LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

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_M\METHODS\8270-BM121518.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 | 3.746 | 135 | 146 | 150 | rBV | 90986 | 221145 | 3.08% | 0.371% |
| 2 | 4.681 | 300 | 305 | 311 | rBV | 207455 | 285471 | 3.97% | 0.480% |
| 3 | 5.051 | 360 | 368 | 372 | rBV | 41796 | 72365 | 1.01% | 0.122% |
| 4 | 5.122 | 374 | 380 | 394 | rVB | 2033757 | 2891980 | 40.24% | 4.858% |
| 5 | 5.875 | 503 | 508 | 515 | rBV | 241090 | 363269 | 5.05% | 0.610% |
| 6 | 5.951 | 515 | 521 | 527 | rVB2 | 49000 | 95419 | 1.33% | 0.160% |
| 7 | 6.051 | 533 | 538 | 554 | rBV | 252670 | 452635 | 6.30% | 0.760% |
| 8 | 6.575 | 615 | 627 | 631 | rBV2 | 64808 | 159898 | 2.22% | 0.269% |
| 9 | 6.692 | 638 | 647 | 659 | rVB | 1714994 | 2668732 | 37.13% | 4.483% |
| 10 | 7.028 | 697 | 704 | 716 | rBV | 2641682 | 4126352 | 57.42% | 6.931% |
| 11 | 7.486 | 770 | 782 | 789 | rBV | 566040 | 917328 | 12.76% | 1.541% |
| 12 | 7.557 | 789 | 794 | 808 | rVB | 327732 | 521723 | 7.26% | 0.876% |
| 13 | 7.798 | 823 | 835 | 844 | rBV | 1949049 | 3239039 | 45.07% | 5.441% |
| 14 | 8.281 | 911 | 917 | 931 | rVB3 | 76148 | 183217 | 2.55% | 0.308% |
| 15 | 8.586 | 960 | 969 | 973 | rBV2 | 237782 | 399753 | 5.56% | 0.672% |
| 16 | 8.645 | 973 | 979 | 993 | rVB | 1517395 | 2538209 | 35.32% | 4.264% |
| 17 | 8.863 | 998 | 1016 | 1021 | rBV2 | 405440 | 1267905 | 17.64% | 2.130% |
| 18 | 8.992 | 1033 | 1038 | 1051 | rVB4 | 36045 | 80655 | 1.12% | 0.135% |
| 19 | 9.633 | 1142 | 1147 | 1158 | rVB4 | 61267 | 116373 | 1.62% | 0.195% |
| 20 | 10.057 | 1212 | 1219 | 1226 | rBV | 1462566 | 2308825 | 32.13% | 3.878% |
| 21 | 10.251 | 1246 | 1252 | 1259 | rBV | 699297 | 1134473 | 15.79% | 1.906% |
| 22 | 10.492 | 1285 | 1293 | 1302 | rVB | 375813 | 665350 | 9.26% | 1.118% |
| 23 | 10.780 | 1336 | 1342 | 1351 | rBV5 | 37172 | 83337 | 1.16% | 0.140% |
| 24 | 11.016 | 1375 | 1382 | 1389 | rBV2 | 34441 | 75240 | 1.05% | 0.126% |
| 25 | 11.504 | 1459 | 1465 | 1475 | rVB | 114822 | 214031 | 2.98% | 0.360% |
| 26 | 11.622 | 1478 | 1485 | 1488 | rBV | 51860 | 83901 | 1.17% | 0.141% |
| 27 | 11.663 | 1488 | 1492 | 1500 | rVB | 207975 | 355666 | 4.95% | 0.597% |
| 28 | 12.563 | 1637 | 1645 | 1655 | rBV8 | 27034 | 89692 | 1.25% | 0.151% |
| 29 | 12.751 | 1670 | 1677 | 1685 | rBV | 3787627 | 5517524 | 76.77% | 9.268% |
| 30 | 13.098 | 1728 | 1736 | 1748 | rVB7 | 54520 | 168043 | 2.34% | 0.282% |
| 31 | 13.621 | 1817 | 1825 | 1830 | rBV | 279743 | 423803 | 5.90% | 0.712% |
| 32 | 14.145 | 1907 | 1914 | 1923 | rVB2 | 873397 | 1358063 | 18.90% | 2.281% |
| 33 | 14.380 | 1948 | 1954 | 1961 | rBV | 122343 | 180635 | 2.51% | 0.303% |
| 34 | 15.115 | 2074 | 2079 | 2088 | rBV2 | 32099 | 72038 | 1.00% | 0.121% |

LSC Area Percent Report

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Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

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_M\METHODS\8270-BM121518.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 15.657 | 2164 | 2171 | 2179 | rBV | 2455389 | 3619952 | 50.37% | 6.081% |
| 36 | 15.792 | 2188 | 2194 | 2198 | rBV3 | 37535 | 78599 | 1.09% | 0.132% |
| 37 | 15.880 | 2205 | 2209 | 2225 | rVB | 143832 | 336485 | 4.68% | 0.565% |
| 38 | 16.080 | 2236 | 2243 | 2256 | rVB | 42312 | 91844 | 1.28% | 0.154% |
| 39 | 16.186 | 2256 | 2261 | 2267 | rBV | 172473 | 260888 | 3.63% | 0.438% |
| 40 | 16.539 | 2316 | 2321 | 2325 | rBV | 67070 | 87183 | 1.21% | 0.146% |
| 41 | 16.662 | 2337 | 2342 | 2349 | rBV | 93740 | 139469 | 1.94% | 0.234% |
| 42 | 16.909 | 2378 | 2384 | 2397 | rBV2 | 883641 | 1304511 | 18.15% | 2.191% |
| 43 | 17.821 | 2534 | 2539 | 2542 | rBV3 | 83608 | 121160 | 1.69% | 0.204% |
| 44 | 18.580 | 2663 | 2668 | 2682 | rBV | 1222293 | 1776623 | 24.72% | 2.984% |
| 45 | 19.056 | 2744 | 2749 | 2755 | rVB | 439546 | 477843 | 6.65% | 0.803% |
| 46 | 19.121 | 2756 | 2760 | 2768 | rVB4 | 61126 | 89379 | 1.24% | 0.150% |
| 47 | 19.527 | 2821 | 2829 | 2830 | rBV2 | 61449 | 103518 | 1.44% | 0.174% |
| 48 | 19.562 | 2830 | 2835 | 2841 | rVB | 3991090 | 5053217 | 70.31% | 8.488% |
| 49 | 20.139 | 2928 | 2933 | 2942 | rBV | 633665 | 819307 | 11.40% | 1.376% |
| 50 | 20.221 | 2944 | 2947 | 2950 | rVV2 | 106955 | 135287 | 1.88% | 0.227% |
| 51 | 20.844 | 3048 | 3053 | 3059 | rVB4 | 111217 | 189319 | 2.63% | 0.318% |
| 52 | 21.133 | 3097 | 3102 | 3110 | rBV | 892488 | 1248195 | 17.37% | 2.097% |
| 53 | 21.380 | 3139 | 3144 | 3151 | rBV | 1082058 | 1299744 | 18.09% | 2.183% |
| 54 | 21.980 | 3242 | 3246 | 3251 | rVB2 | 138130 | 195123 | 2.72% | 0.328% |
| 55 | 22.238 | 3285 | 3290 | 3302 | rBV | 5759526 | 7186688 | 100.00% | 12.072% |
| 56 | 22.644 | 3356 | 3359 | 3365 | rVB3 | 83120 | 107516 | 1.50% | 0.181% |
| 57 | 23.291 | 3463 | 3469 | 3483 | rVB | 780475 | 1476574 | 20.55% | 2.480% |

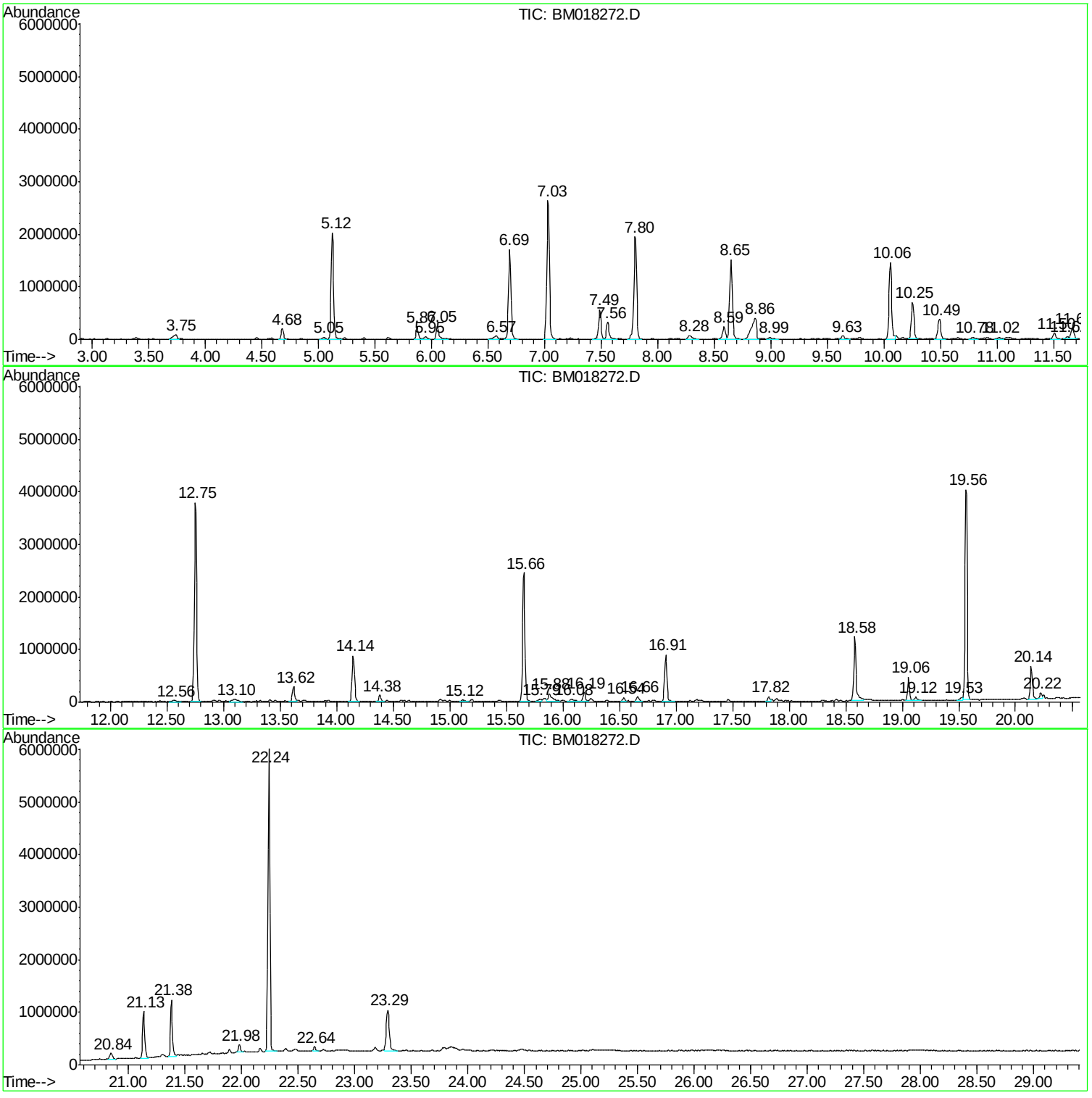
Sum of corrected areas: 59530513

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
BNA_M
**ClientSampleId :**
COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
BNA_M
**ClientSampleId :**
COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

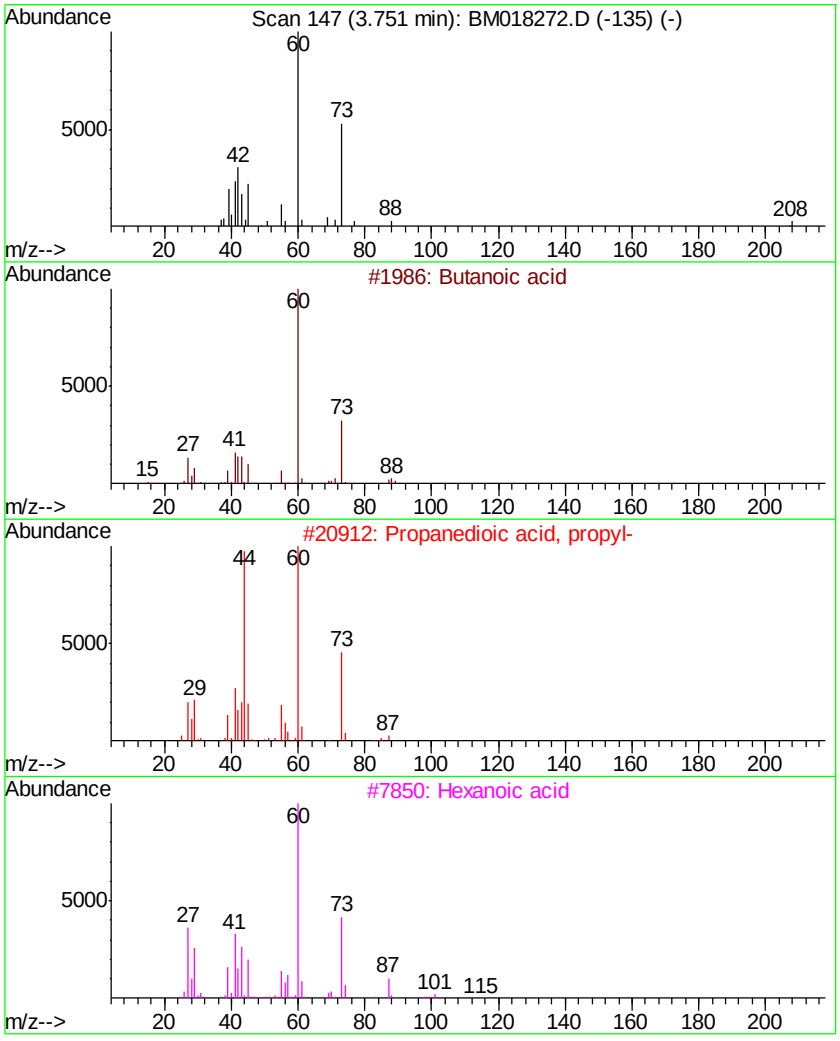
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

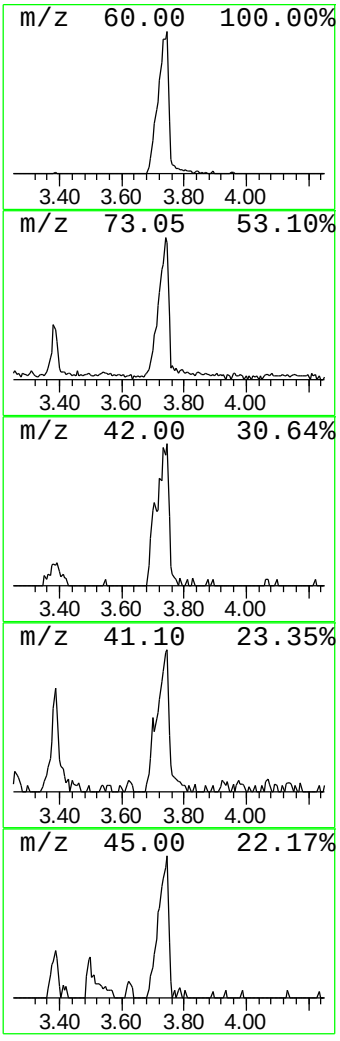
**********

Peak Number 1 Butanoic acid Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.75 | 4.82 ng | 221145 | 1,4-Dichlorobenzene-d4 | 7.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Butanoic acid | 88 | C4H8O2 | 000107-92-6 | 56 |
| 2 | Propanedioic acid, propyl- | 146 | C6H10O4 | 000616-62-6 | 43 |
| 3 | Hexanoic acid | 116 | C6H12O2 | 000142-62-1 | 39 |
| 4 | Hydrazine, 1,2-diethyl- | 88 | C4H12N2 | 001615-80-1 | 12 |
| 5 | Pentanoic acid | 102 | C5H10O2 | 000109-52-4 | 9 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

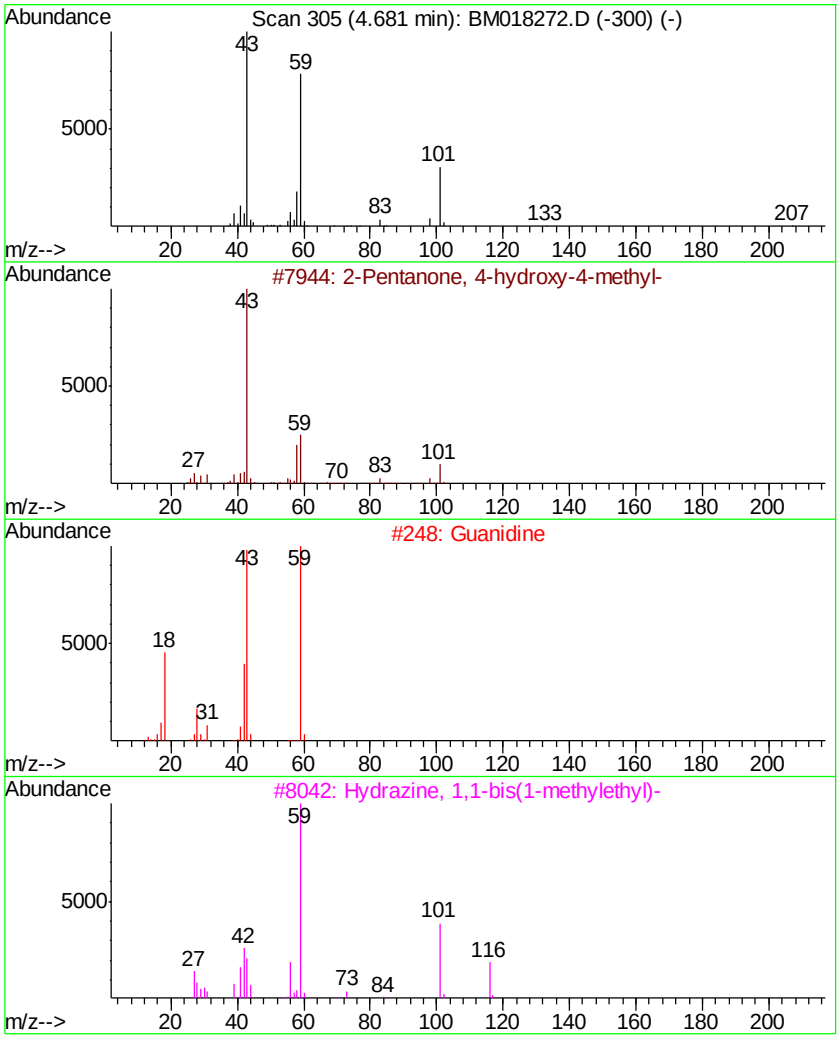
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

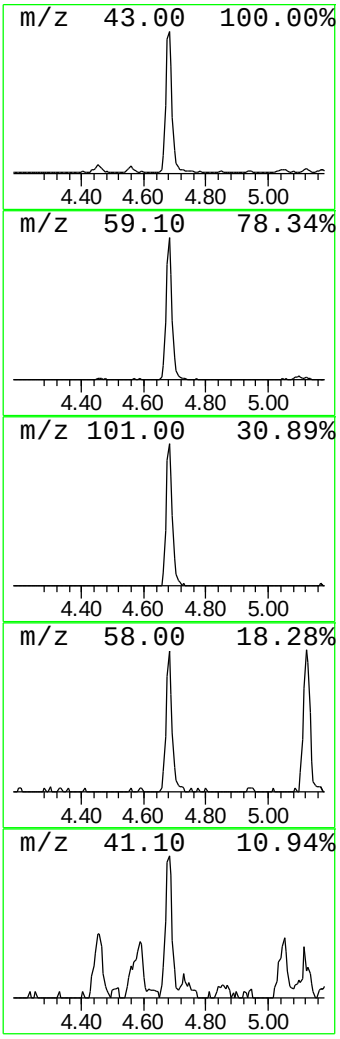
**********

Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 4.68 | 6.22 ng | 285471 | 1,4-Dichlorobenzene-d4 | 7.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 56 |
| 2 | Guanidine | 59 | CH5N3 | 000113-00-8 | 50 |
| 3 | Hydrazine, 1,1-bis(1-methylethyl)- | 116 | C6H16N2 | 000921-14-2 | 38 |
| 4 | 2-Nonanone, 9-hydroxy- | 158 | C9H18O2 | 025368-56-3 | 36 |
| 5 | Dimethadione | 129 | C5H7NO3 | 000695-53-4 | 36 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

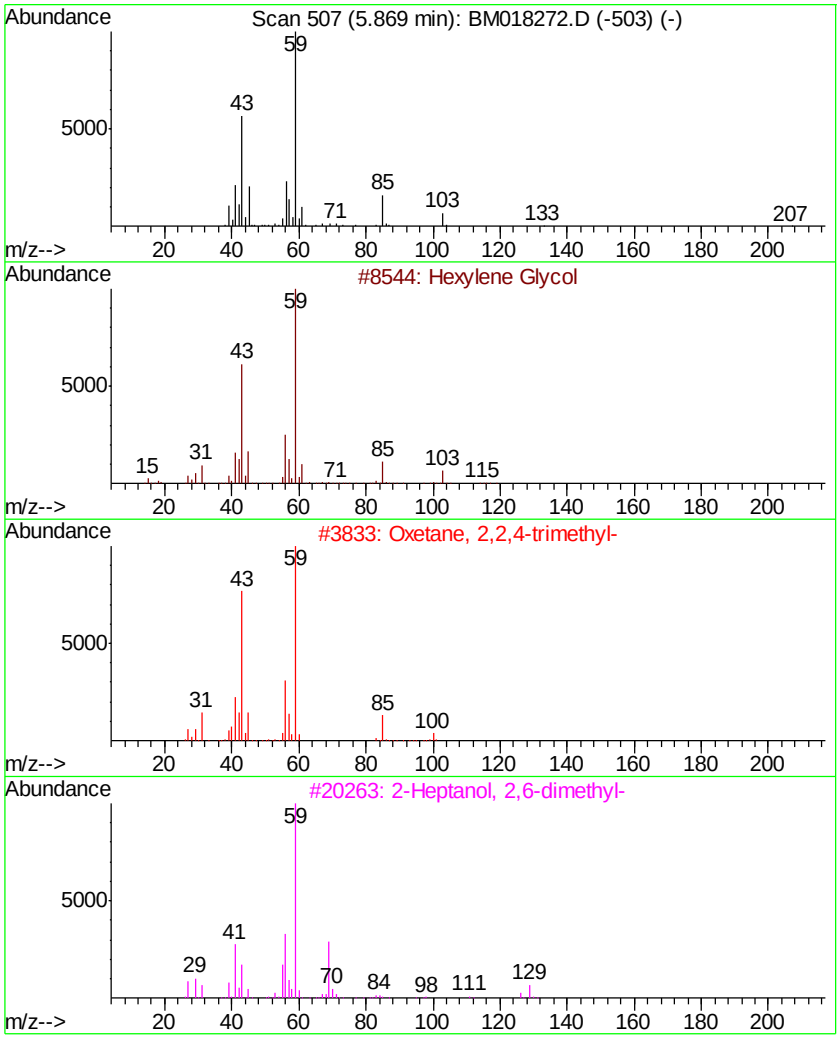
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

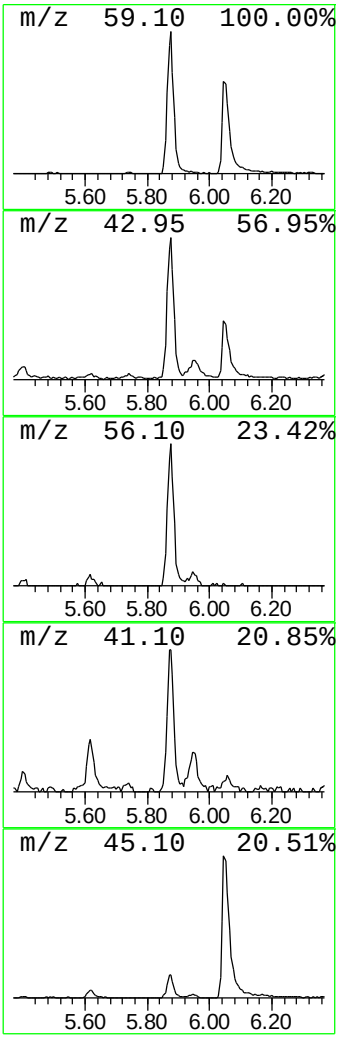
**********

Peak Number 3 Hexylene Glycol Concentration Rank 13

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 5.87 | 7.92 ng | 363269 | 1,4-Dichlorobenzene-d4 | 7.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexylene Glycol | 118 | C6H14O2 | 000107-41-5 | 83 |
| 2 | Oxetane, 2,2,4-trimethyl- | 100 | C6H12O | 023120-44-7 | 78 |
| 3 | 2-Heptanol, 2,6-dimethyl- | 144 | C9H20O | 013254-34-7 | 45 |
| 4 | dl-Erythro-O-methylthreonine | 133 | C5H11NO3 | 1000214-70-7 | 45 |
| 5 | Hexane, 1-(1-methoxyethoxy)- | 160 | C9H20O2 | 054340-90-8 | 42 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

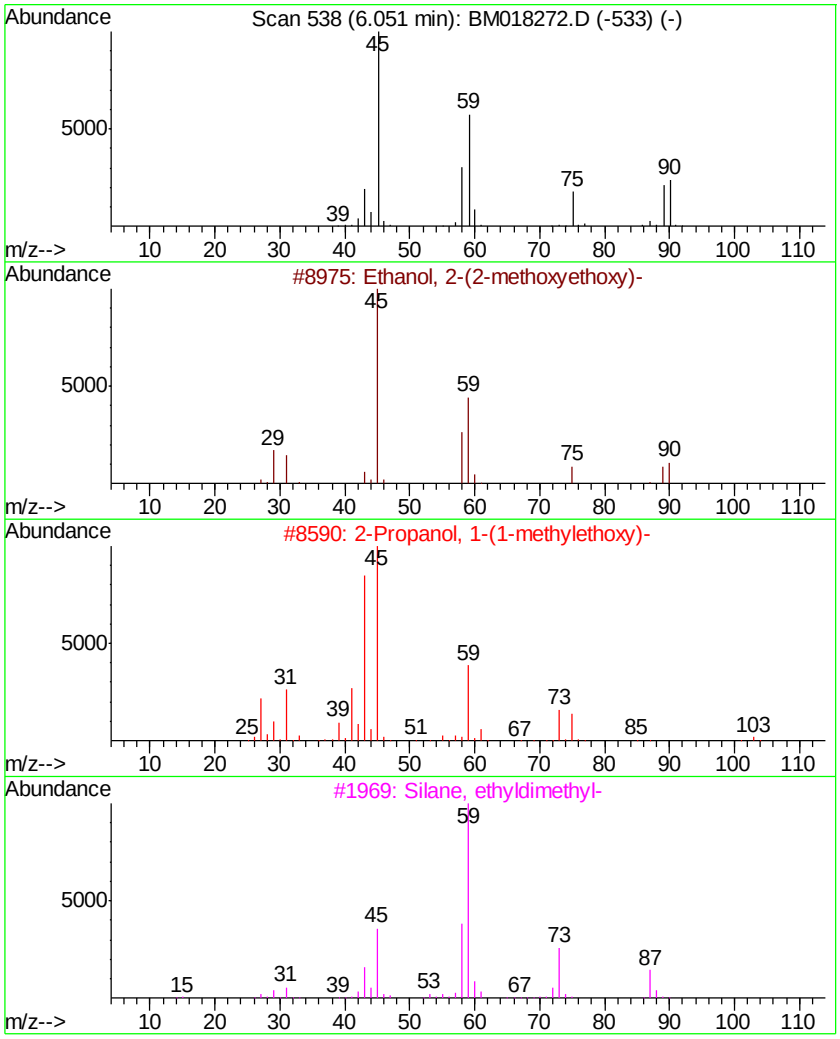
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

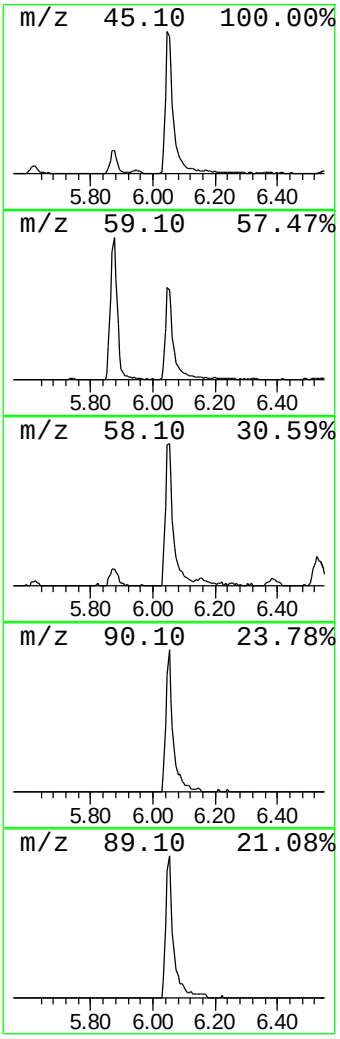
**********

Peak Number 4 Ethanol, 2-(2-methoxyethoxy)- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.05 | 9.87 ng | 452635 | 1,4-Dichlorobenzene-d4 | 7.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethanol, 2-(2-methoxyethoxy)- | 120 | C5H12O3 | 000111-77-3 | 83 |
| 2 | 2-Propanol, 1-(1-methylethoxy)- | 118 | C6H14O2 | 003944-36-3 | 50 |
| 3 | Silane, ethyldimethyl- | 88 | C4H12Si | 000758-21-4 | 42 |
| 4 | Carbonic acid, dimethyl ester | 90 | C3H6O3 | 000616-38-6 | 33 |
| 5 | Acetaldehyde, tetramer | 176 | C8H16O4 | 000108-62-3 | 32 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

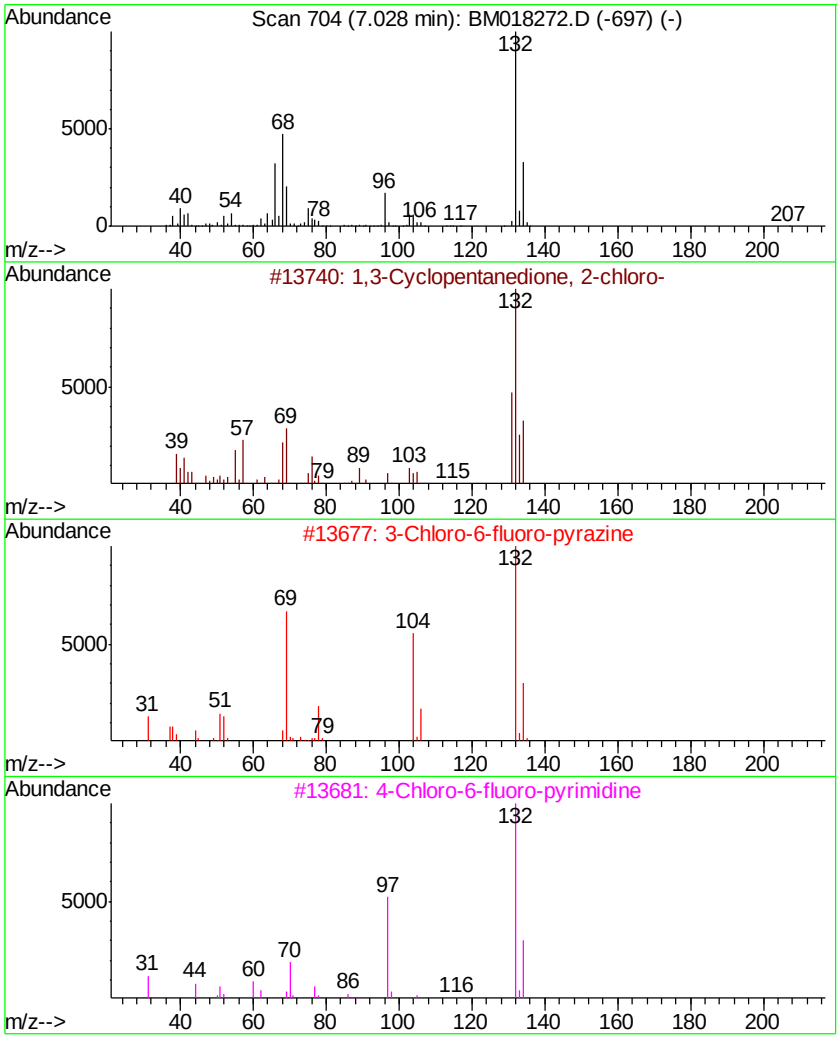
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

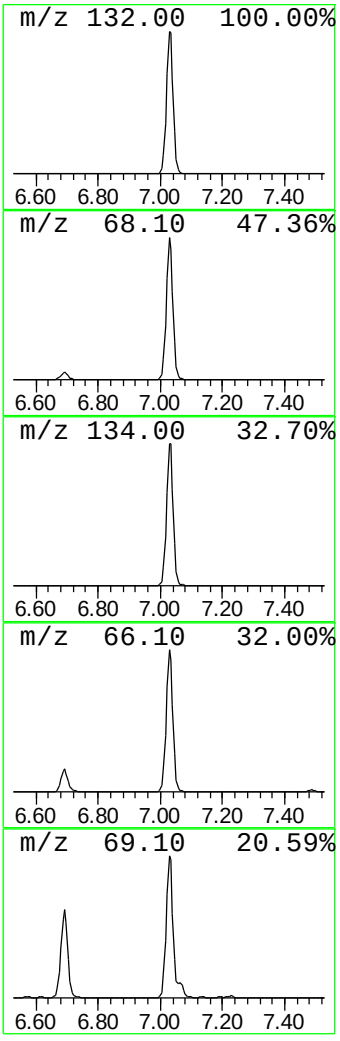
**********

Peak Number 5 unknown7.03 Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.03 | 89.96 ng | 4126350 | 1,4-Dichlorobenzene-d4 | 7.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Cyclopentanedione, 2-chloro- | 132 | C5H5ClO2 | 014203-19-1 | 38 |
| 2 | 3-Chloro-6-fluoro-pyrazine | 132 | C4H2ClFN2 | 1000146-10-7 | 27 |
| 3 | 4-Chloro-6-fluoro-pyrimidine | 132 | C4H2ClFN2 | 051422-01-6 | 27 |
| 4 | 1H-Benzimidazole, 2-methyl- | 132 | C8H8N2 | 000615-15-6 | 22 |
| 5 | 5-Fluoro-2-chloropyrimidine | 132 | C4H2ClFN2 | 062802-42-0 | 12 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

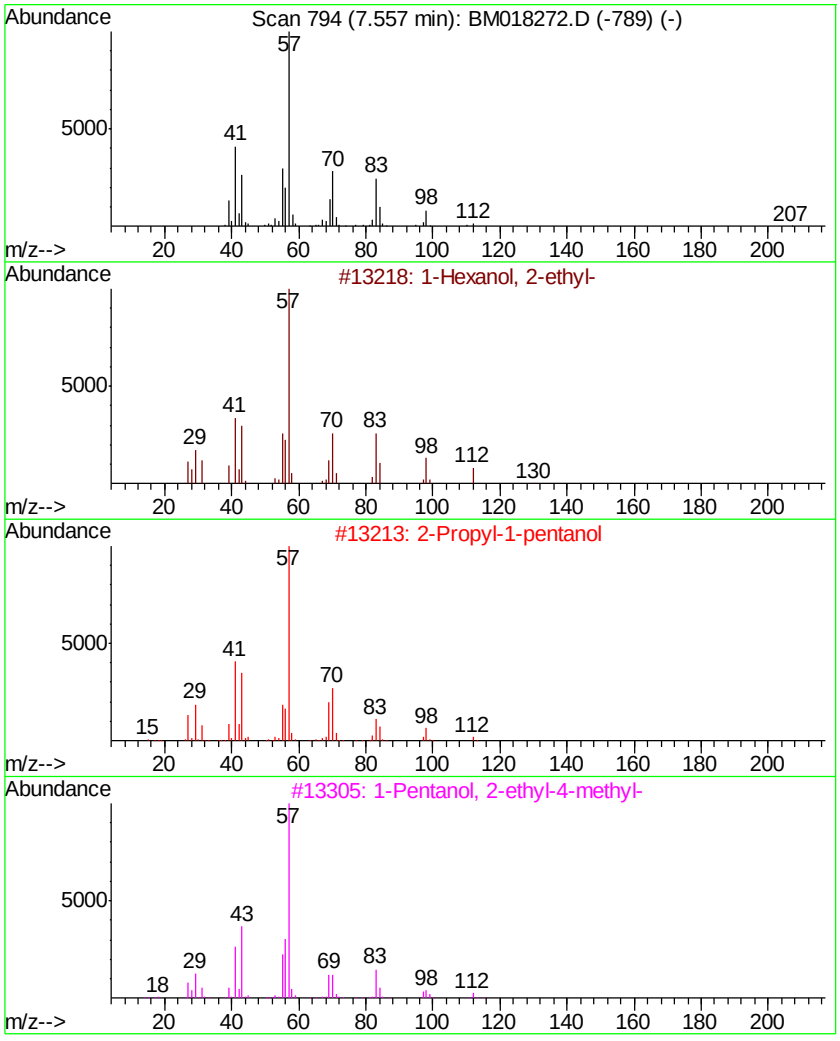
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

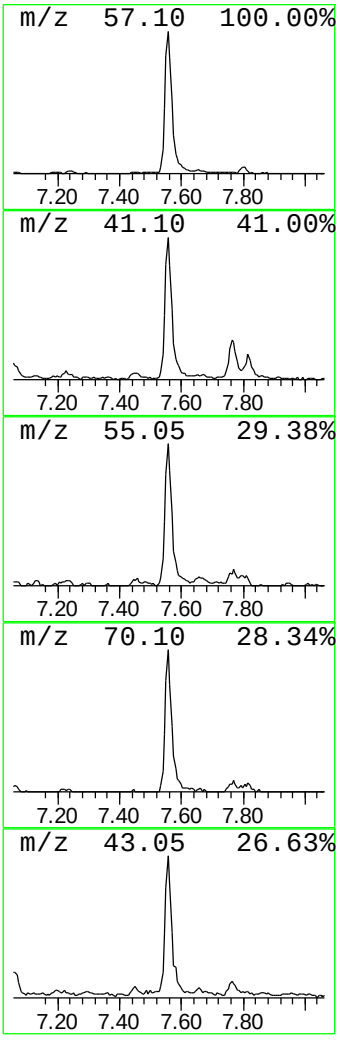
**********

Peak Number 6 1-Hexanol, 2-ethyl- Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.56 | 11.37 ng | 521723 | 1,4-Dichlorobenzene-d4 | 7.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Hexanol, 2-ethyl- | 130 | C8H18O | 000104-76-7 | 83 |
| 2 | 2-Propyl-1-pentanol | 130 | C8H18O | 058175-57-8 | 59 |
| 3 | 1-Pentanol, 2-ethyl-4-methyl- | 130 | C8H18O | 000106-67-2 | 50 |
| 4 | Heptane, 1,1'-oxybis- | 214 | C14H30O | 000629-64-1 | 50 |
| 5 | dl-2-Ethylhexyl chloroformate | 192 | C9H17ClO2 | 024468-13-1 | 42 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

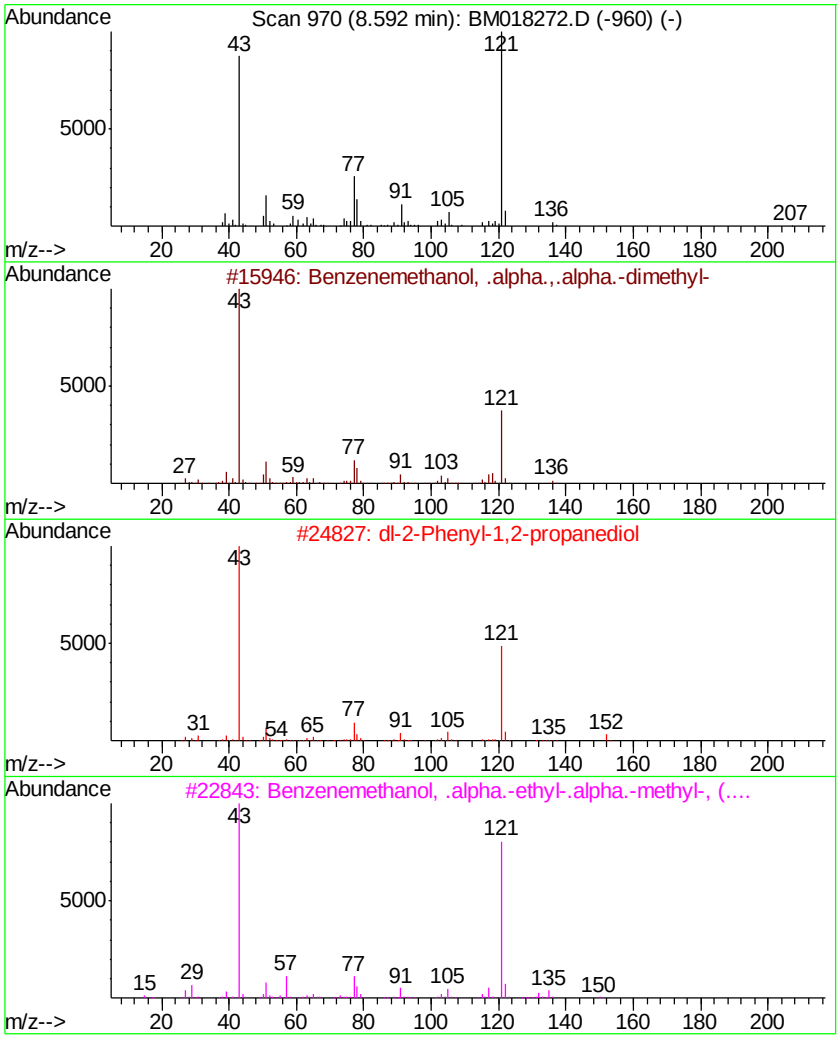
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

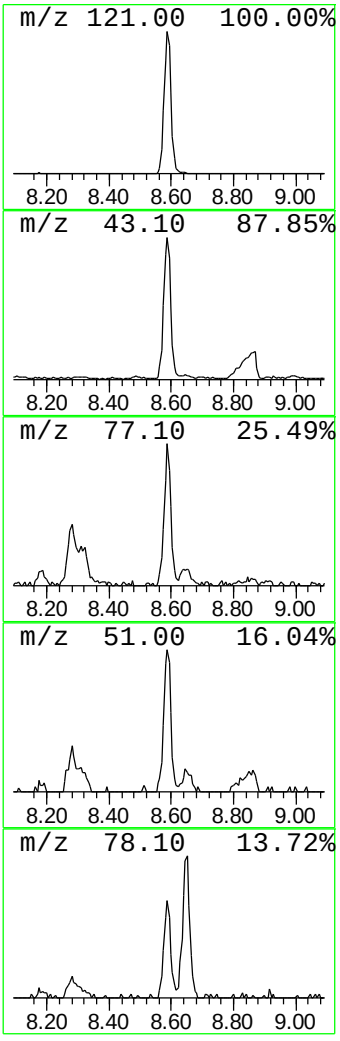
**********

Peak Number 8 Benzenemethanol, .alpha.,.a... Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.59 | 8.72 ng | 399753 | 1,4-Dichlorobenzene-d4 | 7.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzenemethanol, .alpha.,.alpha.... | 136 | C9H12O | 000617-94-7 | 78 |
| 2 | dl-2-Phenyl-1,2-propanediol | 152 | C9H12O2 | 004217-66-7 | 78 |
| 3 | Benzenemethanol, .alpha.-ethyl-.... | 150 | C10H14O | 019641-57-7 | 72 |
| 4 | Benzeneacetic acid, .alpha.-hydr... | 166 | C9H10O3 | 000515-30-0 | 72 |
| 5 | Benzaldehyde dimethyl acetal | 152 | C9H12O2 | 001125-88-8 | 72 |



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Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

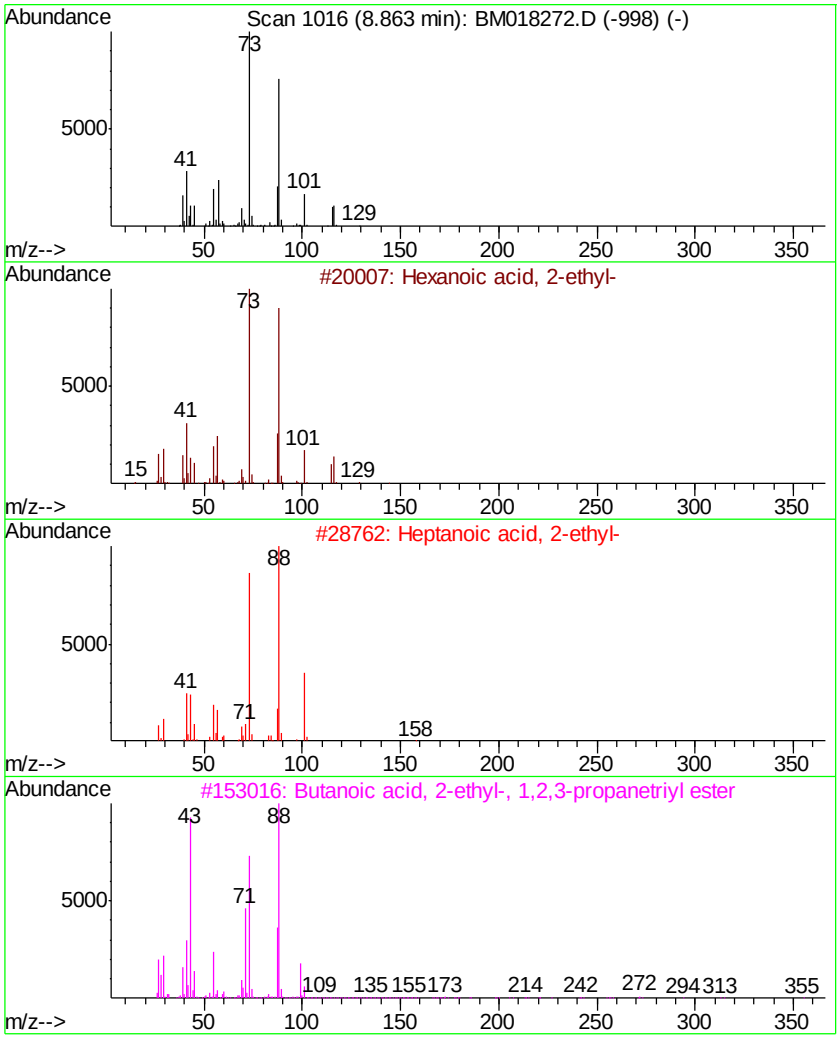
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

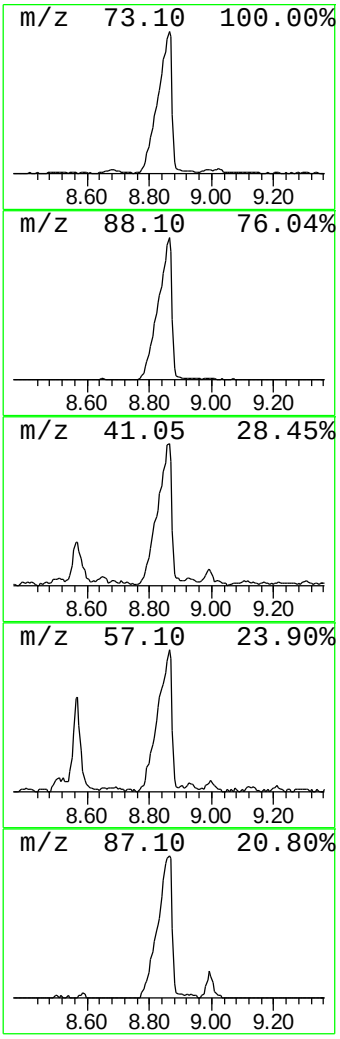
**********

Peak Number 9 Hexanoic acid, 2-ethyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.86 | 27.64 ng | 1267910 | 1,4-Dichlorobenzene-d4 | 7.49 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexanoic acid, 2-ethyl- | 144 | C8H16O2 | 000149-57-5 | 90 |
| 2 | Heptanoic acid, 2-ethyl- | 158 | C9H18O2 | 003274-29-1 | 53 |
| 3 | Butanoic acid, 2-ethyl-, 1,2,3-p... | 386 | C21H38O6 | 056554-54-2 | 45 |
| 4 | 1,4-Dioxane | 88 | C4H8O2 | 000123-91-1 | 43 |
| 5 | Heptanoic acid, ethyl ester | 158 | C9H18O2 | 000106-30-9 | 36 |



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Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

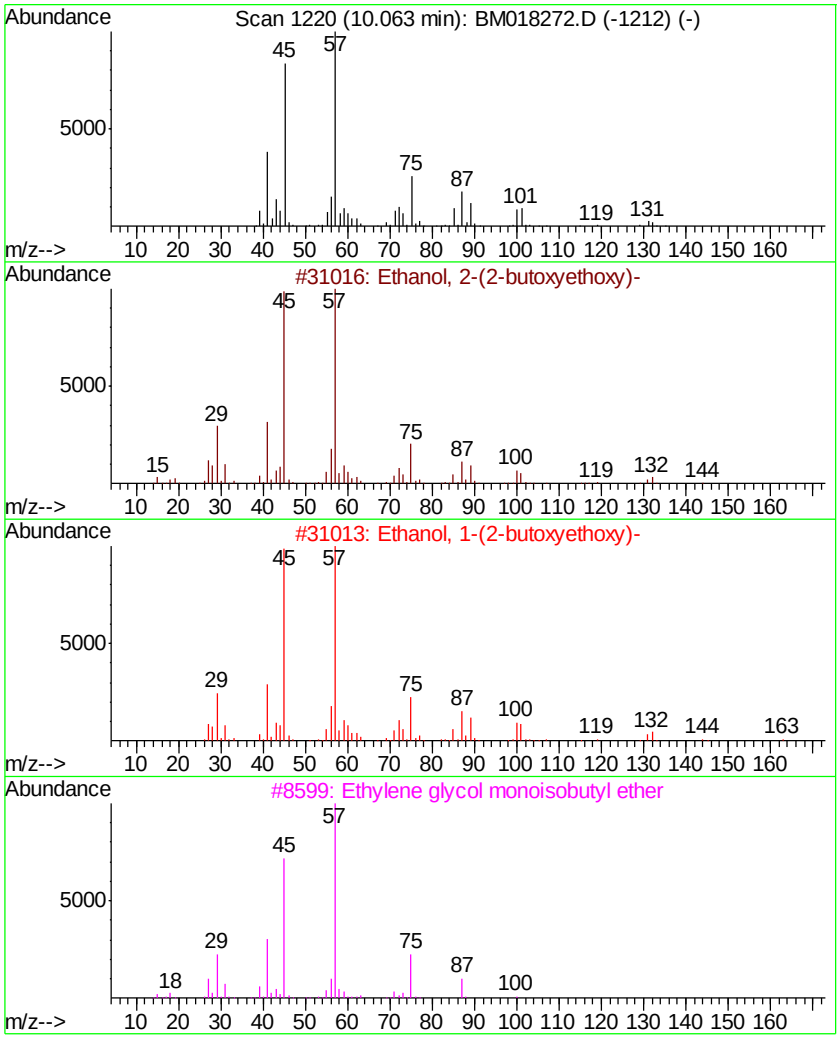
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

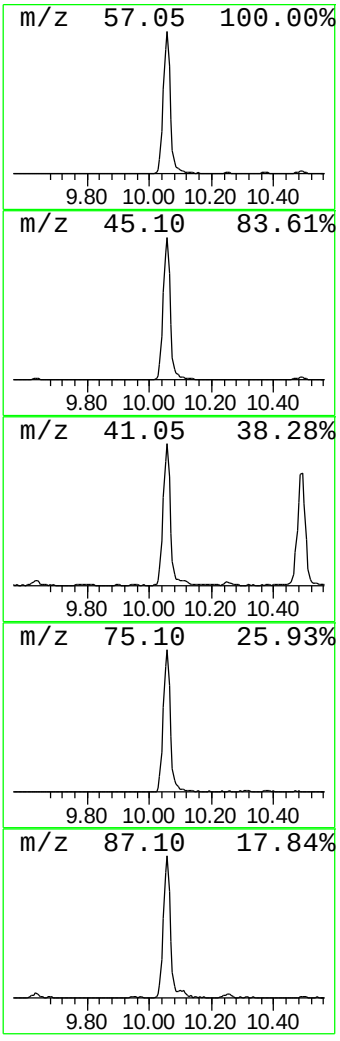
**********

Peak Number 10 Ethanol, 2-(2-butoxyethoxy)- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.06 | 40.70 ng | 2308830 | Naphthalene-d8 | 10.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Ethanol, 2-(2-butoxyethoxy)- | 162 | C8H18O3 | 000112-34-5 | 90 |
| 2 | Ethanol, 1-(2-butoxyethoxy)- | 162 | C8H18O3 | 054446-78-5 | 90 |
| 3 | Ethylene glycol monoisobutyl ether | 118 | C6H14O2 | 004439-24-1 | 59 |
| 4 | 3,3-Dimethylbutane-2-ol | 102 | C6H14O | 000464-07-3 | 50 |
| 5 | Ethanol, 2-[2-(2-butoxyethoxy)et... | 206 | C10H22O4 | 000143-22-6 | 50 |



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Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

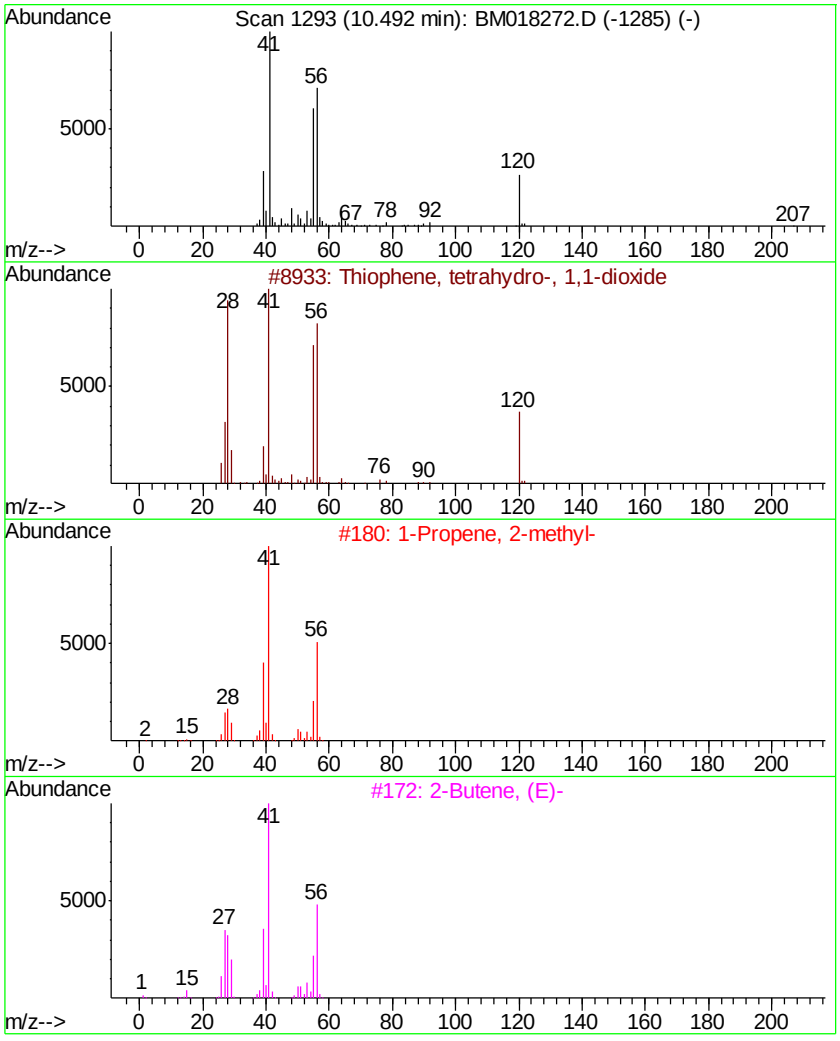
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

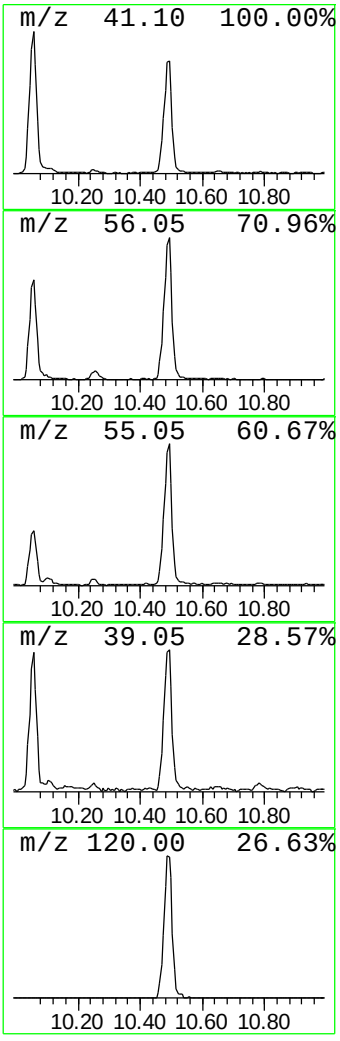
**********

Peak Number 11 Thiophene, tetrahydro-, 1,1... Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.49 | 11.73 ng | 665350 | Naphthalene-d8 | 10.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Thiophene, tetrahydro-, 1,1-dioxide | 120 | C4H8O2S | 000126-33-0 | 86 |
| 2 | 1-Propene, 2-methyl- | 56 | C4H8 | 000115-11-7 | 46 |
| 3 | 2-Butene, (E)- | 56 | C4H8 | 000624-64-6 | 46 |
| 4 | Cyclobutane | 56 | C4H8 | 000287-23-0 | 46 |
| 5 | 2-Butene, (Z)- | 56 | C4H8 | 000590-18-1 | 46 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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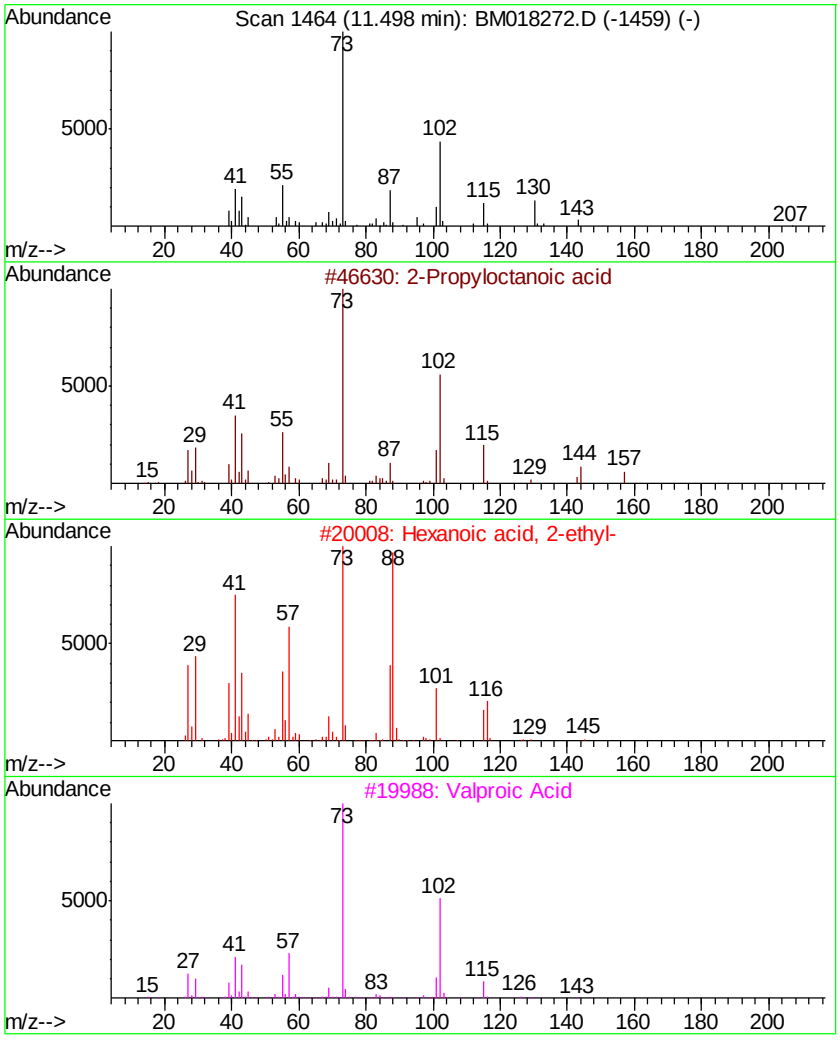
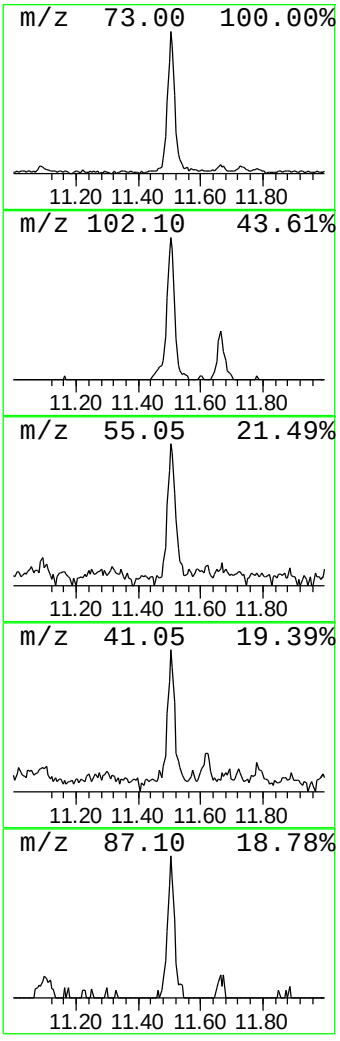
Peak Number 12 unknown11.50 Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.50 | 3.77 ng | 214031 | Naphthalene-d8 | 10.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Propyloctanoic acid | 186 | C11H22O2 | 031080-41-8 | 40 |
| 2 | Hexanoic acid, 2-ethyl- | 144 | C8H16O2 | 000149-57-5 | 35 |
| 3 | Valproic Acid | 144 | C8H16O2 | 000099-66-1 | 12 |
| 4 | Isopropyl 5,11-dihydroxy-3,7,11-... | 314 | C18H34O4 | 1000223-34-1 | 10 |
| 5 | Butane, 2-methoxy-2-methyl- | 102 | C6H14O | 000994-05-8 | 10 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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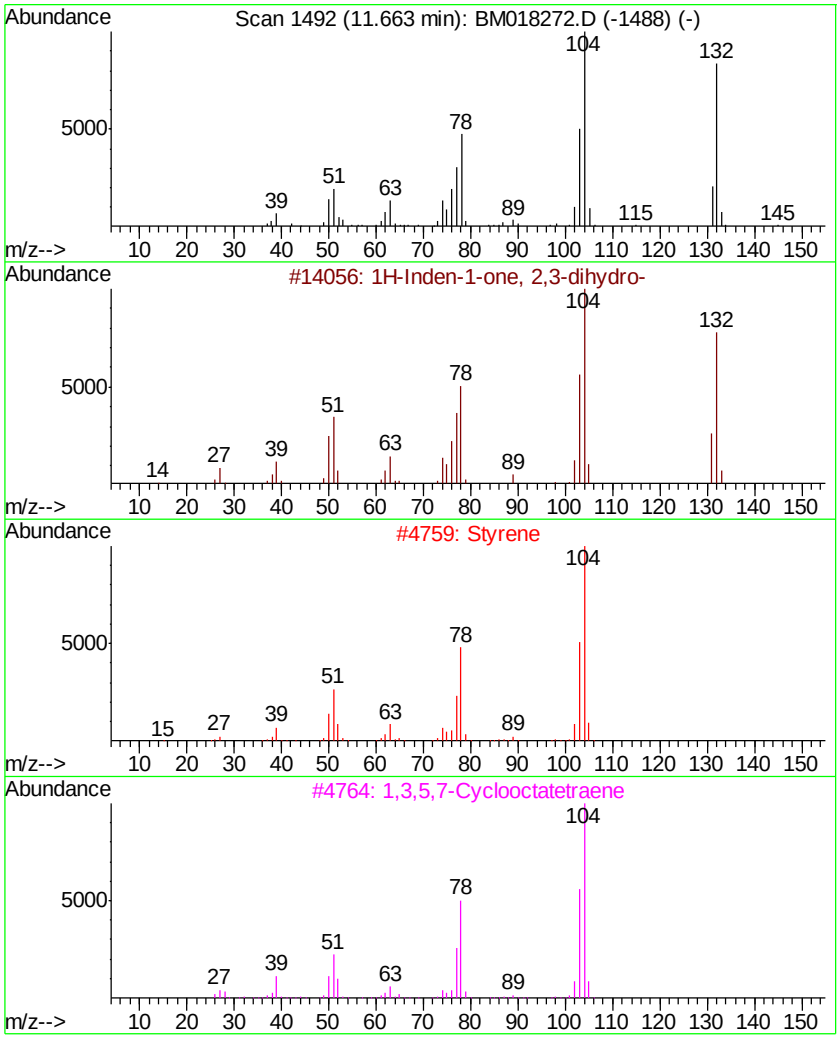
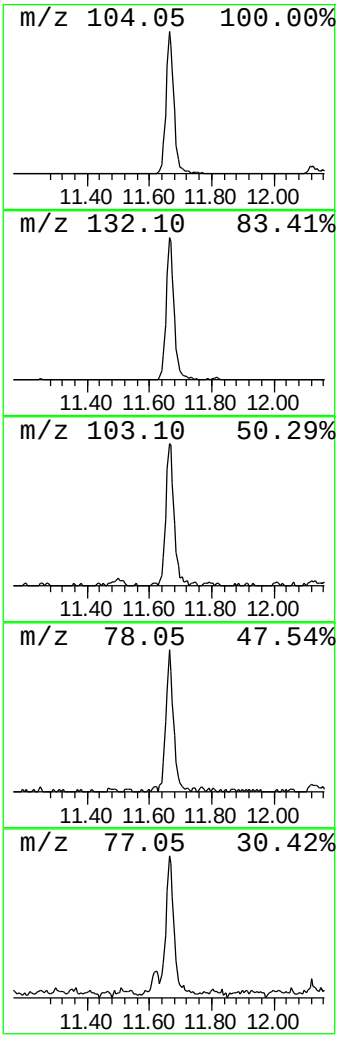
Peak Number 13 1H-Inden-1-one, 2,3-dihydro- Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.66 | 6.27 ng | 355666 | Naphthalene-d8 | 10.25 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1H-Inden-1-one, 2,3-dihydro- | 132 | C9H8O | 000083-33-0 | 97 |
| 2 | Styrene | 104 | C8H8 | 000100-42-5 | 70 |
| 3 | 1,3,5,7-Cyclooctatetraene | 104 | C8H8 | 000629-20-9 | 64 |
| 4 | Bicyclo[4.2.0]octa-1,3,5-triene | 104 | C8H8 | 000694-87-1 | 64 |
| 5 | 2H-Inden-2-one, 1,3-dihydro- | 132 | C9H8O | 000615-13-4 | 60 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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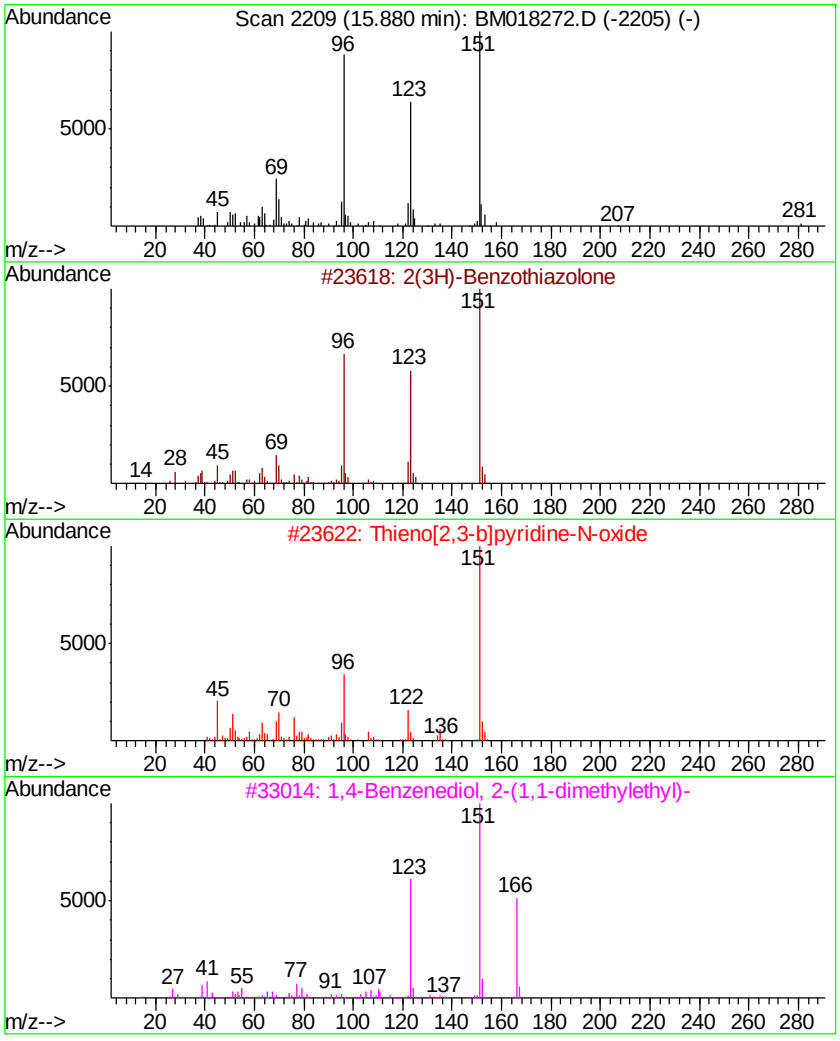
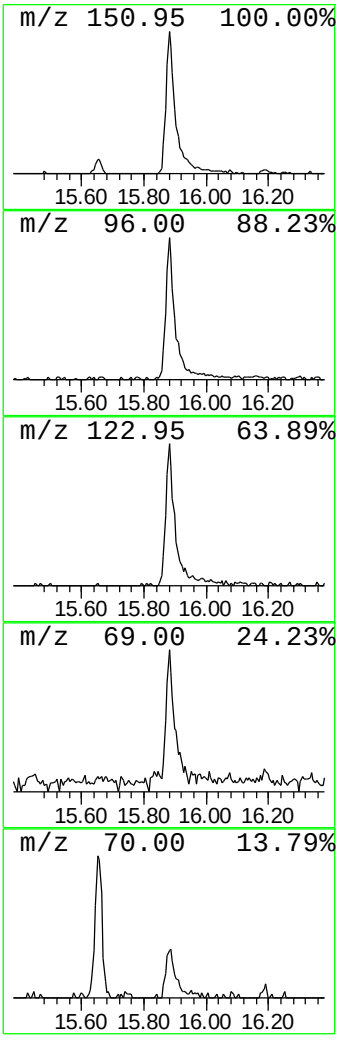
Peak Number 14 2(3H)-Benzothiazolone Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.88 | 5.16 ng | 336485 | Phenanthrene-d10 | 16.91 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2(3H)-Benzothiazolone | 151 | C7H5NOS | 000934-34-9 | 94 |
| 2 | Thieno[2,3-b]pyridine-N-oxide | 151 | C7H5NOS | 025557-50-0 | 43 |
| 3 | 1,4-Benzenediol, 2-(1,1-dimethyl... | 166 | C10H14O2 | 001948-33-0 | 43 |
| 4 | 1,2-Benzisothiazol-3(2H)-one | 151 | C7H5NOS | 002634-33-5 | 35 |
| 5 | 4-Methoxyformanilide | 151 | C8H9NO2 | 023896-88-0 | 35 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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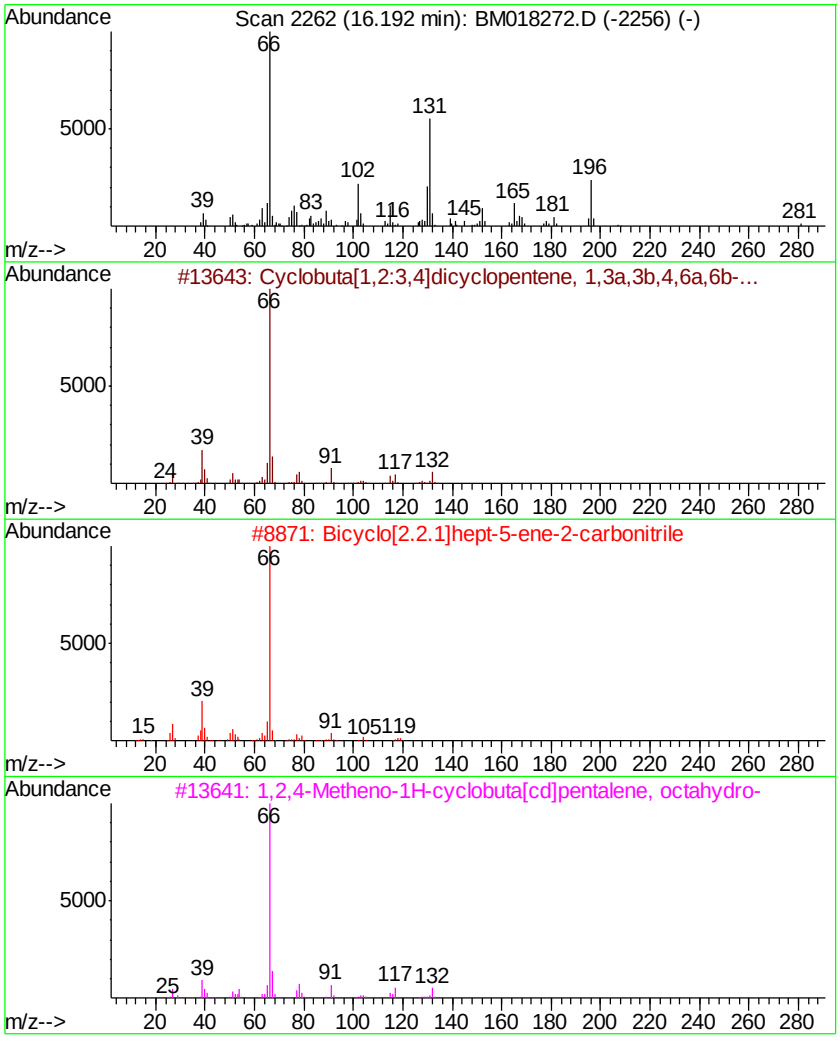
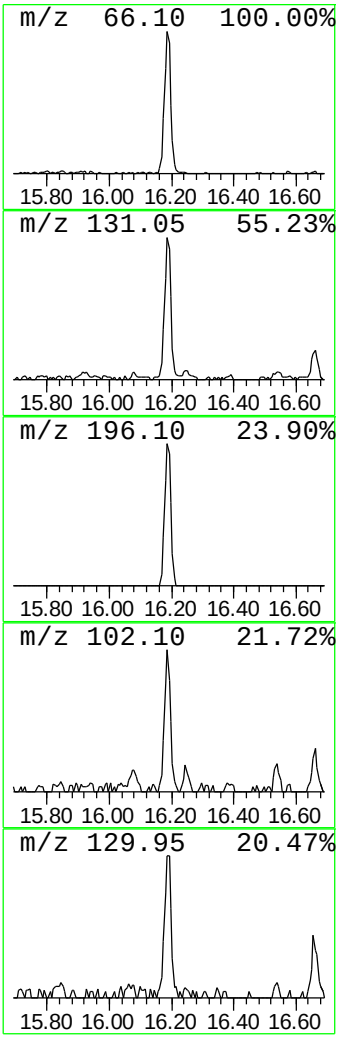
Peak Number 15 Cyclobuta[1,2:3,4]dicyclope... Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.19 | 4.00 ng | 260888 | Phenanthrene-d10 | 16.91 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclobuta[1,2:3,4]dicyclopentene... | 132 | C10H12 | 105226-58-2 | 58 |
| 2 | Bicyclo[2.2.1]hept-5-ene-2-carbo... | 119 | C8H9N | 000095-11-4 | 58 |
| 3 | 1,2,4-Metheno-1H-cyclobuta[cd]pe... | 132 | C10H12 | 006707-86-4 | 53 |
| 4 | 4,7-Methano-1H-indene, 3a,4,7,7a... | 132 | C10H12 | 000077-73-6 | 53 |
| 5 | 4,7-Methanoisobenzofuran-1,3-dio... | 164 | C9H8O3 | 000826-62-0 | 42 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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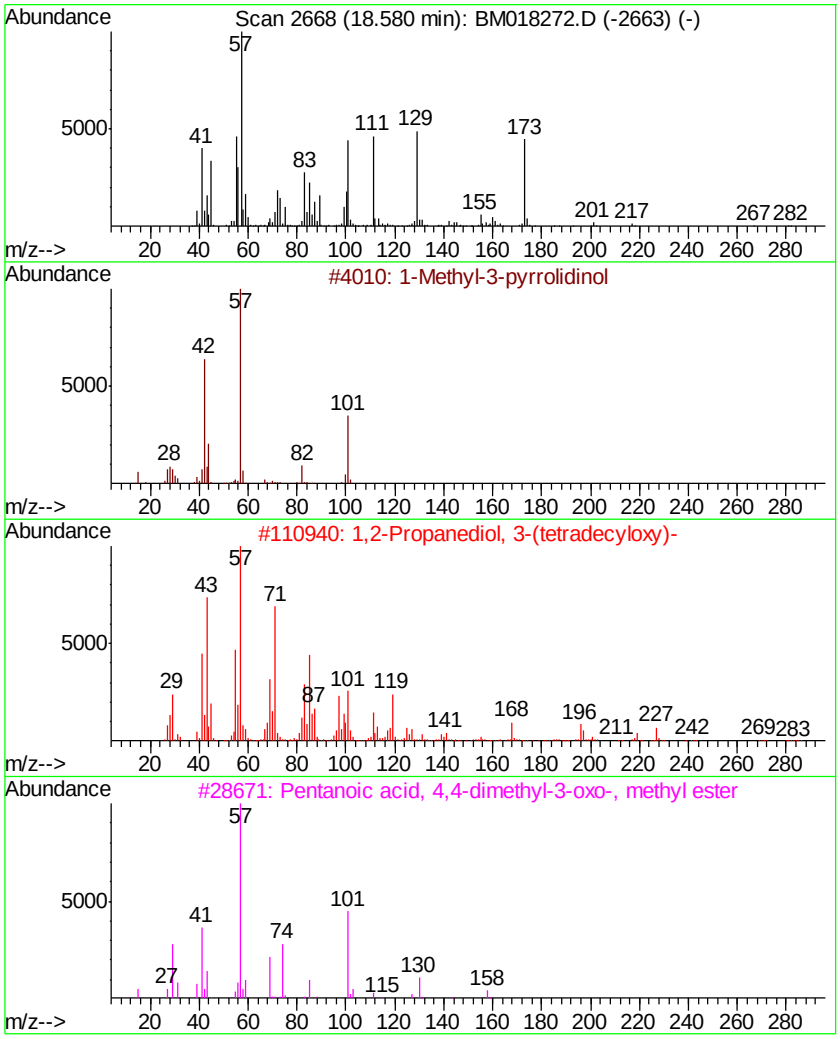
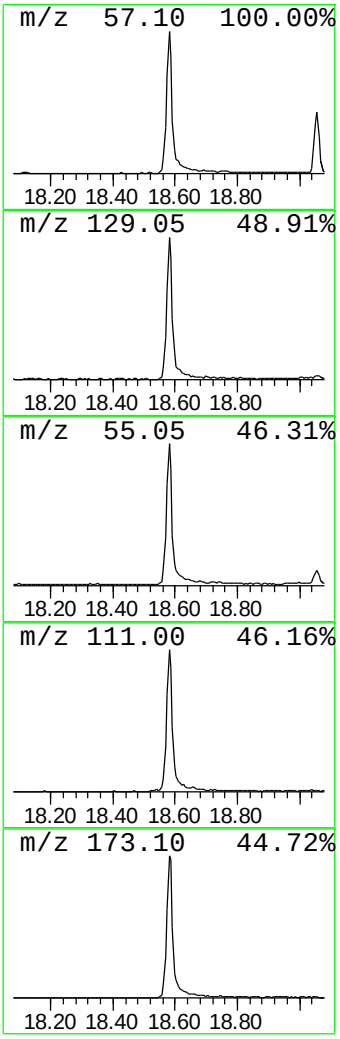
Peak Number 16 unknown18.58 Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.58 | 27.24 ng | 1776620 | Phenanthrene-d10 | 16.91 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Methyl-3-pyrrolidinol | 101 | C5H11NO | 013220-33-2 | 10 |
| 2 | 1,2-Propanediol, 3-(tetradecyloxy)- | 288 | C17H36O3 | 001561-06-4 | 9 |
| 3 | Pentanoic acid, 4,4-dimethyl-3-o... | 158 | C8H14O3 | 055107-14-7 | 9 |
| 4 | Pentanoic acid, 3-oxo-, methyl e... | 130 | C6H10O3 | 030414-53-0 | 9 |
| 5 | Propionic acid, 2-diethylborylox... | 186 | C9H19BO3 | 1000149-82-1 | 9 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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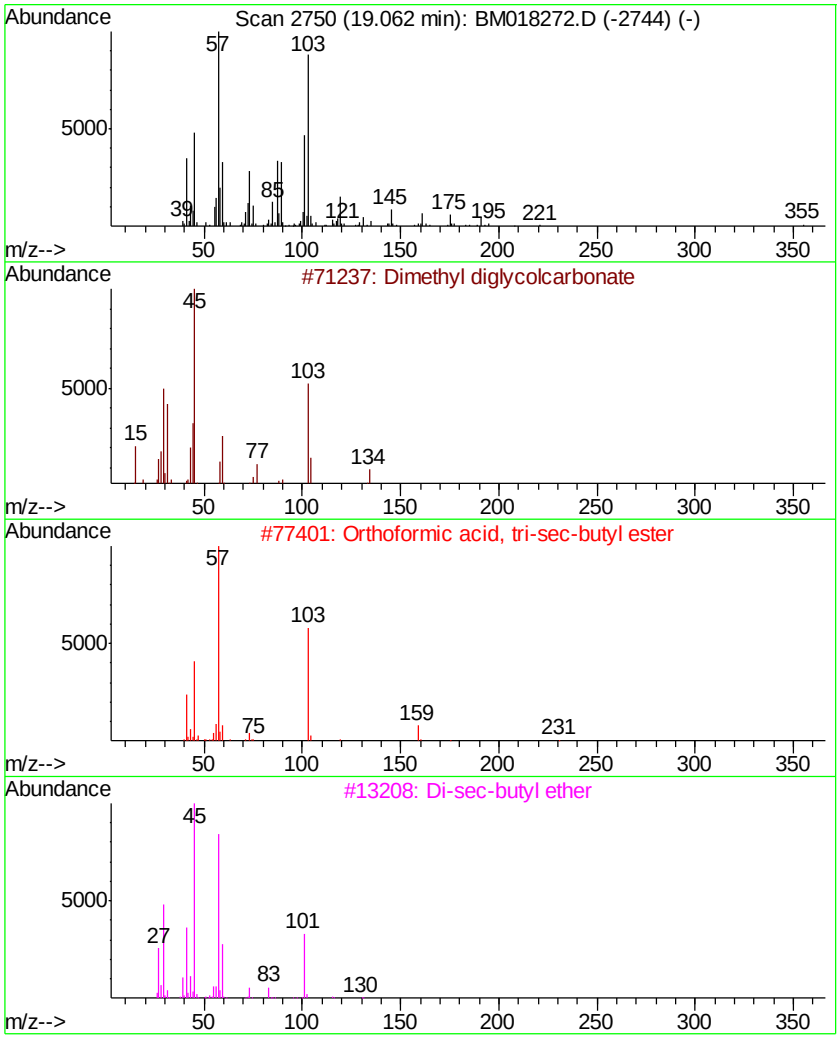
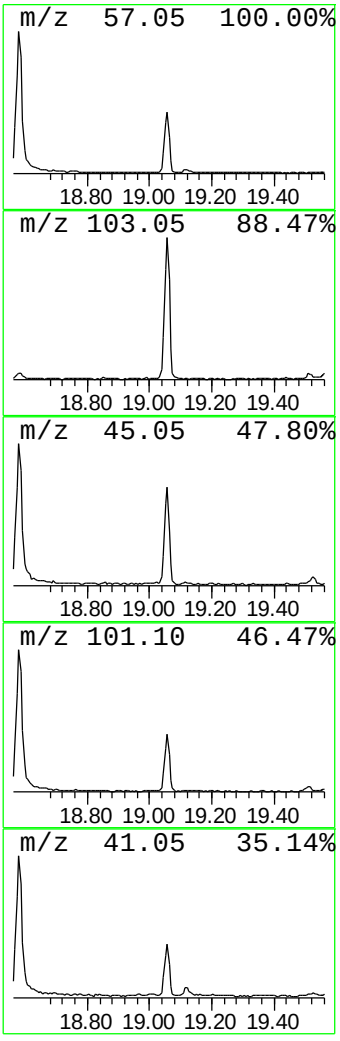
Peak Number 17 unknown19.06 Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.06 | 7.66 ng | 477843 | Chrysene-d12 | 21.13 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dimethyl diglycolcarbonate | 222 | C8H14O7 | 087292-23-7 | 38 |
| 2 | Orthoformic acid, tri-sec-butyl ... | 232 | C13H28O3 | 016754-48-6 | 32 |
| 3 | Di-sec-butyl ether | 130 | C8H18O | 006863-58-7 | 27 |
| 4 | Ethanethioamide, N,N-dimethyl- | 103 | C4H9NS | 000631-67-4 | 22 |
| 5 | 1-tert-Butoxy-2-ethoxyethane | 146 | C8H18O2 | 051422-54-9 | 22 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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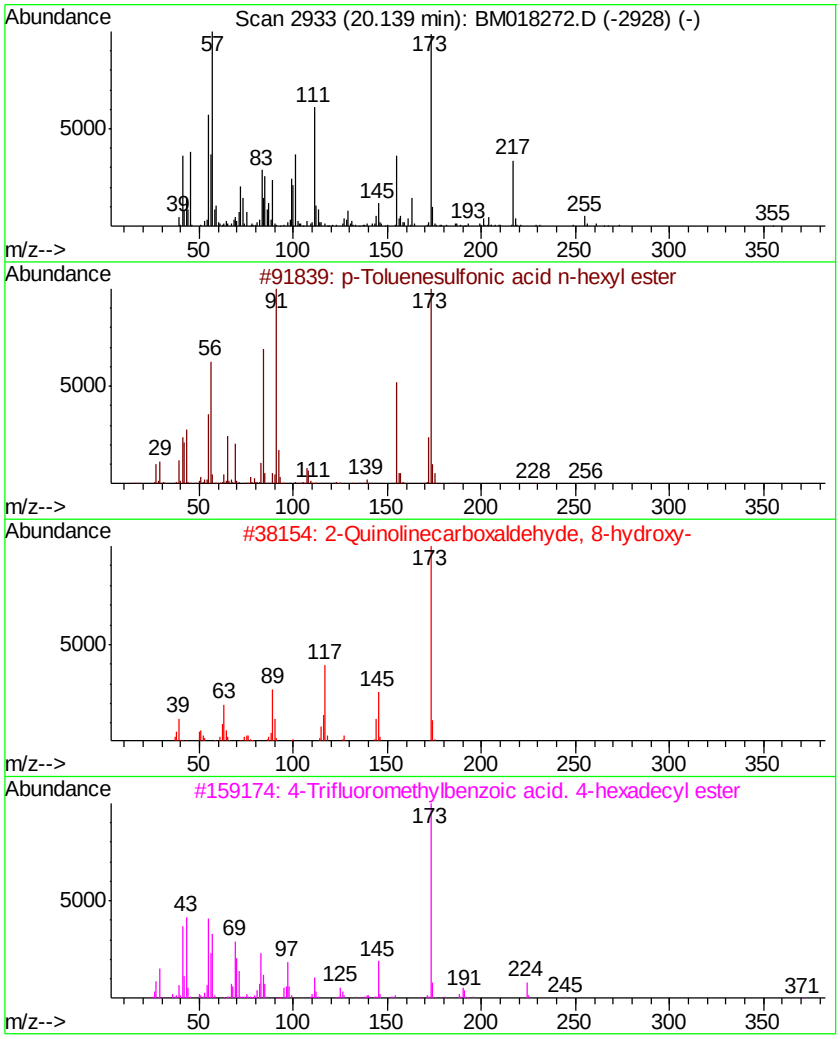
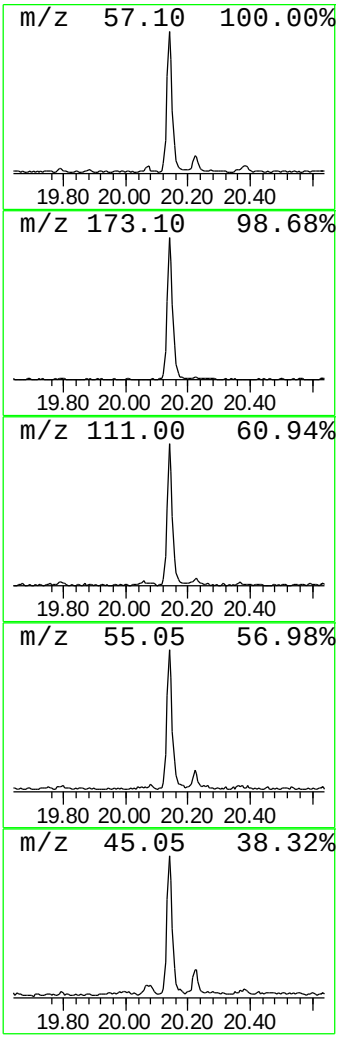
Peak Number 18 unknown20.14 Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 20.14 | 13.13 ng | 819307 | Chrysene-d12 | 21.13 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | p-Toluenesulfonic acid n-hexyl e... | 256 | C13H20O3S | 003839-35-8 | 22 |
| 2 | 2-Quinolinecarboxaldehyde, 8-hyd... | 173 | C10H7NO2 | 014510-06-6 | 18 |
| 3 | 4-Trifluoromethylbenzoic acid, 4... | 414 | C24H37F3O2 | 1000283-03-4 | 14 |
| 4 | 2-Chloro-6-hydroxyisonicotinic acid | 173 | C6H4ClNO3 | 006313-51-5 | 12 |
| 5 | Butanamide, N-methyl-4-(methylth... | 230 | C11H22N2OS | 097443-86-2 | 12 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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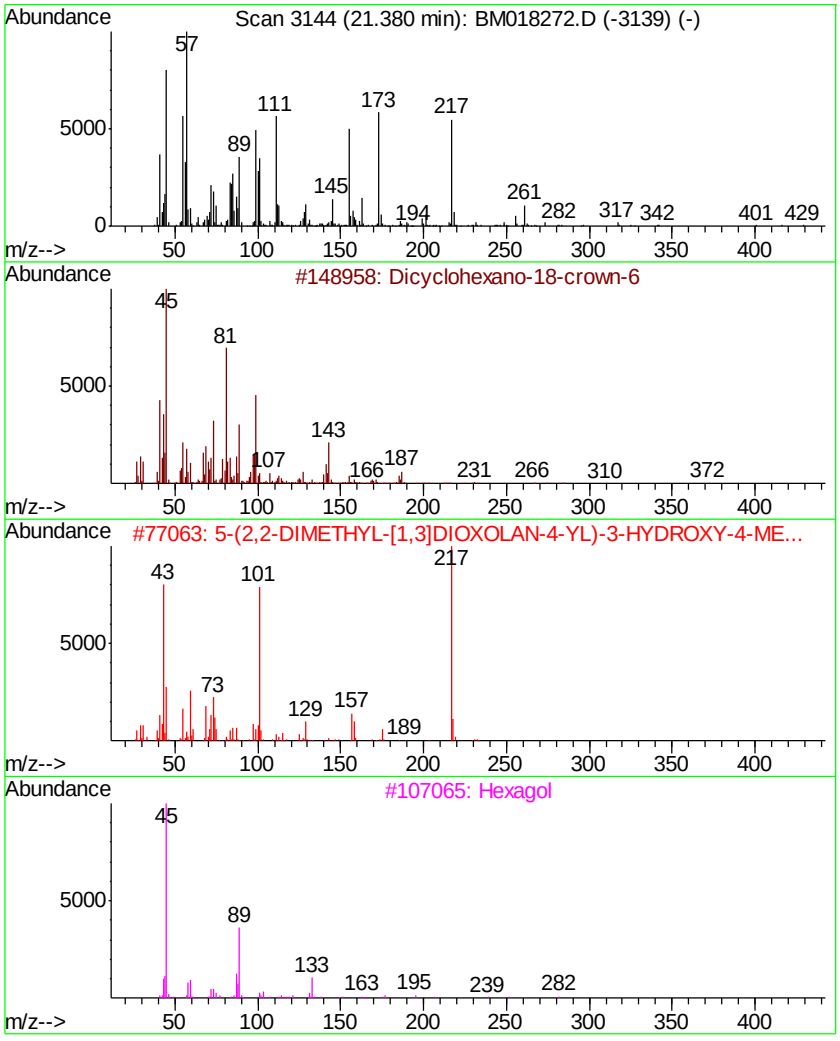
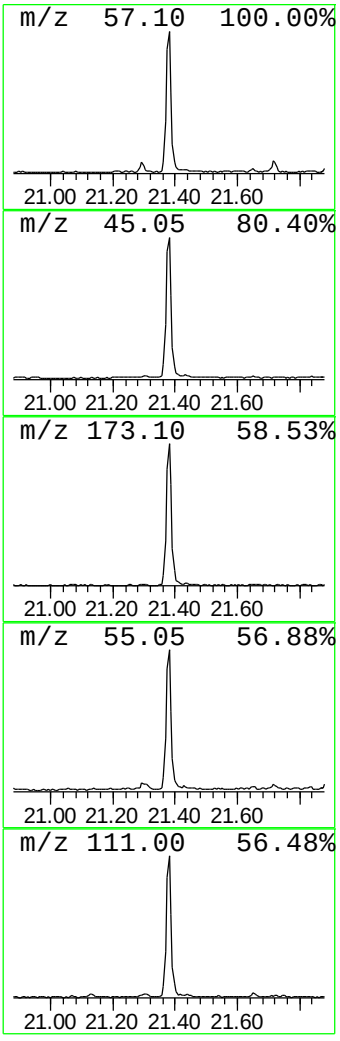
Peak Number 19 unknown21.38 Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 21.38 | 20.83 ng | 1299740 | Chrysene-d12 | 21.13 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dicyclohexano-18-crown-6 | 372 | C20H36O6 | 016069-36-6 | 16 |
| 2 | 5-(2,2-DIMETHYL-[1,3]DIOXOLAN-4-... | 232 | C10H16O6 | 1000185-10-7 | 15 |
| 3 | Hexagol | 282 | C12H26O7 | 002615-15-8 | 15 |
| 4 | Pentaethylene glycol | 238 | C10H22O6 | 004792-15-8 | 14 |
| 5 | 1,4,7,10,13,16-Hexaoxacyclooctad... | 264 | C12H24O6 | 017455-13-9 | 14 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

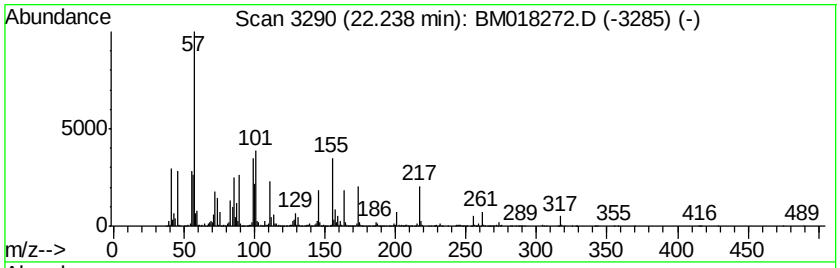
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

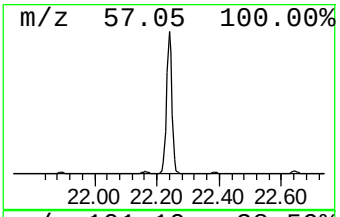
**********

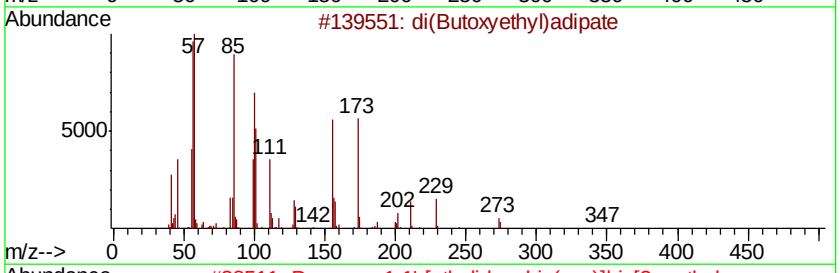
Peak Number 20 unknown22.24 Concentration Rank 1

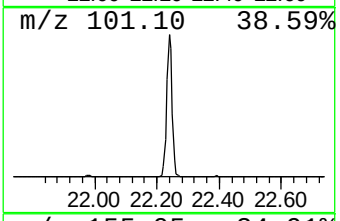
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 22.24 | 97.34 ng | 7186690 | Perylene-d12 | 23.29 |

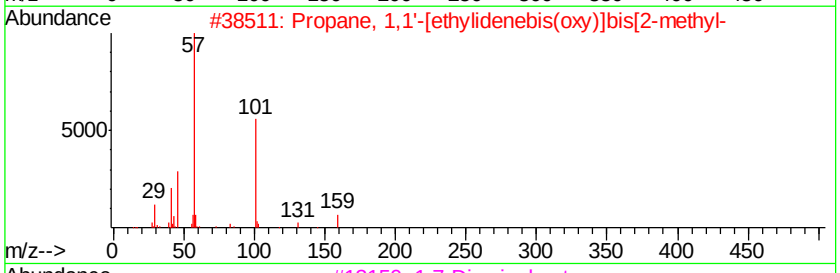
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | di(Butoxyethyl)adipate | 346 | C18H34O6 | 000141-18-4 | 12 |
| 2 | Propane, 1,1'-[ethylidenebis(oxy... | 174 | C10H22O2 | 005669-09-0 | 10 |
| 3 | 1,7-Diaminoheptane | 130 | C7H18N2 | 000646-19-5 | 10 |
| 4 | 1-Methyl-3-pyrrolidinol | 101 | C5H11NO | 013220-33-2 | 9 |
| 5 | Propanamide, N-ethyl- | 101 | C5H11NO | 005129-72-6 | 9 |

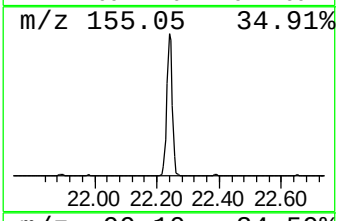


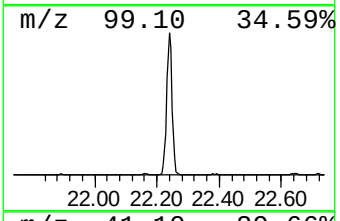



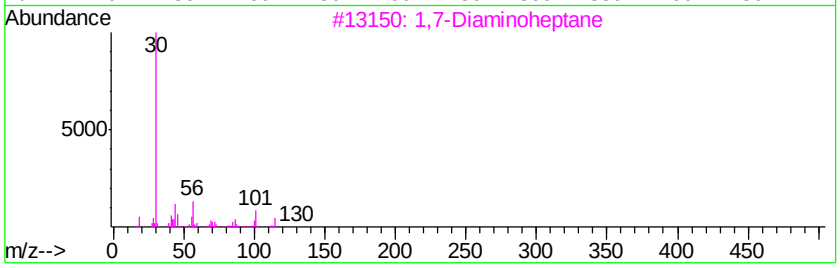



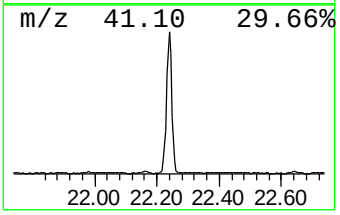



Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121818\
Data File : BM018272.D
Acq On : 18 Dec 2018 15:46
Operator : JU/SJ
Sample : J6440-08
Misc :
ALS Vial : 3 Sample Multiplier: 1

**Instrument :** BNA_M
**ClientSampleId :** COMP-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM121518.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 |
| Butanoic acid | 3.75 | 4.8 | ng | 221145 | 1 | 7.49 | 917328 | 20.0 |
| 2-Pentanone, 4-hy... | 4.68 | 6.2 | ng | 285471 | 1 | 7.49 | 917328 | 20.0 |
| Hexylene Glycol | 5.87 | 7.9 | ng | 363269 | 1 | 7.49 | 917328 | 20.0 |
| Ethanol, 2-(2-met... | 6.05 | 9.9 | ng | 452635 | 1 | 7.49 | 917328 | 20.0 |
| unknown7.03 | 7.03 | 90.0 | ng | 4126350 | 1 | 7.49 | 917328 | 20.0 |
| 1-Hexanol, 2-ethyl- | 7.56 | 11.4 | ng | 521723 | 1 | 7.49 | 917328 | 20.0 |
| Benzenemethanol, ... | 8.59 | 8.7 | ng | 399753 | 1 | 7.49 | 917328 | 20.0 |
| Hexanoic acid, 2-... | 8.86 | 27.6 | ng | 1267910 | 1 | 7.49 | 917328 | 20.0 |
| Ethanol, 2-(2-but... | 10.06 | 40.7 | ng | 2308830 | 2 | 10.25 | 1134470 | 20.0 |
| Thiophene, tetrah... | 10.49 | 11.7 | ng | 665350 | 2 | 10.25 | 1134470 | 20.0 |
| unknown11.50 | 11.50 | 3.8 | ng | 214031 | 2 | 10.25 | 1134470 | 20.0 |
| 1H-Inden-1-one, 2... | 11.66 | 6.3 | ng | 355666 | 2 | 10.25 | 1134470 | 20.0 |
| 2(3H)-Benzothiazo... | 15.88 | 5.2 | ng | 336485 | 4 | 16.91 | 1304510 | 20.0 |
| Cyclobuta[1,2:3,4... | 16.19 | 4.0 | ng | 260888 | 4 | 16.91 | 1304510 | 20.0 |
| unknown18.58 | 18.58 | 27.2 | ng | 1776620 | 4 | 16.91 | 1304510 | 20.0 |
| unknown19.06 | 19.06 | 7.7 | ng | 477843 | 5 | 21.13 | 1248200 | 20.0 |
| unknown20.14 | 20.14 | 13.1 | ng | 819307 | 5 | 21.13 | 1248200 | 20.0 |
| unknown21.38 | 21.38 | 20.8 | ng | 1299740 | 5 | 21.13 | 1248200 | 20.0 |
| unknown22.24 | 22.24 | 97.3 | ng | 7186690 | 6 | 23.29 | 1476570 | 20.0 |