# LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

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-BF101819.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 | 5.351 | 552 | 555 | 575 | rBV | 409499 | 513529 | 26.35% | 2.856% |
| 2 | 5.557 | 587 | 590 | 601 | rBV | 36501 | 48546 | 2.49% | 0.270% |
| 3 | 6.381 | 726 | 730 | 739 | rBV | 480053 | 573972 | 29.45% | 3.192% |
| 4 | 6.440 | 739 | 740 | 747 | rVV2 | 18733 | 25393 | 1.30% | 0.141% |
| 5 | 6.504 | 747 | 751 | 758 | rVV | 654796 | 603986 | 30.99% | 3.359% |
| 6 | 6.563 | 758 | 761 | 765 | rVV | 84142 | 86881 | 4.46% | 0.483% |
| 7 | 6.604 | 765 | 768 | 776 | rVB | 33539 | 34808 | 1.79% | 0.194% |
| 8 | 6.728 | 786 | 789 | 798 | rBV | 228468 | 198781 | 10.20% | 1.106% |
| 9 | 6.881 | 812 | 815 | 830 | rBV | 484388 | 435448 | 22.34% | 2.422% |
| 10 | 6.992 | 830 | 834 | 844 | rVB | 39935 | 47088 | 2.42% | 0.262% |
| 11 | 7.292 | 882 | 885 | 892 | rBV | 345720 | 346771 | 17.79% | 1.929% |
| 12 | 7.345 | 892 | 894 | 900 | rVV | 26195 | 36507 | 1.87% | 0.203% |
| 13 | 7.581 | 929 | 934 | 942 | rBV | 119814 | 133651 | 6.86% | 0.743% |
| 14 | 7.763 | 961 | 965 | 968 | rBV2 | 23150 | 25298 | 1.30% | 0.141% |
| 15 | 7.810 | 968 | 973 | 981 | rVB | 50819 | 60277 | 3.09% | 0.335% |
| 16 | 8.010 | 1003 | 1007 | 1018 | rBV | 290576 | 284751 | 14.61% | 1.584% |
| 17 | 8.228 | 1041 | 1044 | 1049 | rBV | 129240 | 115916 | 5.95% | 0.645% |
| 18 | 8.281 | 1050 | 1053 | 1063 | rVB | 130874 | 132875 | 6.82% | 0.739% |
| 19 | 8.716 | 1122 | 1127 | 1133 | rBV2 | 51136 | 57238 | 2.94% | 0.318% |
| 20 | 8.781 | 1135 | 1138 | 1142 | rBV | 39865 | 28830 | 1.48% | 0.160% |
| 21 | 8.822 | 1142 | 1145 | 1148 | rBV | 26695 | 19956 | 1.02% | 0.111% |
| 22 | 8.892 | 1154 | 1157 | 1160 | rBV | 26013 | 20773 | 1.07% | 0.116% |
| 23 | 9.004 | 1173 | 1176 | 1184 | rBV | 36558 | 33937 | 1.74% | 0.189% |
| 24 | 9.081 | 1185 | 1189 | 1198 | rVB | 804752 | 647165 | 33.21% | 3.599% |
| 25 | 9.234 | 1213 | 1215 | 1219 | rVV2 | 23680 | 25136 | 1.29% | 0.140% |
| 26 | 9.481 | 1253 | 1257 | 1261 | rBV | 123928 | 119400 | 6.13% | 0.664% |
| 27 | 9.757 | 1301 | 1304 | 1308 | rBV | 365970 | 318126 | 16.32% | 1.769% |
| 28 | 9.975 | 1338 | 1341 | 1349 | rBV5 | 15874 | 26439 | 1.36% | 0.147% |
| 29 | 10.551 | 1436 | 1439 | 1451 | rVB | 411778 | 386715 | 19.84% | 2.151% |
| 30 | 11.245 | 1554 | 1557 | 1559 | rBV | 353497 | 298539 | 15.32% | 1.660% |
| 31 | 11.269 | 1559 | 1561 | 1566 | rVV | 231593 | 199973 | 10.26% | 1.112% |
| 32 | 11.322 | 1568 | 1570 | 1574 | rVB | 34297 | 33688 | 1.73% | 0.187% |
| 33 | 11.492 | 1594 | 1599 | 1604 | rBV2 | 17760 | 32885 | 1.69% | 0.183% |
| 34 | 11.580 | 1611 | 1614 | 1615 | rVV3 | 22553 | 24947 | 1.28% | 0.139% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

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-BF101819.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 11.657 | 1615 | 1627 | 1628 | rVV3 | 87049 | 243553 | 12.50% | 1.355% |
| 36 | 11.710 | 1632 | 1636 | 1637 | rVV2 | 184239 | 285004 | 14.62% | 1.585% |
| 37 | 11.786 | 1639 | 1649 | 1659 | rVV3 | 637794 | 1712058 | 87.84% | 9.521% |
| 38 | 11.857 | 1659 | 1661 | 1664 | rVV | 49288 | 61419 | 3.15% | 0.342% |
| 39 | 11.886 | 1664 | 1666 | 1673 | rVB2 | 23713 | 28566 | 1.47% | 0.159% |
| 40 | 12.463 | 1760 | 1764 | 1773 | rBV | 290898 | 345384 | 17.72% | 1.921% |
| 41 | 12.569 | 1774 | 1782 | 1794 | rVV | 710685 | 1094103 | 56.14% | 6.085% |
| 42 | 12.692 | 1797 | 1803 | 1807 | rBV | 211140 | 242598 | 12.45% | 1.349% |
| 43 | 12.827 | 1822 | 1826 | 1830 | rVB | 648246 | 553002 | 28.37% | 3.075% |
| 44 | 12.910 | 1836 | 1840 | 1845 | rVB6 | 15745 | 29913 | 1.53% | 0.166% |
| 45 | 13.004 | 1852 | 1856 | 1857 | rBV4 | 14631 | 20814 | 1.07% | 0.116% |
| 46 | 13.022 | 1857 | 1859 | 1864 | rVV | 24785 | 32434 | 1.66% | 0.180% |
| 47 | 13.163 | 1868 | 1883 | 1891 | rVV | 590395 | 1948955 | 100.00% | 10.839% |
| 48 | 13.539 | 1945 | 1947 | 1952 | rVB | 19767 | 21406 | 1.10% | 0.119% |
| 49 | 13.645 | 1962 | 1965 | 1966 | rBV | 25268 | 22295 | 1.14% | 0.124% |
| 50 | 13.669 | 1966 | 1969 | 1973 | rVB3 | 27426 | 41108 | 2.11% | 0.229% |
| 51 | 13.745 | 1978 | 1982 | 1990 | rVB2 | 110298 | 201674 | 10.35% | 1.122% |
| 52 | 13.886 | 2000 | 2006 | 2009 | rBV2 | 268915 | 363458 | 18.65% | 2.021% |
| 53 | 13.951 | 2009 | 2017 | 2024 | rVV2 | 724611 | 1665371 | 85.45% | 9.262% |
| 54 | 14.039 | 2028 | 2032 | 2036 | rBV | 44805 | 47321 | 2.43% | 0.263% |
| 55 | 14.345 | 2077 | 2084 | 2088 | rBV2 | 120443 | 165350 | 8.48% | 0.920% |
| 56 | 14.380 | 2088 | 2090 | 2093 | rVB4 | 18050 | 20575 | 1.06% | 0.114% |
| 57 | 14.557 | 2113 | 2120 | 2126 | rBV | 560991 | 893323 | 45.84% | 4.968% |
| 58 | 14.645 | 2131 | 2135 | 2138 | rVB | 132282 | 138400 | 7.10% | 0.770% |
| 59 | 14.921 | 2178 | 2182 | 2184 | rBV | 80943 | 106434 | 5.46% | 0.592% |
| 60 | 14.963 | 2184 | 2189 | 2196 | rVB2 | 161206 | 248854 | 12.77% | 1.384% |
| 61 | 15.027 | 2196 | 2200 | 2204 | rBV | 20041 | 26526 | 1.36% | 0.148% |
| 62 | 15.133 | 2211 | 2218 | 2227 | rBV | 147857 | 337106 | 17.30% | 1.875% |
| 63 | 15.210 | 2227 | 2231 | 2235 | rVB | 51006 | 61361 | 3.15% | 0.341% |
| 64 | 15.268 | 2237 | 2241 | 2245 | rBV | 62141 | 66338 | 3.40% | 0.369% |
| 65 | 15.321 | 2245 | 2250 | 2255 | rBV2 | 253602 | 369302 | 18.95% | 2.054% |
| 66 | 15.721 | 2312 | 2318 | 2323 | rBV | 93716 | 140700 | 7.22% | 0.782% |
| 67 | 15.815 | 2327 | 2334 | 2343 | rBV2 | 61578 | 159873 | 8.20% | 0.889% |
| 68 | 16.186 | 2392 | 2397 | 2404 | rVB3 | 45551 | 76927 | 3.95% | 0.428% |
| 69 | 16.598 | 2463 | 2467 | 2475 | rVB6 | 13594 | 29384 | 1.51% | 0.163% |
| 70 | 16.739 | 2484 | 2491 | 2499 | rVB4 | 51174 | 108812 | 5.58% | 0.605% |
| 71 | 16.892 | 2514 | 2517 | 2524 | rVB6 | 17967 | 34059 | 1.75% | 0.189% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

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-BF101819.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 72 | 17.162 | 2558 | 2563 | 2571 | rBV3 | 26157 | 59007 | 3.03% | 0.328% | |

Sum of corrected areas: 17980992

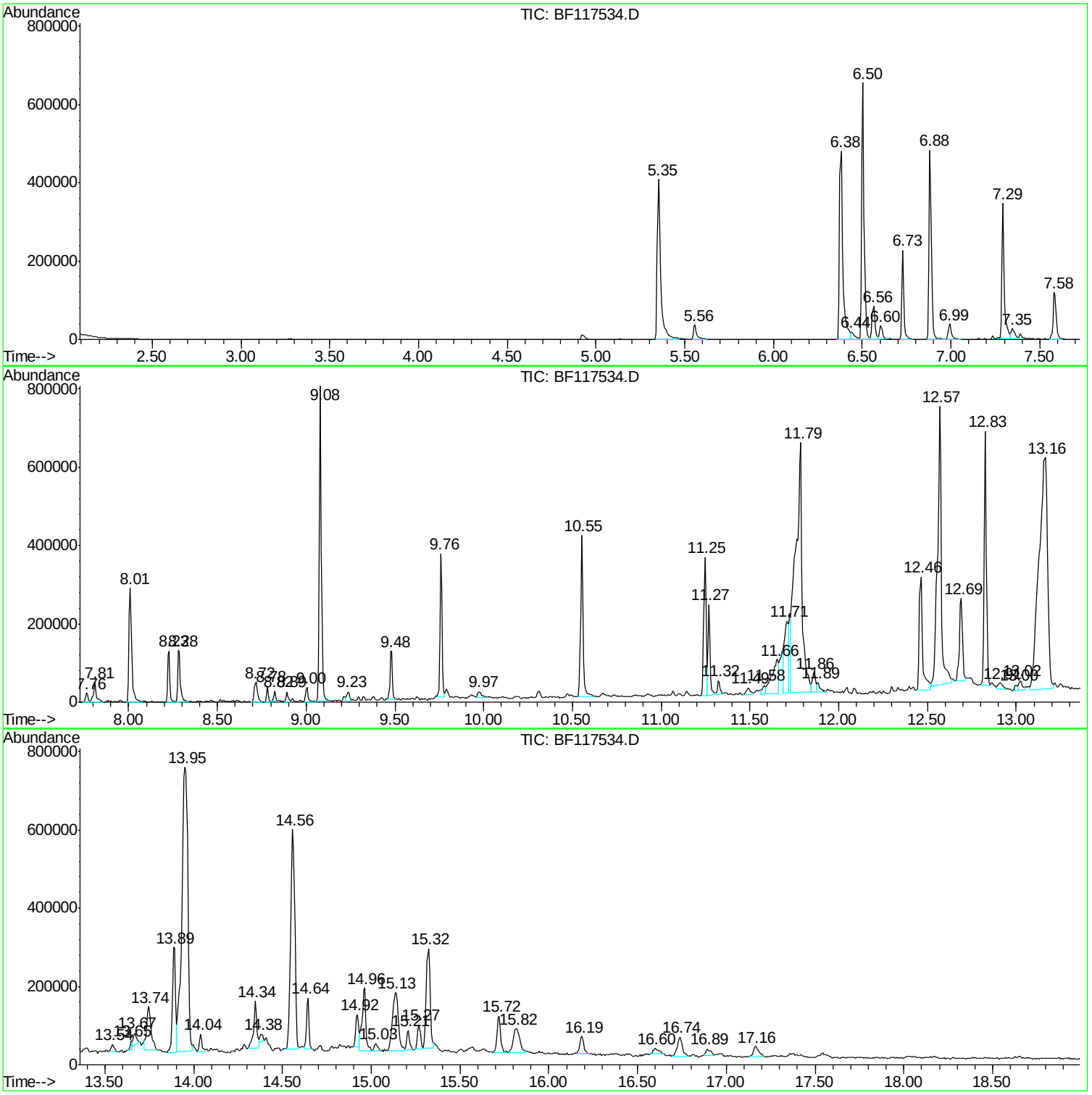
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.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\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

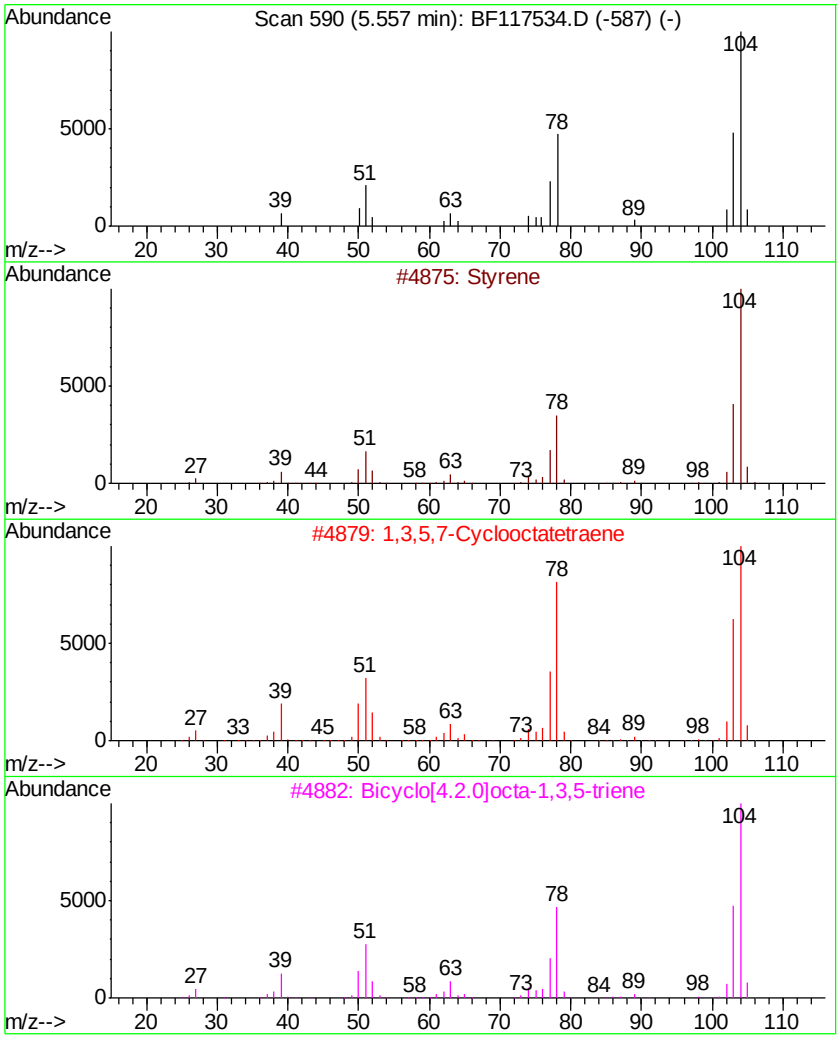
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

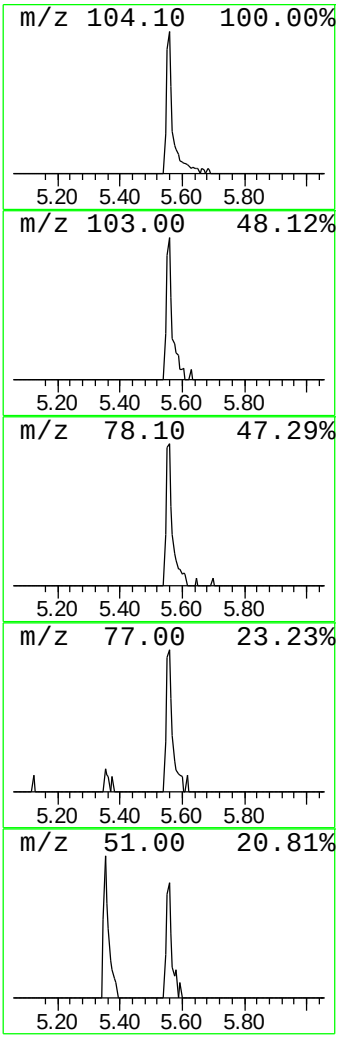
**********

Peak Number 1 Styrene Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.56 | 4.88 ng | 48546 | 1,4-Dichlorobenzene-d4 | 6.73 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Styrene | 104 | C8H8 | 000100-42-5 | 94 |
| 2 | 1,3,5,7-Cyclooctatetraene | 104 | C8H8 | 000629-20-9 | 91 |
| 3 | Bicyclo[4.2.0]octa-1,3,5-triene | 104 | C8H8 | 000694-87-1 | 91 |
| 4 | 3(2H)-Furanone, dihydro-2,2-dime... | 190 | C12H14O2 | 063678-00-2 | 45 |
| 5 | Butanedioic acid, phenyl- | 194 | C10H10O4 | 000635-51-8 | 43 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

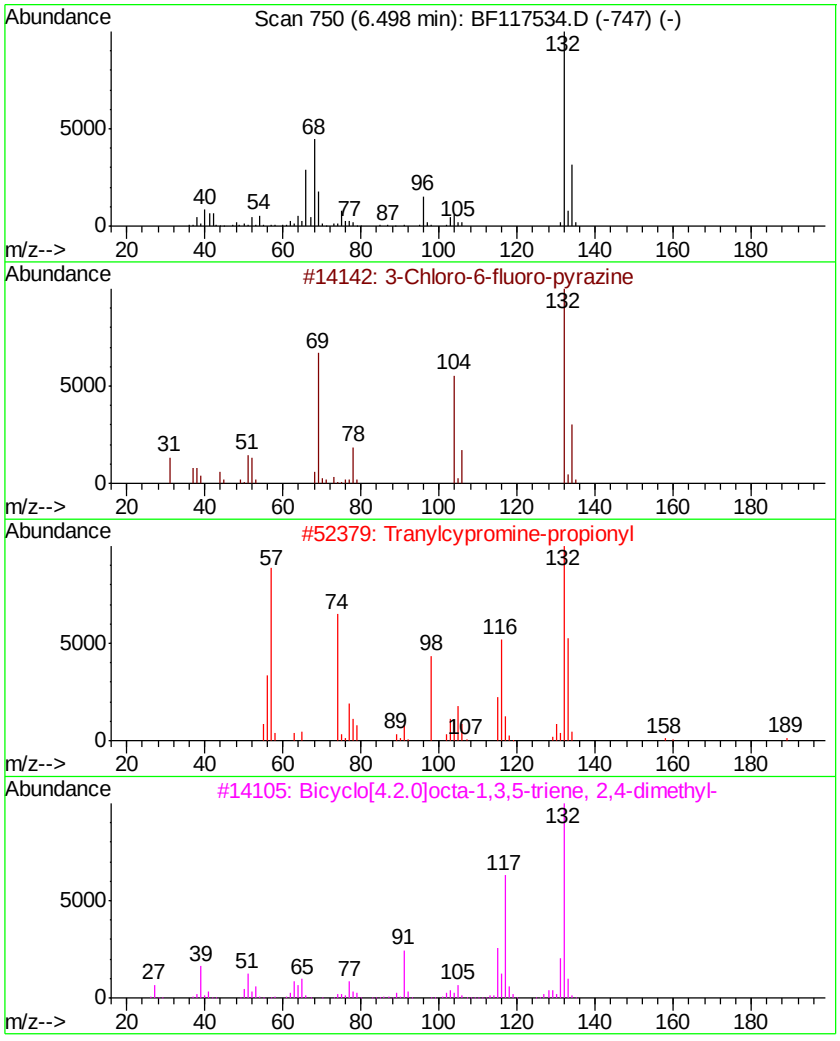
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

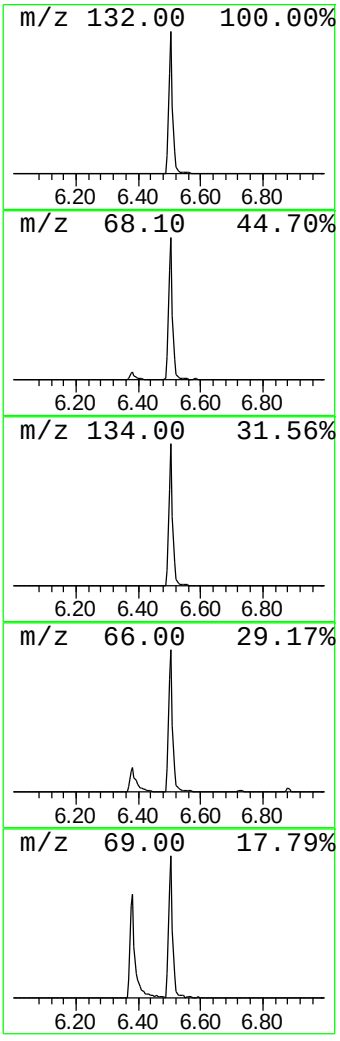
**********

Peak Number 2 unknown6.50 Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.50 | 60.77 ng | 603986 | 1,4-Dichlorobenzene-d4 | 6.73 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 16 |
| 2 | Tranylcypromine-propionyl | 189 | C12H15NO | 1000123-86-3 | 12 |
| 3 | Bicyclo[4.2.0]octa-1,3,5-triene,... | 132 | C10H12 | 028749-81-7 | 9 |
| 4 | Xenon | 132 | Xe | 007440-63-3 | 9 |
| 5 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 9 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

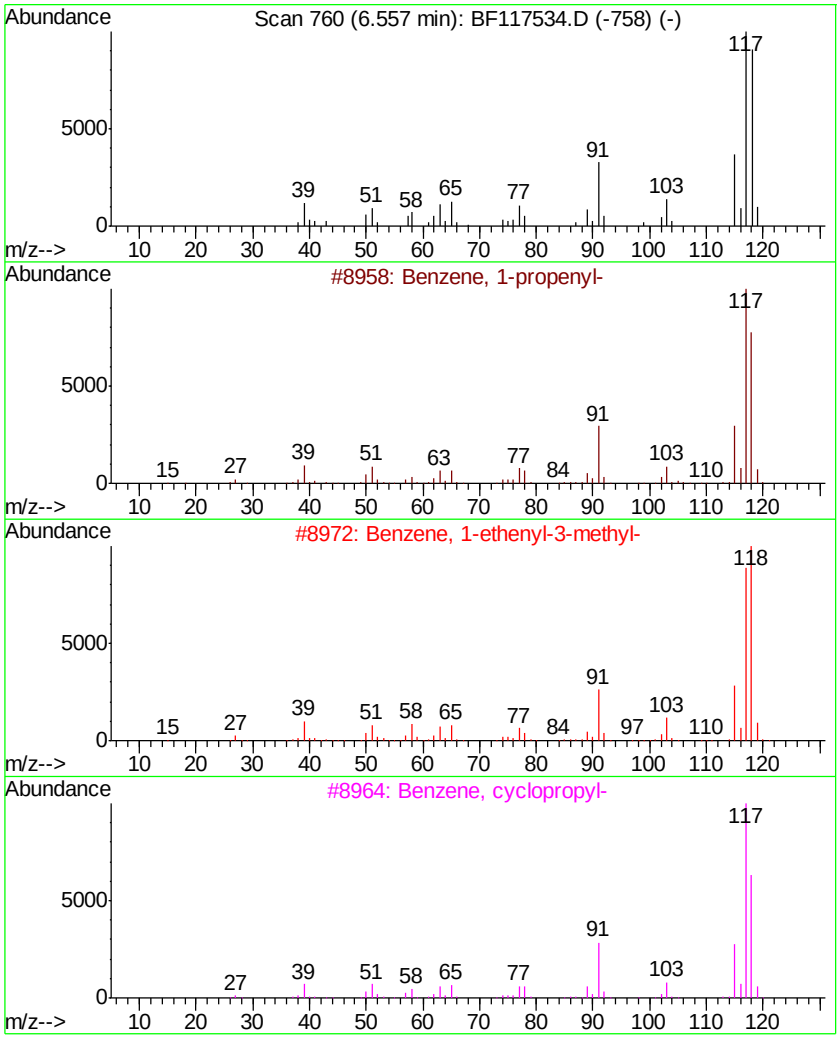
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

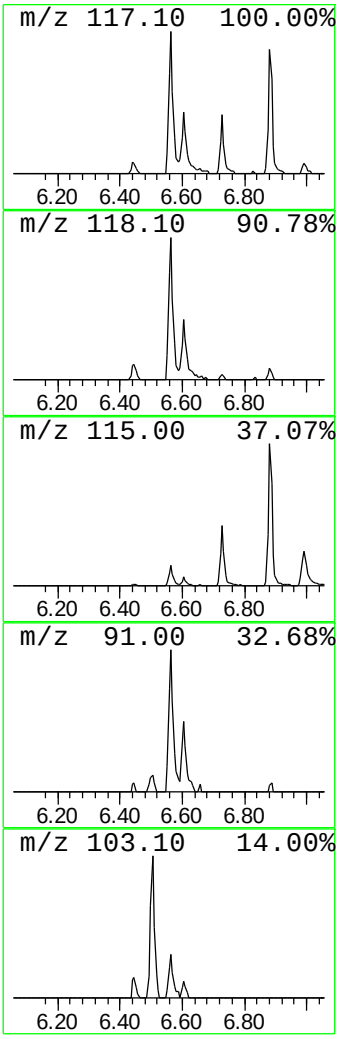
**********

Peak Number 3 Benzene, 1-propenyl- Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.56 | 8.74 ng | 86881 | 1,4-Dichlorobenzene-d4 | 6.73 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-propenyl- | 118 | C9H10 | 000637-50-3 | 94 |
| 2 | Benzene, 1-ethenyl-3-methyl- | 118 | C9H10 | 000100-80-1 | 94 |
| 3 | Benzene, cyclopropyl- | 118 | C9H10 | 000873-49-4 | 93 |
| 4 | Benzene, 1-ethenyl-2-methyl- | 118 | C9H10 | 000611-15-4 | 93 |
| 5 | Benzene, 1-ethenyl-4-methyl- | 118 | C9H10 | 000622-97-9 | 90 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

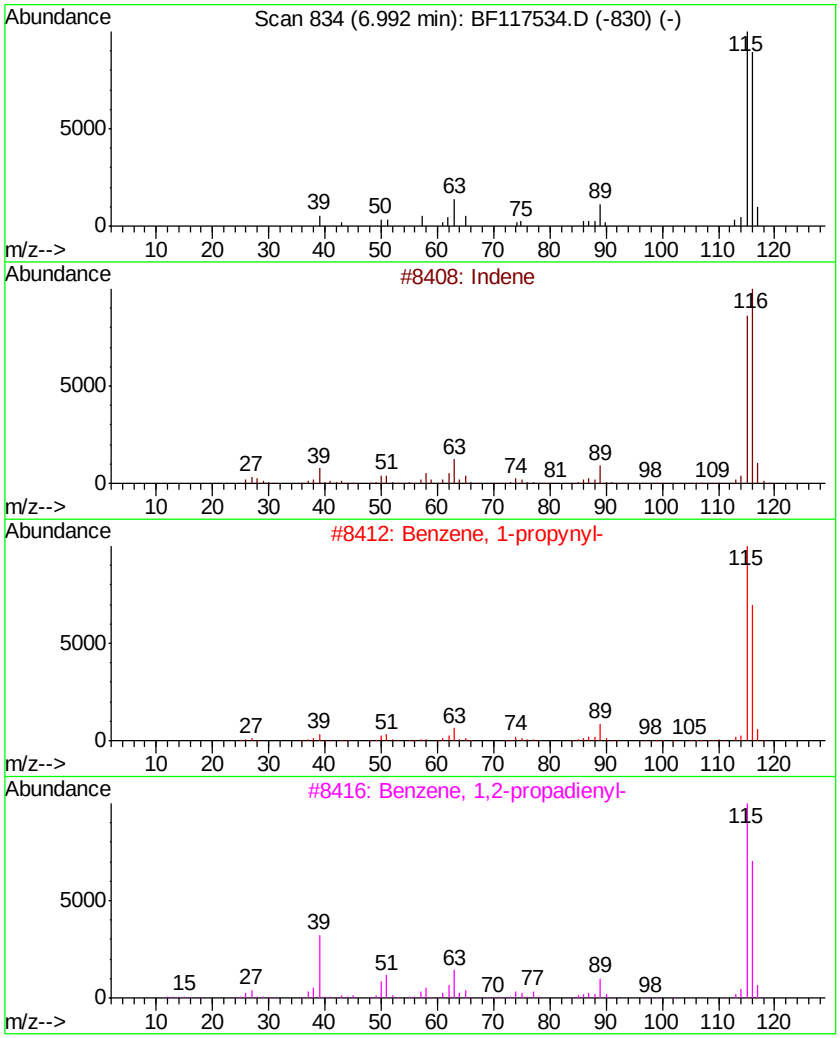
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

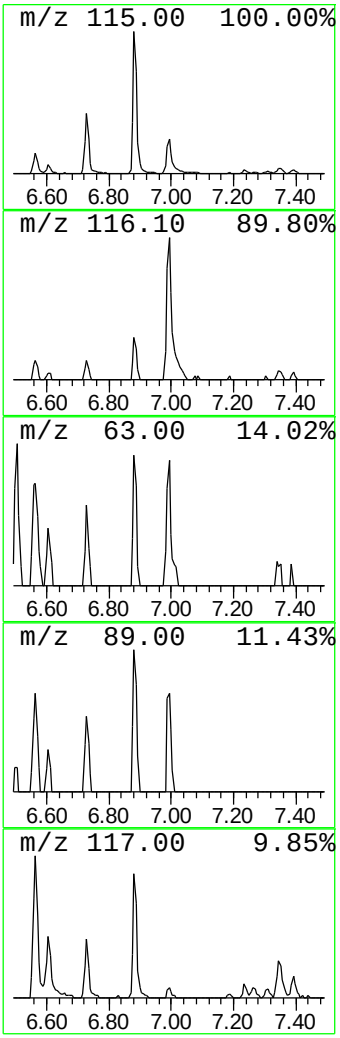
**********

Peak Number 5 Indene Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.99 | 4.74 ng | 47088 | 1,4-Dichlorobenzene-d4 | 6.73 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Indene | 116 | C9H8 | 000095-13-6 | 95 |
| 2 | Benzene, 1-propynyl- | 116 | C9H8 | 000673-32-5 | 94 |
| 3 | Benzene, 1,2-propadienyl- | 116 | C9H8 | 002327-99-3 | 91 |
| 4 | 3-Methylphenylacetylene | 116 | C9H8 | 000766-82-5 | 91 |
| 5 | Benzene, 1-ethynyl-4-methyl- | 116 | C9H8 | 000766-97-2 | 91 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

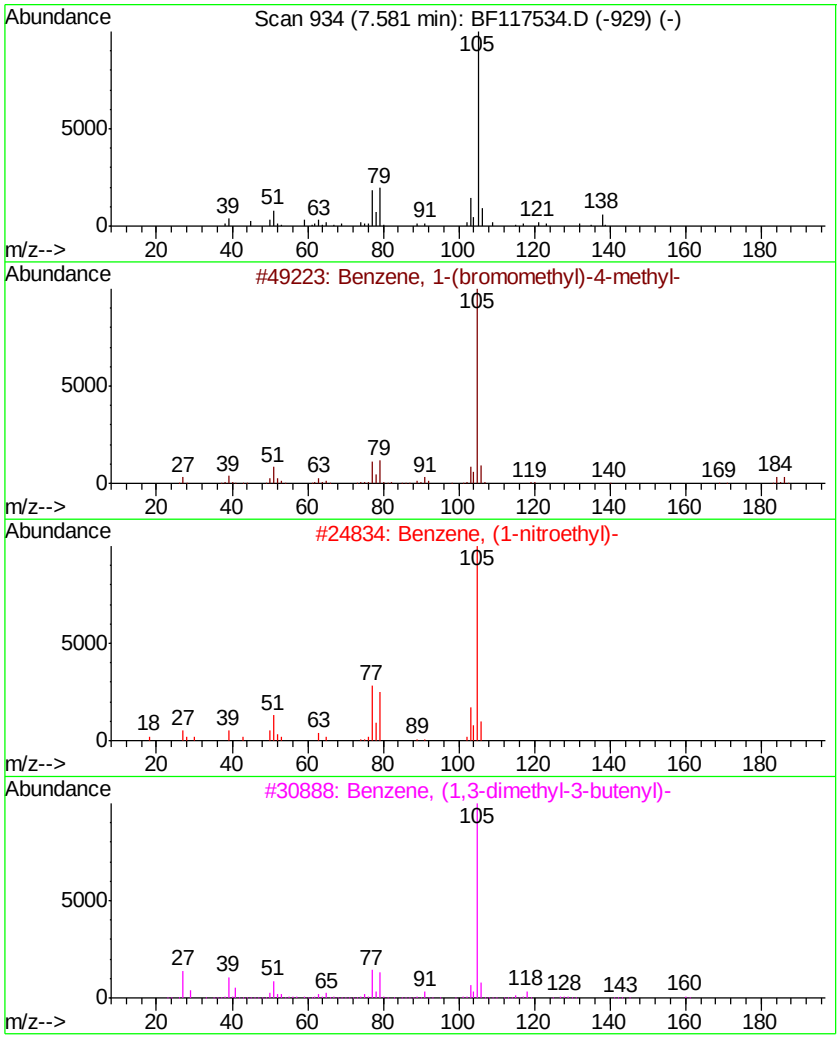
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

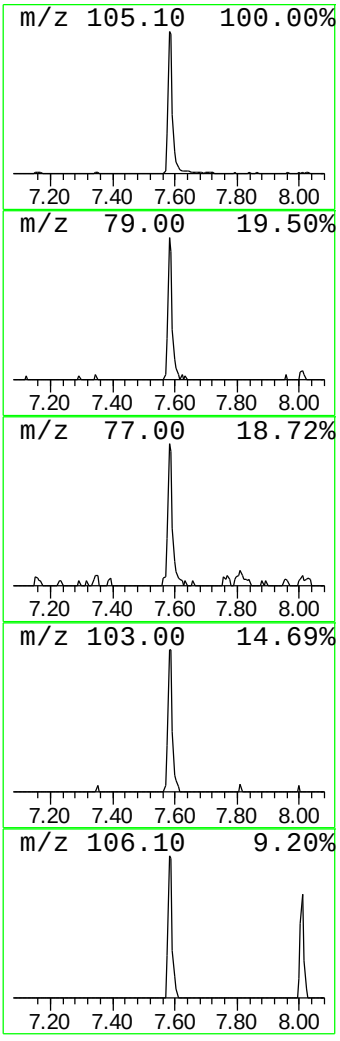
**********

Peak Number 6 Benzene, 1-(bromomethyl)-4-... Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.58 | 9.39 ng | 133651 | Naphthalene-d8 | 8.01 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-(bromomethyl)-4-methyl- | 184 | C8H9Br | 000104-81-4 | 59 |
| 2 | Benzene, (1-nitroethyl)- | 151 | C8H9NO2 | 007214-61-1 | 59 |
| 3 | Benzene, (1,3-dimethyl-3-butenyl)- | 160 | C12H16 | 056851-51-5 | 56 |
| 4 | Benzene, (1-bromoethyl)- | 184 | C8H9Br | 000585-71-7 | 50 |
| 5 | Ether, p-methylbenzyl vinyl | 148 | C10H12O | 026437-10-5 | 40 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

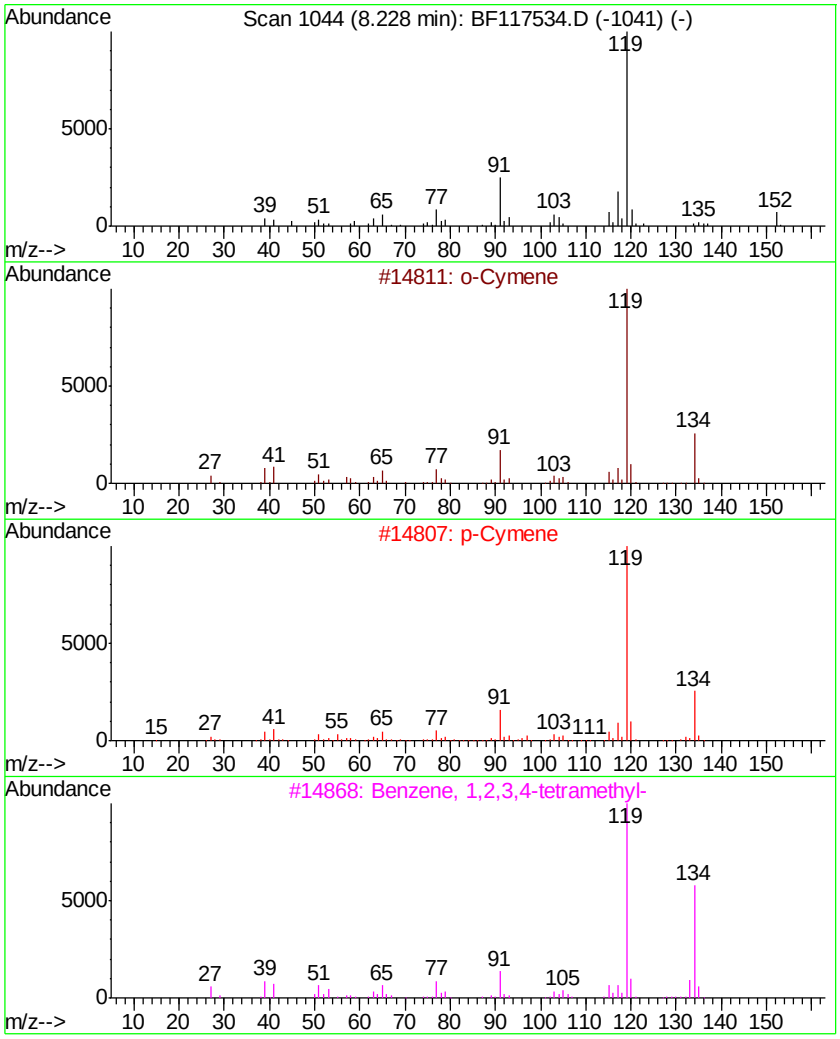
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

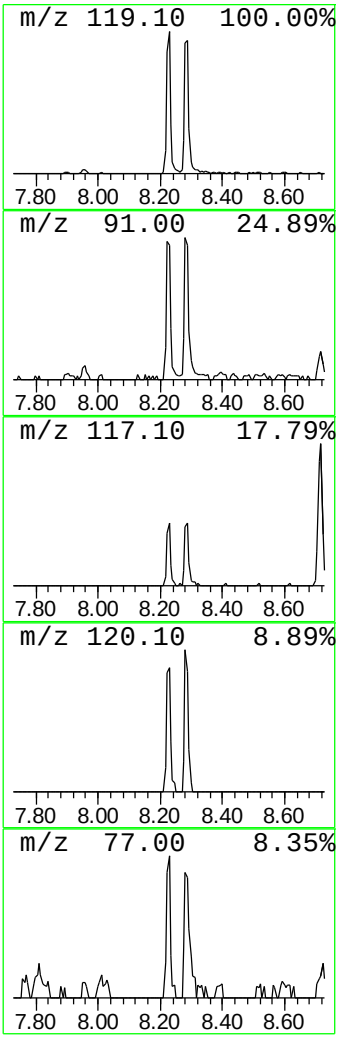
**********

Peak Number 7 o-Cymene Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.23 | 8.14 ng | 115916 | Naphthalene-d8 | 8.01 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | o-Cymene | 134 | C10H14 | 000527-84-4 | 90 |
| 2 | p-Cymene | 134 | C10H14 | 000099-87-6 | 86 |
| 3 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 80 |
| 4 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 80 |
| 5 | 1,3-Cyclopentadiene, 1,2,3,4-tet... | 134 | C10H14 | 076089-59-3 | 80 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

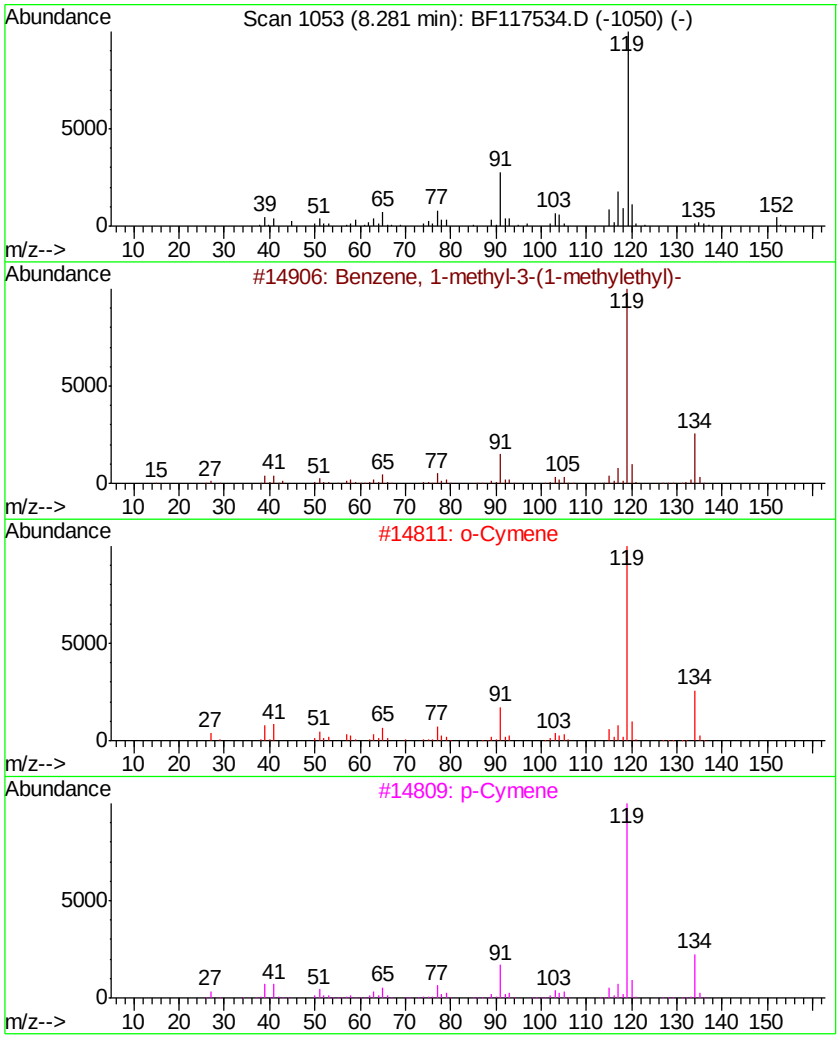
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

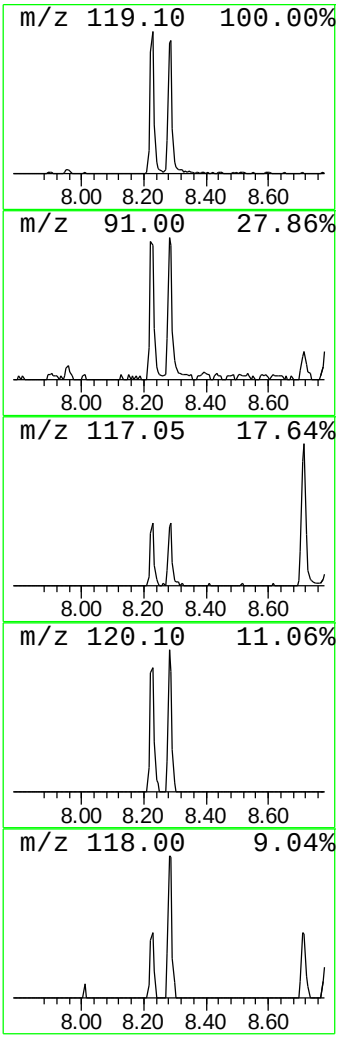
**********

Peak Number 8 Benzene, 1-methyl-3-(1-meth... Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.28 | 9.33 ng | 132875 | Naphthalene-d8 | 8.01 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 87 |
| 2 | o-Cymene | 134 | C10H14 | 000527-84-4 | 87 |
| 3 | p-Cymene | 134 | C10H14 | 000099-87-6 | 74 |
| 4 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 72 |
| 5 | Benzene, 1-ethyl-3,5-dimethyl- | 134 | C10H14 | 000934-74-7 | 64 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

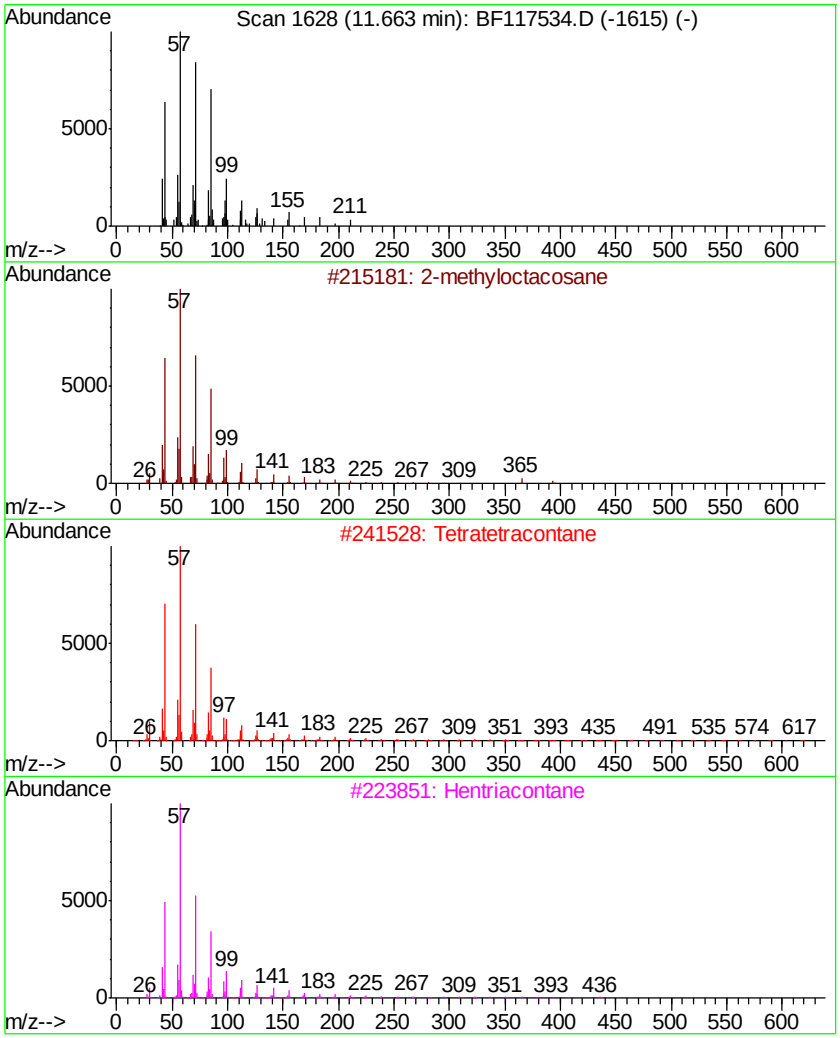
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

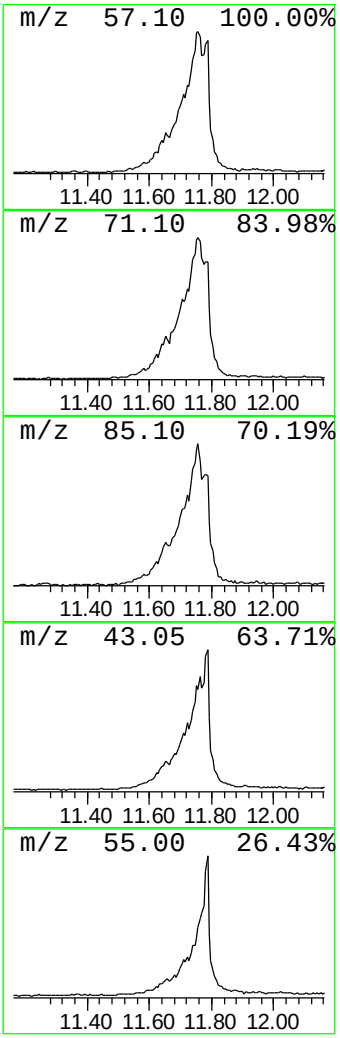
**********

Peak Number 9 2-methyloctacosane Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.66 | 16.32 ng | 243553 | Phenanthrene-d10 | 11.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-methyloctacosane | 408 | C29H60 | 1000376-72-8 | 86 |
| 2 | Tetratetracontane | 619 | C44H90 | 007098-22-8 | 80 |
| 3 | Hentriacontane | 437 | C31H64 | 000630-04-6 | 80 |
| 4 | Heneicosane | 296 | C21H44 | 000629-94-7 | 80 |
| 5 | Hexacosane | 366 | C26H54 | 000630-01-3 | 72 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

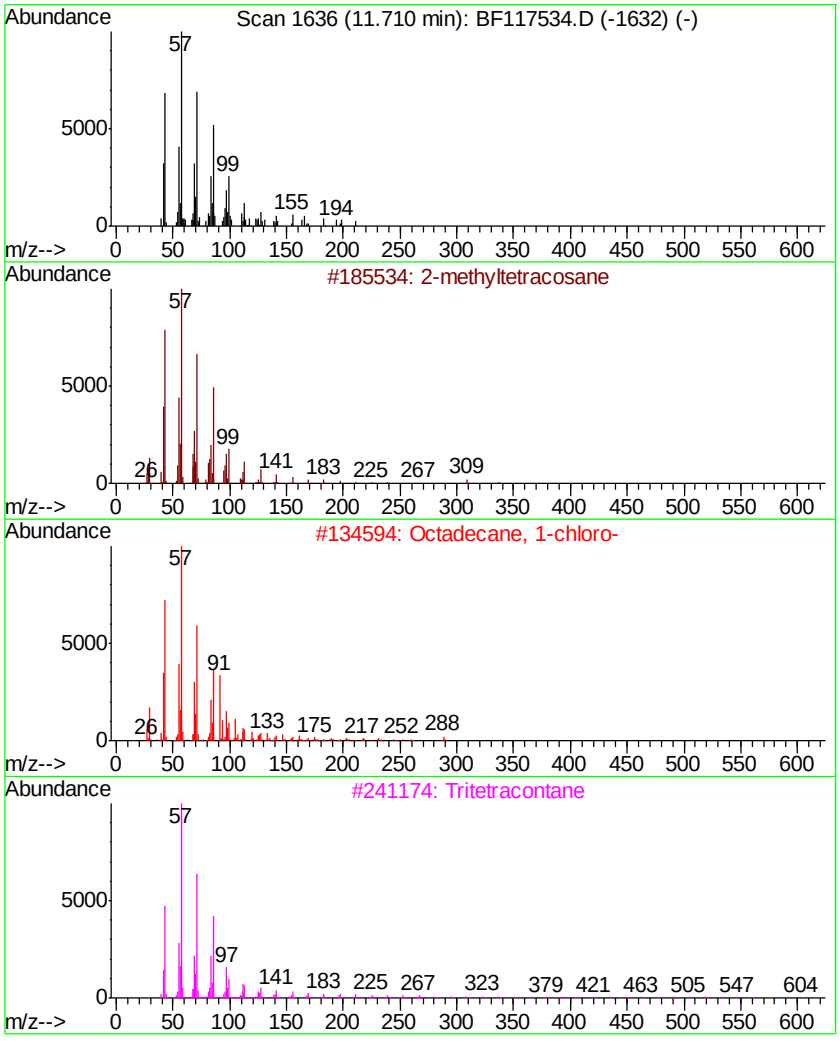
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

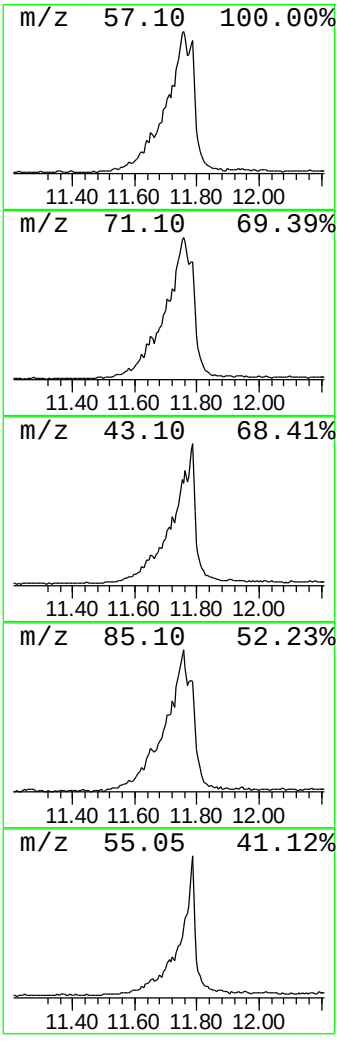
**********

Peak Number 10 Octadecane, 1-chloro- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.71 | 19.09 ng | 285004 | Phenanthrene-d10 | 11.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-methyltetracosane | 352 | C25H52 | 1000376-72-6 | 86 |
| 2 | Octadecane, 1-chloro- | 288 | C18H37Cl | 003386-33-2 | 80 |
| 3 | Tritetracontane | 605 | C43H88 | 007098-21-7 | 80 |
| 4 | Heneicosane | 296 | C21H44 | 000629-94-7 | 72 |
| 5 | Heptadecane | 240 | C17H36 | 000629-78-7 | 58 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

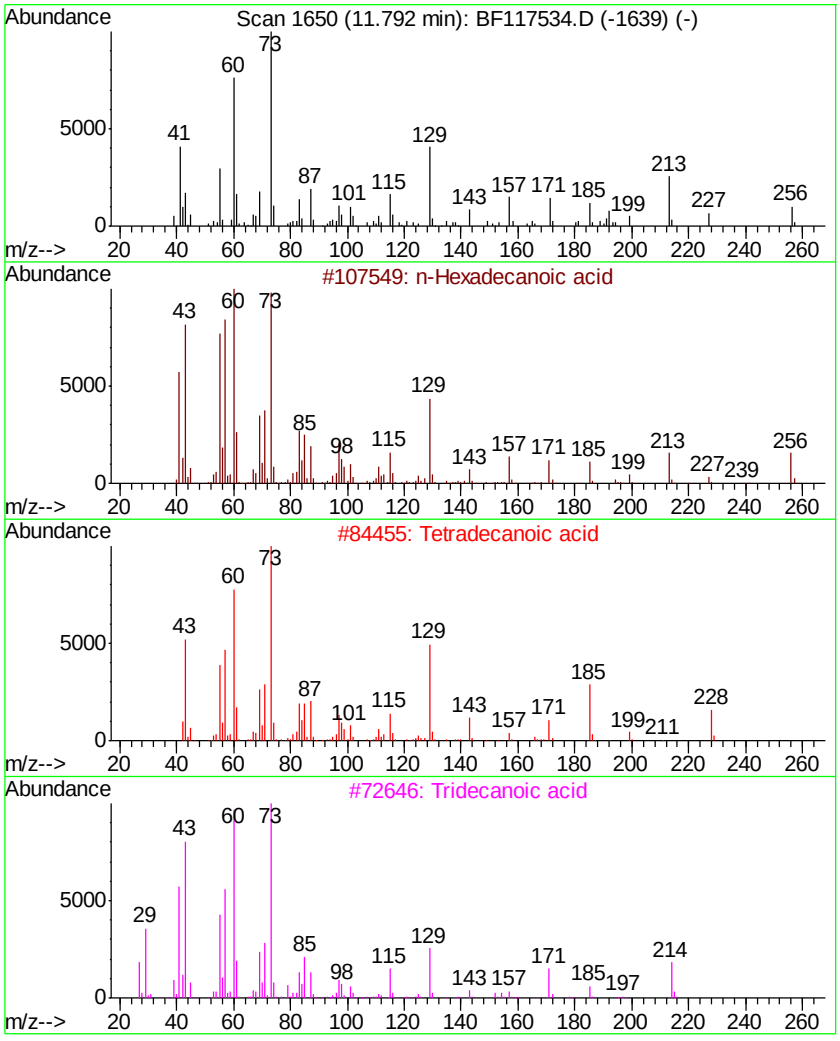
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

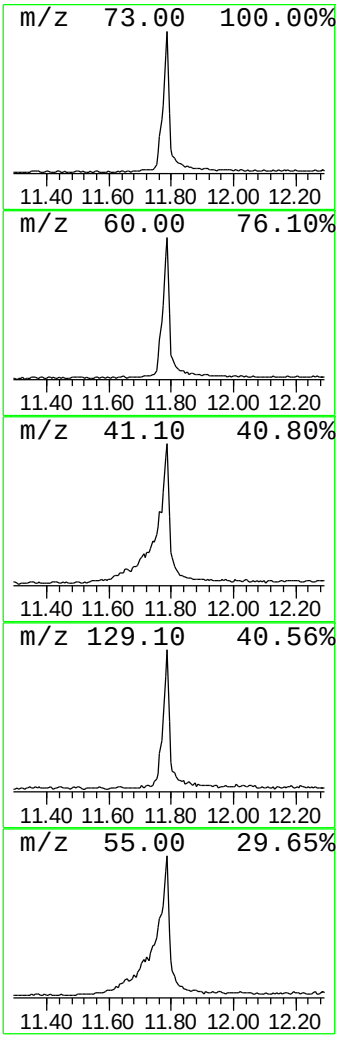
**********

Peak Number 11 n-Hexadecanoic acid Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.79 | 114.70 ng | 1712060 | Phenanthrene-d10 | 11.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | n-Hexadecanoic acid | 256 | C16H32O2 | 000057-10-3 | 76 |
| 2 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 76 |
| 3 | Tridecanoic acid | 214 | C13H26O2 | 000638-53-9 | 70 |
| 4 | Pentadecanoic acid | 242 | C15H30O2 | 001002-84-2 | 64 |
| 5 | Dodecanoic acid | 200 | C12H24O2 | 000143-07-7 | 58 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

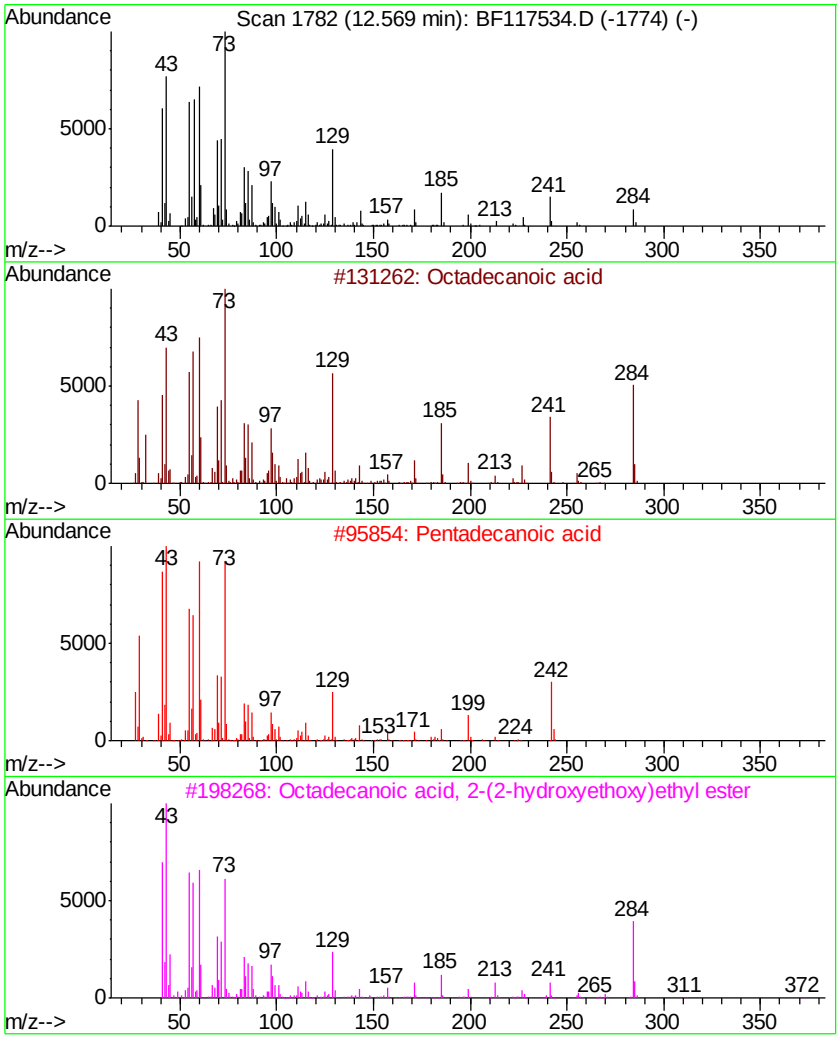
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

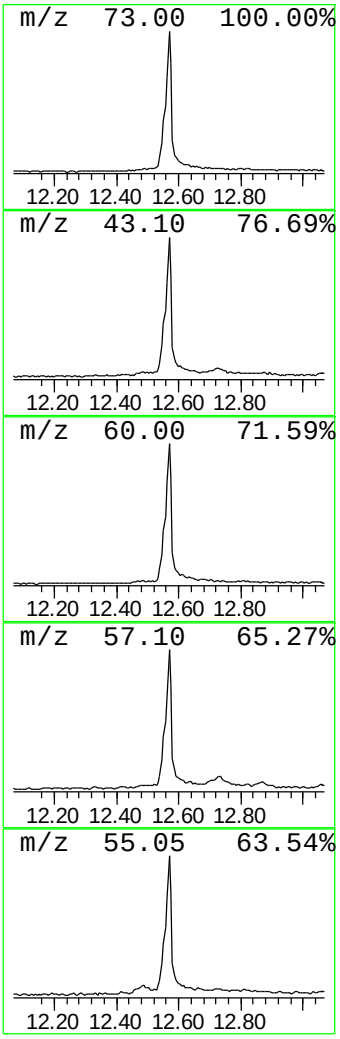
**********

Peak Number 12 Octadecanoic acid Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.57 | 60.21 ng | 1094100 | Chrysene-d12 | 13.89 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Octadecanoic acid | 284 | C18H36O2 | 000057-11-4 | 99 |
| 2 | Pentadecanoic acid | 242 | C15H30O2 | 001002-84-2 | 76 |
| 3 | Octadecanoic acid, 2-(2-hydroxye... | 372 | C22H44O4 | 000106-11-6 | 72 |
| 4 | n-Decanoic acid | 172 | C10H20O2 | 000334-48-5 | 68 |
| 5 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 58 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

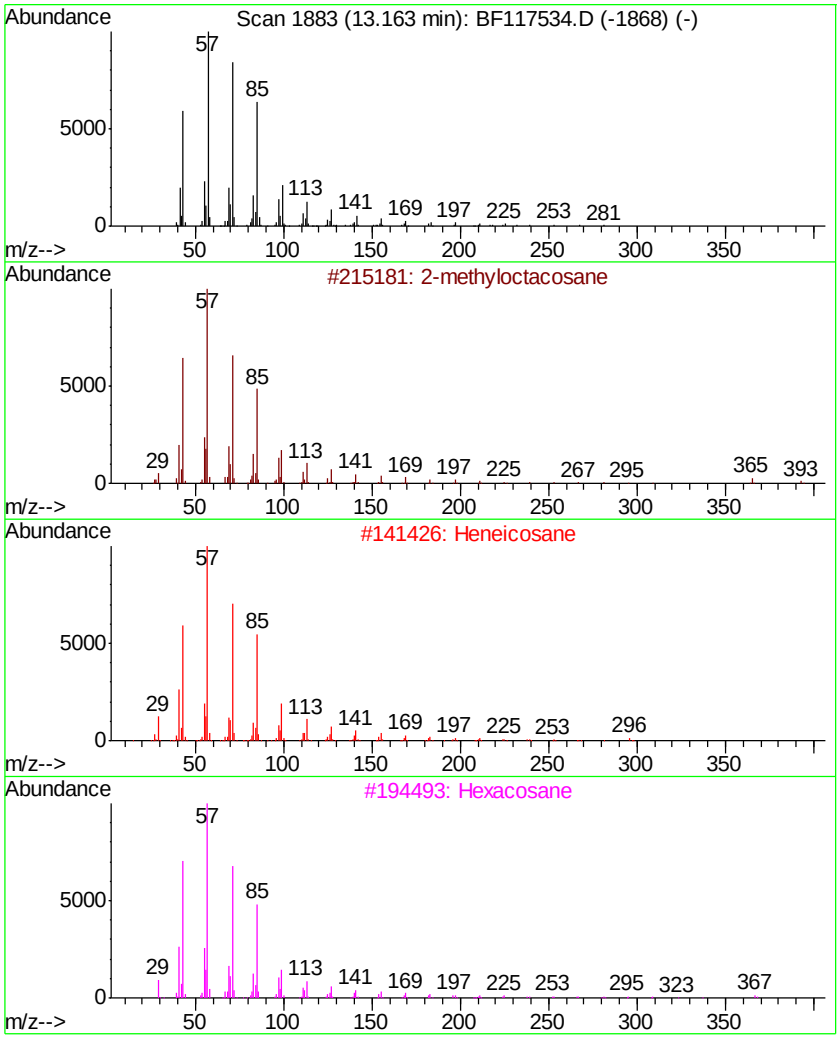
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

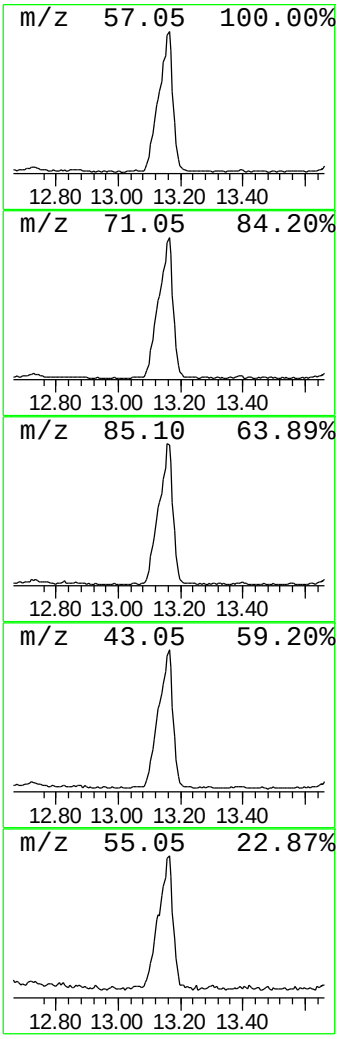
**********

Peak Number 13 Heptadecane Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.16 | 107.25 ng | 1948960 | Chrysene-d12 | 13.89 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-methyloctacosane | 408 | C29H60 | 1000376-72-8 | 91 |
| 2 | Heneicosane | 296 | C21H44 | 000629-94-7 | 91 |
| 3 | Hexacosane | 366 | C26H54 | 000630-01-3 | 87 |
| 4 | Heptadecane | 240 | C17H36 | 000629-78-7 | 86 |
| 5 | Heptacosane | 380 | C27H56 | 000593-49-7 | 86 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

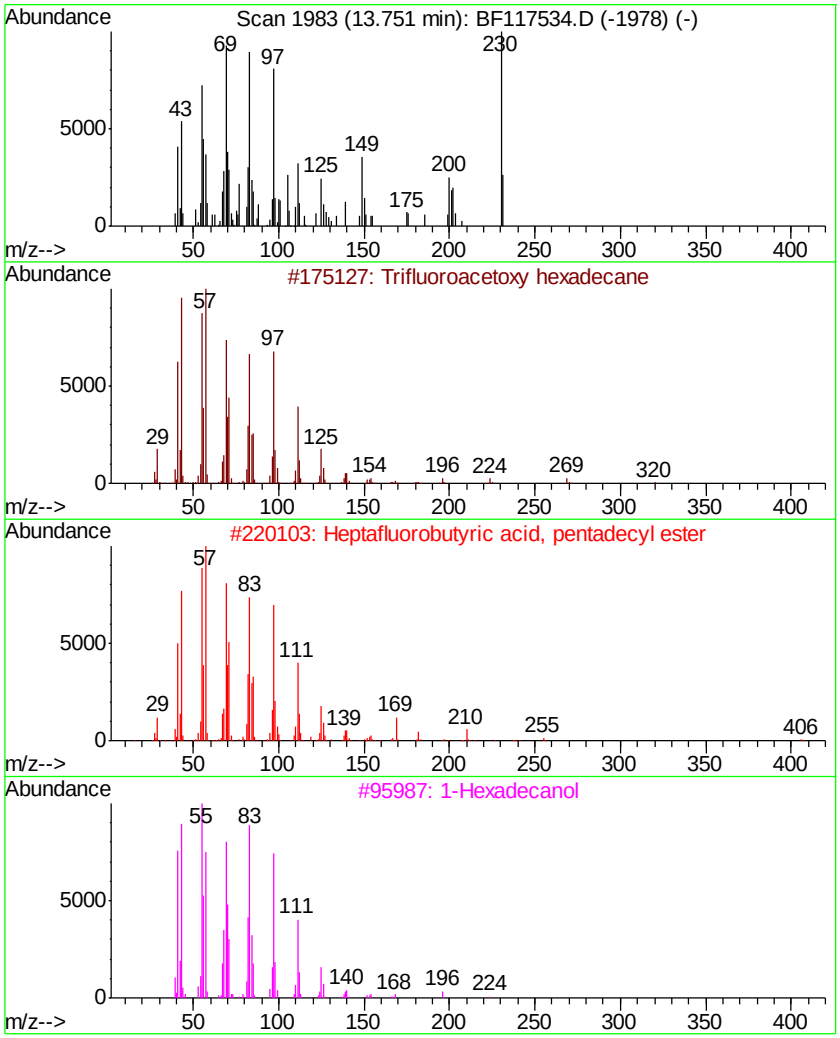
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

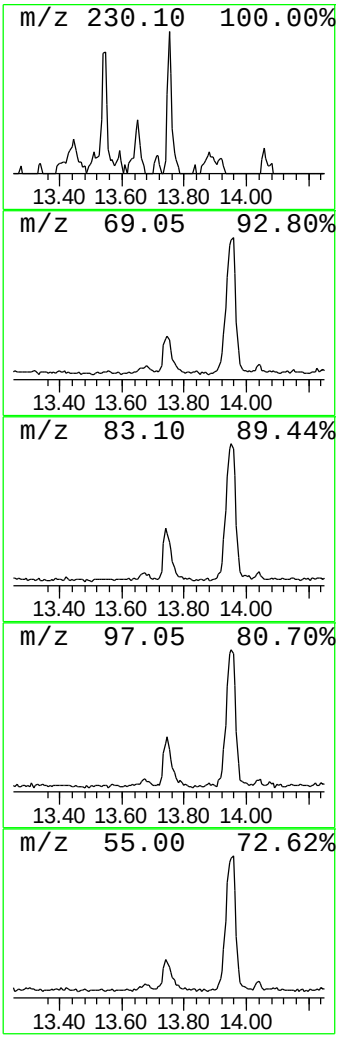
**********

Peak Number 14 Trifluoroacetoxy hexadecane Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.75 | 11.10 ng | 201674 | Chrysene-d12 | 13.89 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Trifluoroacetoxy hexadecane | 338 | C18H33F3O2 | 006222-03-3 | 68 |
| 2 | Heptafluorobutyric acid, pentade... | 424 | C19H31F7O2 | 959261-23-5 | 64 |
| 3 | 1-Hexadecanol | 242 | C16H34O | 036653-82-4 | 64 |
| 4 | Pentafluoropropionic acid, tetra... | 360 | C17H29F5O2 | 006222-06-6 | 64 |
| 5 | Heptafluorobutyric acid, n-tetra... | 410 | C18H29F7O2 | 007365-36-8 | 64 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

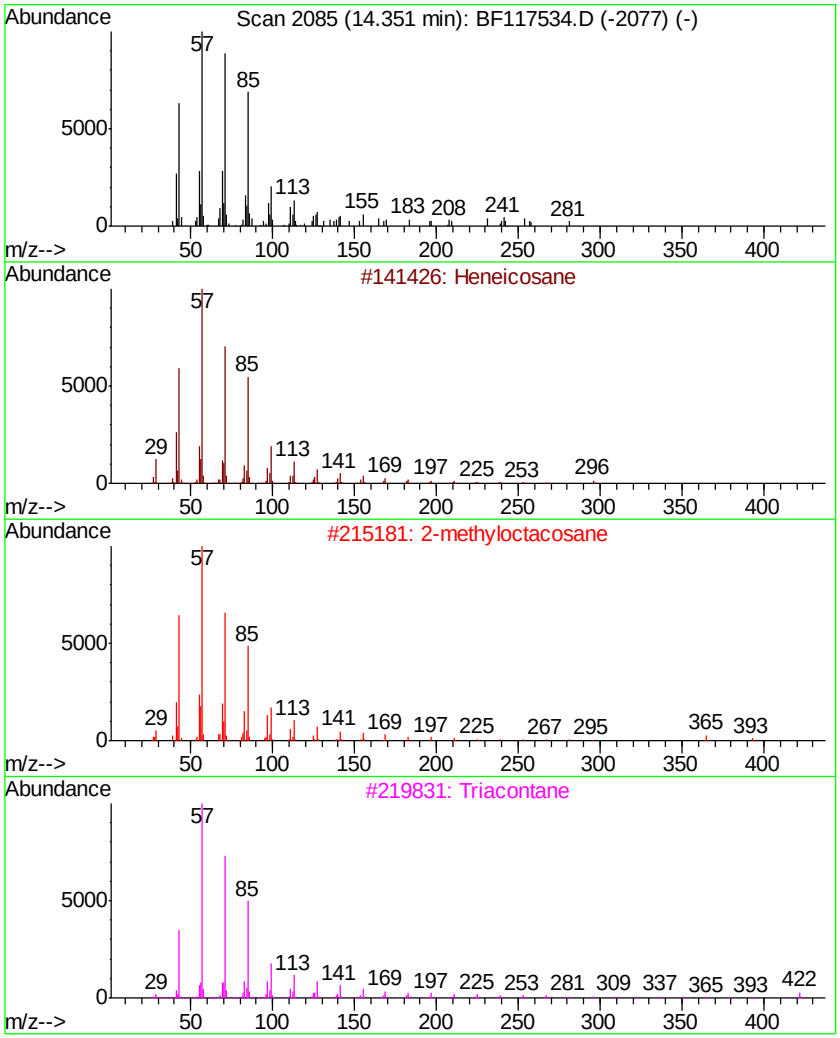
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

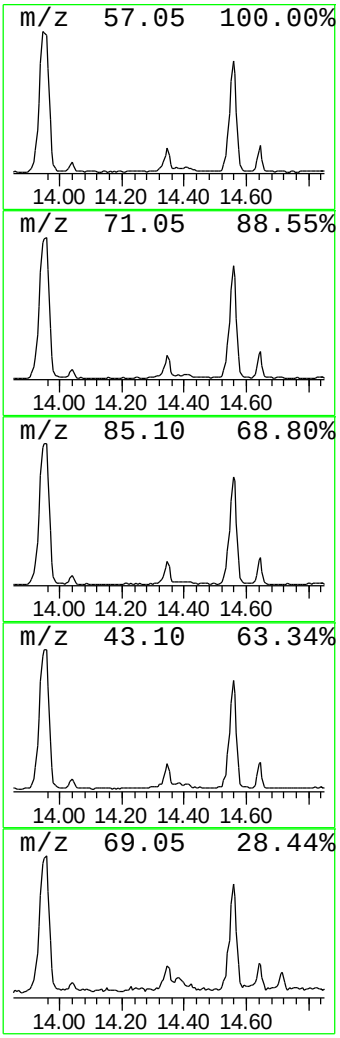
**********

Peak Number 15 Heneicosane Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.35 | 9.10 ng | 165350 | Chrysene-d12 | 13.89 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Heneicosane | 296 | C21H44 | 000629-94-7 | 91 |
| 2 | 2-methyloctacosane | 408 | C29H60 | 1000376-72-8 | 91 |
| 3 | Triacontane | 422 | C30H62 | 000638-68-6 | 91 |
| 4 | 2-methyltetracosane | 352 | C25H52 | 1000376-72-6 | 90 |
| 5 | Heptadecane | 240 | C17H36 | 000629-78-7 | 87 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

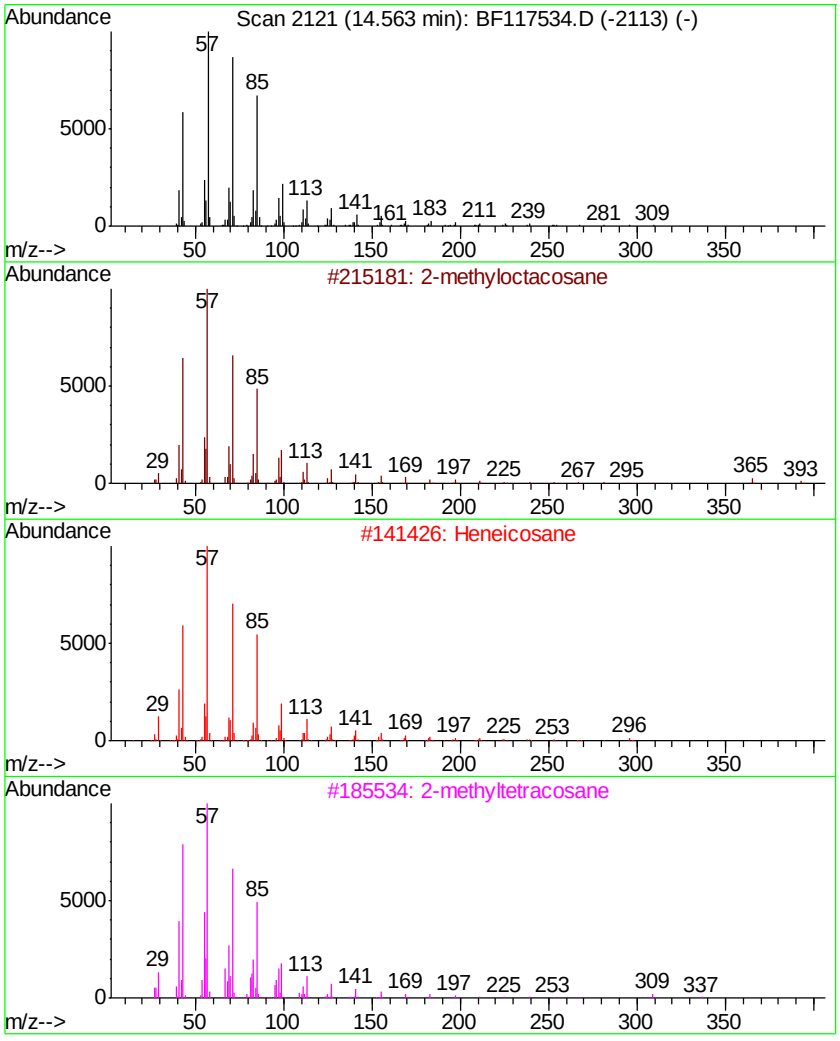
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

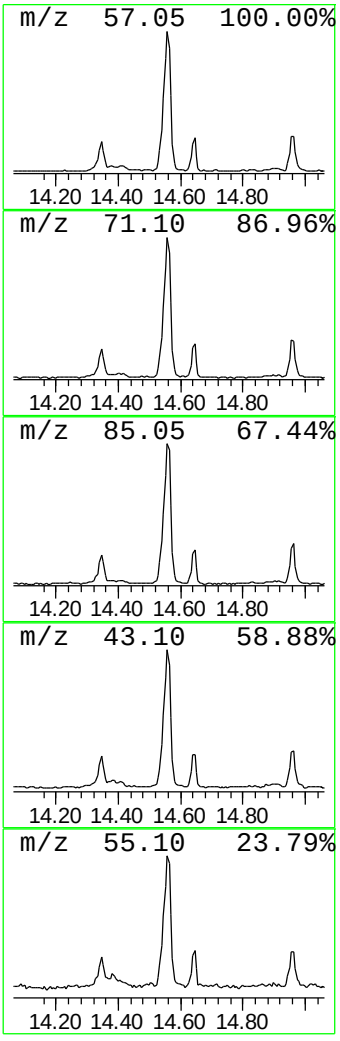
**********

Peak Number 16 Heptadecane, 9-octyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.56 | 49.16 ng | 893323 | Chrysene-d12 | 13.89 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-methyloctacosane | 408 | C29H60 | 1000376-72-8 | 91 |
| 2 | Heneicosane | 296 | C21H44 | 000629-94-7 | 91 |
| 3 | 2-methyltetracosane | 352 | C25H52 | 1000376-72-6 | 90 |
| 4 | Heptadecane, 9-octyl- | 352 | C25H52 | 007225-64-1 | 90 |
| 5 | Heptadecane | 240 | C17H36 | 000629-78-7 | 86 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

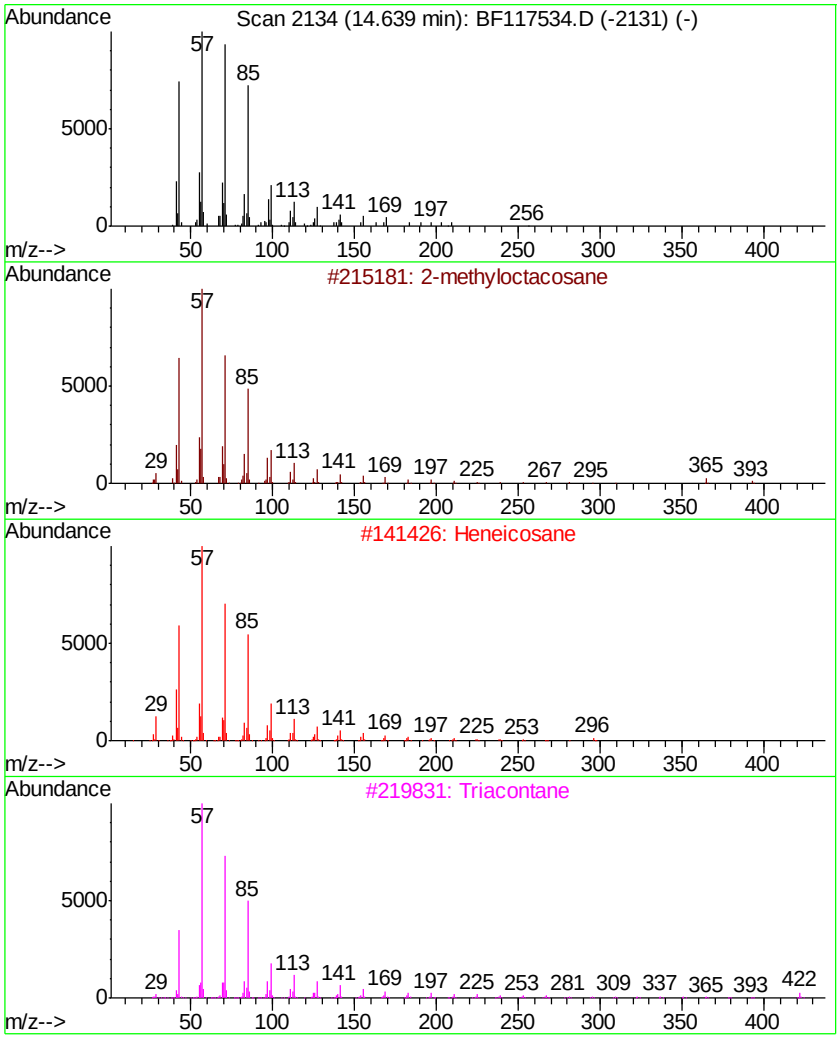
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

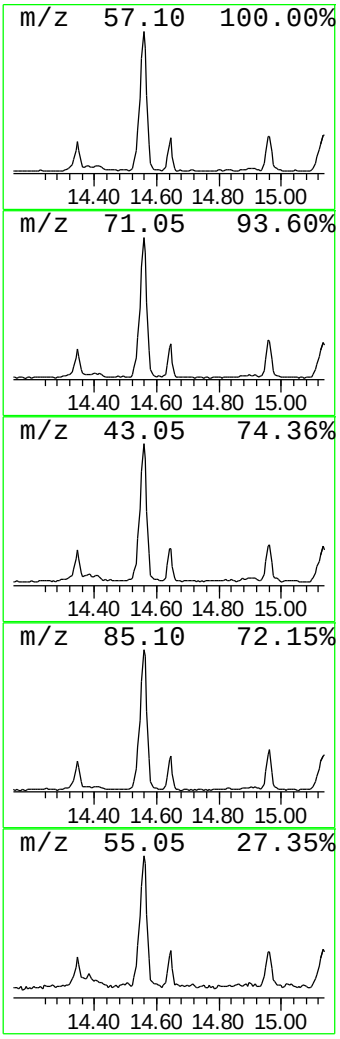
**********

Peak Number 17 Triacontane Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.64 | 7.50 ng | 138400 | Perylene-d12 | 15.33 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-methyloctacosane | 408 | C29H60 | 1000376-72-8 | 91 |
| 2 | Heneicosane | 296 | C21H44 | 000629-94-7 | 91 |
| 3 | Triacontane | 422 | C30H62 | 000638-68-6 | 91 |
| 4 | Heptadecane | 240 | C17H36 | 000629-78-7 | 90 |
| 5 | 2-methyltetracosane | 352 | C25H52 | 1000376-72-6 | 90 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

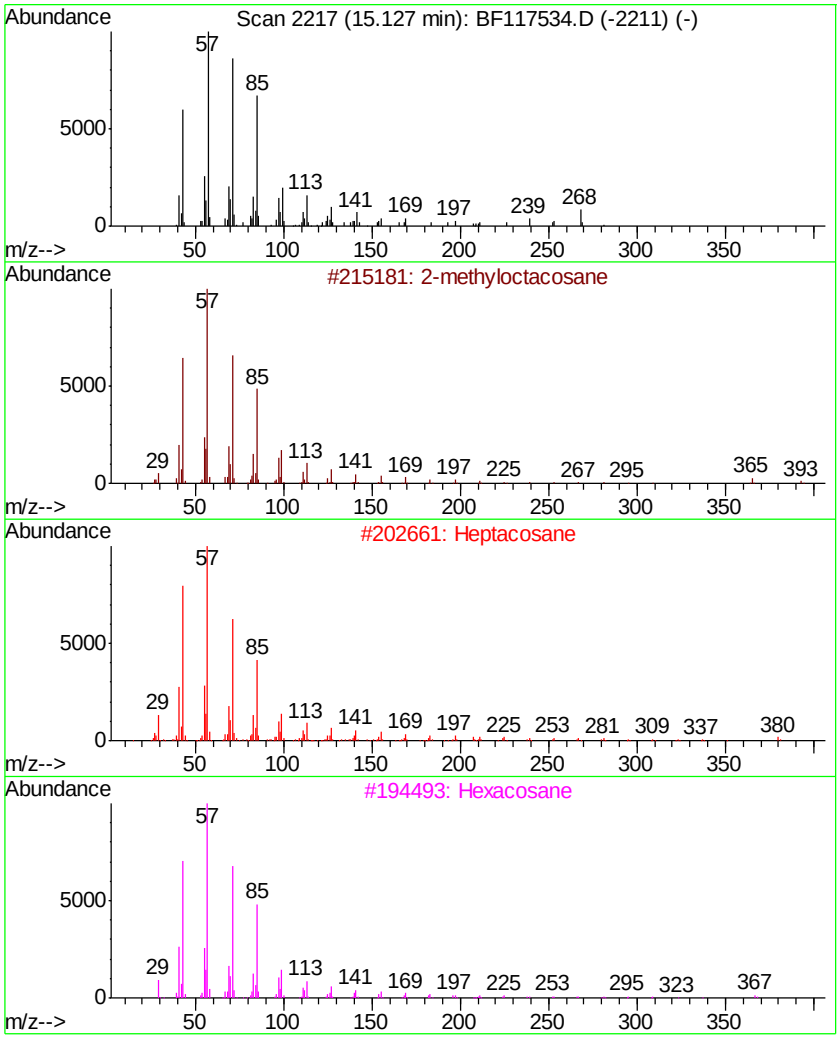
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

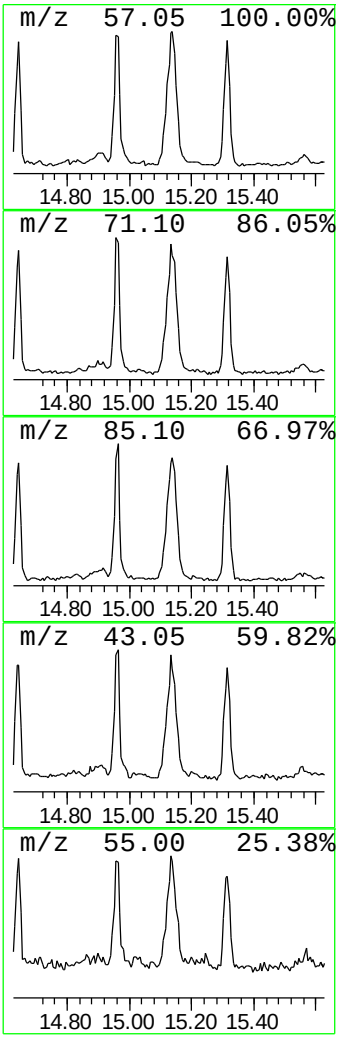
**********

Peak Number 18 Dodecane, 2-methyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.13 | 18.26 ng | 337106 | Perylene-d12 | 15.33 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-methyloctacosane | 408 | C29H60 | 1000376-72-8 | 91 |
| 2 | Heptacosane | 380 | C27H56 | 000593-49-7 | 91 |
| 3 | Hexacosane | 366 | C26H54 | 000630-01-3 | 91 |
| 4 | Octadecane | 254 | C18H38 | 000593-45-3 | 91 |
| 5 | Dodecane, 2-methyl- | 184 | C13H28 | 001560-97-0 | 90 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

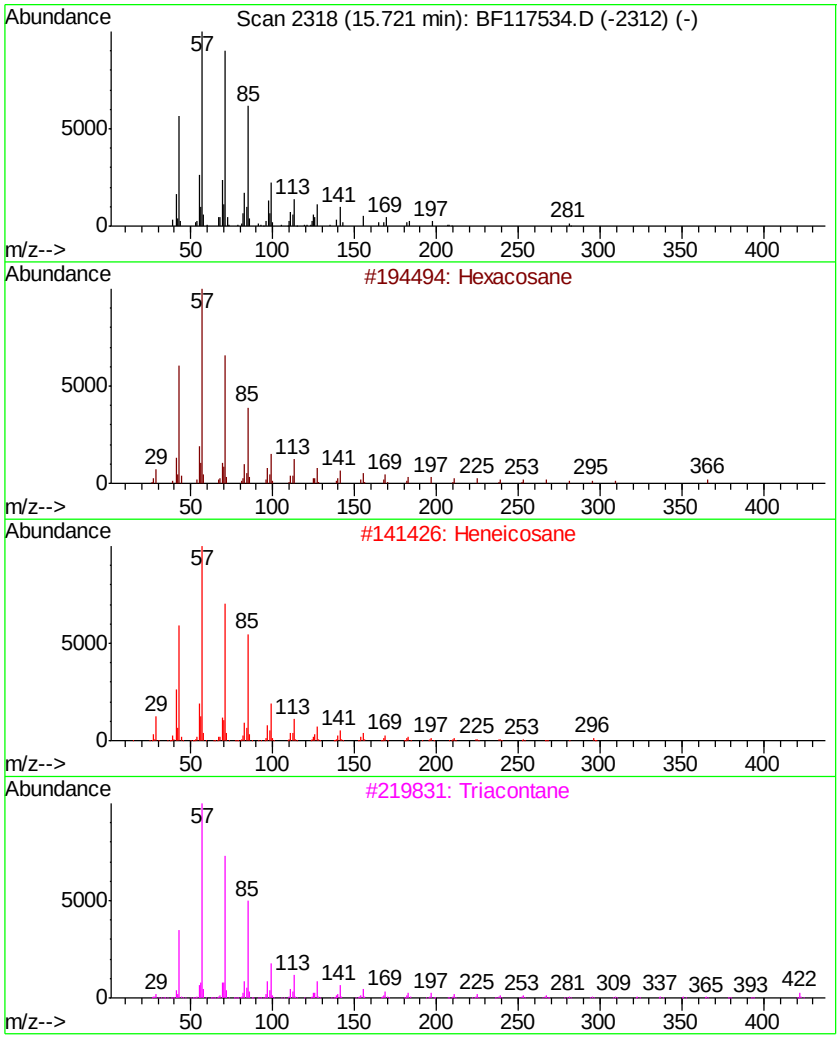
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

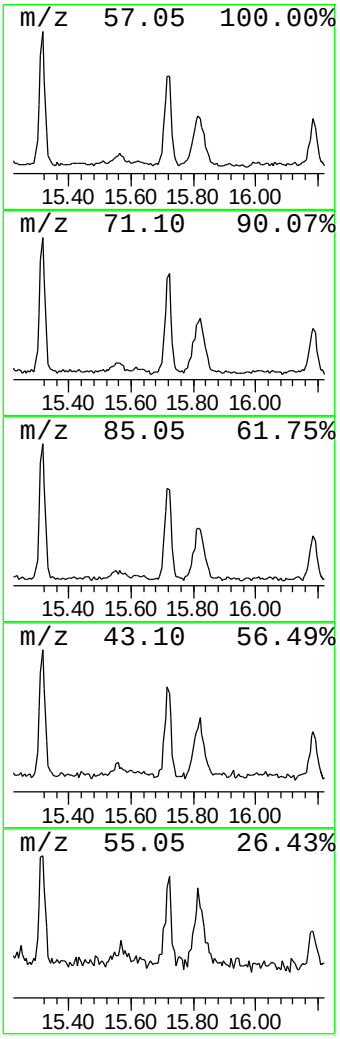
**********

Peak Number 19 Heneicosane, 11-(1-ethylpro... Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.72 | 7.62 ng | 140700 | Perylene-d12 | 15.33 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexacosane | 366 | C26H54 | 000630-01-3 | 91 |
| 2 | Heneicosane | 296 | C21H44 | 000629-94-7 | 91 |
| 3 | Triacontane | 422 | C30H62 | 000638-68-6 | 91 |
| 4 | Heneicosane, 11-(1-ethylpropyl)- | 366 | C26H54 | 055282-11-6 | 91 |
| 5 | 2-methyloctacosane | 408 | C29H60 | 1000376-72-8 | 91 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

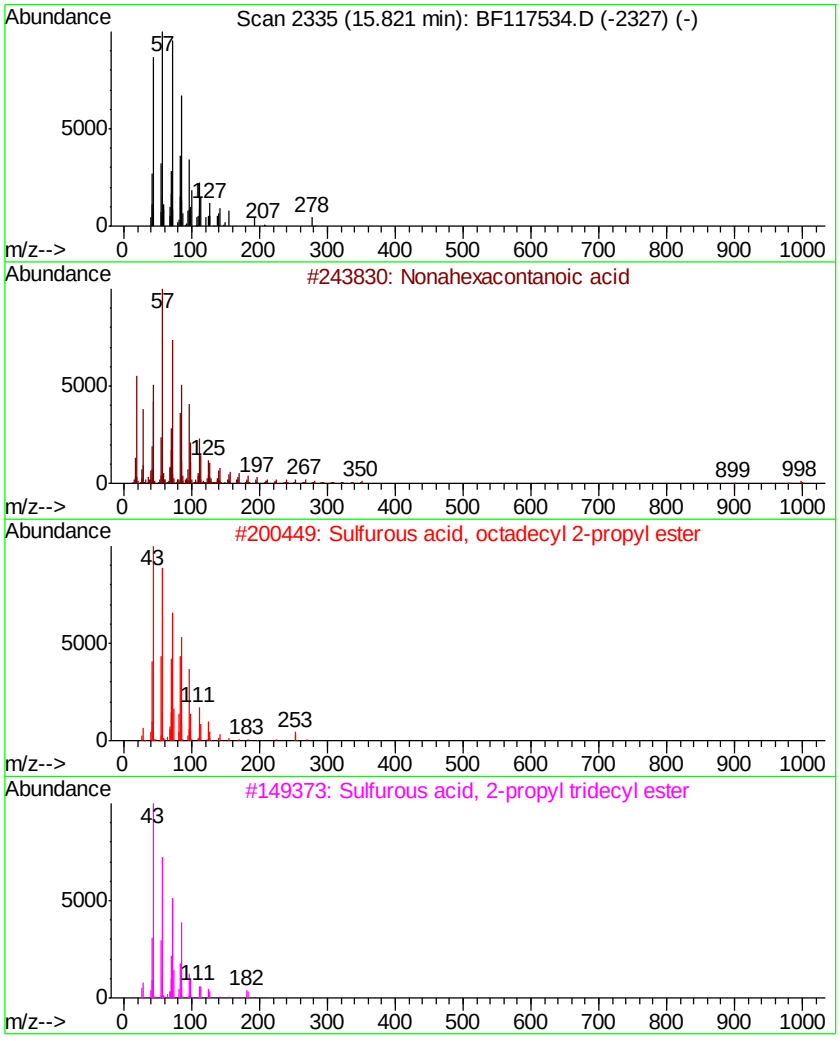
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

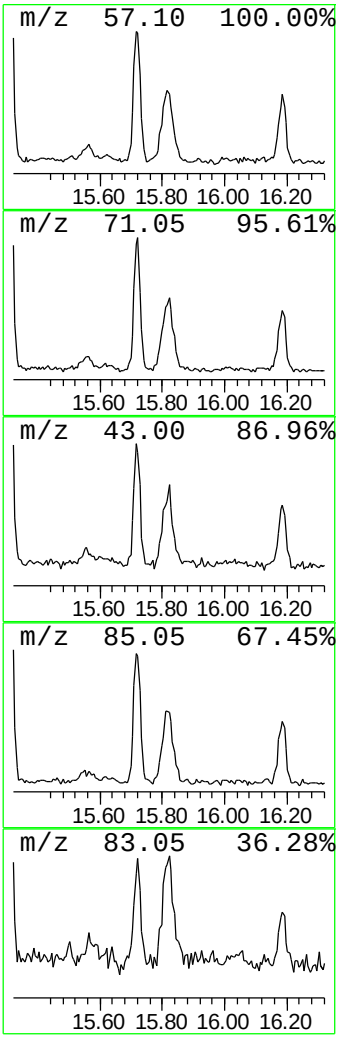
**********

Peak Number 20 Nonahexacontanoic acid Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.82 | 8.66 ng | 159873 | Perylene-d12 | 15.33 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Nonahexacontanoic acid | 999 | C69H138O2 | 040710-32-5 | 87 |
| 2 | Sulfurous acid, octadecyl 2-prop... | 376 | C21H44O3S | 1000309-12-7 | 87 |
| 3 | Sulfurous acid, 2-propyl tridecy... | 306 | C16H34O3S | 1000309-12-4 | 86 |
| 4 | 2-methyltetracosane | 352 | C25H52 | 1000376-72-6 | 74 |
| 5 | 1-Eicosene | 280 | C20H40 | 003452-07-1 | 70 |



# Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF102519\
Data File : BF117534.D
Acq On : 25 Oct 2019 14:26
Operator : JU
Sample : K5502-13
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_F
**ClientSampleId :** 178-60-(0-2.1)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF101819.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 |
| Styrene | 5.56 | 4.9 | ng | 48546 | 1 | 6.73 | 198781 | 20.0 |
| unknown6.50 | 6.50 | 60.8 | ng | 603986 | 1 | 6.73 | 198781 | 20.0 |
| Benzene, 1-propenyl- | 6.56 | 8.7 | ng | 86881 | 1 | 6.73 | 198781 | 20.0 |
| Indene | 6.99 | 4.7 | ng | 47088 | 1 | 6.73 | 198781 | 20.0 |
| Benzene, 1-(bromo... | 7.58 | 9.4 | ng | 133651 | 2 | 8.01 | 284751 | 20.0 |
| o-Cymene | 8.23 | 8.1 | ng | 115916 | 2 | 8.01 | 284751 | 20.0 |
| Benzene, 1-methyl... | 8.28 | 9.3 | ng | 132875 | 2 | 8.01 | 284751 | 20.0 |
| 2-methyloctacosane | 11.66 | 16.3 | ng | 243553 | 4 | 11.25 | 298539 | 20.0 |
| Octadecane, 1-chl... | 11.71 | 19.1 | ng | 285004 | 4 | 11.25 | 298539 | 20.0 |
| n-Hexadecanoic acid | 11.79 | 114.7 | ng | 1712060 | 4 | 11.25 | 298539 | 20.0 |
| Octadecanoic acid | 12.57 | 60.2 | ng | 1094100 | 5 | 13.89 | 363458 | 20.0 |
| Heptadecane | 13.16 | 107.3 | ng | 1948960 | 5 | 13.89 | 363458 | 20.0 |
| Trifluoroacetoxy ... | 13.75 | 11.1 | ng | 201674 | 5 | 13.89 | 363458 | 20.0 |
| Heneicosane | 14.35 | 9.1 | ng | 165350 | 5 | 13.89 | 363458 | 20.0 |
| Heptadecane, 9-oc... | 14.56 | 49.2 | ng | 893323 | 5 | 13.89 | 363458 | 20.0 |
| Triacontane | 14.64 | 7.5 | ng | 138400 | 6 | 15.33 | 369302 | 20.0 |
| Dodecane, 2-methyl- | 15.13 | 18.3 | ng | 337106 | 6 | 15.33 | 369302 | 20.0 |
| Heneicosane, 11-(... | 15.72 | 7.6 | ng | 140700 | 6 | 15.33 | 369302 | 20.0 |
| Nonahexacontanoic... | 15.82 | 8.7 | ng | 159873 | 6 | 15.33 | 369302 | 20.0 |