LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF091415\
Data File : BF081607.D
Acq On : 14 Sep 2015 14:34
Operator : UM/IZ
Sample : G3597-01 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GP-1(0-5)

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-BF090115.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 | 1.543 | 16 | 18 | 56 | rVB | 967869 | 3232088 | 100.00% | 29.678% |
| 2 | 4.469 | 272 | 274 | 290 | rBB | 69344 | 149316 | 4.62% | 1.371% |
| 3 | 5.371 | 351 | 353 | 367 | rBB | 102051 | 213587 | 6.61% | 1.961% |
| 4 | 7.635 | 549 | 551 | 557 | rBV | 117426 | 243253 | 7.53% | 2.234% |
| 5 | 7.737 | 557 | 560 | 566 | rVB | 151457 | 260550 | 8.06% | 2.392% |
| 6 | 8.229 | 599 | 603 | 608 | rBB | 188243 | 334612 | 10.35% | 3.073% |
| 7 | 8.549 | 628 | 631 | 637 | rBB | 116483 | 182901 | 5.66% | 1.679% |
| 8 | 9.509 | 713 | 715 | 724 | rBV | 98446 | 166607 | 5.15% | 1.530% |
| 9 | 11.132 | 853 | 857 | 860 | rBV | 259706 | 446086 | 13.80% | 4.096% |
| 10 | 13.761 | 1084 | 1087 | 1091 | rBV | 185195 | 294552 | 9.11% | 2.705% |
| 11 | 14.824 | 1177 | 1180 | 1184 | rBB | 30051 | 43168 | 1.34% | 0.396% |
| 12 | 15.258 | 1214 | 1218 | 1222 | rBV2 | 283969 | 460773 | 14.26% | 4.231% |
| 13 | 17.156 | 1381 | 1384 | 1390 | rBB | 79857 | 135295 | 4.19% | 1.242% |
| 14 | 18.767 | 1521 | 1525 | 1527 | rBV | 275680 | 465310 | 14.40% | 4.273% |
| 15 | 18.813 | 1527 | 1529 | 1533 | rVB | 120972 | 189190 | 5.85% | 1.737% |
| 16 | 18.939 | 1538 | 1540 | 1545 | rVB | 19525 | 33225 | 1.03% | 0.305% |
| 17 | 19.990 | 1629 | 1632 | 1635 | rVV | 21464 | 34259 | 1.06% | 0.315% |
| 18 | 20.047 | 1635 | 1637 | 1641 | rVB | 25143 | 45368 | 1.40% | 0.417% |
| 19 | 20.230 | 1649 | 1653 | 1656 | rVV2 | 18666 | 56172 | 1.74% | 0.516% |
| 20 | 20.516 | 1672 | 1678 | 1686 | rBV2 | 11857 | 40807 | 1.26% | 0.375% |
| 21 | 20.744 | 1691 | 1698 | 1701 | rVB2 | 23048 | 54236 | 1.68% | 0.498% |
| 22 | 21.202 | 1735 | 1738 | 1740 | rBV | 24503 | 40322 | 1.25% | 0.370% |
| 23 | 21.430 | 1755 | 1758 | 1761 | rVV | 296685 | 378256 | 11.70% | 3.473% |
| 24 | 21.785 | 1786 | 1789 | 1792 | rBV | 315858 | 447490 | 13.85% | 4.109% |
| 25 | 22.105 | 1815 | 1817 | 1819 | rBV | 203179 | 283257 | 8.76% | 2.601% |
| 26 | 22.150 | 1819 | 1821 | 1824 | rVV | 23537 | 41095 | 1.27% | 0.377% |
| 27 | 22.299 | 1828 | 1834 | 1836 | rVV3 | 32701 | 87083 | 2.69% | 0.800% |
| 28 | 22.425 | 1844 | 1845 | 1850 | rVV2 | 30455 | 60918 | 1.88% | 0.559% |
| 29 | 22.550 | 1853 | 1856 | 1857 | rVV | 25272 | 36797 | 1.14% | 0.338% |
| 30 | 22.585 | 1857 | 1859 | 1861 | rVB | 36725 | 36505 | 1.13% | 0.335% |
| 31 | 22.962 | 1887 | 1892 | 1894 | rBV | 47421 | 69086 | 2.14% | 0.634% |
| 32 | 23.088 | 1900 | 1903 | 1905 | rBV | 32645 | 48531 | 1.50% | 0.446% |
| 33 | 23.122 | 1905 | 1906 | 1909 | rVB2 | 37378 | 53602 | 1.66% | 0.492% |
| 34 | 23.213 | 1912 | 1914 | 1916 | rVB | 28387 | 34513 | 1.07% | 0.317% |

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF091415\
Data File : BF081607.D
Acq On : 14 Sep 2015 14:34
Operator : UM/IZ
Sample : G3597-01 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GP-1(0-5)

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-BF090115.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 23.385 | 1925 | 1929 | 1931 | rBV2 | 388674 | 642767 | 19.89% | 5.902% |
| 36 | 23.419 | 1931 | 1932 | 1934 | rVB | 146392 | 103657 | 3.21% | 0.952% |
| 37 | 23.499 | 1937 | 1939 | 1941 | rBV | 106624 | 109018 | 3.37% | 1.001% |
| 38 | 23.830 | 1966 | 1968 | 1970 | rBV | 37587 | 63869 | 1.98% | 0.586% |
| 39 | 23.865 | 1970 | 1971 | 1975 | rVB3 | 15259 | 35801 | 1.11% | 0.329% |
| 40 | 24.345 | 2010 | 2013 | 2016 | rVV3 | 16701 | 43319 | 1.34% | 0.398% |
| 41 | 24.482 | 2023 | 2025 | 2029 | rBV | 173965 | 299332 | 9.26% | 2.749% |
| 42 | 24.573 | 2031 | 2033 | 2035 | rVB | 30964 | 33364 | 1.03% | 0.306% |
| 43 | 24.722 | 2044 | 2046 | 2049 | rBV | 89199 | 108603 | 3.36% | 0.997% |
| 44 | 24.779 | 2049 | 2051 | 2053 | rVV | 113342 | 155685 | 4.82% | 1.430% |
| 45 | 24.825 | 2053 | 2055 | 2061 | rVB2 | 268349 | 332976 | 10.30% | 3.058% |
| 46 | 25.625 | 2123 | 2125 | 2131 | rVB5 | 26260 | 63415 | 1.96% | 0.582% |
| 47 | 25.876 | 2144 | 2147 | 2149 | rBV | 63072 | 112638 | 3.48% | 1.034% |
| 48 | 26.174 | 2170 | 2173 | 2176 | rBV | 52165 | 87152 | 2.70% | 0.800% |

Sum of corrected areas: 10890406

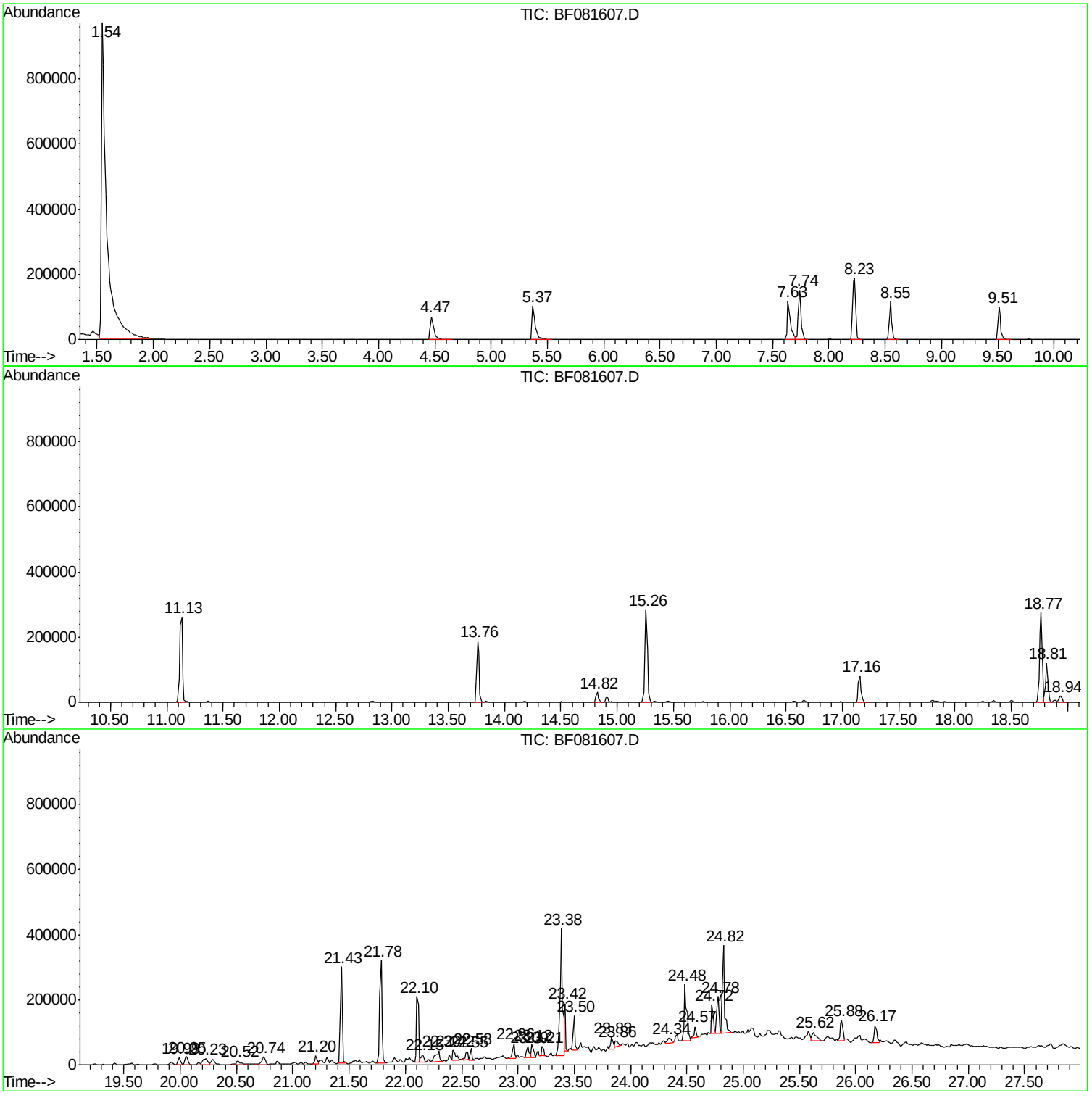
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF091415\
Data File : BF081607.D
Acq On : 14 Sep 2015 14:34
Operator : UM/IZ
Sample : G3597-01 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GP-1(0-5)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF090115.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\BF091415\
Data File : BF081607.D
Acq On : 14 Sep 2015 14:34
Operator : UM/IZ
Sample : G3597-01 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GP-1(0-5)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF090115.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

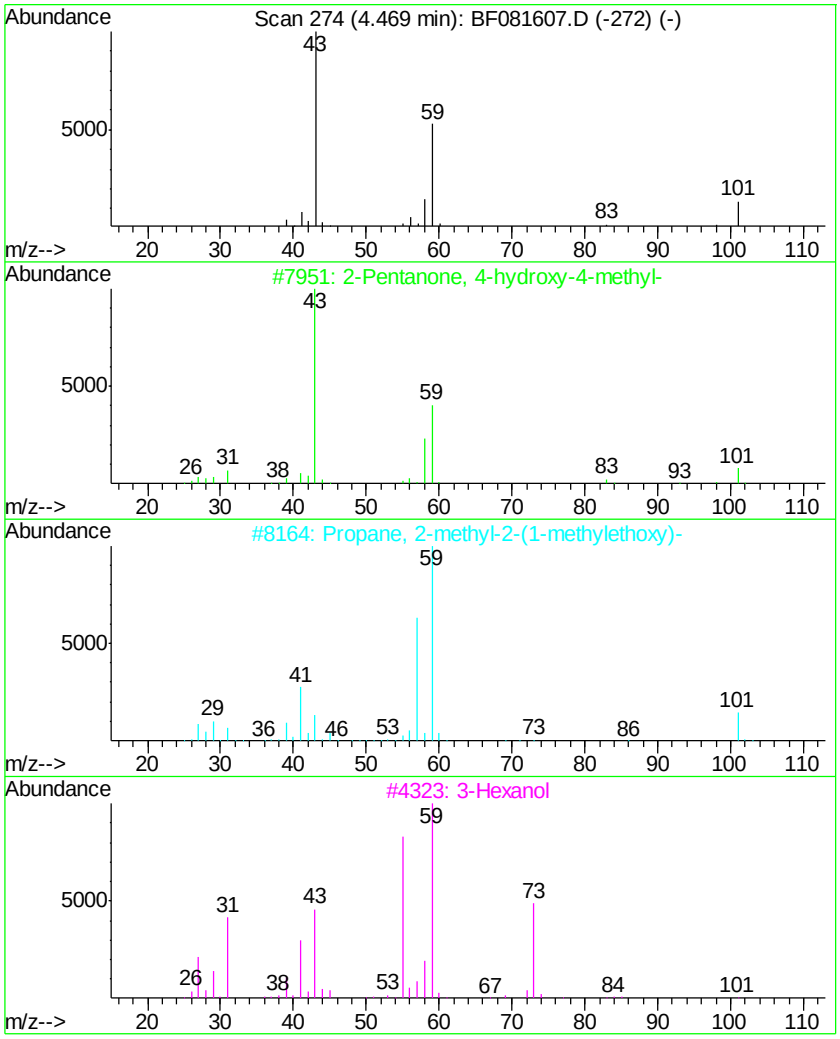
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

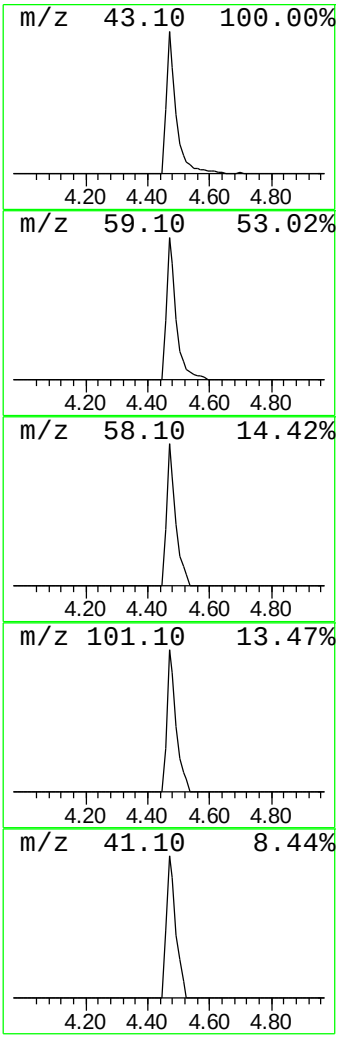
**********

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

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.47 | 8.92 ng | 149316 | 1,4-Dichlorobenzene-d4 | 8.23 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 50 |
| 2 | Propane, 2-methyl-2-(1-methyleth... | 116 | C7H16O | 017348-59-3 | 36 |
| 3 | 3-Hexanol | 102 | C6H14O | 000623-37-0 | 33 |
| 4 | 3-Hexanol, 4-methyl- | 116 | C7H16O | 000615-29-2 | 33 |
| 5 | Acetic acid, cyano-, 1,1-dimethy... | 141 | C7H11NO2 | 001116-98-9 | 25 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF091415\
Data File : BF081607.D
Acq On : 14 Sep 2015 14:34
Operator : UM/IZ
Sample : G3597-01 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GP-1(0-5)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF090115.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

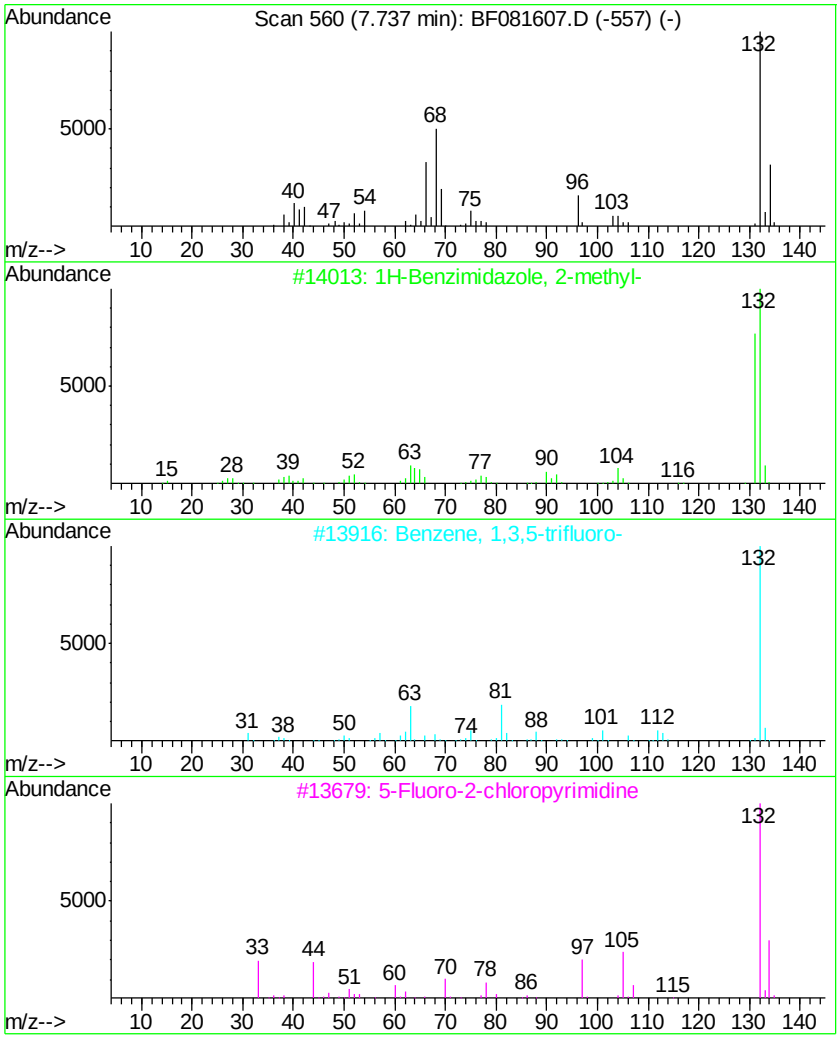
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

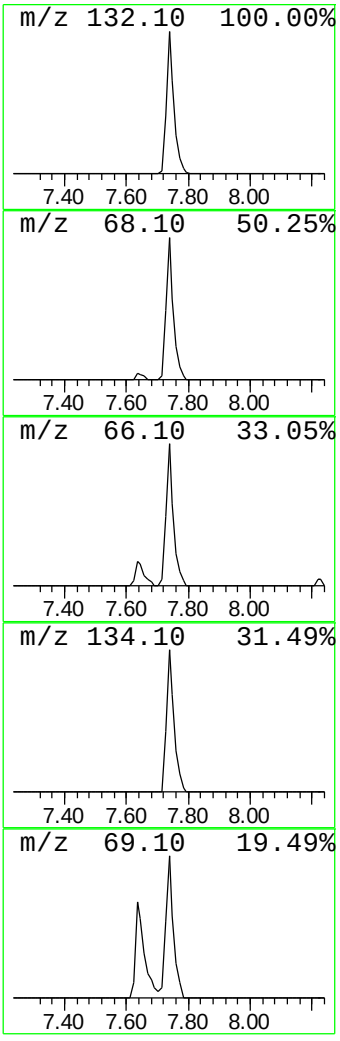
**********

Peak Number 3 unknown7.74 Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.74 | 15.57 ng | 260550 | 1,4-Dichlorobenzene-d4 | 8.23 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1H-Benzimidazole, 2-methyl- | 132 | C8H8N2 | 000615-15-6 | 22 |
| 2 | Benzene, 1,3,5-trifluoro- | 132 | C6H3F3 | 000372-38-3 | 14 |
| 3 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 12 |
| 4 | 2-Cyclohexen-1-one | 96 | C6H8O | 000930-68-7 | 11 |
| 5 | 5-Aminoindole | 132 | C8H8N2 | 005192-03-0 | 10 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF091415\
Data File : BF081607.D
Acq On : 14 Sep 2015 14:34
Operator : UM/IZ
Sample : G3597-01 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GP-1(0-5)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF090115.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

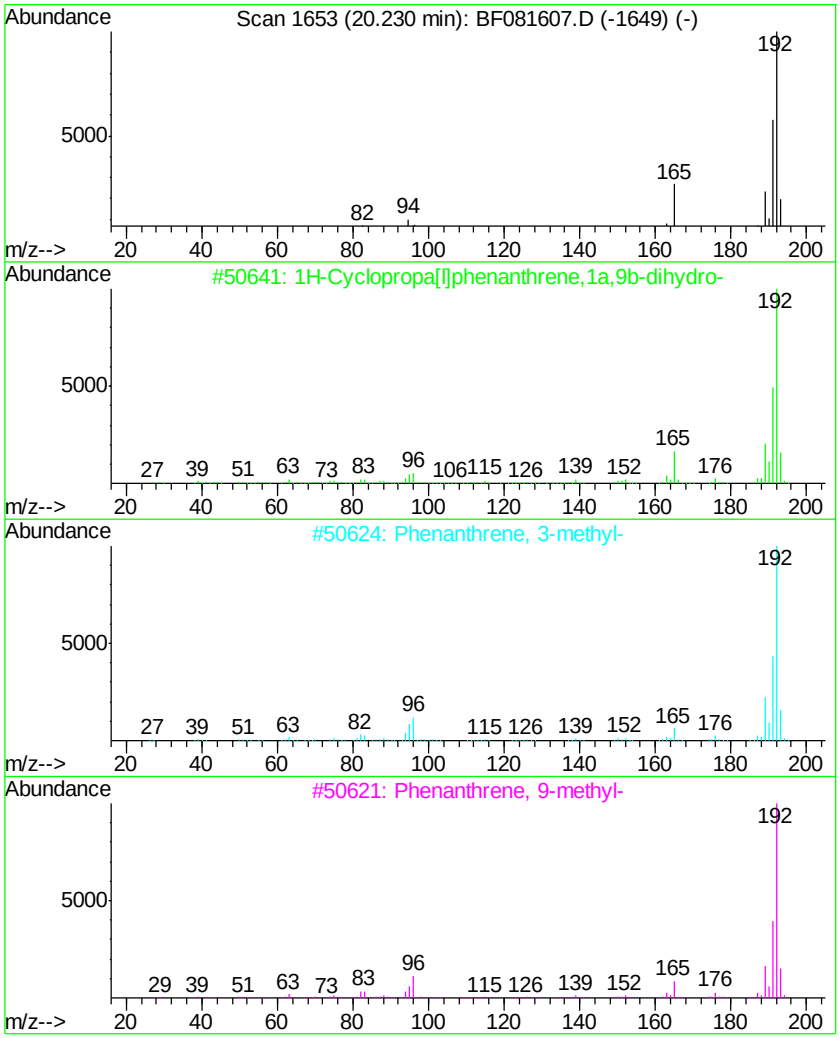
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

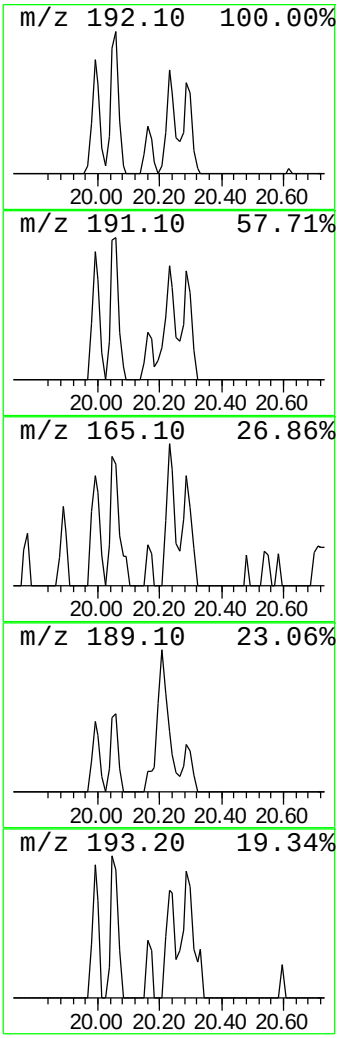
**********

Peak Number 5 1H-Cyclopropa[l]phenanthren... Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.23 | 2.41 ng | 56172 | Phenanthrene-d10 | 18.77 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1H-Cyclopropa[l]phenanthrene,1a,... | 192 | C15H12 | 000949-41-7 | 80 |
| 2 | Phenanthrene, 3-methyl- | 192 | C15H12 | 000832-71-3 | 80 |
| 3 | Phenanthrene, 9-methyl- | 192 | C15H12 | 000883-20-5 | 80 |
| 4 | 1H-Indene, 2-phenyl- | 192 | C15H12 | 004505-48-0 | 80 |
| 5 | 1H-Indene, 1-phenyl- | 192 | C15H12 | 001961-96-2 | 80 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF091415\
Data File : BF081607.D
Acq On : 14 Sep 2015 14:34
Operator : UM/IZ
Sample : G3597-01 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GP-1(0-5)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF090115.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

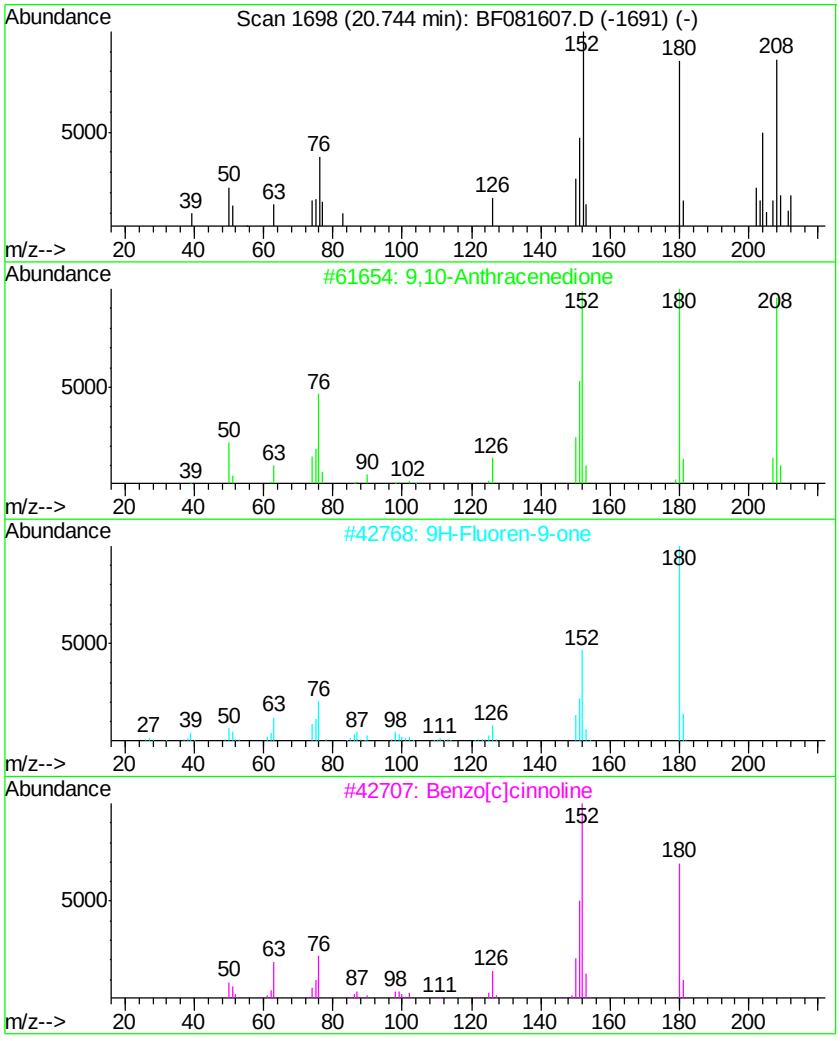
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

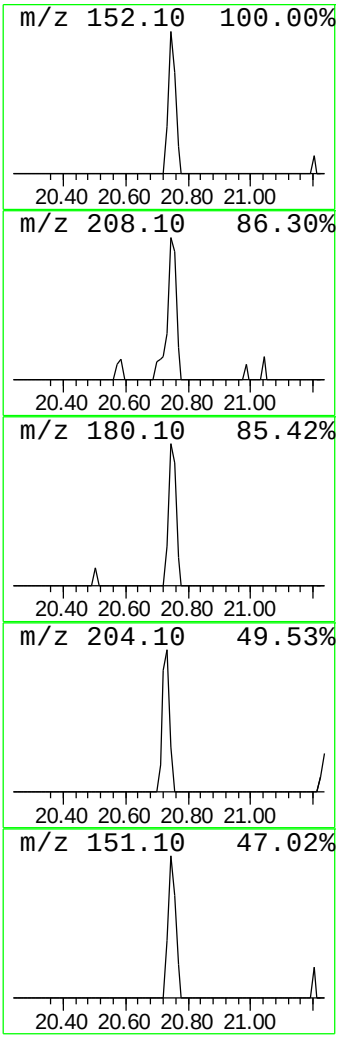
**********

Peak Number 6 9,10-Anthracenedione Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.74 | 2.33 ng | 54236 | Phenanthrene-d10 | 18.77 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 98 |
| 2 | 9H-Fluoren-9-one | 180 | C13H8O | 000486-25-9 | 60 |
| 3 | Benzo[c]cinnoline | 180 | C12H8N2 | 000230-17-1 | 53 |
| 4 | Benzo[h]cinnoline | 180 | C12H8N2 | 000230-31-9 | 53 |
| 5 | 1H-Phenalen-1-one | 180 | C13H8O | 000548-39-0 | 49 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF091415\
Data File : BF081607.D
Acq On : 14 Sep 2015 14:34
Operator : UM/IZ
Sample : G3597-01 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GP-1(0-5)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF090115.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

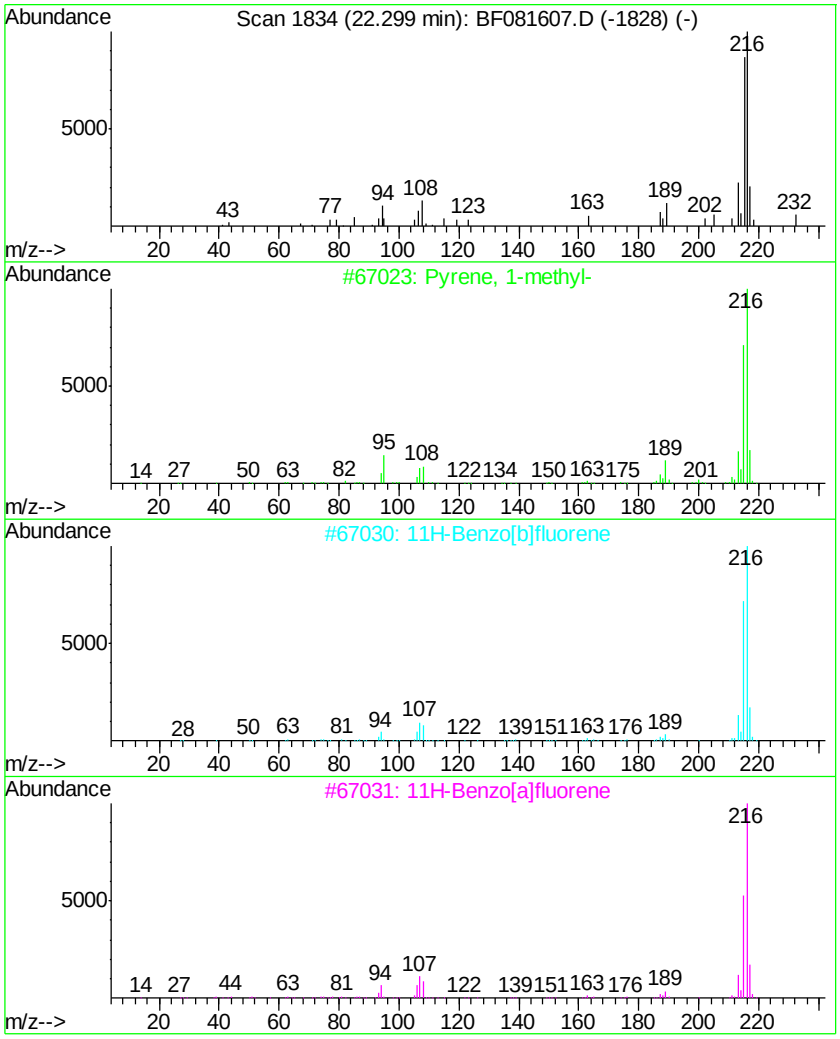
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

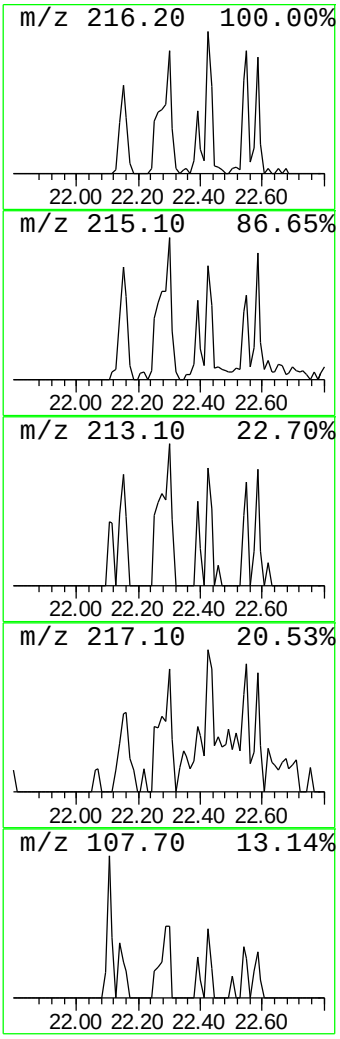
**********

Peak Number 7 Pyrene, 1-methyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 22.30 | 2.71 ng | 87083 | Chrysene-d12 | 23.38 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pyrene, 1-methyl- | 216 | C17H12 | 002381-21-7 | 94 |
| 2 | 11H-Benzo[b]fluorene | 216 | C17H12 | 000243-17-4 | 93 |
| 3 | 11H-Benzo[a]fluorene | 216 | C17H12 | 000238-84-6 | 90 |
| 4 | Fluoranthene, 2-methyl- | 216 | C17H12 | 033543-31-6 | 87 |
| 5 | 7H-Benzo[c]fluorene | 216 | C17H12 | 000205-12-9 | 74 |



# Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF091415\
Data File : BF081607.D
Acq On : 14 Sep 2015 14:34
Operator : UM/IZ
Sample : G3597-01 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GP-1(0-5)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF090115.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

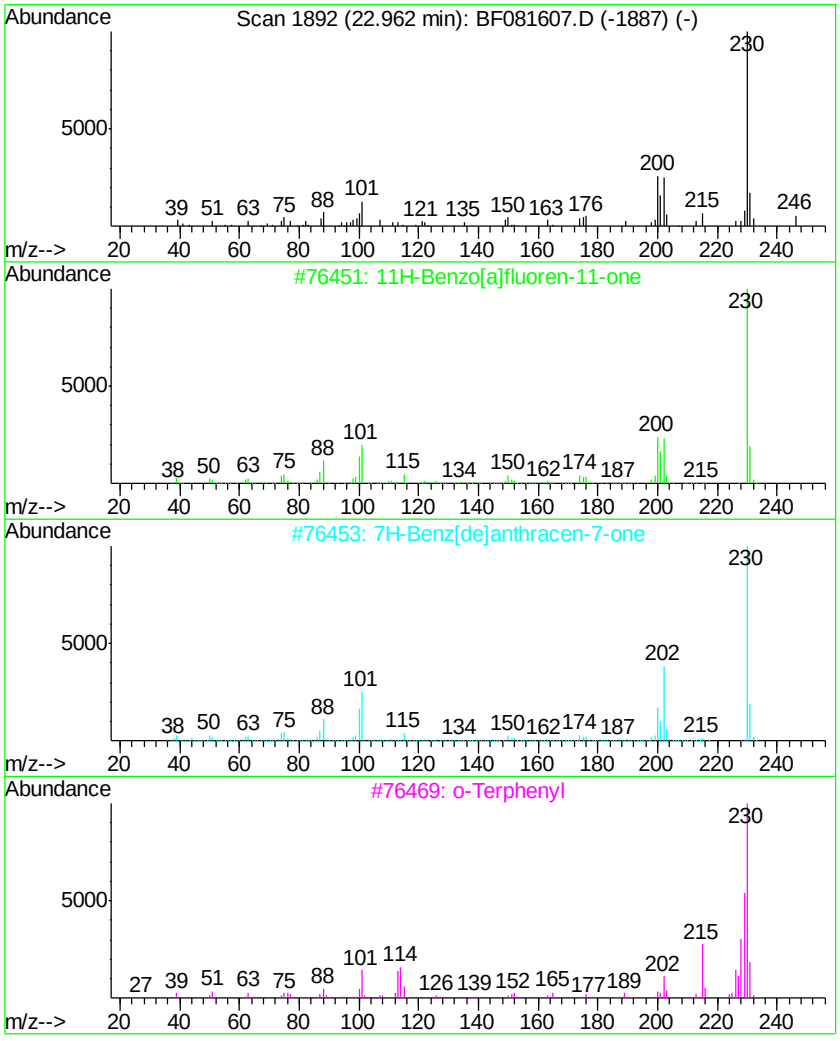
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

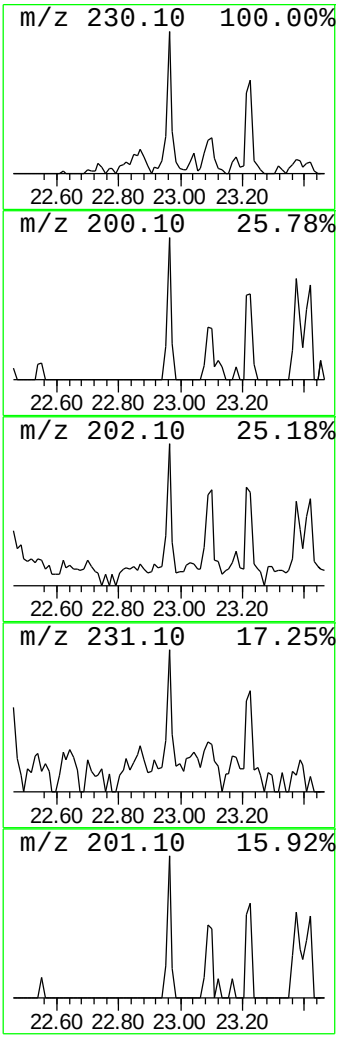
**********

Peak Number 8 11H-Benzo[a]fluoren-11-one Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 22.96 | 2.15 ng | 69086 | Chrysene-d12 | 23.38 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 11H-Benzo[a]fluoren-11-one | 230 | C17H10O | 000479-79-8 | 95 |
| 2 | 7H-Benz[de]anthracen-7-one | 230 | C17H10O | 000082-05-3 | 81 |
| 3 | o-Terphenyl | 230 | C18H14 | 000084-15-1 | 58 |
| 4 | Dibenzo[c,h][2,6]naphthyridine | 230 | C16H10N2 | 000218-30-4 | 53 |
| 5 | Pyrene, 1,3-dimethyl- | 230 | C18H14 | 064401-21-4 | 53 |



Data Path : Z:\HPCHEM1\BNA_F\DATA\BF091415\
Data File : BF081607.D
Acq On : 14 Sep 2015 14:34
Operator : UM/IZ
Sample : G3597-01 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GP-1(0-5)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF090115.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

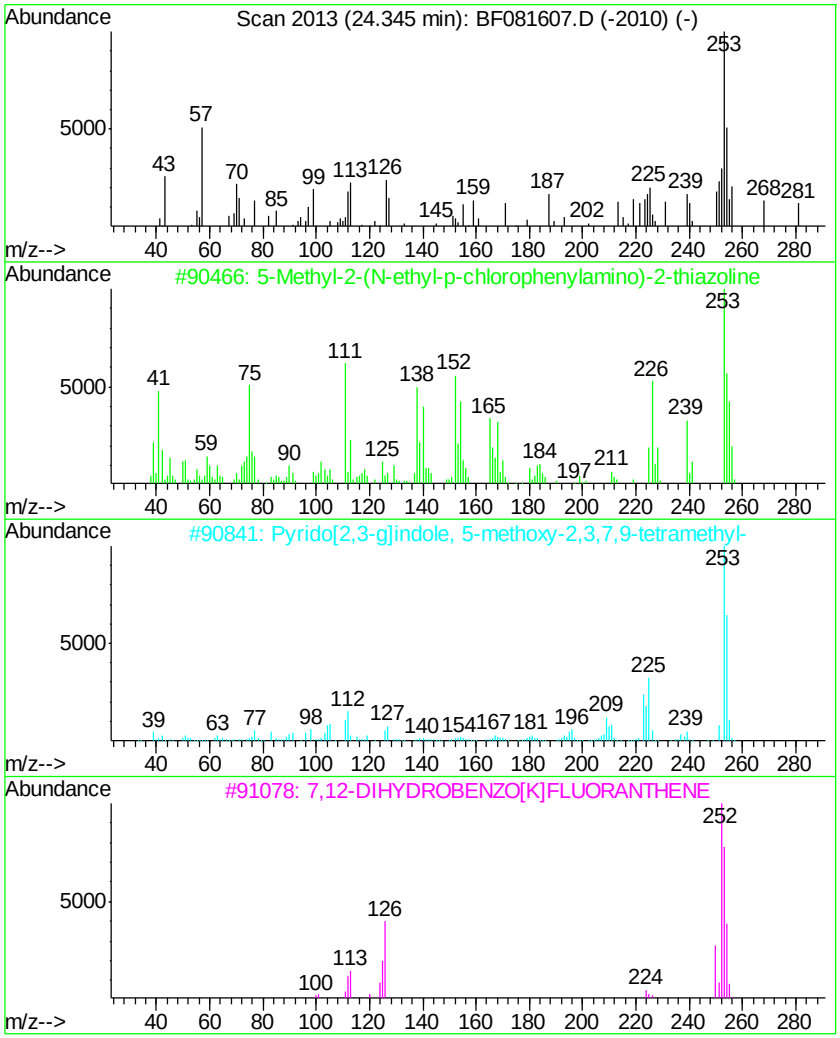
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

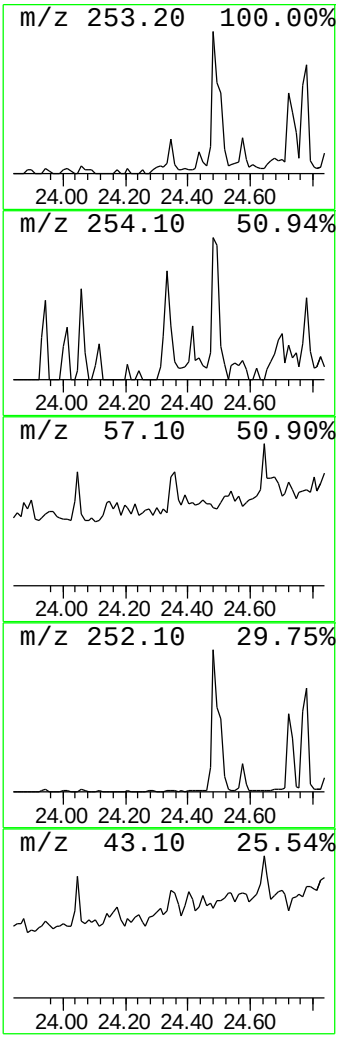
**********

Peak Number 9 5-Methyl-2-(N-ethyl-p-chlor... Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 24.34 | 2.60 ng | 43319 | Perylene-d12 | 24.82 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 5-Methyl-2-(N-ethyl-p-chlorophen... | 254 | C12H15ClN2S | 075220-53-0 | 55 |
| 2 | Pyrido[2,3-g]indole, 5-methoxy-2... | 254 | C16H18N2O | 201991-45-9 | 47 |
| 3 | 7,12-DIHYDROBENZO[K]FLUORANTHENE | 254 | C20H14 | 1000080-17-7 | 46 |
| 4 | 2-(4-Hydroxy-benzylidene)-benzo[... | 254 | C15H10O2S | 1000297-32-7 | 43 |
| 5 | 9H-Fluorene, 9-(phenylmethylene)- | 254 | C20H14 | 001836-87-9 | 43 |



# Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF091415\
Data File : BF081607.D
Acq On : 14 Sep 2015 14:34
Operator : UM/IZ
Sample : G3597-01 5X
Misc :
ALS Vial : 6 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** GP-1(0-5)

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF090115.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| 2-Pentanone, 4-hy... | 4.47 | 8.9 | ng | 149316 | 1 | 8.23 | 334612 | 20.0 |
| unknown7.74 | 7.74 | 15.6 | ng | 260550 | 1 | 8.23 | 334612 | 20.0 |
| 1H-Cyclopropa[l]p... | 20.23 | 2.4 | ng | 56172 | 4 | 18.77 | 465310 | 20.0 |
| 9,10-Anthracenedione | 20.74 | 2.3 | ng | 54236 | 4 | 18.77 | 465310 | 20.0 |
| Pyrene, 1-methyl- | 22.30 | 2.7 | ng | 87083 | 5 | 23.38 | 642767 | 20.0 |
| 11H-Benzo[a]fluor... | 22.96 | 2.1 | ng | 69086 | 5 | 23.38 | 642767 | 20.0 |
| 5-Methyl-2-(N-eth... | 24.34 | 2.6 | ng | 43319 | 6 | 24.82 | 332976 | 20.0 |