LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090519\
Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

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:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.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 | 5.457 | 568 | 573 | 576 | rBV | 1585349 | 1509611 | 19.75% | 4.409% |
| 2 | 6.134 | 684 | 688 | 691 | rVB | 1220496 | 1078056 | 14.10% | 3.149% |
| 3 | 6.298 | 714 | 716 | 719 | rVB | 187255 | 147007 | 1.92% | 0.429% |
| 4 | 6.475 | 741 | 746 | 755 | rBV | 1648076 | 1731105 | 22.65% | 5.056% |
| 5 | 6.551 | 755 | 759 | 762 | rBV | 808256 | 622858 | 8.15% | 1.819% |
| 6 | 6.616 | 765 | 770 | 773 | rVB | 1942841 | 1716430 | 22.46% | 5.013% |
| 7 | 6.845 | 805 | 809 | 811 | rBV | 544299 | 453097 | 5.93% | 1.323% |
| 8 | 6.922 | 819 | 822 | 826 | rVB | 252423 | 209934 | 2.75% | 0.613% |
| 9 | 6.963 | 826 | 829 | 832 | rBV | 215792 | 182081 | 2.38% | 0.532% |
| 10 | 7.004 | 832 | 836 | 839 | rVB | 1437622 | 1266295 | 16.57% | 3.698% |
| 11 | 7.404 | 899 | 904 | 907 | rBV | 1182787 | 1130105 | 14.79% | 3.301% |
| 12 | 7.439 | 907 | 910 | 915 | rVB | 247606 | 192256 | 2.52% | 0.562% |
| 13 | 7.851 | 974 | 980 | 982 | rBV | 115673 | 134142 | 1.76% | 0.392% |
| 14 | 8.128 | 1023 | 1027 | 1029 | rBV | 657781 | 612702 | 8.02% | 1.789% |
| 15 | 8.151 | 1029 | 1031 | 1034 | rVB | 227952 | 175646 | 2.30% | 0.513% |
| 16 | 8.828 | 1143 | 1146 | 1149 | rBV2 | 127288 | 111674 | 1.46% | 0.326% |
| 17 | 8.863 | 1149 | 1152 | 1157 | rVB | 239251 | 200786 | 2.63% | 0.586% |
| 18 | 8.986 | 1169 | 1173 | 1177 | rBV | 152427 | 129360 | 1.69% | 0.378% |
| 19 | 9.198 | 1205 | 1209 | 1212 | rBV | 2398973 | 1886067 | 24.68% | 5.508% |
| 20 | 9.586 | 1272 | 1275 | 1280 | rVB | 265954 | 216341 | 2.83% | 0.632% |
| 21 | 9.874 | 1318 | 1324 | 1328 | rBV | 808236 | 721190 | 9.44% | 2.106% |
| 22 | 10.663 | 1454 | 1458 | 1461 | rBV | 1229010 | 1011091 | 13.23% | 2.953% |
| 23 | 10.792 | 1476 | 1480 | 1483 | rVB2 | 60106 | 82896 | 1.08% | 0.242% |
| 24 | 11.357 | 1573 | 1576 | 1579 | rBV | 650724 | 592597 | 7.75% | 1.731% |
| 25 | 11.463 | 1591 | 1594 | 1598 | rBV | 105463 | 106203 | 1.39% | 0.310% |
| 26 | 11.916 | 1662 | 1671 | 1678 | rBV | 2139824 | 3427339 | 44.84% | 10.010% |
| 27 | 12.110 | 1702 | 1704 | 1709 | rVB | 120945 | 122965 | 1.61% | 0.359% |
| 28 | 12.221 | 1720 | 1723 | 1728 | rBV | 224766 | 242255 | 3.17% | 0.708% |
| 29 | 12.286 | 1731 | 1734 | 1735 | rVV2 | 84673 | 77552 | 1.01% | 0.226% |
| 30 | 12.310 | 1735 | 1738 | 1741 | rVV | 646020 | 577274 | 7.55% | 1.686% |
| 31 | 12.345 | 1741 | 1744 | 1748 | rVV3 | 104144 | 124607 | 1.63% | 0.364% |
| 32 | 12.574 | 1780 | 1783 | 1784 | rBV | 179198 | 189406 | 2.48% | 0.553% |
| 33 | 12.616 | 1787 | 1790 | 1795 | rVB | 417043 | 463103 | 6.06% | 1.353% |
| 34 | 12.710 | 1796 | 1806 | 1809 | rBV | 4388967 | 7643102 | 100.00% | 22.322% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090519\
Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

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:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 12.798 | 1819 | 1821 | 1824 | rBV | 133805 | 126654 | 1.66% | 0.370% |
| 36 | 12.945 | 1842 | 1846 | 1848 | rBV | 1518929 | 1300992 | 17.02% | 3.800% |
| 37 | 13.051 | 1861 | 1864 | 1866 | rVB | 348856 | 270908 | 3.54% | 0.791% |
| 38 | 13.086 | 1866 | 1870 | 1873 | rBV | 561518 | 496163 | 6.49% | 1.449% |
| 39 | 13.310 | 1905 | 1908 | 1912 | rBV2 | 311675 | 330877 | 4.33% | 0.966% |
| 40 | 13.715 | 1975 | 1977 | 1979 | rBV2 | 167350 | 138628 | 1.81% | 0.405% |
| 41 | 13.845 | 1997 | 1999 | 2003 | rVB | 242920 | 260998 | 3.41% | 0.762% |
| 42 | 13.998 | 2020 | 2025 | 2028 | rBV | 522630 | 707078 | 9.25% | 2.065% |
| 43 | 14.780 | 2155 | 2158 | 2161 | rBV | 347224 | 357606 | 4.68% | 1.044% |
| 44 | 15.115 | 2212 | 2215 | 2219 | rVB | 564169 | 702725 | 9.19% | 2.052% |
| 45 | 15.933 | 2351 | 2354 | 2357 | rVB | 380876 | 459888 | 6.02% | 1.343% |

Sum of corrected areas: 34239650

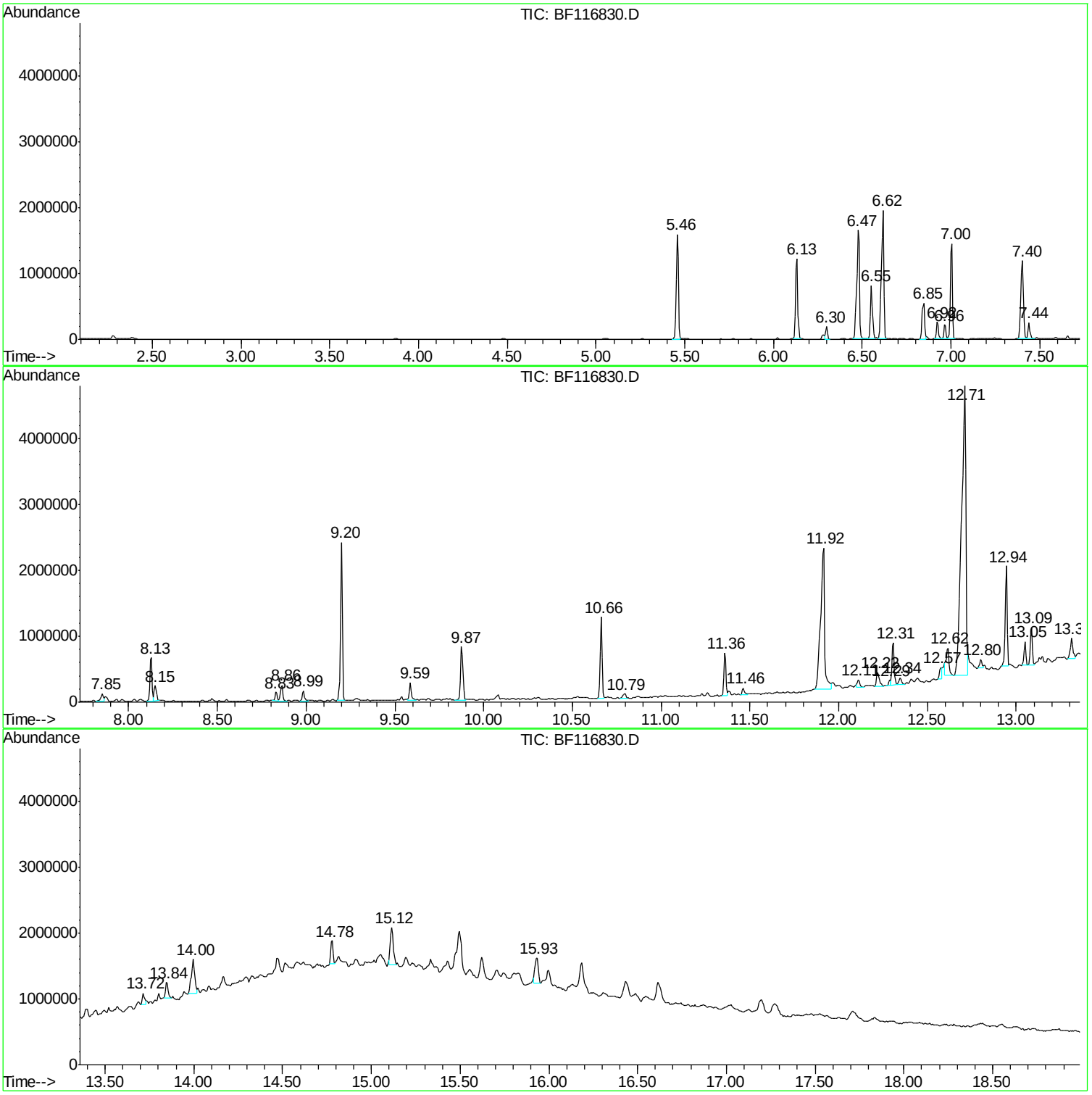
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090519\
Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090519\
Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

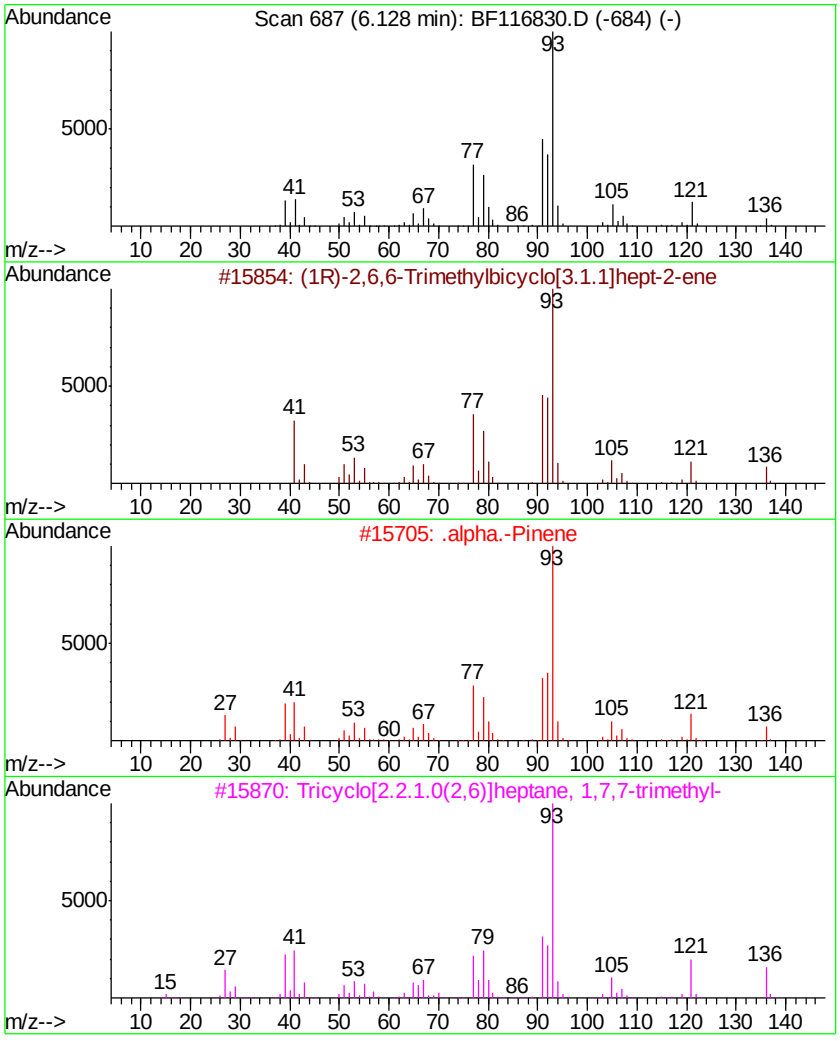
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

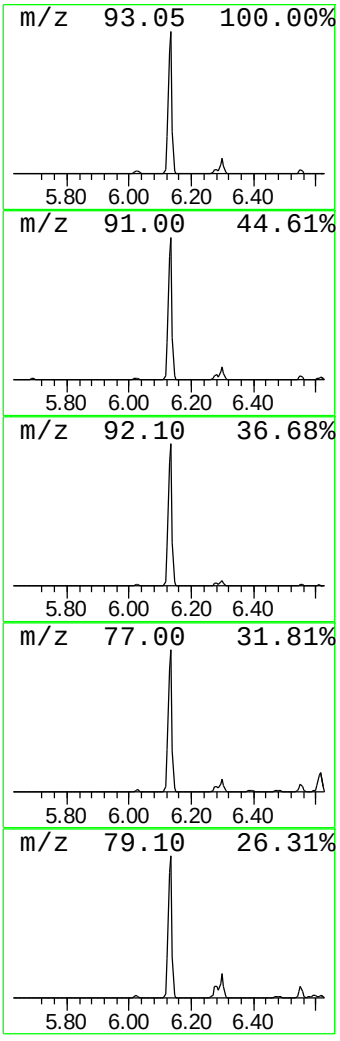
**********

Peak Number 1 (1R)-2,6,6-Trimethylbicyclo... Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.13 | 47.59 ng | 1078060 | 1,4-Dichlorobenzene-d4 | 6.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | (1R)-2,6,6-Trimethylbicyclo[3.1.... | 136 | C10H16 | 007785-70-8 | 95 |
| 2 | .alpha.-Pinene | 136 | C10H16 | 000080-56-8 | 95 |
| 3 | Tricyclo[2.2.1.0(2,6)]heptane, 1... | 136 | C10H16 | 000508-32-7 | 91 |
| 4 | trans-.beta.-Ocimene | 136 | C10H16 | 003779-61-1 | 91 |
| 5 | (+)-3-Carene | 136 | C10H16 | 000498-15-7 | 91 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090519\
Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

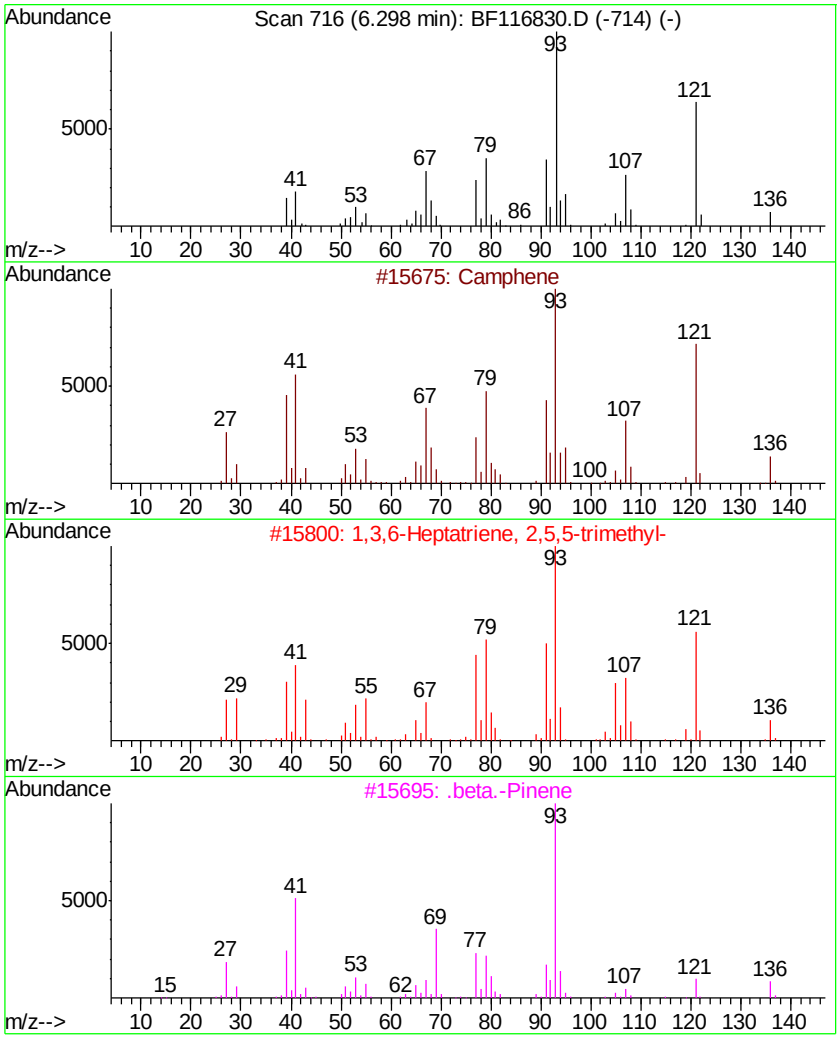
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

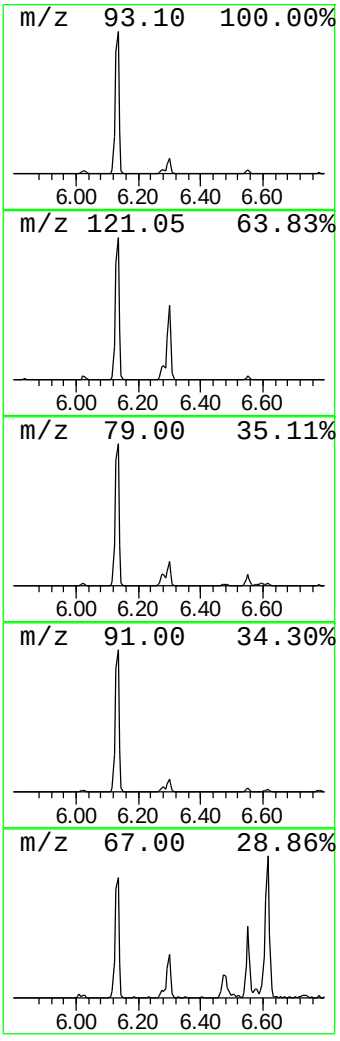
**********

Peak Number 2 Camphene Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.30 | 6.49 ng | 147007 | 1,4-Dichlorobenzene-d4 | 6.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Camphene | 136 | C10H16 | 000079-92-5 | 76 |
| 2 | 1,3,6-Heptatriene, 2,5,5-trimethyl- | 136 | C10H16 | 029548-02-5 | 64 |
| 3 | .beta.-Pinene | 136 | C10H16 | 000127-91-3 | 64 |
| 4 | Bicyclo[3.1.1]heptane, 6,6-dimet... | 136 | C10H16 | 018172-67-3 | 59 |
| 5 | Bicyclo[2.2.1]hept-2-ene, 2,7,7-... | 136 | C10H16 | 000514-14-7 | 59 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090519\
Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

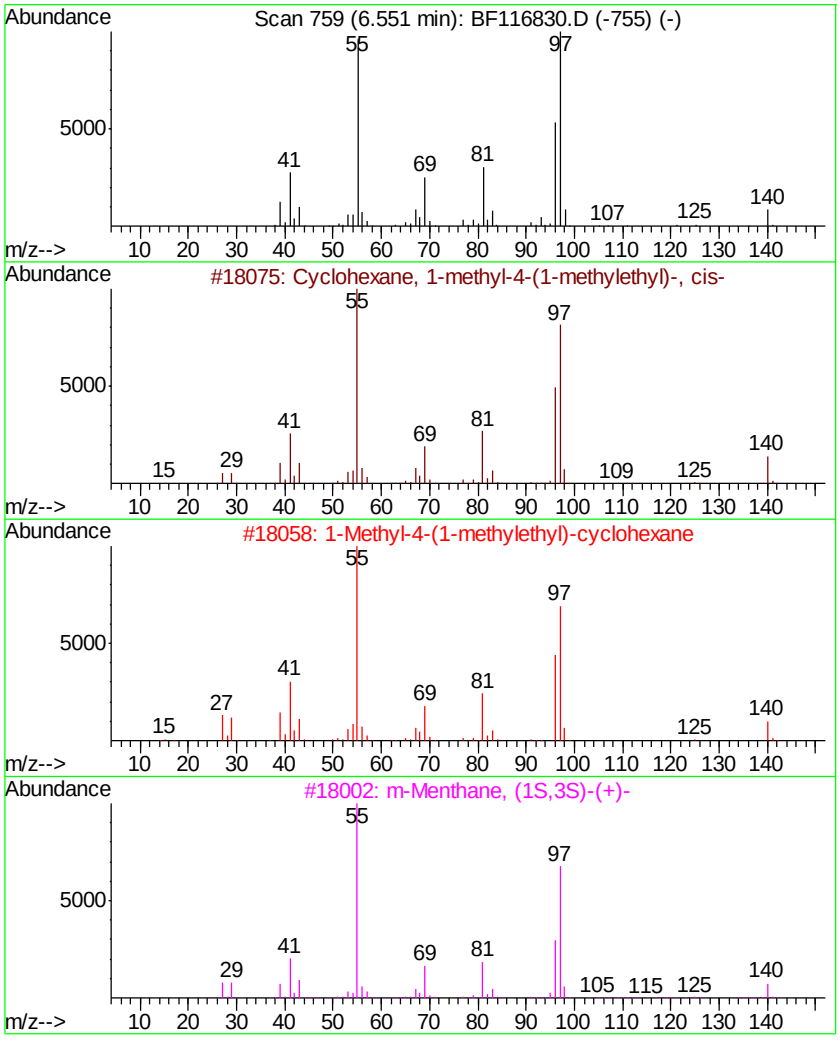
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

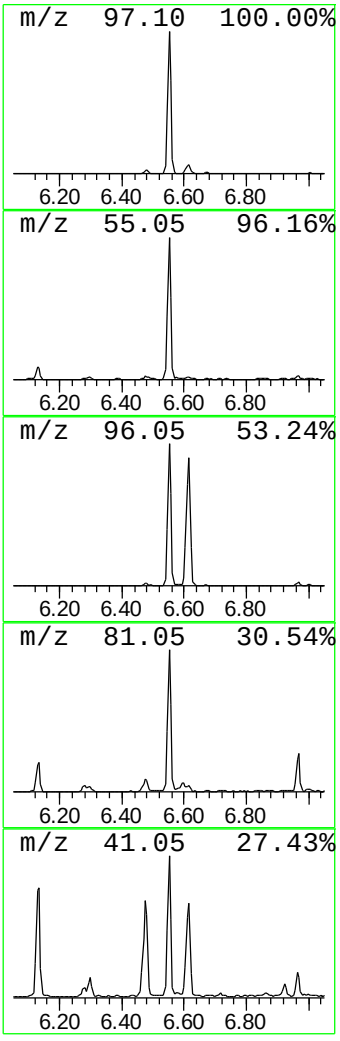
**********

Peak Number 3 Cyclohexane, 1-methyl-4-(1-... Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.55 | 27.49 ng | 622858 | 1,4-Dichlorobenzene-d4 | 6.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexane, 1-methyl-4-(1-methy... | 140 | C10H20 | 006069-98-3 | 91 |
| 2 | 1-Methyl-4-(1-methylethyl)-cyclo... | 140 | C10H20 | 000099-82-1 | 91 |
| 3 | m-Menthane, (1S,3S)-(+)- | 140 | C10H20 | 013837-67-7 | 91 |
| 4 | Cyclohexane, 1-methyl-4-(1-methy... | 140 | C10H20 | 001678-82-6 | 91 |
| 5 | Cyclohexane, 1-methyl-3-(1-methy... | 140 | C10H20 | 016580-24-8 | 91 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090519\
Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

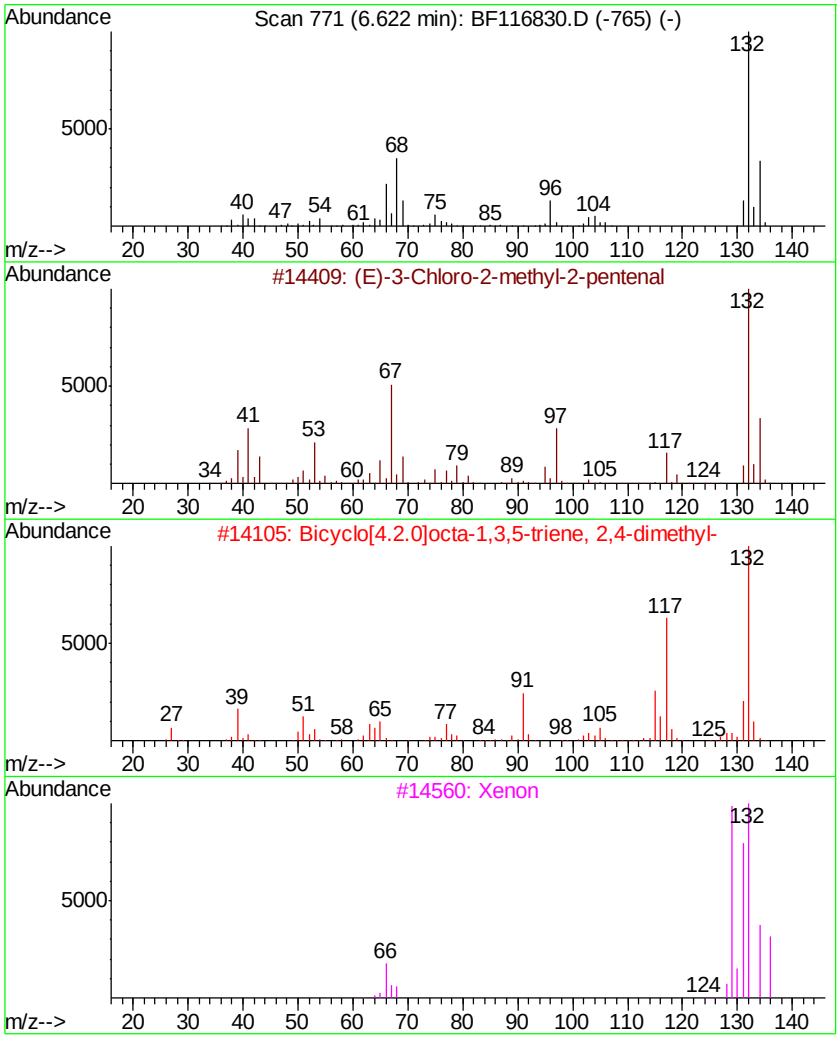
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

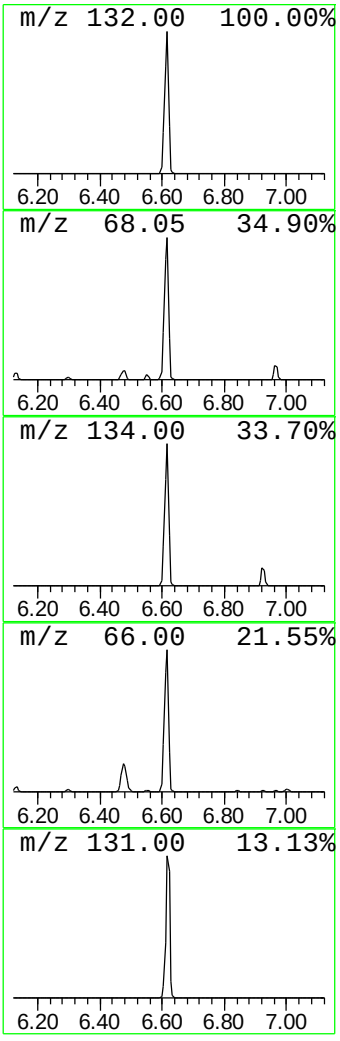
**********

Peak Number 4 unknown6.62 Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.62 | 75.76 ng | 1716430 | 1,4-Dichlorobenzene-d4 | 6.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO | 031357-76-3 | 16 |
| 2 | Bicyclo[4.2.0]octa-1,3,5-triene,... | 132 | C10H12 | 028749-81-7 | 9 |
| 3 | Xenon | 132 | Xe | 007440-63-3 | 9 |
| 4 | 4-Chloro-6-fluoro-pyrimidine | 132 | C4H2ClFN2 | 051422-01-6 | 9 |
| 5 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 9 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090519\
Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

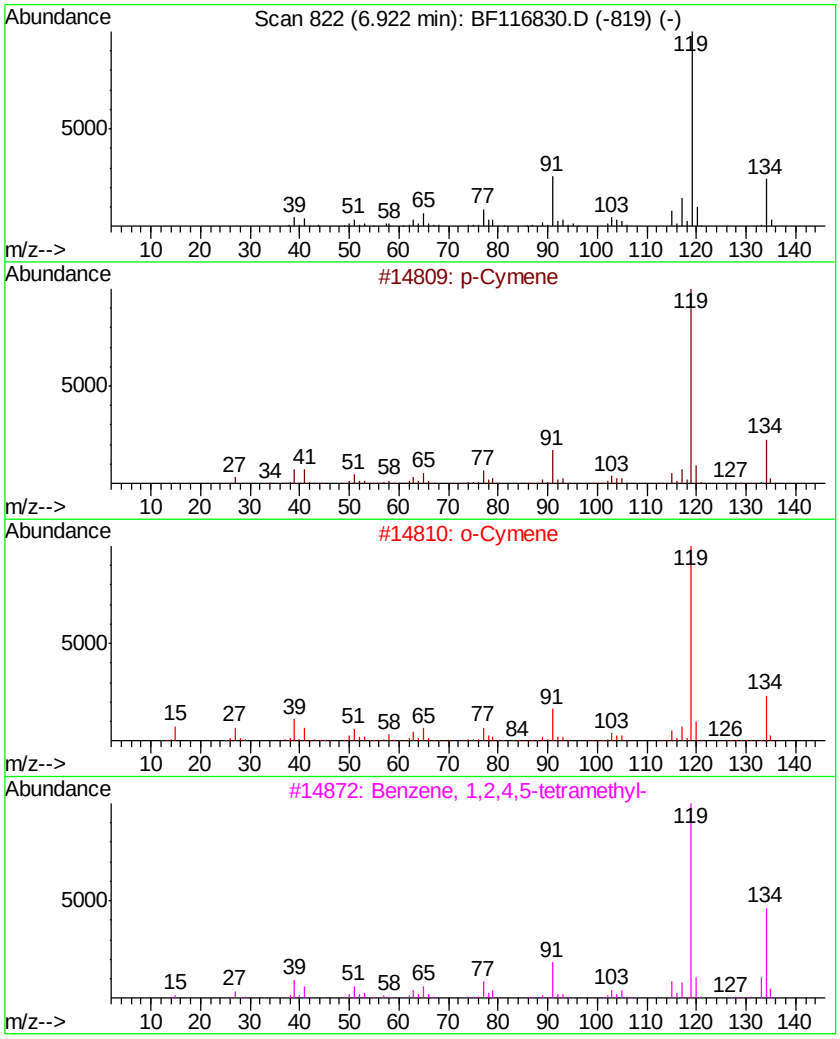
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

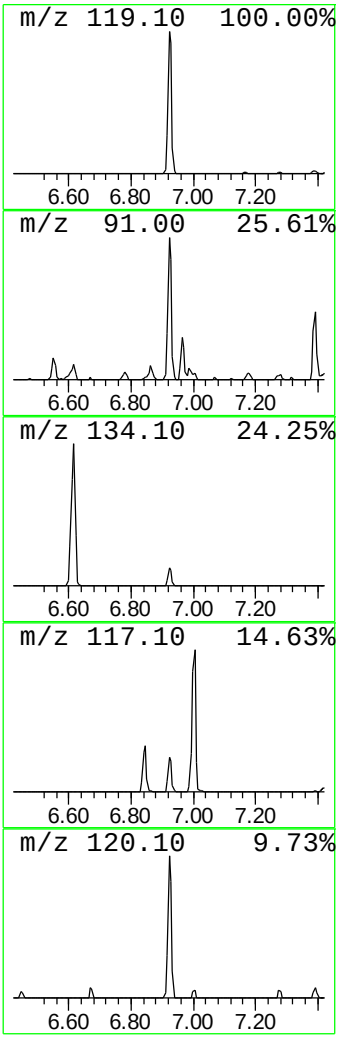
**********

Peak Number 5 p-Cymene Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.92 | 9.27 ng | 209934 | 1,4-Dichlorobenzene-d4 | 6.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | p-Cymene | 134 | C10H14 | 000099-87-6 | 94 |
| 2 | o-Cymene | 134 | C10H14 | 000527-84-4 | 94 |
| 3 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 91 |
| 4 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 91 |
| 5 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 91 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090519\
Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

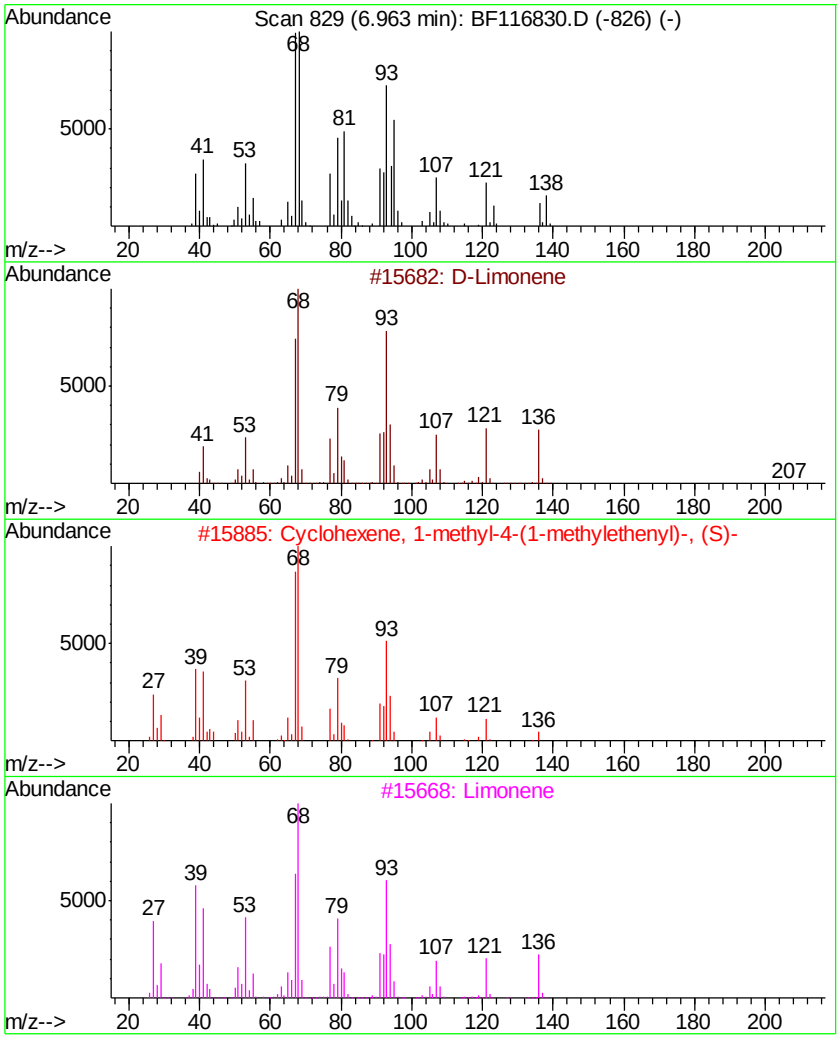
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

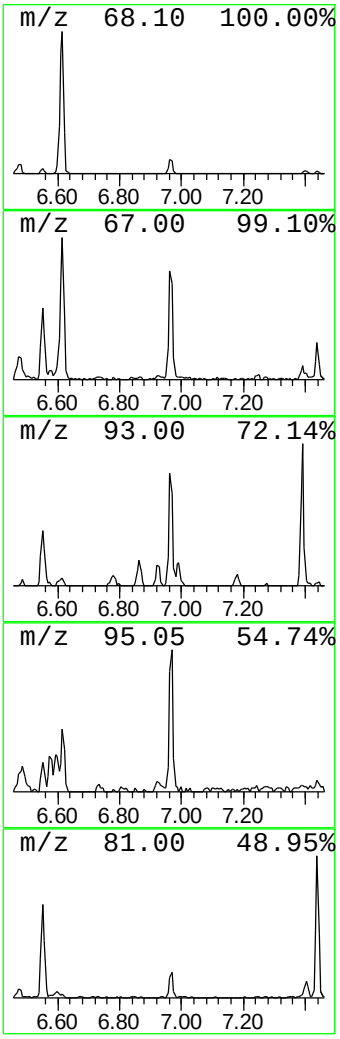
**********

Peak Number 6 D-Limonene Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.96 | 8.04 ng | 182081 | 1,4-Dichlorobenzene-d4 | 6.85 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | D-Limonene | 136 | C10H16 | 005989-27-5 | 96 |
| 2 | Cyclohexene, 1-methyl-4-(1-methy... | 136 | C10H16 | 005989-54-8 | 94 |
| 3 | Limonene | 136 | C10H16 | 000138-86-3 | 76 |
| 4 | 1,5-Cyclooctadiene, 1,5-dimethyl- | 136 | C10H16 | 003760-14-3 | 70 |
| 5 | Cyclohexene, 1-methyl-5-(1-methy... | 136 | C10H16 | 013898-73-2 | 46 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090519\
Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

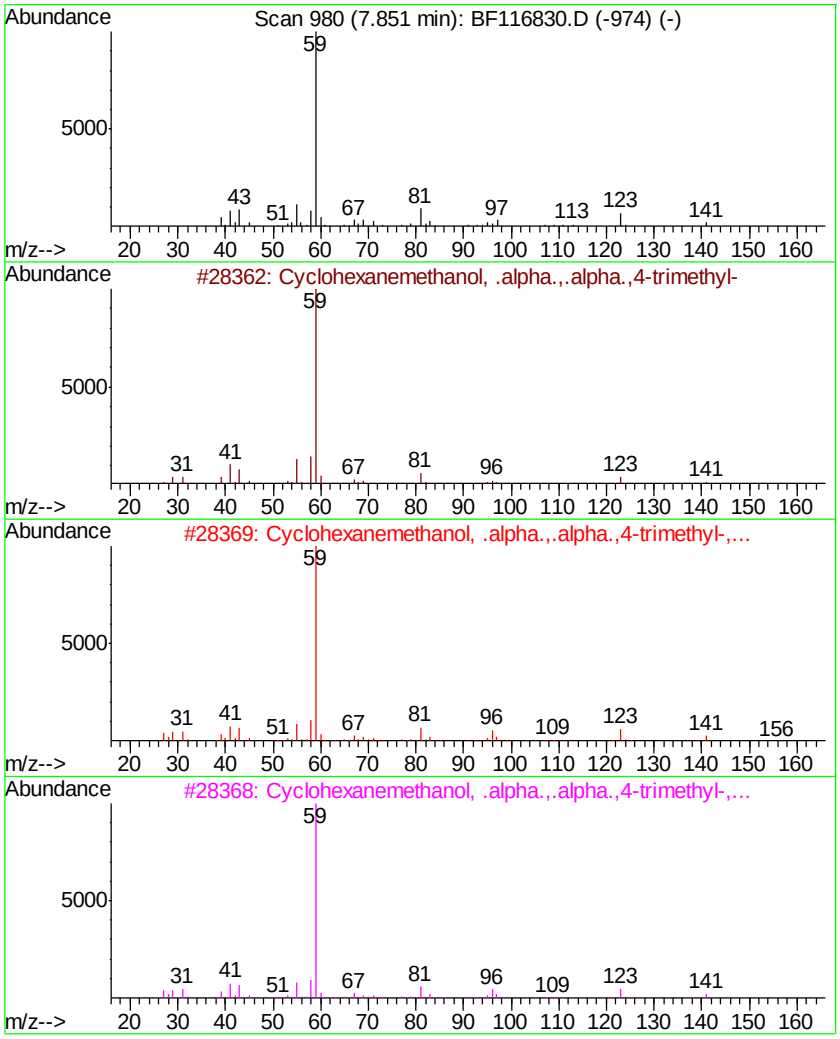
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

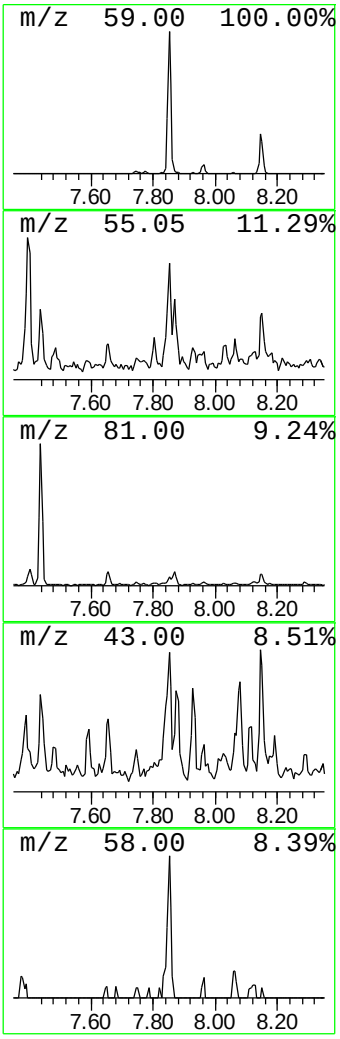
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 8 Cyclohexanemethanol, .alpha... Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.85 | 4.38 ng | 134142 | Naphthalene-d8 | 8.13 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexanemethanol, .alpha.,.al... | 156 | C10H20O | 000498-81-7 | 83 |
| 2 | Cyclohexanemethanol, .alpha.,.al... | 156 | C10H20O | 005114-00-1 | 78 |
| 3 | Cyclohexanemethanol, .alpha.,.al... | 156 | C10H20O | 007322-63-6 | 64 |
| 4 | 2-Pentanol, 2,3-dimethyl- | 116 | C7H16O | 004911-70-0 | 45 |
| 5 | 4-O-Acetyl-2,5-di-O-methyl-3,6-d... | 215 | C10H17NO4 | 1000101-80-3 | 45 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090519\
Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

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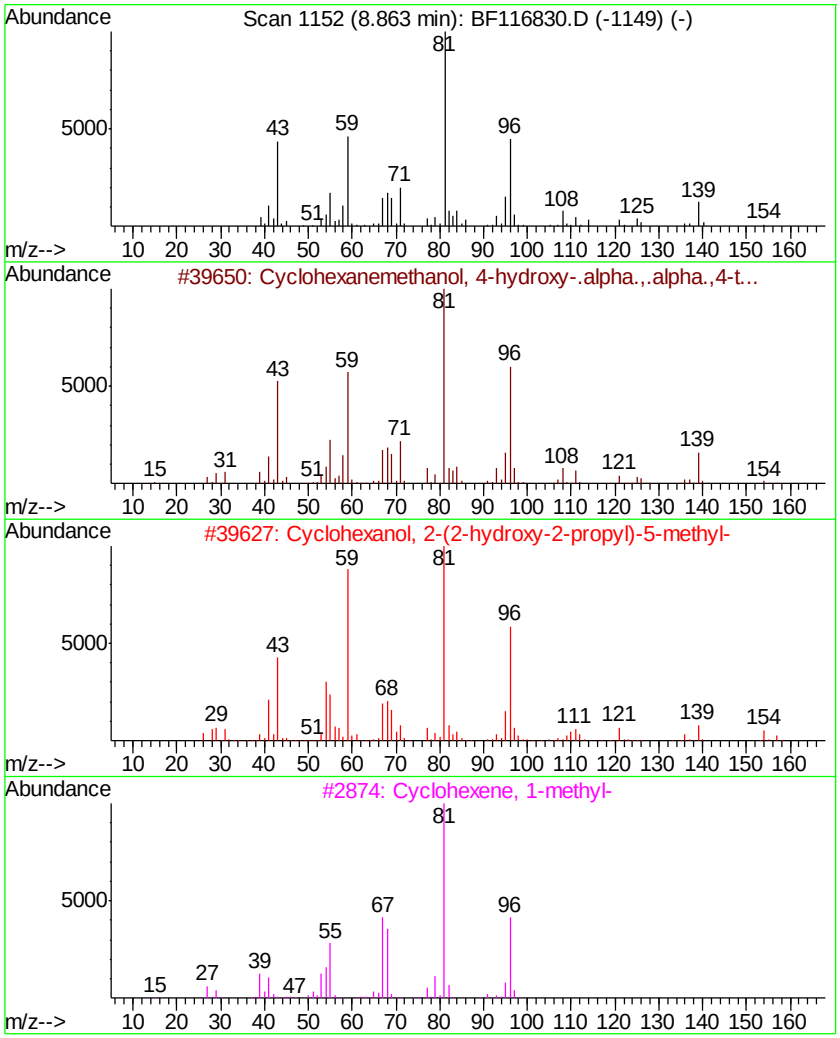
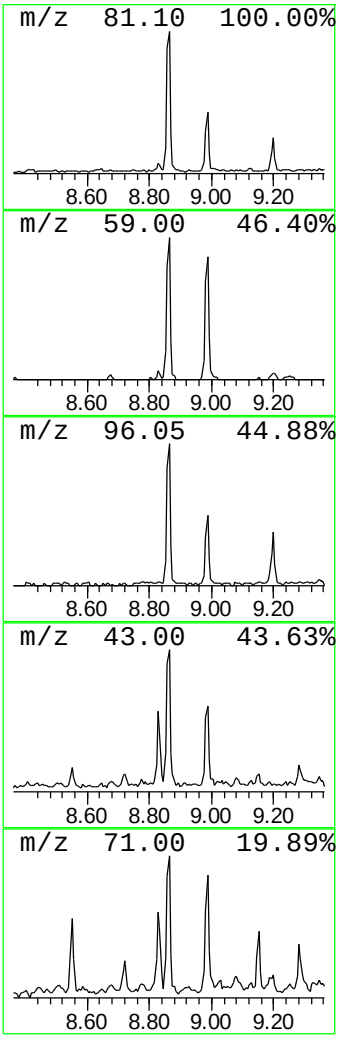
Peak Number 9 Cyclohexanemethanol, 4-hydr... Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.86 | 6.55 ng | 200786 | Naphthalene-d8 | 8.13 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexanemethanol, 4-hydroxy-.... | 172 | C10H20O2 | 000080-53-5 | 91 |
| 2 | Cyclohexanol, 2-(2-hydroxy-2-pro... | 172 | C10H20O2 | 138663-70-4 | 50 |
| 3 | Cyclohexene, 1-methyl- | 96 | C7H12 | 000591-49-1 | 49 |
| 4 | 2-Butenenitrile, 2-amino-3-methyl- | 96 | C5H8N2 | 1000196-28-0 | 47 |
| 5 | 4-Methylcyclohexanol acetate | 156 | C9H16O2 | 022597-23-5 | 47 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090519\
Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

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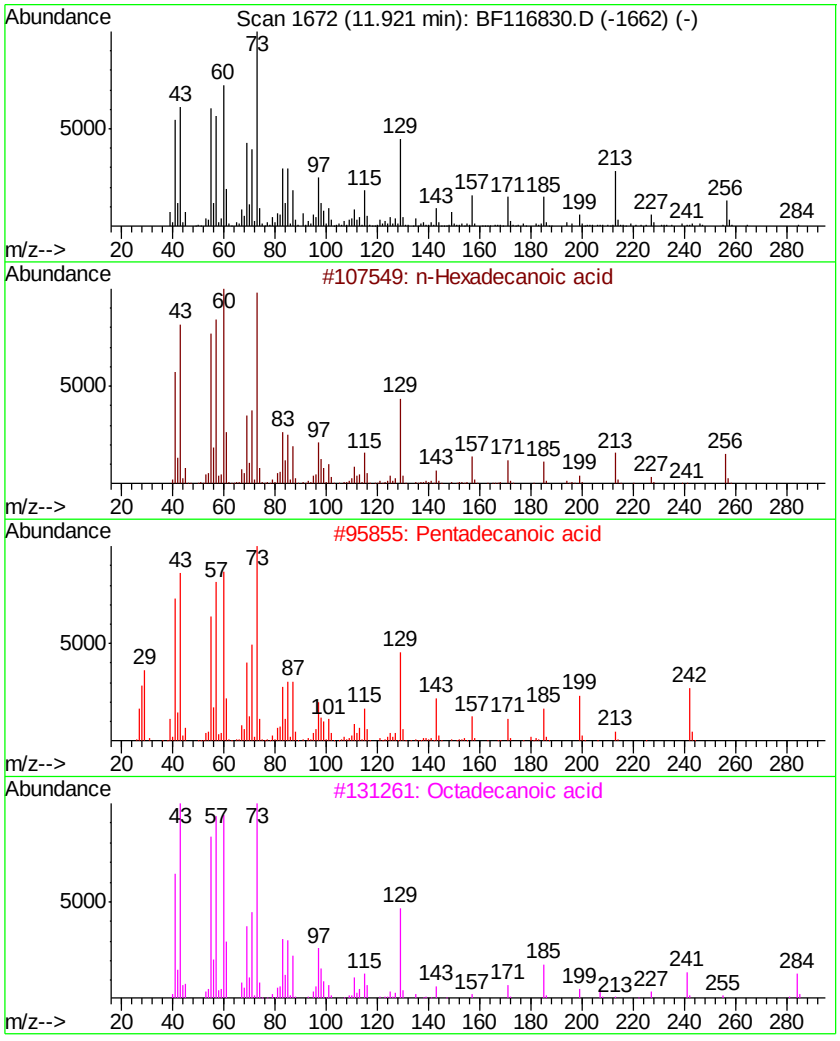
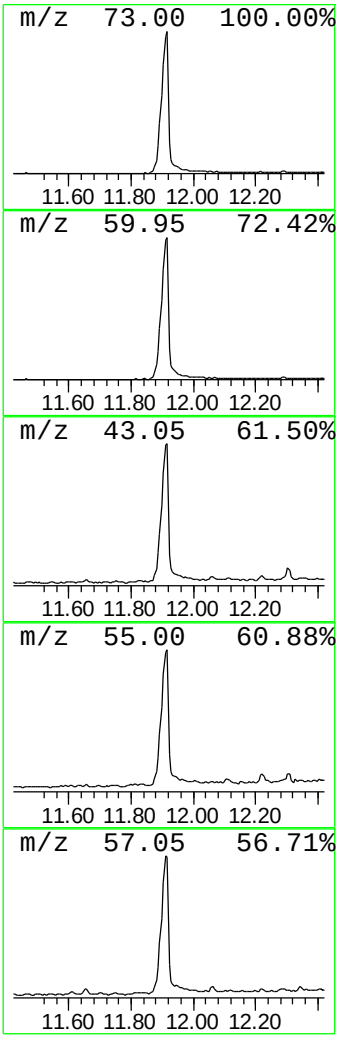
Peak Number 10 n-Hexadecanoic acid Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.92 | 115.67 ng | 3427340 | Phenanthrene-d10 | 11.36 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | n-Hexadecanoic acid | 256 | C16H32O2 | 000057-10-3 | 98 |
| 2 | Pentadecanoic acid | 242 | C15H30O2 | 001002-84-2 | 83 |
| 3 | Octadecanoic acid | 284 | C18H36O2 | 000057-11-4 | 81 |
| 4 | n-Decanoic acid | 172 | C10H20O2 | 000334-48-5 | 64 |
| 5 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 52 |



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Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

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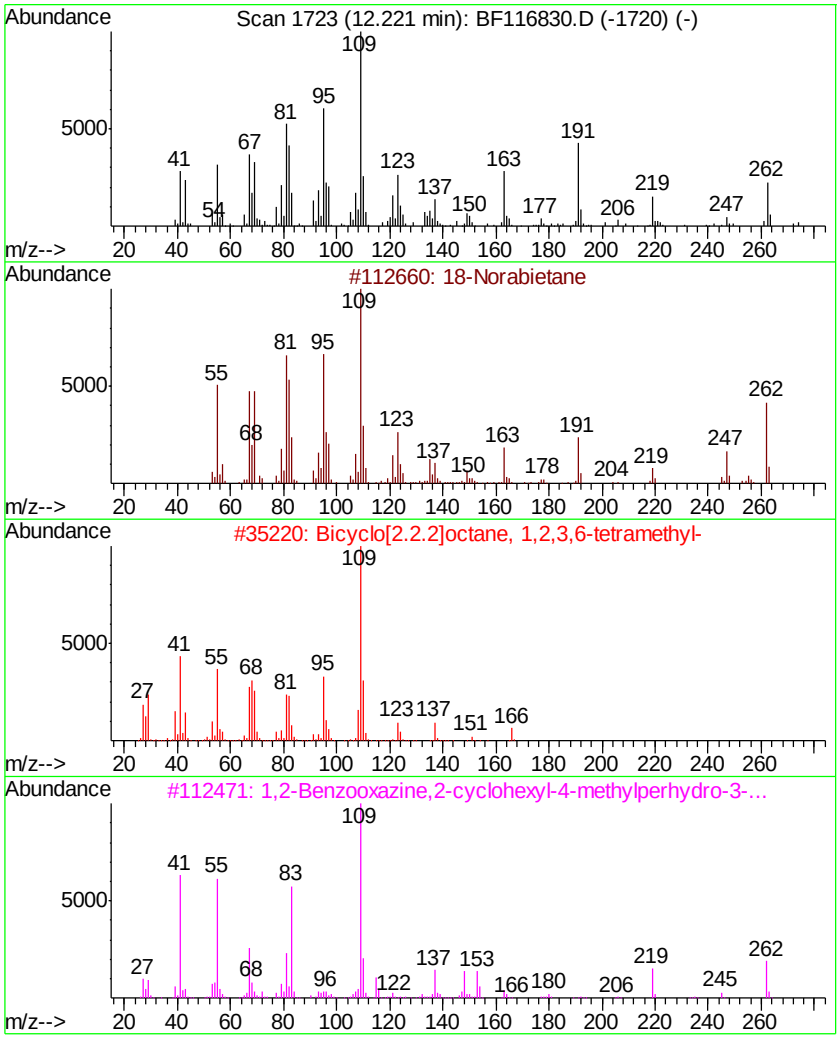
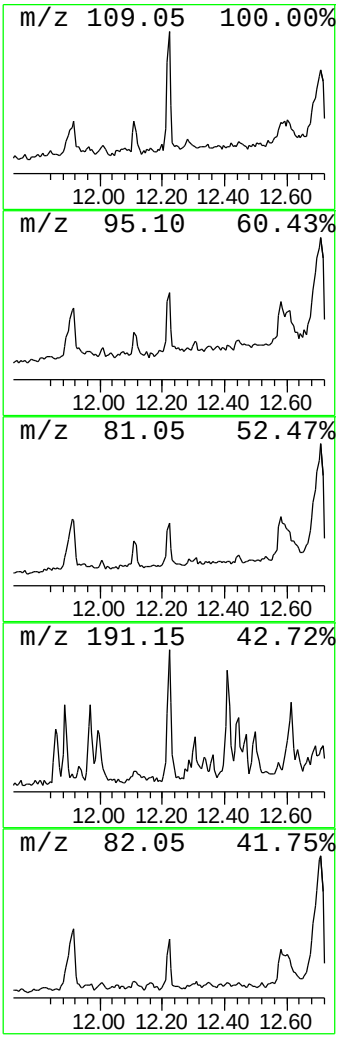
Peak Number 11 18-Norabietane Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.22 | 8.18 ng | 242255 | Phenanthrene-d10 | 11.36 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 18-Norabietane | 262 | C19H34 | 1000293-16-6 | 93 |
| 2 | Bicyclo[2.2.2]octane, 1,2,3,6-te... | 166 | C12H22 | 062338-45-8 | 43 |
| 3 | 1,2-Benzooxazine,2-cyclohexyl-4-... | 262 | C16H26N2O | 037898-39-8 | 42 |
| 4 | Pyrazol-4-amine, 1-(4-fluorobenz... | 191 | C10H10FN3 | 1000272-83-9 | 27 |
| 5 | 2,3-Pyridinediamine | 109 | C5H7N3 | 000452-58-4 | 27 |



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Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

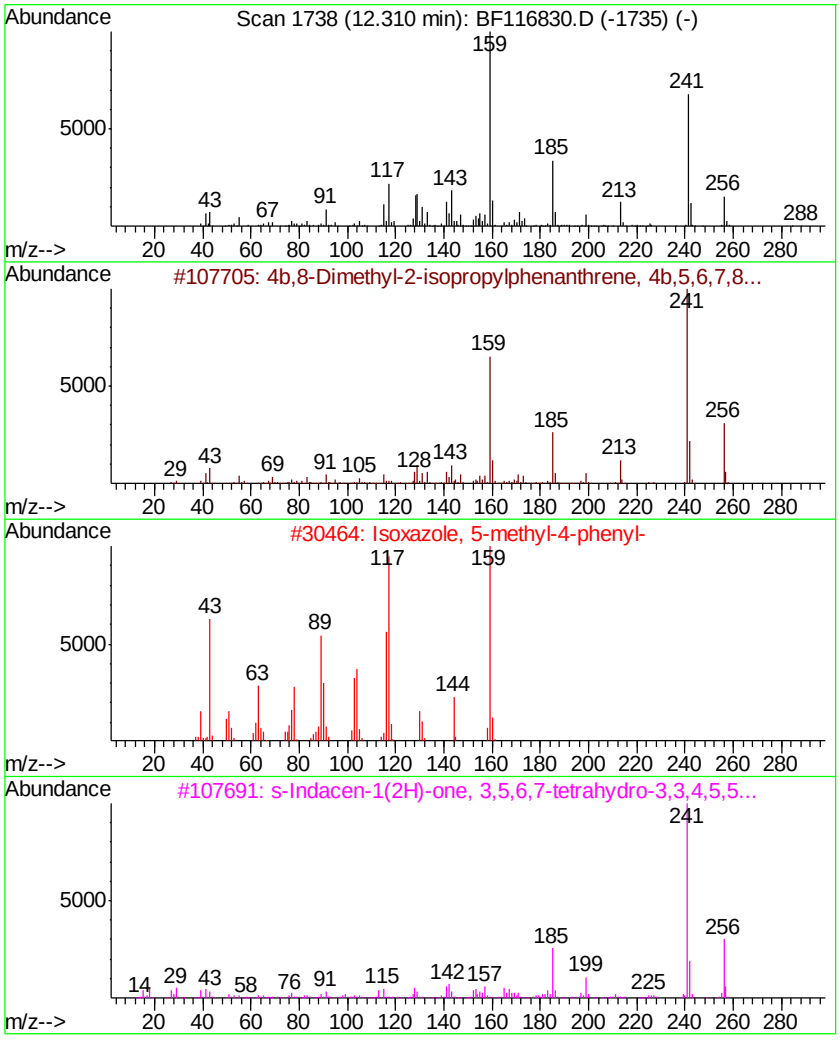
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

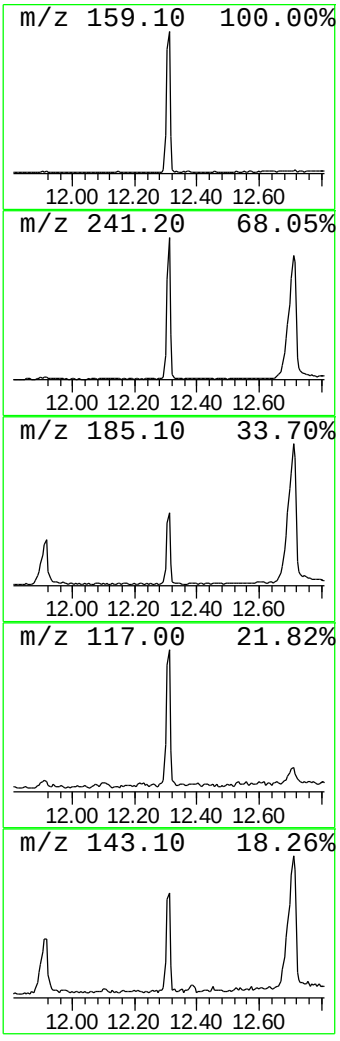
**********

Peak Number 12 4b,8-Dimethyl-2-isopropylph... Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.31 | 19.48 ng | 577274 | Phenanthrene-d10 | 11.36 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4b,8-Dimethyl-2-isopropylphenant... | 256 | C19H28 | 1000197-14-1 | 99 |
| 2 | Isoxazole, 5-methyl-4-phenyl- | 159 | C10H9NO | 023253-49-8 | 43 |
| 3 | s-Indacen-1(2H)-one, 3,5,6,7-tet... | 256 | C18H24O | 038754-94-8 | 38 |
| 4 | Naphthalene, 1,2,3,4-tetrahydro-... | 174 | C13H18 | 030316-36-0 | 38 |
| 5 | 2(1H)-Quinolinone, hydrazone | 159 | C9H9N3 | 015793-77-8 | 35 |



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Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

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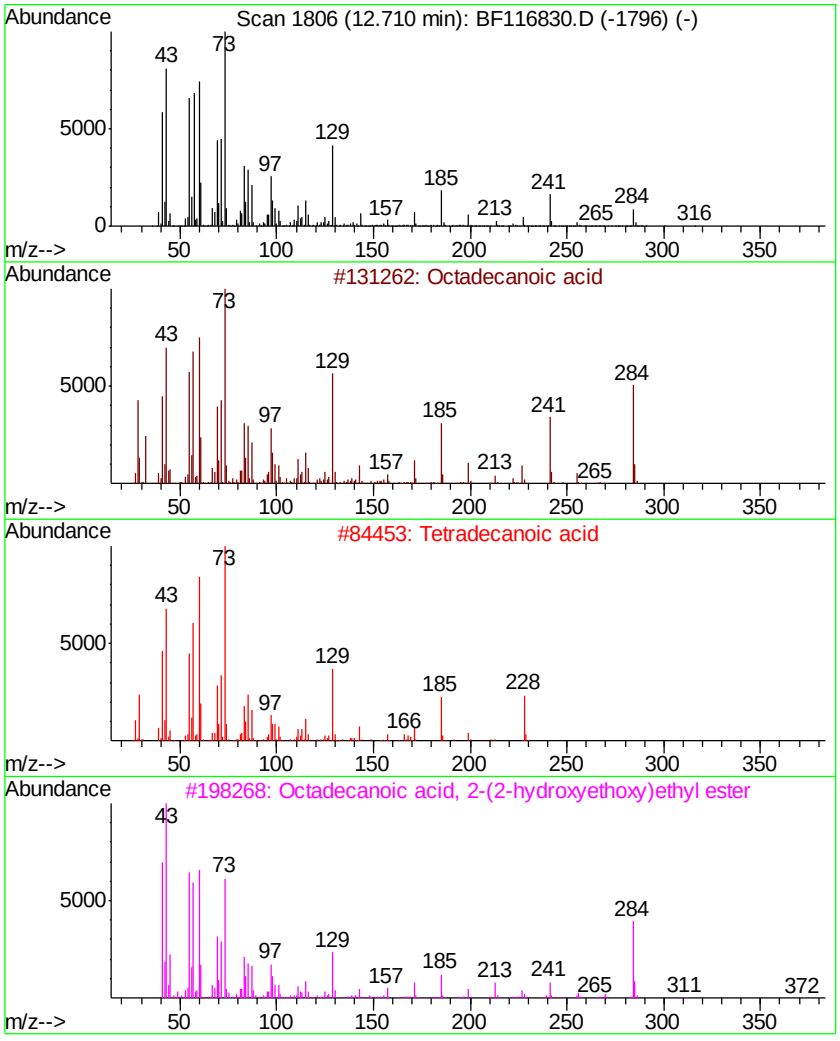
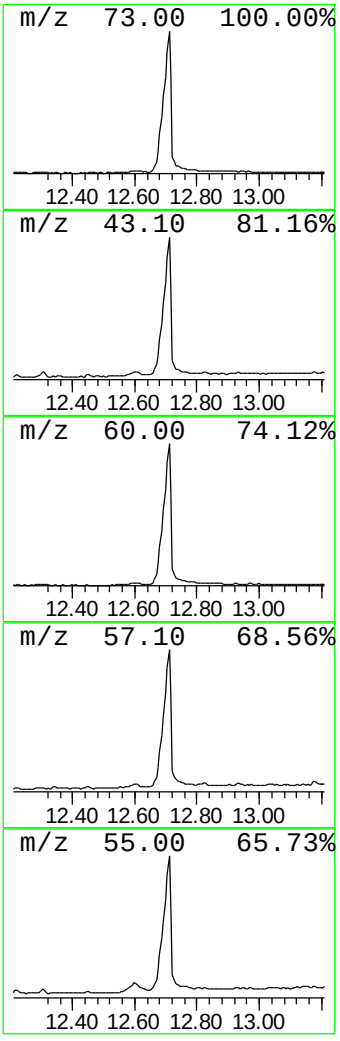
Peak Number 13 Octadecanoic acid Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.71 | 216.19 ng | 7643100 | Chrysene-d12 | 14.00 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Octadecanoic acid | 284 | C18H36O2 | 000057-11-4 | 99 |
| 2 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 90 |
| 3 | Octadecanoic acid, 2-(2-hydroxye... | 372 | C22H44O4 | 000106-11-6 | 86 |
| 4 | Pentadecanoic acid | 242 | C15H30O2 | 001002-84-2 | 64 |
| 5 | n-PROPYL NONYL ETHER | 186 | C12H26O | 1000130-69-3 | 25 |



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Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

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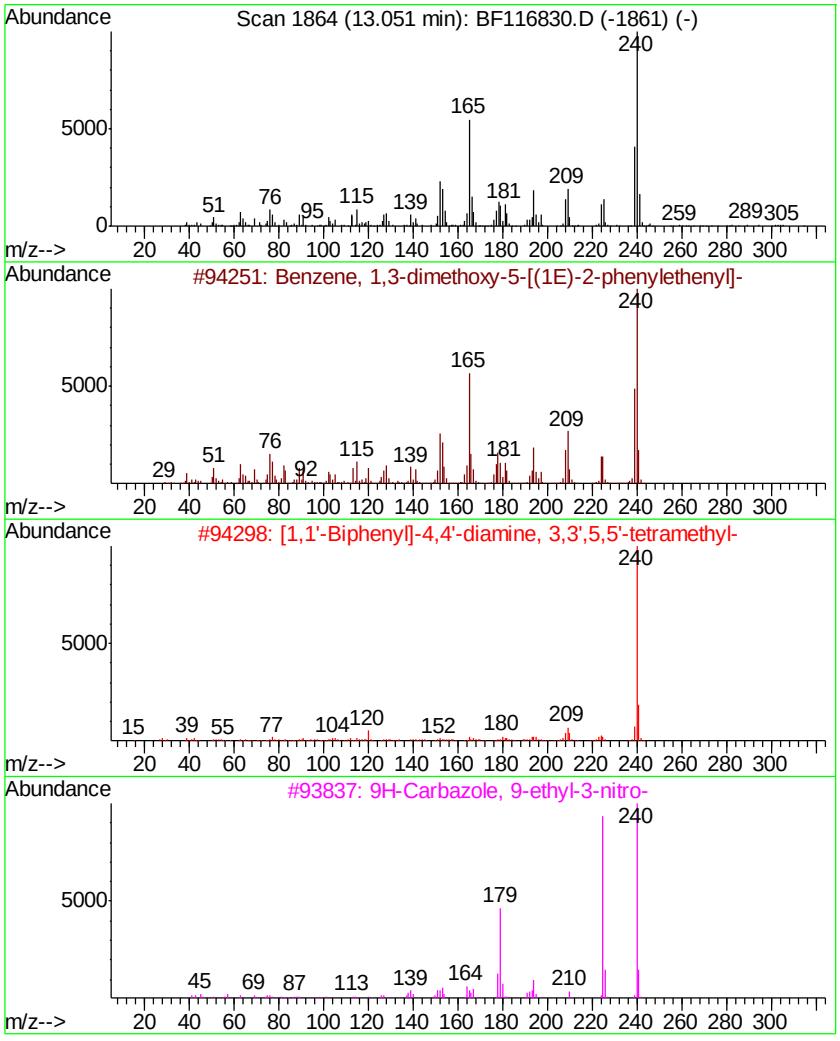
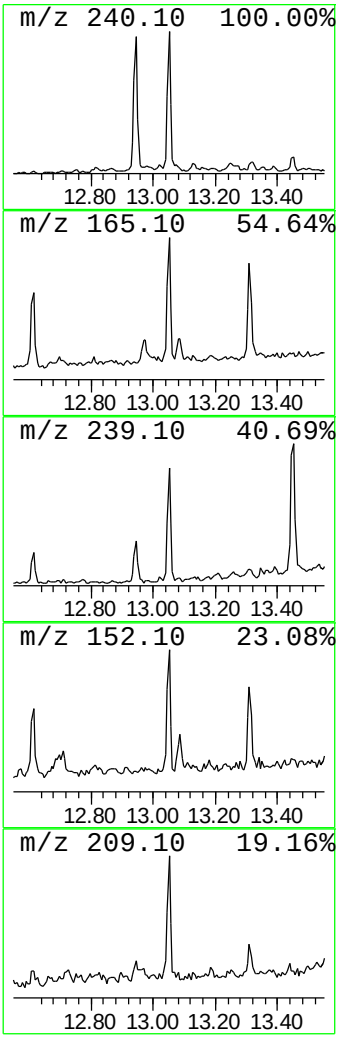
Peak Number 14 Benzene, 1,3-dimethoxy-5-[(... Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.05 | 7.66 ng | 270908 | Chrysene-d12 | 14.00 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,3-dimethoxy-5-[(1E)-2... | 240 | C16H16O2 | 021956-56-9 | 99 |
| 2 | [1,1'-Biphenyl]-4,4'-diamine, 3,... | 240 | C16H20N2 | 054827-17-7 | 49 |
| 3 | 9H-Carbazole, 9-ethyl-3-nitro- | 240 | C14H12N2O2 | 000086-20-4 | 46 |
| 4 | [1,2,4]Triazolo[1,5-b]pyridazin-... | 240 | C12H12N6 | 1000350-58-0 | 43 |
| 5 | Dibenzo[b,E]thiepin-11(6H)-one, ... | 240 | C15H12OS | 084964-28-3 | 43 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090519\
Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

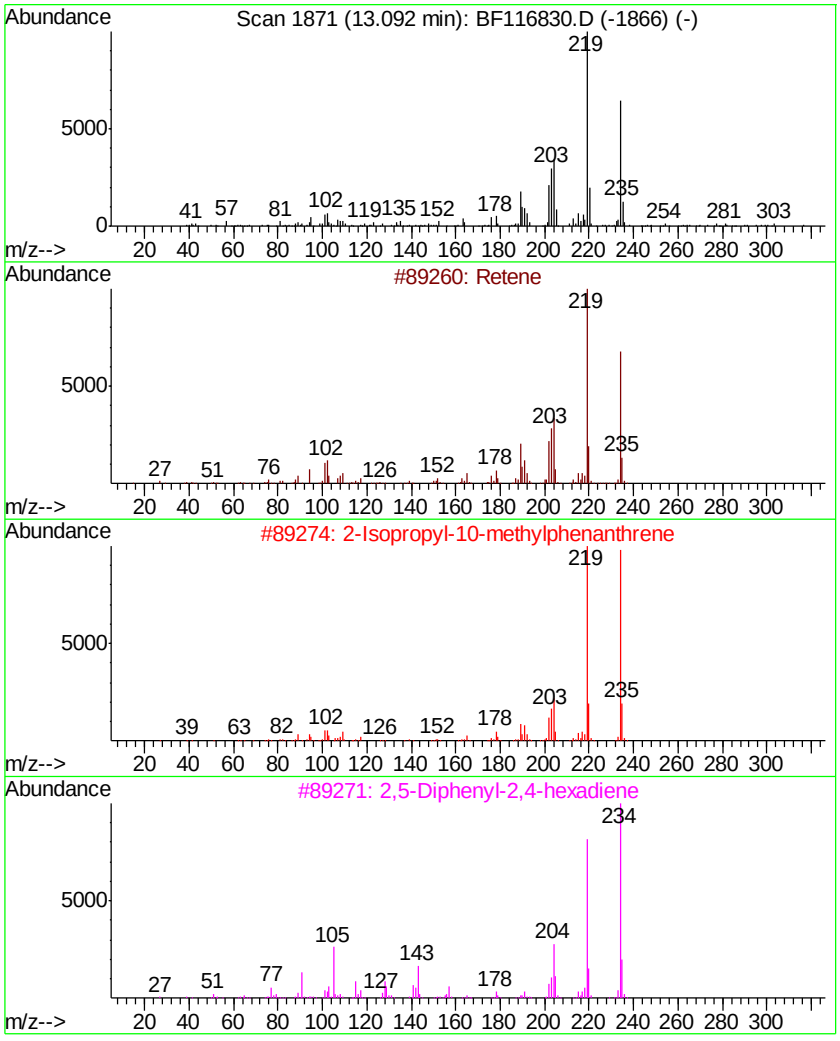
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

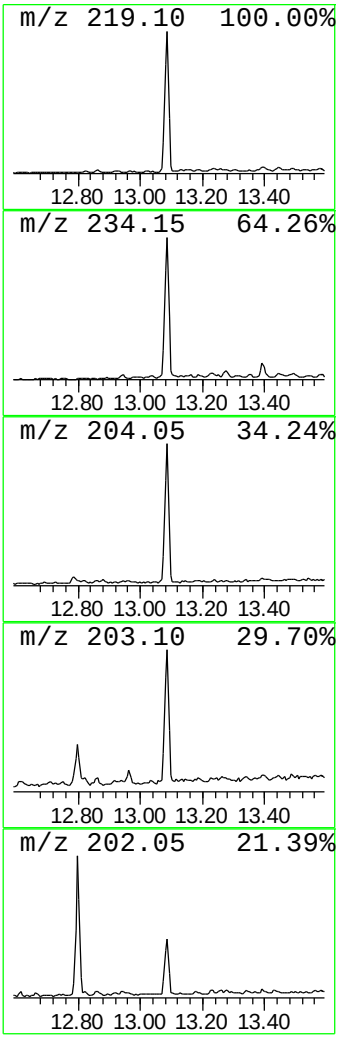
**********

Peak Number 15 Retene Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.09 | 14.03 ng | 496163 | Chrysene-d12 | 14.00 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Retene | 234 | C18H18 | 000483-65-8 | 99 |
| 2 | 2-Isopropyl-10-methylphenanthrene | 234 | C18H18 | 066552-97-4 | 95 |
| 3 | 2,5-Diphenyl-2,4-hexadiene | 234 | C18H18 | 016819-47-9 | 59 |
| 4 | Phenanthrene, 2,4,5,7-tetramethyl- | 234 | C18H18 | 007396-38-5 | 59 |
| 5 | Phenol, 2,6-bis(1,1-dimethylethy... | 234 | C16H26O | 004130-42-1 | 49 |



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Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

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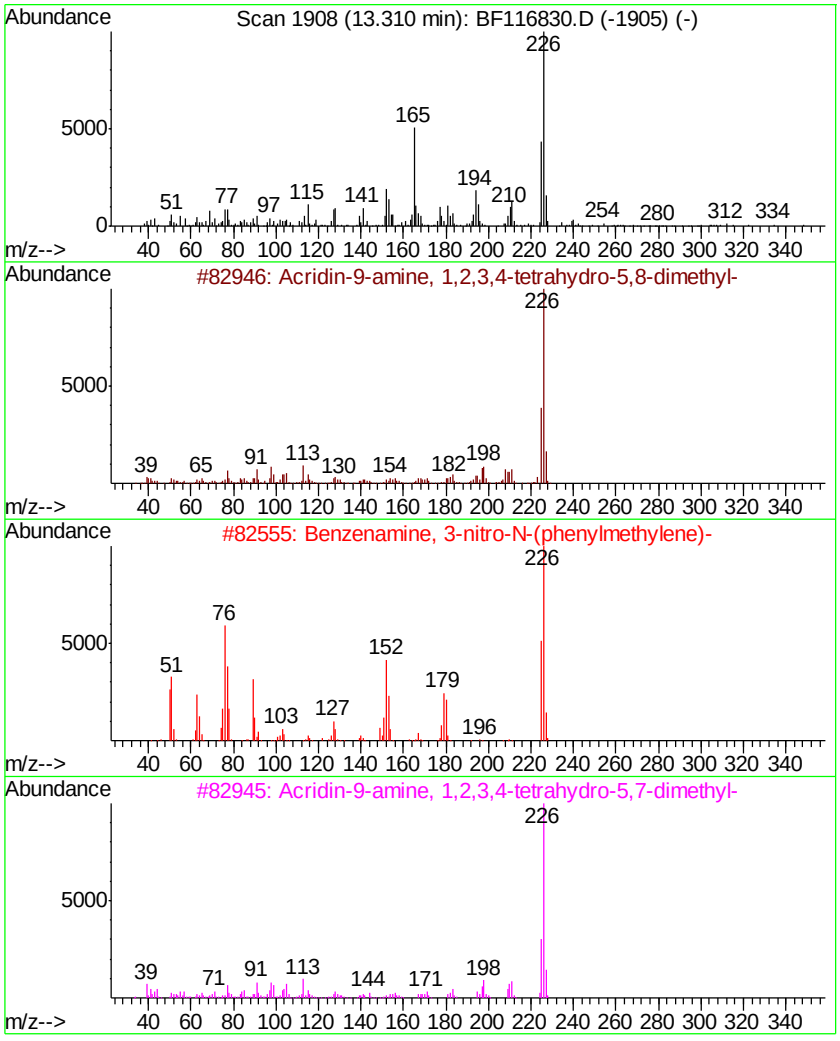
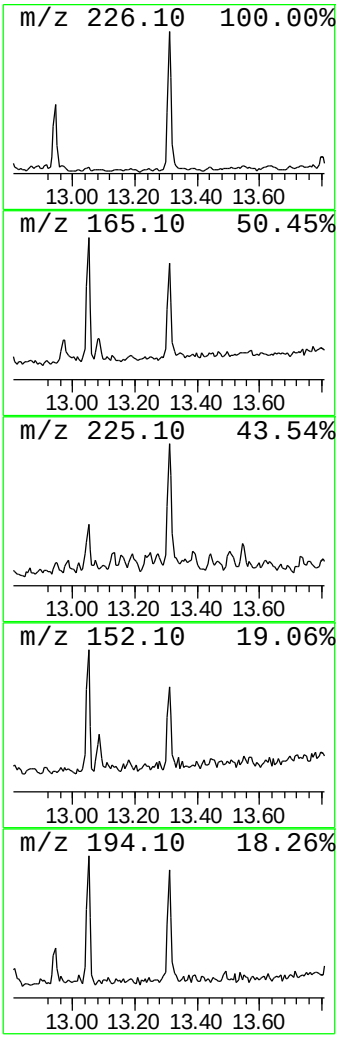
Peak Number 16 Acridin-9-amine, 1,2,3,4-te... Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.31 | 9.36 ng | 330877 | Chrysene-d12 | 14.00 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Acridin-9-amine, 1,2,3,4-tetrahy... | 226 | C15H18N2 | 297758-19-1 | 64 |
| 2 | Benzenamine, 3-nitro-N-(phenylme... | 226 | C13H10N2O2 | 005341-44-6 | 55 |
| 3 | Acridin-9-amine, 1,2,3,4-tetrahy... | 226 | C15H18N2 | 1000300-57-6 | 53 |
| 4 | Benzenamine, N-[(4-nitrophenyl)m... | 226 | C13H10N2O2 | 000785-80-8 | 52 |
| 5 | 9H-Xanthen-9-one, 2-methoxy- | 226 | C14H10O3 | 001214-20-6 | 46 |



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Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

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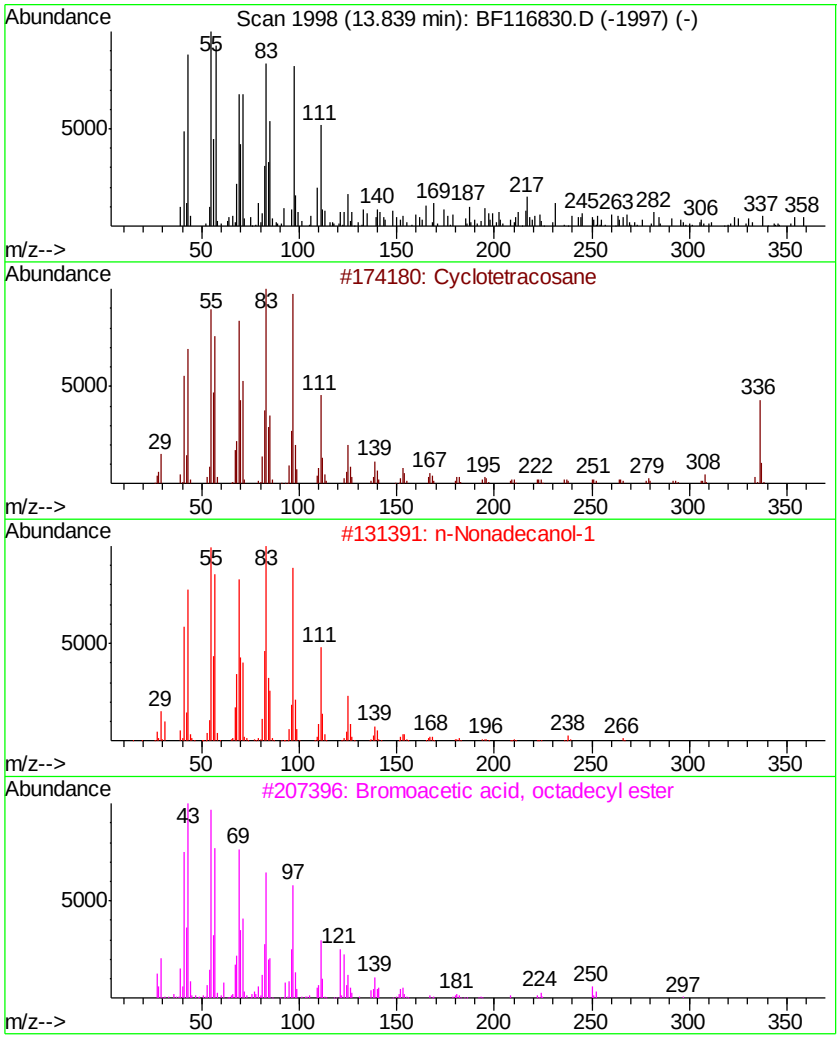
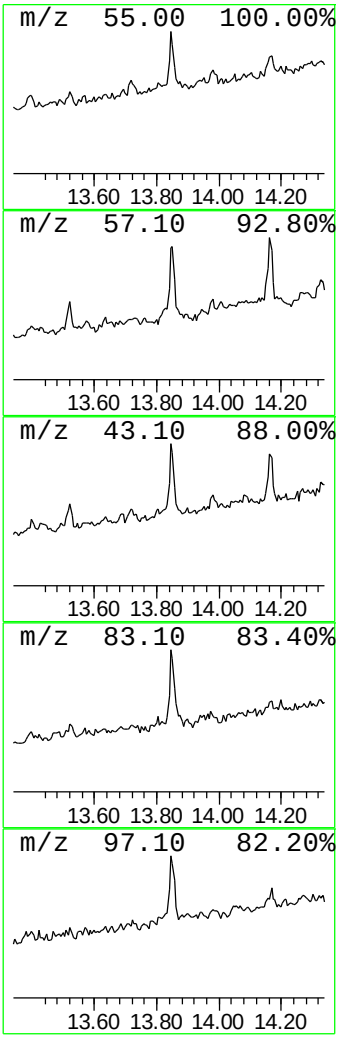
Peak Number 17 Cyclotetracosane Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.84 | 7.38 ng | 260998 | Chrysene-d12 | 14.00 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclotetracosane | 336 | C24H48 | 000297-03-0 | 90 |
| 2 | n-Nonadecanol-1 | 284 | C19H40O | 001454-84-8 | 76 |
| 3 | Bromoacetic acid, octadecyl ester | 390 | C20H39BrO2 | 018992-03-5 | 72 |
| 4 | n-Pentadecanol | 228 | C15H32O | 000629-76-5 | 70 |
| 5 | Trifluoroacetic acid, pentadecyl... | 324 | C17H31F3O2 | 959010-23-2 | 68 |



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Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

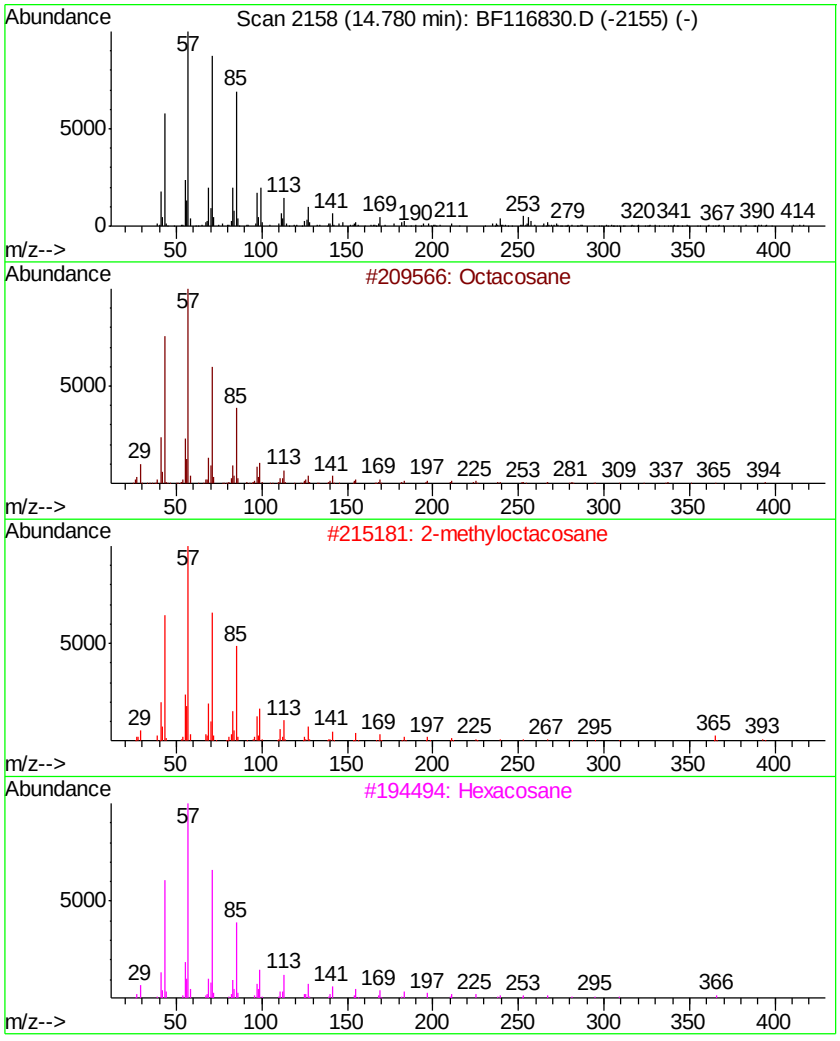
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

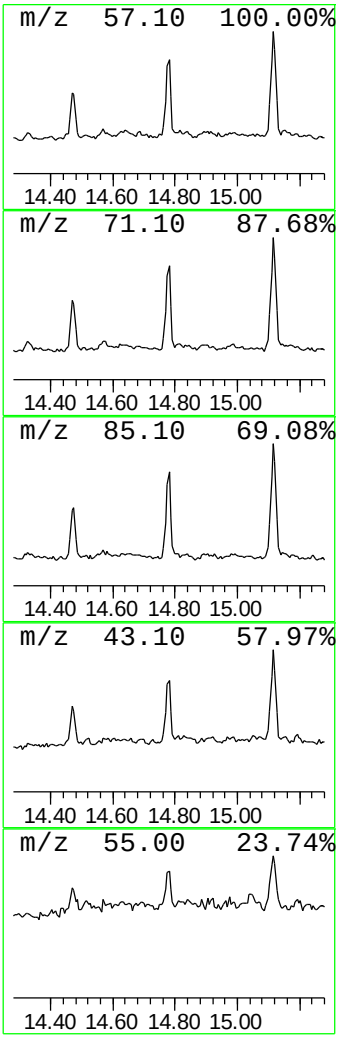
**********

Peak Number 18 Octacosane Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.78 | 10.18 ng | 357606 | Perylene-d12 | 15.47 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Octacosane | 394 | C28H58 | 000630-02-4 | 91 |
| 2 | 2-methyloctacosane | 408 | C29H60 | 1000376-72-8 | 91 |
| 3 | Hexacosane | 366 | C26H54 | 000630-01-3 | 86 |
| 4 | Triacontane | 422 | C30H62 | 000638-68-6 | 83 |
| 5 | Heneicosane | 296 | C21H44 | 000629-94-7 | 83 |



# Library Search Compound Report

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Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

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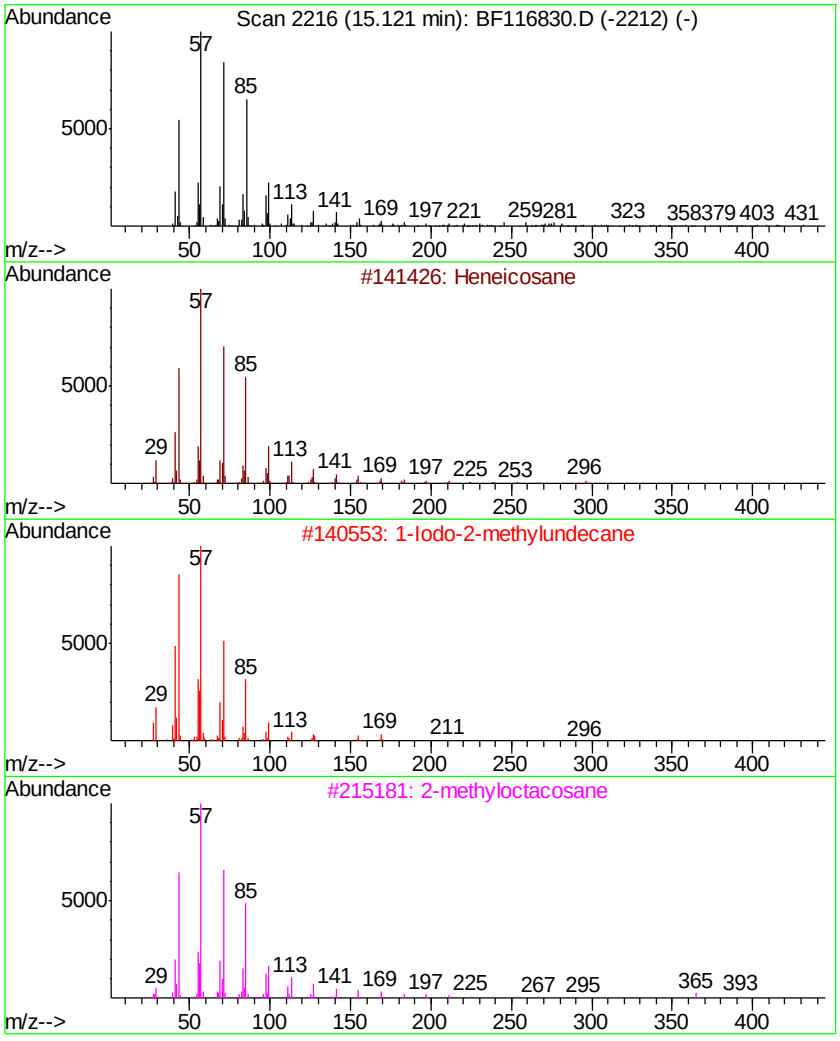
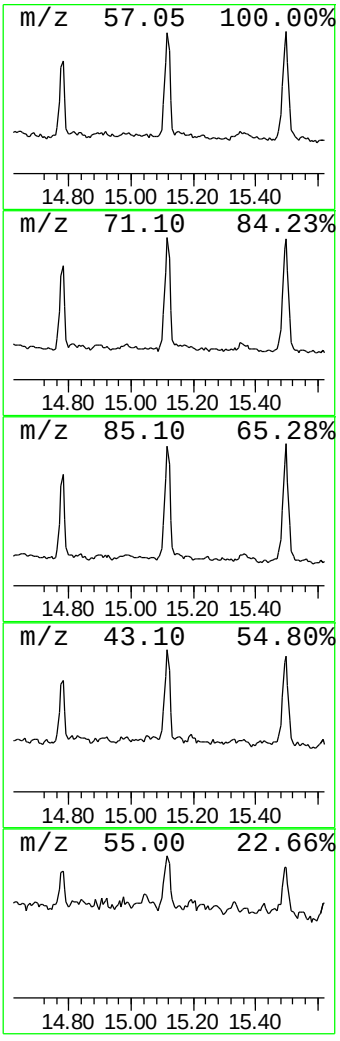
Peak Number 19 Heneicosane Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.12 | 20.00 ng | 702725 | Perylene-d12 | 15.47 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Heneicosane | 296 | C21H44 | 000629-94-7 | 91 |
| 2 | 1-Iodo-2-methylundecane | 296 | C12H25I | 073105-67-6 | 91 |
| 3 | 2-methyloctacosane | 408 | C29H60 | 1000376-72-8 | 90 |
| 4 | Pentadecane, 8-hexyl- | 296 | C21H44 | 013475-75-7 | 89 |
| 5 | Hexacosane | 366 | C26H54 | 000630-01-3 | 87 |



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Data File : BF116830.D
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Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

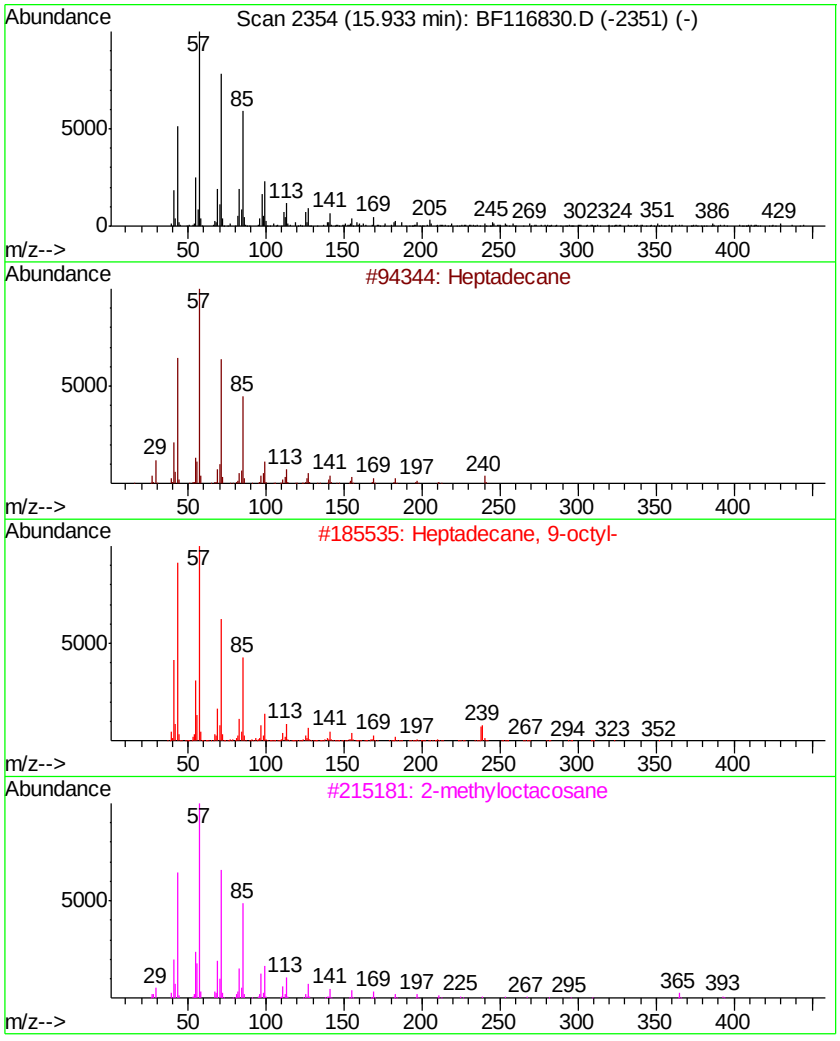
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

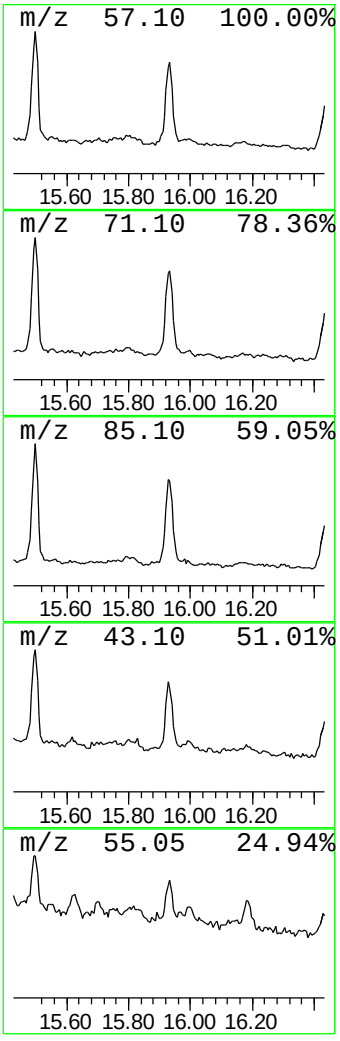
**********

Peak Number 20 Heptadecane Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.93 | 13.09 ng | 459888 | Perylene-d12 | 15.47 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Heptadecane | 240 | C17H36 | 000629-78-7 | 95 |
| 2 | Heptadecane, 9-octyl- | 352 | C25H52 | 007225-64-1 | 93 |
| 3 | 2-methyloctacosane | 408 | C29H60 | 1000376-72-8 | 91 |
| 4 | Heneicosane | 296 | C21H44 | 000629-94-7 | 87 |
| 5 | Hentriacontane | 437 | C31H64 | 000630-04-6 | 87 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF090519\
Data File : BF116830.D
Acq On : 5 Sep 2019 11:48
Operator : HP/JU
Sample : K4625-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** HF-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF083019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| (1R)-2,6,6-Trimet... | 6.13 | 47.6 | ng | 1078060 | 1 | 6.85 | 453097 | 20.0 |
| Camphene | 6.30 | 6.5 | ng | 147007 | 1 | 6.85 | 453097 | 20.0 |
| Cyclohexane, 1-me... | 6.55 | 27.5 | ng | 622858 | 1 | 6.85 | 453097 | 20.0 |
| unknown6.62 | 6.62 | 75.8 | ng | 1716430 | 1 | 6.85 | 453097 | 20.0 |
| p-Cymene | 6.92 | 9.3 | ng | 209934 | 1 | 6.85 | 453097 | 20.0 |
| D-Limonene | 6.96 | 8.0 | ng | 182081 | 1 | 6.85 | 453097 | 20.0 |
| Cyclohexanemethan... | 7.85 | 4.4 | ng | 134142 | 2 | 8.13 | 612702 | 20.0 |
| Cyclohexanemethan... | 8.86 | 6.5 | ng | 200786 | 2 | 8.13 | 612702 | 20.0 |
| n-Hexadecanoic acid | 11.92 | 115.7 | ng | 3427340 | 4 | 11.36 | 592597 | 20.0 |
| 18-Norabietane | 12.22 | 8.2 | ng | 242255 | 4 | 11.36 | 592597 | 20.0 |
| 4b,8-Dimethyl-2-i... | 12.31 | 19.5 | ng | 577274 | 4 | 11.36 | 592597 | 20.0 |
| Octadecanoic acid | 12.71 | 216.2 | ng | 7643100 | 5 | 14.00 | 707078 | 20.0 |
| Benzene, 1,3-dime... | 13.05 | 7.7 | ng | 270908 | 5 | 14.00 | 707078 | 20.0 |
| Retene | 13.09 | 14.0 | ng | 496163 | 5 | 14.00 | 707078 | 20.0 |
| Acridin-9-amine, ... | 13.31 | 9.4 | ng | 330877 | 5 | 14.00 | 707078 | 20.0 |
| Cyclotetracosane | 13.84 | 7.4 | ng | 260998 | 5 | 14.00 | 707078 | 20.0 |
| Octacosane | 14.78 | 10.2 | ng | 357606 | 6 | 15.47 | 702725 | 20.0 |
| Heneicosane | 15.12 | 20.0 | ng | 702725 | 6 | 15.47 | 702725 | 20.0 |
| Heptadecane | 15.93 | 13.1 | ng | 459888 | 6 | 15.47 | 702725 | 20.0 |