LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

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

Signal : TIC

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.633 | 978 | 986 | 996 | rVB | 332858 | 565373 | 1.59% | 0.217% |
| 2 | 11.007 | 1368 | 1390 | 1395 | rVV | 5070963 | 14571932 | 40.93% | 5.595% |
| 3 | 11.089 | 1399 | 1404 | 1411 | rVB | 308691 | 525139 | 1.47% | 0.202% |
| 4 | 12.587 | 1645 | 1659 | 1668 | rBV | 4035276 | 8526246 | 23.95% | 3.274% |
| 5 | 12.793 | 1681 | 1694 | 1701 | rVB | 2430814 | 4380774 | 12.30% | 1.682% |
| 6 | 13.568 | 1817 | 1826 | 1836 | rVV | 1878302 | 3088937 | 8.68% | 1.186% |
| 7 | 13.757 | 1852 | 1858 | 1869 | rVB | 694069 | 1340545 | 3.77% | 0.515% |
| 8 | 13.909 | 1869 | 1884 | 1891 | rBV | 887469 | 2463606 | 6.92% | 0.946% |
| 9 | 14.050 | 1899 | 1908 | 1913 | rVV | 1199723 | 2312428 | 6.49% | 0.888% |
| 10 | 14.103 | 1913 | 1917 | 1926 | rVV2 | 915831 | 1599780 | 4.49% | 0.614% |
| 11 | 14.285 | 1936 | 1948 | 1951 | rBV | 560277 | 904846 | 2.54% | 0.347% |
| 12 | 14.450 | 1964 | 1976 | 1982 | rBV2 | 638952 | 1302668 | 3.66% | 0.500% |
| 13 | 14.714 | 2015 | 2021 | 2029 | rVV2 | 864777 | 1511251 | 4.24% | 0.580% |
| 14 | 14.832 | 2029 | 2041 | 2045 | rVV | 5984332 | 15017864 | 42.18% | 5.766% |
| 15 | 14.873 | 2045 | 2048 | 2052 | rVV | 447766 | 609582 | 1.71% | 0.234% |
| 16 | 14.932 | 2052 | 2058 | 2067 | rVV2 | 236295 | 573488 | 1.61% | 0.220% |
| 17 | 15.037 | 2067 | 2076 | 2081 | rVV | 441092 | 765650 | 2.15% | 0.294% |
| 18 | 15.155 | 2086 | 2096 | 2100 | rVV2 | 4532354 | 9983251 | 28.04% | 3.833% |
| 19 | 15.196 | 2100 | 2103 | 2118 | rVB | 310621 | 534935 | 1.50% | 0.205% |
| 20 | 15.337 | 2118 | 2127 | 2132 | rBV3 | 255100 | 487626 | 1.37% | 0.187% |
| 21 | 15.390 | 2132 | 2136 | 2148 | rVB2 | 269905 | 455374 | 1.28% | 0.175% |
| 22 | 15.507 | 2148 | 2156 | 2160 | rBV | 189252 | 437229 | 1.23% | 0.168% |
| 23 | 15.701 | 2185 | 2189 | 2196 | rVV3 | 228115 | 603504 | 1.70% | 0.232% |
| 24 | 15.807 | 2196 | 2207 | 2212 | rVV | 5504833 | 13200822 | 37.08% | 5.068% |
| 25 | 15.878 | 2212 | 2219 | 2221 | rVV | 454053 | 775139 | 2.18% | 0.298% |
| 26 | 15.907 | 2221 | 2224 | 2226 | rVV | 726799 | 1001061 | 2.81% | 0.384% |
| 27 | 15.942 | 2226 | 2230 | 2235 | rVV3 | 1255863 | 2107019 | 5.92% | 0.809% |
| 28 | 15.989 | 2235 | 2238 | 2241 | rVV2 | 315636 | 495481 | 1.39% | 0.190% |
| 29 | 16.030 | 2241 | 2245 | 2248 | rVV | 687752 | 1100349 | 3.09% | 0.422% |
| 30 | 16.071 | 2248 | 2252 | 2259 | rVV | 1353267 | 2024050 | 5.68% | 0.777% |
| 31 | 16.218 | 2259 | 2277 | 2284 | rVV | 1427116 | 3309292 | 9.29% | 1.271% |
| 32 | 16.306 | 2289 | 2292 | 2297 | rVB | 267202 | 372554 | 1.05% | 0.143% |
| 33 | 16.565 | 2326 | 2336 | 2343 | rBV | 841484 | 1390371 | 3.91% | 0.534% |
| 34 | 16.776 | 2359 | 2372 | 2376 | rBV2 | 1122205 | 2478806 | 6.96% | 0.952% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

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

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 16.823 | 2376 | 2380 | 2385 | rVV2 | 370132 | 554149 | 1.56% | 0.213% |
| 36 | 16.923 | 2391 | 2397 | 2402 | rVB2 | 438796 | 771992 | 2.17% | 0.296% |
| 37 | 17.041 | 2413 | 2417 | 2421 | rVB2 | 308777 | 435198 | 1.22% | 0.167% |
| 38 | 17.123 | 2428 | 2431 | 2439 | rVB4 | 141966 | 346880 | 0.97% | 0.133% |
| 39 | 17.205 | 2439 | 2445 | 2454 | rVV3 | 475881 | 1356938 | 3.81% | 0.521% |
| 40 | 17.299 | 2454 | 2461 | 2471 | rVB | 2017634 | 3556079 | 9.99% | 1.365% |
| 41 | 17.593 | 2487 | 2511 | 2514 | rBV | 8832451 | 35603773 | 100.00% | 13.670% |
| 42 | 17.646 | 2516 | 2520 | 2524 | rVB | 2998846 | 4155663 | 11.67% | 1.596% |
| 43 | 17.887 | 2548 | 2561 | 2569 | rBV | 1877448 | 3834162 | 10.77% | 1.472% |
| 44 | 17.993 | 2575 | 2579 | 2587 | rBV2 | 511386 | 861857 | 2.42% | 0.331% |
| 45 | 18.063 | 2587 | 2591 | 2598 | rVB4 | 241106 | 457650 | 1.29% | 0.176% |
| 46 | 18.198 | 2606 | 2614 | 2623 | rVB | 218697 | 553614 | 1.55% | 0.213% |
| 47 | 18.357 | 2630 | 2641 | 2645 | rBV | 1919544 | 3307067 | 9.29% | 1.270% |
| 48 | 18.410 | 2645 | 2650 | 2655 | rVB | 2672135 | 4123897 | 11.58% | 1.583% |
| 49 | 18.492 | 2655 | 2664 | 2669 | rBV | 881463 | 1616062 | 4.54% | 0.620% |
| 50 | 18.563 | 2669 | 2676 | 2685 | rVV3 | 3413225 | 7868024 | 22.10% | 3.021% |
| 51 | 18.645 | 2685 | 2690 | 2694 | rVV4 | 237278 | 428293 | 1.20% | 0.164% |
| 52 | 18.692 | 2694 | 2698 | 2702 | rVV2 | 261860 | 385850 | 1.08% | 0.148% |
| 53 | 18.780 | 2710 | 2713 | 2718 | rVV3 | 211810 | 403918 | 1.13% | 0.155% |
| 54 | 18.845 | 2718 | 2724 | 2729 | rVV | 1749837 | 2561970 | 7.20% | 0.984% |
| 55 | 18.903 | 2729 | 2734 | 2740 | rVV | 261060 | 447218 | 1.26% | 0.172% |
| 56 | 19.086 | 2760 | 2765 | 2769 | rVB3 | 371980 | 517156 | 1.45% | 0.199% |
| 57 | 19.174 | 2776 | 2780 | 2784 | rVB3 | 254345 | 350171 | 0.98% | 0.134% |
| 58 | 19.256 | 2788 | 2794 | 2799 | rBV | 524565 | 1017325 | 2.86% | 0.391% |
| 59 | 19.321 | 2802 | 2805 | 2814 | rVB2 | 337137 | 718437 | 2.02% | 0.276% |
| 60 | 19.573 | 2834 | 2848 | 2853 | rVV | 7412866 | 21172073 | 59.47% | 8.129% |
| 61 | 19.626 | 2853 | 2857 | 2864 | rVB4 | 312300 | 553205 | 1.55% | 0.212% |
| 62 | 19.773 | 2877 | 2882 | 2888 | rVB | 511154 | 791801 | 2.22% | 0.304% |
| 63 | 19.902 | 2893 | 2904 | 2905 | rBV2 | 5431615 | 10783365 | 30.29% | 4.140% |
| 64 | 19.926 | 2906 | 2908 | 2912 | rVV2 | 6195337 | 7597517 | 21.34% | 2.917% |
| 65 | 19.961 | 2912 | 2914 | 2921 | rVB2 | 637903 | 683577 | 1.92% | 0.262% |
| 66 | 20.067 | 2926 | 2932 | 2937 | rVB | 809379 | 1172212 | 3.29% | 0.450% |
| 67 | 20.131 | 2937 | 2943 | 2949 | rVB | 239470 | 421633 | 1.18% | 0.162% |
| 68 | 20.202 | 2949 | 2955 | 2956 | rBV2 | 687767 | 1033469 | 2.90% | 0.397% |
| 69 | 20.261 | 2962 | 2965 | 2972 | rVB | 394635 | 500262 | 1.41% | 0.192% |
| 70 | 20.343 | 2972 | 2979 | 2981 | rBV2 | 721352 | 1267134 | 3.56% | 0.487% |
| 71 | 20.384 | 2981 | 2986 | 2990 | rVB | 2126121 | 3146222 | 8.84% | 1.208% |

LSC Area Percent Report

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Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

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

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 20.484 | 2995 | 3003 | 3006 | rBV | 2366412 | 3722813 | 10.46% | 1.429% |
| 73 | 20.537 | 3006 | 3012 | 3015 | rVV2 | 664273 | 1389270 | 3.90% | 0.533% |
| 74 | 20.572 | 3015 | 3018 | 3021 | rVV2 | 454813 | 532444 | 1.50% | 0.204% |
| 75 | 20.607 | 3021 | 3024 | 3030 | rVB2 | 235298 | 367502 | 1.03% | 0.141% |
| 76 | 20.672 | 3031 | 3035 | 3039 | rBV | 363428 | 529595 | 1.49% | 0.203% |
| 77 | 20.719 | 3039 | 3043 | 3046 | rVB2 | 318134 | 380798 | 1.07% | 0.146% |
| 78 | 20.895 | 3069 | 3073 | 3077 | rBV | 349026 | 478608 | 1.34% | 0.184% |
| 79 | 20.995 | 3087 | 3090 | 3096 | rVB4 | 202081 | 379069 | 1.06% | 0.146% |
| 80 | 21.089 | 3101 | 3106 | 3111 | rBV | 279001 | 533448 | 1.50% | 0.205% |
| 81 | 21.142 | 3111 | 3115 | 3121 | rVV3 | 186395 | 354379 | 1.00% | 0.136% |
| 82 | 21.324 | 3141 | 3146 | 3150 | rBV | 643275 | 1074432 | 3.02% | 0.413% |
| 83 | 21.371 | 3150 | 3154 | 3158 | rVV | 699968 | 1078169 | 3.03% | 0.414% |
| 84 | 21.418 | 3158 | 3162 | 3167 | rVV2 | 590589 | 1062535 | 2.98% | 0.408% |
| 85 | 21.606 | 3185 | 3194 | 3202 | rBV | 202112 | 521248 | 1.46% | 0.200% |
| 86 | 21.747 | 3206 | 3218 | 3223 | rVV2 | 2856244 | 6543352 | 18.38% | 2.512% |
| 87 | 21.818 | 3224 | 3230 | 3240 | rVB | 2325264 | 4389933 | 12.33% | 1.685% |
| 88 | 21.959 | 3249 | 3254 | 3262 | rBV | 643586 | 1108179 | 3.11% | 0.425% |
| 89 | 22.164 | 3282 | 3289 | 3296 | rVV2 | 363508 | 732841 | 2.06% | 0.281% |
| 90 | 22.393 | 3317 | 3328 | 3335 | rBV3 | 168598 | 560963 | 1.58% | 0.215% |
| 91 | 22.487 | 3336 | 3344 | 3350 | rVV | 309601 | 806503 | 2.27% | 0.310% |
| 92 | 22.816 | 3396 | 3400 | 3408 | rVB3 | 251329 | 505489 | 1.42% | 0.194% |
| 93 | 22.905 | 3408 | 3415 | 3428 | rVB3 | 141550 | 361939 | 1.02% | 0.139% |
| 94 | 23.997 | 3589 | 3601 | 3607 | rBV | 729543 | 2494515 | 7.01% | 0.958% |
| 95 | 24.244 | 3635 | 3643 | 3651 | rVB | 145600 | 348689 | 0.98% | 0.134% |
| 96 | 24.726 | 3715 | 3725 | 3732 | rBV | 312884 | 903280 | 2.54% | 0.347% |
| 97 | 24.879 | 3743 | 3751 | 3763 | rVV | 513859 | 1478463 | 4.15% | 0.568% |
| 98 | 25.020 | 3765 | 3775 | 3782 | rVV2 | 186102 | 619558 | 1.74% | 0.238% |
| 99 | 25.102 | 3783 | 3789 | 3802 | rVB2 | 144702 | 451741 | 1.27% | 0.173% |
| 100 | 28.751 | 4394 | 4410 | 4432 | rVB2 | 107288 | 571165 | 1.60% | 0.219% |

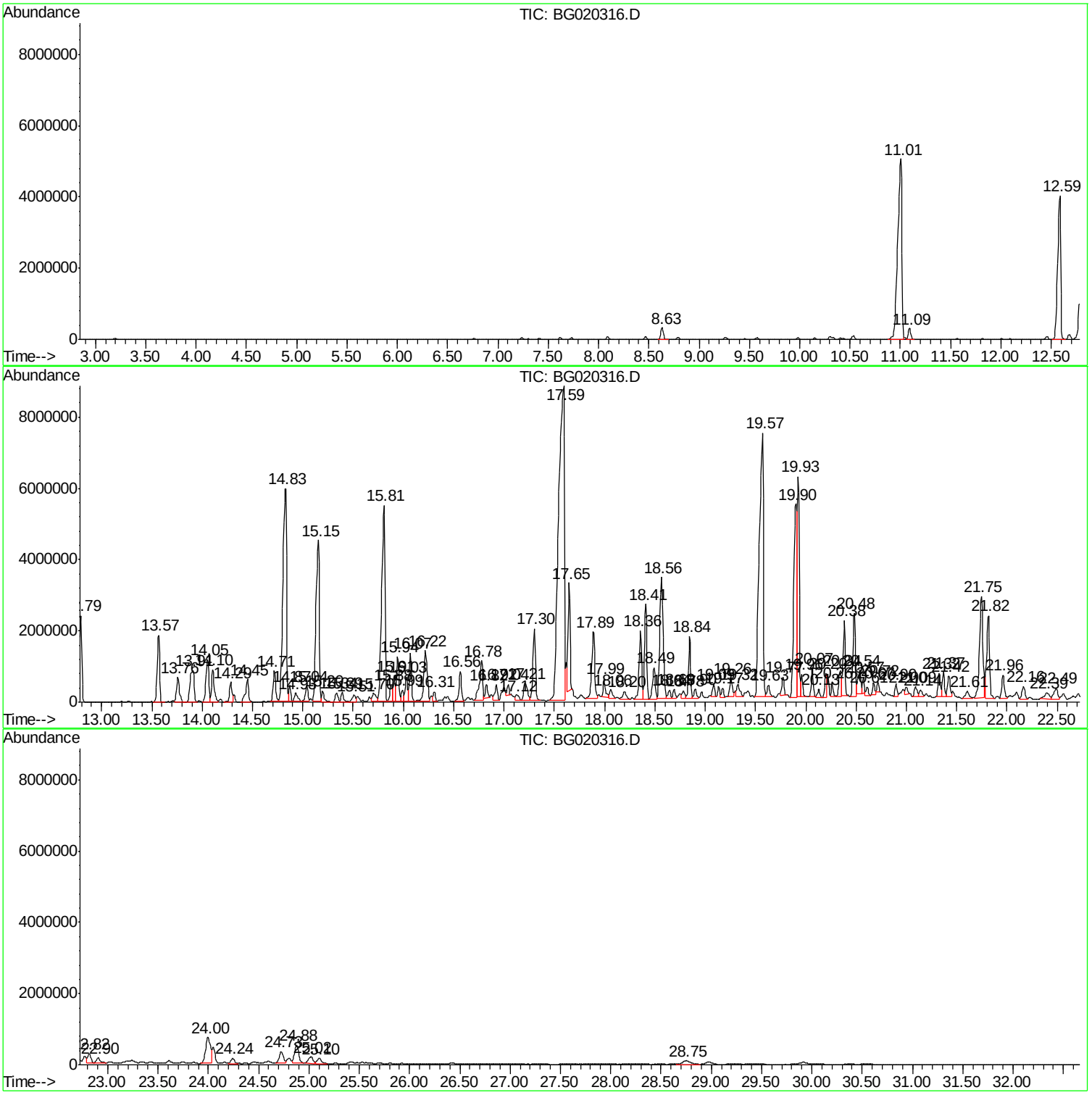
Sum of corrected areas: 260453705

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

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



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

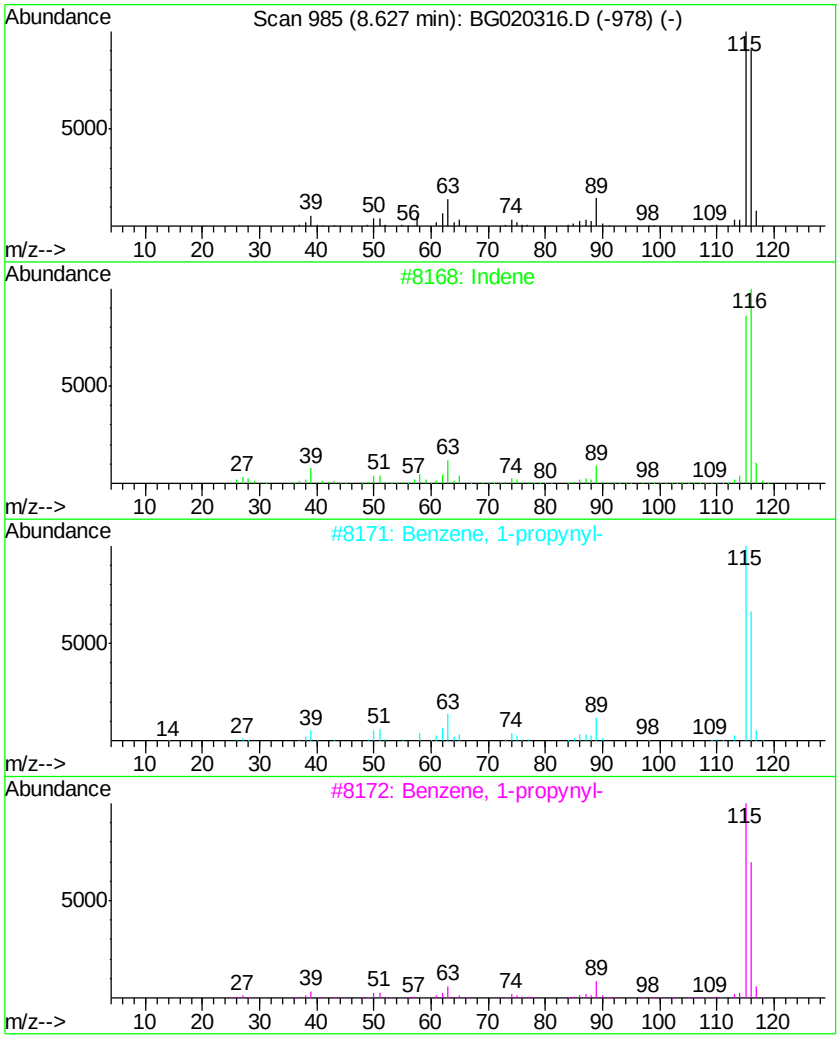
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

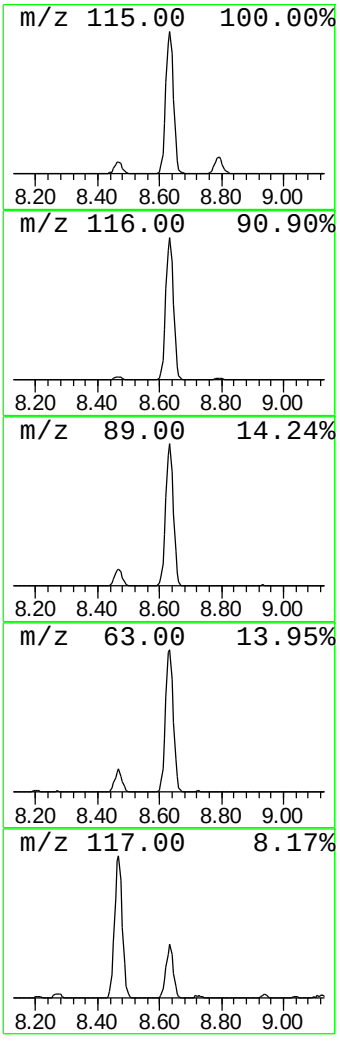
**********

Peak Number 1 Indene Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.63 | 20.00 ng/ul | 565373 | 1,4-Dichlorobenzene-d4 | 8.09 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Indene | 116 | C9H8 | 000095-13-6 | 95 |
| 2 | Benzene, 1-propynyl- | 116 | C9H8 | 000673-32-5 | 94 |
| 3 | Benzene, 1-propynyl- | 116 | C9H8 | 000673-32-5 | 91 |
| 4 | Benzene, 1-propynyl- | 116 | C9H8 | 000673-32-5 | 91 |
| 5 | Indene | 116 | C9H8 | 000095-13-6 | 91 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

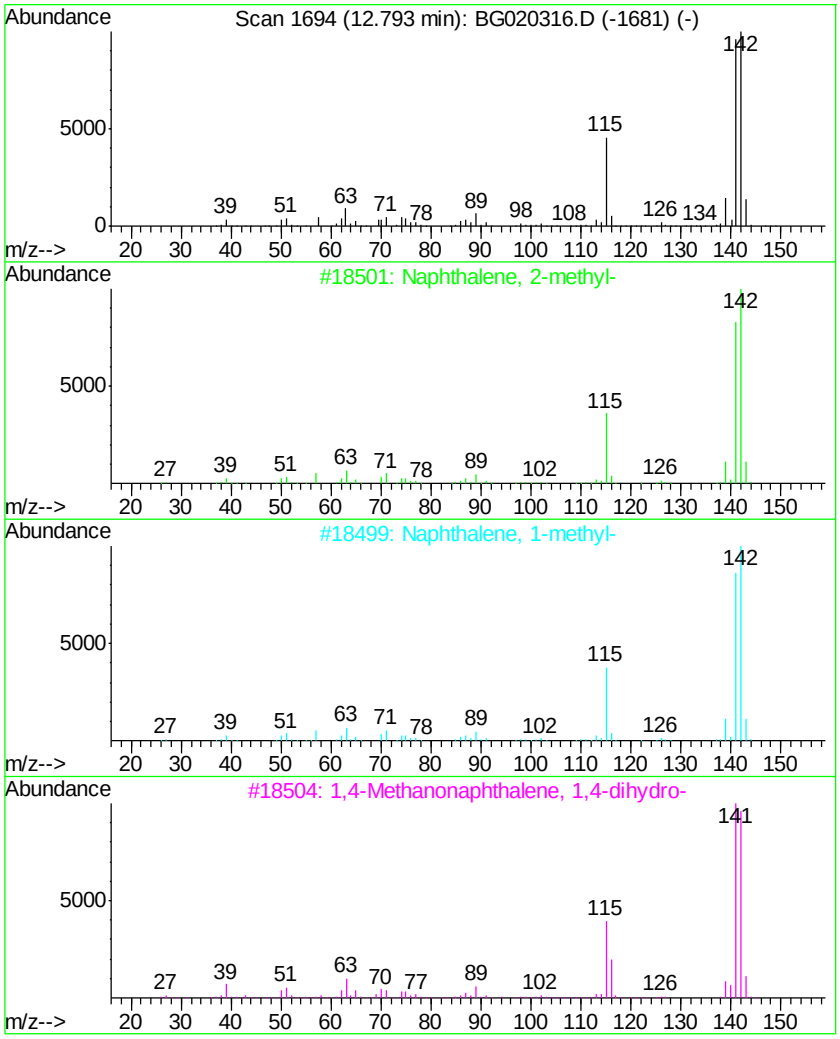
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

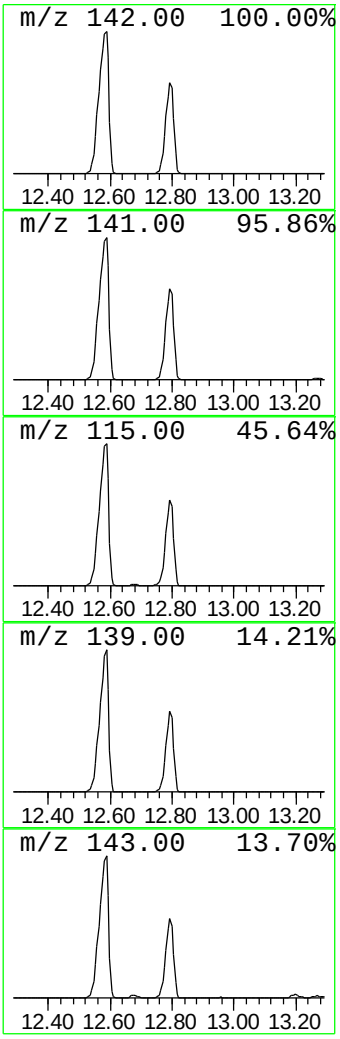
**********

Peak Number 2 Naphthalene, 1-methyl- Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.79 | 6.01 ng/ul | 4380770 | Naphthalene-d8 | 10.92 |

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



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

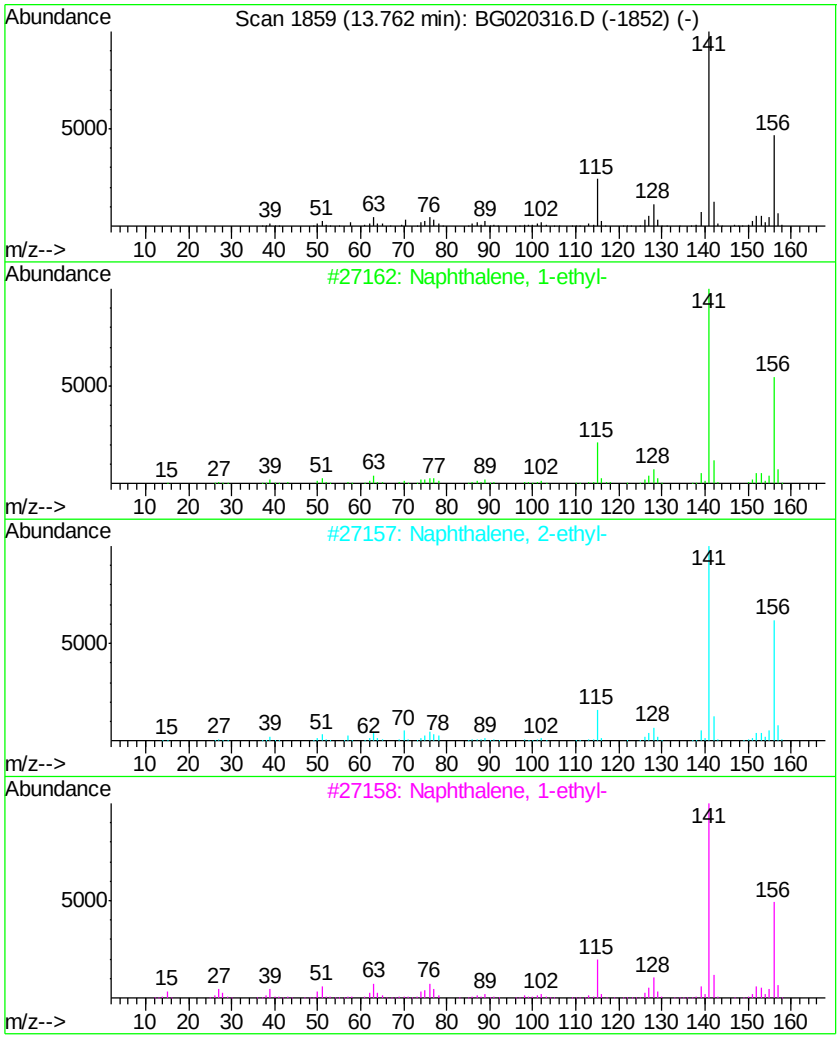
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

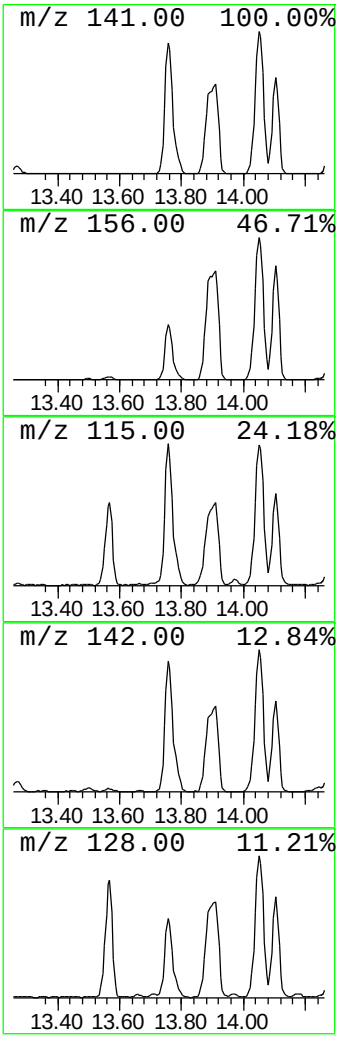
**********

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

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.76 | 17.74 ng/ul | 1340550 | Acenaphthene-d10 | 14.73 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1-ethyl- | 156 | C12H12 | 001127-76-0 | 97 |
| 2 | Naphthalene, 2-ethyl- | 156 | C12H12 | 000939-27-5 | 94 |
| 3 | Naphthalene, 1-ethyl- | 156 | C12H12 | 001127-76-0 | 94 |
| 4 | Naphthalene, 2-ethyl- | 156 | C12H12 | 000939-27-5 | 93 |
| 5 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 91 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

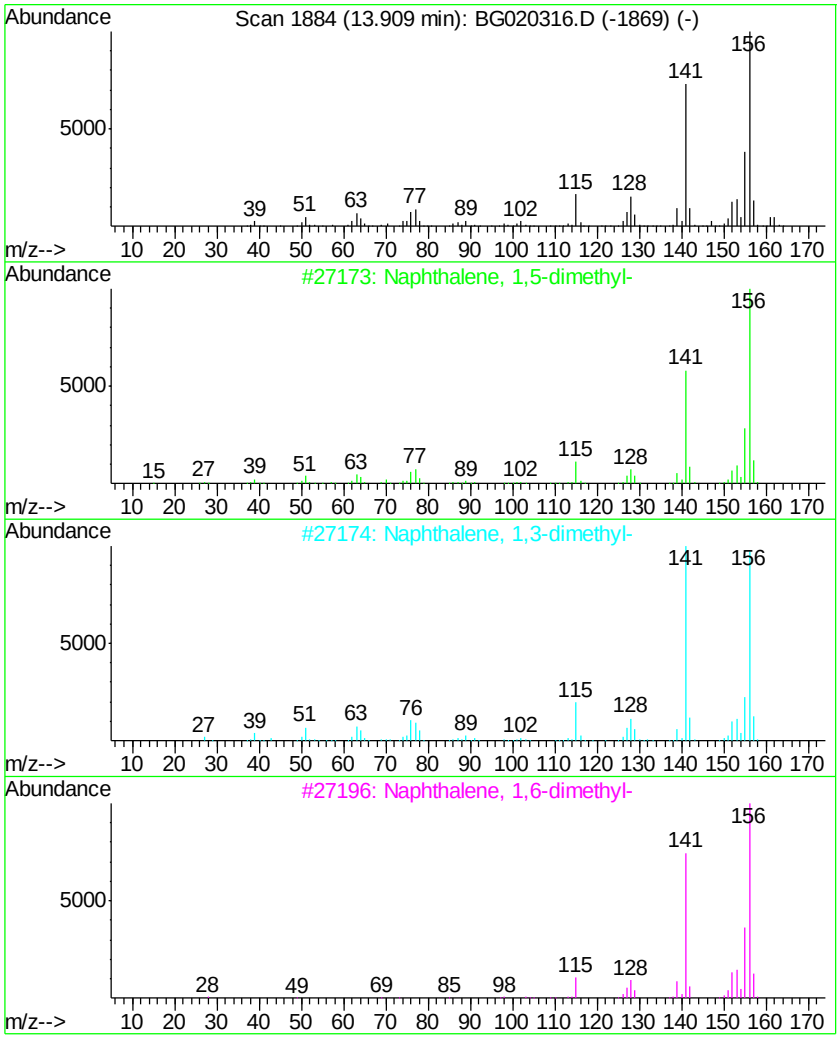
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

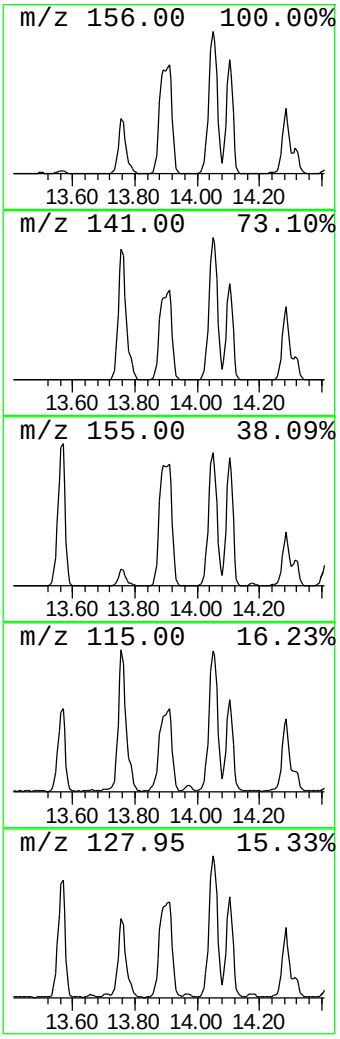
**********

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

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.91 | 32.60 ng/ul | 2463610 | Acenaphthene-d10 | 14.73 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,5-dimethyl- | 156 | C12H12 | 000571-61-9 | 97 |
| 2 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 96 |
| 3 | Naphthalene, 1,6-dimethyl- | 156 | C12H12 | 000575-43-9 | 96 |
| 4 | Naphthalene, 2,6-dimethyl- | 156 | C12H12 | 000581-42-0 | 96 |
| 5 | Naphthalene, 2,7-dimethyl- | 156 | C12H12 | 000582-16-1 | 96 |



Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

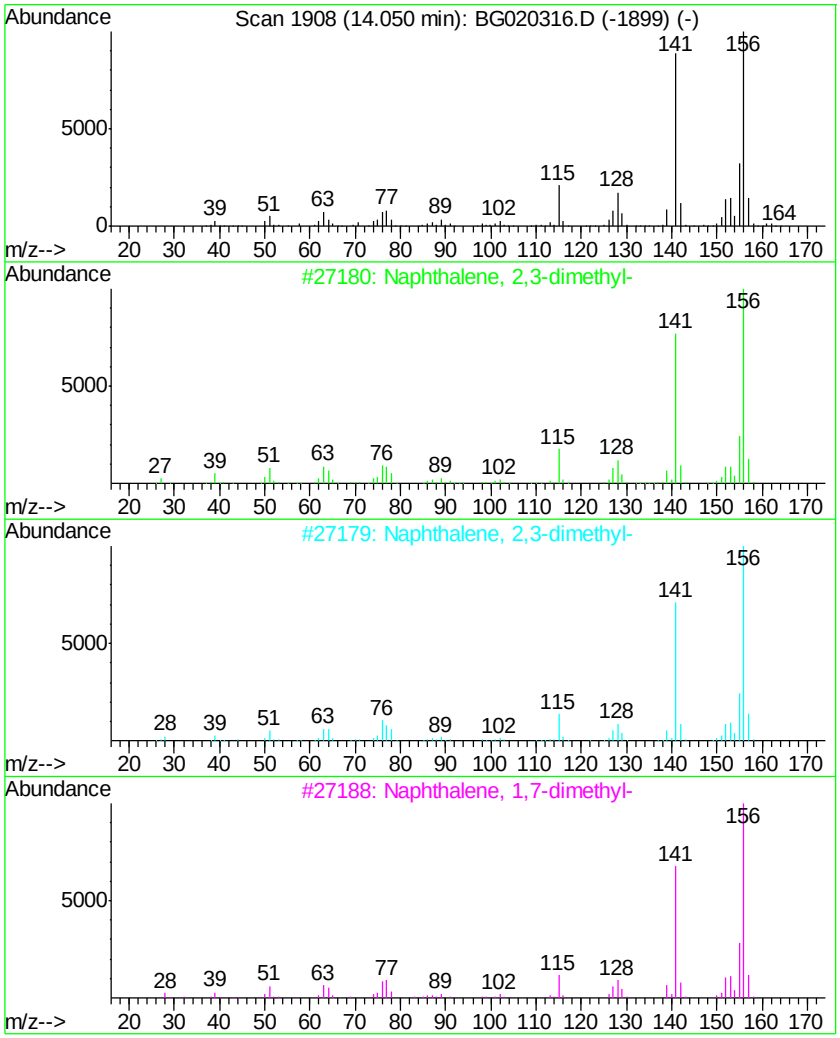
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

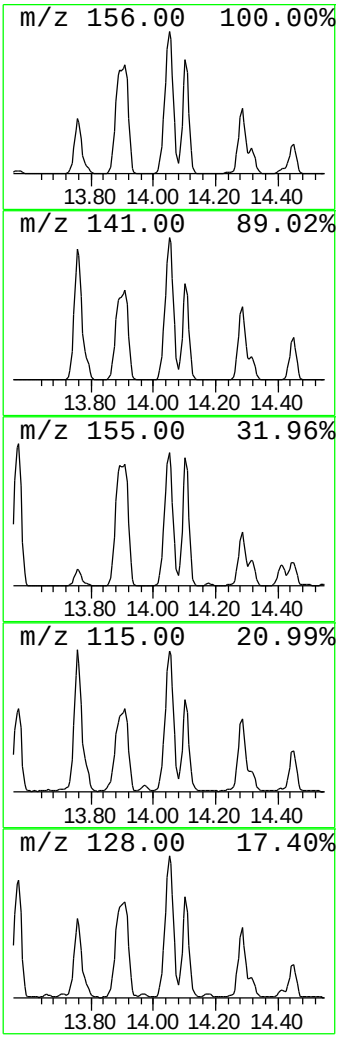
**********

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

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.05 | 30.60 ng/ul | 2312430 | Acenaphthene-d10 | 14.73 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 97 |
| 2 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 97 |
| 3 | Naphthalene, 1,7-dimethyl- | 156 | C12H12 | 000575-37-1 | 97 |
| 4 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 97 |
| 5 | Naphthalene, 2,6-dimethyl- | 156 | C12H12 | 000581-42-0 | 96 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

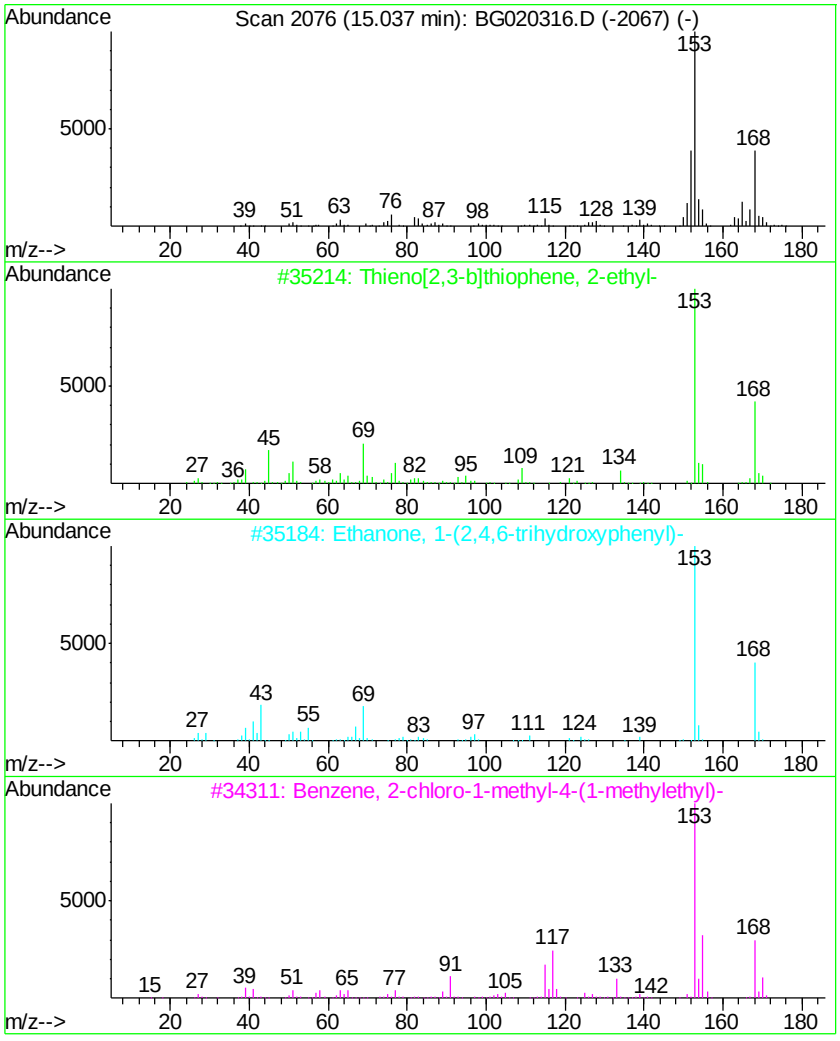
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

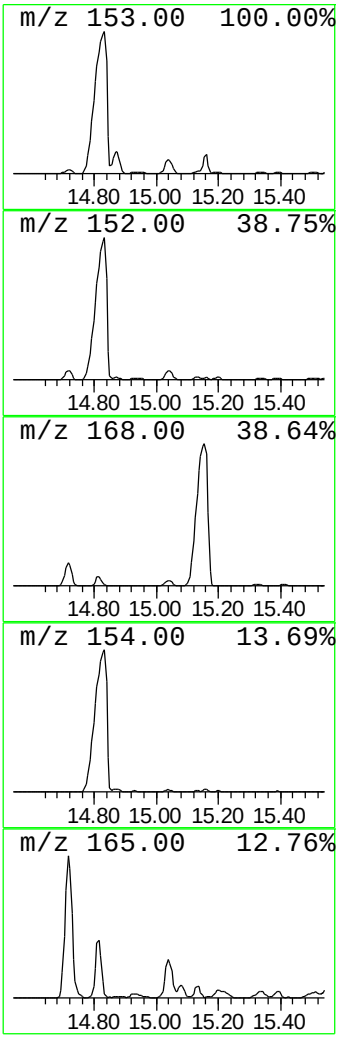
**********

Peak Number 7 Thieno[2,3-b]thiophene, 2-e... Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.04 | 10.13 ng/ul | 765650 | Acenaphthene-d10 | 14.73 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Thieno[2,3-b]thiophene, 2-ethyl- | 168 | C8H8S2 | 005912-01-6 | 53 |
| 2 | Ethanone, 1-(2,4,6-trihydroxyphe... | 168 | C8H8O4 | 000480-66-0 | 52 |
| 3 | Benzene, 2-chloro-1-methyl-4-(1-... | 168 | C10H13Cl | 004395-79-3 | 50 |
| 4 | Acetophenone, 3'-fluoro-4'-methoxy- | 168 | C9H9FO2 | 000455-91-4 | 50 |
| 5 | Ethanone, 1-(2,4,6-trihydroxyphe... | 168 | C8H8O4 | 000480-66-0 | 50 |



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Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

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

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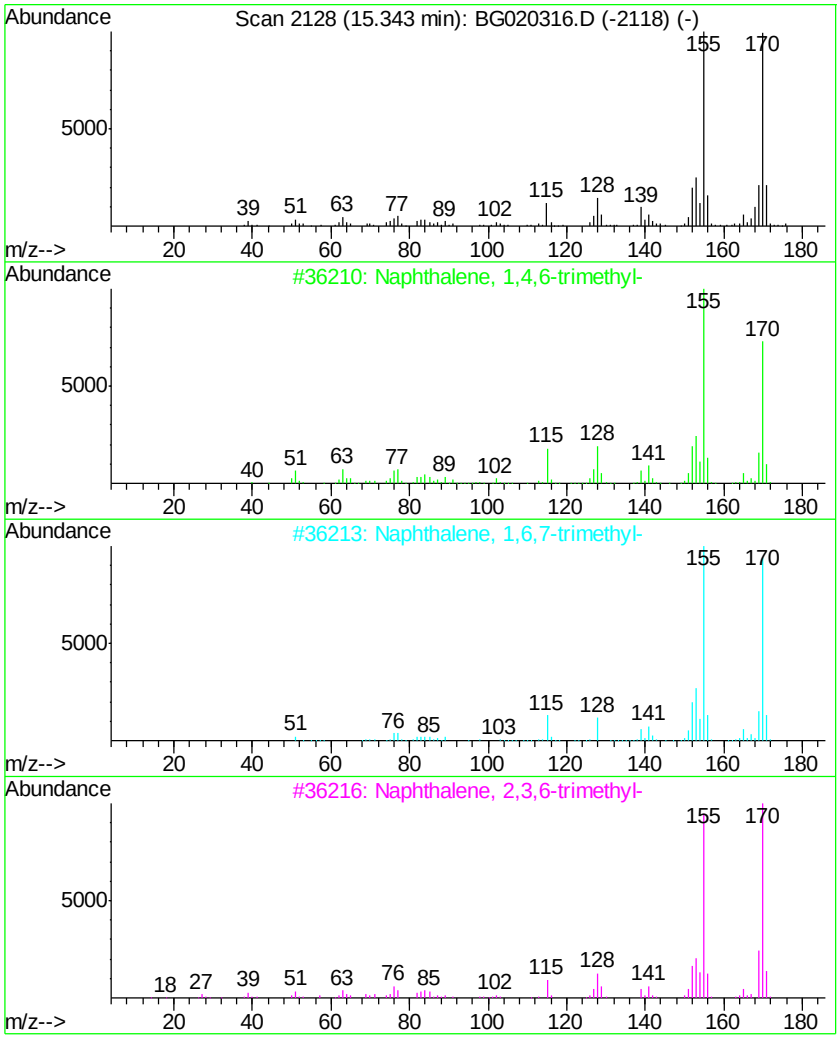
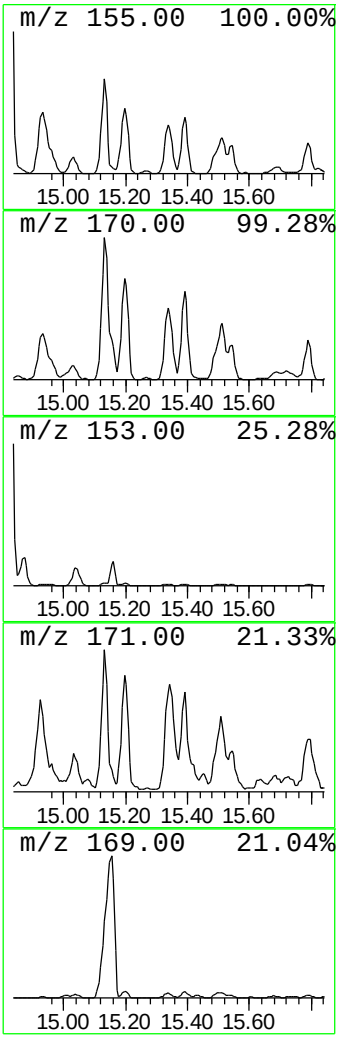
Peak Number 8 Naphthalene, 1,4,6-trimethyl- Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.34 | 6.45 ng/ul | 487626 | Acenaphthene-d10 | 14.73 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,4,6-trimethyl- | 170 | C13H14 | 002131-42-2 | 97 |
| 2 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 96 |
| 3 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 96 |
| 4 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 95 |
| 5 | Naphthalene, 1,4,6-trimethyl- | 170 | C13H14 | 002131-42-2 | 94 |



# Library Search Compound Report

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Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

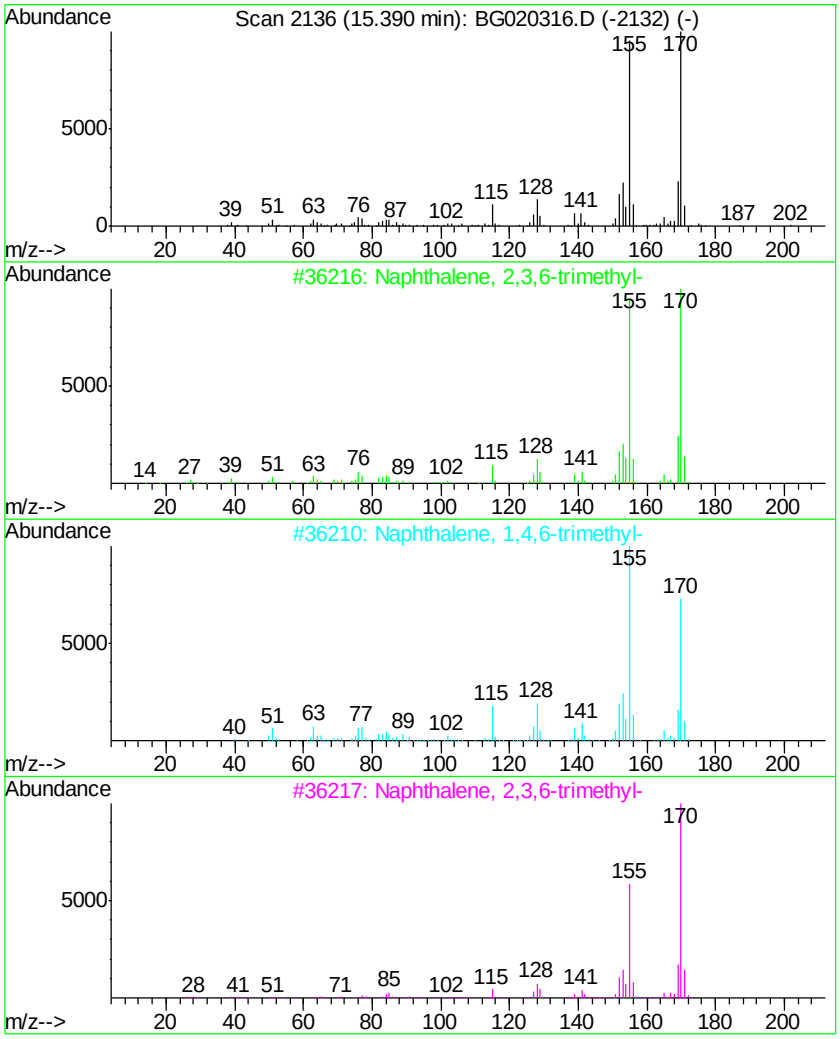
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

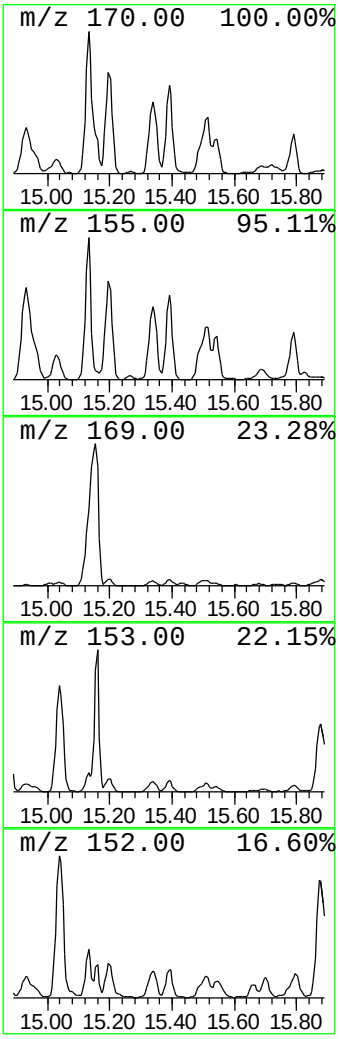
**********

Peak Number 9 Naphthalene, 2,3,6-trimethyl- Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.39 | 6.03 ng/ul | 455374 | Acenaphthene-d10 | 14.73 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 98 |
| 2 | Naphthalene, 1,4,6-trimethyl- | 170 | C13H14 | 002131-42-2 | 96 |
| 3 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 96 |
| 4 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 95 |
| 5 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 94 |



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Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

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

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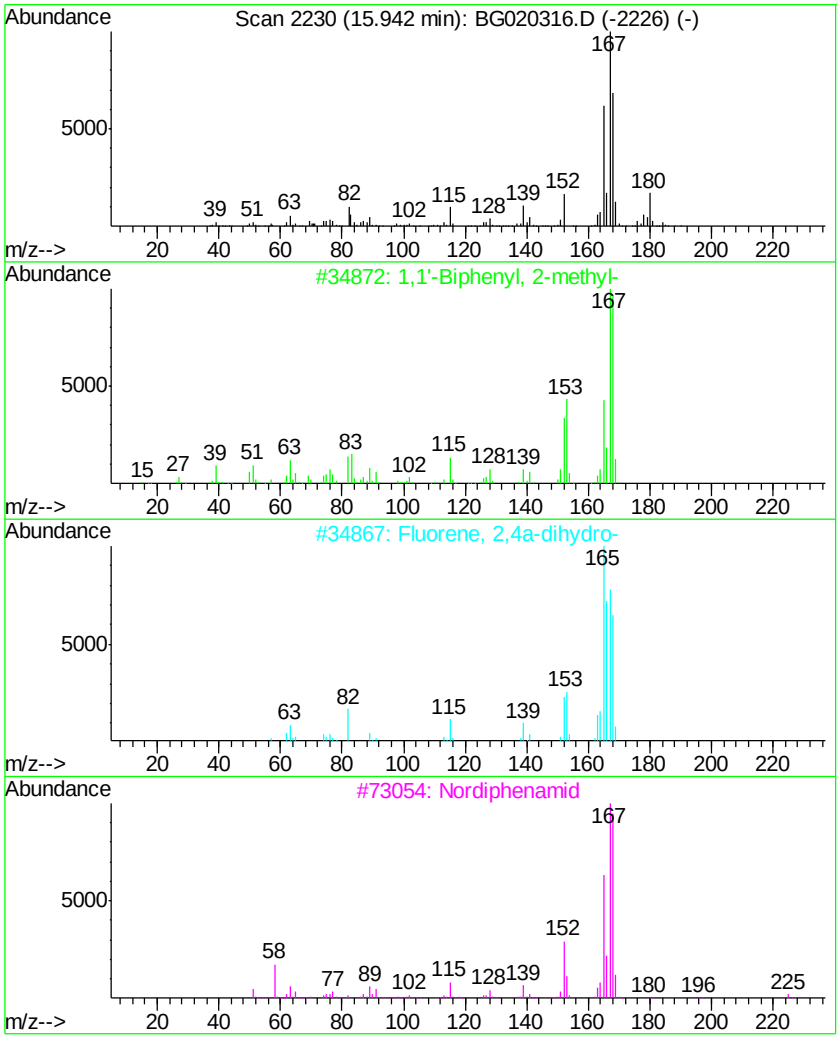
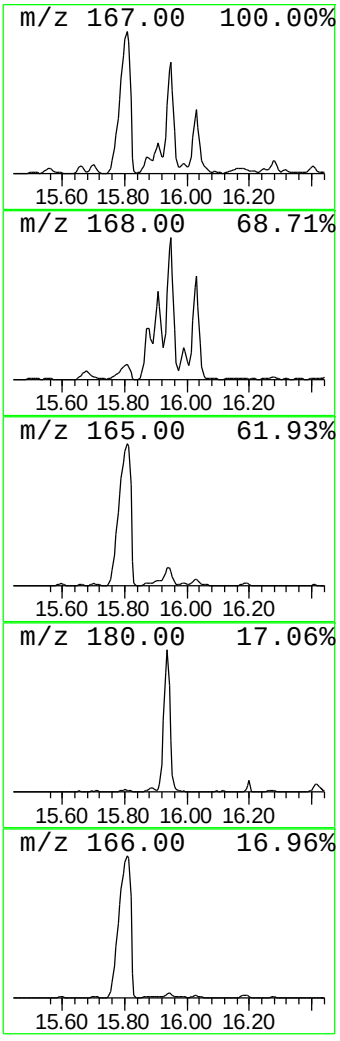
Peak Number 11 1,1'-Biphenyl, 2-methyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.94 | 27.88 ng/ul | 2107020 | Acenaphthene-d10 | 14.73 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,1'-Biphenyl, 2-methyl- | 168 | C13H12 | 000643-58-3 | 52 |
| 2 | Fluorene, 2,4a-dihydro- | 168 | C13H12 | 059247-36-8 | 52 |
| 3 | Nordiphenamid | 225 | C15H15NO | 000954-21-2 | 49 |
| 4 | Nordiphenamid | 225 | C15H15NO | 000954-21-2 | 47 |
| 5 | Benzene, 1,1'-(chloromethylene)bis- | 202 | C13H11Cl | 000090-99-3 | 47 |



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Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

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

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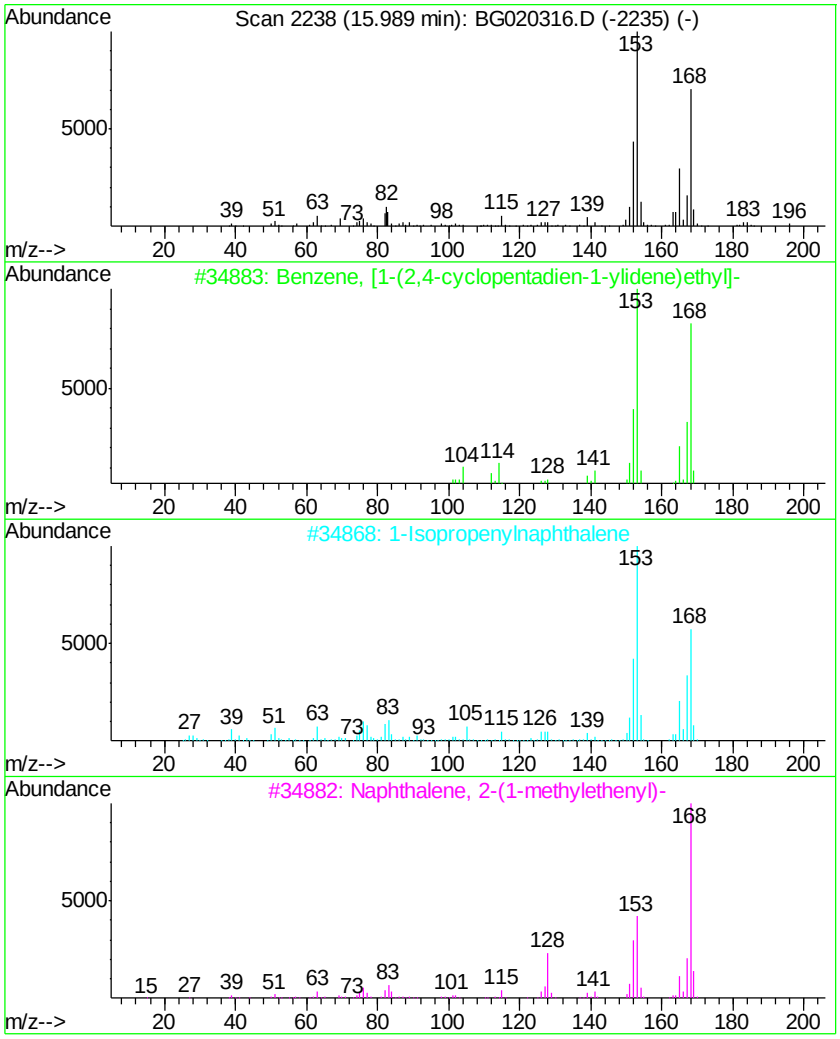
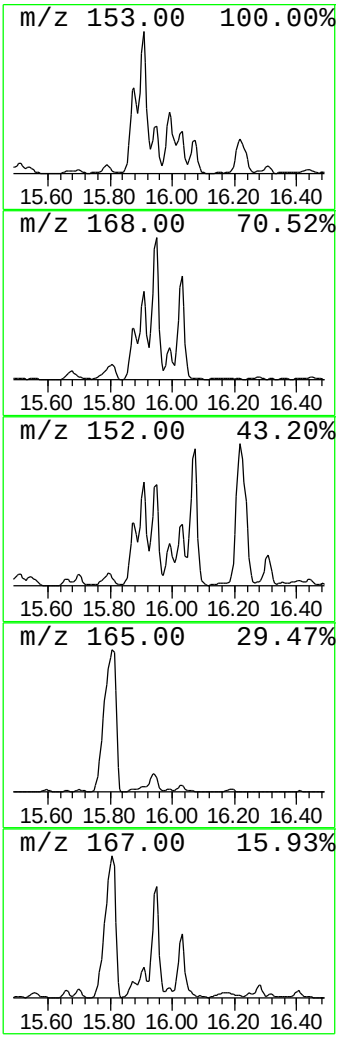
Peak Number 12 Benzene, [1-(2,4-cyclopenta... Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.99 | 6.56 ng/ul | 495481 | Acenaphthene-d10 | 14.73 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, [1-(2,4-cyclopentadien-... | 168 | C13H12 | 002320-32-3 | 74 |
| 2 | 1-Isopropenylnaphthalene | 168 | C13H12 | 001855-47-6 | 64 |
| 3 | Naphthalene, 2-(1-methylethenyl)- | 168 | C13H12 | 003710-23-4 | 58 |
| 4 | 1,1'-Biphenyl, 2-methyl- | 168 | C13H12 | 000643-58-3 | 50 |
| 5 | Naphthalene, 1-(2-propenyl)- | 168 | C13H12 | 002489-86-3 | 50 |



Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

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

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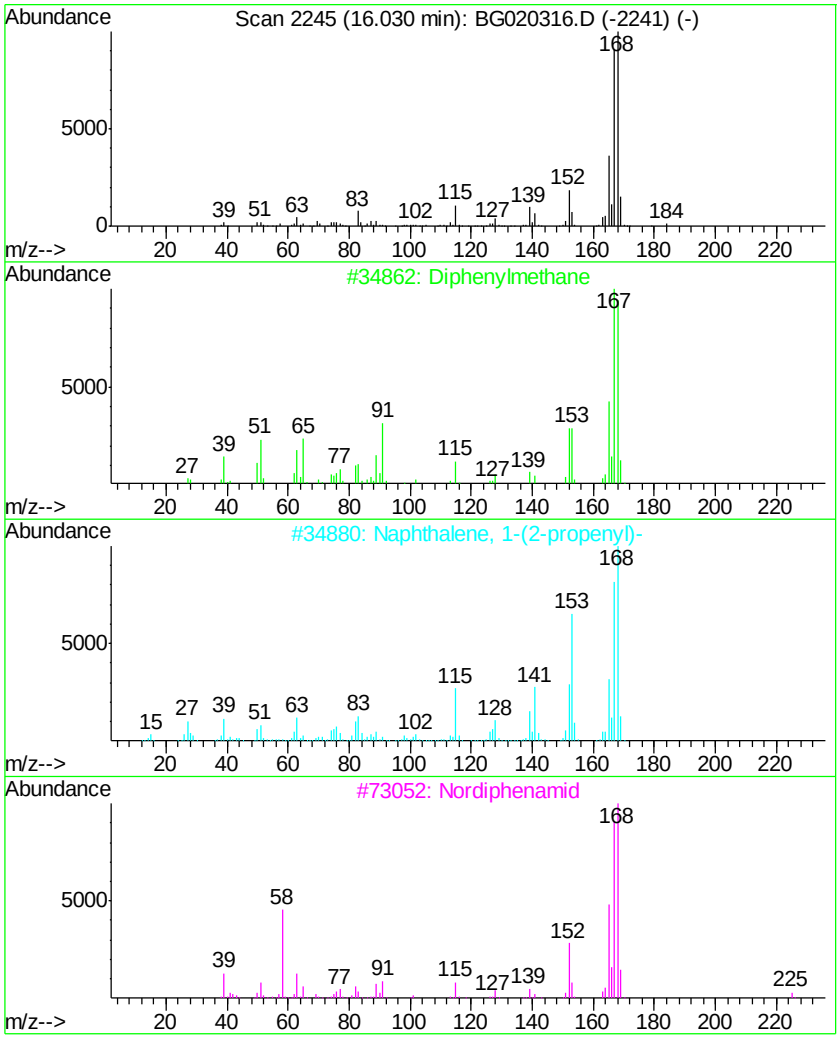
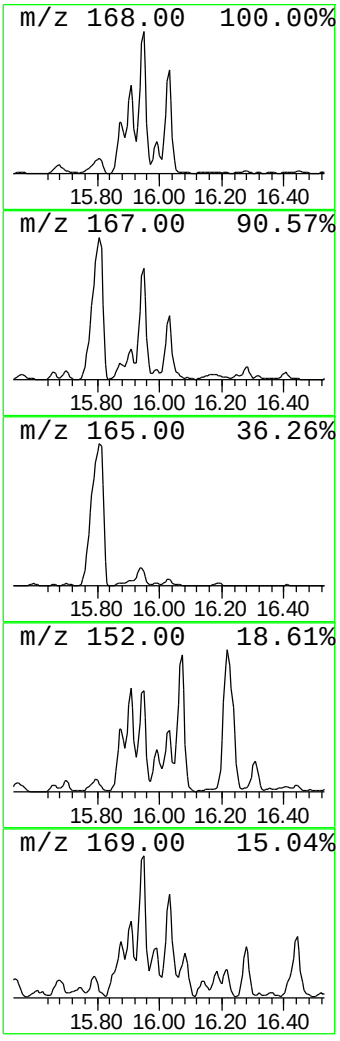
Peak Number 13 Diphenylmethane Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.03 | 14.56 ng/ul | 1100350 | Acenaphthene-d10 | 14.73 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Diphenylmethane | 168 | C13H12 | 000101-81-5 | 83 |
| 2 | Naphthalene, 1-(2-propenyl)- | 168 | C13H12 | 002489-86-3 | 83 |
| 3 | Nordiphenamid | 225 | C15H15NO | 000954-21-2 | 83 |
| 4 | Diphenylmethane | 168 | C13H12 | 000101-81-5 | 83 |
| 5 | 1,1'-Biphenyl, 2-methyl- | 168 | C13H12 | 000643-58-3 | 83 |



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Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

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

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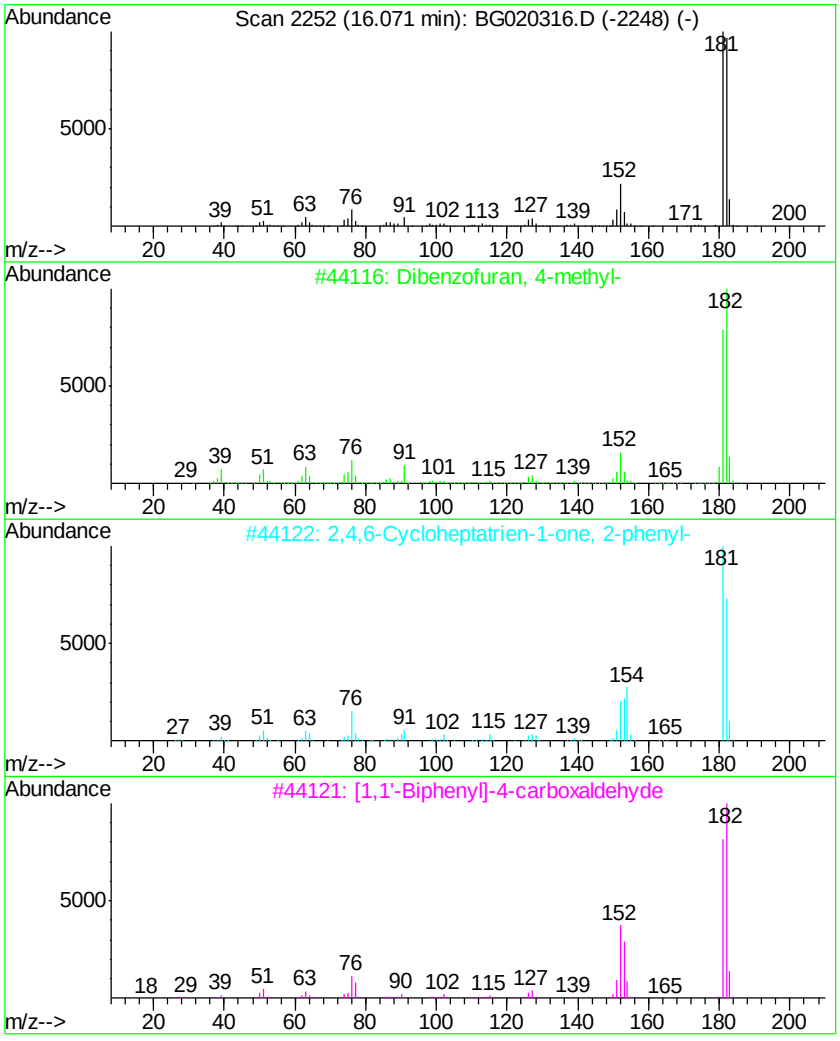
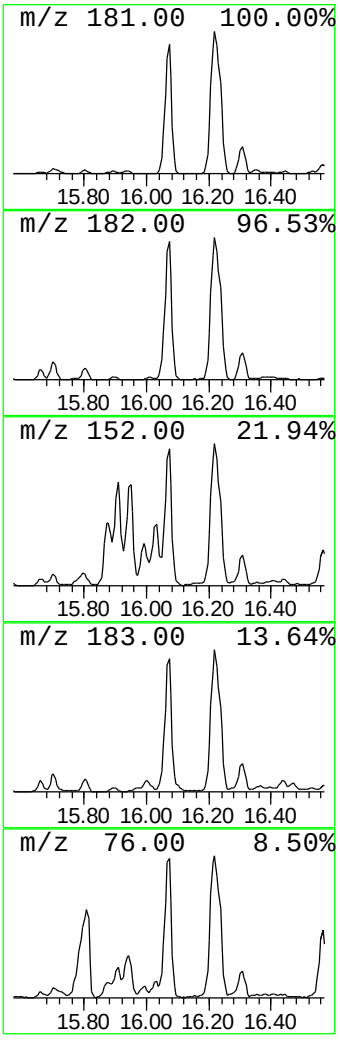
Peak Number 14 Dibenzofuran, 4-methyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.07 | 26.79 ng/ul | 2024050 | Acenaphthene-d10 | 14.73 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dibenzofuran, 4-methyl- | 182 | C13H10O | 007320-53-8 | 87 |
| 2 | 2,4,6-Cycloheptatrien-1-one, 2-p... | 182 | C13H10O | 014562-09-5 | 80 |
| 3 | [1,1'-Biphenyl]-4-carboxaldehyde | 182 | C13H10O | 003218-36-8 | 80 |
| 4 | 9H-Fluoren-9-ol | 182 | C13H10O | 001689-64-1 | 78 |
| 5 | 9H-Fluoren-9-ol | 182 | C13H10O | 001689-64-1 | 78 |



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Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

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

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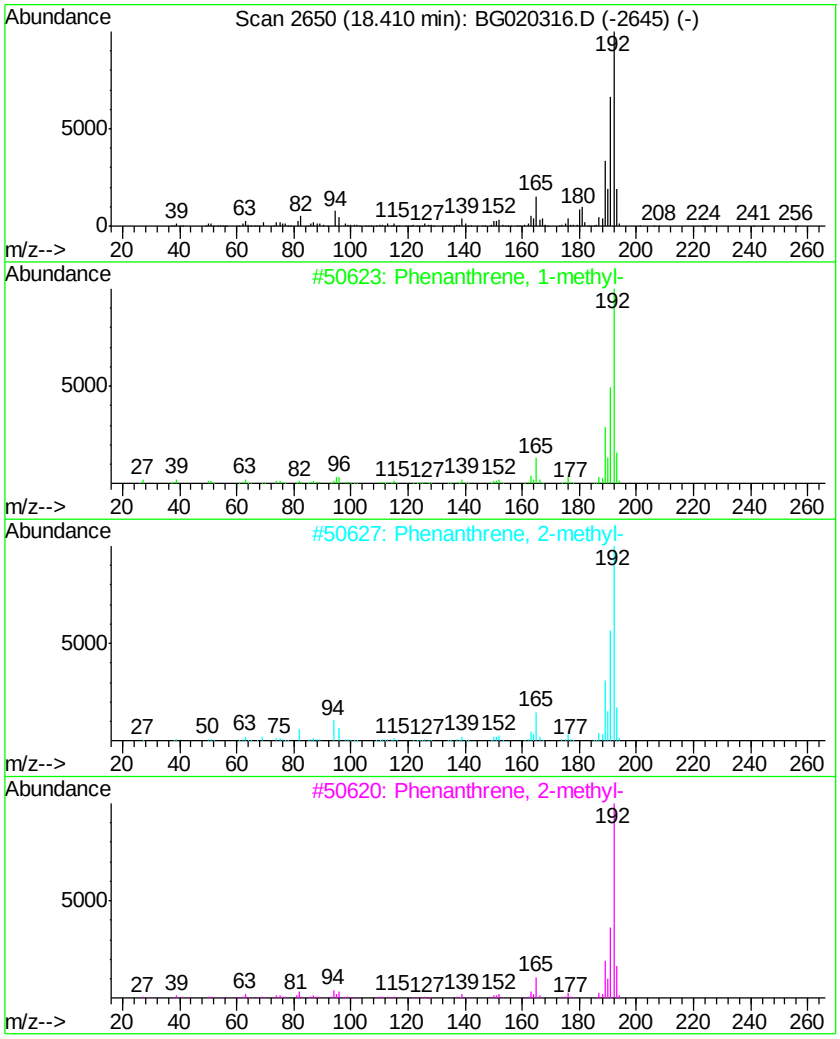
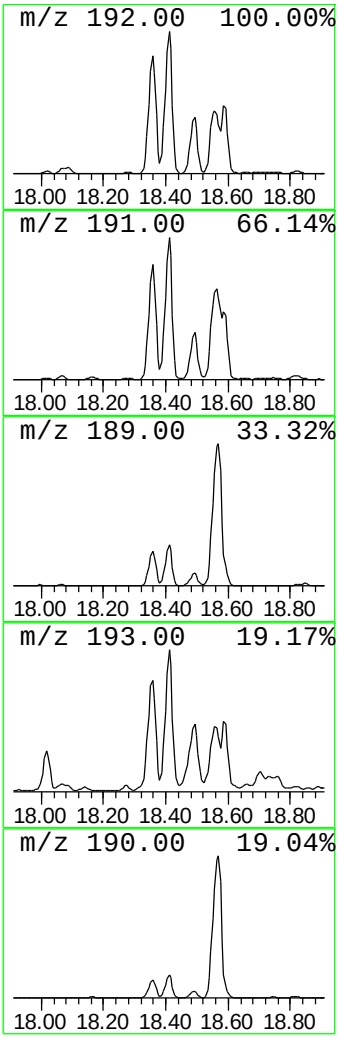
Peak Number 15 Phenanthrene, 1-methyl- Concentration Rank 31

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.41 | 2.32 ng/ul | 4123900 | Phenanthrene-d10 | 17.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 97 |
| 2 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 95 |
| 3 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 95 |
| 4 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 94 |
| 5 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 93 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

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

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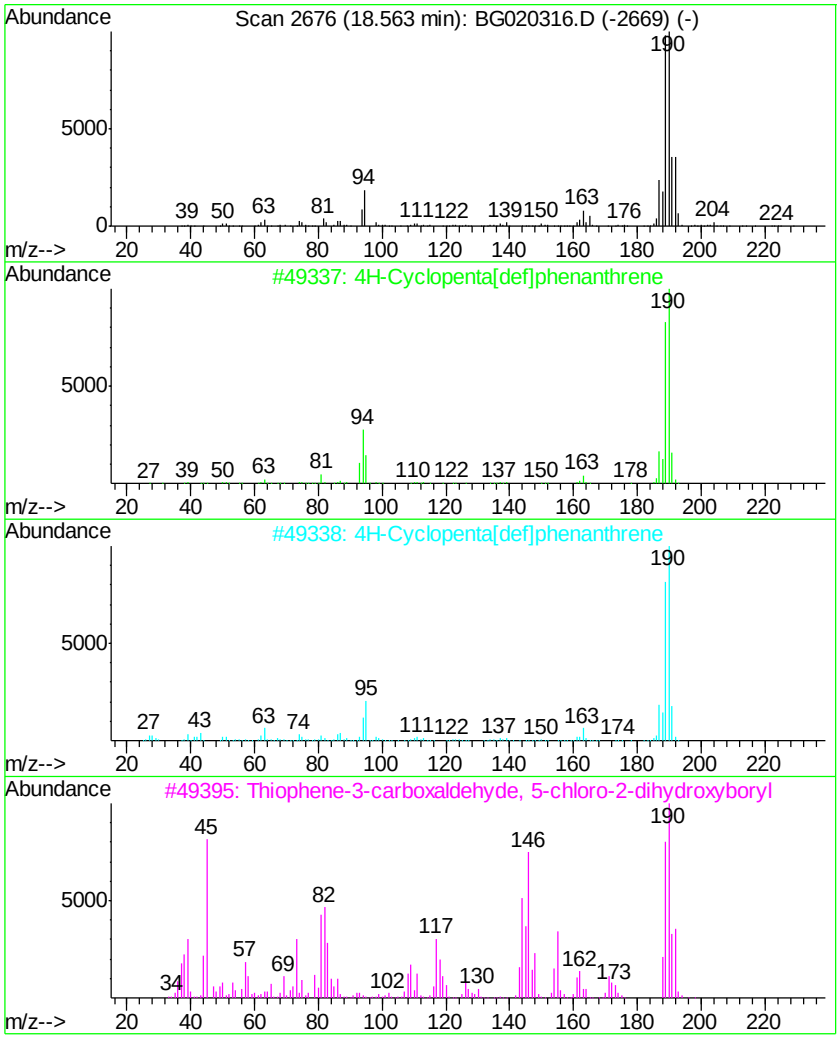
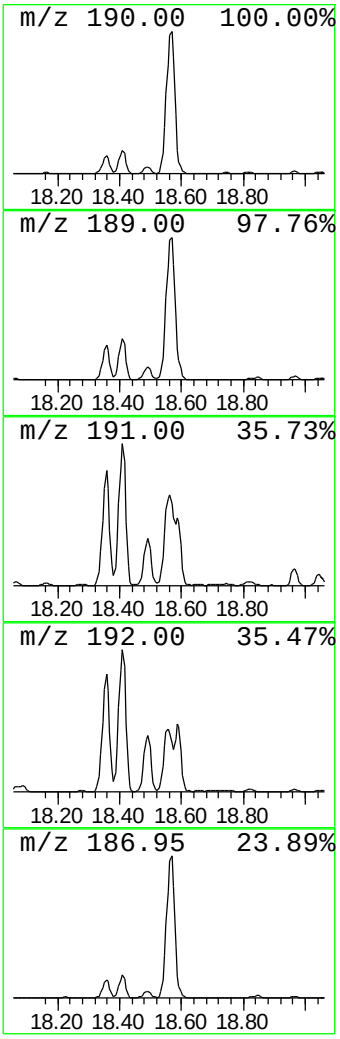
Peak Number 16 4H-Cyclopenta[def]phenanthrene Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.56 | 4.42 ng/ul | 7868020 | Phenanthrene-d10 | 17.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 83 |
| 2 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 76 |
| 3 | Thiophene-3-carboxaldehyde, 5-ch... | 190 | C5H4BClO3S | 036155-87-0 | 64 |
| 4 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 59 |
| 5 | 2,3,5,6-Tetramethylterephthalald... | 190 | C12H14O2 | 007072-01-7 | 50 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

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

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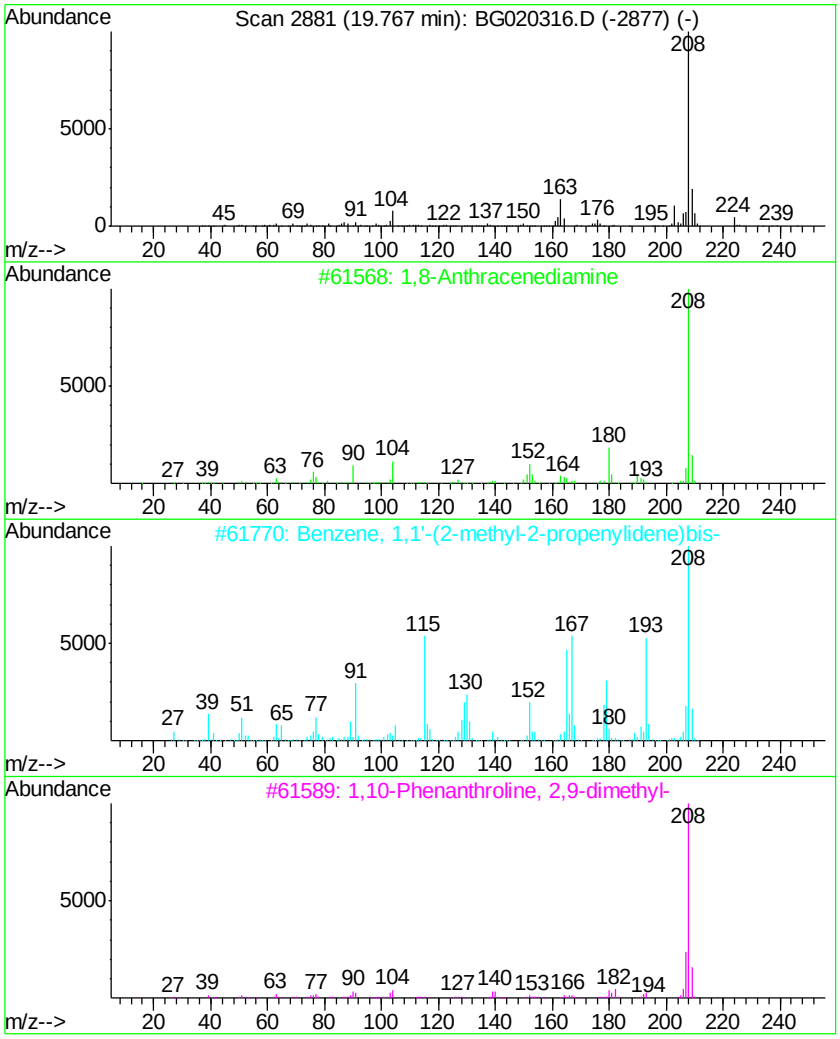
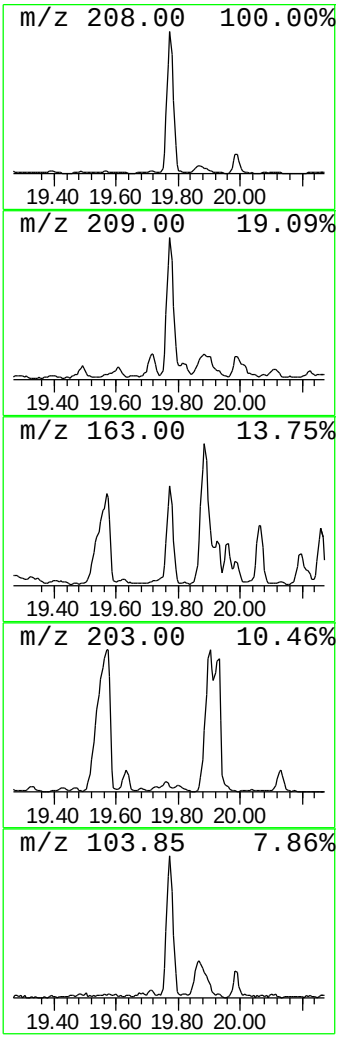
Peak Number 17 1,8-Anthracenediamine Concentration Rank 30

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.77 | 2.42 ng/ul | 791801 | Chrysene-d12 | 21.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,8-Anthracenediamine | 208 | C14H12N2 | 139312-39-3 | 64 |
| 2 | Benzene, 1,1'-(2-methyl-2-propen... | 208 | C16H16 | 070813-56-8 | 59 |
| 3 | 1,10-Phenanthroline, 2,9-dimethyl- | 208 | C14H12N2 | 000484-11-7 | 59 |
| 4 | 1,10-Phenanthroline, 2,9-dimethyl- | 208 | C14H12N2 | 000484-11-7 | 59 |
| 5 | 5-Ethyl-2-formylpyridine thiosem... | 208 | C9H12N4S | 031181-48-3 | 53 |



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Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

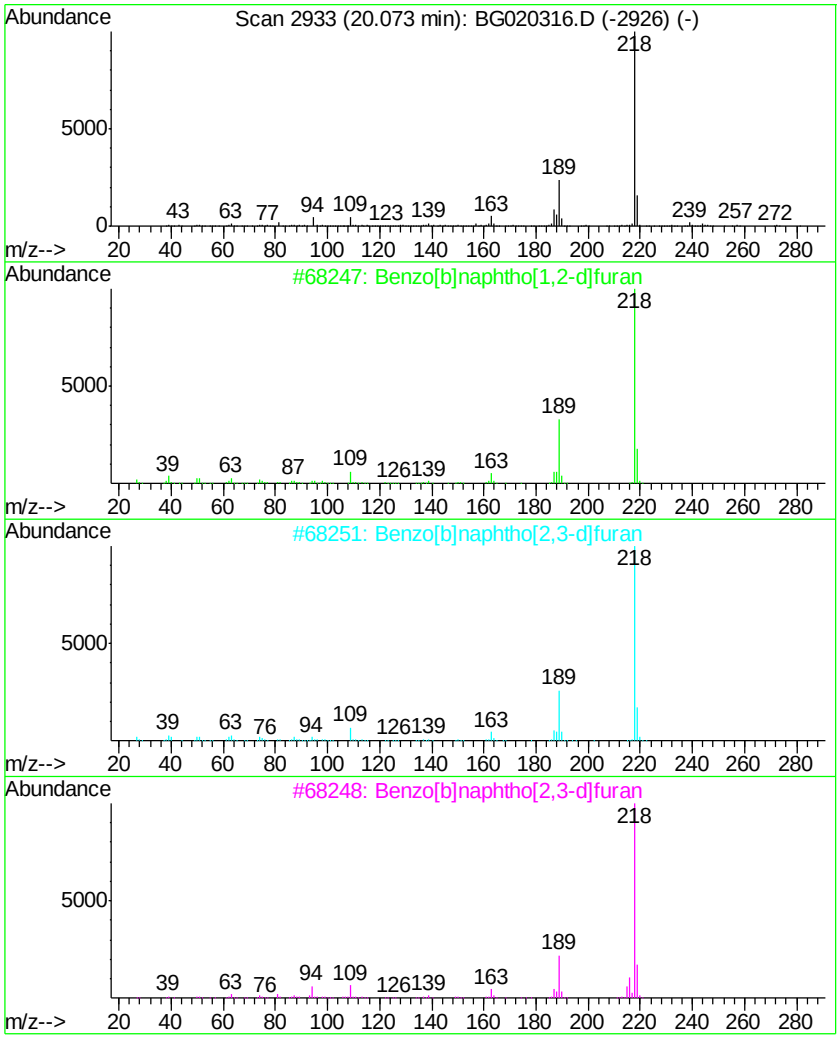
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

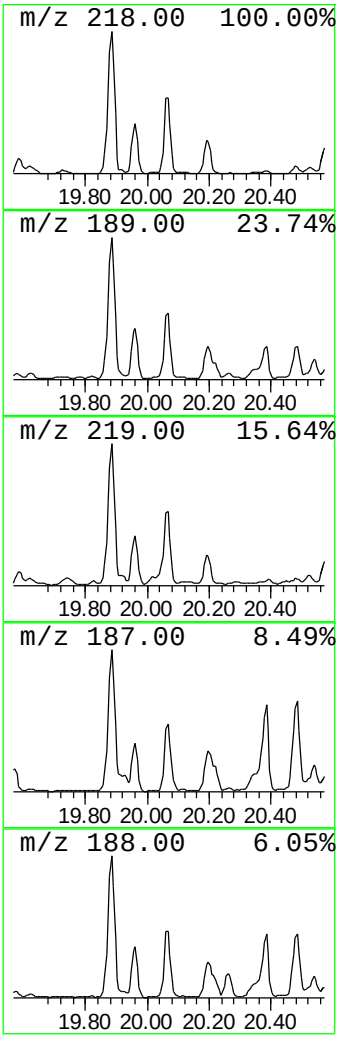
**********

Peak Number 18 Benzo[b]naphtho[1,2-d]furan Concentration Rank 23

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.07 | 3.58 ng/ul | 1172210 | Chrysene-d12 | 21.76 |

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



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

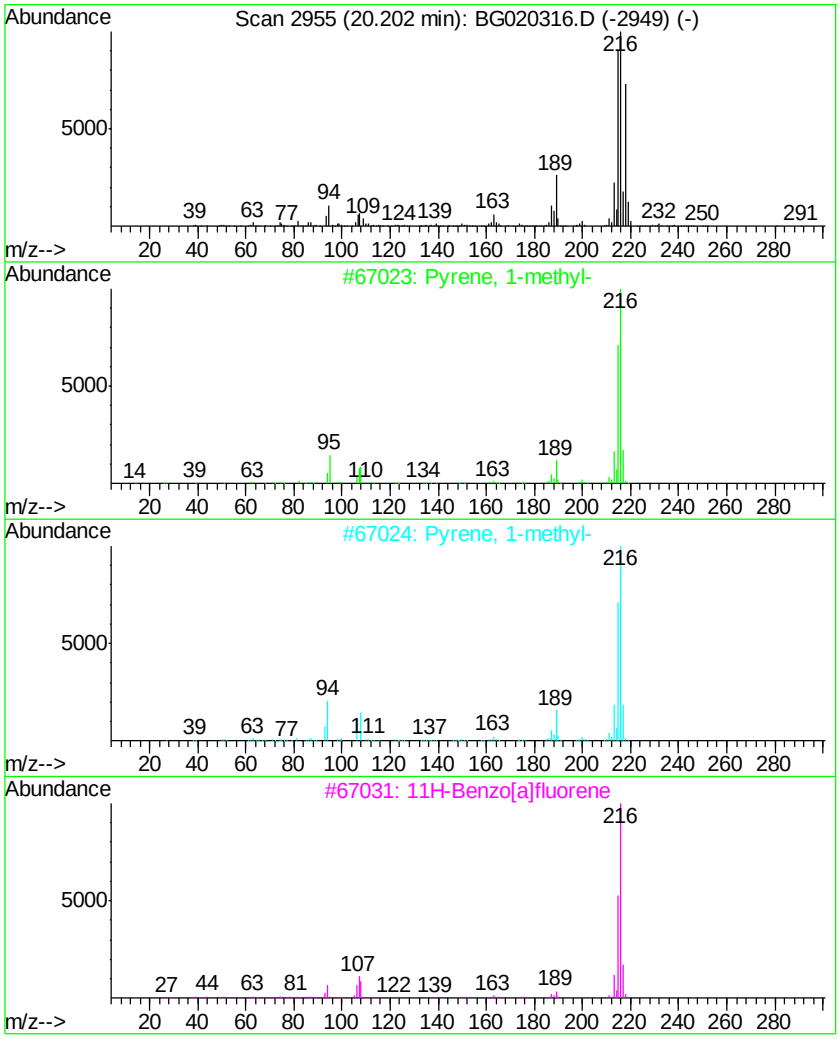
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

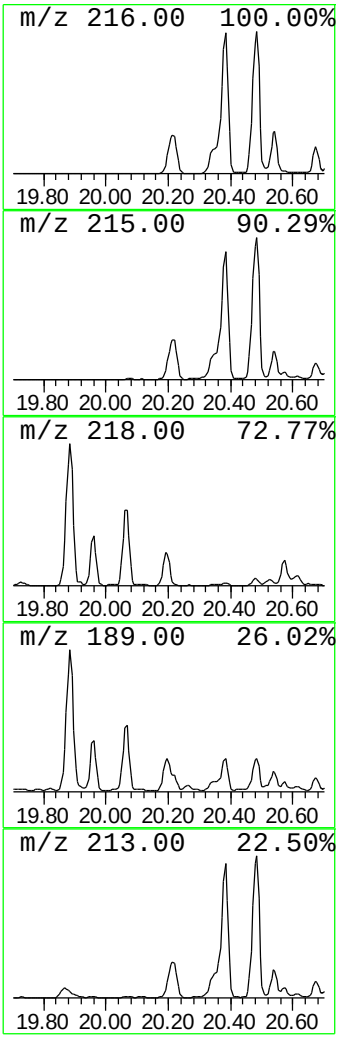
**********

Peak Number 19 Pyrene, 1-methyl- Concentration Rank 28

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.20 | 3.16 ng/ul | 1033470 | Chrysene-d12 | 21.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 94 |
| 2 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 89 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 81 |
| 4 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 81 |
| 5 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 76 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

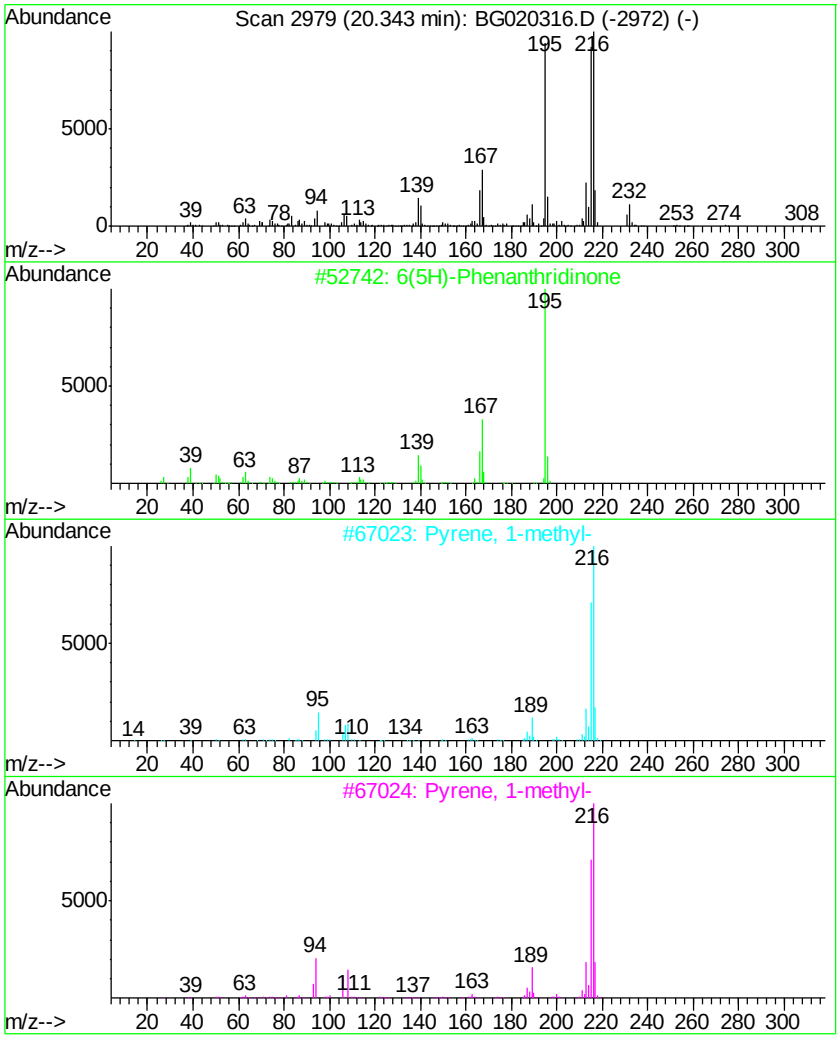
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

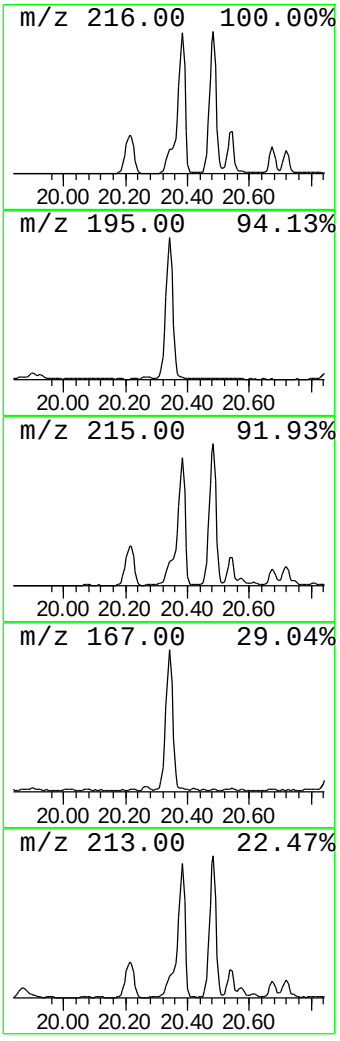
**********

Peak Number 20 6(5H)-Phenanthridinone Concentration Rank 22

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.34 | 3.87 ng/ul | 1267130 | Chrysene-d12 | 21.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 6(5H)-Phenanthridinone | 195 | C13H9NO | 001015-89-0 | 93 |
| 2 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 90 |
| 3 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 89 |
| 4 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 87 |
| 5 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 83 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

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

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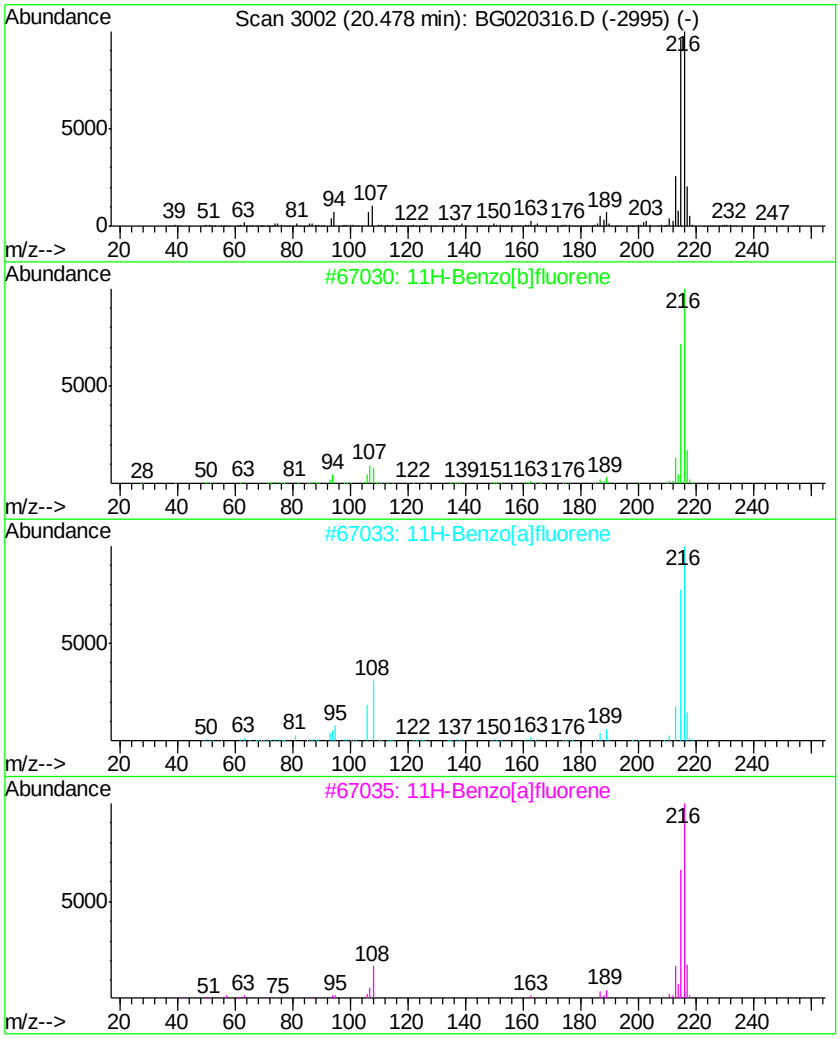
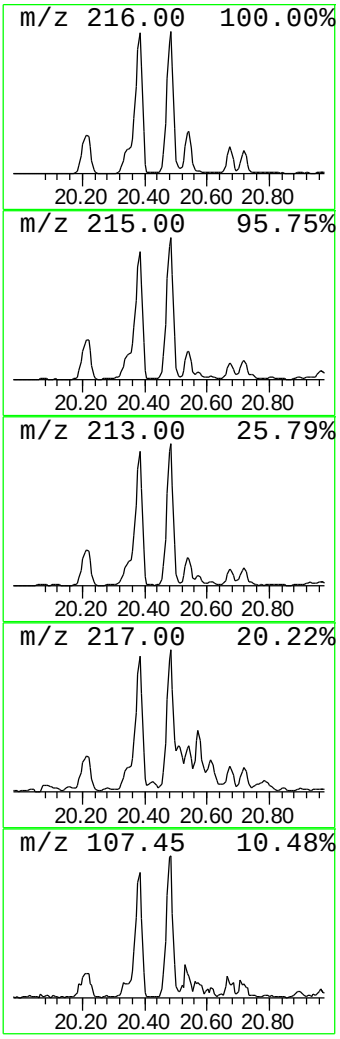
Peak Number 22 11H-Benzo[b]fluorene Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.48 | 11.38 ng/ul | 3722810 | Chrysene-d12 | 21.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 95 |
| 2 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 93 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 93 |
| 4 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 93 |
| 5 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 93 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

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

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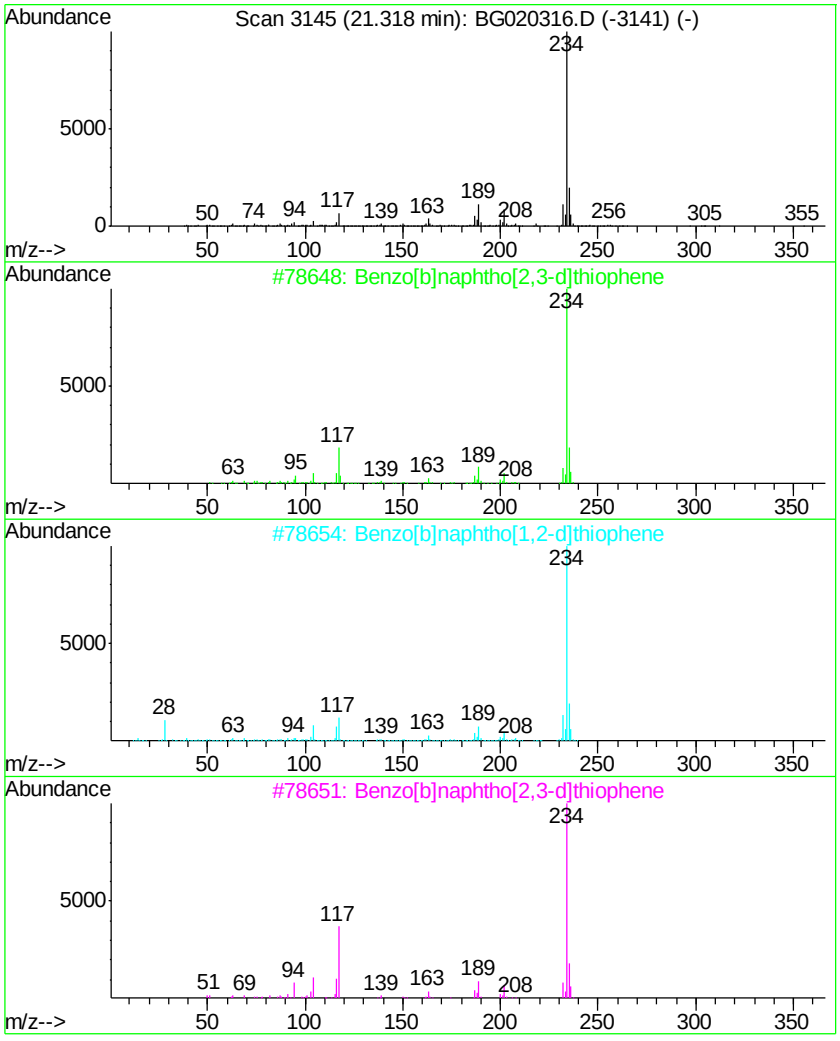
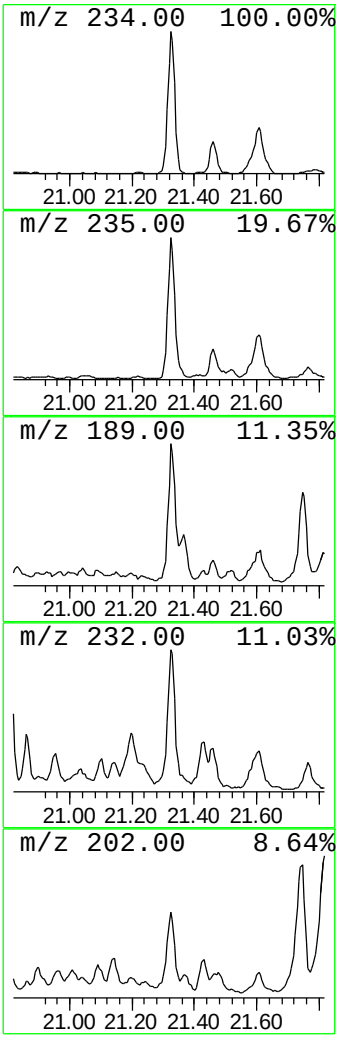
Peak Number 24 Benzo[b]naphtho[2,3-d]thiop... Concentration Rank 26

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 21.32 | 3.28 ng/ul | 1074430 | Chrysene-d12 | 21.76 |

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



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

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

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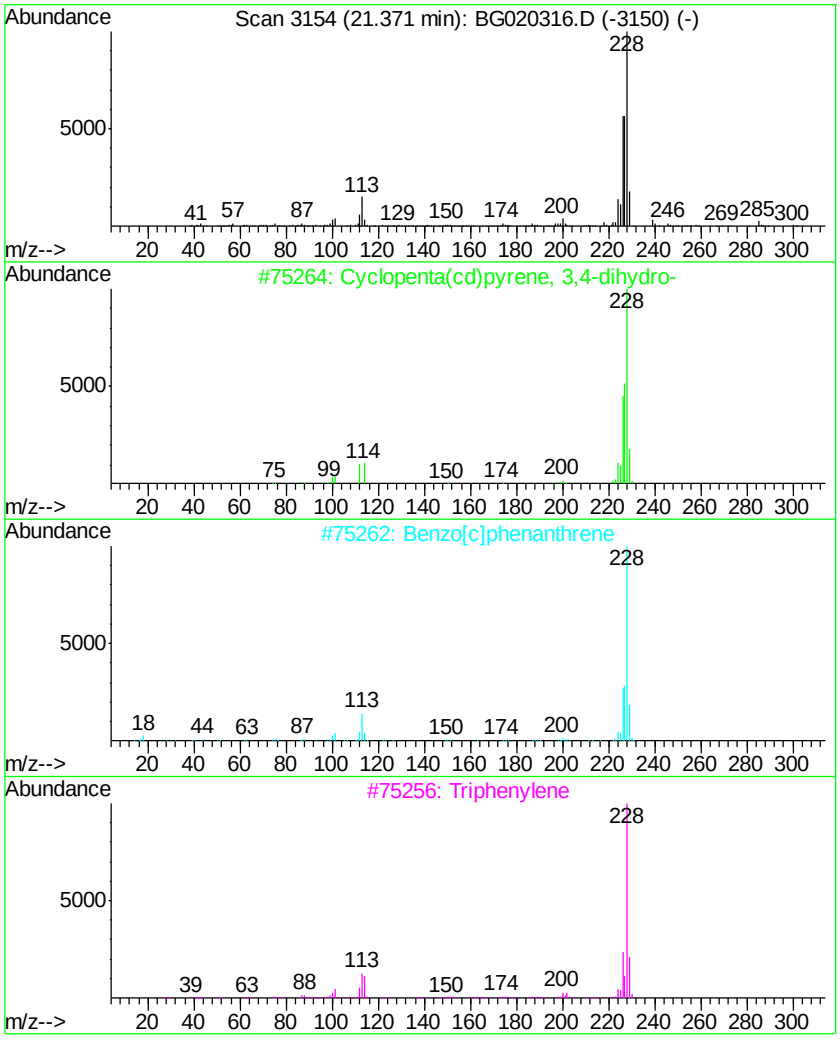
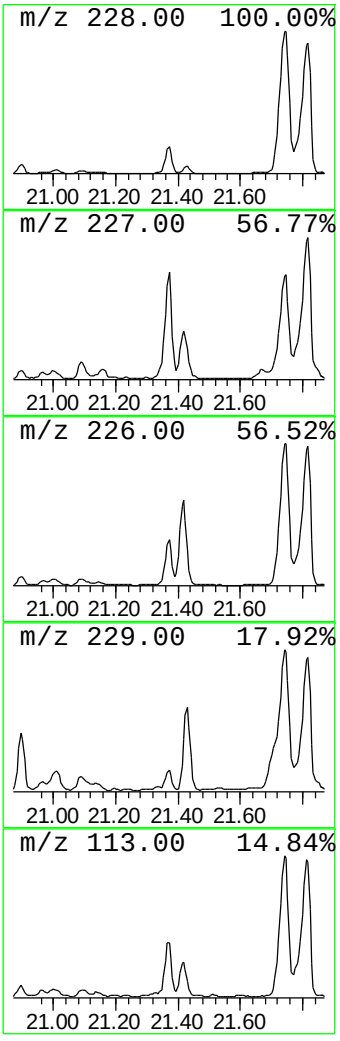
Peak Number 25 Cyclopenta(cd)pyrene, 3,4-d... Concentration Rank 25

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 21.37 | 3.30 ng/ul | 1078170 | Chrysene-d12 | 21.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(cd)pyrene, 3,4-dihydro- | 228 | C18H12 | 025732-74-5 | 64 |
| 2 | Benzo[c]phenanthrene | 228 | C18H12 | 000195-19-7 | 52 |
| 3 | Triphenylene | 228 | C18H12 | 000217-59-4 | 49 |
| 4 | Triphenylene | 228 | C18H12 | 000217-59-4 | 49 |
| 5 | Benzo[c]phenanthrene | 228 | C18H12 | 000195-19-7 | 49 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

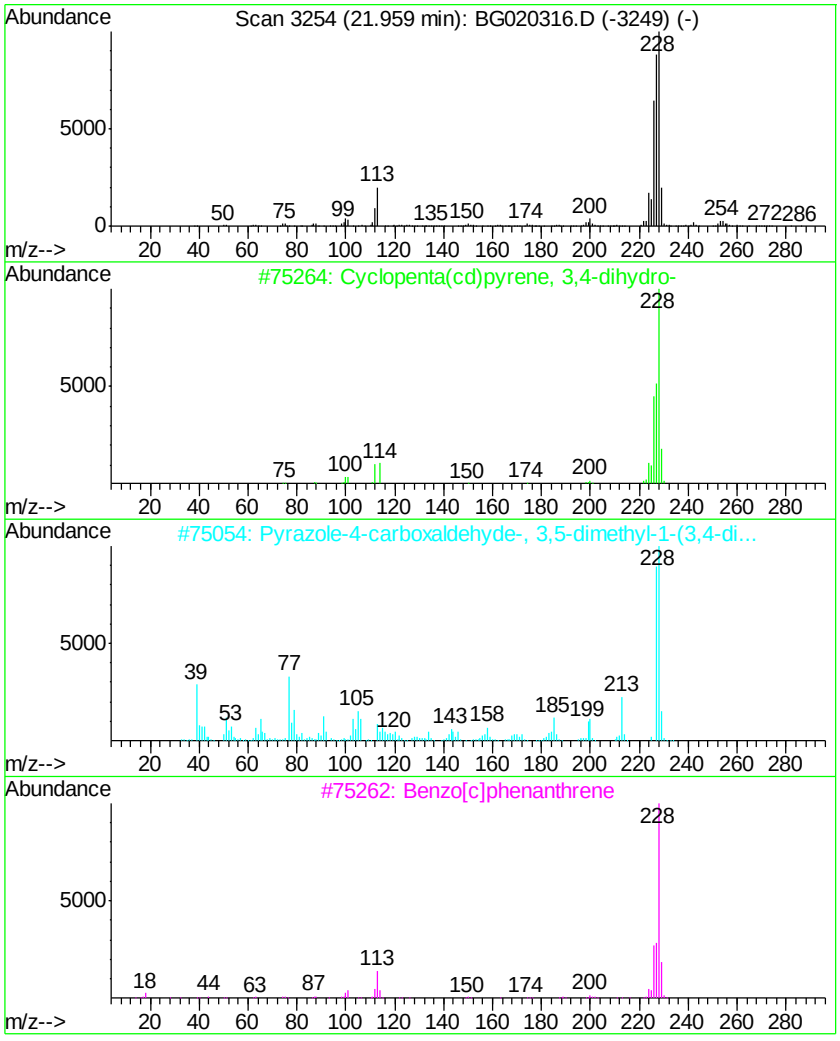
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

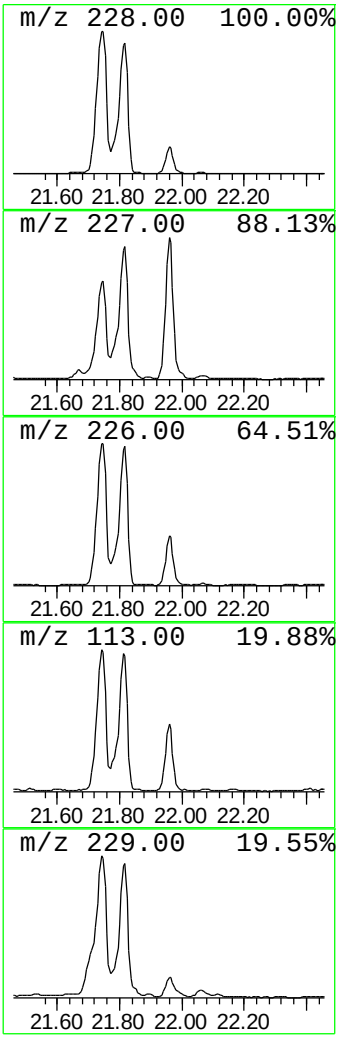
**********

Peak Number 27 Cyclopenta(cd)pyrene, 3,4-d... Concentration Rank 24

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 21.96 | 3.39 ng/ul | 1108180 | Chrysene-d12 | 21.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(cd)pyrene, 3,4-dihydro- | 228 | C18H12 | 025732-74-5 | 91 |
| 2 | Pyrazole-4-carboxaldehyde-, 3,5-... | 228 | C14H16N2O | 1000272-54-8 | 50 |
| 3 | Benzo[c]phenanthrene | 228 | C18H12 | 000195-19-7 | 46 |
| 4 | Triphenylene | 228 | C18H12 | 000217-59-4 | 45 |
| 5 | Chrysene | 228 | C18H12 | 000218-01-9 | 43 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

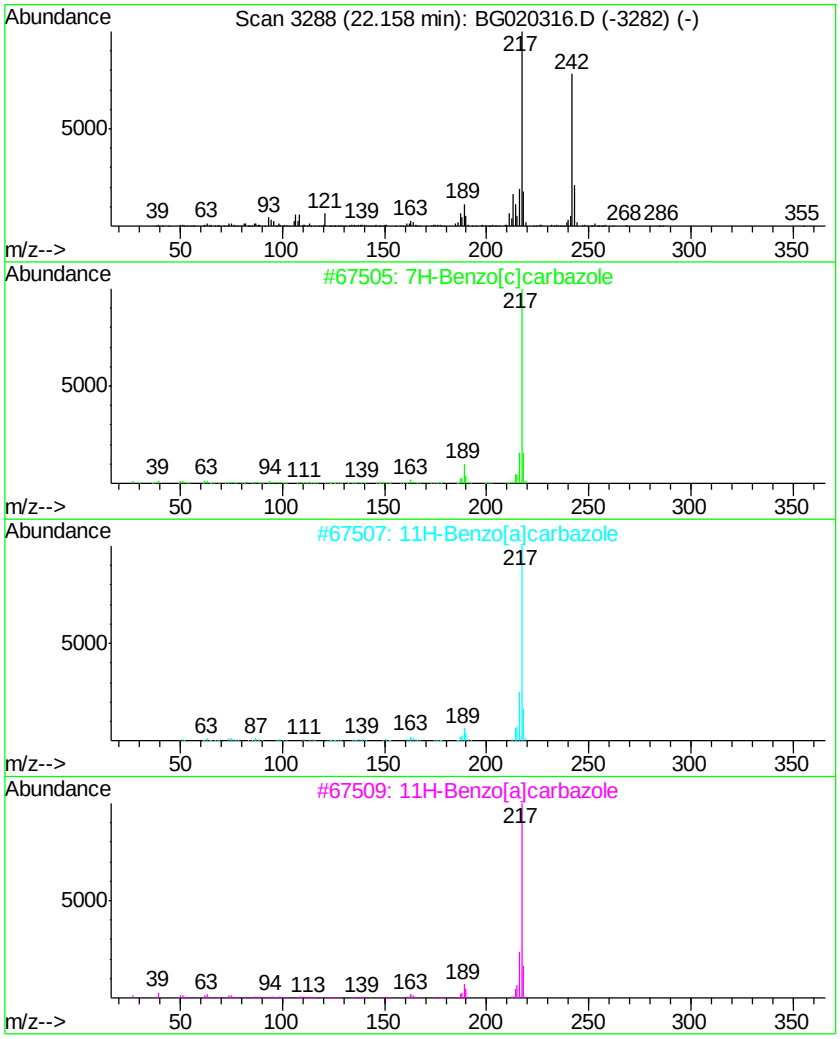
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

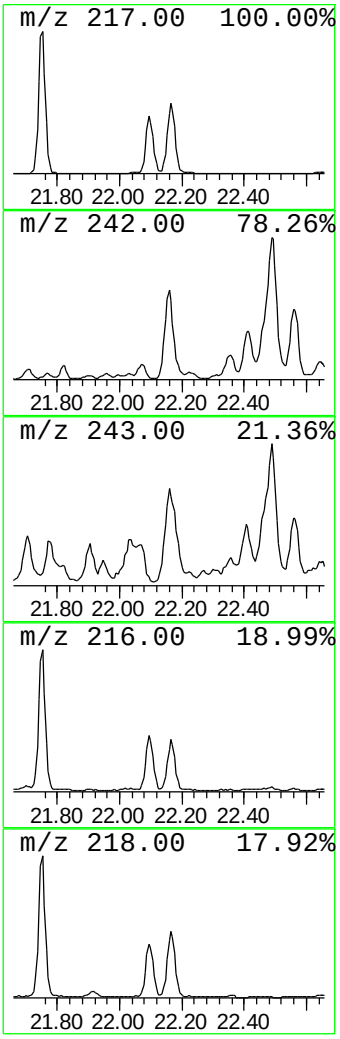
**********

Peak Number 28 7H-Benzo[c]carbazole Concentration Rank 32

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 22.16 | 2.24 ng/ul | 732841 | Chrysene-d12 | 21.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 7H-Benzo[c]carbazole | 217 | C16H11N | 000205-25-4 | 64 |
| 2 | 11H-Benzo[a]carbazole | 217 | C16H11N | 000239-01-0 | 64 |
| 3 | 11H-Benzo[a]carbazole | 217 | C16H11N | 000239-01-0 | 64 |
| 4 | Benzo(b)carbazole | 217 | C16H11N | 000243-28-7 | 64 |
| 5 | 7H-Benzo[c]carbazole | 217 | C16H11N | 000205-25-4 | 58 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

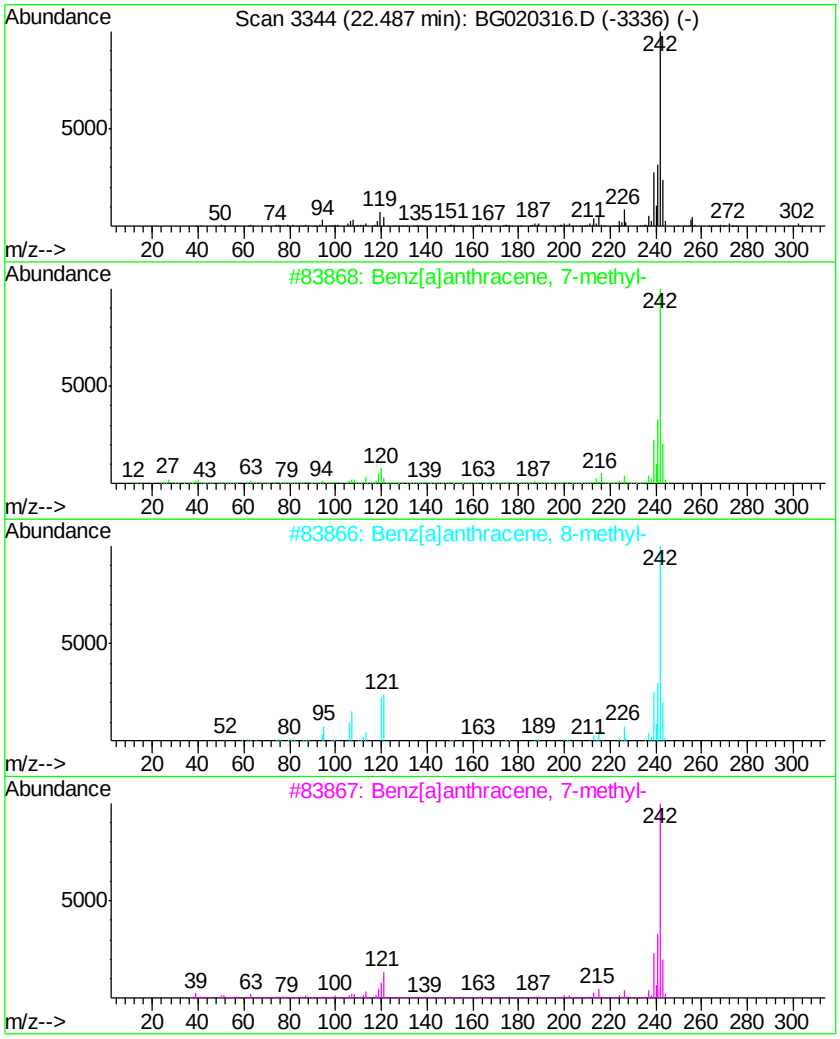
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

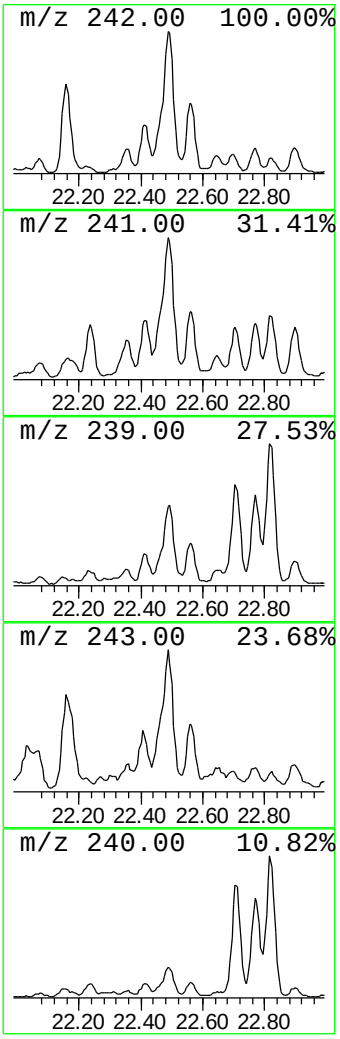
**********

Peak Number 29 Benz[a]anthracene, 7-methyl- Concentration Rank 29

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 22.49 | 2.47 ng/ul | 806503 | Chrysene-d12 | 21.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benz[a]anthracene, 7-methyl- | 242 | C19H14 | 002541-69-7 | 94 |
| 2 | Benz[a]anthracene, 8-methyl- | 242 | C19H14 | 002381-31-9 | 94 |
| 3 | Benz[a]anthracene, 7-methyl- | 242 | C19H14 | 002541-69-7 | 93 |
| 4 | Chrysene, 1-methyl- | 242 | C19H14 | 003351-28-8 | 93 |
| 5 | Chrysene, 2-methyl- | 242 | C19H14 | 003351-32-4 | 93 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121915\
Data File : BG020316.D
Acq On : 19 Dec 2015 17:50
Operator : UM/SJ
Sample : G4849-09
Misc :
ALS Vial : 47 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** D9N73

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

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

| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Indene | 8.63 | 20.0 | ng/ul | 565373 | 1 | 8.09 | 565373 | 20.0 |
| Naphthalene, 1-me... | 12.79 | 6.0 | ng/ul | 4380770 | 2 | 10.92 | 14571900 | 20.0 |
| Naphthalene, 1-et... | 13.76 | 17.7 | ng/ul | 1340550 | 3 | 14.73 | 1511250 | 20.0 |
| Naphthalene, 1,5-... | 13.91 | 32.6 | ng/ul | 2463610 | 3 | 14.73 | 1511250 | 20.0 |
| Naphthalene, 2,3-... | 14.05 | 30.6 | ng/ul | 2312430 | 3 | 14.73 | 1511250 | 20.0 |
| Thieno[2,3-b]thio... | 15.04 | 10.1 | ng/ul | 765650 | 3 | 14.73 | 1511250 | 20.0 |
| Naphthalene, 1,4,... | 15.34 | 6.5 | ng/ul | 487626 | 3 | 14.73 | 1511250 | 20.0 |
| Naphthalene, 2,3,... | 15.39 | 6.0 | ng/ul | 455374 | 3 | 14.73 | 1511250 | 20.0 |
| 1,1'-Biphenyl, 2-... | 15.94 | 27.9 | ng/ul | 2107020 | 3 | 14.73 | 1511250 | 20.0 |
| Benzene, [1-(2,4-... | 15.99 | 6.6 | ng/ul | 495481 | 3 | 14.73 | 1511250 | 20.0 |
| Diphenylmethane | 16.03 | 14.6 | ng/ul | 1100350 | 3 | 14.73 | 1511250 | 20.0 |
| Dibenzofuran, 4-m... | 16.07 | 26.8 | ng/ul | 2024050 | 3 | 14.73 | 1511250 | 20.0 |
| Phenanthrene, 1-m... | 18.41 | 2.3 | ng/ul | 4123900 | 4 | 17.49 | 35603800 | 20.0 |
| 4H-Cyclopenta[def... | 18.56 | 4.4 | ng/ul | 7868020 | 4 | 17.49 | 35603800 | 20.0 |
| 1,8-Anthracenedia... | 19.77 | 2.4 | ng/ul | 791801 | 5 | 21.76 | 6543350 | 20.0 |
| Benzo[b]naphtho[1... | 20.07 | 3.6 | ng/ul | 1172210 | 5 | 21.76 | 6543350 | 20.0 |
| Pyrene, 1-methyl- | 20.20 | 3.2 | ng/ul | 1033470 | 5 | 21.76 | 6543350 | 20.0 |
| 6(5H)-Phenanthrid... | 20.34 | 3.9 | ng/ul | 1267130 | 5 | 21.76 | 6543350 | 20.0 |
| 11H-Benzo[b]fluorene | 20.48 | 11.4 | ng/ul | 3722810 | 5 | 21.76 | 6543350 | 20.0 |
| Benzo[b]naphtho[2... | 21.32 | 3.3 | ng/ul | 1074430 | 5 | 21.76 | 6543350 | 20.0 |
| Cyclopenta(cd)pyr... | 21.37 | 3.3 | ng/ul | 1078170 | 5 | 21.76 | 6543350 | 20.0 |
| Cyclopenta(cd)pyr... | 21.96 | 3.4 | ng/ul | 1108180 | 5 | 21.76 | 6543350 | 20.0 |
| 7H-Benzo[c]carbazole | 22.16 | 2.2 | ng/ul | 732841 | 5 | 21.76 | 6543350 | 20.0 |
| Benz[a]anthracene... | 22.49 | 2.5 | ng/ul | 806503 | 5 | 21.76 | 6543350 | 20.0 |