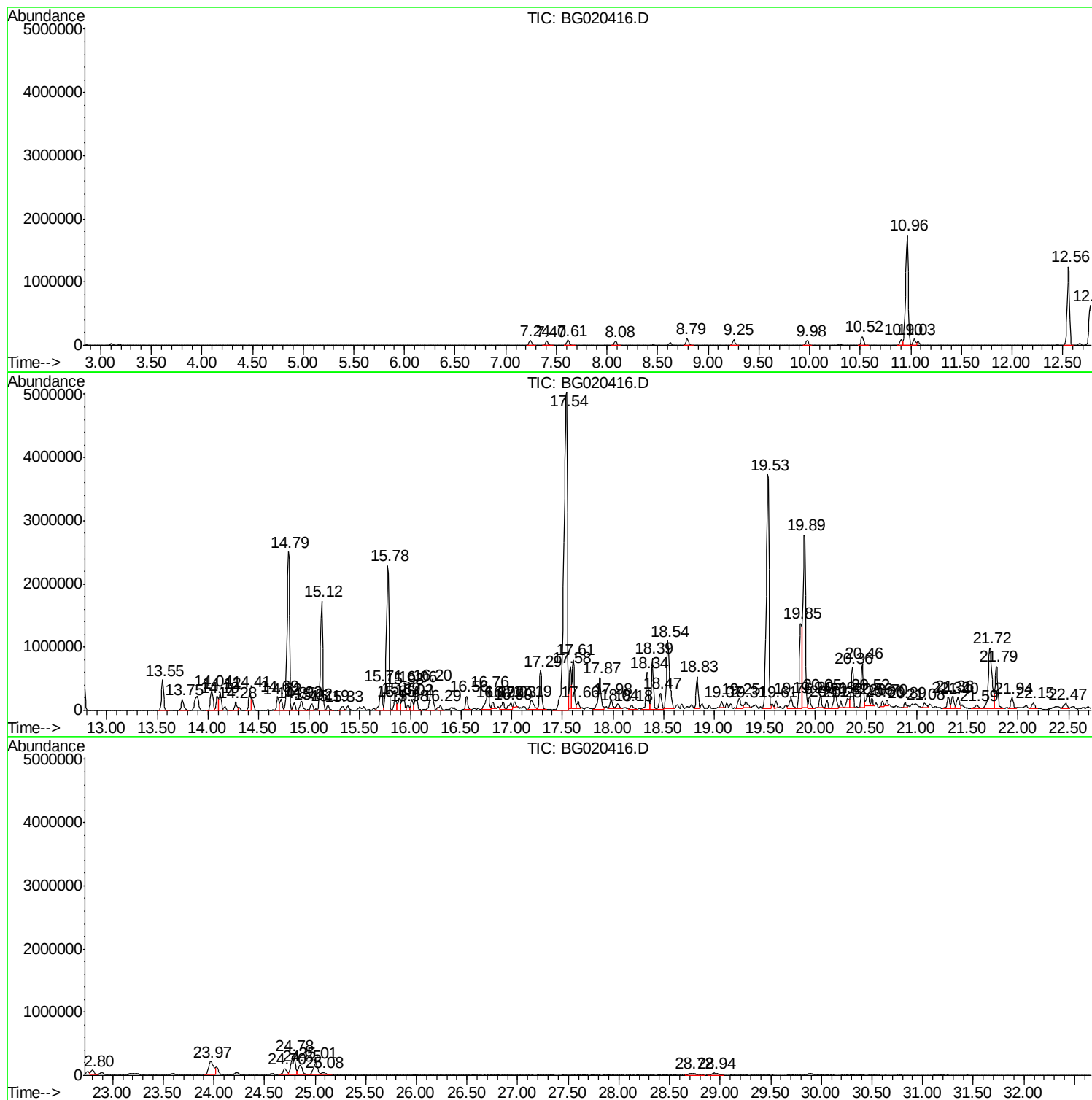
Sum of corrected areas: 80696628

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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



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

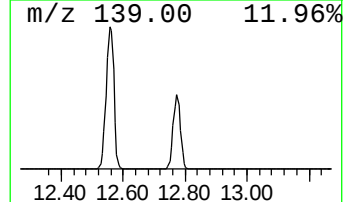
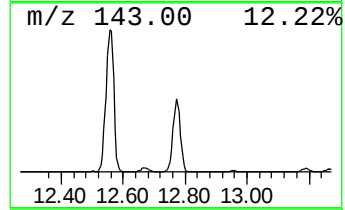
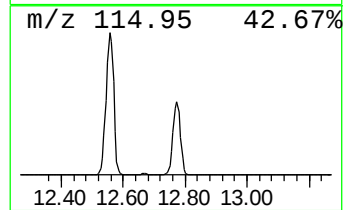
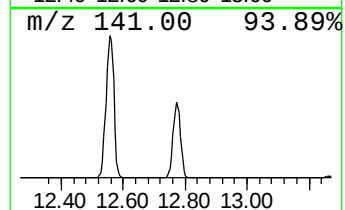
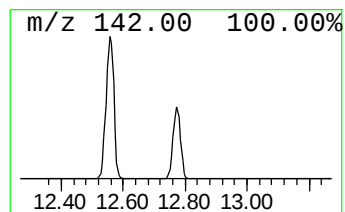
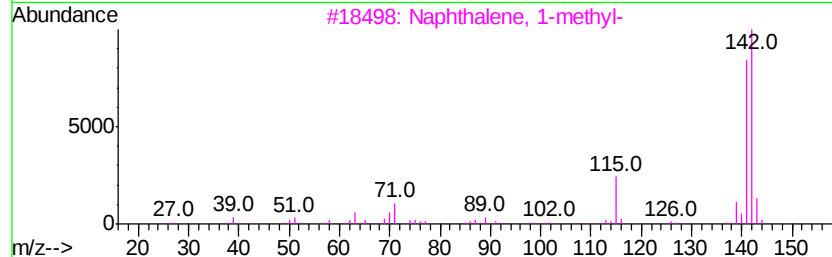
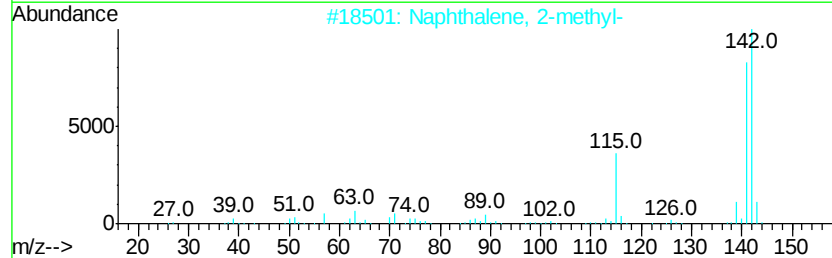
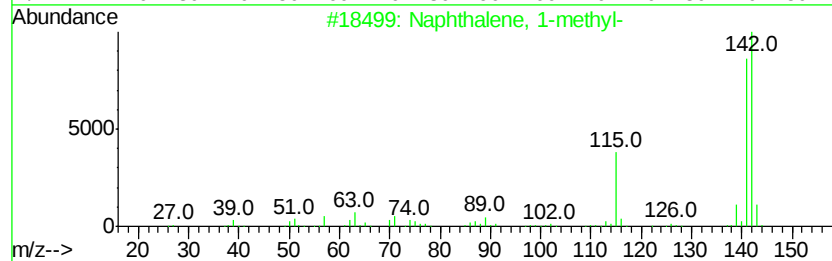
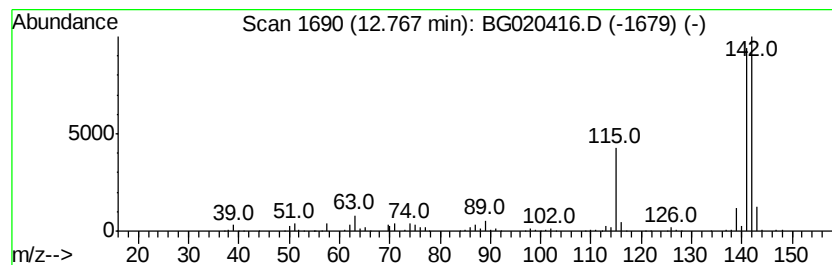
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 1 Naphthalene, 1-methyl- Concentration Rank 1

| R.T.  | EstConc      | Area    | Relative to ISTD | R.T.  |
|-------|--------------|---------|------------------|-------|
| 12.77 | 117.66 ng/ul | 1063570 | Naphthalene-d8   | 10.90 |

| 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    |    | Bicyclo[4.4.1]undeca-1,3,5,7,9-p... | 142 | C11H10  | 002443-46-1 | 91   |



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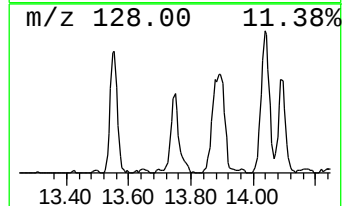
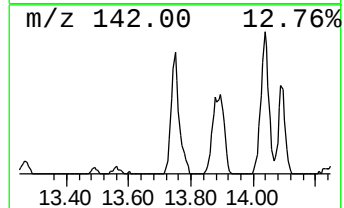
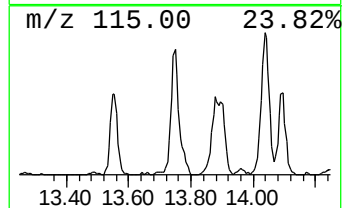
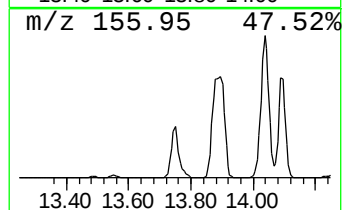
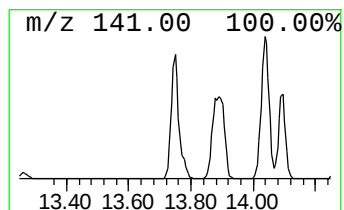
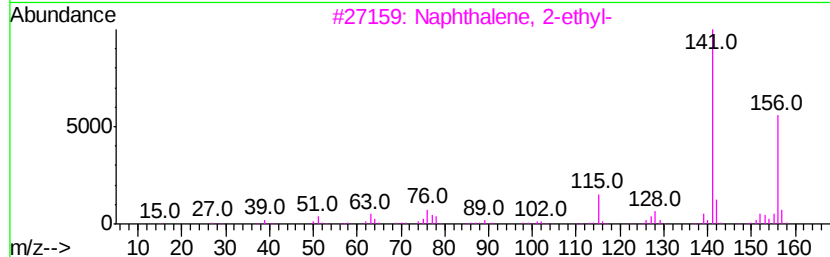
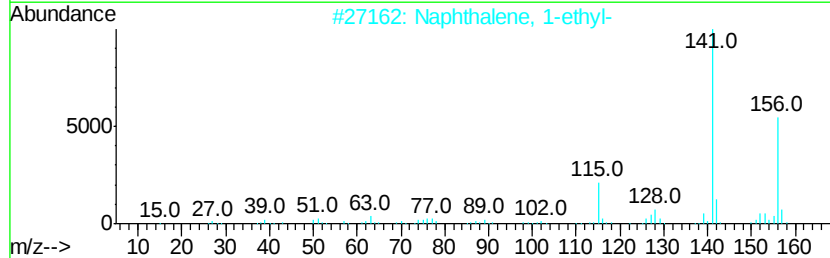
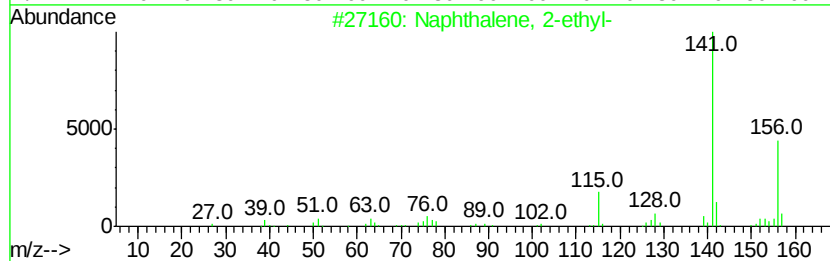
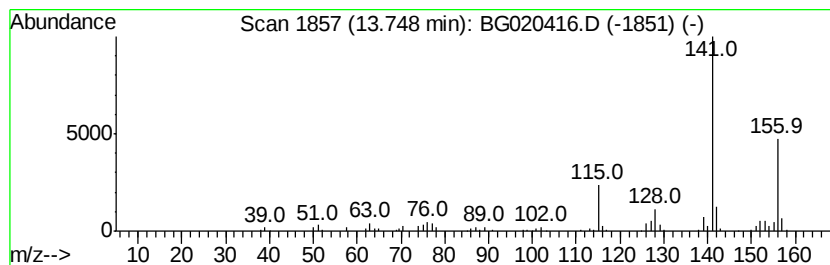
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\*\*\*\*\*  
Peak Number 2 Naphthalene, 2-ethyl- Concentration Rank 5

| R.T.    | EstConc     | Area                  | Relative to ISTD | R.T.           |
|---------|-------------|-----------------------|------------------|----------------|
| 13.75   | 24.06 ng/ul | 319153                | Acenaphthene-d10 | 14.72          |
| Hit# of | 5           | Tentative ID          | MW MolForm       | CAS# Qual      |
| 1       |             | Naphthalene, 2-ethyl- | 156 C12H12       | 000939-27-5 97 |
| 2       |             | Naphthalene, 1-ethyl- | 156 C12H12       | 001127-76-0 97 |
| 3       |             | Naphthalene, 2-ethyl- | 156 C12H12       | 000939-27-5 95 |
| 4       |             | Naphthalene, 2-ethyl- | 156 C12H12       | 000939-27-5 94 |
| 5       |             | Naphthalene, 1-ethyl- | 156 C12H12       | 001127-76-0 93 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

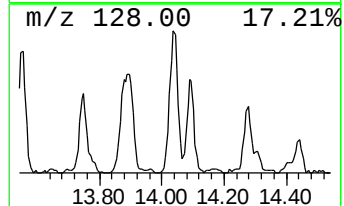
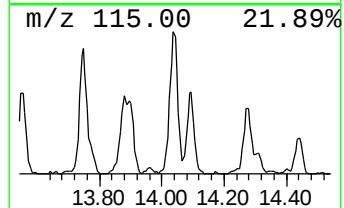
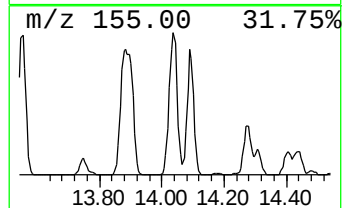
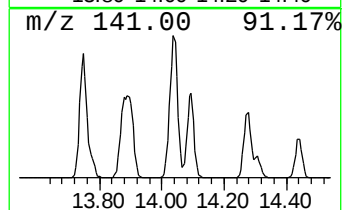
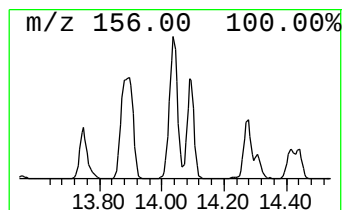
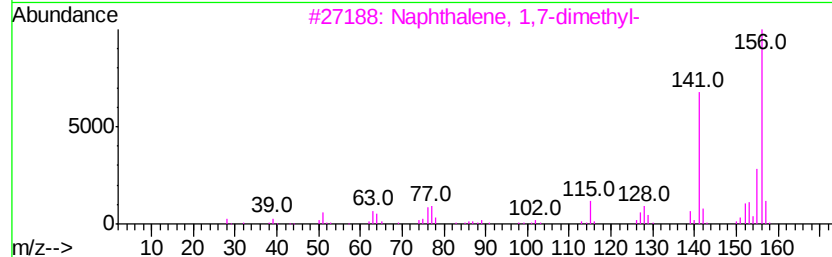
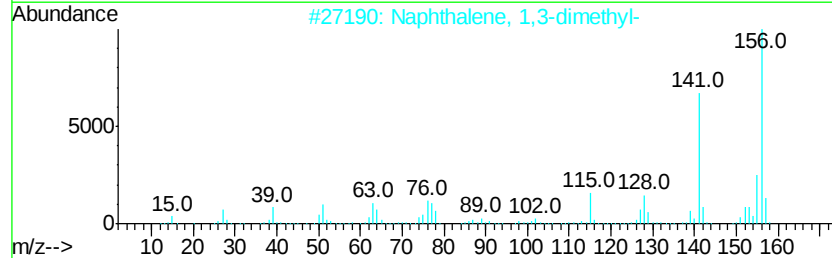
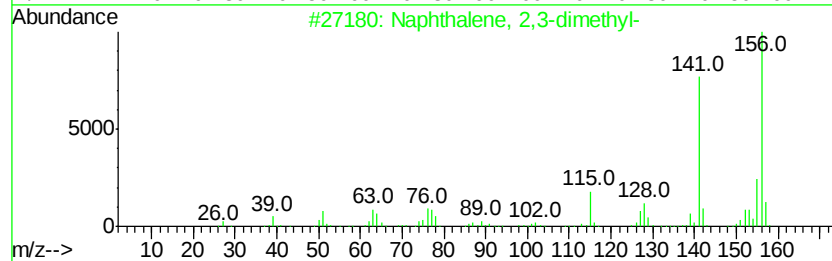
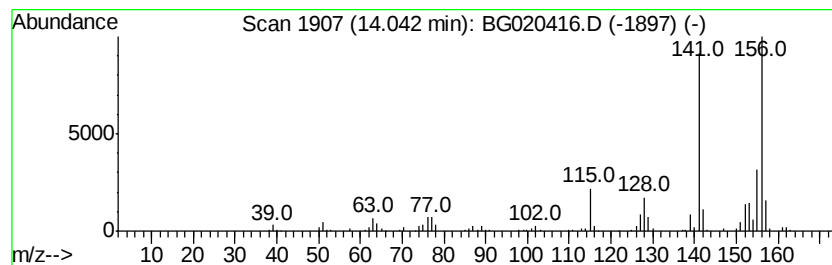
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BNA\_G  
ClientSampleId :  
D9N73ME

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Quant Title : SVOA CALIBRATION

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

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

| R.T.    | EstConc     | Area                       | Relative to ISTD | R.T.           |
|---------|-------------|----------------------------|------------------|----------------|
| 14.04   | 44.07 ng/ul | 584753                     | Acenaphthene-d10 | 14.72          |
| Hit# of | 5           | Tentative ID               | MW MolForm       | CAS# Qual      |
| 1       |             | Naphthalene, 2,3-dimethyl- | 156 C12H12       | 000581-40-8 97 |
| 2       |             | Naphthalene, 1,3-dimethyl- | 156 C12H12       | 000575-41-7 97 |
| 3       |             | Naphthalene, 1,7-dimethyl- | 156 C12H12       | 000575-37-1 97 |
| 4       |             | Naphthalene, 2,3-dimethyl- | 156 C12H12       | 000581-40-8 97 |
| 5       |             | Naphthalene, 1,7-dimethyl- | 156 C12H12       | 000575-37-1 96 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

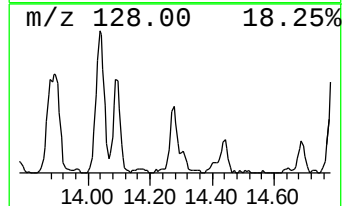
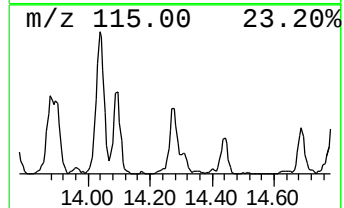
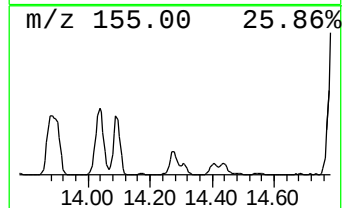
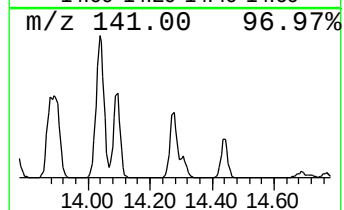
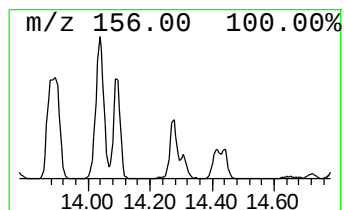
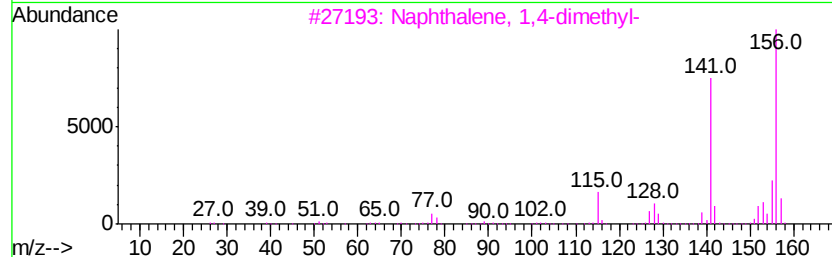
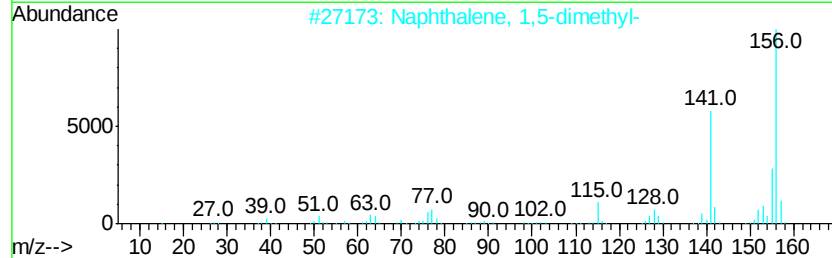
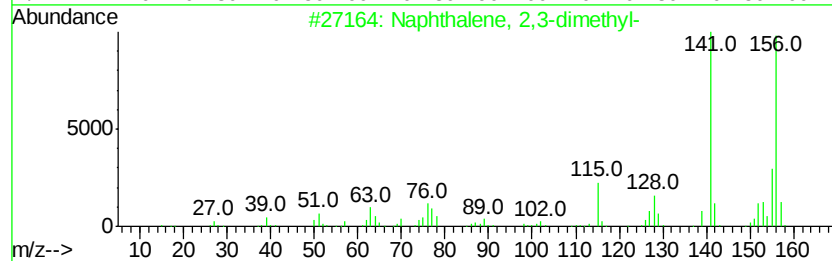
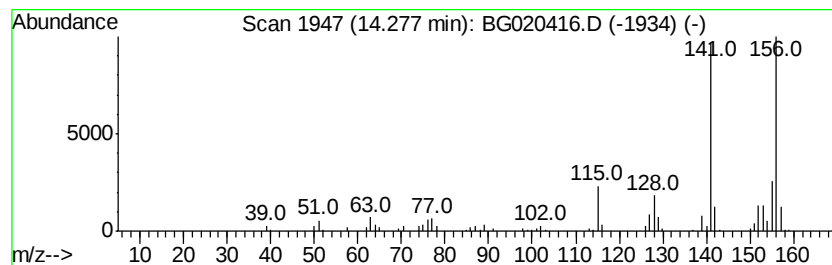
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BNA\_G  
ClientSampleId :  
D9N73ME

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

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Peak Number 4 Naphthalene, 1,5-dimethyl- Concentration Rank 7

| R.T.    | EstConc     | Area                       | Relative to ISTD | R.T.           |
|---------|-------------|----------------------------|------------------|----------------|
| 14.28   | 17.22 ng/ul | 228416                     | Acenaphthene-d10 | 14.72          |
| Hit# of | 5           | Tentative ID               | MW MolForm       | CAS# Qual      |
| 1       |             | Naphthalene, 2,3-dimethyl- | 156 C12H12       | 000581-40-8 97 |
| 2       |             | Naphthalene, 1,5-dimethyl- | 156 C12H12       | 000571-61-9 97 |
| 3       |             | Naphthalene, 1,4-dimethyl- | 156 C12H12       | 000571-58-4 97 |
| 4       |             | Naphthalene, 2,3-dimethyl- | 156 C12H12       | 000581-40-8 97 |
| 5       |             | Naphthalene, 1,6-dimethyl- | 156 C12H12       | 000575-43-9 96 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

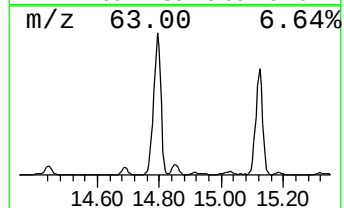
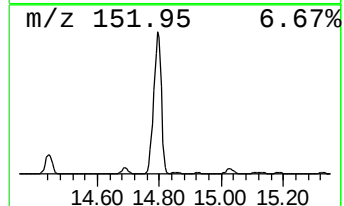
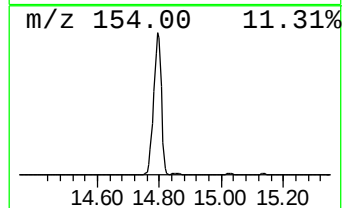
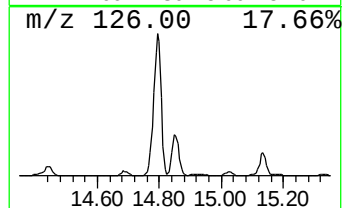
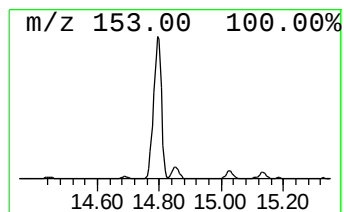
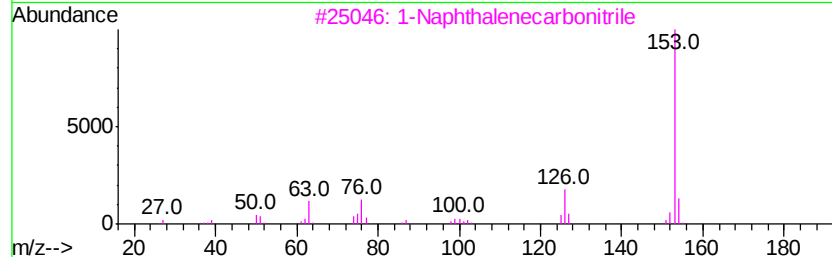
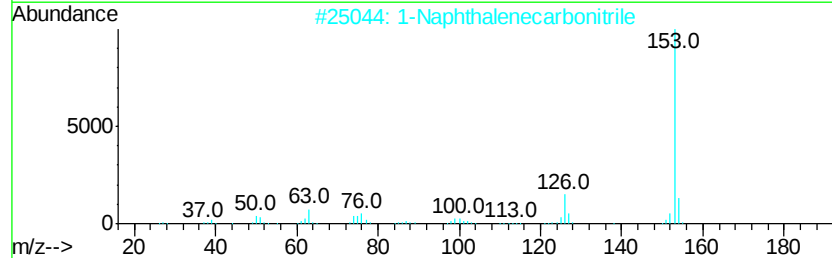
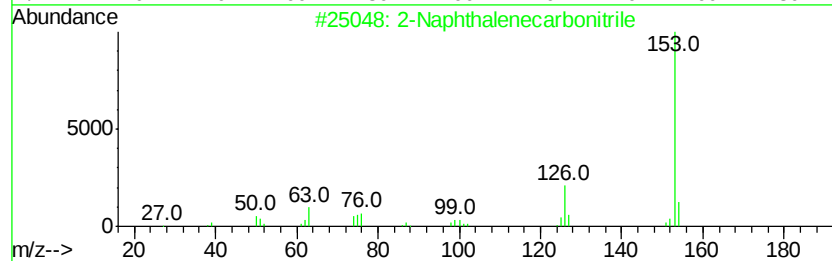
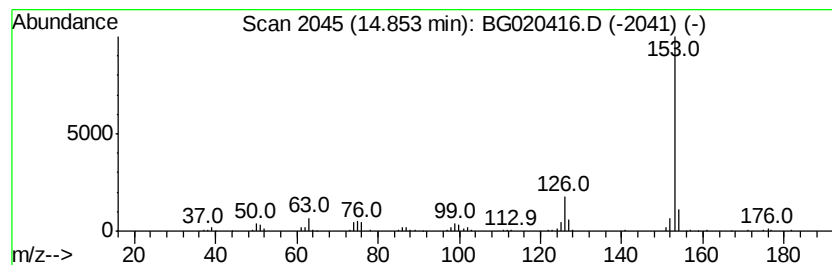
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Quant Title : SVOA CALIBRATION

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

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Peak Number 5 2-Naphthalenecarbonitrile Concentration Rank 9

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 14.85 | 13.79 ng/ul | 182943 | Acenaphthene-d10 | 14.72 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | 2-Naphthalenecarbonitrile | 153 | C11H7N  | 000613-46-7 | 95   |
| 2    |    | 1-Naphthalenecarbonitrile | 153 | C11H7N  | 000086-53-3 | 95   |
| 3    |    | 1-Naphthalenecarbonitrile | 153 | C11H7N  | 000086-53-3 | 91   |
| 4    |    | 2-Naphthalenecarbonitrile | 153 | C11H7N  | 000613-46-7 | 91   |
| 5    |    | 2-Naphthalenecarbonitrile | 153 | C11H7N  | 000613-46-7 | 91   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

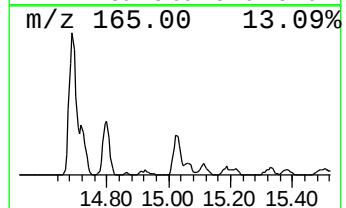
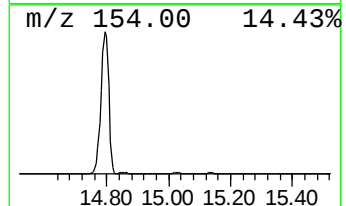
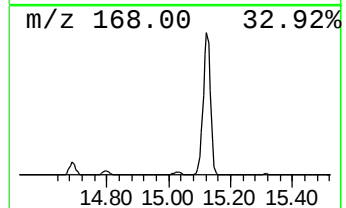
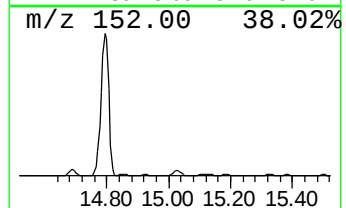
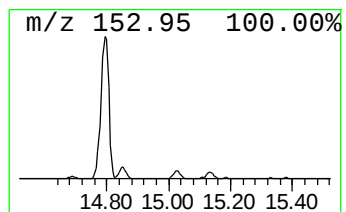
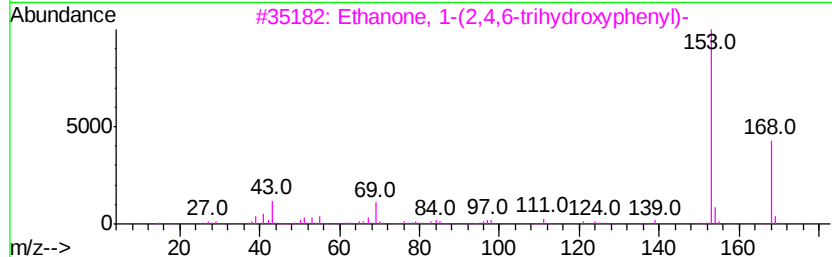
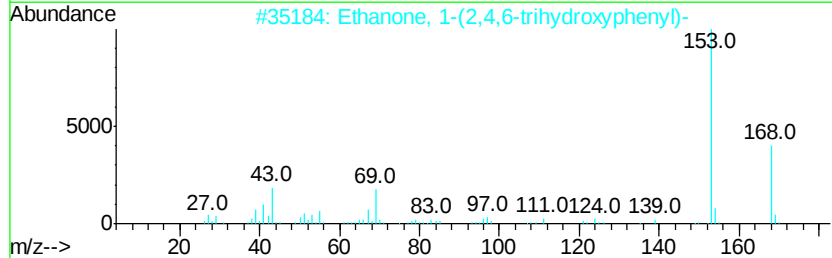
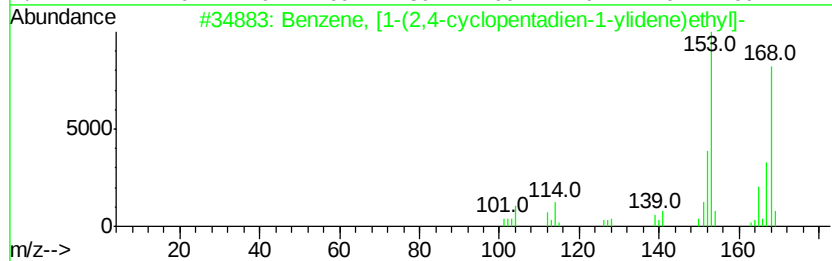
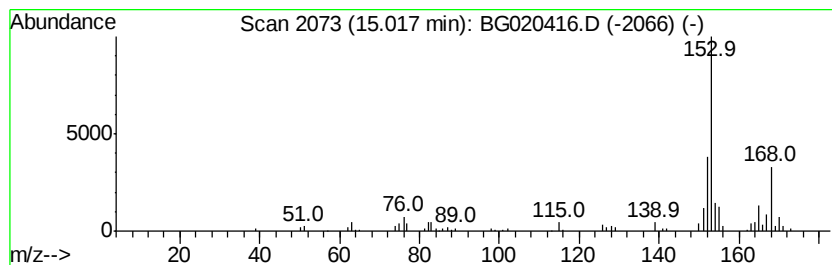
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 6 Benzene, [1-(2,4-cyclopenta... Concentration Rank 8

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 15.02 | 15.39 ng/ul | 204176 | Acenaphthene-d10 | 14.72 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzene, [1-(2,4-cyclopentadien-... | 168 | C13H12  | 002320-32-3 | 64   |
| 2    |    | Ethanone, 1-(2,4,6-trihydroxyphe... | 168 | C8H8O4  | 000480-66-0 | 53   |
| 3    |    | Ethanone, 1-(2,4,6-trihydroxyphe... | 168 | C8H8O4  | 000480-66-0 | 53   |
| 4    |    | Ethanone, 1-(2,3,4-trihydroxyphe... | 168 | C8H8O4  | 000528-21-2 | 53   |
| 5    |    | Acetophenone, 3'-fluoro-4'-methoxy- | 168 | C9H9FO2 | 000455-91-4 | 53   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

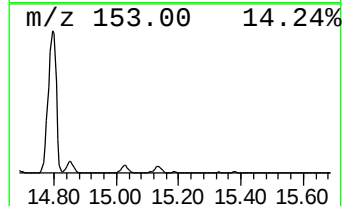
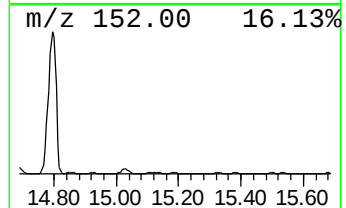
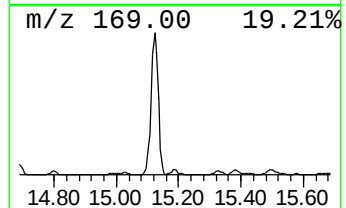
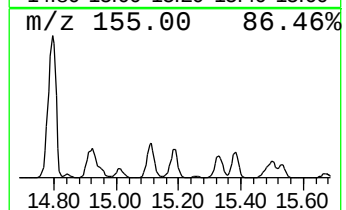
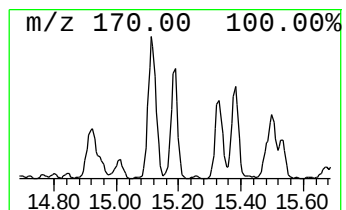
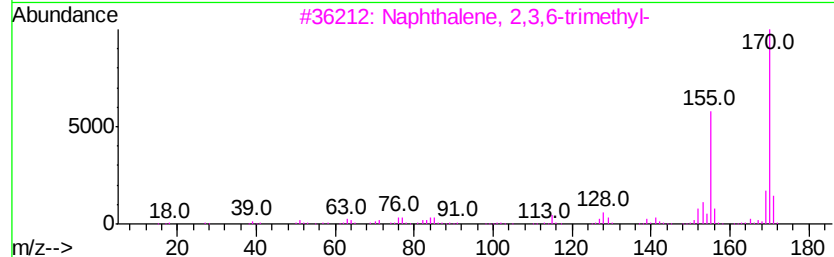
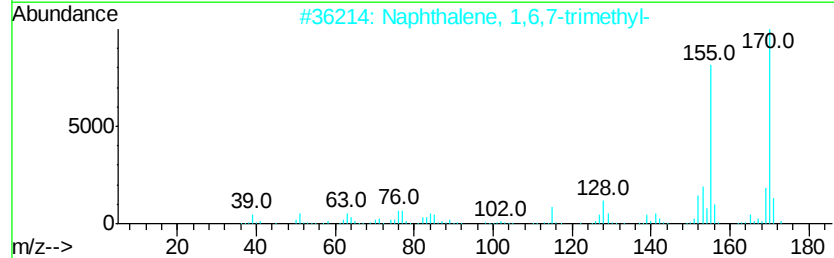
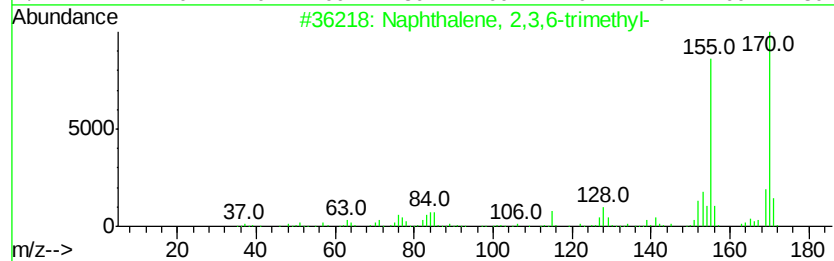
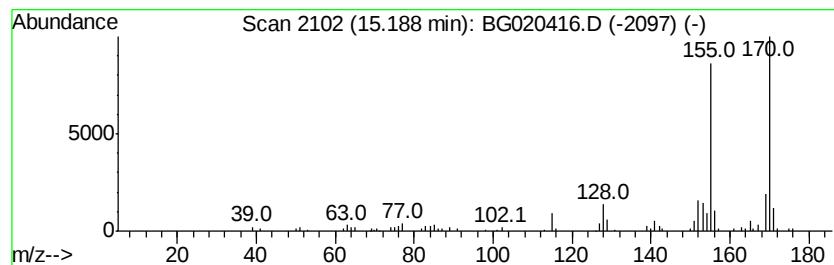
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 7 Naphthalene, 2,3,6-trimethyl- Concentration Rank 11

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 15.19 | 9.59 ng/ul | 127175 | Acenaphthene-d10 | 14.72 |

| Hit# | of | 5 | Tentative ID                  | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------|-----|---------|-------------|------|
| 1    |    |   | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14  | 000829-26-5 | 95   |
| 2    |    |   | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14  | 002245-38-7 | 94   |
| 3    |    |   | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14  | 000829-26-5 | 94   |
| 4    |    |   | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14  | 002245-38-7 | 91   |
| 5    |    |   | Naphthalene, 1,4,6-trimethyl- | 170 | C13H14  | 002131-42-2 | 91   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

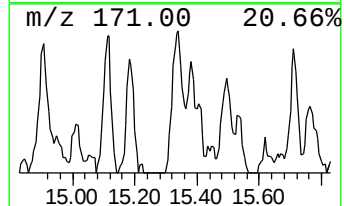
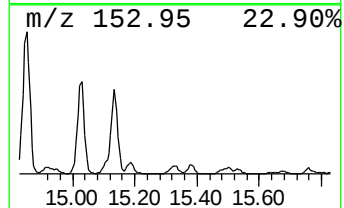
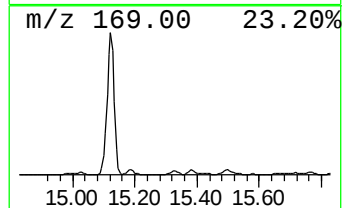
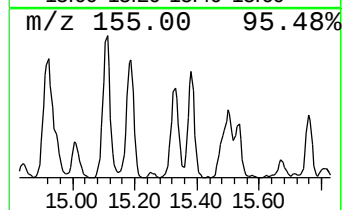
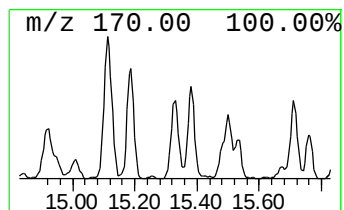
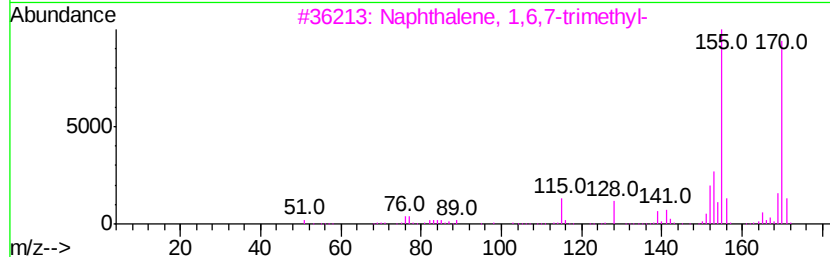
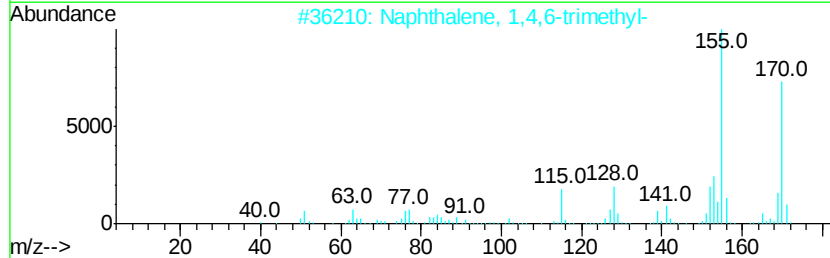
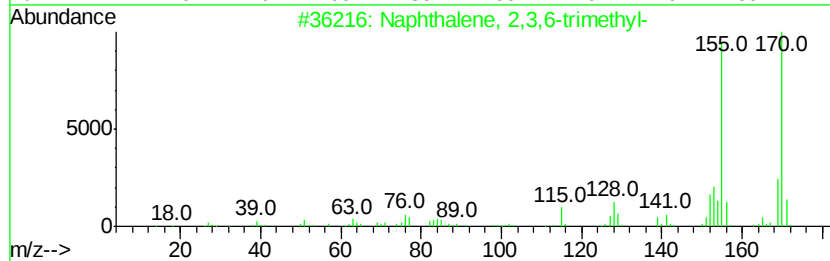
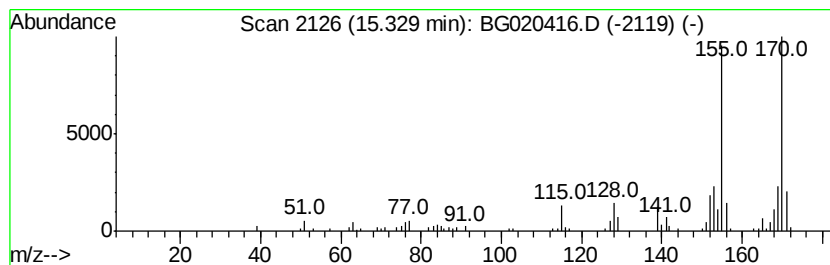
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 8 Naphthalene, 1,4,6-trimethyl- Concentration Rank 12

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 15.33 | 9.05 ng/ul | 120091 | Acenaphthene-d10 | 14.72 |

| Hit# | of | 5 | Tentative ID                  | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------|-----|---------|-------------|------|
| 1    |    |   | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14  | 000829-26-5 | 96   |
| 2    |    |   | Naphthalene, 1,4,6-trimethyl- | 170 | C13H14  | 002131-42-2 | 94   |
| 3    |    |   | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14  | 002245-38-7 | 94   |
| 4    |    |   | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14  | 000829-26-5 | 94   |
| 5    |    |   | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14  | 002245-38-7 | 93   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

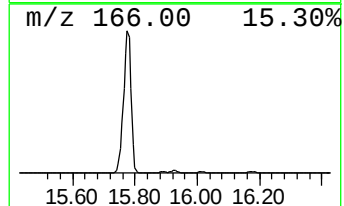
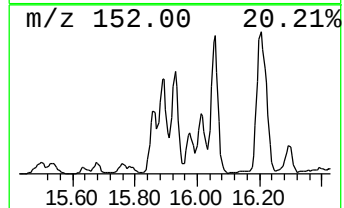
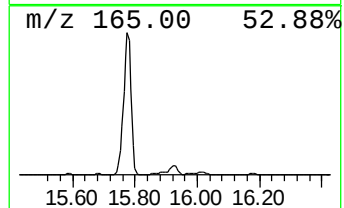
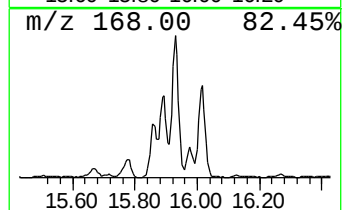
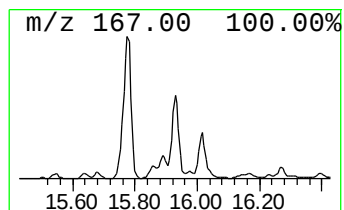
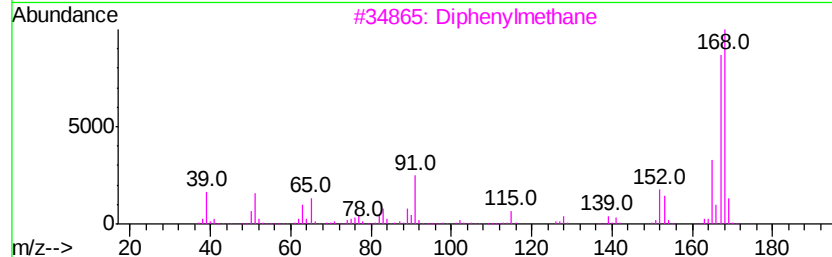
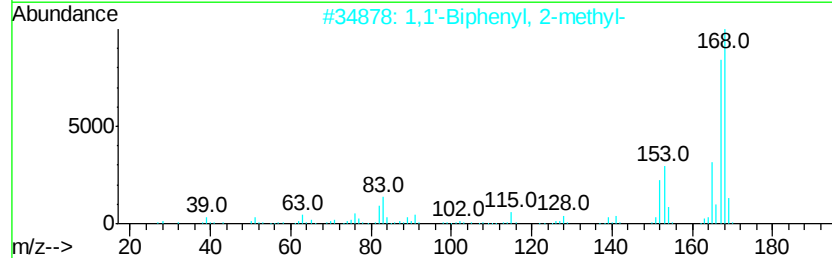
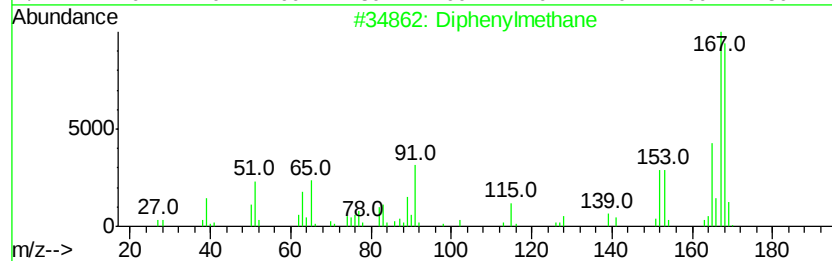
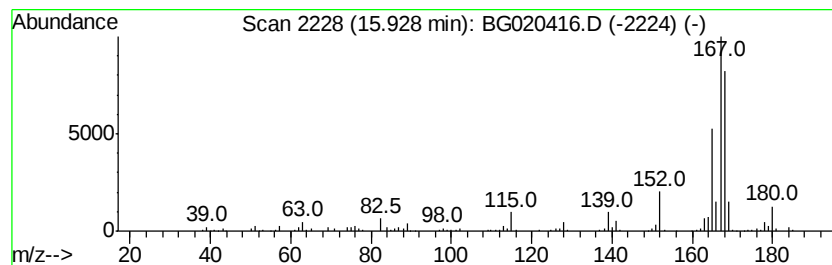
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 9 Diphenylmethane Concentration Rank 4

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 15.93 | 42.39 ng/ul | 562343 | Acenaphthene-d10 | 14.72 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Diphenylmethane                     | 168 | C13H12   | 000101-81-5 | 76   |
| 2    |    | 1,1'-Biphenyl, 2-methyl-            | 168 | C13H12   | 000643-58-3 | 68   |
| 3    |    | Diphenylmethane                     | 168 | C13H12   | 000101-81-5 | 64   |
| 4    |    | Nordiphenamid                       | 225 | C15H15NO | 000954-21-2 | 64   |
| 5    |    | Benzeneethanol, .alpha.,.alpha.,... | 350 | C26H22O  | 000981-24-8 | 64   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

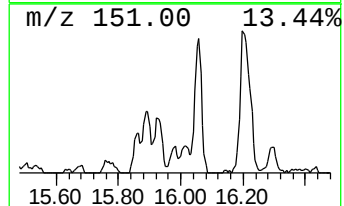
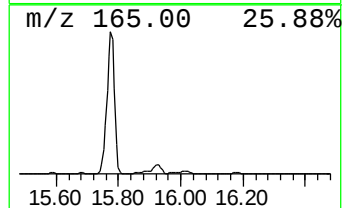
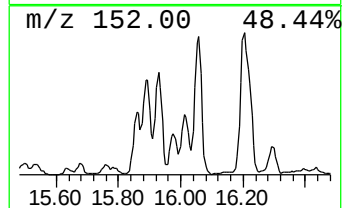
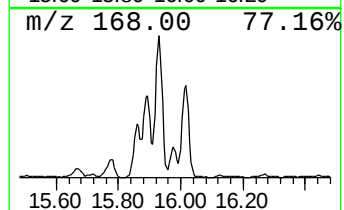
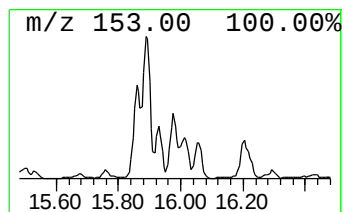
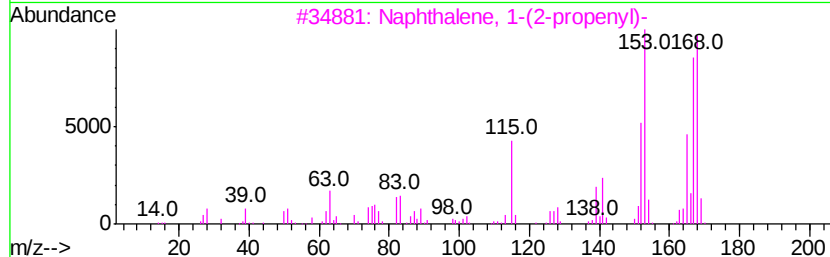
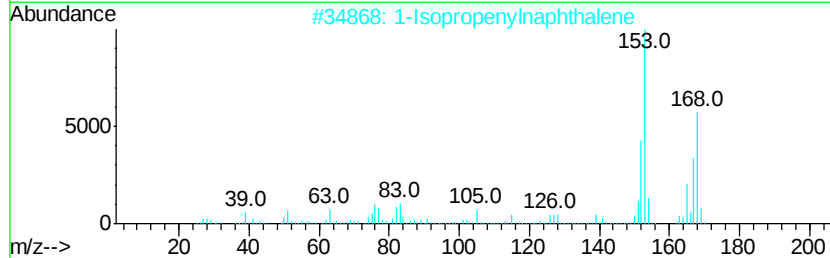
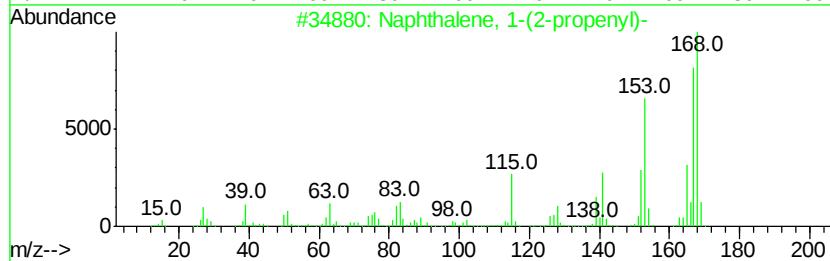
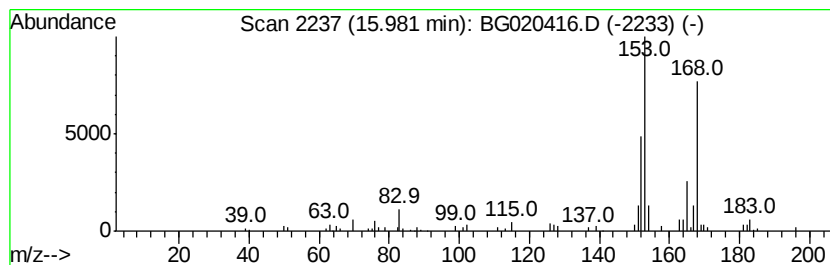
Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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-(2-propenyl)- Concentration Rank 10

| R.T.    | EstConc    | Area                                | Relative to ISTD | R.T.           |
|---------|------------|-------------------------------------|------------------|----------------|
| 15.98   | 9.88 ng/ul | 131144                              | Acenaphthene-d10 | 14.72          |
| Hit# of | 5          | Tentative ID                        | MW MolForm       | CAS# Qual      |
| 1       |            | Naphthalene, 1-(2-propenyl)-        | 168 C13H12       | 002489-86-3 72 |
| 2       |            | 1-Isopropenylnaphthalene            | 168 C13H12       | 001855-47-6 72 |
| 3       |            | Naphthalene, 1-(2-propenyl)-        | 168 C13H12       | 002489-86-3 72 |
| 4       |            | Naphthalene, 2-(1-methylethenyl)-   | 168 C13H12       | 003710-23-4 58 |
| 5       |            | 1-Cyclohexene-1-ethanol, 2,6,6-t... | 168 C11H20O      | 000472-65-1 50 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

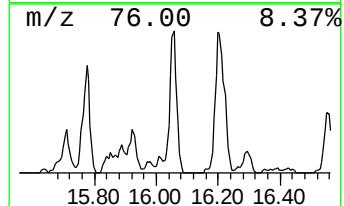
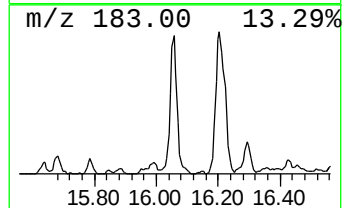
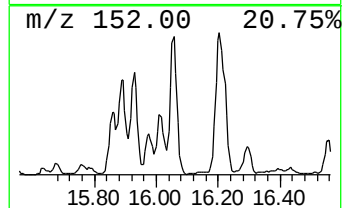
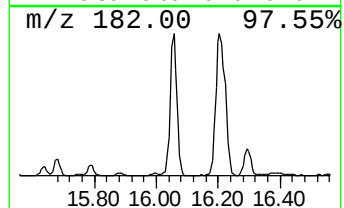
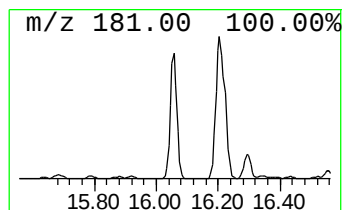
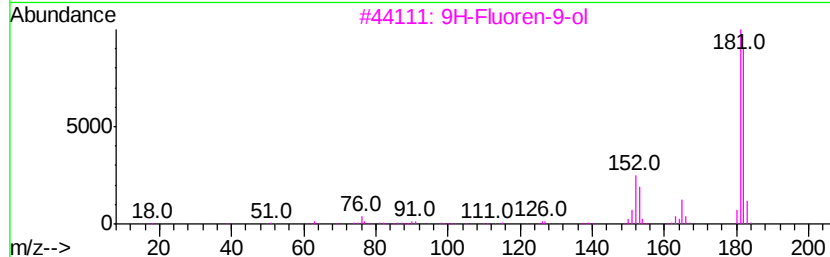
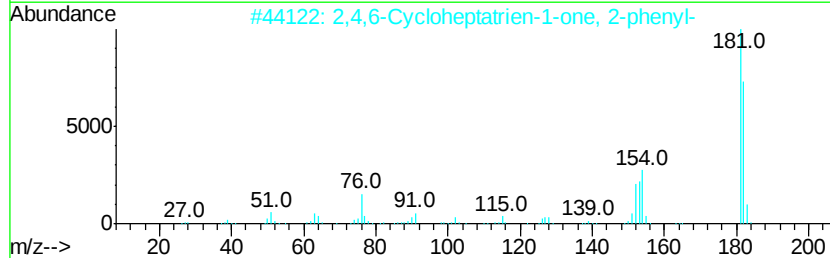
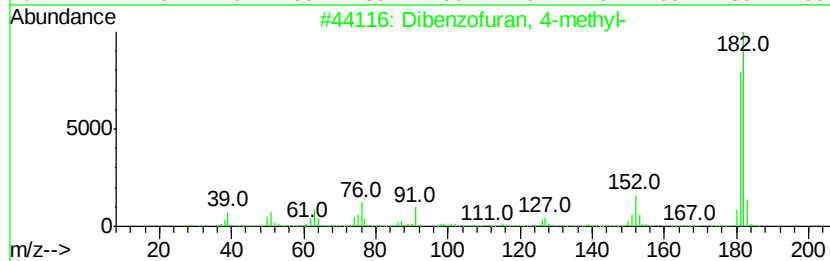
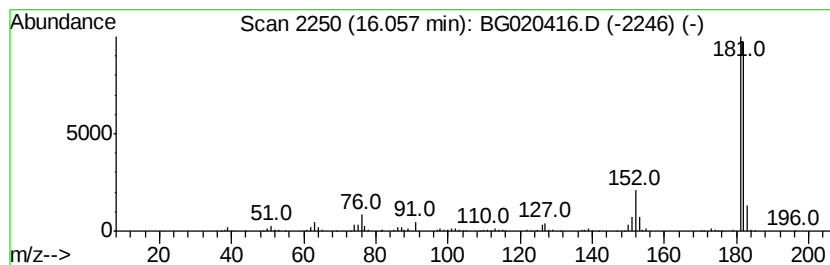
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 12 Dibenzofuran, 4-methyl- Concentration Rank 3

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 16.06 | 42.97 ng/ul | 570133 | Acenaphthene-d10 | 14.72 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Dibenzofuran, 4-methyl-             | 182 | C13H10O | 007320-53-8 | 91   |
| 2    |    | 2,4,6-Cycloheptatrien-1-one, 2-p... | 182 | C13H10O | 014562-09-5 | 86   |
| 3    |    | 9H-Fluoren-9-ol                     | 182 | C13H10O | 001689-64-1 | 78   |
| 4    |    | [1,1'-Biphenyl]-4-carboxaldehyde    | 182 | C13H10O | 003218-36-8 | 64   |
| 5    |    | 2-Hydroxyfluorene                   | 182 | C13H10O | 002443-58-5 | 59   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

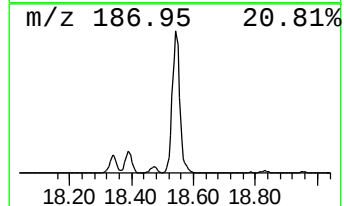
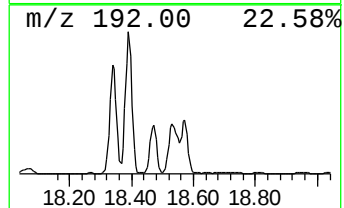
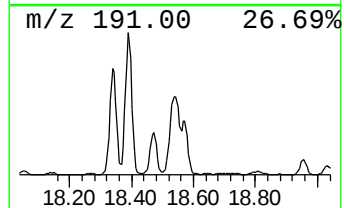
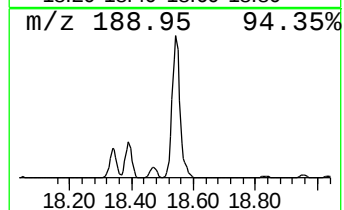
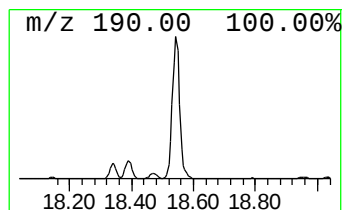
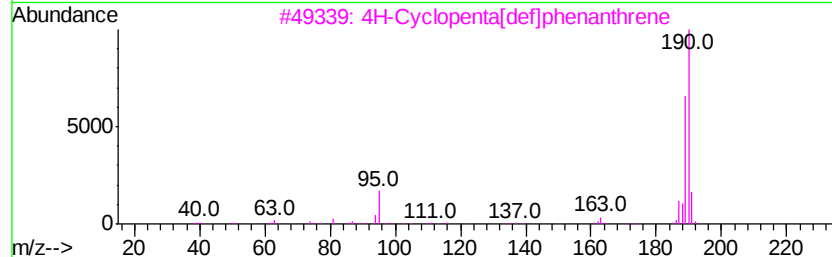
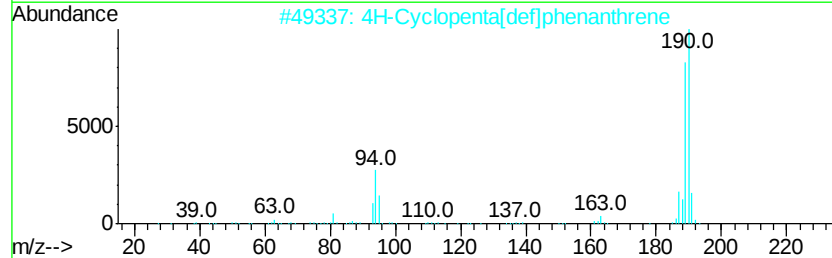
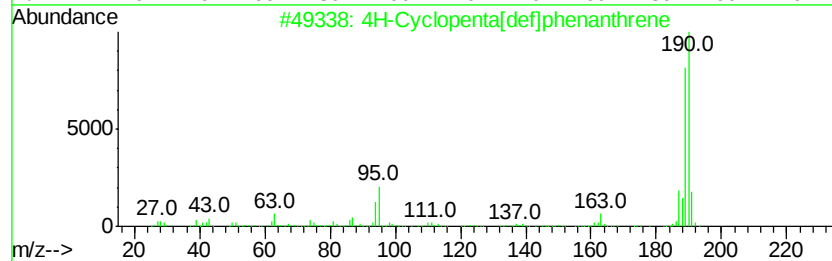
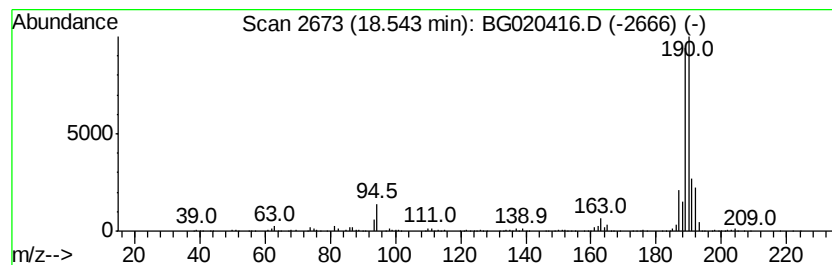
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 13 4H-Cyclopenta[def]phenanthrene Concentration Rank 19

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 18.54 | 3.69 ng/ul | 2224020 | Phenanthrene-d10 | 17.47 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|----------|-------------|------|
| 1    |    |   | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10   | 000203-64-5 | 90   |
| 2    |    |   | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10   | 000203-64-5 | 83   |
| 3    |    |   | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10   | 000203-64-5 | 74   |
| 4    |    |   | 6H-Cyclobuta[flk]phenanthrene       | 190 | C15H10   | 083469-43-6 | 72   |
| 5    |    |   | 2,3,5,6-Tetramethylterephthalald... | 190 | C12H14O2 | 007072-01-7 | 50   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

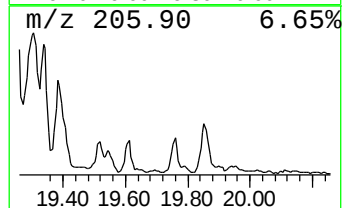
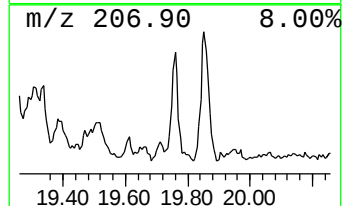
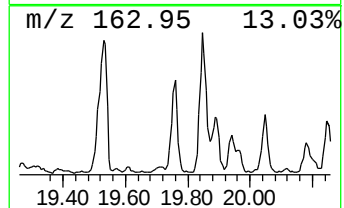
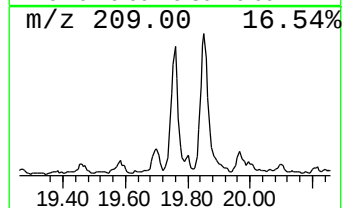
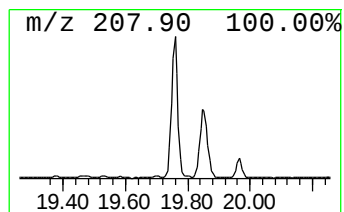
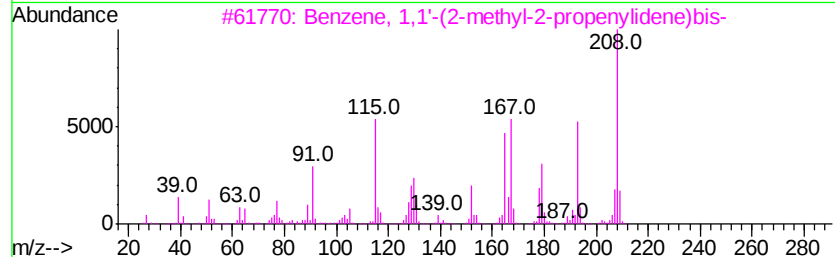
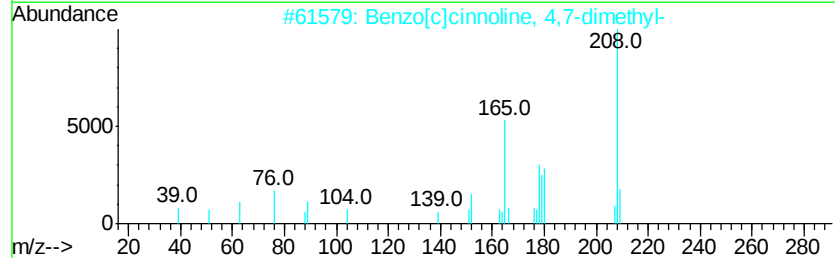
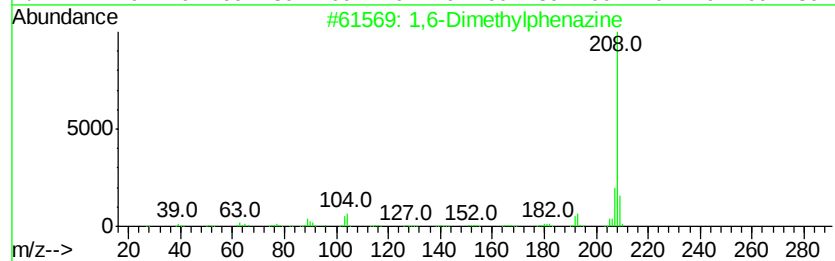
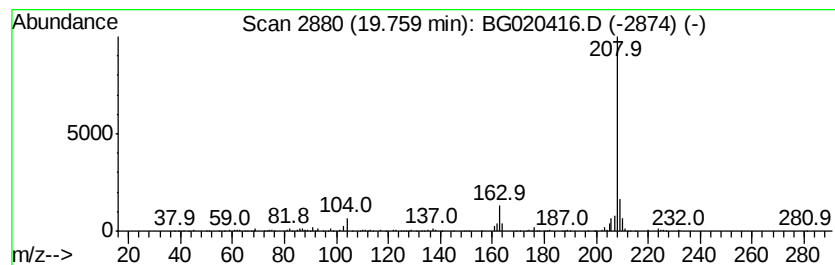
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 14 1,6-Dimethylphenazine Concentration Rank 20

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 19.76 | 2.96 ng/ul | 352143 | Chrysene-d12     | 21.74 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,6-Dimethylphenazine               | 208 | C14H12N2 | 058718-43-7 | 64   |
| 2    |    | Benzo[c]cinnoline, 4,7-dimethyl-    | 208 | C14H12N2 | 020684-54-2 | 64   |
| 3    |    | Benzene, 1,1'-(2-methyl-2-propen... | 208 | C16H16   | 070813-56-8 | 59   |
| 4    |    | 4,7-Dimethyl-1,10-phenanthroline    | 208 | C14H12N2 | 003248-05-3 | 59   |
| 5    |    | 1,10-Phenanthroline, 2,9-dimethyl-  | 208 | C14H12N2 | 000484-11-7 | 59   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

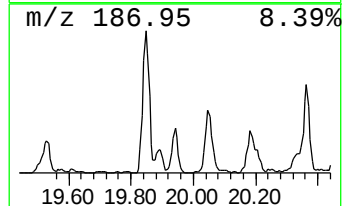
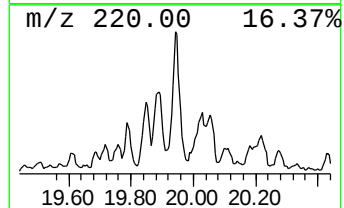
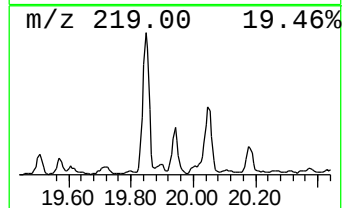
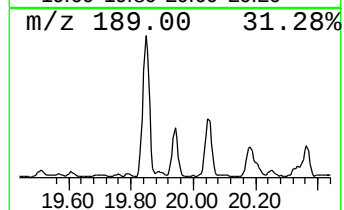
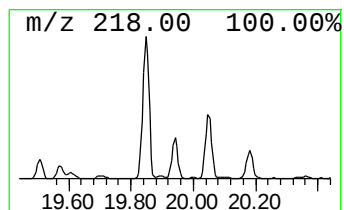
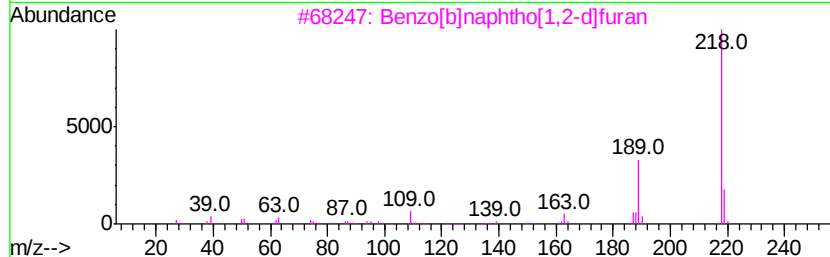
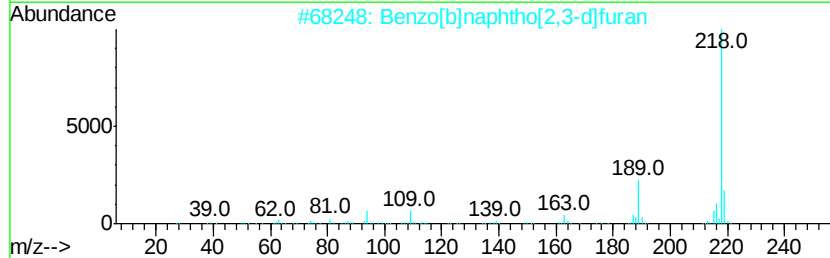
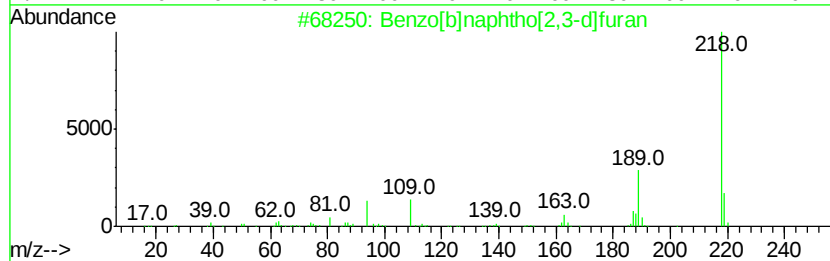
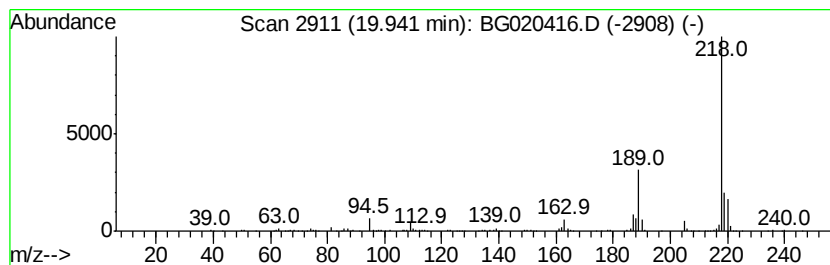
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 15 Benzo[b]naphtho[2,3-d]furan Concentration Rank 28

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 19.94 | 2.31 ng/ul | 275313 | Chrysene-d12     | 21.74 |

| Hit# | of | Tentative ID                | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[b]naphtho[2,3-d]furan | 218 | C16H10O | 000243-42-5 | 90   |
| 2    |    | Benzo[b]naphtho[2,3-d]furan | 218 | C16H10O | 000243-42-5 | 87   |
| 3    |    | Benzo[b]naphtho[1,2-d]furan | 218 | C16H10O | 000239-30-5 | 87   |
| 4    |    | Indeno[2,1-b]chromene,      | 218 | C16H10O | 000243-24-3 | 87   |
| 5    |    | Benzo[b]naphtho[2,3-d]furan | 218 | C16H10O | 000243-42-5 | 83   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

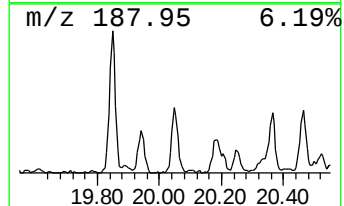
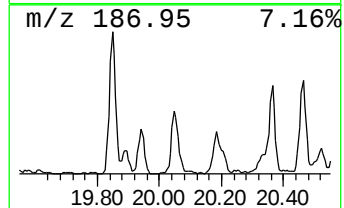
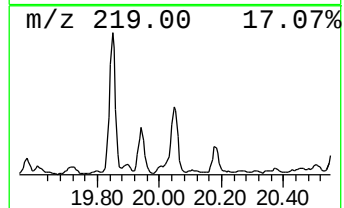
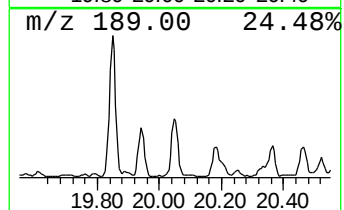
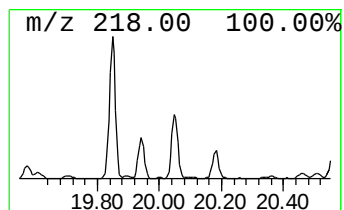
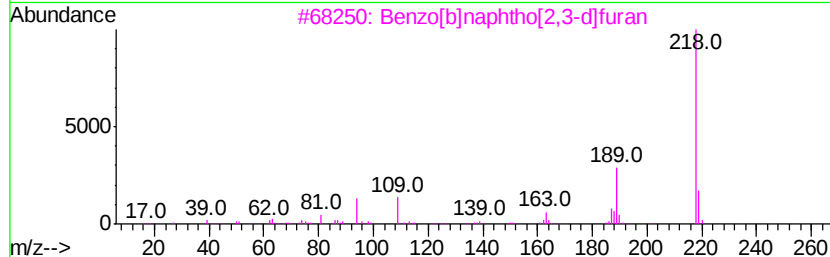
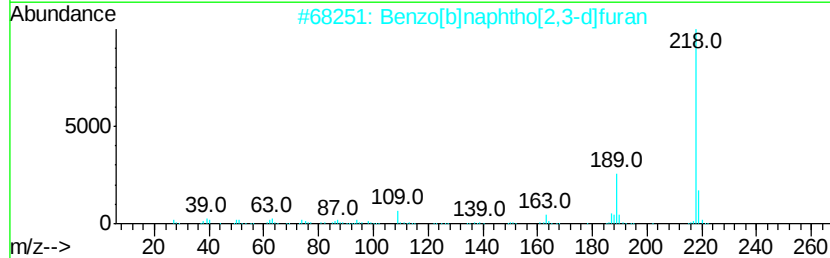
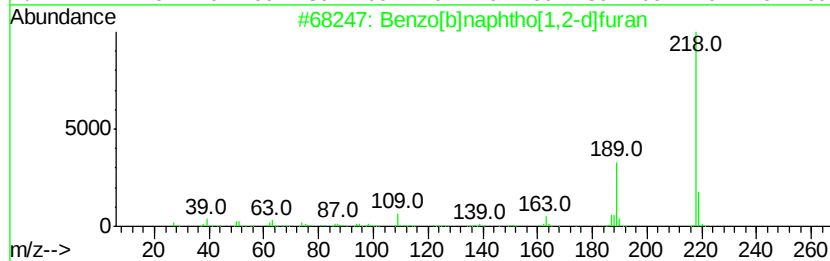
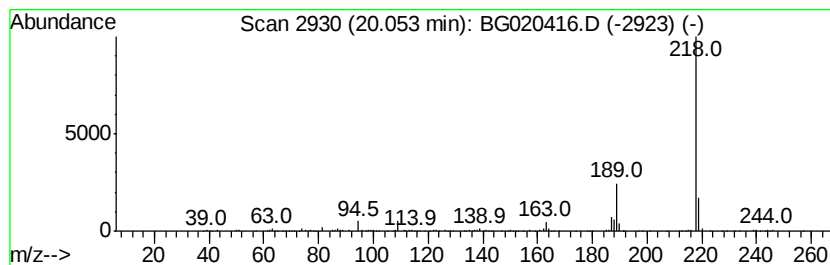
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 16 Benzo[b]naphtho[1,2-d]furan Concentration Rank 22

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 20.05 | 2.70 ng/ul | 321286 | Chrysene-d12     | 21.74 |

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



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

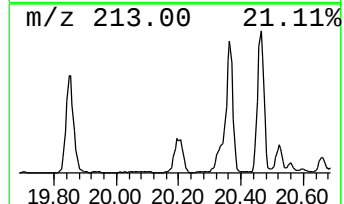
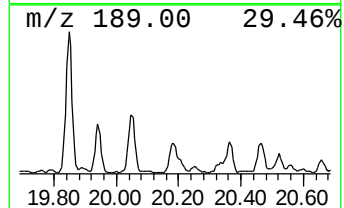
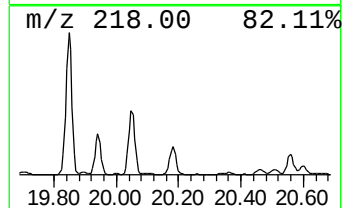
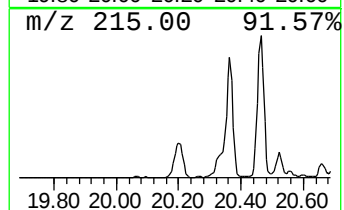
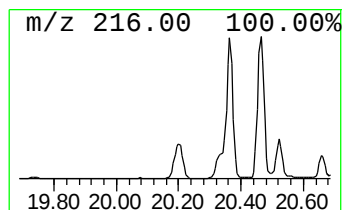
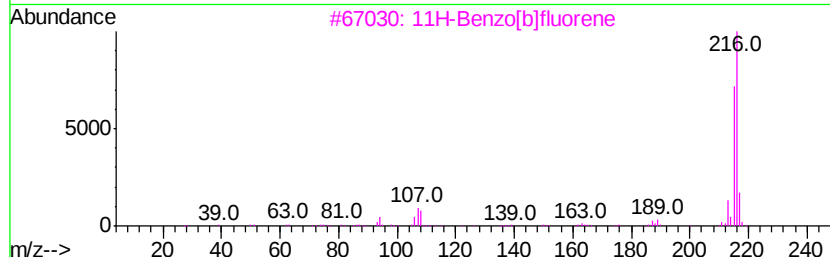
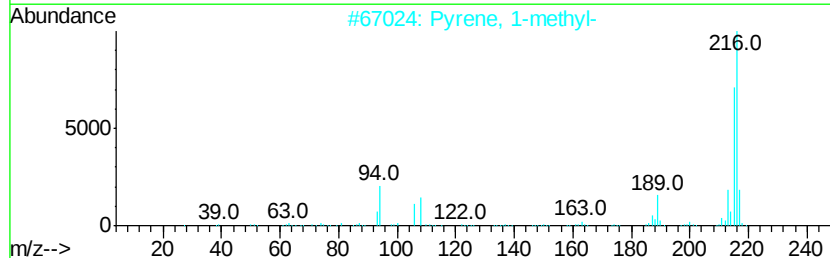
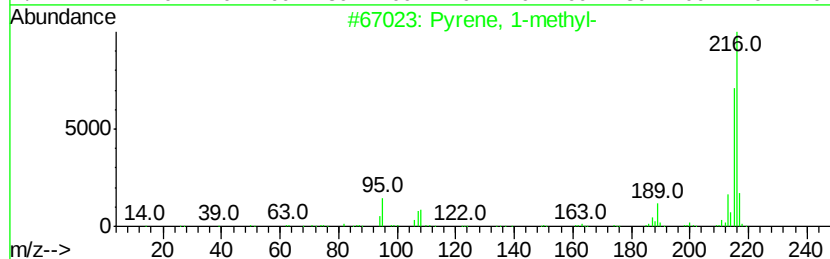
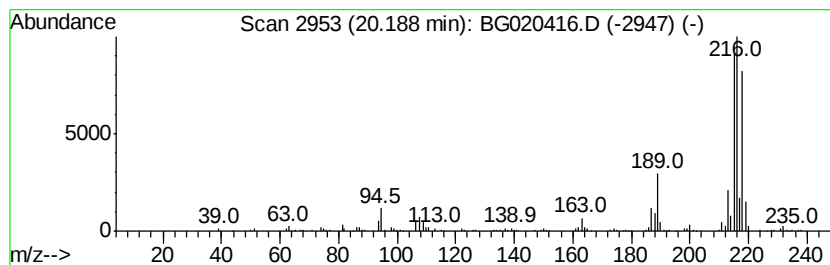
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 17 Pyrene, 1-methyl- Concentration Rank 18

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 20.19 | 4.10 ng/ul | 488119 | Chrysene-d12     | 21.74 |

| Hit# | of | 5 | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|---|----------------------|-----|---------|-------------|------|
| 1    |    |   | Pyrene, 1-methyl-    | 216 | C17H12  | 002381-21-7 | 96   |
| 2    |    |   | Pyrene, 1-methyl-    | 216 | C17H12  | 002381-21-7 | 91   |
| 3    |    |   | 11H-Benzo[b]fluorene | 216 | C17H12  | 000243-17-4 | 86   |
| 4    |    |   | Benzo[k]l[xanthene   | 218 | C16H10O | 000200-23-7 | 70   |
| 5    |    |   | Pyrene, 2-methyl-    | 216 | C17H12  | 003442-78-2 | 60   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

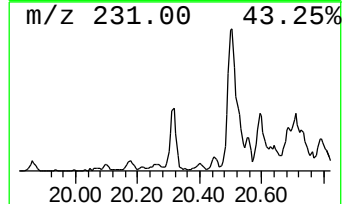
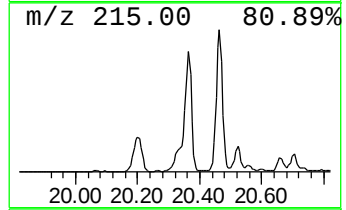
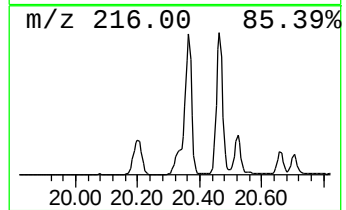
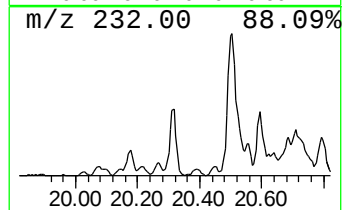
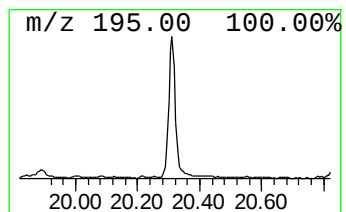
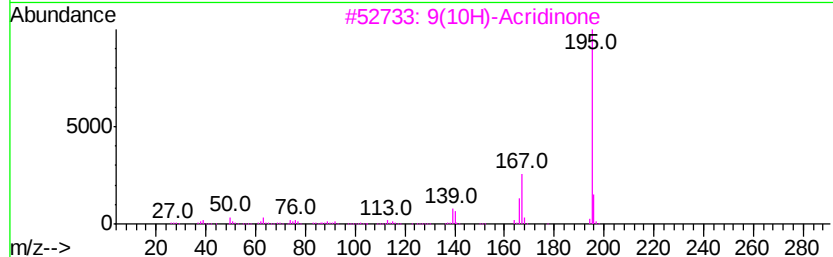
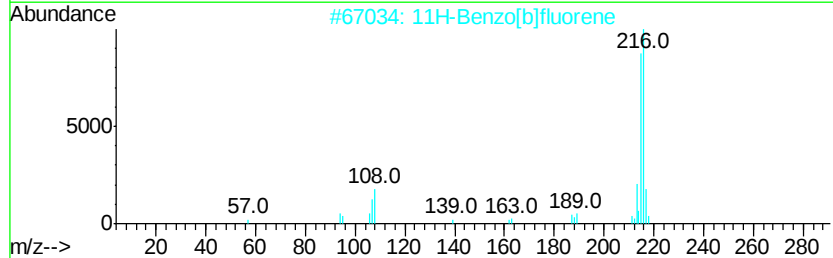
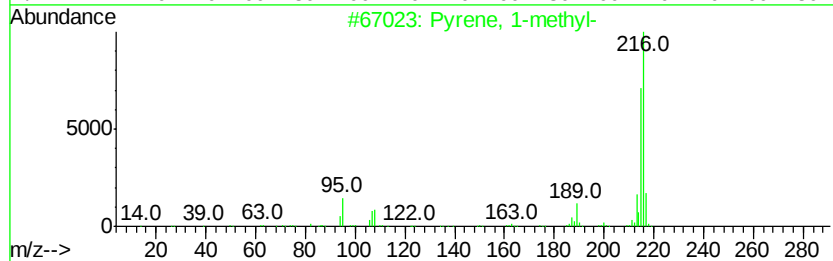
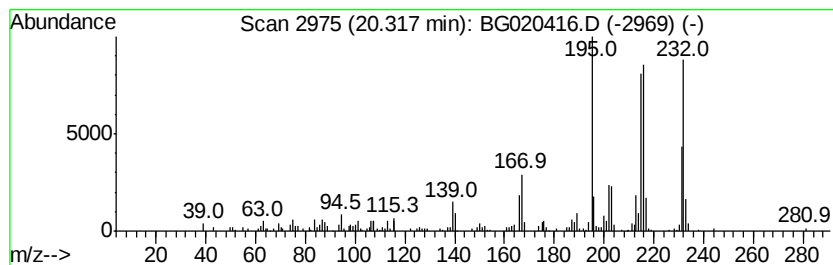
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 18 11H-Benzo[b]fluorene Concentration Rank 27

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 20.32 | 2.48 ng/ul | 295337 | Chrysene-d12     | 21.74 |

| Hit# | of | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------|-----|---------|-------------|------|
| 1    | 5  | Pyrene, 1-methyl-    | 216 | C17H12  | 002381-21-7 | 83   |
| 2    |    | 11H-Benzo[b]fluorene | 216 | C17H12  | 000243-17-4 | 56   |
| 3    |    | 9(10H)-Acridinone    | 195 | C13H9NO | 000578-95-0 | 56   |
| 4    |    | 3-Acridinol          | 195 | C13H9NO | 007132-70-9 | 53   |
| 5    |    | 11H-Benzo[b]fluorene | 216 | C17H12  | 000243-17-4 | 52   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

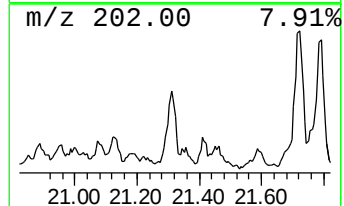
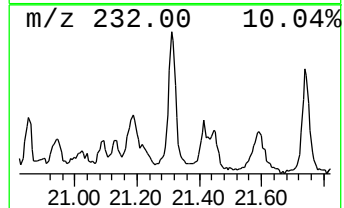
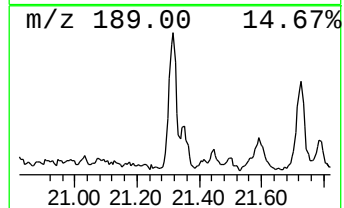
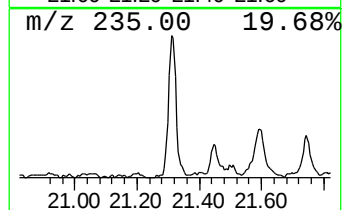
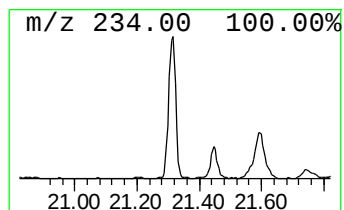
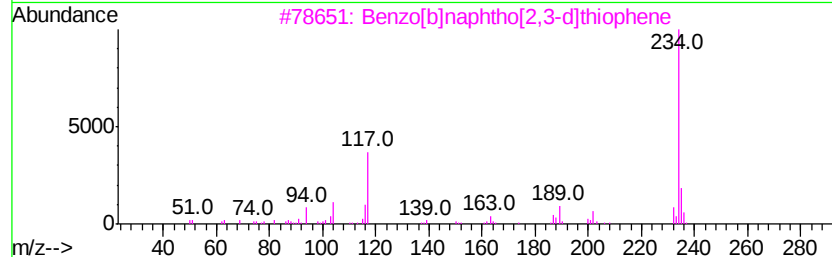
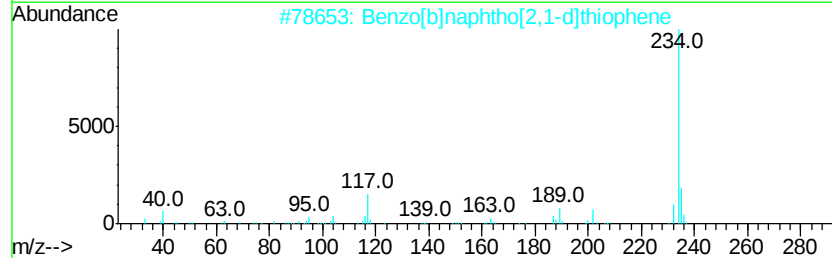
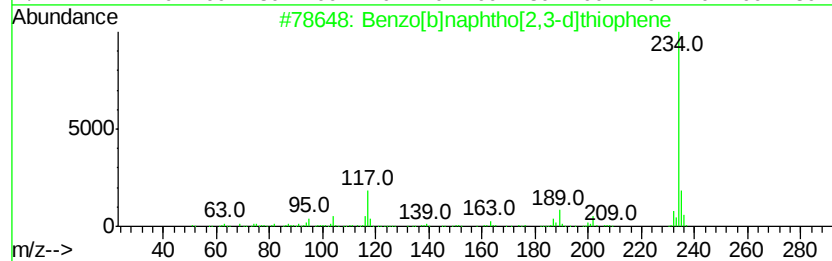
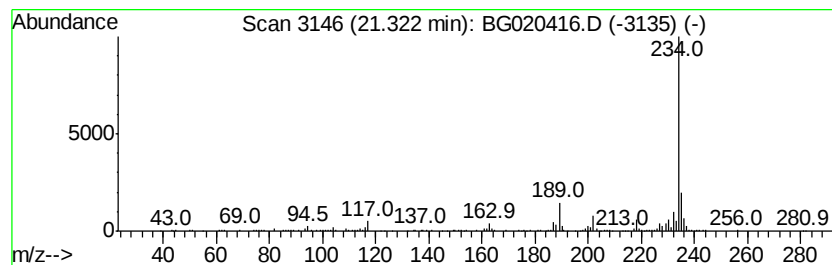
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 22 Benzo[b]naphtho[2,3-d]thioph... Concentration Rank 23

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 21.32 | 2.70 ng/ul | 321043 | Chrysene-d12     | 21.74 |

| Hit# | of | Tentative ID                    | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[b]naphtho[2,3-d]thiophene | 234 | C16H10S | 000243-46-9 | 94   |
| 2    |    | Benzo[b]naphtho[2,1-d]thiophene | 234 | C16H10S | 000239-35-0 | 93   |
| 3    |    | Benzo[b]naphtho[2,3-d]thiophene | 234 | C16H10S | 000243-46-9 | 93   |
| 4    |    | Benzo[b]naphtho[2,1-d]thiophene | 234 | C16H10S | 000239-35-0 | 93   |
| 5    |    | Benzo[b]naphtho[1,2-d]thiophene | 234 | C16H10S | 000205-43-6 | 91   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

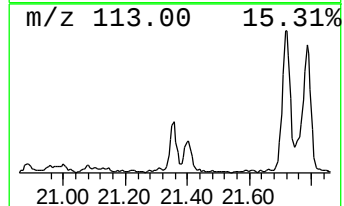
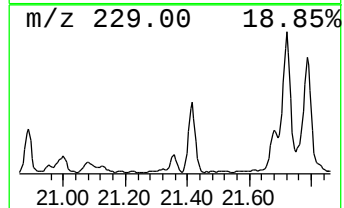
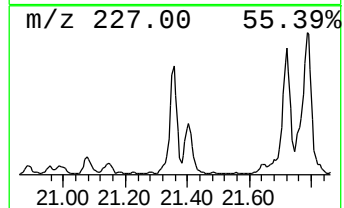
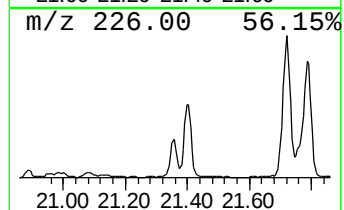
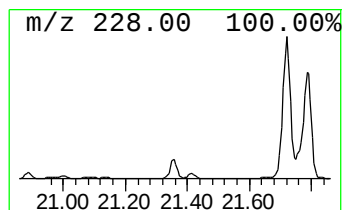
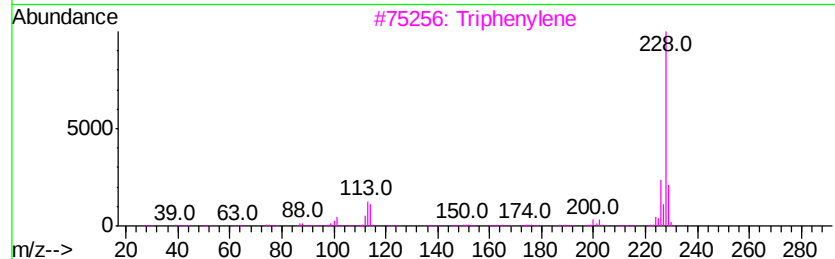
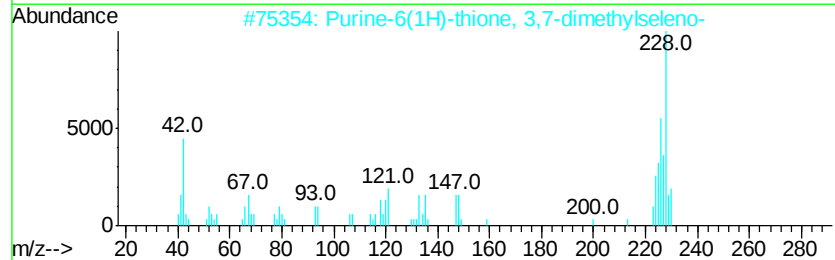
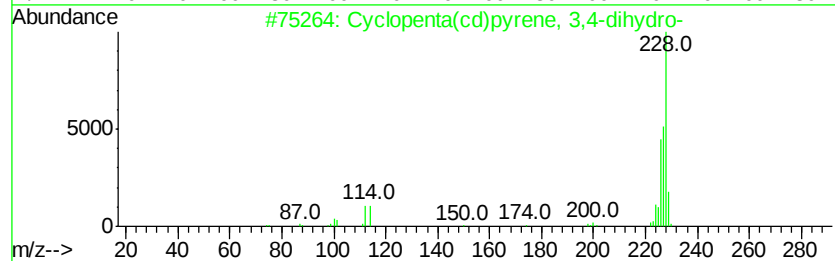
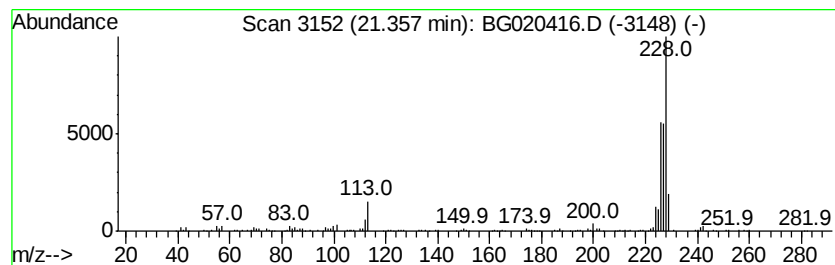
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 23 Cyclopenta(cd)pyrene, 3,4-d... Concentration Rank 26

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 21.36 | 2.61 ng/ul | 310180 | Chrysene-d12     | 21.74 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Cyclopenta(cd)pyrene, 3,4-dihydro-  | 228 | C18H12   | 025732-74-5 | 58   |
| 2    |    | Purine-6(1H)-thione, 3,7-dimethy... | 228 | C7H8N4Se | 023663-58-3 | 58   |
| 3    |    | Triphenylene                        | 228 | C18H12   | 000217-59-4 | 55   |
| 4    |    | Benzo[cl]phenanthrene               | 228 | C18H12   | 000195-19-7 | 53   |
| 5    |    | Triphenylene                        | 228 | C18H12   | 000217-59-4 | 53   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

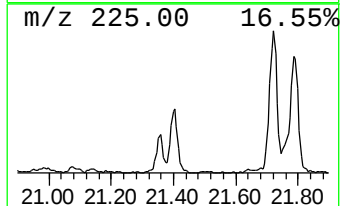
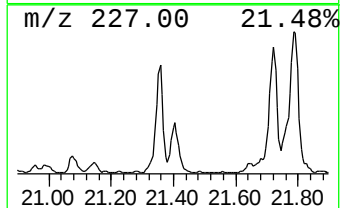
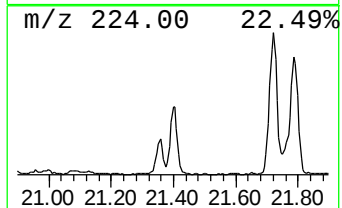
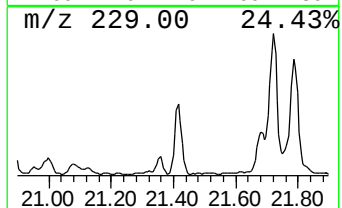
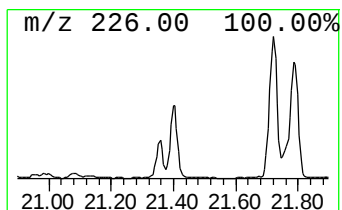
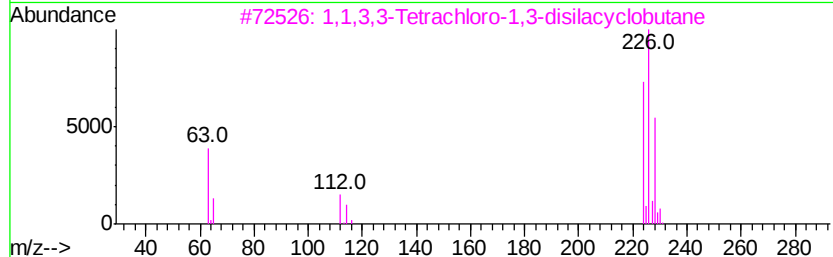
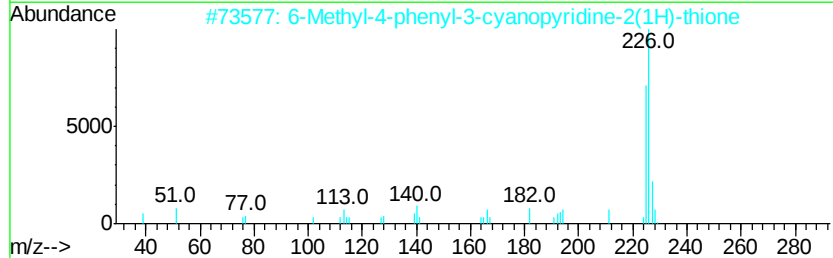
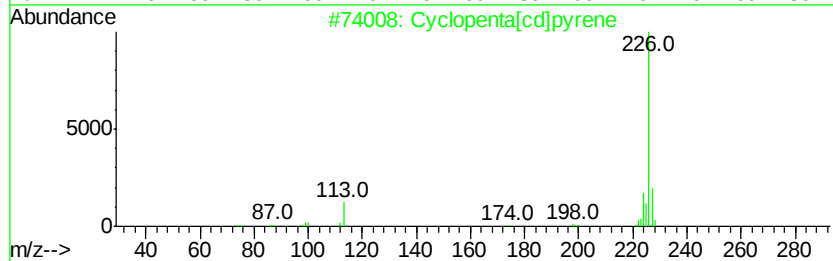
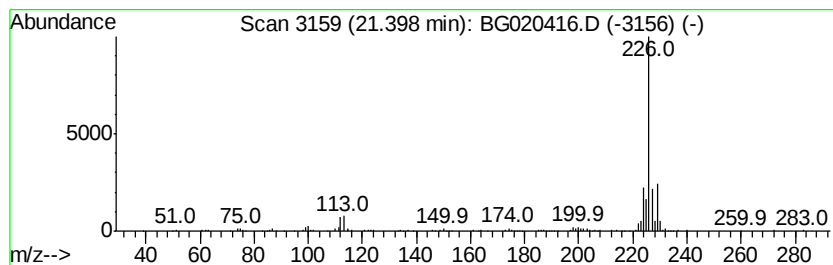
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 24 unknown-01 Concentration Rank 24

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 21.40 | 2.66 ng/ul | 316639 | Chrysene-d12     | 21.74 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#        | Qual |
|------|----|-------------------------------------|-----|------------|-------------|------|
| 1    | 5  | Cyclopenta[cd]pyrene                | 226 | C18H10     | 027208-37-3 | 49   |
| 2    |    | 6-Methyl-4-phenyl-3-cyanopyridin... | 226 | C13H10N2S  | 078564-23-5 | 38   |
| 3    |    | 1,1,3,3-Tetrachloro-1,3-disilacy... | 224 | C2H4Cl4Si2 | 002146-97-6 | 38   |
| 4    |    | .beta.-Carboline, 7-methoxy-1,2-... | 226 | C14H14N2O  | 006519-18-2 | 37   |
| 5    |    | Benzene, 1,2,4-trichloro-5-(meth... | 226 | C7H5Cl3S   | 004163-78-4 | 35   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

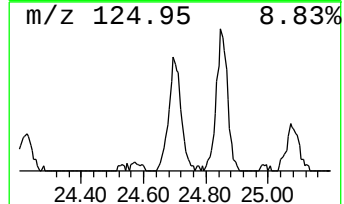
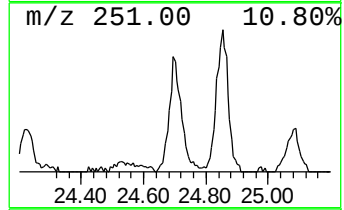
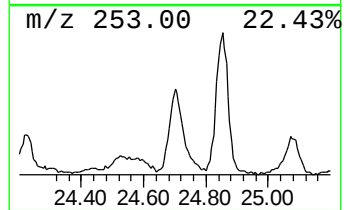
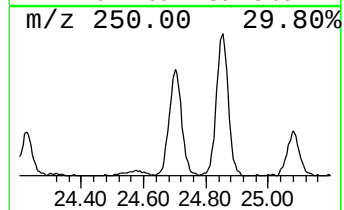
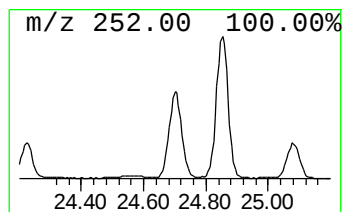
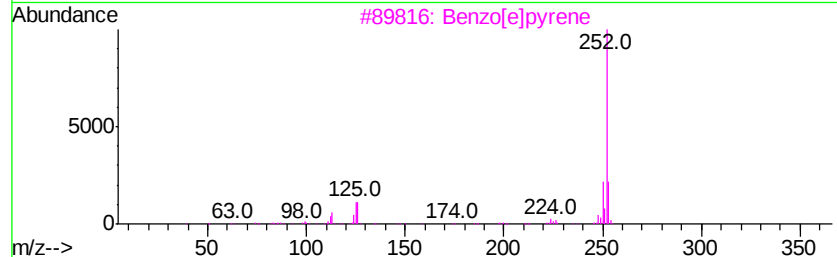
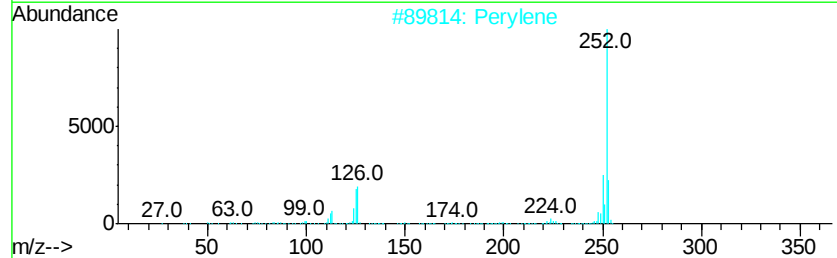
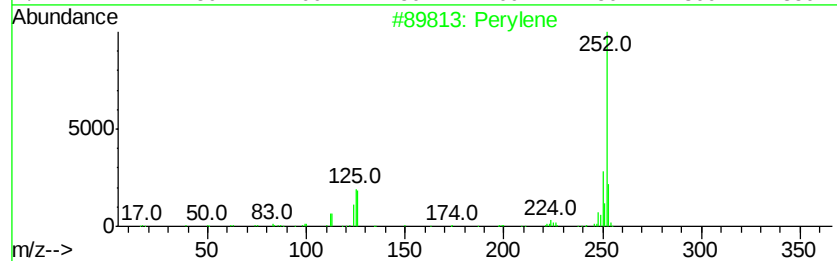
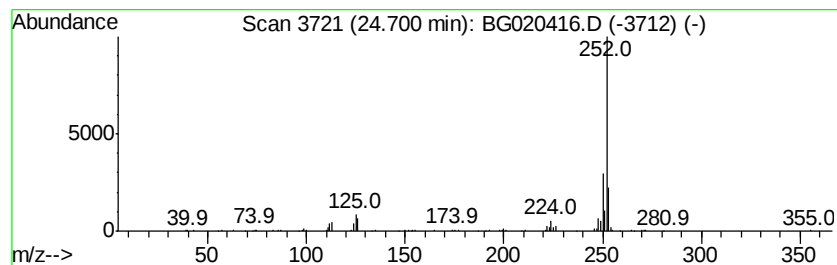
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 26 Perylene Concentration Rank 13

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 24.70 | 8.90 ng/ul | 247813 | Perylene-d12     | 25.01 |

| Hit# | of | 5 | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|---|----------------------|-----|---------|-------------|------|
| 1    |    |   | Perylene             | 252 | C20H12  | 000198-55-0 | 95   |
| 2    |    |   | Perylene             | 252 | C20H12  | 000198-55-0 | 93   |
| 3    |    |   | Benzo[e]pyrene       | 252 | C20H12  | 000192-97-2 | 91   |
| 4    |    |   | Benzo[i]fluoranthene | 252 | C20H12  | 000205-82-3 | 90   |
| 5    |    |   | Benzo[k]fluoranthene | 252 | C20H12  | 000207-08-9 | 89   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\  
Data File : BG020416.D  
Acq On : 22 Dec 2015 19:33  
Operator : UM/SJ  
Sample : G4849-09  
Misc : med level RX  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N73ME

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

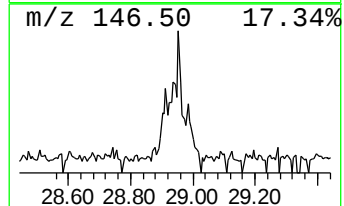
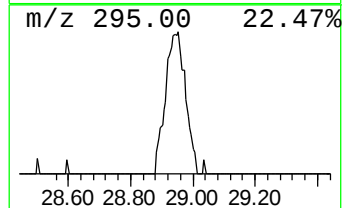
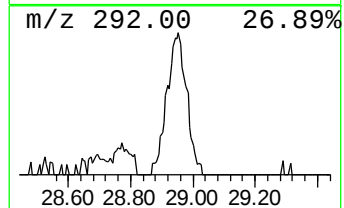
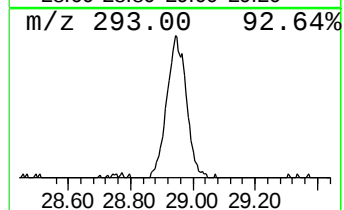
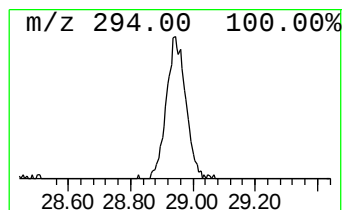
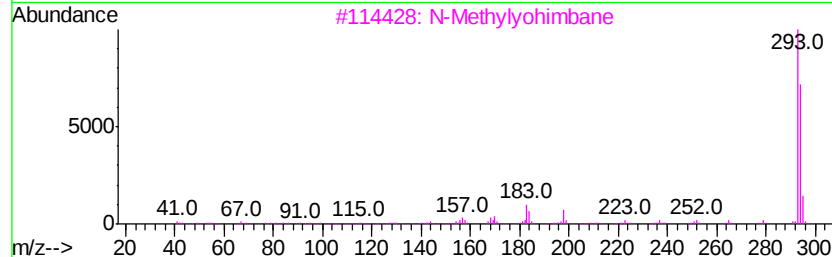
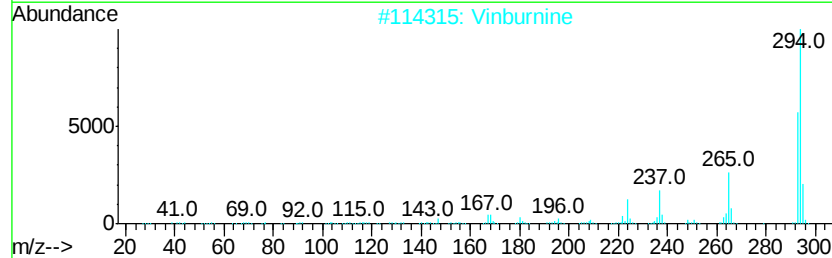
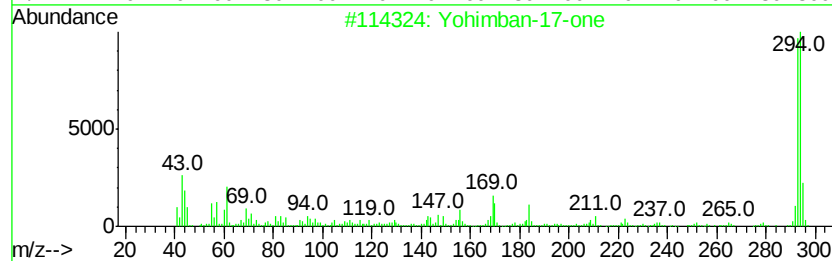
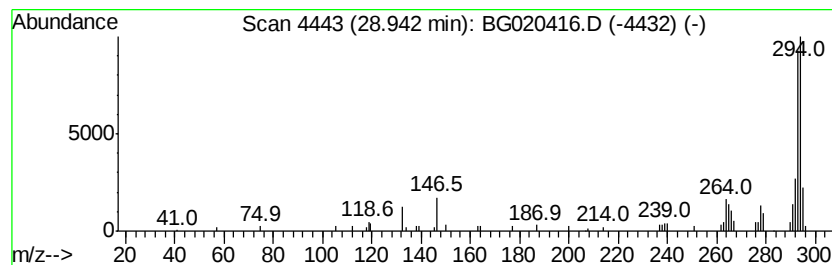
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 28 Yohimban-17-one Concentration Rank 16

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 28.94 | 5.04 ng/ul | 140345 | Perylene-d12     | 25.01 |

| Hit# | of | Tentative ID                   | MW  | MolForm   | CAS#         | Qual |
|------|----|--------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Yohimban-17-one                | 294 | C19H22N2O | 000523-14-8  | 64   |
| 2    |    | Vinburnine                     | 294 | C19H22N2O | 004880-88-0  | 53   |
| 3    |    | N-Methylvohimbane              | 294 | C20H26N2  | 1000128-76-0 | 53   |
| 4    |    | 11-Methyldibenzo(a,c)phenazine | 294 | C21H14N2  | 004559-60-8  | 47   |
| 5    |    | Vinburnine                     | 294 | C19H22N2O | 004880-88-0  | 45   |



Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG122215\  
 Data File : BG020416.D  
 Acq On : 22 Dec 2015 19:33  
 Operator : UM/SJ  
 Sample : G4849-09  
 Misc : med level RX  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N73ME

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 |
| Naphthalene, 1-me... | 12.77 | 117.7   | ng/ul | 1063570  | 2                     | 10.90 | 180792   | 20.0 |
| Naphthalene, 2-et... | 13.75 | 24.1    | ng/ul | 319153   | 3                     | 14.72 | 265346   | 20.0 |
| Naphthalene, 2,3-... | 14.04 | 44.1    | ng/ul | 584753   | 3                     | 14.72 | 265346   | 20.0 |
| Naphthalene, 1,5-... | 14.28 | 17.2    | ng/ul | 228416   | 3                     | 14.72 | 265346   | 20.0 |
| 2-Naphthalenecarb... | 14.85 | 13.8    | ng/ul | 182943   | 3                     | 14.72 | 265346   | 20.0 |
| Benzene, [1-(2,4-... | 15.02 | 15.4    | ng/ul | 204176   | 3                     | 14.72 | 265346   | 20.0 |
| Naphthalene, 2,3,... | 15.19 | 9.6     | ng/ul | 127175   | 3                     | 14.72 | 265346   | 20.0 |
| Naphthalene, 1,4,... | 15.33 | 9.1     | ng/ul | 120091   | 3                     | 14.72 | 265346   | 20.0 |
| Diphenylmethane      | 15.93 | 42.4    | ng/ul | 562343   | 3                     | 14.72 | 265346   | 20.0 |
| Naphthalene, 1-(2... | 15.98 | 9.9     | ng/ul | 131144   | 3                     | 14.72 | 265346   | 20.0 |
| Dibenzofuran, 4-m... | 16.06 | 43.0    | ng/ul | 570133   | 3                     | 14.72 | 265346   | 20.0 |
| 4H-Cyclopenta[def... | 18.54 | 3.7     | ng/ul | 2224020  | 4                     | 17.47 | 12049600 | 20.0 |
| 1,6-Dimethylphena... | 19.76 | 3.0     | ng/ul | 352143   | 5                     | 21.74 | 2381320  | 20.0 |
| Benzo[b]naphtho[2... | 19.94 | 2.3     | ng/ul | 275313   | 5                     | 21.74 | 2381320  | 20.0 |
| Benzo[b]naphtho[1... | 20.05 | 2.7     | ng/ul | 321286   | 5                     | 21.74 | 2381320  | 20.0 |
| Pyrene, 1-methyl-    | 20.19 | 4.1     | ng/ul | 488119   | 5                     | 21.74 | 2381320  | 20.0 |
| 11H-Benzo[b]fluorene | 20.32 | 2.5     | ng/ul | 295337   | 5                     | 21.74 | 2381320  | 20.0 |
| Benzo[b]naphtho[2... | 21.32 | 2.7     | ng/ul | 321043   | 5                     | 21.74 | 2381320  | 20.0 |
| Cyclopenta(cd)pyr... | 21.36 | 2.6     | ng/ul | 310180   | 5                     | 21.74 | 2381320  | 20.0 |
| unknown-01           | 21.40 | 2.7     | ng/ul | 316639   | 5                     | 21.74 | 2381320  | 20.0 |
| Perylene             | 24.70 | 8.9     | ng/ul | 247813   | 6                     | 25.01 | 556891   | 20.0 |
| Yohimban-17-one      | 28.94 | 5.0     | ng/ul | 140345   | 6                     | 25.01 | 556891   | 20.0 |