LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA_G\DATA\BG062019\
Data File : BG041366.D
Acq On : 20 Jun 2019 20:54
Operator : HP/JU
Sample : K3455-03
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** TP-2-GIS

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_G\METHODS\8270-BG061719.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 | 3.147 | 5 | 10 | 21 | rVB | 156963 | 230638 | 14.64% | 1.315% |
| 2 | 4.616 | 256 | 260 | 264 | rVB | 15364 | 20423 | 1.30% | 0.116% |
| 3 | 5.621 | 425 | 431 | 443 | rBV | 525910 | 857091 | 54.41% | 4.886% |
| 4 | 7.125 | 684 | 687 | 691 | rVB2 | 12072 | 16773 | 1.06% | 0.096% |
| 5 | 7.236 | 699 | 706 | 721 | rBV | 571503 | 1053223 | 66.87% | 6.004% |
| 6 | 7.612 | 763 | 770 | 782 | rVB | 547164 | 990628 | 62.89% | 5.648% |
| 7 | 8.082 | 843 | 850 | 859 | rBV | 161226 | 282698 | 17.95% | 1.612% |
| 8 | 8.406 | 897 | 905 | 913 | rBV | 420983 | 738916 | 46.91% | 4.213% |
| 9 | 9.263 | 1043 | 1051 | 1063 | rBV | 354604 | 674109 | 42.80% | 3.843% |
| 10 | 10.903 | 1323 | 1330 | 1338 | rBV | 202759 | 389384 | 24.72% | 2.220% |
| 11 | 13.335 | 1738 | 1744 | 1753 | rBV | 866472 | 1359713 | 86.32% | 7.752% |
| 12 | 14.034 | 1857 | 1863 | 1868 | rBV5 | 11725 | 19085 | 1.21% | 0.109% |
| 13 | 14.158 | 1879 | 1884 | 1892 | rBV | 91236 | 138535 | 8.80% | 0.790% |
| 14 | 14.445 | 1928 | 1933 | 1943 | rBV | 22654 | 46025 | 2.92% | 0.262% |
| 15 | 14.722 | 1973 | 1980 | 1986 | rBV2 | 341773 | 544793 | 34.59% | 3.106% |
| 16 | 15.109 | 2041 | 2046 | 2052 | rVV4 | 14885 | 28025 | 1.78% | 0.160% |
| 17 | 15.180 | 2054 | 2058 | 2063 | rVB3 | 12036 | 15883 | 1.01% | 0.091% |
| 18 | 15.327 | 2078 | 2083 | 2086 | rBV5 | 9741 | 18665 | 1.18% | 0.106% |
| 19 | 15.497 | 2104 | 2112 | 2113 | rBV7 | 7316 | 17830 | 1.13% | 0.102% |
| 20 | 15.591 | 2123 | 2128 | 2133 | rBV7 | 9938 | 16989 | 1.08% | 0.097% |
| 21 | 15.762 | 2151 | 2157 | 2164 | rVB5 | 15064 | 35545 | 2.26% | 0.203% |
| 22 | 16.049 | 2202 | 2206 | 2215 | rVB | 20492 | 31673 | 2.01% | 0.181% |
| 23 | 16.208 | 2227 | 2233 | 2240 | rBV | 746364 | 1157831 | 73.51% | 6.601% |
| 24 | 16.766 | 2323 | 2328 | 2333 | rVB6 | 15643 | 28465 | 1.81% | 0.162% |
| 25 | 16.990 | 2361 | 2366 | 2369 | rBV4 | 19217 | 27491 | 1.75% | 0.157% |
| 26 | 17.125 | 2383 | 2389 | 2393 | rBV3 | 24460 | 44429 | 2.82% | 0.253% |
| 27 | 17.183 | 2394 | 2399 | 2406 | rVB5 | 19917 | 48434 | 3.07% | 0.276% |
| 28 | 17.283 | 2412 | 2416 | 2423 | rVB2 | 21739 | 36312 | 2.31% | 0.207% |
| 29 | 17.465 | 2441 | 2447 | 2451 | rBV2 | 409443 | 649921 | 41.26% | 3.705% |
| 30 | 17.507 | 2451 | 2454 | 2462 | rVB | 386424 | 567156 | 36.01% | 3.233% |
| 31 | 17.601 | 2465 | 2470 | 2477 | rVV | 86246 | 132969 | 8.44% | 0.758% |
| 32 | 17.971 | 2531 | 2533 | 2538 | rVB | 15890 | 21888 | 1.39% | 0.125% |
| 33 | 18.053 | 2544 | 2547 | 2553 | rVB7 | 17858 | 24865 | 1.58% | 0.142% |
| 34 | 18.317 | 2588 | 2592 | 2594 | rBV2 | 106328 | 148980 | 9.46% | 0.849% |

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA_G\DATA\BG062019\
Data File : BG041366.D
Acq On : 20 Jun 2019 20:54
Operator : HP/JU
Sample : K3455-03
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** TP-2-GIS

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_G\METHODS\8270-BG061719.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 18.388 | 2600 | 2604 | 2610 | rVB | 112712 | 161587 | 10.26% | 0.921% |
| 36 | 18.470 | 2614 | 2618 | 2623 | rVB2 | 44578 | 64635 | 4.10% | 0.368% |
| 37 | 18.541 | 2623 | 2630 | 2632 | rBV2 | 88620 | 181800 | 11.54% | 1.036% |
| 38 | 18.829 | 2676 | 2679 | 2684 | rVB | 54907 | 72471 | 4.60% | 0.413% |
| 39 | 18.887 | 2685 | 2689 | 2693 | rVB2 | 45163 | 60987 | 3.87% | 0.348% |
| 40 | 19.246 | 2745 | 2750 | 2753 | rBV | 55859 | 90338 | 5.74% | 0.515% |
| 41 | 19.516 | 2790 | 2796 | 2802 | rBV | 894866 | 1232623 | 78.26% | 7.027% |
| 42 | 19.663 | 2818 | 2821 | 2825 | rBV | 59752 | 78620 | 4.99% | 0.448% |
| 43 | 19.839 | 2847 | 2851 | 2853 | rBV | 131180 | 176648 | 11.21% | 1.007% |
| 44 | 19.880 | 2853 | 2858 | 2864 | rVV | 776059 | 1084879 | 68.88% | 6.185% |
| 45 | 19.939 | 2866 | 2868 | 2875 | rVB2 | 60300 | 82057 | 5.21% | 0.468% |
| 46 | 20.062 | 2884 | 2889 | 2894 | rBV | 1250338 | 1575113 | 100.00% | 8.980% |
| 47 | 21.743 | 3168 | 3175 | 3180 | rBV2 | 472579 | 1277696 | 81.12% | 7.284% |
| 48 | 21.796 | 3180 | 3184 | 3195 | rVB | 306182 | 594662 | 37.75% | 3.390% |
| 49 | 24.011 | 3556 | 3561 | 3569 | rBV3 | 133339 | 391144 | 24.83% | 2.230% |

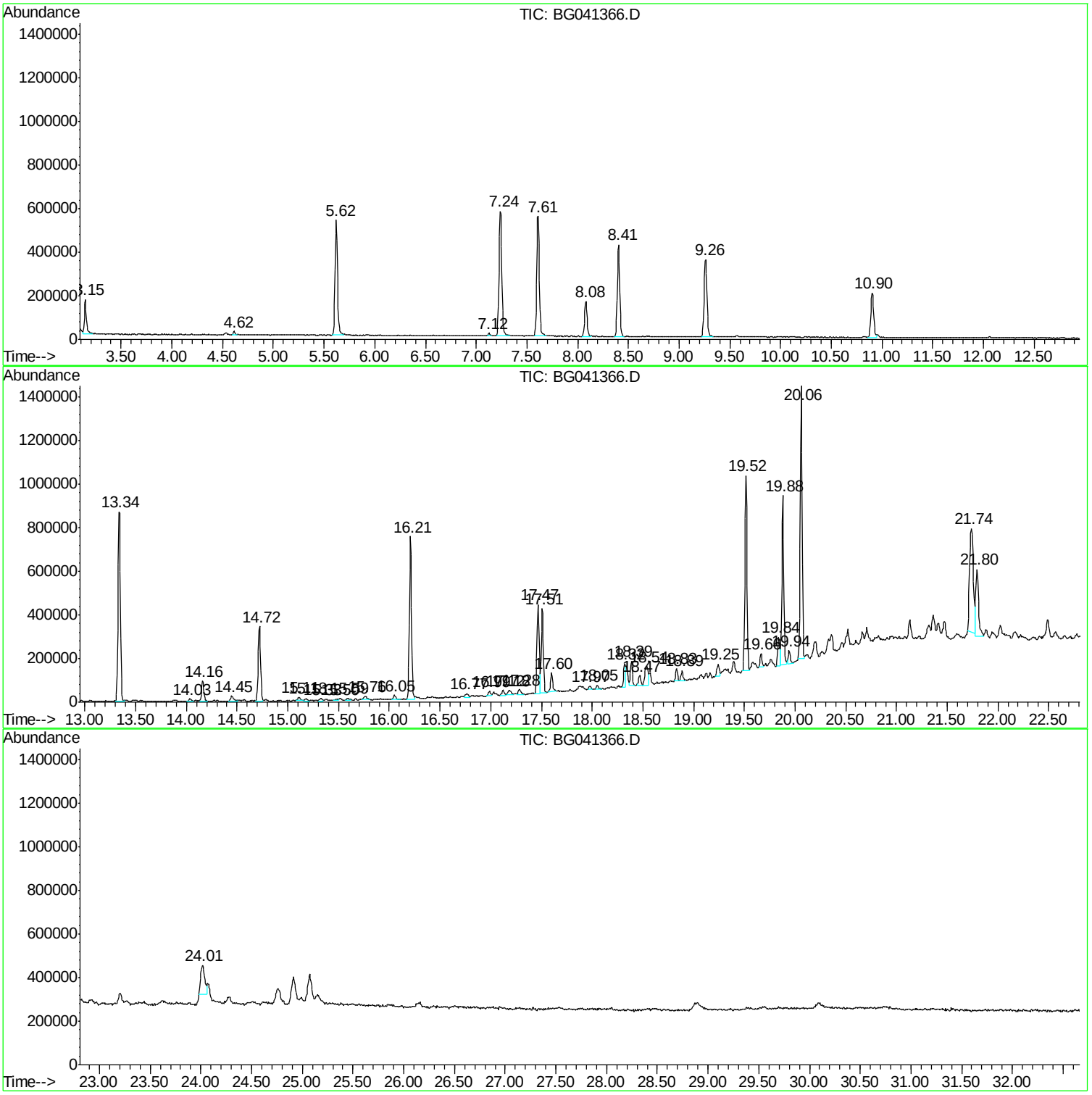
Sum of corrected areas: 17540645

Data Path : Z:\SVOASRV\HPCHEM1\BNA_G\DATA\BG062019\
Data File : BG041366.D
Acq On : 20 Jun 2019 20:54
Operator : HP/JU
Sample : K3455-03
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :**
BNA_G
**ClientSampleId :**
TP-2-GIS

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG061719.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_G\DATA\BG062019\
Data File : BG041366.D
Acq On : 20 Jun 2019 20:54
Operator : HP/JU
Sample : K3455-03
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** TP-2-GIS

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG061719.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

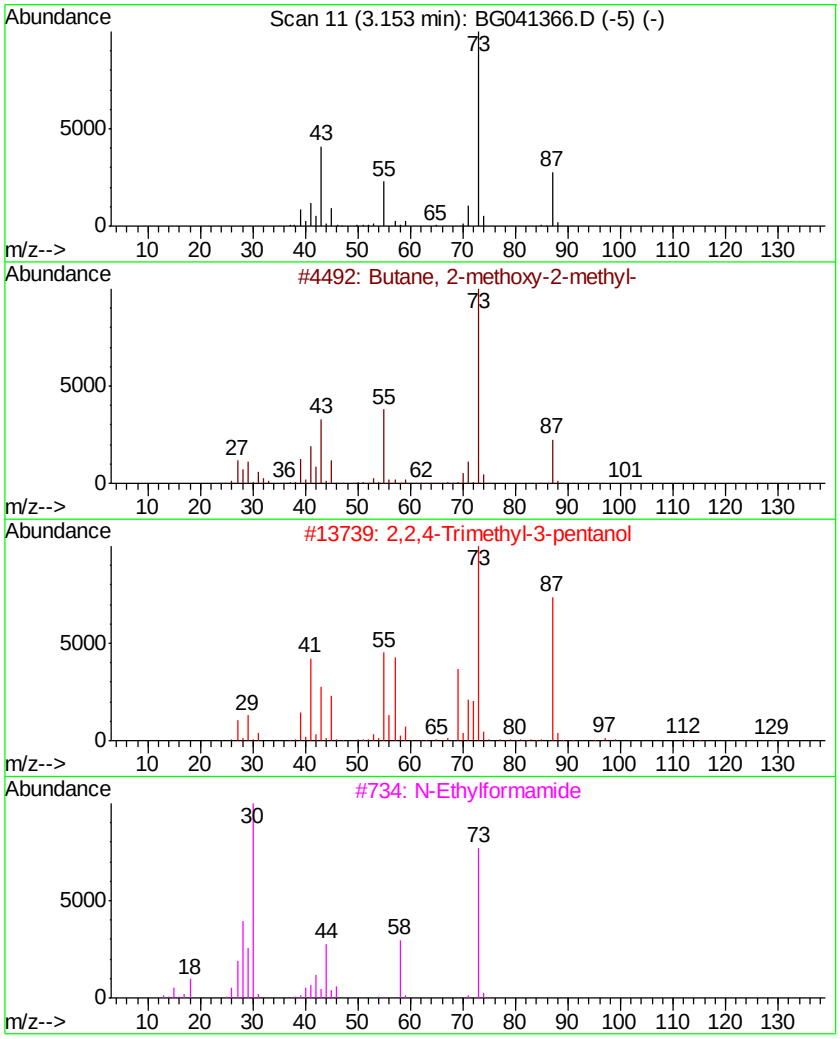
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

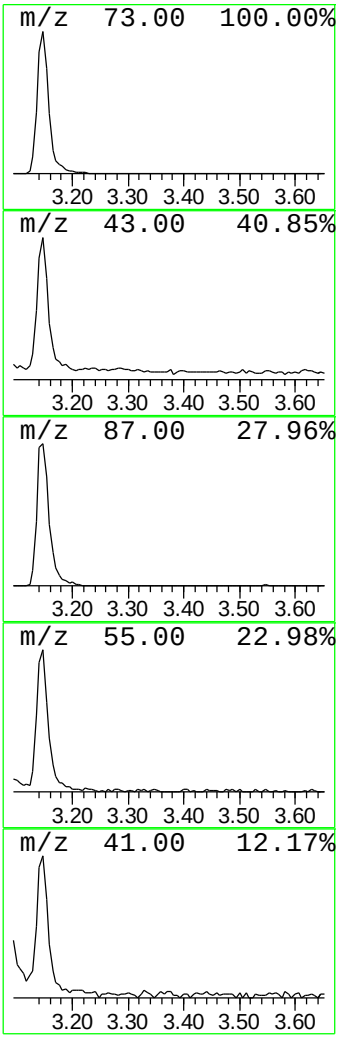
**********

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.15 | 16.32 ng | 230638 | 1,4-Dichlorobenzene-d4 | 8.08 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Butane, 2-methoxy-2-methyl- | 102 | C6H14O | 000994-05-8 | 72 |
| 2 | 2,2,4-Trimethyl-3-pentanol | 130 | C8H18O | 005162-48-1 | 38 |
| 3 | N-Ethylformamide | 73 | C3H7NO | 000627-45-2 | 9 |
| 4 | 2-Methyl-5-hexen-3-ol | 114 | C7H14O | 032815-70-6 | 9 |
| 5 | Silane, tetramethyl- | 88 | C4H12Si | 000075-76-3 | 9 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA_G\DATA\BG062019\
Data File : BG041366.D
Acq On : 20 Jun 2019 20:54
Operator : HP/JU
Sample : K3455-03
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** TP-2-GIS

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG061719.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

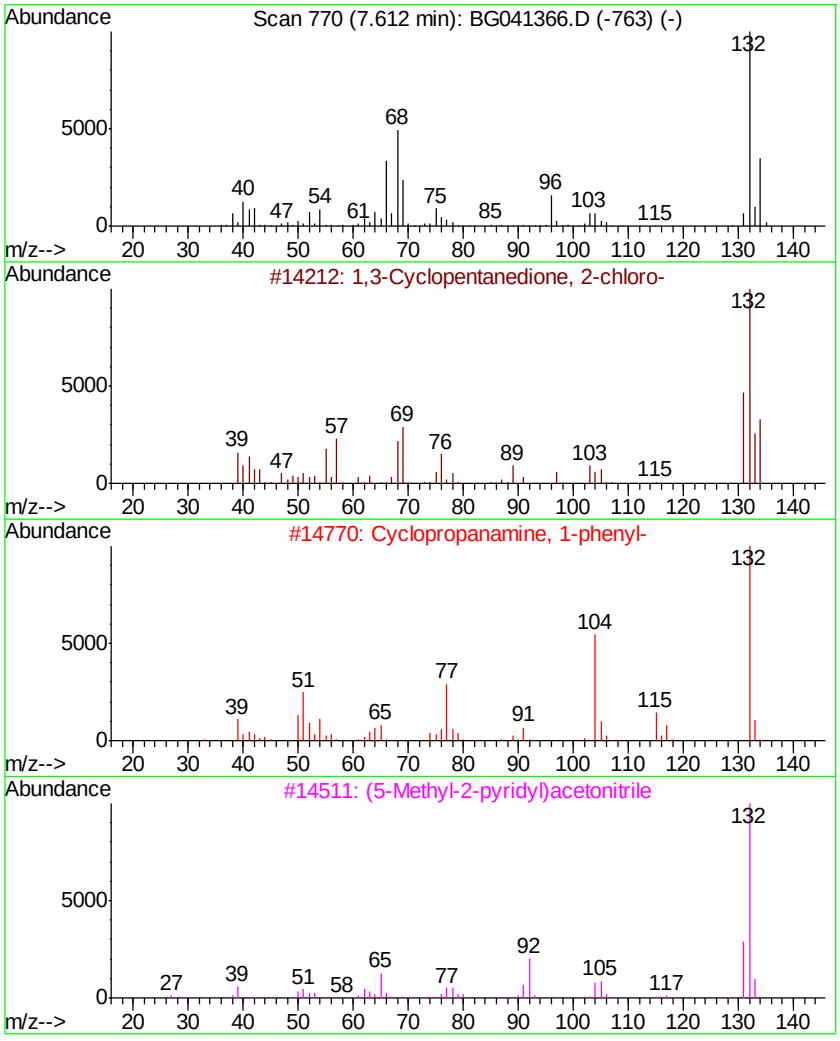
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

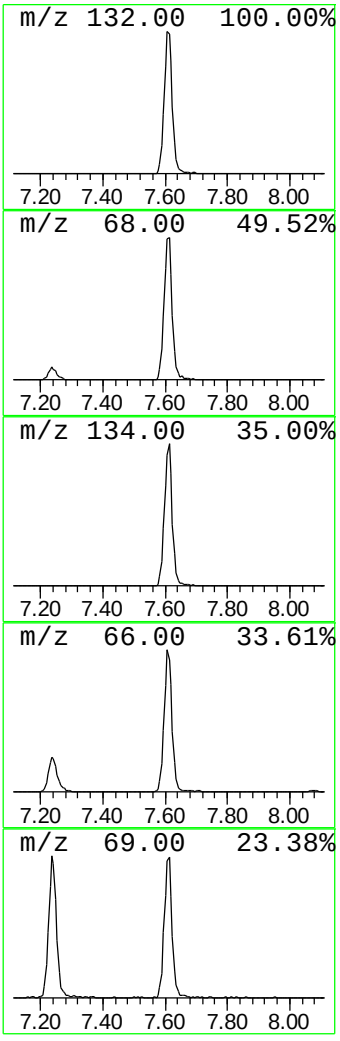
**********

Peak Number 2 unknown7.61 Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 7.61 | 70.08 ng | 990628 | 1,4-Dichlorobenzene-d4 | 8.08 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,3-Cyclopentanedione, 2-chloro- | 132 | C5H5ClO2 | 014203-19-1 | 35 |
| 2 | Cyclopropanamine, 1-phenyl- | 133 | C9H11N | 1000351-26-2 | 22 |
| 3 | (5-Methyl-2-pyridyl)acetonitrile | 132 | C8H8N2 | 1000241-93-9 | 22 |
| 4 | 1H-Benzimidazole, 2-methyl- | 132 | C8H8N2 | 000615-15-6 | 22 |
| 5 | 5-Aminoindole | 132 | C8H8N2 | 005192-03-0 | 22 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA_G\DATA\BG062019\
Data File : BG041366.D
Acq On : 20 Jun 2019 20:54
Operator : HP/JU
Sample : K3455-03
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** TP-2-GIS

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG061719.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

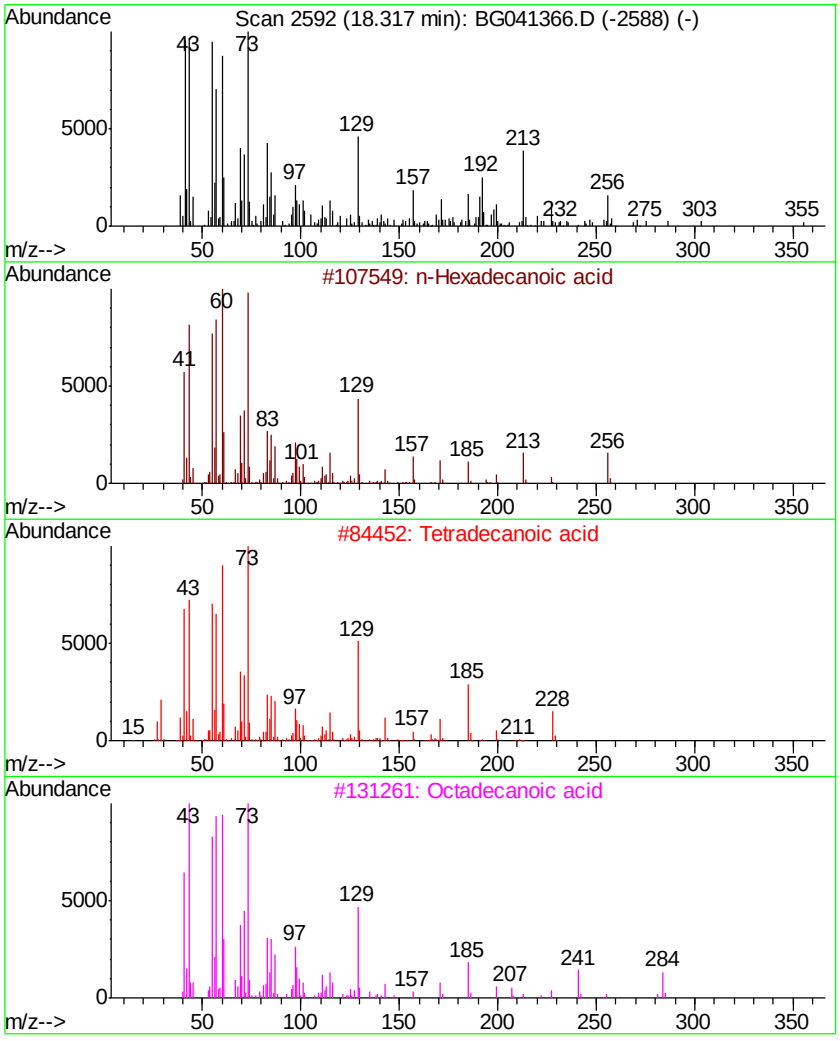
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

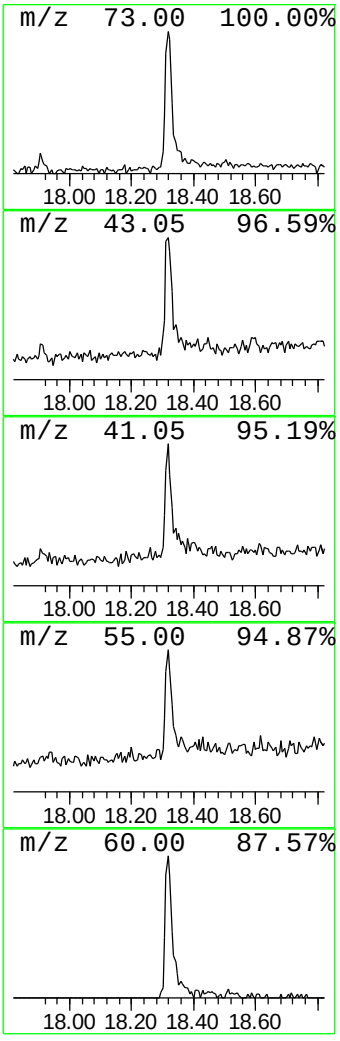
**********

Peak Number 4 n-Hexadecanoic acid Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.32 | 4.58 ng | 148980 | Phenanthrene-d10 | 17.47 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | n-Hexadecanoic acid | 256 | C16H32O2 | 000057-10-3 | 98 |
| 2 | Tetradecanoic acid | 228 | C14H28O2 | 000544-63-8 | 86 |
| 3 | Octadecanoic acid | 284 | C18H36O2 | 000057-11-4 | 70 |
| 4 | Pentadecanoic acid | 242 | C15H30O2 | 001002-84-2 | 64 |
| 5 | Tridecanoic acid | 214 | C13H26O2 | 000638-53-9 | 60 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA_G\DATA\BG062019\
Data File : BG041366.D
Acq On : 20 Jun 2019 20:54
Operator : HP/JU
Sample : K3455-03
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** TP-2-GIS

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG061719.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

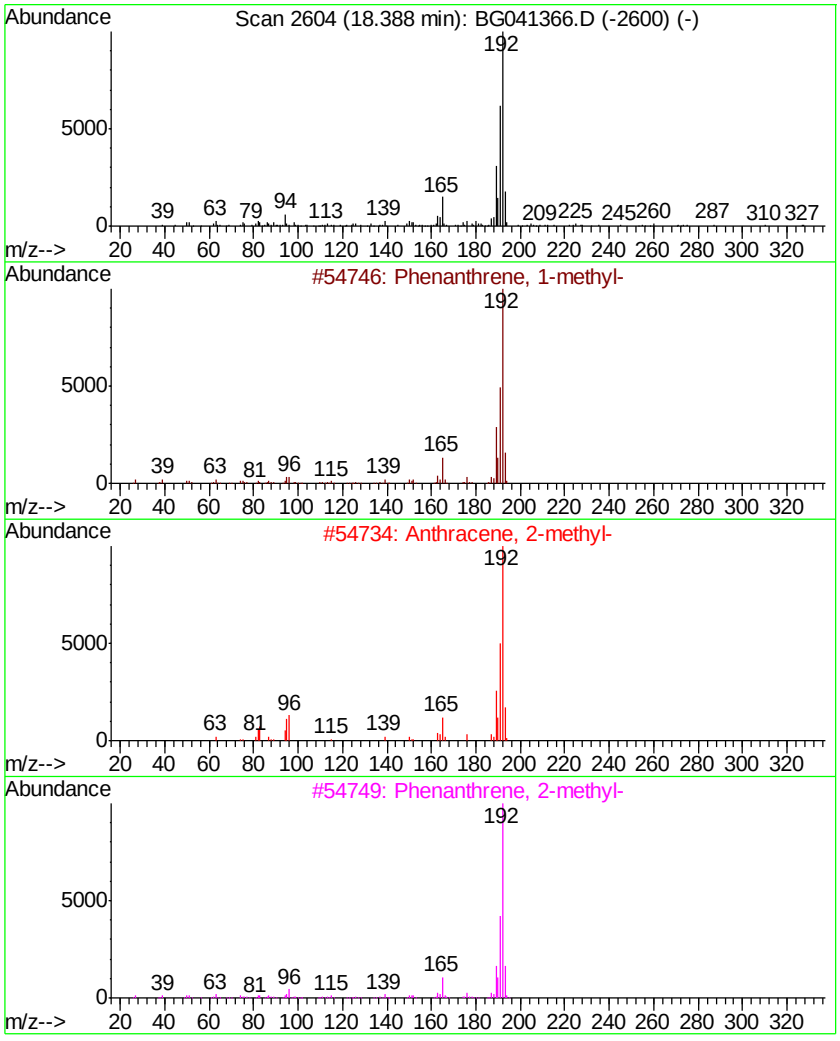
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

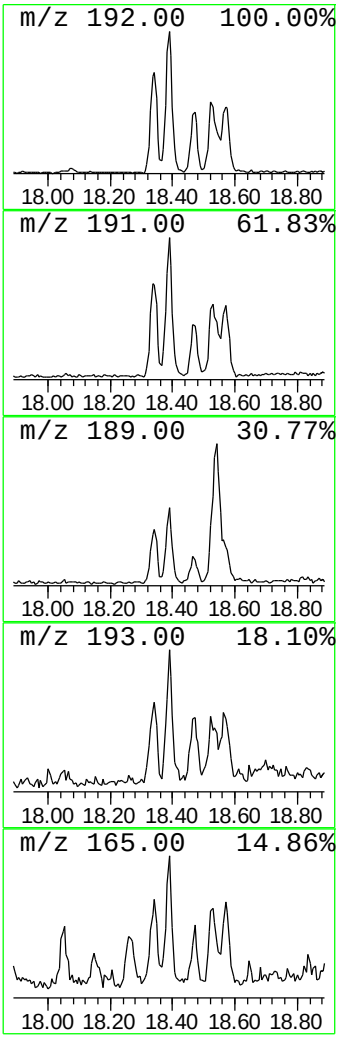
**********

Peak Number 5 Phenanthrene, 1-methyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.39 | 4.97 ng | 161587 | Phenanthrene-d10 | 17.47 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Phenanthrene, 1-methyl- | 192 | C15H12 | 000832-69-9 | 95 |
| 2 | Anthracene, 2-methyl- | 192 | C15H12 | 000613-12-7 | 94 |
| 3 | Phenanthrene, 2-methyl- | 192 | C15H12 | 002531-84-2 | 93 |
| 4 | Anthracene, 9-methyl- | 192 | C15H12 | 000779-02-2 | 93 |
| 5 | Naphtho[2,3-b]norbornadiene | 192 | C15H12 | 107426-38-0 | 91 |



# Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA_G\DATA\BG062019\
Data File : BG041366.D
Acq On : 20 Jun 2019 20:54
Operator : HP/JU
Sample : K3455-03
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** TP-2-GIS

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG061719.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

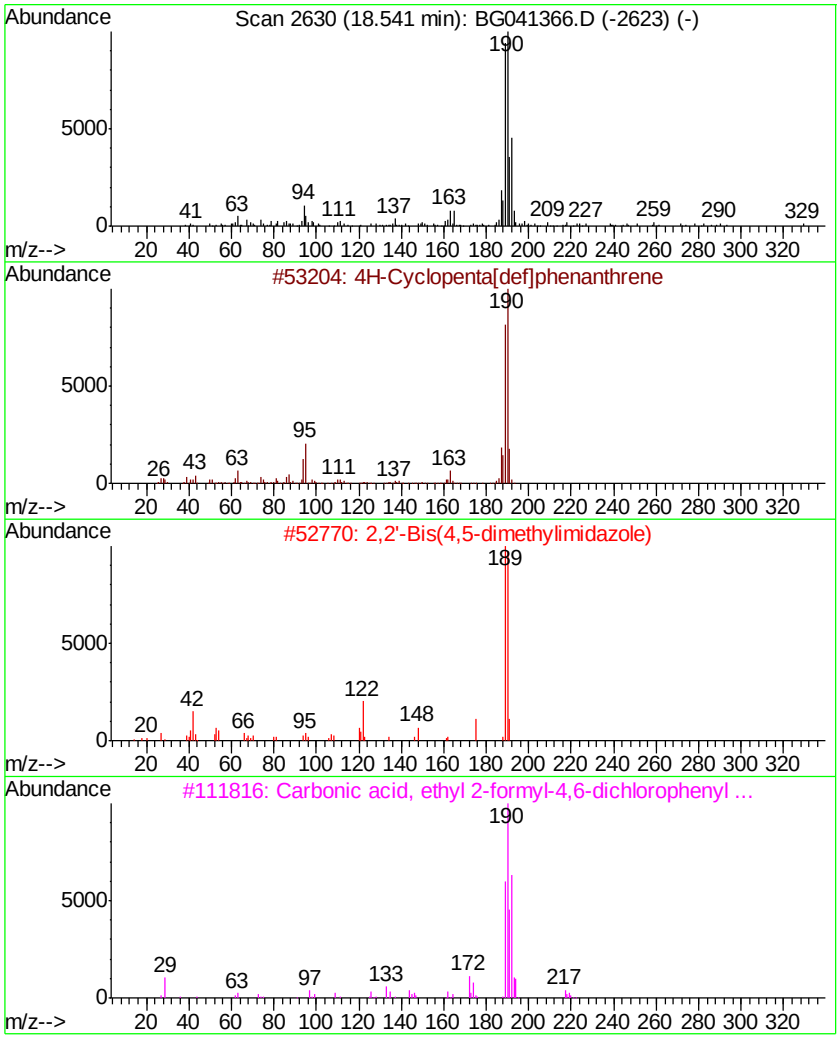
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

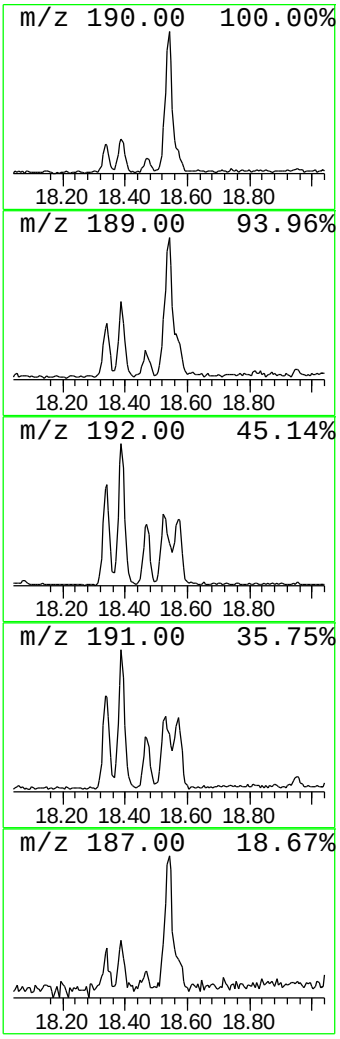
**********

Peak Number 6 4H-Cyclopenta[def]phenanthrene Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.54 | 5.59 ng | 181800 | Phenanthrene-d10 | 17.47 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4H-Cyclopenta[def]phenanthrene | 190 | C15H10 | 000203-64-5 | 62 |
| 2 | 2,2'-Bis(4,5-dimethylimidazole) | 190 | C10H14N4 | 069286-06-2 | 50 |
| 3 | Carbonic acid, ethyl 2-formyl-4,... | 262 | C10H8Cl2O4 | 1000331-34-4 | 42 |
| 4 | Thiophene-3-carboxaldehyde, 5-ch... | 190 | C5H4BClO3S | 036155-87-0 | 38 |
| 5 | 1-Aminocyclopentanecarboxylic ac... | 445 | C24H44ClNO4 | 1000329-17-5 | 32 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA_G\DATA\BG062019\
Data File : BG041366.D
Acq On : 20 Jun 2019 20:54
Operator : HP/JU
Sample : K3455-03
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** TP-2-GIS

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG061719.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

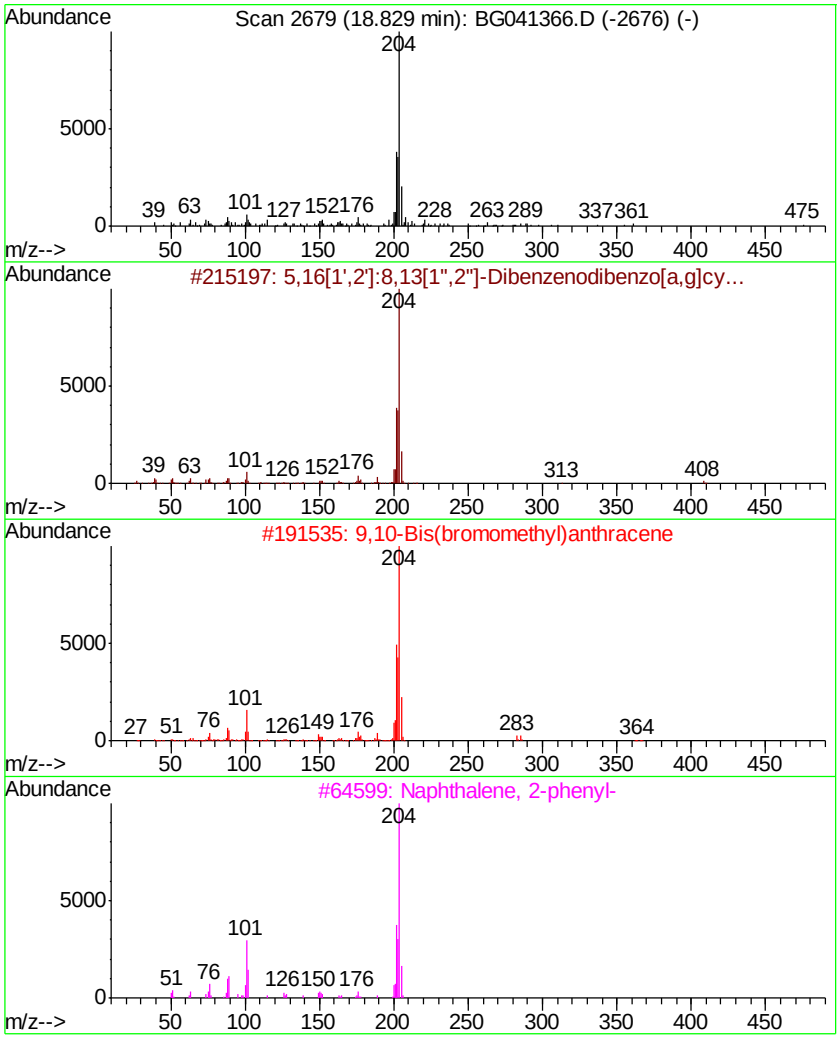
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

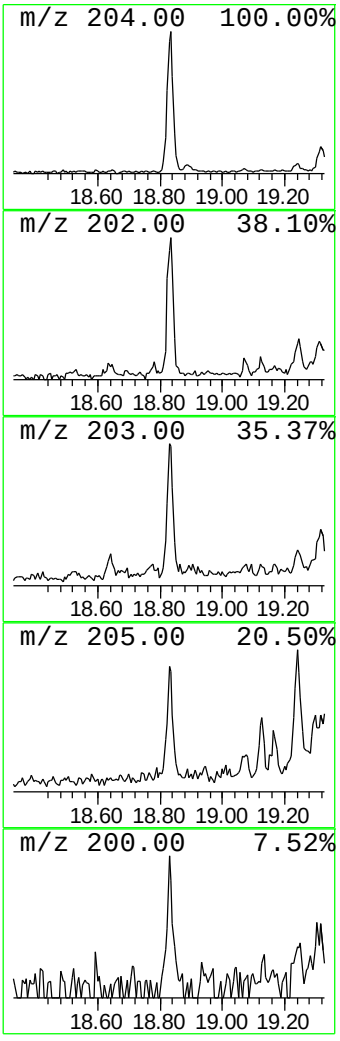
**********

Peak Number 7 5,16[1',2']:8,13[1'',2'']-D... Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 18.83 | 2.23 ng | 72471 | Phenanthrene-d10 | 17.47 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24 | 005672-97-9 | 87 |
| 2 | 9,10-Bis(bromomethyl)anthracene | 362 | C16H12Br2 | 034373-96-1 | 64 |
| 3 | Naphthalene, 2-phenyl- | 204 | C16H12 | 000612-94-2 | 58 |
| 4 | [1,1'-Biphenyl]-2-ol, 5-chloro- | 204 | C12H9ClO | 000607-12-5 | 50 |
| 5 | Naphthalene, 1-phenyl- | 204 | C16H12 | 000605-02-7 | 49 |



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA_G\DATA\BG062019\
Data File : BG041366.D
Acq On : 20 Jun 2019 20:54
Operator : HP/JU
Sample : K3455-03
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** TP-2-GIS

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG061719.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

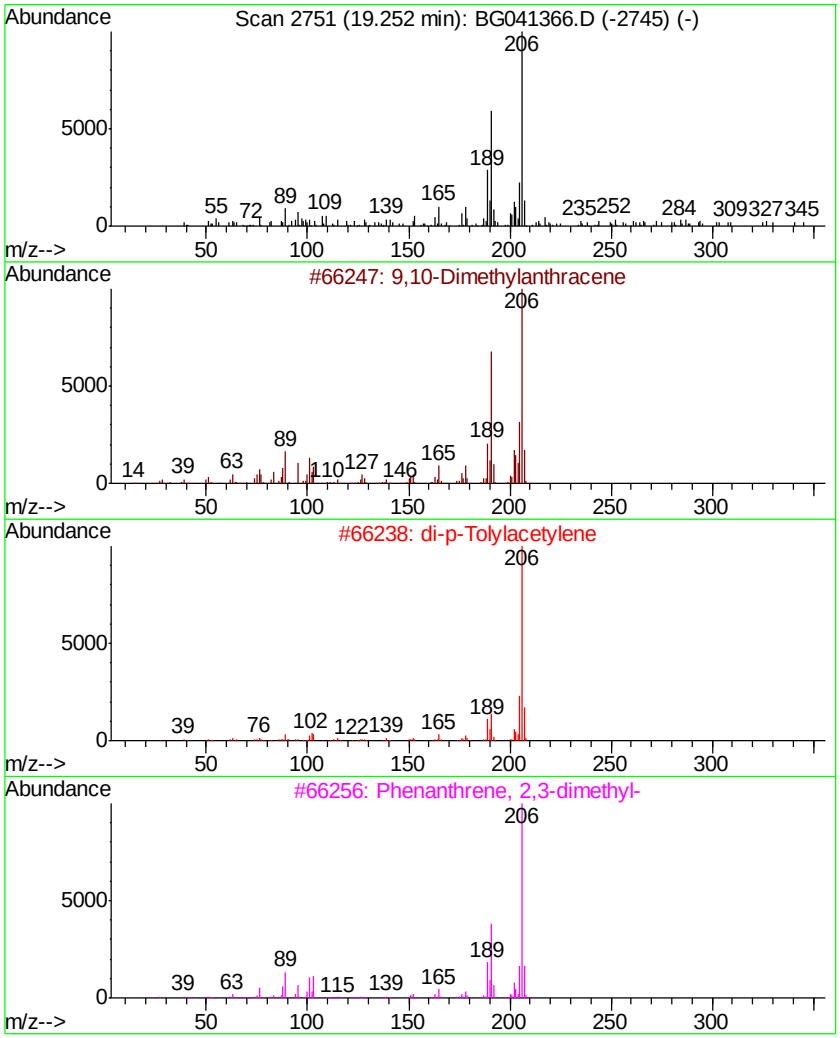
TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: LSCINT.P

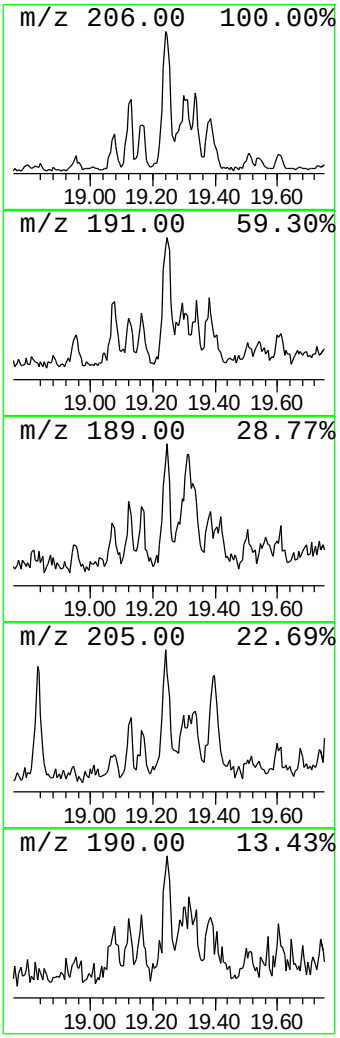
**********

Peak Number 8 9,10-Dimethylanthracene Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 19.25 | 2.78 ng | 90338 | Phenanthrene-d10 | 17.47 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 9,10-Dimethylanthracene | 206 | C16H14 | 000781-43-1 | 95 |
| 2 | di-p-Tolylacetylene | 206 | C16H14 | 002789-88-0 | 91 |
| 3 | Phenanthrene, 2,3-dimethyl- | 206 | C16H14 | 003674-65-5 | 90 |
| 4 | Phenanthrene, 3,6-dimethyl- | 206 | C16H14 | 001576-67-6 | 90 |
| 5 | Phenanthrene, 2,5-dimethyl- | 206 | C16H14 | 003674-66-6 | 90 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_G\DATA\BG062019\
Data File : BG041366.D
Acq On : 20 Jun 2019 20:54
Operator : HP/JU
Sample : K3455-03
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :** BNA_G
**ClientSampleId :** TP-2-GIS

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_G\METHODS\8270-BG061719.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 |
| Butane, 2-methoxy... | 3.15 | 16.3 | ng | 230638 | 1 | 8.08 | 282698 | 20.0 |
| unknown7.61 | 7.61 | 70.1 | ng | 990628 | 1 | 8.08 | 282698 | 20.0 |
| n-Hexadecanoic acid | 18.32 | 4.6 | ng | 148980 | 4 | 17.47 | 649921 | 20.0 |
| Phenanthrene, 1-m... | 18.39 | 5.0 | ng | 161587 | 4 | 17.47 | 649921 | 20.0 |
| 4H-Cyclopenta[def... | 18.54 | 5.6 | ng | 181800 | 4 | 17.47 | 649921 | 20.0 |
| 5,16[1',2']:8,13[... | 18.83 | 2.2 | ng | 72471 | 4 | 17.47 | 649921 | 20.0 |
| 9,10-Dimethylanth... | 19.25 | 2.8 | ng | 90338 | 4 | 17.47 | 649921 | 20.0 |