LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF040717\
Data File : BF094297.D
Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

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_F\METHODS\8270-BF032217.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 | 2.581 | 109 | 118 | 120 | rBV | 1004615 | 1738401 | 27.86% | 1.472% |
| 2 | 2.616 | 120 | 124 | 127 | rVB | 2316565 | 2955787 | 47.36% | 2.504% |
| 3 | 2.916 | 166 | 175 | 178 | rBV | 2770398 | 4013042 | 64.31% | 3.399% |
| 4 | 3.393 | 251 | 256 | 257 | rBV | 361504 | 457510 | 7.33% | 0.388% |
| 5 | 3.422 | 257 | 261 | 264 | rVB | 1431395 | 1544008 | 24.74% | 1.308% |
| 6 | 3.910 | 339 | 344 | 348 | rBV | 1373295 | 1671617 | 26.79% | 1.416% |
| 7 | 3.987 | 354 | 357 | 359 | rBV | 227756 | 265538 | 4.26% | 0.225% |
| 8 | 4.016 | 359 | 362 | 364 | rBV | 486435 | 436552 | 7.00% | 0.370% |
| 9 | 4.051 | 364 | 368 | 370 | rBV | 1527851 | 1905078 | 30.53% | 1.614% |
| 10 | 4.246 | 397 | 401 | 406 | rBV2 | 1320398 | 1394559 | 22.35% | 1.181% |
| 11 | 4.416 | 426 | 430 | 435 | rBV | 1684962 | 1710095 | 27.40% | 1.448% |
| 12 | 4.610 | 460 | 463 | 468 | rBV2 | 471309 | 670473 | 10.74% | 0.568% |
| 13 | 4.687 | 471 | 476 | 479 | rVB | 869462 | 870708 | 13.95% | 0.738% |
| 14 | 4.946 | 515 | 520 | 523 | rVV | 1079256 | 1106404 | 17.73% | 0.937% |
| 15 | 5.004 | 525 | 530 | 533 | rVV2 | 505357 | 662416 | 10.61% | 0.561% |
| 16 | 5.110 | 541 | 548 | 551 | rBV2 | 575300 | 701092 | 11.23% | 0.594% |
| 17 | 5.257 | 569 | 573 | 576 | rVV | 1355339 | 1234503 | 19.78% | 1.046% |
| 18 | 5.498 | 608 | 614 | 621 | rVB2 | 1437343 | 1741272 | 27.90% | 1.475% |
| 19 | 5.616 | 629 | 634 | 638 | rVV | 3040075 | 3049846 | 48.87% | 2.583% |
| 20 | 5.663 | 638 | 642 | 647 | rVV | 1255284 | 1263229 | 20.24% | 1.070% |
| 21 | 5.804 | 660 | 666 | 669 | rBV2 | 499075 | 665175 | 10.66% | 0.563% |
| 22 | 5.851 | 669 | 674 | 677 | rVV | 863140 | 925866 | 14.84% | 0.784% |
| 23 | 5.887 | 677 | 680 | 684 | rVV2 | 338109 | 327292 | 5.24% | 0.277% |
| 24 | 5.922 | 684 | 686 | 692 | rVV2 | 505353 | 524248 | 8.40% | 0.444% |
| 25 | 6.034 | 701 | 705 | 708 | rVV | 2765485 | 3247402 | 52.04% | 2.751% |
| 26 | 6.063 | 708 | 710 | 715 | rVB | 1800114 | 1530536 | 24.53% | 1.296% |
| 27 | 6.145 | 720 | 724 | 727 | rVV | 739739 | 743418 | 11.91% | 0.630% |
| 28 | 6.187 | 727 | 731 | 735 | rVB2 | 269518 | 431489 | 6.91% | 0.365% |
| 29 | 6.228 | 735 | 738 | 741 | rBV2 | 770921 | 853977 | 13.68% | 0.723% |
| 30 | 6.251 | 741 | 742 | 749 | rVB3 | 293134 | 295346 | 4.73% | 0.250% |
| 31 | 6.310 | 749 | 752 | 756 | rBV3 | 398310 | 482165 | 7.73% | 0.408% |
| 32 | 6.404 | 764 | 768 | 770 | rBV | 246446 | 302935 | 4.85% | 0.257% |
| 33 | 6.487 | 774 | 782 | 784 | rVV2 | 1978533 | 2924654 | 46.87% | 2.477% |
| 34 | 6.510 | 784 | 786 | 795 | rVV3 | 2238530 | 2774969 | 44.47% | 2.350% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF040717\
Data File : BF094297.D
Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

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_F\METHODS\8270-BF032217.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 6.616 | 798 | 804 | 808 | rVB5 | 496656 | 901260 | 14.44% | 0.763% |
| 36 | 6.657 | 808 | 811 | 815 | rBV | 342346 | 376060 | 6.03% | 0.319% |
| 37 | 6.698 | 815 | 818 | 822 | rVB3 | 229624 | 288422 | 4.62% | 0.244% |
| 38 | 6.763 | 822 | 829 | 831 | rBV | 1187528 | 1291121 | 20.69% | 1.094% |
| 39 | 6.792 | 831 | 834 | 838 | rVB | 769023 | 673919 | 10.80% | 0.571% |
| 40 | 6.863 | 841 | 846 | 849 | rVB4 | 215495 | 335629 | 5.38% | 0.284% |
| 41 | 6.904 | 849 | 853 | 854 | rBV2 | 377781 | 370560 | 5.94% | 0.314% |
| 42 | 6.934 | 854 | 858 | 860 | rVV4 | 275056 | 382149 | 6.12% | 0.324% |
| 43 | 6.975 | 860 | 865 | 868 | rVB5 | 743839 | 1038335 | 16.64% | 0.879% |
| 44 | 7.063 | 874 | 880 | 883 | rBV2 | 2443973 | 3573028 | 57.26% | 3.026% |
| 45 | 7.104 | 883 | 887 | 891 | rVB2 | 418291 | 500844 | 8.03% | 0.424% |
| 46 | 7.169 | 891 | 898 | 902 | rBV2 | 1305861 | 1737093 | 27.84% | 1.471% |
| 47 | 7.222 | 903 | 907 | 910 | rVB | 393338 | 439035 | 7.04% | 0.372% |
| 48 | 7.334 | 923 | 926 | 927 | rVV | 358418 | 349741 | 5.60% | 0.296% |
| 49 | 7.363 | 927 | 931 | 933 | rVV | 1876830 | 2458596 | 39.40% | 2.082% |
| 50 | 7.392 | 933 | 936 | 939 | rVV | 3782806 | 3846863 | 61.64% | 3.258% |
| 51 | 7.428 | 939 | 942 | 947 | rVB3 | 657611 | 824063 | 13.21% | 0.698% |
| 52 | 7.475 | 947 | 950 | 956 | rVB2 | 844116 | 1034733 | 16.58% | 0.876% |
| 53 | 7.563 | 962 | 965 | 968 | rVB2 | 376099 | 407098 | 6.52% | 0.345% |
| 54 | 7.604 | 968 | 972 | 974 | rBV2 | 611496 | 678004 | 10.86% | 0.574% |
| 55 | 7.657 | 978 | 981 | 984 | rBV2 | 316441 | 379574 | 6.08% | 0.322% |
| 56 | 7.704 | 985 | 989 | 991 | rBV3 | 288558 | 420711 | 6.74% | 0.356% |
| 57 | 7.734 | 991 | 994 | 997 | rVB3 | 682440 | 811651 | 13.01% | 0.687% |
| 58 | 7.781 | 997 | 1002 | 1003 | rBV4 | 216233 | 332633 | 5.33% | 0.282% |
| 59 | 7.839 | 1010 | 1012 | 1014 | rVB | 356021 | 272962 | 4.37% | 0.231% |
| 60 | 7.916 | 1022 | 1025 | 1028 | rBV | 923721 | 1147231 | 18.38% | 0.972% |
| 61 | 7.981 | 1032 | 1036 | 1038 | rBV | 1047657 | 970613 | 15.55% | 0.822% |
| 62 | 8.081 | 1051 | 1053 | 1055 | rBV | 379460 | 319682 | 5.12% | 0.271% |
| 63 | 8.169 | 1064 | 1068 | 1072 | rVB2 | 1122829 | 1173320 | 18.80% | 0.994% |
| 64 | 8.239 | 1073 | 1080 | 1083 | rVB | 4722750 | 6240465 | 100.00% | 5.286% |
| 65 | 8.357 | 1092 | 1100 | 1104 | rBV | 4130768 | 5785806 | 92.71% | 4.901% |
| 66 | 8.622 | 1142 | 1145 | 1148 | rBV3 | 419673 | 520718 | 8.34% | 0.441% |
| 67 | 8.651 | 1148 | 1150 | 1152 | rVV | 753186 | 688828 | 11.04% | 0.583% |
| 68 | 8.686 | 1152 | 1156 | 1159 | rVB | 3350439 | 3546487 | 56.83% | 3.004% |
| 69 | 8.781 | 1170 | 1172 | 1174 | rBV | 338759 | 353846 | 5.67% | 0.300% |
| 70 | 8.798 | 1174 | 1175 | 1178 | rVB | 459057 | 294482 | 4.72% | 0.249% |
| 71 | 8.834 | 1178 | 1181 | 1184 | rBV4 | 217946 | 334607 | 5.36% | 0.283% |

LSC Area Percent Report

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Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

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_F\METHODS\8270-BF032217.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 8.869 | 1184 | 1187 | 1190 | rBV3 | 350039 | 444446 | 7.12% | 0.376% |
| 73 | 8.916 | 1191 | 1195 | 1201 | rVB2 | 1063612 | 1844641 | 29.56% | 1.562% |
| 74 | 9.010 | 1204 | 1211 | 1215 | rVB2 | 1664721 | 2997389 | 48.03% | 2.539% |
| 75 | 9.092 | 1221 | 1225 | 1228 | rBV | 1857385 | 2387540 | 38.26% | 2.022% |
| 76 | 9.128 | 1228 | 1231 | 1237 | rVB | 1866971 | 2102936 | 33.70% | 1.781% |
| 77 | 9.186 | 1238 | 1241 | 1243 | rBV3 | 232504 | 320840 | 5.14% | 0.272% |
| 78 | 9.216 | 1243 | 1246 | 1247 | rBV | 573620 | 475764 | 7.62% | 0.403% |
| 79 | 9.233 | 1247 | 1249 | 1251 | rVB | 455115 | 312601 | 5.01% | 0.265% |
| 80 | 9.333 | 1262 | 1266 | 1269 | rVB | 616995 | 670055 | 10.74% | 0.568% |
| 81 | 9.498 | 1288 | 1294 | 1298 | rVV3 | 1215068 | 1841098 | 29.50% | 1.559% |
| 82 | 9.563 | 1302 | 1305 | 1309 | rVB4 | 404996 | 407600 | 6.53% | 0.345% |
| 83 | 9.604 | 1309 | 1312 | 1316 | rVB4 | 229038 | 278707 | 4.47% | 0.236% |
| 84 | 9.663 | 1319 | 1322 | 1324 | rVB2 | 463123 | 479313 | 7.68% | 0.406% |
| 85 | 9.698 | 1324 | 1328 | 1331 | rBV4 | 293378 | 500889 | 8.03% | 0.424% |
| 86 | 9.751 | 1331 | 1337 | 1338 | rBV6 | 368818 | 580558 | 9.30% | 0.492% |
| 87 | 9.810 | 1343 | 1347 | 1352 | rVB3 | 452532 | 600938 | 9.63% | 0.509% |
| 88 | 9.904 | 1359 | 1363 | 1365 | rBV | 527746 | 607576 | 9.74% | 0.515% |
| 89 | 9.933 | 1365 | 1368 | 1372 | rVB2 | 464559 | 544996 | 8.73% | 0.462% |
| 90 | 10.016 | 1377 | 1382 | 1388 | rVB4 | 817828 | 1487172 | 23.83% | 1.260% |
| 91 | 10.175 | 1405 | 1409 | 1410 | rBV | 536175 | 572081 | 9.17% | 0.485% |
| 92 | 10.363 | 1438 | 1441 | 1444 | rVB2 | 362413 | 431653 | 6.92% | 0.366% |
| 93 | 10.410 | 1445 | 1449 | 1452 | rVV6 | 160565 | 281170 | 4.51% | 0.238% |
| 94 | 10.480 | 1456 | 1461 | 1465 | rVV2 | 1490525 | 1988628 | 31.87% | 1.684% |
| 95 | 10.692 | 1494 | 1497 | 1499 | rBV | 545484 | 599597 | 9.61% | 0.508% |
| 96 | 11.263 | 1591 | 1594 | 1600 | rVV | 342485 | 421753 | 6.76% | 0.357% |
| 97 | 11.327 | 1601 | 1605 | 1607 | rVV | 632578 | 705239 | 11.30% | 0.597% |
| 98 | 13.304 | 1936 | 1941 | 1944 | rBV | 2194215 | 2346724 | 37.60% | 1.988% |
| 99 | 14.574 | 2153 | 2157 | 2161 | rBV | 718536 | 720636 | 11.55% | 0.610% |
| 100 | 16.204 | 2430 | 2434 | 2440 | rBV | 523162 | 585649 | 9.38% | 0.496% |

Sum of corrected areas: 118059960

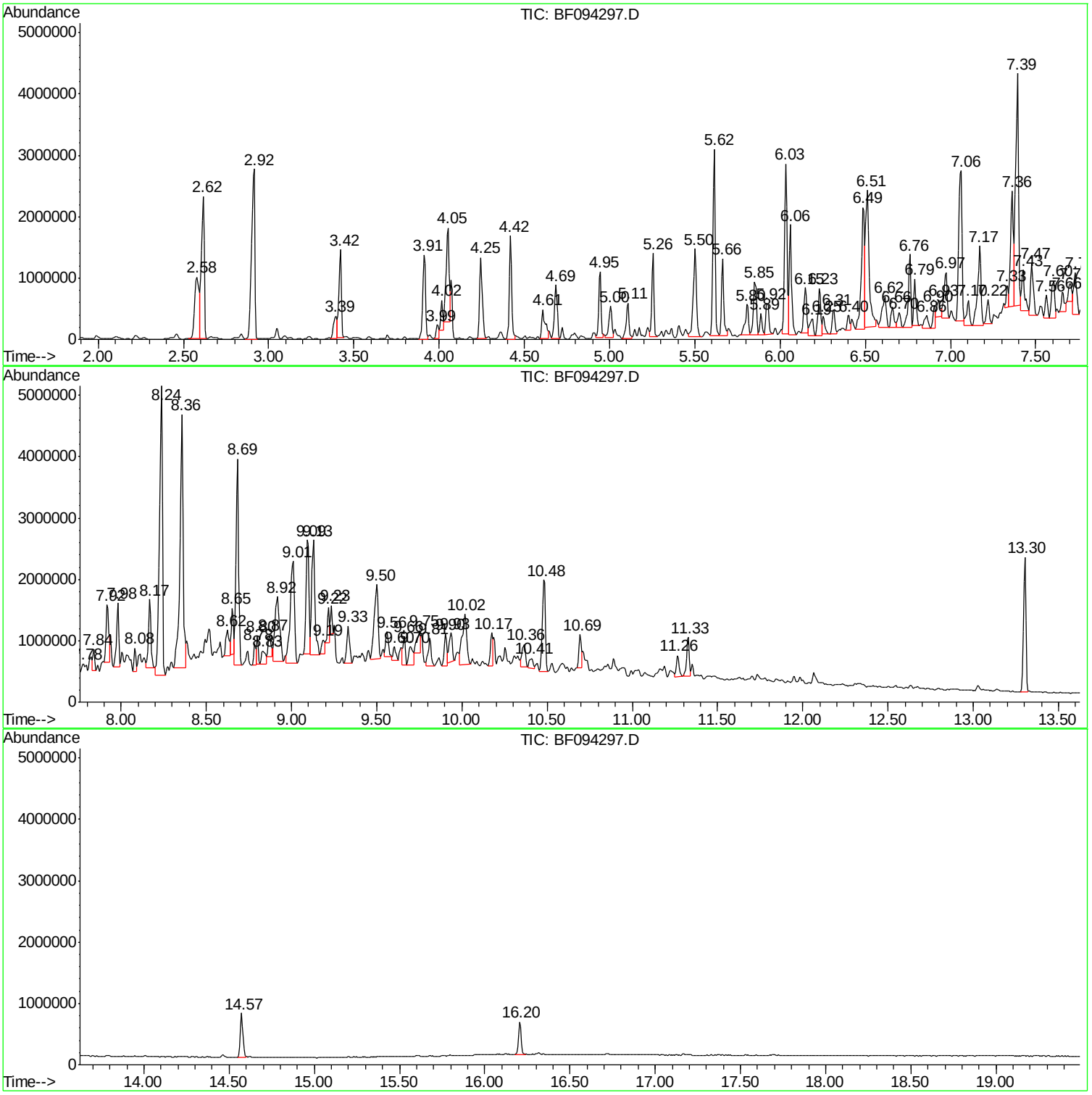
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA F\DATA\BF040717\
Data File : BF094297.D
Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Data Path : Z:\HPCHEM1\BNA F\DATA\BF040717\
Data File : BF094297.D
Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

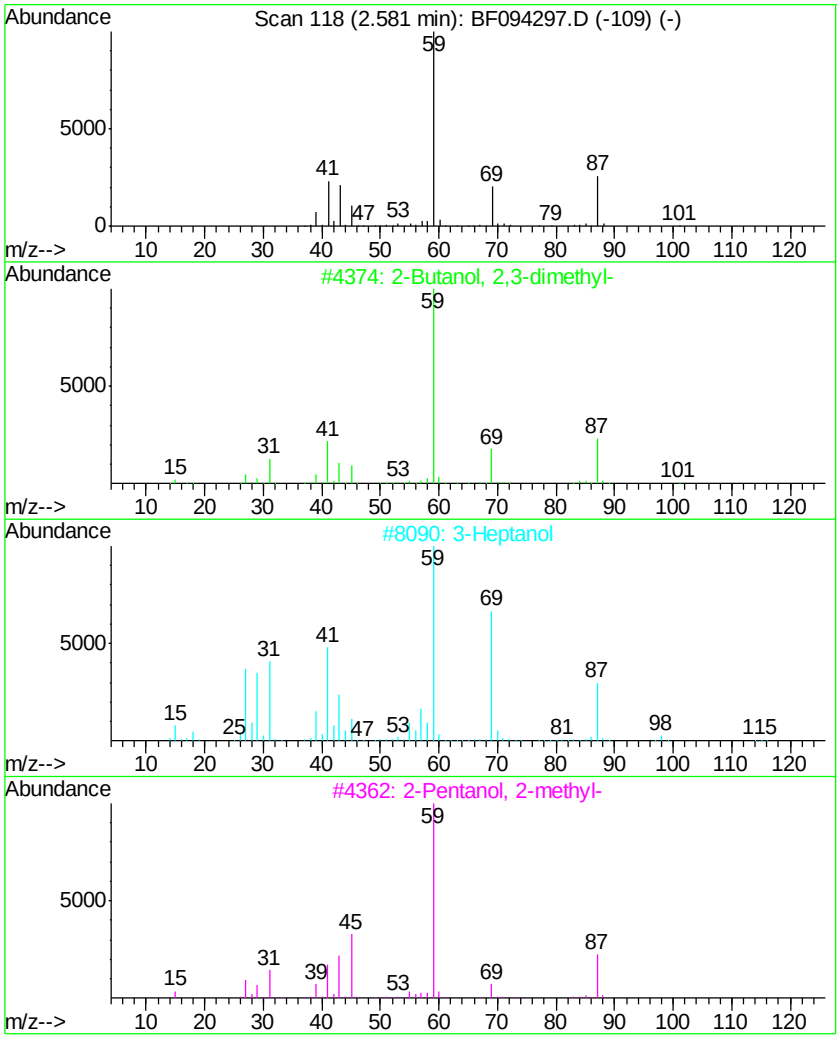
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

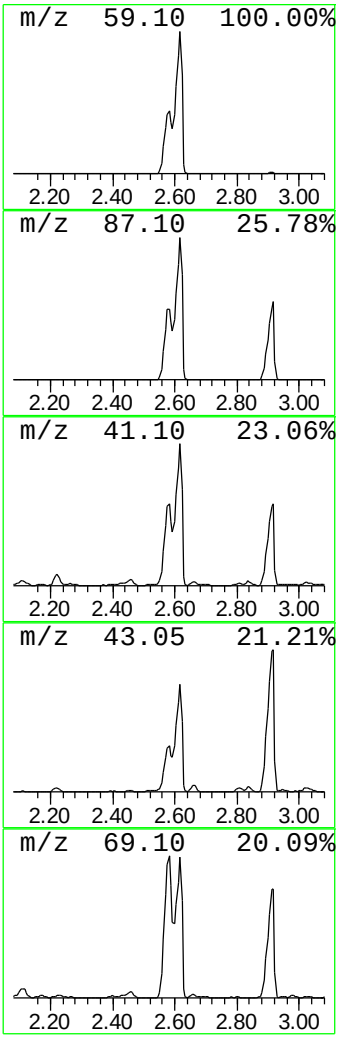
**********

Peak Number 1 2-Butanol, 2,3-dimethyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.58 | 37.55 ng | 1738400 | 1,4-Dichlorobenzene-d4 | 5.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Butanol, 2,3-dimethyl- | 102 | C6H14O | 000594-60-5 | 83 |
| 2 | 3-Heptanol | 116 | C7H16O | 000589-82-2 | 40 |
| 3 | 2-Pentanol, 2-methyl- | 102 | C6H14O | 000590-36-3 | 40 |
| 4 | Propane, 2-ethoxy-2-methyl- | 102 | C6H14O | 000637-92-3 | 39 |
| 5 | Propane, 1-ethoxy- | 88 | C5H12O | 000628-32-0 | 36 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF040717\
Data File : BF094297.D
Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

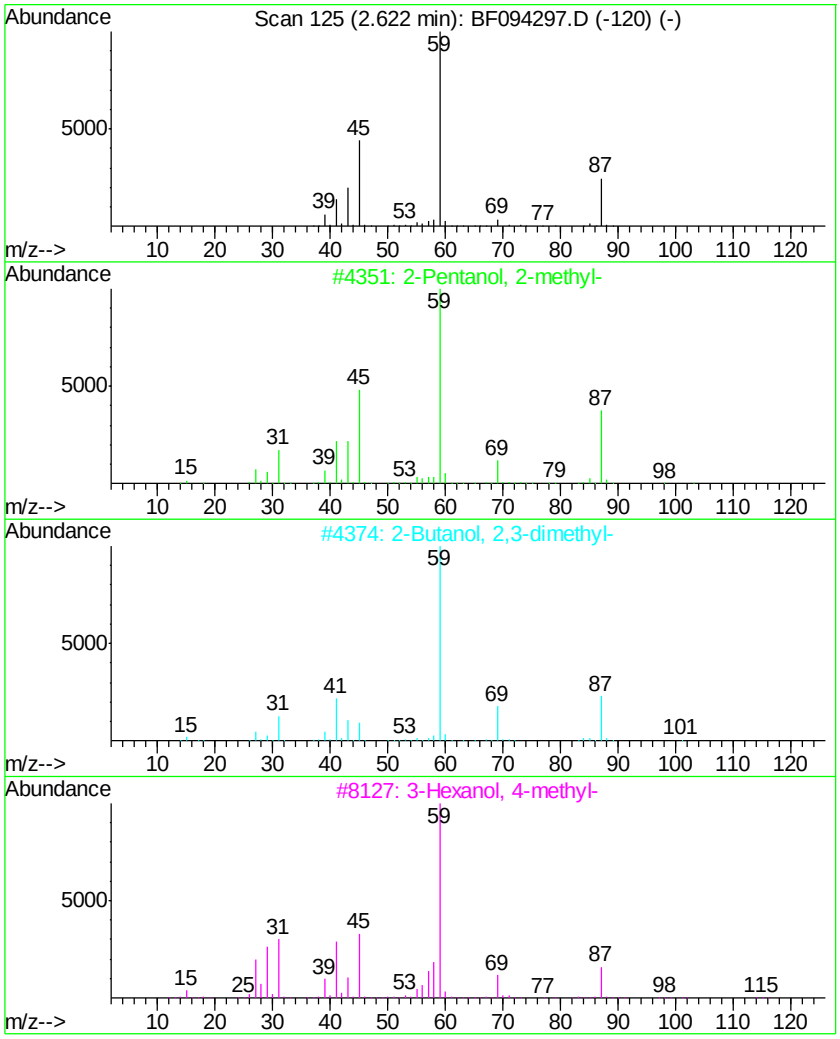
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

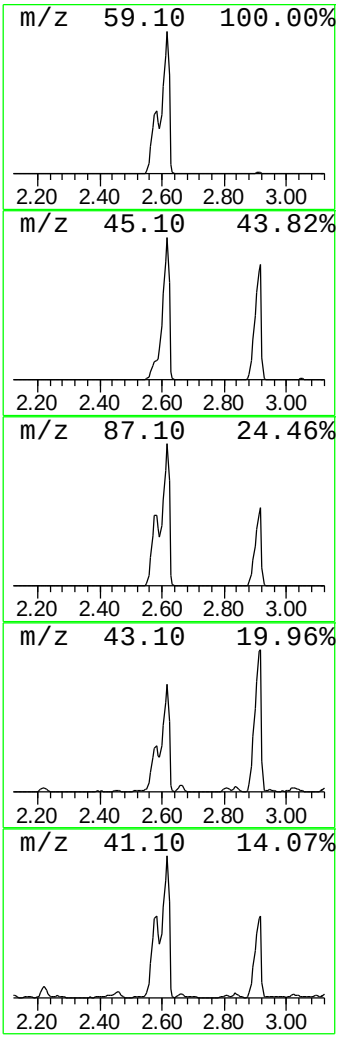
**********

Peak Number 2 2-Pentanol, 2-methyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.62 | 63.85 ng | 2955790 | 1,4-Dichlorobenzene-d4 | 5.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanol, 2-methyl- | 102 | C6H14O | 000590-36-3 | 78 |
| 2 | 2-Butanol, 2,3-dimethyl- | 102 | C6H14O | 000594-60-5 | 53 |
| 3 | 3-Hexanol, 4-methyl- | 116 | C7H16O | 000615-29-2 | 43 |
| 4 | 2-Butanone, 3-ethoxy-3-methyl- | 130 | C7H14O2 | 036687-99-7 | 33 |
| 5 | Propanoic acid, 2-hydroxy-2-meth... | 118 | C5H10O3 | 002110-78-3 | 23 |



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Data File : BF094297.D
Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

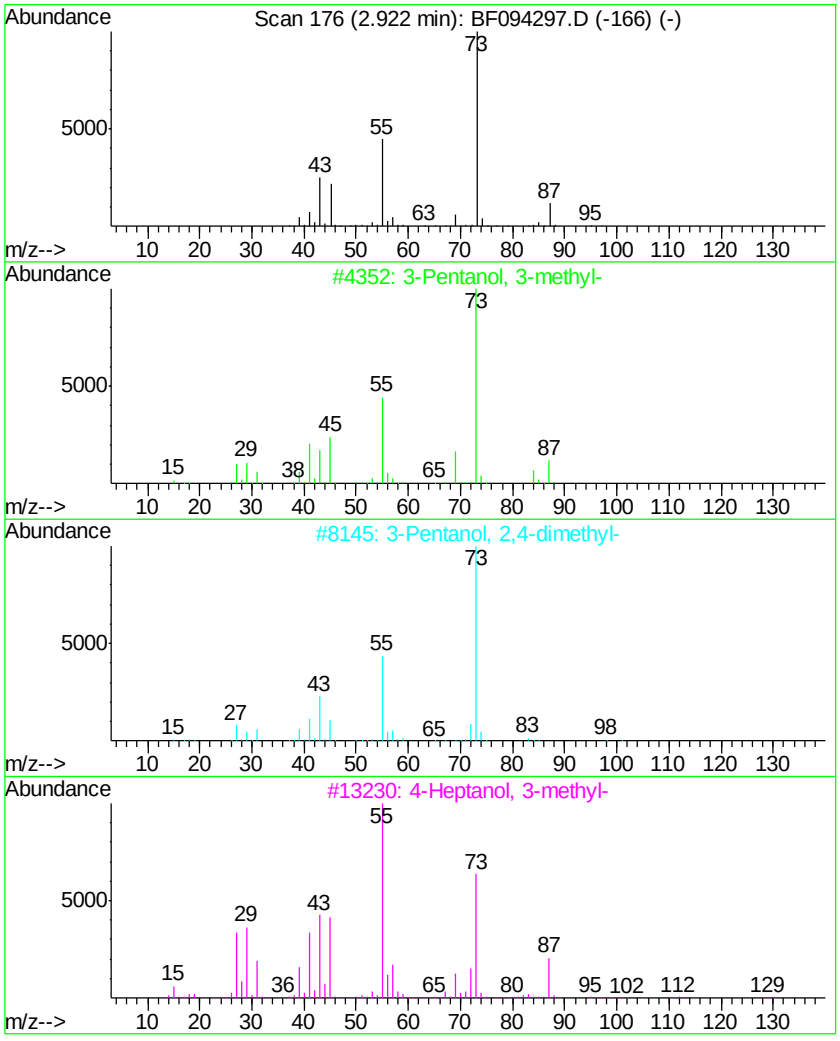
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

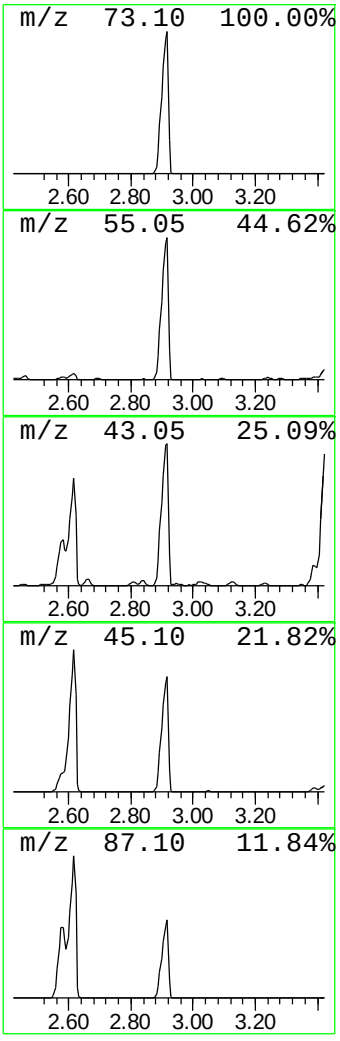
**********

Peak Number 3 3-Pentanol, 3-methyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.92 | 86.69 ng | 4013040 | 1,4-Dichlorobenzene-d4 | 5.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Pentanol, 3-methyl- | 102 | C6H14O | 000077-74-7 | 64 |
| 2 | 3-Pentanol, 2,4-dimethyl- | 116 | C7H16O | 000600-36-2 | 47 |
| 3 | 4-Heptanol, 3-methyl- | 130 | C8H18O | 001838-73-9 | 39 |
| 4 | 1,3-Dioxolane, 2-(1-bromoethyl)- | 180 | C5H9BrO2 | 005267-73-2 | 38 |
| 5 | 1,3-Dioxolane, 2-methyl- | 88 | C4H8O2 | 000497-26-7 | 35 |



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Data File : BF094297.D
Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
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ALS Vial : 30 Sample Multiplier: 1

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Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

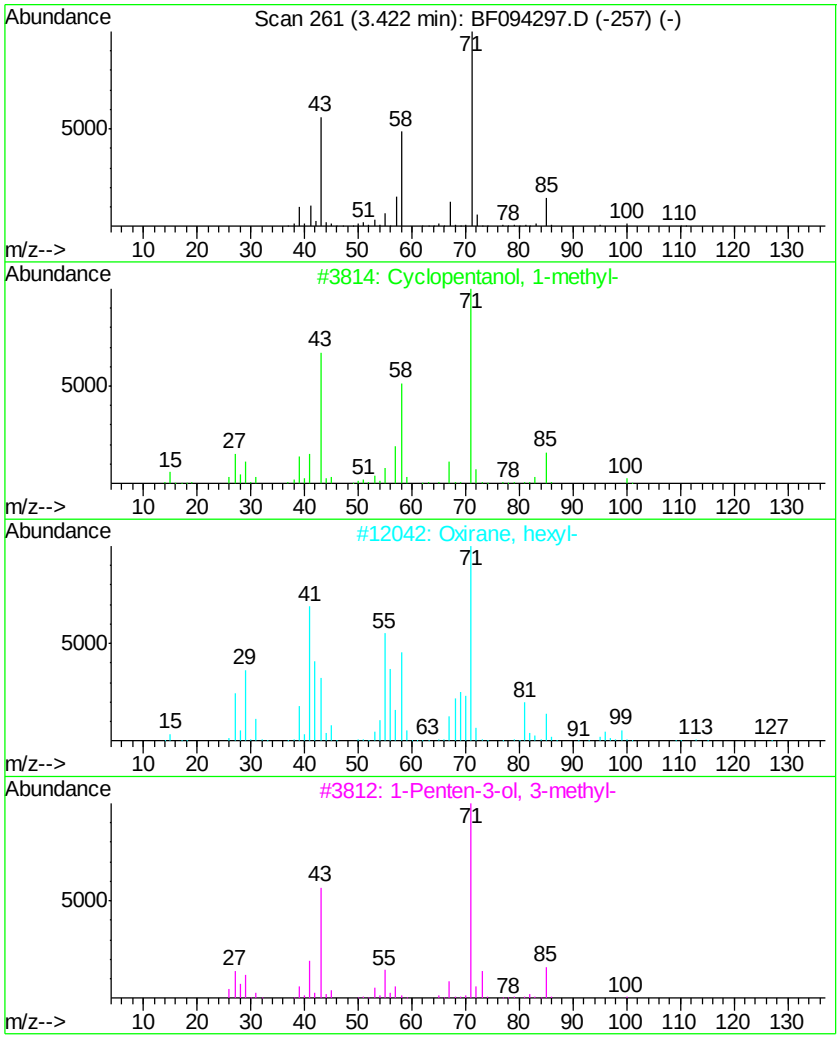
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

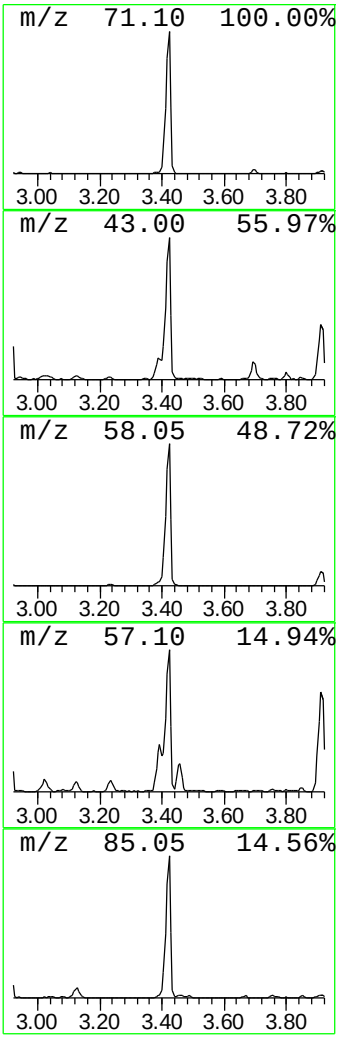
**********

Peak Number 4 Cyclopentanol, 1-methyl- Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.42 | 33.35 ng | 1544010 | 1,4-Dichlorobenzene-d4 | 5.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopentanol, 1-methyl- | 100 | C6H12O | 001462-03-9 | 91 |
| 2 | Oxirane, hexyl- | 128 | C8H16O | 002984-50-1 | 56 |
| 3 | 1-Penten-3-ol, 3-methyl- | 100 | C6H12O | 000918-85-4 | 53 |
| 4 | Valeric acid, 2-tetrahydrofurylm... | 186 | C10H18O3 | 005451-86-5 | 47 |
| 5 | Propanoic acid, 2-methyl-, anhyd... | 158 | C8H14O3 | 000097-72-3 | 43 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF040717\
Data File : BF094297.D
Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

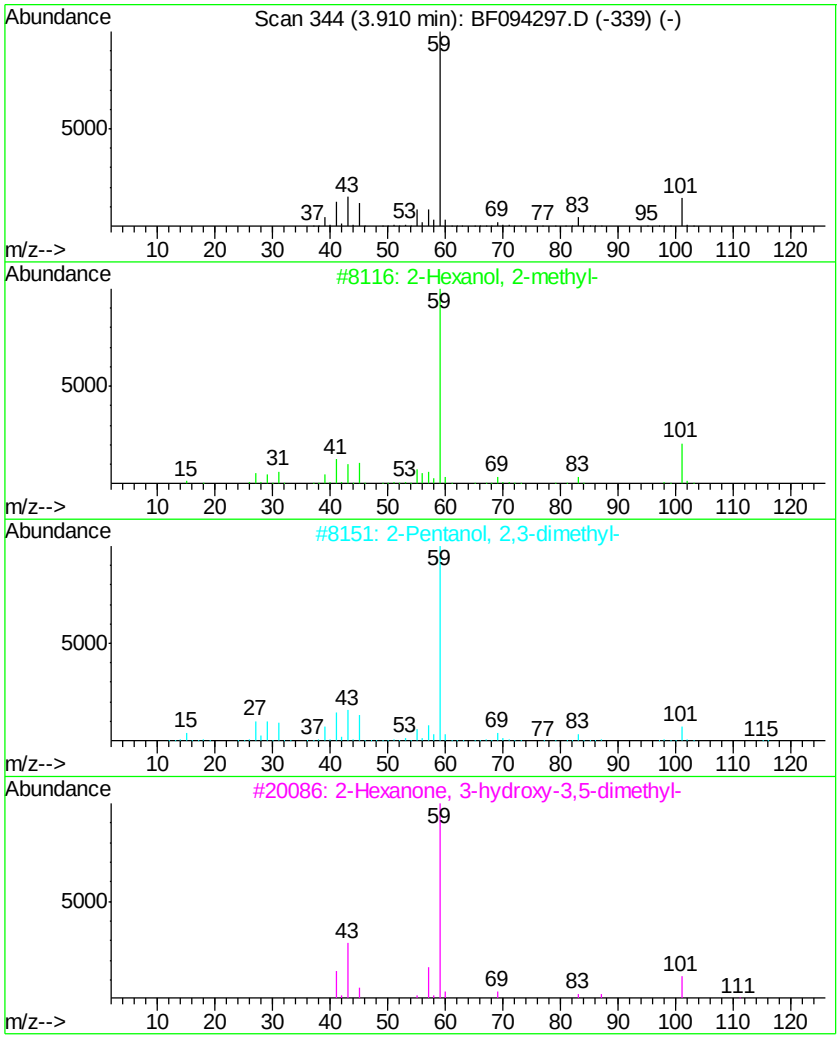
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

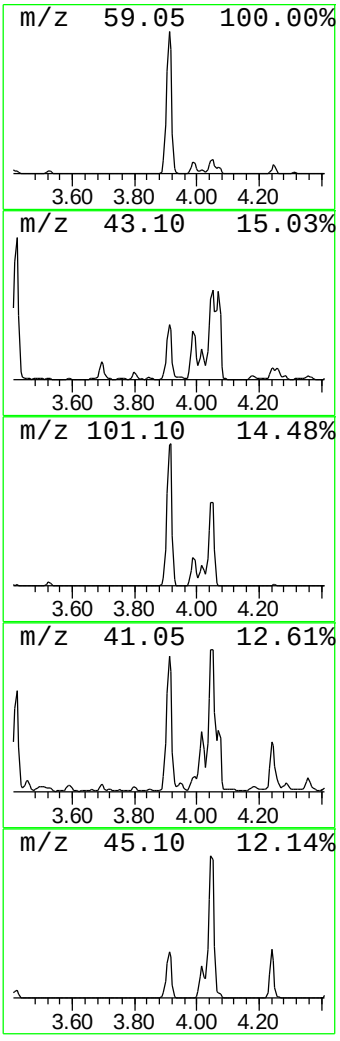
**********

Peak Number 5 2-Hexanol, 2-methyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.91 | 36.11 ng | 1671620 | 1,4-Dichlorobenzene-d4 | 5.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Hexanol, 2-methyl- | 116 | C7H16O | 000625-23-0 | 74 |
| 2 | 2-Pentanol, 2,3-dimethyl- | 116 | C7H16O | 004911-70-0 | 64 |
| 3 | 2-Hexanone, 3-hydroxy-3,5-dimethyl- | 144 | C8H16O2 | 006321-14-8 | 50 |
| 4 | Ethanol, pentamethyl- | 116 | C7H16O | 000594-83-2 | 50 |
| 5 | 2-Butanol, 2,3-dimethyl- | 102 | C6H14O | 000594-60-5 | 39 |



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Data File : BF094297.D
Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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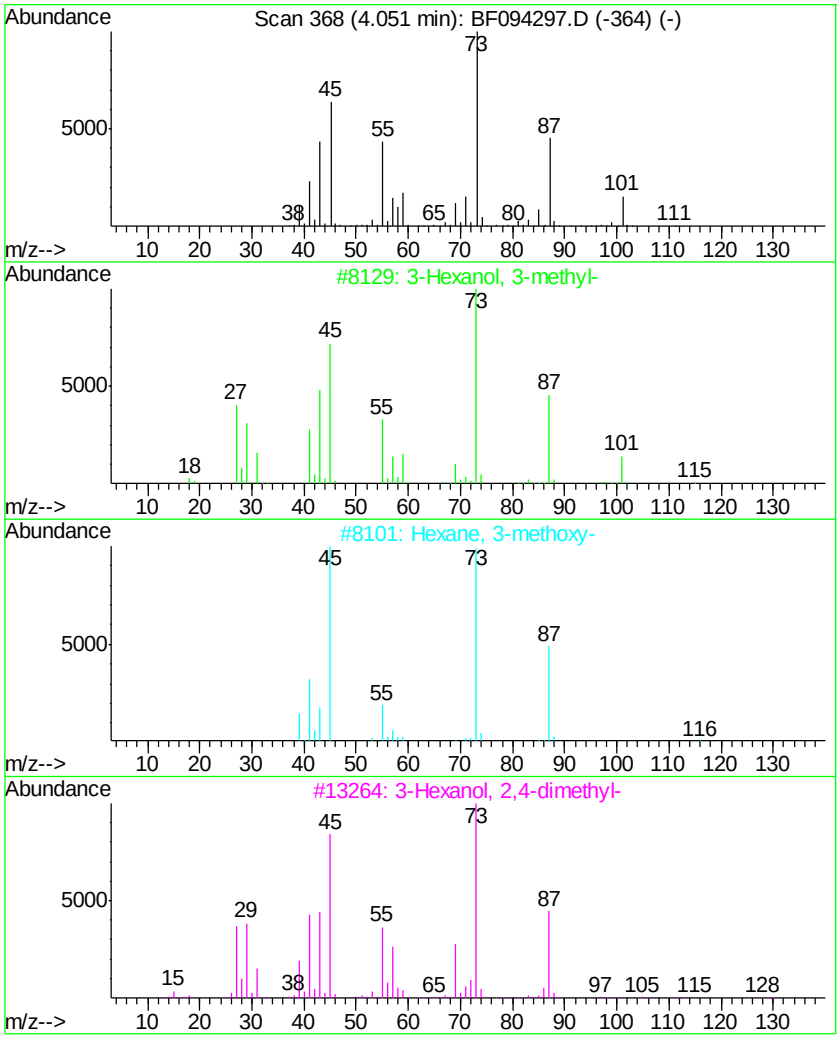
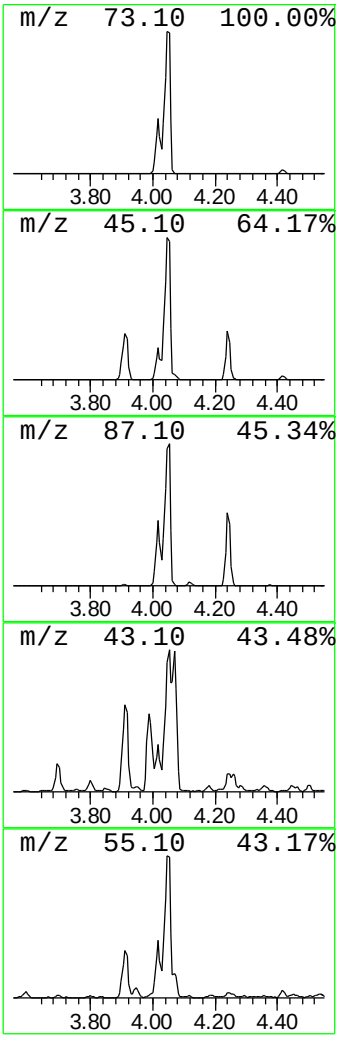
Peak Number 6 3-Hexanol, 3-methyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.05 | 41.15 ng | 1905080 | 1,4-Dichlorobenzene-d4 | 5.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Hexanol, 3-methyl- | 116 | C7H16O | 000597-96-6 | 80 |
| 2 | Hexane, 3-methoxy- | 116 | C7H16O | 054658-01-4 | 50 |
| 3 | 3-Hexanol, 2,4-dimethyl- | 130 | C8H18O | 013432-25-2 | 42 |
| 4 | 4-Heptanol, 3,5-dimethyl- | 144 | C9H20O | 019549-79-2 | 38 |
| 5 | Butane, 2-methoxy-2-methyl- | 102 | C6H14O | 000994-05-8 | 38 |



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Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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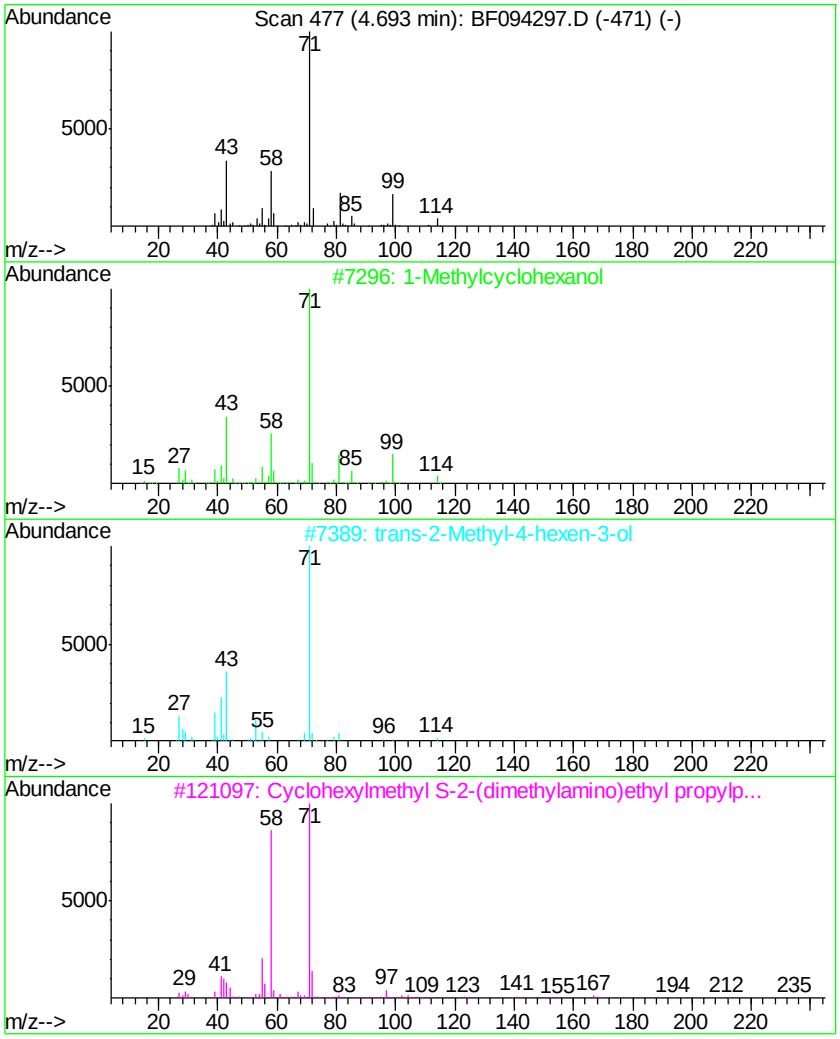
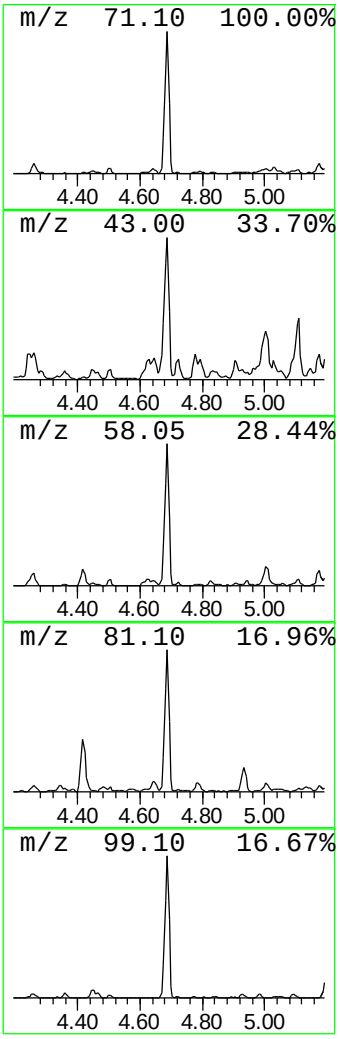
Peak Number 8 1-Methylcyclohexanol Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.69 | 18.81 ng | 870708 | 1,4-Dichlorobenzene-d4 | 5.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Methylcyclohexanol | 114 | C7H14O | 000590-67-0 | 95 |
| 2 | trans-2-Methyl-4-hexen-3-ol | 114 | C7H14O | 096346-76-8 | 50 |
| 3 | Cyclohexylmethyl S-2-(dimethylam... | 307 | C14H30NO2PS | 1000298-43-5 | 45 |
| 4 | 4-Hexen-3-ol, 2-methyl- | 114 | C7H14O | 004798-60-1 | 36 |
| 5 | 3-Methoxyhex-1-ene | 114 | C7H14O | 108811-41-2 | 33 |



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Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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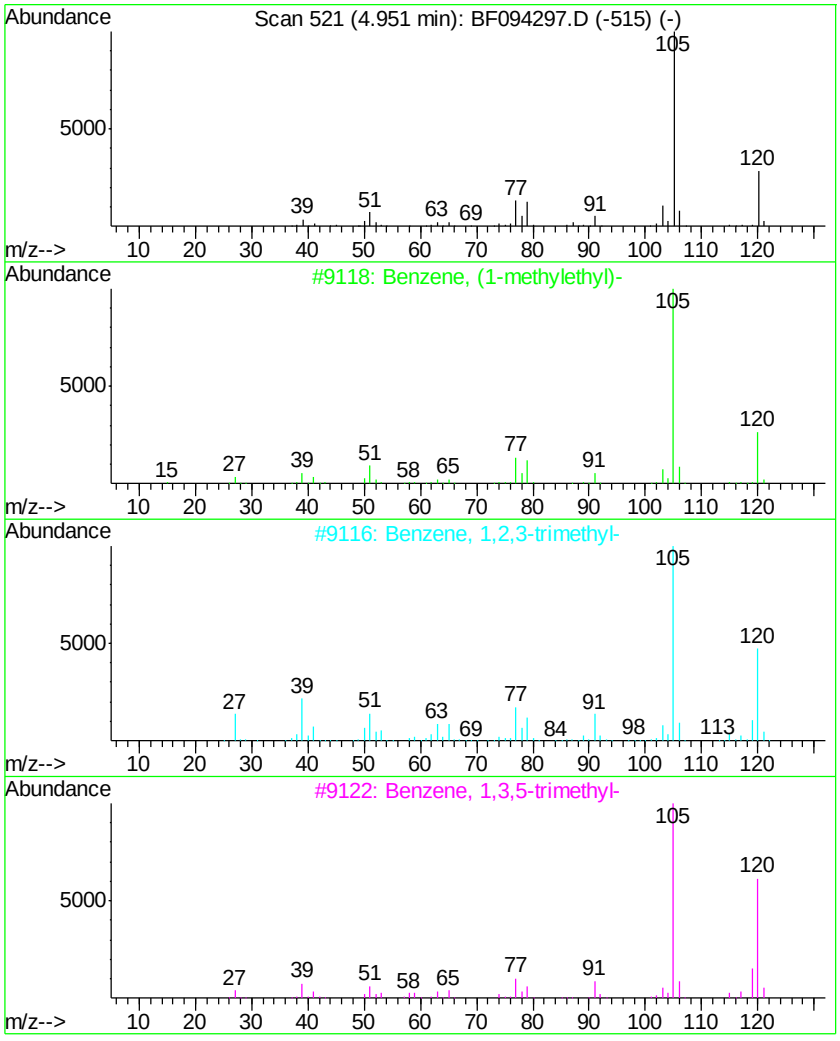
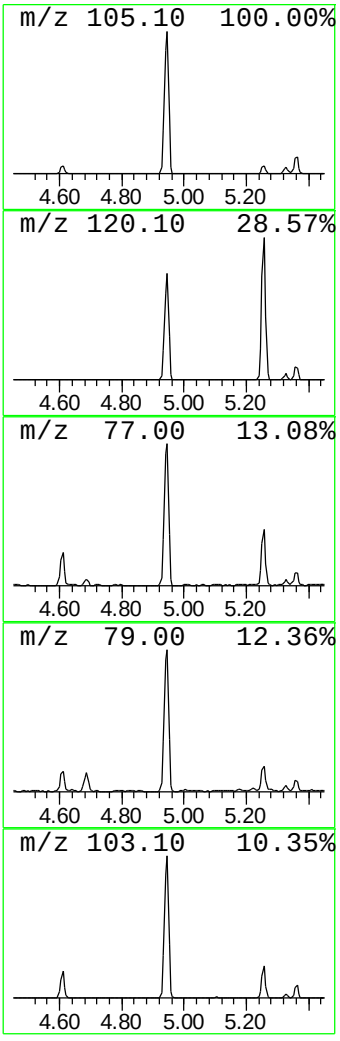
Peak Number 9 Benzene, (1-methylethyl)- Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.95 | 23.90 ng | 1106400 | 1,4-Dichlorobenzene-d4 | 5.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, (1-methylethyl)- | 120 | C9H12 | 000098-82-8 | 94 |
| 2 | Benzene, 1,2,3-trimethyl- | 120 | C9H12 | 000526-73-8 | 91 |
| 3 | Benzene, 1,3,5-trimethyl- | 120 | C9H12 | 000108-67-8 | 83 |
| 4 | 2,4-Nonadiyne | 120 | C9H12 | 063621-15-8 | 83 |
| 5 | Benzene, 1-ethyl-4-methyl- | 120 | C9H12 | 000622-96-8 | 80 |



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Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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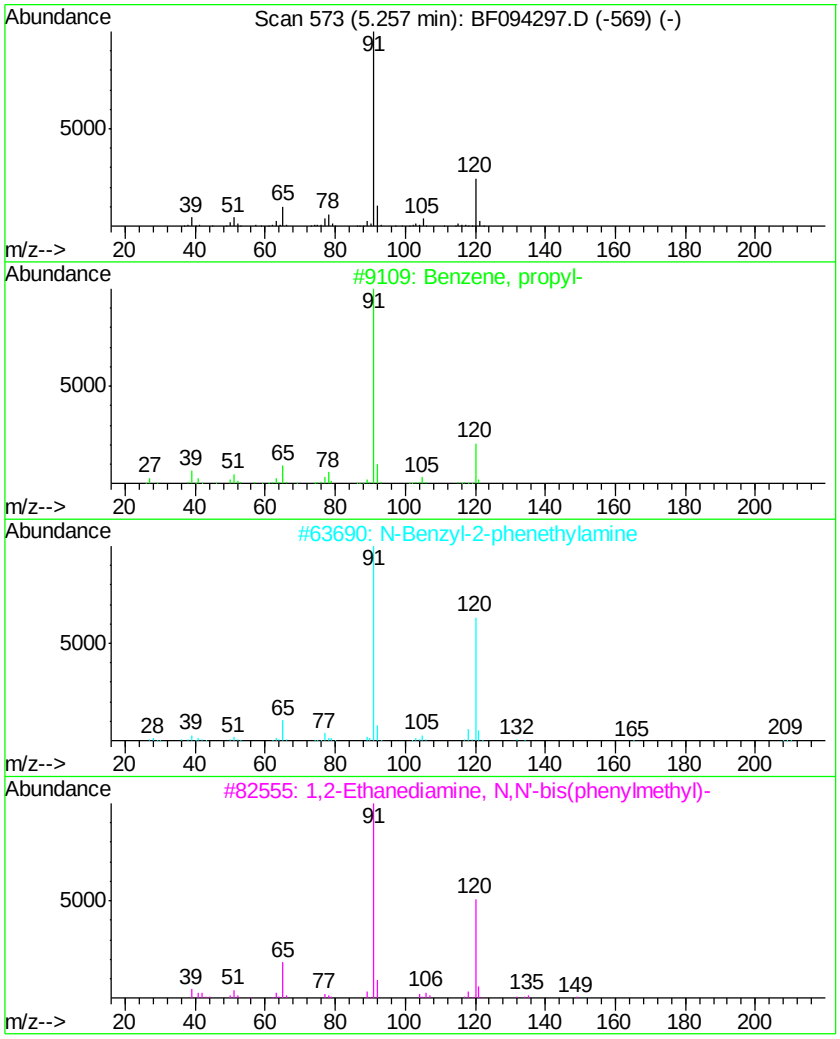
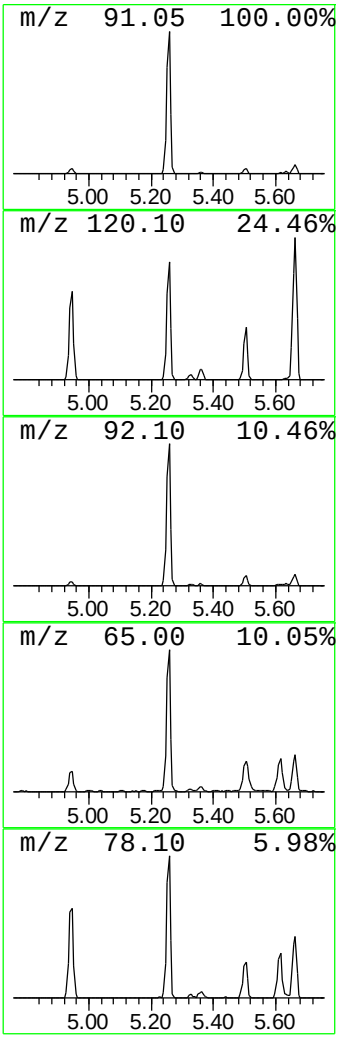
Peak Number 10 Benzene, propyl- Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.26 | 26.67 ng | 1234500 | 1,4-Dichlorobenzene-d4 | 5.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, propyl- | 120 | C9H12 | 000103-65-1 | 90 |
| 2 | N-Benzyl-2-phenethylamine | 211 | C15H17N | 003647-71-0 | 64 |
| 3 | 1,2-Ethanediamine, N,N'-bis(phen... | 240 | C16H20N2 | 000140-28-3 | 64 |
| 4 | Propanenitrile, 3-[(phenylmethyl... | 160 | C10H12N2 | 000706-03-6 | 59 |
| 5 | Ethanol, 2-[(phenylmethyl)amino]- | 151 | C9H13NO | 000104-63-2 | 50 |



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Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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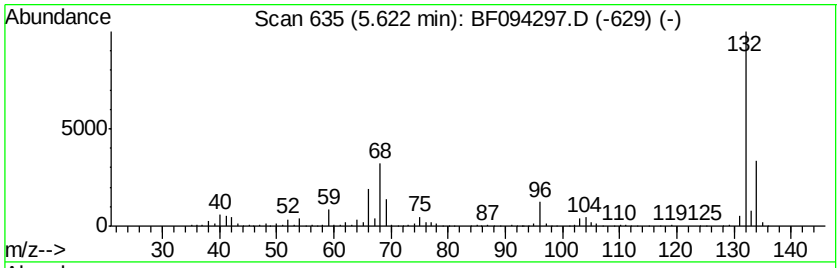
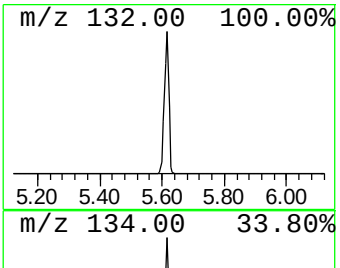
Peak Number 11 unknown5.62 Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.62 | 65.88 ng | 3049850 | 1,4-Dichlorobenzene-d4 | 5.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 35 |
| 2 | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO | 031357-76-3 | 25 |
| 3 | Imidazole, 4,5-dicyano-1-methyl- | 132 | C6H4N4 | 019485-35-9 | 22 |
| 4 | Tranylcypromine-propionyl | 189 | C12H15NO | 1000123-86-3 | 12 |
| 5 | Benzene, 1,3,5-trifluoro- | 132 | C6H3F3 | 000372-38-3 | 9 |



# Library Search Compound Report

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Data File : BF094297.D
Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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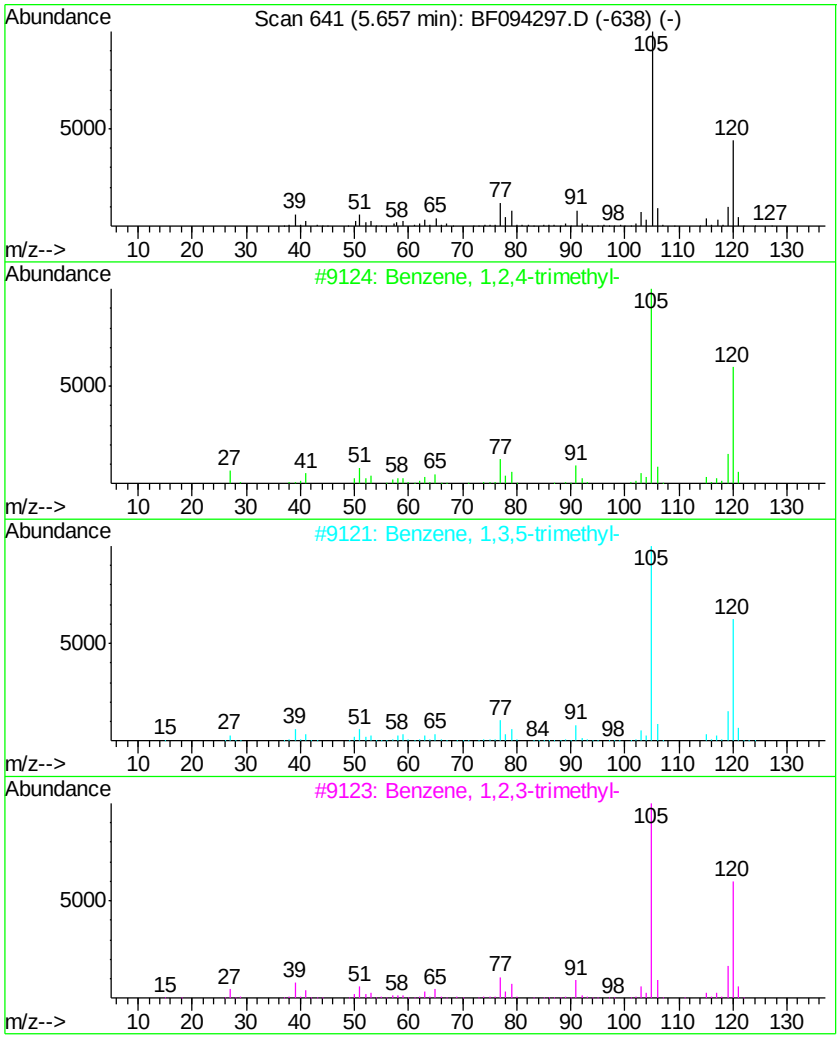
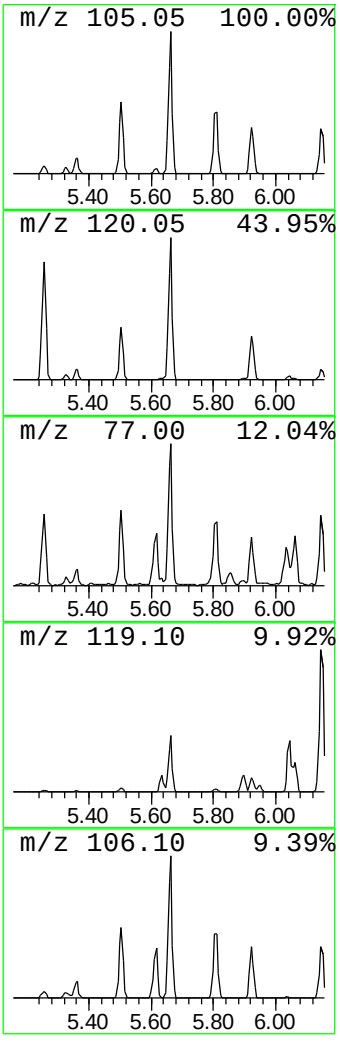
Peak Number 12 Benzene, 1,2,4-trimethyl- Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.66 | 27.29 ng | 1263230 | 1,4-Dichlorobenzene-d4 | 5.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,4-trimethyl- | 120 | C9H12 | 000095-63-6 | 95 |
| 2 | Benzene, 1,3,5-trimethyl- | 120 | C9H12 | 000108-67-8 | 95 |
| 3 | Benzene, 1,2,3-trimethyl- | 120 | C9H12 | 000526-73-8 | 93 |
| 4 | Benzene, 1-ethyl-4-methyl- | 120 | C9H12 | 000622-96-8 | 90 |
| 5 | Benzene, 1-ethyl-3-methyl- | 120 | C9H12 | 000620-14-4 | 90 |



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Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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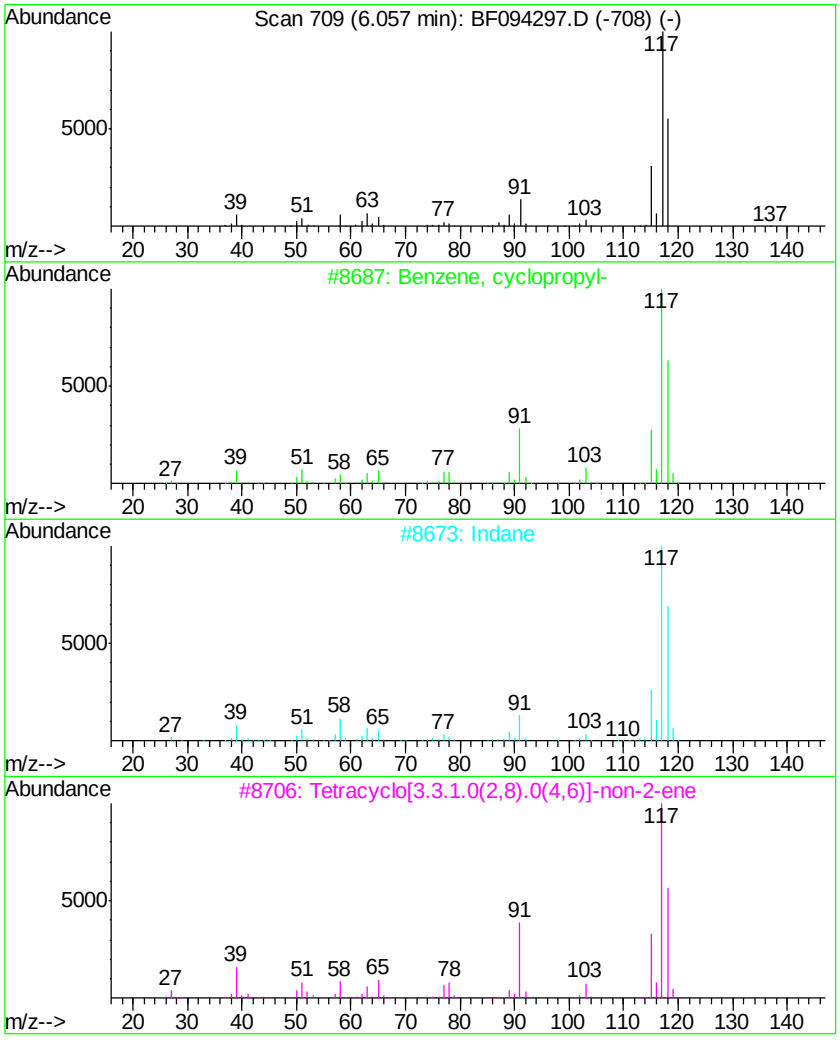
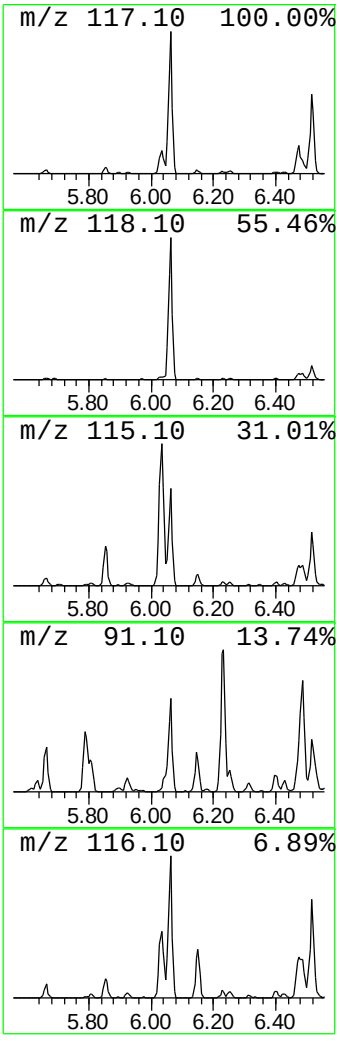
Peak Number 14 Benzene, cyclopropyl- Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.06 | 33.06 ng | 1530540 | 1,4-Dichlorobenzene-d4 | 5.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, cyclopropyl- | 118 | C9H10 | 000873-49-4 | 64 |
| 2 | Indane | 118 | C9H10 | 000496-11-7 | 64 |
| 3 | Tetracyclo[3.3.1.0(2,8).0(4,6)]-... | 118 | C9H10 | 1000191-13-7 | 64 |
| 4 | Benzene, 1,1'-(1,5-hexadiene-1,6... | 234 | C18H18 | 004439-45-6 | 59 |
| 5 | Benzaldehyde, 4-(1-phenyl-2-prop... | 238 | C16H14O2 | 1000277-56-1 | 53 |



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Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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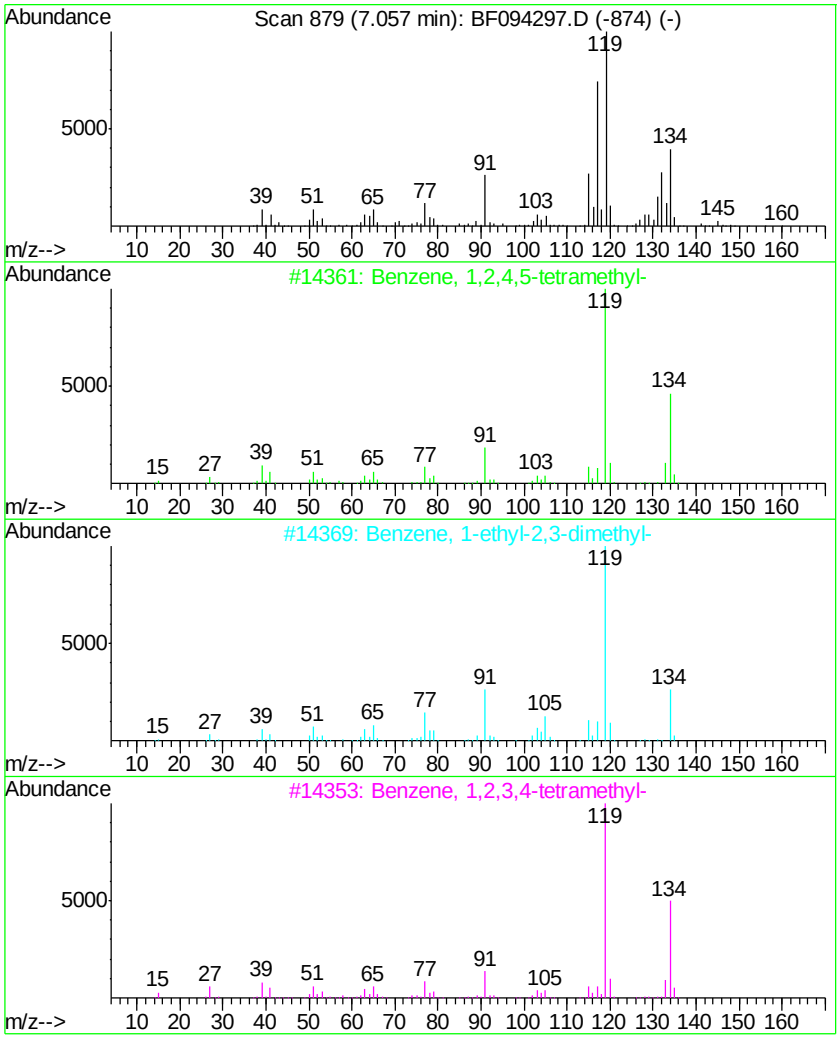
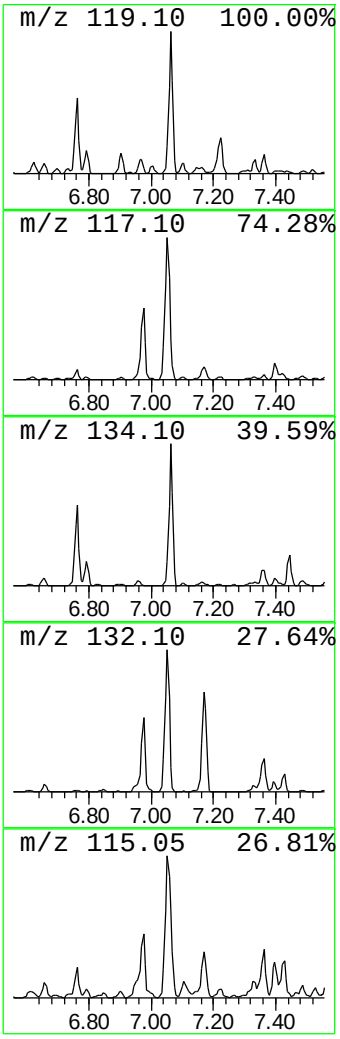
Peak Number 15 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.06 | 29.07 ng | 3573030 | Naphthalene-d8 | 7.36 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 95 |
| 2 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 94 |
| 3 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 94 |
| 4 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 91 |
| 5 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 91 |



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Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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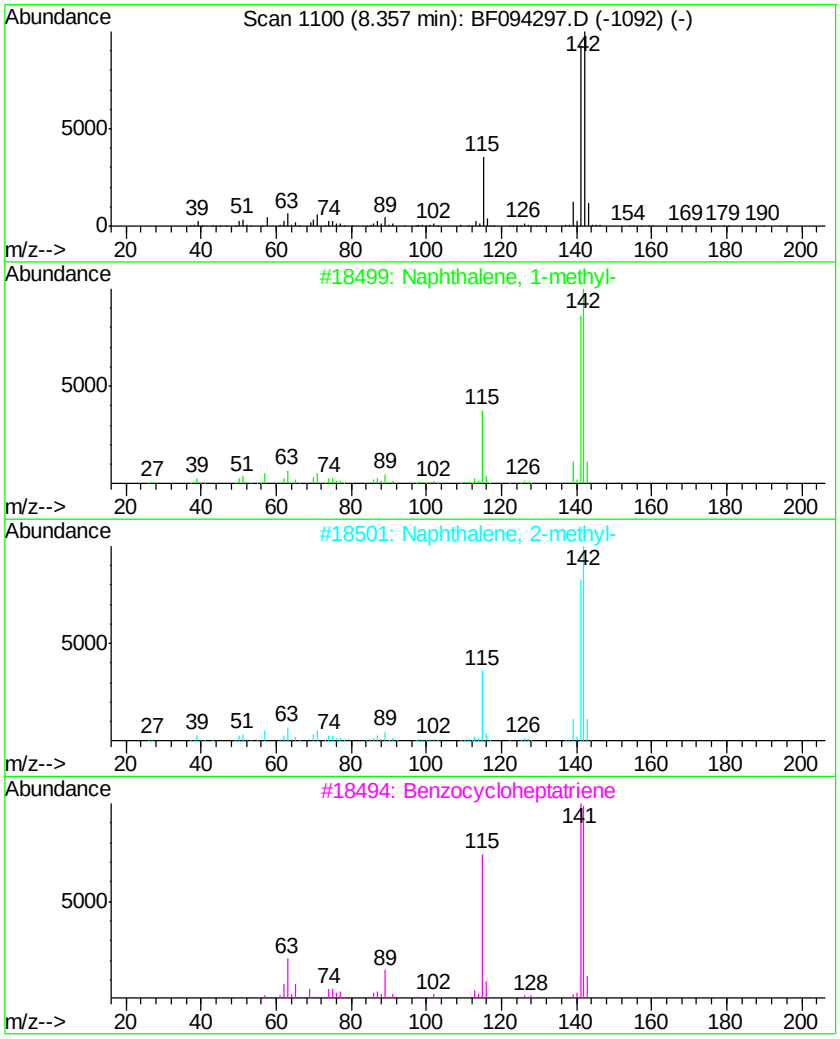
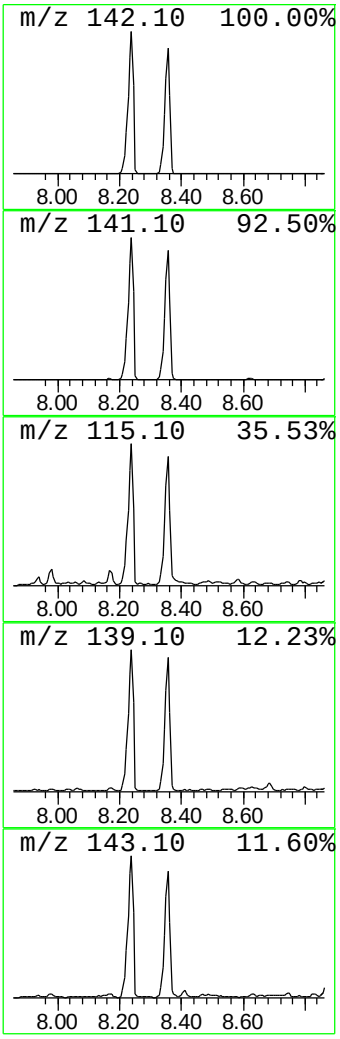
Peak Number 16 Naphthalene, 1-methyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.36 | 47.07 ng | 5785810 | Naphthalene-d8 | 7.36 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1-methyl- | 142 | C11H10 | 000090-12-0 | 96 |
| 2 | Naphthalene, 2-methyl- | 142 | C11H10 | 000091-57-6 | 96 |
| 3 | Benzocycloheptatriene | 142 | C11H10 | 000264-09-5 | 91 |
| 4 | 1,4-Methanonaphthalene, 1,4-dihy... | 142 | C11H10 | 004453-90-1 | 91 |
| 5 | Bicyclo[4.4.1]undeca-1,3,5,7,9-p... | 142 | C11H10 | 002443-46-1 | 91 |



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Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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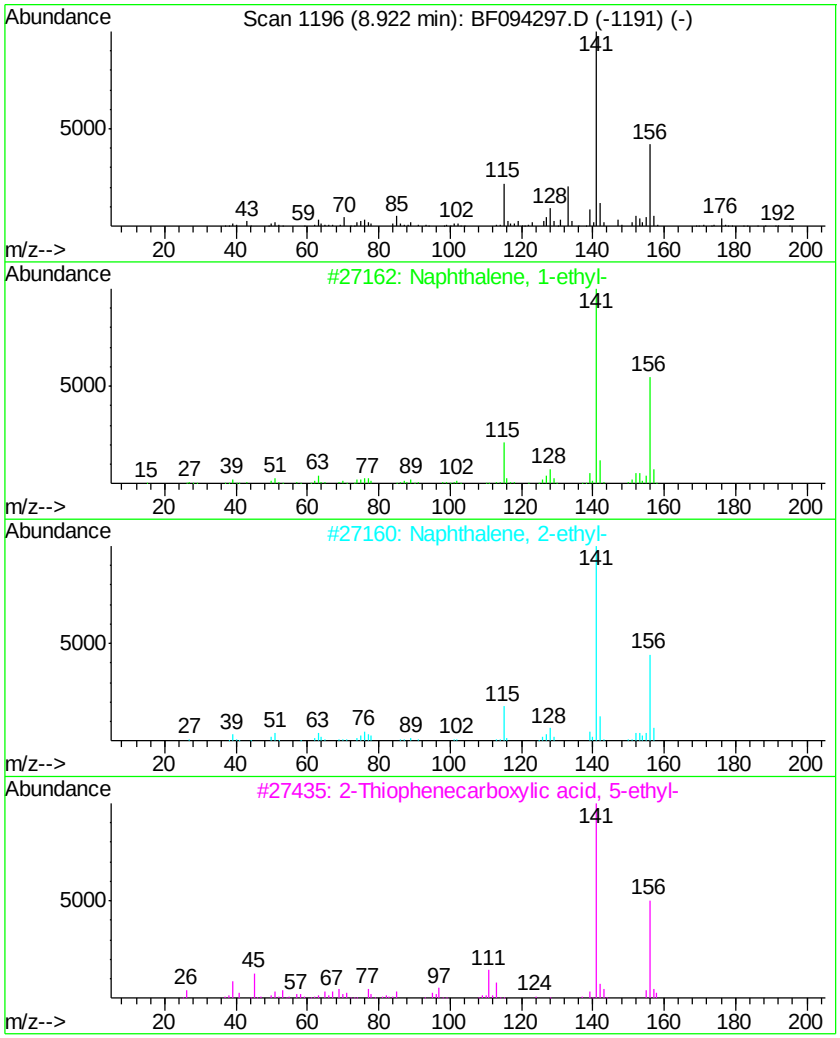
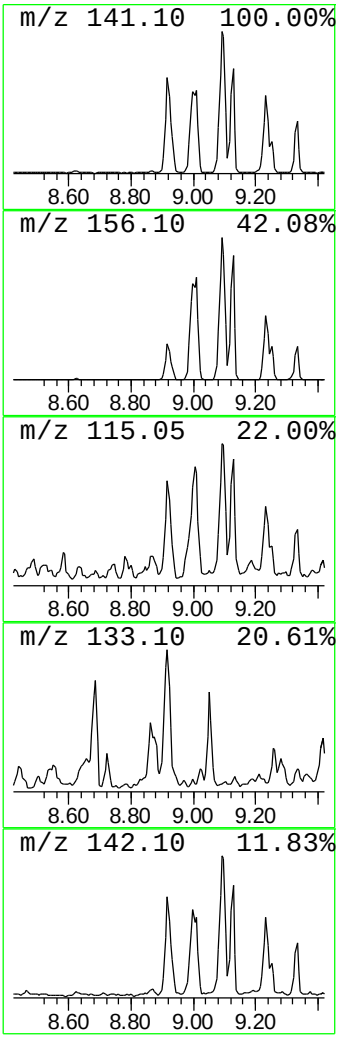
Peak Number 17 Naphthalene, 1-ethyl- Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.92 | 20.04 ng | 1844640 | Acenaphthene-d10 | 9.50 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1-ethyl- | 156 | C12H12 | 001127-76-0 | 96 |
| 2 | Naphthalene, 2-ethyl- | 156 | C12H12 | 000939-27-5 | 95 |
| 3 | 2-Thiophenecarboxylic acid, 5-et... | 156 | C7H8O2S | 023229-72-3 | 53 |
| 4 | Naphthalene, 1-propyl- | 170 | C13H14 | 002765-18-6 | 43 |
| 5 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 43 |



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Data File : BF094297.D
Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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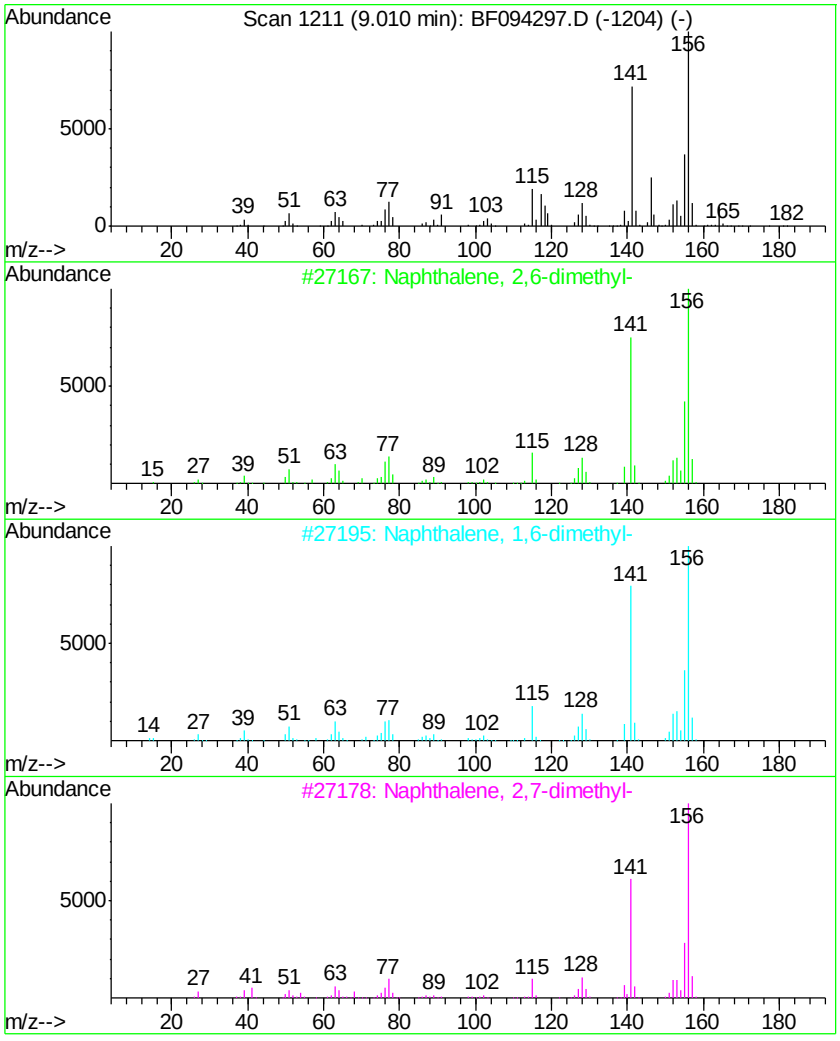
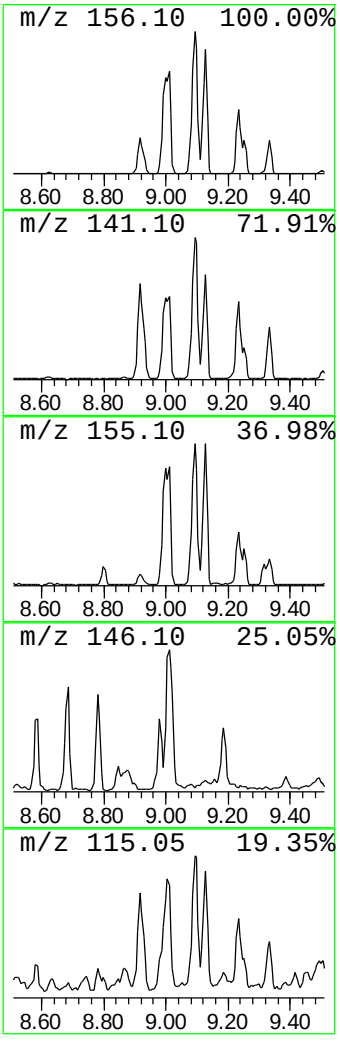
Peak Number 18 Naphthalene, 2,6-dimethyl- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.01 | 32.56 ng | 2997390 | Acenaphthene-d10 | 9.50 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2,6-dimethyl- | 156 | C12H12 | 000581-42-0 | 97 |
| 2 | Naphthalene, 1,6-dimethyl- | 156 | C12H12 | 000575-43-9 | 97 |
| 3 | Naphthalene, 2,7-dimethyl- | 156 | C12H12 | 000582-16-1 | 96 |
| 4 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 96 |
| 5 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 96 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF040717\
Data File : BF094297.D
Acq On : 8 Apr 2017 3:55
Operator : SJ/MA
Sample : I2593-01
Misc :
ALS Vial : 30 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** TW-10

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF032217.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT 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 |
| 2-Butanol, 2,3-di... | 2.58 | 37.5 | ng | 1738400 | 1 | 5.85 | 925866 | 20.0 |
| 2-Pentanol, 2-met... | 2.62 | 63.9 | ng | 2955790 | 1 | 5.85 | 925866 | 20.0 |
| 3-Pentanol, 3-met... | 2.92 | 86.7 | ng | 4013040 | 1 | 5.85 | 925866 | 20.0 |
| Cyclopentanol, 1-... | 3.42 | 33.4 | ng | 1544010 | 1 | 5.85 | 925866 | 20.0 |
| 2-Hexanol, 2-methyl- | 3.91 | 36.1 | ng | 1671620 | 1 | 5.85 | 925866 | 20.0 |
| 3-Hexanol, 3-methyl- | 4.05 | 41.1 | ng | 1905080 | 1 | 5.85 | 925866 | 20.0 |
| 1-Methylcyclohexanol | 4.69 | 18.8 | ng | 870708 | 1 | 5.85 | 925866 | 20.0 |
| Benzene, (1-methy... | 4.95 | 23.9 | ng | 1106400 | 1 | 5.85 | 925866 | 20.0 |
| Benzene, propyl- | 5.26 | 26.7 | ng | 1234500 | 1 | 5.85 | 925866 | 20.0 |
| unknown5.62 | 5.62 | 65.9 | ng | 3049850 | 1 | 5.85 | 925866 | 20.0 |
| Benzene, 1,2,4-tr... | 5.66 | 27.3 | ng | 1263230 | 1 | 5.85 | 925866 | 20.0 |
| Benzene, cyclopro... | 6.06 | 33.1 | ng | 1530540 | 1 | 5.85 | 925866 | 20.0 |
| Benzene, 1,2,4,5-... | 7.06 | 29.1 | ng | 3573030 | 2 | 7.36 | 2458600 | 20.0 |
| Naphthalene, 1-me... | 8.36 | 47.1 | ng | 5785810 | 2 | 7.36 | 2458600 | 20.0 |
| Naphthalene, 1-et... | 8.92 | 20.0 | ng | 1844640 | 3 | 9.50 | 1841100 | 20.0 |
| Naphthalene, 2,6-... | 9.01 | 32.6 | ng | 2997390 | 3 | 9.50 | 1841100 | 20.0 |