LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

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-BF122215.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 | 4.773 | 232 | 235 | 238 | rBB | 24952 | 29088 | 1.17% | 0.099% |
| 2 | 4.990 | 252 | 254 | 257 | rVB2 | 31435 | 47018 | 1.89% | 0.160% |
| 3 | 5.321 | 281 | 283 | 285 | rBV | 25851 | 28804 | 1.16% | 0.098% |
| 4 | 5.436 | 292 | 293 | 299 | rBV | 262577 | 351119 | 14.12% | 1.195% |
| 5 | 5.527 | 299 | 301 | 304 | rVV3 | 20644 | 27398 | 1.10% | 0.093% |
| 6 | 5.584 | 304 | 306 | 310 | rVB3 | 19133 | 29630 | 1.19% | 0.101% |
| 7 | 5.653 | 310 | 312 | 313 | rBV | 21870 | 28991 | 1.17% | 0.099% |
| 8 | 5.687 | 313 | 315 | 316 | rVV | 33022 | 33300 | 1.34% | 0.113% |
| 9 | 5.721 | 316 | 318 | 321 | rVB2 | 22216 | 34241 | 1.38% | 0.117% |
| 10 | 5.847 | 327 | 329 | 332 | rVB | 51283 | 53795 | 2.16% | 0.183% |
| 11 | 6.087 | 348 | 350 | 352 | rVB2 | 22251 | 30553 | 1.23% | 0.104% |
| 12 | 6.133 | 352 | 354 | 358 | rBV2 | 22485 | 34373 | 1.38% | 0.117% |
| 13 | 6.259 | 364 | 365 | 368 | rBV | 16528 | 25060 | 1.01% | 0.085% |
| 14 | 6.316 | 368 | 370 | 375 | rVB2 | 58657 | 57637 | 2.32% | 0.196% |
| 15 | 6.384 | 375 | 376 | 378 | rBV | 66391 | 62908 | 2.53% | 0.214% |
| 16 | 6.419 | 378 | 379 | 381 | rBV2 | 45479 | 70190 | 2.82% | 0.239% |
| 17 | 6.510 | 383 | 387 | 390 | rBV2 | 162596 | 349625 | 14.06% | 1.190% |
| 18 | 6.567 | 390 | 392 | 393 | rBV | 40177 | 56360 | 2.27% | 0.192% |
| 19 | 6.601 | 393 | 395 | 398 | rVB | 655041 | 768288 | 30.89% | 2.615% |
| 20 | 6.659 | 399 | 400 | 402 | rBV2 | 22930 | 29877 | 1.20% | 0.102% |
| 21 | 6.693 | 402 | 403 | 406 | rBV3 | 58069 | 118508 | 4.76% | 0.403% |
| 22 | 6.739 | 406 | 407 | 408 | rBV | 73296 | 79062 | 3.18% | 0.269% |
| 23 | 6.773 | 408 | 410 | 412 | rVB2 | 81474 | 131164 | 5.27% | 0.446% |
| 24 | 6.819 | 412 | 414 | 419 | rBV | 358787 | 501945 | 20.18% | 1.708% |
| 25 | 6.887 | 419 | 420 | 425 | rVB | 89163 | 103630 | 4.17% | 0.353% |
| 26 | 6.979 | 425 | 428 | 430 | rBV2 | 911000 | 946691 | 38.06% | 3.222% |
| 27 | 7.024 | 430 | 432 | 433 | rBV | 207223 | 228863 | 9.20% | 0.779% |
| 28 | 7.059 | 433 | 435 | 437 | rVB | 54808 | 90068 | 3.62% | 0.307% |
| 29 | 7.093 | 437 | 438 | 441 | rVB3 | 33988 | 65181 | 2.62% | 0.222% |
| 30 | 7.173 | 441 | 445 | 447 | rVB3 | 101292 | 211965 | 8.52% | 0.721% |
| 31 | 7.230 | 447 | 450 | 451 | rBV2 | 134541 | 151037 | 6.07% | 0.514% |
| 32 | 7.264 | 451 | 453 | 456 | rVB2 | 99937 | 150047 | 6.03% | 0.511% |
| 33 | 7.356 | 456 | 461 | 462 | rBV3 | 131756 | 286392 | 11.51% | 0.975% |
| 34 | 7.390 | 462 | 464 | 465 | rBV | 537341 | 607723 | 24.43% | 2.068% |

LSC Area Percent Report

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Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

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-BF122215.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 7.413 | 465 | 466 | 467 | rBV | 85348 | 65352 | 2.63% | 0.222% |
| 36 | 7.447 | 467 | 469 | 470 | rVB2 | 144891 | 175428 | 7.05% | 0.597% |
| 37 | 7.504 | 472 | 474 | 477 | rBV5 | 135389 | 212390 | 8.54% | 0.723% |
| 38 | 7.562 | 477 | 479 | 481 | rVB2 | 194088 | 322612 | 12.97% | 1.098% |
| 39 | 7.607 | 481 | 483 | 484 | rBV | 144022 | 187122 | 7.52% | 0.637% |
| 40 | 7.630 | 484 | 485 | 488 | rBV2 | 177905 | 233307 | 9.38% | 0.794% |
| 41 | 7.699 | 488 | 491 | 492 | rVB | 325329 | 321715 | 12.93% | 1.095% |
| 42 | 7.722 | 492 | 493 | 495 | rVB2 | 211407 | 249559 | 10.03% | 0.849% |
| 43 | 7.756 | 495 | 496 | 497 | rBV | 81854 | 96853 | 3.89% | 0.330% |
| 44 | 7.790 | 497 | 499 | 501 | rBV | 370775 | 350645 | 14.10% | 1.193% |
| 45 | 7.859 | 501 | 505 | 507 | rBV4 | 180051 | 482554 | 19.40% | 1.642% |
| 46 | 7.950 | 508 | 513 | 516 | rBV5 | 370088 | 1033223 | 41.54% | 3.517% |
| 47 | 8.042 | 518 | 521 | 524 | rVB4 | 244109 | 664285 | 26.71% | 2.261% |
| 48 | 8.110 | 524 | 527 | 530 | rBV | 589322 | 933731 | 37.54% | 3.178% |
| 49 | 8.167 | 530 | 532 | 534 | rBV3 | 129988 | 242876 | 9.76% | 0.827% |
| 50 | 8.236 | 534 | 538 | 542 | rVB7 | 361207 | 1078258 | 43.35% | 3.670% |
| 51 | 8.293 | 542 | 543 | 547 | rVB4 | 203895 | 390141 | 15.68% | 1.328% |
| 52 | 8.362 | 547 | 549 | 550 | rBV2 | 317783 | 532212 | 21.40% | 1.811% |
| 53 | 8.396 | 550 | 552 | 553 | rBV2 | 200392 | 267041 | 10.74% | 0.909% |
| 54 | 8.499 | 560 | 561 | 563 | rBV2 | 385444 | 396891 | 15.96% | 1.351% |
| 55 | 8.579 | 565 | 568 | 570 | rBV3 | 508018 | 1253084 | 50.38% | 4.265% |
| 56 | 8.659 | 574 | 575 | 577 | rVB | 491440 | 554122 | 22.28% | 1.886% |
| 57 | 8.750 | 581 | 583 | 585 | rVB2 | 530227 | 697137 | 28.03% | 2.373% |
| 58 | 8.830 | 588 | 590 | 591 | rVB | 252251 | 271913 | 10.93% | 0.925% |
| 59 | 8.899 | 594 | 596 | 600 | rVB3 | 852298 | 1557796 | 62.63% | 5.302% |
| 60 | 9.013 | 600 | 606 | 608 | rBV4 | 807805 | 2487384 | 100.00% | 8.466% |
| 61 | 9.116 | 613 | 615 | 617 | rBV3 | 349352 | 646743 | 26.00% | 2.201% |
| 62 | 9.173 | 617 | 620 | 621 | rVV2 | 762230 | 1204006 | 48.40% | 4.098% |
| 63 | 9.196 | 621 | 622 | 624 | rVB2 | 1002312 | 942913 | 37.91% | 3.209% |
| 64 | 9.310 | 630 | 632 | 633 | rBV | 399699 | 555932 | 22.35% | 1.892% |
| 65 | 9.390 | 636 | 639 | 640 | rBV2 | 540028 | 1163513 | 46.78% | 3.960% |
| 66 | 9.585 | 654 | 656 | 657 | rBV | 383724 | 539519 | 21.69% | 1.836% |
| 67 | 9.870 | 679 | 681 | 683 | rBV2 | 436476 | 561547 | 22.58% | 1.911% |
| 68 | 11.882 | 855 | 857 | 861 | rBV3 | 250465 | 559245 | 22.48% | 1.903% |
| 69 | 12.705 | 927 | 929 | 948 | rVB5 | 269719 | 1178923 | 47.40% | 4.012% |
| 70 | 12.945 | 948 | 950 | 952 | rVB | 682381 | 668474 | 26.87% | 2.275% |
| 71 | 13.996 | 1040 | 1042 | 1045 | rVB | 252309 | 242110 | 9.73% | 0.824% |

LSC Area Percent Report

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Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

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-BF122215.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 15.425 | 1165 | 1167 | 1170 | rVB | 192982 | 240551 | 9.67% | 0.819% |

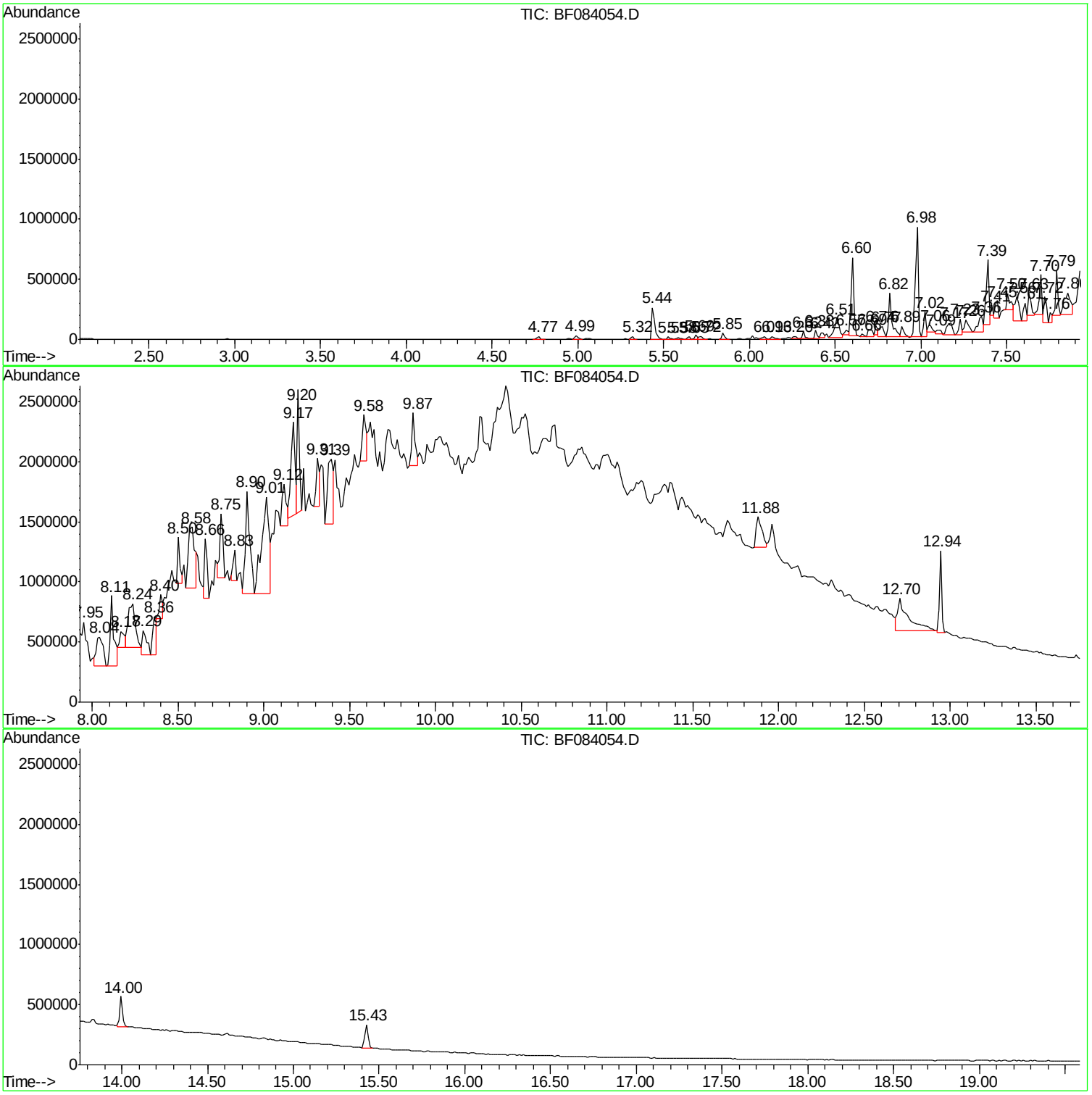
Sum of corrected areas: 29381638

Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.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\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

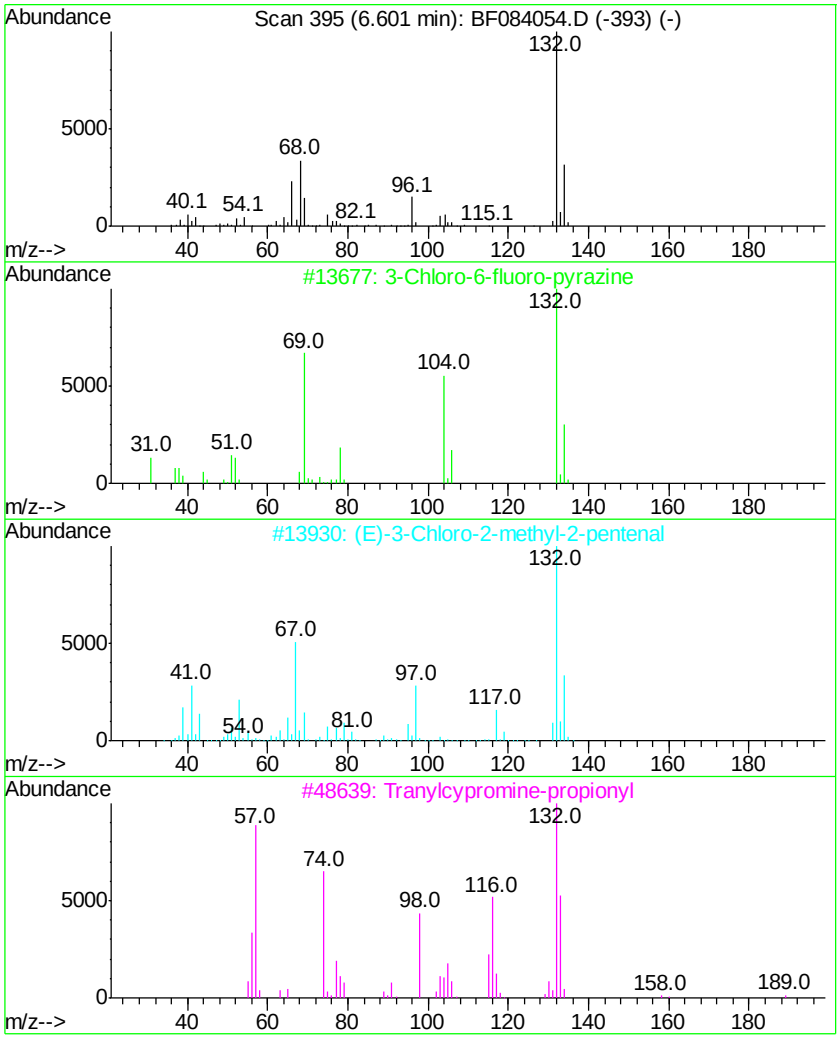
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

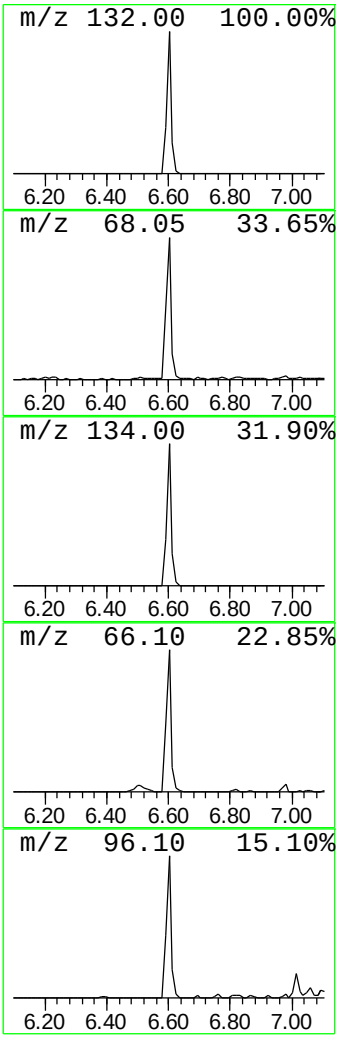
**********

Peak Number 1 unknown6.60 Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.60 | 30.61 ng | 768288 | 1,4-Dichlorobenzene-d4 | 6.82 |

| 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 | 17 |
| 3 | Tranylcypromine-propionyl | 189 | C12H15NO | 1000123-86-3 | 12 |
| 4 | 4-Methylpyrrolo[1,2-a]pyrazine | 132 | C8H8N2 | 064608-60-2 | 9 |
| 5 | (5-METHYL-2-PYRIDYL)ACETONITRILE | 132 | C8H8N2 | 1000241-93-9 | 9 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

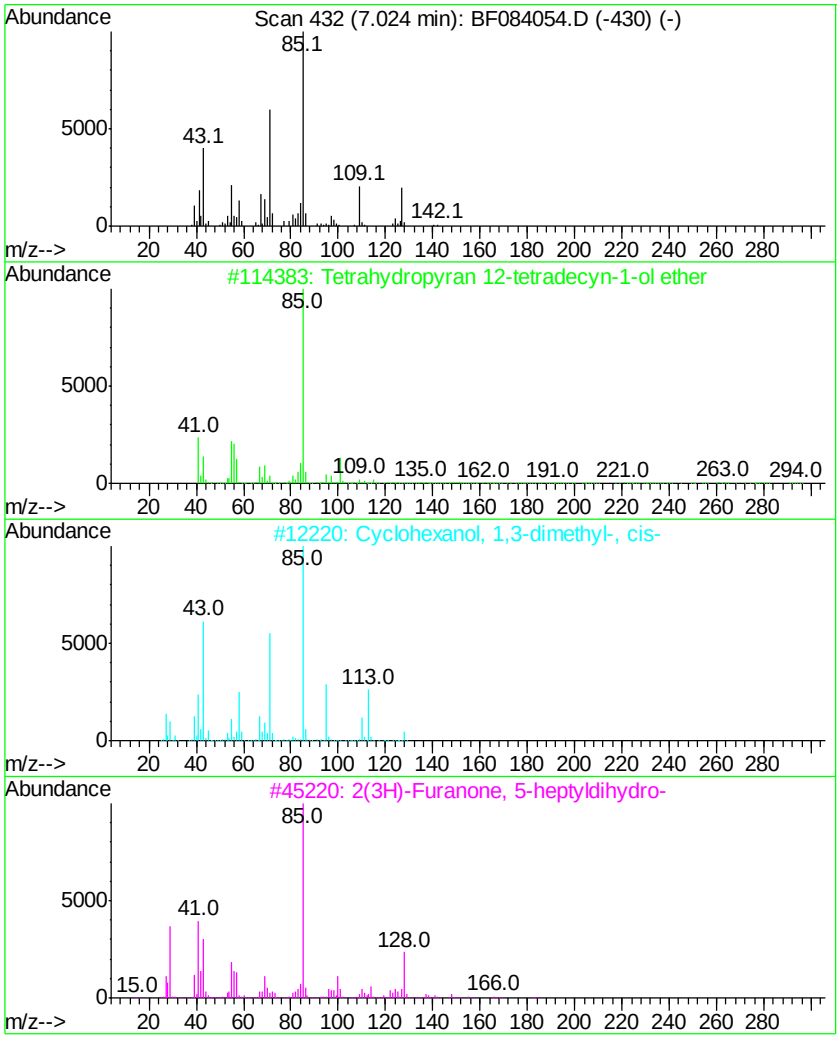
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

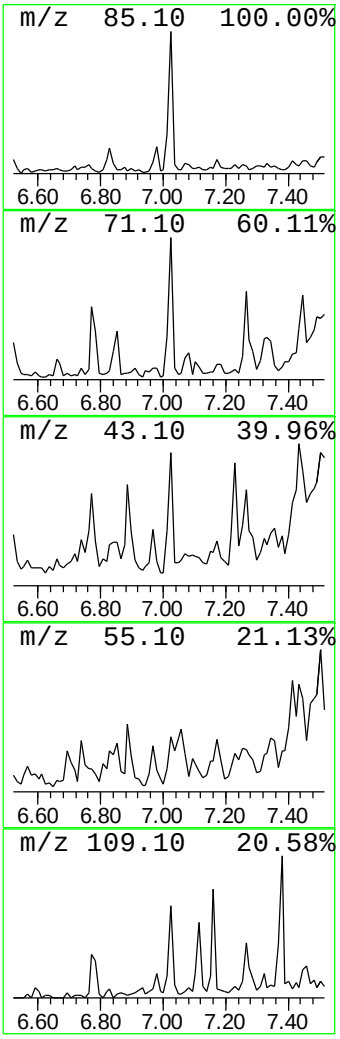
**********

Peak Number 3 unknown7.02 Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.02 | 9.12 ng | 228863 | 1,4-Dichlorobenzene-d4 | 6.82 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Tetrahydropyran 12-tetradecyn-1-... | 294 | C19H34O2 | 096249-40-0 | 43 |
| 2 | Cyclohexanol, 1,3-dimethyl-, cis- | 128 | C8H16O | 015466-94-1 | 40 |
| 3 | 2(3H)-Furanone, 5-heptyldihydro- | 184 | C11H20O2 | 000104-67-6 | 37 |
| 4 | 2(3H)-Furanone, 5-butyldihydro- | 142 | C8H14O2 | 000104-50-7 | 35 |
| 5 | 2(3H)-Furanone, dihydro-5-propyl- | 128 | C7H12O2 | 000105-21-5 | 35 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

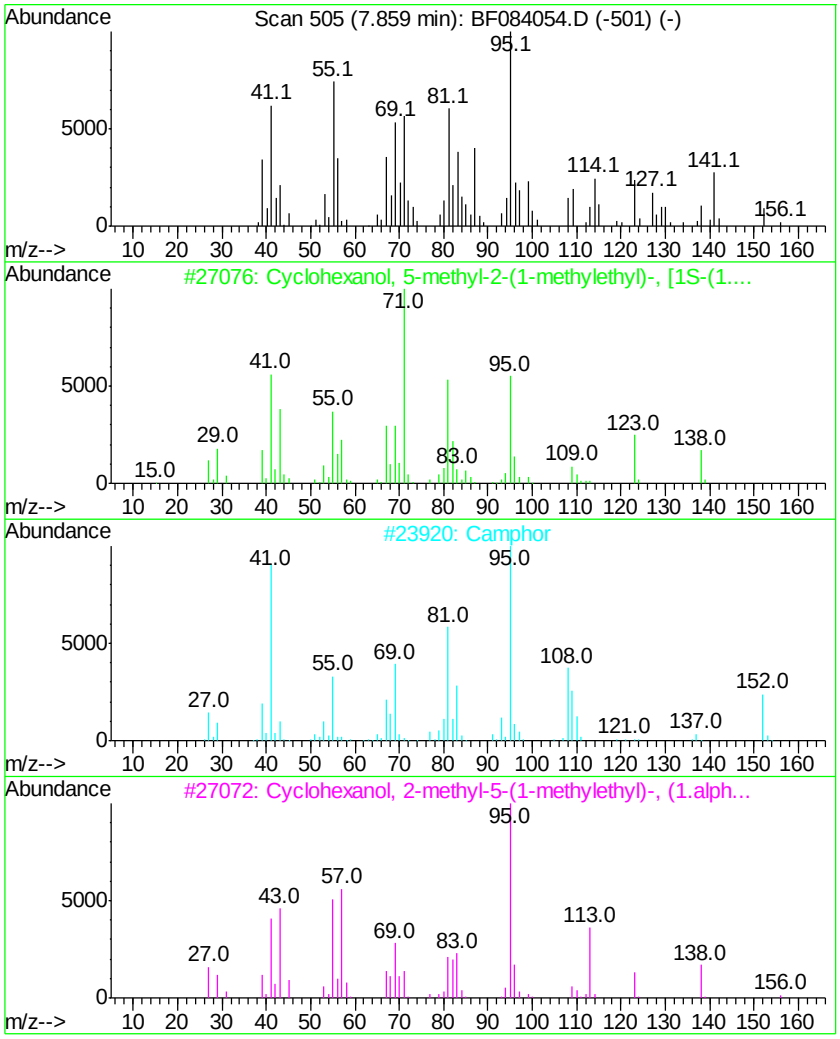
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

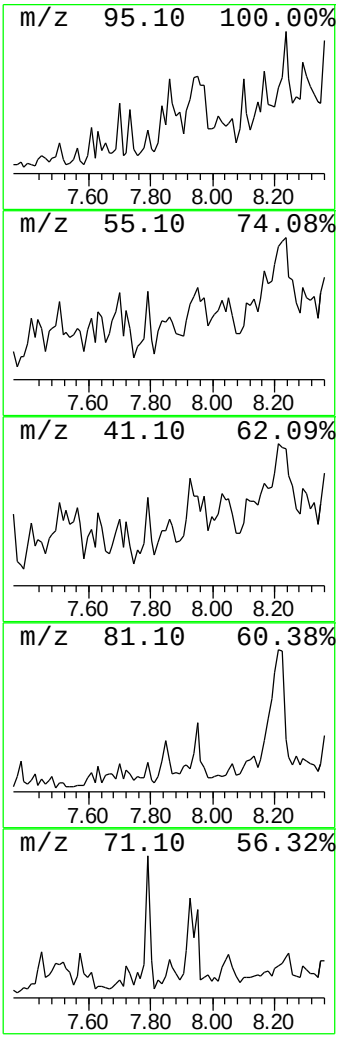
**********

Peak Number 4 unknown7.86 Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.86 | 10.34 ng | 482554 | Naphthalene-d8 | 8.11 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexanol, 5-methyl-2-(1-meth... | 156 | C10H20O | 023283-97-8 | 38 |
| 2 | Camphor | 152 | C10H16O | 000076-22-2 | 30 |
| 3 | Cyclohexanol, 2-methyl-5-(1-meth... | 156 | C10H20O | 042846-32-2 | 27 |
| 4 | Bicyclo[2.2.1]heptan-2-one, 1,7,... | 152 | C10H16O | 000464-48-2 | 27 |
| 5 | Cyclohexanol, 5-methyl-2-(1-meth... | 198 | C12H22O2 | 002230-87-7 | 27 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

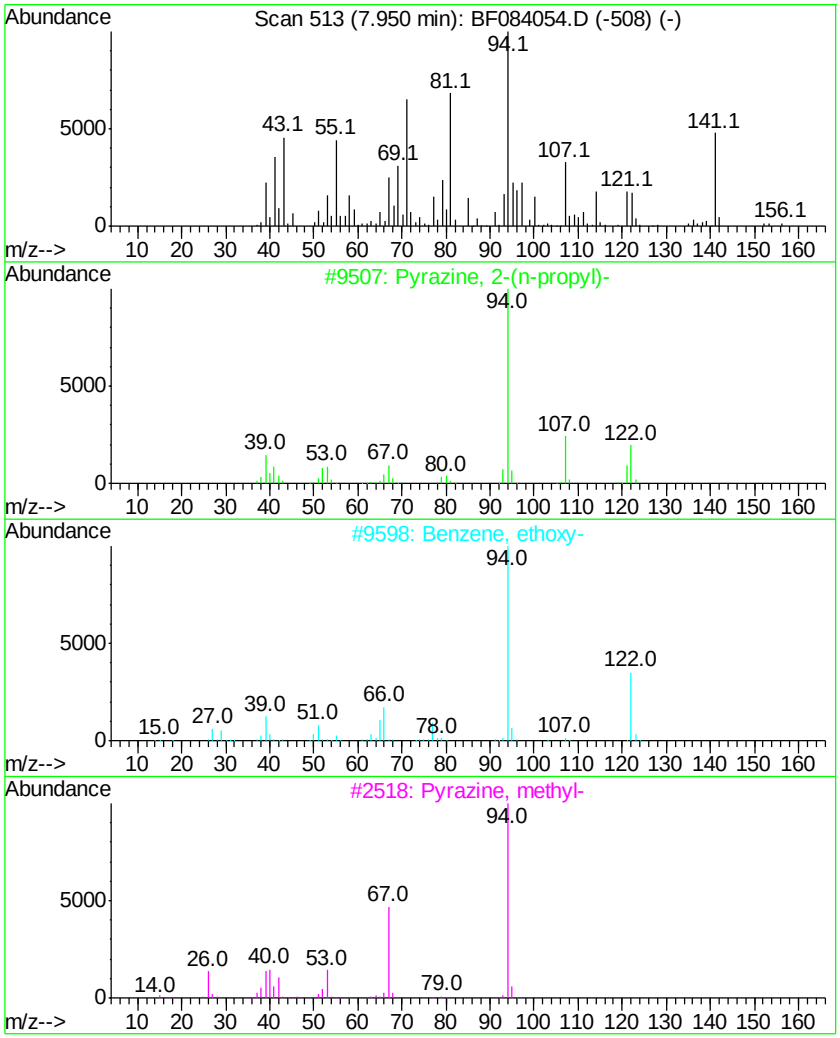
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

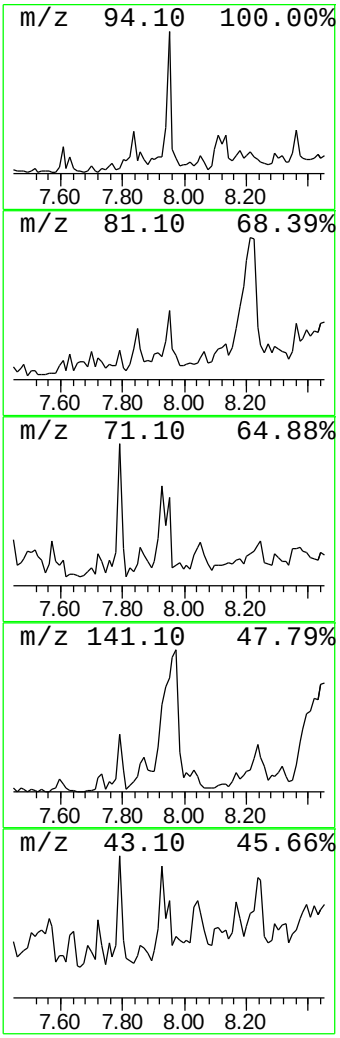
**********

Peak Number 5 unknown7.95 Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.95 | 22.13 ng | 1033220 | Naphthalene-d8 | 8.11 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrazine, 2-(n-propyl)- | 122 | C7H10N2 | 018138-03-9 | 35 |
| 2 | Benzene, ethoxy- | 122 | C8H10O | 000103-73-1 | 22 |
| 3 | Pyrazine, methyl- | 94 | C5H6N2 | 000109-08-0 | 14 |
| 4 | Acetic acid, phenyl ester | 136 | C8H8O2 | 000122-79-2 | 14 |
| 5 | Pyrimidine, 5-methyl- | 94 | C5H6N2 | 002036-41-1 | 14 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

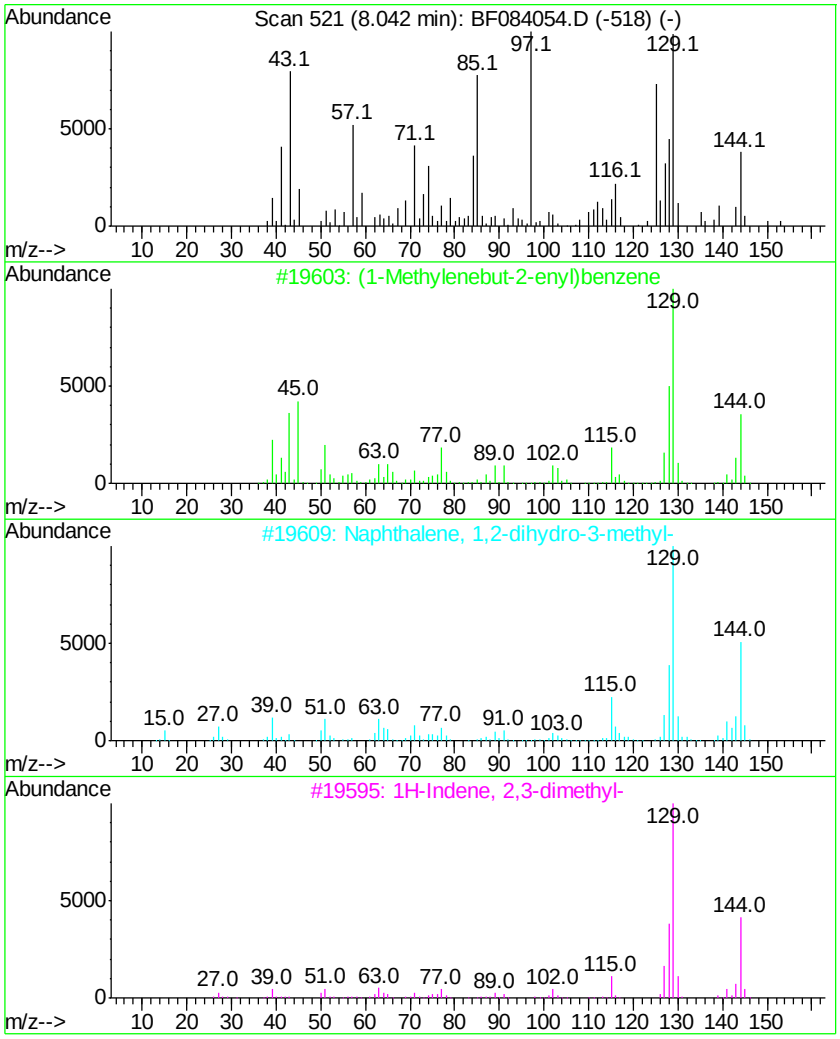
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

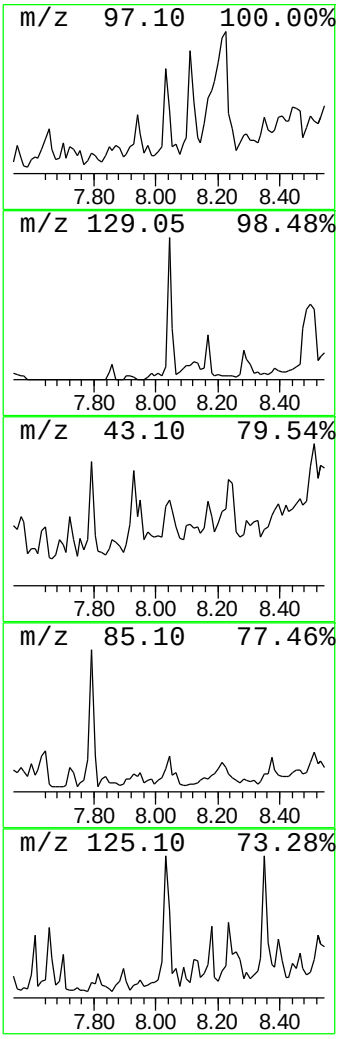
**********

Peak Number 6 unknown8.04 Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.04 | 14.23 ng | 664285 | Naphthalene-d8 | 8.11 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | (1-Methylenebut-2-enyl)benzene | 144 | C11H12 | 070588-46-4 | 47 |
| 2 | Naphthalene, 1,2-dihydro-3-methyl- | 144 | C11H12 | 002717-44-4 | 38 |
| 3 | 1H-Indene, 2,3-dimethyl- | 144 | C11H12 | 004773-82-4 | 38 |
| 4 | 1H-Indene, 1,1-dimethyl- | 144 | C11H12 | 018636-55-0 | 35 |
| 5 | (1-Methylbuta-1,3-dienyl)benzene | 144 | C11H12 | 054758-36-0 | 35 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

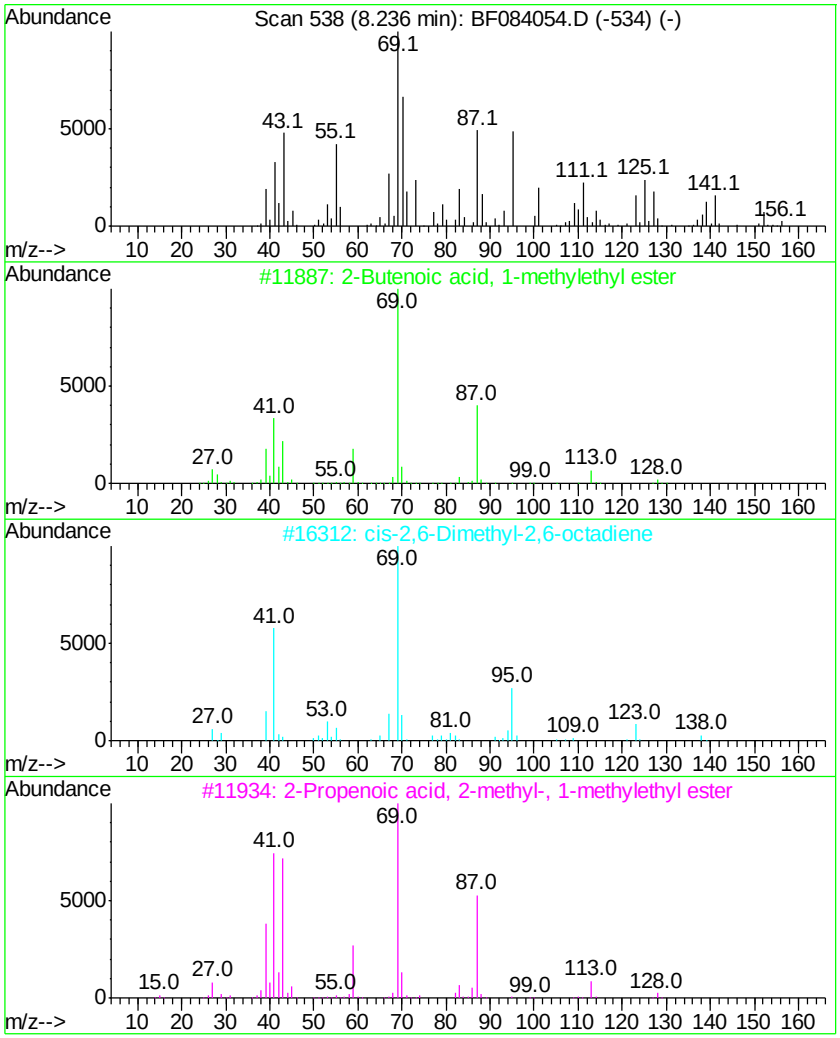
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

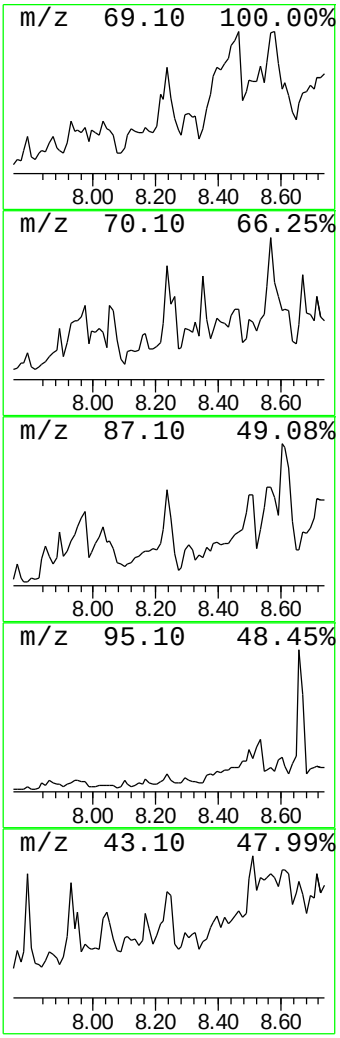
**********

Peak Number 7 unknown8.24 Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.24 | 23.10 ng | 1078260 | Naphthalene-d8 | 8.11 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Butenoic acid, 1-methylethyl e... | 128 | C7H12O2 | 018060-77-0 | 27 |
| 2 | cis-2,6-Dimethyl-2,6-octadiene | 138 | C10H18 | 002492-22-0 | 27 |
| 3 | 2-Propenoic acid, 2-methyl-, 1-m... | 128 | C7H12O2 | 004655-34-9 | 27 |
| 4 | Cyclohexane, 1-ethyl-2-propyl- | 154 | C11H22 | 062238-33-9 | 25 |
| 5 | 2-Propenoic acid, 2-methyl-, dec... | 226 | C14H26O2 | 003179-47-3 | 25 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

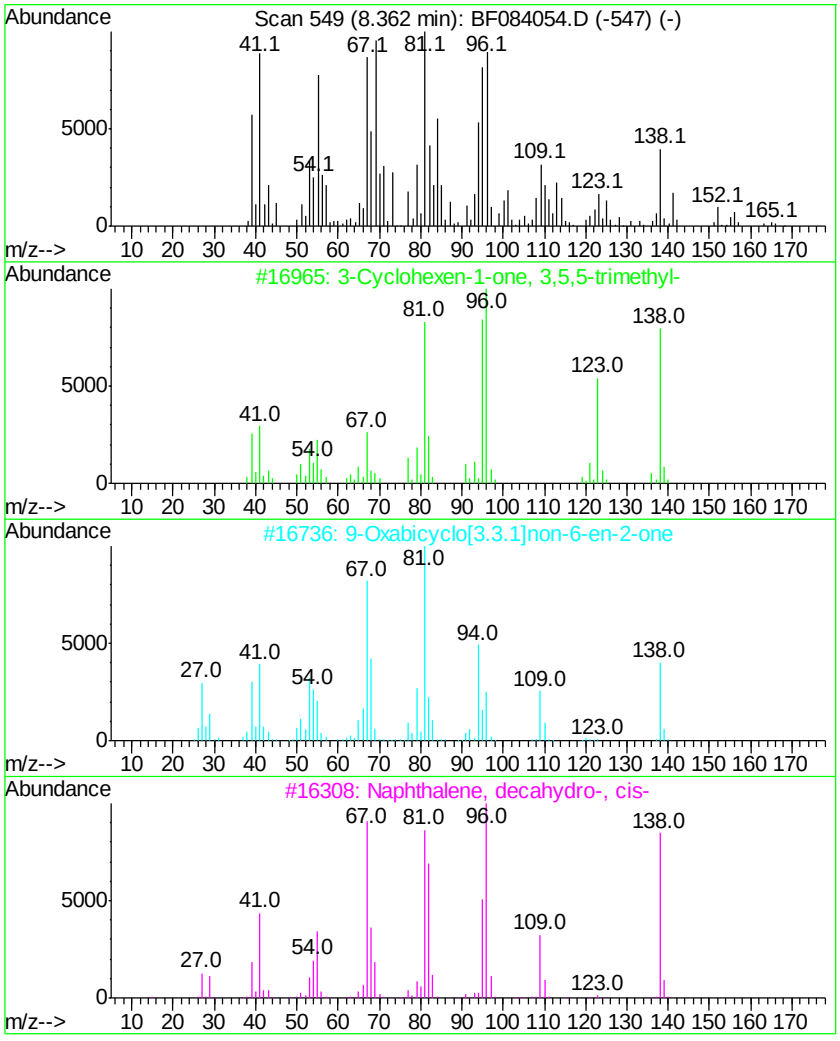
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

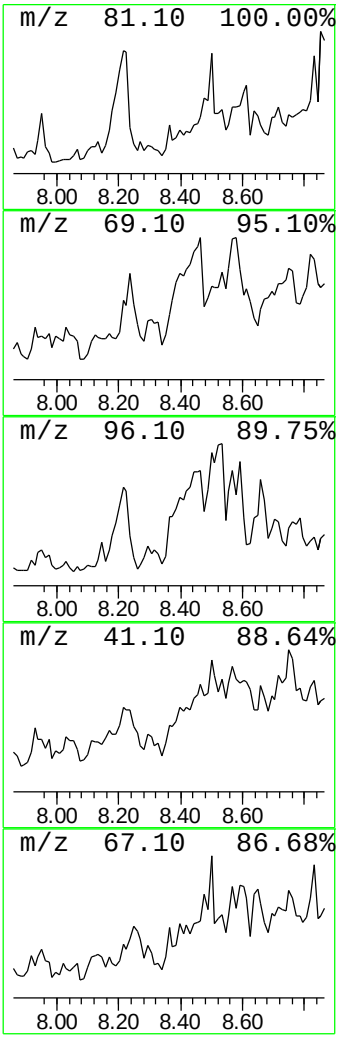
**********

Peak Number 8 3-Cyclohexen-1-one, 3,5,5-t... Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.36 | 11.40 ng | 532212 | Naphthalene-d8 | 8.11 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Cyclohexen-1-one, 3,5,5-trimet... | 138 | C9H14O | 000471-01-2 | 89 |
| 2 | 9-Oxabicyclo[3.3.1]non-6-en-2-one | 138 | C8H10O2 | 1000190-61-5 | 64 |
| 3 | Naphthalene, decahydro-, cis- | 138 | C10H18 | 000493-01-6 | 60 |
| 4 | endo-2-Methylbicyclo[3.3.1]nonane | 138 | C10H18 | 042558-37-2 | 58 |
| 5 | Spiro[4.5]decane | 138 | C10H18 | 000176-63-6 | 55 |



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Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

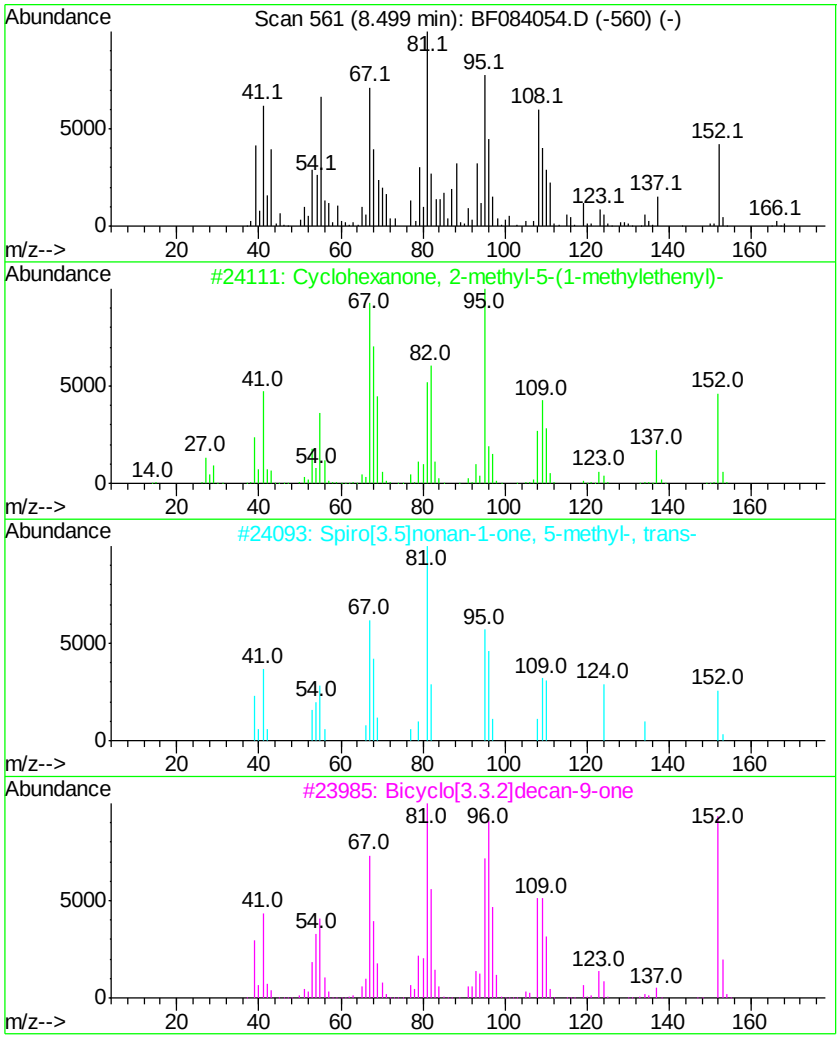
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

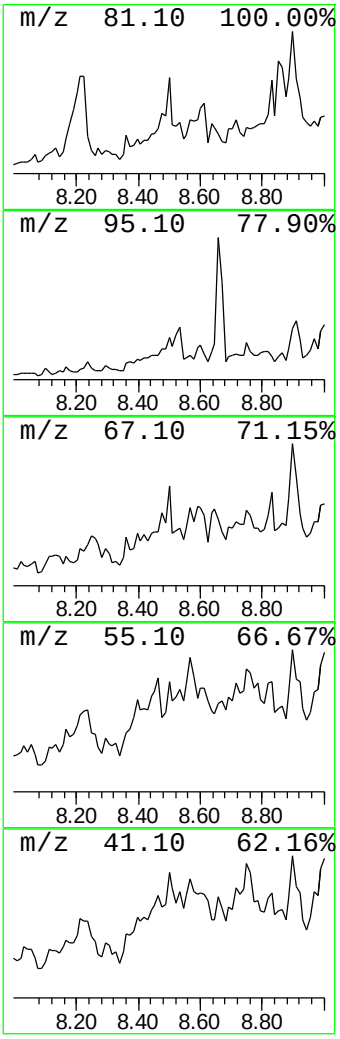
**********

Peak Number 9 Cyclohexanone, 2-methyl-5-(... Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.50 | 8.50 ng | 396891 | Naphthalene-d8 | 8.11 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexanone, 2-methyl-5-(1-met... | 152 | C10H16O | 007764-50-3 | 64 |
| 2 | Spiro[3.5]nonan-1-one, 5-methyl-... | 152 | C10H16O | 065147-56-0 | 64 |
| 3 | Bicyclo[3.3.2]decan-9-one | 152 | C10H16O | 028054-91-3 | 62 |
| 4 | cis-Decalin, 2-syn-methyl- | 152 | C11H20 | 1000155-85-6 | 50 |
| 5 | Bicyclo[4.1.0]heptan-3-one, 4,7,... | 152 | C10H16O | 004176-04-9 | 49 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

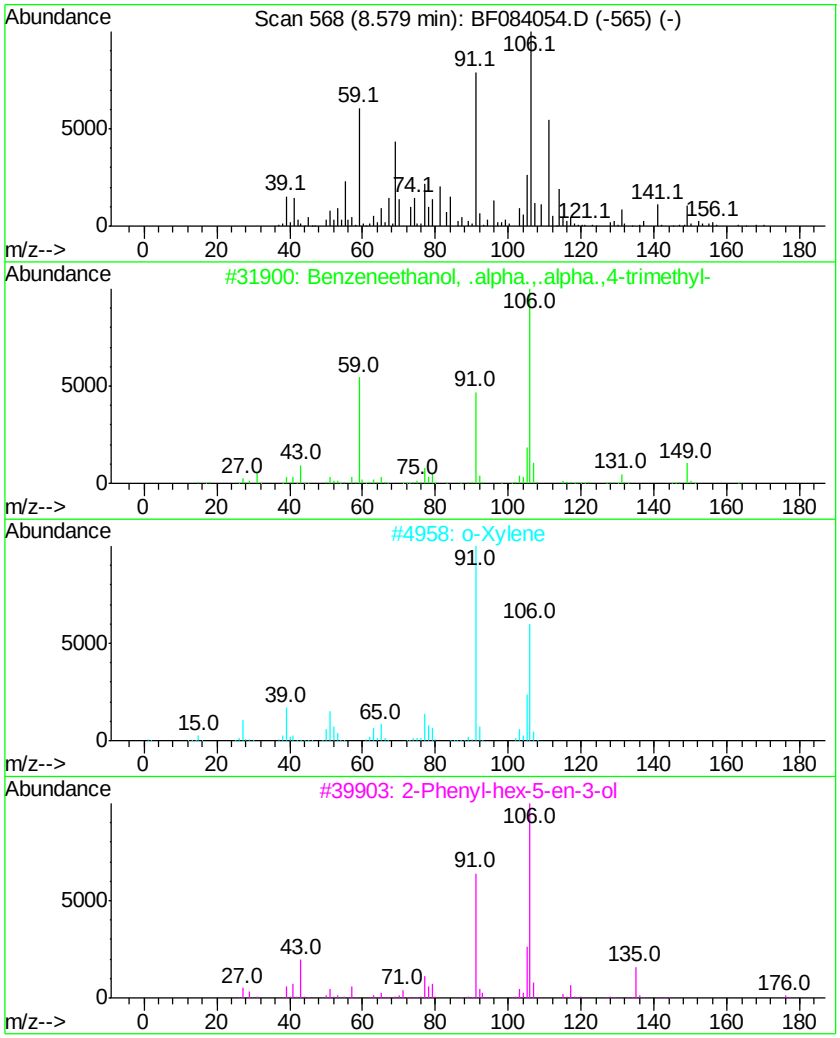
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

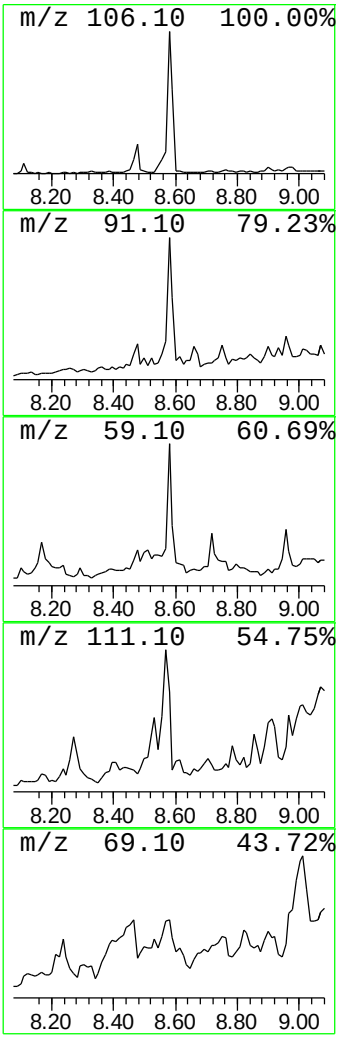
**********

Peak Number 10 Benzeneethanol, .alpha.,.al... Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.58 | 26.84 ng | 1253080 | Naphthalene-d8 | 8.11 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzeneethanol, .alpha.,.alpha.,... | 164 | C11H16O | 020834-59-7 | 50 |
| 2 | o-Xylene | 106 | C8H10 | 000095-47-6 | 38 |
| 3 | 2-Phenyl-hex-5-en-3-ol | 176 | C12H16O | 077383-06-3 | 38 |
| 4 | Benzeneethanol, .alpha.,.beta.-d... | 150 | C10H14O | 052089-32-4 | 35 |
| 5 | p-Xylene | 106 | C8H10 | 000106-42-3 | 30 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.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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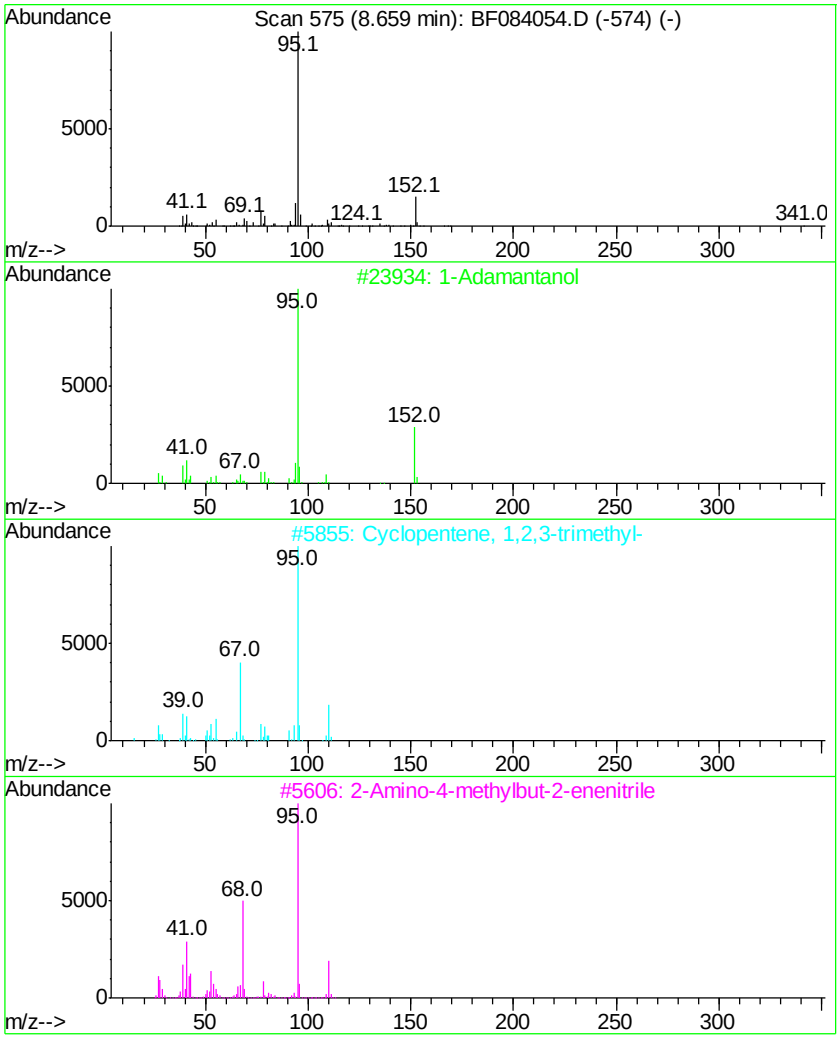
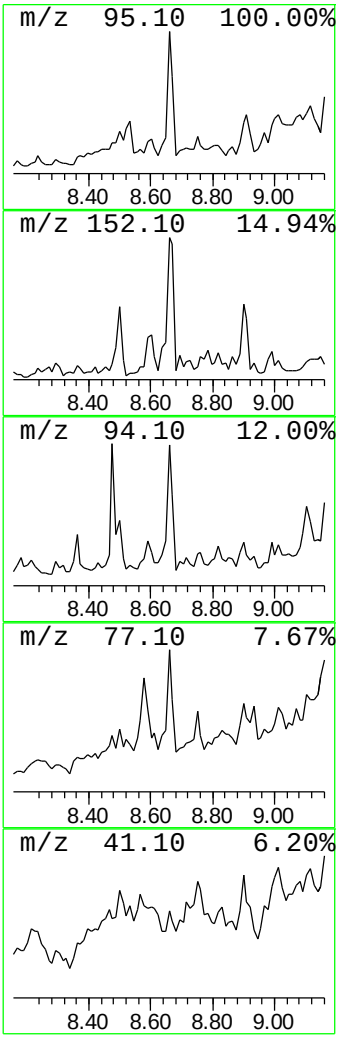
Peak Number 11 unknown8.66 Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.66 | 11.87 ng | 554122 | Naphthalene-d8 | 8.11 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Adamantanol | 152 | C10H16O | 000768-95-6 | 46 |
| 2 | Cyclopentene, 1,2,3-trimethyl- | 110 | C8H14 | 000473-91-6 | 38 |
| 3 | 2-Amino-4-methylbut-2-enenitrile | 110 | C6H10N2 | 1000197-39-9 | 38 |
| 4 | Furan, 2-ethyl-5-methyl- | 110 | C7H10O | 001703-52-2 | 38 |
| 5 | 1,3-Dimethyl-1-cyclohexene | 110 | C8H14 | 002808-76-6 | 38 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.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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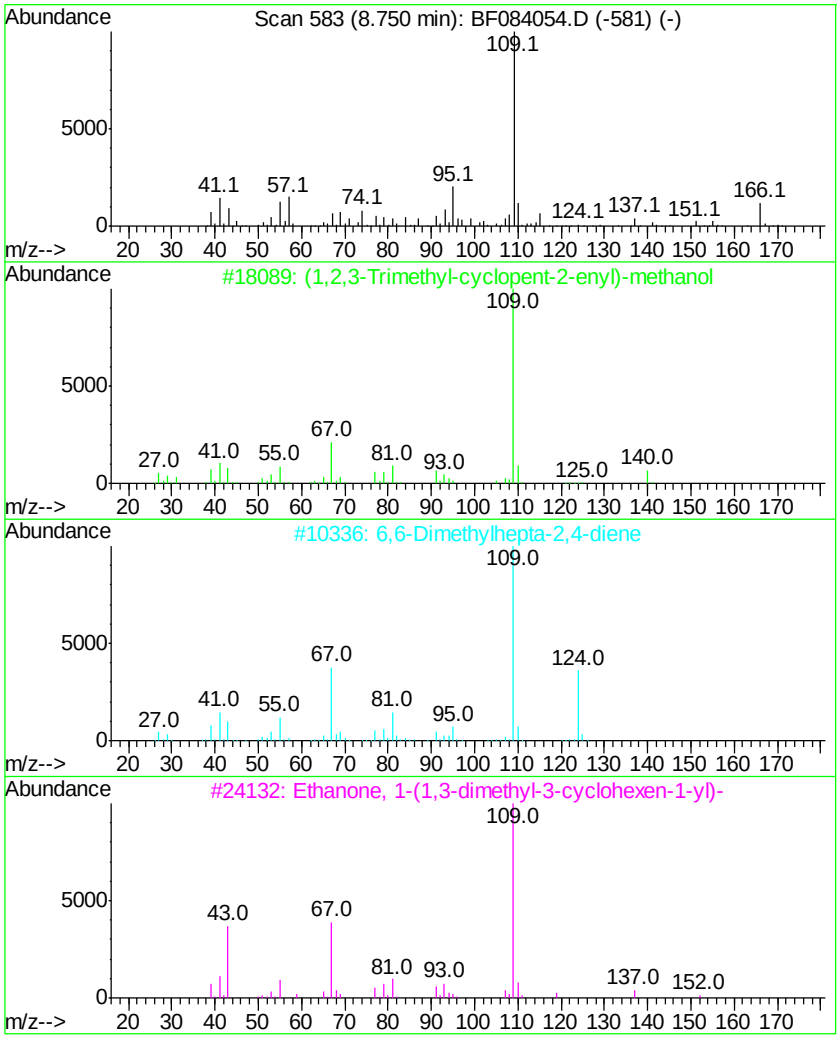
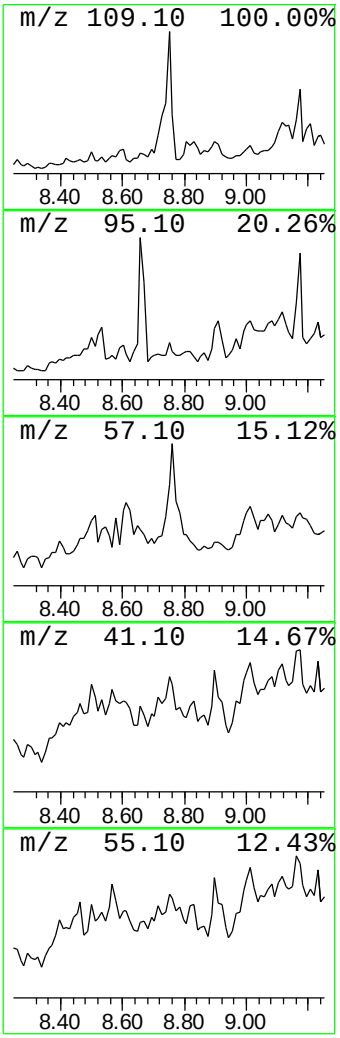
Peak Number 12 (1,2,3-Trimethyl-cyclopent-... Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.75 | 14.93 ng | 697137 | Naphthalene-d8 | 8.11 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | (1,2,3-Trimethyl-cyclopent-2-enyl... | 140 | C9H16O | 1000190-91-3 | 50 |
| 2 | 6,6-Dimethylhepta-2,4-diene | 124 | C9H16 | 1000195-03-3 | 47 |
| 3 | Ethanone, 1-(1,3-dimethyl-3-cycl... | 152 | C10H16O | 051733-68-7 | 42 |
| 4 | trans-8a-Methylperhydroazulen-4(... | 166 | C11H18O | 032166-45-3 | 42 |
| 5 | Cyclopentane, 2-ethylidene-1,1-d... | 124 | C9H16 | 056324-66-4 | 42 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.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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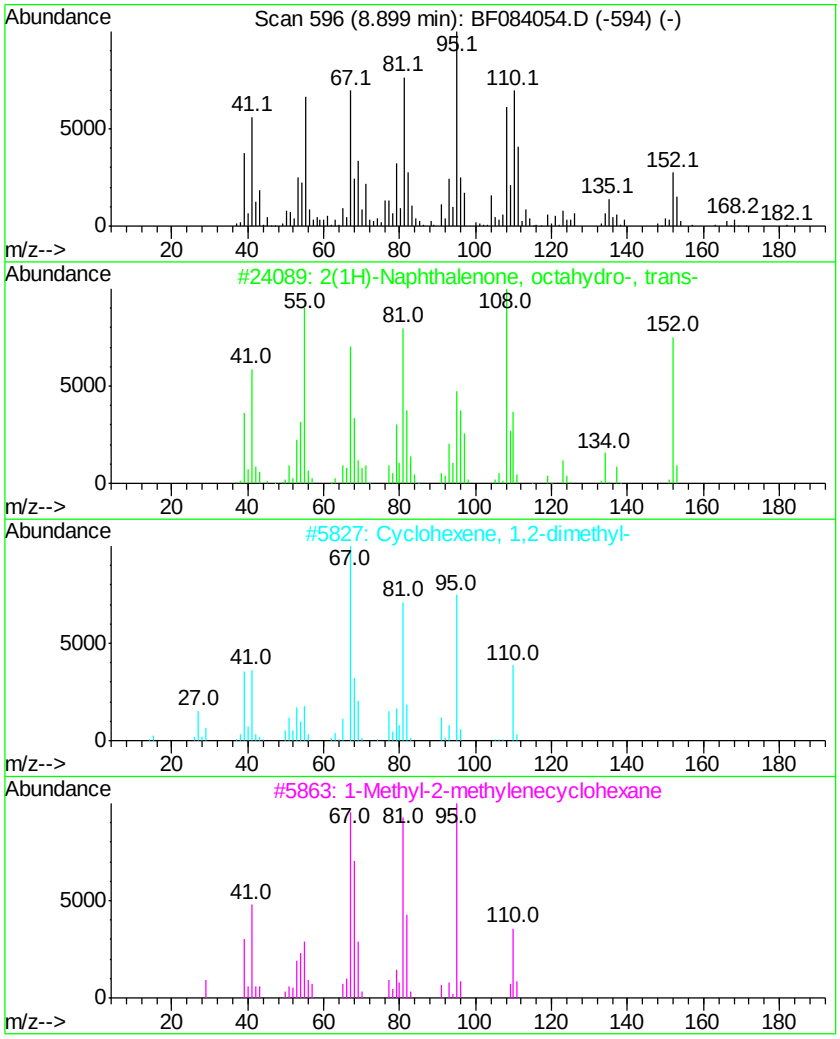
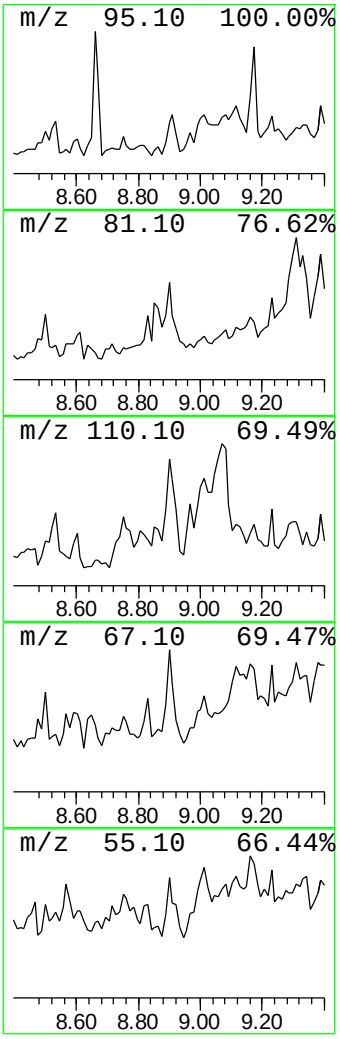
Peak Number 13 2(1H)-Naphthalenone, octahy... Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.90 | 33.37 ng | 1557800 | Naphthalene-d8 | 8.11 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2(1H)-Naphthalenone, octahydro-,... | 152 | C10H16O | 016021-08-2 | 93 |
| 2 | Cyclohexene, 1,2-dimethyl- | 110 | C8H14 | 001674-10-8 | 64 |
| 3 | 1-Methyl-2-methylenecyclohexane | 110 | C8H14 | 002808-75-5 | 52 |
| 4 | Cyclohexene, 1,6-dimethyl- | 110 | C8H14 | 001759-64-4 | 52 |
| 5 | Decalin, syn-1-methyl-, cis- | 152 | C11H20 | 1000158-89-1 | 50 |



# Library Search Compound Report

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Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.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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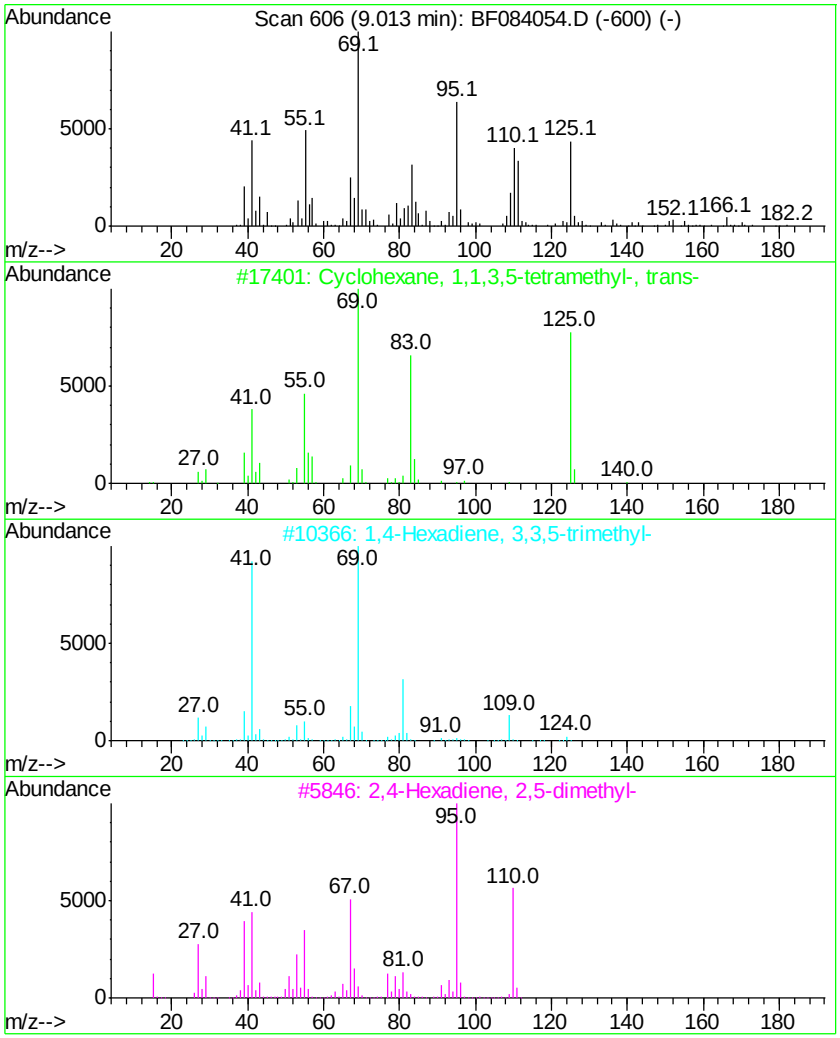
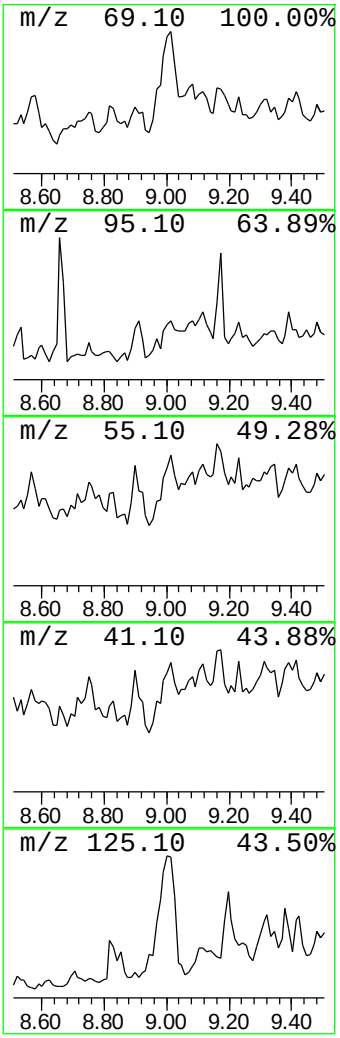
Peak Number 14 unknown9.01 Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.01 | 88.59 ng | 2487380 | Acenaphthene-d10 | 9.88 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20 | 050876-31-8 | 38 |
| 2 | 1,4-Hexadiene, 3,3,5-trimethyl- | 124 | C9H16 | 074753-00-7 | 30 |
| 3 | 2,4-Hexadiene, 2,5-dimethyl- | 110 | C8H14 | 000764-13-6 | 30 |
| 4 | 1-Hexyn-3-ol, 3,5-dimethyl- | 126 | C8H14O | 000107-54-0 | 27 |
| 5 | Cyclooctane, (1-methylpropyl)- | 168 | C12H24 | 016538-89-9 | 27 |



# Library Search Compound Report

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Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.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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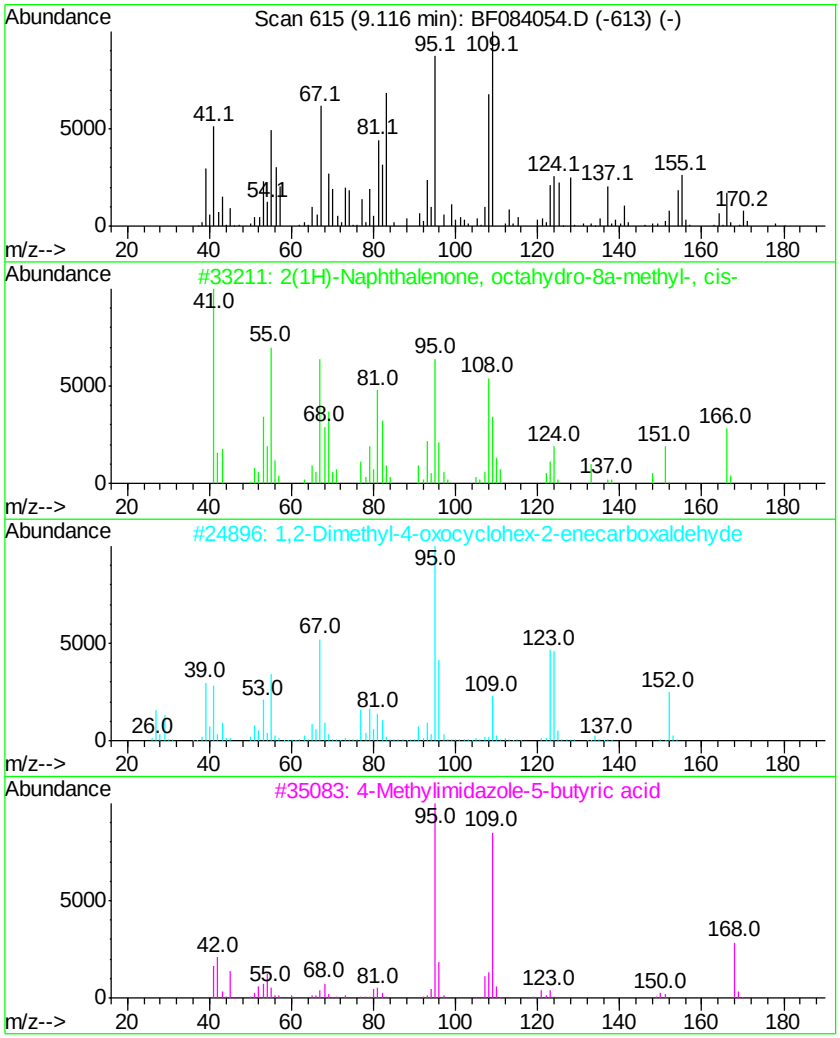
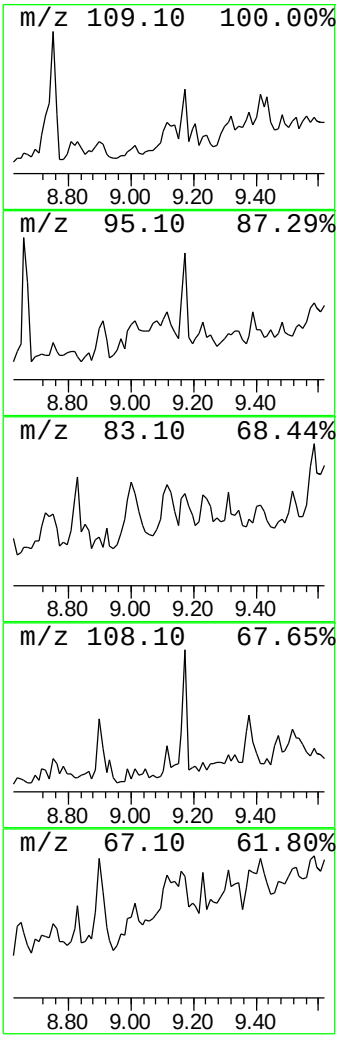
Peak Number 15 unknown9.12 Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.12 | 23.03 ng | 646743 | Acenaphthene-d10 | 9.88 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2(1H)-Naphthalenone, octahydro-8... | 166 | C11H18O | 002530-17-8 | 41 |
| 2 | 1,2-Dimethyl-4-oxocyclohex-2-ene... | 152 | C9H12O2 | 1000187-01-2 | 38 |
| 3 | 4-Methylimidazole-5-butyric acid | 168 | C8H12N2O2 | 1000129-14-7 | 35 |
| 4 | 1,3-Hexadiene, 3-ethyl-2-methyl-... | 124 | C9H16 | 074752-97-9 | 25 |
| 5 | 2-Methylbicyclo[3.2.1]octane | 124 | C9H16 | 1000215-28-0 | 22 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.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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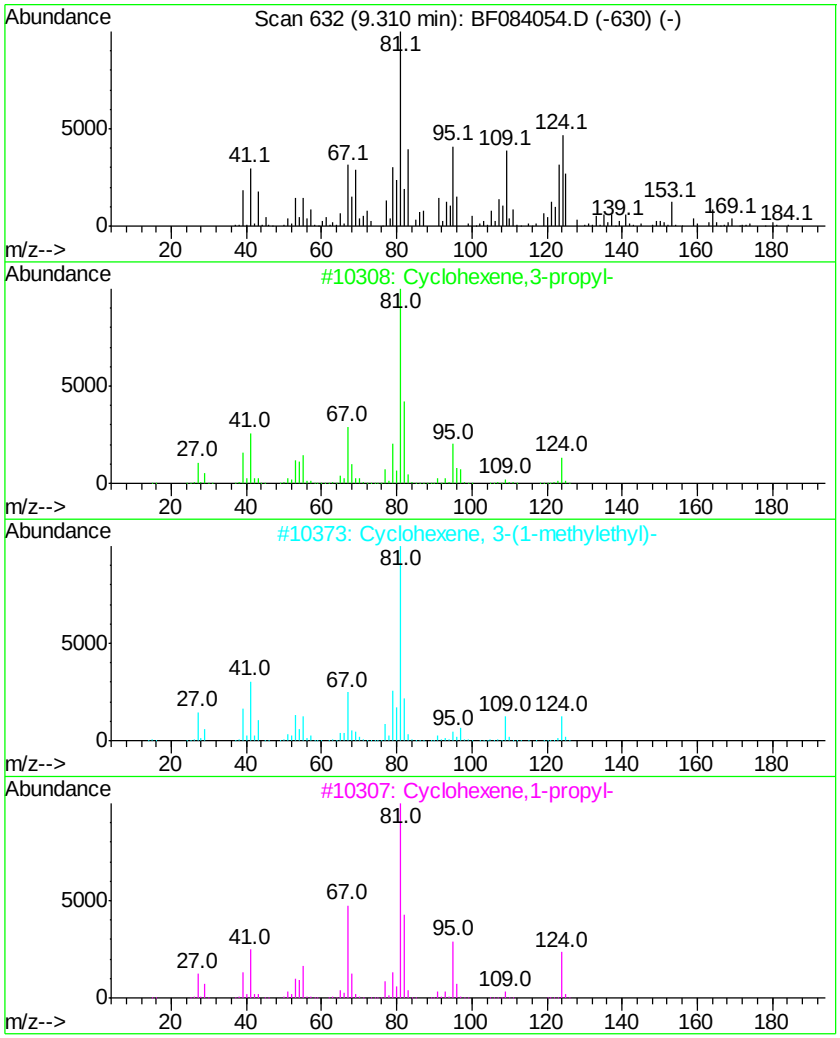
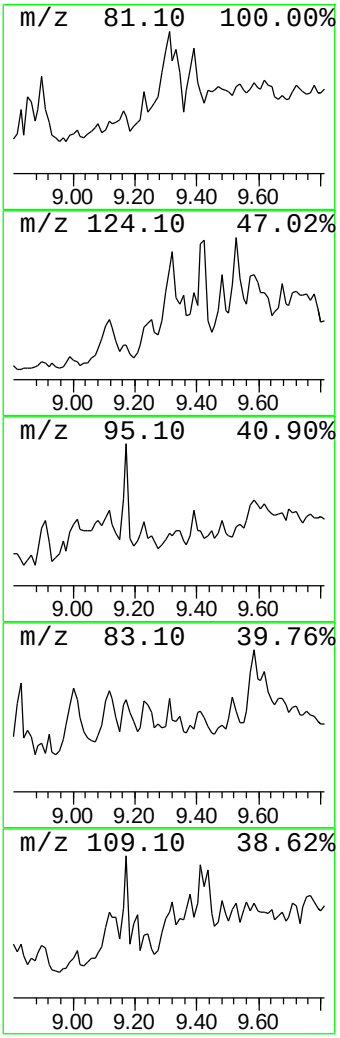
Peak Number 16 unknown9.31 Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.31 | 19.80 ng | 555932 | Acenaphthene-d10 | 9.88 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexene,3-propyl- | 124 | C9H16 | 003983-06-0 | 46 |
| 2 | Cyclohexene, 3-(1-methylethyl)- | 124 | C9H16 | 003983-08-2 | 43 |
| 3 | Cyclohexene,1-propyl- | 124 | C9H16 | 002539-75-5 | 43 |
| 4 | 3-Cyclopentylpropionic acid, but... | 194 | C12H18O2 | 1000292-46-4 | 40 |
| 5 | 6,11-Undecadiene, 1-acetoxy-3,7-... | 252 | C16H28O2 | 1000150-66-0 | 35 |



# Library Search Compound Report

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Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.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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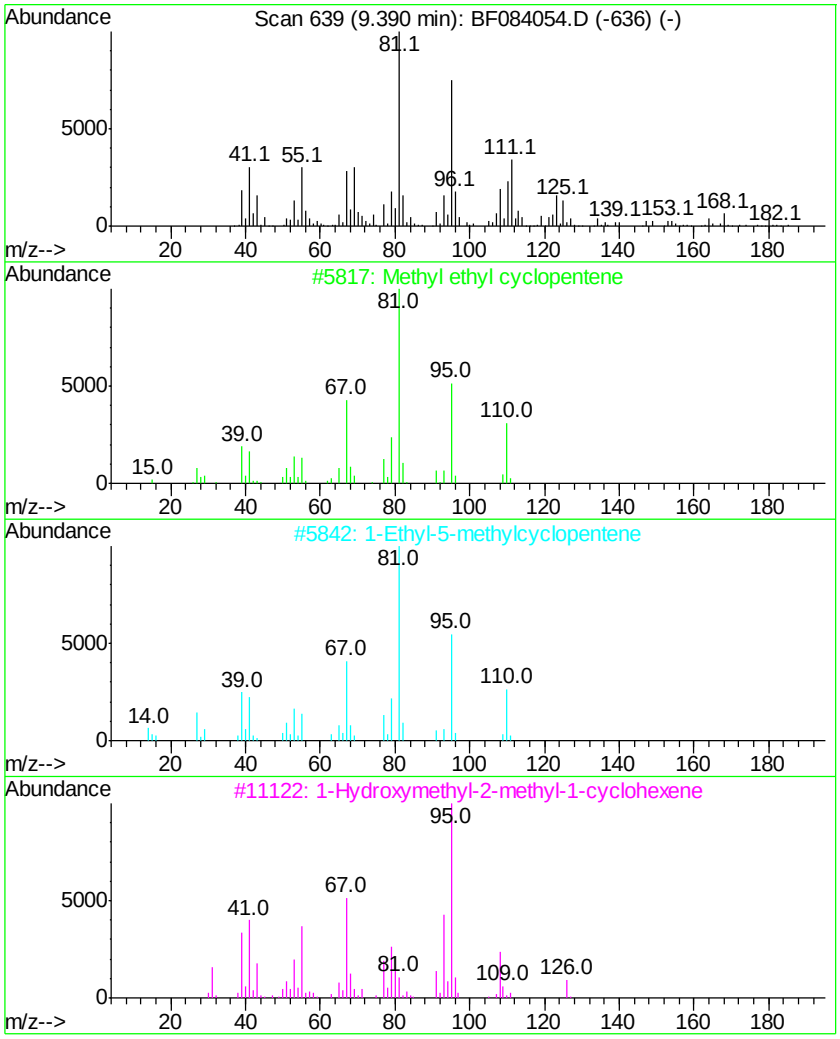
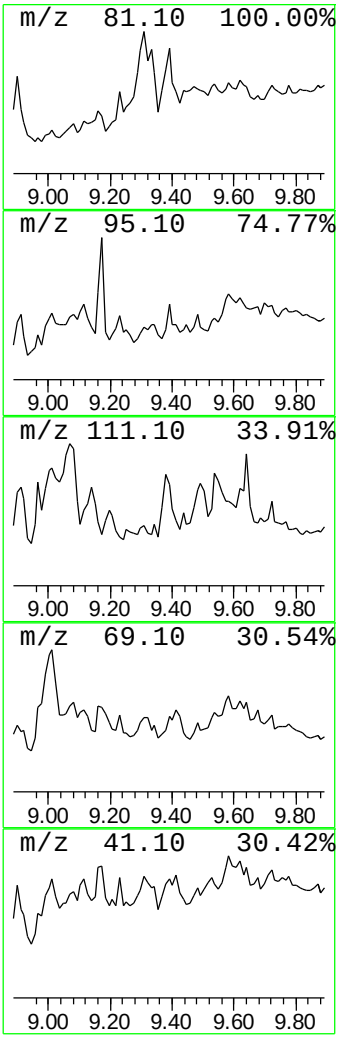
Peak Number 17 unknown9.39 Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.39 | 41.44 ng | 1163510 | Acenaphthene-d10 | 9.88 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Methyl ethyl cyclopentene | 110 | C8H14 | 019780-56-4 | 49 |
| 2 | 1-Ethyl-5-methylcyclopentene | 110 | C8H14 | 097797-57-4 | 43 |
| 3 | 1-Hydroxymethyl-2-methyl-1-cyclo... | 126 | C8H14O | 029474-11-1 | 38 |
| 4 | Cyclohexene, 1-ethyl- | 110 | C8H14 | 001453-24-3 | 38 |
| 5 | 1,3-Dimethyl-1-cyclohexene | 110 | C8H14 | 002808-76-6 | 38 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.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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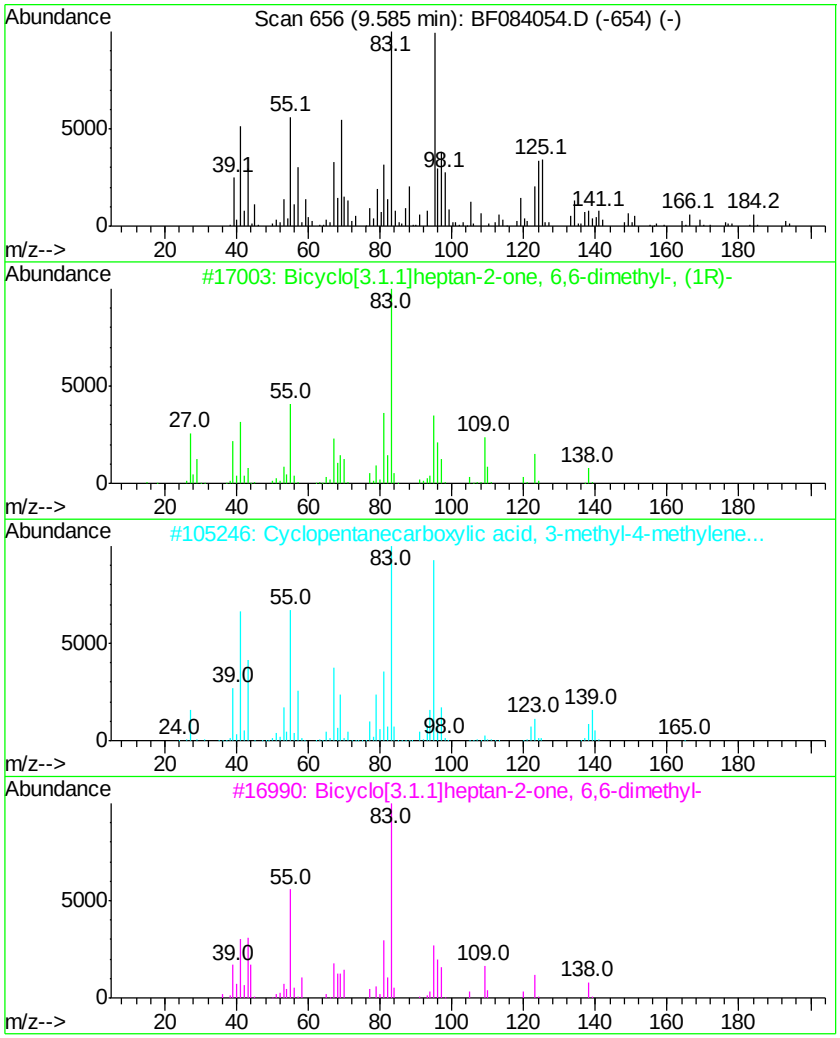
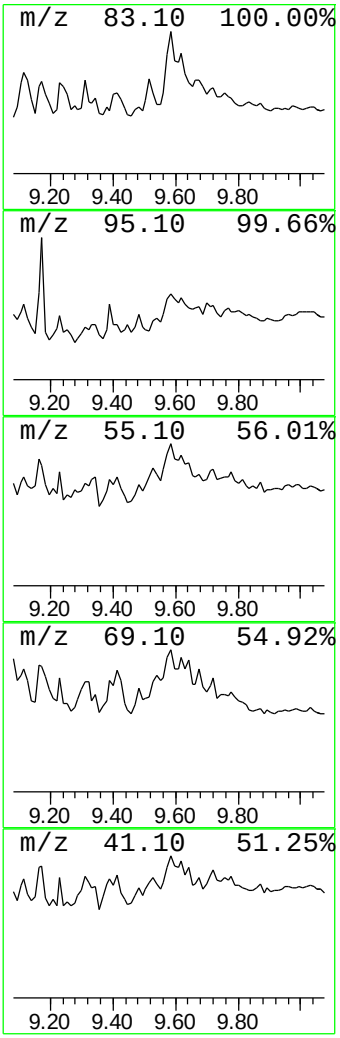
Peak Number 18 Bicyclo[3.1.1]heptan-2-one,... Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.58 | 19.22 ng | 539519 | Acenaphthene-d10 | 9.88 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Bicyclo[3.1.1]heptan-2-one, 6,6-... | 138 | C9H14O | 038651-65-9 | 50 |
| 2 | Cyclopentanecarboxylic acid, 3-m... | 278 | C18H30O2 | 1000152-25-8 | 49 |
| 3 | Bicyclo[3.1.1]heptan-2-one, 6,6-... | 138 | C9H14O | 024903-95-5 | 38 |
| 4 | Bicyclo[3.1.1]heptane, 2,6,6-tri... | 138 | C10H18 | 004755-33-3 | 30 |
| 5 | 1-Tridecyn-4-ol | 196 | C13H24O | 074646-37-0 | 22 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

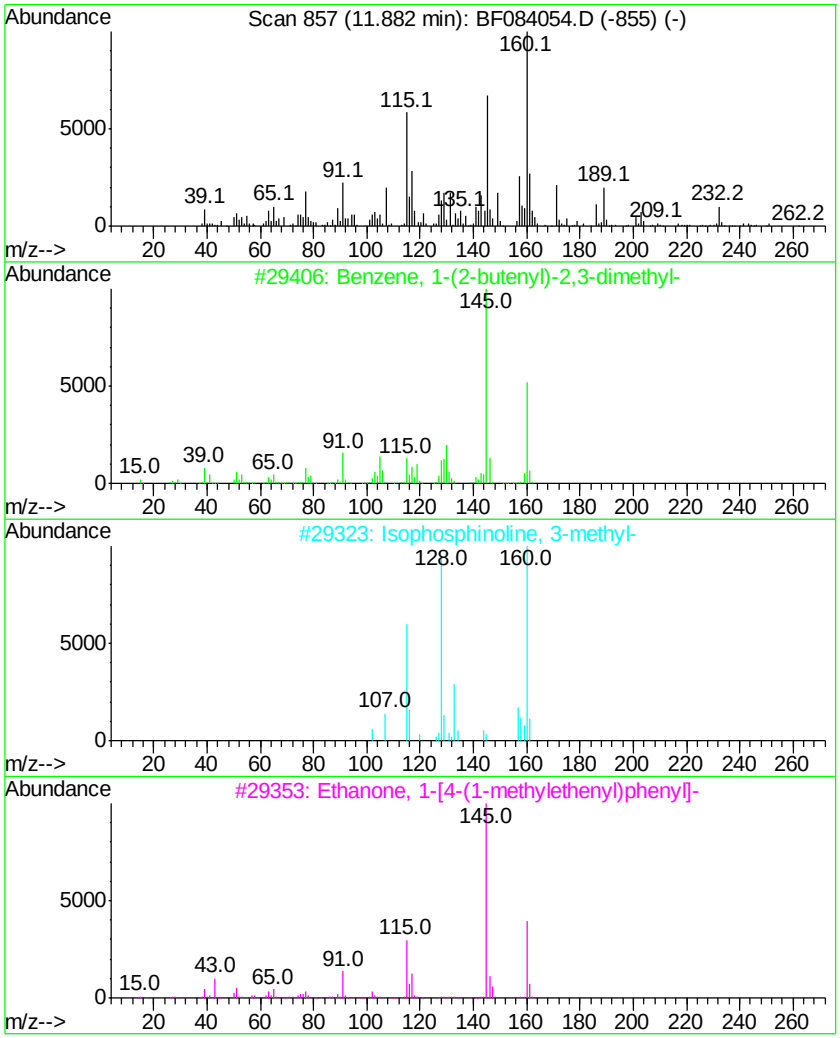
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

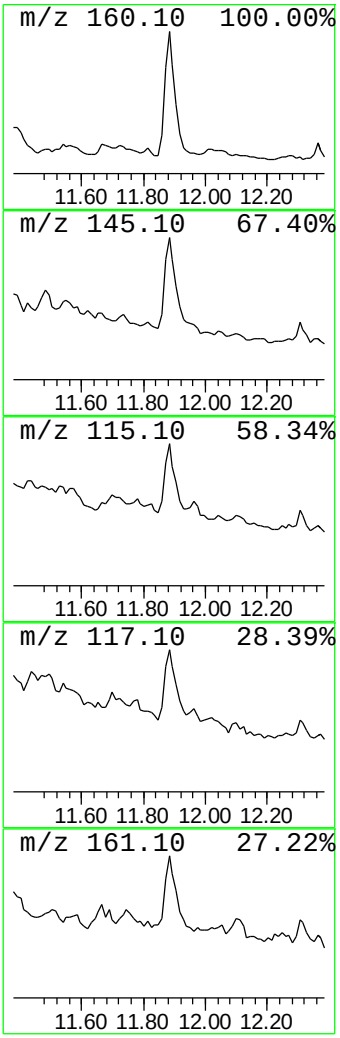
**********

Peak Number 19 Benzene, 1-(2-butenyl)-2,3-... Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.88 | 20.00 ng | 559245 | Phenanthrene-d10 | 11.37 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-(2-butenyl)-2,3-dimet... | 160 | C12H16 | 054340-85-1 | 50 |
| 2 | Isophosphinoline, 3-methyl- | 160 | C10H9P | 049622-63-1 | 45 |
| 3 | Ethanone, 1-[4-(1-methylethenyl)... | 160 | C11H12O | 005359-04-6 | 43 |
| 4 | 1-(Ethylthio)-2-(methylthio)-but... | 160 | C7H12S2 | 1000250-28-8 | 43 |
| 5 | Benzene, 1,3,5-trimethyl-2-(1-me... | 160 | C12H16 | 014679-13-1 | 43 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

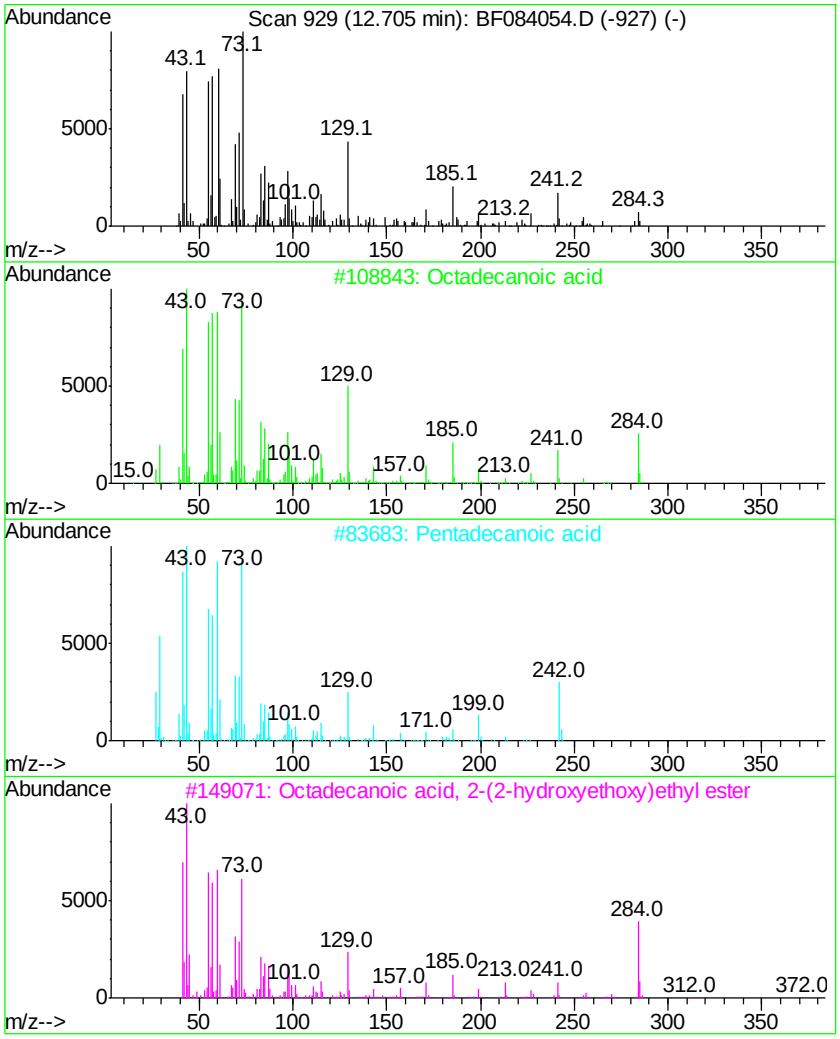
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

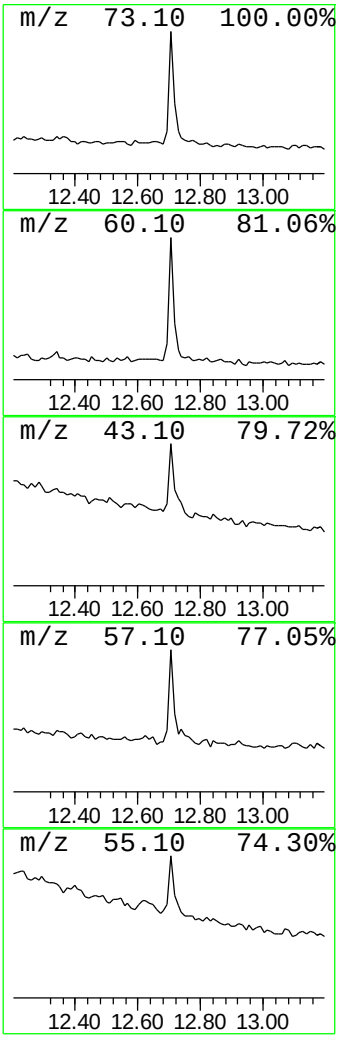
**********

Peak Number 20 Octadecanoic acid Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.70 | 97.39 ng | 1178920 | Chrysene-d12 | 14.00 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Octadecanoic acid | 284 | C18H36O2 | 000057-11-4 | 99 |
| 2 | Pentadecanoic acid | 242 | C15H30O2 | 001002-84-2 | 93 |
| 3 | Octadecanoic acid, 2-(2-hydroxye... | 372 | C22H44O4 | 000106-11-6 | 86 |
| 4 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 80 |
| 5 | n-Decanoic acid | 172 | C10H20O2 | 000334-48-5 | 68 |



# Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF122315\
Data File : BF084054.D
Acq On : 24 Dec 2015 00:58
Operator : UM/SJ
Sample : G4907-05
Misc :
ALS Vial : 39 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-12

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.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 |
| unknown6.60 | 6.60 | 30.6 | ng | 768288 | 1 | 6.82 | 501945 | 20.0 |
| unknown7.02 | 7.02 | 9.1 | ng | 228863 | 1 | 6.82 | 501945 | 20.0 |
| unknown7.86 | 7.86 | 10.3 | ng | 482554 | 2 | 8.11 | 933731 | 20.0 |
| unknown7.95 | 7.95 | 22.1 | ng | 1033220 | 2 | 8.11 | 933731 | 20.0 |
| unknown8.04 | 8.04 | 14.2 | ng | 664285 | 2 | 8.11 | 933731 | 20.0 |
| unknown8.24 | 8.24 | 23.1 | ng | 1078260 | 2 | 8.11 | 933731 | 20.0 |
| 3-Cyclohexen-1-on... | 8.36 | 11.4 | ng | 532212 | 2 | 8.11 | 933731 | 20.0 |
| Cyclohexanone, 2-... | 8.50 | 8.5 | ng | 396891 | 2 | 8.11 | 933731 | 20.0 |
| Benzeneethanol, .... | 8.58 | 26.8 | ng | 1253080 | 2 | 8.11 | 933731 | 20.0 |
| unknown8.66 | 8.66 | 11.9 | ng | 554122 | 2 | 8.11 | 933731 | 20.0 |
| (1,2,3-Trimethyl-... | 8.75 | 14.9 | ng | 697137 | 2 | 8.11 | 933731 | 20.0 |
| 2(1H)-Naphthaleno... | 8.90 | 33.4 | ng | 1557800 | 2 | 8.11 | 933731 | 20.0 |
| unknown9.01 | 9.01 | 88.6 | ng | 2487380 | 3 | 9.88 | 561547 | 20.0 |
| unknown9.12 | 9.12 | 23.0 | ng | 646743 | 3 | 9.88 | 561547 | 20.0 |
| unknown9.31 | 9.31 | 19.8 | ng | 555932 | 3 | 9.88 | 561547 | 20.0 |
| unknown9.39 | 9.39 | 41.4 | ng | 1163510 | 3 | 9.88 | 561547 | 20.0 |
| Bicyclo[3.1.1]hep... | 9.58 | 19.2 | ng | 539519 | 3 | 9.88 | 561547 | 20.0 |
| Benzene, 1-(2-but... | 11.88 | 20.0 | ng | 559245 | 4 | 11.37 | 559245 | 20.0 |
| Octadecanoic acid | 12.70 | 97.4 | ng | 1178920 | 5 | 14.00 | 242110 | 20.0 |