

Data Path : Z:\HPCHEM1\BNA G\DATA\BG053116\  
 Data File : BG022118.D  
 Acq On : 31 May 2016 17:44  
 Operator : UM/SJ  
 Sample : H3201-15  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 BCZN7

## 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-BG052116.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         | 3.501       | 111           | 113         | 119          | rVB4     | 1596           | 2320          | 0.12%           | 0.012%        |
| 2         | 6.163       | 563           | 566         | 573          | rBV3     | 1233           | 2100          | 0.11%           | 0.011%        |
| 3         | 7.297       | 753           | 759         | 770          | rBV2     | 15572          | 34494         | 1.85%           | 0.181%        |
| 4         | 7.455       | 778           | 786         | 798          | rBV      | 73577          | 146580        | 7.86%           | 0.769%        |
| 5         | 7.667       | 815           | 822         | 833          | rBV      | 77591          | 153886        | 8.26%           | 0.807%        |
| 6         | 8.137       | 891           | 902         | 915          | rBV      | 103222         | 222603        | 11.94%          | 1.168%        |
| 7         | 8.343       | 932           | 937         | 942          | rBV4     | 1428           | 2060          | 0.11%           | 0.011%        |
| 8         | 8.848       | 1017          | 1023        | 1032         | rBV3     | 65160          | 132347        | 7.10%           | 0.694%        |
| 9         | 9.306       | 1094          | 1101        | 1111         | rBV      | 88852          | 187656        | 10.07%          | 0.984%        |
| 10        | 9.682       | 1159          | 1165        | 1170         | rBV4     | 3996           | 7714          | 0.41%           | 0.040%        |
| 11        | 10.035      | 1217          | 1225        | 1240         | rBV2     | 77278          | 173319        | 9.30%           | 0.909%        |
| 12        | 10.581      | 1310          | 1318        | 1329         | rBV      | 118706         | 250750        | 13.45%          | 1.315%        |
| 13        | 10.957      | 1374          | 1382        | 1395         | rBV      | 202926         | 406191        | 21.79%          | 2.131%        |
| 14        | 11.116      | 1403          | 1409        | 1410         | rBV3     | 1552           | 1933          | 0.10%           | 0.010%        |
| 15        | 12.168      | 1583          | 1588        | 1594         | rBV2     | 3505           | 5841          | 0.31%           | 0.031%        |
| 16        | 12.538      | 1647          | 1651        | 1656         | rBV2     | 1623           | 2445          | 0.13%           | 0.013%        |
| 17        | 13.354      | 1786          | 1790        | 1797         | rBV4     | 1992           | 4133          | 0.22%           | 0.022%        |
| 18        | 13.636      | 1836          | 1838        | 1846         | rVB4     | 2335           | 3961          | 0.21%           | 0.021%        |
| 19        | 14.159      | 1920          | 1927        | 1939         | rBV      | 363921         | 594153        | 31.88%          | 3.117%        |
| 20        | 14.459      | 1970          | 1978        | 1988         | rBV      | 421912         | 733538        | 39.36%          | 3.848%        |
| 21        | 14.765      | 2023          | 2030        | 2039         | rBV2     | 372552         | 649946        | 34.87%          | 3.409%        |
| 22        | 14.988      | 2063          | 2068        | 2069         | rBV3     | 4418           | 4917          | 0.26%           | 0.026%        |
| 23        | 15.158      | 2093          | 2097        | 2103         | rBV5     | 4302           | 7247          | 0.39%           | 0.038%        |
| 24        | 15.493      | 2148          | 2154        | 2158         | rBV3     | 3288           | 5923          | 0.32%           | 0.031%        |
| 25        | 15.752      | 2191          | 2198        | 2210         | rBV      | 568035         | 983592        | 52.77%          | 5.160%        |
| 26        | 15.875      | 2213          | 2219        | 2231         | rVV      | 148918         | 259132        | 13.90%          | 1.359%        |
| 27        | 15.993      | 2235          | 2239        | 2246         | rVB5     | 6011           | 10798         | 0.58%           | 0.057%        |
| 28        | 16.286      | 2282          | 2289        | 2293         | rBV3     | 1694           | 2693          | 0.14%           | 0.014%        |
| 29        | 16.333      | 2293          | 2297        | 2303         | rVB2     | 2760           | 4076          | 0.22%           | 0.021%        |
| 30        | 16.633      | 2344          | 2348        | 2352         | rVB3     | 1992           | 2856          | 0.15%           | 0.015%        |
| 31        | 17.279      | 2453          | 2458        | 2459         | rBV2     | 2105           | 1905          | 0.10%           | 0.010%        |
| 32        | 17.297      | 2459          | 2461        | 2465         | rVB3     | 2886           | 2923          | 0.16%           | 0.015%        |
| 33        | 17.508      | 2490          | 2497        | 2506         | rBV2     | 466927         | 815970        | 43.78%          | 4.280%        |
| 34        | 17.608      | 2507          | 2514        | 2527         | rVV2     | 638760         | 1106300       | 59.36%          | 5.803%        |

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 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

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Integrator: RTE  
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 Sampling : 1  
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 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-BG052116.M  
 Title : SVOA CALIBRATION

|    |        |      |      |      |      |         |         |         |        |
|----|--------|------|------|------|------|---------|---------|---------|--------|
| 35 | 17.755 | 2533 | 2539 | 2543 | rBV  | 240064  | 336131  | 18.04%  | 1.763% |
| 36 | 17.808 | 2543 | 2548 | 2555 | rVB  | 491705  | 690577  | 37.05%  | 3.622% |
| 37 | 18.155 | 2602 | 2607 | 2615 | rBV2 | 83834   | 113730  | 6.10%   | 0.597% |
| 38 | 18.448 | 2654 | 2657 | 2665 | rVB  | 6571    | 9876    | 0.53%   | 0.052% |
| 39 | 18.631 | 2682 | 2688 | 2689 | rBV3 | 2497    | 2459    | 0.13%   | 0.013% |
| 40 | 18.707 | 2693 | 2701 | 2708 | rVB3 | 11177   | 21851   | 1.17%   | 0.115% |
| 41 | 19.065 | 2756 | 2762 | 2765 | rBV  | 190313  | 255297  | 13.70%  | 1.339% |
| 42 | 19.107 | 2765 | 2769 | 2775 | rVB  | 380769  | 501576  | 26.91%  | 2.631% |
| 43 | 19.524 | 2835 | 2840 | 2849 | rBV3 | 8698    | 15002   | 0.80%   | 0.079% |
| 44 | 19.776 | 2877 | 2883 | 2887 | rBV2 | 5983    | 9401    | 0.50%   | 0.049% |
| 45 | 19.888 | 2890 | 2902 | 2913 | rBV  | 931194  | 1658256 | 88.97%  | 8.699% |
| 46 | 20.176 | 2945 | 2951 | 2954 | rBV  | 757634  | 978942  | 52.53%  | 5.135% |
| 47 | 20.217 | 2954 | 2958 | 2967 | rVB  | 1485431 | 1863758 | 100.00% | 9.776% |
| 48 | 20.317 | 2973 | 2975 | 2977 | rBV2 | 2069    | 1993    | 0.11%   | 0.010% |
| 49 | 20.382 | 2984 | 2986 | 2988 | rBV3 | 2377    | 2284    | 0.12%   | 0.012% |
| 50 | 20.675 | 3032 | 3036 | 3038 | rBV4 | 1657    | 2350    | 0.13%   | 0.012% |
| 51 | 20.716 | 3039 | 3043 | 3045 | rVB4 | 3190    | 3520    | 0.19%   | 0.018% |
| 52 | 20.746 | 3045 | 3048 | 3051 | rBV5 | 2134    | 3907    | 0.21%   | 0.020% |
| 53 | 20.910 | 3072 | 3076 | 3078 | rVV2 | 11925   | 17353   | 0.93%   | 0.091% |
| 54 | 20.940 | 3078 | 3081 | 3086 | rVV5 | 16471   | 27585   | 1.48%   | 0.145% |
| 55 | 20.993 | 3086 | 3090 | 3094 | rVB7 | 4729    | 6931    | 0.37%   | 0.036% |
| 56 | 21.169 | 3115 | 3120 | 3123 | rVV  | 257840  | 367282  | 19.71%  | 1.927% |
| 57 | 21.204 | 3123 | 3126 | 3135 | rVB  | 493275  | 702133  | 37.67%  | 3.683% |
| 58 | 21.639 | 3198 | 3200 | 3203 | rVB3 | 2450    | 2628    | 0.14%   | 0.014% |
| 59 | 21.786 | 3218 | 3225 | 3238 | rBV  | 472486  | 944491  | 50.68%  | 4.954% |
| 60 | 21.939 | 3248 | 3251 | 3256 | rVB7 | 6859    | 8159    | 0.44%   | 0.043% |
| 61 | 21.986 | 3256 | 3259 | 3265 | rVB6 | 9244    | 13115   | 0.70%   | 0.069% |
| 62 | 22.033 | 3265 | 3267 | 3268 | rBV  | 4227    | 3946    | 0.21%   | 0.021% |
| 63 | 22.215 | 3295 | 3298 | 3300 | rBV4 | 2245    | 2587    | 0.14%   | 0.014% |
| 64 | 22.285 | 3304 | 3310 | 3314 | rVV  | 116605  | 210145  | 11.28%  | 1.102% |
| 65 | 22.332 | 3314 | 3318 | 3327 | rVB  | 230144  | 379354  | 20.35%  | 1.990% |
| 66 | 22.473 | 3340 | 3342 | 3345 | rBV4 | 2794    | 3611    | 0.19%   | 0.019% |
| 67 | 22.561 | 3356 | 3357 | 3359 | rBV2 | 2536    | 2146    | 0.12%   | 0.011% |
| 68 | 23.014 | 3432 | 3434 | 3438 | rBV3 | 3162    | 5085    | 0.27%   | 0.027% |
| 69 | 23.219 | 3462 | 3469 | 3474 | rBV3 | 30880   | 64267   | 3.45%   | 0.337% |
| 70 | 23.278 | 3474 | 3479 | 3482 | rVV6 | 6396    | 10837   | 0.58%   | 0.057% |
| 71 | 23.355 | 3488 | 3492 | 3499 | rBV7 | 12467   | 18048   | 0.97%   | 0.095% |

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Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG052116.M  
 Title : SVOA CALIBRATION

|    |        |      |      |      |      |        |         |        |        |
|----|--------|------|------|------|------|--------|---------|--------|--------|
| 72 | 23.531 | 3520 | 3522 | 3523 | rBV2 | 3828   | 2218    | 0.12%  | 0.012% |
| 73 | 23.584 | 3530 | 3531 | 3536 | rBV5 | 2943   | 3486    | 0.19%  | 0.018% |
| 74 | 23.672 | 3544 | 3546 | 3547 | rBV2 | 2972   | 2515    | 0.13%  | 0.013% |
| 75 | 23.719 | 3547 | 3554 | 3558 | rVV4 | 82917  | 195673  | 10.50% | 1.026% |
| 76 | 23.778 | 3558 | 3564 | 3575 | rVB2 | 167486 | 392811  | 21.08% | 2.061% |
| 77 | 24.042 | 3607 | 3609 | 3610 | rVB2 | 3179   | 1934    | 0.10%  | 0.010% |
| 78 | 24.876 | 3739 | 3751 | 3768 | rBV2 | 389015 | 1213105 | 65.09% | 6.363% |
| 79 | 25.100 | 3775 | 3789 | 3810 | rVB3 | 294070 | 979304  | 52.54% | 5.137% |
| 80 | 25.481 | 3852 | 3854 | 3856 | rBV3 | 2270   | 2341    | 0.13%  | 0.012% |
| 81 | 25.622 | 3876 | 3878 | 3879 | rBV2 | 2671   | 1902    | 0.10%  | 0.010% |
| 82 | 25.687 | 3885 | 3889 | 3890 | rBV3 | 2566   | 2728    | 0.15%  | 0.014% |
| 83 | 26.222 | 3975 | 3980 | 3982 | rBV6 | 7372   | 12469   | 0.67%  | 0.065% |
| 84 | 26.404 | 4008 | 4011 | 4013 | rBV4 | 2175   | 3413    | 0.18%  | 0.018% |
| 85 | 27.038 | 4117 | 4119 | 4122 | rBV4 | 2424   | 2304    | 0.12%  | 0.012% |
| 86 | 27.221 | 4148 | 4150 | 4151 | rBV2 | 3618   | 2391    | 0.13%  | 0.013% |
| 87 | 27.244 | 4151 | 4154 | 4155 | rBV3 | 6703   | 7575    | 0.41%  | 0.040% |
| 88 | 27.614 | 4208 | 4217 | 4219 | rBV8 | 12448  | 29601   | 1.59%  | 0.155% |
| 89 | 28.172 | 4311 | 4312 | 4313 | rBV  | 3403   | 1944    | 0.10%  | 0.010% |
| 90 | 29.706 | 4572 | 4573 | 4575 | rBV2 | 2776   | 1971    | 0.11%  | 0.010% |
| 91 | 30.000 | 4620 | 4623 | 4626 | rBV4 | 2568   | 3936    | 0.21%  | 0.021% |
| 92 | 30.217 | 4658 | 4660 | 4663 | rBV3 | 2889   | 3003    | 0.16%  | 0.016% |
| 93 | 31.762 | 4921 | 4923 | 4925 | rVB3 | 2880   | 2144    | 0.12%  | 0.011% |
| 94 | 31.786 | 4925 | 4927 | 4929 | rVB2 | 3404   | 2291    | 0.12%  | 0.012% |
| 95 | 31.939 | 4951 | 4953 | 4956 | rVB3 | 3121   | 2152    | 0.12%  | 0.011% |
| 96 | 32.038 | 4968 | 4970 | 4973 | rBV3 | 2844   | 3574    | 0.19%  | 0.019% |

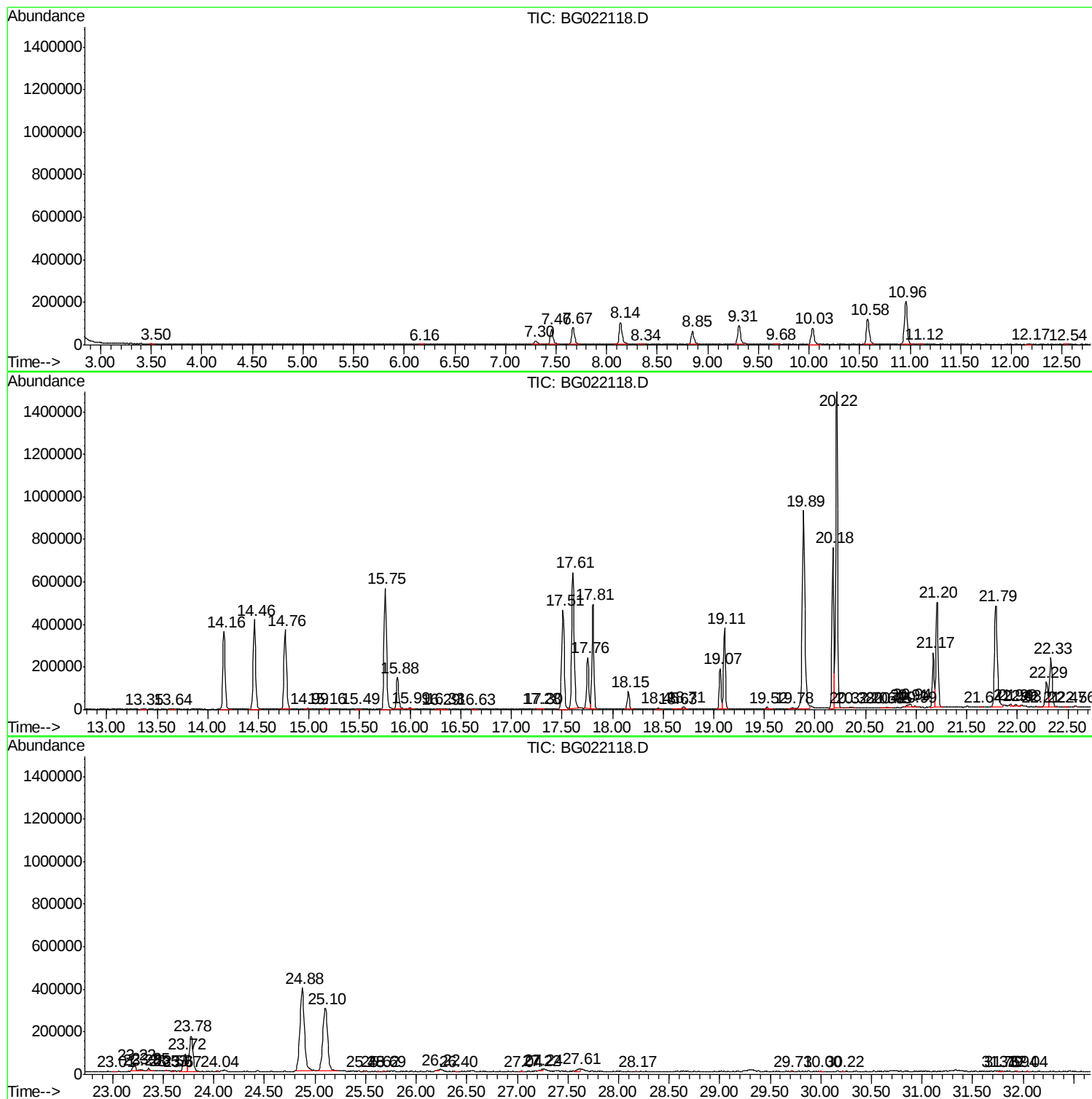
Sum of corrected areas: 19063700

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Instrument :  
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Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG052116.M  
Quant Title : SVOA CALIBRATION

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



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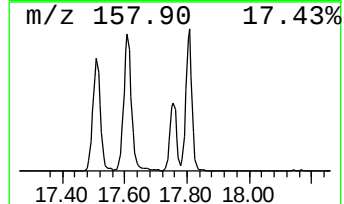
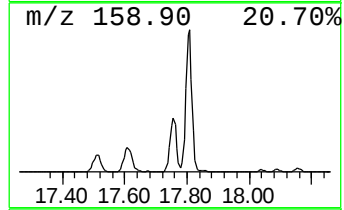
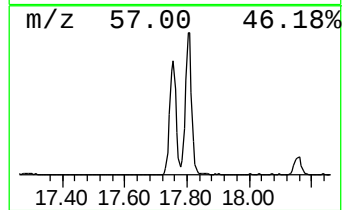
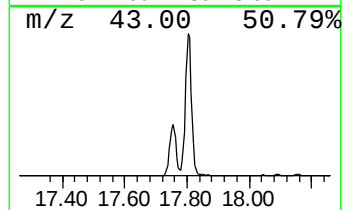
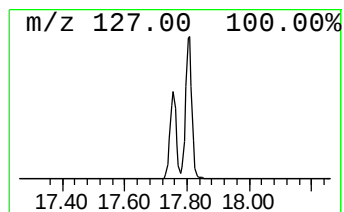
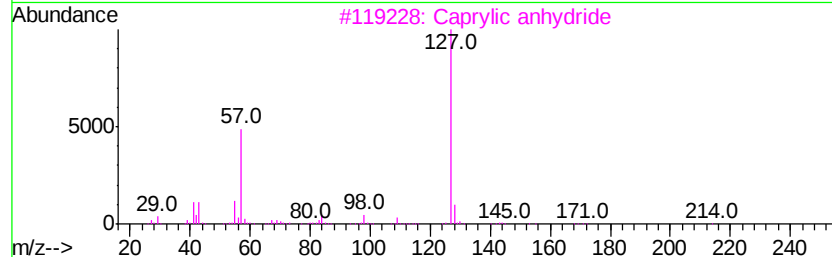
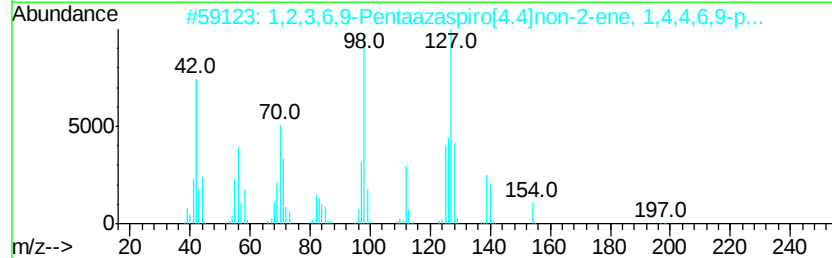
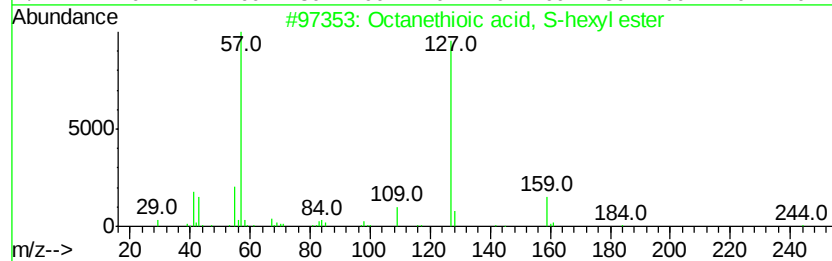
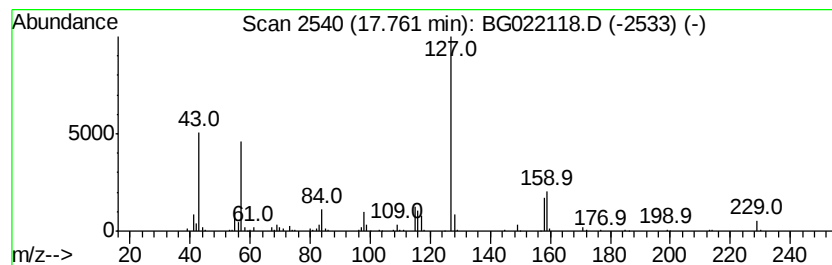
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 1 Octanethioic acid, S-hexyl ... Concentration Rank 6

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 17.76 | 8.24 ng/ul | 336131 | Phenanthrene-d10 | 17.51 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#         | Qual |
|------|----|-------------------------------------|-----|----------|--------------|------|
| 1    | 5  | Octanethioic acid, S-hexyl ester    | 244 | C14H28OS | 055590-85-7  | 50   |
| 2    |    | 1,2,3,6,9-Pentaazaspiro[4.4]non-... | 197 | C9H19N5  | 1000221-38-7 | 43   |
| 3    |    | Caprylic anhydride                  | 270 | C16H30O3 | 000623-66-5  | 43   |
| 4    |    | 1,3,5-Triazin-2(1H)-one, 4,6-dia... | 127 | C3H5N5O  | 000645-92-1  | 43   |
| 5    |    | 6-Azathymine                        | 127 | C4H5N3O2 | 000932-53-6  | 43   |



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Quant Title : SVOA CALIBRATION

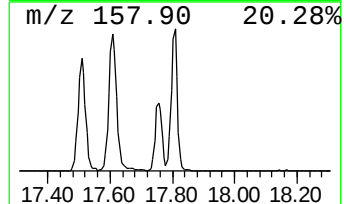
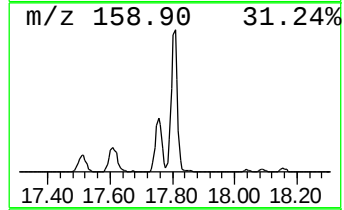
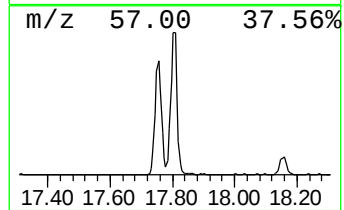
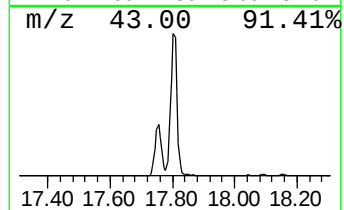
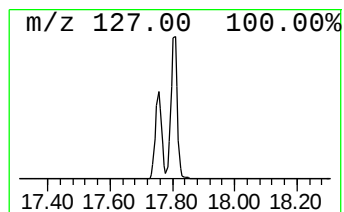
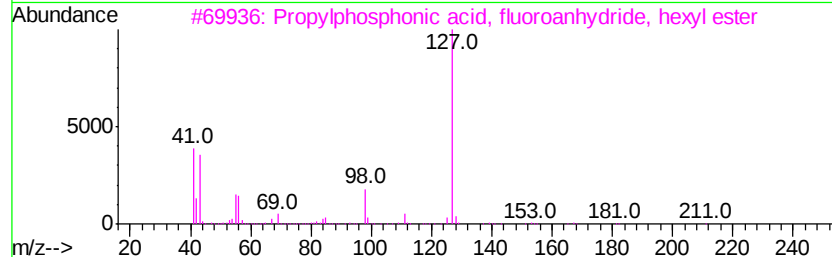
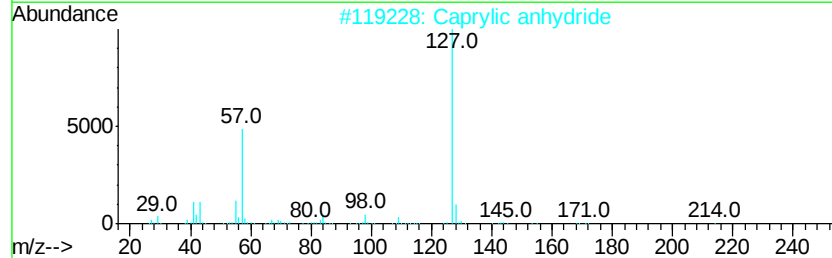
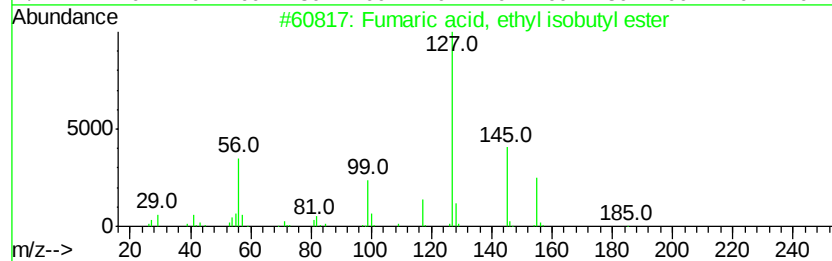
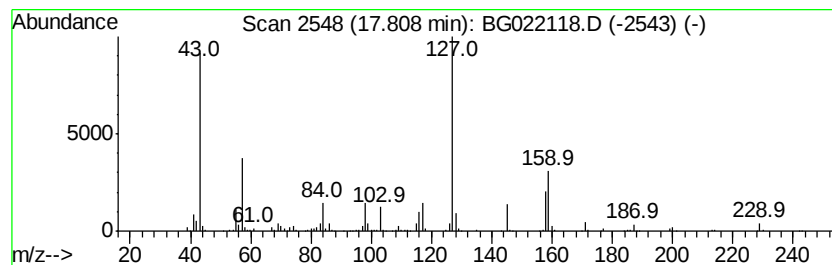
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 2 unknown-01 Concentration Rank 3

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 17.81 | 16.93 ng/ul | 690577 | Phenanthrene-d10 | 17.51 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Fumaric acid, ethyl isobutyl ester  | 200 | C10H16O4  | 1000330-42-7 | 43   |
| 2    |    | Caprylic anhydride                  | 270 | C16H30O3  | 000623-66-5  | 38   |
| 3    |    | Propylphosphonic acid, fluoroanh... | 210 | C9H20F02P | 333416-18-5  | 38   |
| 4    |    | Fumaric acid, ethyl 4-heptyl ester  | 242 | C13H22O4  | 1000348-51-2 | 37   |
| 5    |    | Hexanoic acid, 2-ethyl-, anhydride  | 270 | C16H30O3  | 036765-89-6  | 35   |



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ClientSampleId :  
BCZN7

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG052116.M  
Quant Title : SVOA CALIBRATION

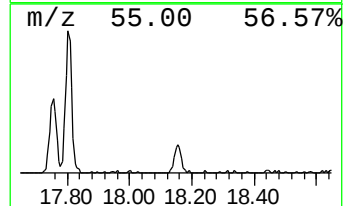
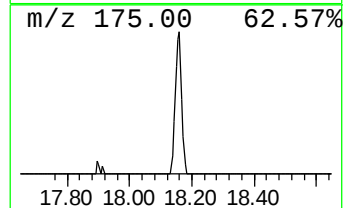
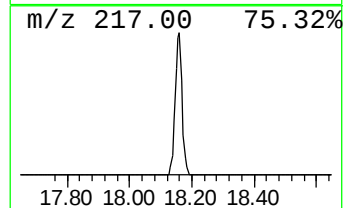
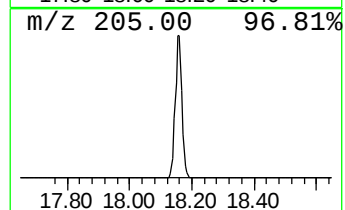
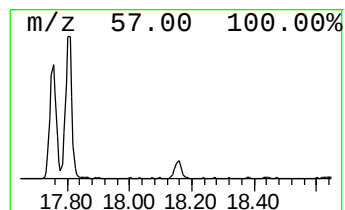
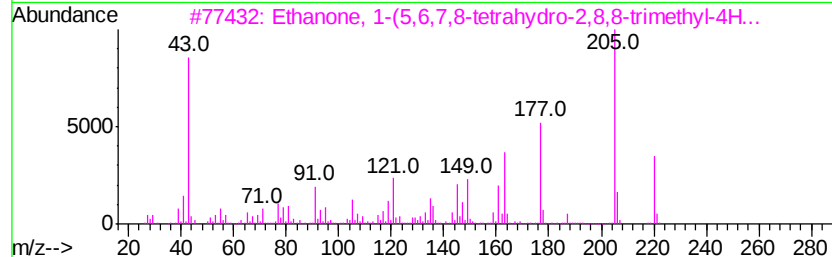
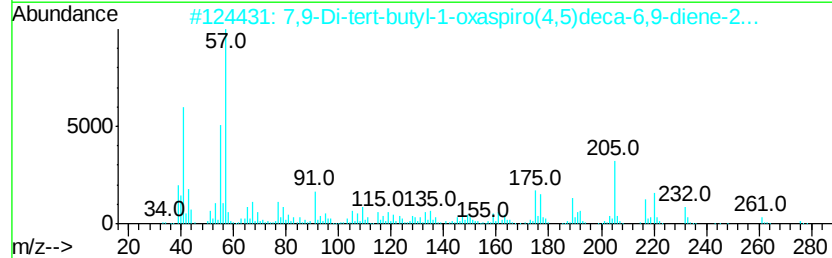
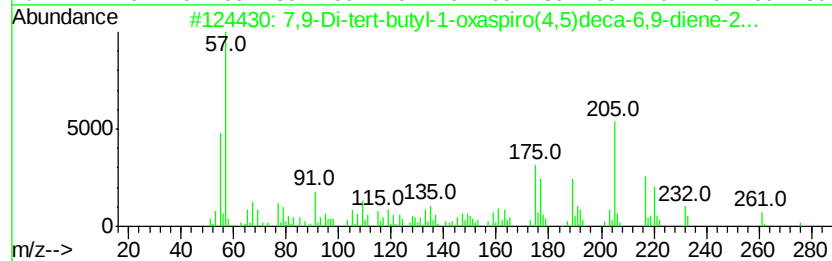
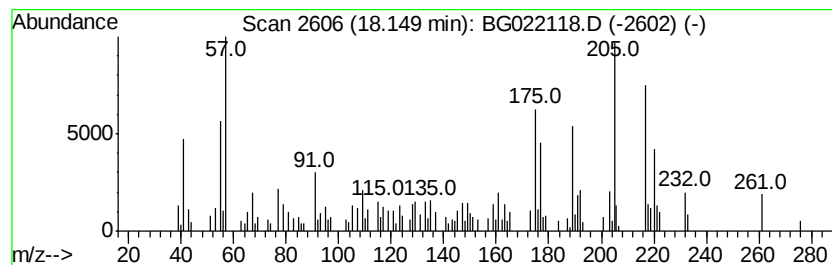
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TIC Integration Parameters: LSCINT.P

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Peak Number 3 7,9-Di-tert-butyl-1-oxaspiro... Concentration Rank 13

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.15 | 2.79 ng/ul | 113730 | Phenanthrene-d10 | 17.51 |

| Hit# | of | 5 | Tentative ID                         | MW  | MolForm  | CAS#         | Qual |
|------|----|---|--------------------------------------|-----|----------|--------------|------|
| 1    |    |   | 7,9-Di-tert-butyl-1-oxaspiro(4,5...) | 276 | C17H24O3 | 082304-66-3  | 98   |
| 2    |    |   | 7,9-Di-tert-butyl-1-oxaspiro(4,5...) | 276 | C17H24O3 | 082304-66-3  | 93   |
| 3    |    |   | Ethanone, 1-(5,6,7,8-tetrahydro-...) | 220 | C14H20O2 | 071596-88-8  | 50   |
| 4    |    |   | 9-Acetylphenanthrene                 | 220 | C16H12O  | 002039-77-2  | 42   |
| 5    |    |   | 2-(3,3-Dimethylbut-1-ynyl)thieno...  | 220 | C12H12S2 | 1000250-48-5 | 42   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG053116\  
Data File : BG022118.D  
Acq On : 31 May 2016 17:44  
Operator : UM/SJ  
Sample : H3201-15  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
BCZN7

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG052116.M  
Quant Title : SVOA CALIBRATION

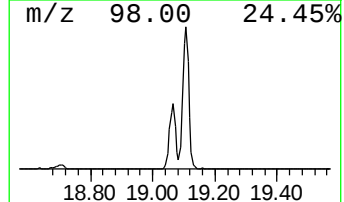
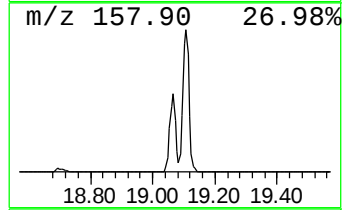
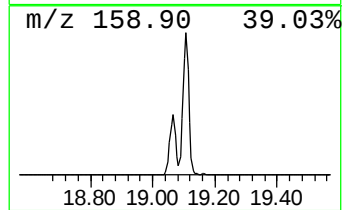
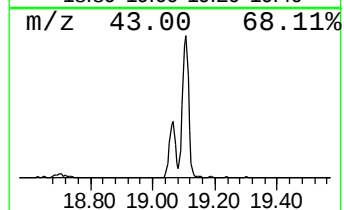
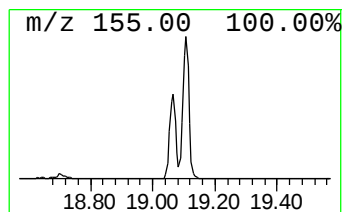
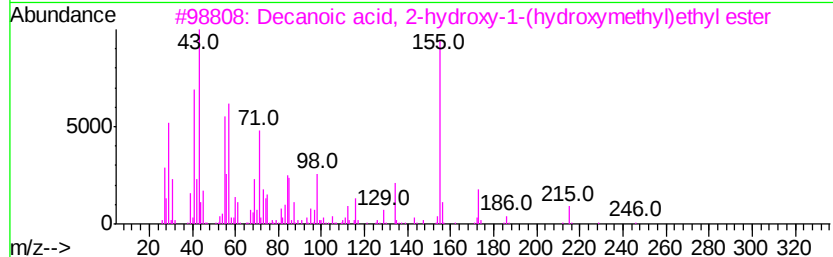
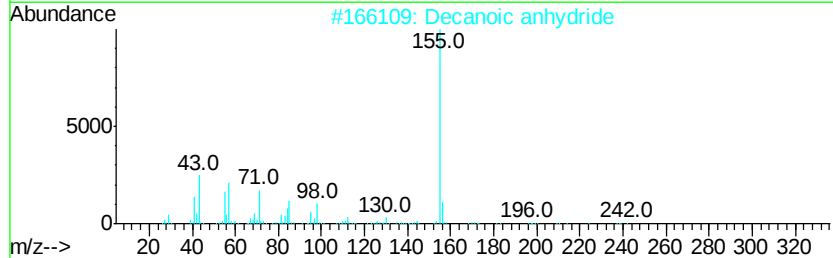
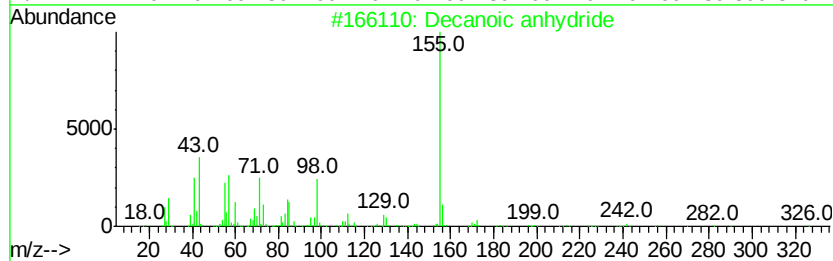
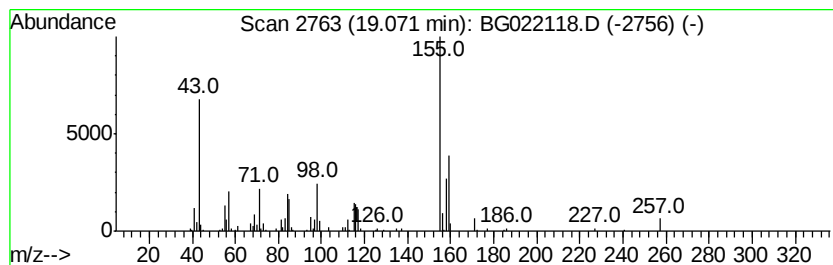
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 4 unknown-02 Concentration Rank 10

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 19.07 | 6.26 ng/ul | 255297 | Phenanthrene-d10 | 17.51 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#         | Qual |
|------|----|-------------------------------------|-----|----------|--------------|------|
| 1    | 5  | Decanoic anhydride                  | 326 | C20H38O3 | 002082-76-0  | 47   |
| 2    |    | Decanoic anhydride                  | 326 | C20H38O3 | 002082-76-0  | 46   |
| 3    |    | Decanoic acid, 2-hydroxy-1-(hydr... | 246 | C13H26O4 | 003376-48-5  | 38   |
| 4    |    | Fumaric acid, isobutyl 2-methylp... | 256 | C14H24O4 | 1000348-72-1 | 35   |
| 5    |    | Fumaric acid, butyl 3-heptyl ester  | 270 | C15H26O4 | 1000348-68-0 | 35   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG053116\  
Data File : BG022118.D  
Acq On : 31 May 2016 17:44  
Operator : UM/SJ  
Sample : H3201-15  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
BCZN7

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG052116.M  
Quant Title : SVOA CALIBRATION

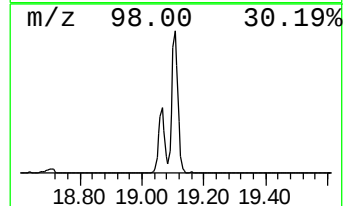
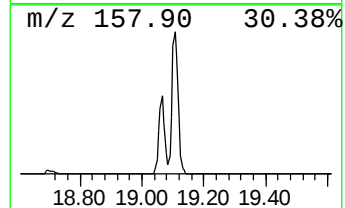
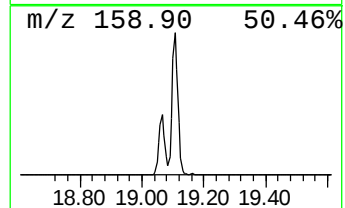
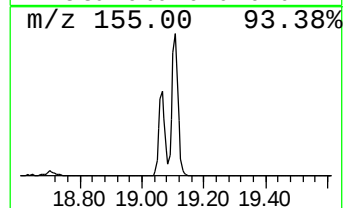
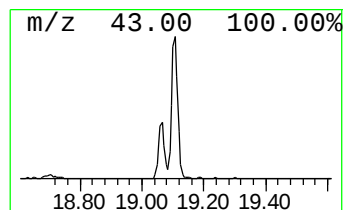
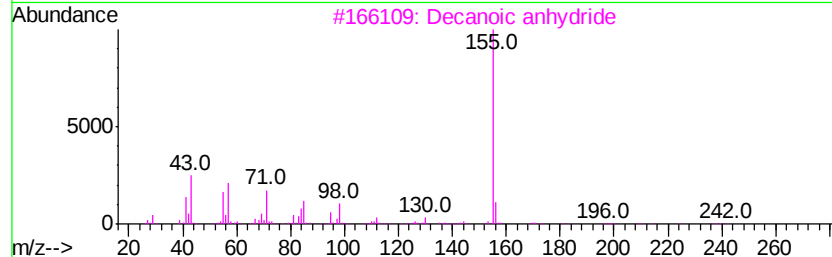
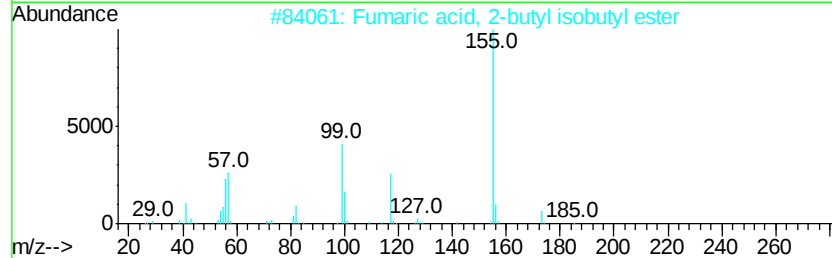
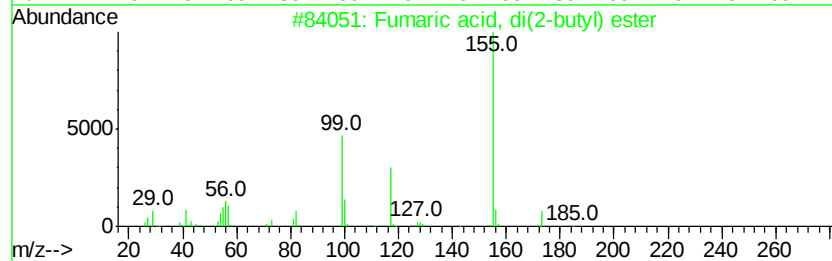
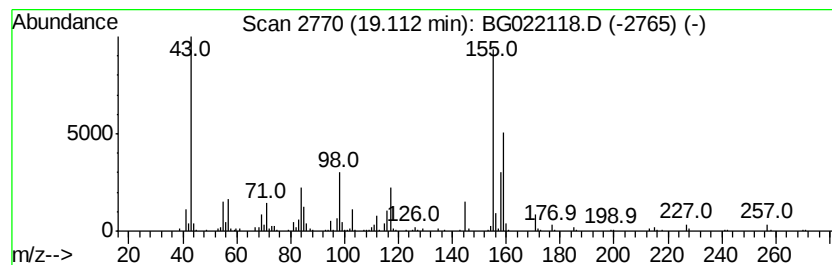
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 5 unknown-03 Concentration Rank 5

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 19.11 | 12.29 ng/ul | 501576 | Phenanthrene-d10 | 17.51 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|-------------------------------------|-----|------------|--------------|------|
| 1    | 5  | Fumaric acid, di(2-butyl) ester     | 228 | C12H20O4   | 1000348-65-7 | 35   |
| 2    |    | Fumaric acid, 2-butyl isobutyl e... | 228 | C12H20O4   | 1000348-63-9 | 35   |
| 3    |    | Decanoic anhydride                  | 326 | C20H38O3   | 002082-76-0  | 27   |
| 4    |    | Nonanoic acid, 9-oxo-, 1-methyle... | 214 | C12H22O3   | 034208-02-1  | 27   |
| 5    |    | 2,6-Difluoro-3-methylbenzoic aci... | 256 | C14H18F2O2 | 1000338-84-2 | 25   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG053116\  
Data File : BG022118.D  
Acq On : 31 May 2016 17:44  
Operator : UM/SJ  
Sample : H3201-15  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
BCZN7

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG052116.M  
Quant Title : SVOA CALIBRATION

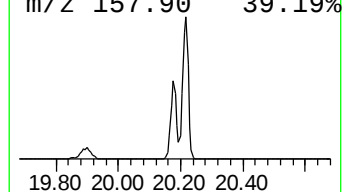
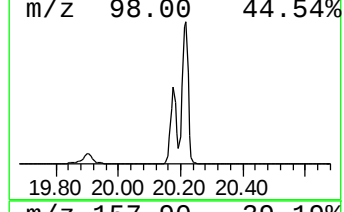
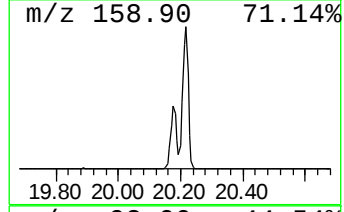
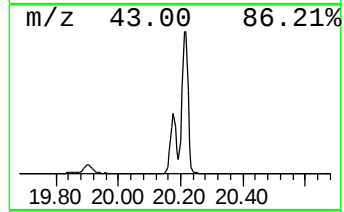
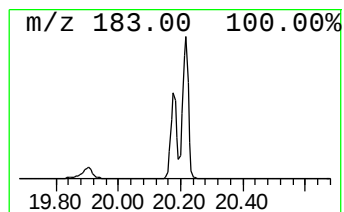
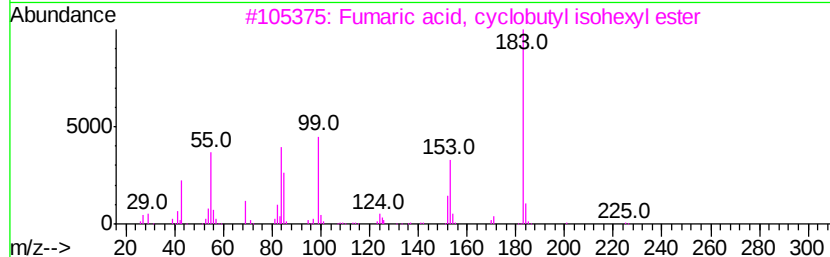
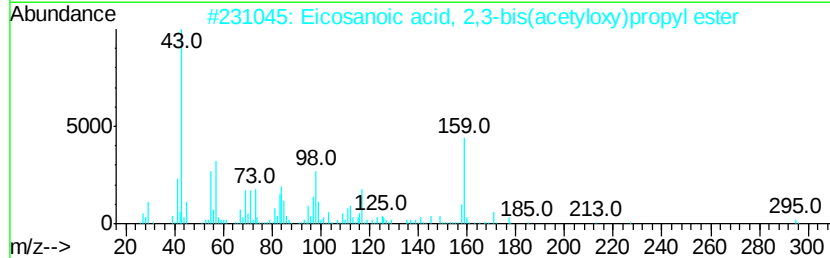
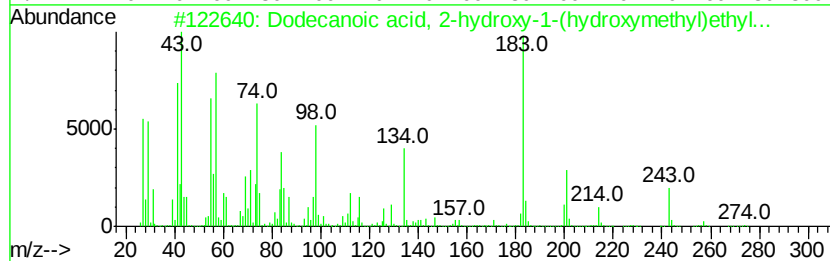
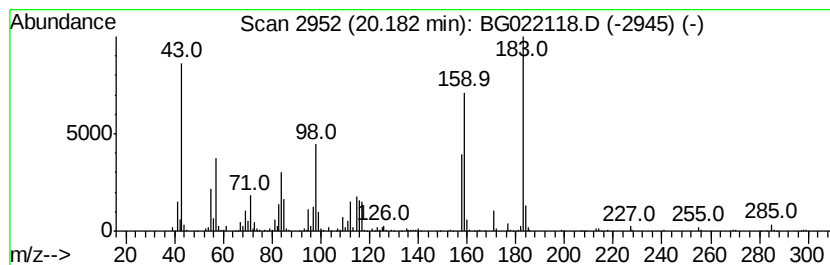
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 6 unknown-04 Concentration Rank 2

| R.T.  | EstConc     | Area   | Relative to ISTD | R.T.  |
|-------|-------------|--------|------------------|-------|
| 20.18 | 20.73 ng/ul | 978942 | Chrysene-d12     | 21.79 |

| Hit# | of | Tentative ID                        | MW  | MolForm     | CAS#         | Qual |
|------|----|-------------------------------------|-----|-------------|--------------|------|
| 1    | 5  | Dodecanoic acid, 2-hydroxy-1-(hy... | 274 | C15H30O4    | 001678-45-1  | 43   |
| 2    |    | Eicosanoic acid, 2,3-bis(acetylo... | 470 | C27H50O6    | 055429-67-9  | 22   |
| 3    |    | Fumaric acid, cyclobutyl isohexy... | 254 | C14H22O4    | 1000345-03-5 | 22   |
| 4    |    | 4-Nitrophenyl laurate               | 321 | C18H27NO4   | 001956-11-2  | 20   |
| 5    |    | Dodecanoic acid, 2,4,5-trichloro... | 378 | C18H25Cl3O2 | 1000360-54-9 | 18   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG053116\  
Data File : BG022118.D  
Acq On : 31 May 2016 17:44  
Operator : UM/SJ  
Sample : H3201-15  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
BCZN7

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG052116.M  
Quant Title : SVOA CALIBRATION

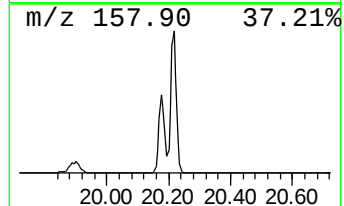
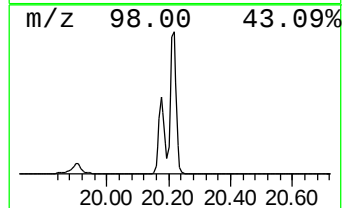
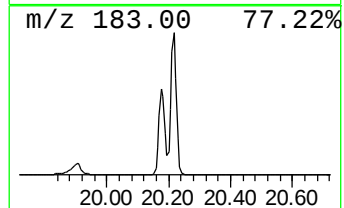
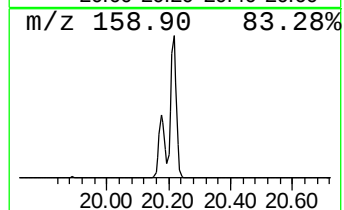
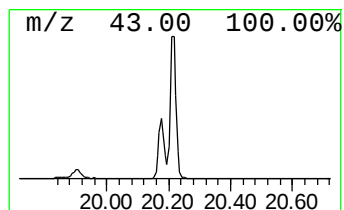
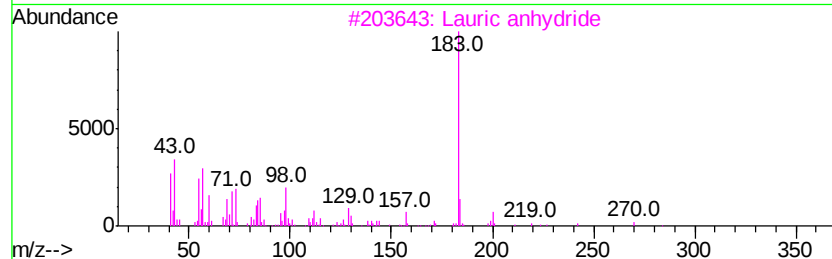
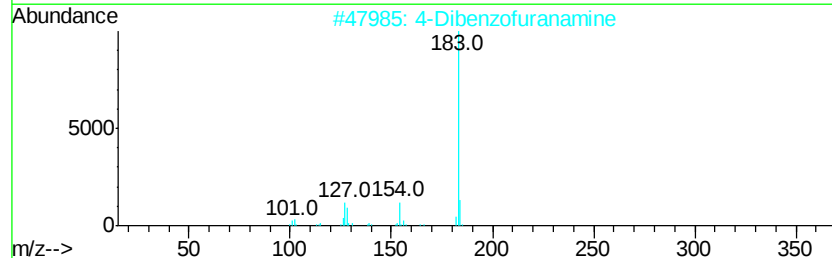
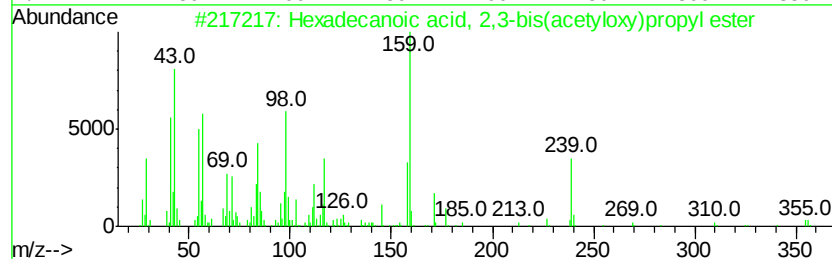
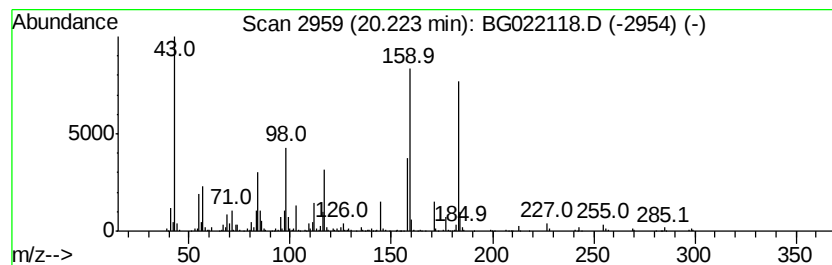
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 7 unknown-05 Concentration Rank 1

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 20.22 | 39.47 ng/ul | 1863760 | Chrysene-d12     | 21.79 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Hexadecanoic acid, 2,3-bis(acety... | 414 | C23H42O6  | 055268-70-7  | 27   |
| 2    |    | 4-Dibenzofuranamine                 | 183 | C12H9NO   | 050548-43-1  | 18   |
| 3    |    | Lauric anhydride                    | 382 | C24H46O3  | 000645-66-9  | 14   |
| 4    |    | Dodecanoyl chloride                 | 218 | C12H23ClO | 000112-16-3  | 12   |
| 5    |    | Fumaric acid, cyclobutyl isohexy... | 254 | C14H22O4  | 1000345-03-5 | 10   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG053116\  
Data File : BG022118.D  
Acq On : 31 May 2016 17:44  
Operator : UM/SJ  
Sample : H3201-15  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
BCZN7

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG052116.M  
Quant Title : SVOA CALIBRATION

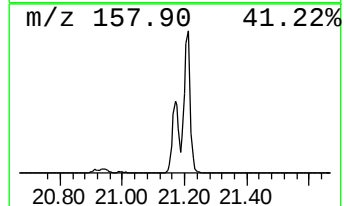
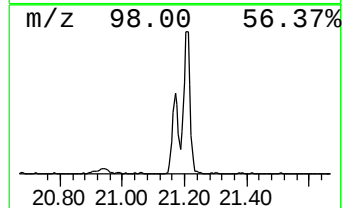
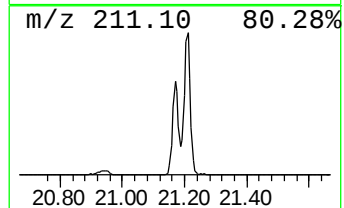
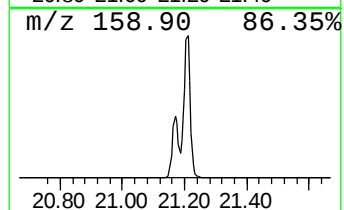
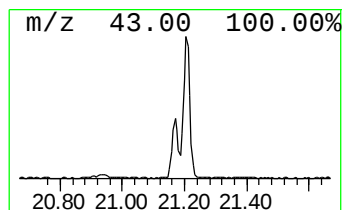
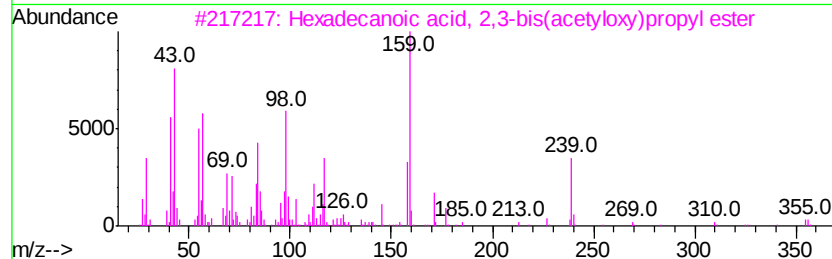
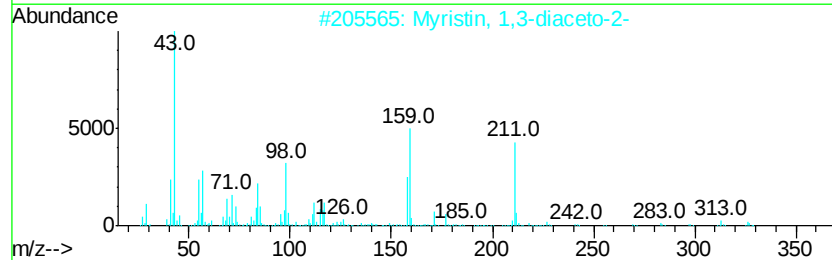
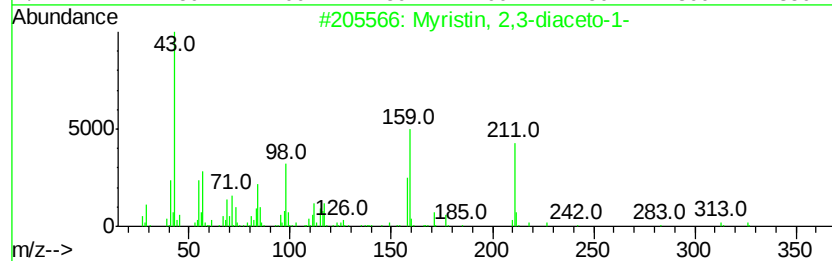
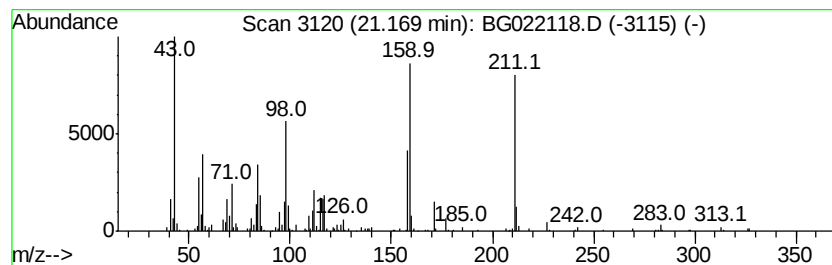
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 8 Myristin, 2,3-diaceto-1- Concentration Rank 9

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 21.17 | 7.78 ng/ul | 367282 | Chrysene-d12     | 21.79 |

| Hit# | of | Tentative ID                                      | MW  | MolForm     | CAS#         | Qual |
|------|----|---------------------------------------------------|-----|-------------|--------------|------|
| 1    | 5  | Myristin, 2,3-diaceto-1-                          | 386 | C21H38O6    | 014473-55-3  | 91   |
| 2    |    | Myristin, 1,3-diaceto-2-                          | 386 | C21H38O6    | 014290-23-4  | 91   |
| 3    |    | Hexadecanoic acid, 2,3-bis(acetyloxy)propyl ester | 414 | C23H42O6    | 055268-70-7  | 49   |
| 4    |    | 1-Dodecanamine, N-methyl-N-nitroso-               | 228 | C13H28N2O   | 055090-44-3  | 18   |
| 5    |    | Myristic acid, 3,4-dichlorophenyl ester           | 372 | C20H30Cl2O2 | 1000357-93-1 | 14   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG053116\  
Data File : BG022118.D  
Acq On : 31 May 2016 17:44  
Operator : UM/SJ  
Sample : H3201-15  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
BCZN7

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG052116.M  
Quant Title : SVOA CALIBRATION

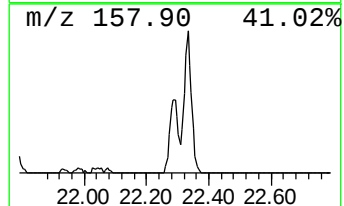
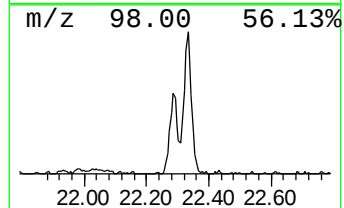
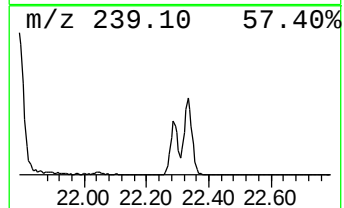
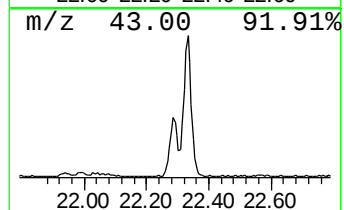
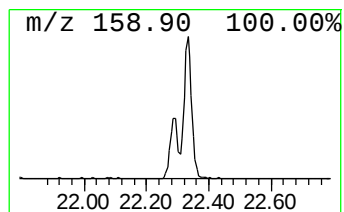
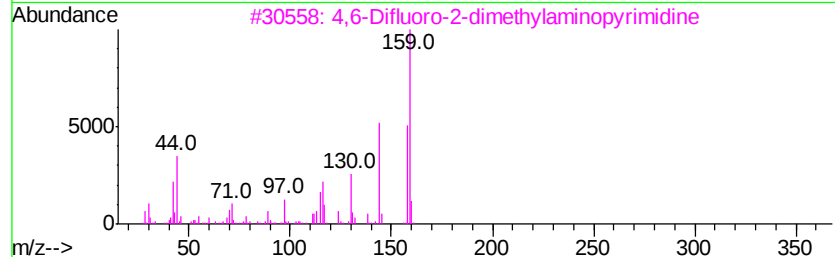
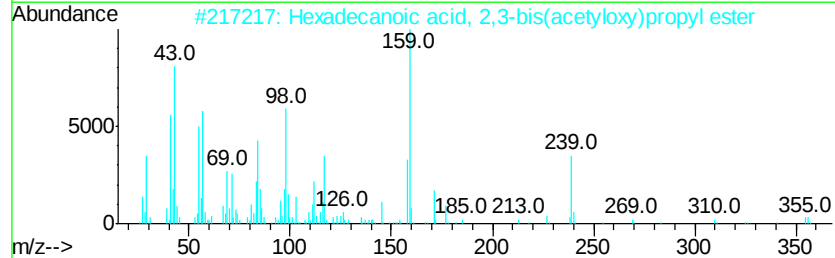
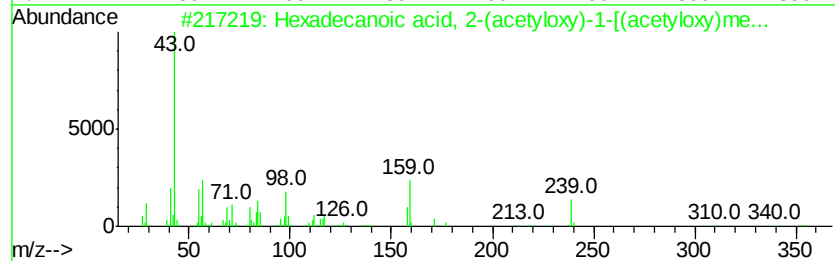
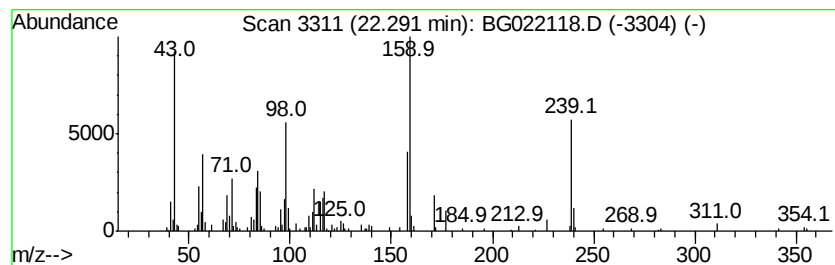
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 10 Hexadecanoic acid, 2-(acety... Concentration Rank 11

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 22.29 | 4.45 ng/ul | 210145 | Chrysene-d12     | 21.79 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Hexadecanoic acid, 2-(acetyloxy)... | 414 | C23H42O6 | 055268-69-4 | 91   |
| 2    |    | Hexadecanoic acid, 2,3-bis(acety... | 414 | C23H42O6 | 055268-70-7 | 38   |
| 3    |    | 4,6-Difluoro-2-dimethylaminopvri... | 159 | C6H7F2N3 | 165258-63-9 | 30   |
| 4    |    | 1-Methyl-2-formylindole             | 159 | C10H9NO  | 027421-51-8 | 27   |
| 5    |    | Hexadecanoic acid, 2-hydroxy-1-(... | 330 | C19H38O4 | 023470-00-0 | 25   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG053116\  
Data File : BG022118.D  
Acq On : 31 May 2016 17:44  
Operator : UM/SJ  
Sample : H3201-15  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
BCZN7

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG052116.M  
Quant Title : SVOA CALIBRATION

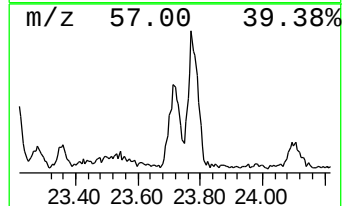
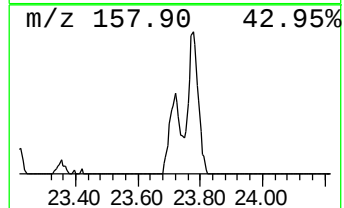
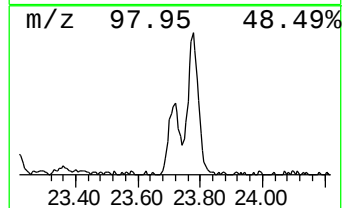
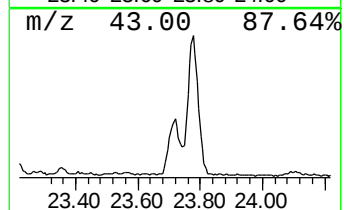
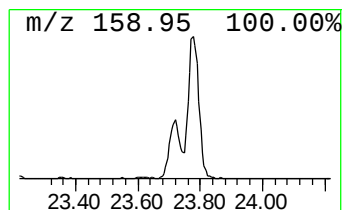
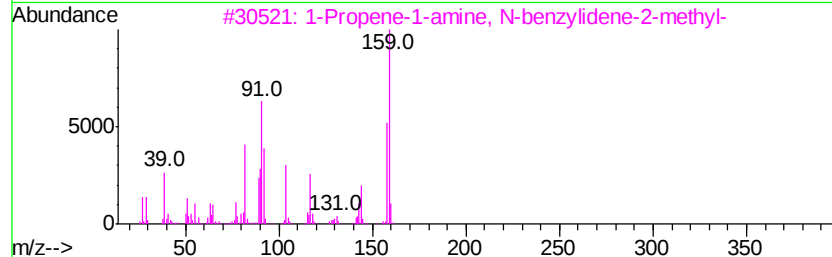
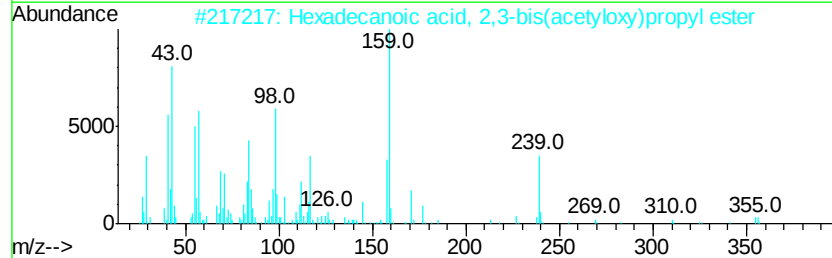
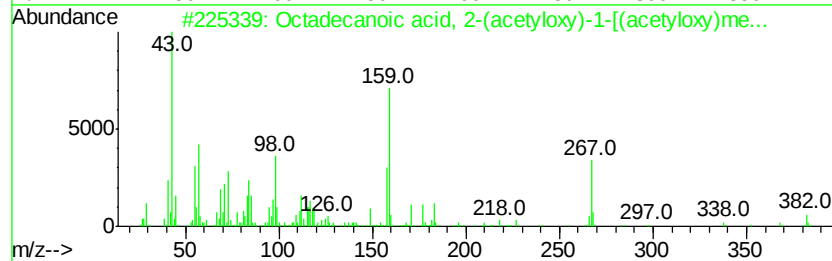
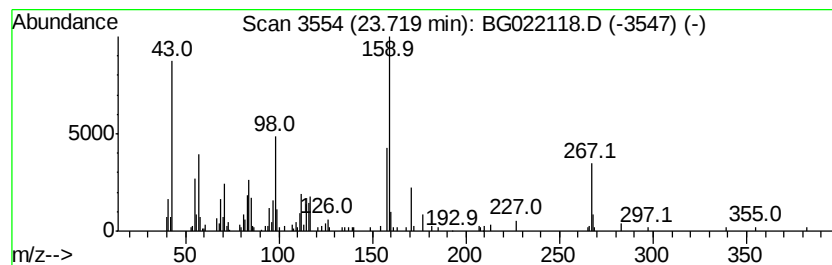
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 12 Octadecanoic acid, 2-(acety... Concentration Rank 12

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 23.72 | 4.00 ng/ul | 195673 | Perylene-d12     | 25.11 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|-------------------------------------|-----|------------|--------------|------|
| 1    | 5  | Octadecanoic acid, 2-(acetyloxy)... | 442 | C25H46O6   | 055401-62-2  | 87   |
| 2    |    | Hexadecanoic acid, 2,3-bis(acety... | 414 | C23H42O6   | 055268-70-7  | 53   |
| 3    |    | 1-Propene-1-amine, N-benzylidene... | 159 | C11H13N    | 039575-55-8  | 38   |
| 4    |    | 2(1H)-Quinolinone, hydrazone        | 159 | C9H9N3     | 015793-77-8  | 27   |
| 5    |    | 2,4-Difluorobenzoic acid, pentad... | 368 | C22H34F2O2 | 1000338-79-3 | 27   |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG053116\  
Data File : BG022118.D  
Acq On : 31 May 2016 17:44  
Operator : UM/SJ  
Sample : H3201-15  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
BCZN7

Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG052116.M  
Quant Title : SVOA CALIBRATION

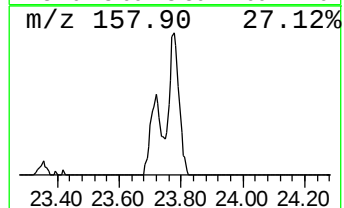
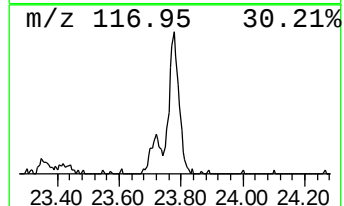
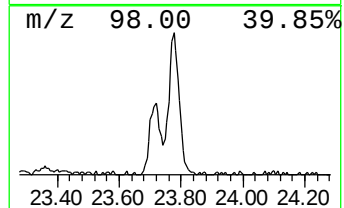
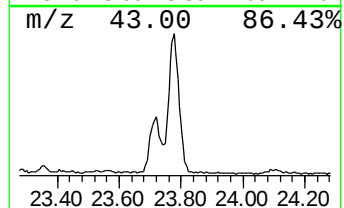
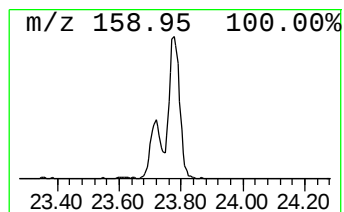
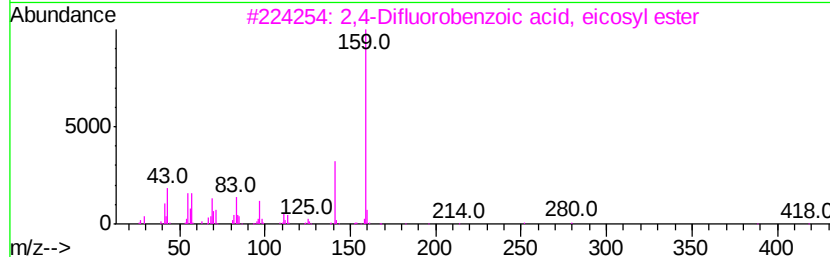
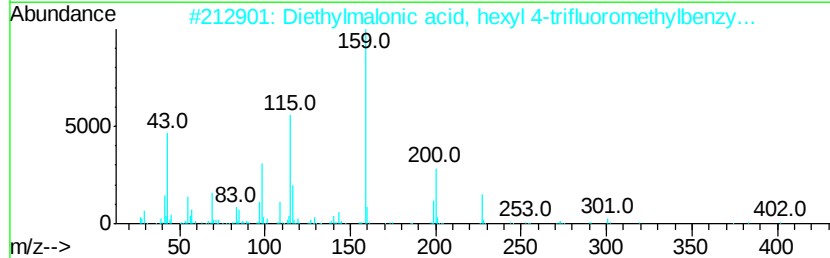
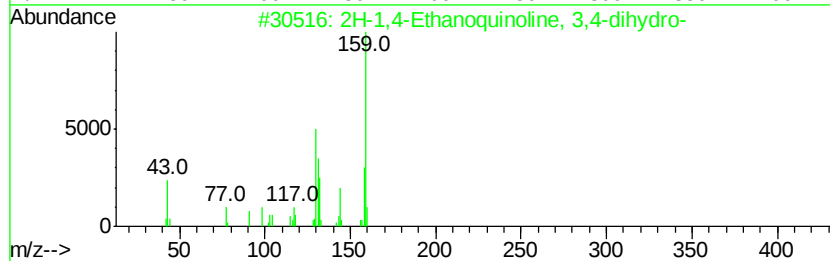
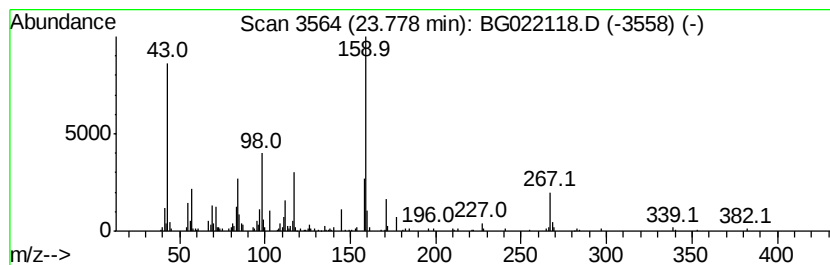
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 13 unknown-06 Concentration Rank 8

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 23.78 | 8.02 ng/ul | 392811 | Perylene-d12     | 25.11 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|-------------------------------------|-----|------------|--------------|------|
| 1    | 5  | 2H-1,4-Ethanoquinoline, 3,4-dihy... | 159 | C11H13N    | 004363-25-1  | 43   |
| 2    |    | Diethylmalonic acid, hexyl 4-tri... | 402 | C21H29F3O4 | 1000368-40-4 | 37   |
| 3    |    | 2,4-Difluorobenzoic acid, eicosv... | 438 | C27H44F2O2 | 1000338-79-8 | 27   |
| 4    |    | 1-Naphthalenol, 2-amino-            | 159 | C10H9NO    | 000606-41-7  | 27   |
| 5    |    | Hexadecanoic acid, 2,3-bis(acety... | 414 | C23H42O6   | 055268-70-7  | 27   |



Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG053116\  
Data File : BG022118.D  
Acq On : 31 May 2016 17:44  
Operator : UM/SJ  
Sample : H3201-15  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
BCZN7

Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG052116.M  
Quant Title : SVOA CALIBRATION

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

| TIC Top Hit name     | RT    | EstConc | Units | Response | --Internal Standard-- |       |        |      |
|----------------------|-------|---------|-------|----------|-----------------------|-------|--------|------|
|                      |       |         |       |          | #                     | RT    | Resp   | Conc |
| Octanethioic acid... | 17.76 | 8.2     | ng/ul | 336131   | 4                     | 17.51 | 815970 | 20.0 |
| unknown-01           | 17.81 | 16.9    | ng/ul | 690577   | 4                     | 17.51 | 815970 | 20.0 |
| 7,9-Di-tert-butyl... | 18.15 | 2.8     | ng/ul | 113730   | 4                     | 17.51 | 815970 | 20.0 |
| unknown-02           | 19.07 | 6.3     | ng/ul | 255297   | 4                     | 17.51 | 815970 | 20.0 |
| unknown-03           | 19.11 | 12.3    | ng/ul | 501576   | 4                     | 17.51 | 815970 | 20.0 |
| unknown-04           | 20.18 | 20.7    | ng/ul | 978942   | 5                     | 21.79 | 944491 | 20.0 |
| unknown-05           | 20.22 | 39.5    | ng/ul | 1863760  | 5                     | 21.79 | 944491 | 20.0 |
| Myristin, 2,3-dia... | 21.17 | 7.8     | ng/ul | 367282   | 5                     | 21.79 | 944491 | 20.0 |
| Hexadecanoic acid... | 22.29 | 4.5     | ng/ul | 210145   | 5                     | 21.79 | 944491 | 20.0 |
| Octadecanoic acid... | 23.72 | 4.0     | ng/ul | 195673   | 6                     | 25.11 | 979304 | 20.0 |
| unknown-06           | 23.78 | 8.0     | ng/ul | 392811   | 6                     | 25.11 | 979304 | 20.0 |