LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % 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:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.120 | 3 | 5 | 17 | rVB | 84313 | 112762 | 4.89% | 0.296% |
| 2 | 5.558 | 413 | 420 | 432 | rBV | 402949 | 663716 | 28.79% | 1.740% |
| 3 | 5.987 | 485 | 493 | 512 | rBV | 46488 | 182324 | 7.91% | 0.478% |
| 4 | 7.162 | 686 | 693 | 703 | rBV | 415315 | 768172 | 33.32% | 2.014% |
| 5 | 7.532 | 749 | 756 | 769 | rVB | 458343 | 794096 | 34.44% | 2.082% |
| 6 | 7.667 | 771 | 779 | 788 | rBV2 | 72659 | 226830 | 9.84% | 0.595% |
| 7 | 7.744 | 788 | 792 | 809 | rVB | 38538 | 119943 | 5.20% | 0.314% |
| 8 | 7.996 | 829 | 835 | 844 | rVB | 105689 | 181893 | 7.89% | 0.477% |
| 9 | 8.325 | 883 | 891 | 900 | rVB | 370987 | 648863 | 28.15% | 1.701% |
| 10 | 8.548 | 923 | 929 | 946 | rBV | 18167 | 65054 | 2.82% | 0.171% |
| 11 | 9.165 | 1027 | 1034 | 1046 | rBV | 248272 | 460520 | 19.98% | 1.207% |
| 12 | 9.289 | 1049 | 1055 | 1068 | rVV4 | 30577 | 92890 | 4.03% | 0.244% |
| 13 | 9.395 | 1068 | 1073 | 1089 | rVB3 | 18683 | 48722 | 2.11% | 0.128% |
| 14 | 9.794 | 1134 | 1141 | 1144 | rBV2 | 25083 | 52160 | 2.26% | 0.137% |
| 15 | 9.841 | 1144 | 1149 | 1168 | rVB2 | 50434 | 164617 | 7.14% | 0.432% |
| 16 | 10.241 | 1211 | 1217 | 1226 | rBV4 | 14992 | 44059 | 1.91% | 0.116% |
| 17 | 10.399 | 1242 | 1244 | 1258 | rVB3 | 22393 | 49863 | 2.16% | 0.131% |
| 18 | 10.822 | 1307 | 1316 | 1322 | rBV | 133253 | 245232 | 10.64% | 0.643% |
| 19 | 11.339 | 1393 | 1404 | 1421 | rBV | 68692 | 220613 | 9.57% | 0.578% |
| 20 | 11.480 | 1421 | 1428 | 1443 | rVV | 86085 | 240657 | 10.44% | 0.631% |
| 21 | 12.473 | 1590 | 1597 | 1608 | rBV3 | 24605 | 72221 | 3.13% | 0.189% |
| 22 | 12.632 | 1618 | 1624 | 1633 | rBV2 | 26848 | 56995 | 2.47% | 0.149% |
| 23 | 12.914 | 1669 | 1672 | 1681 | rVB3 | 17538 | 36286 | 1.57% | 0.095% |
| 24 | 13.114 | 1701 | 1706 | 1715 | rBV2 | 26142 | 53586 | 2.32% | 0.140% |
| 25 | 13.225 | 1717 | 1725 | 1727 | rBV6 | 16438 | 33354 | 1.45% | 0.087% |
| 26 | 13.278 | 1727 | 1734 | 1743 | rVB | 856031 | 1386224 | 60.13% | 3.634% |
| 27 | 13.549 | 1774 | 1780 | 1788 | rBV2 | 43654 | 135214 | 5.87% | 0.355% |
| 28 | 13.895 | 1834 | 1839 | 1848 | rBV | 29325 | 60186 | 2.61% | 0.158% |
| 29 | 14.107 | 1867 | 1875 | 1886 | rBV2 | 140845 | 279661 | 12.13% | 0.733% |
| 30 | 14.383 | 1916 | 1922 | 1933 | rBV | 92048 | 193166 | 8.38% | 0.506% |
| 31 | 14.659 | 1963 | 1969 | 1977 | rVB | 235967 | 382301 | 16.58% | 1.002% |
| 32 | 15.258 | 2067 | 2071 | 2077 | rBV4 | 21283 | 38598 | 1.67% | 0.101% |
| 33 | 15.928 | 2180 | 2185 | 2192 | rVB9 | 13710 | 30367 | 1.32% | 0.080% |
| 34 | 16.151 | 2216 | 2223 | 2232 | rBV | 746041 | 1189416 | 51.59% | 3.118% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % 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:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 16.386 | 2259 | 2263 | 2268 | rVB6 | 27044 | 45872 | 1.99% | 0.120% |
| 36 | 16.568 | 2290 | 2294 | 2301 | rVV | 37186 | 67333 | 2.92% | 0.177% |
| 37 | 16.986 | 2362 | 2365 | 2372 | rVB2 | 20853 | 33160 | 1.44% | 0.087% |
| 38 | 17.068 | 2375 | 2379 | 2387 | rVB5 | 21665 | 43408 | 1.88% | 0.114% |
| 39 | 17.409 | 2431 | 2437 | 2441 | rBV2 | 328622 | 505695 | 21.94% | 1.326% |
| 40 | 17.450 | 2441 | 2444 | 2455 | rVV | 229211 | 341670 | 14.82% | 0.896% |
| 41 | 17.544 | 2455 | 2460 | 2465 | rVV | 64693 | 94065 | 4.08% | 0.247% |
| 42 | 17.926 | 2522 | 2525 | 2531 | rVB | 49391 | 68298 | 2.96% | 0.179% |
| 43 | 17.990 | 2533 | 2536 | 2543 | rVB | 39721 | 65828 | 2.86% | 0.173% |
| 44 | 18.290 | 2582 | 2587 | 2591 | rBV | 122583 | 214869 | 9.32% | 0.563% |
| 45 | 18.337 | 2591 | 2595 | 2601 | rVB | 132022 | 197041 | 8.55% | 0.517% |
| 46 | 18.419 | 2605 | 2609 | 2613 | rVB | 34978 | 49888 | 2.16% | 0.131% |
| 47 | 18.478 | 2613 | 2619 | 2623 | rBV2 | 179467 | 340022 | 14.75% | 0.891% |
| 48 | 18.519 | 2623 | 2626 | 2632 | rVB | 99286 | 132465 | 5.75% | 0.347% |
| 49 | 18.601 | 2635 | 2640 | 2650 | rBV9 | 31884 | 109292 | 4.74% | 0.287% |
| 50 | 18.684 | 2651 | 2654 | 2658 | rVB3 | 26631 | 35847 | 1.55% | 0.094% |
| 51 | 18.784 | 2666 | 2671 | 2675 | rBV | 96007 | 143028 | 6.20% | 0.375% |
| 52 | 18.831 | 2675 | 2679 | 2690 | rVB3 | 99812 | 175219 | 7.60% | 0.459% |
| 53 | 19.030 | 2710 | 2713 | 2718 | rVB3 | 28179 | 38407 | 1.67% | 0.101% |
| 54 | 19.077 | 2718 | 2721 | 2725 | rVV | 44284 | 58441 | 2.53% | 0.153% |
| 55 | 19.118 | 2726 | 2728 | 2732 | rVB | 34038 | 37816 | 1.64% | 0.099% |
| 56 | 19.201 | 2737 | 2742 | 2748 | rBV | 147732 | 274537 | 11.91% | 0.720% |
| 57 | 19.342 | 2762 | 2766 | 2779 | rVB2 | 134366 | 247221 | 10.72% | 0.648% |
| 58 | 19.465 | 2781 | 2787 | 2793 | rVB | 1145876 | 1696867 | 73.60% | 4.449% |
| 59 | 19.524 | 2793 | 2797 | 2800 | rBV | 61351 | 85355 | 3.70% | 0.224% |
| 60 | 19.559 | 2800 | 2803 | 2808 | rVB | 46905 | 69532 | 3.02% | 0.182% |
| 61 | 19.618 | 2808 | 2813 | 2817 | rBV | 117945 | 184877 | 8.02% | 0.485% |
| 62 | 19.665 | 2817 | 2821 | 2825 | rVB2 | 52022 | 70024 | 3.04% | 0.184% |
| 63 | 19.706 | 2825 | 2828 | 2831 | rBV | 45012 | 59924 | 2.60% | 0.157% |
| 64 | 19.794 | 2839 | 2843 | 2844 | rBV | 136709 | 157229 | 6.82% | 0.412% |
| 65 | 19.829 | 2844 | 2849 | 2856 | rVB | 1389341 | 1985576 | 86.13% | 5.206% |
| 66 | 19.894 | 2856 | 2860 | 2866 | rVB2 | 70559 | 110887 | 4.81% | 0.291% |
| 67 | 20.023 | 2875 | 2882 | 2886 | rBV | 1736749 | 2255636 | 97.84% | 5.914% |
| 68 | 20.059 | 2886 | 2888 | 2897 | rVB3 | 56623 | 88527 | 3.84% | 0.232% |
| 69 | 20.153 | 2898 | 2904 | 2914 | rBV4 | 175286 | 440978 | 19.13% | 1.156% |
| 70 | 20.317 | 2930 | 2932 | 2937 | rVB | 233990 | 278487 | 12.08% | 0.730% |
| 71 | 20.417 | 2945 | 2949 | 2953 | rBV | 117144 | 151934 | 6.59% | 0.398% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % 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:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 20.476 | 2954 | 2959 | 2964 | rVB2 | 234306 | 333445 | 14.46% | 0.874% |
| 73 | 20.617 | 2979 | 2983 | 2987 | rBV | 204756 | 274938 | 11.93% | 0.721% |
| 74 | 20.658 | 2987 | 2990 | 2995 | rVB | 168783 | 229082 | 9.94% | 0.601% |
| 75 | 21.081 | 3058 | 3062 | 3069 | rVB | 229354 | 354377 | 15.37% | 0.929% |
| 76 | 21.263 | 3087 | 3093 | 3097 | rBV2 | 167268 | 328487 | 14.25% | 0.861% |
| 77 | 21.304 | 3097 | 3100 | 3105 | rVV | 185865 | 315341 | 13.68% | 0.827% |
| 78 | 21.357 | 3105 | 3109 | 3113 | rVV2 | 149608 | 265629 | 11.52% | 0.696% |
| 79 | 21.416 | 3116 | 3119 | 3127 | rVB | 191699 | 327472 | 14.20% | 0.859% |
| 80 | 21.674 | 3156 | 3163 | 3169 | rBV2 | 918062 | 2305408 | 100.00% | 6.044% |
| 81 | 21.733 | 3169 | 3173 | 3186 | rVB | 846199 | 1589827 | 68.96% | 4.168% |
| 82 | 21.956 | 3206 | 3211 | 3217 | rBV | 178188 | 322457 | 13.99% | 0.845% |
| 83 | 22.097 | 3231 | 3235 | 3241 | rVB3 | 49841 | 100771 | 4.37% | 0.264% |
| 84 | 22.162 | 3243 | 3246 | 3251 | rVB5 | 53410 | 82713 | 3.59% | 0.217% |
| 85 | 22.344 | 3274 | 3277 | 3281 | rVB2 | 49992 | 65014 | 2.82% | 0.170% |
| 86 | 22.426 | 3282 | 3291 | 3296 | rVV | 202981 | 461613 | 20.02% | 1.210% |
| 87 | 22.497 | 3298 | 3303 | 3311 | rVB2 | 136312 | 293380 | 12.73% | 0.769% |
| 88 | 22.697 | 3332 | 3337 | 3341 | rBV4 | 94002 | 188982 | 8.20% | 0.495% |
| 89 | 22.843 | 3358 | 3362 | 3370 | rVB | 78799 | 147345 | 6.39% | 0.386% |
| 90 | 23.525 | 3471 | 3478 | 3494 | rVB5 | 70779 | 282522 | 12.25% | 0.741% |
| 91 | 23.919 | 3534 | 3545 | 3551 | rBV2 | 656193 | 2237444 | 97.05% | 5.866% |
| 92 | 24.165 | 3580 | 3587 | 3598 | rBV | 127337 | 330445 | 14.33% | 0.866% |
| 93 | 24.636 | 3659 | 3667 | 3681 | rVB | 400335 | 1238567 | 53.72% | 3.247% |
| 94 | 24.788 | 3683 | 3693 | 3704 | rVB | 544462 | 1561697 | 67.74% | 4.095% |
| 95 | 24.935 | 3709 | 3718 | 3726 | rVV2 | 258158 | 823246 | 35.71% | 2.158% |
| 96 | 25.012 | 3726 | 3731 | 3746 | rVB3 | 132180 | 472925 | 20.51% | 1.240% |
| 97 | 28.648 | 4337 | 4350 | 4372 | rVB2 | 284227 | 1421298 | 61.65% | 3.726% |
| 98 | 29.118 | 4422 | 4430 | 4443 | rVB | 56366 | 220560 | 9.57% | 0.578% |
| 99 | 29.271 | 4450 | 4456 | 4468 | rVB2 | 60951 | 215429 | 9.34% | 0.565% |
| 100 | 29.818 | 4533 | 4549 | 4571 | rVB3 | 213759 | 1064647 | 46.18% | 2.791% |

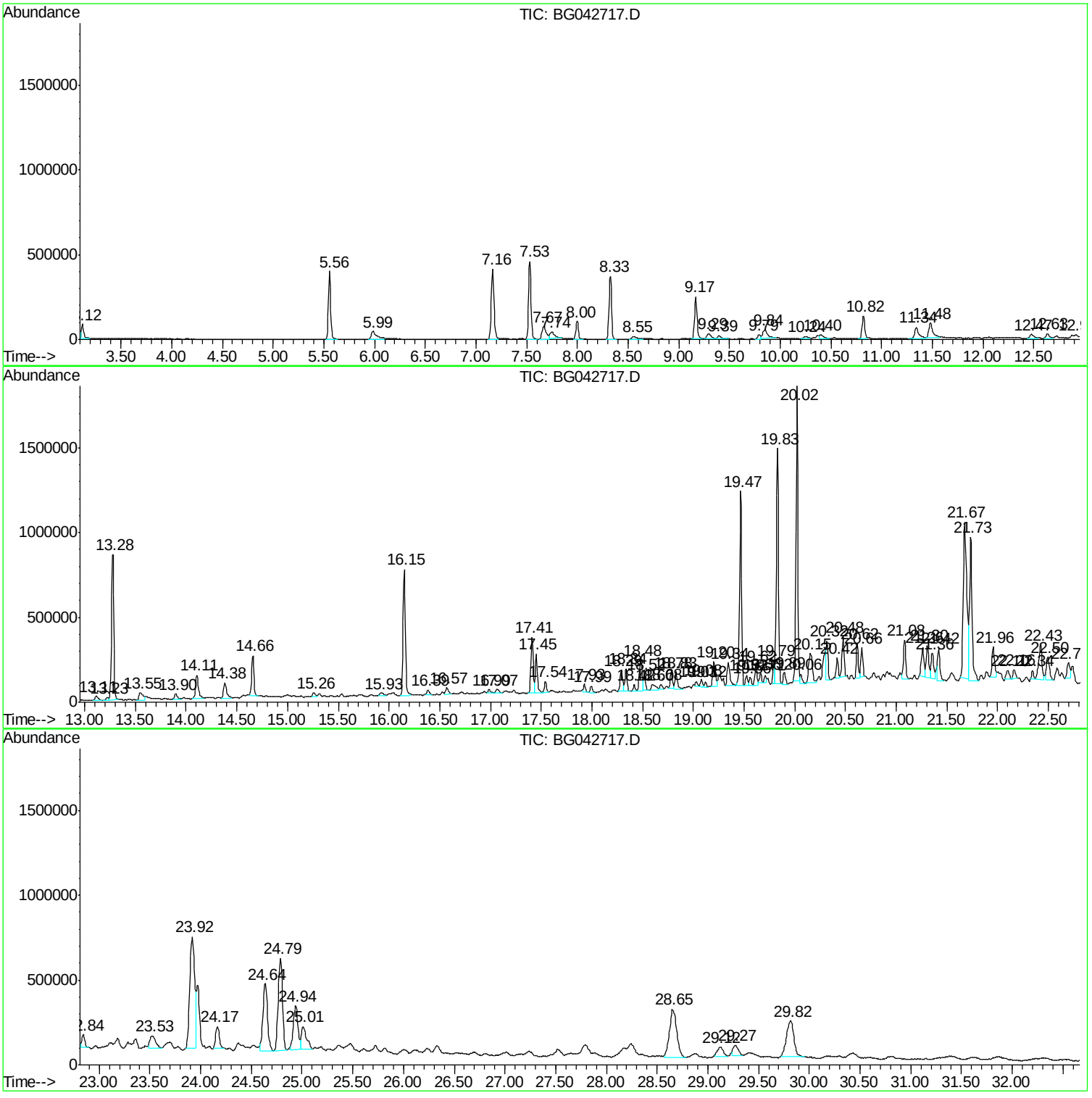
Sum of corrected areas: 38140877

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

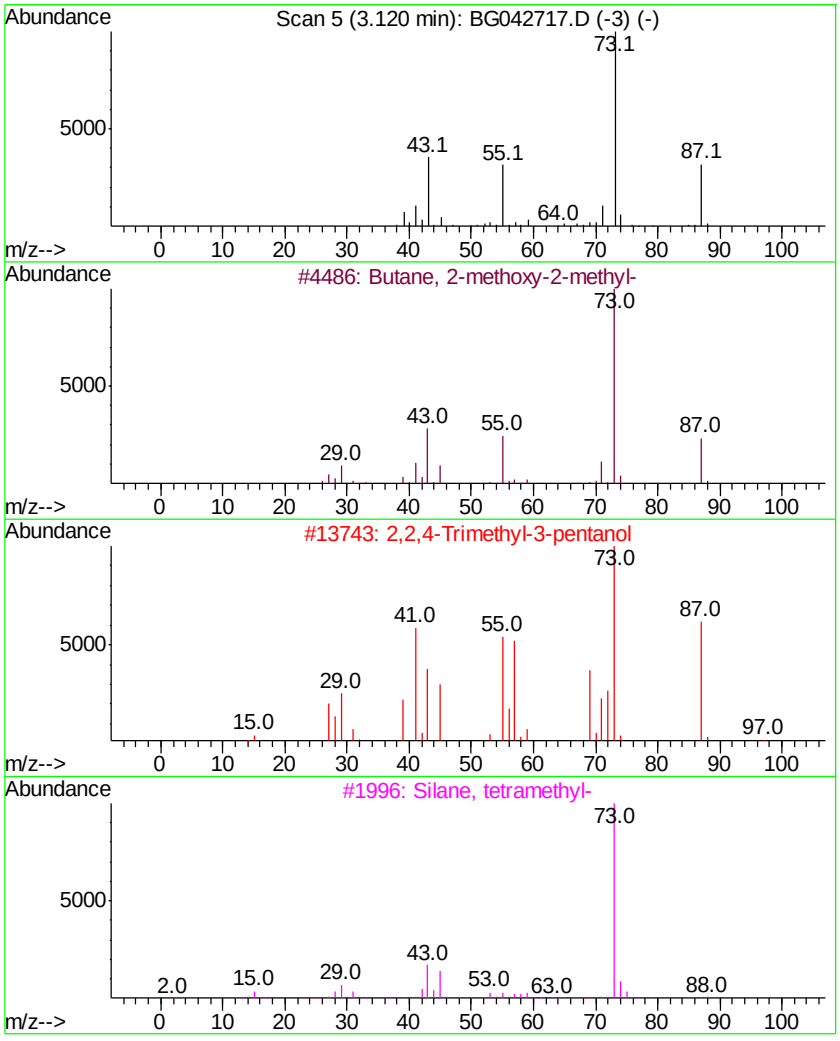
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

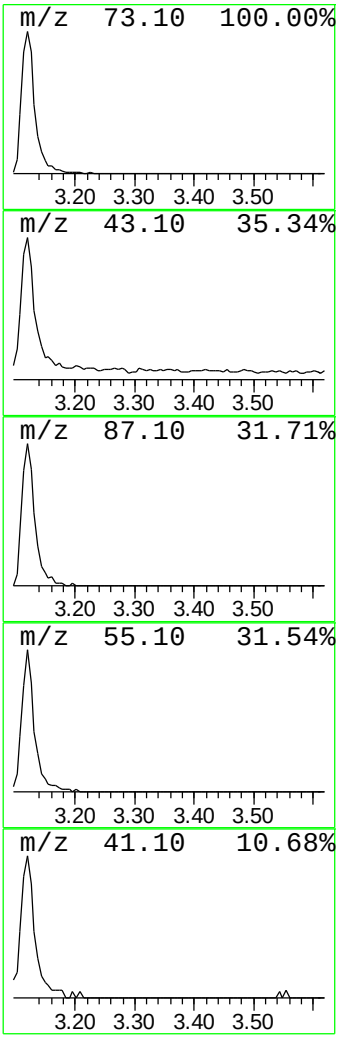
**********

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.12 | 12.40 ng | 112762 | 1,4-Dichlorobenzene-d4 | 8.00 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Butane, 2-methoxy-2-methyl- | 102 | C6H14O | 000994-05-8 | 64 |
| 2 | 2,2,4-Trimethyl-3-pentanol | 130 | C8H18O | 005162-48-1 | 33 |
| 3 | Silane, tetramethyl- | 88 | C4H12Si | 000075-76-3 | 17 |
| 4 | 3-Pentanol, 3-methyl- | 102 | C6H14O | 000077-74-7 | 9 |
| 5 | 1,3-Dioxolane, 2-pentadecyl- | 284 | C18H36O2 | 004360-57-0 | 9 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

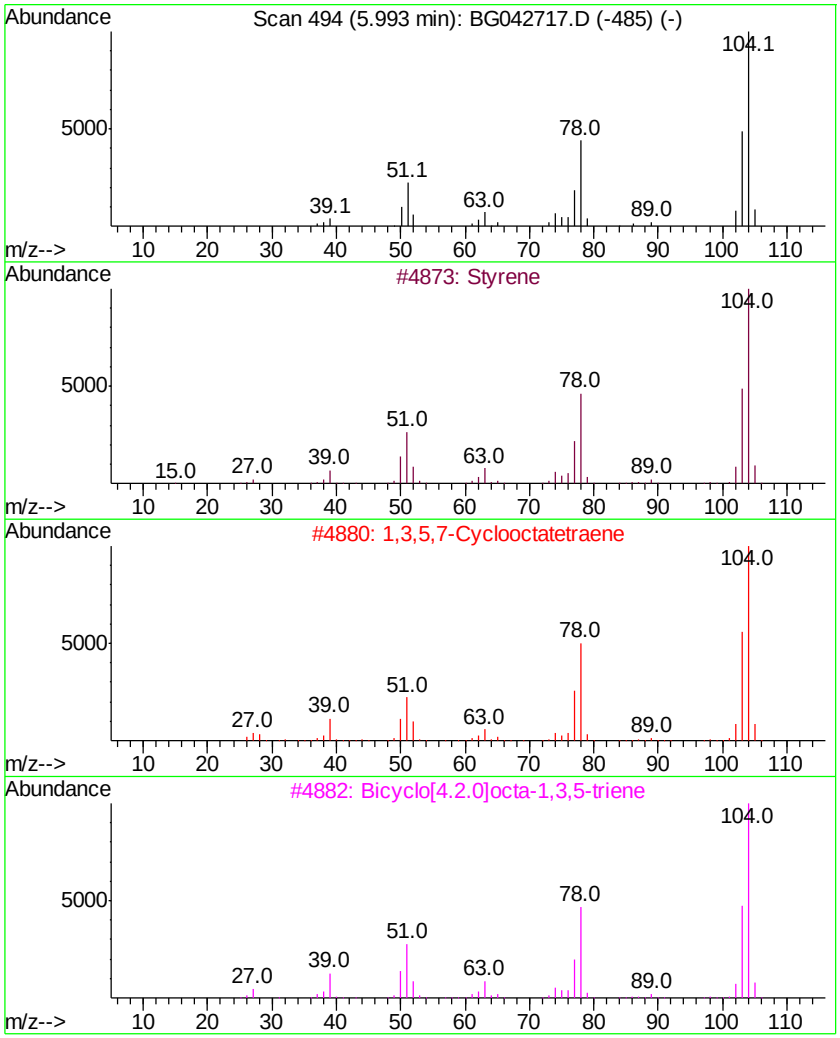
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

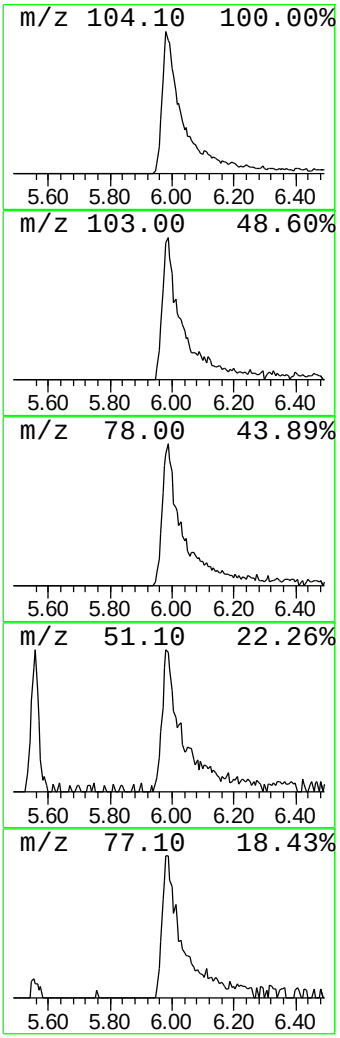
**********

Peak Number 2 1,3,5,7-Cyclooctatetraene Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.99 | 20.05 ng | 182324 | 1,4-Dichlorobenzene-d4 | 8.00 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Styrene | 104 | C8H8 | 000100-42-5 | 96 |
| 2 | 1,3,5,7-Cyclooctatetraene | 104 | C8H8 | 000629-20-9 | 96 |
| 3 | Bicyclo[4.2.0]octa-1,3,5-triene | 104 | C8H8 | 000694-87-1 | 94 |
| 4 | Butanedioic acid, phenyl- | 194 | C10H10O4 | 000635-51-8 | 64 |
| 5 | Benzene, 1,1'-(1,2-cyclobutanedi... | 208 | C16H16 | 007694-30-6 | 42 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

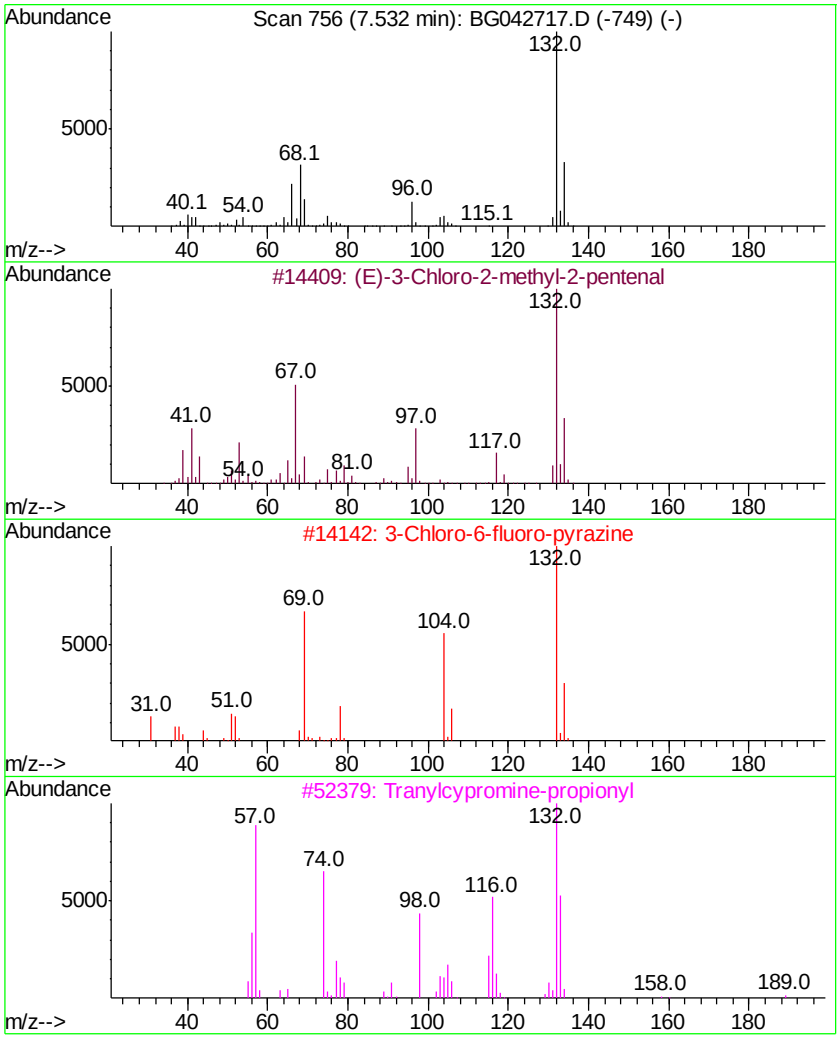
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

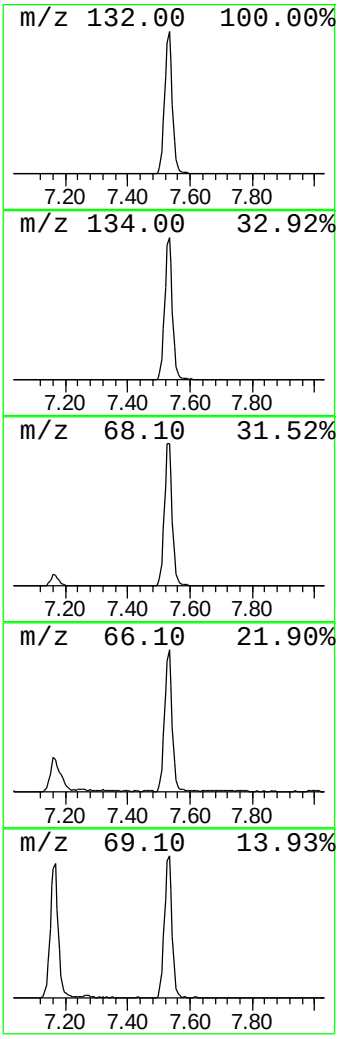
**********

Peak Number 3 unknown7.53 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.53 | 87.31 ng | 794096 | 1,4-Dichlorobenzene-d4 | 8.00 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO | 031357-76-3 | 25 |
| 2 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 25 |
| 3 | Tranylcypromine-propionyl | 189 | C12H15NO | 1000123-86-3 | 16 |
| 4 | Bicyclo[4.2.0]octa-1,3,5-triene,... | 132 | C10H12 | 028749-81-7 | 9 |
| 5 | Cyclopropanamine, 1-phenyl- | 133 | C9H11N | 1000351-26-2 | 9 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

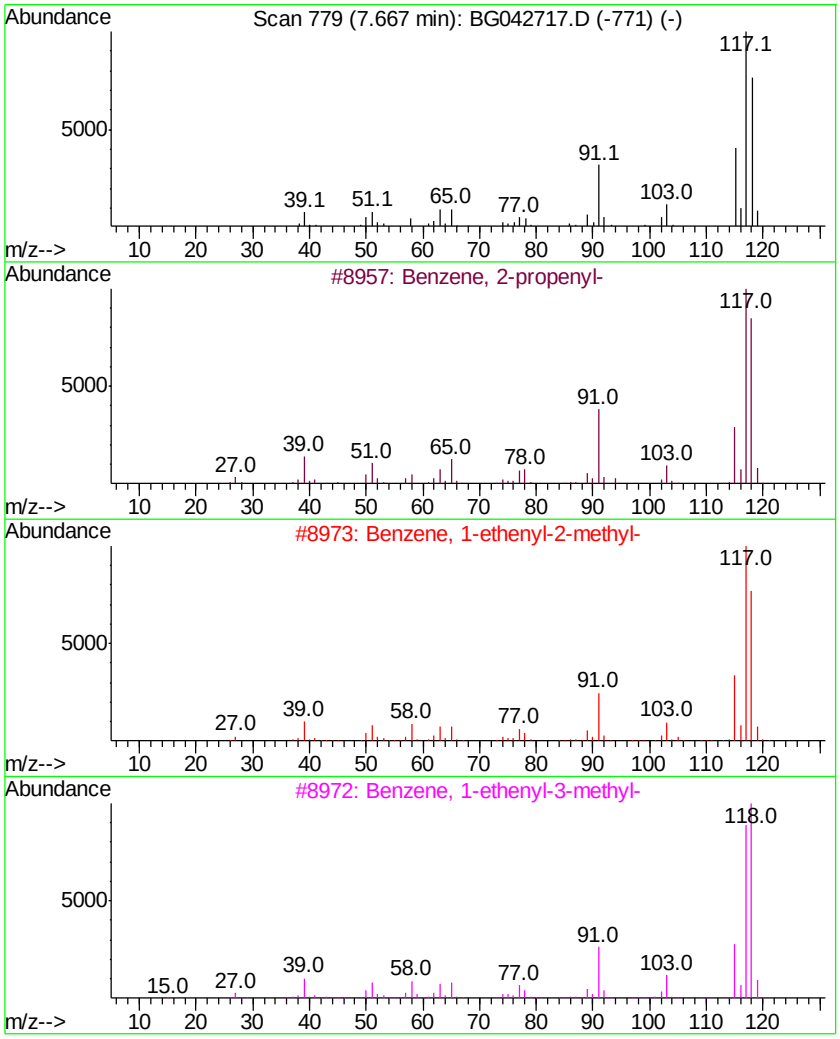
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

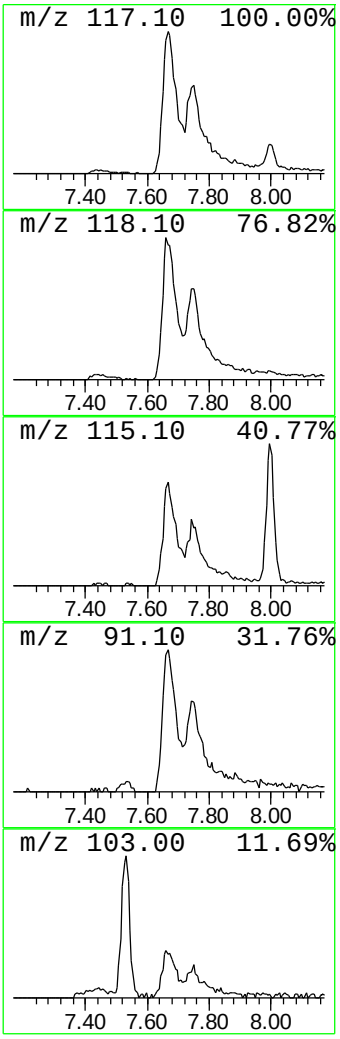
**********

Peak Number 4 Benzene, 2-propenyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.67 | 24.94 ng | 226830 | 1,4-Dichlorobenzene-d4 | 8.00 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 2-propenyl- | 118 | C9H10 | 000300-57-2 | 94 |
| 2 | Benzene, 1-ethenyl-2-methyl- | 118 | C9H10 | 000611-15-4 | 93 |
| 3 | Benzene, 1-ethenyl-3-methyl- | 118 | C9H10 | 000100-80-1 | 93 |
| 4 | Benzene, cyclopropyl- | 118 | C9H10 | 000873-49-4 | 93 |
| 5 | Benzene, 1-propenyl- | 118 | C9H10 | 000637-50-3 | 90 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

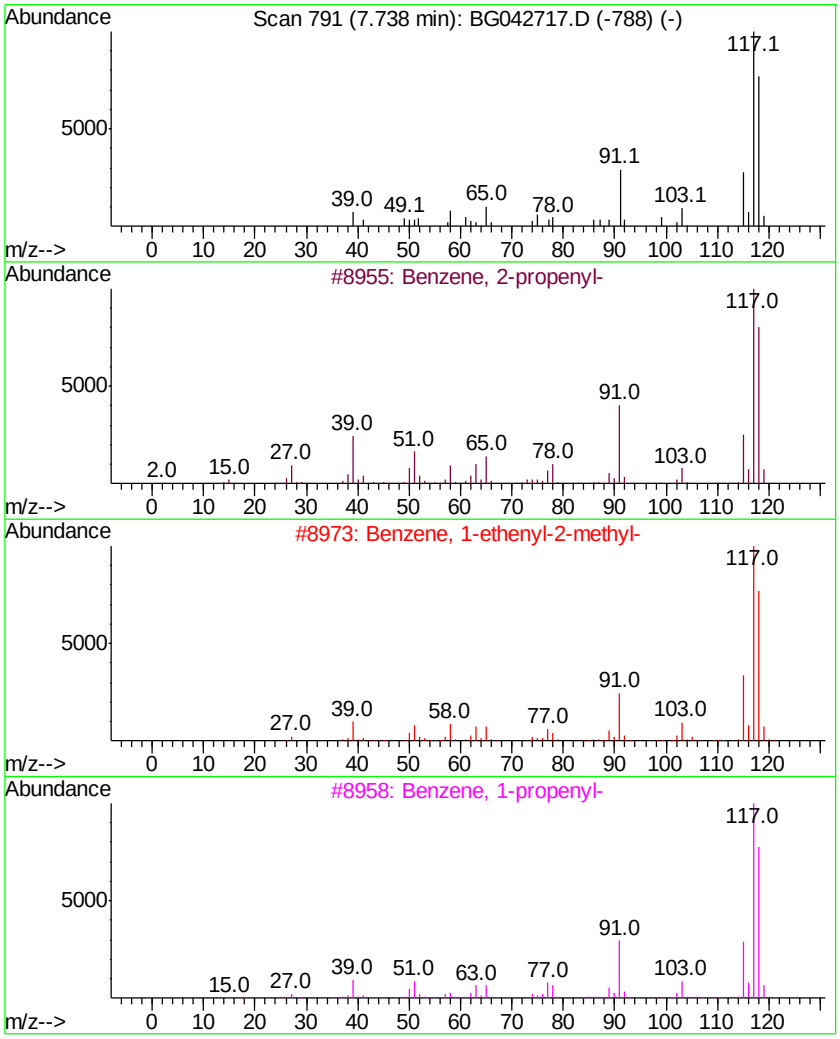
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

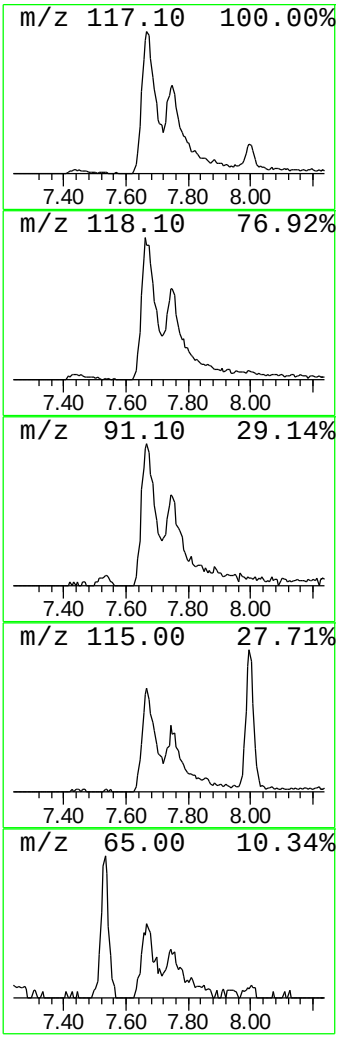
**********

Peak Number 5 Benzene, 1-propenyl- Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.74 | 13.19 ng | 119943 | 1,4-Dichlorobenzene-d4 | 8.00 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 2-propenyl- | 118 | C9H10 | 000300-57-2 | 89 |
| 2 | Benzene, 1-ethenyl-2-methyl- | 118 | C9H10 | 000611-15-4 | 81 |
| 3 | Benzene, 1-propenyl- | 118 | C9H10 | 000637-50-3 | 81 |
| 4 | Indane | 118 | C9H10 | 000496-11-7 | 76 |
| 5 | Benzene, cyclopropyl- | 118 | C9H10 | 000873-49-4 | 74 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

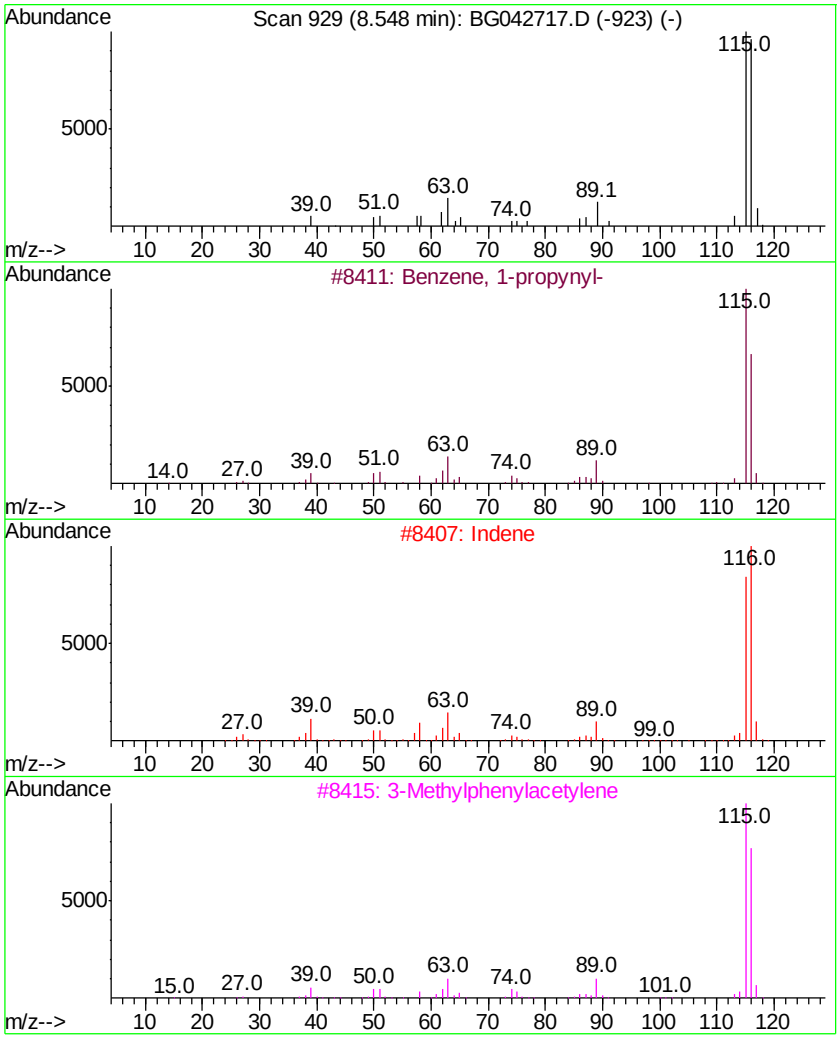
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

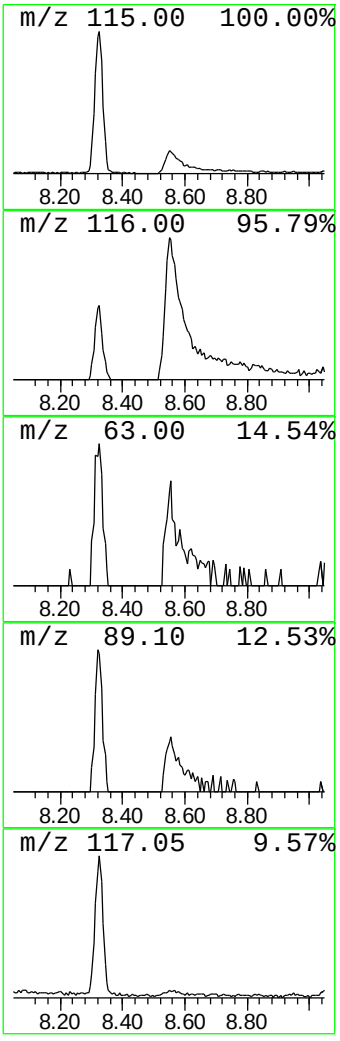
**********

Peak Number 7 Indene Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.55 | 7.15 ng | 65054 | 1,4-Dichlorobenzene-d4 | 8.00 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-propynyl- | 116 | C9H8 | 000673-32-5 | 91 |
| 2 | Indene | 116 | C9H8 | 000095-13-6 | 91 |
| 3 | 3-Methylphenylacetylene | 116 | C9H8 | 000766-82-5 | 91 |
| 4 | Benzene, 1-ethynyl-4-methyl- | 116 | C9H8 | 000766-97-2 | 90 |
| 5 | Benzene, 1,2-propadienyl- | 116 | C9H8 | 002327-99-3 | 90 |



# Library Search Compound Report

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Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

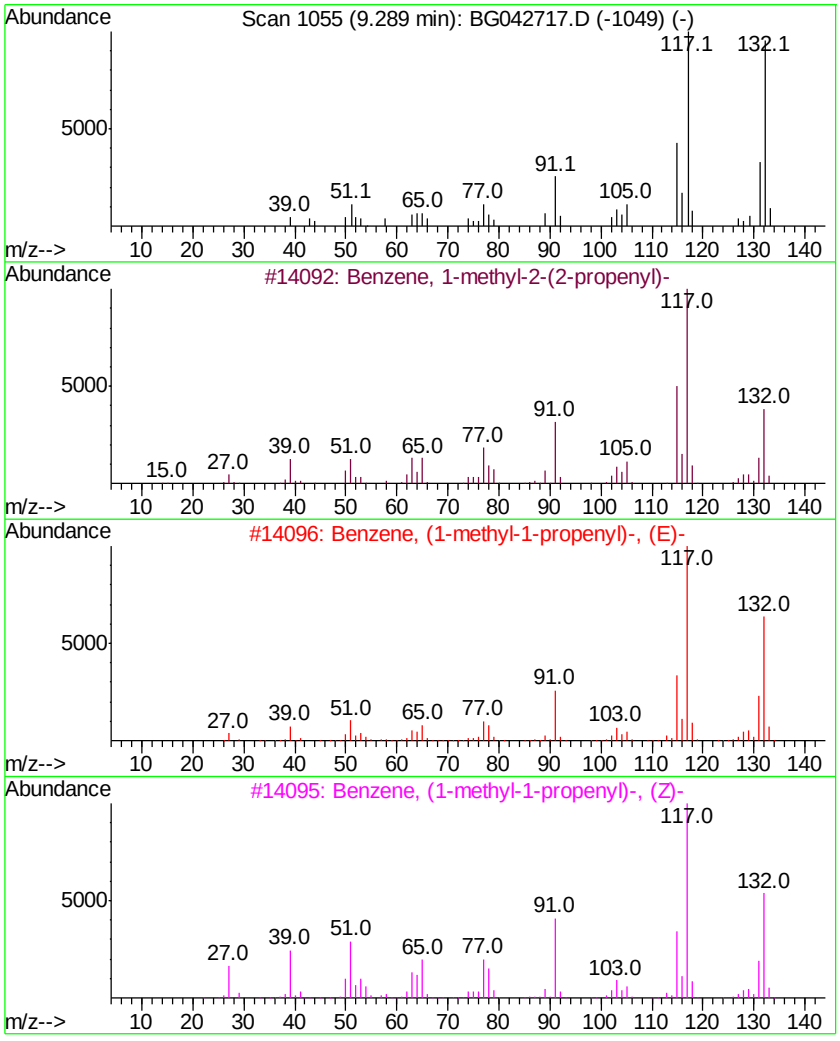
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

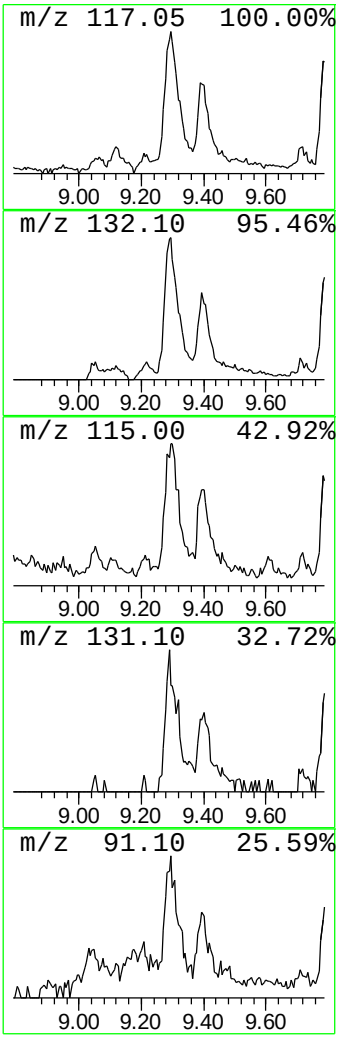
**********

Peak Number 8 Benzene, 1-methyl-2-(2-prop... Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.29 | 10.21 ng | 92890 | 1,4-Dichlorobenzene-d4 | 8.00 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-methyl-2-(2-propenyl)- | 132 | C10H12 | 001587-04-8 | 94 |
| 2 | Benzene, (1-methyl-1-propenyl)-, ... | 132 | C10H12 | 000768-00-3 | 94 |
| 3 | Benzene, (1-methyl-1-propenyl)-, ... | 132 | C10H12 | 000767-99-7 | 91 |
| 4 | Benzene, 4-ethenyl-1,2-dimethyl- | 132 | C10H12 | 027831-13-6 | 91 |
| 5 | Benzene, 1-ethenyl-3,5-dimethyl- | 132 | C10H12 | 005379-20-4 | 91 |



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Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

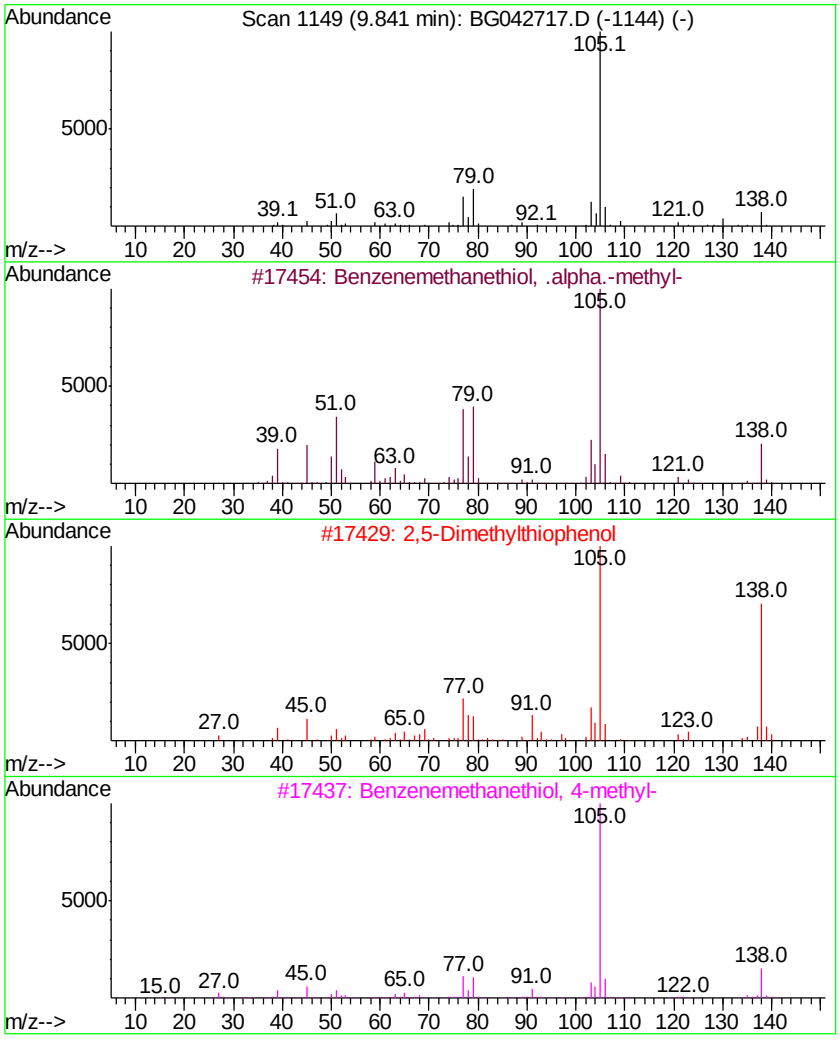
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

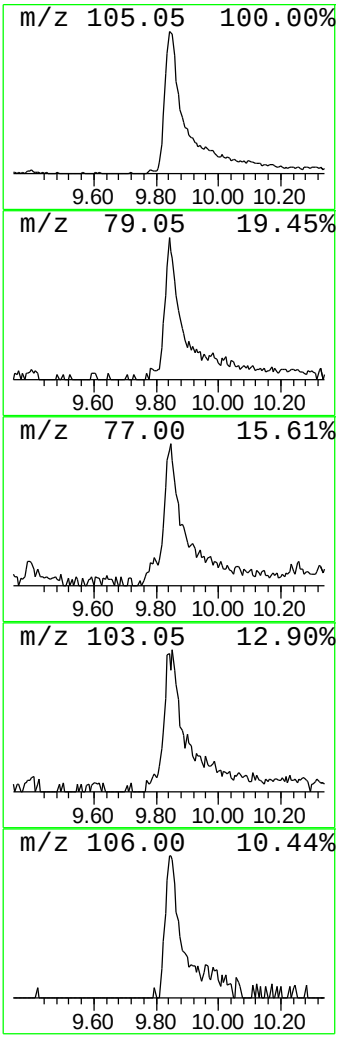
**********

Peak Number 9 Benzenemethanethiol, .alpha... Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.84 | 13.43 ng | 164617 | Naphthalene-d8 | 10.82 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzenemethanethiol, .alpha.-met... | 138 | C8H10S | 006263-65-6 | 80 |
| 2 | 2,5-Dimethylthiophenol | 138 | C8H10S | 004001-61-0 | 72 |
| 3 | Benzenemethanethiol, 4-methyl- | 138 | C8H10S | 004498-99-1 | 72 |
| 4 | 3-Methylbenzyl mercaptan | 138 | C8H10S | 025697-56-7 | 64 |
| 5 | 1,3,5-Cycloheptatriene, 7,7-dime... | 120 | C9H12 | 007557-11-1 | 64 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

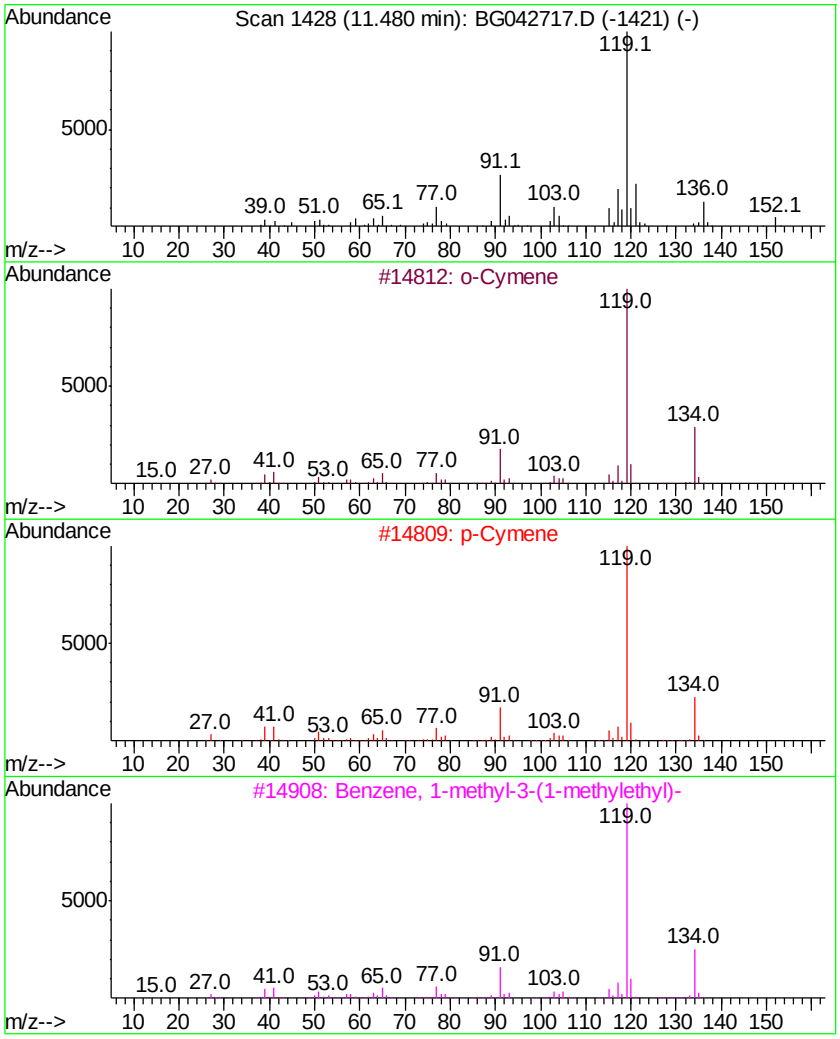
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

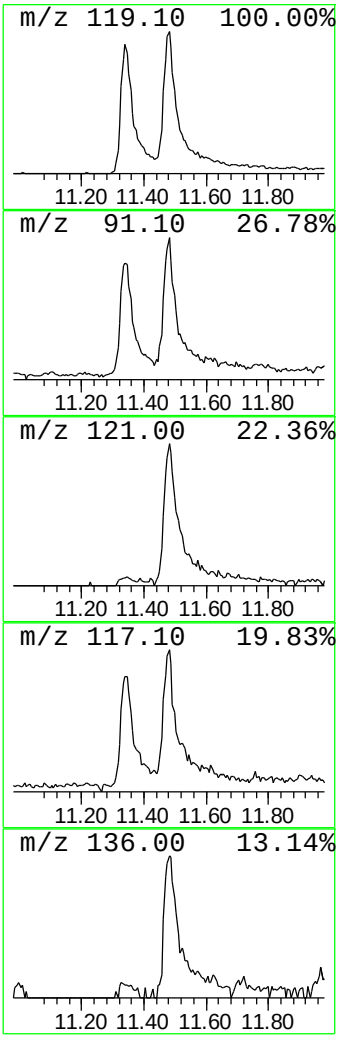
**********

Peak Number 11 o-Cymene Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.48 | 19.63 ng | 240657 | Naphthalene-d8 | 10.82 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | o-Cymene | 134 | C10H14 | 000527-84-4 | 76 |
| 2 | p-Cymene | 134 | C10H14 | 000099-87-6 | 76 |
| 3 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 68 |
| 4 | 1,3-Cyclopentadiene, 1,2,3,4-tet... | 134 | C10H14 | 076089-59-3 | 59 |
| 5 | m-Toluic acid, 2,2-dimethylpropy... | 206 | C13H18O2 | 069912-00-1 | 50 |



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Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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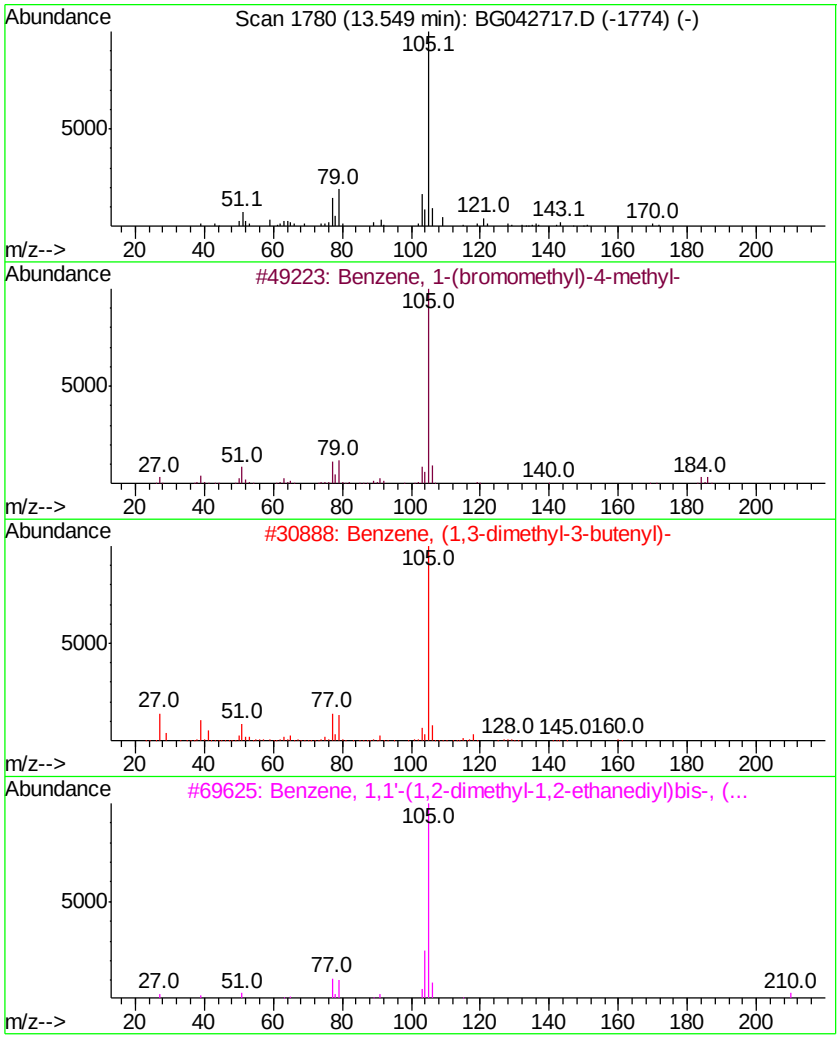
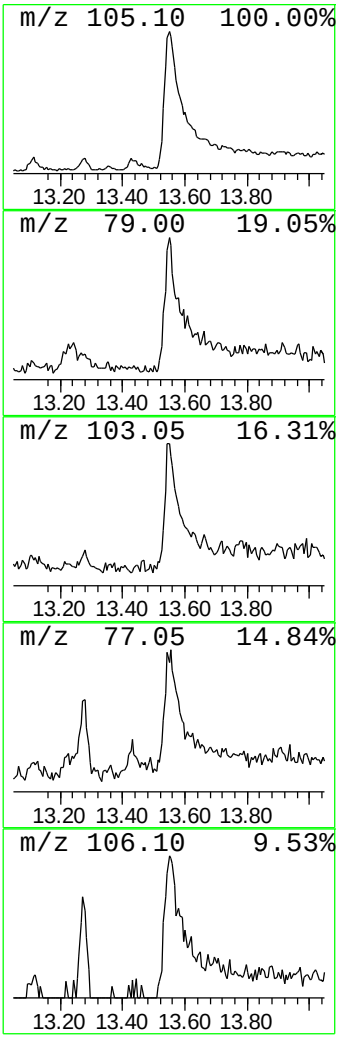
Peak Number 12 Benzene, 1-(bromomethyl)-4-... Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.55 | 7.07 ng | 135214 | Acenaphthene-d10 | 14.65 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-(bromomethyl)-4-methyl- | 184 | C8H9Br | 000104-81-4 | 53 |
| 2 | Benzene, (1,3-dimethyl-3-butenyl)- | 160 | C12H16 | 056851-51-5 | 53 |
| 3 | Benzene, 1,1'-(1,2-dimethyl-1,2-... | 210 | C16H18 | 002726-21-8 | 53 |
| 4 | Benzene, (1-nitroethyl)- | 151 | C8H9NO2 | 007214-61-1 | 53 |
| 5 | Ether, p-methylbenzyl vinyl | 148 | C10H12O | 026437-10-5 | 50 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

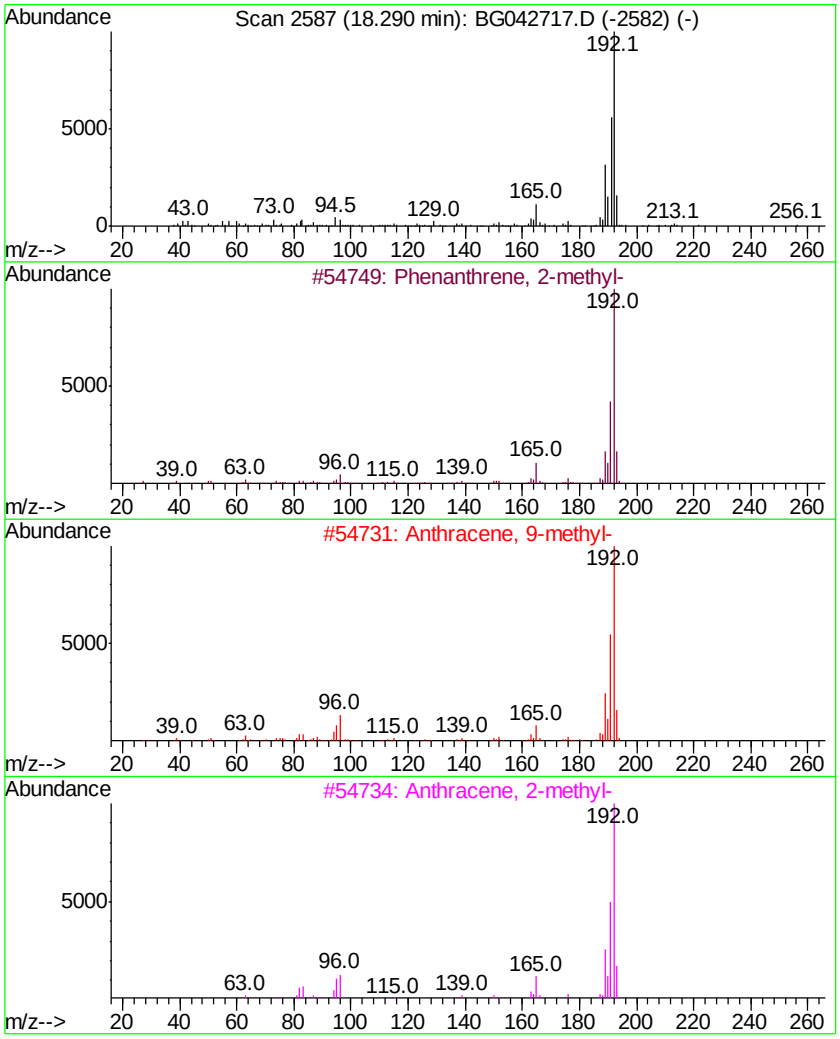
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

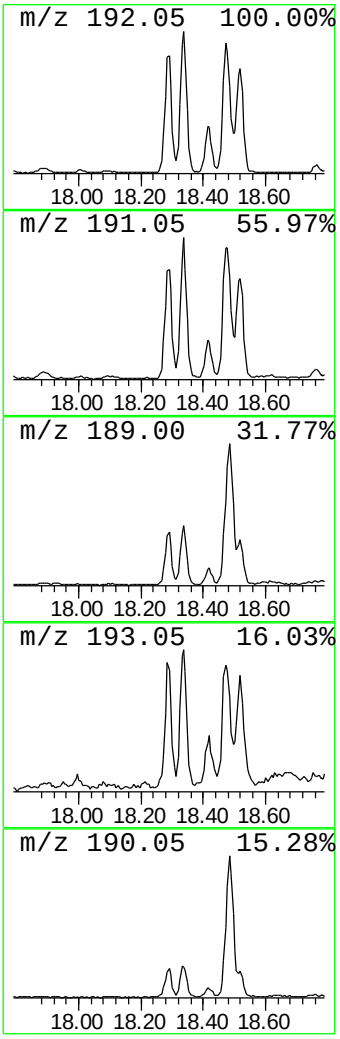
**********

Peak Number 13 Phenanthrene, 2-methyl- Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.29 | 8.50 ng | 214869 | Phenanthrene-d10 | 17.41 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 93 |
| 2 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 93 |
| 3 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 93 |
| 4 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 91 |
| 5 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 91 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

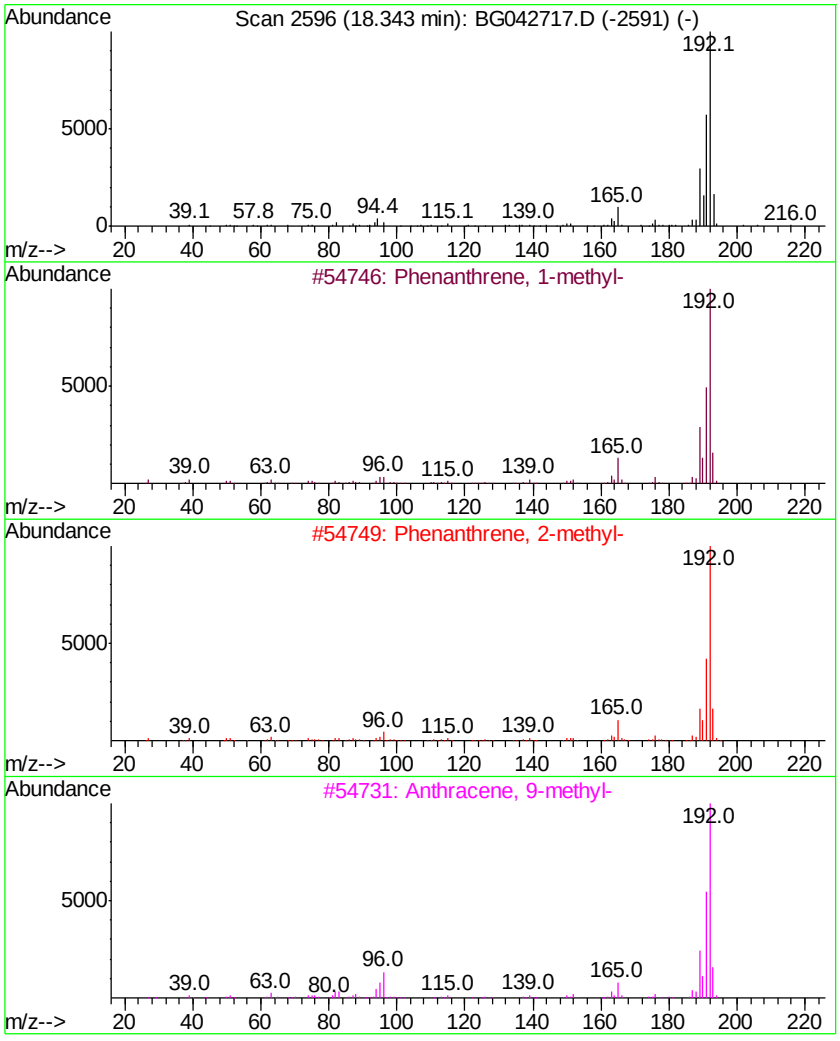
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

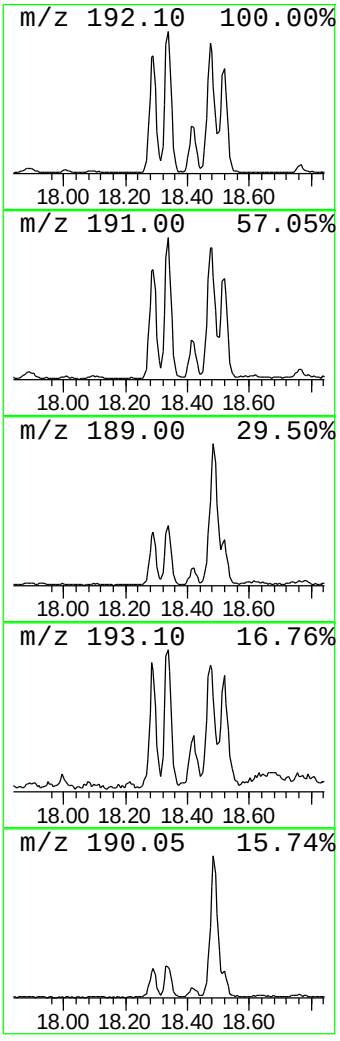
**********

Peak Number 14 Phenanthrene, 1-methyl- Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.34 | 7.79 ng | 197041 | Phenanthrene-d10 | 17.41 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 93 |
| 2 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 93 |
| 3 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 91 |
| 4 | Phenanthrene, 3-methyl- | 192 | C15H12 | 000832-71-3 | 90 |
| 5 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 90 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

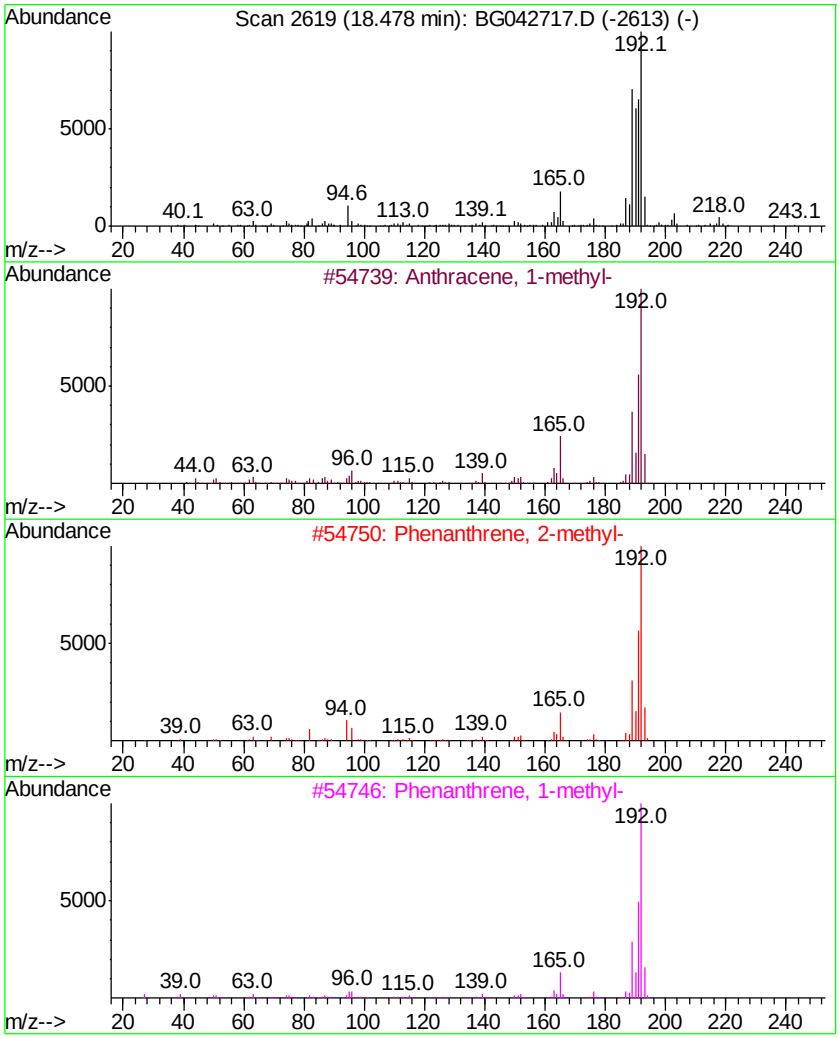
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

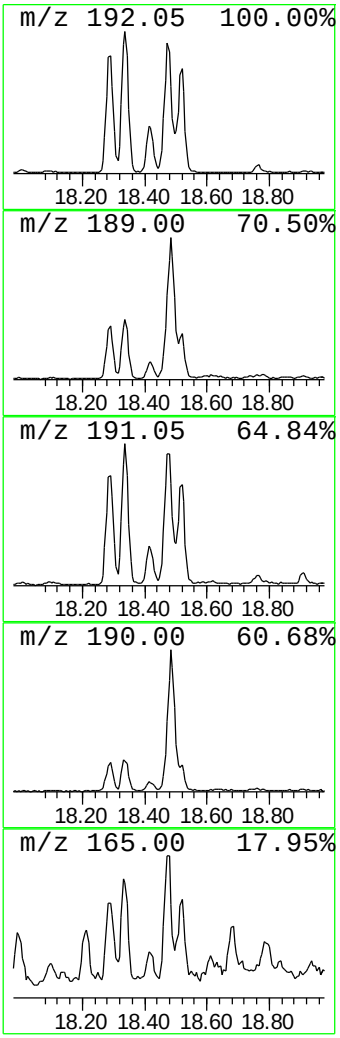
**********

Peak Number 15 Anthracene, 1-methyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.48 | 13.45 ng | 340022 | Phenanthrene-d10 | 17.41 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Anthracene, 1-methyl- | 192 | C15H12 | 000610-48-0 | 70 |
| 2 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 64 |
| 3 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 60 |
| 4 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 60 |
| 5 | Phenanthrene, 4-methyl- | 192 | C15H12 | 000832-64-4 | 55 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

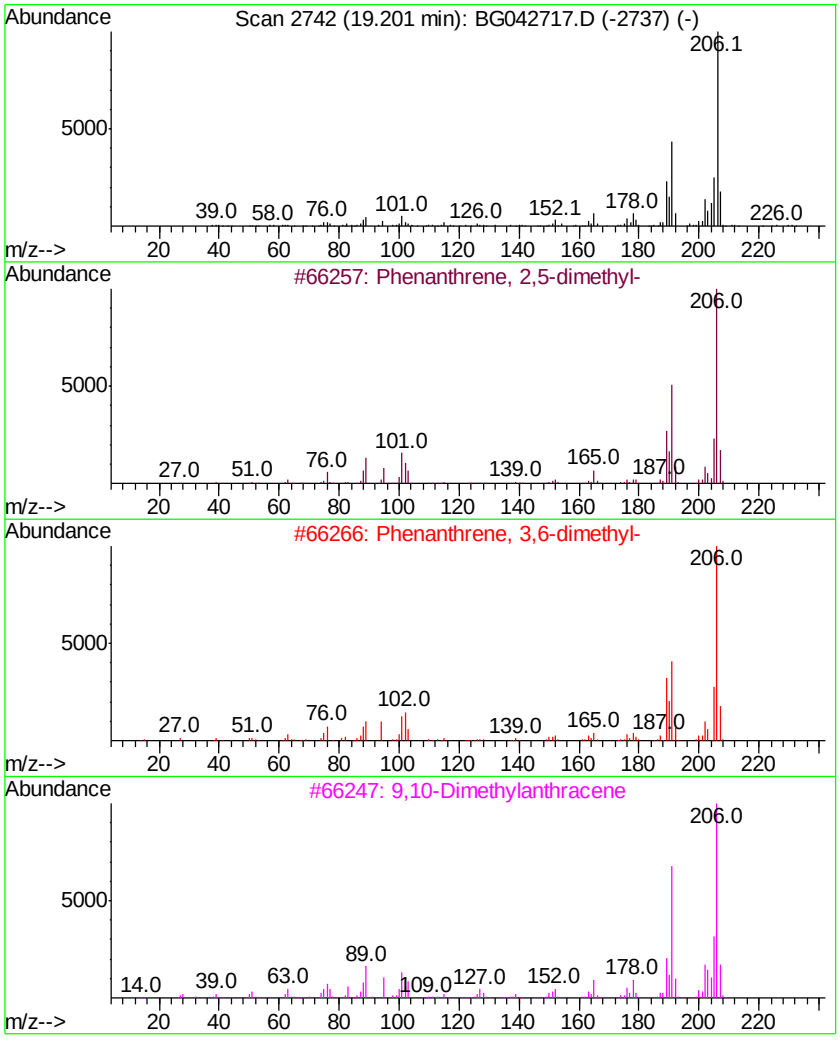
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

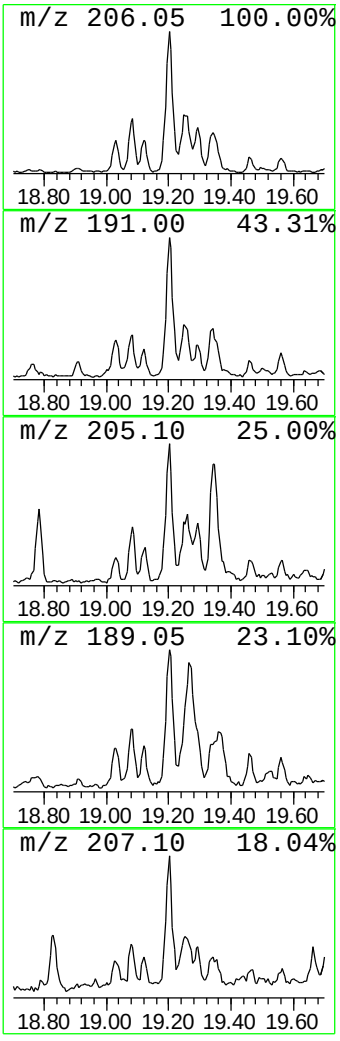
**********

Peak Number 16 Phenanthrene, 2,5-dimethyl- Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.20 | 10.86 ng | 274537 | Phenanthrene-d10 | 17.41 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 94 |
| 2 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 93 |
| 3 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 91 |
| 4 | di-p-Tolylacetylene | 206 | C16H14 | 002789-88-0 | 87 |
| 5 | Phenanthrene, 2,3-dimethyl- | 206 | C16H14 | 003674-65-5 | 83 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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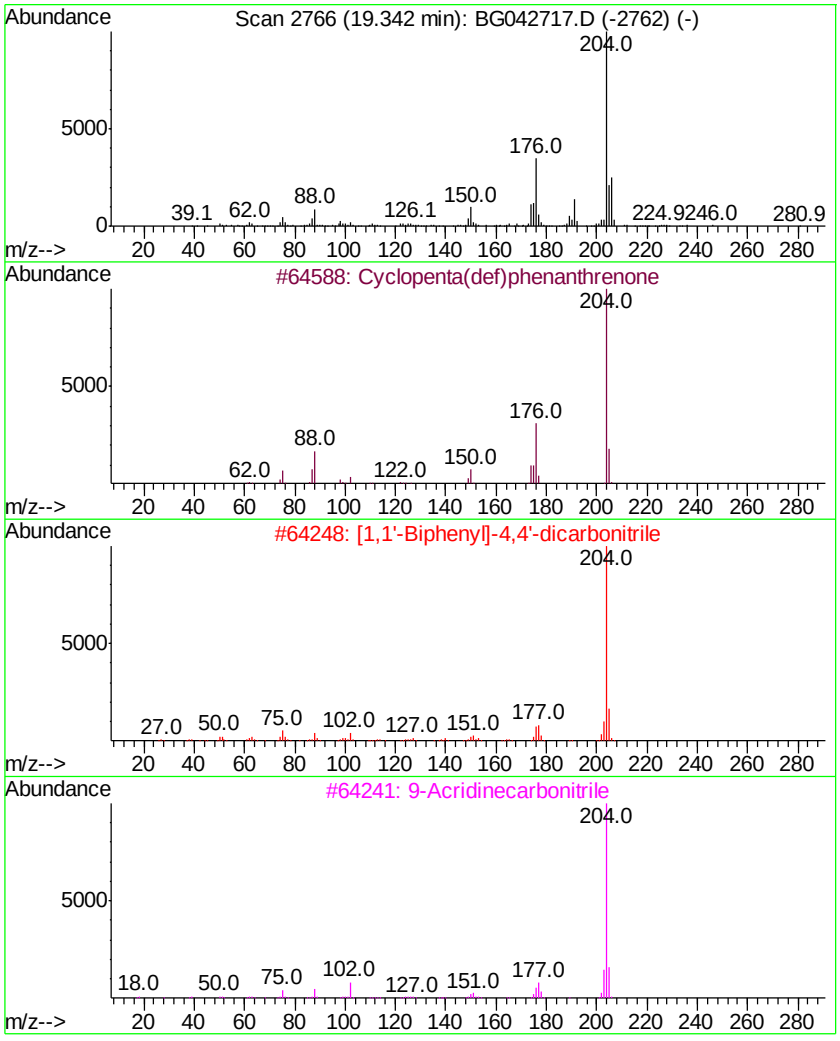
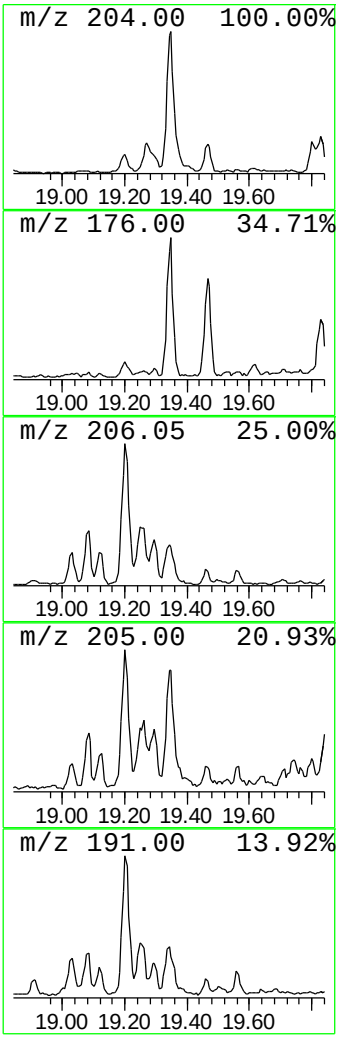
Peak Number 17 Cyclopenta(def)phenanthrenone Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.34 | 9.78 ng | 247221 | Phenanthrene-d10 | 17.41 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopenta(def)phenanthrenone | 204 | C15H8O | 005737-13-3 | 93 |
| 2 | [1,1'-Biphenyl]-4,4'-dicarbonitrile | 204 | C14H8N2 | 001591-30-6 | 47 |
| 3 | 9-Acridinecarbonitrile | 204 | C14H8N2 | 005326-19-2 | 47 |
| 4 | 2-Chloro-4-phenylphenol | 204 | C12H9ClO | 000092-04-6 | 47 |
| 5 | [1,1'-Biphenyl]-2,2'-dicarbonitrile | 204 | C14H8N2 | 004341-02-0 | 47 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

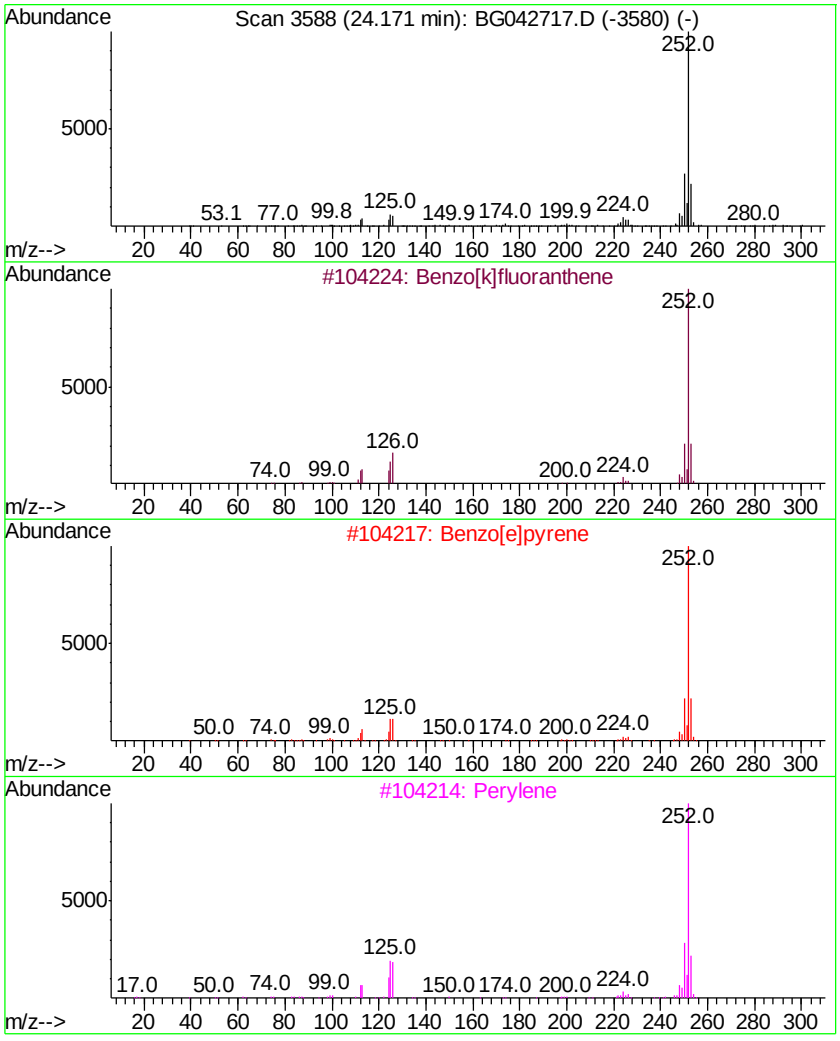
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

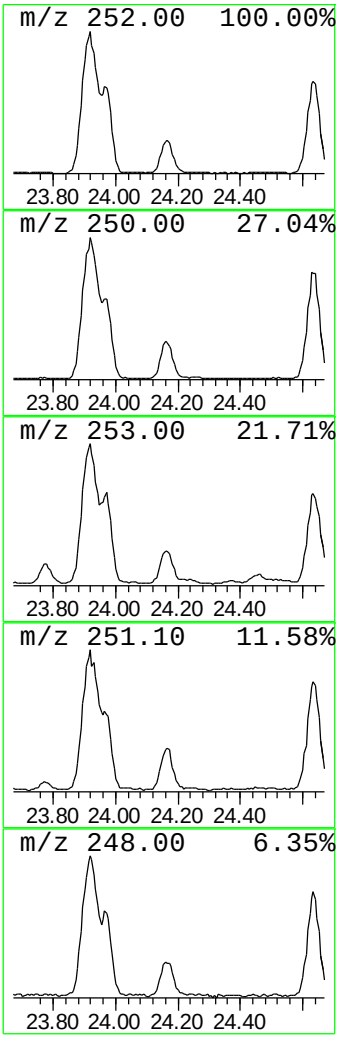
**********

Peak Number 18 Benzo[e]pyrene Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 24.17 | 8.03 ng | 330445 | Perylene-d12 | 24.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[k]fluoranthene | 252 | C20H12 | 000207-08-9 | 95 |
| 2 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 91 |
| 3 | Perylene | 252 | C20H12 | 000198-55-0 | 90 |
| 4 | Benzo[a]pyrene | 252 | C20H12 | 000050-32-8 | 90 |
| 5 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 81 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

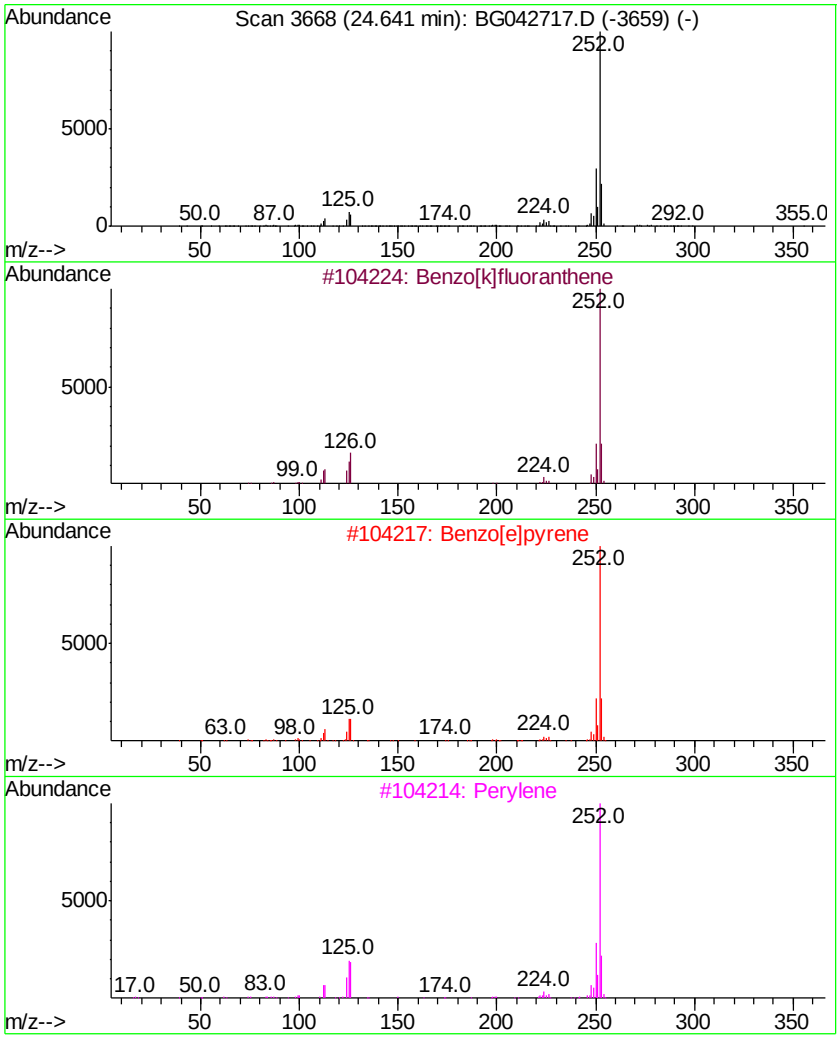
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

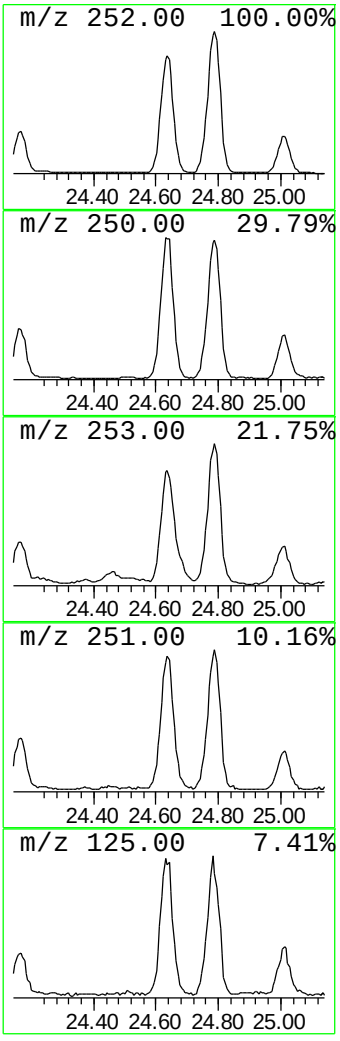
**********

Peak Number 19 Perylene Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 24.64 | 30.09 ng | 1238570 | Perylene-d12 | 24.94 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[k]fluoranthene | 252 | C20H12 | 000207-08-9 | 95 |
| 2 | Benzo[e]pyrene | 252 | C20H12 | 000192-97-2 | 95 |
| 3 | Perylene | 252 | C20H12 | 000198-55-0 | 94 |
| 4 | Benzo[a]pyrene | 252 | C20H12 | 000050-32-8 | 91 |
| 5 | Benz[e]acephenanthrylene | 252 | C20H12 | 000205-99-2 | 91 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_G\DATA\BG090419\
Data File : BG042717.D
Acq On : 4 Sep 2019 21:10
Operator : HP/JU
Sample : K4554-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** SB-7-(0-2)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG082219.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Butane, 2-methoxy... | 3.12 | 12.4 | ng | 112762 | 1 | 8.00 | 181893 | 20.0 |
| 1,3,5,7-Cycloocta... | 5.99 | 20.1 | ng | 182324 | 1 | 8.00 | 181893 | 20.0 |
| unknown7.53 | 7.53 | 87.3 | ng | 794096 | 1 | 8.00 | 181893 | 20.0 |
| Benzene, 2-propenyl- | 7.67 | 24.9 | ng | 226830 | 1 | 8.00 | 181893 | 20.0 |
| Benzene, 1-propenyl- | 7.74 | 13.2 | ng | 119943 | 1 | 8.00 | 181893 | 20.0 |
| Indene | 8.55 | 7.2 | ng | 65054 | 1 | 8.00 | 181893 | 20.0 |
| Benzene, 1-methyl... | 9.29 | 10.2 | ng | 92890 | 1 | 8.00 | 181893 | 20.0 |
| Benzenemethanethi... | 9.84 | 13.4 | ng | 164617 | 2 | 10.82 | 245232 | 20.0 |
| o-Cymene | 11.48 | 19.6 | ng | 240657 | 2 | 10.82 | 245232 | 20.0 |
| Benzene, 1-(bromo... | 13.55 | 7.1 | ng | 135214 | 3 | 14.65 | 382301 | 20.0 |
| Phenanthrene, 2-m... | 18.29 | 8.5 | ng | 214869 | 4 | 17.41 | 505695 | 20.0 |
| Phenanthrene, 1-m... | 18.34 | 7.8 | ng | 197041 | 4 | 17.41 | 505695 | 20.0 |
| Anthracene, 1-met... | 18.48 | 13.4 | ng | 340022 | 4 | 17.41 | 505695 | 20.0 |
| Phenanthrene, 2,5... | 19.20 | 10.9 | ng | 274537 | 4 | 17.41 | 505695 | 20.0 |
| Cyclopenta(def)ph... | 19.34 | 9.8 | ng | 247221 | 4 | 17.41 | 505695 | 20.0 |
| Benzo[e]pyrene | 24.17 | 8.0 | ng | 330445 | 6 | 24.94 | 823246 | 20.0 |
| Perylene | 24.64 | 30.1 | ng | 1238570 | 6 | 24.94 | 823246 | 20.0 |