LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

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-BF121716.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 | 4.567 | 208 | 217 | 220 | rVB | 146945 | 285072 | 1.03% | 0.112% |
| 2 | 4.864 | 235 | 243 | 245 | rBV3 | 161308 | 337283 | 1.22% | 0.133% |
| 3 | 4.933 | 245 | 249 | 251 | rVV3 | 546942 | 1320744 | 4.78% | 0.520% |
| 4 | 4.978 | 251 | 253 | 257 | rVV3 | 194519 | 456317 | 1.65% | 0.180% |
| 5 | 5.047 | 257 | 259 | 261 | rVV | 298850 | 418513 | 1.52% | 0.165% |
| 6 | 5.367 | 285 | 287 | 292 | rBV | 1562950 | 1986752 | 7.19% | 0.782% |
| 7 | 5.539 | 299 | 302 | 304 | rVB2 | 1046289 | 1873833 | 6.78% | 0.738% |
| 8 | 5.584 | 304 | 306 | 307 | rBV | 691842 | 718167 | 2.60% | 0.283% |
| 9 | 5.630 | 309 | 310 | 311 | rVB | 580748 | 398393 | 1.44% | 0.157% |
| 10 | 5.653 | 311 | 312 | 318 | rVB2 | 746041 | 1203620 | 4.36% | 0.474% |
| 11 | 5.790 | 322 | 324 | 327 | rVB | 1370778 | 1319609 | 4.78% | 0.520% |
| 12 | 5.916 | 328 | 335 | 337 | rBV4 | 341551 | 875050 | 3.17% | 0.345% |
| 13 | 5.950 | 337 | 338 | 341 | rVB3 | 266427 | 398814 | 1.44% | 0.157% |
| 14 | 6.076 | 346 | 349 | 354 | rVB3 | 756908 | 1733528 | 6.28% | 0.683% |
| 15 | 6.167 | 354 | 357 | 359 | rBV | 1906440 | 3353926 | 12.14% | 1.321% |
| 16 | 6.201 | 359 | 360 | 363 | rVB3 | 1155558 | 1864209 | 6.75% | 0.734% |
| 17 | 6.259 | 363 | 365 | 369 | rBV3 | 911094 | 1611365 | 5.83% | 0.635% |
| 18 | 6.361 | 373 | 374 | 375 | rBV | 342249 | 422520 | 1.53% | 0.166% |
| 19 | 6.396 | 375 | 377 | 379 | rBV | 605181 | 800800 | 2.90% | 0.315% |
| 20 | 6.453 | 379 | 382 | 385 | rVB2 | 996711 | 1600166 | 5.79% | 0.630% |
| 21 | 6.544 | 387 | 390 | 394 | rVB | 2671372 | 3836172 | 13.89% | 1.511% |
| 22 | 6.613 | 394 | 396 | 397 | rBV | 368433 | 386075 | 1.40% | 0.152% |
| 23 | 6.636 | 397 | 398 | 401 | rBV2 | 483704 | 1099025 | 3.98% | 0.433% |
| 24 | 6.693 | 401 | 403 | 404 | rVB | 343240 | 392124 | 1.42% | 0.154% |
| 25 | 6.762 | 406 | 409 | 413 | rVB3 | 1439482 | 2714390 | 9.83% | 1.069% |
| 26 | 6.853 | 413 | 417 | 419 | rVB | 7426993 | 10474446 | 37.92% | 4.125% |
| 27 | 6.887 | 419 | 420 | 421 | rVB | 1025736 | 703655 | 2.55% | 0.277% |
| 28 | 6.922 | 421 | 423 | 426 | rBV2 | 4244861 | 5985258 | 21.67% | 2.357% |
| 29 | 6.979 | 426 | 428 | 430 | rBV | 1078415 | 1556772 | 5.64% | 0.613% |
| 30 | 7.013 | 430 | 431 | 433 | rVB | 967535 | 790845 | 2.86% | 0.311% |
| 31 | 7.059 | 433 | 435 | 437 | rBV3 | 330425 | 592881 | 2.15% | 0.233% |
| 32 | 7.104 | 437 | 439 | 442 | rVB2 | 1671665 | 2645420 | 9.58% | 1.042% |
| 33 | 7.184 | 442 | 446 | 448 | rBV3 | 689186 | 1724030 | 6.24% | 0.679% |
| 34 | 7.230 | 448 | 450 | 452 | rVB3 | 826799 | 1135445 | 4.11% | 0.447% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

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-BF121716.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 7.299 | 452 | 456 | 458 | rBV2 | 3080452 | 7786495 | 28.19% | 3.066% |
| 36 | 7.333 | 458 | 459 | 461 | rVB2 | 2454671 | 1772068 | 6.42% | 0.698% |
| 37 | 7.424 | 461 | 467 | 468 | rBV4 | 1538257 | 3053208 | 11.05% | 1.202% |
| 38 | 7.447 | 468 | 469 | 471 | rVB | 1029262 | 1372481 | 4.97% | 0.540% |
| 39 | 7.493 | 471 | 473 | 476 | rBV4 | 1073400 | 2726854 | 9.87% | 1.074% |
| 40 | 7.539 | 476 | 477 | 479 | rBV2 | 1421488 | 1296644 | 4.69% | 0.511% |
| 41 | 7.642 | 482 | 486 | 488 | rBV4 | 1080003 | 3115010 | 11.28% | 1.227% |
| 42 | 7.733 | 492 | 494 | 496 | rVV3 | 1842324 | 3595589 | 13.02% | 1.416% |
| 43 | 7.802 | 496 | 500 | 505 | rVV2 | 6271074 | 13578833 | 49.16% | 5.347% |
| 44 | 7.893 | 505 | 508 | 510 | rVB3 | 2121122 | 3463701 | 12.54% | 1.364% |
| 45 | 8.065 | 520 | 523 | 525 | rBV4 | 2556806 | 5600824 | 20.28% | 2.205% |
| 46 | 8.316 | 542 | 545 | 546 | rBV | 3642290 | 5482357 | 19.85% | 2.159% |
| 47 | 8.487 | 559 | 560 | 562 | rBV2 | 1189059 | 1735036 | 6.28% | 0.683% |
| 48 | 9.139 | 615 | 617 | 618 | rVB | 2393288 | 2011219 | 7.28% | 0.792% |
| 49 | 10.133 | 700 | 704 | 708 | rBV4 | 2425980 | 10601897 | 38.38% | 4.175% |
| 50 | 10.350 | 716 | 723 | 727 | rBV2 | 5649811 | 27620906 | 100.00% | 10.876% |
| 51 | 10.465 | 731 | 733 | 736 | rVV4 | 3171221 | 6188341 | 22.40% | 2.437% |
| 52 | 10.545 | 736 | 740 | 742 | rVV3 | 2009520 | 6956728 | 25.19% | 2.739% |
| 53 | 10.590 | 742 | 744 | 749 | rVB4 | 3516010 | 7953331 | 28.79% | 3.132% |
| 54 | 10.739 | 755 | 757 | 761 | rBV4 | 2749630 | 8044324 | 29.12% | 3.168% |
| 55 | 10.830 | 763 | 765 | 766 | rVV2 | 1706042 | 2732732 | 9.89% | 1.076% |
| 56 | 10.865 | 766 | 768 | 770 | rVV2 | 2405373 | 3335064 | 12.07% | 1.313% |
| 57 | 10.922 | 770 | 773 | 775 | rVV3 | 1464613 | 3088625 | 11.18% | 1.216% |
| 58 | 10.991 | 775 | 779 | 781 | rVV5 | 2156526 | 5292542 | 19.16% | 2.084% |
| 59 | 11.070 | 784 | 786 | 789 | rVB3 | 1319158 | 2513164 | 9.10% | 0.990% |
| 60 | 11.139 | 789 | 792 | 795 | rVB2 | 3544688 | 6162471 | 22.31% | 2.427% |
| 61 | 11.219 | 797 | 799 | 801 | rVV3 | 1045702 | 1379671 | 5.00% | 0.543% |
| 62 | 11.356 | 804 | 811 | 814 | rBV2 | 4515010 | 13668496 | 49.49% | 5.382% |
| 63 | 11.459 | 814 | 820 | 822 | rVV3 | 2282565 | 5804051 | 21.01% | 2.285% |
| 64 | 11.516 | 822 | 825 | 829 | rVB | 2131583 | 3673105 | 13.30% | 1.446% |
| 65 | 11.768 | 843 | 847 | 851 | rBV | 3137671 | 6181096 | 22.38% | 2.434% |
| 66 | 11.871 | 855 | 856 | 858 | rVB2 | 1017854 | 967705 | 3.50% | 0.381% |
| 67 | 12.031 | 868 | 870 | 873 | rBV3 | 567537 | 1079267 | 3.91% | 0.425% |
| 68 | 12.111 | 873 | 877 | 883 | rVV | 3682652 | 9018419 | 32.65% | 3.551% |
| 69 | 12.236 | 886 | 888 | 891 | rVB | 684342 | 747202 | 2.71% | 0.294% |
| 70 | 12.625 | 920 | 922 | 928 | rVB | 500284 | 820957 | 2.97% | 0.323% |
| 71 | 12.876 | 941 | 944 | 946 | rBV | 3794521 | 3627595 | 13.13% | 1.428% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

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-BF121716.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 12.979 | 951 | 953 | 955 | rBV2 | 276882 | 443941 | 1.61% | 0.175% |
| 73 | 13.162 | 967 | 969 | 971 | rVB | 307541 | 351922 | 1.27% | 0.139% |
| 74 | 13.916 | 1033 | 1035 | 1038 | rBV | 1209560 | 1143627 | 4.14% | 0.450% |
| 75 | 15.311 | 1155 | 1157 | 1160 | rBV | 656322 | 949825 | 3.44% | 0.374% |

Sum of corrected areas: 253952542

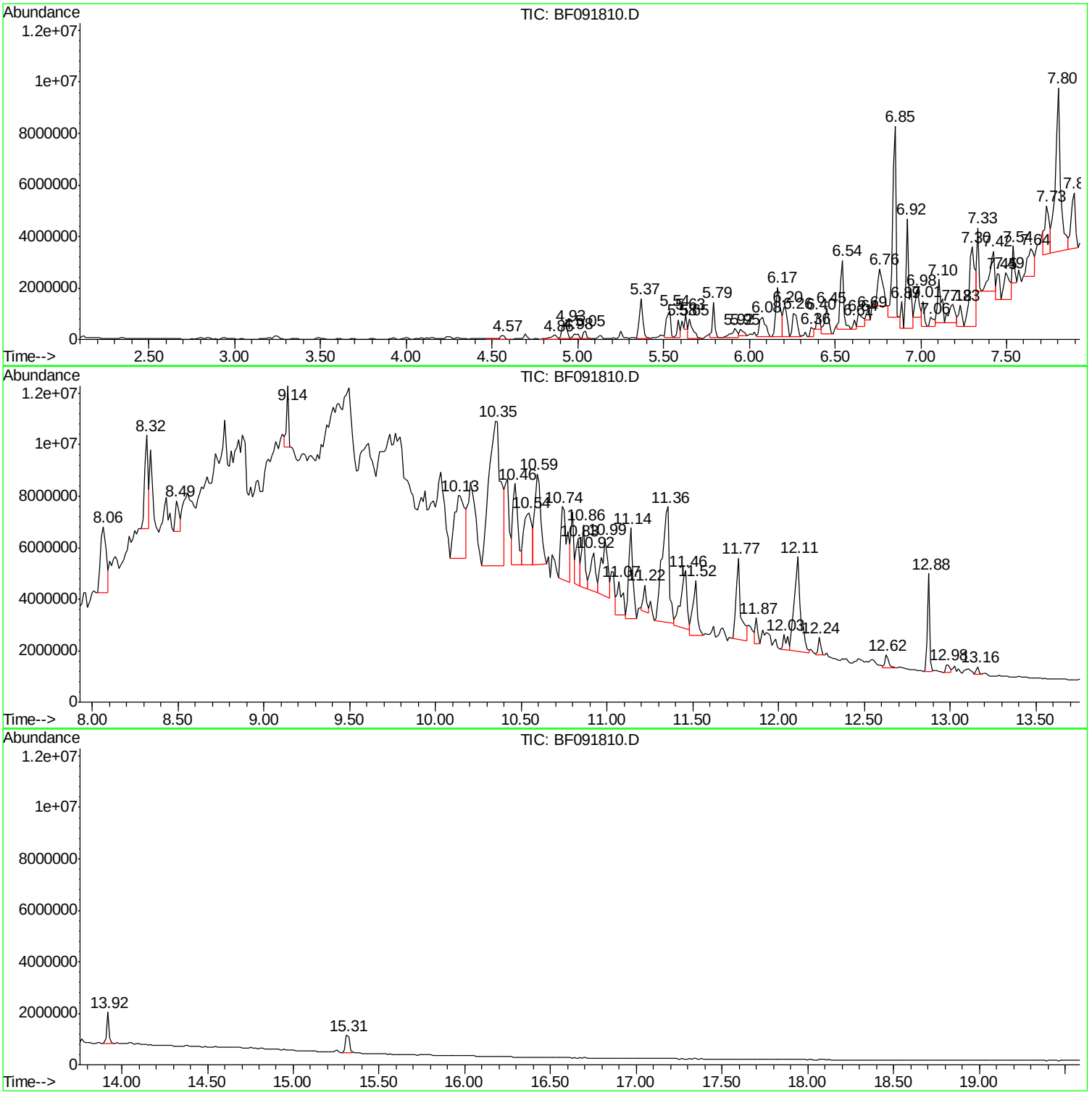
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.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\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

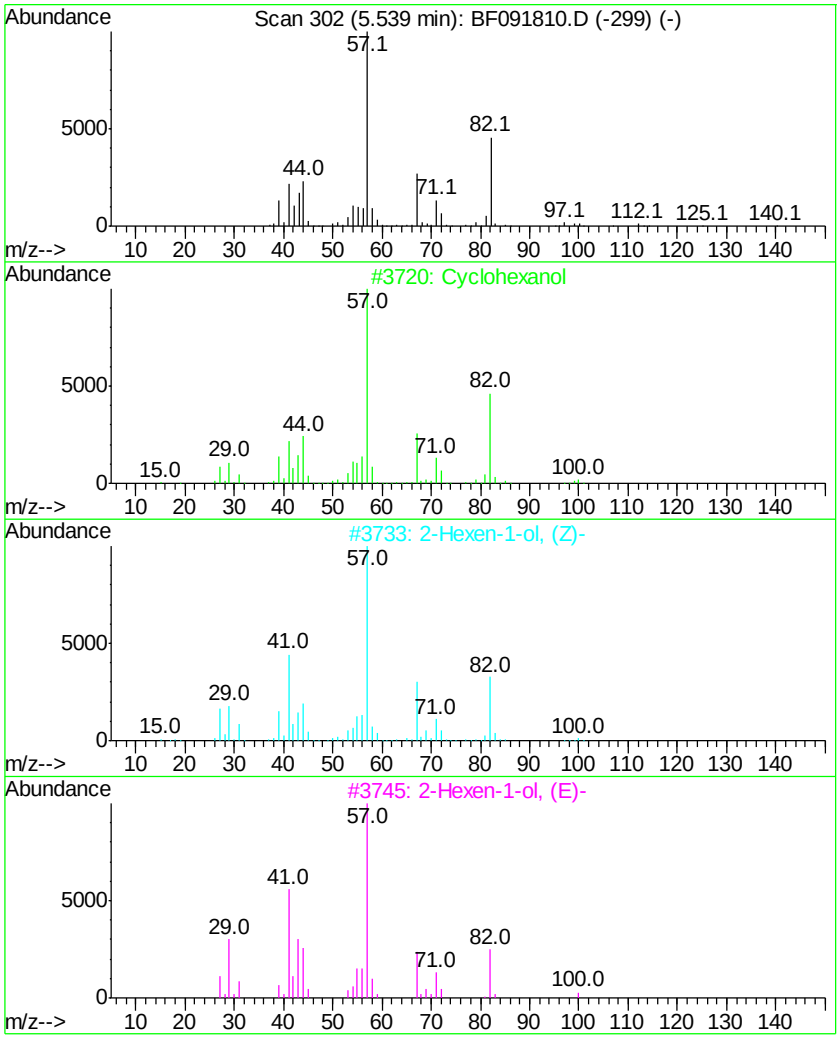
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

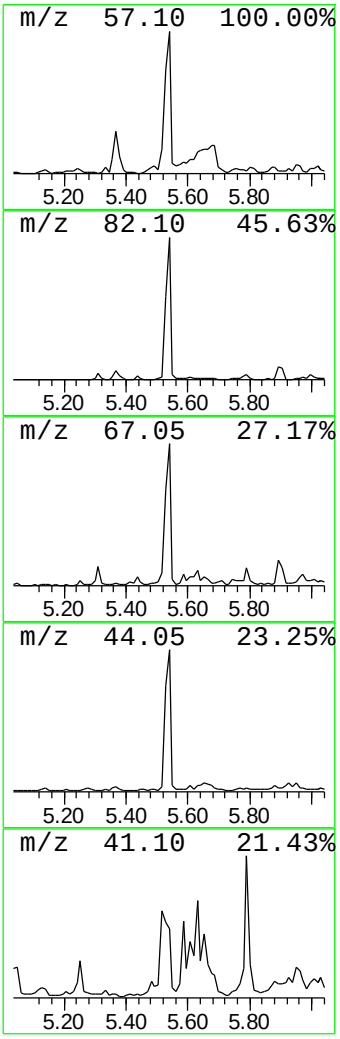
**********

Peak Number 1 Cyclohexanol Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.54 | 13.81 ng | 1873830 | 1,4-Dichlorobenzene-d4 | 6.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexanol | 100 | C6H12O | 000108-93-0 | 93 |
| 2 | 2-Hexen-1-ol, (Z)- | 100 | C6H12O | 000928-94-9 | 87 |
| 3 | 2-Hexen-1-ol, (E)- | 100 | C6H12O | 000928-95-0 | 64 |
| 4 | Cyclohexylmethylsilane | 128 | C7H16Si | 002096-99-3 | 45 |
| 5 | 2-Hepten-1-ol, (Z)- | 114 | C7H14O | 055454-22-3 | 43 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

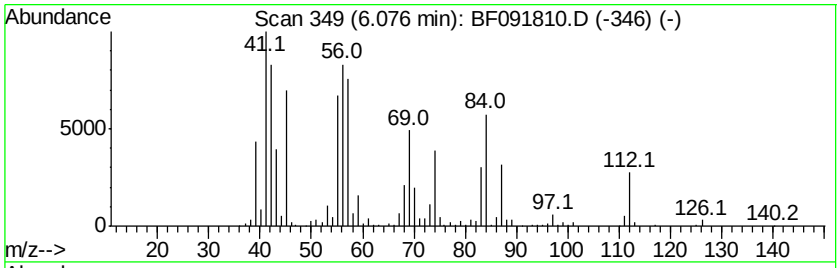
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

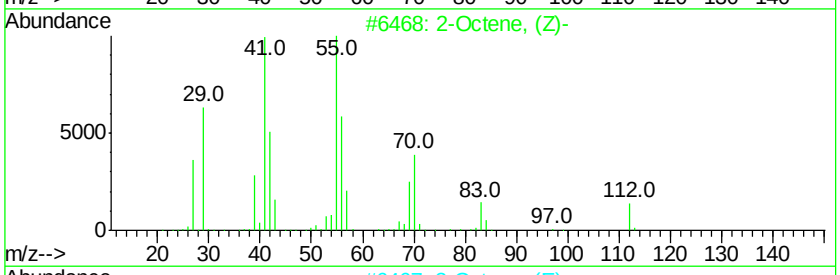
**********

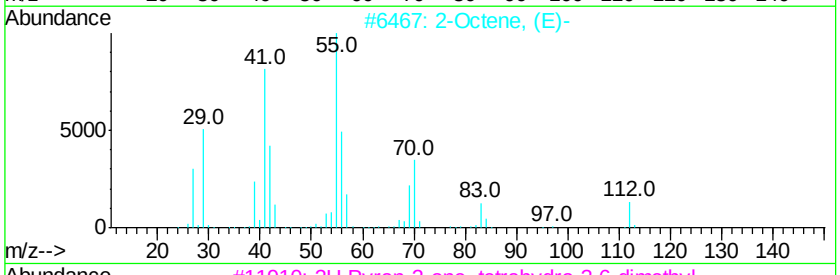
Peak Number 2 unknown6.08 Concentration Rank 16

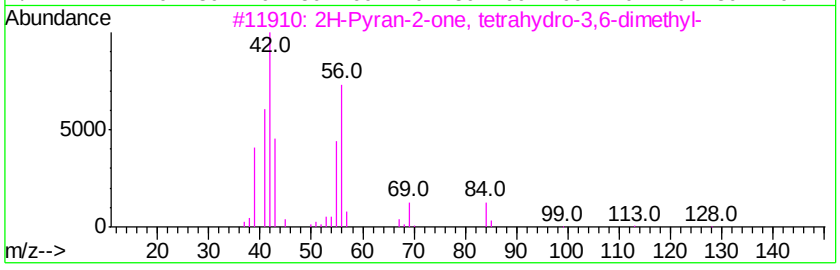
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.08 | 12.77 ng | 1733530 | 1,4-Dichlorobenzene-d4 | 6.76 |

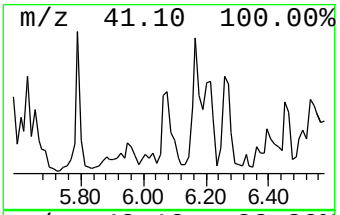
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Octene, (Z)- | 112 | C8H16 | 007642-04-8 | 46 |
| 2 | 2-Octene, (E)- | 112 | C8H16 | 013389-42-9 | 43 |
| 3 | 2H-Pyran-2-one, tetrahydro-3,6-d... | 128 | C7H12O2 | 003720-22-7 | 43 |
| 4 | Cyclooctane | 112 | C8H16 | 000292-64-8 | 38 |
| 5 | 2-Heptene, 6-methyl- | 112 | C8H16 | 073548-72-8 | 38 |

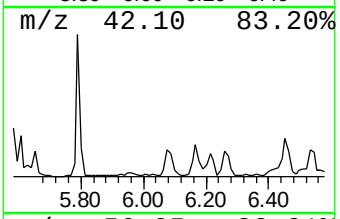


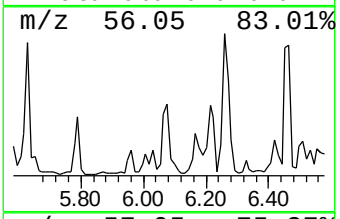



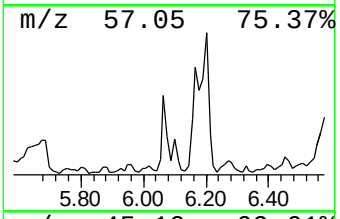



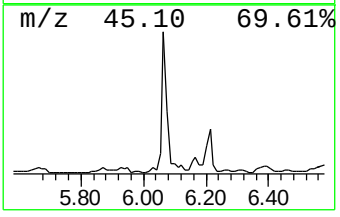



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Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

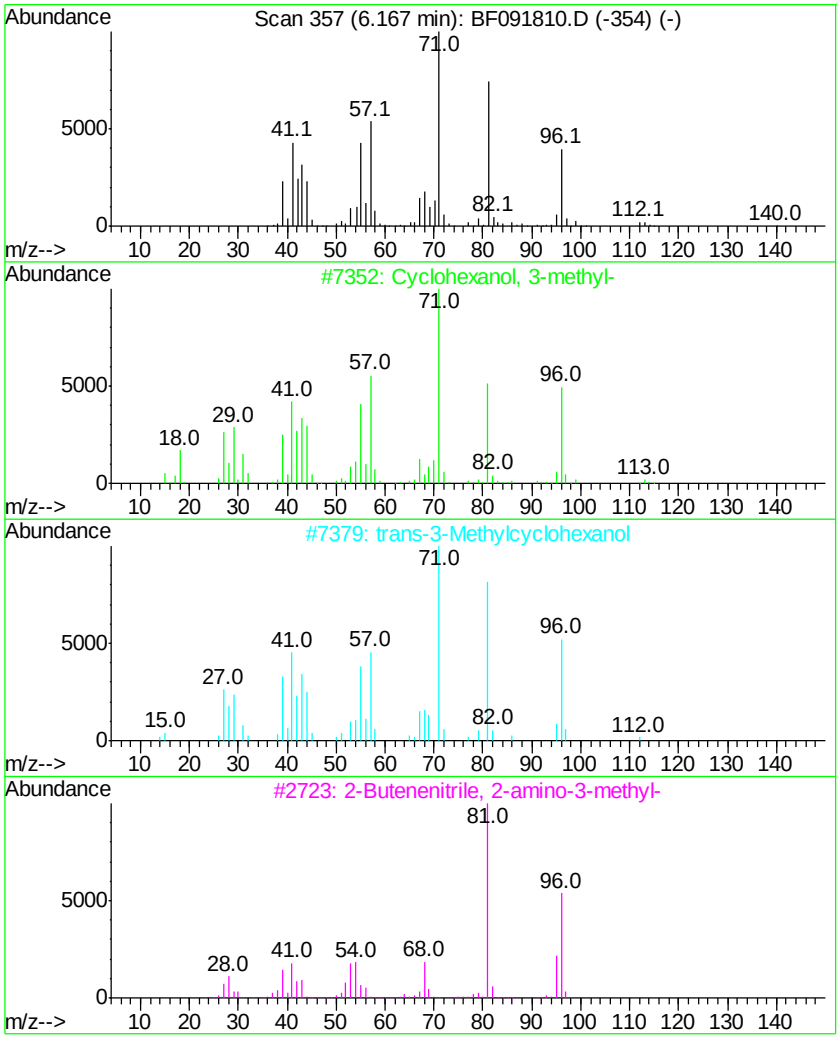
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

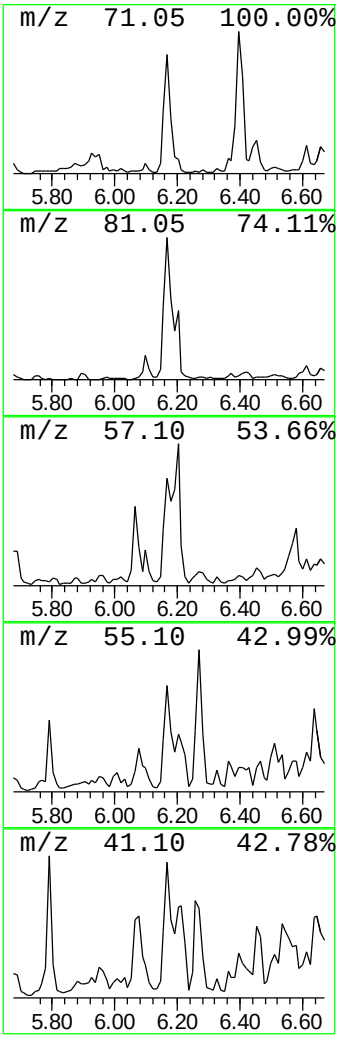
**********

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

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.17 | 24.71 ng | 3353930 | 1,4-Dichlorobenzene-d4 | 6.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexanol, 3-methyl- | 114 | C7H14O | 000591-23-1 | 92 |
| 2 | trans-3-Methylcyclohexanol | 114 | C7H14O | 007443-55-2 | 90 |
| 3 | 2-Butenenitrile, 2-amino-3-methyl- | 96 | C5H8N2 | 1000196-28-0 | 35 |
| 4 | 2,4-Hexadiene, 2-methyl- | 96 | C7H12 | 028823-41-8 | 35 |
| 5 | Cyclohexene, 4-methyl- | 96 | C7H12 | 000591-47-9 | 35 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

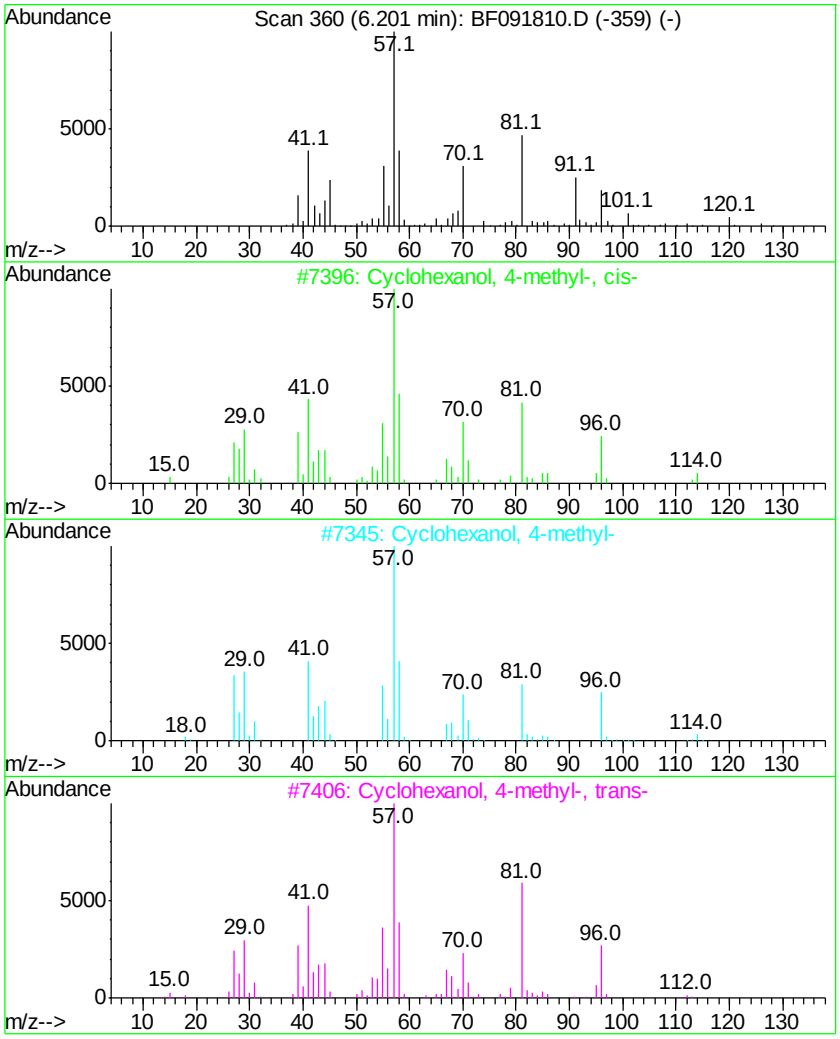
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

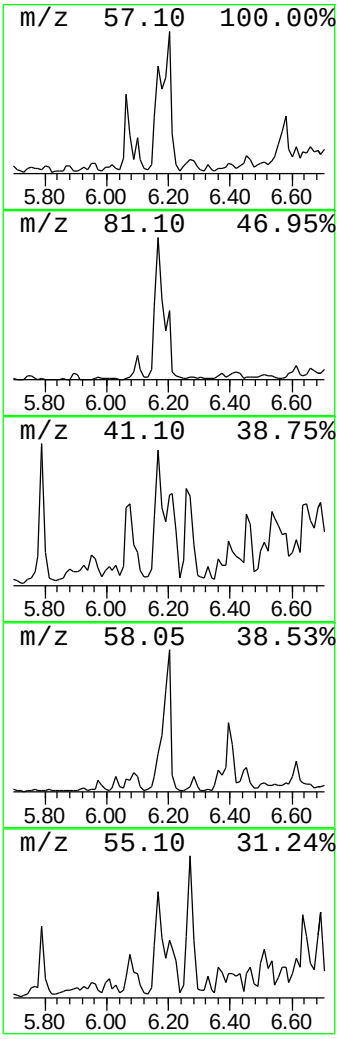
**********

Peak Number 4 unknown6.20 Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.20 | 13.74 ng | 1864210 | 1,4-Dichlorobenzene-d4 | 6.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexanol, 4-methyl-, cis- | 114 | C7H14O | 007731-28-4 | 38 |
| 2 | Cyclohexanol, 4-methyl- | 114 | C7H14O | 000589-91-3 | 37 |
| 3 | Cyclohexanol, 4-methyl-, trans- | 114 | C7H14O | 007731-29-5 | 25 |
| 4 | Oxirane, (butoxymethyl)- | 130 | C7H14O2 | 002426-08-6 | 25 |
| 5 | Oxirane, 2,2'-[oxybis(methylene)... | 130 | C6H10O3 | 002238-07-5 | 23 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

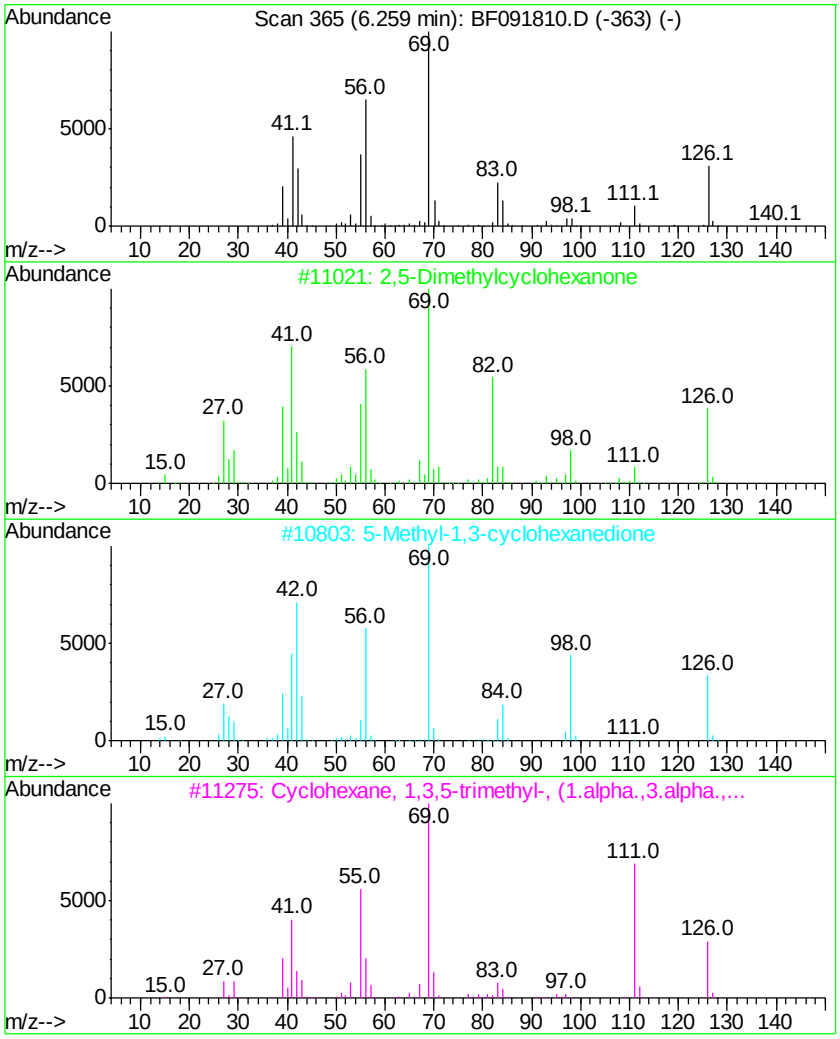
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

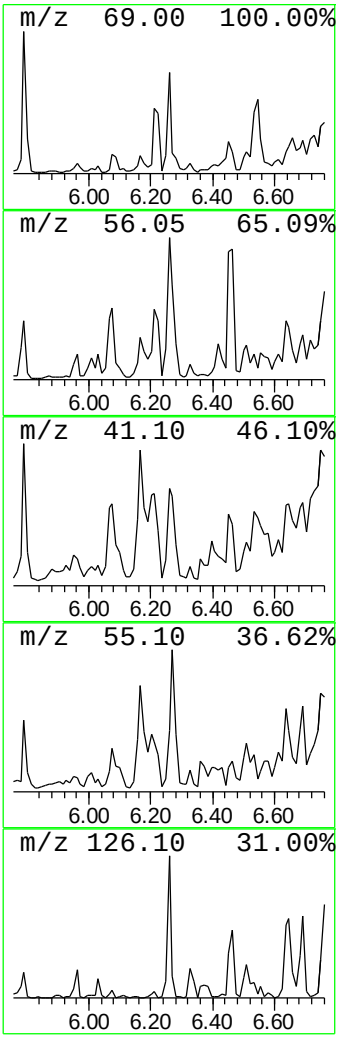
**********

Peak Number 5 2,5-Dimethylcyclohexanone Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.26 | 11.87 ng | 1611370 | 1,4-Dichlorobenzene-d4 | 6.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2,5-Dimethylcyclohexanone | 126 | C8H14O | 000932-51-4 | 87 |
| 2 | 5-Methyl-1,3-cyclohexanedione | 126 | C7H10O2 | 004341-24-6 | 59 |
| 3 | Cyclohexane, 1,3,5-trimethyl-, (... | 126 | C9H18 | 001795-26-2 | 53 |
| 4 | Cyclohexanone, 3,5-dimethyl- | 126 | C8H14O | 002320-30-1 | 53 |
| 5 | Cyclohexanone, 3-methyl-, (R)- | 112 | C7H12O | 013368-65-5 | 49 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

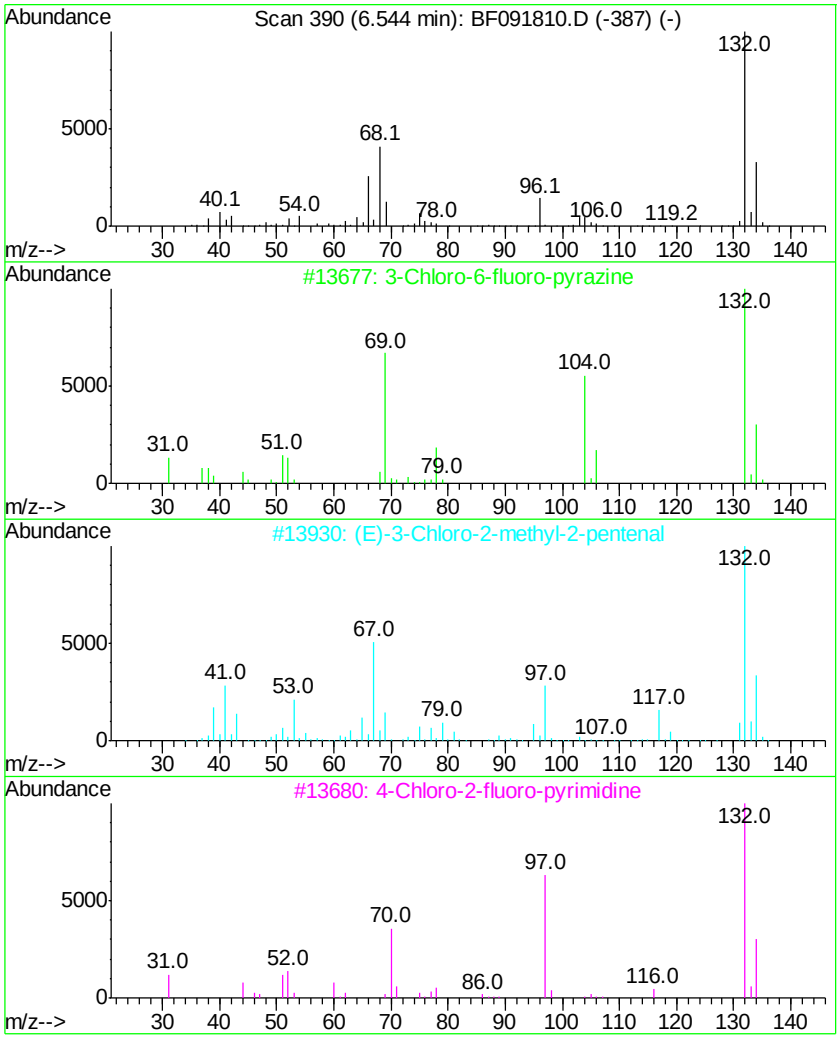
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

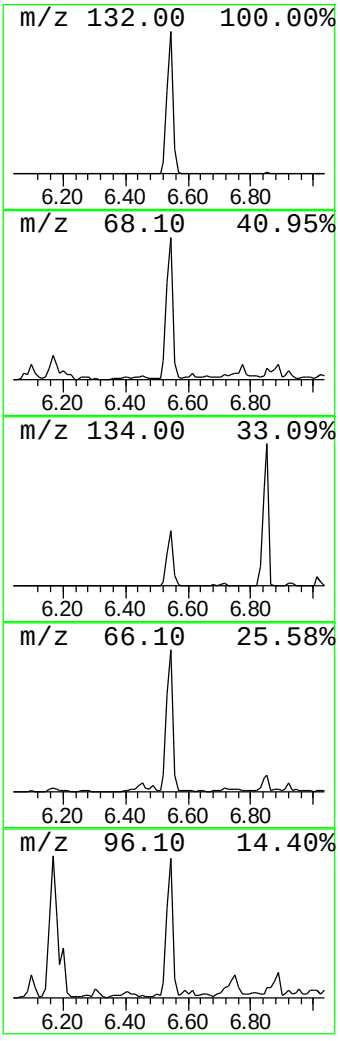
**********

Peak Number 6 unknown6.54 Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.54 | 28.27 ng | 3836170 | 1,4-Dichlorobenzene-d4 | 6.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 30 |
| 2 | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO | 031357-76-3 | 16 |
| 3 | 4-Chloro-2-fluoro-pyrimidine | 132 | C4H2ClFN2 | 051422-00-5 | 9 |
| 4 | 4-Chloro-6-fluoro-pyrimidine | 132 | C4H2ClFN2 | 051422-01-6 | 9 |
| 5 | 1-Methylpyrrolo[1,2-a]pyrazine | 132 | C8H8N2 | 064608-59-9 | 9 |



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Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

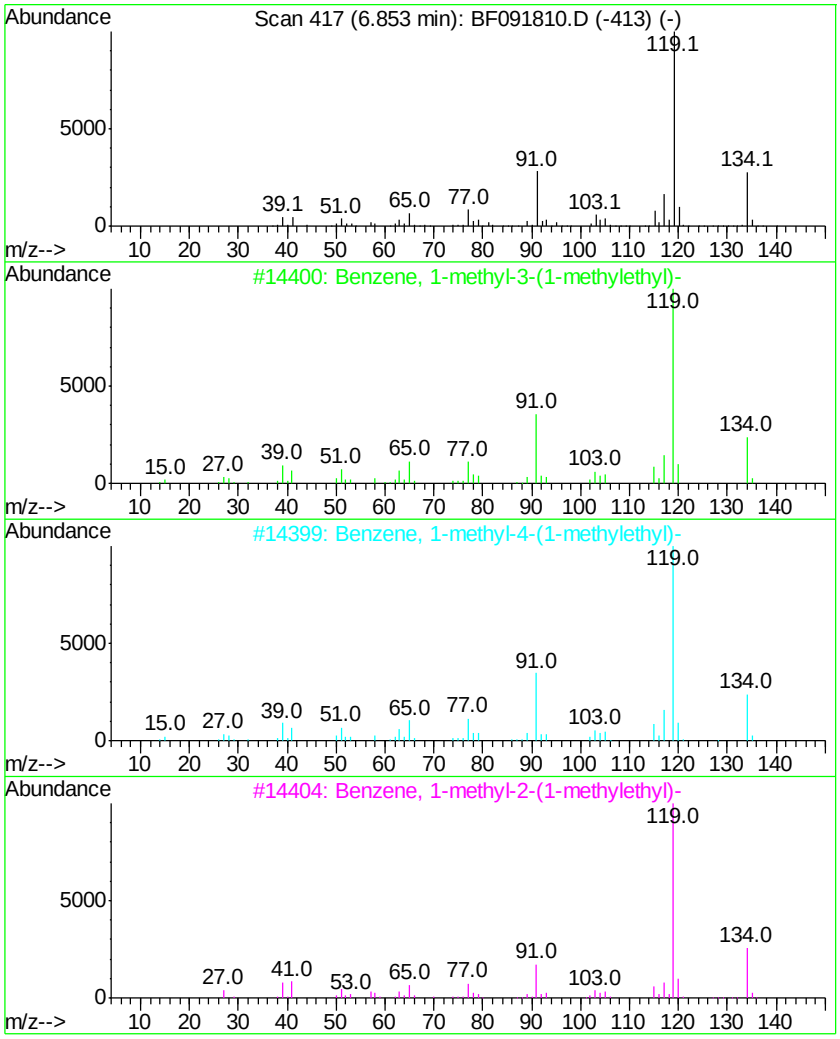
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

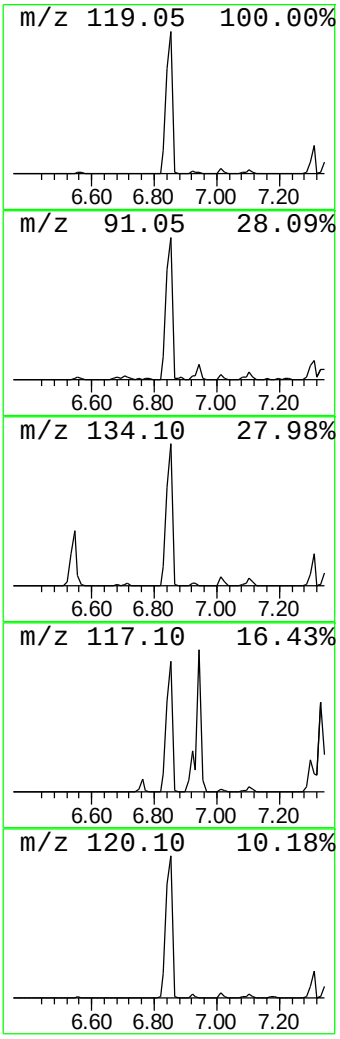
**********

Peak Number 7 Benzene, 1-methyl-3-(1-meth... Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.85 | 77.18 ng | 10474400 | 1,4-Dichlorobenzene-d4 | 6.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 95 |
| 2 | Benzene, 1-methyl-4-(1-methyleth... | 134 | C10H14 | 000099-87-6 | 95 |
| 3 | Benzene, 1-methyl-2-(1-methyleth... | 134 | C10H14 | 000527-84-4 | 94 |
| 4 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 91 |
| 5 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 91 |



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Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

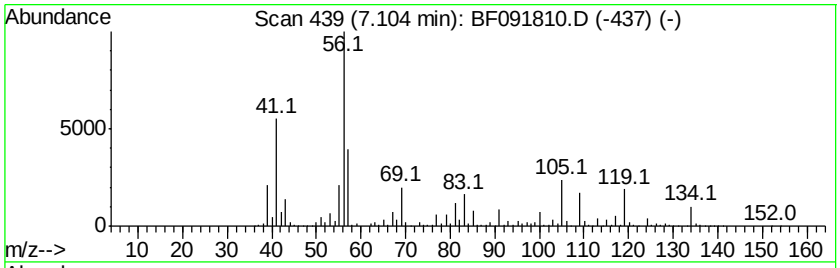
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

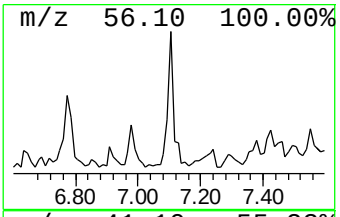
**********

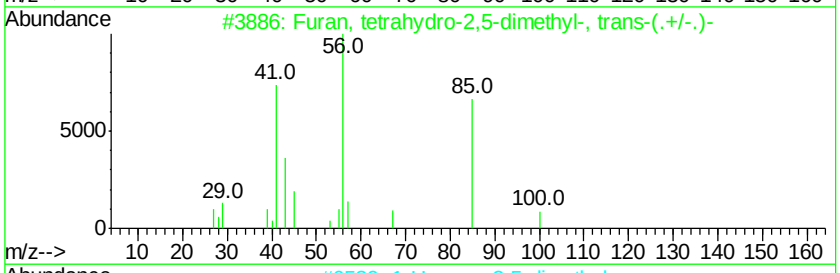
Peak Number 9 unknown7.10 Concentration Rank 9

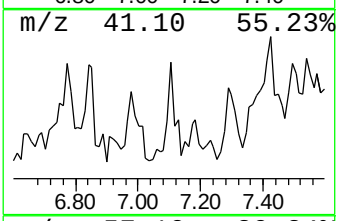
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.10 | 19.49 ng | 2645420 | 1,4-Dichlorobenzene-d4 | 6.76 |

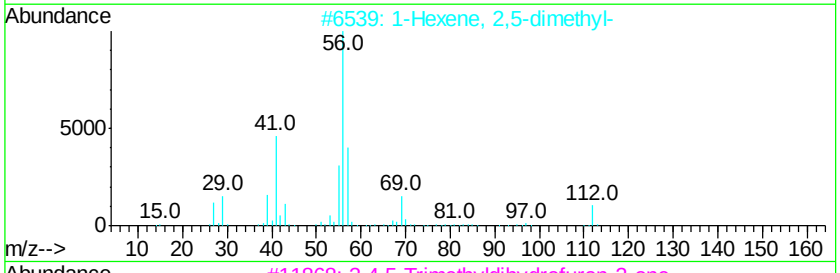
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Furan, tetrahydro-2,5-dimethyl-,... | 100 | C6H12O | 038484-59-2 | 43 |
| 2 | 1-Hexene, 2,5-dimethyl- | 112 | C8H16 | 006975-92-4 | 38 |
| 3 | 3,4,5-Trimethyldihydrofuran-2-one | 128 | C7H12O2 | 1000194-05-2 | 38 |
| 4 | Oxirane, 2,3-bis(1-methylethyl)-... | 128 | C8H16O | 054644-32-5 | 38 |
| 5 | Cyclopentanone, 2,2,5-trimethyl- | 126 | C8H14O | 004573-09-5 | 38 |

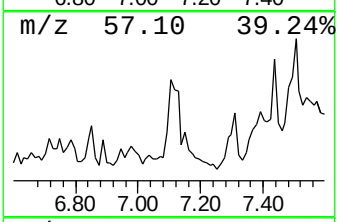


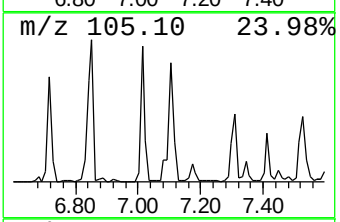



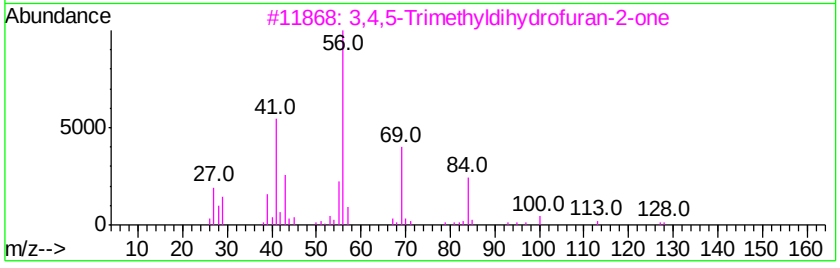



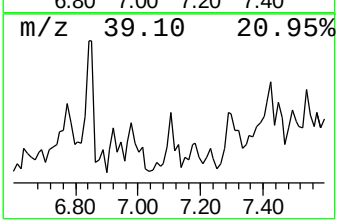



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

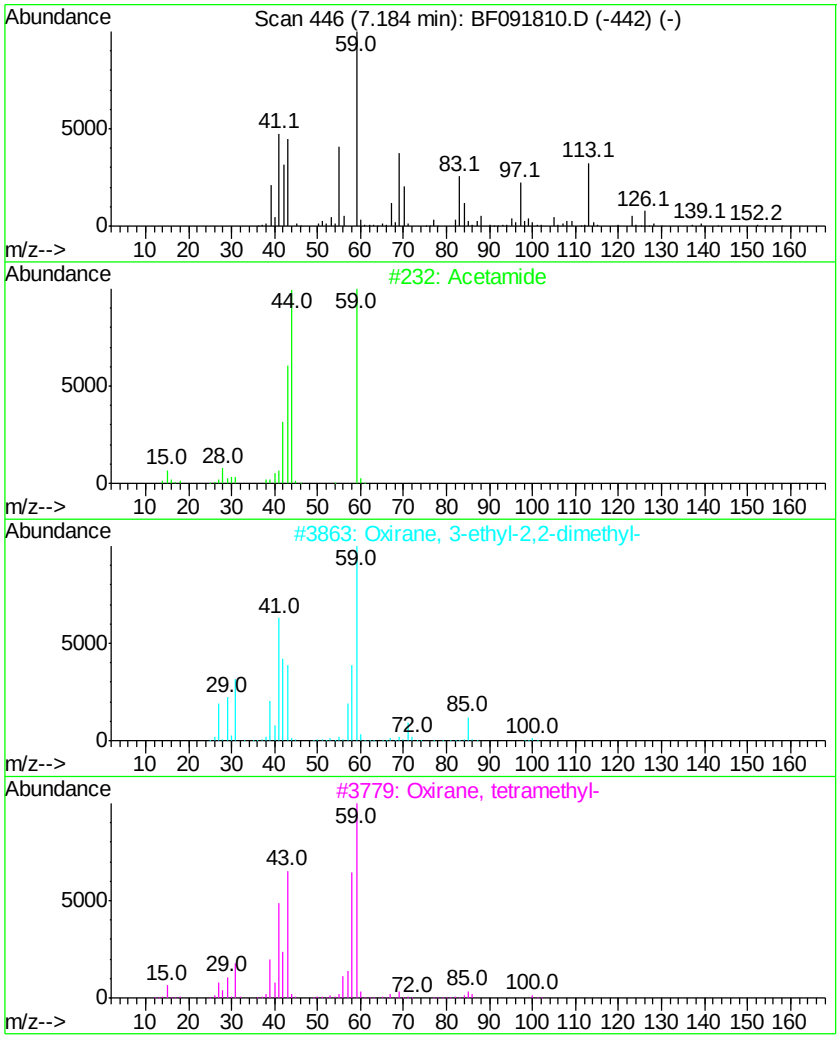
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

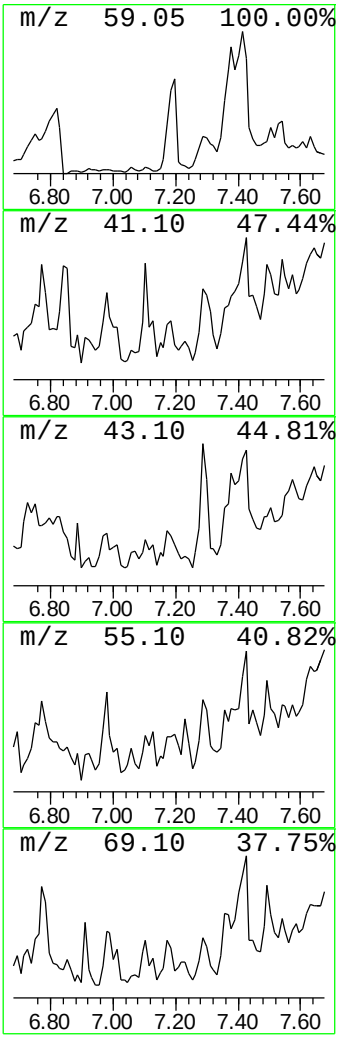
**********

Peak Number 10 unknown7.18 Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.18 | 12.70 ng | 1724030 | 1,4-Dichlorobenzene-d4 | 6.76 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Acetamide | 59 | C2H5NO | 000060-35-5 | 38 |
| 2 | Oxirane, 3-ethyl-2,2-dimethyl- | 100 | C6H12O | 001192-22-9 | 38 |
| 3 | Oxirane, tetramethyl- | 100 | C6H12O | 005076-20-0 | 35 |
| 4 | Propanediamide | 102 | C3H6N2O2 | 000108-13-4 | 32 |
| 5 | 3-Hexene, 1-(1-methoxyethoxy)-, ... | 158 | C9H18O2 | 054340-97-5 | 32 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

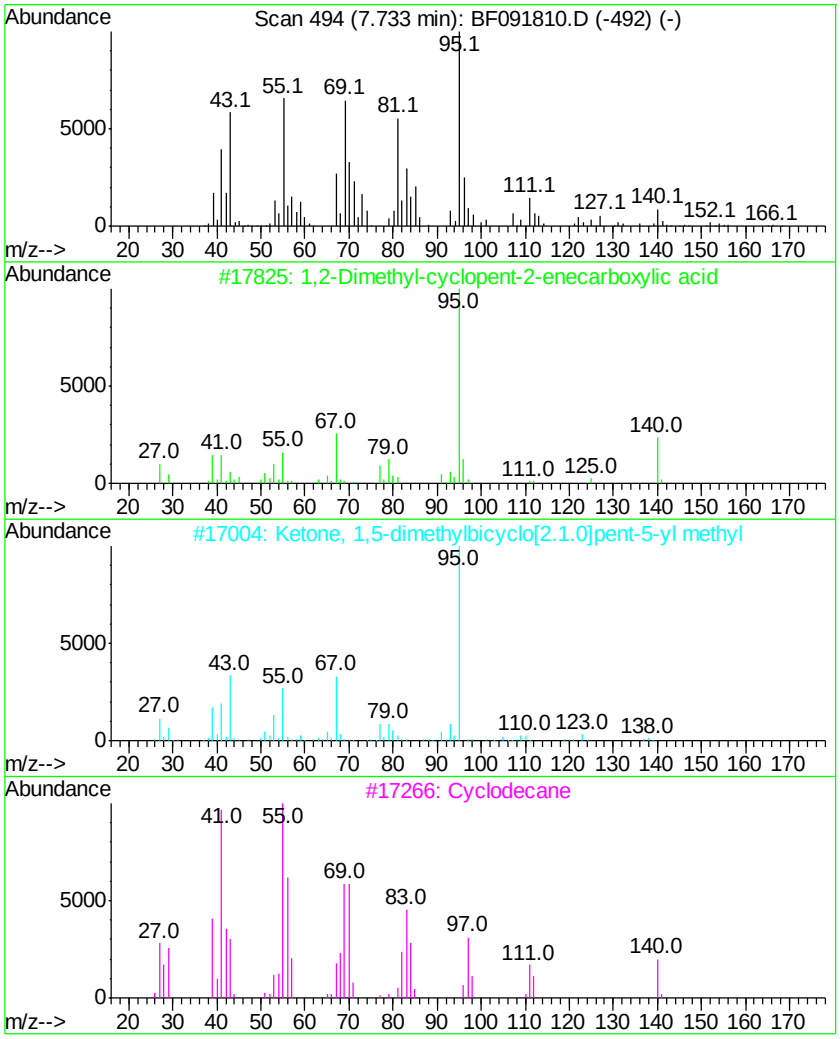
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

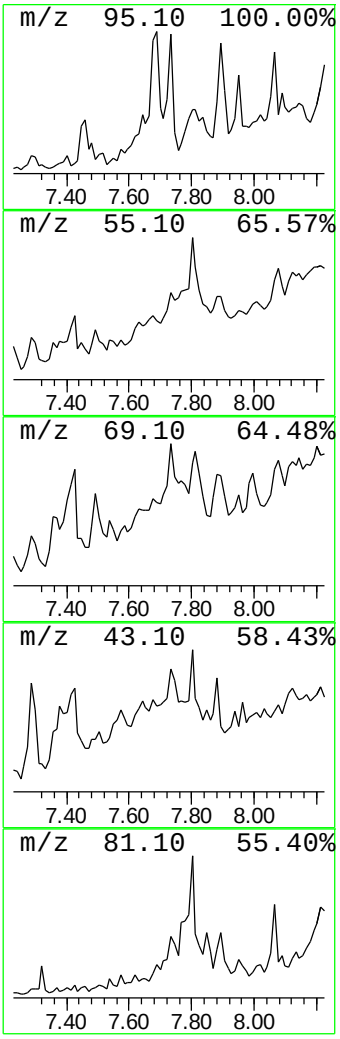
**********

Peak Number 11 unknown7.73 Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.73 | 12.84 ng | 3595590 | Naphthalene-d8 | 8.05 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,2-Dimethyl-cyclopent-2-enecarb... | 140 | C8H12O2 | 1000190-58-1 | 35 |
| 2 | Ketone, 1,5-dimethylbicyclo[2.1.... | 138 | C9H14O | 024081-57-0 | 27 |
| 3 | Cyclodecane | 140 | C10H20 | 000293-96-9 | 15 |
| 4 | Cyclopropanecarboxylic acid, 3-e... | 140 | C8H12O2 | 067528-58-9 | 14 |
| 5 | trans-4-Decene | 140 | C10H20 | 019398-89-1 | 11 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

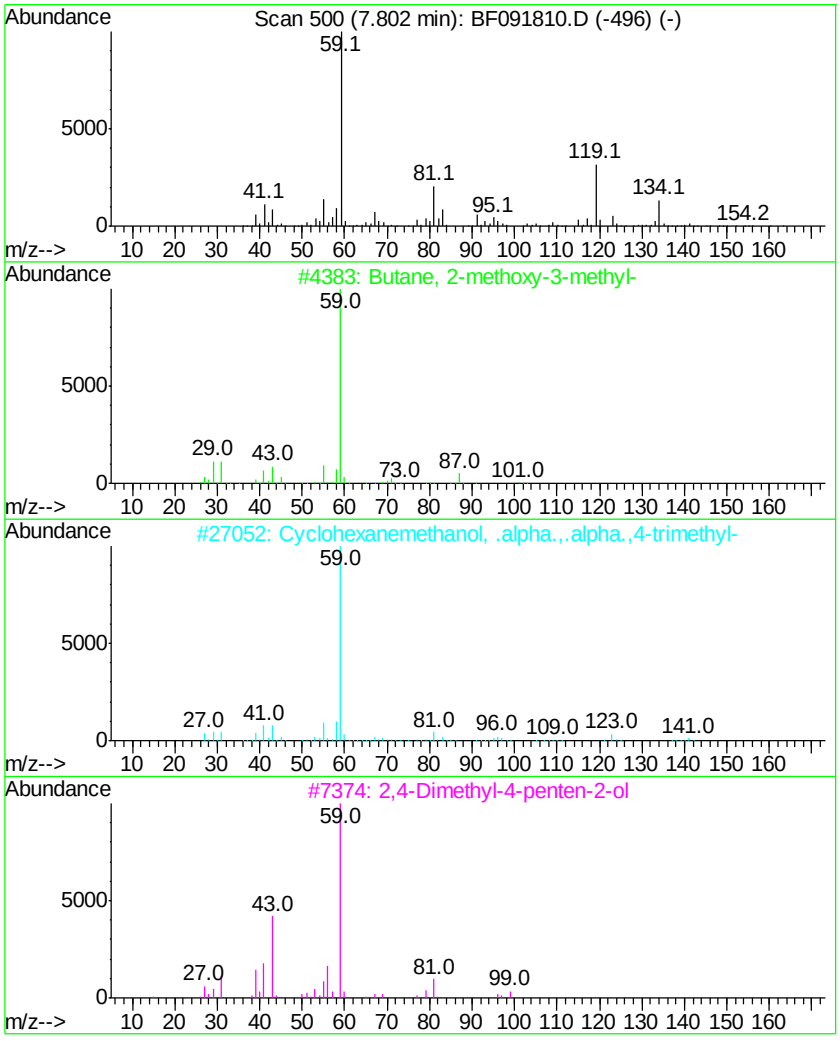
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

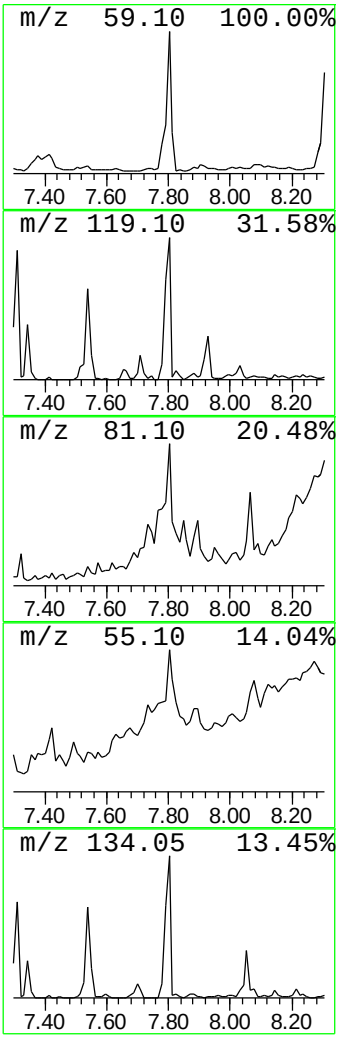
**********

Peak Number 12 unknown7.80 Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.80 | 48.49 ng | 13578800 | Naphthalene-d8 | 8.05 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Butane, 2-methoxy-3-methyl- | 102 | C6H14O | 062016-49-3 | 47 |
| 2 | Cyclohexanemethanol, .alpha.,.al... | 156 | C10H20O | 000498-81-7 | 42 |
| 3 | 2,4-Dimethyl-4-penten-2-ol | 114 | C7H14O | 019781-53-4 | 37 |
| 4 | Cyclohexanemethanol, .alpha.,.al... | 156 | C10H20O | 005114-00-1 | 33 |
| 5 | 1,8-Nonanediol, 8-methyl- | 174 | C10H22O2 | 054725-73-4 | 33 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

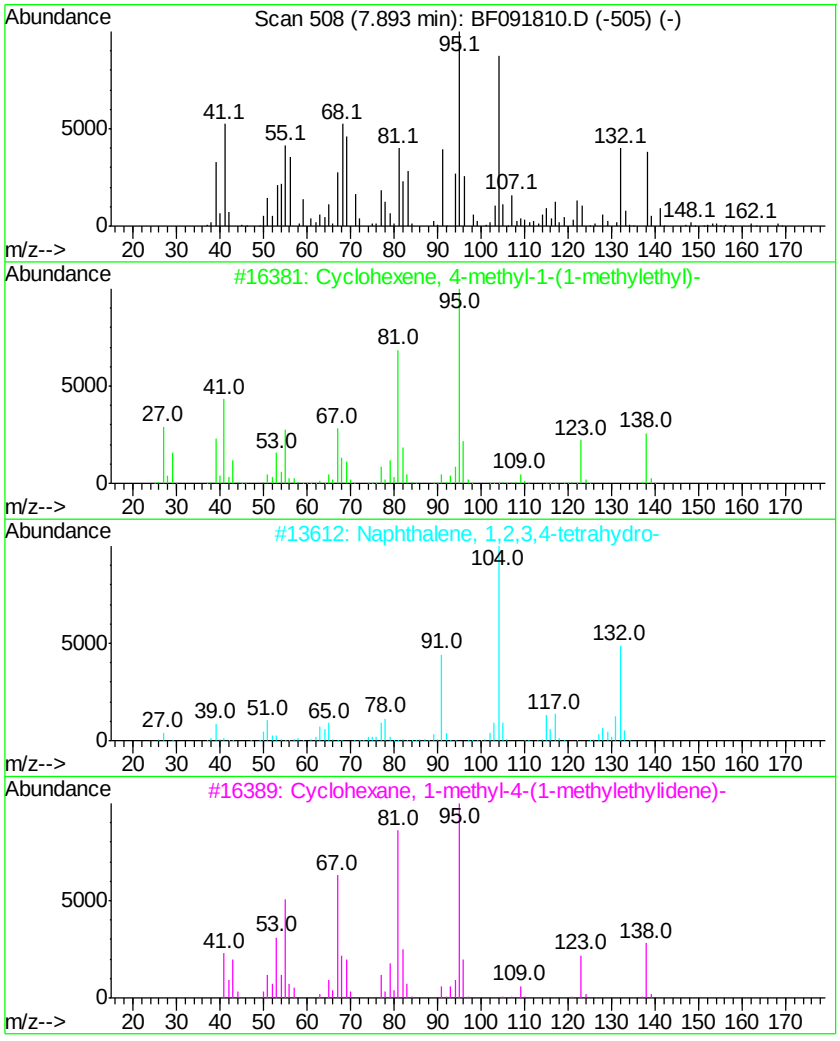
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

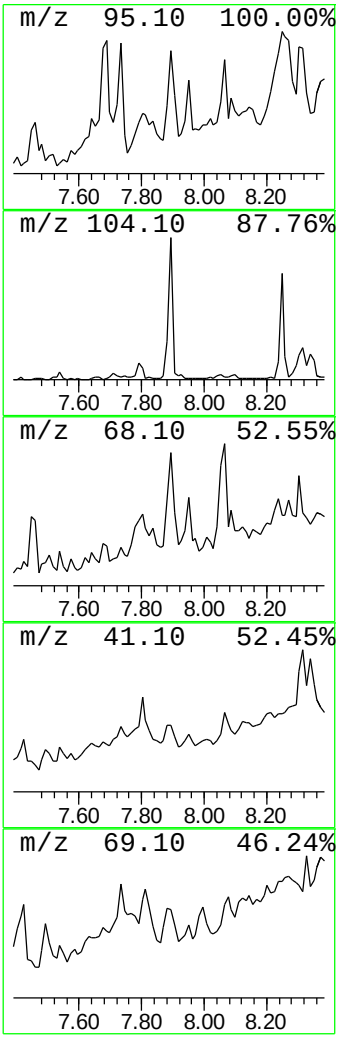
**********

Peak Number 13 unknown7.89 Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.89 | 12.37 ng | 3463700 | Naphthalene-d8 | 8.05 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexene, 4-methyl-1-(1-methy... | 138 | C10H18 | 000500-00-5 | 38 |
| 2 | Naphthalene, 1,2,3,4-tetrahydro- | 132 | C10H12 | 000119-64-2 | 38 |
| 3 | Cyclohexane, 1-methyl-4-(1-methy... | 138 | C10H18 | 001124-27-2 | 35 |
| 4 | 2H-Inden-2-one, 1,3-dihydro- | 132 | C9H8O | 000615-13-4 | 25 |
| 5 | Indan, epoxide | 132 | C9H8O | 000768-22-9 | 25 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.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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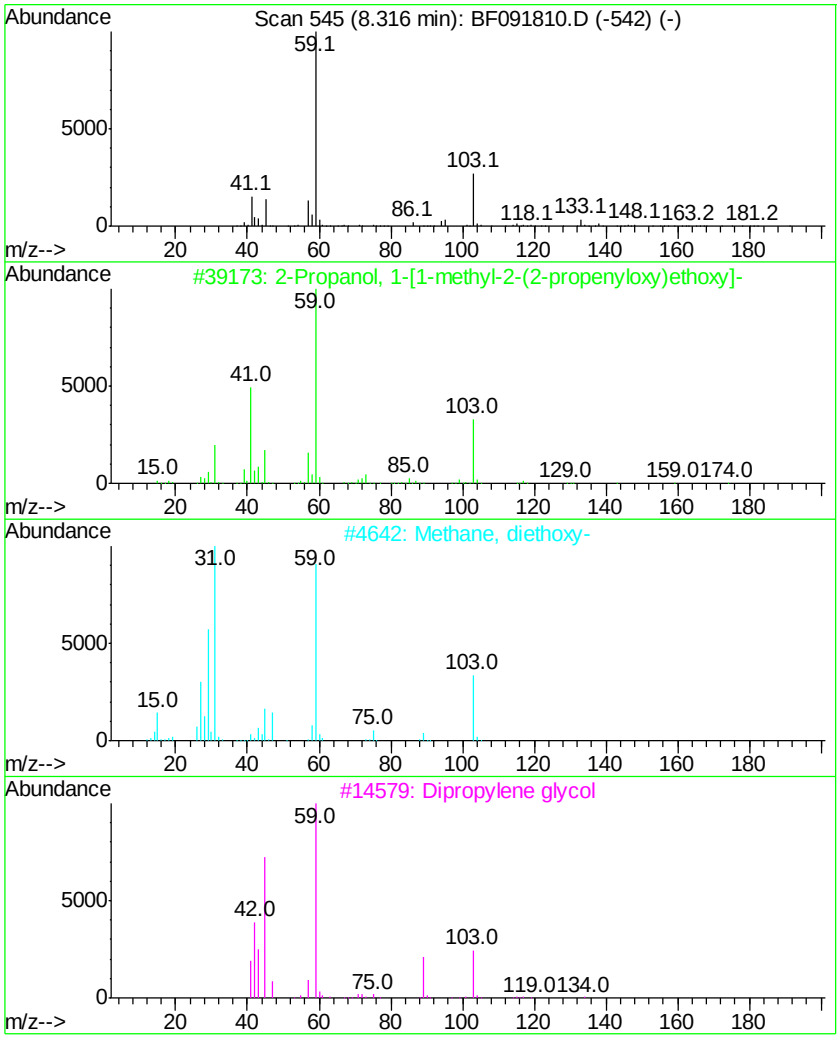
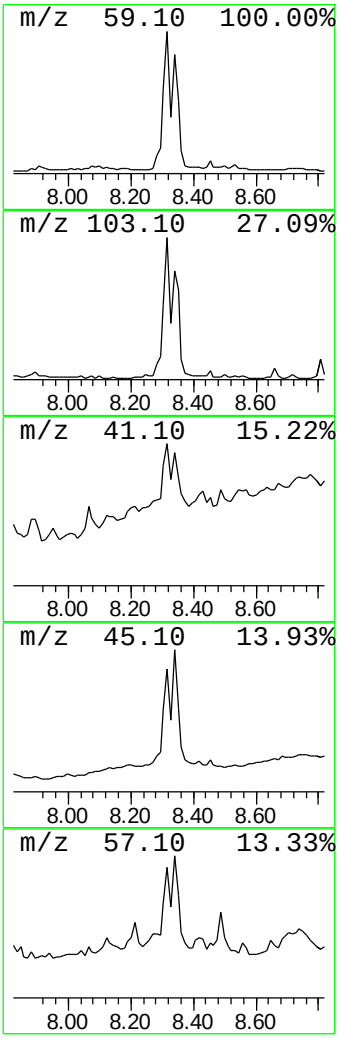
Peak Number 14 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.32 | 19.58 ng | 5482360 | Naphthalene-d8 | 8.05 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Propanol, 1-[1-methyl-2-(2-pro... | 174 | C9H18O3 | 055956-25-7 | 78 |
| 2 | Methane, diethoxy- | 104 | C5H12O2 | 000462-95-3 | 72 |
| 3 | Dipropylene glycol | 134 | C6H14O3 | 025265-71-8 | 64 |
| 4 | 1-Propanol, 2-(2-hydroxypropoxy)- | 134 | C6H14O3 | 000106-62-7 | 56 |
| 5 | 2,5,8,11,14,17-Hexaoxaoctadecane | 266 | C12H26O6 | 001191-87-3 | 56 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

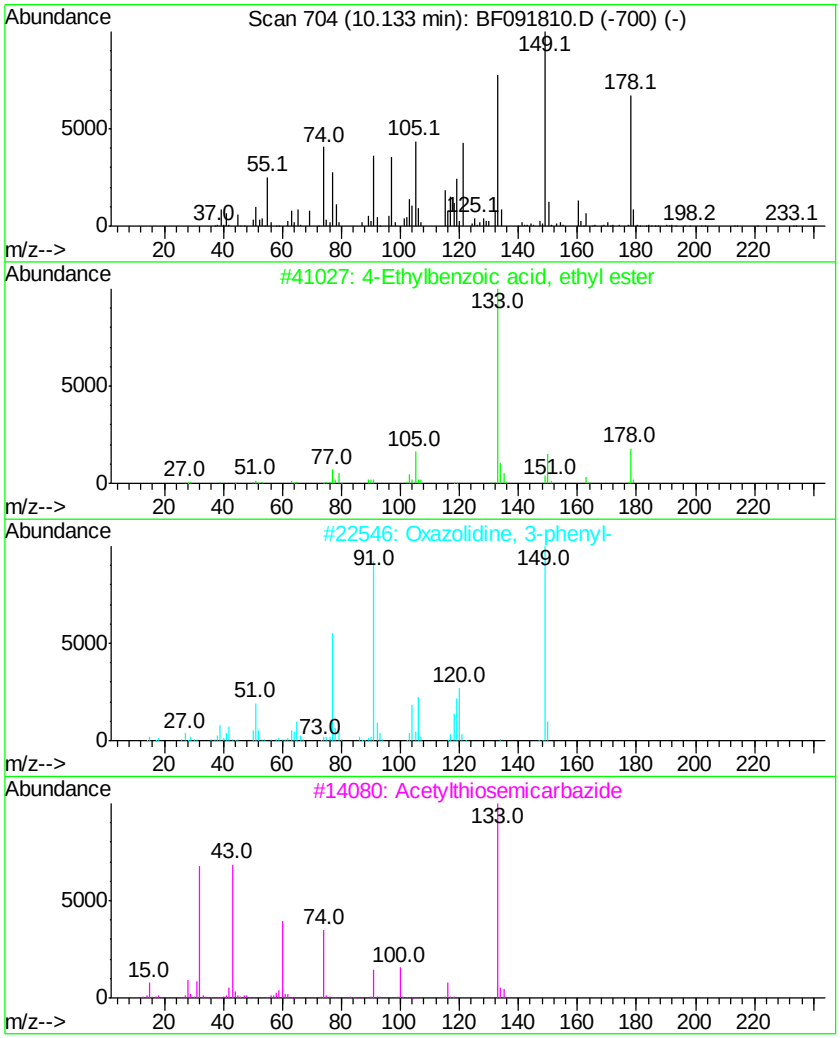
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

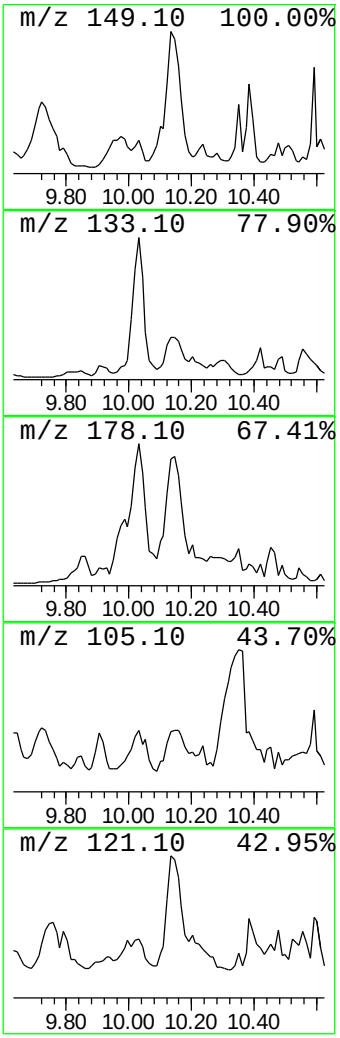
**********

Peak Number 15 unknown10.13 Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.13 | 20.00 ng | 10601900 | Acenaphthene-d10 | 9.81 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4-Ethylbenzoic acid, ethyl ester | 178 | C11H14O2 | 036207-13-3 | 38 |
| 2 | Oxazolidine, 3-phenyl- | 149 | C9H11NO | 020503-92-8 | 30 |
| 3 | Acetylthiosemicarbazide | 133 | C3H7N3OS | 002302-88-7 | 22 |
| 4 | Benzene, 1-ethyl-3-(1-methylethyl)- | 148 | C11H16 | 004920-99-4 | 14 |
| 5 | Phenol, 2-(1,1-dimethylethyl)-3-... | 164 | C11H16O | 013037-79-1 | 14 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

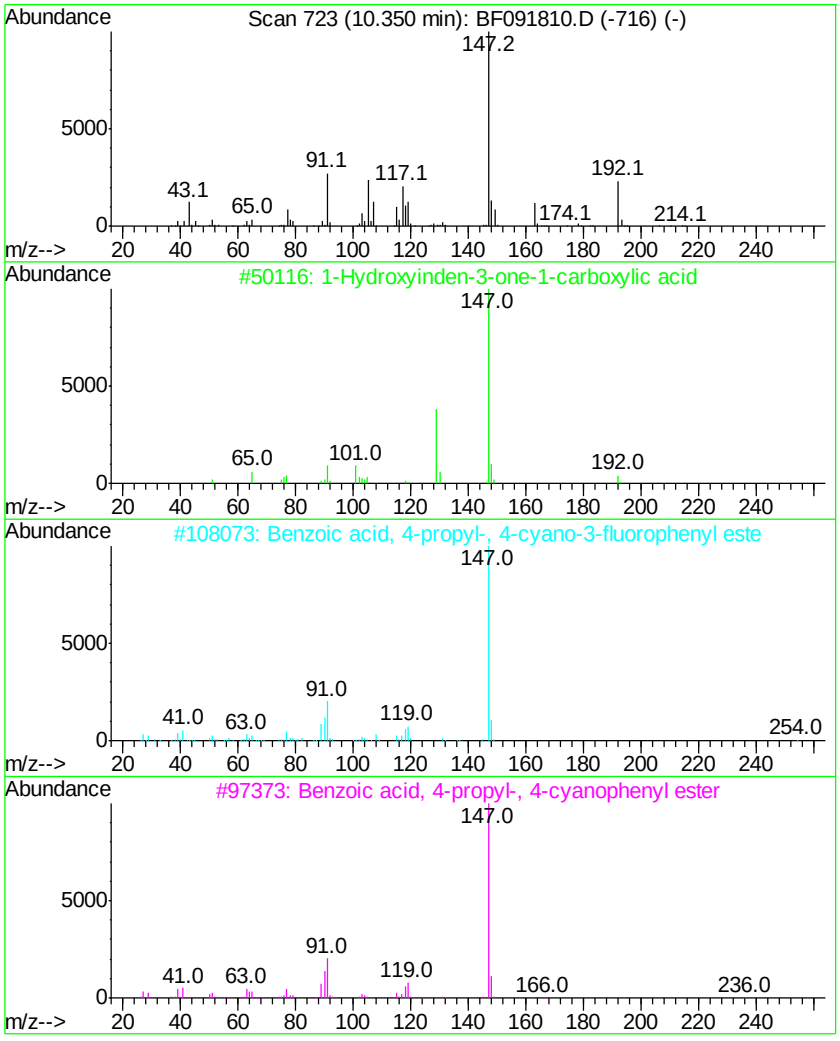
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

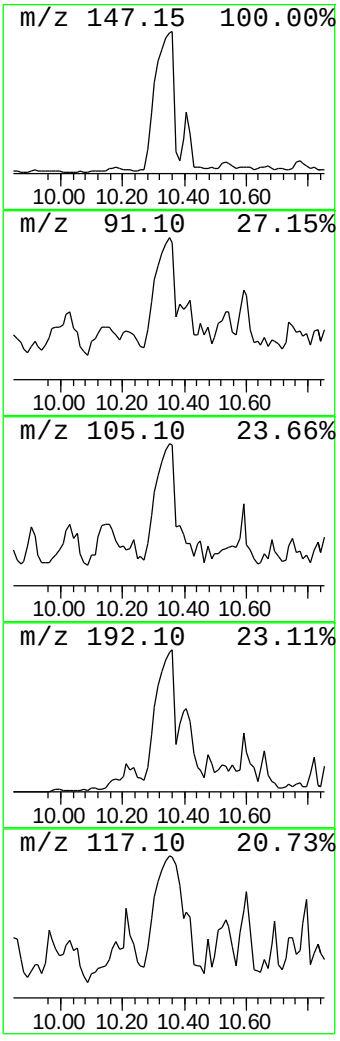
**********

Peak Number 16 unknown10.35 Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.35 | 52.11 ng | 27620900 | Acenaphthene-d10 | 9.81 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Hydroxyinden-3-one-1-carboxyli... | 192 | C10H8O4 | 1000215-33-8 | 46 |
| 2 | Benzoic acid, 4-propyl-, 4-cyano... | 283 | C17H14FNO2 | 086776-51-4 | 43 |
| 3 | Benzoic acid, 4-propyl-, 4-cyano... | 265 | C17H15NO2 | 056131-49-8 | 43 |
| 4 | Pyrido[3,4-d]pyrimidin-4(3H)-one | 147 | C7H5N3O | 019178-25-7 | 43 |
| 5 | 4-n-Propylacetophenone | 162 | C11H14O | 002932-65-2 | 40 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

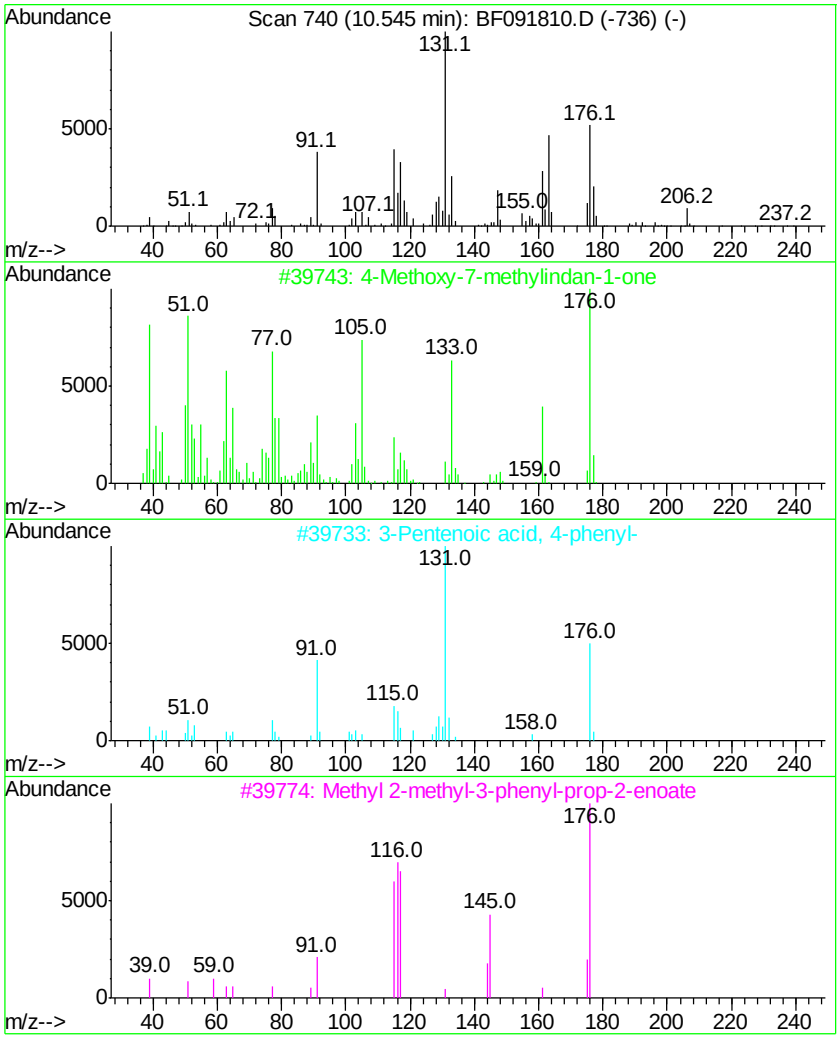
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

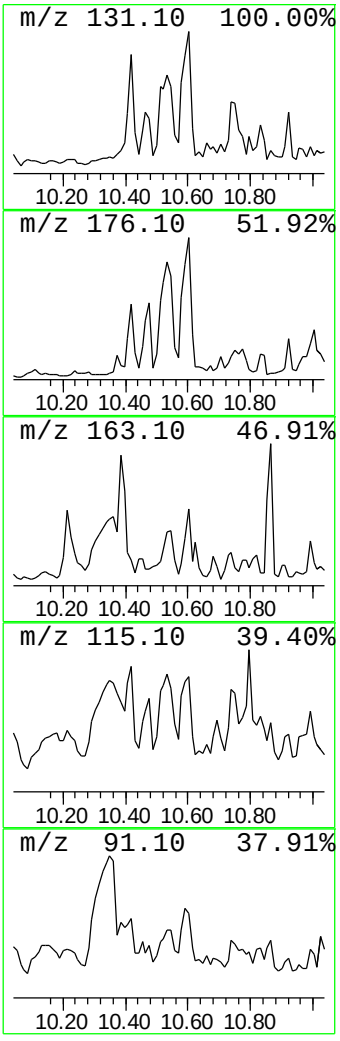
**********

Peak Number 17 4-Methoxy-7-methylindan-1-one Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.54 | 13.12 ng | 6956730 | Acenaphthene-d10 | 9.81 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4-Methoxy-7-methylindan-1-one | 176 | C11H12O2 | 103988-25-6 | 64 |
| 2 | 3-Pentenoic acid, 4-phenyl- | 176 | C11H12O2 | 053774-19-9 | 41 |
| 3 | Methyl 2-methyl-3-phenyl-prop-2-... | 176 | C11H12O2 | 1000147-09-1 | 25 |
| 4 | 1H-Indene, 2,3-dihydro-1,3-dimet... | 146 | C11H14 | 004175-53-5 | 22 |
| 5 | [2-(Hydroxy-phenyl-phosphinoyl)-... | 316 | C15H13N2O4P | 300566-65-8 | 16 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

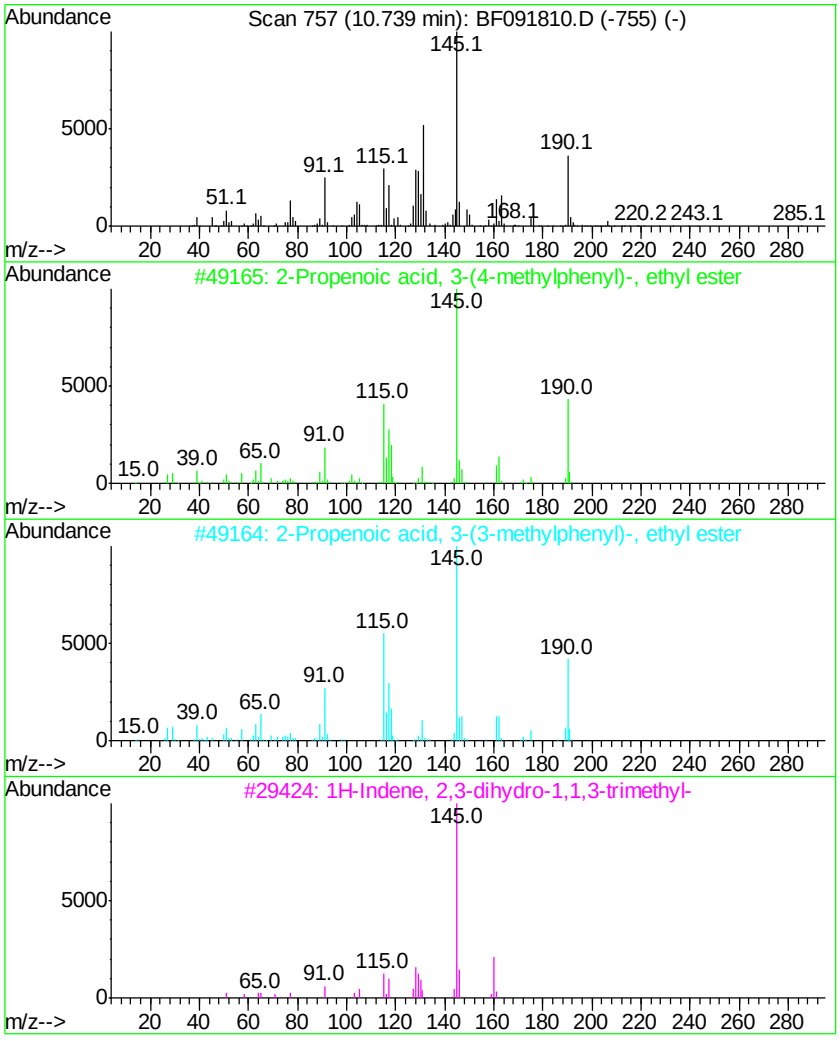
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

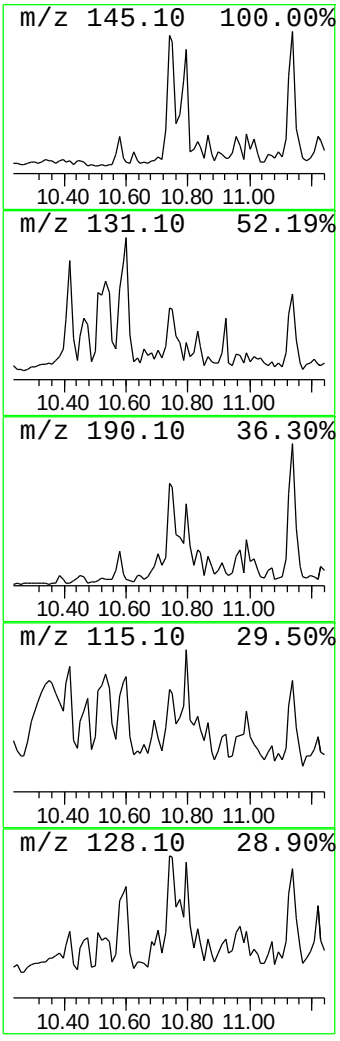
**********

Peak Number 18 2-Propenoic acid, 3-(4-meth... Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.74 | 11.77 ng | 8044320 | Phenanthrene-d10 | 11.31 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Propenoic acid, 3-(4-methylphe... | 190 | C12H14O2 | 020511-20-0 | 60 |
| 2 | 2-Propenoic acid, 3-(3-methylphe... | 190 | C12H14O2 | 050556-03-1 | 53 |
| 3 | 1H-Indene, 2,3-dihydro-1,1,3-tri... | 160 | C12H16 | 002613-76-5 | 50 |
| 4 | Phenylthio 2-benzylpent-3-enoate | 282 | C18H18OS | 1000284-46-0 | 47 |
| 5 | Cyclopropane, 1-chloro-1,2-dimet... | 180 | C11H13Cl | 1000154-03-9 | 47 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

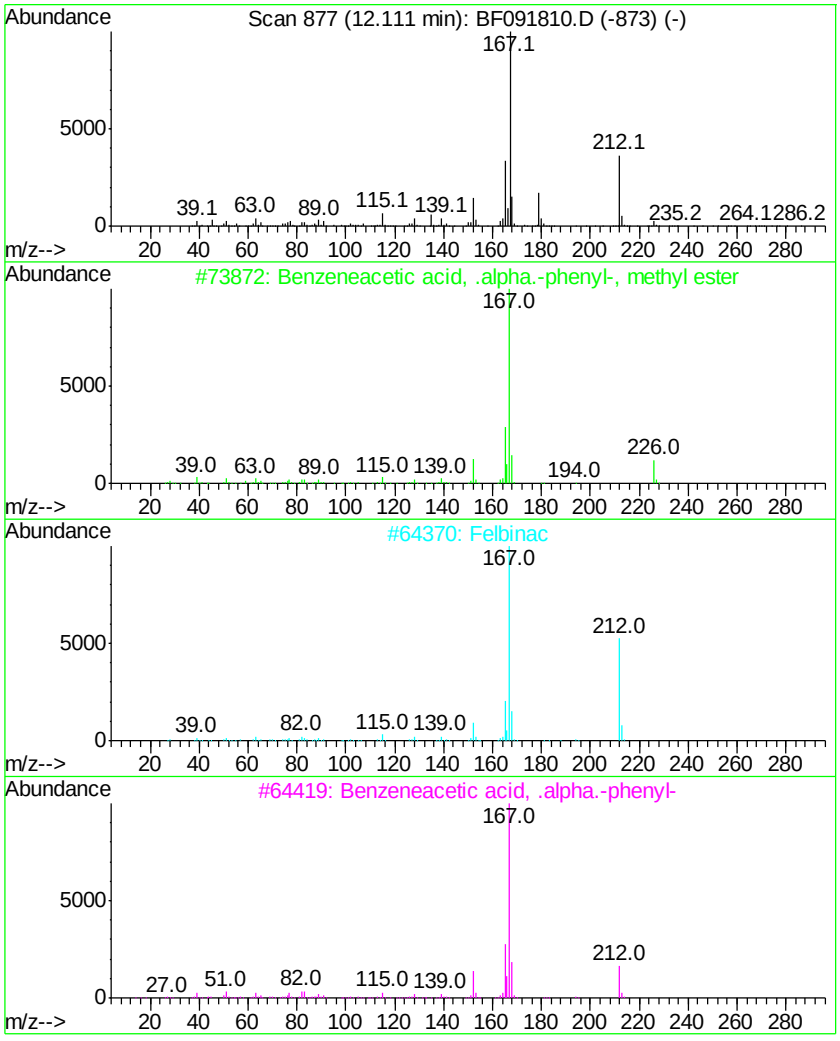
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

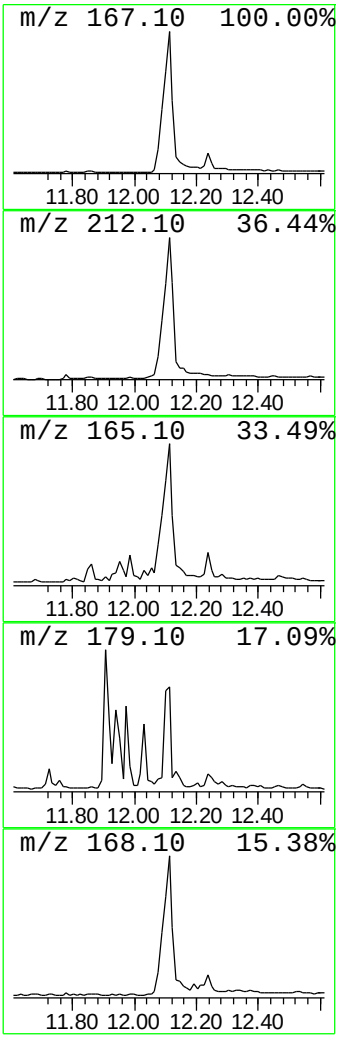
**********

Peak Number 19 Benzeneacetic acid, .alpha.... Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.11 | 13.20 ng | 9018420 | Phenanthrene-d10 | 11.31 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzeneacetic acid, .alpha.-phen... | 226 | C15H14O2 | 003469-00-9 | 93 |
| 2 | Felbinac | 212 | C14H12O2 | 005728-52-9 | 87 |
| 3 | Benzeneacetic acid, .alpha.-phenyl- | 212 | C14H12O2 | 000117-34-0 | 72 |
| 4 | Benzeneacetaldehyde, .alpha.-phe... | 196 | C14H12O | 000947-91-1 | 68 |
| 5 | Benzene, 1,1'-[[(4-methylphenyl)... | 290 | C20H18S | 032110-49-9 | 64 |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

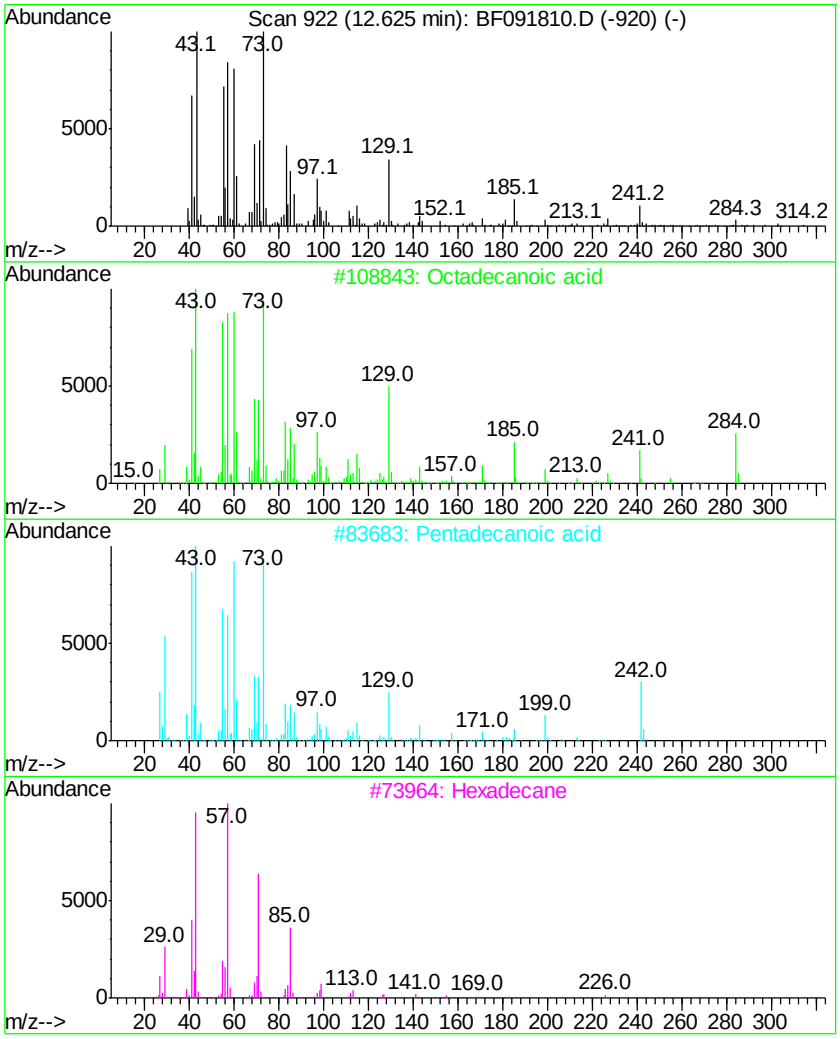
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

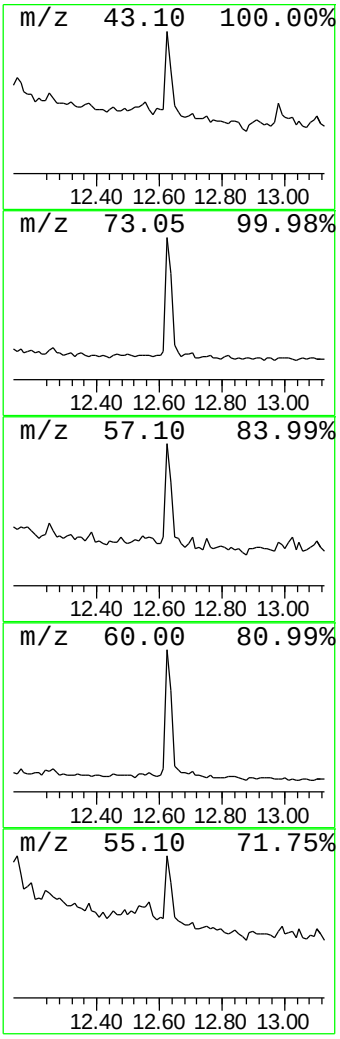
**********

Peak Number 20 Octadecanoic acid Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.63 | 14.36 ng | 820957 | Chrysene-d12 | 13.92 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Octadecanoic acid | 284 | C18H36O2 | 000057-11-4 | 98 |
| 2 | Pentadecanoic acid | 242 | C15H30O2 | 001002-84-2 | 81 |
| 3 | Hexadecane | 226 | C16H34 | 000544-76-3 | 25 |
| 4 | Ethanone, 1-(4,5-dihydro-2-thiaz... | 129 | C5H7NOS | 029926-41-8 | 22 |
| 5 | Methoxyacetic acid, 2-tetradecyl... | 286 | C17H34O3 | 1000282-04-8 | 11 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF122016\
Data File : BF091810.D
Acq On : 20 Dec 2016 10:42
Operator : UM/SJ
Sample : H6147-02
Misc :
ALS Vial : 27 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** MW-18

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121716.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 |
| Cyclohexanol | 5.54 | 13.8 | ng | 1873830 | 1 | 6.76 | 2714390 | 20.0 |
| unknown6.08 | 6.08 | 12.8 | ng | 1733530 | 1 | 6.76 | 2714390 | 20.0 |
| Cyclohexanol, 3-m... | 6.17 | 24.7 | ng | 3353930 | 1 | 6.76 | 2714390 | 20.0 |
| unknown6.20 | 6.20 | 13.7 | ng | 1864210 | 1 | 6.76 | 2714390 | 20.0 |
| 2,5-Dimethylcyclo... | 6.26 | 11.9 | ng | 1611370 | 1 | 6.76 | 2714390 | 20.0 |
| unknown6.54 | 6.54 | 28.3 | ng | 3836170 | 1 | 6.76 | 2714390 | 20.0 |
| Benzene, 1-methyl... | 6.85 | 77.2 | ng | 10474400 | 1 | 6.76 | 2714390 | 20.0 |
| unknown7.10 | 7.10 | 19.5 | ng | 2645420 | 1 | 6.76 | 2714390 | 20.0 |
| unknown7.18 | 7.18 | 12.7 | ng | 1724030 | 1 | 6.76 | 2714390 | 20.0 |
| unknown7.73 | 7.73 | 12.8 | ng | 3595590 | 2 | 8.05 | 5600820 | 20.0 |
| unknown7.80 | 7.80 | 48.5 | ng | 13578800 | 2 | 8.05 | 5600820 | 20.0 |
| unknown7.89 | 7.89 | 12.4 | ng | 3463700 | 2 | 8.05 | 5600820 | 20.0 |
| 2-Propanol, 1-[1-... | 8.32 | 19.6 | ng | 5482360 | 2 | 8.05 | 5600820 | 20.0 |
| unknown10.13 | 10.13 | 20.0 | ng | 10601900 | 3 | 9.81 | 10601900 | 20.0 |
| unknown10.35 | 10.35 | 52.1 | ng | 27620900 | 3 | 9.81 | 10601900 | 20.0 |
| 4-Methoxy-7-methy... | 10.54 | 13.1 | ng | 6956730 | 3 | 9.81 | 10601900 | 20.0 |
| 2-Propenoic acid,... | 10.74 | 11.8 | ng | 8044320 | 4 | 11.31 | 13668500 | 20.0 |
| Benzeneacetic aci... | 12.11 | 13.2 | ng | 9018420 | 4 | 11.31 | 13668500 | 20.0 |
| Octadecanoic acid | 12.63 | 14.4 | ng | 820957 | 5 | 13.92 | 1143630 | 20.0 |