LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

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-BG122415.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 | 7.233 | 741 | 748 | 756 | rBV | 40918 | 71808 | 4.89% | 0.418% |
| 2 | 7.397 | 770 | 776 | 784 | rBV | 32221 | 54880 | 3.74% | 0.319% |
| 3 | 7.603 | 805 | 811 | 819 | rBV | 42152 | 71130 | 4.85% | 0.414% |
| 4 | 8.079 | 885 | 892 | 899 | rVB | 58511 | 100576 | 6.85% | 0.585% |
| 5 | 8.614 | 977 | 983 | 993 | rBB | 47891 | 81148 | 5.53% | 0.472% |
| 6 | 8.784 | 1005 | 1012 | 1022 | rBV2 | 55182 | 94319 | 6.42% | 0.548% |
| 7 | 9.248 | 1084 | 1091 | 1102 | rBB | 41200 | 77183 | 5.26% | 0.449% |
| 8 | 9.971 | 1208 | 1214 | 1223 | rVB | 38339 | 65897 | 4.49% | 0.383% |
| 9 | 10.312 | 1263 | 1272 | 1279 | rBV4 | 35887 | 89922 | 6.13% | 0.523% |
| 10 | 10.388 | 1279 | 1285 | 1289 | rBV2 | 36371 | 68965 | 4.70% | 0.401% |
| 11 | 10.511 | 1300 | 1306 | 1315 | rBV | 57245 | 100293 | 6.83% | 0.583% |
| 12 | 10.893 | 1364 | 1371 | 1375 | rVV | 90190 | 160117 | 10.91% | 0.931% |
| 13 | 10.946 | 1375 | 1380 | 1386 | rVB | 68361 | 120334 | 8.20% | 0.700% |
| 14 | 11.028 | 1386 | 1394 | 1405 | rBV2 | 42461 | 87208 | 5.94% | 0.507% |
| 15 | 12.762 | 1677 | 1689 | 1700 | rBV | 430209 | 712865 | 48.56% | 4.145% |
| 16 | 13.543 | 1811 | 1822 | 1827 | rVV | 96993 | 151036 | 10.29% | 0.878% |
| 17 | 13.766 | 1855 | 1860 | 1866 | rVB3 | 19890 | 36119 | 2.46% | 0.210% |
| 18 | 13.872 | 1871 | 1878 | 1879 | rBV | 112652 | 155259 | 10.58% | 0.903% |
| 19 | 14.031 | 1897 | 1905 | 1911 | rBV | 211817 | 385020 | 26.23% | 2.239% |
| 20 | 14.107 | 1911 | 1918 | 1923 | rVV | 128918 | 222939 | 15.19% | 1.296% |
| 21 | 14.160 | 1923 | 1927 | 1933 | rVB | 44818 | 72299 | 4.92% | 0.420% |
| 22 | 14.266 | 1939 | 1945 | 1949 | rBV | 106039 | 164488 | 11.20% | 0.956% |
| 23 | 14.301 | 1949 | 1951 | 1961 | rVB | 32069 | 42264 | 2.88% | 0.246% |
| 24 | 14.407 | 1961 | 1969 | 1972 | rBV | 145237 | 266342 | 18.14% | 1.549% |
| 25 | 14.677 | 2008 | 2015 | 2017 | rBV | 54336 | 82620 | 5.63% | 0.480% |
| 26 | 14.712 | 2017 | 2021 | 2026 | rVV2 | 162902 | 252059 | 17.17% | 1.466% |
| 27 | 14.777 | 2026 | 2032 | 2039 | rVV | 273908 | 434789 | 29.62% | 2.528% |
| 28 | 14.912 | 2049 | 2055 | 2065 | rBV3 | 56601 | 123098 | 8.38% | 0.716% |
| 29 | 15.106 | 2076 | 2088 | 2095 | rBV3 | 72635 | 144860 | 9.87% | 0.842% |
| 30 | 15.176 | 2095 | 2100 | 2108 | rVB | 53479 | 84662 | 5.77% | 0.492% |
| 31 | 15.317 | 2117 | 2124 | 2130 | rBV2 | 49901 | 122585 | 8.35% | 0.713% |
| 32 | 15.376 | 2130 | 2134 | 2138 | rVB | 37640 | 52268 | 3.56% | 0.304% |
| 33 | 15.494 | 2146 | 2154 | 2157 | rBV3 | 35554 | 81239 | 5.53% | 0.472% |
| 34 | 15.529 | 2157 | 2160 | 2164 | rVB2 | 27682 | 34903 | 2.38% | 0.203% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

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-BG122415.M
Title : SVOA CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 15.582 | 2164 | 2169 | 2174 | rBV2 | 55631 | 82865 | 5.64% | 0.482% |
| 36 | 15.705 | 2185 | 2190 | 2194 | rVV | 223649 | 338035 | 23.03% | 1.966% |
| 37 | 15.758 | 2194 | 2199 | 2208 | rVB2 | 237722 | 405587 | 27.63% | 2.358% |
| 38 | 15.829 | 2208 | 2211 | 2216 | rBV2 | 24786 | 45808 | 3.12% | 0.266% |
| 39 | 15.964 | 2230 | 2234 | 2240 | rVB2 | 24015 | 40113 | 2.73% | 0.233% |
| 40 | 16.046 | 2242 | 2248 | 2253 | rBV3 | 21566 | 41537 | 2.83% | 0.242% |
| 41 | 16.169 | 2262 | 2269 | 2281 | rBV2 | 72057 | 159999 | 10.90% | 0.930% |
| 42 | 16.422 | 2304 | 2312 | 2322 | rBV6 | 39646 | 82520 | 5.62% | 0.480% |
| 43 | 16.757 | 2361 | 2369 | 2374 | rVV2 | 69830 | 177001 | 12.06% | 1.029% |
| 44 | 16.810 | 2374 | 2378 | 2383 | rVV | 60149 | 94292 | 6.42% | 0.548% |
| 45 | 16.910 | 2390 | 2395 | 2399 | rVV | 44960 | 72748 | 4.96% | 0.423% |
| 46 | 17.027 | 2412 | 2415 | 2420 | rVV4 | 20611 | 36896 | 2.51% | 0.215% |
| 47 | 17.115 | 2426 | 2430 | 2438 | rVV2 | 31054 | 55975 | 3.81% | 0.325% |
| 48 | 17.186 | 2438 | 2442 | 2447 | rVV5 | 15955 | 29114 | 1.98% | 0.169% |
| 49 | 17.274 | 2447 | 2457 | 2463 | rVB | 90446 | 164168 | 11.18% | 0.955% |
| 50 | 17.456 | 2482 | 2488 | 2491 | rBV | 204355 | 321972 | 21.93% | 1.872% |
| 51 | 17.503 | 2491 | 2496 | 2501 | rVV | 983332 | 1468082 | 100.00% | 8.536% |
| 52 | 17.556 | 2501 | 2505 | 2508 | rVV | 214004 | 329869 | 22.47% | 1.918% |
| 53 | 17.591 | 2508 | 2511 | 2516 | rVV | 219995 | 321964 | 21.93% | 1.872% |
| 54 | 17.638 | 2516 | 2519 | 2525 | rVV5 | 27255 | 58898 | 4.01% | 0.342% |
| 55 | 17.862 | 2553 | 2557 | 2564 | rBV3 | 17864 | 39541 | 2.69% | 0.230% |
| 56 | 17.973 | 2572 | 2576 | 2579 | rVB | 25800 | 32960 | 2.25% | 0.192% |
| 57 | 18.038 | 2582 | 2587 | 2592 | rBV2 | 56457 | 79920 | 5.44% | 0.465% |
| 58 | 18.185 | 2606 | 2612 | 2618 | rVB2 | 34899 | 70729 | 4.82% | 0.411% |
| 59 | 18.332 | 2632 | 2637 | 2641 | rVV | 199840 | 301104 | 20.51% | 1.751% |
| 60 | 18.379 | 2641 | 2645 | 2654 | rVV | 218226 | 326740 | 22.26% | 1.900% |
| 61 | 18.461 | 2654 | 2659 | 2664 | rVV | 85483 | 126556 | 8.62% | 0.736% |
| 62 | 18.525 | 2664 | 2670 | 2674 | rVV3 | 227997 | 474773 | 32.34% | 2.761% |
| 63 | 18.561 | 2674 | 2676 | 2682 | rVB | 139017 | 183376 | 12.49% | 1.066% |
| 64 | 18.825 | 2716 | 2721 | 2725 | rVV | 98062 | 137748 | 9.38% | 0.801% |
| 65 | 18.878 | 2725 | 2730 | 2739 | rVB4 | 19421 | 49455 | 3.37% | 0.288% |
| 66 | 19.066 | 2759 | 2762 | 2766 | rVB2 | 29383 | 38341 | 2.61% | 0.223% |
| 67 | 19.119 | 2767 | 2771 | 2774 | rBV | 28397 | 35304 | 2.40% | 0.205% |
| 68 | 19.154 | 2774 | 2777 | 2782 | rVB2 | 23067 | 31326 | 2.13% | 0.182% |
| 69 | 19.236 | 2786 | 2791 | 2796 | rBV2 | 107597 | 181478 | 12.36% | 1.055% |
| 70 | 19.307 | 2796 | 2803 | 2806 | rBV3 | 47277 | 101317 | 6.90% | 0.589% |
| 71 | 19.377 | 2811 | 2815 | 2817 | rBV2 | 24114 | 38441 | 2.62% | 0.224% |

LSC Area Percent Report

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Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

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-BG122415.M
Title : SVOA CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 19.507 | 2831 | 2837 | 2842 | rBV | 356862 | 505809 | 34.45% | 2.941% |
| 73 | 19.601 | 2850 | 2853 | 2857 | rVB3 | 24941 | 32262 | 2.20% | 0.188% |
| 74 | 19.654 | 2857 | 2862 | 2867 | rBV | 109680 | 160488 | 10.93% | 0.933% |
| 75 | 19.748 | 2872 | 2878 | 2880 | rBV3 | 19500 | 36756 | 2.50% | 0.214% |
| 76 | 19.771 | 2880 | 2882 | 2888 | rVB | 24656 | 31971 | 2.18% | 0.186% |
| 77 | 19.842 | 2888 | 2894 | 2896 | rBV | 301293 | 445755 | 30.36% | 2.592% |
| 78 | 19.871 | 2896 | 2899 | 2906 | rVV | 513813 | 707896 | 48.22% | 4.116% |
| 79 | 19.936 | 2906 | 2910 | 2915 | rVB3 | 24772 | 40222 | 2.74% | 0.234% |
| 80 | 20.200 | 2948 | 2955 | 2960 | rVB | 49218 | 106948 | 7.28% | 0.622% |
| 81 | 20.353 | 2971 | 2981 | 2989 | rVB | 115071 | 284924 | 19.41% | 1.657% |
| 82 | 20.423 | 2989 | 2993 | 2995 | rBV5 | 19825 | 30177 | 2.06% | 0.175% |
| 83 | 20.453 | 2995 | 2998 | 3004 | rVV | 85893 | 125078 | 8.52% | 0.727% |
| 84 | 20.517 | 3004 | 3009 | 3013 | rVV | 71866 | 95723 | 6.52% | 0.557% |
| 85 | 20.658 | 3029 | 3033 | 3036 | rVV | 60991 | 87703 | 5.97% | 0.510% |
| 86 | 20.699 | 3036 | 3040 | 3051 | rVB | 85246 | 150419 | 10.25% | 0.875% |
| 87 | 20.946 | 3078 | 3082 | 3085 | rBV3 | 21502 | 36428 | 2.48% | 0.212% |
| 88 | 21.310 | 3140 | 3144 | 3147 | rBV | 28759 | 42548 | 2.90% | 0.247% |
| 89 | 21.346 | 3147 | 3150 | 3156 | rVB2 | 66424 | 94015 | 6.40% | 0.547% |
| 90 | 21.733 | 3207 | 3216 | 3220 | rBV2 | 331027 | 807089 | 54.98% | 4.693% |
| 91 | 21.780 | 3220 | 3224 | 3231 | rVB | 150056 | 264635 | 18.03% | 1.539% |
| 92 | 22.468 | 3333 | 3341 | 3348 | rVV3 | 49418 | 130185 | 8.87% | 0.757% |
| 93 | 22.756 | 3385 | 3390 | 3392 | rBV2 | 18148 | 28915 | 1.97% | 0.168% |
| 94 | 23.966 | 3589 | 3596 | 3603 | rBV2 | 53083 | 187548 | 12.78% | 1.091% |
| 95 | 24.231 | 3635 | 3641 | 3650 | rVB2 | 25808 | 68571 | 4.67% | 0.399% |
| 96 | 24.695 | 3713 | 3720 | 3726 | rBV | 44949 | 120471 | 8.21% | 0.700% |
| 97 | 24.777 | 3726 | 3734 | 3741 | rVV | 145255 | 423691 | 28.86% | 2.464% |
| 98 | 24.847 | 3741 | 3746 | 3758 | rVB | 97025 | 254468 | 17.33% | 1.480% |
| 99 | 25.006 | 3763 | 3773 | 3782 | rBV | 140062 | 412917 | 28.13% | 2.401% |
| 100 | 29.889 | 4596 | 4604 | 4605 | rBV8 | 20469 | 42578 | 2.90% | 0.248% |

Sum of corrected areas: 17198236

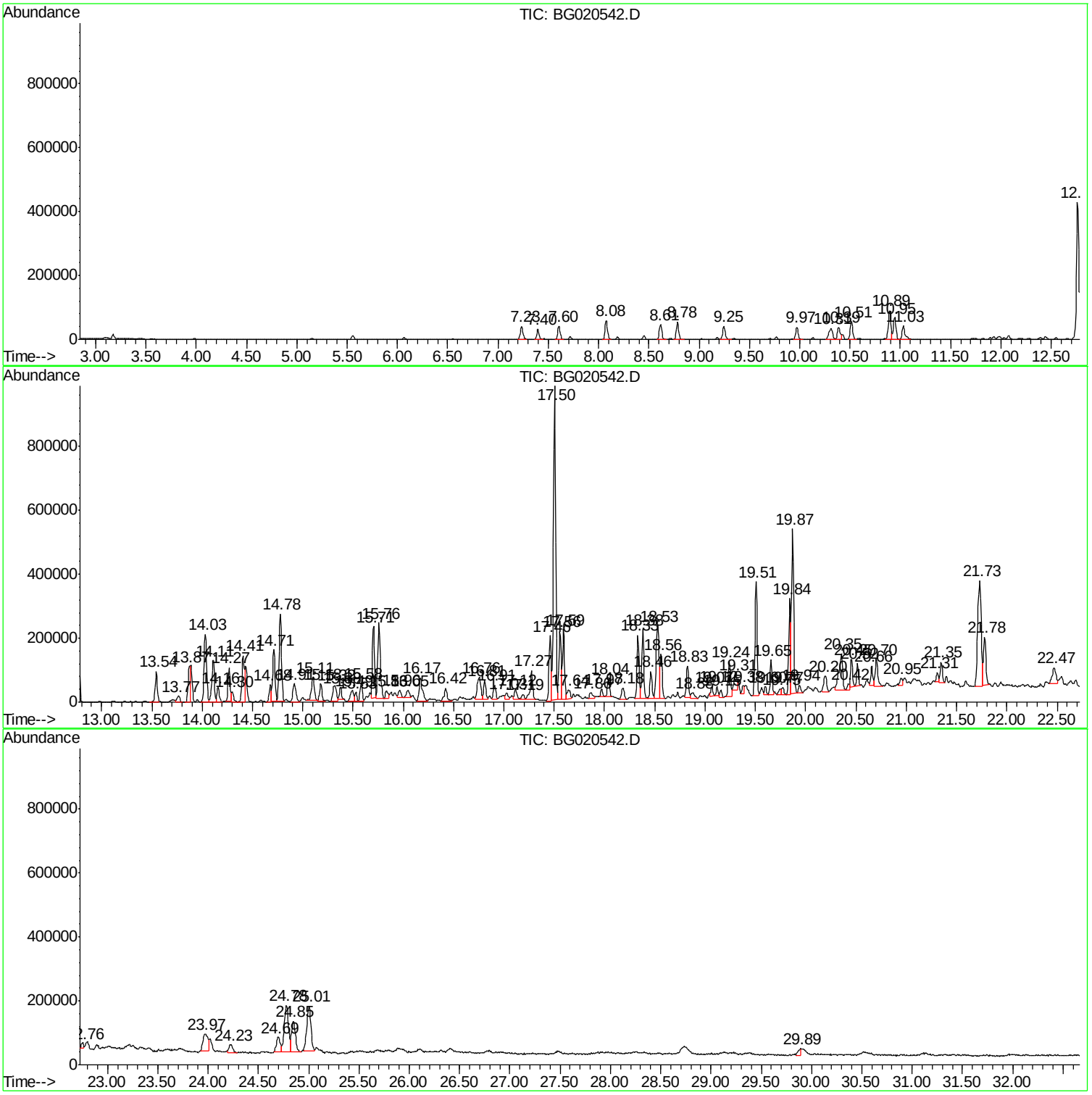
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.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\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

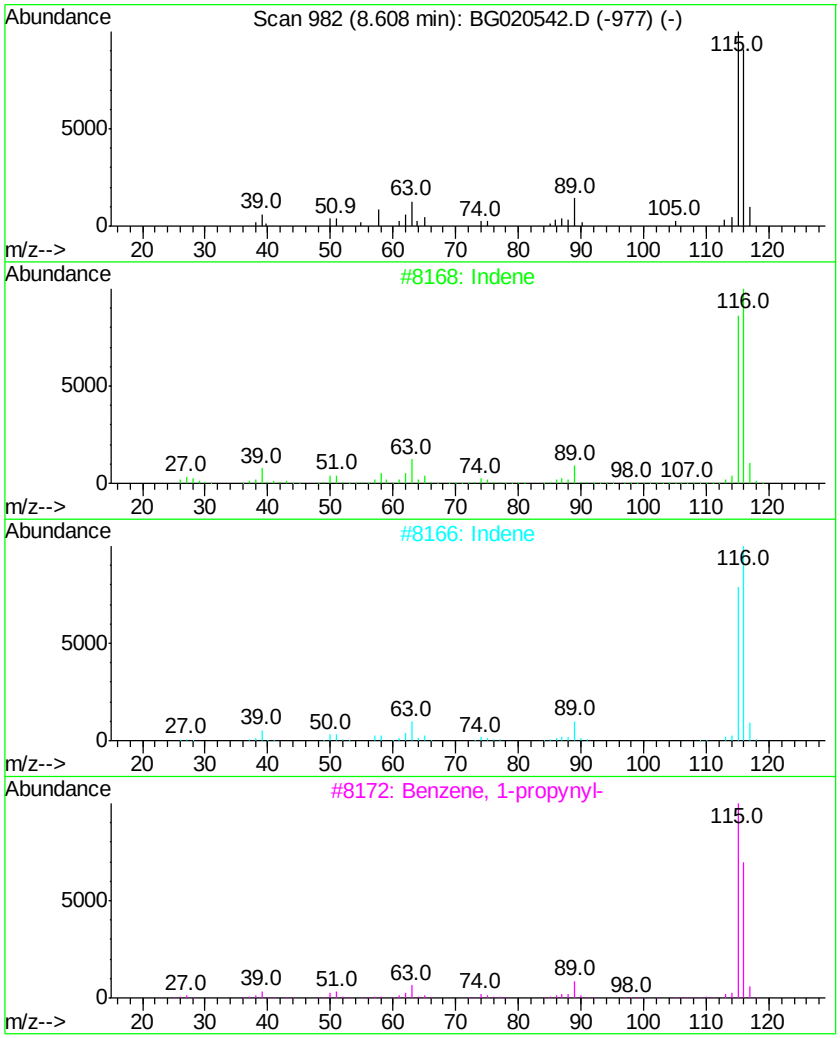
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

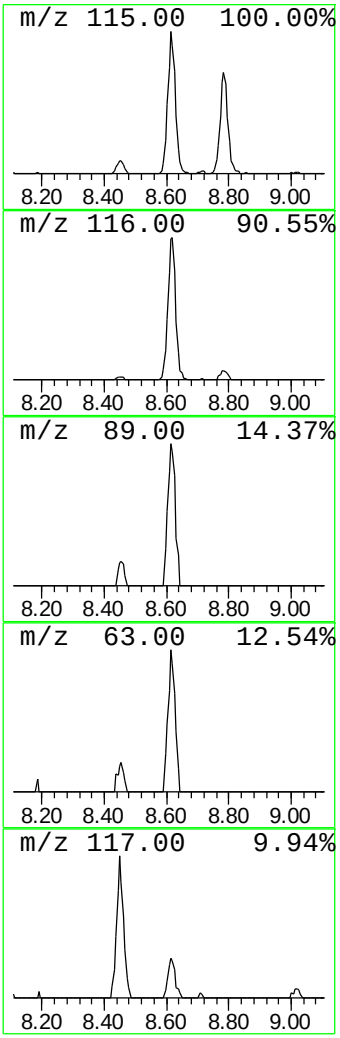
**********

Peak Number 1 Indene Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.61 | 16.14 ng/ul | 81148 | 1,4-Dichlorobenzene-d4 | 8.07 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Indene | 116 | C9H8 | 000095-13-6 | 95 |
| 2 | Indene | 116 | C9H8 | 000095-13-6 | 94 |
| 3 | Benzene, 1-propynyl- | 116 | C9H8 | 000673-32-5 | 94 |
| 4 | Benzene,1-ethynyl-2-methyl- | 116 | C9H8 | 000766-47-2 | 91 |
| 5 | Benzene, 1-propynyl- | 116 | C9H8 | 000673-32-5 | 91 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

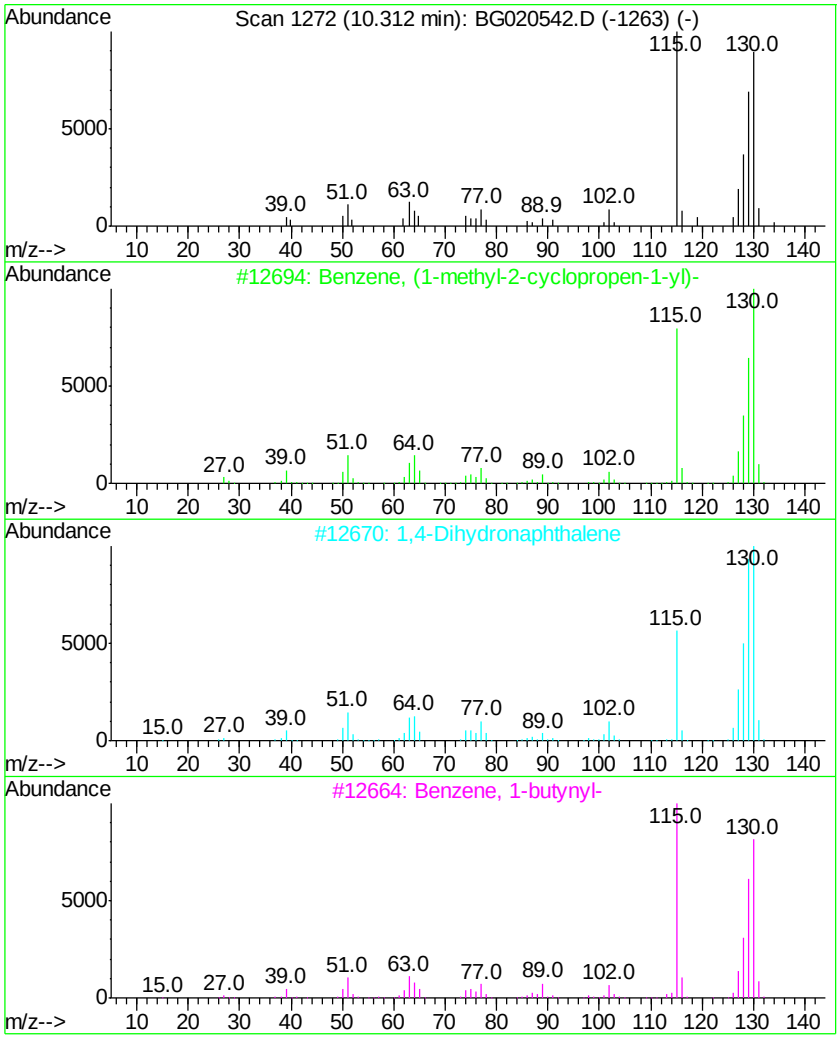
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

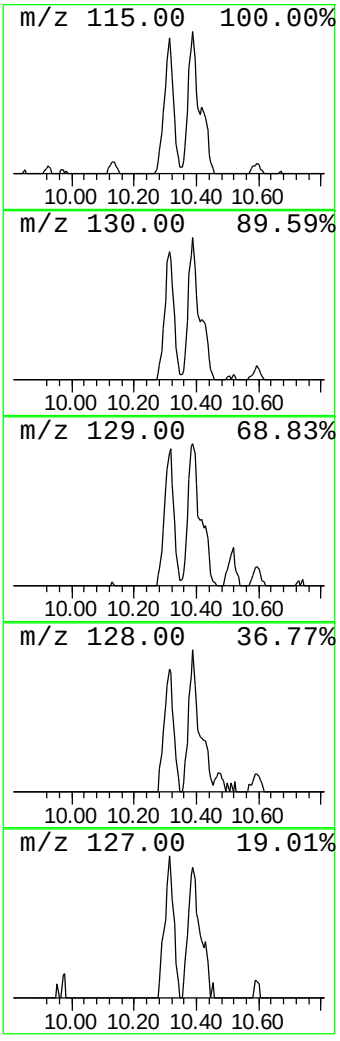
**********

Peak Number 2 Benzene, (1-methyl-2-cyclop... Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.31 | 11.23 ng/ul | 89922 | Naphthalene-d8 | 10.89 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, (1-methyl-2-cyclopropen... | 130 | C10H10 | 065051-83-4 | 93 |
| 2 | 1,4-Dihydronaphthalene | 130 | C10H10 | 000612-17-9 | 92 |
| 3 | Benzene, 1-butynyl- | 130 | C10H10 | 000622-76-4 | 91 |
| 4 | 1H-Indene, 3-methyl- | 130 | C10H10 | 000767-60-2 | 90 |
| 5 | 1H-Indene, 1-methyl- | 130 | C10H10 | 000767-59-9 | 90 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

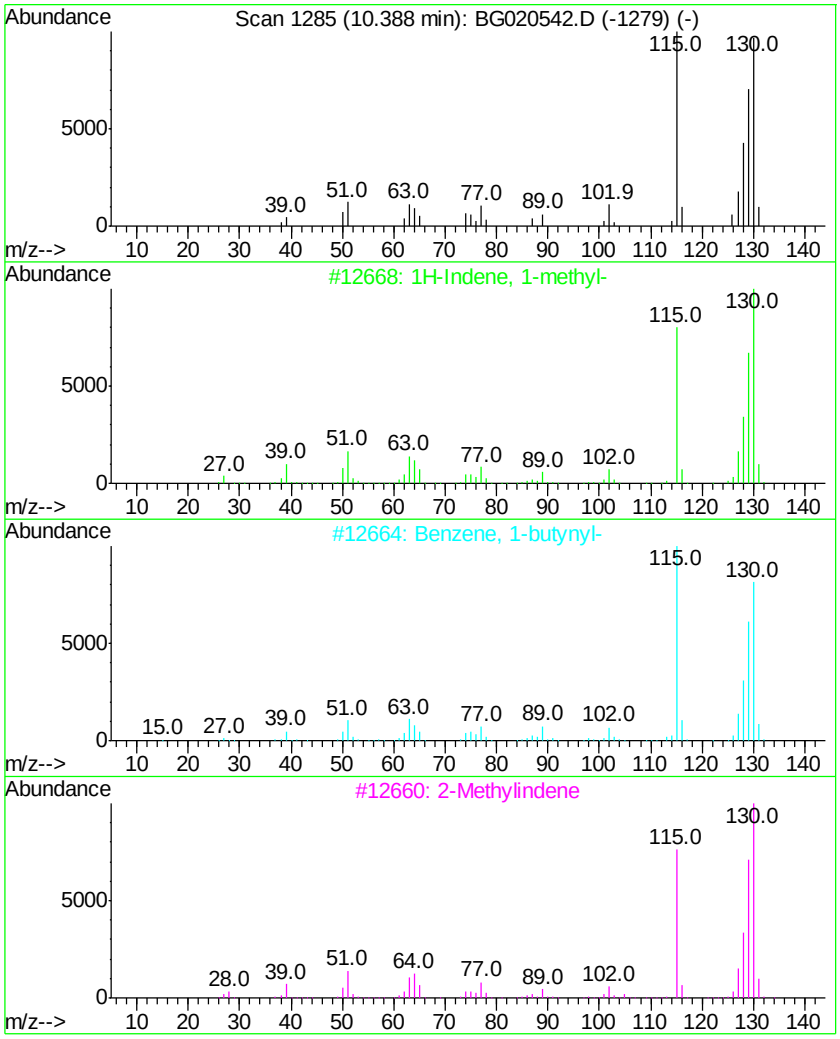
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

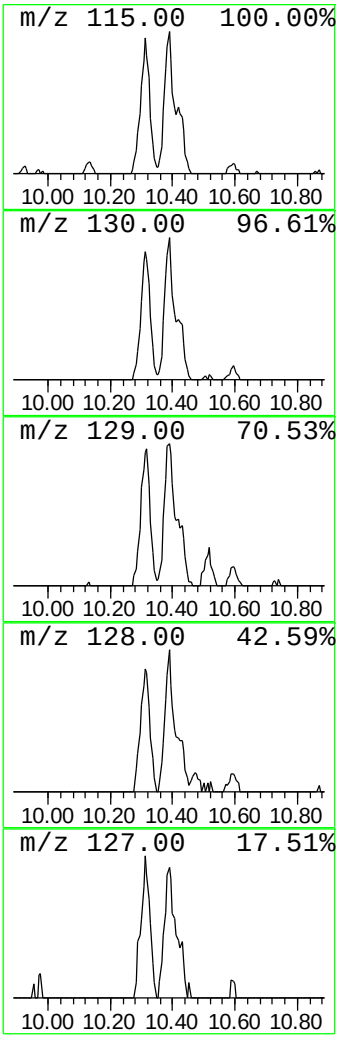
**********

Peak Number 3 1H-Indene, 1-methyl- Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.39 | 8.61 ng/ul | 68965 | Naphthalene-d8 | 10.89 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1H-Indene, 1-methyl- | 130 | C10H10 | 000767-59-9 | 95 |
| 2 | Benzene, 1-butynyl- | 130 | C10H10 | 000622-76-4 | 94 |
| 3 | 2-Methylindene | 130 | C10H10 | 002177-47-1 | 94 |
| 4 | 1H-Indene, 1-methyl- | 130 | C10H10 | 000767-59-9 | 90 |
| 5 | 1H-Indene, 3-methyl- | 130 | C10H10 | 000767-60-2 | 90 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

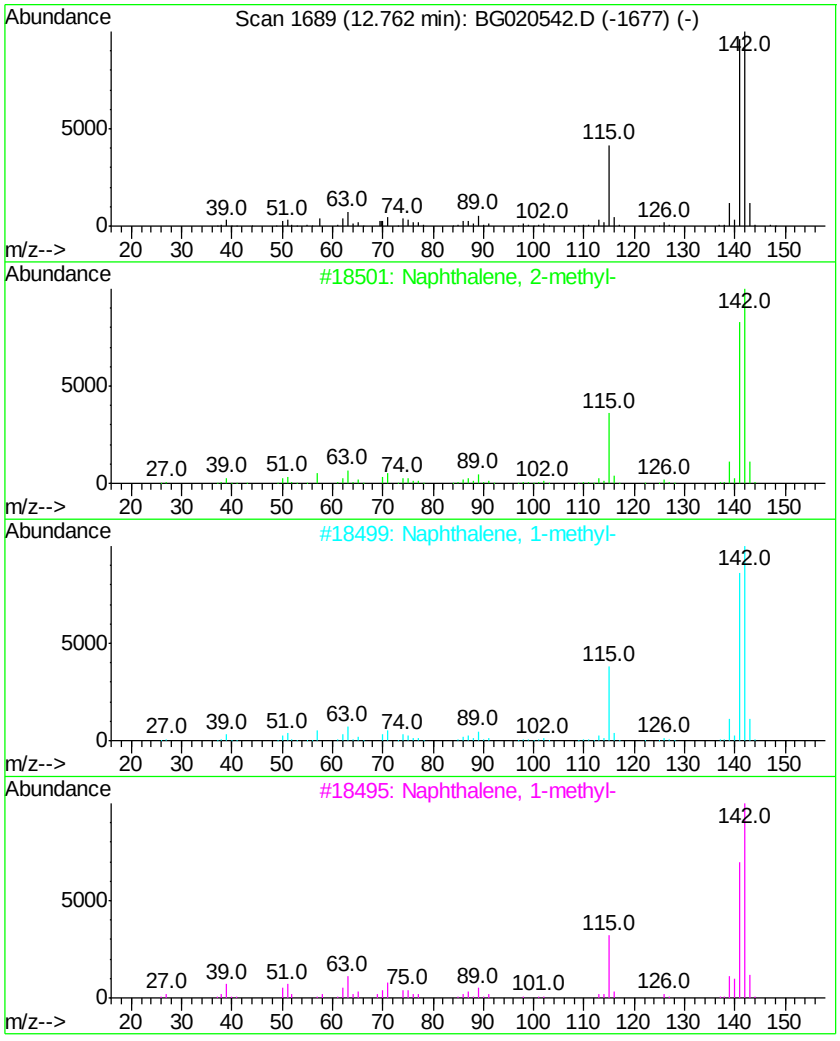
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

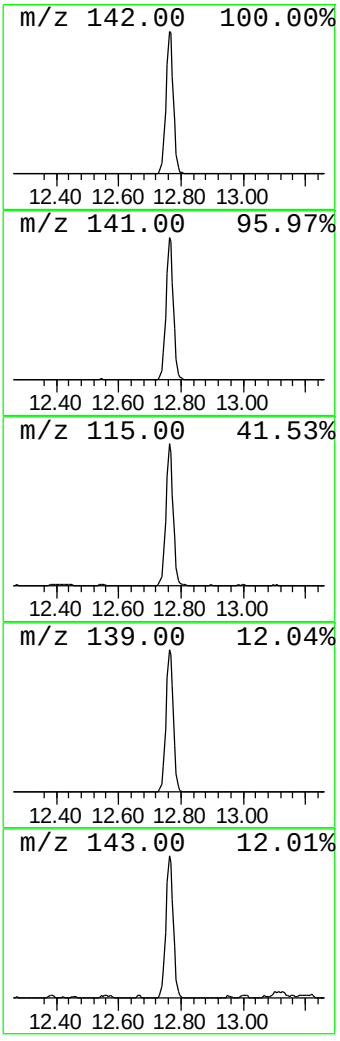
**********

Peak Number 4 Naphthalene, 1-methyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.76 | 89.04 ng/ul | 712865 | Naphthalene-d8 | 10.89 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2-methyl- | 142 | C11H10 | 000091-57-6 | 96 |
| 2 | Naphthalene, 1-methyl- | 142 | C11H10 | 000090-12-0 | 96 |
| 3 | Naphthalene, 1-methyl- | 142 | C11H10 | 000090-12-0 | 94 |
| 4 | 1,4-Methanonaphthalene, 1,4-dihy... | 142 | C11H10 | 004453-90-1 | 94 |
| 5 | 1H-Indene, 1-ethylidene- | 142 | C11H10 | 002471-83-2 | 94 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

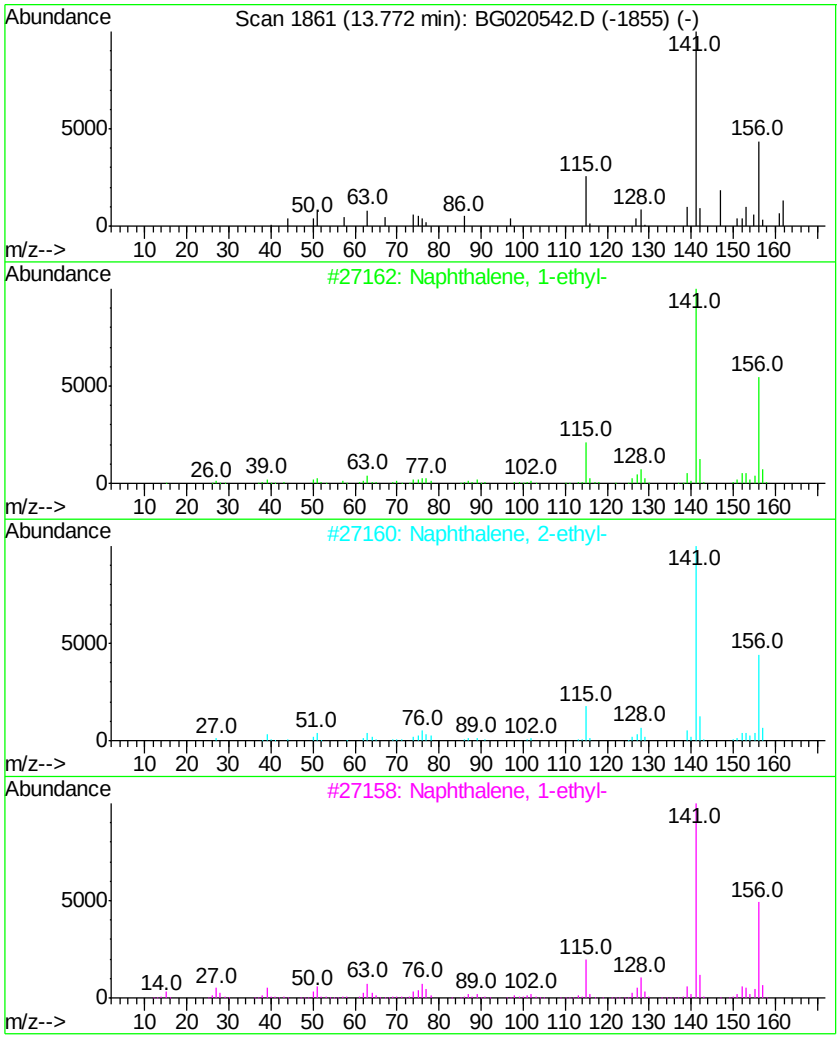
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

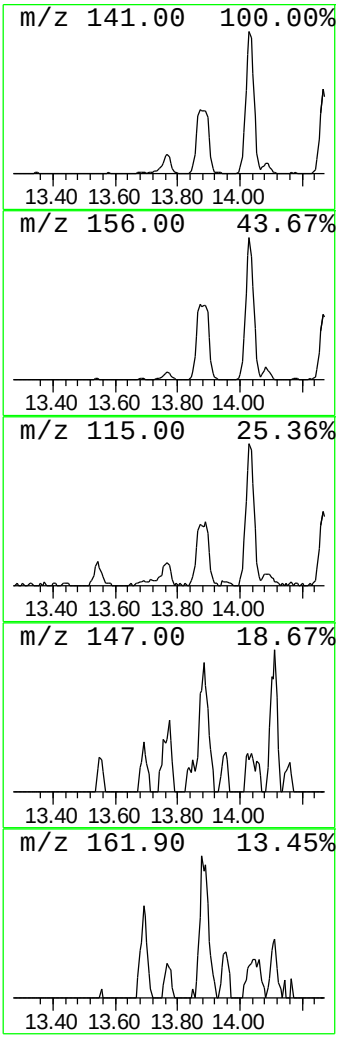
**********

Peak Number 5 Naphthalene, 1-ethyl- Concentration Rank 41

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.77 | 2.87 ng/ul | 36119 | Acenaphthene-d10 | 14.71 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1-ethyl- | 156 | C12H12 | 001127-76-0 | 87 |
| 2 | Naphthalene, 2-ethyl- | 156 | C12H12 | 000939-27-5 | 81 |
| 3 | Naphthalene, 1-ethyl- | 156 | C12H12 | 001127-76-0 | 80 |
| 4 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 74 |
| 5 | Naphthalene, 1-ethyl- | 156 | C12H12 | 001127-76-0 | 74 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

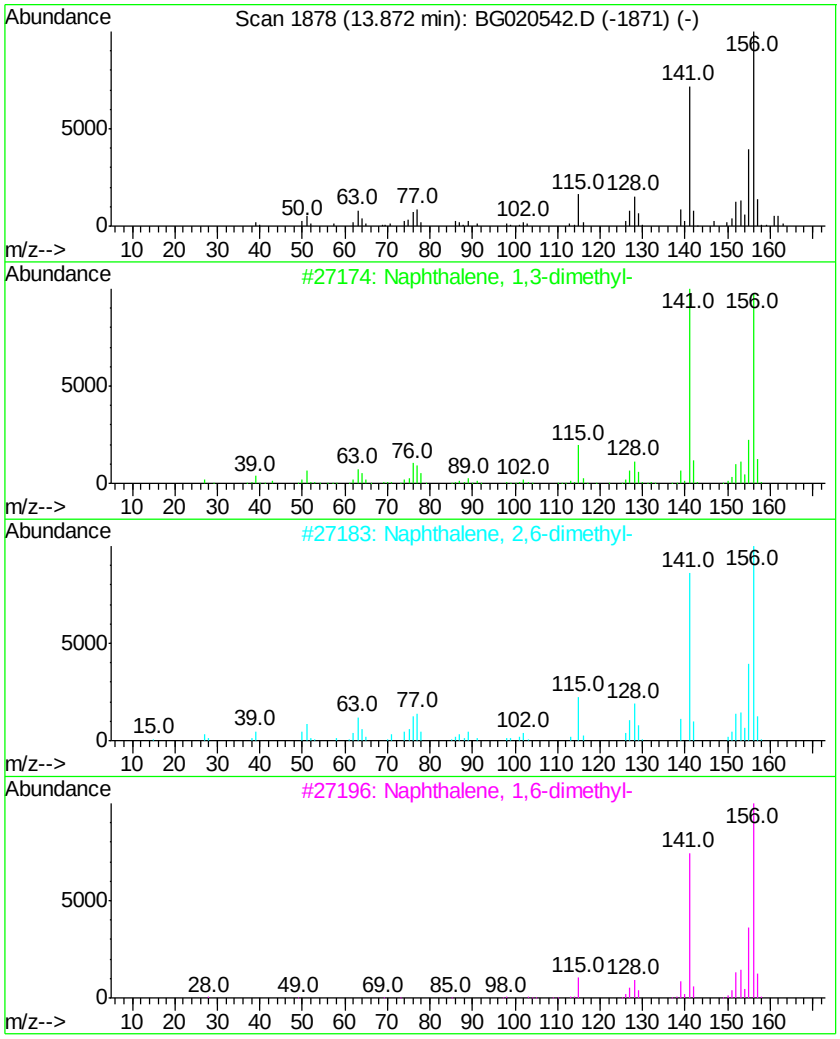
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

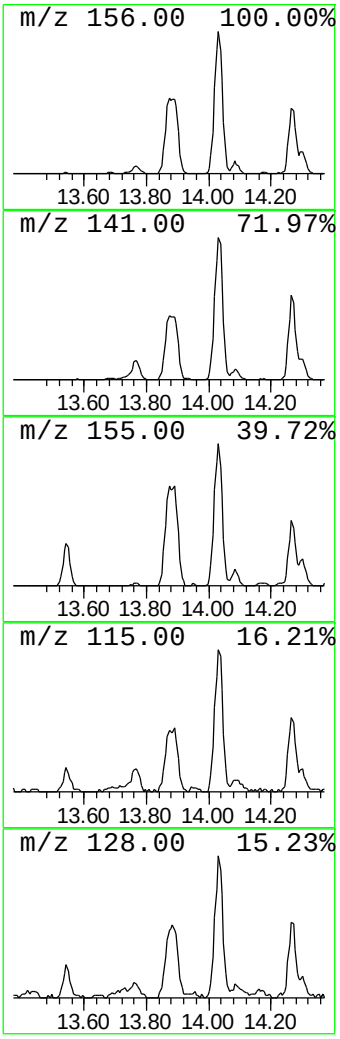
**********

Peak Number 6 Naphthalene, 1,3-dimethyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.87 | 12.32 ng/ul | 155259 | Acenaphthene-d10 | 14.71 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 96 |
| 2 | Naphthalene, 2,6-dimethyl- | 156 | C12H12 | 000581-42-0 | 96 |
| 3 | Naphthalene, 1,6-dimethyl- | 156 | C12H12 | 000575-43-9 | 96 |
| 4 | Naphthalene, 2,6-dimethyl- | 156 | C12H12 | 000581-42-0 | 95 |
| 5 | Naphthalene, 2,6-dimethyl- | 156 | C12H12 | 000581-42-0 | 95 |



Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

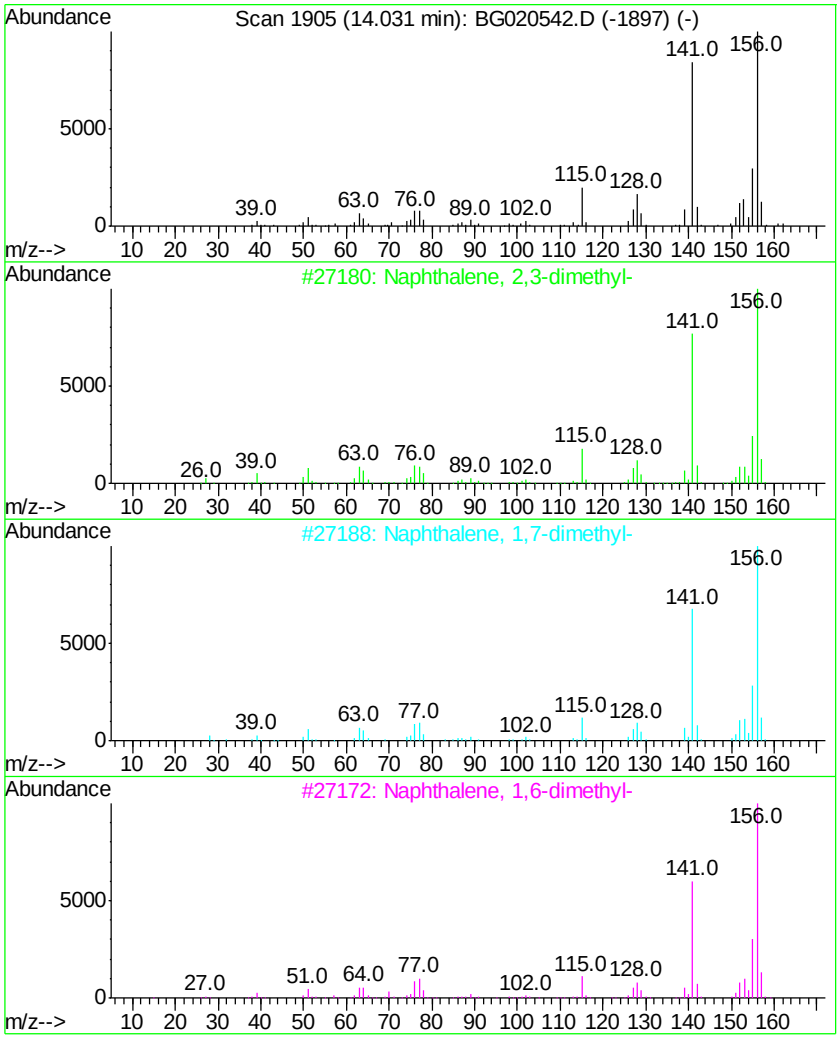
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

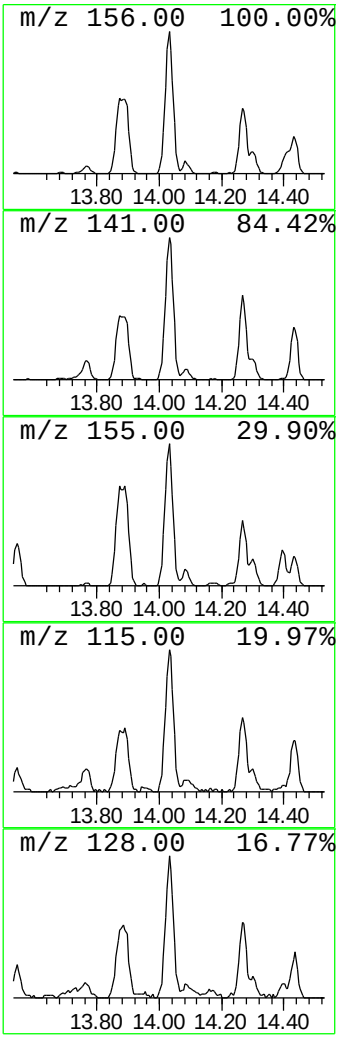
**********

Peak Number 7 Naphthalene, 2,3-dimethyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.03 | 30.55 ng/ul | 385020 | Acenaphthene-d10 | 14.71 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 97 |
| 2 | Naphthalene, 1,7-dimethyl- | 156 | C12H12 | 000575-37-1 | 97 |
| 3 | Naphthalene, 1,6-dimethyl- | 156 | C12H12 | 000575-43-9 | 97 |
| 4 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 97 |
| 5 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 96 |



# Library Search Compound Report

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Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

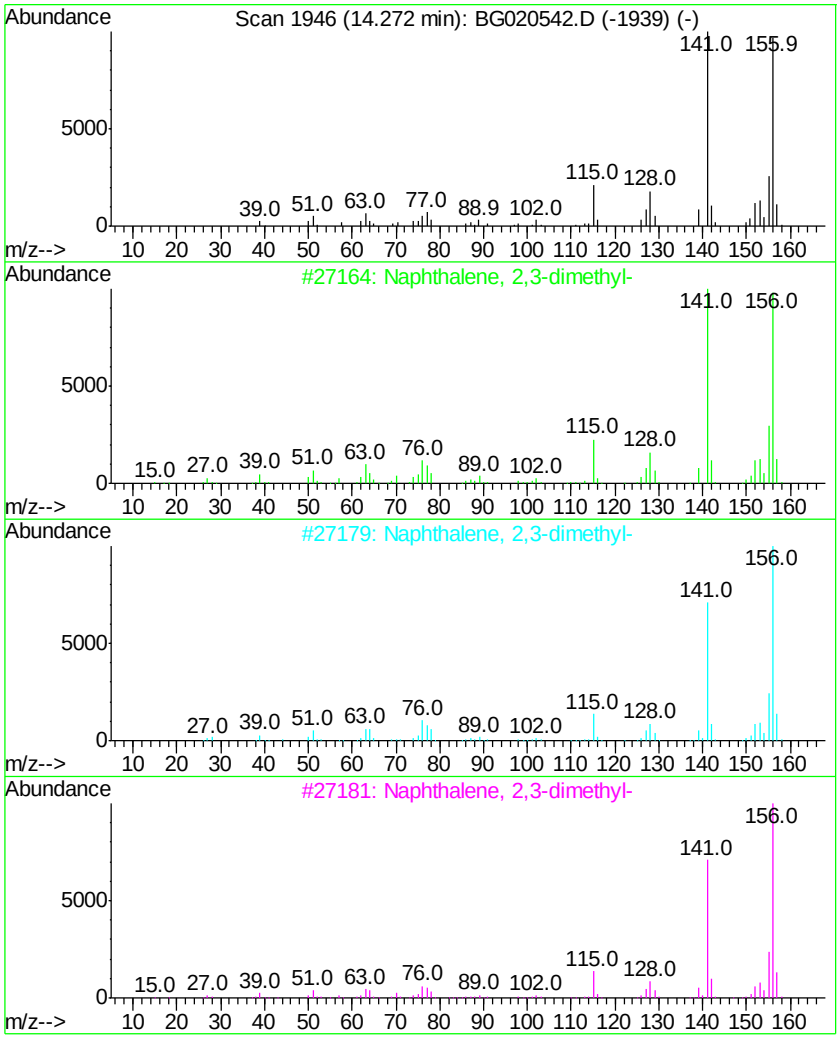
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

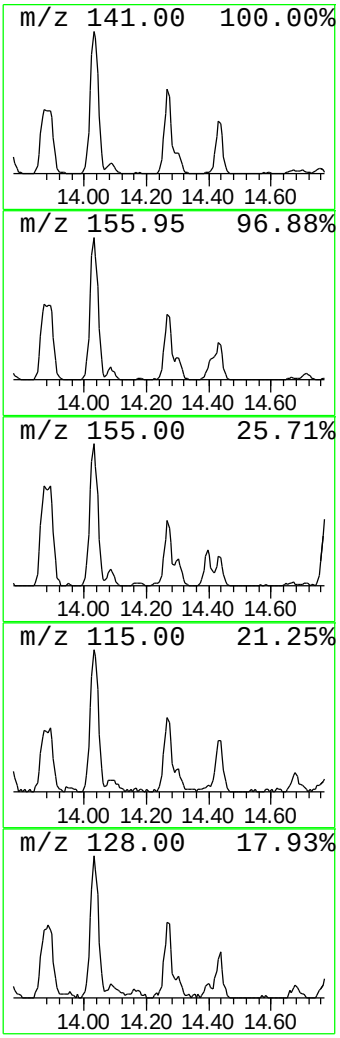
**********

Peak Number 8 Naphthalene, 1,7-dimethyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.27 | 13.05 ng/ul | 164488 | Acenaphthene-d10 | 14.71 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 98 |
| 2 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 97 |
| 3 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 97 |
| 4 | Naphthalene, 1,7-dimethyl- | 156 | C12H12 | 000575-37-1 | 97 |
| 5 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 97 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

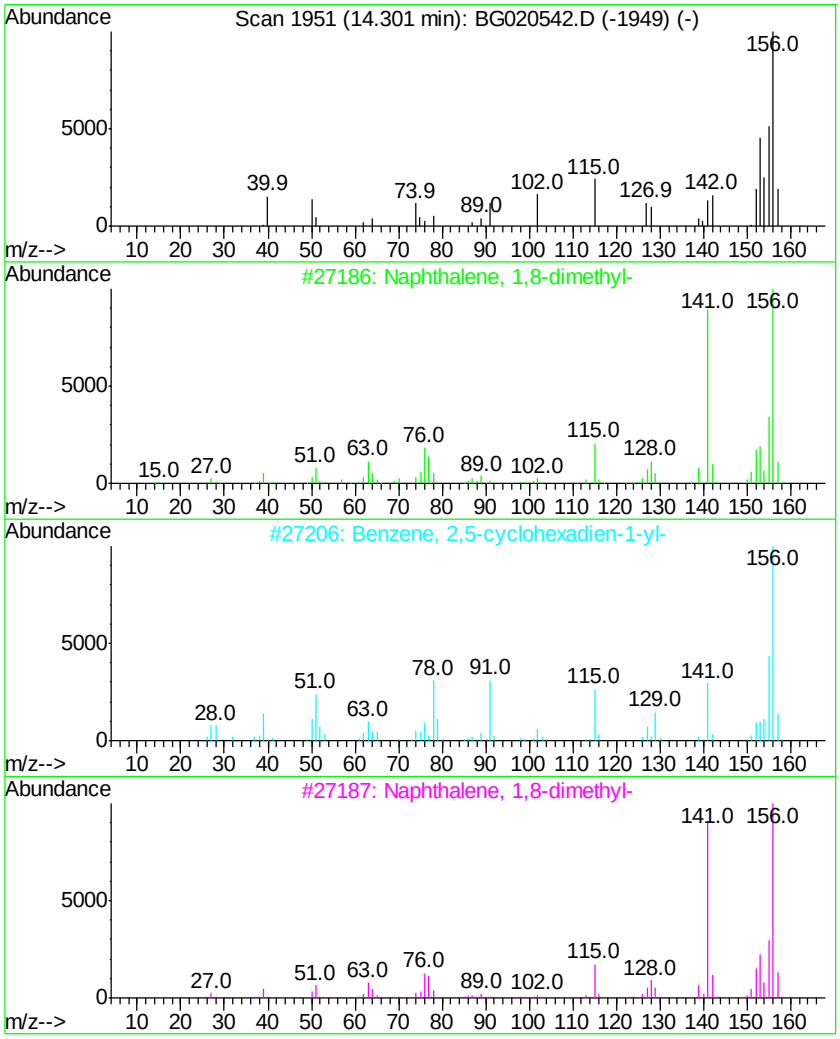
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

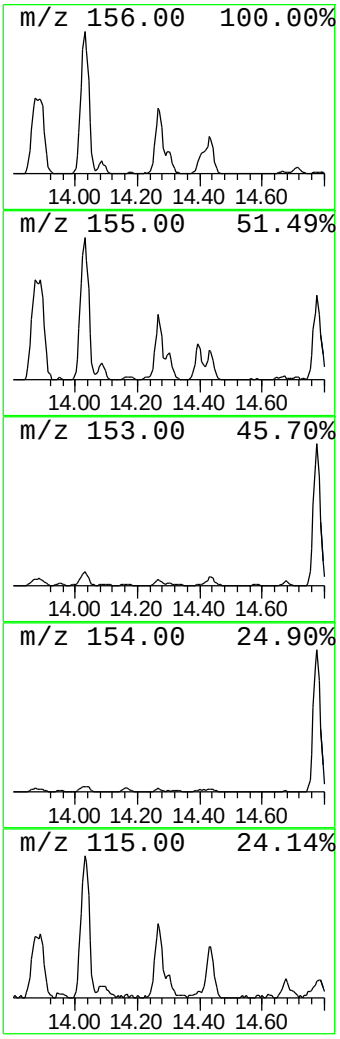
**********

Peak Number 9 unknown-01 Concentration Rank 34

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.30 | 3.35 ng/ul | 42264 | Acenaphthene-d10 | 14.71 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,8-dimethyl- | 156 | C12H12 | 000569-41-5 | 49 |
| 2 | Benzene, 2,5-cyclohexadien-1-yl- | 156 | C12H12 | 004794-05-2 | 47 |
| 3 | Naphthalene, 1,8-dimethyl- | 156 | C12H12 | 000569-41-5 | 47 |
| 4 | Naphthalene, 1,4-dimethyl- | 156 | C12H12 | 000571-58-4 | 47 |
| 5 | Naphthalene, 1,2-dimethyl- | 156 | C12H12 | 000573-98-8 | 47 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

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

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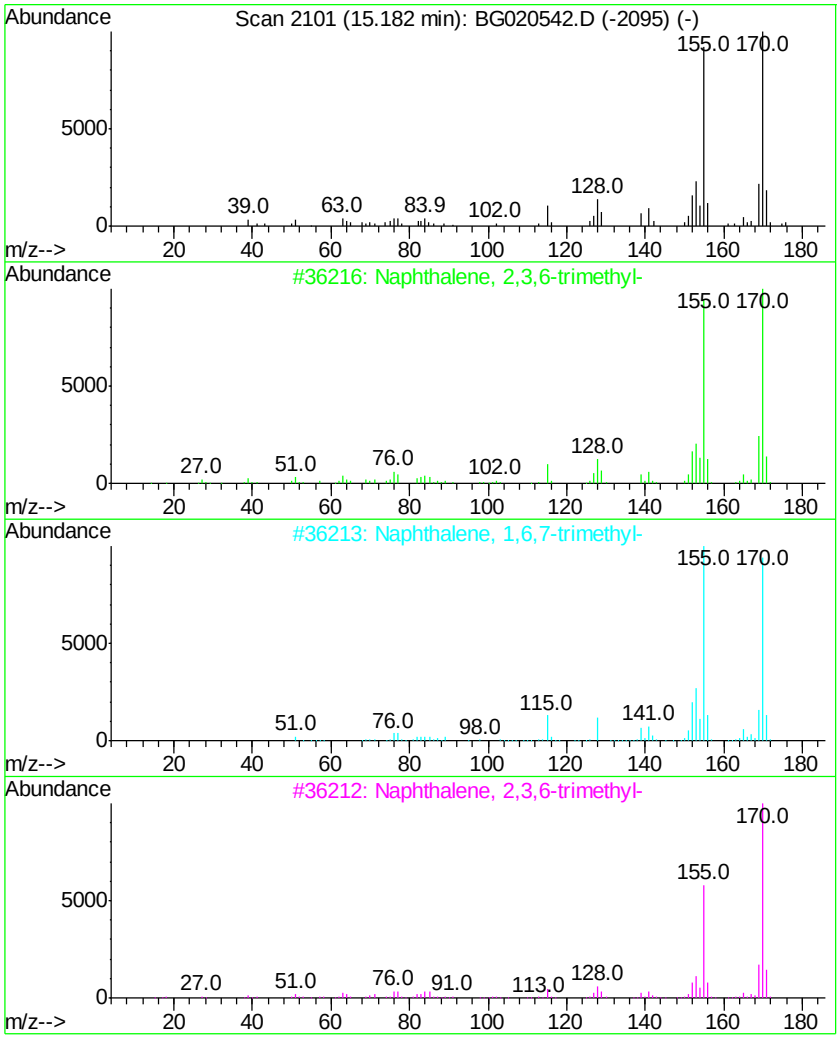
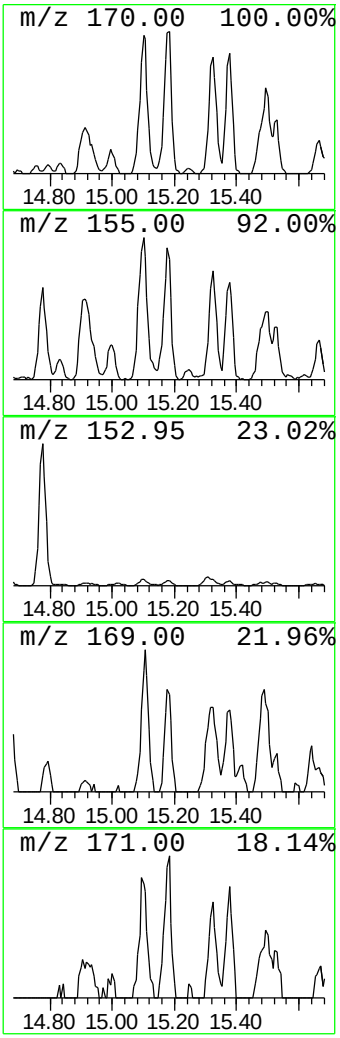
Peak Number 10 Naphthalene, 2,3,6-trimethyl- Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.18 | 6.72 ng/ul | 84662 | Acenaphthene-d10 | 14.71 |

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



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

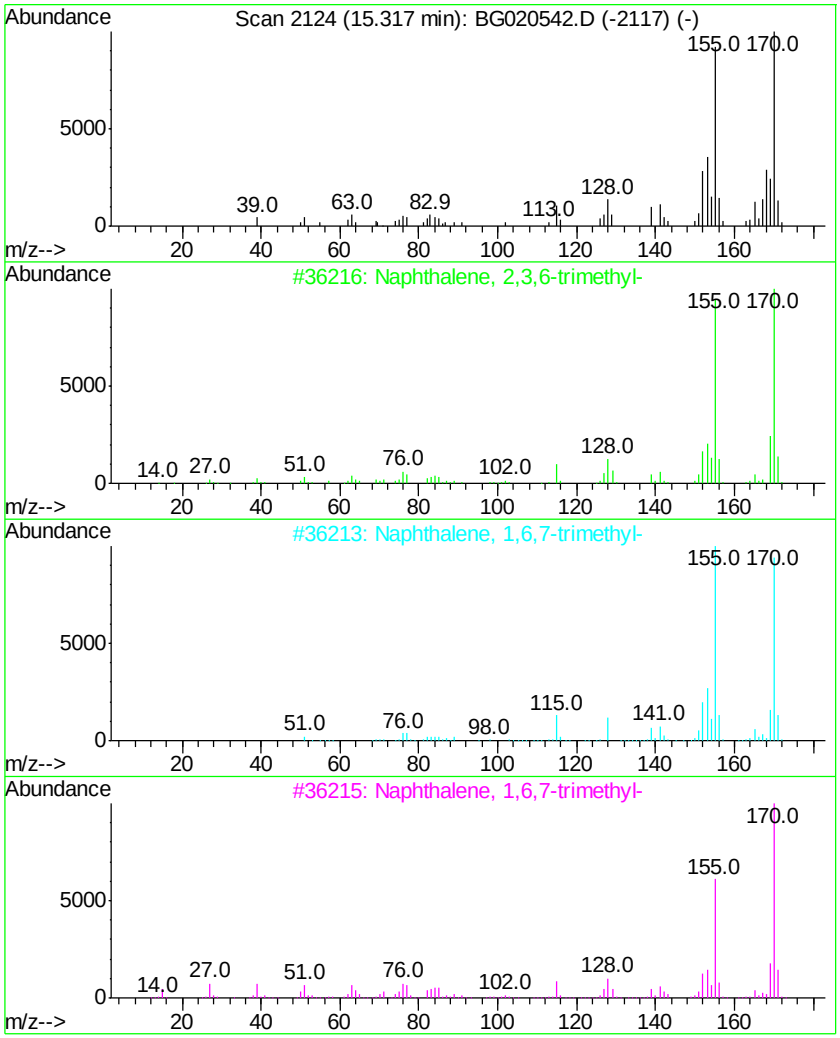
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

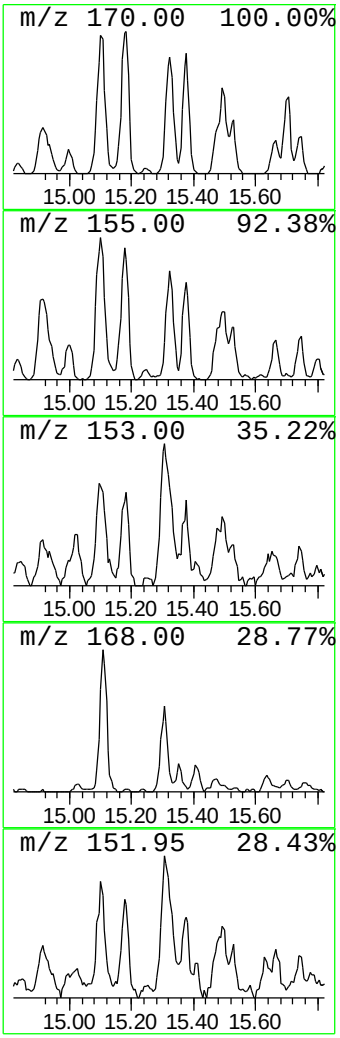
**********

Peak Number 11 Naphthalene, 1,6,7-trimethyl- Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.32 | 9.73 ng/ul | 122585 | Acenaphthene-d10 | 14.71 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 95 |
| 2 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 94 |
| 3 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 93 |
| 4 | Naphthalene, 1,4,5-trimethyl- | 170 | C13H14 | 002131-41-1 | 93 |
| 5 | 3-(2-Methyl-propenyl)-1H-indene | 170 | C13H14 | 1000187-78-5 | 89 |



# Library Search Compound Report

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Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

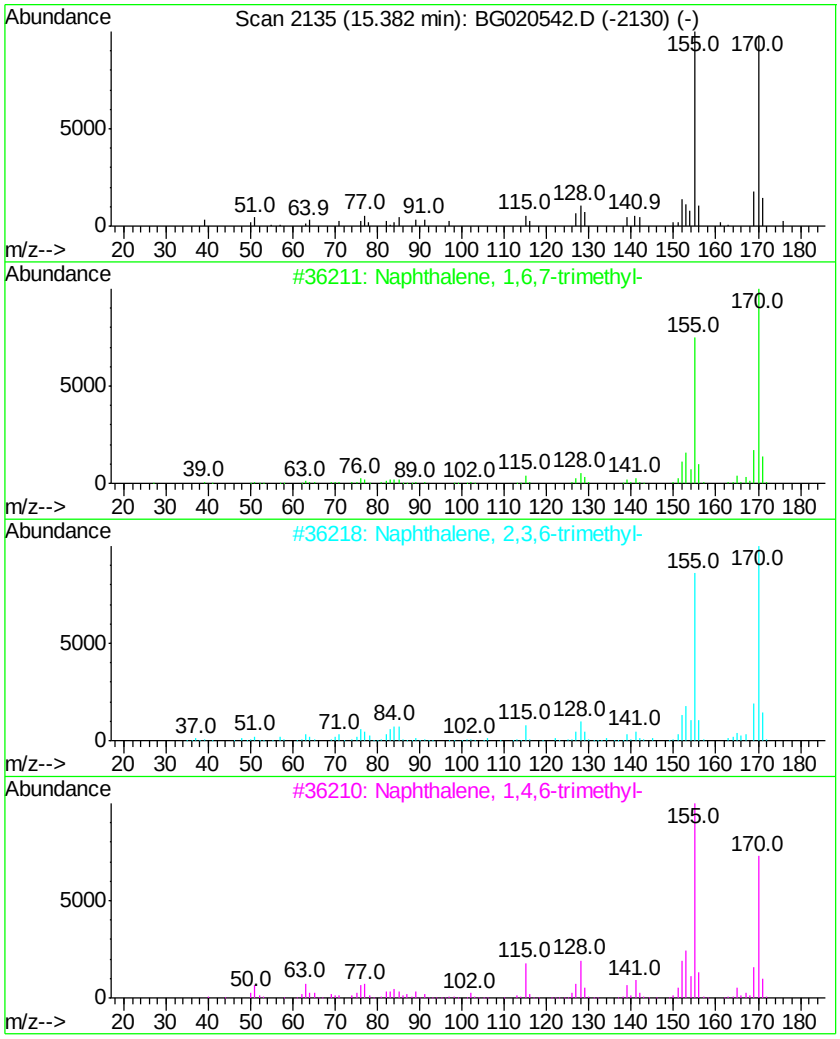
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

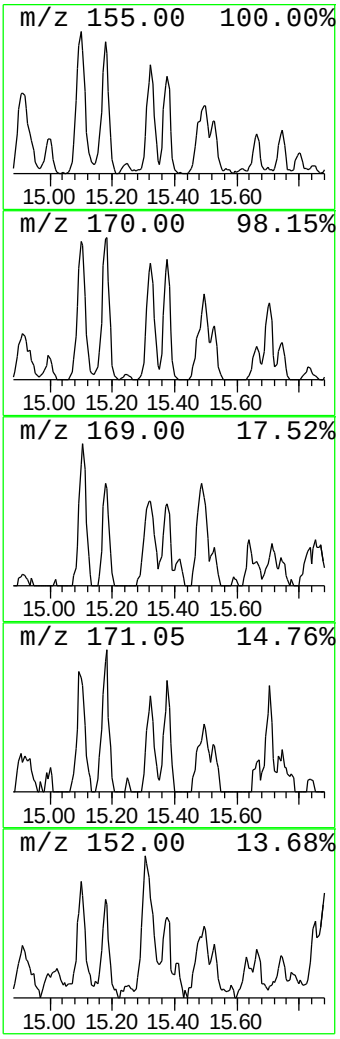
**********

Peak Number 12 Naphthalene, 1,4,6-trimethyl- Concentration Rank 30

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.38 | 4.15 ng/ul | 52268 | Acenaphthene-d10 | 14.71 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 97 |
| 2 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 97 |
| 3 | Naphthalene, 1,4,6-trimethyl- | 170 | C13H14 | 002131-42-2 | 96 |
| 4 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 95 |
| 5 | Naphthalene, 1,4,5-trimethyl- | 170 | C13H14 | 002131-41-1 | 94 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

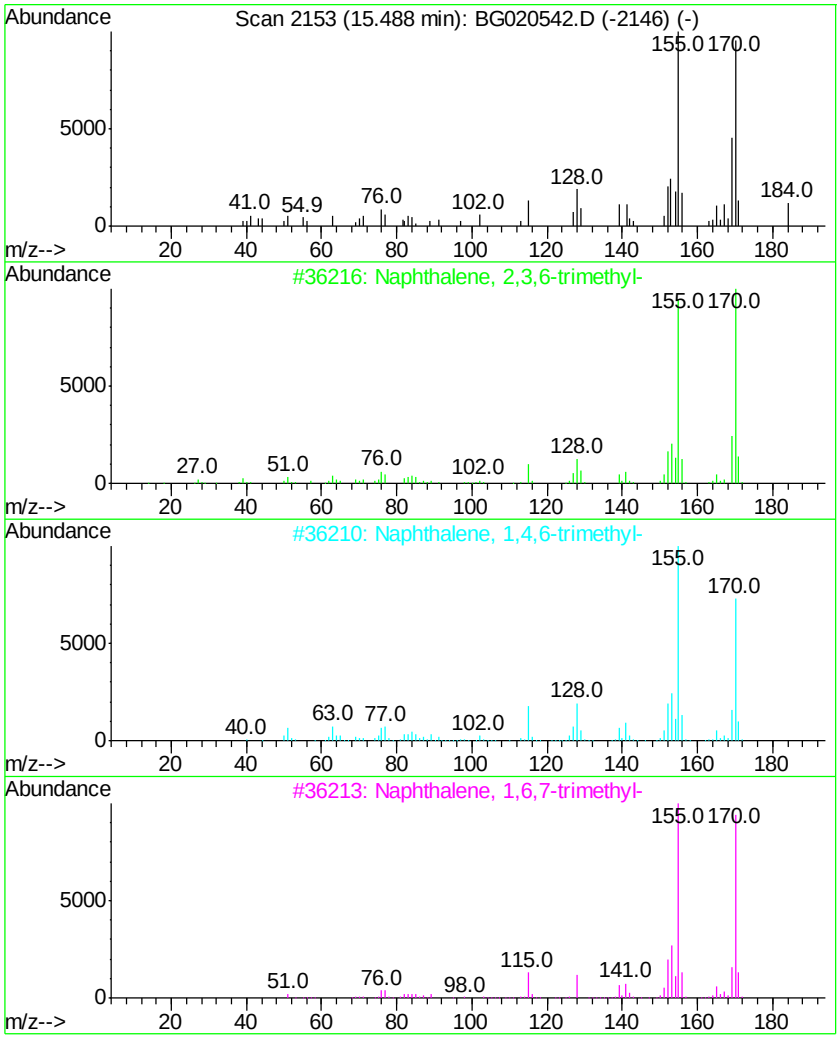
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

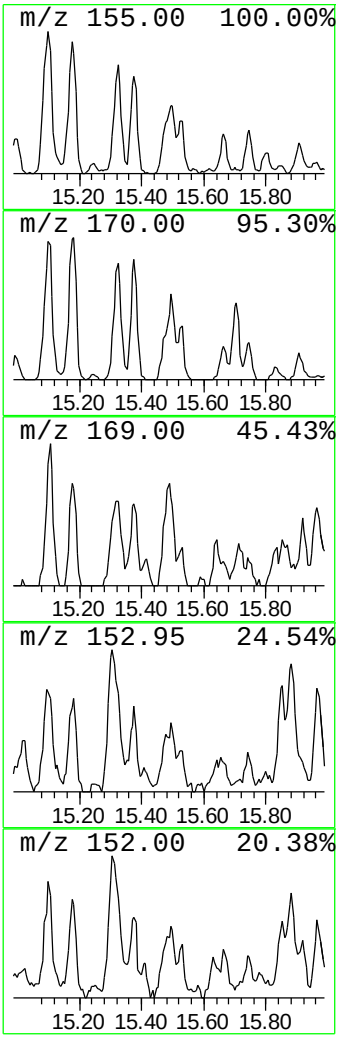
**********

Peak Number 13 Naphthalene, 1,4,5-trimethyl- Concentration Rank 22

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.49 | 6.45 ng/ul | 81239 | Acenaphthene-d10 | 14.71 |

| 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, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 96 |
| 4 | Naphthalene, 1,4,5-trimethyl- | 170 | C13H14 | 002131-41-1 | 95 |
| 5 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 94 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

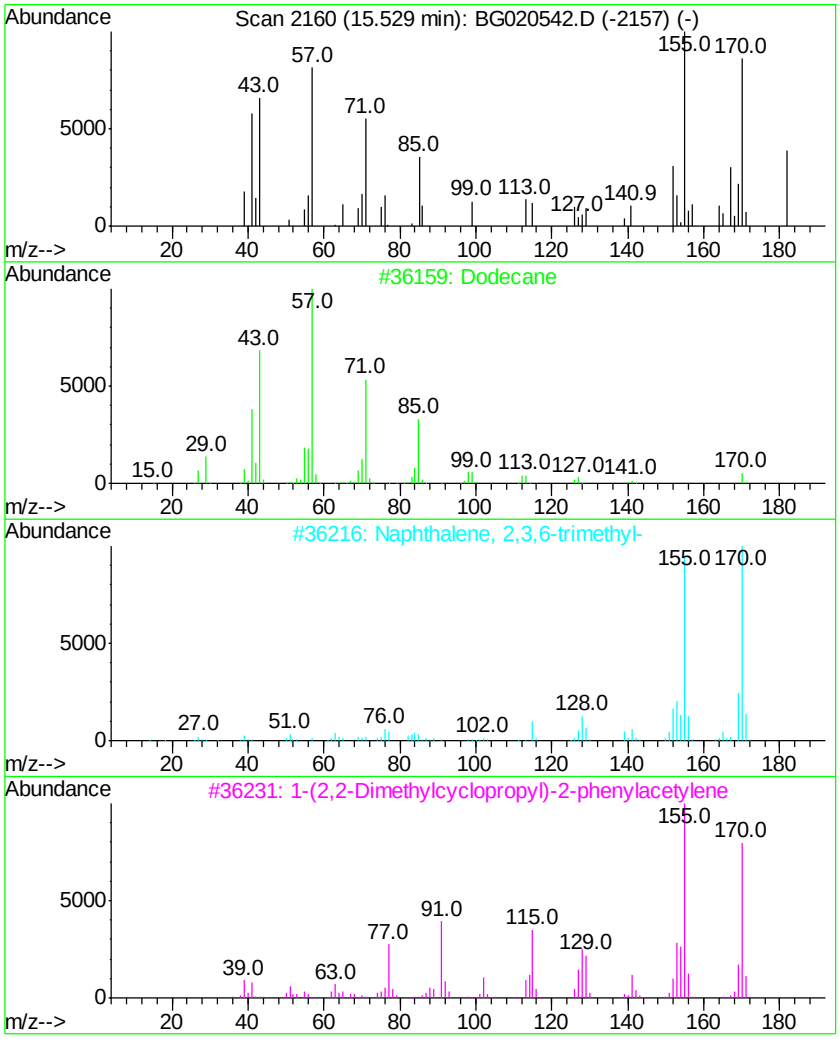
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

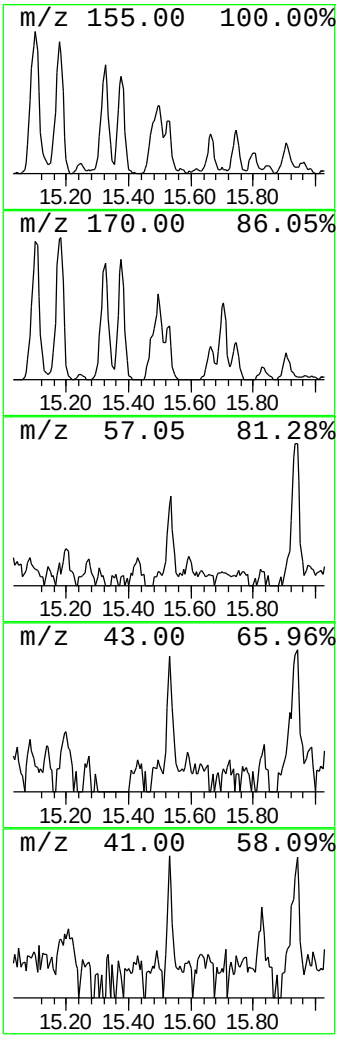
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 14 (DEL) Alkane: Straight-Chai... Concentration Rank 42

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.53 | 2.77 ng/ul | 34903 | Acenaphthene-d10 | 14.71 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dodecane | 170 | C12H26 | 000112-40-3 | 49 |
| 2 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 43 |
| 3 | 1-(2,2-Dimethylcyclopropyl)-2-ph... | 170 | C13H14 | 1000294-91-1 | 43 |
| 4 | Dodecane | 170 | C12H26 | 000112-40-3 | 38 |
| 5 | Metharbital | 198 | C9H14N2O3 | 000050-11-3 | 38 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

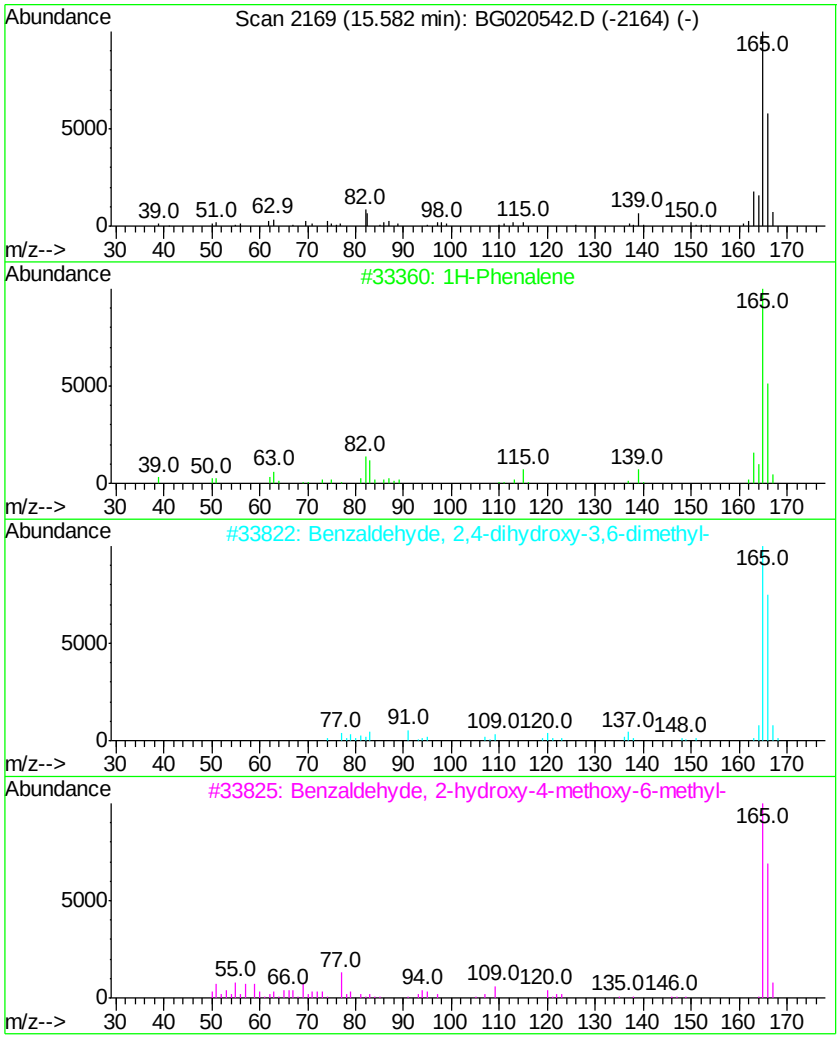
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

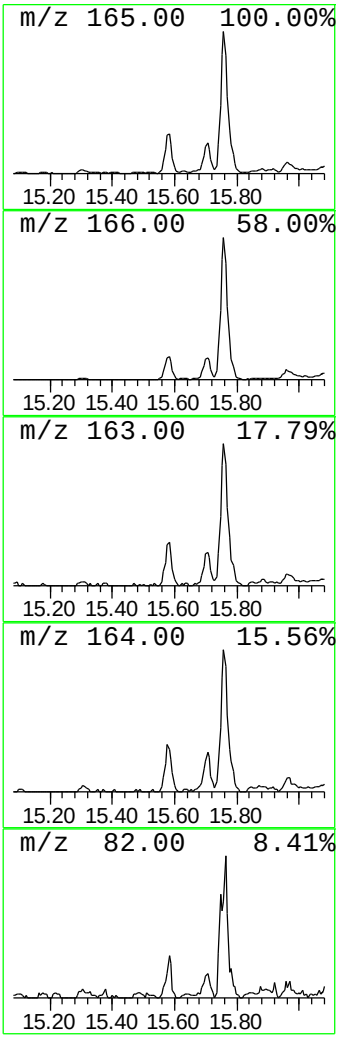
**********

Peak Number 15 1H-Phenalene Concentration Rank 21

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.58 | 6.58 ng/ul | 82865 | Acenaphthene-d10 | 14.71 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1H-Phenalene | 166 | C13H10 | 000203-80-5 | 90 |
| 2 | Benzaldehyde, 2,4-dihydroxy-3,6-... | 166 | C9H10O3 | 034883-14-2 | 64 |
| 3 | Benzaldehyde, 2-hydroxy-4-methox... | 166 | C9H10O3 | 034883-08-4 | 45 |
| 4 | Fluorene | 166 | C13H10 | 000086-73-7 | 38 |
| 5 | 3-Trifluoromethylbenzhydryl chlo... | 270 | C14H10ClF3 | 067240-79-3 | 33 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

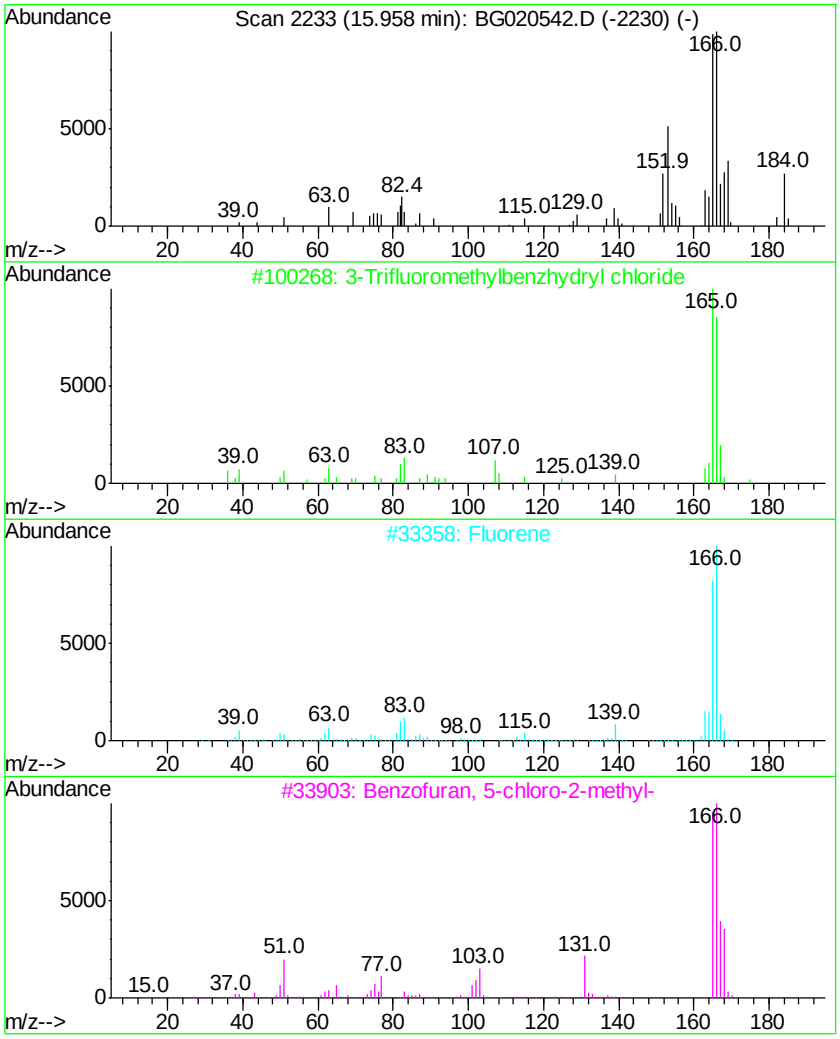
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

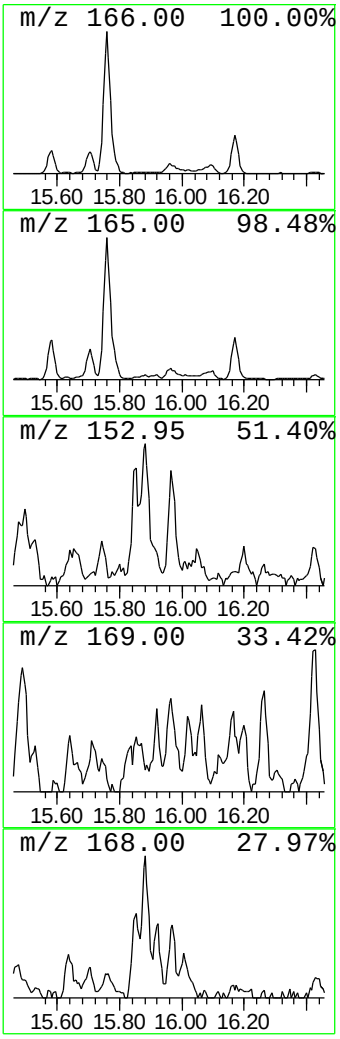
**********

Peak Number 16 unknown-02 Concentration Rank 38

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.96 | 3.18 ng/ul | 40113 | Acenaphthene-d10 | 14.71 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Trifluoromethylbenzhydryl chlo... | 270 | C14H10ClF3 | 067240-79-3 | 43 |
| 2 | Fluorene | 166 | C13H10 | 000086-73-7 | 43 |
| 3 | Benzofuran, 5-chloro-2-methyl- | 166 | C9H7ClO | 042180-82-5 | 38 |
| 4 | Fluorene | 166 | C13H10 | 000086-73-7 | 30 |
| 5 | 1-Isopropenylnaphthalene | 168 | C13H12 | 001855-47-6 | 30 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

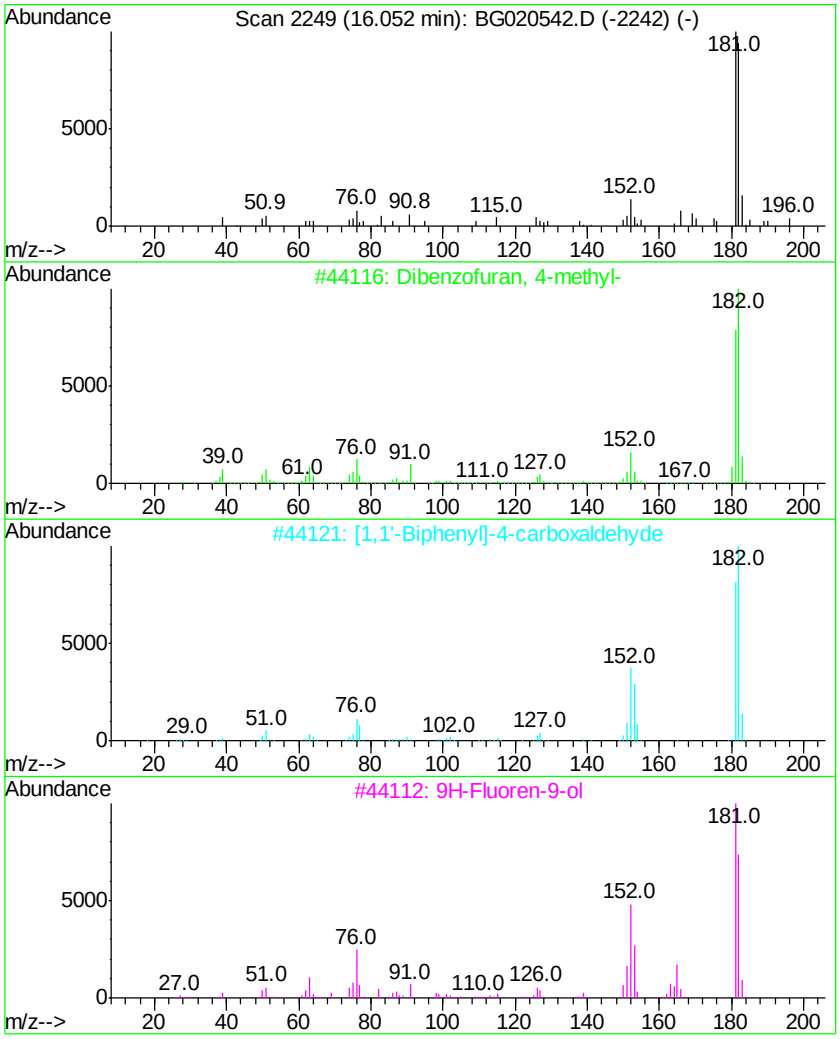
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

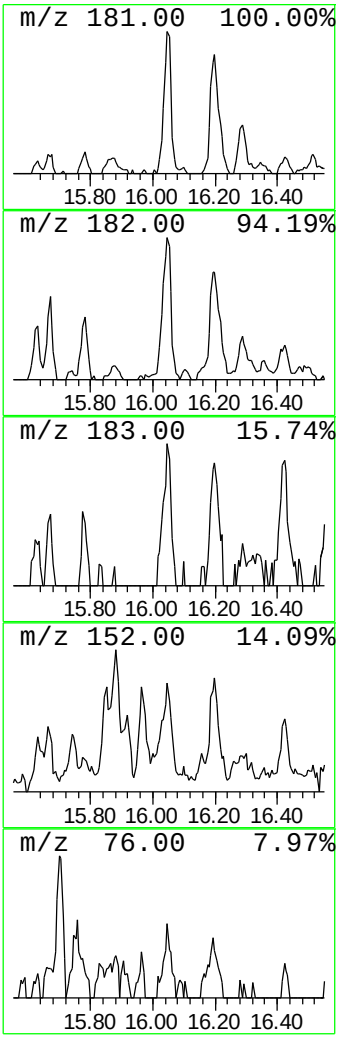
**********

Peak Number 17 Dibenzofuran, 4-methyl- Concentration Rank 36

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.05 | 3.30 ng/ul | 41537 | Acenaphthene-d10 | 14.71 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dibenzofuran, 4-methyl- | 182 | C13H10O | 007320-53-8 | 90 |
| 2 | [1,1'-Biphenyl]-4-carboxaldehyde | 182 | C13H10O | 003218-36-8 | 80 |
| 3 | 9H-Fluoren-9-ol | 182 | C13H10O | 001689-64-1 | 78 |
| 4 | 9H-Fluoren-9-ol | 182 | C13H10O | 001689-64-1 | 78 |
| 5 | Pyridine, 4,4'-(1,2-ethenediyl)bis- | 182 | C12H10N2 | 001135-32-6 | 64 |



Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

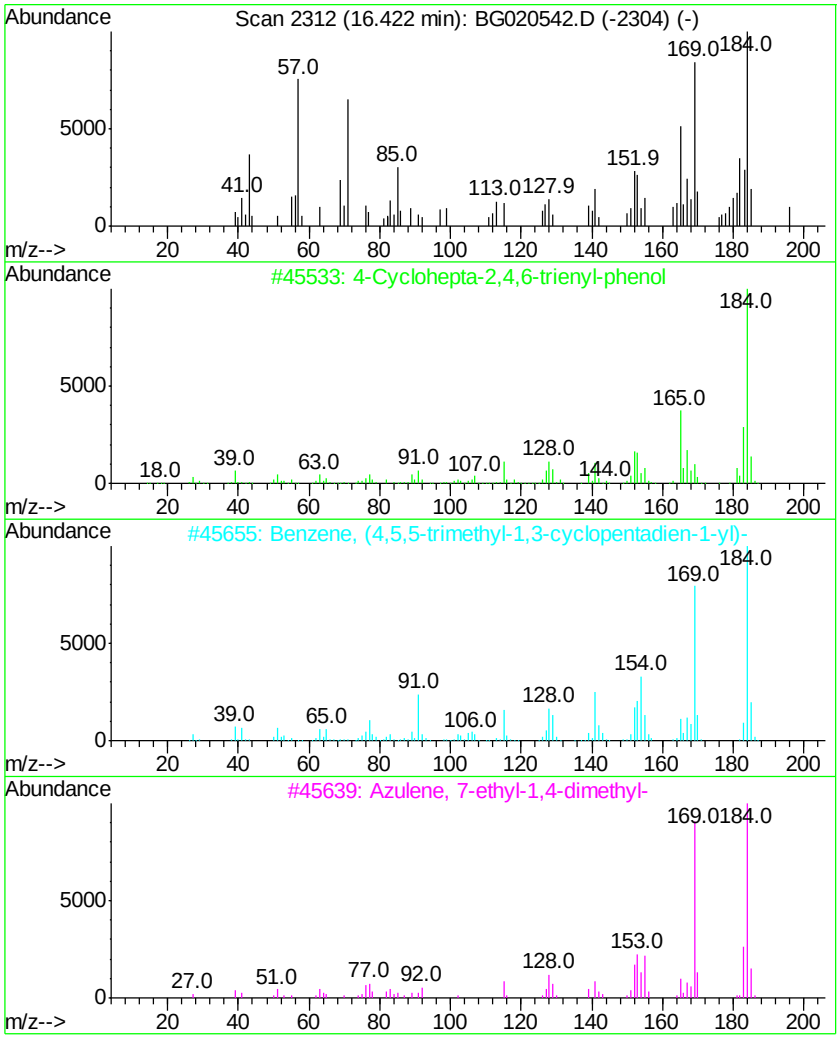
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

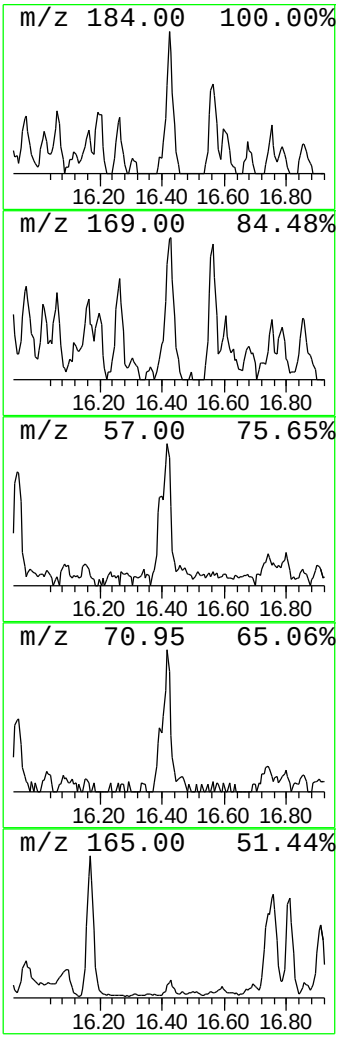
**********

Peak Number 19 4-Cyclohepta-2,4,6-trienyl-... Concentration Rank 26

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.42 | 5.13 ng/ul | 82520 | Phenanthrene-d10 | 17.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4-Cyclohepta-2,4,6-trienyl-phenol | 184 | C13H12O | 091902-42-0 | 83 |
| 2 | Benzene, (4,5,5-trimethyl-1,3-cy... | 184 | C14H16 | 033930-85-7 | 70 |
| 3 | Azulene, 7-ethyl-1,4-dimethyl- | 184 | C14H16 | 000529-05-5 | 64 |
| 4 | Cyclopentene, 1,2-dimethyl-4-met... | 184 | C14H16 | 1000152-22-4 | 58 |
| 5 | 1,4,5,8-Tetramethylnaphthalene | 184 | C14H16 | 002717-39-7 | 53 |



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Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

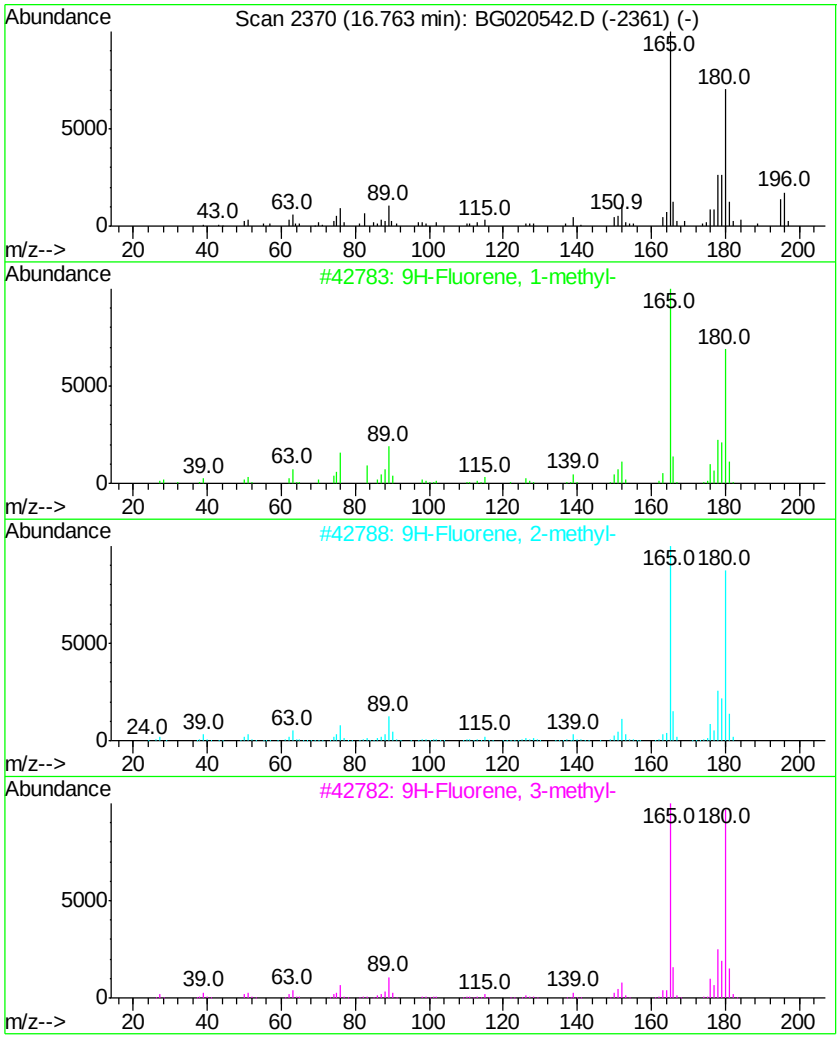
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

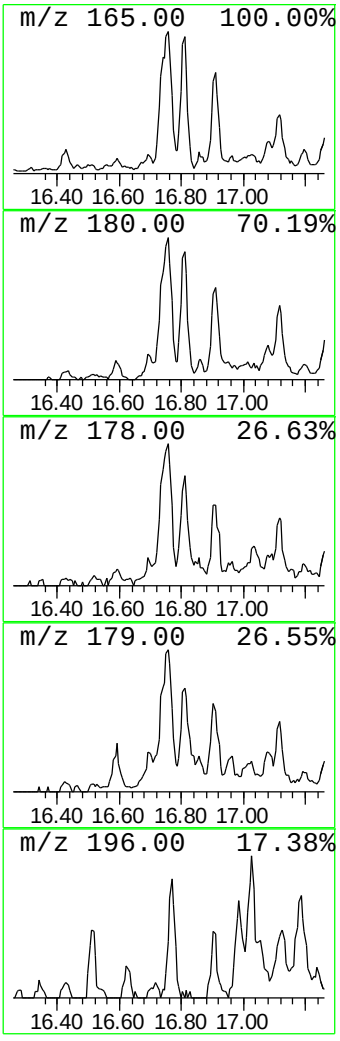
**********

Peak Number 20 9H-Fluorene, 1-methyl- Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.76 | 10.99 ng/ul | 177001 | Phenanthrene-d10 | 17.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 96 |
| 2 | 9H-Fluorene, 2-methyl- | 180 | C14H12 | 001430-97-3 | 96 |
| 3 | 9H-Fluorene, 3-methyl- | 180 | C14H12 | 002523-39-9 | 93 |
| 4 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 90 |
| 5 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 90 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

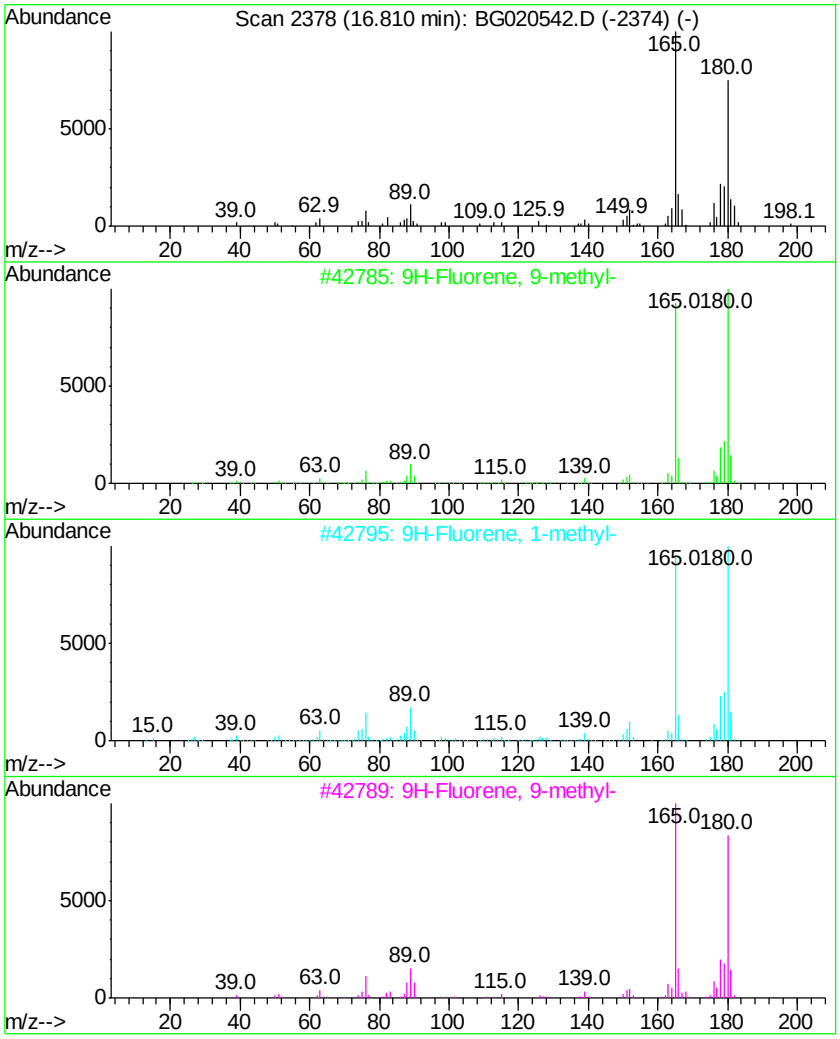
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

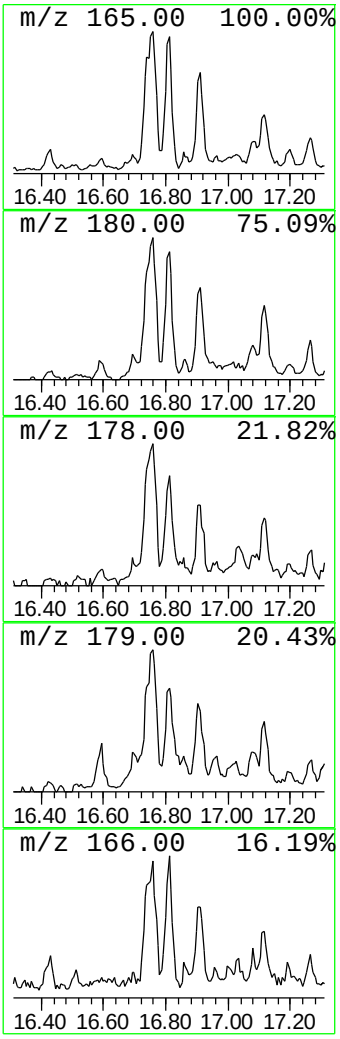
**********

Peak Number 21 9H-Fluorene, 9-methyl- Concentration Rank 24

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.81 | 5.86 ng/ul | 94292 | Phenanthrene-d10 | 17.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Fluorene, 9-methyl- | 180 | C14H12 | 002523-37-7 | 90 |
| 2 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 90 |
| 3 | 9H-Fluorene, 9-methyl- | 180 | C14H12 | 002523-37-7 | 87 |
| 4 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 76 |
| 5 | 9H-Fluorene, 9-methyl- | 180 | C14H12 | 002523-37-7 | 76 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

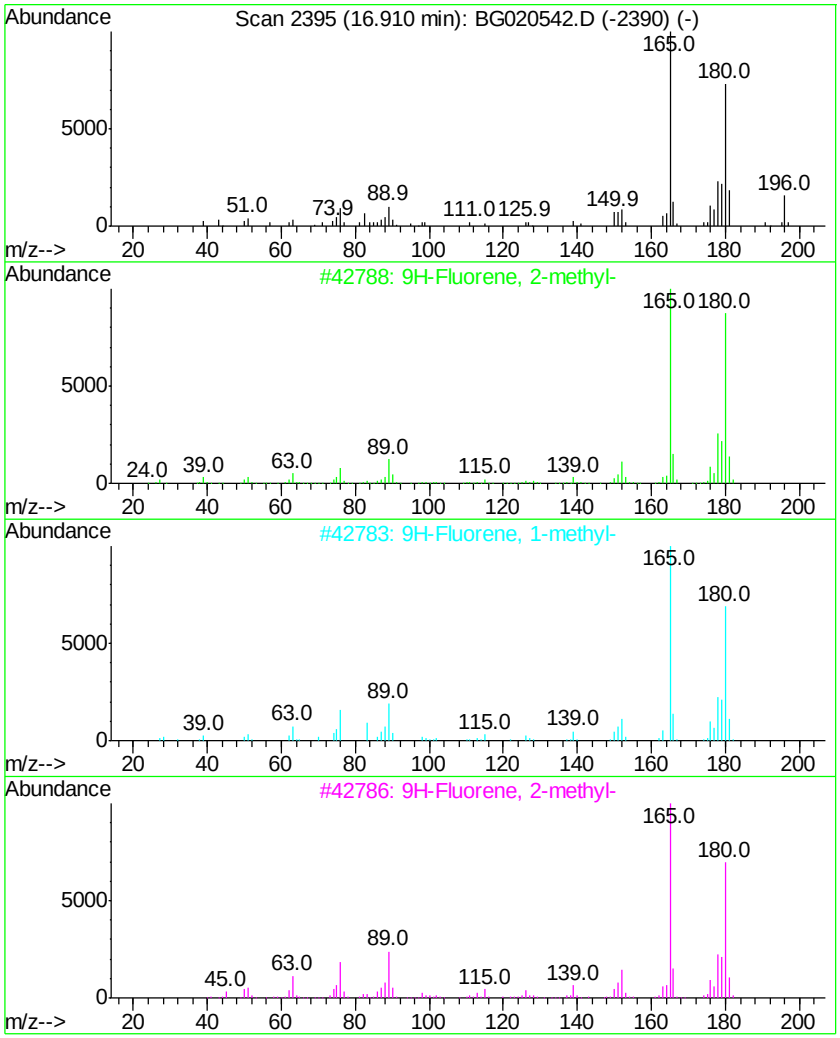
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

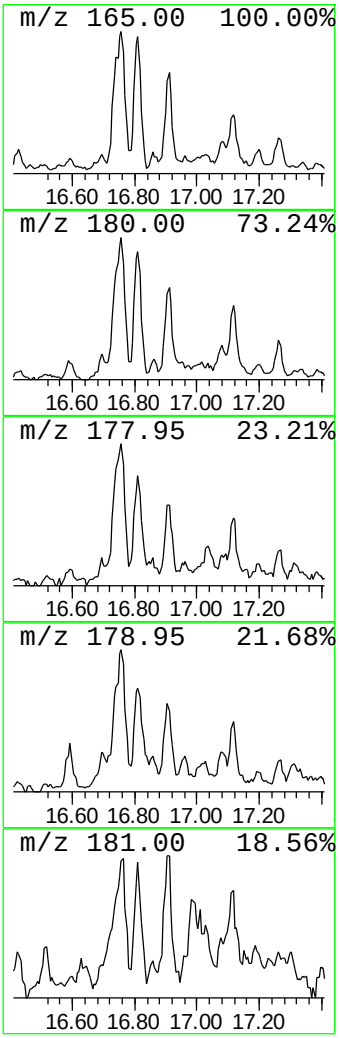
**********

Peak Number 22 9H-Fluorene, 2-methyl- Concentration Rank 28

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.91 | 4.52 ng/ul | 72748 | Phenanthrene-d10 | 17.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Fluorene, 2-methyl- | 180 | C14H12 | 001430-97-3 | 94 |
| 2 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 91 |
| 3 | 9H-Fluorene, 2-methyl- | 180 | C14H12 | 001430-97-3 | 91 |
| 4 | 9H-Fluorene, 4-methyl- | 180 | C14H12 | 001556-99-6 | 87 |
| 5 | 9H-Fluorene, 9-methyl- | 180 | C14H12 | 002523-37-7 | 81 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

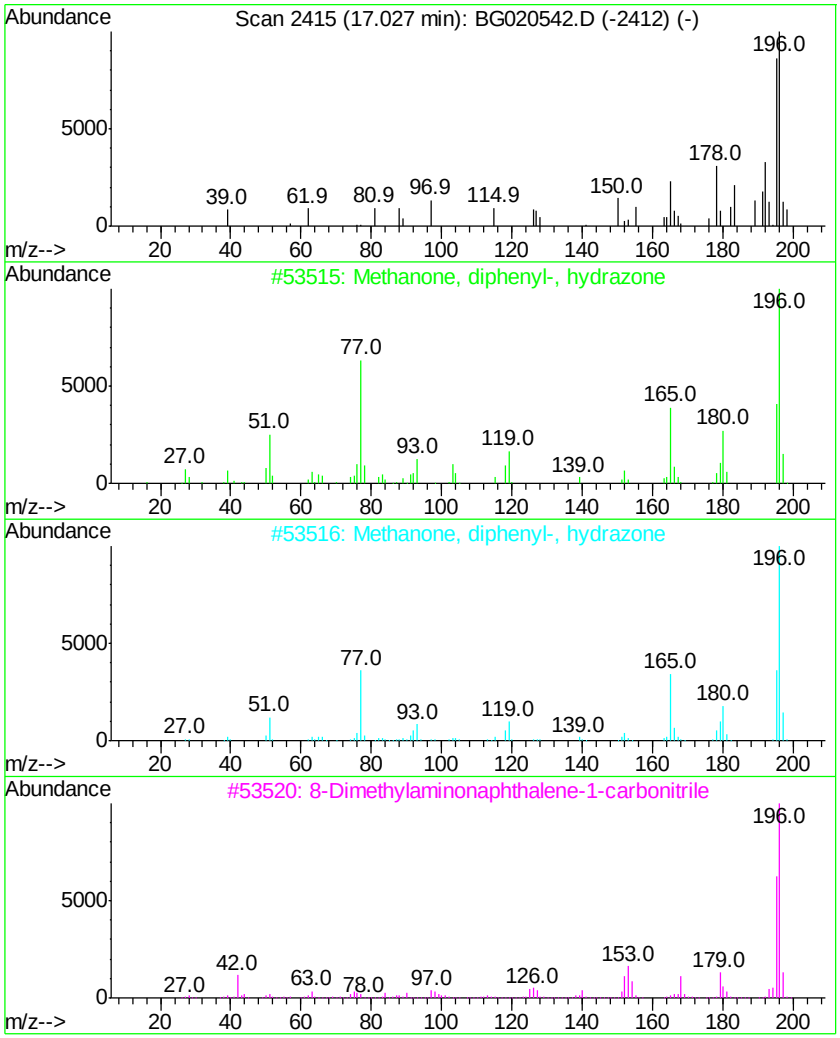
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

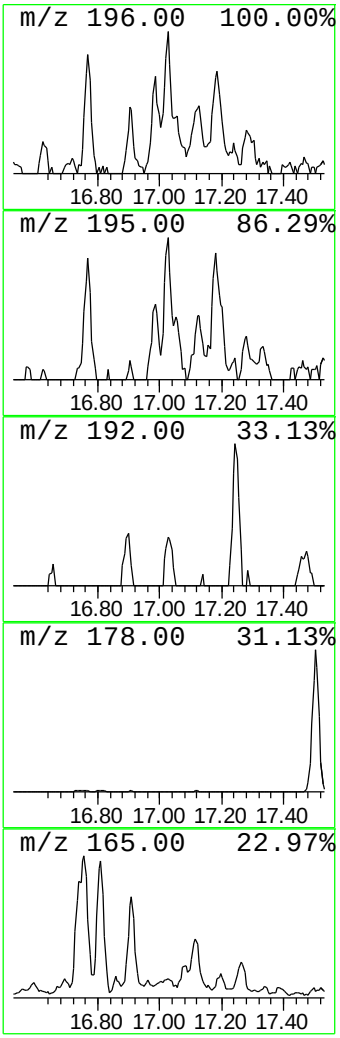
**********

Peak Number 23 unknown-03 Concentration Rank 48

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.03 | 2.29 ng/ul | 36896 | Phenanthrene-d10 | 17.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Methanone, diphenyl-, hydrazone | 196 | C13H12N2 | 005350-57-2 | 38 |
| 2 | Methanone, diphenyl-, hydrazone | 196 | C13H12N2 | 005350-57-2 | 38 |
| 3 | 8-Dimethylaminonaphthalene-1-car... | 196 | C13H12N2 | 128644-69-9 | 38 |
| 4 | Methanone, diphenyl-, hydrazone | 196 | C13H12N2 | 005350-57-2 | 35 |
| 5 | Perimidine, 2-ethyl- | 196 | C13H12N2 | 028478-13-9 | 35 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

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

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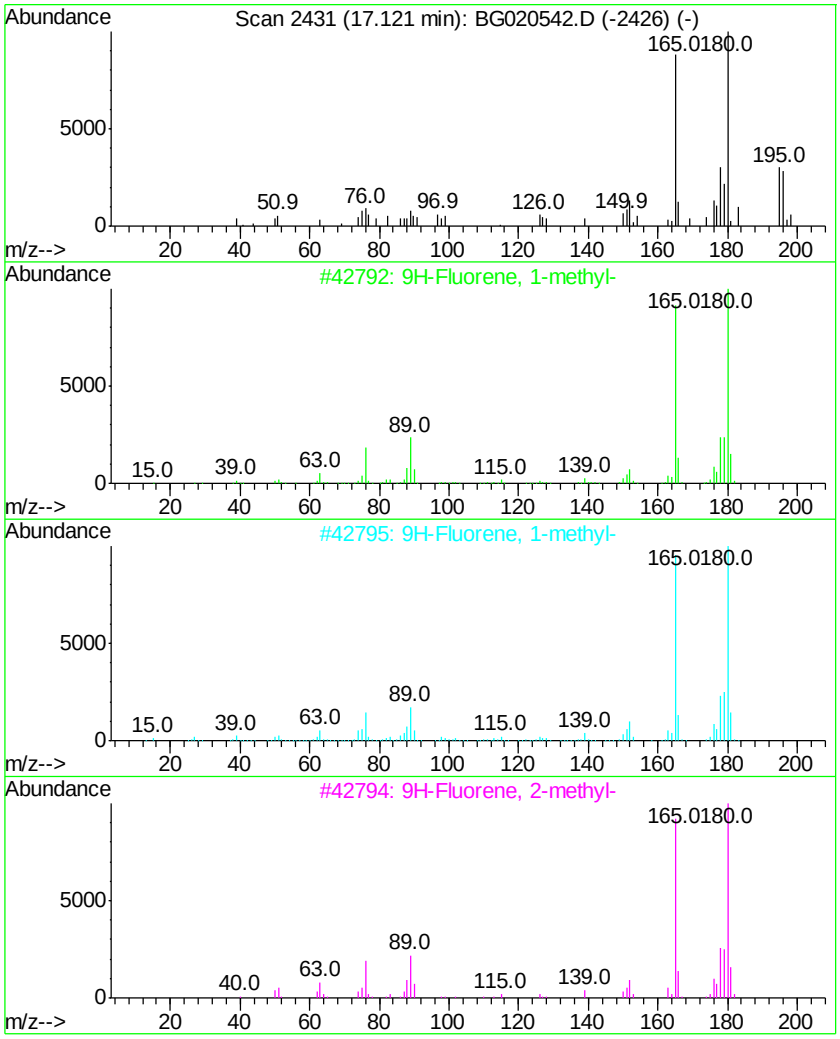
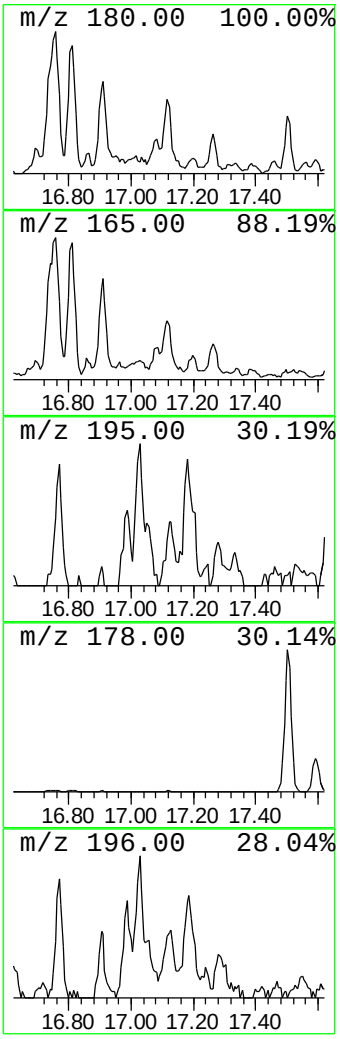
Peak Number 24 9H-Fluorene, 4-methyl- Concentration Rank 33

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.12 | 3.48 ng/ul | 55975 | Phenanthrene-d10 | 17.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 93 |
| 2 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 93 |
| 3 | 9H-Fluorene, 2-methyl- | 180 | C14H12 | 001430-97-3 | 93 |
| 4 | 9H-Fluorene, 4-methyl- | 180 | C14H12 | 001556-99-6 | 89 |
| 5 | 9H-Fluorene, 1-methyl- | 180 | C14H12 | 001730-37-6 | 89 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

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

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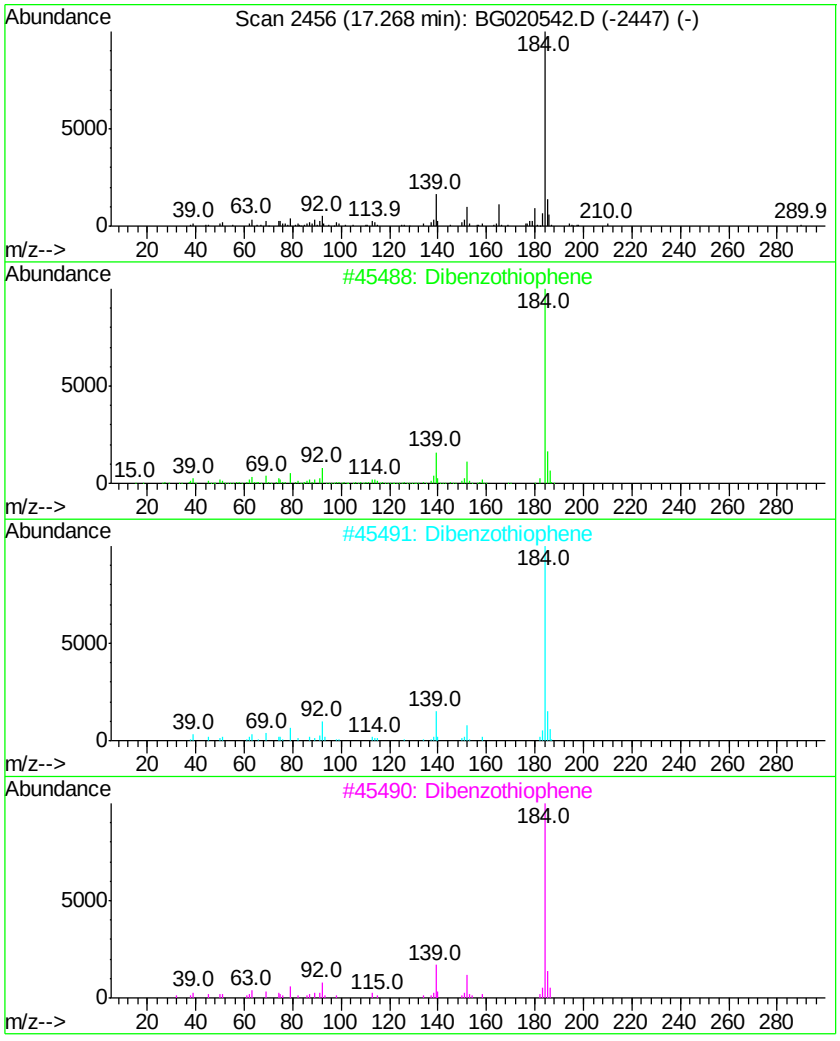
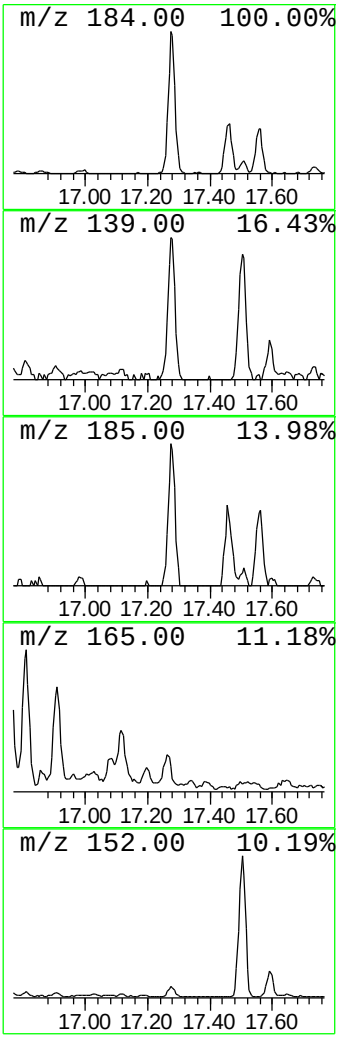
Peak Number 25 Dibenzothiophene Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.27 | 10.20 ng/ul | 164168 | Phenanthrene-d10 | 17.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 96 |
| 2 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 93 |
| 3 | Dibenzothiophene | 184 | C12H8S | 000132-65-0 | 93 |
| 4 | Naphtho[2,3-b]thiophene | 184 | C12H8S | 000268-77-9 | 93 |
| 5 | Azuleno(2,1-b)thiophene | 184 | C12H8S | 000248-13-5 | 91 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

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

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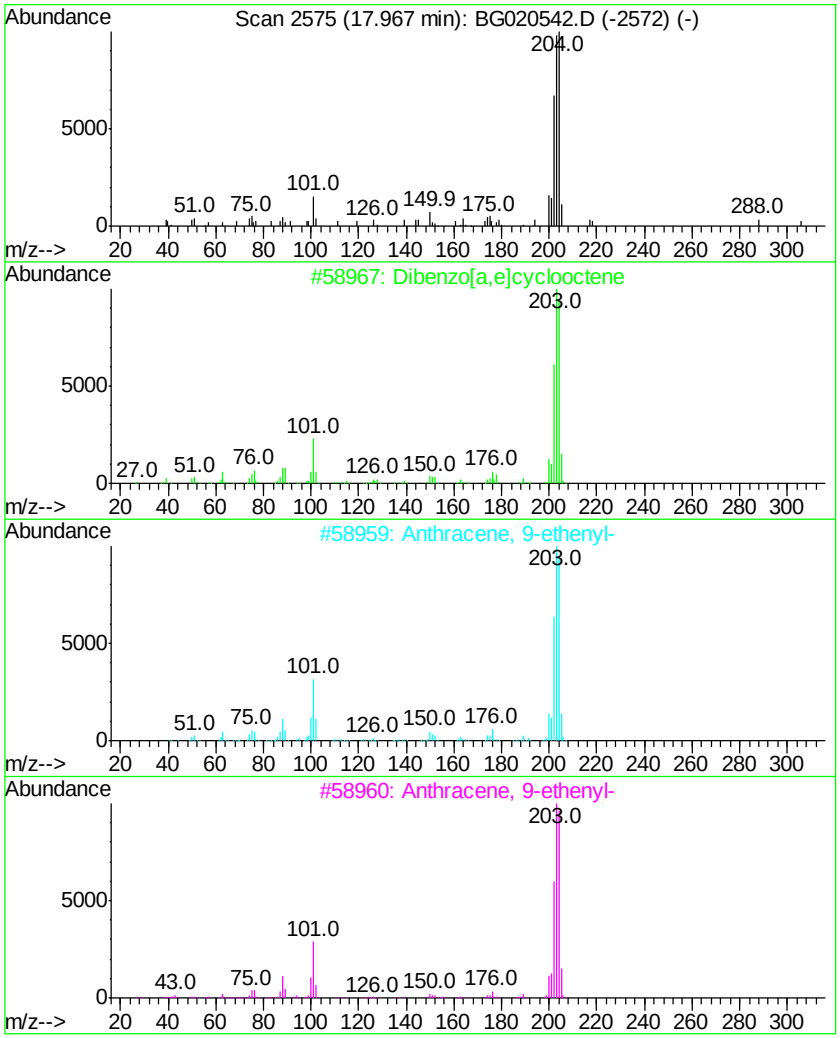
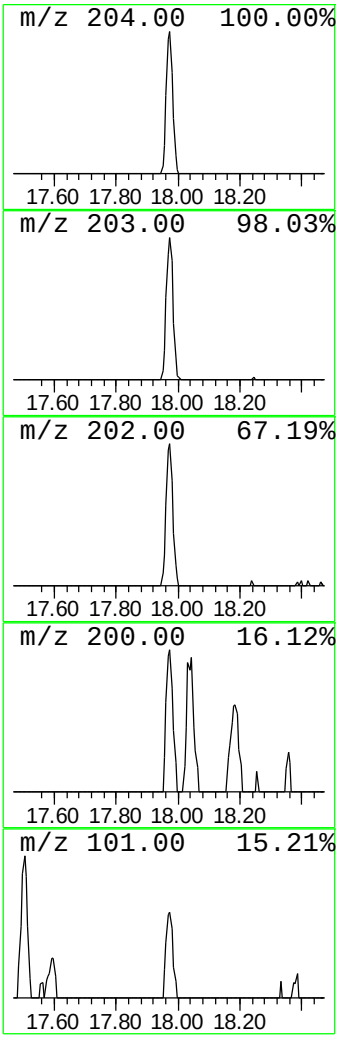
Peak Number 26 Dibenzo[a,e]cyclooctene Concentration Rank 51

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.97 | 2.05 ng/ul | 32960 | Phenanthrene-d10 | 17.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dibenzo[a,e]cyclooctene | 204 | C16H12 | 000262-89-5 | 76 |
| 2 | Anthracene, 9-ethenyl- | 204 | C16H12 | 002444-68-0 | 68 |
| 3 | Anthracene, 9-ethenyl- | 204 | C16H12 | 002444-68-0 | 64 |
| 4 | Bis(4-fluorophenyl)methane | 204 | C13H10F2 | 000457-68-1 | 53 |
| 5 | 1H-Indene, 1-(phenylmethylene)- | 204 | C16H12 | 005394-86-5 | 53 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

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

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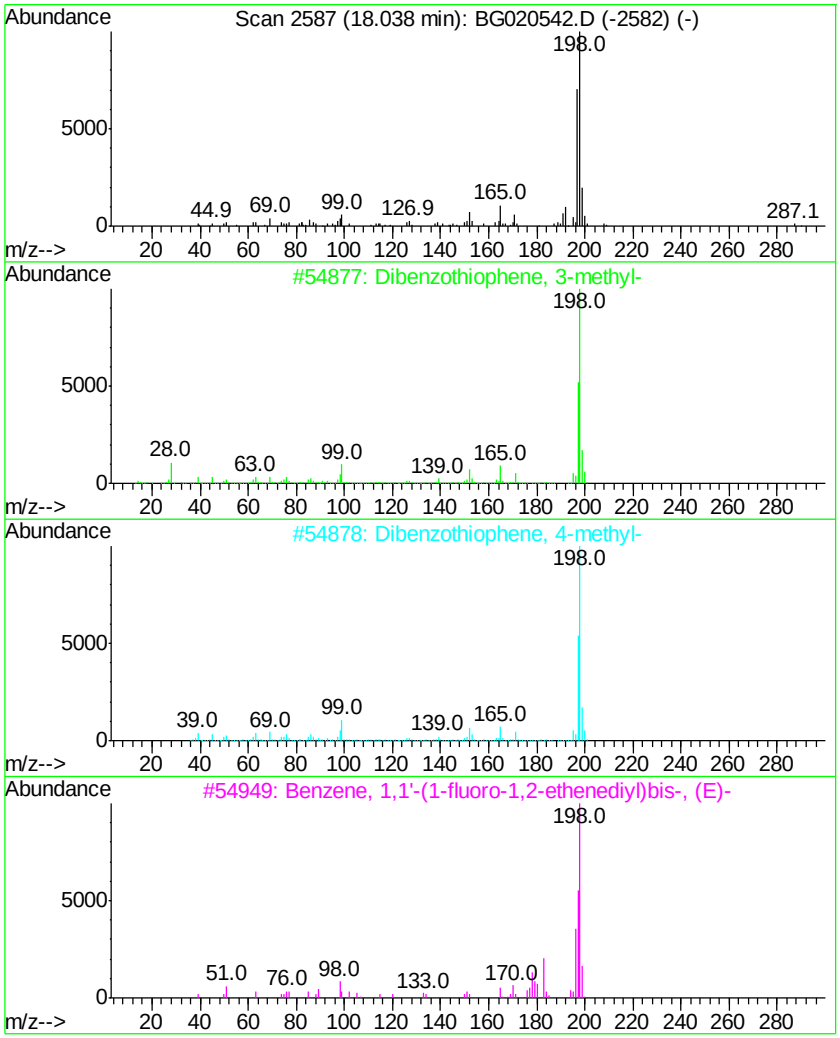
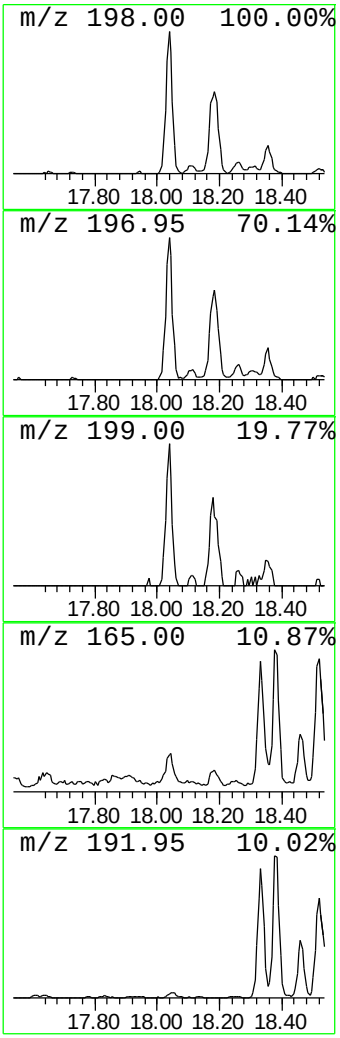
Peak Number 27 Dibenzothiophene, 3-methyl- Concentration Rank 27

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.04 | 4.96 ng/ul | 79920 | Phenanthrene-d10 | 17.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dibenzothiophene, 3-methyl- | 198 | C13H10S | 016587-52-3 | 93 |
| 2 | Dibenzothiophene, 4-methyl- | 198 | C13H10S | 007372-88-5 | 87 |
| 3 | Benzene, 1,1'-(1-fluoro-1,2-ethe... | 198 | C14H11F | 000671-19-2 | 72 |
| 4 | Benzenamine, 4,4'-methylenebis- | 198 | C13H14N2 | 000101-77-9 | 64 |
| 5 | Benzenamine, 4,4'-methylenebis- | 198 | C13H14N2 | 000101-77-9 | 64 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

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

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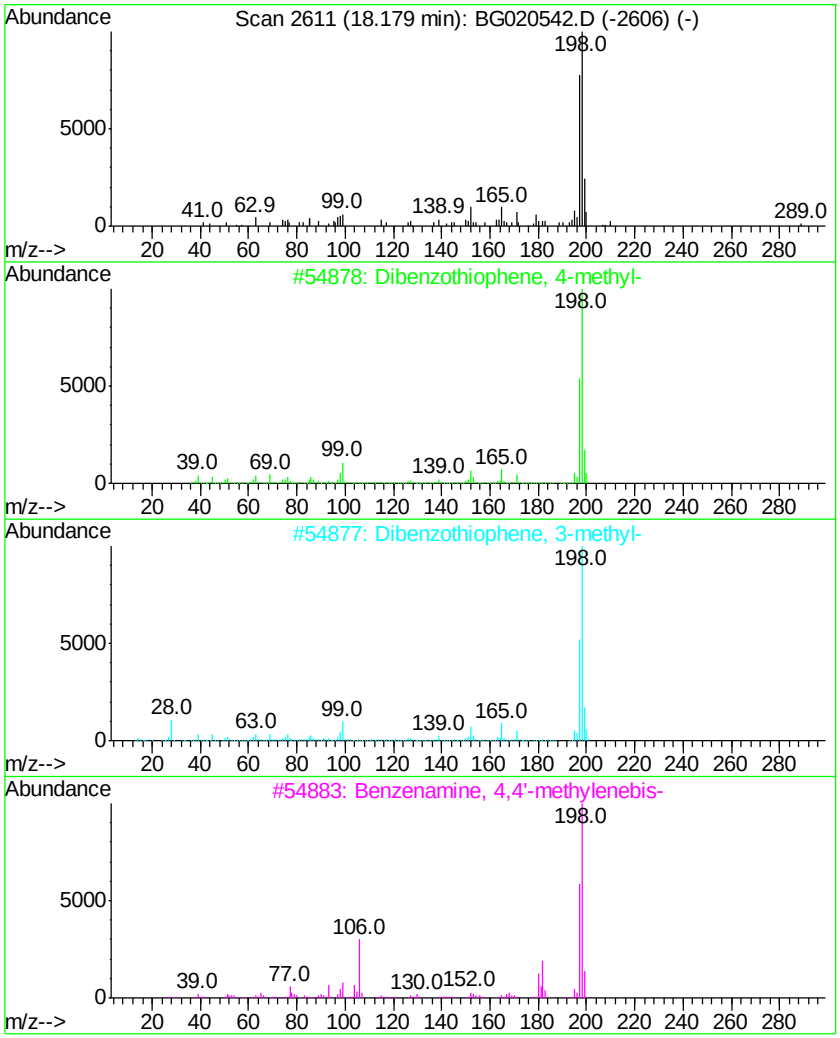
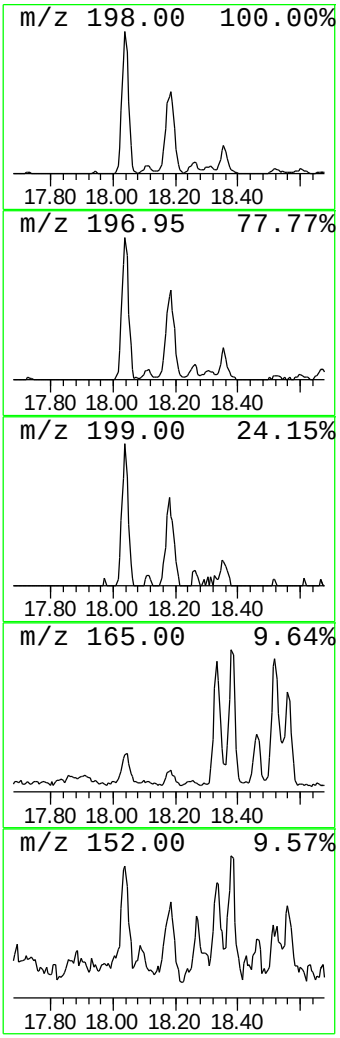
Peak Number 28 Dibenzothiophene, 4-methyl- Concentration Rank 29

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.18 | 4.39 ng/ul | 70729 | Phenanthrene-d10 | 17.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dibenzothiophene, 4-methyl- | 198 | C13H10S | 007372-88-5 | 89 |
| 2 | Dibenzothiophene, 3-methyl- | 198 | C13H10S | 016587-52-3 | 86 |
| 3 | Benzenamine, 4,4'-methylenebis- | 198 | C13H14N2 | 000101-77-9 | 80 |
| 4 | Benzenamine, 4,4'-methylenebis- | 198 | C13H14N2 | 000101-77-9 | 80 |
| 5 | 9-Acridinamine, 1,2,3,4-tetrahydro- | 198 | C13H14N2 | 000321-64-2 | 72 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

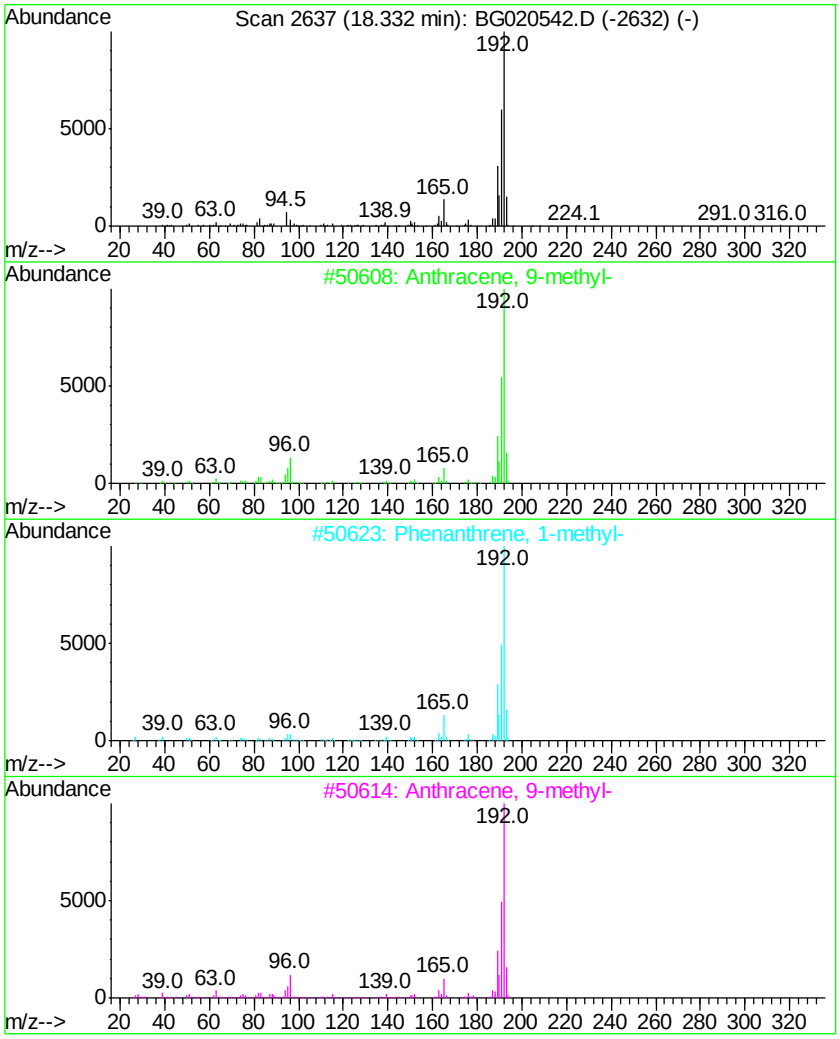
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

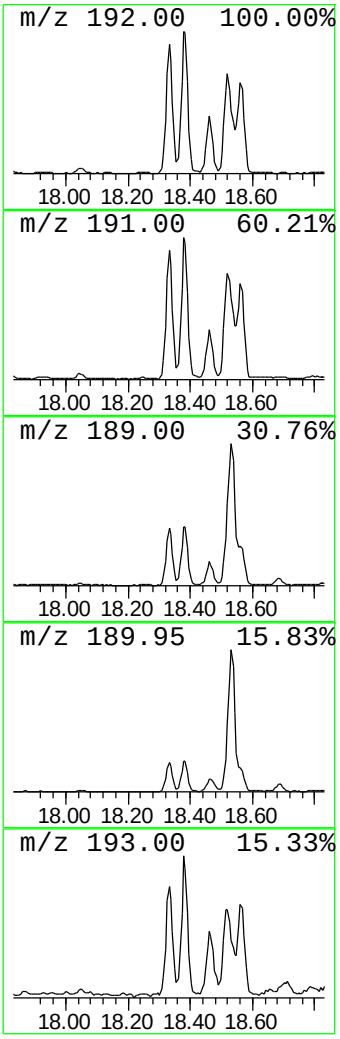
**********

Peak Number 29 Anthracene, 9-methyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.33 | 18.70 ng/ul | 301104 | Phenanthrene-d10 | 17.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 93 |
| 2 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 93 |
| 3 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 91 |
| 4 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 91 |
| 5 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 91 |



Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

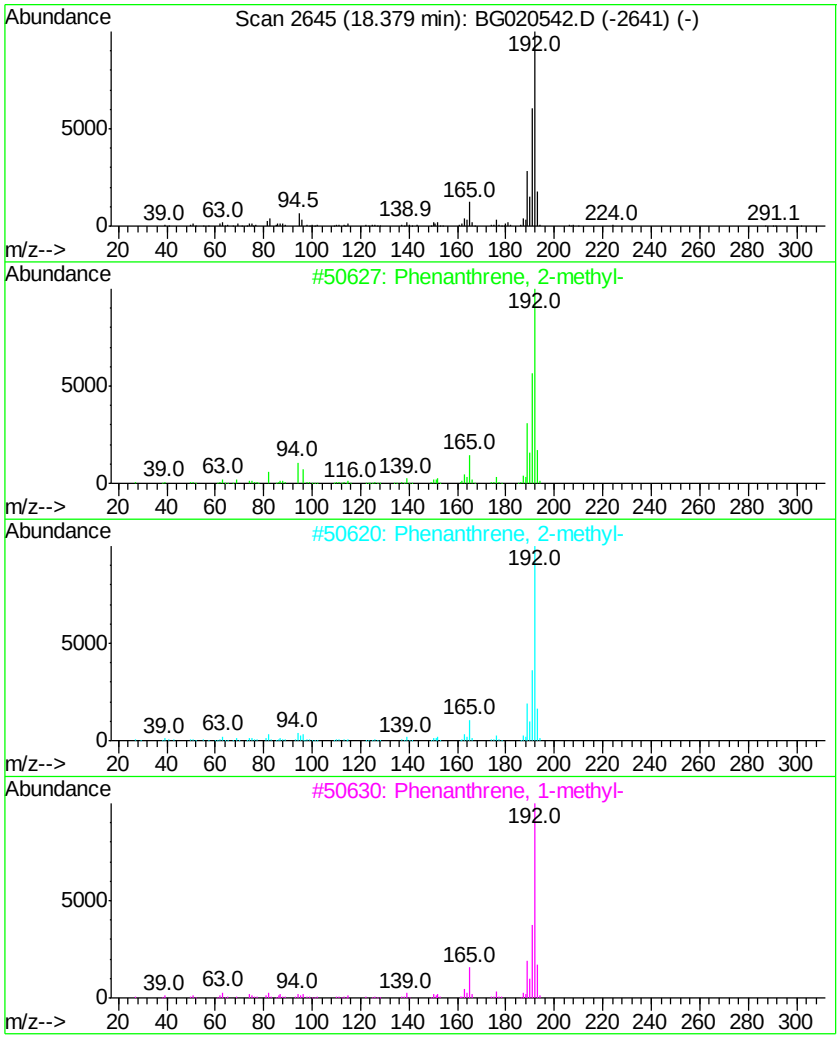
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

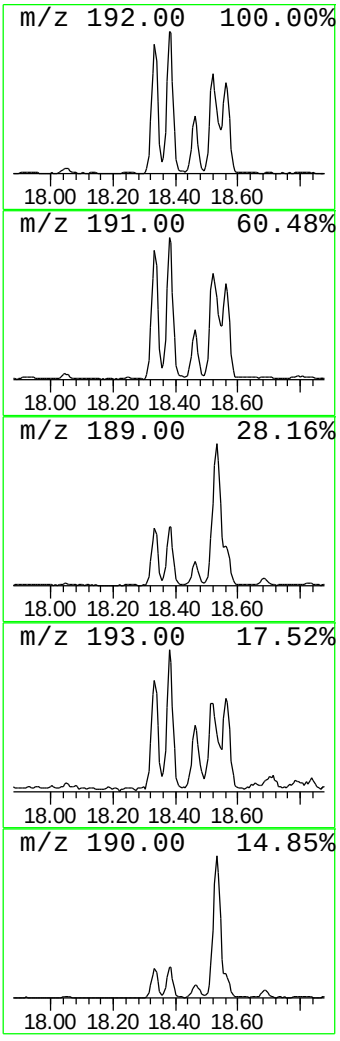
**********

Peak Number 30 Phenanthrene, 2-methyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.38 | 20.30 ng/ul | 326740 | Phenanthrene-d10 | 17.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 96 |
| 2 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 96 |
| 3 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 94 |
| 4 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 93 |
| 5 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 93 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

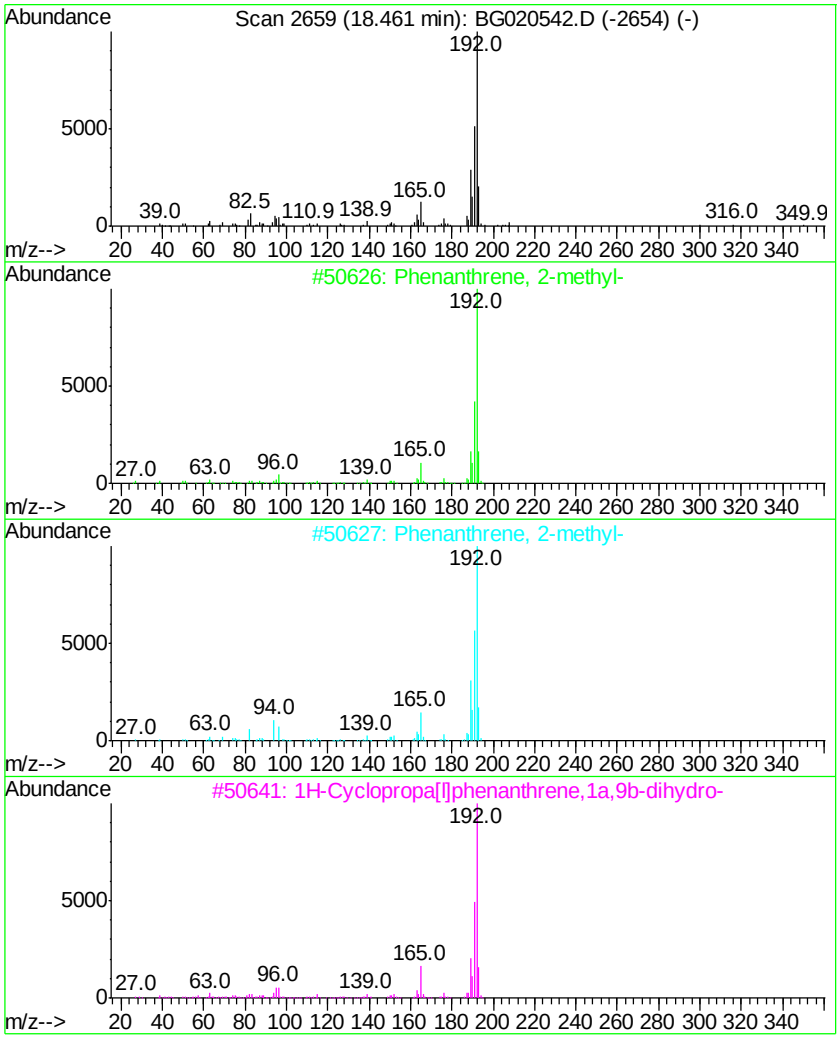
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

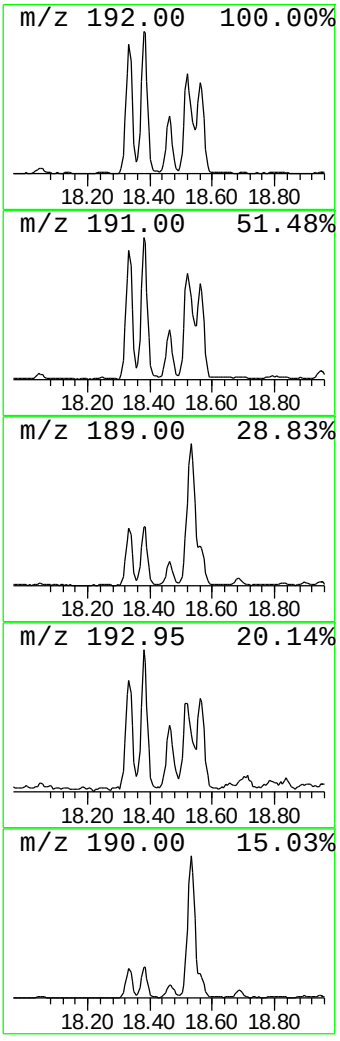
**********

Peak Number 31 Anthracene, 2-methyl- Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.46 | 7.86 ng/ul | 126556 | Phenanthrene-d10 | 17.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 97 |
| 2 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 96 |
| 3 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 95 |
| 4 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 95 |
| 5 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 95 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.M
Quant Title : SVOA CALIBRATION

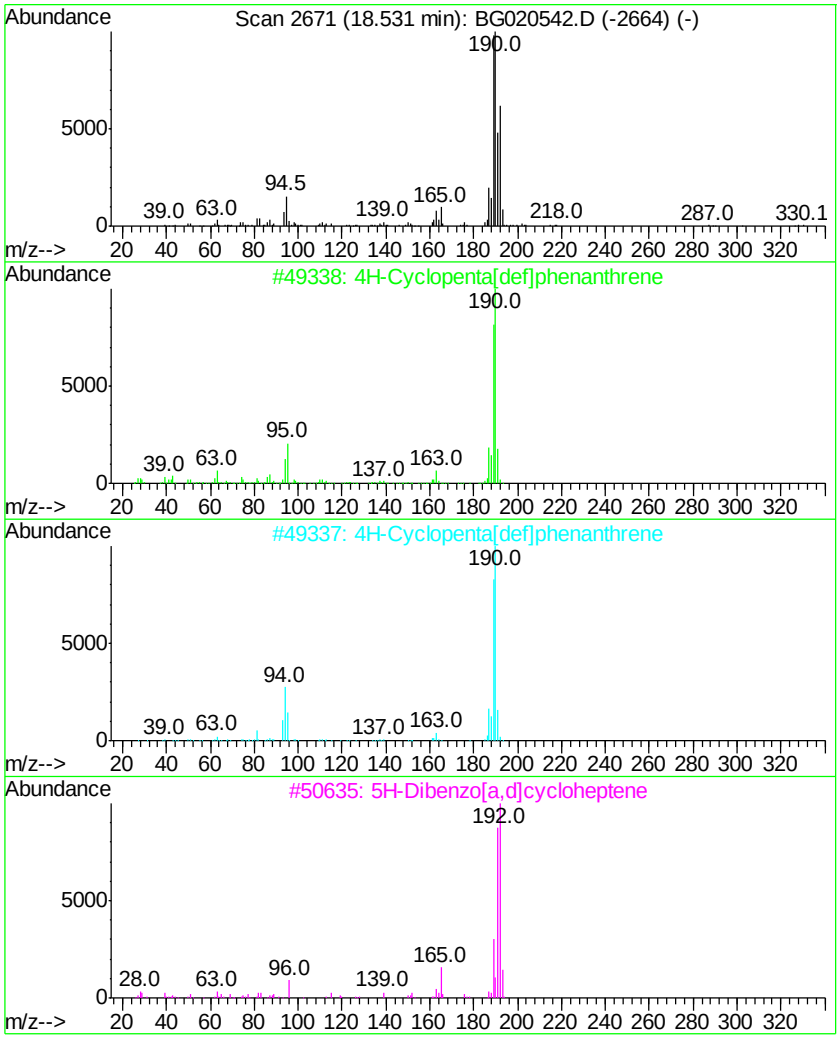
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

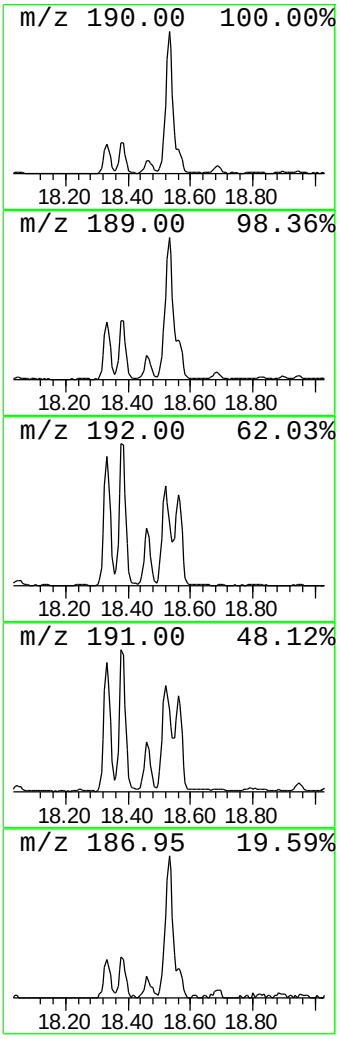
**********

Peak Number 32 4H-Cyclopenta[def]phenanthrene Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.53 | 29.49 ng/ul | 474773 | Phenanthrene-d10 | 17.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 55 |
| 2 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 53 |
| 3 | 5H-Dibenzo[a,d]cycloheptene | 192 | C15H12 | 000256-81-5 | 46 |
| 4 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 46 |
| 5 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 46 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122515\
Data File : BG020542.D
Acq On : 26 Dec 2015 16:09
Operator : UM/SJ
Sample : G4802-21
Misc :
ALS Vial : 79 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** G9D96

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG122415.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 | 8.61 | 16.1 | ng/ul | 81148 | 1 | 8.07 | 100576 | 20.0 |
| Benzene, (1-methy... | 10.31 | 11.2 | ng/ul | 89922 | 2 | 10.89 | 160117 | 20.0 |
| 1H-Indene, 1-methyl- | 10.39 | 8.6 | ng/ul | 68965 | 2 | 10.89 | 160117 | 20.0 |
| Naphthalene, 1-me... | 12.76 | 89.0 | ng/ul | 712865 | 2 | 10.89 | 160117 | 20.0 |
| Naphthalene, 1-et... | 13.77 | 2.9 | ng/ul | 36119 | 3 | 14.71 | 252059 | 20.0 |
| Naphthalene, 1,3-... | 13.87 | 12.3 | ng/ul | 155259 | 3 | 14.71 | 252059 | 20.0 |
| Naphthalene, 2,3-... | 14.03 | 30.6 | ng/ul | 385020 | 3 | 14.71 | 252059 | 20.0 |
| Naphthalene, 1,7-... | 14.27 | 13.1 | ng/ul | 164488 | 3 | 14.71 | 252059 | 20.0 |
| unknown-01 | 14.30 | 3.4 | ng/ul | 42264 | 3 | 14.71 | 252059 | 20.0 |
| Naphthalene, 2,3,... | 15.18 | 6.7 | ng/ul | 84662 | 3 | 14.71 | 252059 | 20.0 |
| Naphthalene, 1,6,... | 15.32 | 9.7 | ng/ul | 122585 | 3 | 14.71 | 252059 | 20.0 |
| Naphthalene, 1,4,... | 15.38 | 4.2 | ng/ul | 52268 | 3 | 14.71 | 252059 | 20.0 |
| Naphthalene, 1,4,... | 15.49 | 6.5 | ng/ul | 81239 | 3 | 14.71 | 252059 | 20.0 |
| (DEL) Alkane: Str... | 15.53 | 2.8 | ng/ul | 34903 | 3 | 14.71 | 252059 | 20.0 |
| 1H-Phenalene | 15.58 | 6.6 | ng/ul | 82865 | 3 | 14.71 | 252059 | 20.0 |
| unknown-02 | 15.96 | 3.2 | ng/ul | 40113 | 3 | 14.71 | 252059 | 20.0 |
| Dibenzofuran, 4-m... | 16.05 | 3.3 | ng/ul | 41537 | 3 | 14.71 | 252059 | 20.0 |
| 4-Cyclohepta-2,4,... | 16.42 | 5.1 | ng/ul | 82520 | 4 | 17.46 | 321972 | 20.0 |
| 9H-Fluorene, 1-me... | 16.76 | 11.0 | ng/ul | 177001 | 4 | 17.46 | 321972 | 20.0 |
| 9H-Fluorene, 9-me... | 16.81 | 5.9 | ng/ul | 94292 | 4 | 17.46 | 321972 | 20.0 |
| 9H-Fluorene, 2-me... | 16.91 | 4.5 | ng/ul | 72748 | 4 | 17.46 | 321972 | 20.0 |
| unknown-03 | 17.03 | 2.3 | ng/ul | 36896 | 4 | 17.46 | 321972 | 20.0 |
| 9H-Fluorene, 4-me... | 17.12 | 3.5 | ng/ul | 55975 | 4 | 17.46 | 321972 | 20.0 |
| Dibenzothiophene | 17.27 | 10.2 | ng/ul | 164168 | 4 | 17.46 | 321972 | 20.0 |
| Dibenzo[a,e]cyclo... | 17.97 | 2.0 | ng/ul | 32960 | 4 | 17.46 | 321972 | 20.0 |
| Dibenzothiophene,... | 18.04 | 5.0 | ng/ul | 79920 | 4 | 17.46 | 321972 | 20.0 |
| Dibenzothiophene,... | 18.18 | 4.4 | ng/ul | 70729 | 4 | 17.46 | 321972 | 20.0 |
| Anthracene, 9-met... | 18.33 | 18.7 | ng/ul | 301104 | 4 | 17.46 | 321972 | 20.0 |
| Phenanthrene, 2-m... | 18.38 | 20.3 | ng/ul | 326740 | 4 | 17.46 | 321972 | 20.0 |
| Anthracene, 2-met... | 18.46 | 7.9 | ng/ul | 126556 | 4 | 17.46 | 321972 | 20.0 |
| 4H-Cyclopenta[def... | 18.53 | 29.5 | ng/ul | 474773 | 4 | 17.46 | 321972 | 20.0 |