LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

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:\HPCHEM1\BNA_G\METHODS\8270-BG072616.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 | 3.003 | 22 | 28 | 44 | rVB | 3304501 | 5350318 | 3.32% | 0.301% |
| 2 | 4.583 | 287 | 297 | 312 | rBV | 3808599 | 5973934 | 3.71% | 0.336% |
| 3 | 5.200 | 394 | 402 | 411 | rBV | 4341724 | 7294371 | 4.53% | 0.410% |
| 4 | 8.261 | 905 | 923 | 928 | rVV | 27838999 | 116861237 | 72.54% | 6.571% |
| 5 | 8.419 | 943 | 950 | 954 | rBV | 6554463 | 11067628 | 6.87% | 0.622% |
| 6 | 8.466 | 954 | 958 | 963 | rVV | 2333484 | 4610009 | 2.86% | 0.259% |
| 7 | 8.548 | 967 | 972 | 976 | rVV | 2392999 | 3806801 | 2.36% | 0.214% |
| 8 | 8.977 | 1039 | 1045 | 1055 | rVB | 4560686 | 8110487 | 5.03% | 0.456% |
| 9 | 9.318 | 1095 | 1103 | 1109 | rBV | 2085674 | 3871334 | 2.40% | 0.218% |
| 10 | 10.922 | 1368 | 1376 | 1381 | rBV | 5897089 | 9492580 | 5.89% | 0.534% |
| 11 | 10.975 | 1381 | 1385 | 1391 | rVB | 1159523 | 1977210 | 1.23% | 0.111% |
| 12 | 11.638 | 1483 | 1498 | 1502 | rBV2 | 607068 | 1756222 | 1.09% | 0.099% |
| 13 | 11.715 | 1502 | 1511 | 1519 | rVV2 | 7715720 | 15093405 | 9.37% | 0.849% |
| 14 | 11.956 | 1545 | 1552 | 1565 | rVB2 | 972023 | 2495497 | 1.55% | 0.140% |
| 15 | 12.367 | 1616 | 1622 | 1628 | rVB | 4331026 | 6501306 | 4.04% | 0.366% |
| 16 | 13.424 | 1790 | 1802 | 1807 | rBV | 5161826 | 8508551 | 5.28% | 0.478% |
| 17 | 13.606 | 1826 | 1833 | 1837 | rBV | 8308748 | 12481938 | 7.75% | 0.702% |
| 18 | 13.665 | 1837 | 1843 | 1852 | rVV2 | 1882539 | 4842389 | 3.01% | 0.272% |
| 19 | 13.741 | 1852 | 1856 | 1862 | rVV | 1357063 | 2522037 | 1.57% | 0.142% |
| 20 | 13.806 | 1862 | 1867 | 1873 | rVB | 1151530 | 1928717 | 1.20% | 0.108% |
| 21 | 13.935 | 1884 | 1889 | 1895 | rBV | 1510522 | 2699679 | 1.68% | 0.152% |
| 22 | 13.994 | 1895 | 1899 | 1912 | rVB | 3922373 | 6740761 | 4.18% | 0.379% |
| 23 | 14.435 | 1968 | 1974 | 1991 | rBV | 8345018 | 15043437 | 9.34% | 0.846% |
| 24 | 14.675 | 2010 | 2015 | 2018 | rBV | 2020929 | 2855925 | 1.77% | 0.161% |
| 25 | 14.775 | 2027 | 2032 | 2036 | rBV | 6597218 | 10960350 | 6.80% | 0.616% |
| 26 | 14.887 | 2046 | 2051 | 2058 | rVB2 | 4408411 | 7053148 | 4.38% | 0.397% |
| 27 | 14.993 | 2066 | 2069 | 2074 | rVV2 | 998620 | 1824648 | 1.13% | 0.103% |
| 28 | 15.046 | 2074 | 2078 | 2090 | rVV | 2486748 | 5247937 | 3.26% | 0.295% |
| 29 | 15.433 | 2139 | 2144 | 2154 | rBV | 7769394 | 15020458 | 9.32% | 0.845% |
| 30 | 15.662 | 2179 | 2183 | 2197 | rBV4 | 631249 | 2083842 | 1.29% | 0.117% |
| 31 | 15.985 | 2234 | 2238 | 2252 | rVB | 995159 | 2665586 | 1.65% | 0.150% |
| 32 | 16.338 | 2287 | 2298 | 2314 | rBV2 | 6243790 | 15789566 | 9.80% | 0.888% |
| 33 | 16.737 | 2358 | 2366 | 2370 | rBV2 | 28795735 | 75680328 | 46.98% | 4.256% |
| 34 | 16.802 | 2370 | 2377 | 2380 | rVV2 | 47206872 | 117109891 | 72.70% | 6.585% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

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:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 16.849 | 2380 | 2385 | 2398 | rVB | 41025519 | 75173355 | 46.66% | 4.227% |
| 36 | 17.049 | 2416 | 2419 | 2422 | rBV | 1073962 | 1715560 | 1.06% | 0.096% |
| 37 | 17.178 | 2437 | 2441 | 2449 | rBV | 2022173 | 4908080 | 3.05% | 0.276% |
| 38 | 17.460 | 2485 | 2489 | 2499 | rVB3 | 1657110 | 3163972 | 1.96% | 0.178% |
| 39 | 17.577 | 2504 | 2509 | 2518 | rVB | 1930948 | 3297321 | 2.05% | 0.185% |
| 40 | 18.171 | 2606 | 2610 | 2622 | rVB3 | 936293 | 2264952 | 1.41% | 0.127% |
| 41 | 18.464 | 2654 | 2660 | 2661 | rBV | 1650419 | 2301729 | 1.43% | 0.129% |
| 42 | 18.682 | 2692 | 2697 | 2701 | rBV2 | 1014335 | 1694857 | 1.05% | 0.095% |
| 43 | 18.876 | 2723 | 2730 | 2734 | rBV | 30533919 | 43865583 | 27.23% | 2.467% |
| 44 | 19.128 | 2771 | 2773 | 2779 | rVB4 | 1668531 | 2749985 | 1.71% | 0.155% |
| 45 | 19.222 | 2779 | 2789 | 2791 | rBV5 | 10409996 | 25955828 | 16.11% | 1.460% |
| 46 | 19.281 | 2795 | 2799 | 2801 | rBV | 9229263 | 10127388 | 6.29% | 0.569% |
| 47 | 19.310 | 2801 | 2804 | 2807 | rBV3 | 4739482 | 6610128 | 4.10% | 0.372% |
| 48 | 19.375 | 2812 | 2815 | 2822 | rVV6 | 16988073 | 40936897 | 25.41% | 2.302% |
| 49 | 19.434 | 2822 | 2825 | 2829 | rVV | 10522731 | 14209141 | 8.82% | 0.799% |
| 50 | 19.498 | 2829 | 2836 | 2840 | rVV5 | 11648159 | 26982355 | 16.75% | 1.517% |
| 51 | 19.557 | 2841 | 2846 | 2850 | rVV3 | 17157530 | 39966264 | 24.81% | 2.247% |
| 52 | 19.616 | 2854 | 2856 | 2860 | rVB | 6563267 | 7310685 | 4.54% | 0.411% |
| 53 | 19.663 | 2860 | 2864 | 2867 | rBV | 15461360 | 21033647 | 13.06% | 1.183% |
| 54 | 19.722 | 2867 | 2874 | 2879 | rVV3 | 54978301 | 161092225 | 100.00% | 9.059% |
| 55 | 19.786 | 2883 | 2885 | 2888 | rVV | 31028634 | 31534497 | 19.58% | 1.773% |
| 56 | 19.827 | 2888 | 2892 | 2894 | rVV | 21346414 | 29811509 | 18.51% | 1.676% |
| 57 | 19.851 | 2894 | 2896 | 2900 | rVV3 | 10677197 | 15447121 | 9.59% | 0.869% |
| 58 | 19.915 | 2903 | 2907 | 2916 | rVB | 19143073 | 25173231 | 15.63% | 1.416% |
| 59 | 20.062 | 2927 | 2932 | 2934 | rBV | 30550484 | 42534991 | 26.40% | 2.392% |
| 60 | 20.098 | 2934 | 2938 | 2942 | rVV2 | 46604767 | 82106334 | 50.97% | 4.617% |
| 61 | 20.139 | 2942 | 2945 | 2950 | rVV4 | 3616402 | 7067673 | 4.39% | 0.397% |
| 62 | 20.197 | 2950 | 2955 | 2958 | rVV | 12030182 | 18850511 | 11.70% | 1.060% |
| 63 | 20.238 | 2958 | 2962 | 2966 | rVV | 18611682 | 24168506 | 15.00% | 1.359% |
| 64 | 20.280 | 2966 | 2969 | 2972 | rVB | 4413838 | 5091654 | 3.16% | 0.286% |
| 65 | 20.332 | 2972 | 2978 | 2983 | rBV4 | 8600548 | 19104702 | 11.86% | 1.074% |
| 66 | 20.374 | 2983 | 2985 | 2992 | rVB | 8432601 | 11682133 | 7.25% | 0.657% |
| 67 | 20.444 | 2992 | 2997 | 3001 | rBV2 | 4883037 | 7373985 | 4.58% | 0.415% |
| 68 | 20.644 | 3022 | 3031 | 3034 | rBV | 52456395 | 111814901 | 69.41% | 6.288% |
| 69 | 20.673 | 3034 | 3036 | 3043 | rVB | 8954797 | 9279851 | 5.76% | 0.522% |
| 70 | 20.767 | 3043 | 3052 | 3055 | rBV | 13619283 | 19924982 | 12.37% | 1.120% |
| 71 | 20.814 | 3055 | 3060 | 3062 | rBV2 | 3698731 | 5091486 | 3.16% | 0.286% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

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:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 20.879 | 3067 | 3071 | 3075 | rVB | 4600612 | 5332167 | 3.31% | 0.300% |
| 73 | 20.979 | 3077 | 3088 | 3101 | rVB2 | 8463753 | 20989351 | 13.03% | 1.180% |
| 74 | 21.084 | 3102 | 3106 | 3111 | rBV2 | 3292114 | 4105928 | 2.55% | 0.231% |
| 75 | 21.178 | 3112 | 3122 | 3126 | rBV | 49830592 | 106688181 | 66.23% | 5.999% |
| 76 | 21.302 | 3138 | 3143 | 3147 | rBV | 10594530 | 13937400 | 8.65% | 0.784% |
| 77 | 21.343 | 3147 | 3150 | 3160 | rVB2 | 1386666 | 2097444 | 1.30% | 0.118% |
| 78 | 21.507 | 3173 | 3178 | 3184 | rVV2 | 2785187 | 4318782 | 2.68% | 0.243% |
| 79 | 21.748 | 3208 | 3219 | 3224 | rBV | 46312070 | 101496094 | 63.00% | 5.707% |
| 80 | 21.795 | 3224 | 3227 | 3239 | rVB3 | 794937 | 1654337 | 1.03% | 0.093% |
| 81 | 21.907 | 3240 | 3246 | 3252 | rVB2 | 1850952 | 3400971 | 2.11% | 0.191% |
| 82 | 22.189 | 3288 | 3294 | 3302 | rVB2 | 1884599 | 3110548 | 1.93% | 0.175% |
| 83 | 22.283 | 3303 | 3310 | 3314 | rBV4 | 649191 | 1858070 | 1.15% | 0.104% |
| 84 | 22.342 | 3315 | 3320 | 3325 | rVB | 1657168 | 2945796 | 1.83% | 0.166% |
| 85 | 22.723 | 3379 | 3385 | 3397 | rVB2 | 5776119 | 10528370 | 6.54% | 0.592% |
| 86 | 23.834 | 3565 | 3574 | 3577 | rBV | 688470 | 1862914 | 1.16% | 0.105% |
| 87 | 24.398 | 3661 | 3670 | 3702 | rBV2 | 3466792 | 13904663 | 8.63% | 0.782% |
| 88 | 25.302 | 3814 | 3824 | 3839 | rVB2 | 1107453 | 3361556 | 2.09% | 0.189% |

Sum of corrected areas: 1778332118

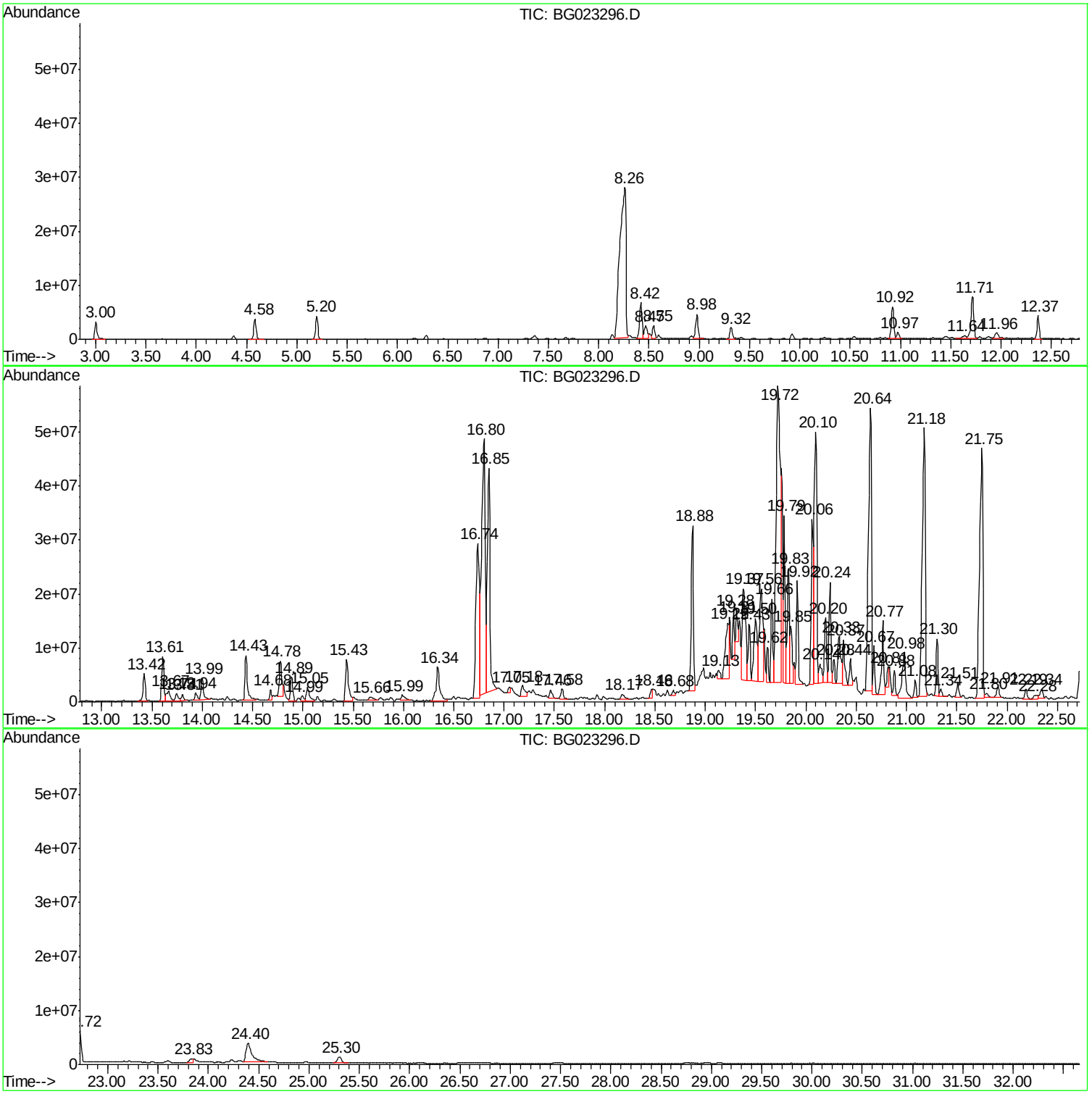
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

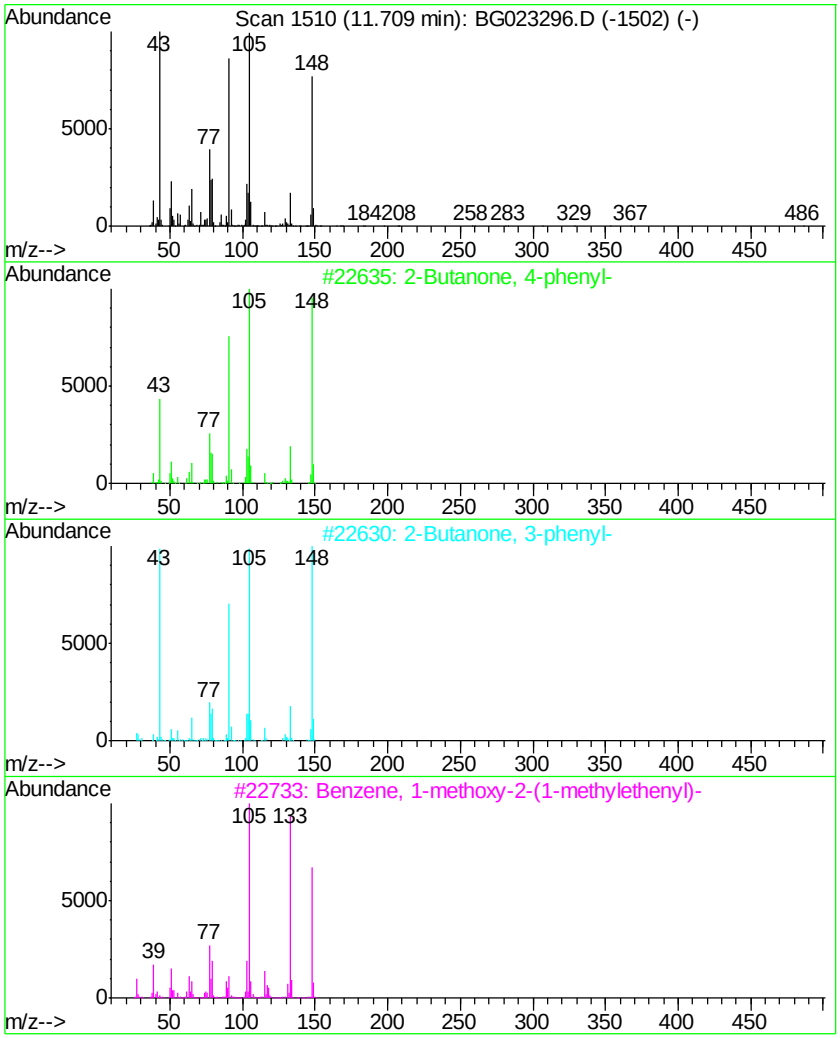
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

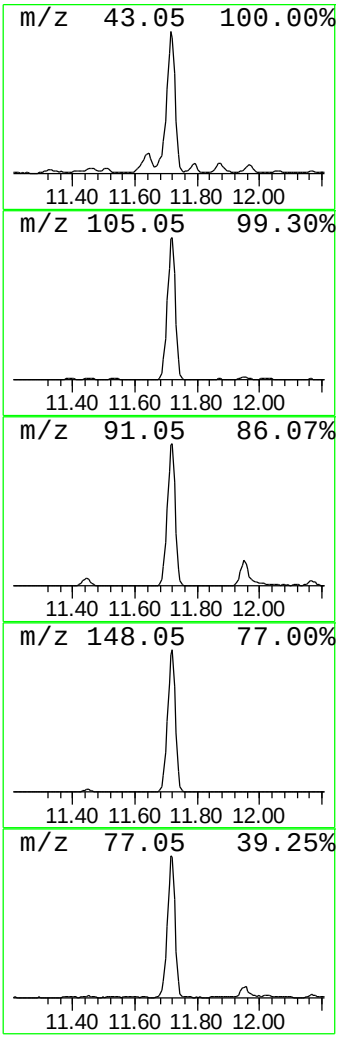
**********

Peak Number 1 2-Butanone, 4-phenyl- Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.71 | 152.67 ng | 15093400 | Naphthalene-d8 | 10.97 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Butanone, 4-phenyl- | 148 | C10H12O | 002550-26-7 | 97 |
| 2 | 2-Butanone, 3-phenyl- | 148 | C10H12O | 000769-59-5 | 87 |
| 3 | Benzene, 1-methoxy-2-(1-methylet... | 148 | C10H12O | 010278-02-1 | 72 |
| 4 | 3-Buten-2-ol, 4-phenyl- | 148 | C10H12O | 017488-65-2 | 64 |
| 5 | Benzene, 1-methyl-4-butyl | 148 | C11H16 | 001595-05-7 | 64 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

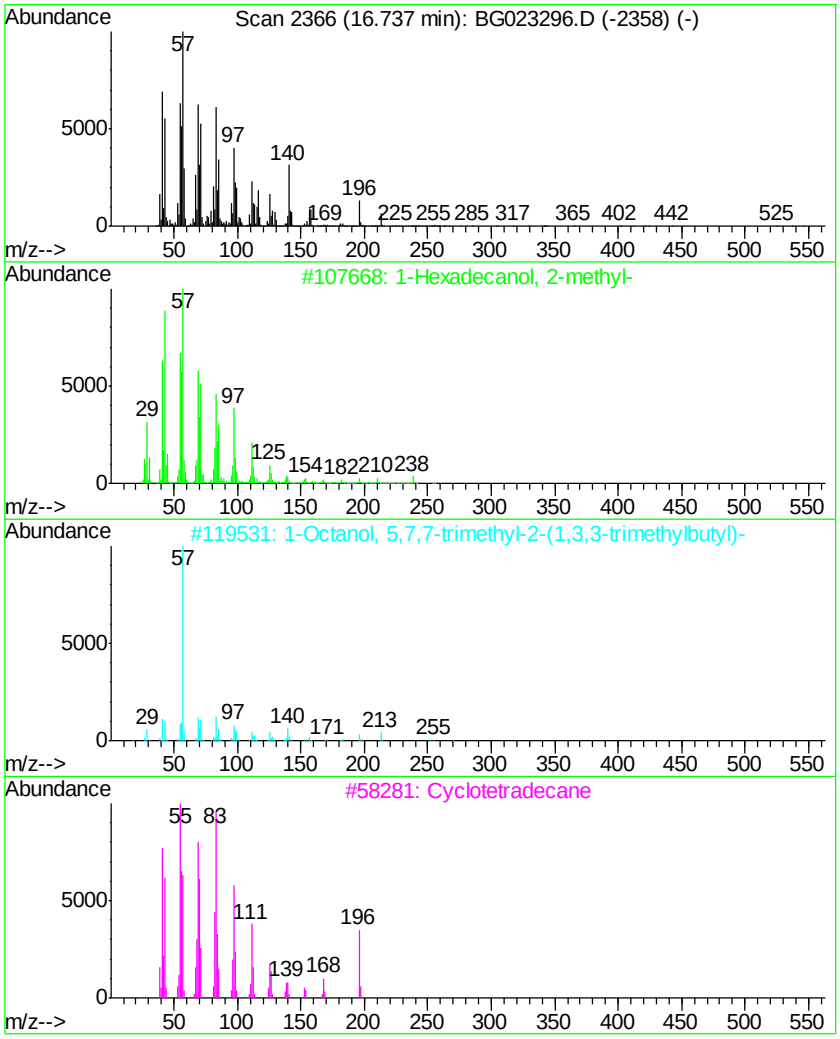
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

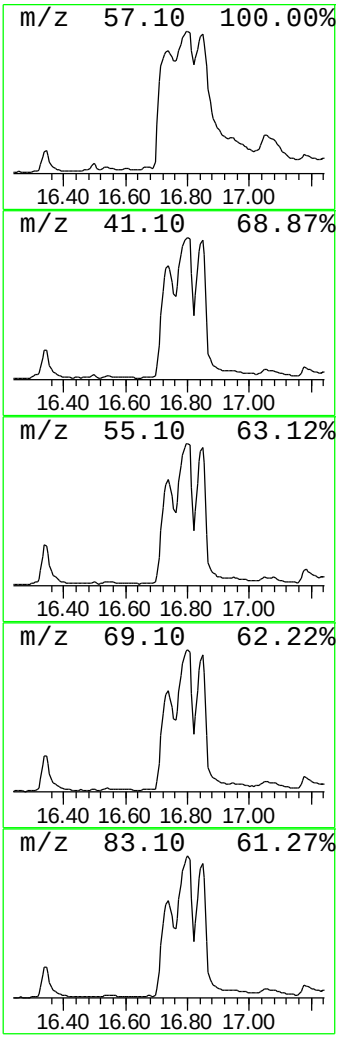
**********

Peak Number 2 1-Hexadecanol, 2-methyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.74 | 459.04 ng | 75680300 | Phenanthrene-d10 | 17.58 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Hexadecanol, 2-methyl- | 256 | C17H36O | 002490-48-4 | 90 |
| 2 | 1-Octanol, 5,7,7-trimethyl-2-(1,... | 270 | C18H38O | 036400-98-3 | 90 |
| 3 | Cyclotetradecane | 196 | C14H28 | 000295-17-0 | 83 |
| 4 | 1-Tetradecene | 196 | C14H28 | 001120-36-1 | 68 |
| 5 | Titanium tetrachloride | 188 | Cl4Ti | 007550-45-0 | 53 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

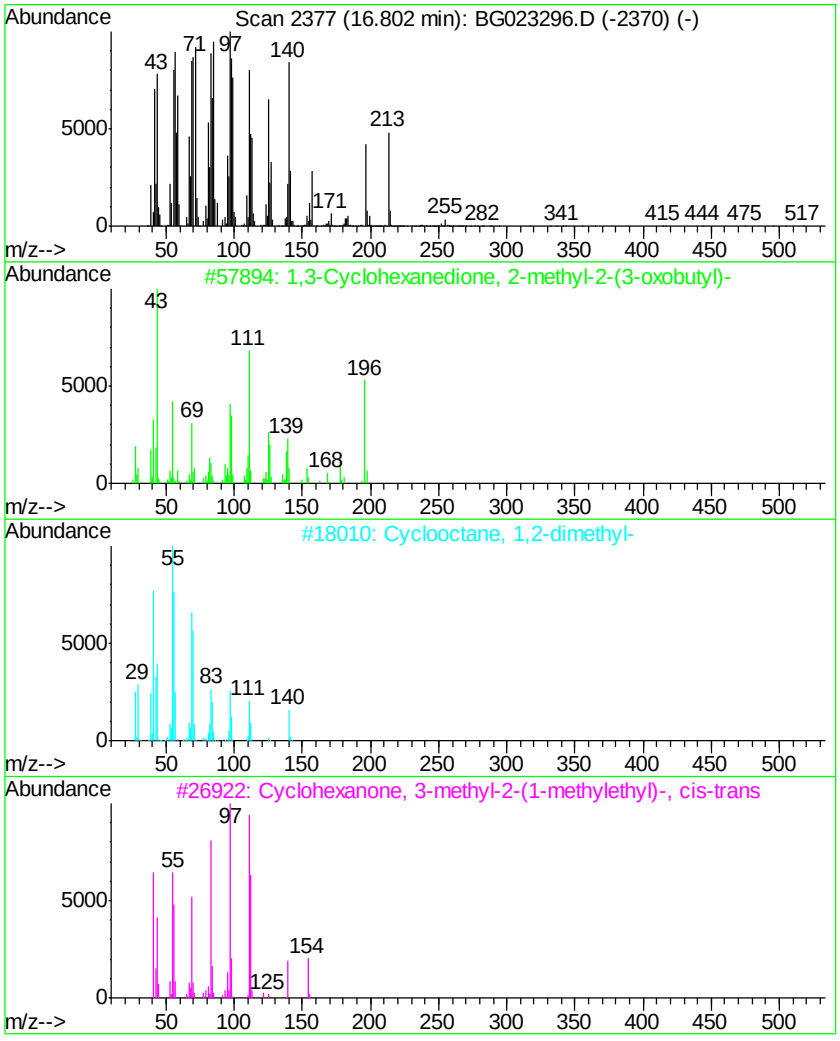
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

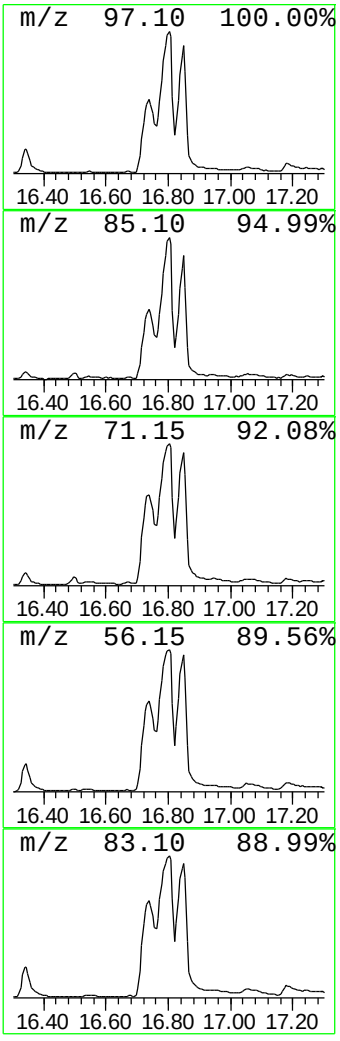
**********

Peak Number 3 unknown16.80 Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.80 | 710.33 ng | 117110000 | Phenanthrene-d10 | 17.58 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Cyclohexanedione, 2-methyl-2... | 196 | C11H16O3 | 005073-65-4 | 27 |
| 2 | Cyclooctane, 1,2-dimethyl- | 140 | C10H20 | 013151-94-5 | 27 |
| 3 | Cyclohexanone, 3-methyl-2-(1-met... | 154 | C10H18O | 028357-23-5 | 25 |
| 4 | Cyclodecane | 140 | C10H20 | 000293-96-9 | 25 |
| 5 | 5-Tetradecene, (Z)- | 196 | C14H28 | 041446-62-2 | 20 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

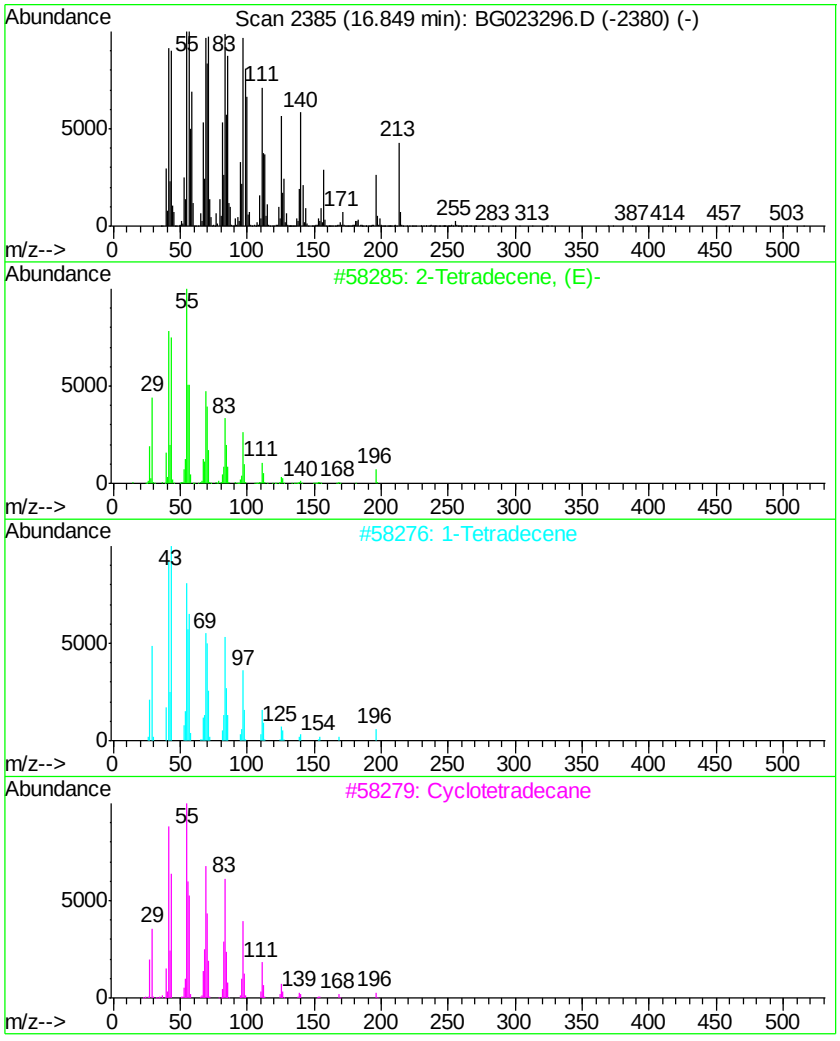
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

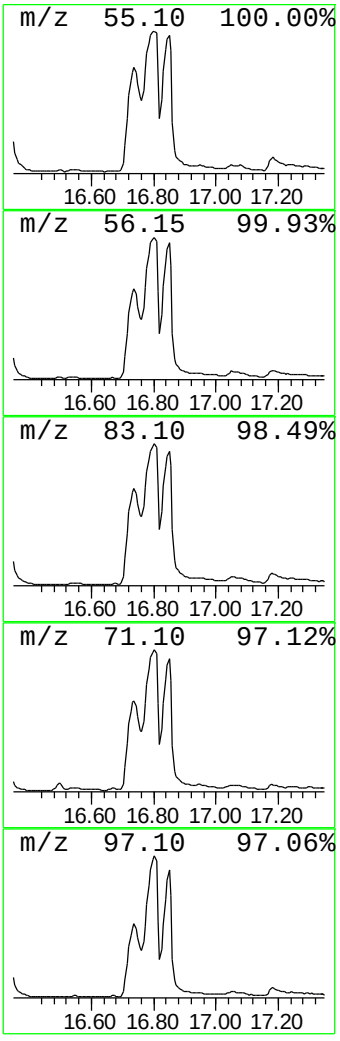
**********

Peak Number 4 unknown16.85 Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.85 | 455.97 ng | 75173400 | Phenanthrene-d10 | 17.58 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Tetradecene, (E)- | 196 | C14H28 | 035953-54-9 | 46 |
| 2 | 1-Tetradecene | 196 | C14H28 | 001120-36-1 | 46 |
| 3 | Cyclotetradecane | 196 | C14H28 | 000295-17-0 | 42 |
| 4 | Formic acid, dec-2-yl ester | 186 | C11H22O2 | 1000367-89-5 | 41 |
| 5 | 5-Tetradecene, (E)- | 196 | C14H28 | 041446-66-6 | 38 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

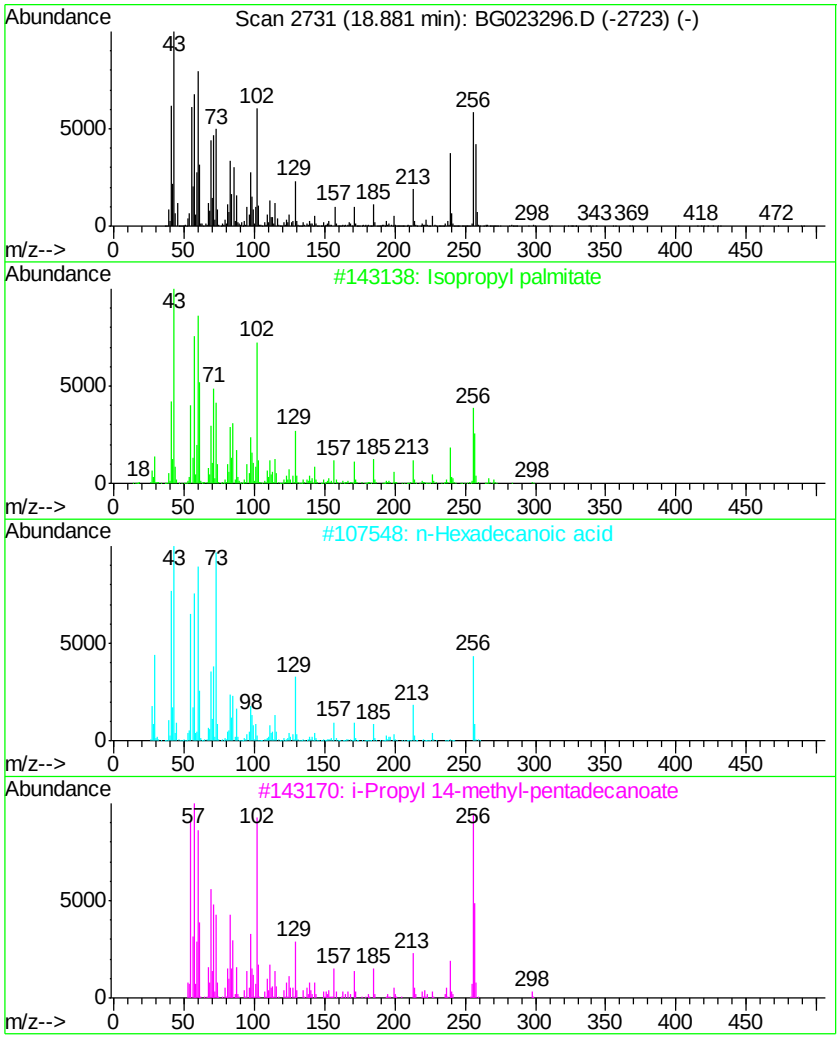
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

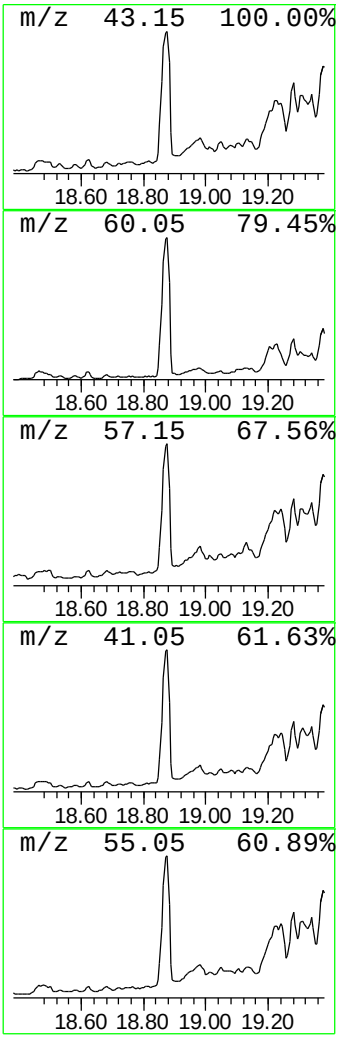
**********

Peak Number 5 Isopropyl palmitate Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.88 | 266.07 ng | 43865600 | Phenanthrene-d10 | 17.58 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Isopropyl palmitate | 298 | C19H38O2 | 000142-91-6 | 96 |
| 2 | n-Hexadecanoic acid | 256 | C16H32O2 | 000057-10-3 | 72 |
| 3 | i-Propyl 14-methyl-pentadecanoate | 298 | C19H38O2 | 1000336-62-4 | 68 |
| 4 | Butanoic acid, 3-methyl-, 1-meth... | 144 | C8H16O2 | 032665-23-9 | 22 |
| 5 | Tridecanoic acid | 214 | C13H26O2 | 000638-53-9 | 18 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

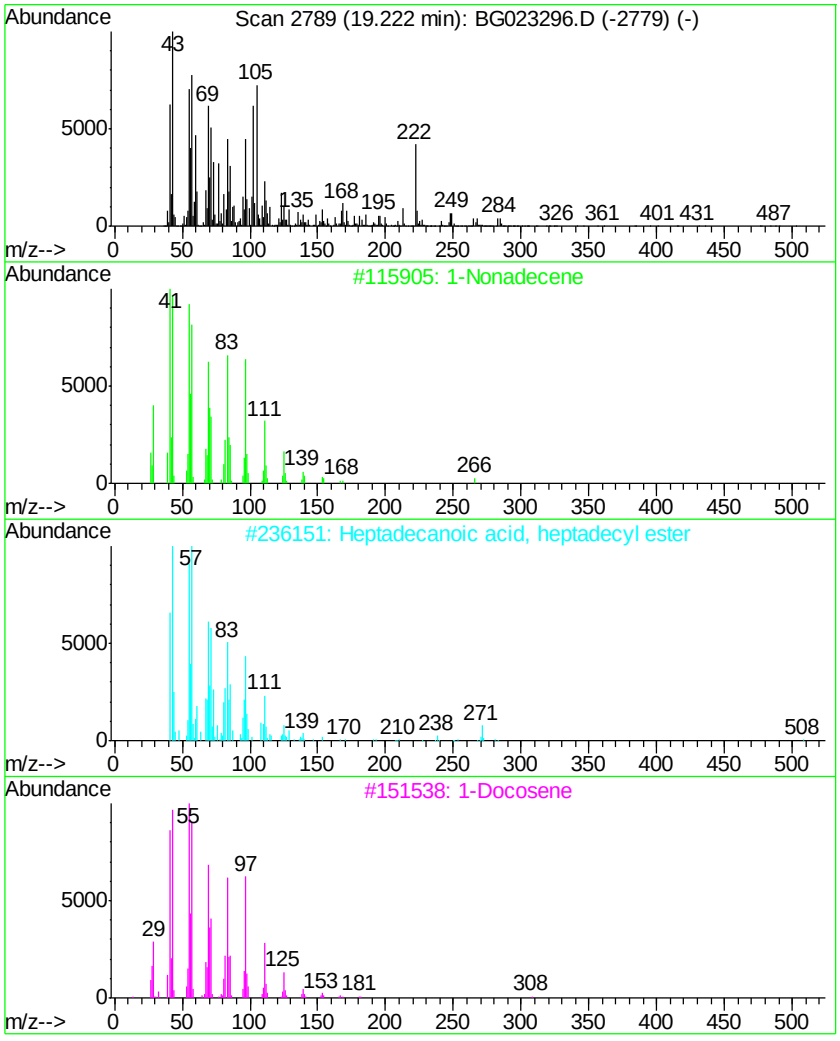
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

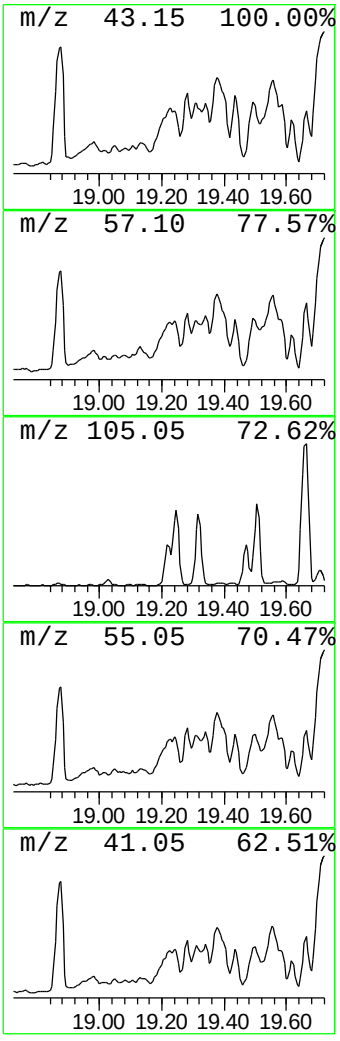
**********

Peak Number 6 1-Nonadecene Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.22 | 157.44 ng | 25955800 | Phenanthrene-d10 | 17.58 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Nonadecene | 266 | C19H38 | 018435-45-5 | 89 |
| 2 | Heptadecanoic acid, heptadecyl e... | 509 | C34H68O2 | 036617-50-2 | 52 |
| 3 | 1-Docosene | 308 | C22H44 | 001599-67-3 | 50 |
| 4 | Heptadecyl heptafluorobutyrate | 452 | C21H35F7O2 | 959085-66-6 | 46 |
| 5 | 1-Hexadecanol, 2-methyl- | 256 | C17H36O | 002490-48-4 | 46 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

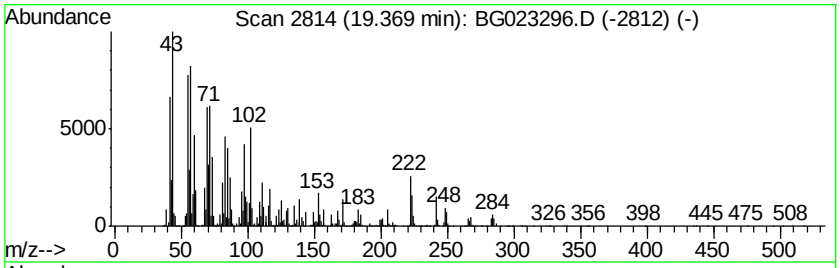
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

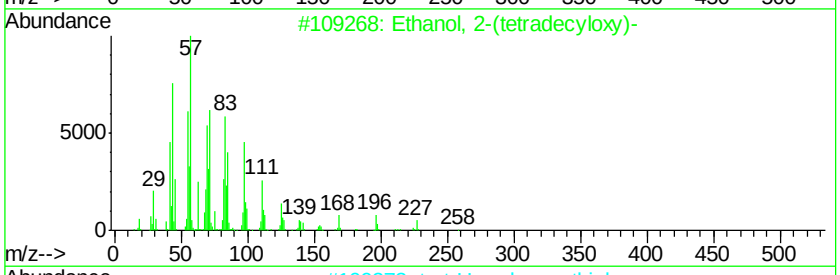
**********

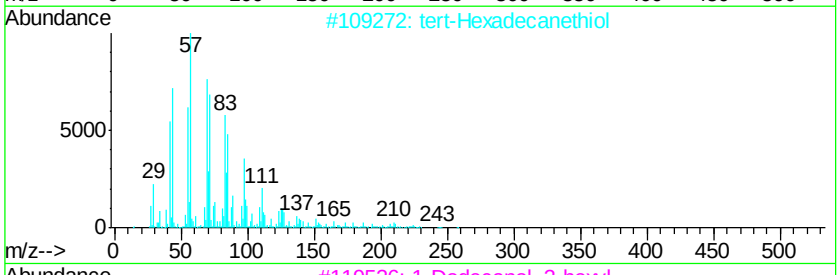
Peak Number 7 unknown19.37 Concentration Rank 11

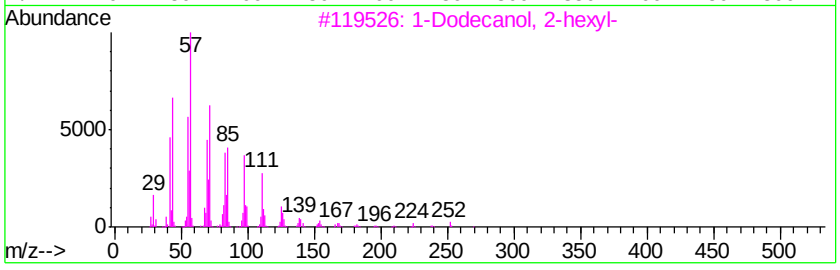
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.37 | 248.30 ng | 40936900 | Phenanthrene-d10 | 17.58 |

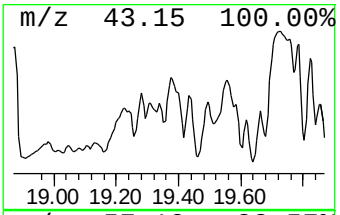
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethanol, 2-(tetradecyloxy)- | 258 | C16H34O2 | 002136-70-1 | 38 |
| 2 | tert-Hexadecanethiol | 258 | C16H34S | 025360-09-2 | 35 |
| 3 | 1-Dodecanol, 2-hexyl- | 270 | C18H38O | 110225-00-8 | 30 |
| 4 | 1-Decanol, 2-octyl- | 270 | C18H38O | 045235-48-1 | 30 |
| 5 | Heneicosane, 11-cyclopentyl- | 364 | C26H52 | 006703-81-7 | 30 |

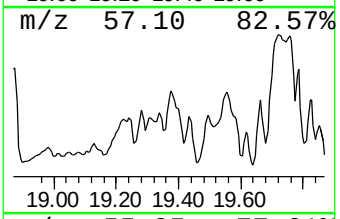


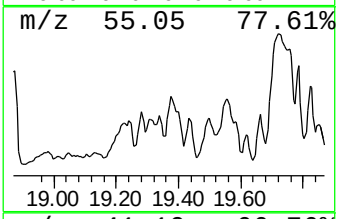



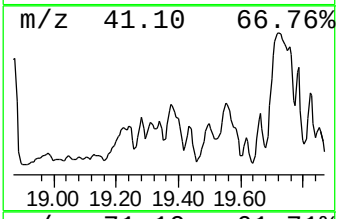



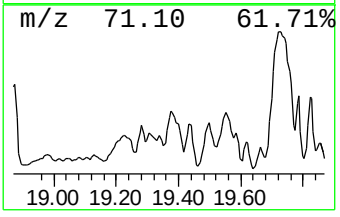



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

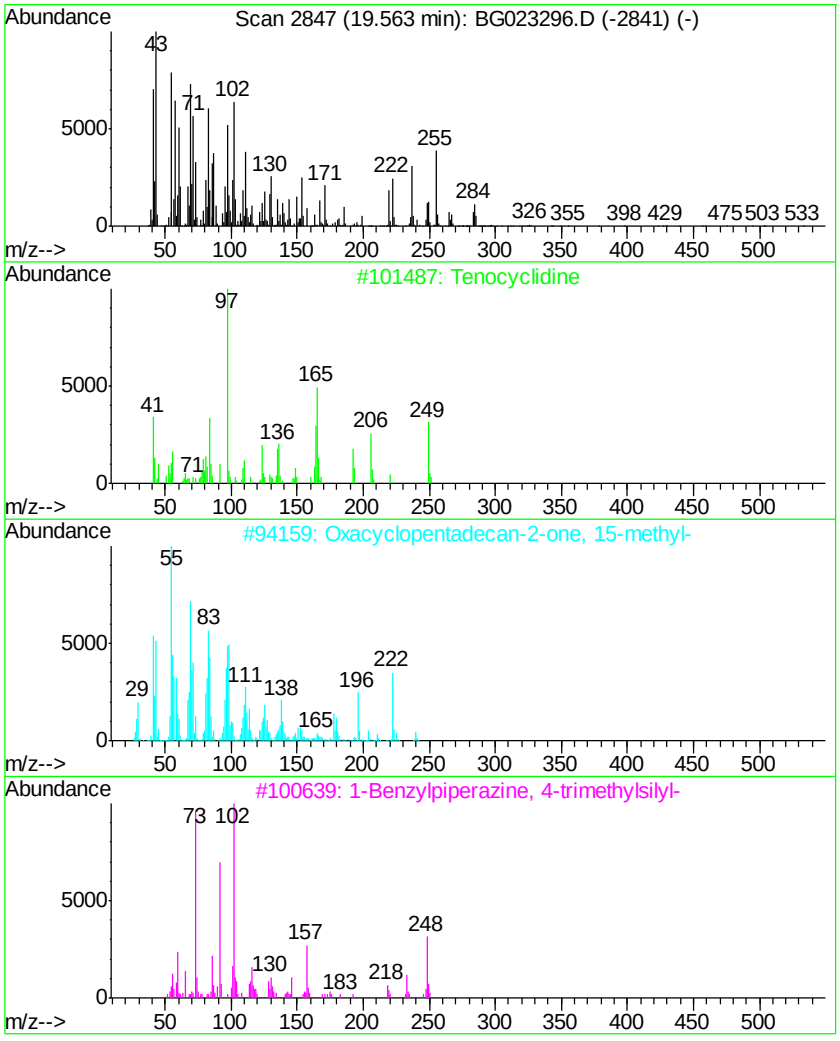
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

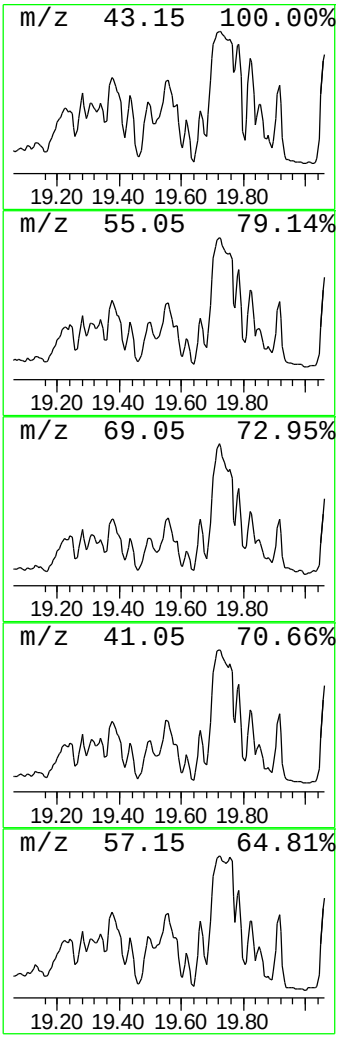
**********

Peak Number 9 unknown19.56 Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.56 | 242.42 ng | 39966300 | Phenanthrene-d10 | 17.58 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Tenocyclidine | 249 | C15H23NS | 021500-98-1 | 15 |
| 2 | Oxacyclopentadecan-2-one, 15-met... | 240 | C15H28O2 | 032539-85-8 | 14 |
| 3 | 1-Benzylpiperazine, 4-trimethyls... | 248 | C14H24N2Si | 1000373-99-2 | 10 |
| 4 | Cyclopentane, (4-octyldodecyl)- | 350 | C25H50 | 005638-09-5 | 10 |
| 5 | 1,2-Dodecanediol | 202 | C12H26O2 | 001119-87-5 | 10 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

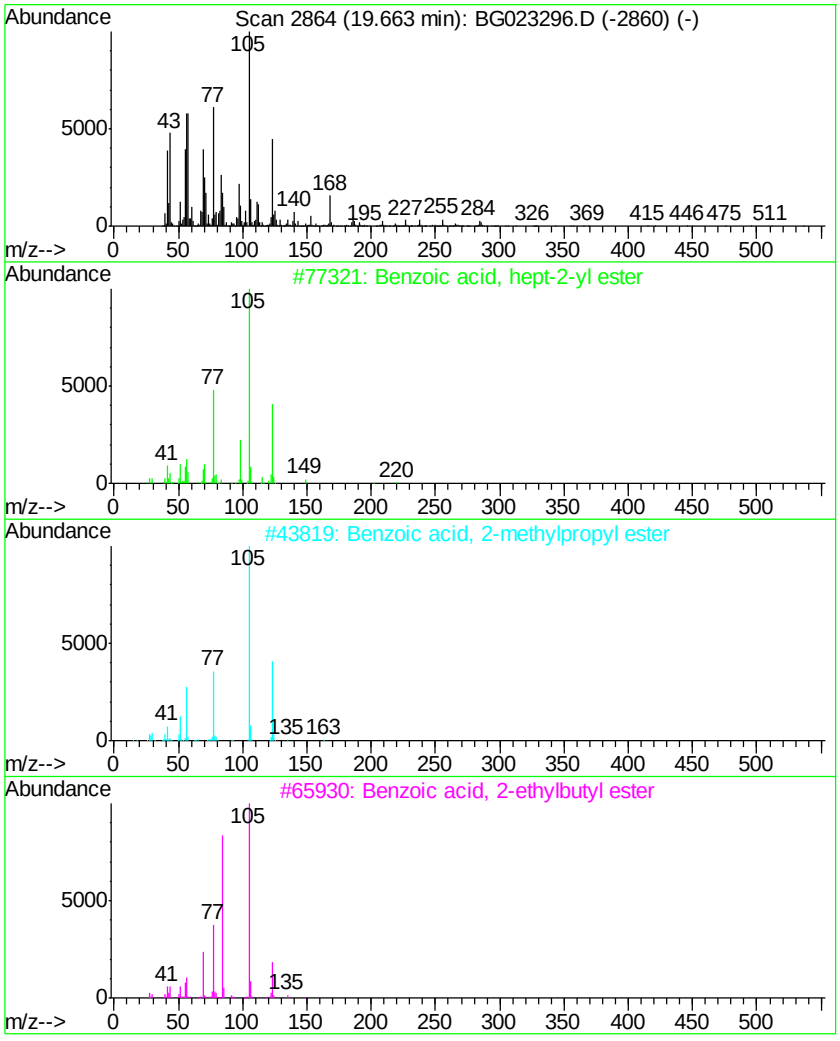
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

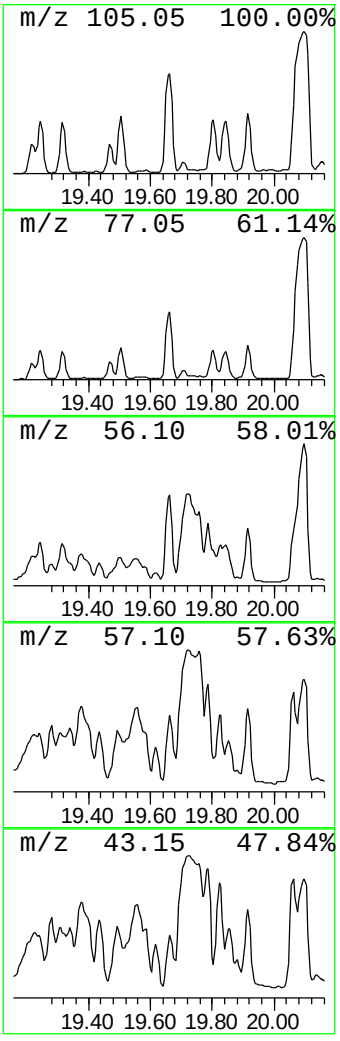
**********

Peak Number 10 Benzoic acid, hept-2-yl ester Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.66 | 127.58 ng | 21033600 | Phenanthrene-d10 | 17.58 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzoic acid, hept-2-yl ester | 220 | C14H20O2 | 1000368-69-4 | 60 |
| 2 | Benzoic acid, 2-methylpropyl ester | 178 | C11H14O2 | 000120-50-3 | 53 |
| 3 | Benzoic acid, 2-ethylbutyl ester | 206 | C13H18O2 | 1000367-92-4 | 35 |
| 4 | Carbonic acid, decyl methyl ester | 216 | C12H24O3 | 1000314-62-2 | 30 |
| 5 | 2-Phenyl-4-ethylidene-2-oxazolin... | 187 | C11H9NO2 | 037791-41-6 | 25 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

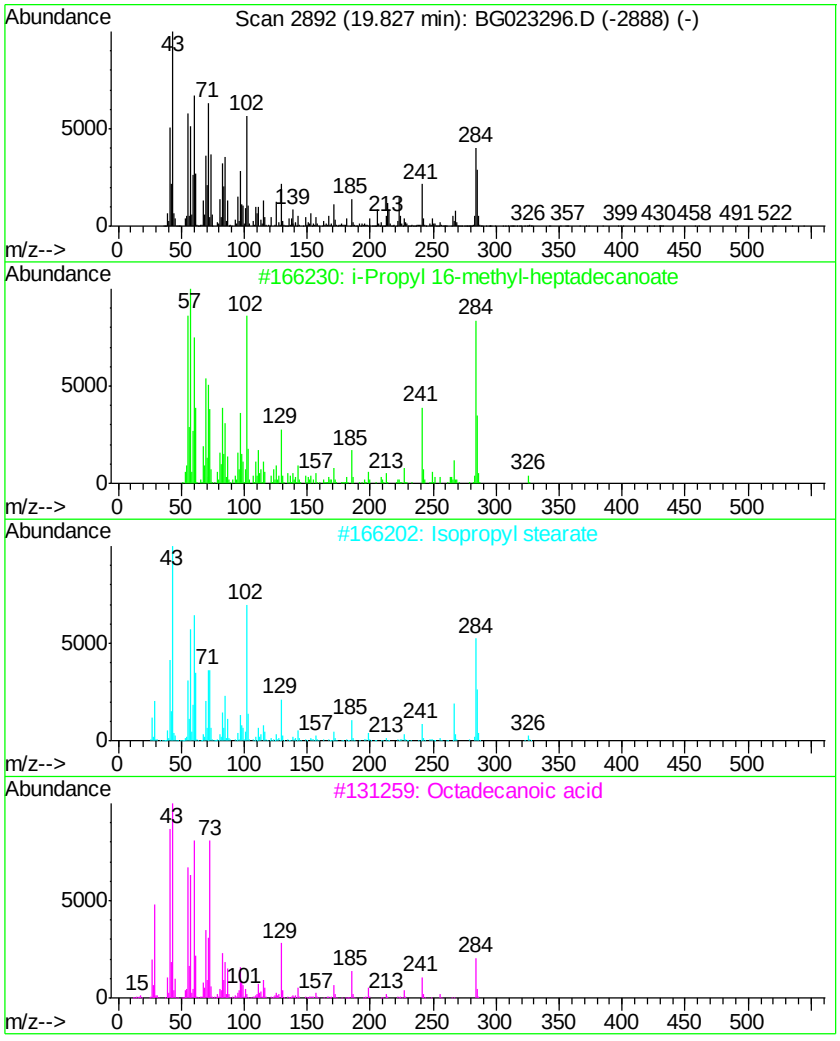
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

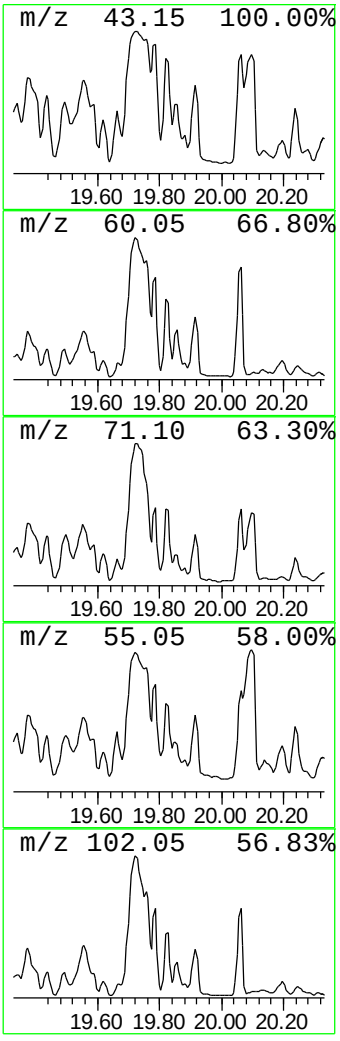
**********

Peak Number 13 i-Propyl 16-methyl-heptadec... Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.83 | 175.31 ng | 29811500 | Chrysene-d12 | 21.91 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | i-Propyl 16-methyl-heptadecanoate | 326 | C21H42O2 | 1000336-66-3 | 72 |
| 2 | Isopropyl stearate | 326 | C21H42O2 | 000112-10-7 | 62 |
| 3 | Octadecanoic acid | 284 | C18H36O2 | 000057-11-4 | 49 |
| 4 | Isopropyl palmitate | 298 | C19H38O2 | 000142-91-6 | 38 |
| 5 | Isopropyl myristate | 270 | C17H34O2 | 000110-27-0 | 30 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

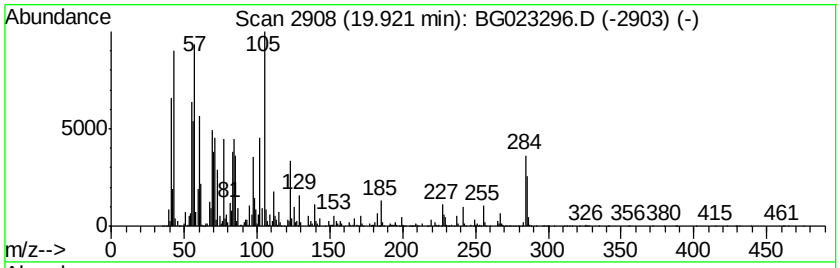
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

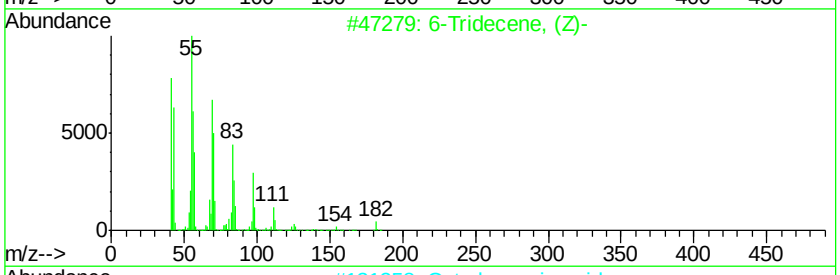
**********

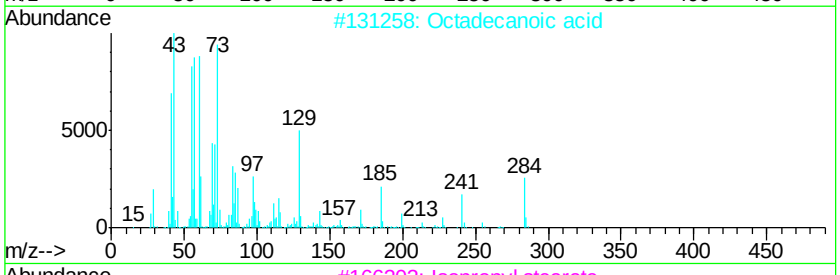
Peak Number 14 unknown19.92 Concentration Rank 18

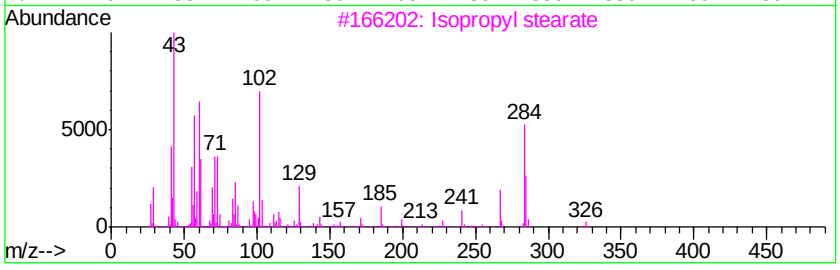
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.92 | 148.04 ng | 25173200 | Chrysene-d12 | 21.91 |

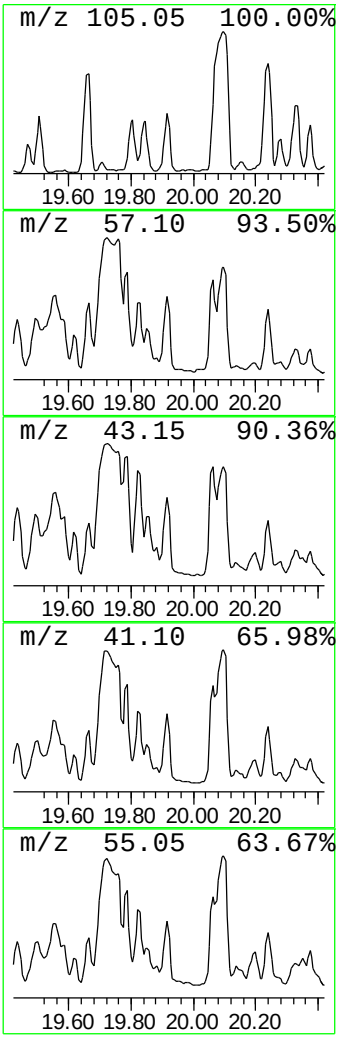
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 6-Tridecene, (Z)- | 182 | C13H26 | 006508-77-6 | 44 |
| 2 | Octadecanoic acid | 284 | C18H36O2 | 000057-11-4 | 30 |
| 3 | Isopropyl stearate | 326 | C21H42O2 | 000112-10-7 | 30 |
| 4 | Formic acid, decyl ester | 186 | C11H22O2 | 005451-52-5 | 25 |
| 5 | Oxalic acid, pentadecyl propyl e... | 342 | C20H38O4 | 1000309-26-8 | 25 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

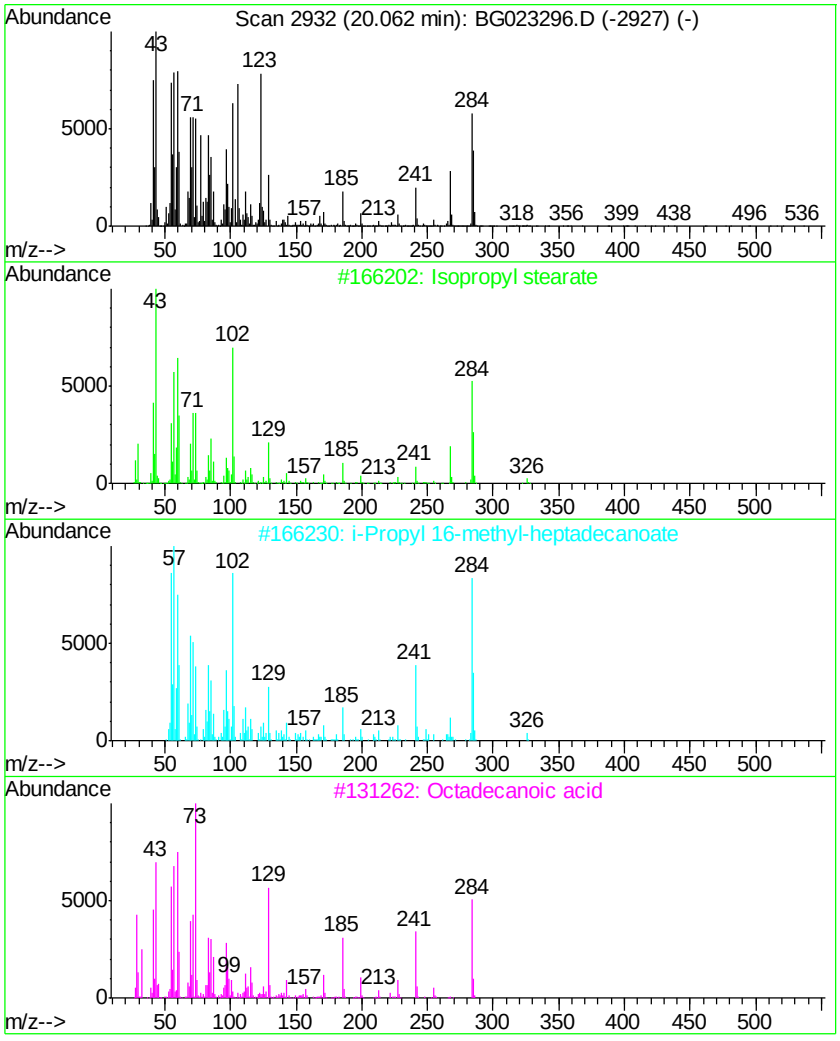
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

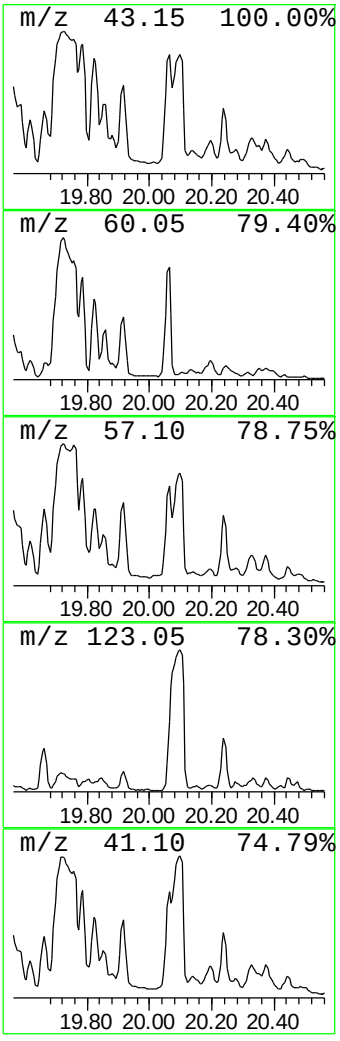
**********

Peak Number 15 unknown20.06 Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.06 | 250.13 ng | 42535000 | Chrysene-d12 | 21.91 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Isopropyl stearate | 326 | C21H42O2 | 000112-10-7 | 49 |
| 2 | i-Propyl 16-methyl-heptadecanoate | 326 | C21H42O2 | 1000336-66-3 | 49 |
| 3 | Octadecanoic acid | 284 | C18H36O2 | 000057-11-4 | 46 |
| 4 | Isopropyl palmitate | 298 | C19H38O2 | 000142-91-6 | 35 |
| 5 | Lauryl acetate | 228 | C14H28O2 | 000112-66-3 | 15 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

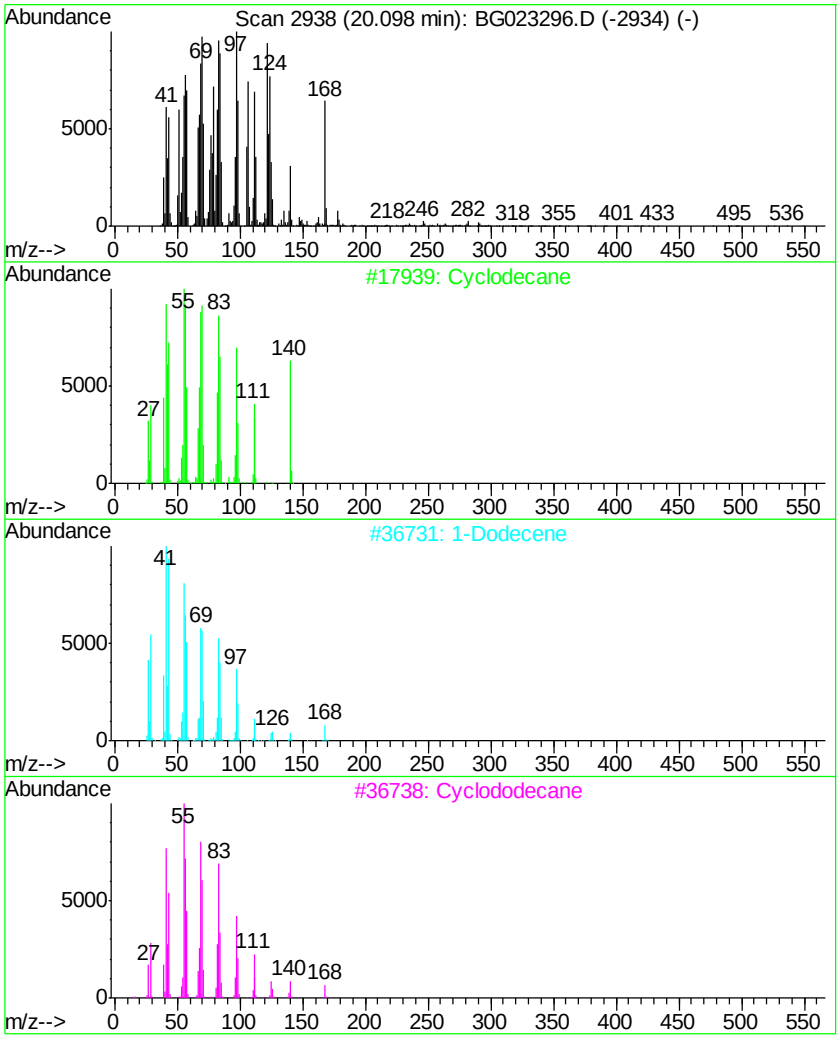
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

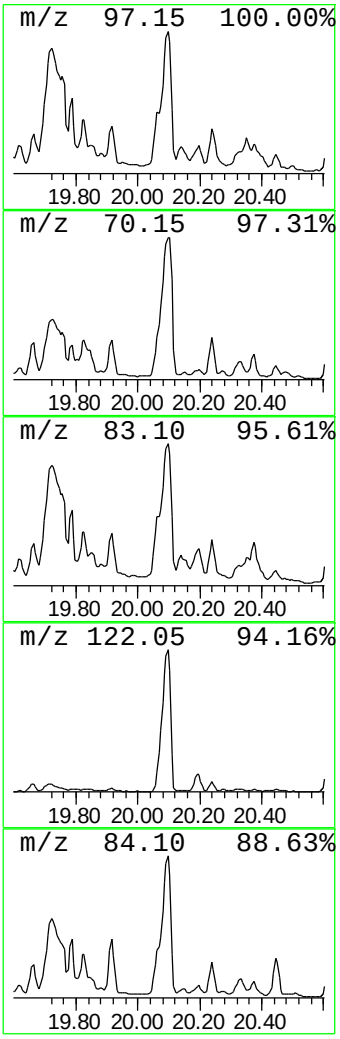
**********

Peak Number 16 Cyclodecane Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.10 | 482.84 ng | 82106300 | Chrysene-d12 | 21.91 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclodecane | 140 | C10H20 | 000293-96-9 | 86 |
| 2 | 1-Dodecene | 168 | C12H24 | 000112-41-4 | 64 |
| 3 | Cyclododecane | 168 | C12H24 | 000294-62-2 | 50 |
| 4 | Bicyclo[2.2.2]octanone, 4-methox... | 168 | C10H16O2 | 003907-11-7 | 42 |
| 5 | 1-Undecene, 2-methyl- | 168 | C12H24 | 018516-37-5 | 38 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

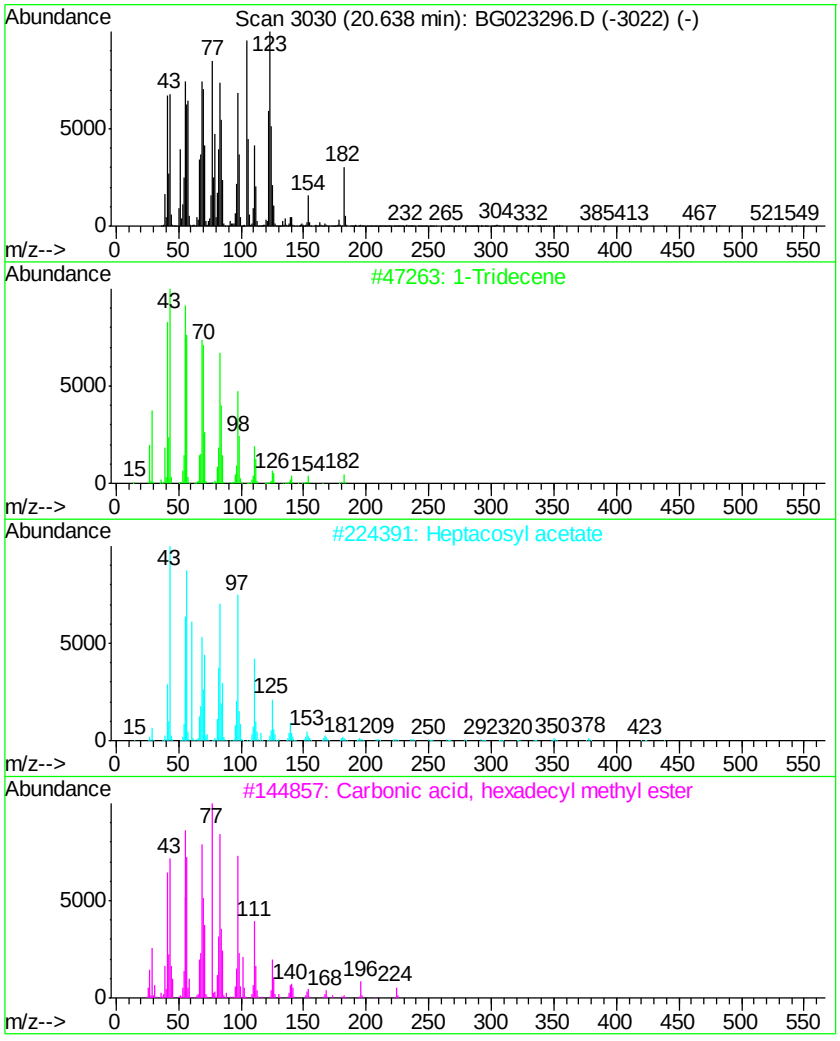
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

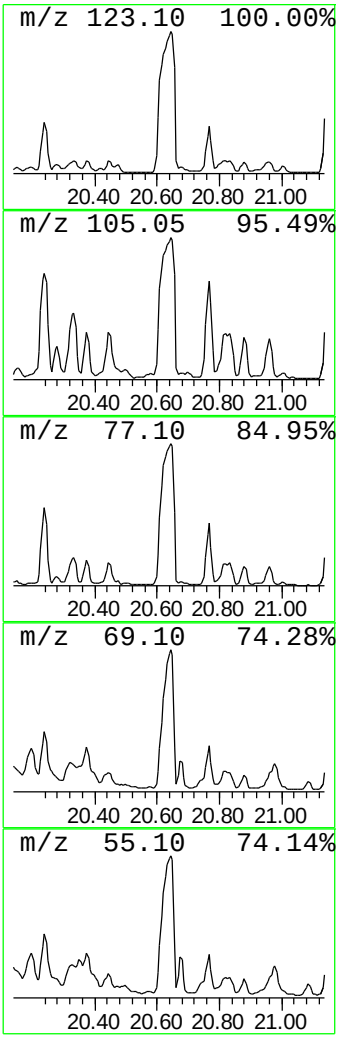
**********

Peak Number 17 1-Tridecene Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.64 | 657.55 ng | 111815000 | Chrysene-d12 | 21.91 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Tridecene | 182 | C13H26 | 002437-56-1 | 95 |
| 2 | Heptacosyl acetate | 438 | C29H58O2 | 1000351-78-2 | 50 |
| 3 | Carbonic acid, hexadecyl methyl ... | 300 | C18H36O3 | 1000314-62-7 | 43 |
| 4 | 3-Heptafluorobutyroxytridecane | 396 | C17H27F7O2 | 1000245-49-5 | 41 |
| 5 | 1-Nonadecene | 266 | C19H38 | 018435-45-5 | 30 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.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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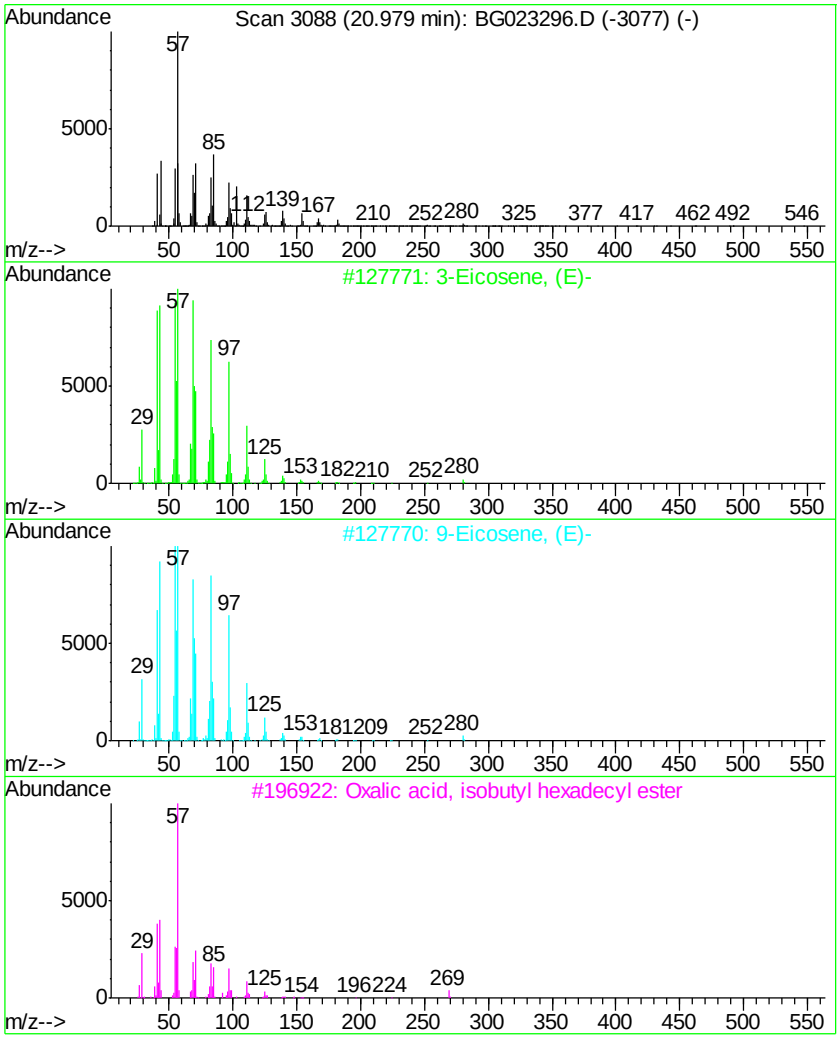
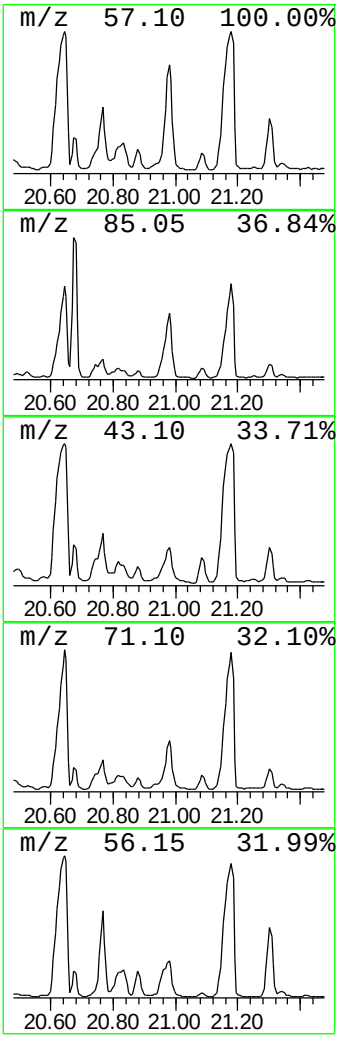
Peak Number 18 3-Eicosene, (E)- Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.98 | 123.43 ng | 20989400 | Chrysene-d12 | 21.91 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Eicosene, (E)- | 280 | C20H40 | 074685-33-9 | 95 |
| 2 | 9-Eicosene, (E)- | 280 | C20H40 | 074685-29-3 | 87 |
| 3 | Oxalic acid, isobutyl hexadecyl ... | 370 | C22H42O4 | 1000309-38-1 | 74 |
| 4 | 2-Octyldodecyl propionate | 354 | C23H46O2 | 1000368-55-1 | 74 |
| 5 | Isobutyl tridecyl carbonate | 300 | C18H36O3 | 959275-44-6 | 72 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

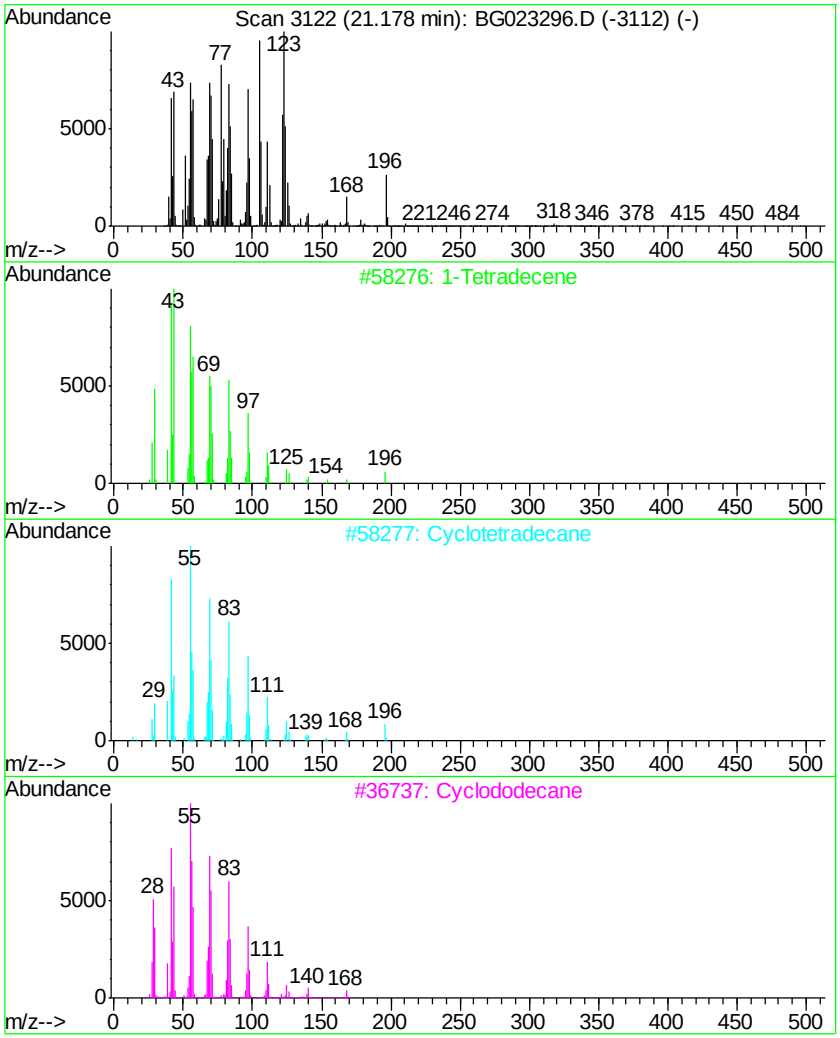
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

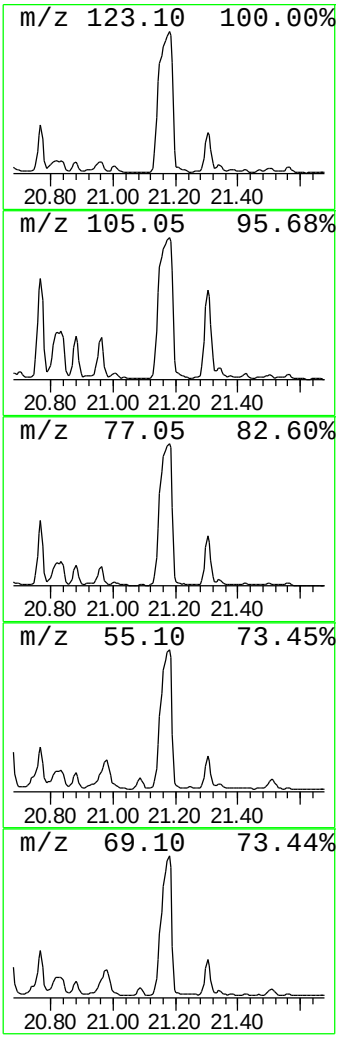
**********

Peak Number 19 1-Tetradecene Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 21.18 | 627.40 ng | 106688000 | Chrysene-d12 | 21.91 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Tetradecene | 196 | C14H28 | 001120-36-1 | 93 |
| 2 | Cyclotetradecane | 196 | C14H28 | 000295-17-0 | 83 |
| 3 | Cyclododecane | 168 | C12H24 | 000294-62-2 | 80 |
| 4 | Cyclodecane, methyl- | 154 | C11H22 | 013151-43-4 | 55 |
| 5 | Benzoic acid, tetradecyl ester | 318 | C21H34O2 | 1000340-22-7 | 55 |



Data Path : Z:\HPCHEM1\BNA G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

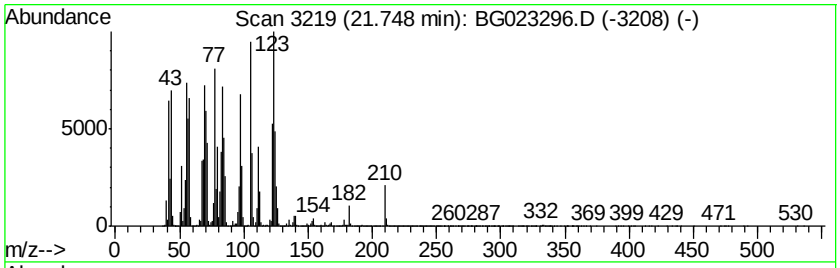
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

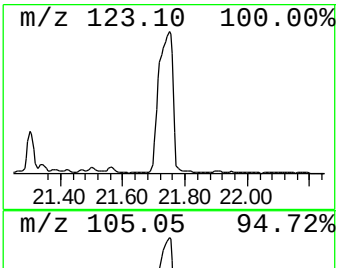
**********

Peak Number 20 Cyclopentadecane Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 21.75 | 596.87 ng | 101496000 | Chrysene-d12 | 21.91 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopentadecane | 210 | C15H30 | 000295-48-7 | 60 |
| 2 | 1-Pentadecene | 210 | C15H30 | 013360-61-7 | 58 |
| 3 | 1-Tridecene | 182 | C13H26 | 002437-56-1 | 53 |
| 4 | Benzoic acid, pentadecyl ester | 332 | C22H36O2 | 1000340-22-8 | 50 |
| 5 | 10-Heneicosene (c,t) | 294 | C21H42 | 095008-11-0 | 46 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_G\DATA\BG072716\
Data File : BG023296.D
Acq On : 27 Jul 2016 23:41
Operator : UM/SJ
Sample : H4175-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** EFF-WW

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG072616.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 |
| 2-Butanone, 4-phe... | 11.71 | 152.7 | ng | 15093400 | 2 | 10.97 | 1977210 | 20.0 |
| 1-Hexadecanol, 2-... | 16.74 | 459.0 | ng | 75680300 | 4 | 17.58 | 3297320 | 20.0 |
| unknown16.80 | 16.80 | 710.3 | ng | 117110000 | 4 | 17.58 | 3297320 | 20.0 |
| unknown16.85 | 16.85 | 456.0 | ng | 75173400 | 4 | 17.58 | 3297320 | 20.0 |
| Isopropyl palmitate | 18.88 | 266.1 | ng | 43865600 | 4 | 17.58 | 3297320 | 20.0 |
| 1-Nonadecene | 19.22 | 157.4 | ng | 25955800 | 4 | 17.58 | 3297320 | 20.0 |
| unknown19.37 | 19.37 | 248.3 | ng | 40936900 | 4 | 17.58 | 3297320 | 20.0 |
| unknown19.56 | 19.56 | 242.4 | ng | 39966300 | 4 | 17.58 | 3297320 | 20.0 |
| Benzoic acid, hep... | 19.66 | 127.6 | ng | 21033600 | 4 | 17.58 | 3297320 | 20.0 |
| i-Propyl 16-methy... | 19.83 | 175.3 | ng | 29811500 | 5 | 21.91 | 3400970 | 20.0 |
| unknown19.92 | 19.92 | 148.0 | ng | 25173200 | 5 | 21.91 | 3400970 | 20.0 |
| unknown20.06 | 20.06 | 250.1 | ng | 42535000 | 5 | 21.91 | 3400970 | 20.0 |
| Cyclodecane | 20.10 | 482.8 | ng | 82106300 | 5 | 21.91 | 3400970 | 20.0 |
| 1-Tridecene | 20.64 | 657.5 | ng | 111815000 | 5 | 21.91 | 3400970 | 20.0 |
| 3-Eicosene, (E)- | 20.98 | 123.4 | ng | 20989400 | 5 | 21.91 | 3400970 | 20.0 |
| 1-Tetradecene | 21.18 | 627.4 | ng | 106688000 | 5 | 21.91 | 3400970 | 20.0 |
| Cyclopentadecane | 21.75 | 596.9 | ng | 101496000 | 5 | 21.91 | 3400970 | 20.0 |