LSC Area Percent Report

Data Path : V:\HPCHEM1\BNA F\DATA\BF112115\
Data File : BF083138.D
Acq On : 22 Nov 2015 5:01
Operator : UM/IZ
Sample : G4480-06
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** LIBERTY SF_002-SPLPSVOC2

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-BF112115.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 | 4.101 | 183 | 185 | 196 | rBV | 212763 | 386425 | 5.26% | 0.752% |
| 2 | 4.810 | 245 | 247 | 260 | rBV | 813518 | 1159225 | 15.77% | 2.255% |
| 3 | 5.256 | 284 | 286 | 296 | rBV | 3223437 | 3303553 | 44.95% | 6.427% |
| 4 | 6.307 | 377 | 378 | 381 | rBV | 1463593 | 2144017 | 29.18% | 4.171% |
| 5 | 6.422 | 386 | 388 | 391 | rBV | 4149772 | 4926420 | 67.04% | 9.585% |
| 6 | 6.650 | 406 | 408 | 411 | rBV | 1346856 | 1218638 | 16.58% | 2.371% |
| 7 | 6.810 | 419 | 422 | 424 | rBV | 4946169 | 4852455 | 66.03% | 9.441% |
| 8 | 7.222 | 455 | 458 | 461 | rBV | 3475290 | 3941377 | 53.63% | 7.668% |
| 9 | 7.359 | 468 | 470 | 476 | rBV2 | 70645 | 108779 | 1.48% | 0.212% |
| 10 | 7.942 | 518 | 521 | 523 | rBV | 1595933 | 1651907 | 22.48% | 3.214% |
| 11 | 9.016 | 612 | 615 | 618 | rBV | 5092053 | 6975196 | 94.92% | 13.571% |
| 12 | 9.348 | 642 | 644 | 646 | rBV | 77878 | 120763 | 1.64% | 0.235% |
| 13 | 9.416 | 649 | 650 | 653 | rBV | 109301 | 175313 | 2.39% | 0.341% |
| 14 | 9.690 | 671 | 674 | 676 | rBV | 1487160 | 1827857 | 24.87% | 3.556% |
| 15 | 10.113 | 706 | 711 | 712 | rBV2 | 46741 | 84079 | 1.14% | 0.164% |
| 16 | 10.479 | 740 | 743 | 745 | rBV | 3644647 | 4596543 | 62.55% | 8.943% |
| 17 | 10.605 | 752 | 754 | 757 | rVB | 69719 | 85735 | 1.17% | 0.167% |
| 18 | 11.051 | 791 | 793 | 795 | rBV | 78372 | 74320 | 1.01% | 0.145% |
| 19 | 11.165 | 800 | 803 | 805 | rBV | 1740571 | 1861429 | 25.33% | 3.622% |
| 20 | 11.713 | 849 | 851 | 855 | rBV2 | 500545 | 557840 | 7.59% | 1.085% |
| 21 | 12.491 | 917 | 919 | 922 | rBV | 228802 | 328668 | 4.47% | 0.639% |
| 22 | 12.754 | 939 | 942 | 944 | rBV | 6451503 | 7348669 | 100.00% | 14.298% |
| 23 | 13.668 | 1019 | 1022 | 1026 | rBV | 196667 | 277106 | 3.77% | 0.539% |
| 24 | 13.782 | 1030 | 1032 | 1035 | rBV | 1821294 | 1814001 | 24.68% | 3.529% |
| 25 | 15.154 | 1149 | 1152 | 1155 | rBV | 1143250 | 1492324 | 20.31% | 2.903% |
| 26 | 16.000 | 1224 | 1226 | 1231 | rVB4 | 38662 | 85153 | 1.16% | 0.166% |

Sum of corrected areas: 51397792

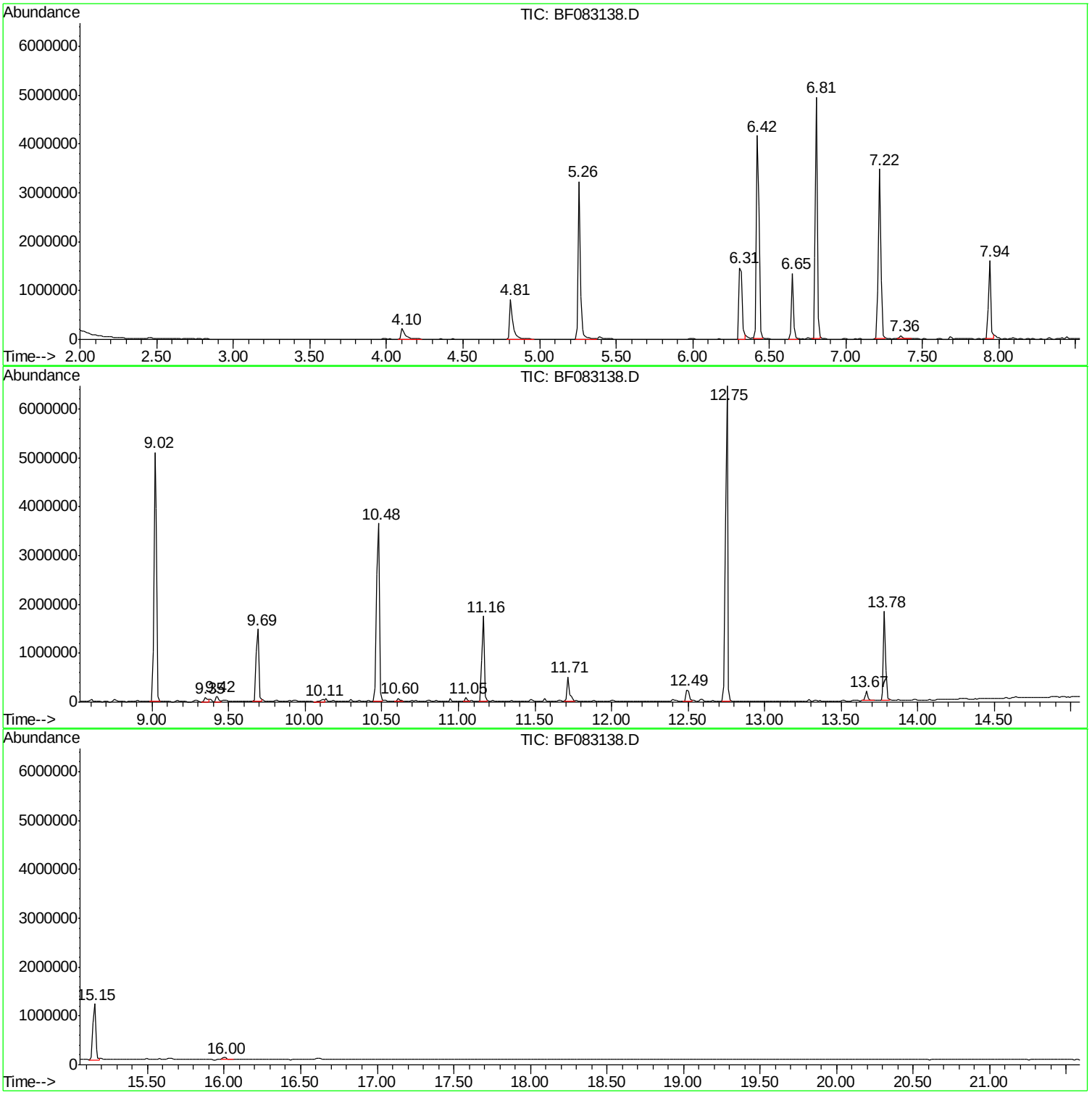
LSC Report - Integrated Chromatogram

Data Path : V:\HPCHEM1\BNA F\DATA\BF112115\
Data File : BF083138.D
Acq On : 22 Nov 2015 5:01
Operator : UM/IZ
Sample : G4480-06
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
LIBERTY SF_002-SPLPSVOC2

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF112115.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Data Path : V:\HPCHEM1\BNA F\DATA\BF112115\
Data File : BF083138.D
Acq On : 22 Nov 2015 5:01
Operator : UM/IZ
Sample : G4480-06
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** LIBERTY SF_002-SPLPSVOC2

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF112115.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

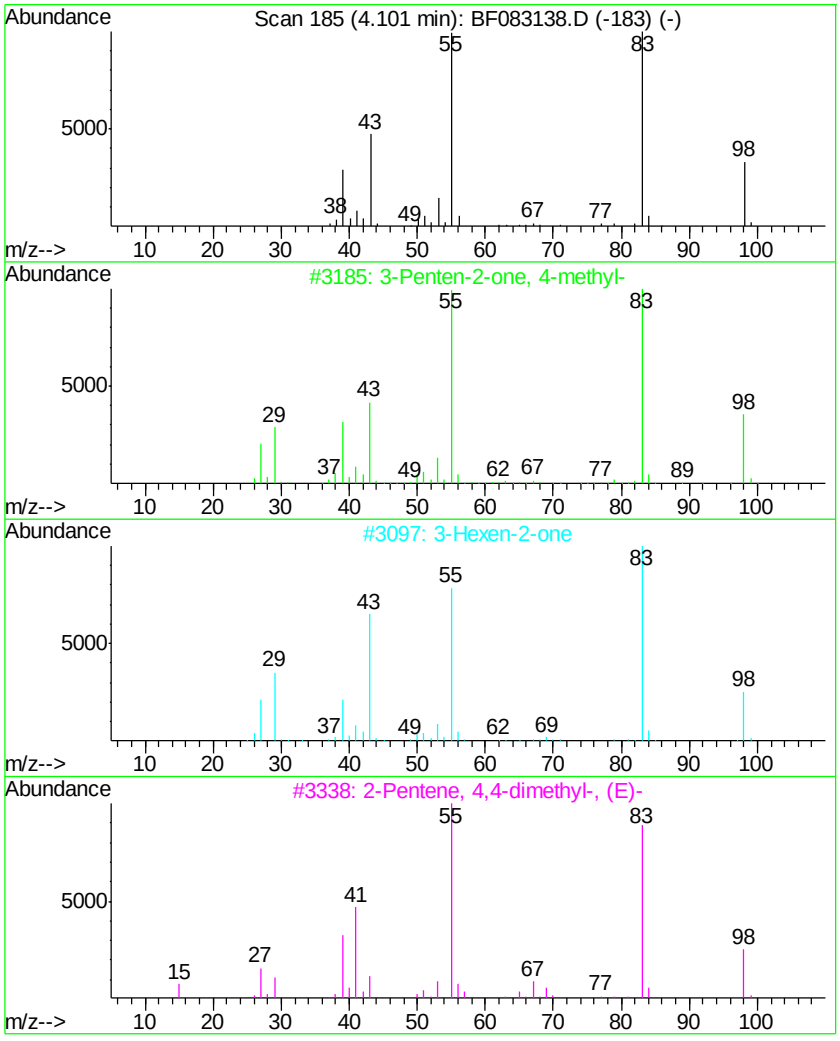
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

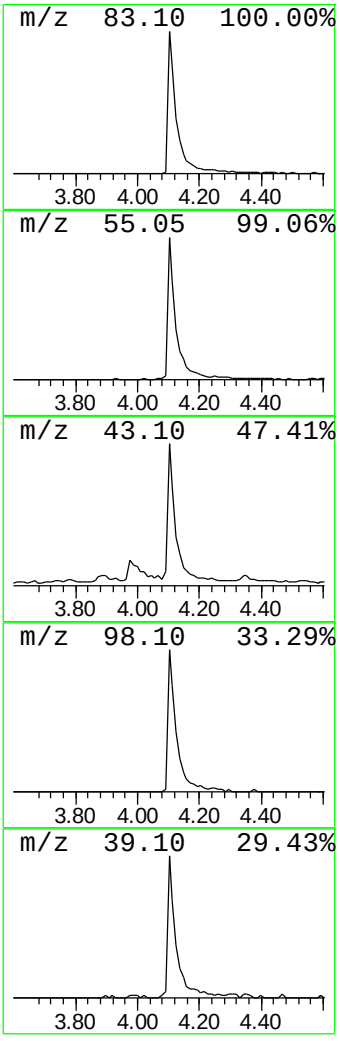
**********

Peak Number 1 3-Penten-2-one, 4-methyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.10 | 6.34 ng | 386425 | 1,4-Dichlorobenzene-d4 | 6.65 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Penten-2-one, 4-methyl- | 98 | C6H10O | 000141-79-7 | 91 |
| 2 | 3-Hexen-2-one | 98 | C6H10O | 000763-93-9 | 87 |
| 3 | 2-Pentene, 4,4-dimethyl-, (E)- | 98 | C7H14 | 000690-08-4 | 80 |
| 4 | 2-Pentene, 2,4-dimethyl- | 98 | C7H14 | 000625-65-0 | 80 |
| 5 | 2-Pentene, 4,4-dimethyl-, (Z)- | 98 | C7H14 | 000762-63-0 | 80 |



Data Path : V:\HPCHEM1\BNA F\DATA\BF112115\
Data File : BF083138.D
Acq On : 22 Nov 2015 5:01
Operator : UM/IZ
Sample : G4480-06
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** LIBERTY SF_002-SPLPSVOC2

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF112115.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

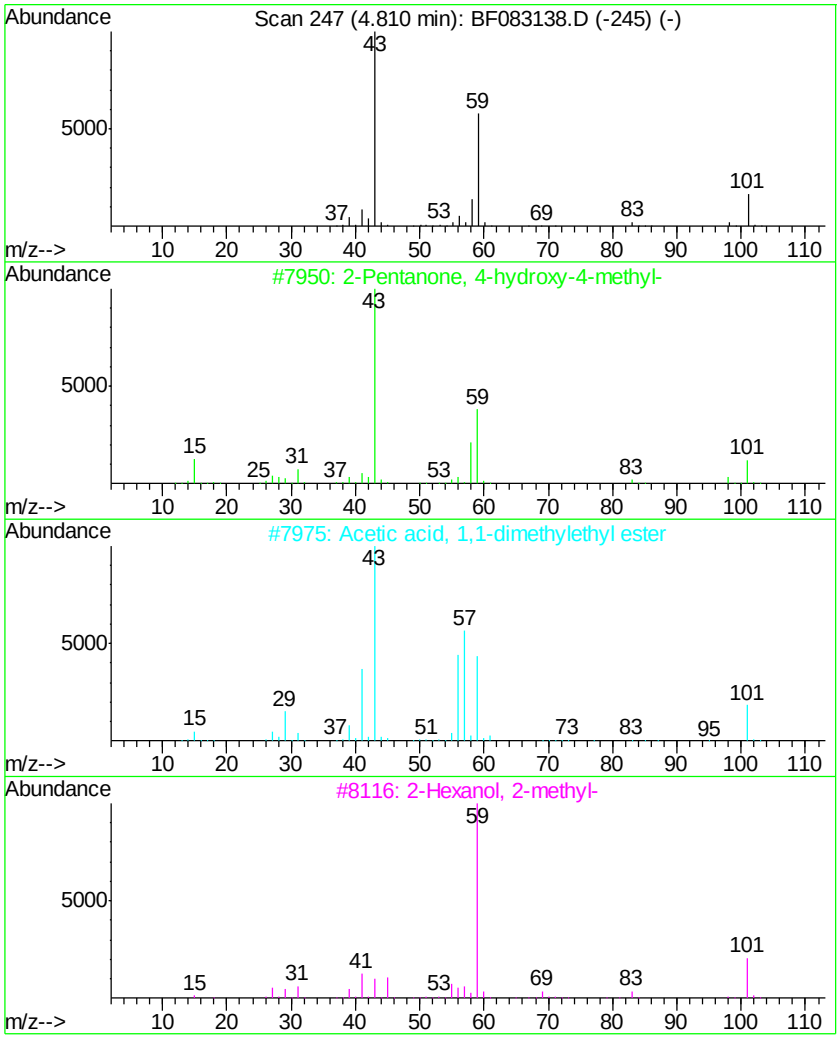
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

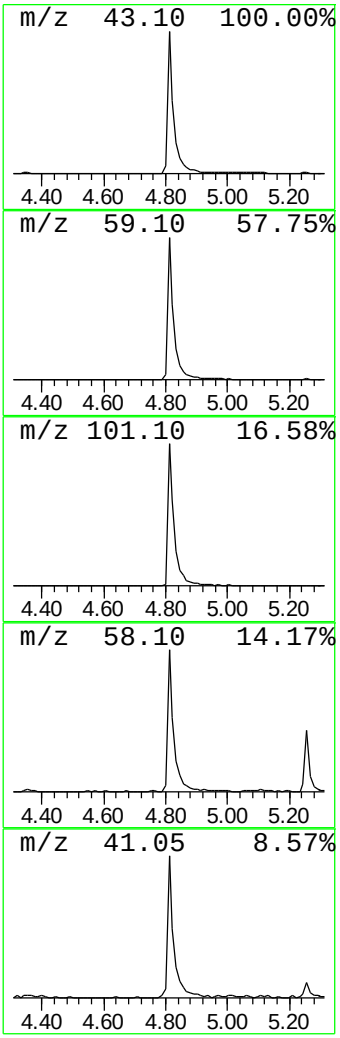
**********

Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.81 | 19.02 ng | 1159230 | 1,4-Dichlorobenzene-d4 | 6.65 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 50 |
| 2 | Acetic acid, 1,1-dimethylethyl e... | 116 | C6H12O2 | 000540-88-5 | 39 |
| 3 | 2-Hexanol, 2-methyl- | 116 | C7H16O | 000625-23-0 | 33 |
| 4 | 3-Hexanol, 4-methyl- | 116 | C7H16O | 000615-29-2 | 33 |
| 5 | 2,3-Butanedione, monooxime | 101 | C4H7NO2 | 000057-71-6 | 9 |



Data Path : V:\HPCHEM1\BNA F\DATA\BF112115\
Data File : BF083138.D
Acq On : 22 Nov 2015 5:01
Operator : UM/IZ
Sample : G4480-06
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
LIBERTY SF_002-SPLPSVOC2

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF112115.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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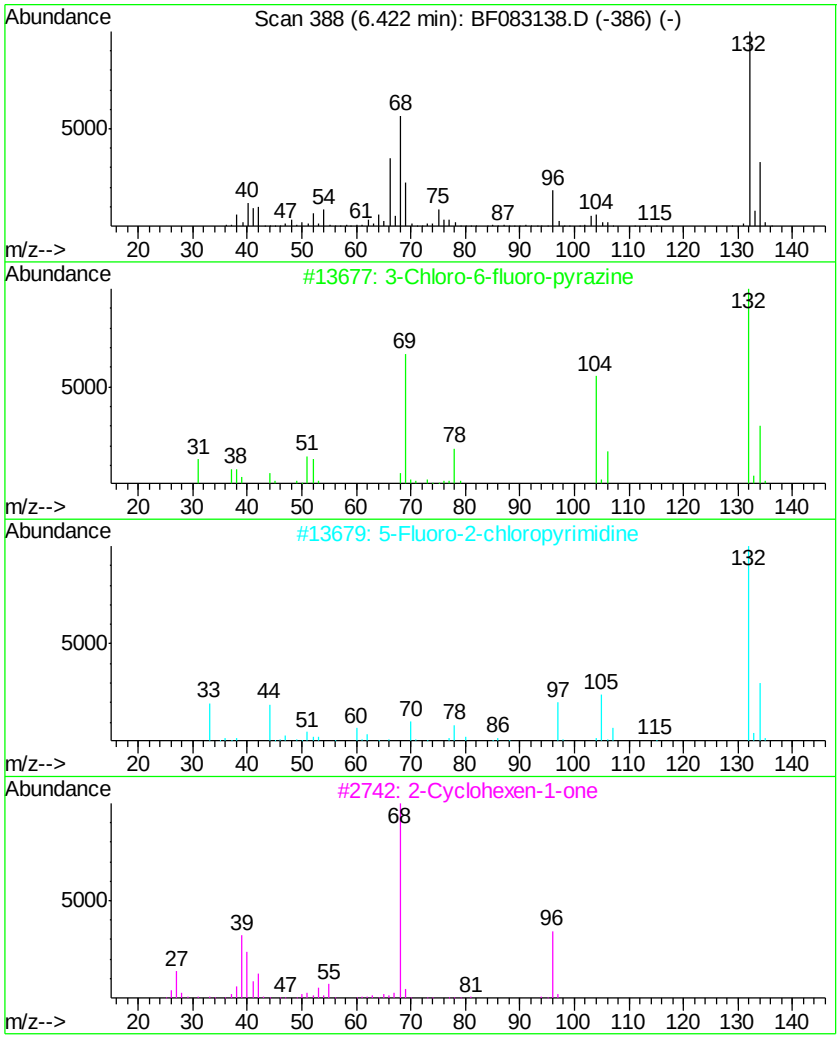
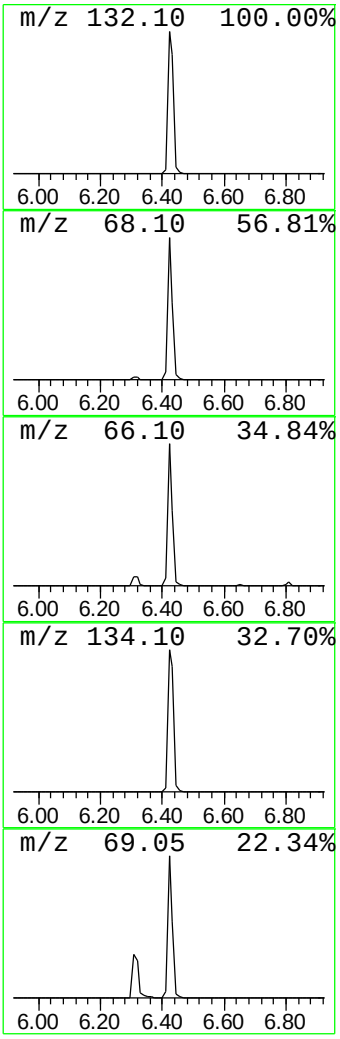
Peak Number 3 unknown6.42 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.42 | 80.85 ng | 4926420 | 1,4-Dichlorobenzene-d4 | 6.65 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 27 |
| 2 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 12 |
| 3 | 2-Cyclohexen-1-one | 96 | C6H8O | 000930-68-7 | 10 |
| 4 | (5-METHYL-2-PYRIDYL)ACETONITRILE | 132 | C8H8N2 | 1000241-93-9 | 10 |
| 5 | Tranylcypromine-propionyl | 189 | C12H15NO | 1000123-86-3 | 9 |



Data Path : V:\HPCHEM1\BNA F\DATA\BF112115\
Data File : BF083138.D
Acq On : 22 Nov 2015 5:01
Operator : UM/IZ
Sample : G4480-06
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** LIBERTY SF_002-SPLPSVOC2

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF112115.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

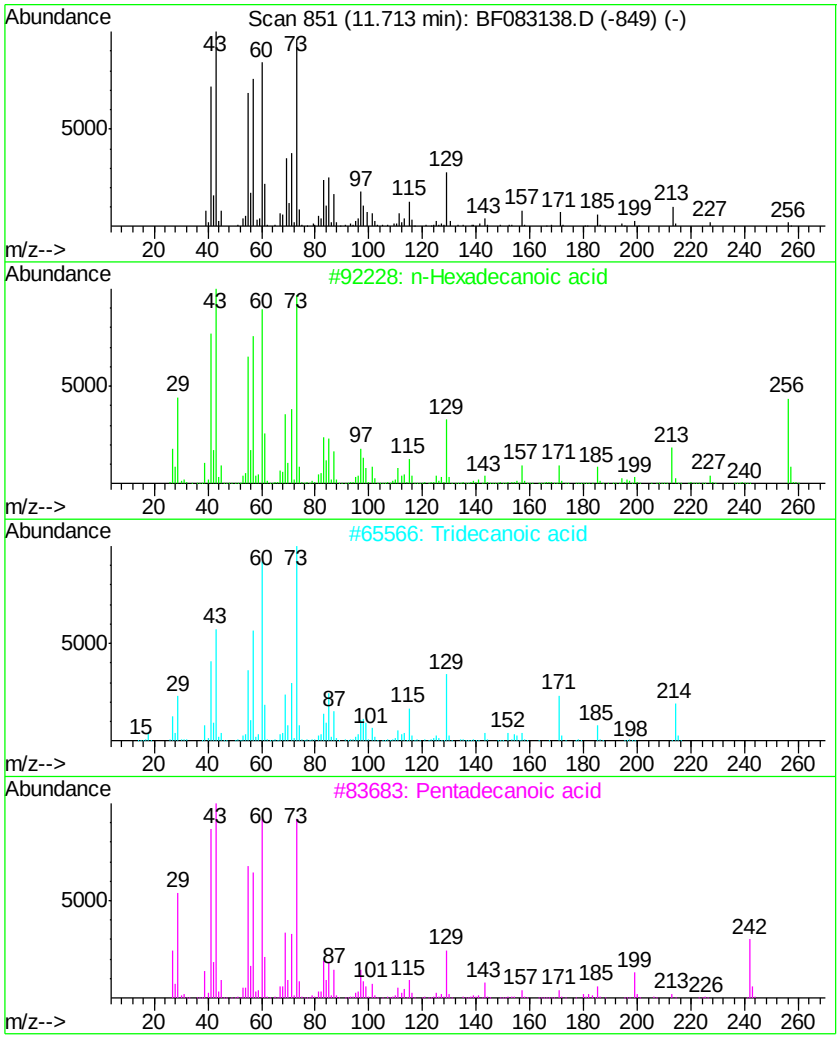
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

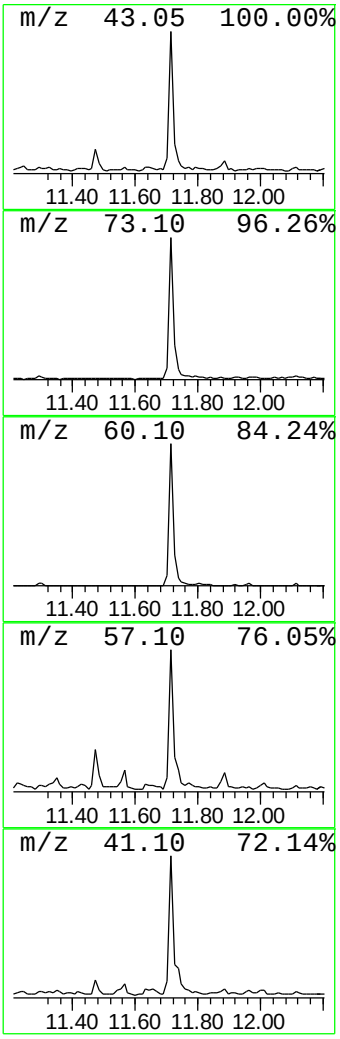
**********

Peak Number 5 n-Hexadecanoic acid Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.71 | 5.99 ng | 557840 | Phenanthrene-d10 | 11.16 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | n-Hexadecanoic acid | 256 | C16H32O2 | 000057-10-3 | 98 |
| 2 | Tridecanoic acid | 214 | C13H26O2 | 000638-53-9 | 90 |
| 3 | Pentadecanoic acid | 242 | C15H30O2 | 001002-84-2 | 87 |
| 4 | Undecanoic acid | 186 | C11H22O2 | 000112-37-8 | 72 |
| 5 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 72 |



# Library Search Compound Report

Data Path : V:\HPCHEM1\BNA F\DATA\BF112115\
Data File : BF083138.D
Acq On : 22 Nov 2015 5:01
Operator : UM/IZ
Sample : G4480-06
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :**
BNA_F
**ClientSampleId :**
LIBERTY SF_002-SPLPSVOC2

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF112115.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

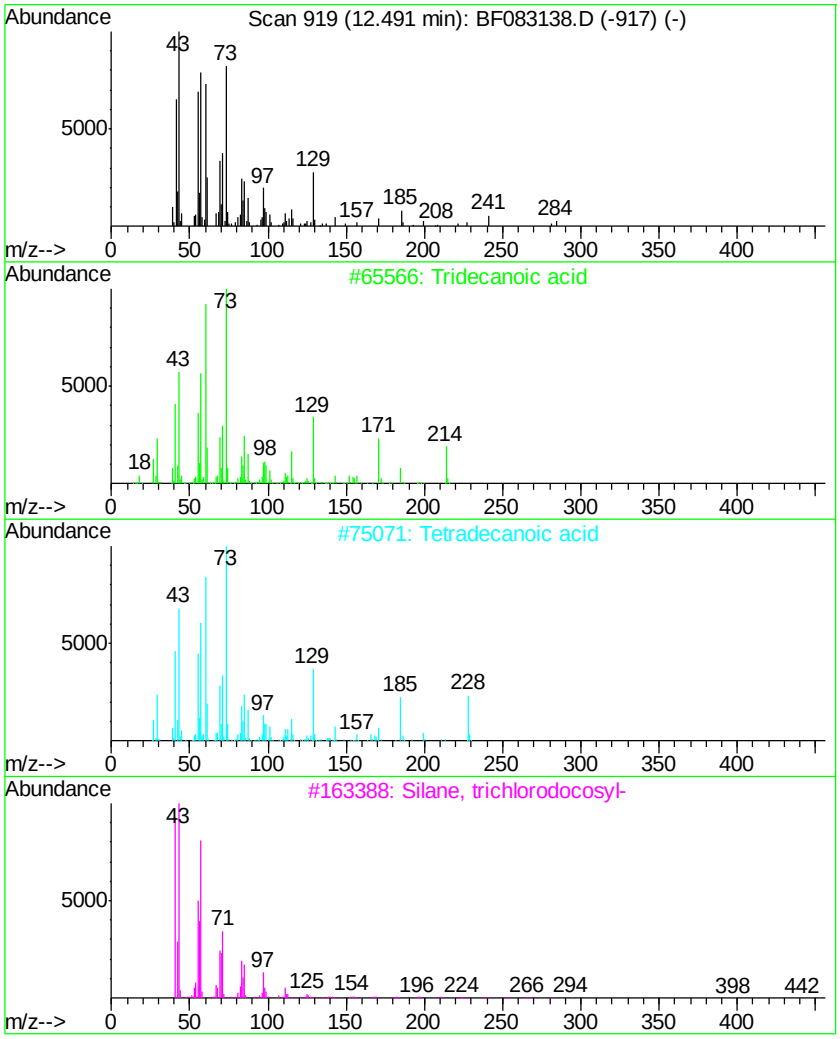
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

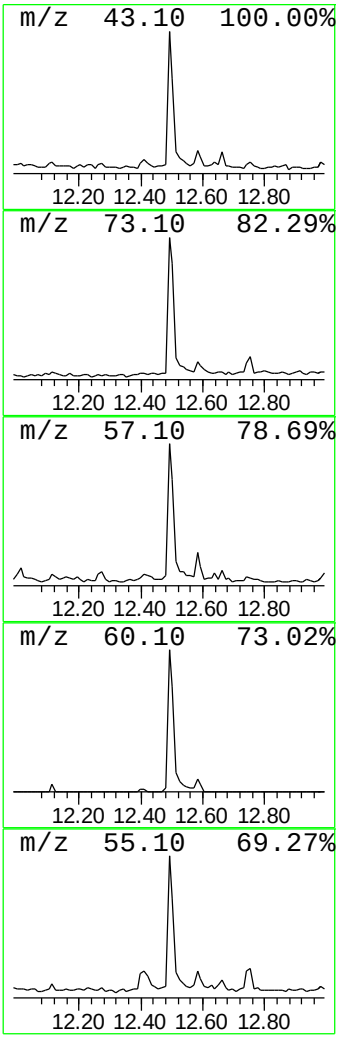
**********

Peak Number 6 Tridecanoic acid Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.49 | 3.62 ng | 328668 | Chrysene-d12 | 13.78 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Tridecanoic acid | 214 | C13H26O2 | 000638-53-9 | 59 |
| 2 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 47 |
| 3 | Silane, trichlorodocosyl- | 442 | C22H45Cl3Si | 007325-84-0 | 30 |
| 4 | Acetic acid, octadecyl ester | 312 | C20H40O2 | 000822-23-1 | 27 |
| 5 | N-Cyclooct-4-enylacetamide | 167 | C10H17NO | 170952-69-9 | 25 |



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Data File : BF083138.D
Acq On : 22 Nov 2015 5:01
Operator : UM/IZ
Sample : G4480-06
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** LIBERTY SF_002-SPLPSVOC2

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF112115.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
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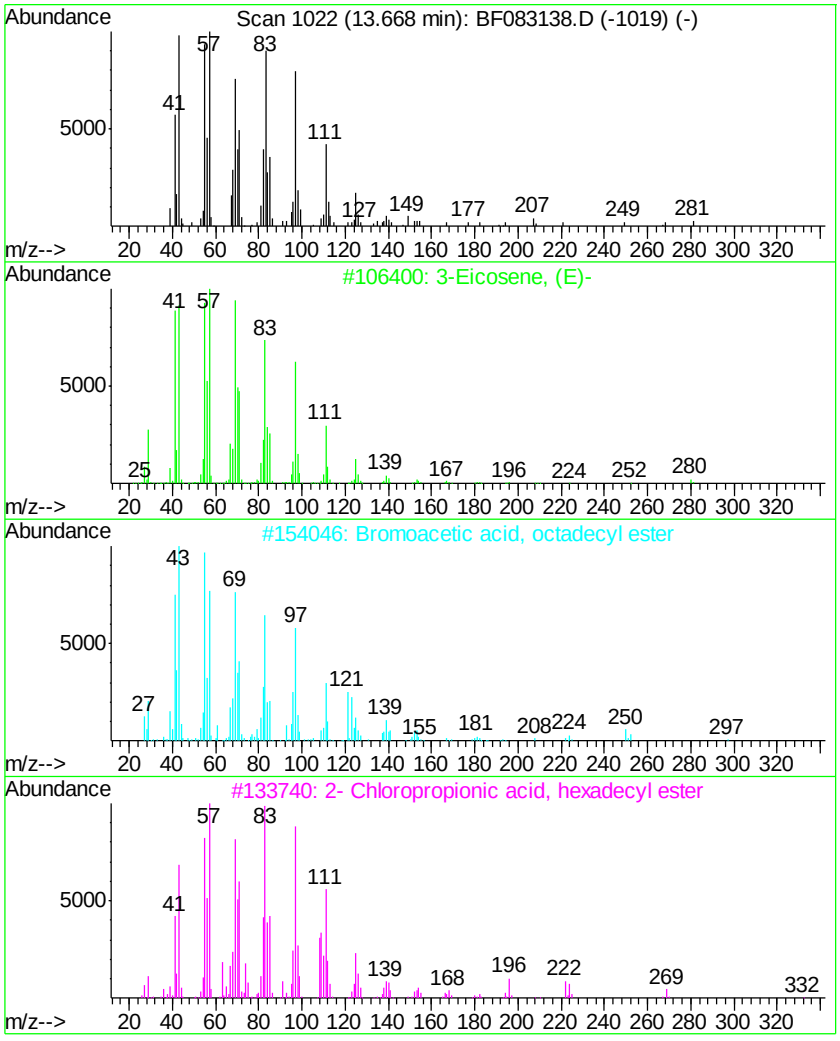
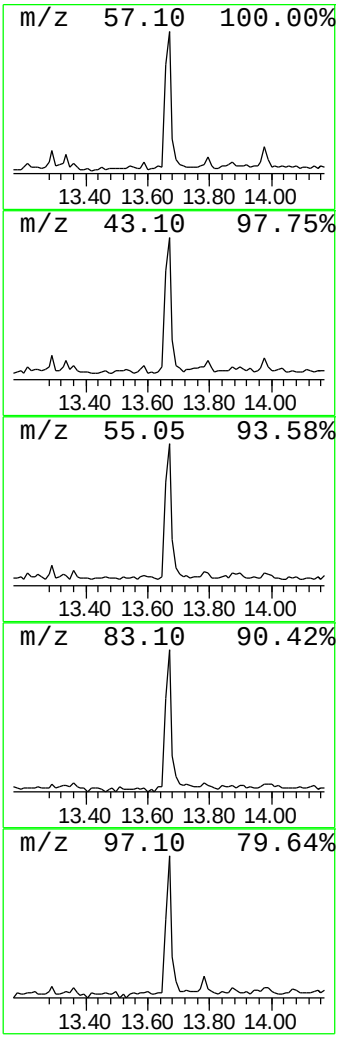
**********

Peak Number 7 3-Eicosene, (E)- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.67 | 3.06 ng | 277106 | Chrysene-d12 | 13.78 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Eicosene, (E)- | 280 | C20H40 | 074685-33-9 | 91 |
| 2 | Bromoacetic acid, octadecyl ester | 390 | C20H39BrO2 | 018992-03-5 | 91 |
| 3 | 2- Chloropropionic acid, hexadec... | 332 | C19H37ClO2 | 086711-81-1 | 91 |
| 4 | 1-Nonadecene | 266 | C19H38 | 018435-45-5 | 90 |
| 5 | Trichloroacetic acid, hexadecyl ... | 386 | C18H33Cl3O2 | 074339-54-1 | 90 |



Tentatively Identified Compound (LSC) summary

Data Path : V:\HPCHEM1\BNA_F\DATA\BF112115\
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Acq On : 22 Nov 2015 5:01
Operator : UM/IZ
Sample : G4480-06
Misc :
ALS Vial : 28 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** LIBERTY SF_002-SPLPSVOC2

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF112115.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 |
| 3-Penten-2-one, 4... | 4.10 | 6.3 | ng | 386425 | 1 | 6.65 | 1218640 | 20.0 |
| 2-Pentanone, 4-hy... | 4.81 | 19.0 | ng | 1159230 | 1 | 6.65 | 1218640 | 20.0 |
| unknown6.42 | 6.42 | 80.8 | ng | 4926420 | 1 | 6.65 | 1218640 | 20.0 |
| n-Hexadecanoic acid | 11.71 | 6.0 | ng | 557840 | 4 | 11.16 | 1861430 | 20.0 |
| Tridecanoic acid | 12.49 | 3.6 | ng | 328668 | 5 | 13.78 | 1814000 | 20.0 |
| 3-Eicosene, (E)- | 13.67 | 3.1 | ng | 277106 | 5 | 13.78 | 1814000 | 20.0 |