

Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
 Data File : BG018295.D  
 Acq On : 6 Aug 2015 5:36  
 Operator : UM/TP  
 Sample : G3109-12RE  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 C01P8RE

## 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-BG080515.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         | 4.766       | 346           | 354         | 365          | rBV      | 2291909        | 3336689       | 8.54%           | 0.644%        |
| 2         | 4.954       | 381           | 386         | 395          | rVB      | 239224         | 353291        | 0.90%           | 0.068%        |
| 3         | 5.090       | 403           | 409         | 421          | rVB      | 574455         | 1026253       | 2.63%           | 0.198%        |
| 4         | 5.454       | 463           | 471         | 479          | rVB2     | 156952         | 325312        | 0.83%           | 0.063%        |
| 5         | 6.535       | 650           | 655         | 660          | rBV      | 336724         | 489654        | 1.25%           | 0.094%        |
| 6         | 6.588       | 660           | 664         | 671          | rVB      | 187260         | 291037        | 0.74%           | 0.056%        |
| 7         | 6.670       | 671           | 678         | 685          | rVB2     | 274668         | 453699        | 1.16%           | 0.088%        |
| 8         | 7.093       | 741           | 750         | 758          | rBV      | 609578         | 1009131       | 2.58%           | 0.195%        |
| 9         | 7.334       | 783           | 791         | 799          | rBV      | 1332297        | 2068459       | 5.29%           | 0.399%        |
| 10        | 7.487       | 799           | 817         | 824          | rVV      | 3362773        | 5537527       | 14.17%          | 1.068%        |
| 11        | 7.557       | 824           | 829         | 836          | rVB2     | 162002         | 260016        | 0.67%           | 0.050%        |
| 12        | 8.080       | 913           | 918         | 925          | rBV2     | 152546         | 256785        | 0.66%           | 0.050%        |
| 13        | 8.674       | 1014          | 1019        | 1028         | rVB      | 166290         | 274146        | 0.70%           | 0.053%        |
| 14        | 9.443       | 1144          | 1150        | 1153         | rVV      | 194880         | 315131        | 0.81%           | 0.061%        |
| 15        | 9.637       | 1178          | 1183        | 1190         | rVV6     | 96306          | 250519        | 0.64%           | 0.048%        |
| 16        | 9.755       | 1199          | 1203        | 1211         | rVV3     | 159905         | 281001        | 0.72%           | 0.054%        |
| 17        | 9.878       | 1218          | 1224        | 1231         | rVV4     | 124457         | 318528        | 0.81%           | 0.061%        |
| 18        | 10.101      | 1257          | 1262        | 1266         | rBV      | 176037         | 288427        | 0.74%           | 0.056%        |
| 19        | 10.231      | 1273          | 1284        | 1288         | rBV      | 322378         | 669574        | 1.71%           | 0.129%        |
| 20        | 10.278      | 1288          | 1292        | 1300         | rVB      | 250563         | 430236        | 1.10%           | 0.083%        |
| 21        | 10.642      | 1341          | 1354        | 1361         | rBV4     | 123738         | 317704        | 0.81%           | 0.061%        |
| 22        | 10.783      | 1372          | 1378        | 1385         | rBV4     | 132707         | 262310        | 0.67%           | 0.051%        |
| 23        | 11.911      | 1558          | 1570        | 1575         | rVB      | 188100         | 371519        | 0.95%           | 0.072%        |
| 24        | 13.539      | 1843          | 1847        | 1852         | rVB2     | 301526         | 476951        | 1.22%           | 0.092%        |
| 25        | 13.868      | 1898          | 1903        | 1913         | rVV3     | 319985         | 580970        | 1.49%           | 0.112%        |
| 26        | 13.950      | 1913          | 1917        | 1922         | rVB2     | 201009         | 259511        | 0.66%           | 0.050%        |
| 27        | 14.038      | 1926          | 1932        | 1937         | rBV4     | 166778         | 330506        | 0.85%           | 0.064%        |
| 28        | 14.132      | 1943          | 1948        | 1951         | rVV      | 370480         | 642386        | 1.64%           | 0.124%        |
| 29        | 14.167      | 1951          | 1954        | 1966         | rVB2     | 1304578        | 2023092       | 5.18%           | 0.390%        |
| 30        | 14.537      | 2013          | 2017        | 2022         | rVB2     | 212472         | 348643        | 0.89%           | 0.067%        |
| 31        | 14.766      | 2051          | 2056        | 2063         | rBV8     | 90679          | 288901        | 0.74%           | 0.056%        |
| 32        | 14.919      | 2078          | 2082        | 2085         | rBV3     | 218601         | 349200        | 0.89%           | 0.067%        |
| 33        | 15.137      | 2115          | 2119        | 2123         | rVB      | 226384         | 316480        | 0.81%           | 0.061%        |
| 34        | 15.190      | 2123          | 2128        | 2133         | rBV2     | 274393         | 439483        | 1.12%           | 0.085%        |

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 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-BG080515.M  
 Title : SVOA CALIBRATION

|    |        |      |      |      |      |          |          |         |        |
|----|--------|------|------|------|------|----------|----------|---------|--------|
| 35 | 15.401 | 2158 | 2164 | 2172 | rVV  | 1615562  | 2299666  | 5.88%   | 0.444% |
| 36 | 15.895 | 2241 | 2248 | 2253 | rVB3 | 379060   | 841694   | 2.15%   | 0.162% |
| 37 | 16.012 | 2263 | 2268 | 2273 | rVB  | 1684025  | 2254215  | 5.77%   | 0.435% |
| 38 | 16.135 | 2283 | 2289 | 2294 | rBV  | 2905804  | 3815842  | 9.76%   | 0.736% |
| 39 | 16.423 | 2334 | 2338 | 2342 | rBV  | 832403   | 1051352  | 2.69%   | 0.203% |
| 40 | 16.470 | 2343 | 2346 | 2350 | rVB  | 321902   | 418831   | 1.07%   | 0.081% |
| 41 | 16.717 | 2385 | 2388 | 2393 | rVV  | 302378   | 393196   | 1.01%   | 0.076% |
| 42 | 16.788 | 2393 | 2400 | 2403 | rVV2 | 5097950  | 7841328  | 20.06%  | 1.513% |
| 43 | 16.823 | 2403 | 2406 | 2411 | rVB  | 2696580  | 3084071  | 7.89%   | 0.595% |
| 44 | 16.899 | 2414 | 2419 | 2422 | rBV2 | 790923   | 1193825  | 3.05%   | 0.230% |
| 45 | 16.952 | 2422 | 2428 | 2432 | rVV  | 801623   | 1525316  | 3.90%   | 0.294% |
| 46 | 17.081 | 2444 | 2450 | 2458 | rVB2 | 3467204  | 5347121  | 13.68%  | 1.032% |
| 47 | 17.375 | 2493 | 2500 | 2503 | rBV  | 7237496  | 12494690 | 31.97%  | 2.411% |
| 48 | 17.405 | 2503 | 2505 | 2510 | rVB  | 5577772  | 5136049  | 13.14%  | 0.991% |
| 49 | 17.522 | 2515 | 2525 | 2531 | rVB  | 7389529  | 16268492 | 41.62%  | 3.139% |
| 50 | 17.628 | 2537 | 2543 | 2550 | rBV2 | 6168522  | 10004059 | 25.60%  | 1.930% |
| 51 | 17.704 | 2551 | 2556 | 2561 | rBV  | 2305601  | 2794461  | 7.15%   | 0.539% |
| 52 | 17.763 | 2561 | 2566 | 2569 | rBV  | 1596307  | 1877215  | 4.80%   | 0.362% |
| 53 | 17.916 | 2587 | 2592 | 2597 | rBV2 | 1373720  | 1930410  | 4.94%   | 0.372% |
| 54 | 18.010 | 2598 | 2608 | 2612 | rVV  | 21551620 | 39084647 | 100.00% | 7.541% |
| 55 | 18.074 | 2612 | 2619 | 2622 | rVV  | 21657688 | 33374490 | 85.39%  | 6.439% |
| 56 | 18.115 | 2622 | 2626 | 2629 | rVB  | 14892303 | 15766613 | 40.34%  | 3.042% |
| 57 | 18.280 | 2648 | 2654 | 2658 | rBV  | 7280937  | 9738201  | 24.92%  | 1.879% |
| 58 | 18.327 | 2658 | 2662 | 2667 | rVB  | 3840738  | 4309546  | 11.03%  | 0.831% |
| 59 | 18.421 | 2669 | 2678 | 2681 | rBV  | 4767545  | 6948932  | 17.78%  | 1.341% |
| 60 | 18.456 | 2681 | 2684 | 2688 | rVB  | 1751904  | 2063099  | 5.28%   | 0.398% |
| 61 | 18.515 | 2690 | 2694 | 2697 | rBV  | 574158   | 914667   | 2.34%   | 0.176% |
| 62 | 18.703 | 2721 | 2726 | 2732 | rBV4 | 501180   | 1054862  | 2.70%   | 0.204% |
| 63 | 18.774 | 2733 | 2738 | 2744 | rBV3 | 947887   | 2239658  | 5.73%   | 0.432% |
| 64 | 18.850 | 2744 | 2751 | 2755 | rVV  | 14428369 | 30438841 | 77.88%  | 5.873% |
| 65 | 18.879 | 2755 | 2756 | 2760 | rVB  | 8781375  | 4675548  | 11.96%  | 0.902% |
| 66 | 18.938 | 2761 | 2766 | 2771 | rBV  | 4868144  | 5467464  | 13.99%  | 1.055% |
| 67 | 19.009 | 2773 | 2778 | 2781 | rVB  | 917698   | 1212308  | 3.10%   | 0.234% |
| 68 | 19.067 | 2781 | 2788 | 2792 | rBV3 | 6821033  | 9642760  | 24.67%  | 1.860% |
| 69 | 19.150 | 2793 | 2802 | 2807 | rVB2 | 15672075 | 30341544 | 77.63%  | 5.854% |
| 70 | 19.214 | 2807 | 2813 | 2817 | rBV  | 12993808 | 14120625 | 36.13%  | 2.724% |
| 71 | 19.273 | 2820 | 2823 | 2828 | rBV2 | 1445766  | 1654109  | 4.23%   | 0.319% |

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ClientSampleId :  
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## Integration Parameters: LSCINT.P

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Smoothing : OFF  
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Start Thrs: 0.2  
Stop Thrs : 0  
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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-BG080515.M  
Title : SVOA CALIBRATION

|     |        |      |      |      |      |          |          |        |        |
|-----|--------|------|------|------|------|----------|----------|--------|--------|
| 72  | 19.326 | 2828 | 2832 | 2835 | rBV3 | 1775896  | 2416817  | 6.18%  | 0.466% |
| 73  | 19.396 | 2841 | 2844 | 2849 | rVB2 | 3963937  | 5061972  | 12.95% | 0.977% |
| 74  | 19.449 | 2851 | 2853 | 2854 | rVV2 | 551630   | 475597   | 1.22%  | 0.092% |
| 75  | 19.479 | 2854 | 2858 | 2862 | rVB  | 2249167  | 2695952  | 6.90%  | 0.520% |
| 76  | 19.526 | 2862 | 2866 | 2868 | rBV2 | 1408579  | 1903331  | 4.87%  | 0.367% |
| 77  | 19.555 | 2868 | 2871 | 2873 | rVV  | 1748279  | 2184983  | 5.59%  | 0.422% |
| 78  | 19.602 | 2873 | 2879 | 2883 | rVB  | 23877073 | 32720985 | 83.72% | 6.313% |
| 79  | 19.661 | 2883 | 2889 | 2892 | rBV6 | 272929   | 623850   | 1.60%  | 0.120% |
| 80  | 19.708 | 2893 | 2897 | 2901 | rBV  | 2141176  | 2957212  | 7.57%  | 0.571% |
| 81  | 19.749 | 2901 | 2904 | 2909 | rVB  | 1814963  | 2078848  | 5.32%  | 0.401% |
| 82  | 19.802 | 2910 | 2913 | 2916 | rVB3 | 555982   | 642208   | 1.64%  | 0.124% |
| 83  | 19.855 | 2916 | 2922 | 2926 | rBV  | 16809821 | 19847298 | 50.78% | 3.829% |
| 84  | 19.919 | 2927 | 2933 | 2937 | rVV  | 14338045 | 17757749 | 45.43% | 3.426% |
| 85  | 19.978 | 2940 | 2943 | 2948 | rVB2 | 1455493  | 1743907  | 4.46%  | 0.336% |
| 86  | 20.054 | 2953 | 2956 | 2964 | rVB4 | 2211939  | 2991260  | 7.65%  | 0.577% |
| 87  | 20.143 | 2965 | 2971 | 2974 | rBV  | 13938911 | 16508417 | 42.24% | 3.185% |
| 88  | 20.184 | 2974 | 2978 | 2981 | rVV  | 6254339  | 7209362  | 18.45% | 1.391% |
| 89  | 20.219 | 2981 | 2984 | 2988 | rVB  | 1782698  | 2153500  | 5.51%  | 0.415% |
| 90  | 20.284 | 2993 | 2995 | 2999 | rVB2 | 1512094  | 1533817  | 3.92%  | 0.296% |
| 91  | 20.378 | 3009 | 3011 | 3015 | rVB3 | 966017   | 966304   | 2.47%  | 0.186% |
| 92  | 20.454 | 3016 | 3024 | 3030 | rBV  | 11333406 | 21519826 | 55.06% | 4.152% |
| 93  | 20.595 | 3045 | 3048 | 3055 | rVB4 | 1732982  | 2119727  | 5.42%  | 0.409% |
| 94  | 20.754 | 3072 | 3075 | 3079 | rVB  | 3108008  | 3285509  | 8.41%  | 0.634% |
| 95  | 20.824 | 3083 | 3087 | 3090 | rBV3 | 2093396  | 3839247  | 9.82%  | 0.741% |
| 96  | 20.859 | 3090 | 3093 | 3099 | rVB4 | 2014616  | 2760910  | 7.06%  | 0.533% |
| 97  | 21.012 | 3116 | 3119 | 3122 | rBV2 | 2250312  | 2949643  | 7.55%  | 0.569% |
| 98  | 21.059 | 3122 | 3127 | 3133 | rVV  | 18958918 | 24388012 | 62.40% | 4.705% |
| 99  | 21.159 | 3141 | 3144 | 3150 | rVB2 | 4492515  | 6244463  | 15.98% | 1.205% |
| 100 | 21.523 | 3202 | 3206 | 3213 | rVB3 | 4768990  | 7859406  | 20.11% | 1.516% |

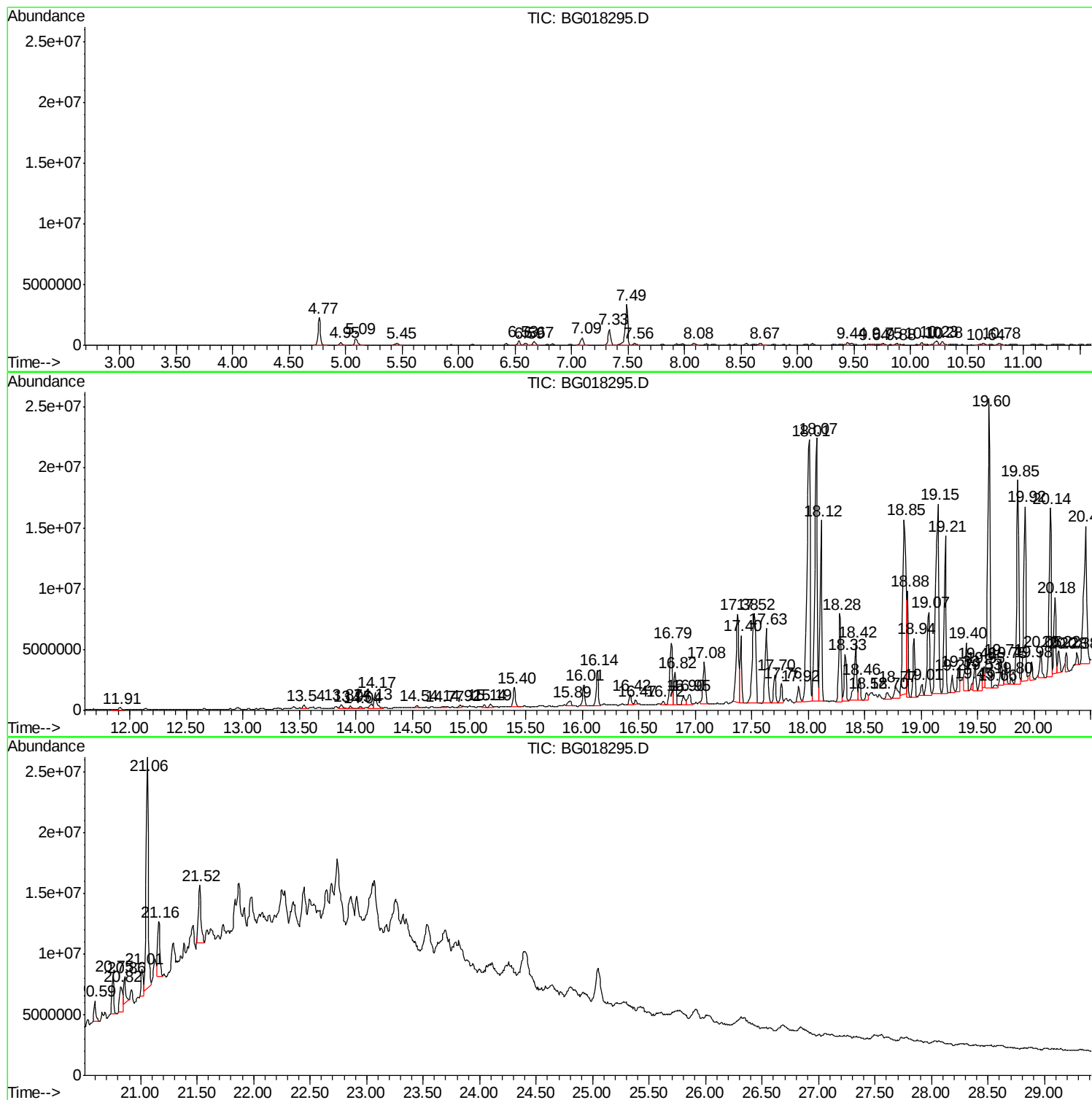
Sum of corrected areas: 518302930

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Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.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-BG080515.M  
Quant Title : SVOA CALIBRATION

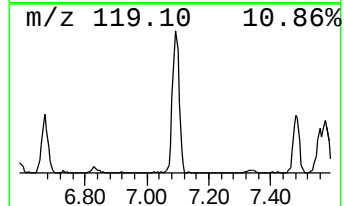
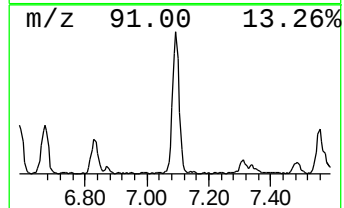
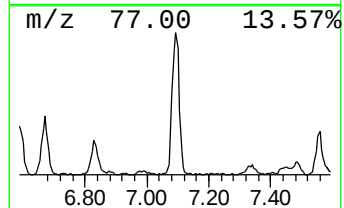
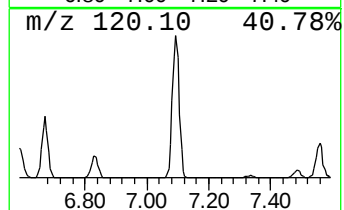
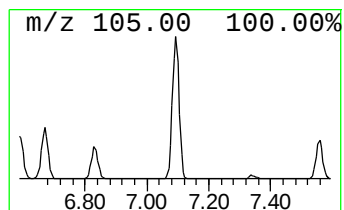
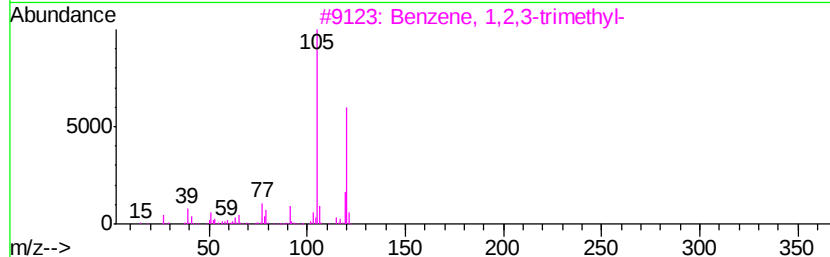
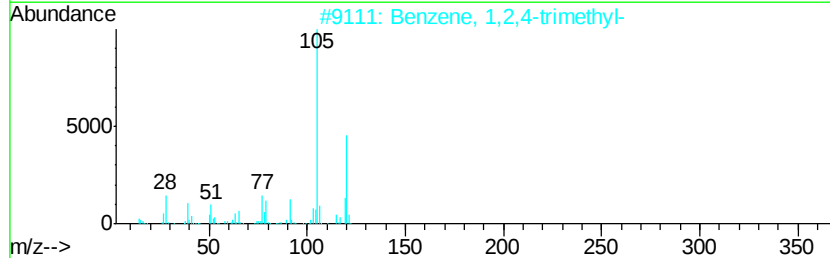
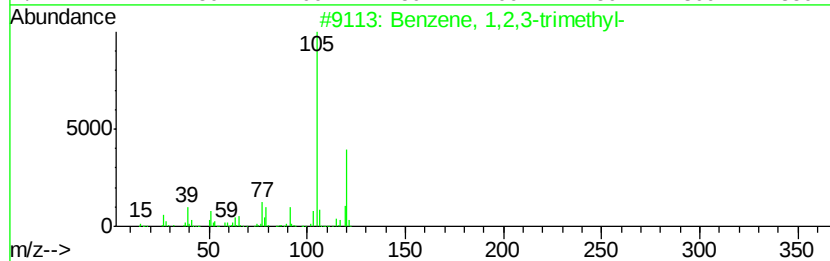
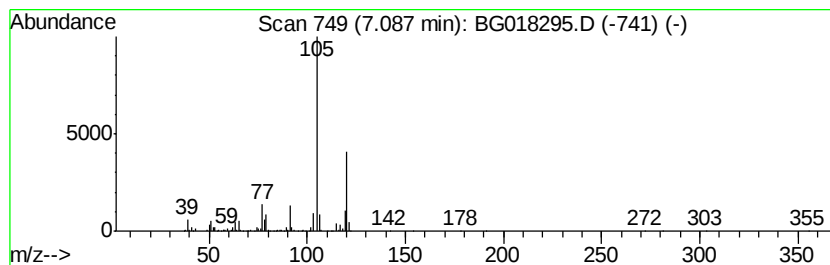
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 3 Benzene, 1,2,3-trimethyl- Concentration Rank 66

| R.T. | EstConc    | Area    | Relative to ISTD       | R.T. |
|------|------------|---------|------------------------|------|
| 7.09 | 3.64 ng/ul | 1009130 | 1,4-Dichlorobenzene-d4 | 7.45 |

| Hit# | of | Tentative ID               | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzene, 1,2,3-trimethyl-  | 120 | C9H12   | 000526-73-8 | 95   |
| 2    |    | Benzene, 1,2,4-trimethyl-  | 120 | C9H12   | 000095-63-6 | 94   |
| 3    |    | Benzene, 1,2,3-trimethyl-  | 120 | C9H12   | 000526-73-8 | 94   |
| 4    |    | Benzene, 1-ethyl-2-methyl- | 120 | C9H12   | 000611-14-3 | 93   |
| 5    |    | Benzene, 1-ethyl-2-methyl- | 120 | C9H12   | 000611-14-3 | 93   |



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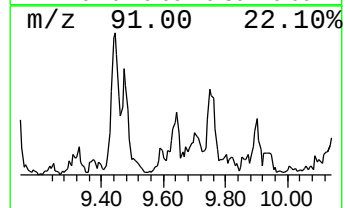
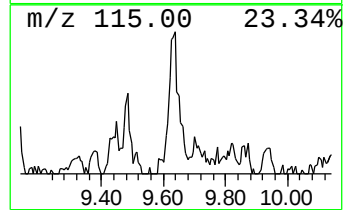
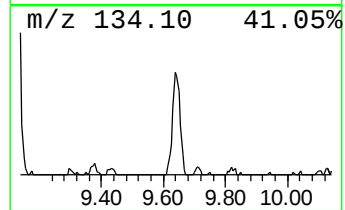
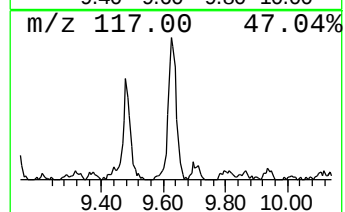
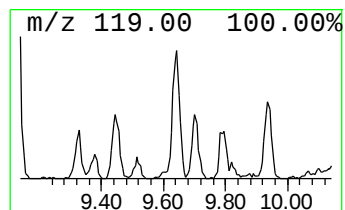
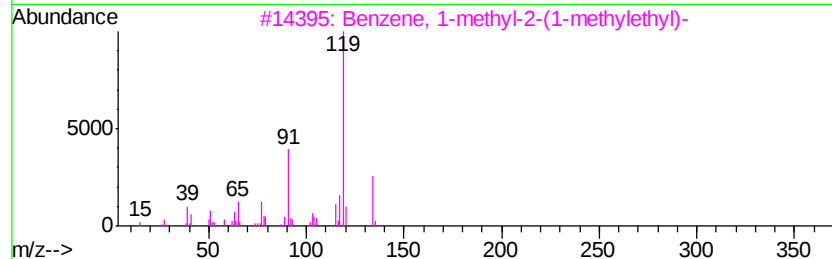
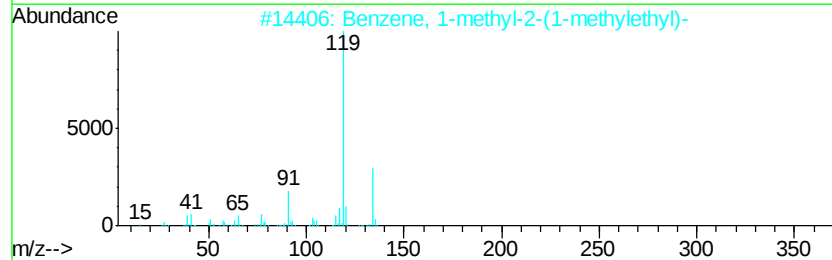
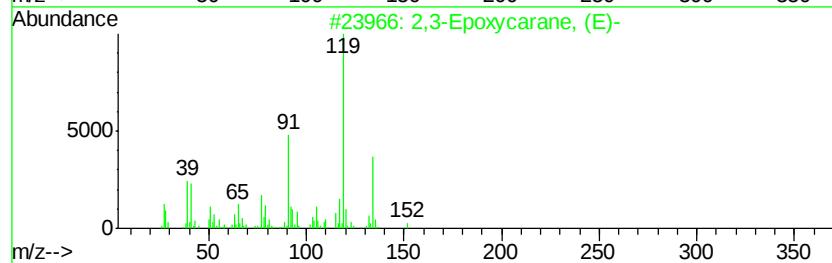
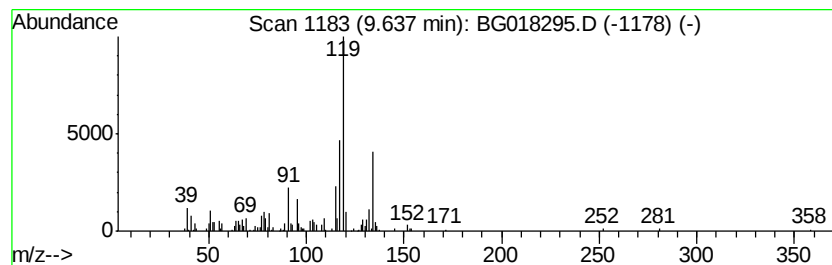
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 5 2,3-Epoxy-carane, (E)- Concentration Rank 53

| R.T. | EstConc    | Area   | Relative to ISTD | R.T.  |
|------|------------|--------|------------------|-------|
| 9.64 | 7.48 ng/ul | 250519 | Naphthalene-d8   | 10.23 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 2,3-Epoxy-carane, (E)-              | 152 | C10H16O | 020053-58-1 | 68   |
| 2    |    | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14  | 000527-84-4 | 64   |
| 3    |    | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14  | 000527-84-4 | 62   |
| 4    |    | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14  | 000535-77-3 | 58   |
| 5    |    | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14  | 000527-84-4 | 58   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

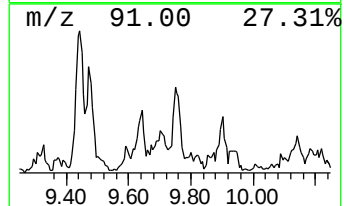
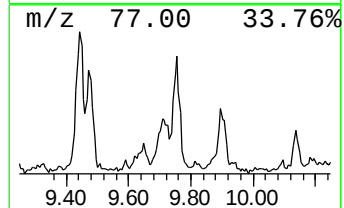
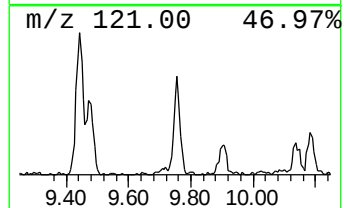
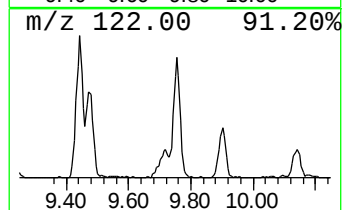
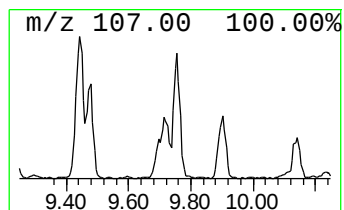
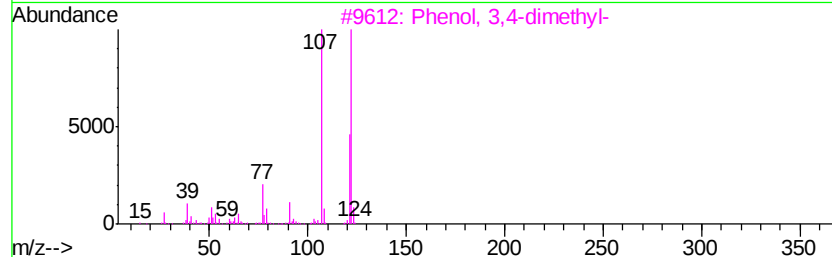
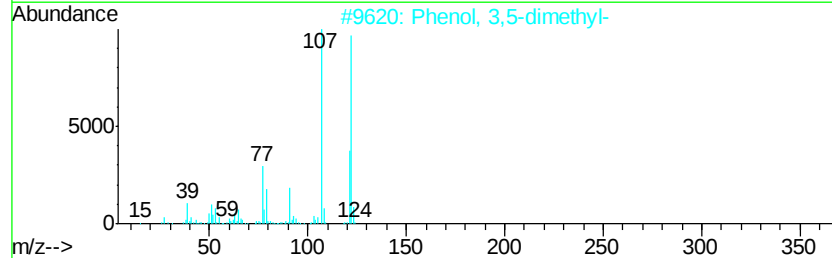
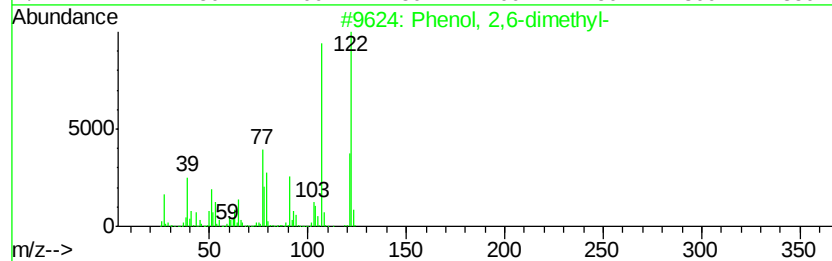
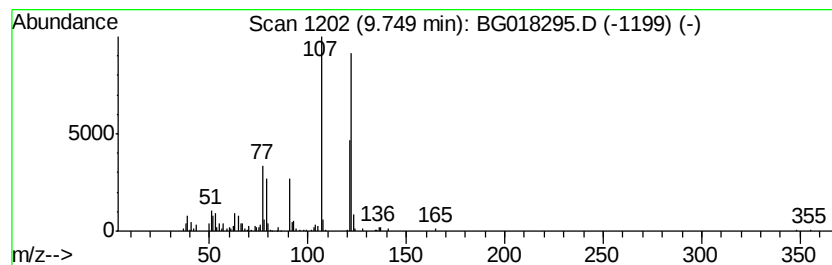
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TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 6 Phenol, 2,6-dimethyl- Concentration Rank 50

| R.T. | EstConc    | Area   | Relative to ISTD | R.T.  |
|------|------------|--------|------------------|-------|
| 9.75 | 8.39 ng/ul | 281001 | Naphthalene-d8   | 10.23 |

| Hit# | of | Tentative ID          | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------|-----|---------|-------------|------|
| 1    | 5  | Phenol, 2,6-dimethyl- | 122 | C8H10O  | 000576-26-1 | 91   |
| 2    |    | Phenol, 3,5-dimethyl- | 122 | C8H10O  | 000108-68-9 | 91   |
| 3    |    | Phenol, 3,4-dimethyl- | 122 | C8H10O  | 000095-65-8 | 90   |
| 4    |    | Phenol, 2,5-dimethyl- | 122 | C8H10O  | 000095-87-4 | 90   |
| 5    |    | Phenol, 3,4-dimethyl- | 122 | C8H10O  | 000095-65-8 | 90   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

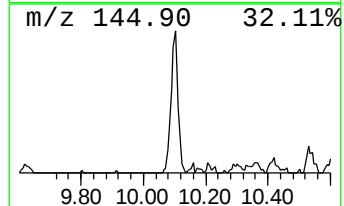
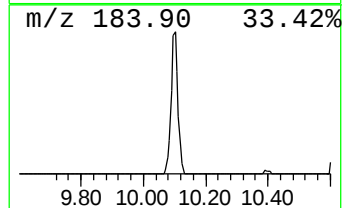
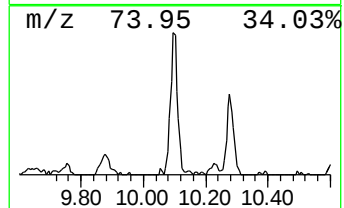
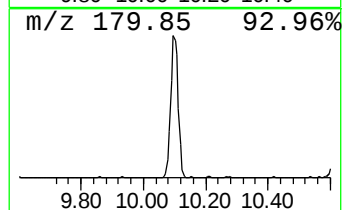
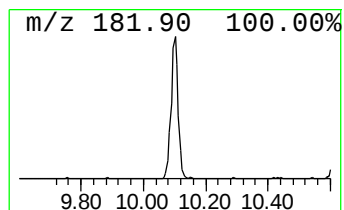
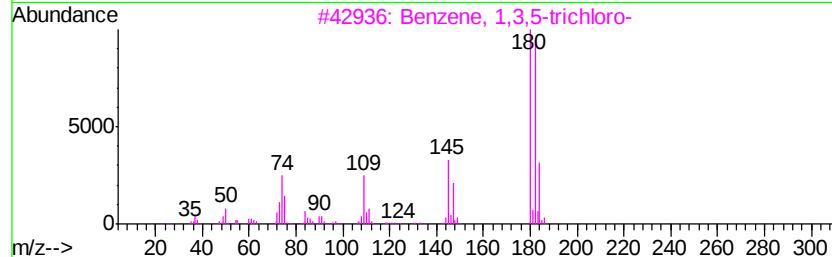
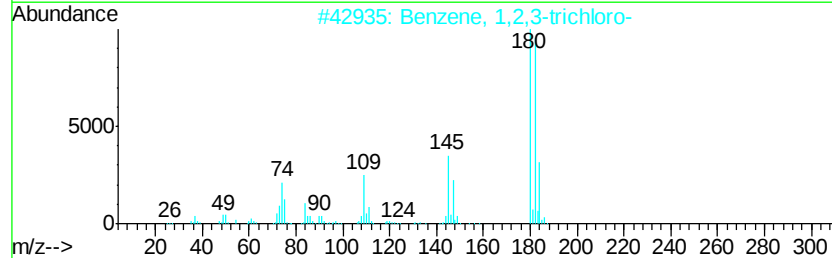
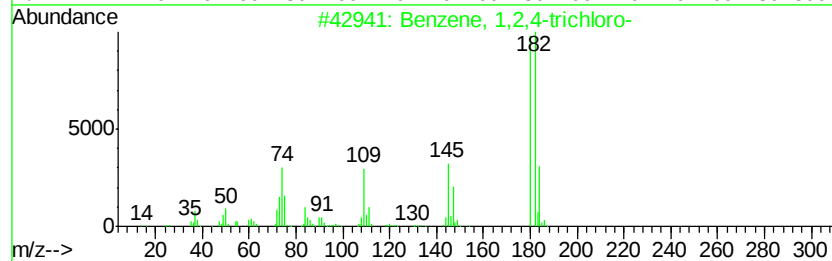
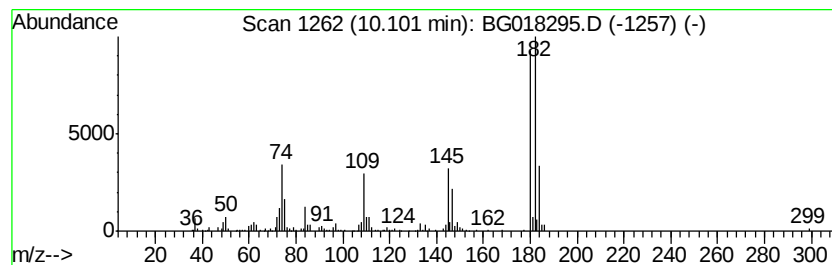
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 7 Benzene, 1,2,4-trichloro- Concentration Rank 49

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 10.10 | 8.62 ng/ul | 288427 | Naphthalene-d8   | 10.23 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzene, 1,2,4-trichloro- | 180 | C6H3Cl3 | 000120-82-1 | 98   |
| 2    |    | Benzene, 1,2,3-trichloro- | 180 | C6H3Cl3 | 000087-61-6 | 98   |
| 3    |    | Benzene, 1,3,5-trichloro- | 180 | C6H3Cl3 | 000108-70-3 | 97   |
| 4    |    | Benzene, 1,3,5-trichloro- | 180 | C6H3Cl3 | 000108-70-3 | 96   |
| 5    |    | Benzene, 1,2,3-trichloro- | 180 | C6H3Cl3 | 000087-61-6 | 95   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

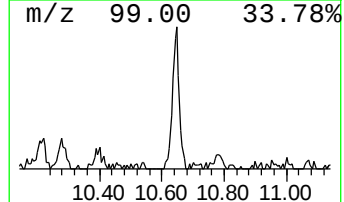
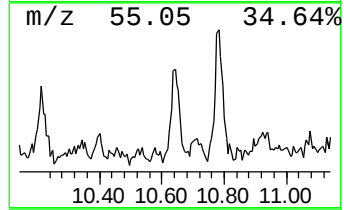
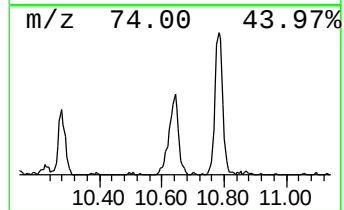
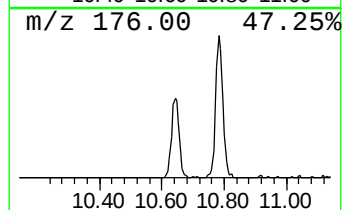
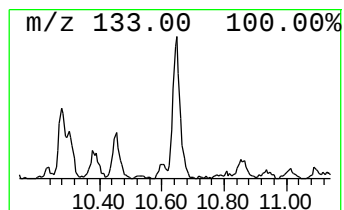
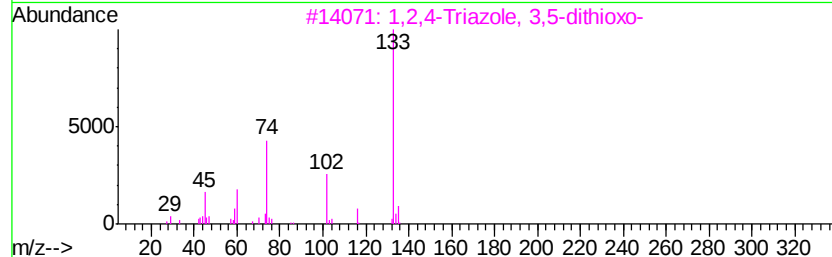
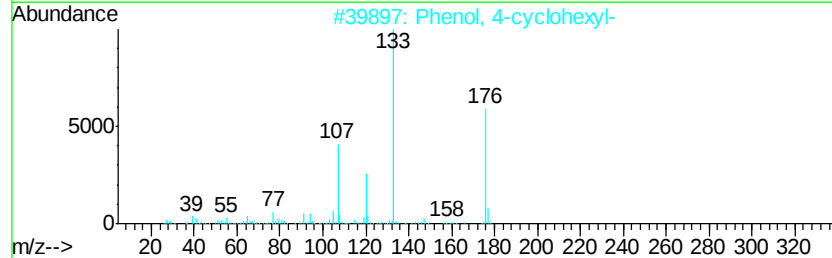
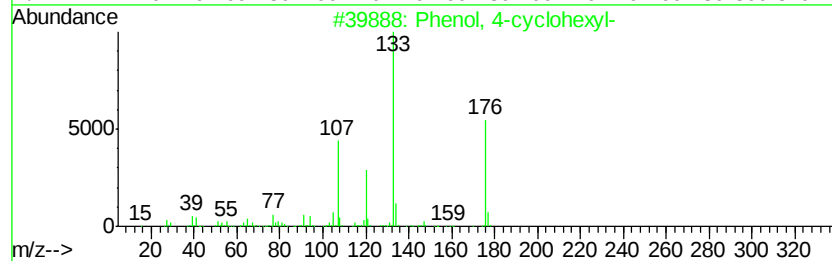
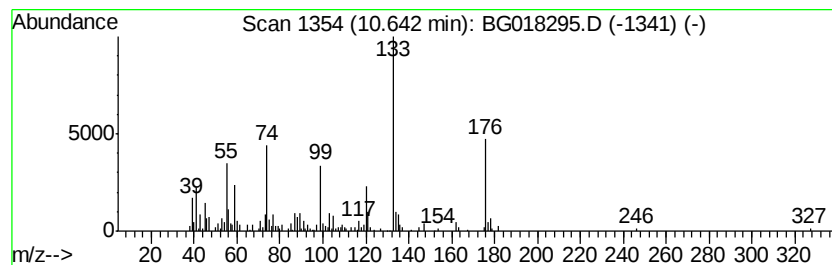
Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

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

\*\*\*\*\*  
Peak Number 8 Phenol, 4-cyclohexyl- Concentration Rank 44

| R.T.    | EstConc                       | Area         | Relative to ISTD | R.T.      |
|---------|-------------------------------|--------------|------------------|-----------|
| 10.64   | 9.49 ng/ul                    | 317704       | Naphthalene-d8   | 10.23     |
| Hit# of | 5                             | Tentative ID | MW MolForm       | CAS# Qual |
| 1       | Phenol, 4-cyclohexyl-         | 176 C12H16O  | 001131-60-8      | 53        |
| 2       | Phenol, 4-cyclohexyl-         | 176 C12H16O  | 001131-60-8      | 43        |
| 3       | 1,2,4-Triazole, 3,5-dithioxo- | 133 C2H3N3S2 | 005650-03-3      | 43        |
| 4       | 1-Phenylcyclohexanol-1        | 176 C12H16O  | 001589-60-2      | 43        |
| 5       | Rhodanine                     | 133 C3H3NOS2 | 000141-84-4      | 38        |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

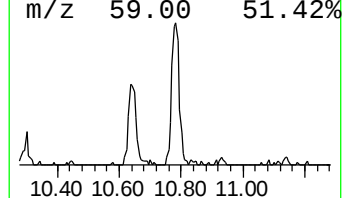
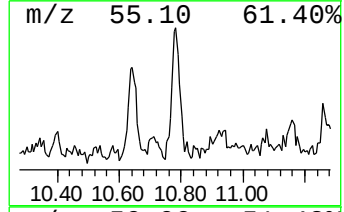
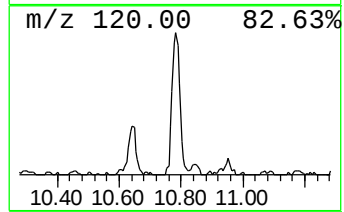
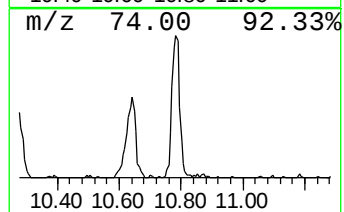
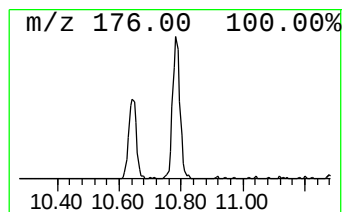
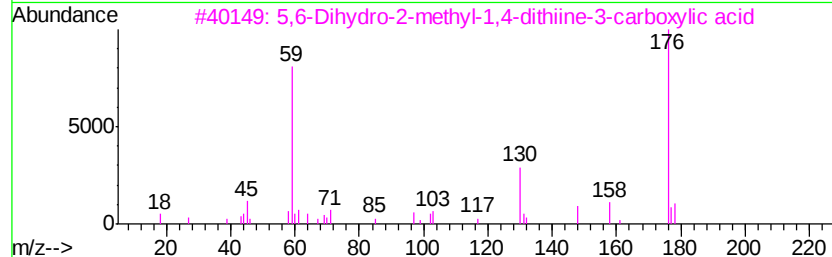
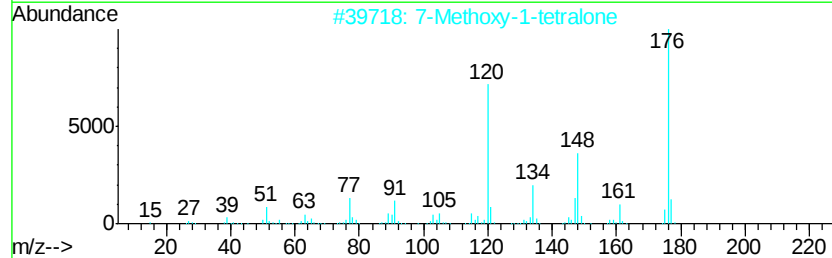
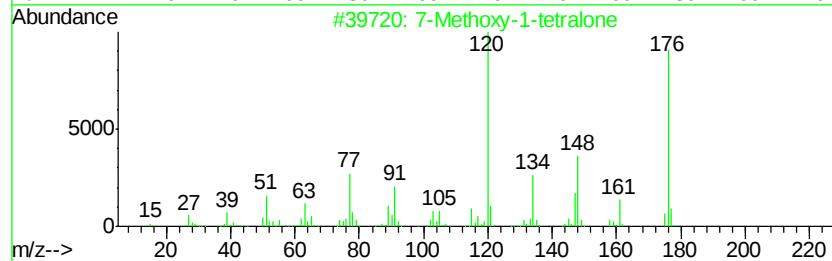
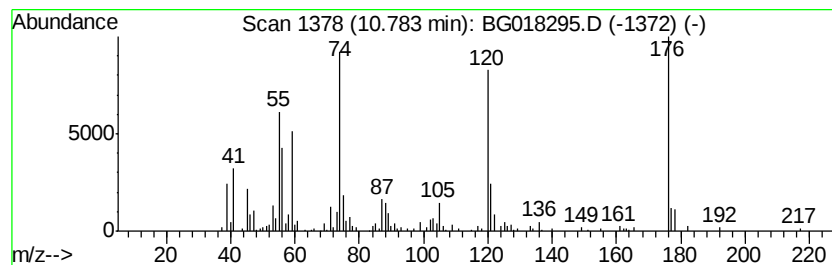
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 unknown-01 Concentration Rank 52

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 10.78 | 7.84 ng/ul | 262310 | Naphthalene-d8   | 10.23 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#         | Qual |
|------|----|-------------------------------------|-----|----------|--------------|------|
| 1    | 5  | 7-Methoxy-1-tetralone               | 176 | C11H12O2 | 006836-19-7  | 25   |
| 2    |    | 7-Methoxy-1-tetralone               | 176 | C11H12O2 | 006836-19-7  | 25   |
| 3    |    | 5,6-Dihydro-2-methyl-1,4-dithiin... | 176 | C6H8O2S2 | 035756-29-7  | 22   |
| 4    |    | 5-Methyl-3,6-dihydro-1,2-dithiin... | 176 | C6H8O2S2 | 1000147-09-6 | 22   |
| 5    |    | Phenylalanine                       | 165 | C9H11NO2 | 000063-91-2  | 16   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

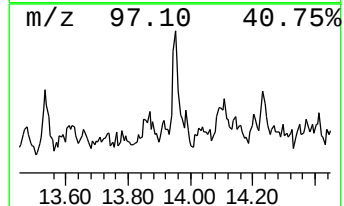
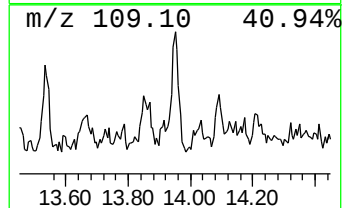
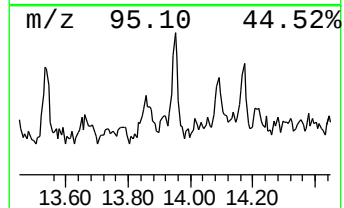
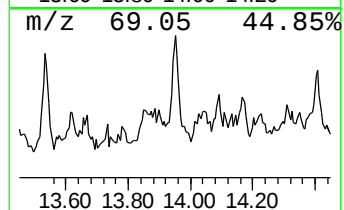
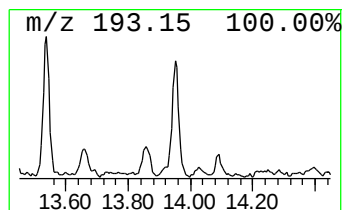
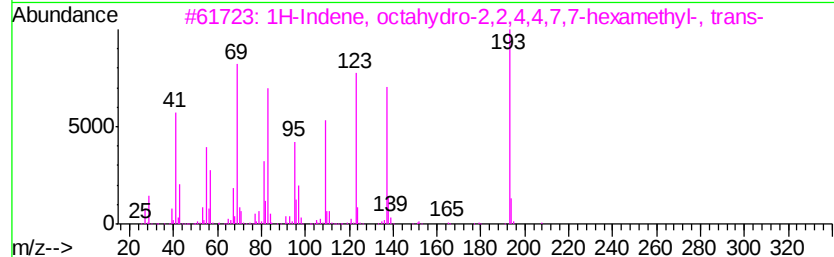
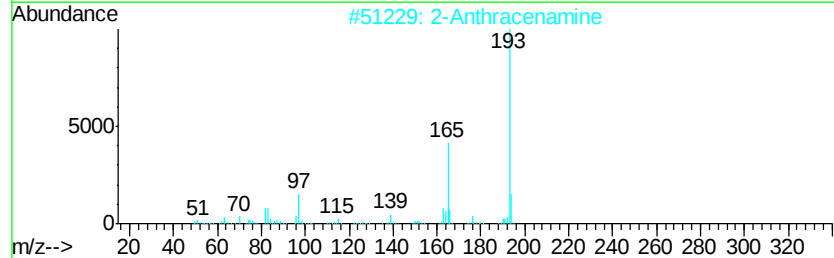
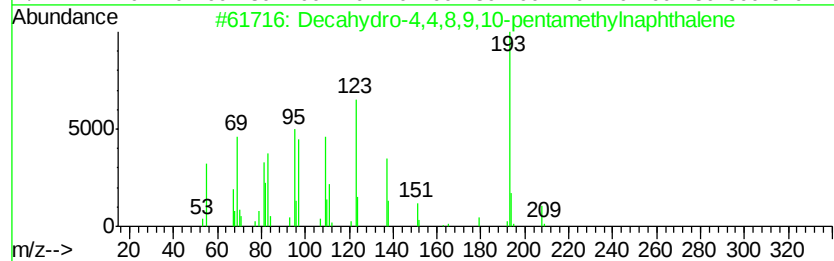
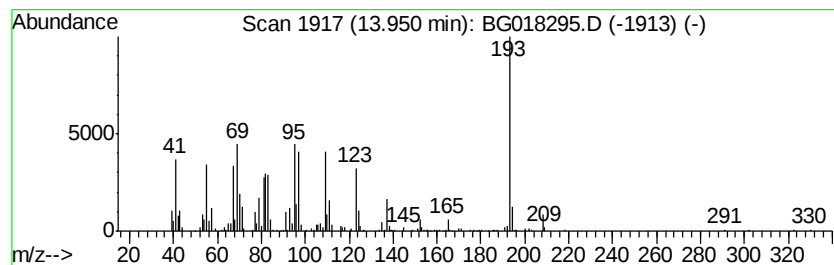
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 10 Decahydro-4,4,8,9,10-pentam... Concentration Rank 51

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 13.95 | 8.08 ng/ul | 259511 | Acenaphthene-d10 | 14.13 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Decahydro-4,4,8,9,10-pentamethyl... | 208 | C15H28    | 080655-44-3  | 83   |
| 2    |    | 2-Anthracenamine                    | 193 | C14H11N   | 000613-13-8  | 43   |
| 3    |    | 1H-Indene, octahydro-2,2,4,4,7,7... | 208 | C15H28    | 054832-83-6  | 37   |
| 4    |    | Borinic acid, diethyl-, 3,3,5-tr... | 208 | C13H25BO  | 057387-76-5  | 32   |
| 5    |    | S-Phenyl 5-(phenylthio)pentaneth... | 302 | C17H18OS2 | 1000234-40-7 | 32   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

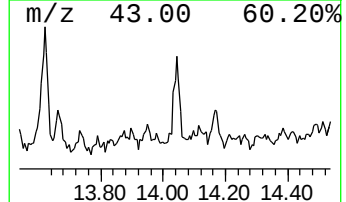
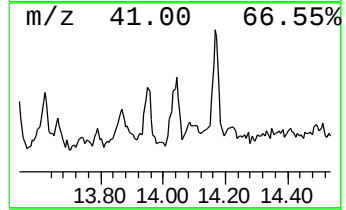
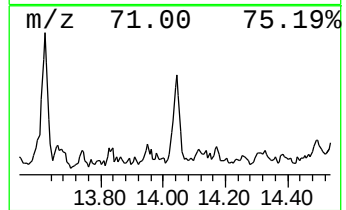
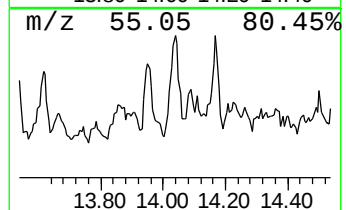
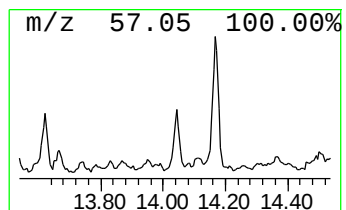
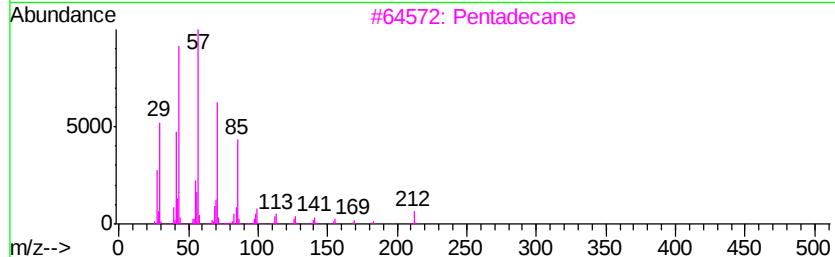
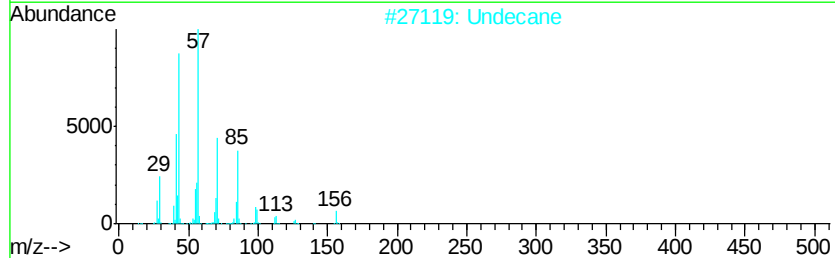
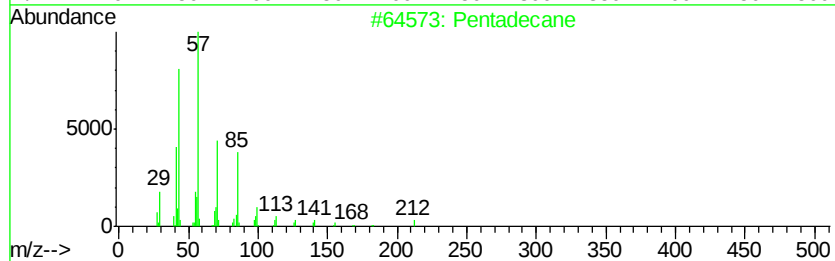
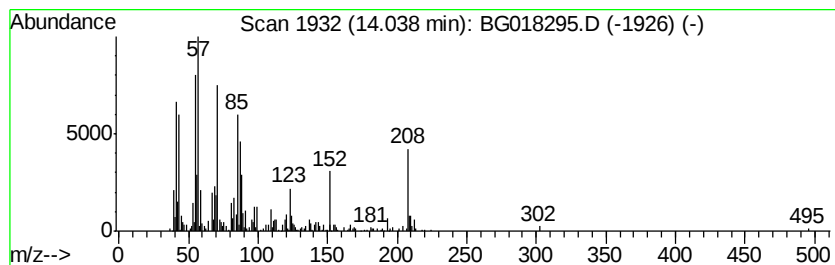
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 11 (DEL) Alkane: Straight-Chai... Concentration Rank 42

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 14.04 | 10.29 ng/ul | 330506 | Acenaphthene-d10 | 14.13 |

| Hit# | of | Tentative ID | MW  | MolForm | CAS#        | Qual |
|------|----|--------------|-----|---------|-------------|------|
| 1    | 5  | Pentadecane  | 212 | C15H32  | 000629-62-9 | 42   |
| 2    |    | Undecane     | 156 | C11H24  | 001120-21-4 | 42   |
| 3    |    | Pentadecane  | 212 | C15H32  | 000629-62-9 | 42   |
| 4    |    | Pentadecane  | 212 | C15H32  | 000629-62-9 | 42   |
| 5    |    | Pentadecane  | 212 | C15H32  | 000629-62-9 | 38   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

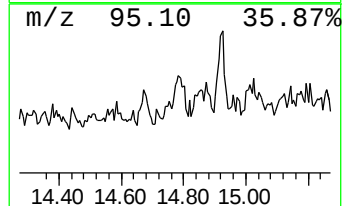
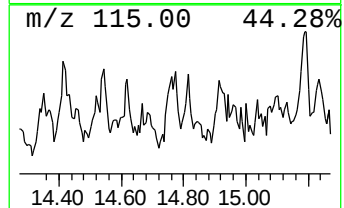
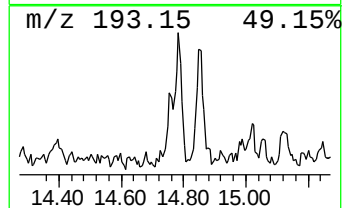
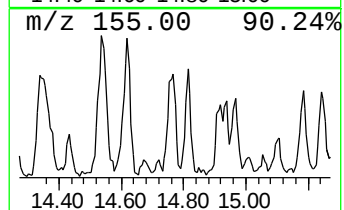
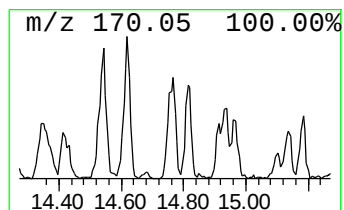
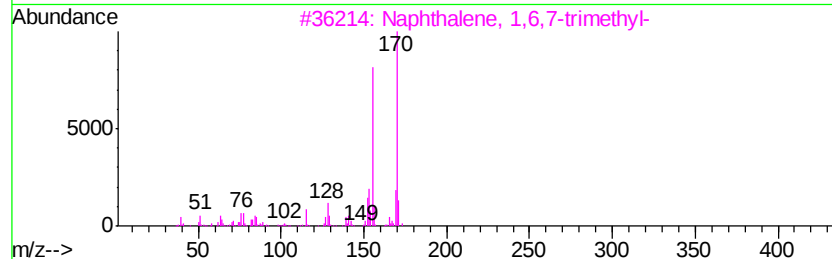
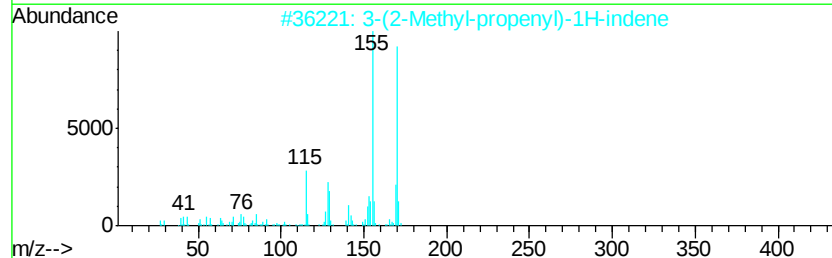
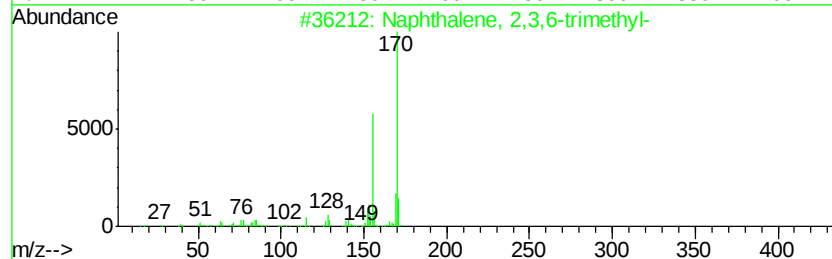
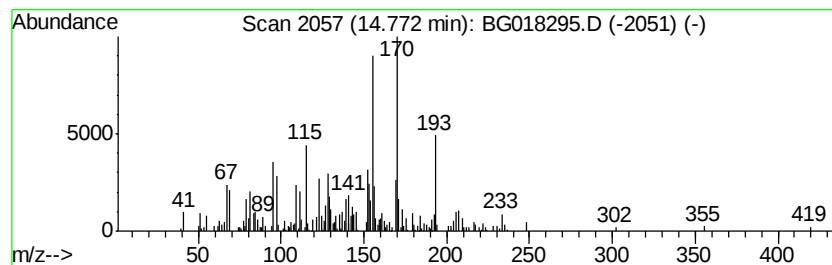
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 12 Naphthalene, 2,3,6-trimethyl- Concentration Rank 46

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 14.77 | 8.99 ng/ul | 288901 | Acenaphthene-d10 | 14.13 |

| Hit# | of | 5 | Tentative ID                    | MW  | MolForm | CAS#         | Qual |
|------|----|---|---------------------------------|-----|---------|--------------|------|
| 1    |    |   | Naphthalene, 2,3,6-trimethyl-   | 170 | C13H14  | 000829-26-5  | 93   |
| 2    |    |   | 3-(2-Methyl-propenyl)-1H-indene | 170 | C13H14  | 1000187-78-5 | 89   |
| 3    |    |   | Naphthalene, 1,6,7-trimethyl-   | 170 | C13H14  | 002245-38-7  | 81   |
| 4    |    |   | Naphthalene, 1,4,6-trimethyl-   | 170 | C13H14  | 002131-42-2  | 81   |
| 5    |    |   | Naphthalene, 2,3,6-trimethyl-   | 170 | C13H14  | 000829-26-5  | 81   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

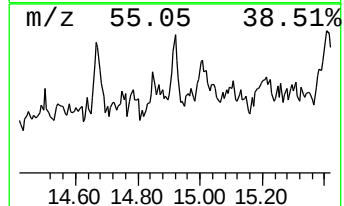
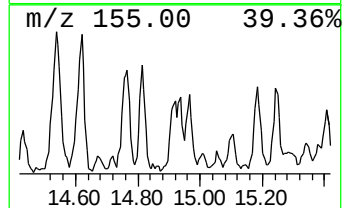
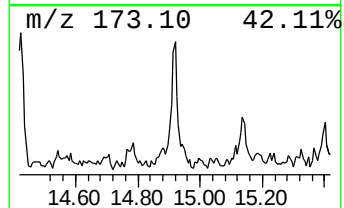
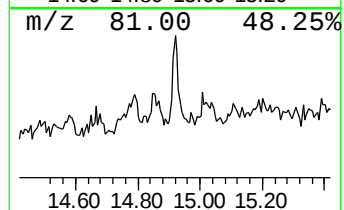
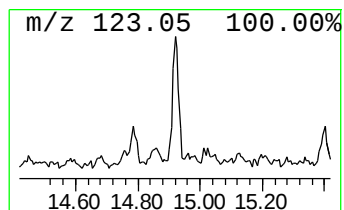
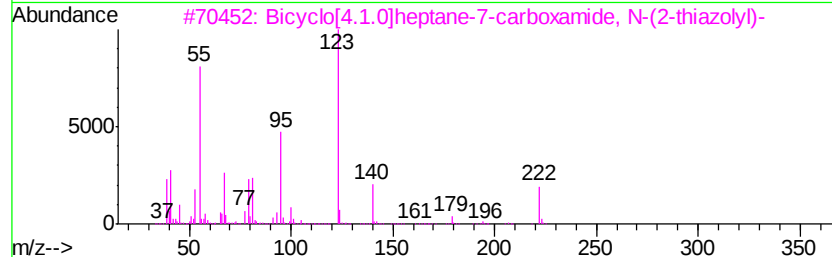
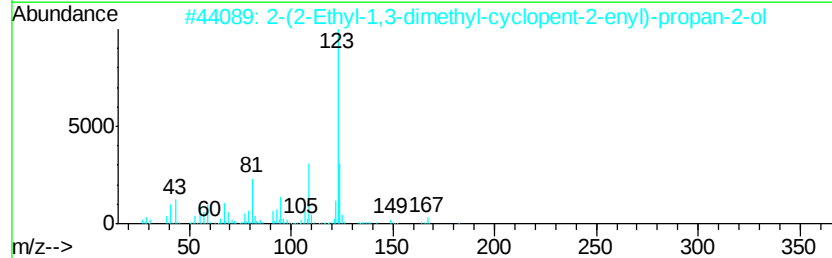
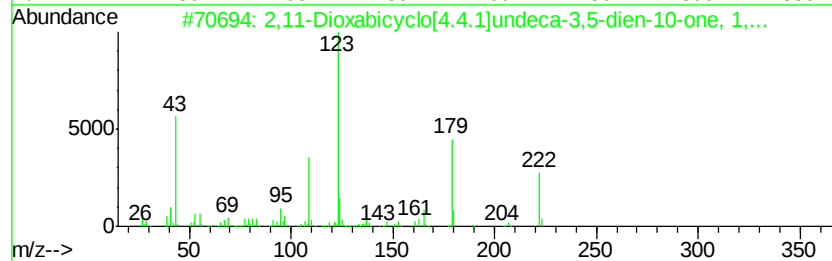
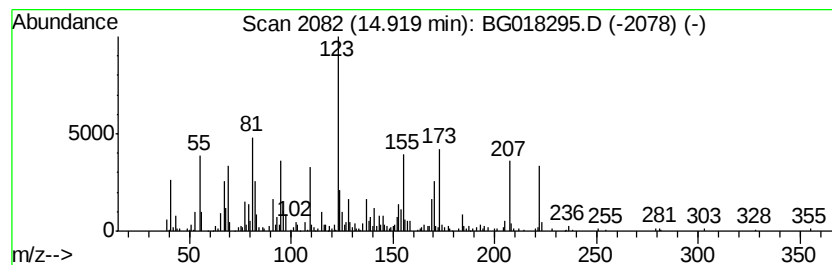
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 13 unknown-02 Concentration Rank 40

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 14.92 | 10.87 ng/ul | 349200 | Acenaphthene-d10 | 14.13 |

| Hit# | of                                   | 5   | Tentative ID | MW           | MolForm | CAS# | Qual |
|------|--------------------------------------|-----|--------------|--------------|---------|------|------|
| 1    | 2,11-Dioxabicyclo[4.4.1]undeca-3...  | 222 | C13H18O3     | 070412-52-1  | 35      |      |      |
| 2    | 2-(2-Ethyl-1,3-dimethyl-cyclopent... | 182 | C12H22O      | 1000186-82-4 | 35      |      |      |
| 3    | Bicyclo[4.1.0]heptane-7-carboxam...  | 222 | C11H14N2O    | 329912-72-3  | 27      |      |      |
| 4    | .beta.-Chloro-para-fluoropropiop...  | 186 | C9H8ClFO     | 000347-93-3  | 25      |      |      |
| 5    | 1-Propanone, 1-(4-fluorophenyl)-     | 152 | C9H9FO       | 000456-03-1  | 25      |      |      |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

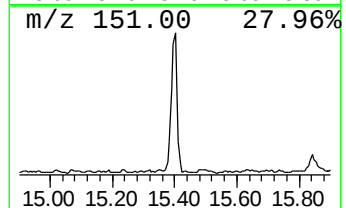
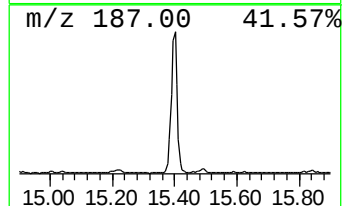
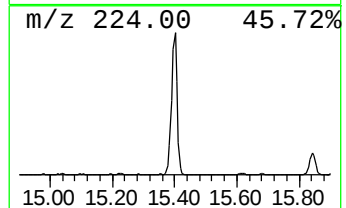
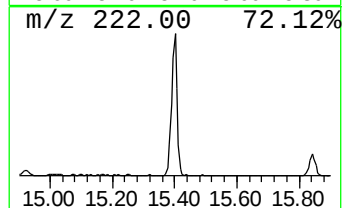
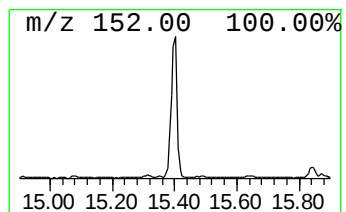
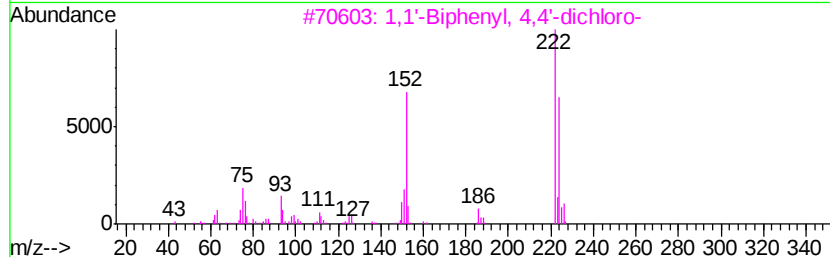
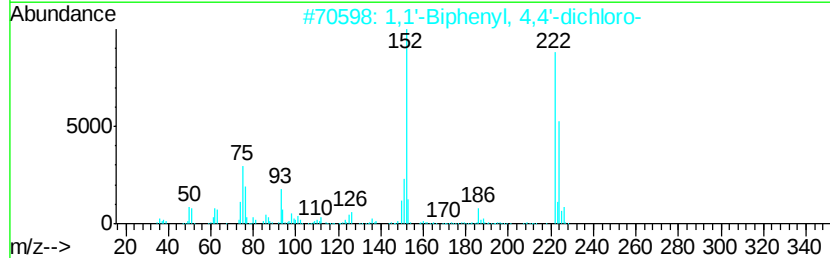
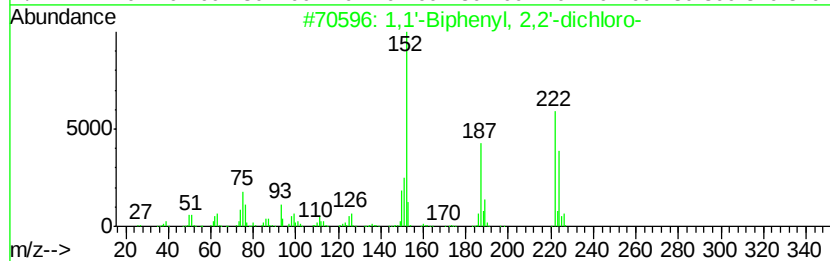
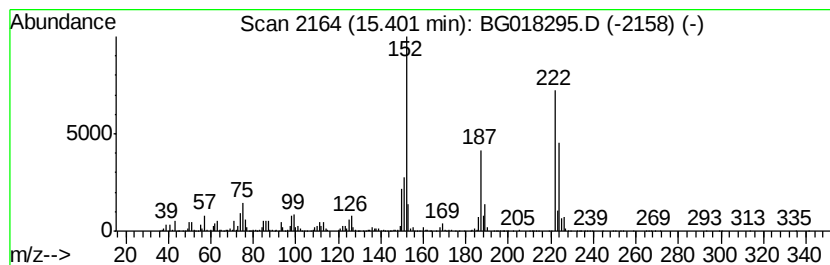
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 14 1,1'-Biphenyl, 2,2'-dichloro- Concentration Rank 17

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 15.40 | 71.60 ng/ul | 2299670 | Acenaphthene-d10 | 14.13 |

| Hit# | of | 5 | Tentative ID                  | MW  | MolForm  | CAS#        | Qual |
|------|----|---|-------------------------------|-----|----------|-------------|------|
| 1    |    |   | 1,1'-Biphenyl, 2,2'-dichloro- | 222 | C12H8Cl2 | 013029-08-8 | 96   |
| 2    |    |   | 1,1'-Biphenyl, 4,4'-dichloro- | 222 | C12H8Cl2 | 002050-68-2 | 93   |
| 3    |    |   | 1,1'-Biphenyl, 4,4'-dichloro- | 222 | C12H8Cl2 | 002050-68-2 | 90   |
| 4    |    |   | 1,1'-Biphenyl, 2,4-dichloro-  | 222 | C12H8Cl2 | 033284-50-3 | 90   |
| 5    |    |   | 1,1'-Biphenyl, 4,4'-dichloro- | 222 | C12H8Cl2 | 002050-68-2 | 90   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

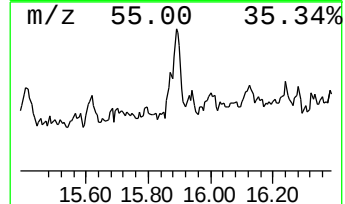
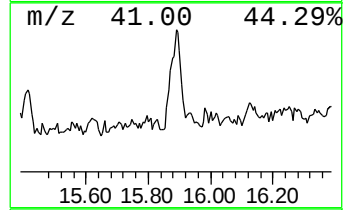
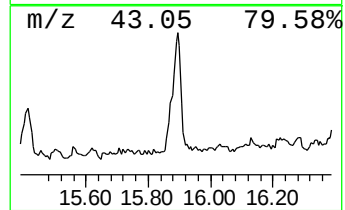
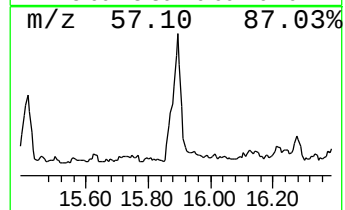
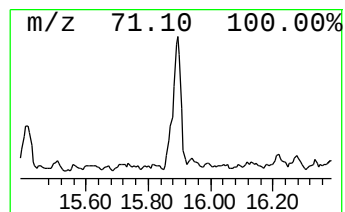
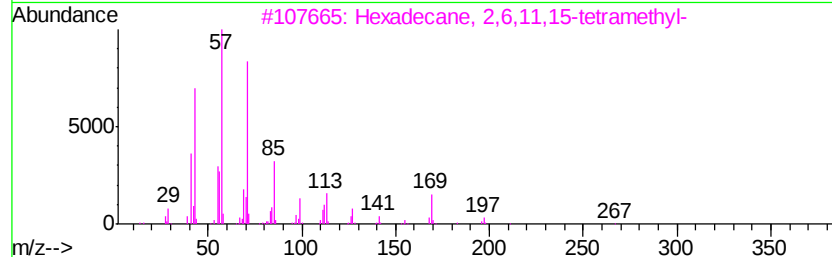
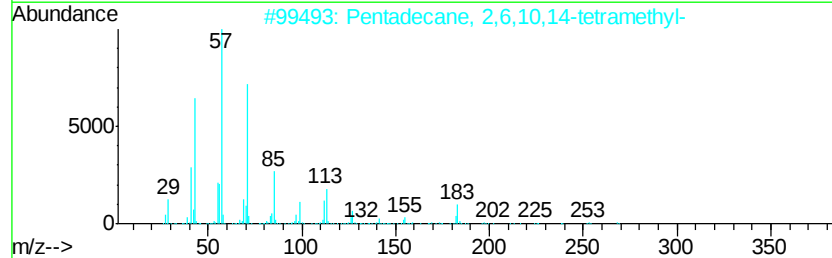
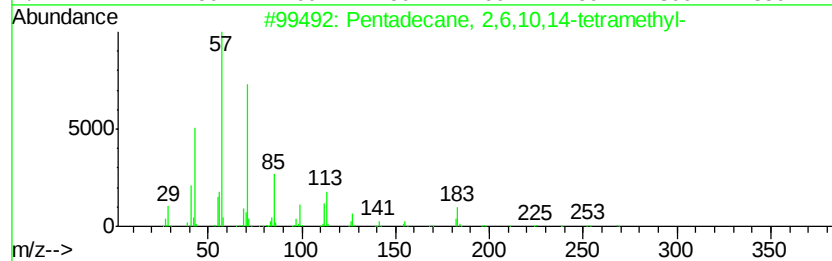
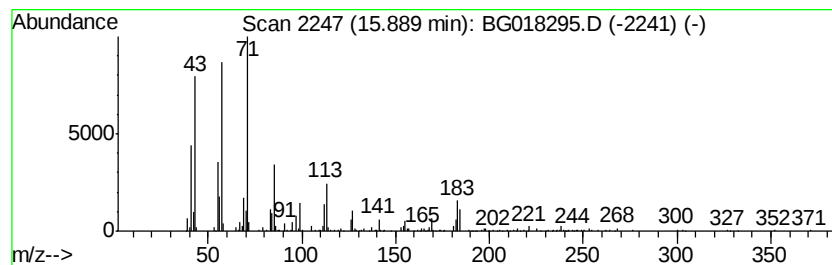
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 15 (DEL) Alkane: Straight-Chai... Concentration Rank 37

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 15.89 | 14.10 ng/ul | 841694 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | Pentadecane, 2,6,10,14-tetramethyl- | 268 | C19H40  | 001921-70-6  | 94   |
| 2    |    | Pentadecane, 2,6,10,14-tetramethyl- | 268 | C19H40  | 001921-70-6  | 93   |
| 3    |    | Hexadecane, 2,6,11,15-tetramethyl-  | 282 | C20H42  | 000504-44-9  | 72   |
| 4    |    | 7-Methyl-octadecane                 | 268 | C19H40  | 1000192-63-3 | 64   |
| 5    |    | Pentadecane, 7-methyl-              | 226 | C16H34  | 006165-40-8  | 64   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

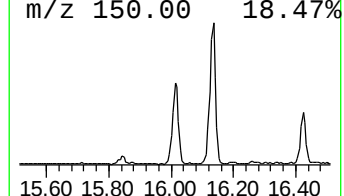
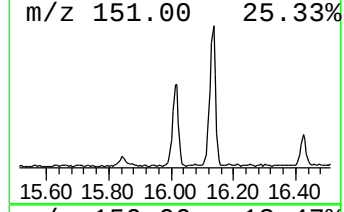
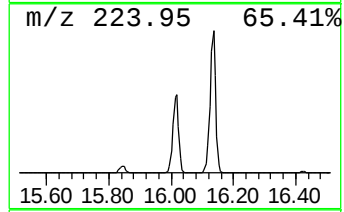
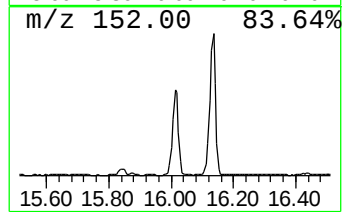
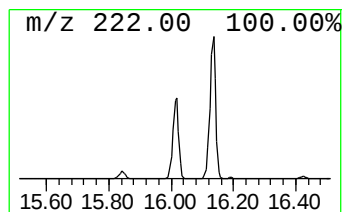
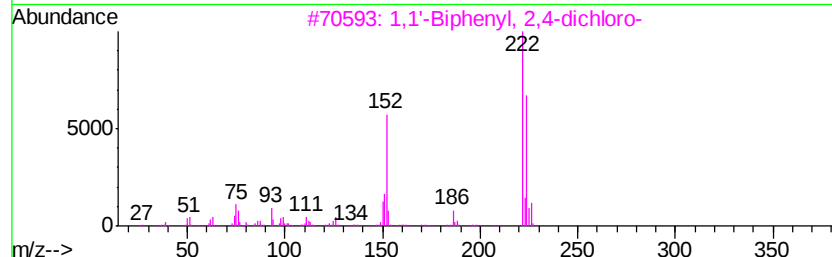
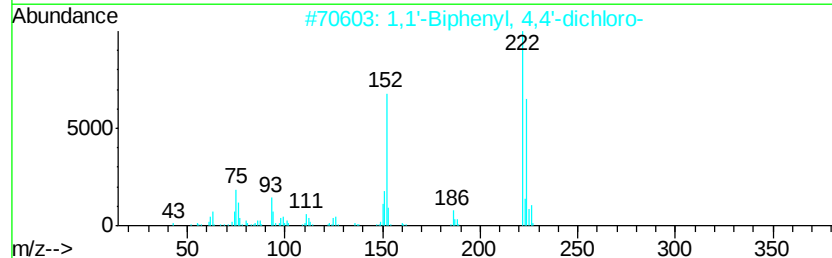
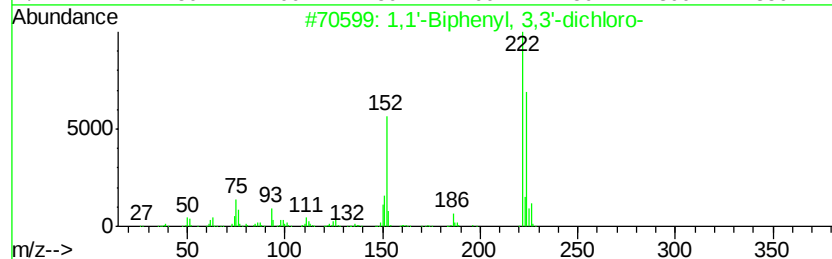
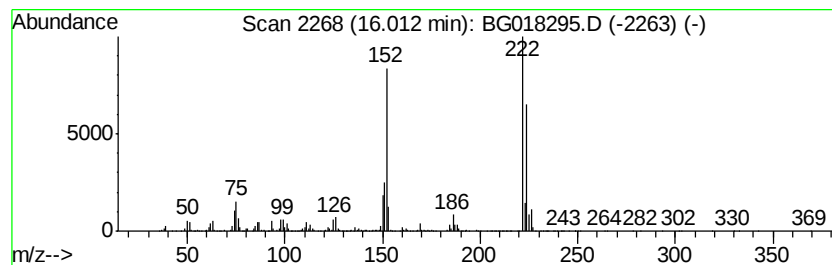
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 16 1,1'-Biphenyl, 3,3'-dichloro- Concentration Rank 26

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 16.01 | 37.76 ng/ul | 2254220 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                  | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 3,3'-dichloro- | 222 | C12H8Cl2 | 002050-67-1 | 95   |
| 2    |    | 1,1'-Biphenyl, 4,4'-dichloro- | 222 | C12H8Cl2 | 002050-68-2 | 95   |
| 3    |    | 1,1'-Biphenyl, 2,4-dichloro-  | 222 | C12H8Cl2 | 033284-50-3 | 95   |
| 4    |    | 1,1'-Biphenyl, 2,3-dichloro-  | 222 | C12H8Cl2 | 016605-91-7 | 95   |
| 5    |    | 1,1'-Biphenyl, 4,4'-dichloro- | 222 | C12H8Cl2 | 002050-68-2 | 95   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

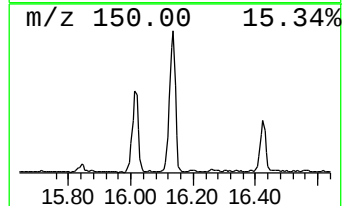
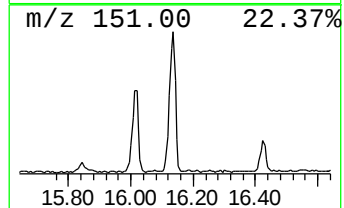
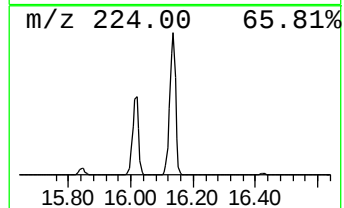
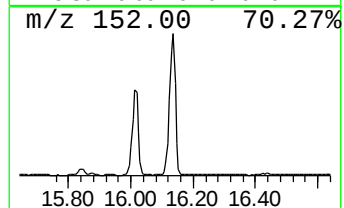
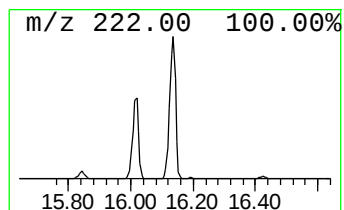
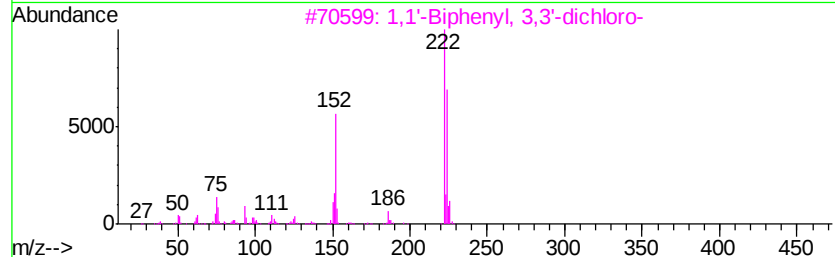
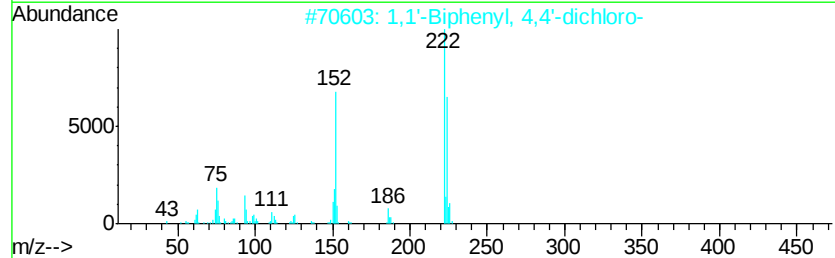
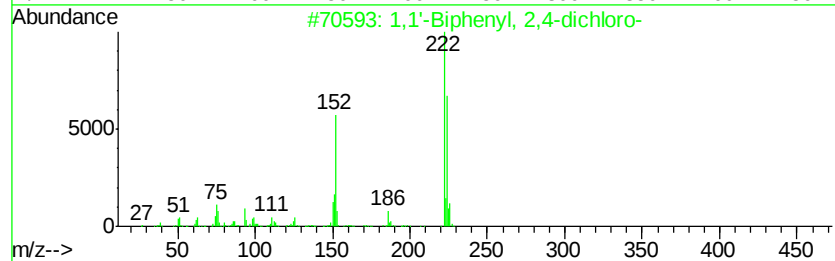
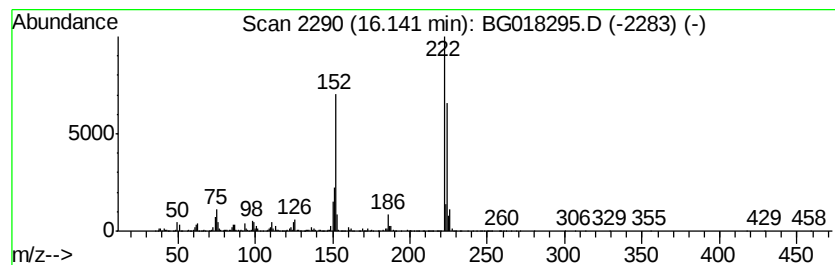
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 17 1,1'-Biphenyl, 2,4-dichloro- Concentration Rank 19

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 16.14 | 63.93 ng/ul | 3815840 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                  | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2,4-dichloro-  | 222 | C12H8Cl2 | 033284-50-3 | 95   |
| 2    |    | 1,1'-Biphenyl, 4,4'-dichloro- | 222 | C12H8Cl2 | 002050-68-2 | 95   |
| 3    |    | 1,1'-Biphenyl, 3,3'-dichloro- | 222 | C12H8Cl2 | 002050-67-1 | 95   |
| 4    |    | 1,1'-Biphenyl, 4,4'-dichloro- | 222 | C12H8Cl2 | 002050-68-2 | 95   |
| 5    |    | 1,1'-Biphenyl, 3,3'-dichloro- | 222 | C12H8Cl2 | 002050-67-1 | 95   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

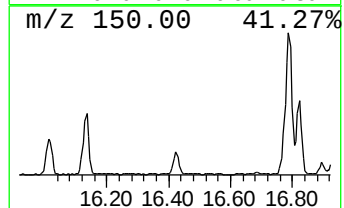
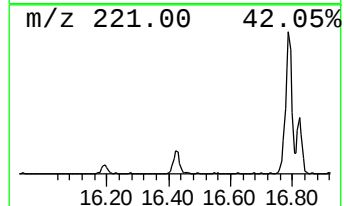
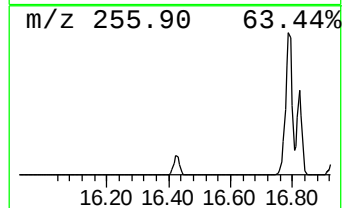
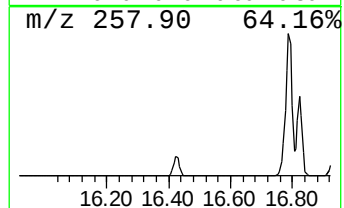
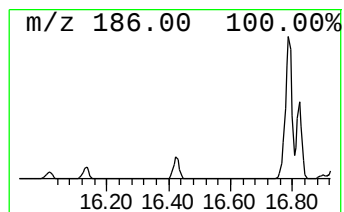
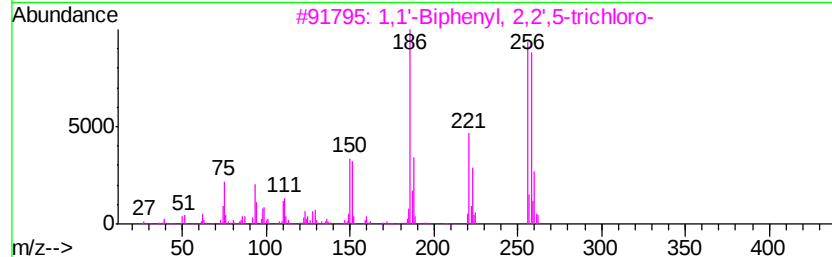
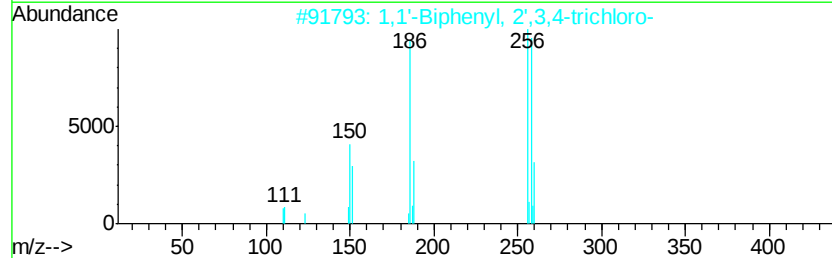
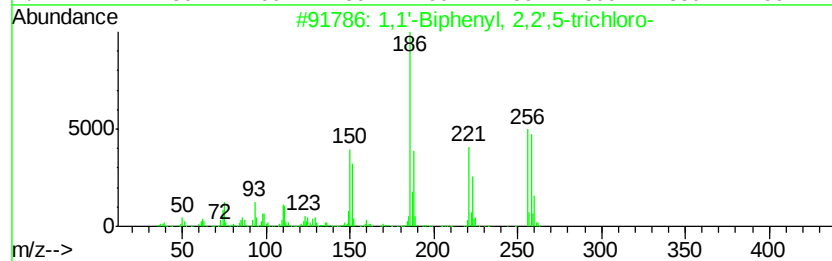
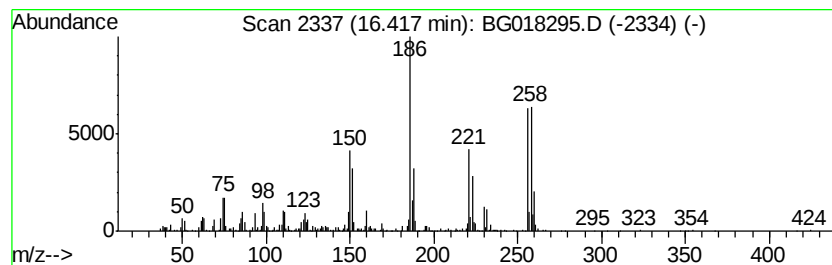
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 18 1,1'-Biphenyl, 2,2',5-trich... Concentration Rank 35

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 16.42 | 17.61 ng/ul | 1051350 | Phenanthrene-d10 | 16.90 |

| Hit# | of | 5 | Tentative ID                     | MW  | MolForm  | CAS#        | Qual |
|------|----|---|----------------------------------|-----|----------|-------------|------|
| 1    |    |   | 1,1'-Biphenyl, 2,2',5-trichloro- | 256 | C12H7Cl3 | 037680-65-2 | 99   |
| 2    |    |   | 1,1'-Biphenyl, 2',3,4-trichloro- | 256 | C12H7Cl3 | 038444-86-9 | 95   |
| 3    |    |   | 1,1'-Biphenyl, 2,2',5-trichloro- | 256 | C12H7Cl3 | 037680-65-2 | 95   |
| 4    |    |   | 1,1'-Biphenyl, 2,4,4'-trichloro- | 256 | C12H7Cl3 | 007012-37-5 | 93   |
| 5    |    |   | 1,1'-Biphenyl, 2,4,4'-trichloro- | 256 | C12H7Cl3 | 007012-37-5 | 86   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

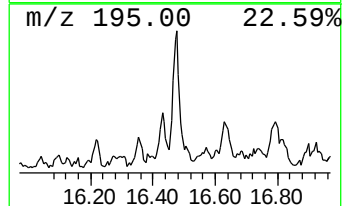
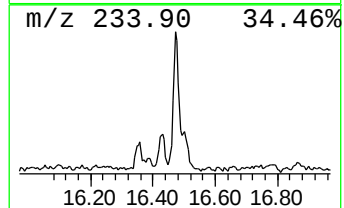
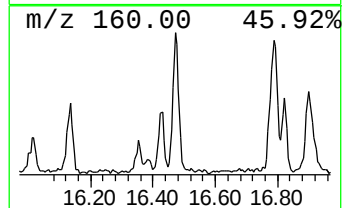
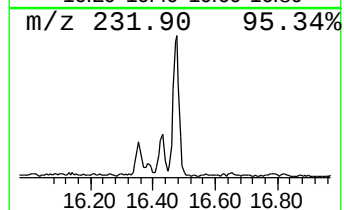
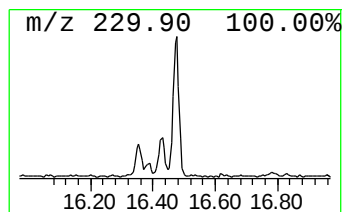
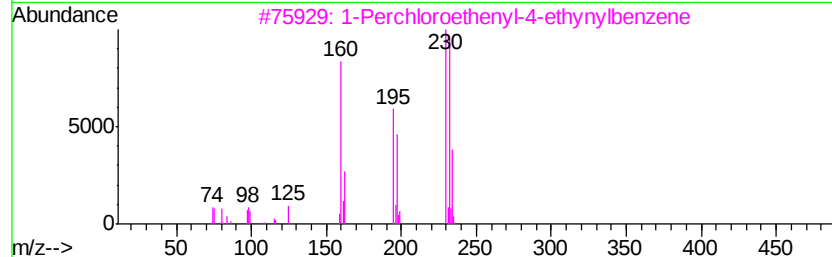
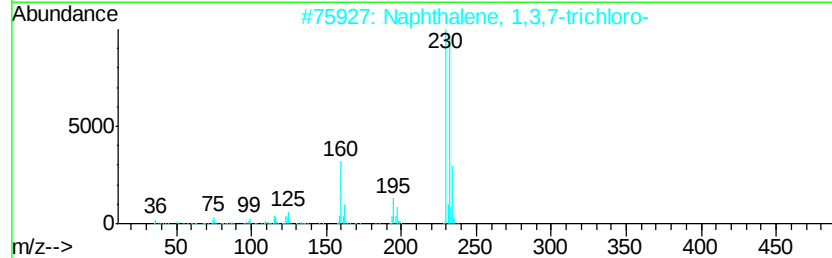
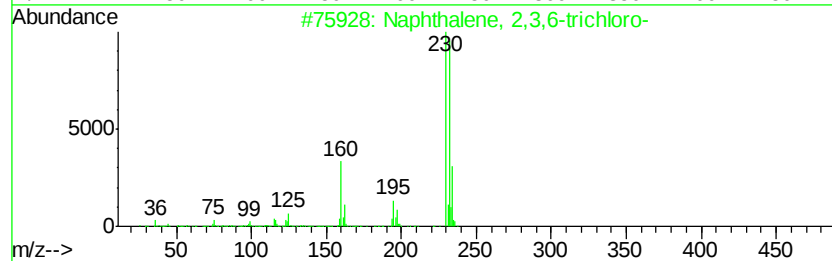
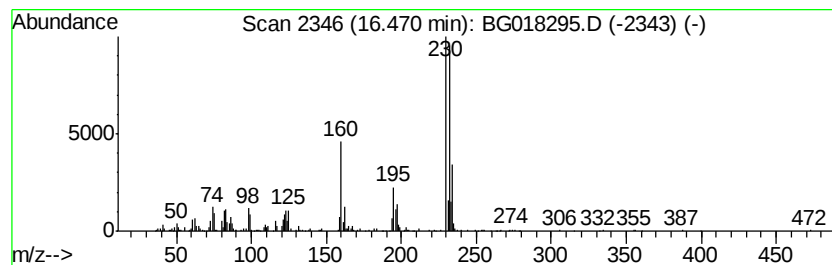
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 19 Naphthalene, 2,3,6-trichloro- Concentration Rank 55

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 16.47 | 7.02 ng/ul | 418831 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#         | Qual |
|------|----|-------------------------------------|-----|----------|--------------|------|
| 1    | 5  | Naphthalene, 2,3,6-trichloro-       | 230 | C10H5Cl3 | 055720-40-6  | 95   |
| 2    |    | Naphthalene, 1,3,7-trichloro-       | 230 | C10H5Cl3 | 055720-37-1  | 95   |
| 3    |    | 1-Perchloroethenyl-4-ethynylbenzene | 230 | C10H5Cl3 | 1000283-76-9 | 93   |
| 4    |    | Phenol, 2,3,4,6-tetrachloro-        | 230 | C6H2Cl4O | 000058-90-2  | 52   |
| 5    |    | Acenaphthylene, 1-bromo-            | 230 | C12H7Br  | 054736-49-1  | 49   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

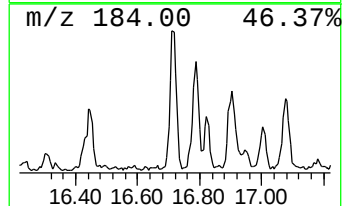
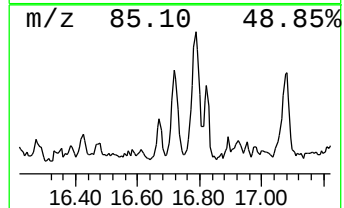
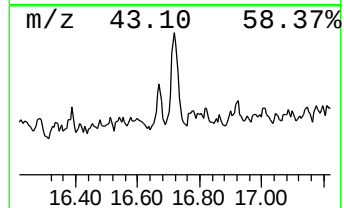
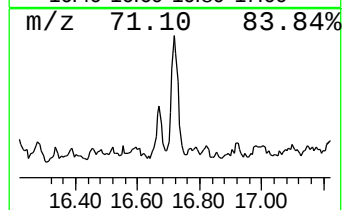
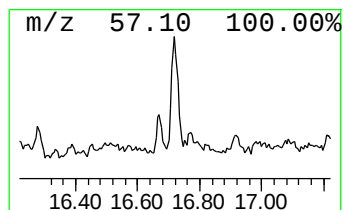
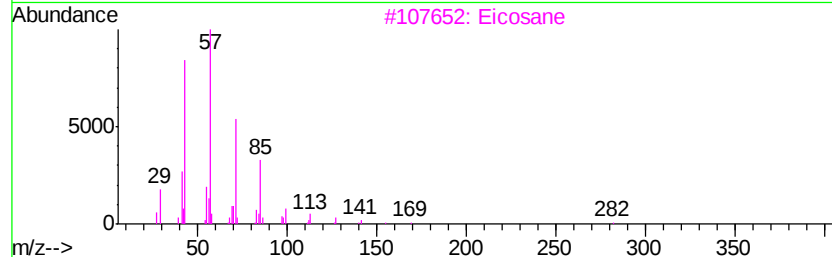
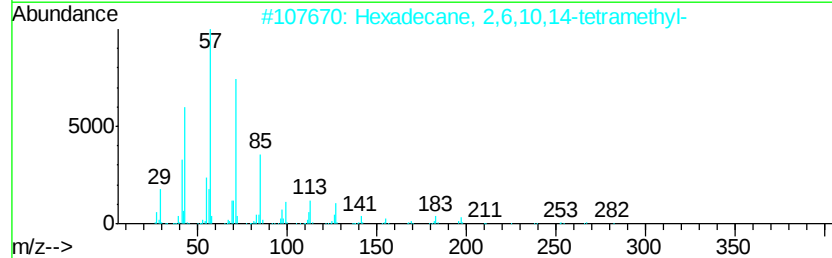
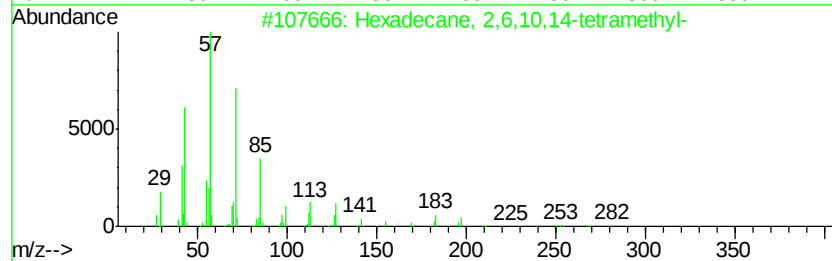
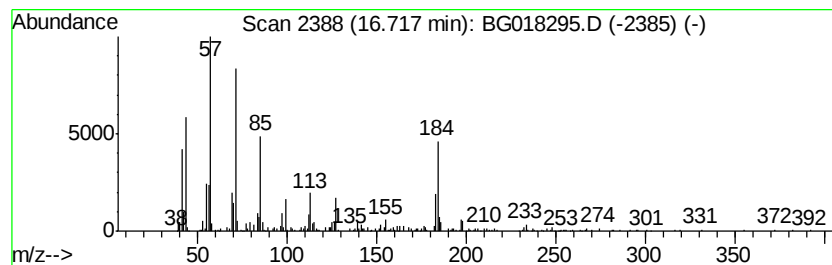
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 20 (DEL) Alkane: Straight-Chai... Concentration Rank 60

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 16.72 | 6.59 ng/ul | 393196 | Phenanthrene-d10 | 16.90 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Hexadecane, 2,6,10,14-tetramethyl-  | 282 | C20H42  | 000638-36-8 | 87   |
| 2    |    |   | Hexadecane, 2,6,10,14-tetramethyl-  | 282 | C20H42  | 000638-36-8 | 70   |
| 3    |    |   | Eicosane                            | 282 | C20H42  | 000112-95-8 | 55   |
| 4    |    |   | Tetradecane                         | 198 | C14H30  | 000629-59-4 | 55   |
| 5    |    |   | Heptadecane, 2,6,10,15-tetramethyl- | 296 | C21H44  | 054833-48-6 | 55   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

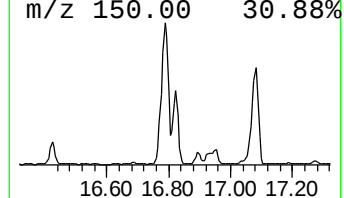
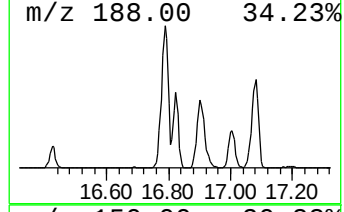
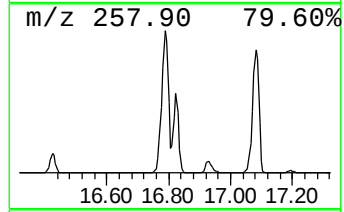
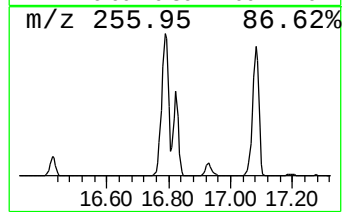
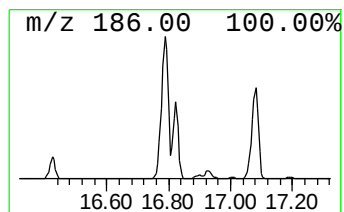
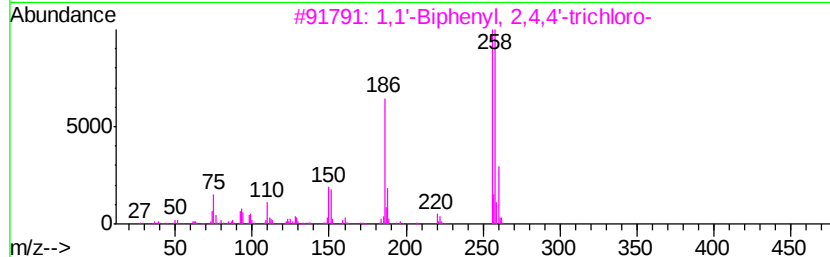
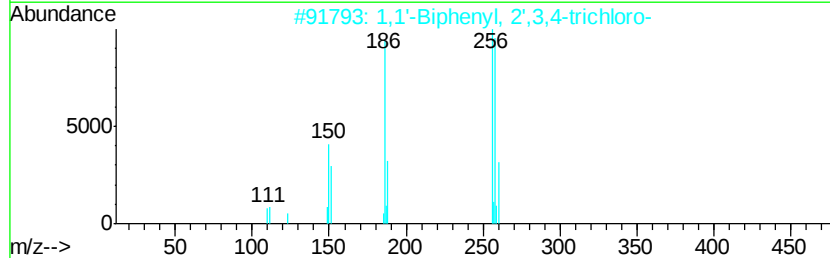
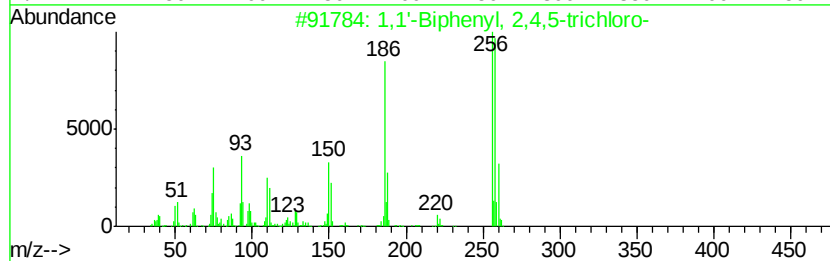
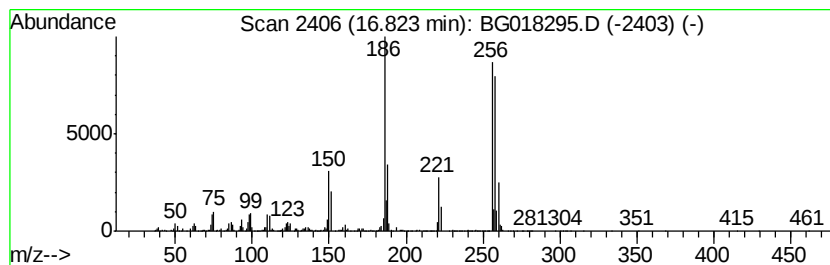
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 22 1,1'-Biphenyl, 2,4,5-trichl... Concentration Rank 23

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 16.82 | 51.67 ng/ul | 3084070 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                     | MW  | MolForm  | CAS#        | Qual |
|------|----|----------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2,4,5-trichloro-  | 256 | C12H7Cl3 | 015862-07-4 | 97   |
| 2    |    | 1,1'-Biphenyl, 2',3,4-trichloro- | 256 | C12H7Cl3 | 038444-86-9 | 96   |
| 3    |    | 1,1'-Biphenyl, 2,4,4'-trichloro- | 256 | C12H7Cl3 | 007012-37-5 | 94   |
| 4    |    | 1,1'-Biphenyl, 2,4',5-trichloro- | 256 | C12H7Cl3 | 016606-02-3 | 94   |
| 5    |    | 1,1'-Biphenyl, 2,2',5-trichloro- | 256 | C12H7Cl3 | 037680-65-2 | 94   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

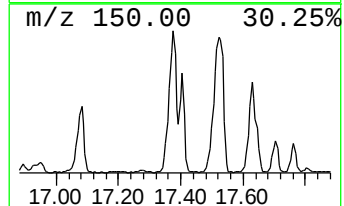
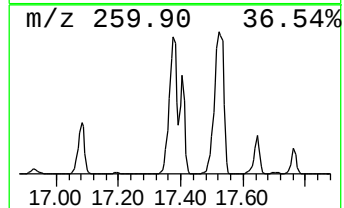
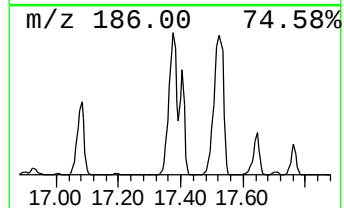
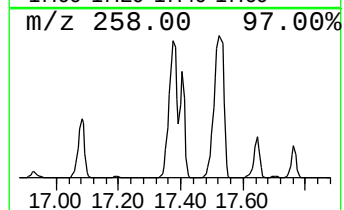
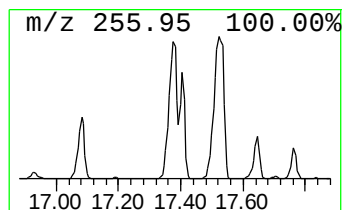
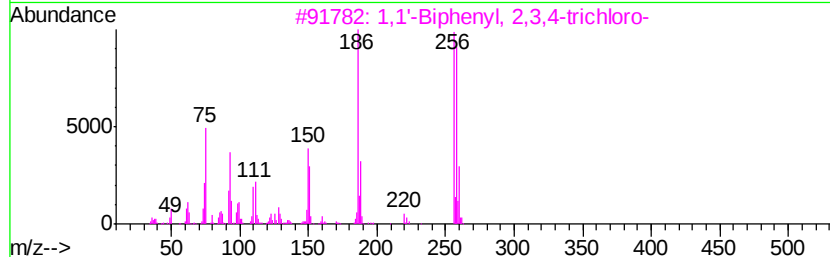
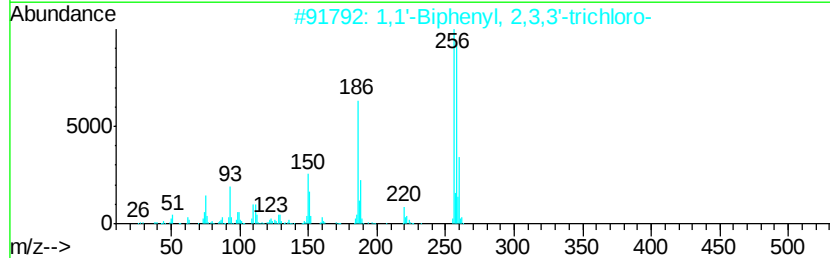
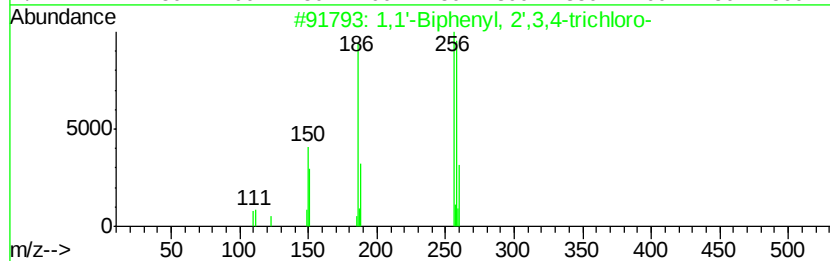
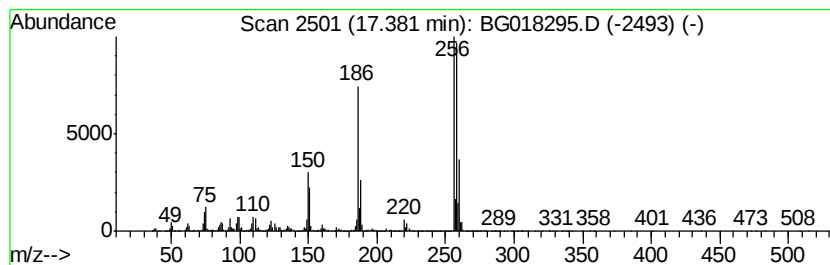
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 23 1,1'-Biphenyl, 2',3,4-trich... Concentration Rank 6

| R.T.  | EstConc      | Area     | Relative to ISTD | R.T.  |
|-------|--------------|----------|------------------|-------|
| 17.38 | 209.32 ng/ul | 12494700 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                     | MW  | MolForm  | CAS#        | Qual |
|------|----|----------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2',3,4-trichloro- | 256 | C12H7Cl3 | 038444-86-9 | 98   |
| 2    |    | 1,1'-Biphenyl, 2,3,3'-trichloro- | 256 | C12H7Cl3 | 038444-84-7 | 96   |
| 3    |    | 1,1'-Biphenyl, 2,3,4-trichloro-  | 256 | C12H7Cl3 | 055702-46-0 | 95   |
| 4    |    | 1,1'-Biphenyl, 2,4,4'-trichloro- | 256 | C12H7Cl3 | 007012-37-5 | 95   |
| 5    |    | 1,1'-Biphenyl, 2,4,5-trichloro-  | 256 | C12H7Cl3 | 015862-07-4 | 95   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

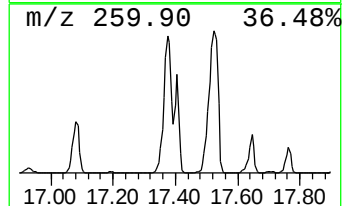
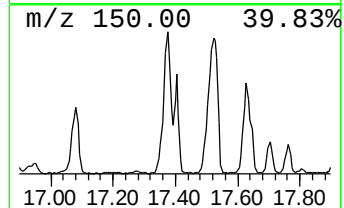
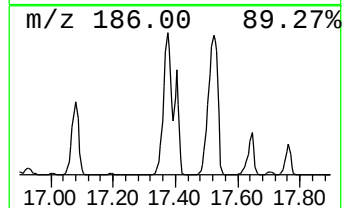
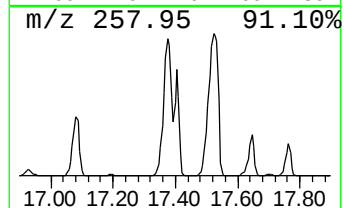
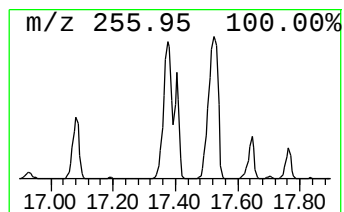
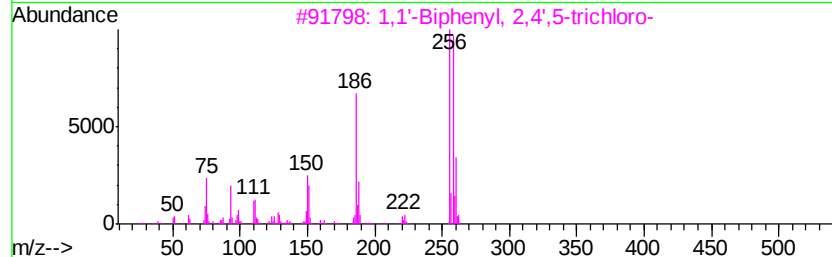
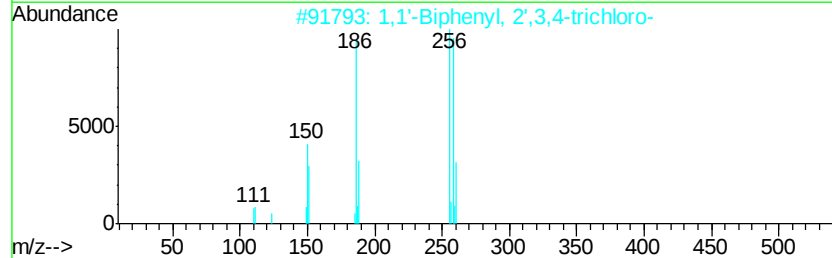
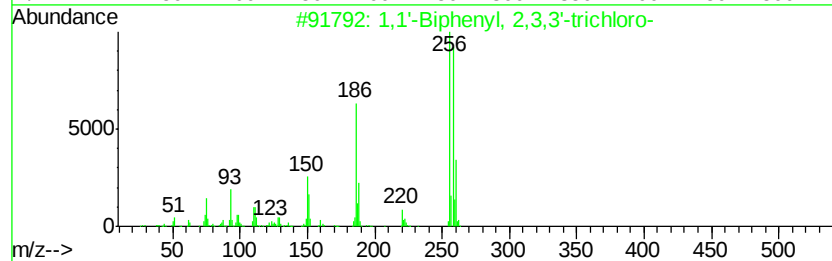
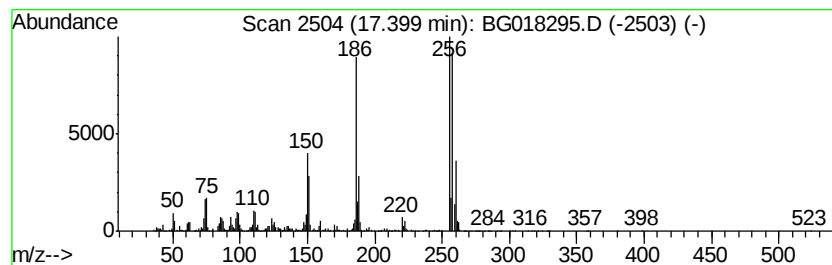
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 24 1,1'-Biphenyl, 2,3,3'-trich... Concentration Rank 14

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 17.40 | 86.04 ng/ul | 5136050 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                     | MW  | MolForm  | CAS#        | Qual |
|------|----|----------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2,3,3'-trichloro- | 256 | C12H7Cl3 | 038444-84-7 | 98   |
| 2    |    | 1,1'-Biphenyl, 2',3,4-trichloro- | 256 | C12H7Cl3 | 038444-86-9 | 98   |
| 3    |    | 1,1'-Biphenyl, 2,4',5-trichloro- | 256 | C12H7Cl3 | 016606-02-3 | 96   |
| 4    |    | 1,1'-Biphenyl, 2,4,4'-trichloro- | 256 | C12H7Cl3 | 007012-37-5 | 96   |
| 5    |    | 1,1'-Biphenyl, 2,4,4'-trichloro- | 256 | C12H7Cl3 | 007012-37-5 | 96   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

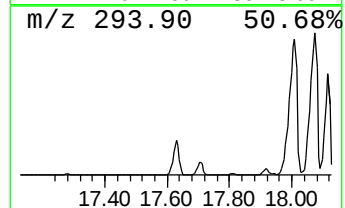
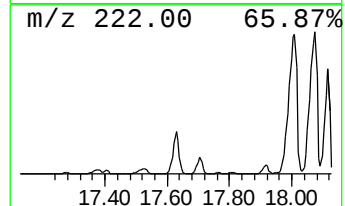
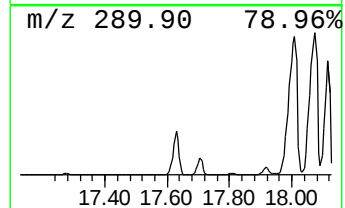
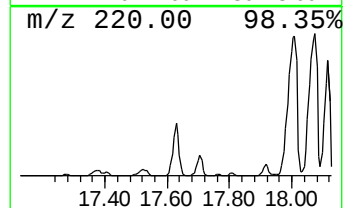
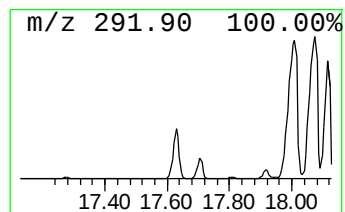
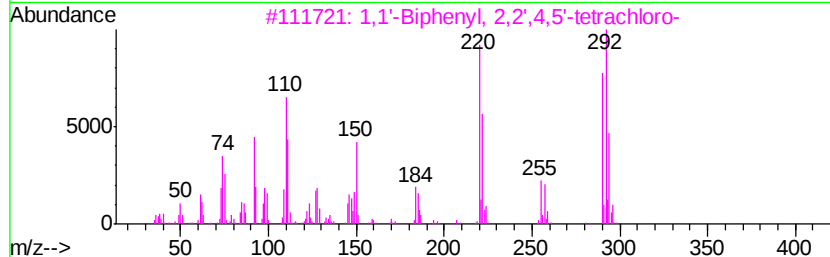
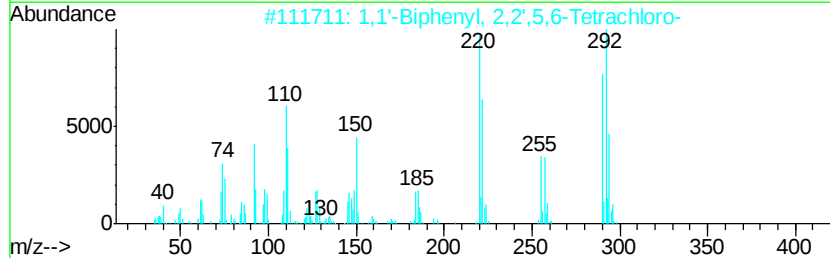
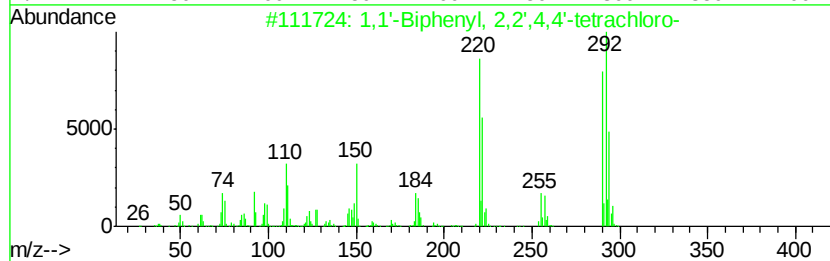
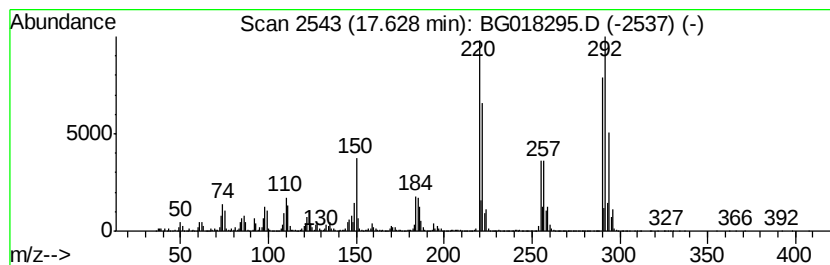
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 26 1,1'-Biphenyl, 2,2',4,4'-te... Concentration Rank 7

| R.T.  | EstConc      | Area     | Relative to ISTD | R.T.  |
|-------|--------------|----------|------------------|-------|
| 17.63 | 167.60 ng/ul | 10004100 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2,2',4,4'-tetrach... | 290 | C12H6Cl4 | 002437-79-8 | 99   |
| 2    |    | 1,1'-Biphenyl, 2,2',5,6-Tetrachl... | 290 | C12H6Cl4 | 041464-41-9 | 99   |
| 3    |    | 1,1'-Biphenyl, 2,2',4,5'-tetrach... | 290 | C12H6Cl4 | 041464-40-8 | 99   |
| 4    |    | 1,1'-Biphenyl, 2,2',5,5'-tetrach... | 290 | C12H6Cl4 | 035693-99-3 | 99   |
| 5    |    | 1,1'-Biphenyl, 2,2',4,5'-tetrach... | 290 | C12H6Cl4 | 041464-40-8 | 99   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

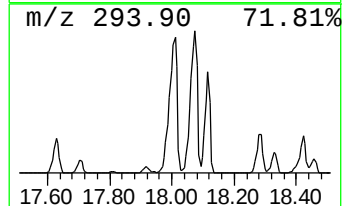
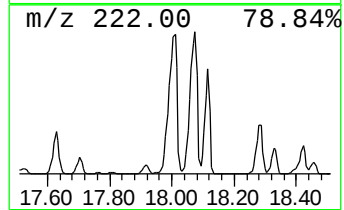
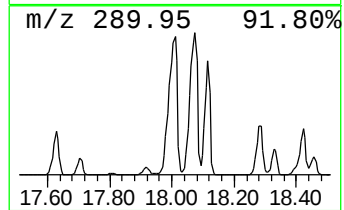
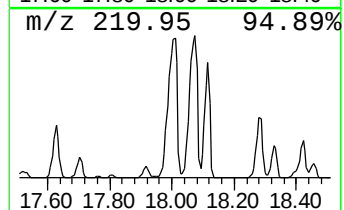
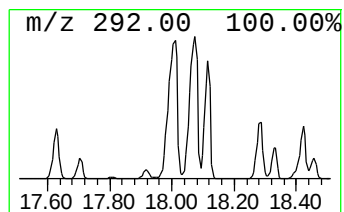
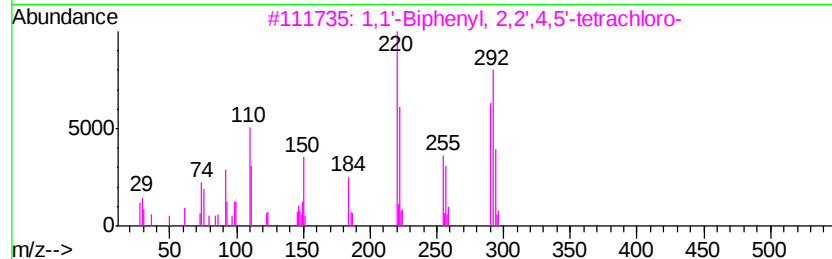
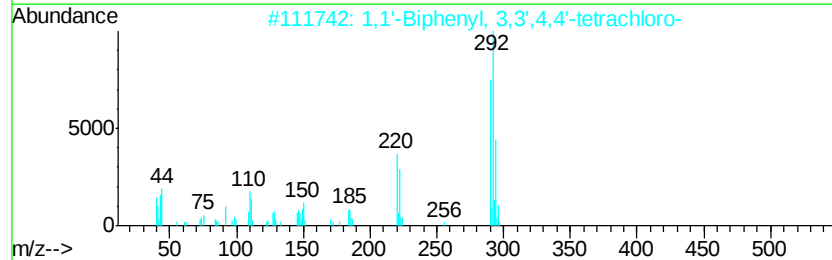
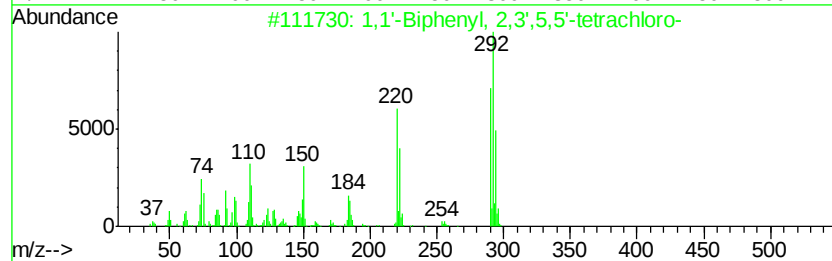
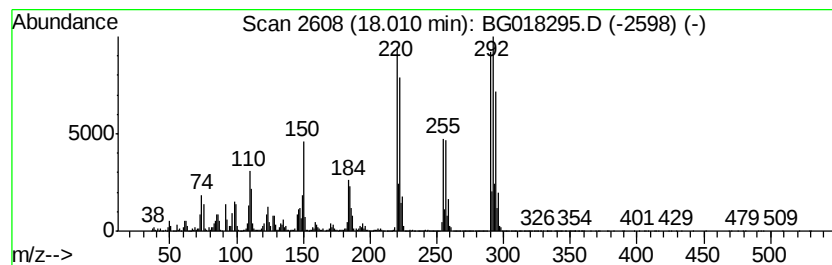
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 30 1,1'-Biphenyl, 2,3',5,5'-te... Concentration Rank 1

| R.T.  | EstConc      | Area     | Relative to ISTD | R.T.  |
|-------|--------------|----------|------------------|-------|
| 18.01 | 654.78 ng/ul | 39084600 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2,3',5,5'-tetrach... | 290 | C12H6Cl4 | 041464-42-0 | 99   |
| 2    |    | 1,1'-Biphenyl, 3,3',4,4'-tetrach... | 290 | C12H6Cl4 | 032598-13-3 | 97   |
| 3    |    | 1,1'-Biphenyl, 2,2',4,5'-tetrach... | 290 | C12H6Cl4 | 041464-40-8 | 96   |
| 4    |    | 1,1'-Biphenyl, 2,2',5,5'-tetrach... | 290 | C12H6Cl4 | 035693-99-3 | 96   |
| 5    |    | 1,1'-Biphenyl, 2,2',4,4'-tetrach... | 290 | C12H6Cl4 | 002437-79-8 | 96   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

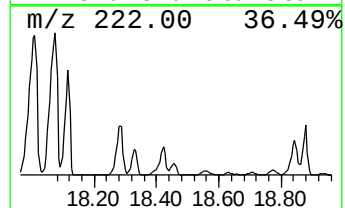
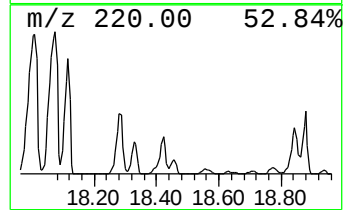
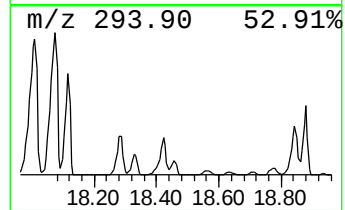
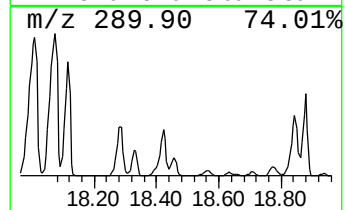
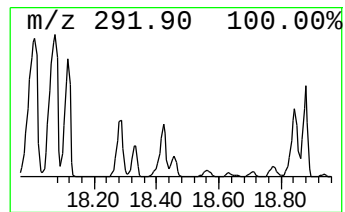
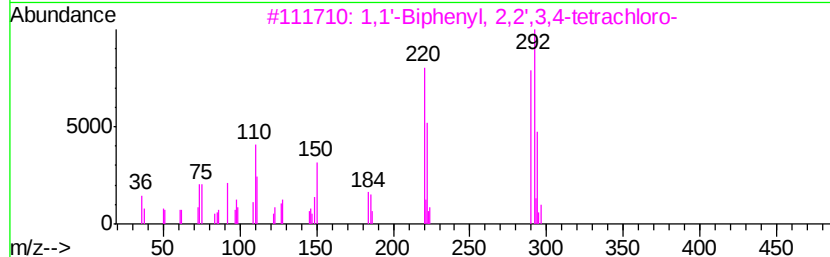
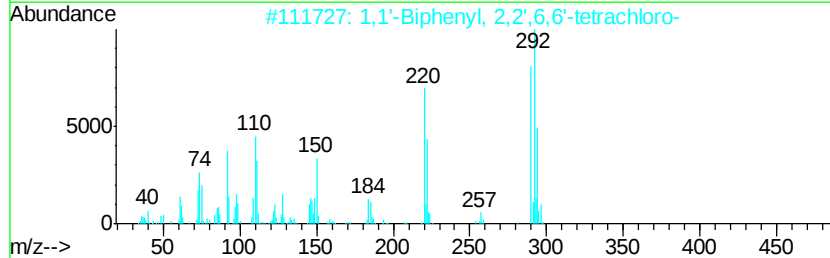
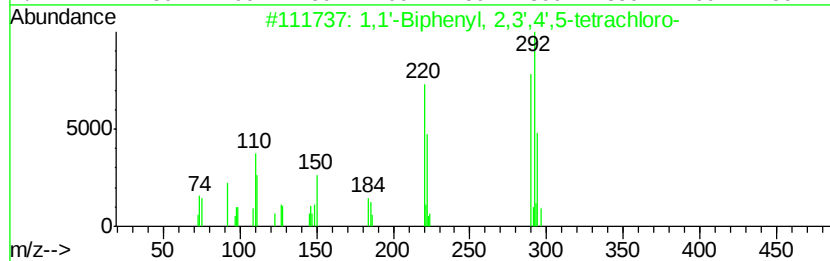
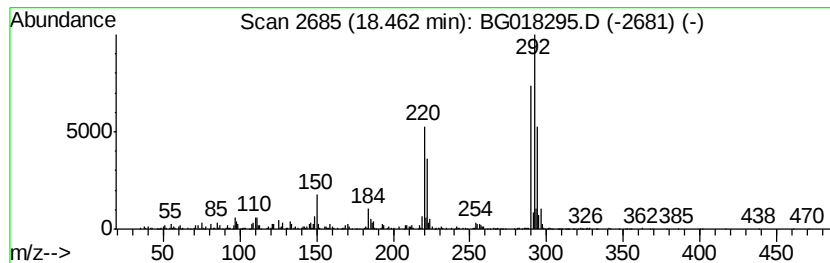
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 36 1,1'-Biphenyl, 2,3',4',5-te... Concentration Rank 28

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 18.46 | 34.56 ng/ul | 2063100 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2,3',4',5-tetrach... | 290 | C12H6Cl4 | 032598-11-1 | 99   |
| 2    |    | 1,1'-Biphenyl, 2,2',6,6'-tetrach... | 290 | C12H6Cl4 | 015968-05-5 | 99   |
| 3    |    | 1,1'-Biphenyl, 2,2',3,4-tetrachl... | 290 | C12H6Cl4 | 052663-59-9 | 98   |
| 4    |    | 1,1'-Biphenyl, 2,3',5,5'-tetrach... | 290 | C12H6Cl4 | 041464-42-0 | 97   |
| 5    |    | 1,1'-Biphenyl, 2,3',4,4'-tetrach... | 290 | C12H6Cl4 | 032598-10-0 | 96   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

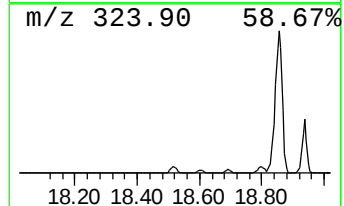
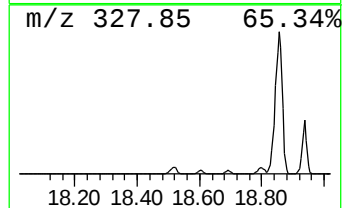
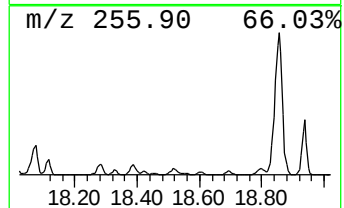
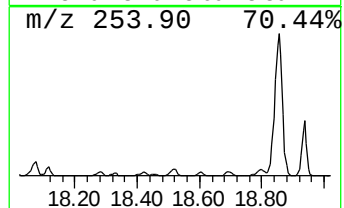
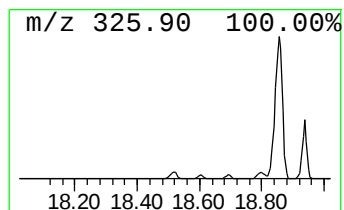
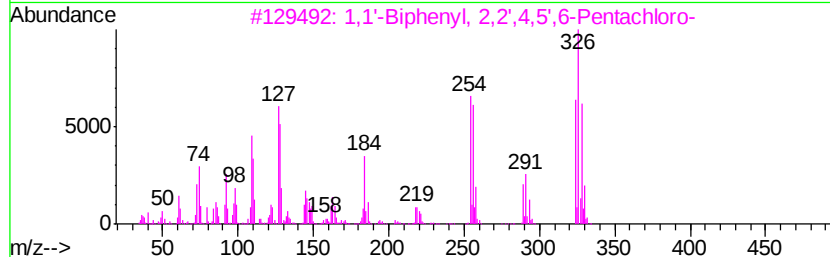
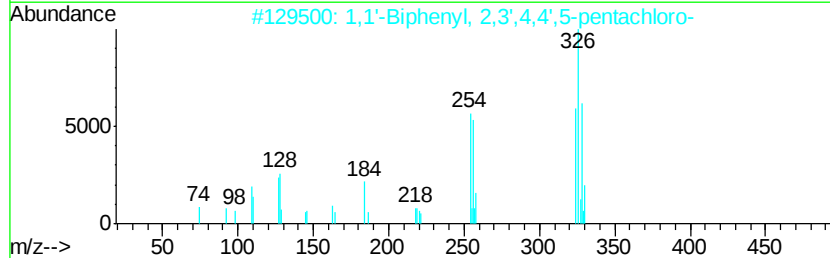
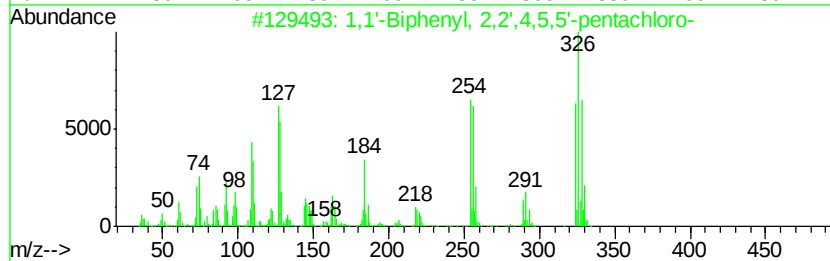
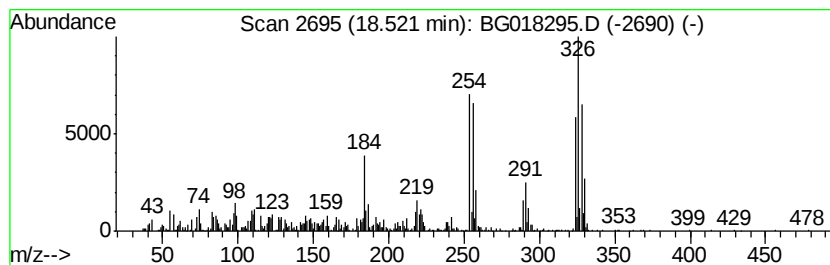
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 37 1,1'-Biphenyl, 2,2',4,5,5'-... Concentration Rank 36

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 18.52 | 15.32 ng/ul | 914667 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2,2',4,5,5'-penta... | 324 | C12H5Cl5 | 037680-73-2 | 96   |
| 2    |    | 1,1'-Biphenyl, 2,3',4,4',5-penta... | 324 | C12H5Cl5 | 031508-00-6 | 96   |
| 3    |    | 1,1'-Biphenyl, 2,2',4,5',6-Penta... | 324 | C12H5Cl5 | 060145-21-3 | 94   |
| 4    |    | 1,1'-Biphenyl, 2,3',4,5',6-Penta... | 324 | C12H5Cl5 | 056558-18-0 | 94   |
| 5    |    | 1,1'-Biphenyl, 2,2',3',4,6-Penta... | 324 | C12H5Cl5 | 060233-25-2 | 94   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

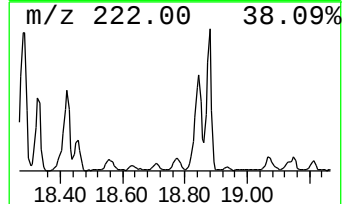
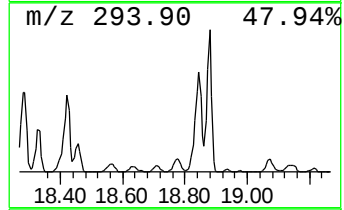
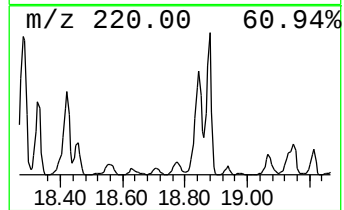
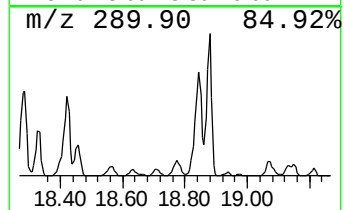
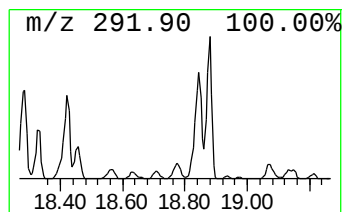
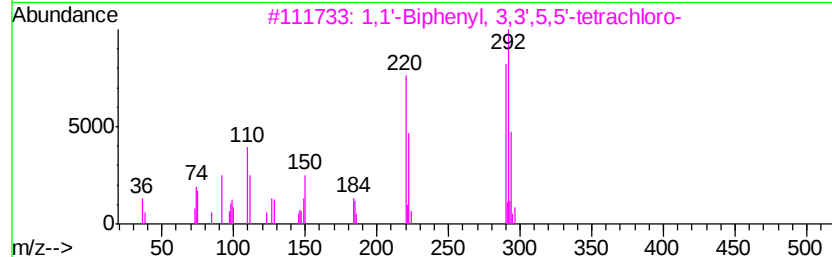
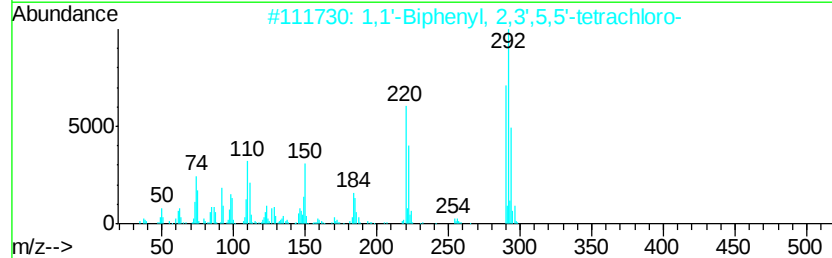
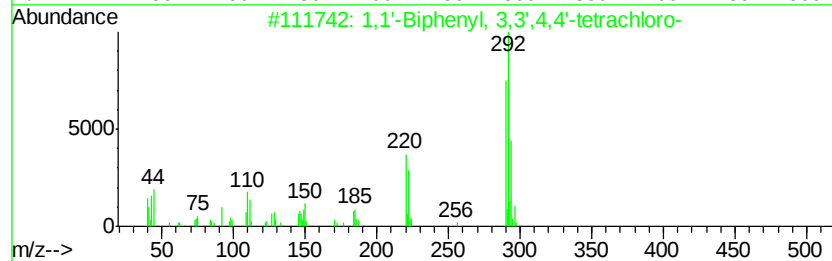
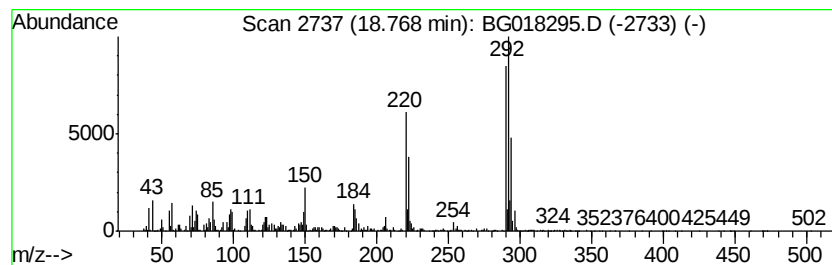
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 39 1,1'-Biphenyl, 3,3',4,4'-te... Concentration Rank 27

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 18.77 | 37.52 ng/ul | 2239660 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 3,3',4,4'-tetrach... | 290 | C12H6Cl4 | 032598-13-3 | 99   |
| 2    |    | 1,1'-Biphenyl, 2,3',5,5'-tetrach... | 290 | C12H6Cl4 | 041464-42-0 | 97   |
| 3    |    | 1,1'-Biphenyl, 3,3',5,5'-tetrach... | 290 | C12H6Cl4 | 033284-52-5 | 96   |
| 4    |    | 1,1'-Biphenyl, 2,3',5,5'-tetrach... | 290 | C12H6Cl4 | 041464-42-0 | 96   |
| 5    |    | 1,1'-Biphenyl, 3,3',4,4'-tetrach... | 290 | C12H6Cl4 | 032598-13-3 | 96   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

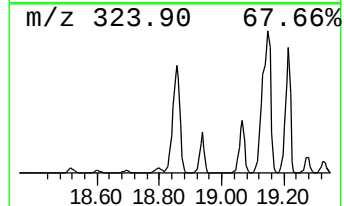
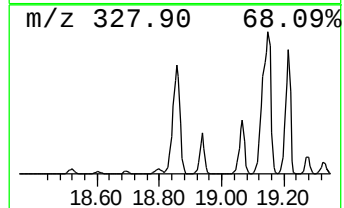
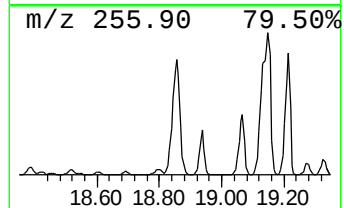
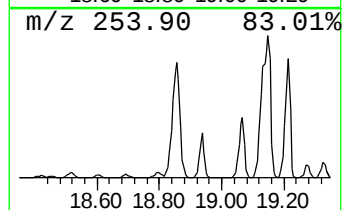
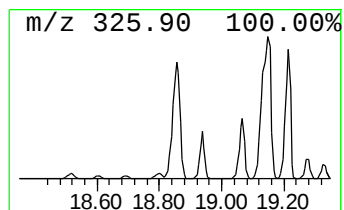
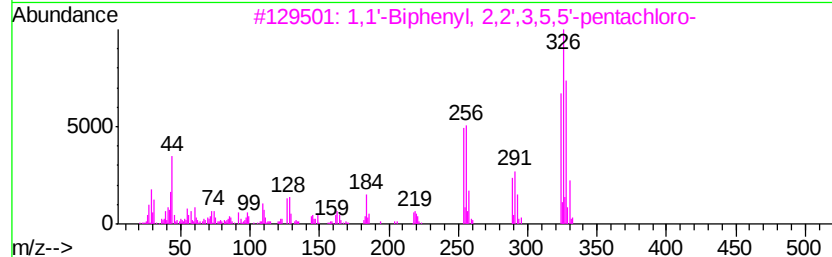
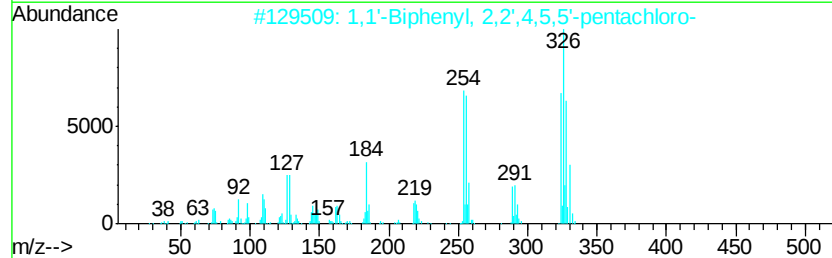
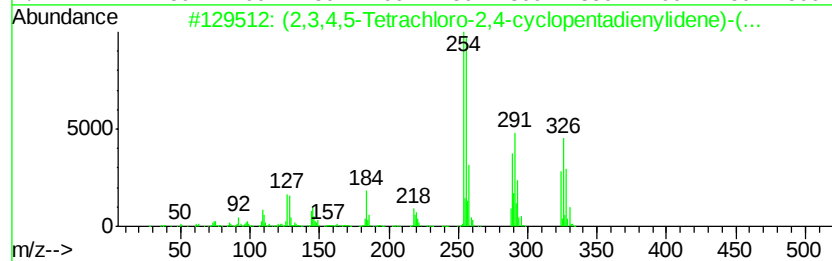
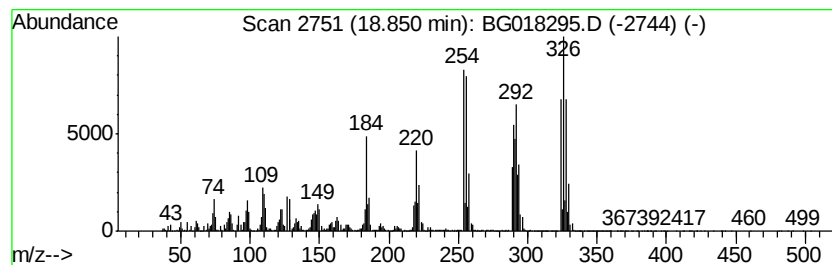
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 40 (2,3,4,5-Tetrachloro-2,4-cy... Concentration Rank 3

| R.T.  | EstConc      | Area     | Relative to ISTD | R.T.  |
|-------|--------------|----------|------------------|-------|
| 18.85 | 509.94 ng/ul | 30438800 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | (2,3,4,5-Tetrachloro-2,4-cyclope... | 324 | C12H5Cl5 | 029887-33-0 | 99   |
| 2    |    | 1,1'-Biphenyl, 2,2',4,5,5'-penta... | 324 | C12H5Cl5 | 037680-73-2 | 99   |
| 3    |    | 1,1'-Biphenyl, 2,2',3,5,5'-penta... | 324 | C12H5Cl5 | 052663-61-3 | 97   |
| 4    |    | 1,1'-Biphenyl, 2,2',3',4,6-Penta... | 324 | C12H5Cl5 | 060233-25-2 | 95   |
| 5    |    | 1,1'-Biphenyl, 2,2',3,3',6-penta... | 324 | C12H5Cl5 | 052663-60-2 | 93   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

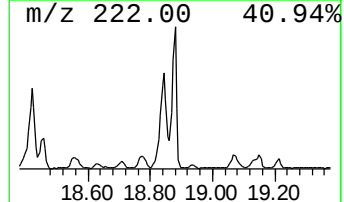
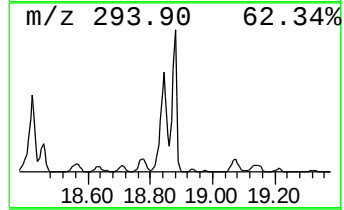
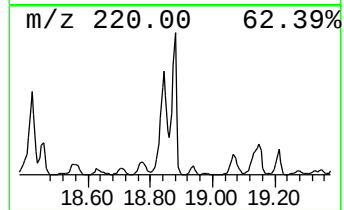
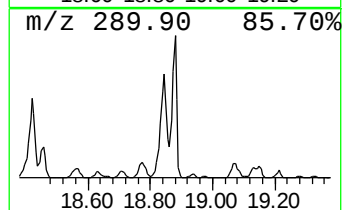
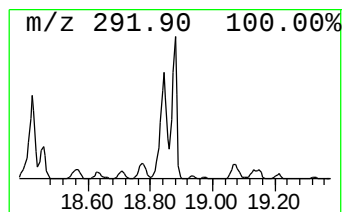
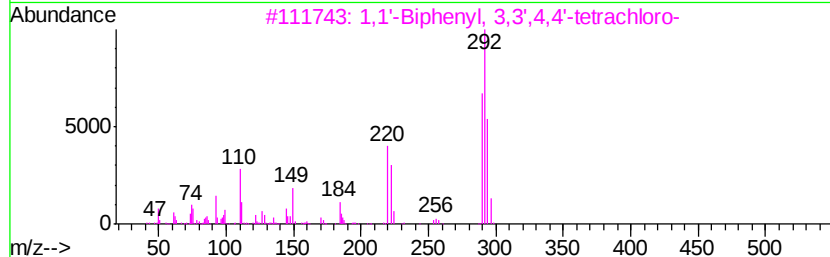
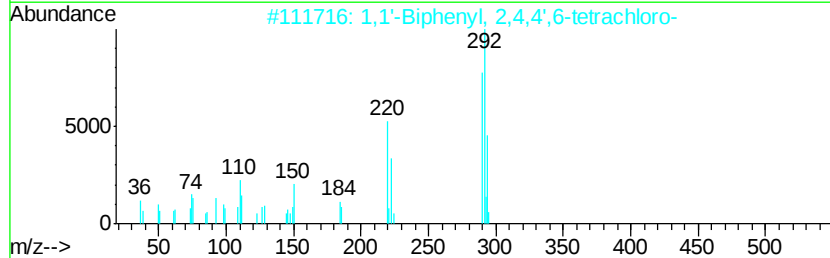
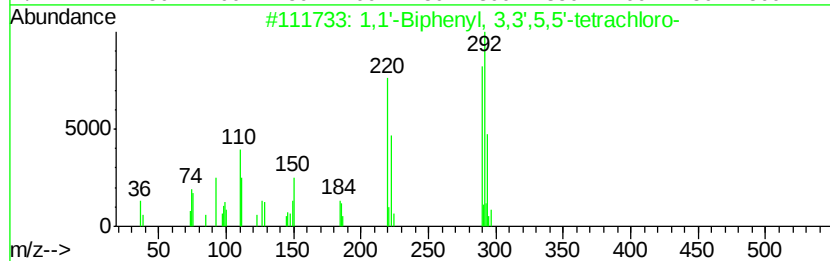
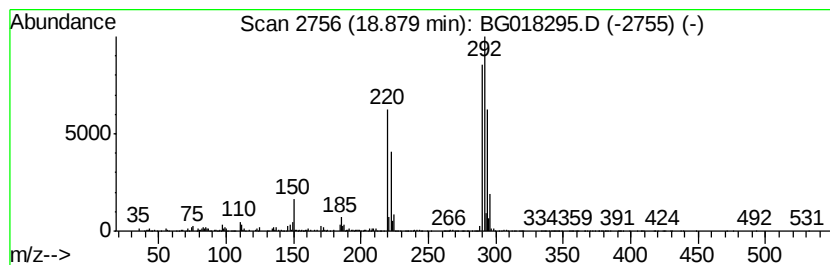
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 41 1,1'-Biphenyl, 3,3',5,5'-te... Concentration Rank 15

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 18.88 | 78.33 ng/ul | 4675550 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 3,3',5,5'-tetrach... | 290 | C12H6Cl4 | 033284-52-5 | 93   |
| 2    |    | 1,1'-Biphenyl, 2,4,4',6-tetrachl... | 290 | C12H6Cl4 | 032598-12-2 | 91   |
| 3    |    | 1,1'-Biphenyl, 3,3',4,4'-tetrach... | 290 | C12H6Cl4 | 032598-13-3 | 90   |
| 4    |    | 1,1'-Biphenyl, 2,3,4',6-tetrachl... | 290 | C12H6Cl4 | 052663-58-8 | 90   |
| 5    |    | 1,1'-Biphenyl, 2,2',4,4'-tetrach... | 290 | C12H6Cl4 | 002437-79-8 | 90   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

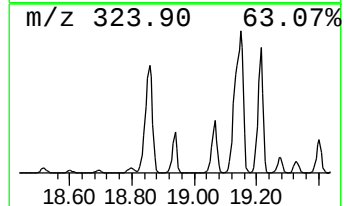
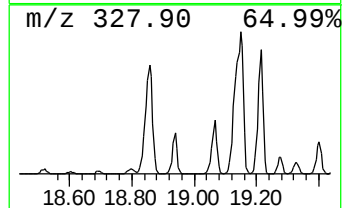
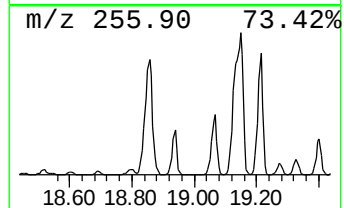
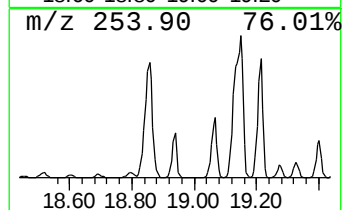
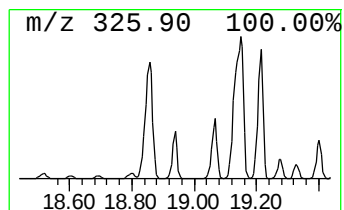
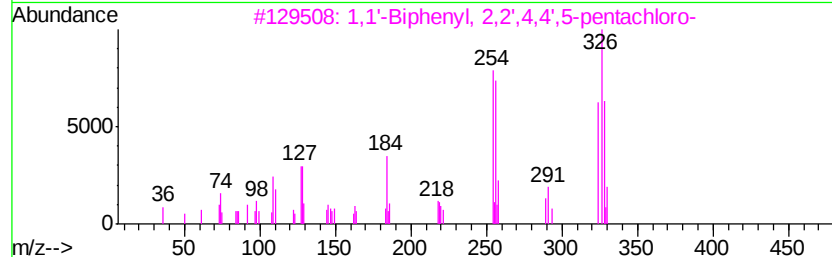
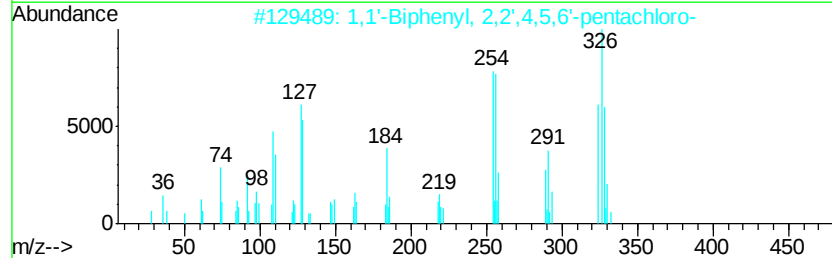
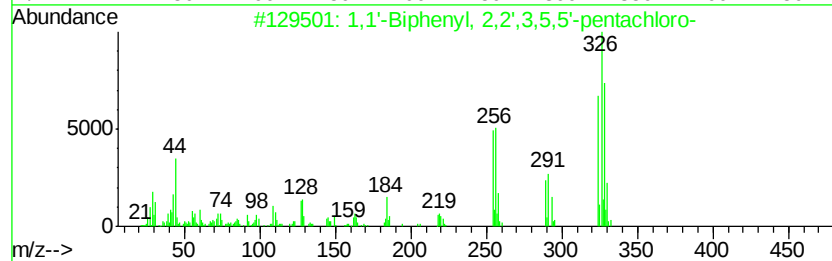
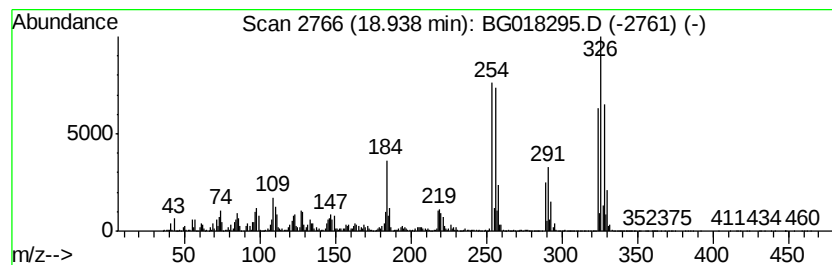
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 42 1,1'-Biphenyl, 2,2',3,5,5'-... Concentration Rank 13

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 18.94 | 91.60 ng/ul | 5467460 | Phenanthrene-d10 | 16.90 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2,2',3,5,5'-penta... | 324 | C12H5Cl5 | 052663-61-3 | 98   |
| 2    |    | 1,1'-Biphenyl, 2,2',4,5,6'-penta... | 324 | C12H5Cl5 | 068194-06-9 | 97   |
| 3    |    | 1,1'-Biphenyl, 2,2',4,4',5-penta... | 324 | C12H5Cl5 | 038380-01-7 | 97   |
| 4    |    | 1,1'-Biphenyl, 2,2',3',4,6-Penta... | 324 | C12H5Cl5 | 060233-25-2 | 96   |
| 5    |    | 1,1'-Biphenyl, 2,2',4,4',6-Penta... | 324 | C12H5Cl5 | 039485-83-1 | 96   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

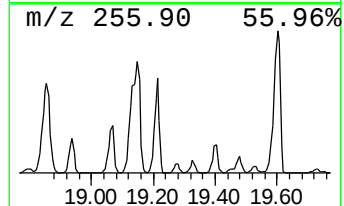
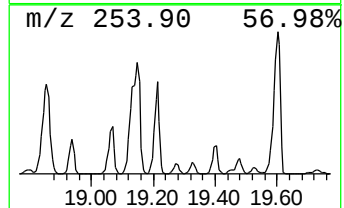
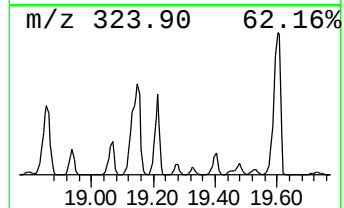
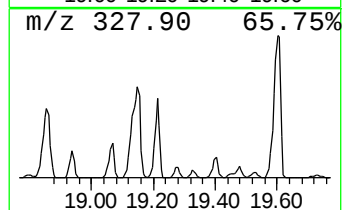
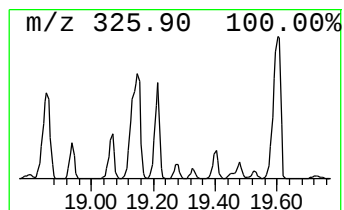
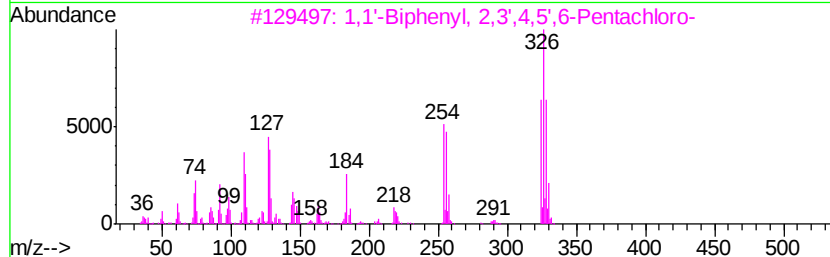
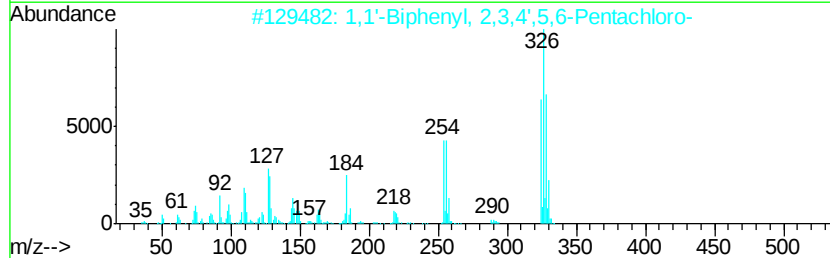
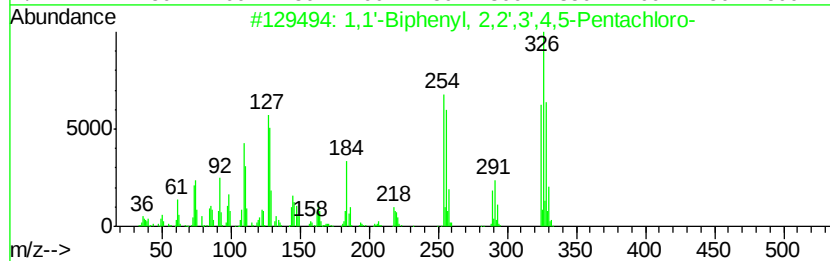
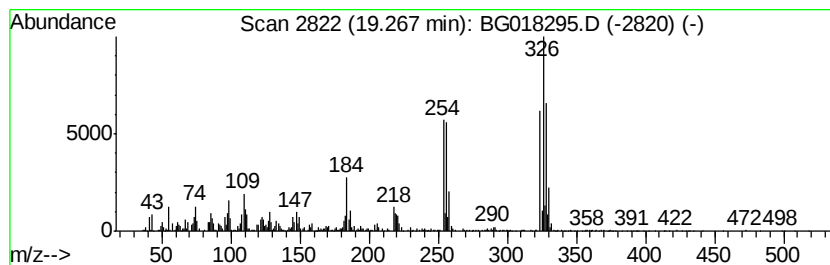
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 46 1,1'-Biphenyl, 2,2',3',4,5-... Concentration Rank 63

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 19.27 | 5.30 ng/ul | 1654110 | Chrysene-d12     | 21.14 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2,2',3',4,5-Penta... | 324 | C12H5Cl5 | 041464-51-1 | 97   |
| 2    |    | 1,1'-Biphenyl, 2,3,4',5,6-Pentac... | 324 | C12H5Cl5 | 068194-11-6 | 96   |
| 3    |    | 1,1'-Biphenyl, 2,3',4,5',6-Penta... | 324 | C12H5Cl5 | 056558-18-0 | 96   |
| 4    |    | 1,1'-Biphenyl, 2,3',4,4',6-Penta... | 324 | C12H5Cl5 | 056558-17-9 | 95   |
| 5    |    | 1,1'-Biphenyl, 2,3,3',4,4'-penta... | 324 | C12H5Cl5 | 032598-14-4 | 95   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

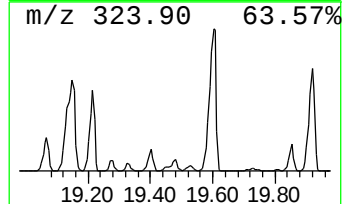
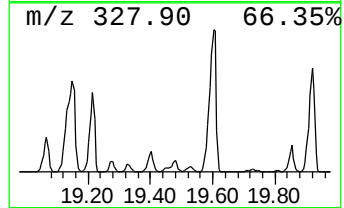
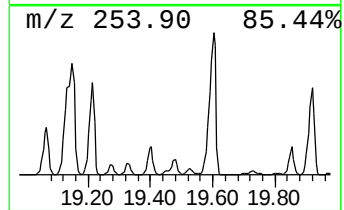
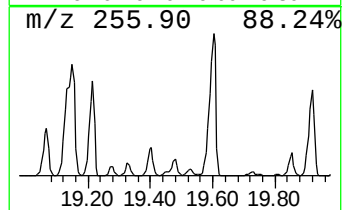
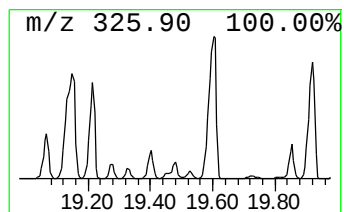
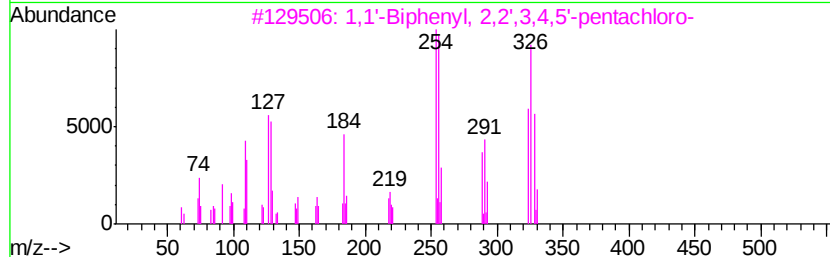
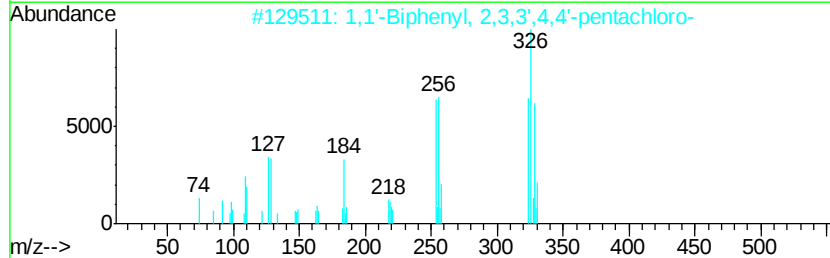
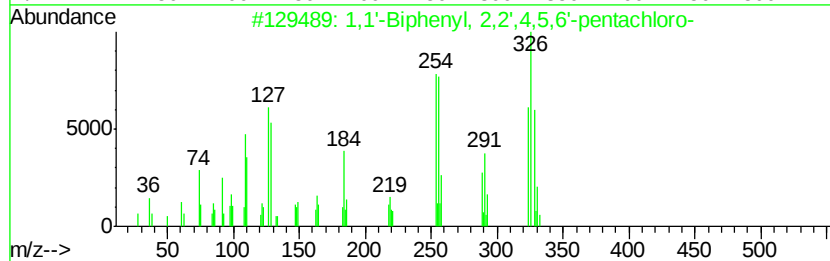
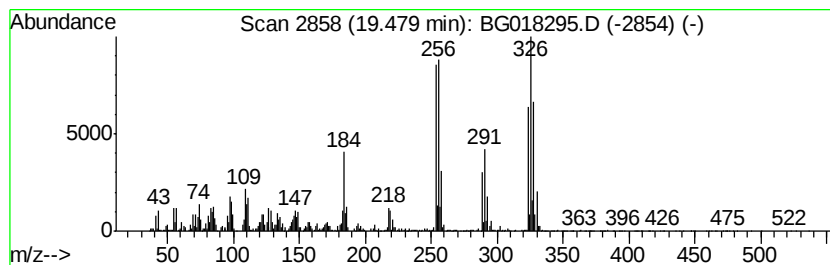
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 47 1,1'-Biphenyl, 2,2',4,5,6'-... Concentration Rank 48

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 19.48 | 8.63 ng/ul | 2695950 | Chrysene-d12     | 21.14 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2,2',4,5,6'-penta... | 324 | C12H5Cl5 | 068194-06-9 | 95   |
| 2    |    | 1,1'-Biphenyl, 2,3,3',4,4'-penta... | 324 | C12H5Cl5 | 032598-14-4 | 94   |
| 3    |    | 1,1'-Biphenyl, 2,2',3,4,5'-penta... | 324 | C12H5Cl5 | 038380-02-8 | 94   |
| 4    |    | 1,1'-Biphenyl, 2,2',4,4',6-Penta... | 324 | C12H5Cl5 | 039485-83-1 | 94   |
| 5    |    | 1,1'-Biphenyl, 2,2',3',4,5-Penta... | 324 | C12H5Cl5 | 041464-51-1 | 94   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

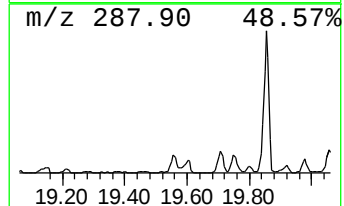
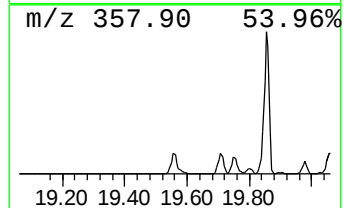
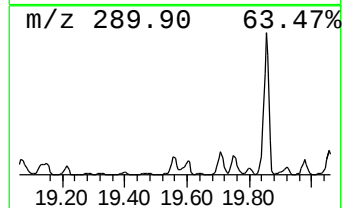
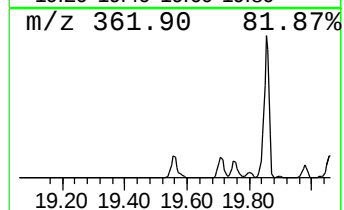
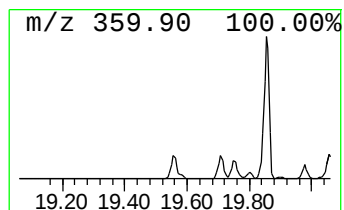
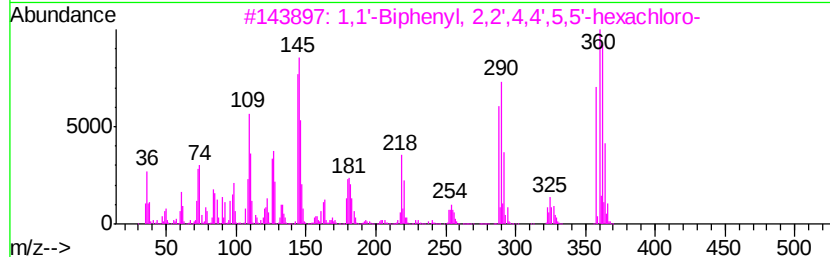
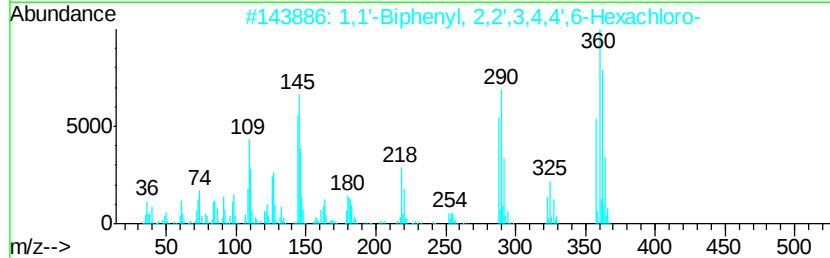
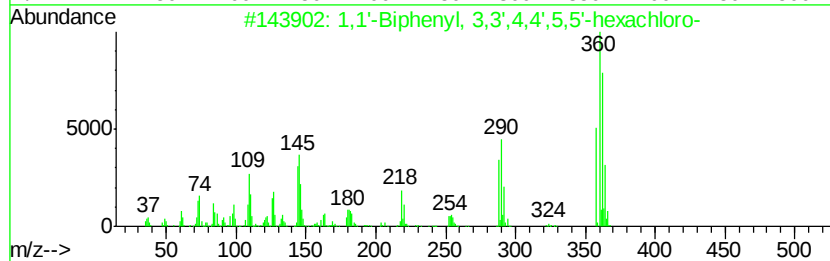
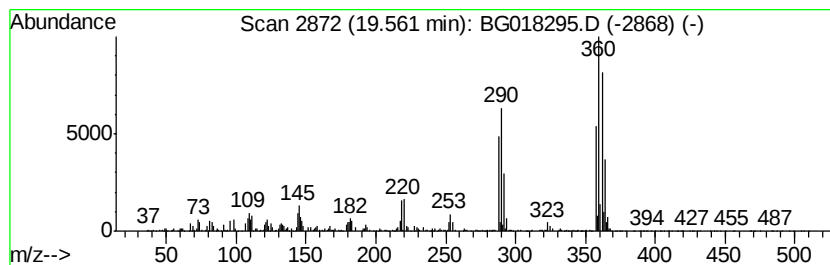
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 49 1,1'-Biphenyl, 3,3',4,4',5,... Concentration Rank 56

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 19.56 | 7.00 ng/ul | 2184980 | Chrysene-d12     | 21.14 |

| Hit# | of   | 5         | Tentative ID         | MW  | MolForm  | CAS#        | Qual |
|------|------|-----------|----------------------|-----|----------|-------------|------|
| 1    | 1,1' | -Biphenyl | 3,3',4,4',5,5'-he... | 358 | C12H4Cl6 | 032774-16-6 | 95   |
| 2    | 1,1' | -Biphenyl | 2,2',3,4,4',6-Hex... | 358 | C12H4Cl6 | 056030-56-9 | 94   |
| 3    | 1,1' | -Biphenyl | 2,2',4,4',5,5'-he... | 358 | C12H4Cl6 | 035065-27-1 | 94   |
| 4    | 1,1' | -Biphenyl | 2,3,3',4,5,6-hexa... | 358 | C12H4Cl6 | 041411-62-5 | 94   |
| 5    | 1,1' | -Biphenyl | 2,2',3,4,4',5'-he... | 358 | C12H4Cl6 | 035065-28-2 | 94   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

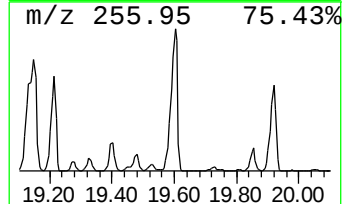
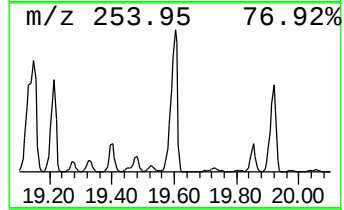
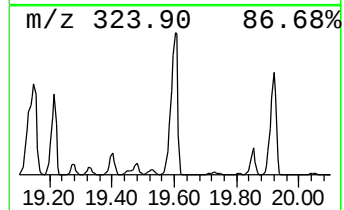
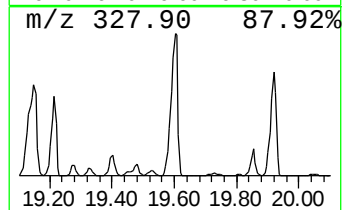
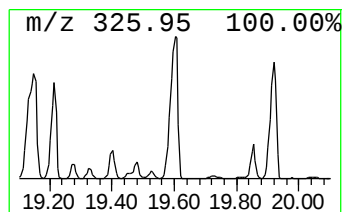
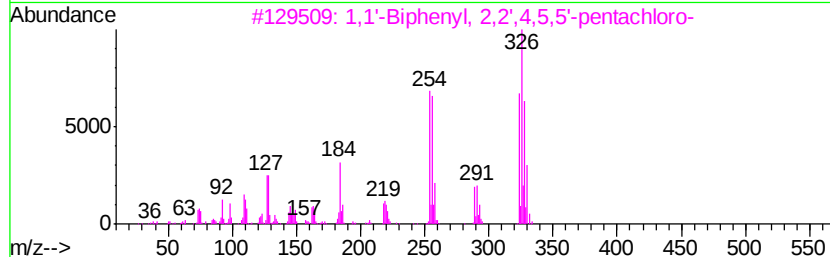
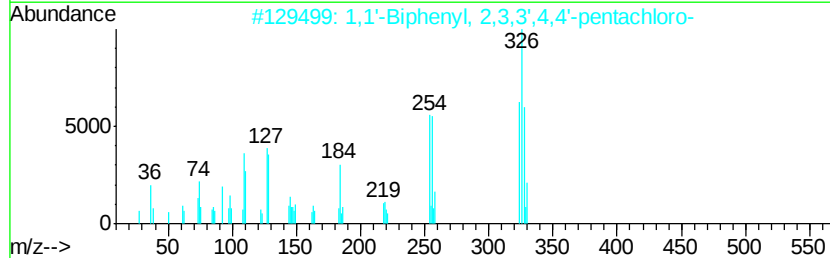
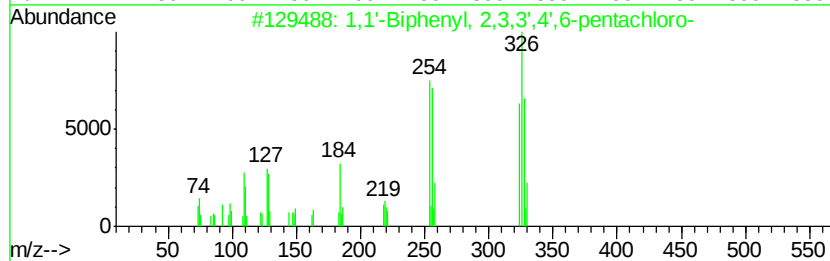
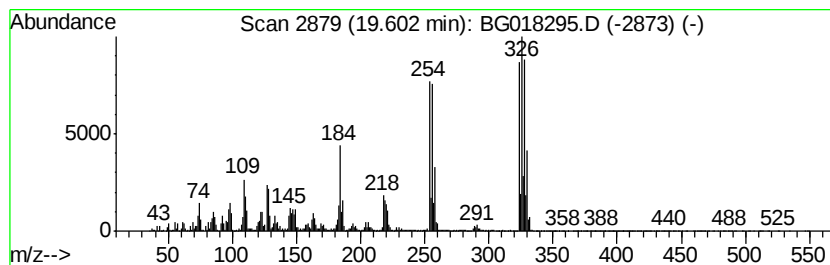
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 50 1,1'-Biphenyl, 2,3,3',4',6-... Concentration Rank 11

| R.T.  | EstConc      | Area     | Relative to ISTD | R.T.  |
|-------|--------------|----------|------------------|-------|
| 19.60 | 104.80 ng/ul | 32721000 | Chrysene-d12     | 21.14 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2,3,3',4',6-penta... | 324 | C12H5Cl5 | 038380-03-9 | 98   |
| 2    |    | 1,1'-Biphenyl, 2,3,3',4,4'-penta... | 324 | C12H5Cl5 | 032598-14-4 | 96   |
| 3    |    | 1,1'-Biphenyl, 2,2',4,5,5'-penta... | 324 | C12H5Cl5 | 037680-73-2 | 95   |
| 4    |    | 1,1'-Biphenyl, 2,2',4,5',6-Penta... | 324 | C12H5Cl5 | 060145-21-3 | 94   |
| 5    |    | 1,1'-Biphenyl, 2,3,3',4,6-Pentac... | 324 | C12H5Cl5 | 074472-35-8 | 93   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

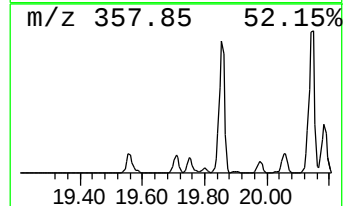
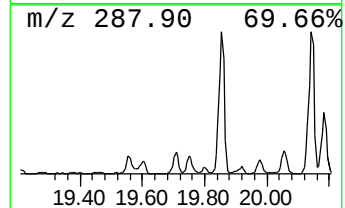
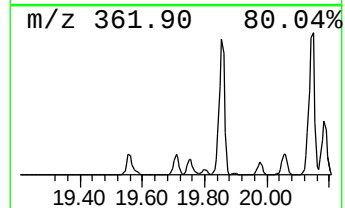
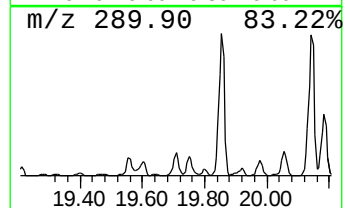
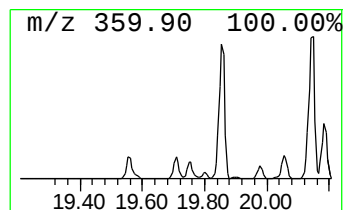
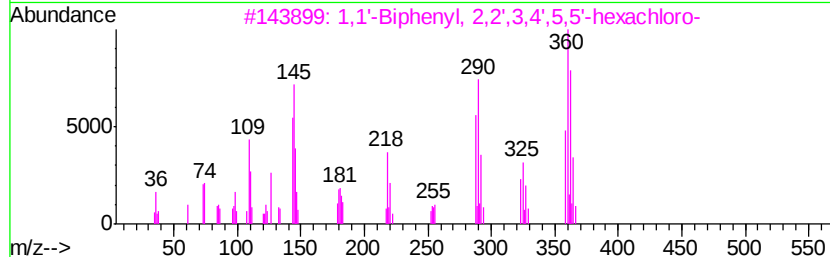
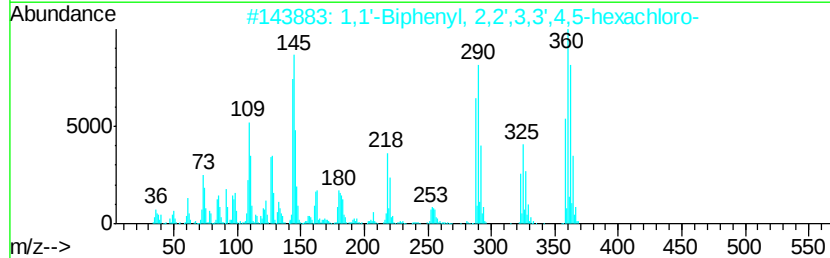
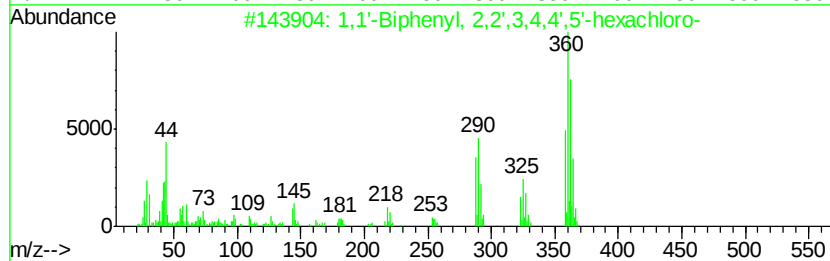
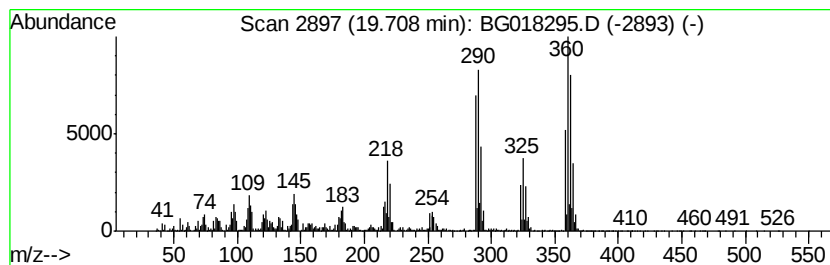
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 51 1,1'-Biphenyl, 2,2',3,4,4',... Concentration Rank 45

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 19.71 | 9.47 ng/ul | 2957210 | Chrysene-d12     | 21.14 |

| Hit# | of   | 5                               | Tentative ID | MW       | MolForm     | CAS# | Qual |
|------|------|---------------------------------|--------------|----------|-------------|------|------|
| 1    | 1,1' | -Biphenyl, 2,2',3,4,4',5'-he... | 358          | C12H4Cl6 | 035065-28-2 | 99   |      |
| 2    | 1,1' | -Biphenyl, 2,2',3,3',4,5-hex... | 358          | C12H4Cl6 | 055215-18-4 | 97   |      |
| 3    | 1,1' | -Biphenyl, 2,2',3,4',5,5'-he... | 358          | C12H4Cl6 | 051908-16-8 | 97   |      |
| 4    | 1,1' | -Biphenyl, 2,2',4,4',5,5'-he... | 358          | C12H4Cl6 | 035065-27-1 | 95   |      |
| 5    | 1,1' | -Biphenyl, 2,2',3,4',5',6-he... | 358          | C12H4Cl6 | 038380-04-0 | 95   |      |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

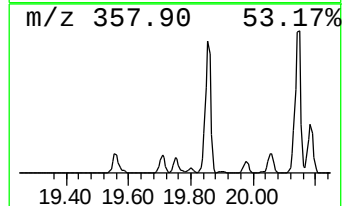
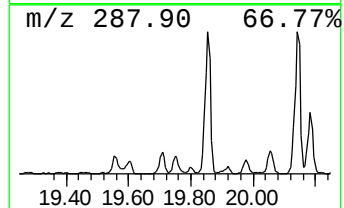
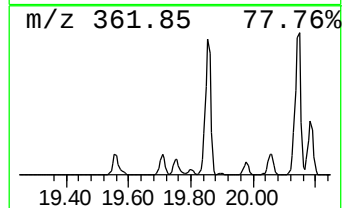
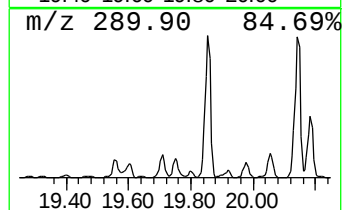
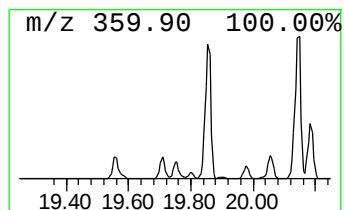
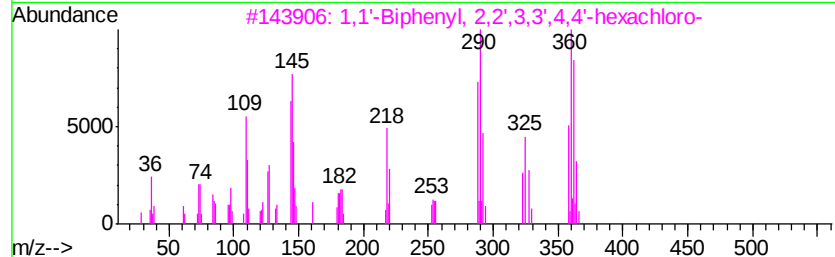
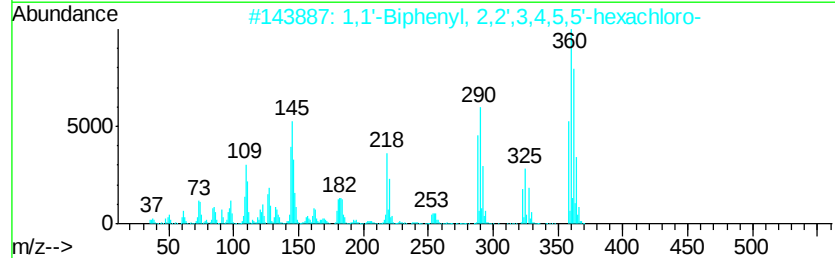
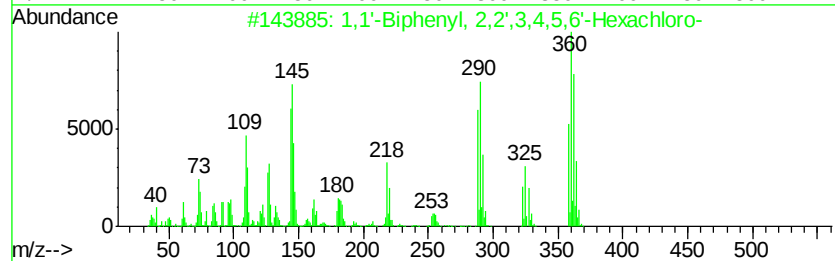
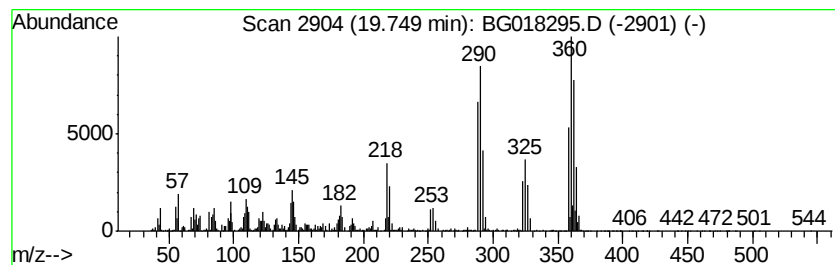
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 52 1,1'-Biphenyl, 2,2',3,4,5,6... Concentration Rank 59

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 19.75 | 6.66 ng/ul | 2078850 | Chrysene-d12     | 21.14 |

| Hit# | of   | 5         | Tentative ID         | MW  | MolForm  | CAS#        | Qual |
|------|------|-----------|----------------------|-----|----------|-------------|------|
| 1    | 1,1' | -Biphenyl | 2,2',3,4,5,6'-Hex... | 358 | C12H4Cl6 | 068194-15-0 | 97   |
| 2    | 1,1' | -Biphenyl | 2,2',3,4,5,5'-hex... | 358 | C12H4Cl6 | 052712-04-6 | 96   |
| 3    | 1,1' | -Biphenyl | 2,2',3,3',4,4'-he... | 358 | C12H4Cl6 | 038380-07-3 | 96   |
| 4    | 1,1' | -Biphenyl | 2,2',3,3',4,5-hex... | 358 | C12H4Cl6 | 055215-18-4 | 95   |
| 5    | 1,1' | -Biphenyl | 2,2',3,4,4',6-Hex... | 358 | C12H4Cl6 | 056030-56-9 | 95   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

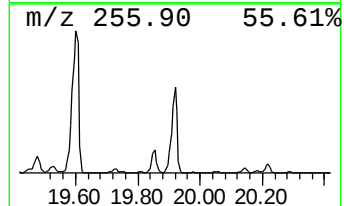
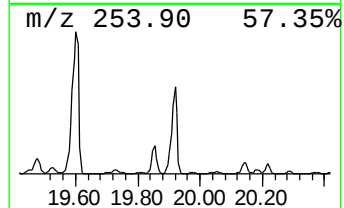
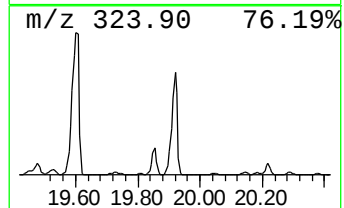
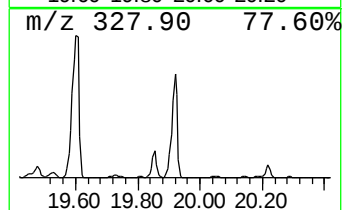
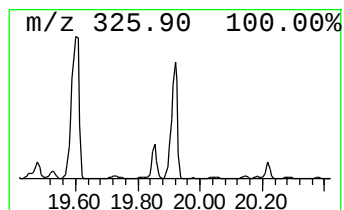
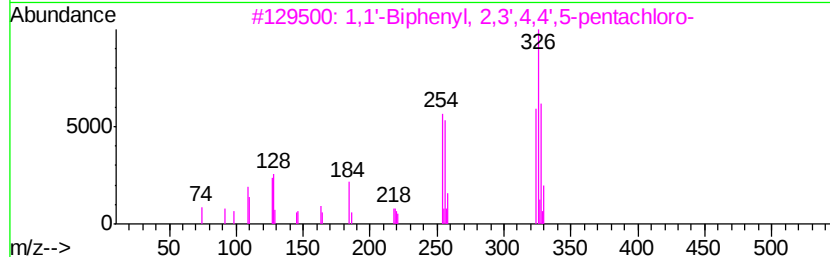
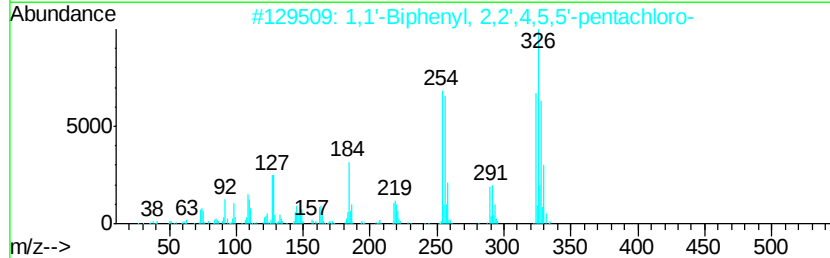
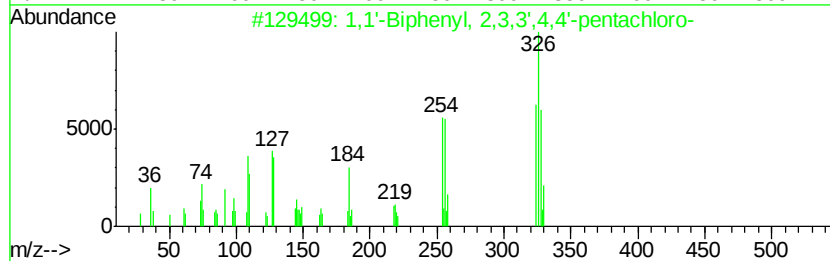
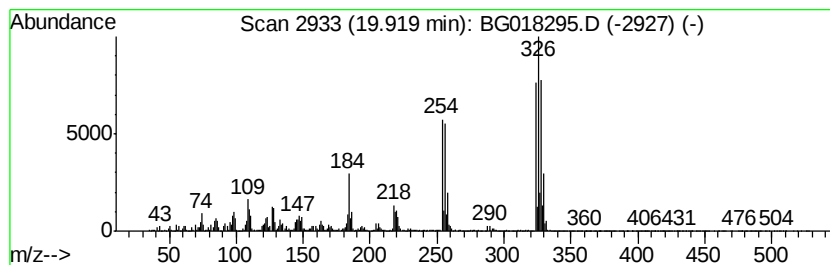
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 55 1,1'-Biphenyl, 2,3,3',4,4'-... Concentration Rank 21

| R.T.  | EstConc     | Area     | Relative to ISTD | R.T.  |
|-------|-------------|----------|------------------|-------|
| 19.92 | 56.88 ng/ul | 17757700 | Chrysene-d12     | 21.14 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2,3,3',4,4'-penta... | 324 | C12H5Cl5 | 032598-14-4 | 96   |
| 2    |    | 1,1'-Biphenyl, 2,2',4,5,5'-penta... | 324 | C12H5Cl5 | 037680-73-2 | 96   |
| 3    |    | 1,1'-Biphenyl, 2,3',4,4',5-penta... | 324 | C12H5Cl5 | 031508-00-6 | 95   |
| 4    |    | 1,1'-Biphenyl, 2,3',4,5,5'-penta... | 324 | C12H5Cl5 | 068194-12-7 | 95   |
| 5    |    | 1,1'-Biphenyl, 2,3',4,5',6-Penta... | 324 | C12H5Cl5 | 056558-18-0 | 95   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

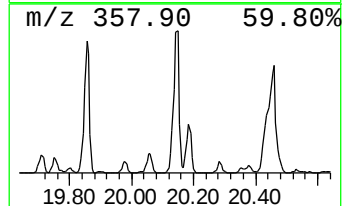
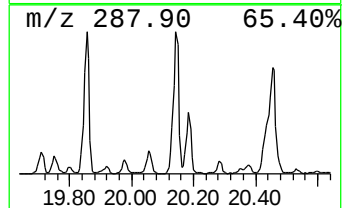
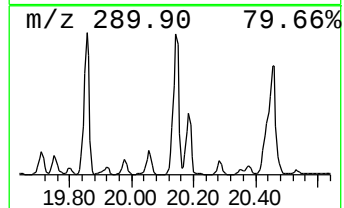
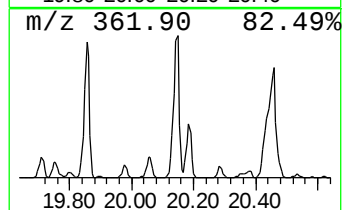
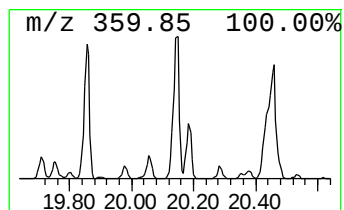
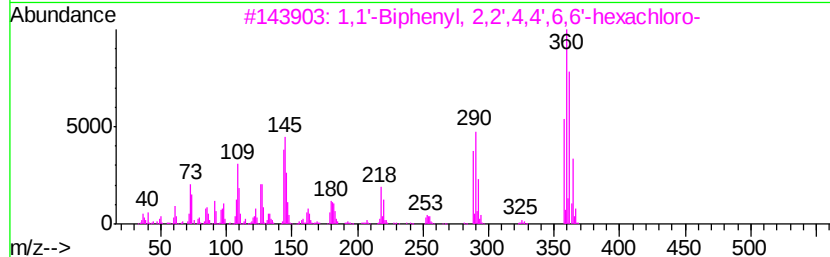
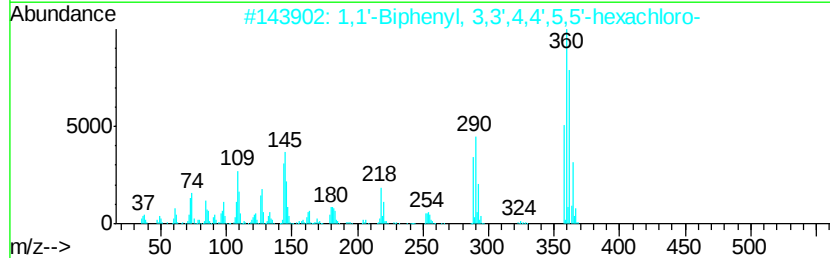
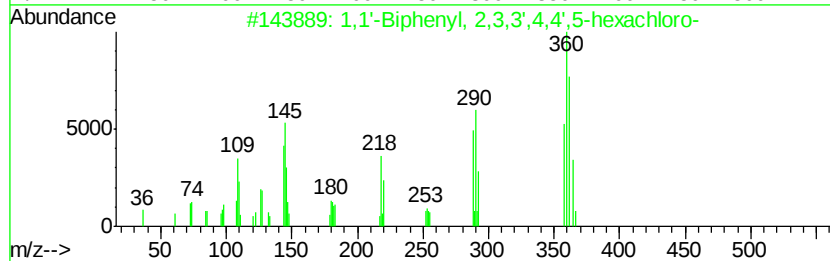
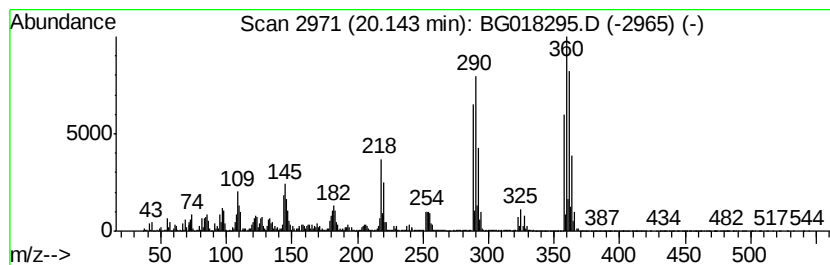
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 58 1,1'-Biphenyl, 2,3,3',4,4',... Concentration Rank 22

| R.T.  | EstConc     | Area     | Relative to ISTD | R.T.  |
|-------|-------------|----------|------------------|-------|
| 20.14 | 52.87 ng/ul | 16508400 | Chrysene-d12     | 21.14 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2,3,3',4,4',5-hex... | 358 | C12H4Cl6 | 038380-08-4 | 99   |
| 2    |    | 1,1'-Biphenyl, 3,3',4,4',5,5'-he... | 358 | C12H4Cl6 | 032774-16-6 | 96   |
| 3    |    | 1,1'-Biphenyl, 2,2',4,4',6,6'-he... | 358 | C12H4Cl6 | 033979-03-2 | 96   |
| 4    |    | 1,1'-Biphenyl, 2,2',3,3',4,4'-he... | 358 | C12H4Cl6 | 038380-07-3 | 95   |
| 5    |    | 1,1'-Biphenyl, 2,2',3,3',5,5'-He... | 358 | C12H4Cl6 | 035694-04-3 | 95   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

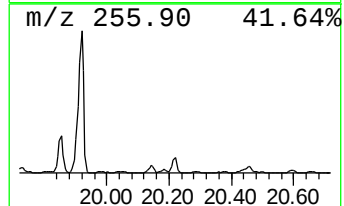
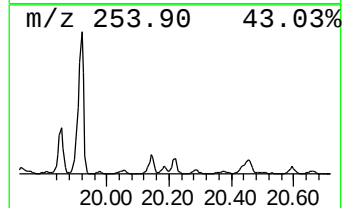
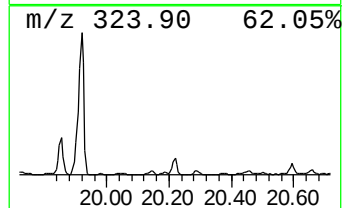
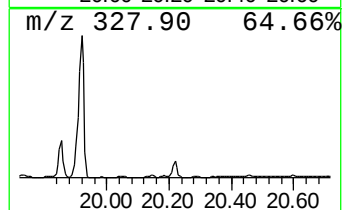
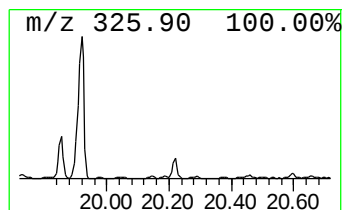
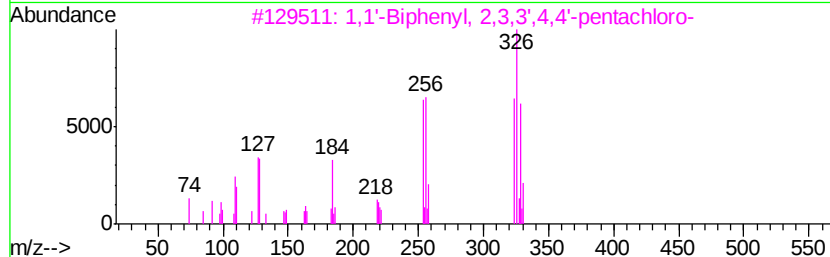
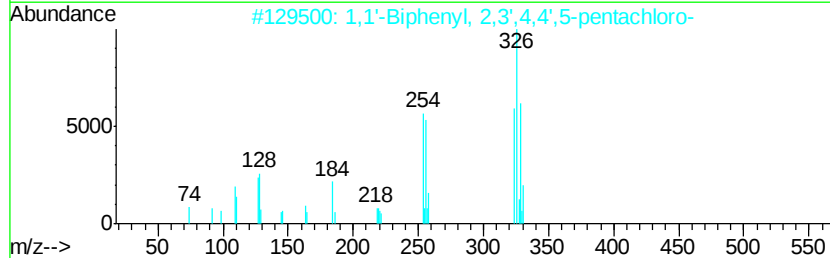
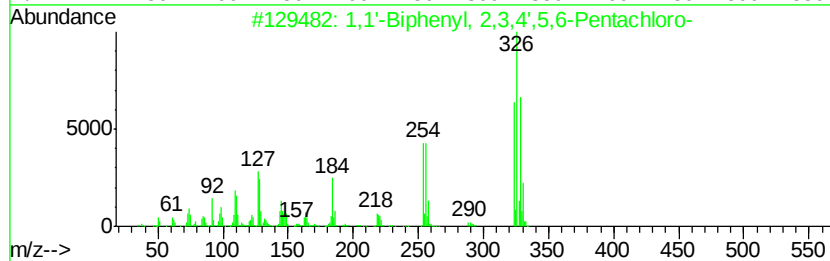
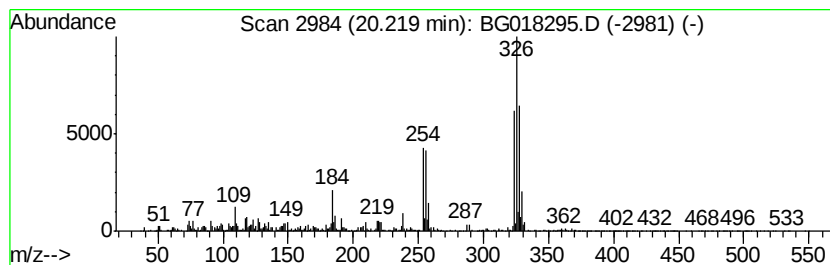
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 60 1,1'-Biphenyl, 2,3,4',5,6-P... Concentration Rank 57

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 20.22 | 6.90 ng/ul | 2153500 | Chrysene-d12     | 21.14 |

| Hit# | of   | 5          | Tentative ID         | MW  | MolForm  | CAS#        | Qual |
|------|------|------------|----------------------|-----|----------|-------------|------|
| 1    | 1,1' | -Biphenyl, | 2,3,4',5,6-Pentac... | 324 | C12H5Cl5 | 068194-11-6 | 95   |
| 2    | 1,1' | -Biphenyl, | 2,3',4,4',5-penta... | 324 | C12H5Cl5 | 031508-00-6 | 94   |
| 3    | 1,1' | -Biphenyl, | 2,3,3',4,4'-penta... | 324 | C12H5Cl5 | 032598-14-4 | 94   |
| 4    | 1,1' | -Biphenyl, | 2',3,4,5,5'-Penta... | 324 | C12H5Cl5 | 070424-70-3 | 94   |
| 5    | 1,1' | -Biphenyl, | 2,2',4,4',5-penta... | 324 | C12H5Cl5 | 038380-01-7 | 93   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

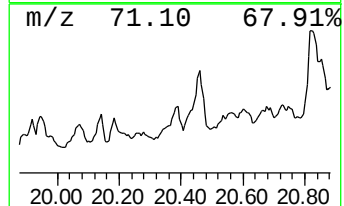
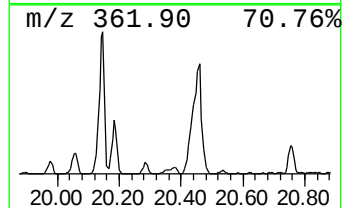
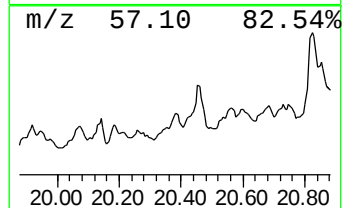
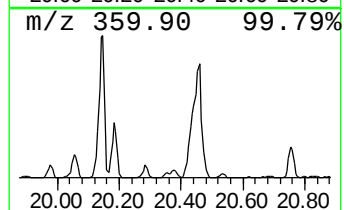
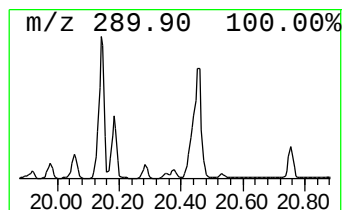
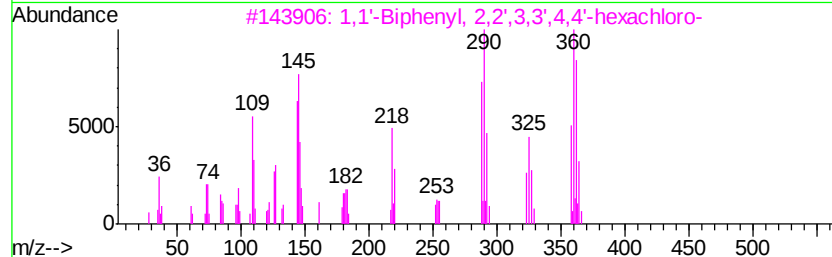
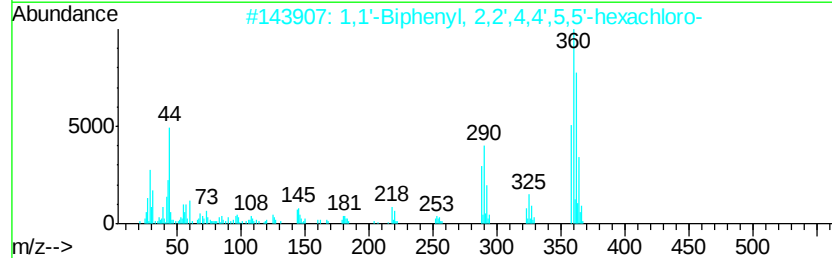
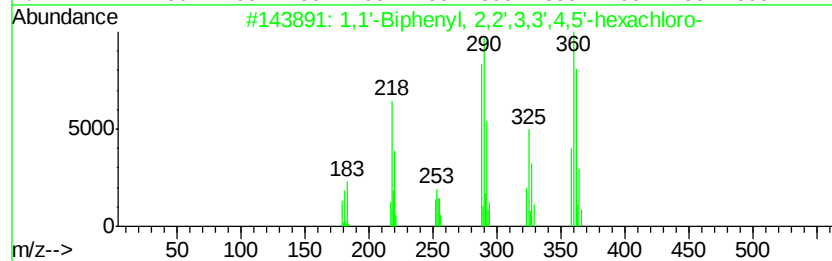
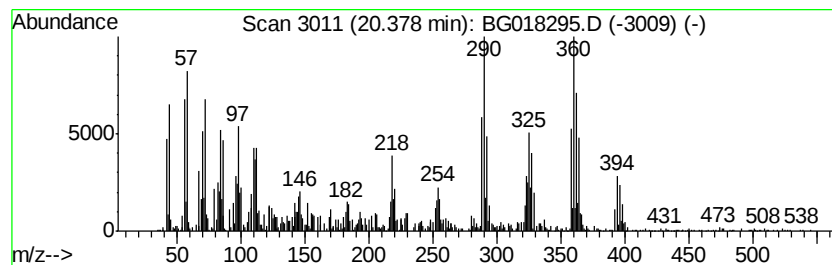
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 62 1,1'-Biphenyl, 2,2',3,3',4,... Concentration Rank 67

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 20.38 | 3.09 ng/ul | 966304 | Chrysene-d12     | 21.14 |

| Hit# | of   | 5         | Tentative ID         | MW  | MolForm  | CAS#        | Qual |
|------|------|-----------|----------------------|-----|----------|-------------|------|
| 1    | 1,1' | -Biphenyl | 2,2',3,3',4,5'-he... | 358 | C12H4Cl6 | 052663-66-8 | 98   |
| 2    | 1,1' | -Biphenyl | 2,2',4,4',5,5'-he... | 358 | C12H4Cl6 | 035065-27-1 | 95   |
| 3    | 1,1' | -Biphenyl | 2,2',3,3',4,4'-he... | 358 | C12H4Cl6 | 038380-07-3 | 95   |
| 4    | 1,1' | -Biphenyl | 2,2',3,3',4,5-hex... | 358 | C12H4Cl6 | 055215-18-4 | 93   |
| 5    | 1,1' | -Biphenyl | 2,3',4,4',5,5'-he... | 358 | C12H4Cl6 | 052663-72-6 | 93   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

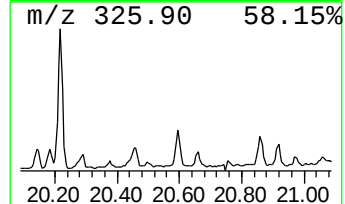
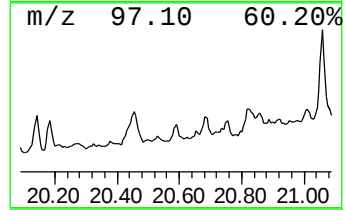
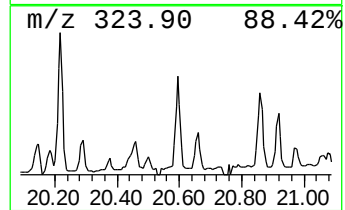
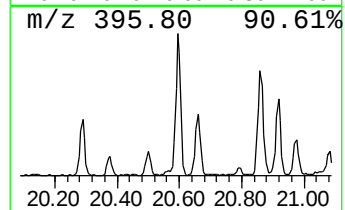
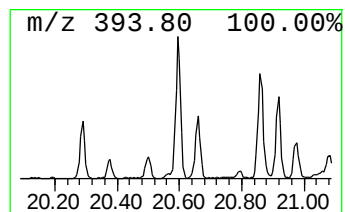
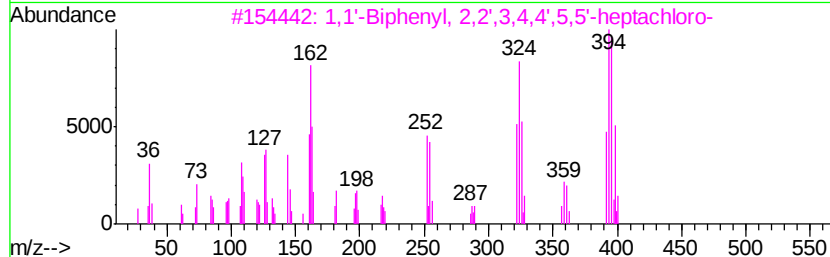
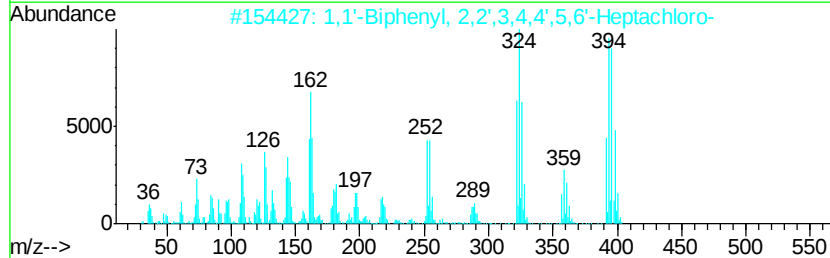
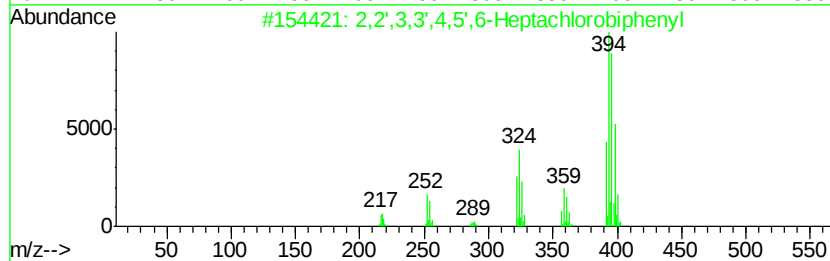
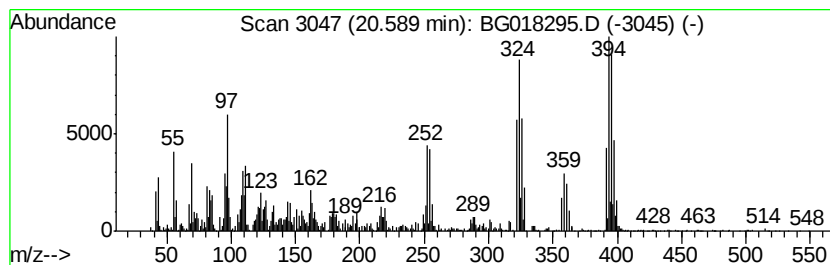
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 64 2,2',3,3',4,5',6-Heptachlor... Concentration Rank 58

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 20.59 | 6.79 ng/ul | 2119730 | Chrysene-d12     | 21.14 |

| Hit# | of                                  | 5   | Tentative ID | MW          | MolForm | CAS# | Qual |
|------|-------------------------------------|-----|--------------|-------------|---------|------|------|
| 1    | 2,2',3,3',4,5',6-Heptachlorobiph... | 392 | C12H3Cl7     | 040186-70-7 | 99      |      |      |
| 2    | 1,1'-Biphenyl, 2,2',3,4,4',5,6'-... | 392 | C12H3Cl7     | 060145-23-5 | 99      |      |      |
| 3    | 1,1'-Biphenyl, 2,2',3,4,4',5,5'-... | 392 | C12H3Cl7     | 035065-29-3 | 99      |      |      |
| 4    | 1,1'-Biphenyl, 2,2',3,4,5,5',6-h... | 392 | C12H3Cl7     | 052712-05-7 | 97      |      |      |
| 5    | 1,1'-Biphenyl, 2,2',3,4',5,5',6-... | 392 | C12H3Cl7     | 052663-68-0 | 97      |      |      |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

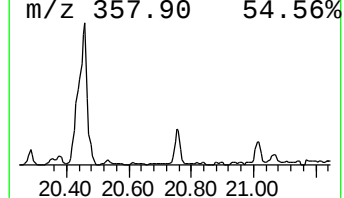
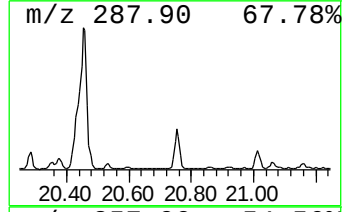
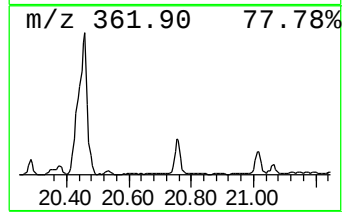
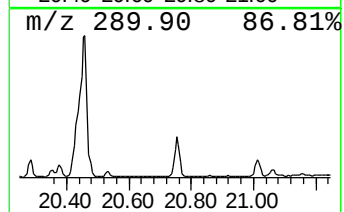
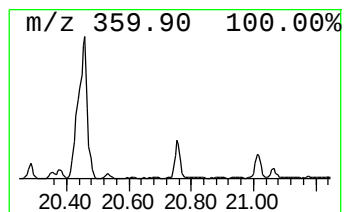
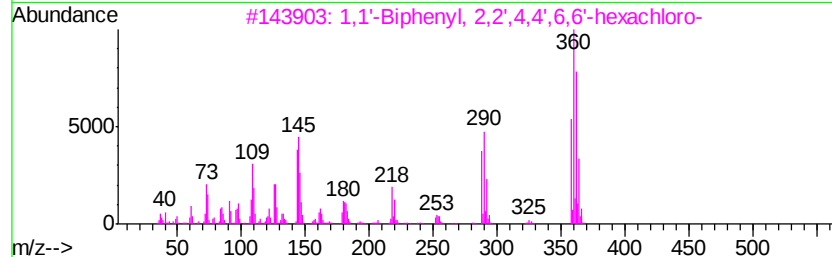
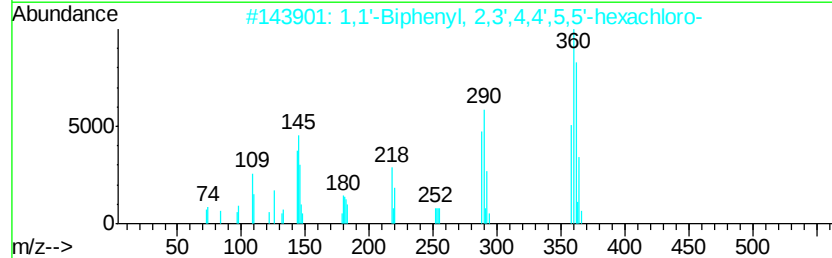
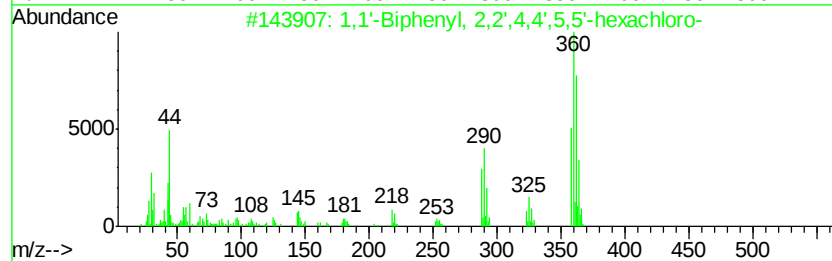
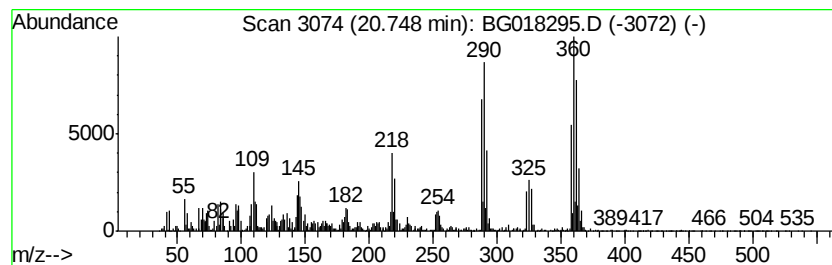
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 65 1,1'-Biphenyl, 2,2',4,4',5,... Concentration Rank 41

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 20.75 | 10.52 ng/ul | 3285510 | Chrysene-d12     | 21.14 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 1,1'-Biphenyl, 2,2',4,4',5,5'-he... | 358 | C12H4Cl6 | 035065-27-1 | 96   |
| 2    |    | 1,1'-Biphenyl, 2,3',4,4',5,5'-he... | 358 | C12H4Cl6 | 052663-72-6 | 96   |
| 3    |    | 1,1'-Biphenyl, 2,2',4,4',6,6'-he... | 358 | C12H4Cl6 | 033979-03-2 | 95   |
| 4    |    | 1,1'-Biphenyl, 2,2',3,4,4',5'-he... | 358 | C12H4Cl6 | 035065-28-2 | 95   |
| 5    |    | 1,1'-Biphenyl, 2,2',3,3',5,5'-He... | 358 | C12H4Cl6 | 035694-04-3 | 95   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

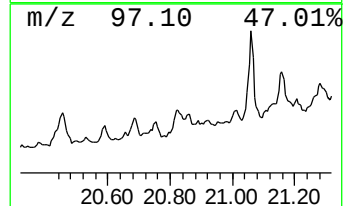
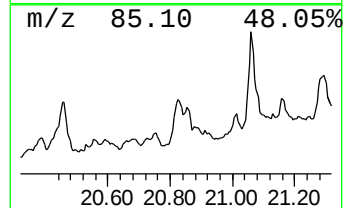
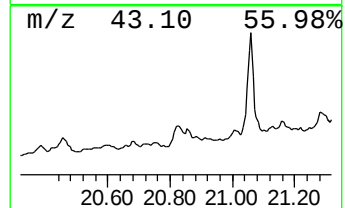
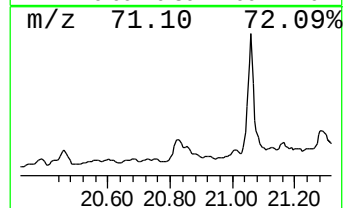
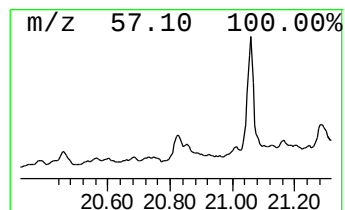
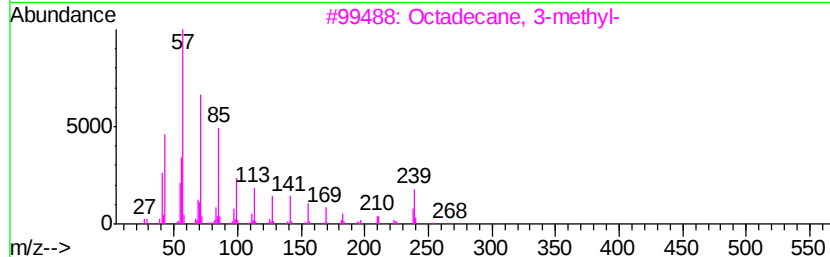
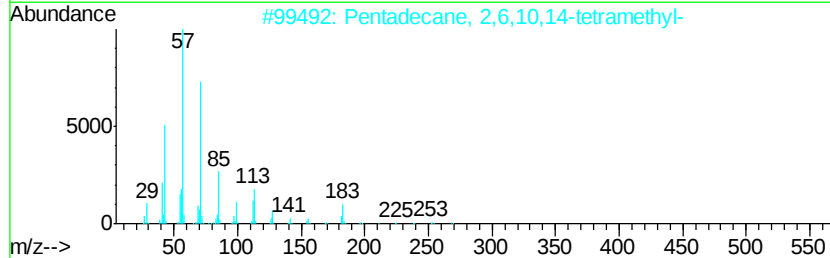
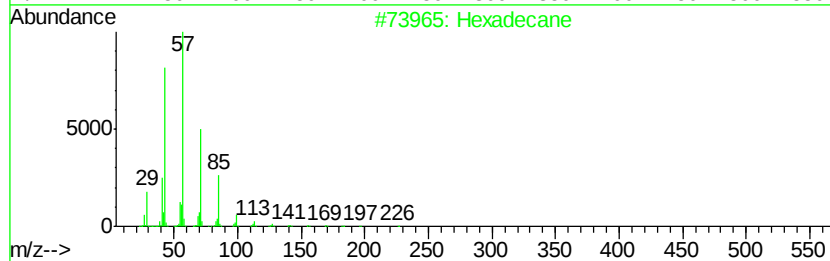
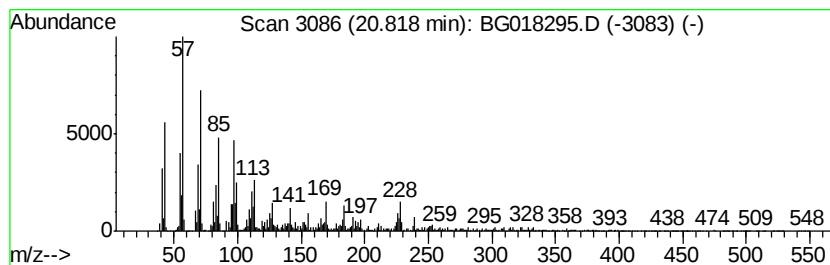
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 66 (DEL) Alkane: Straight-Chai... Concentration Rank 38

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 20.82 | 12.30 ng/ul | 3839250 | Chrysene-d12     | 21.14 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | Hexadecane                          | 226 | C16H34  | 000544-76-3  | 87   |
| 2    |    | Pentadecane, 2,6,10,14-tetramethyl- | 268 | C19H40  | 001921-70-6  | 87   |
| 3    |    | Octadecane, 3-methyl-               | 268 | C19H40  | 006561-44-0  | 83   |
| 4    |    | 7-Methyl-octadecane                 | 268 | C19H40  | 1000192-63-3 | 60   |
| 5    |    | 1-Iodo-2-methylundecane             | 296 | C12H25I | 073105-67-6  | 60   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG080515\  
Data File : BG018295.D  
Acq On : 6 Aug 2015 5:36  
Operator : UM/TP  
Sample : G3109-12RE  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
C01P8RE

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION

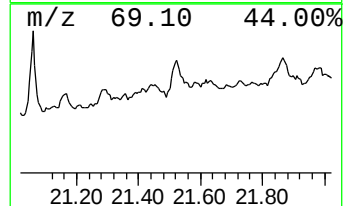
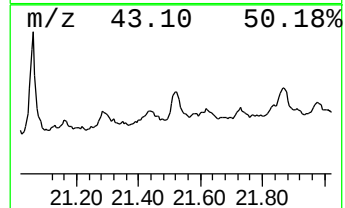
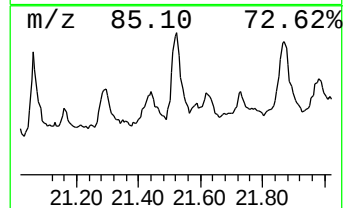
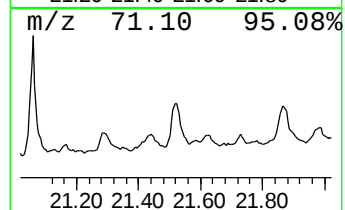
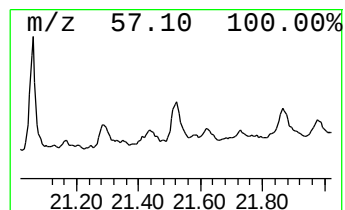
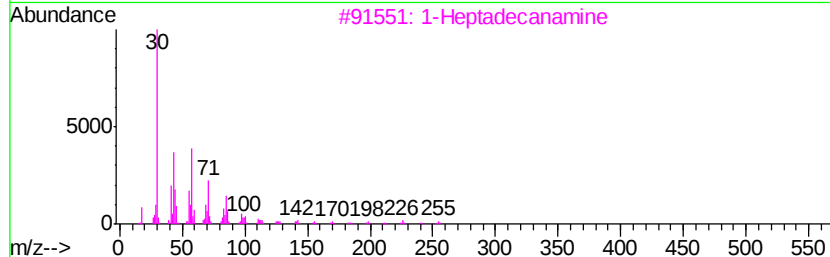
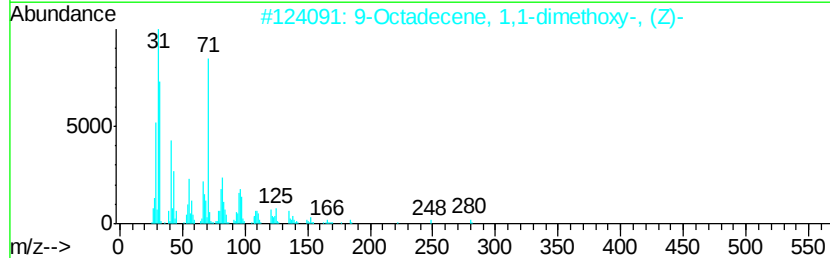
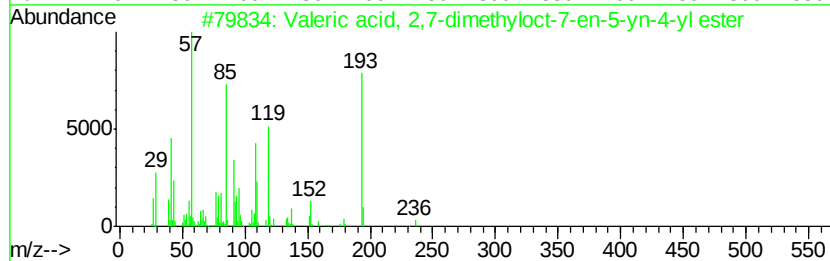
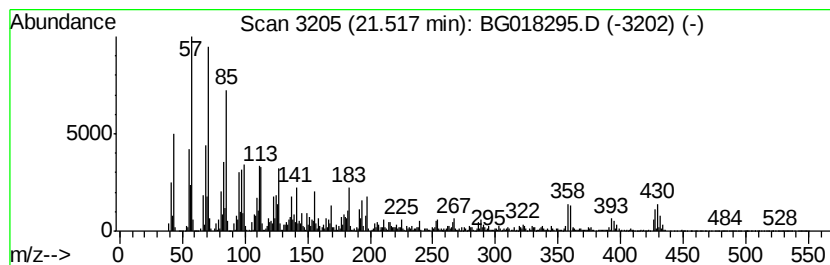
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 68 unknown-03 Concentration Rank 32

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 21.52 | 25.17 ng/ul | 7859410 | Chrysene-d12     | 21.14 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm  | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|----------|--------------|------|
| 1    |    |   | Valeric acid, 2,7-dimethyloct-7-... | 236 | C15H24O2 | 1000292-48-9 | 11   |
| 2    |    |   | 9-Octadecene, 1,1-dimethoxy-, (Z)-  | 312 | C20H40O2 | 015677-71-1  | 10   |
| 3    |    |   | 1-Heptadecanamine                   | 255 | C17H37N  | 004200-95-7  | 10   |
| 4    |    |   | Eicosane, 10-butyl-10-propyl-       | 380 | C27H56   | 055282-33-2  | 9    |
| 5    |    |   | Eicosane, 10-heptyl-10-octyl-       | 493 | C35H72   | 055470-98-9  | 9    |



Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG080515\  
 Data File : BG018295.D  
 Acq On : 6 Aug 2015 5:36  
 Operator : UM/TP  
 Sample : G3109-12RE  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 C01P8RE

Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG080515.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, 1,2,3-tr...  | 7.09  | 3.6     | ng/ul | 1009130  | 1                     | 7.45  | 5537530 | 20.0 |
| 2,3-Epoxy-carane, ... | 9.64  | 7.5     | ng/ul | 250519   | 2                     | 10.23 | 669574  | 20.0 |
| Phenol, 2,6-dimet...  | 9.75  | 8.4     | ng/ul | 281001   | 2                     | 10.23 | 669574  | 20.0 |
| Benzene, 1,2,4-tr...  | 10.10 | 8.6     | ng/ul | 288427   | 2                     | 10.23 | 669574  | 20.0 |
| Phenol, 4-cyclohe...  | 10.64 | 9.5     | ng/ul | 317704   | 2                     | 10.23 | 669574  | 20.0 |
| unknown-01            | 10.78 | 7.8     | ng/ul | 262310   | 2                     | 10.23 | 669574  | 20.0 |
| Decahydro-4,4,8,9...  | 13.95 | 8.1     | ng/ul | 259511   | 3                     | 14.13 | 642386  | 20.0 |
| (DEL) Alkane: Str...  | 14.04 | 10.3    | ng/ul | 330506   | 3                     | 14.13 | 642386  | 20.0 |
| Naphthalene, 2,3,...  | 14.77 | 9.0     | ng/ul | 288901   | 3                     | 14.13 | 642386  | 20.0 |
| unknown-02            | 14.92 | 10.9    | ng/ul | 349200   | 3                     | 14.13 | 642386  | 20.0 |
| 1,1'-Biphenyl, 2,...  | 15.40 | 71.6    | ng/ul | 2299670  | 3                     | 14.13 | 642386  | 20.0 |
| (DEL) Alkane: Str...  | 15.89 | 14.1    | ng/ul | 841694   | 4                     | 16.90 | 1193830 | 20.0 |
| 1,1'-Biphenyl, 3,...  | 16.01 | 37.8    | ng/ul | 2254220  | 4                     | 16.90 | 1193830 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 16.14 | 63.9    | ng/ul | 3815840  | 4                     | 16.90 | 1193830 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 16.42 | 17.6    | ng/ul | 1051350  | 4                     | 16.90 | 1193830 | 20.0 |
| Naphthalene, 2,3,...  | 16.47 | 7.0     | ng/ul | 418831   | 4                     | 16.90 | 1193830 | 20.0 |
| (DEL) Alkane: Str...  | 16.72 | 6.6     | ng/ul | 393196   | 4                     | 16.90 | 1193830 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 16.82 | 51.7    | ng/ul | 3084070  | 4                     | 16.90 | 1193830 | 20.0 |
| 1,1'-Biphenyl, 2'...  | 17.38 | 209.3   | ng/ul | 12494700 | 4                     | 16.90 | 1193830 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 17.40 | 86.0    | ng/ul | 5136050  | 4                     | 16.90 | 1193830 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 17.63 | 167.6   | ng/ul | 10004100 | 4                     | 16.90 | 1193830 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 18.01 | 654.8   | ng/ul | 39084600 | 4                     | 16.90 | 1193830 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 18.46 | 34.6    | ng/ul | 2063100  | 4                     | 16.90 | 1193830 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 18.52 | 15.3    | ng/ul | 914667   | 4                     | 16.90 | 1193830 | 20.0 |
| 1,1'-Biphenyl, 3,...  | 18.77 | 37.5    | ng/ul | 2239660  | 4                     | 16.90 | 1193830 | 20.0 |
| (2,3,4,5-Tetrachl...  | 18.85 | 509.9   | ng/ul | 30438800 | 4                     | 16.90 | 1193830 | 20.0 |
| 1,1'-Biphenyl, 3,...  | 18.88 | 78.3    | ng/ul | 4675550  | 4                     | 16.90 | 1193830 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 18.94 | 91.6    | ng/ul | 5467460  | 4                     | 16.90 | 1193830 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 19.27 | 5.3     | ng/ul | 1654110  | 5                     | 21.14 | 6244460 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 19.48 | 8.6     | ng/ul | 2695950  | 5                     | 21.14 | 6244460 | 20.0 |
| 1,1'-Biphenyl, 3,...  | 19.56 | 7.0     | ng/ul | 2184980  | 5                     | 21.14 | 6244460 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 19.60 | 104.8   | ng/ul | 32721000 | 5                     | 21.14 | 6244460 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 19.71 | 9.5     | ng/ul | 2957210  | 5                     | 21.14 | 6244460 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 19.75 | 6.7     | ng/ul | 2078850  | 5                     | 21.14 | 6244460 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 19.92 | 56.9    | ng/ul | 17757700 | 5                     | 21.14 | 6244460 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 20.14 | 52.9    | ng/ul | 16508400 | 5                     | 21.14 | 6244460 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 20.22 | 6.9     | ng/ul | 2153500  | 5                     | 21.14 | 6244460 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 20.38 | 3.1     | ng/ul | 966304   | 5                     | 21.14 | 6244460 | 20.0 |
| 2,2',3,3',4,5',6-...  | 20.59 | 6.8     | ng/ul | 2119730  | 5                     | 21.14 | 6244460 | 20.0 |
| 1,1'-Biphenyl, 2,...  | 20.75 | 10.5    | ng/ul | 3285510  | 5                     | 21.14 | 6244460 | 20.0 |
| (DEL) Alkane: Str...  | 20.82 | 12.3    | ng/ul | 3839250  | 5                     | 21.14 | 6244460 | 20.0 |
| unknown-03            | 21.52 | 25.2    | ng/ul | 7859410  | 5                     | 21.14 | 6244460 | 20.0 |