

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF070516\  
 Data File : BF088729.D  
 Acq On : 6 Jul 2016 4:01  
 Operator : UM/SJ  
 Sample : H3881-16  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 Q6-B5-0-11-C

Integration Parameters: rteint.p

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF063016.M

Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 1.713       | 9             | 11          | 19           | rVB      | 67708          | 120538        | 5.71%           | 0.523%        |
| 2         | 1.838       | 21            | 22          | 55           | rVB      | 584380         | 1409218       | 66.75%          | 6.119%        |
| 3         | 4.936       | 291           | 293         | 298          | rBB      | 90835          | 124747        | 5.91%           | 0.542%        |
| 4         | 5.370       | 328           | 331         | 333          | rBV      | 1896336        | 2013677       | 95.38%          | 8.743%        |
| 5         | 6.410       | 419           | 422         | 425          | rBV      | 1741195        | 1832458       | 86.80%          | 7.957%        |
| 6         | 6.536       | 431           | 433         | 436          | rBV      | 1457644        | 2001786       | 94.82%          | 8.692%        |
| 7         | 6.776       | 452           | 454         | 456          | rBV      | 699568         | 616923        | 29.22%          | 2.679%        |
| 8         | 6.936       | 465           | 468         | 470          | rBB      | 1190166        | 1531578       | 72.54%          | 6.650%        |
| 9         | 7.336       | 500           | 503         | 506          | rBV      | 1114586        | 1138073       | 53.91%          | 4.942%        |
| 10        | 8.056       | 564           | 566         | 569          | rBV      | 805497         | 758059        | 35.91%          | 3.292%        |
| 11        | 9.142       | 658           | 661         | 663          | rBV      | 1497808        | 2111240       | 100.00%         | 9.167%        |
| 12        | 9.531       | 693           | 695         | 697          | rBV      | 348676         | 301327        | 14.27%          | 1.308%        |
| 13        | 9.748       | 712           | 714         | 717          | rBV      | 23270          | 23213         | 1.10%           | 0.101%        |
| 14        | 9.805       | 717           | 719         | 721          | rVV      | 810417         | 769166        | 36.43%          | 3.340%        |
| 15        | 9.839       | 721           | 722         | 724          | rVB      | 59322          | 41703         | 1.98%           | 0.181%        |
| 16        | 10.251      | 756           | 758         | 760          | rVB      | 46832          | 35497         | 1.68%           | 0.154%        |
| 17        | 10.354      | 765           | 767         | 769          | rBV      | 33618          | 29849         | 1.41%           | 0.130%        |
| 18        | 10.594      | 785           | 788         | 790          | rBV      | 1105520        | 1092665       | 51.75%          | 4.744%        |
| 19        | 10.719      | 797           | 799         | 803          | rVB      | 55389          | 55335         | 2.62%           | 0.240%        |
| 20        | 11.165      | 836           | 838         | 844          | rVB2     | 68756          | 88865         | 4.21%           | 0.386%        |
| 21        | 11.279      | 846           | 848         | 852          | rVV2     | 572503         | 915376        | 43.36%          | 3.975%        |
| 22        | 11.359      | 852           | 855         | 856          | rVB      | 75708          | 90566         | 4.29%           | 0.393%        |
| 23        | 11.508      | 866           | 868         | 870          | rBV      | 36073          | 35061         | 1.66%           | 0.152%        |
| 24        | 11.588      | 873           | 875         | 878          | rVB      | 24088          | 30040         | 1.42%           | 0.130%        |
| 25        | 11.805      | 893           | 894         | 897          | rVB      | 20000          | 25833         | 1.22%           | 0.112%        |
| 26        | 11.897      | 900           | 902         | 905          | rBV      | 41196          | 63125         | 2.99%           | 0.274%        |
| 27        | 12.079      | 916           | 918         | 922          | rVB2     | 20235          | 35437         | 1.68%           | 0.154%        |
| 28        | 12.491      | 951           | 954         | 956          | rBV      | 397575         | 382338        | 18.11%          | 1.660%        |
| 29        | 12.708      | 970           | 973         | 976          | rBV2     | 237682         | 371008        | 17.57%          | 1.611%        |
| 30        | 12.765      | 976           | 978         | 981          | rVB3     | 15350          | 24895         | 1.18%           | 0.108%        |
| 31        | 12.868      | 985           | 987         | 989          | rVB      | 1695353        | 1561999       | 73.98%          | 6.782%        |
| 32        | 12.937      | 989           | 993         | 997          | rVB3     | 19160          | 34822         | 1.65%           | 0.151%        |
| 33        | 13.005      | 997           | 999         | 1001         | rBV2     | 30949          | 55743         | 2.64%           | 0.242%        |
| 34        | 13.039      | 1001          | 1002        | 1004         | rVB      | 37031          | 32026         | 1.52%           | 0.139%        |

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Q6-B5-0-11-C

Integration Parameters: rteint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.2  
Stop Thrs : 0  
Filtering: 5  
Min Area: 3 % of largest Peak  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF063016.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |        |        |        |        |
|----|--------|------|------|------|------|--------|--------|--------|--------|
| 35 | 13.108 | 1006 | 1008 | 1010 | rBV  | 38521  | 40998  | 1.94%  | 0.178% |
| 36 | 13.142 | 1010 | 1011 | 1013 | rBV  | 29295  | 30185  | 1.43%  | 0.131% |
| 37 | 13.451 | 1033 | 1038 | 1043 | rBV6 | 13522  | 42450  | 2.01%  | 0.184% |
| 38 | 13.542 | 1044 | 1046 | 1049 | rVB  | 31425  | 39879  | 1.89%  | 0.173% |
| 39 | 13.657 | 1054 | 1056 | 1057 | rBV2 | 31676  | 42283  | 2.00%  | 0.184% |
| 40 | 13.702 | 1057 | 1060 | 1063 | rBV2 | 15489  | 39514  | 1.87%  | 0.172% |
| 41 | 13.748 | 1063 | 1064 | 1065 | rBV  | 28465  | 22672  | 1.07%  | 0.098% |
| 42 | 13.782 | 1065 | 1067 | 1071 | rBV  | 56868  | 71866  | 3.40%  | 0.312% |
| 43 | 13.908 | 1075 | 1078 | 1079 | rBV2 | 755869 | 865831 | 41.01% | 3.759% |
| 44 | 14.011 | 1085 | 1087 | 1089 | rBV  | 33594  | 37346  | 1.77%  | 0.162% |
| 45 | 14.125 | 1095 | 1097 | 1099 | rVB2 | 22281  | 36893  | 1.75%  | 0.160% |
| 46 | 14.285 | 1109 | 1111 | 1113 | rVB  | 21544  | 35999  | 1.71%  | 0.156% |
| 47 | 14.388 | 1118 | 1120 | 1121 | rBV2 | 15745  | 26328  | 1.25%  | 0.114% |
| 48 | 14.434 | 1121 | 1124 | 1126 | rVB4 | 27296  | 64263  | 3.04%  | 0.279% |
| 49 | 14.594 | 1136 | 1138 | 1139 | rBV  | 15646  | 27363  | 1.30%  | 0.119% |
| 50 | 14.754 | 1150 | 1152 | 1156 | rVB3 | 29122  | 46896  | 2.22%  | 0.204% |
| 51 | 14.823 | 1156 | 1158 | 1160 | rVB  | 28857  | 27124  | 1.28%  | 0.118% |
| 52 | 14.903 | 1163 | 1165 | 1170 | rBV  | 161840 | 361794 | 17.14% | 1.571% |
| 53 | 15.005 | 1171 | 1174 | 1176 | rVB  | 64026  | 73770  | 3.49%  | 0.320% |
| 54 | 15.177 | 1187 | 1189 | 1192 | rVB  | 90172  | 130151 | 6.16%  | 0.565% |
| 55 | 15.234 | 1192 | 1194 | 1197 | rBV  | 118039 | 154145 | 7.30%  | 0.669% |
| 56 | 15.303 | 1197 | 1200 | 1202 | rBV  | 398923 | 545716 | 25.85% | 2.370% |
| 57 | 15.440 | 1210 | 1212 | 1215 | rBV4 | 12449  | 24812  | 1.18%  | 0.108% |
| 58 | 15.748 | 1236 | 1239 | 1241 | rBV2 | 47047  | 78626  | 3.72%  | 0.341% |
| 59 | 16.206 | 1277 | 1279 | 1284 | rBV5 | 10276  | 24968  | 1.18%  | 0.108% |
| 60 | 16.468 | 1299 | 1302 | 1307 | rVB4 | 24331  | 56258  | 2.66%  | 0.244% |
| 61 | 16.617 | 1313 | 1315 | 1319 | rVB2 | 52306  | 101693 | 4.82%  | 0.442% |
| 62 | 17.017 | 1347 | 1350 | 1357 | rVB  | 45427  | 94433  | 4.47%  | 0.410% |
| 63 | 17.223 | 1364 | 1368 | 1376 | rVB4 | 19881  | 64479  | 3.05%  | 0.280% |
| 64 | 19.052 | 1523 | 1528 | 1535 | rVB4 | 18031  | 67653  | 3.20%  | 0.294% |

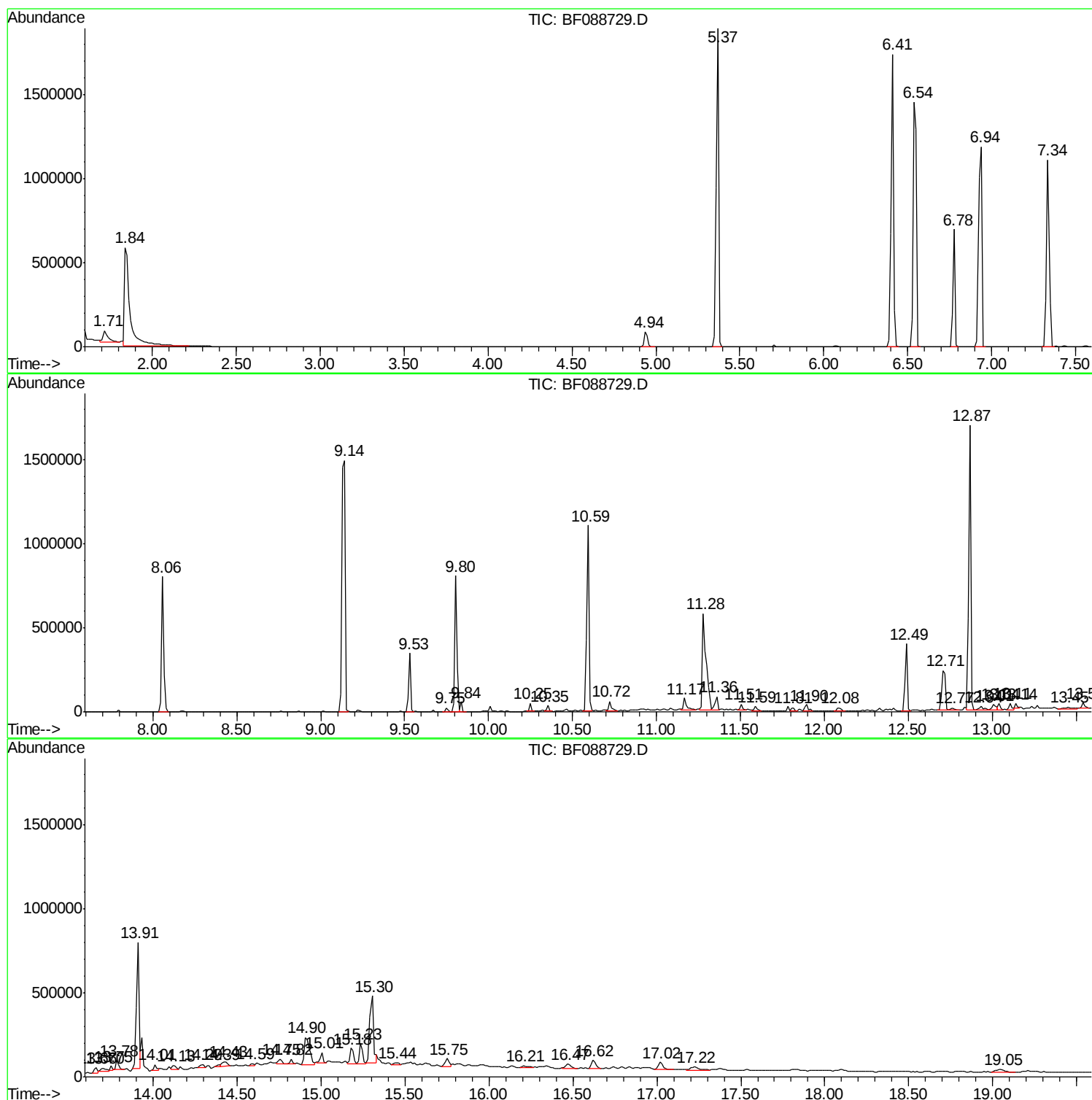
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Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
Q6-B5-0-11-C

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF063016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF070516\  
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Instrument :  
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Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF063016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

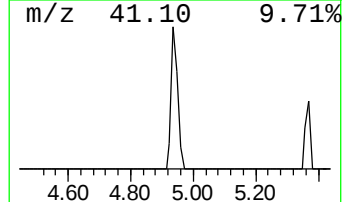
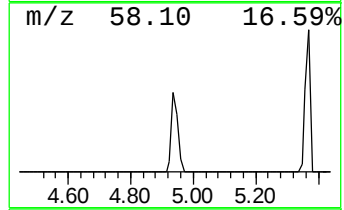
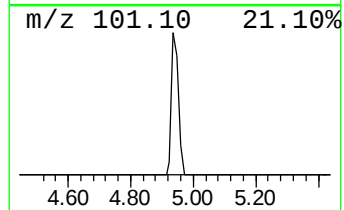
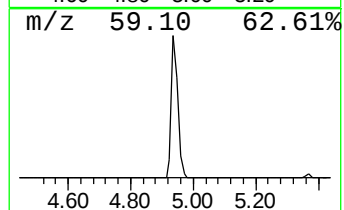
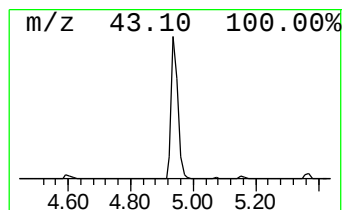
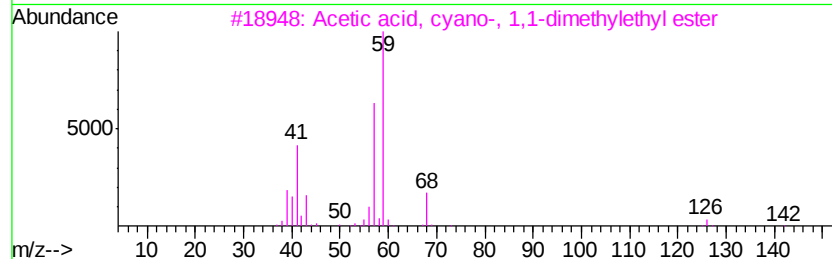
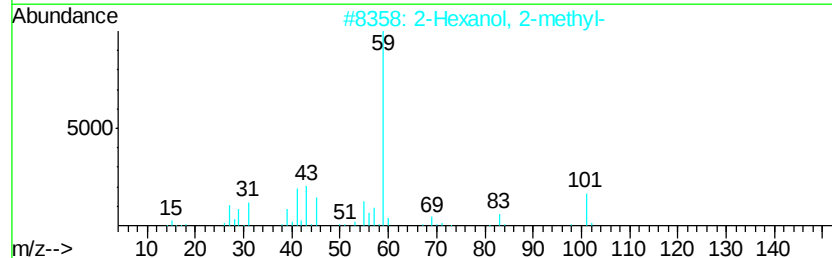
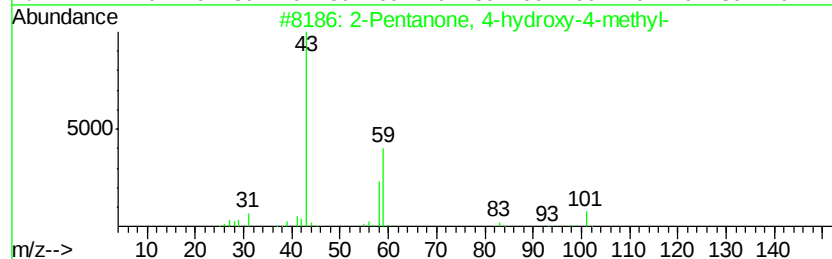
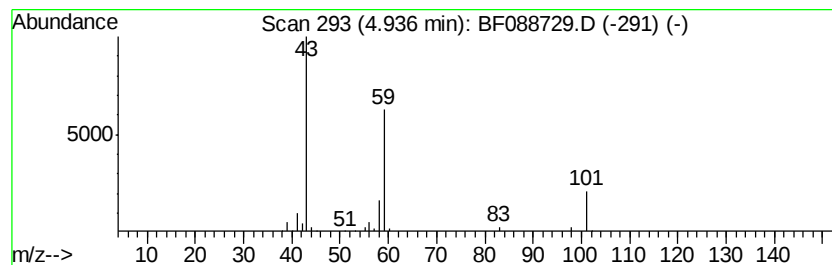
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 3 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 5

| R.T. | EstConc | Area   | Relative to ISTD       | R.T. |
|------|---------|--------|------------------------|------|
| 4.94 | 4.04 ng | 124747 | 1,4-Dichlorobenzene-d4 | 6.78 |

| Hit# | of | Tentative ID                         | MW  | MolForm  | CAS#        | Qual |
|------|----|--------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 2-Pentanone, 4-hydroxy-4-methyl-     | 116 | C6H12O2  | 000123-42-2 | 56   |
| 2    |    | 2-Hexanol, 2-methyl-                 | 116 | C7H16O   | 000625-23-0 | 25   |
| 3    |    | Acetic acid, cyano-, 1,1-dimethyl... | 141 | C7H11NO2 | 001116-98-9 | 17   |
| 4    |    | Acetone                              | 58  | C3H6O    | 000067-64-1 | 10   |
| 5    |    | 5-Hexen-2-one                        | 98  | C6H10O   | 000109-49-9 | 9    |



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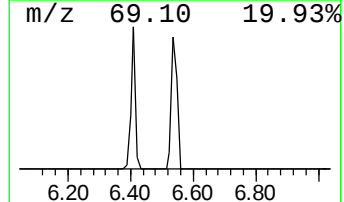
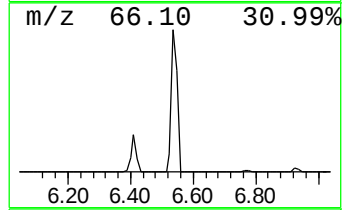
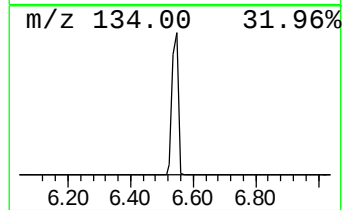
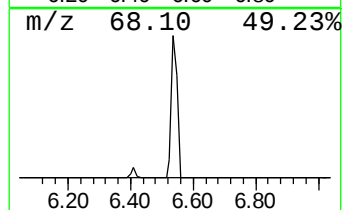
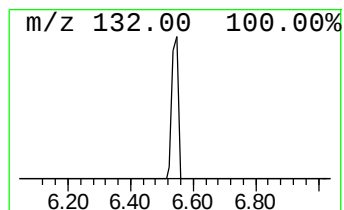
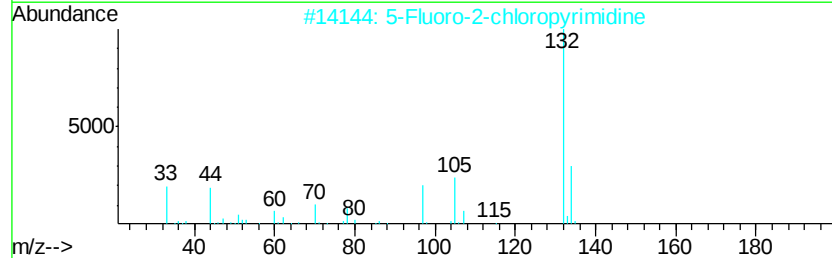
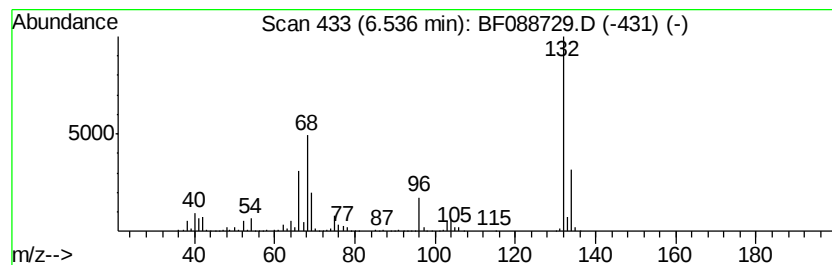
Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF063016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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Peak Number 4 unknown6.54 Concentration Rank 1

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 6.54 | 64.90 ng | 2001790 | 1,4-Dichlorobenzene-d4 | 6.78 |

| Hit# | of | Tentative ID                   | MW  | MolForm   | CAS#         | Qual |
|------|----|--------------------------------|-----|-----------|--------------|------|
| 1    | 5  | 3-Chloro-6-fluoro-pyrazine     | 132 | C4H2ClFN2 | 1000146-10-7 | 27   |
| 2    |    | 5-Fluoro-2-chloropyrimidine    | 132 | C4H2ClFN2 | 062802-42-0  | 12   |
| 3    |    | Tranvlcypropine-propionyl      | 189 | C12H15NO  | 1000123-86-3 | 10   |
| 4    |    | Cyclopropanamine, 1-phenyl-    | 133 | C9H11N    | 1000351-26-2 | 10   |
| 5    |    | 4-Methylpyrrolo[1,2-a]pyrazine | 132 | C8H8N2    | 064608-60-2  | 9    |



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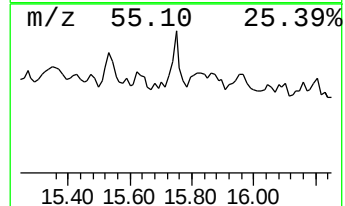
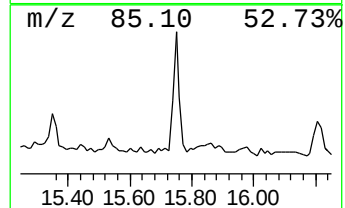
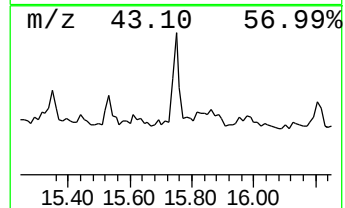
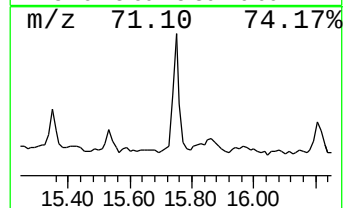
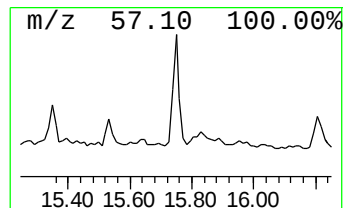
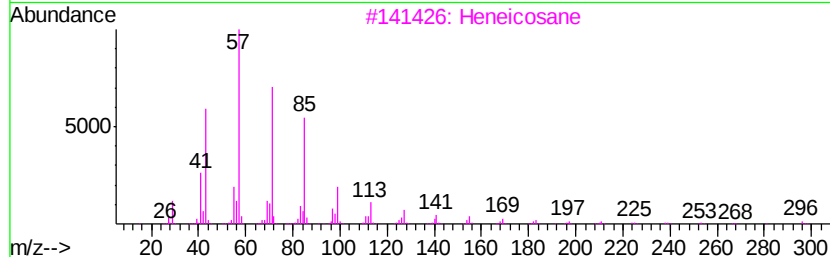
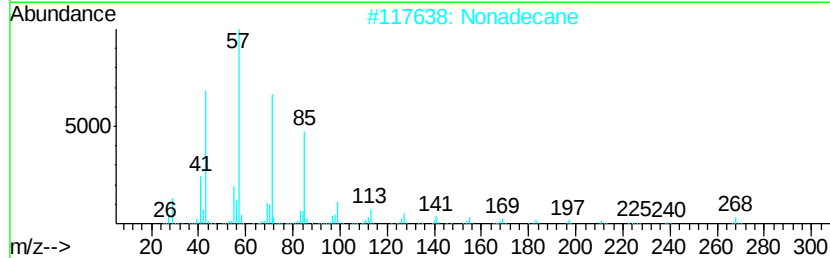
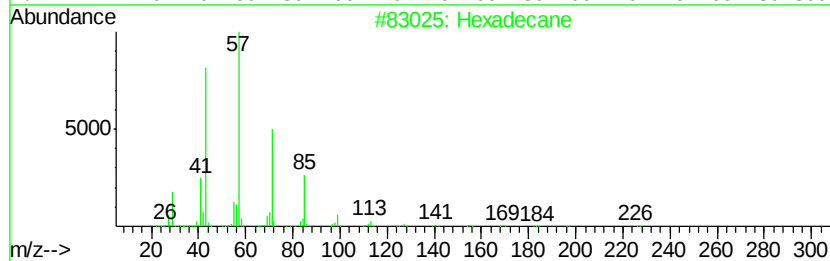
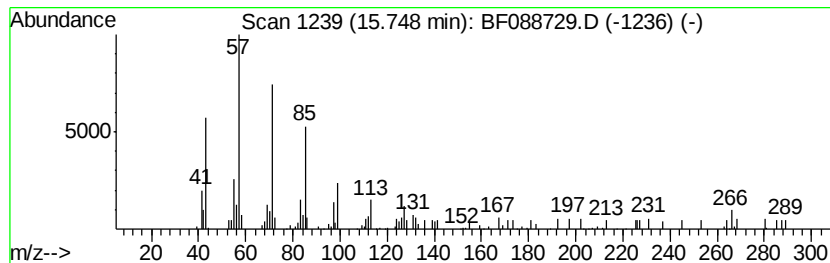
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 8 Hexadecane Concentration Rank 7

| R.T.      | EstConc                    | Area  | Relative to ISTD | R.T.         |      |
|-----------|----------------------------|-------|------------------|--------------|------|
| 15.75     | 2.88 ng                    | 78626 | Perylene-d12     | 15.30        |      |
| Hit# of 5 | Tentative ID               | MW    | MolForm          | CAS#         | Qual |
| 1         | Hexadecane                 | 226   | C16H34           | 000544-76-3  | 89   |
| 2         | Nonadecane                 | 268   | C19H40           | 000629-92-5  | 89   |
| 3         | Heneicosane                | 296   | C21H44           | 000629-94-7  | 76   |
| 4         | Pentacosane                | 352   | C25H52           | 000629-99-2  | 64   |
| 5         | 5-Ethyl-5-methylnonadecane | 310   | C22H46           | 1000360-42-7 | 64   |



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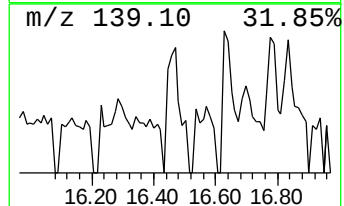
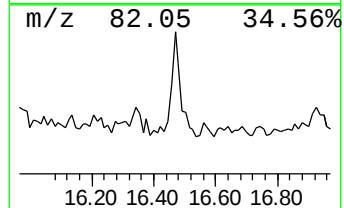
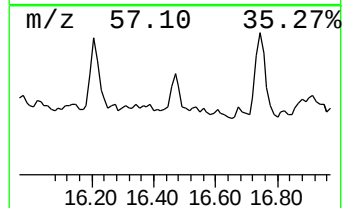
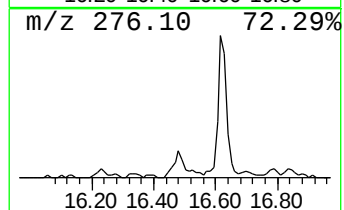
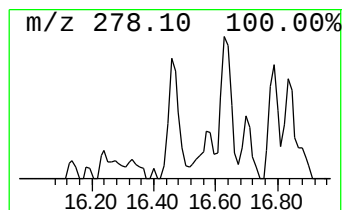
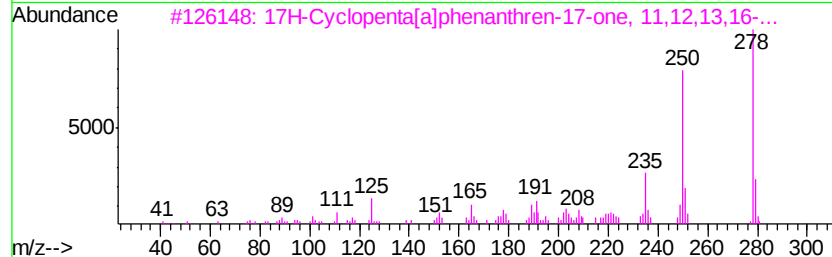
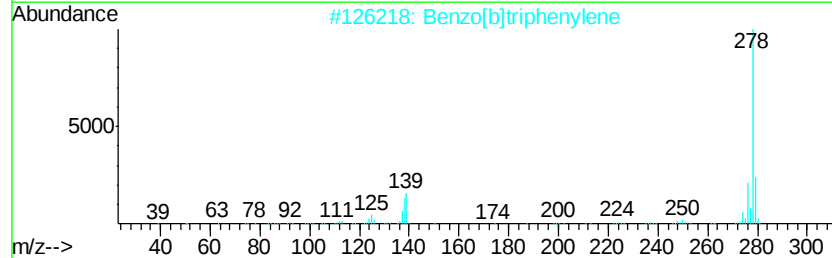
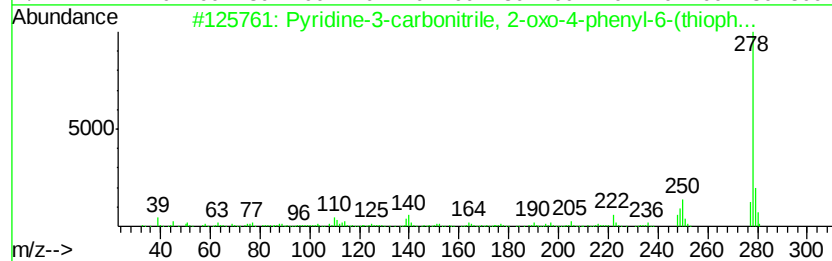
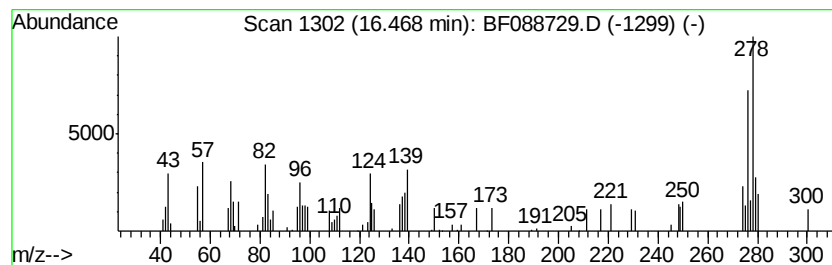
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 unknown16.47 Concentration Rank 11

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 16.47 | 2.06 ng | 56258 | Perylene-d12     | 15.30 |

| Hit# | of | Tentative ID                                 | MW  | MolForm    | CAS#         | Qual |
|------|----|----------------------------------------------|-----|------------|--------------|------|
| 1    | 5  | Pyridine-3-carbonitrile, 2-oxo-4...          | 278 | C16H10N2OS | 1000304-72-3 | 46   |
| 2    |    | Benzo[b]triphenylene                         | 278 | C22H14     | 000215-58-7  | 43   |
| 3    |    | 17H-Cyclopenta[ <i>a</i> ]phenanthren-17-... | 278 | C19H18O2   | 056614-59-6  | 43   |
| 4    |    | Benz[ <i>a</i> ]anthracene-7,12-dicarboni... | 278 | C20H10N2   | 035215-32-8  | 43   |
| 5    |    | Picene                                       | 278 | C22H14     | 000213-46-7  | 43   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF070516\  
Data File : BF088729.D  
Acq On : 6 Jul 2016 4:01  
Operator : UM/SJ  
Sample : H3881-16  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
Q6-B5-0-11-C

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF063016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

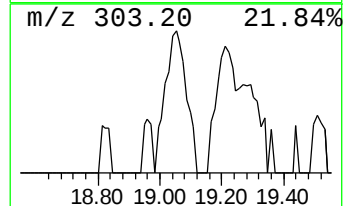
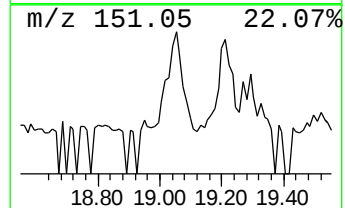
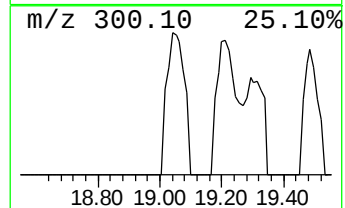
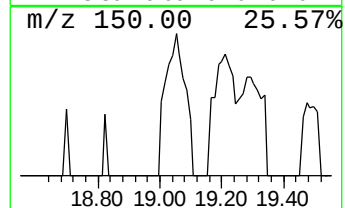
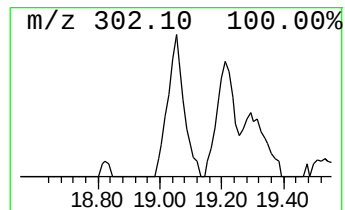
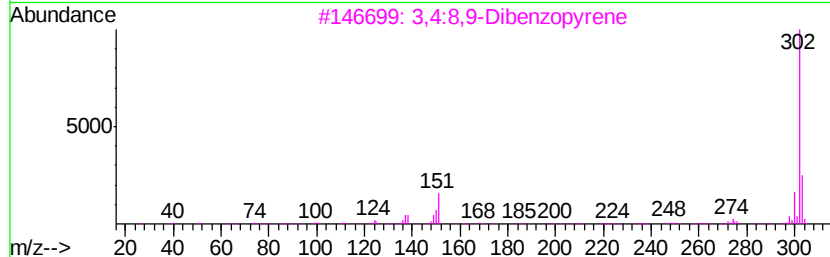
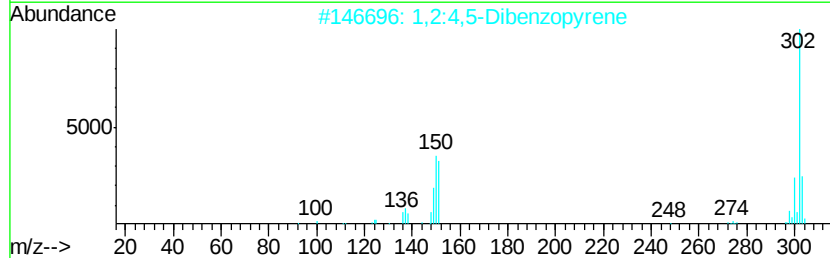
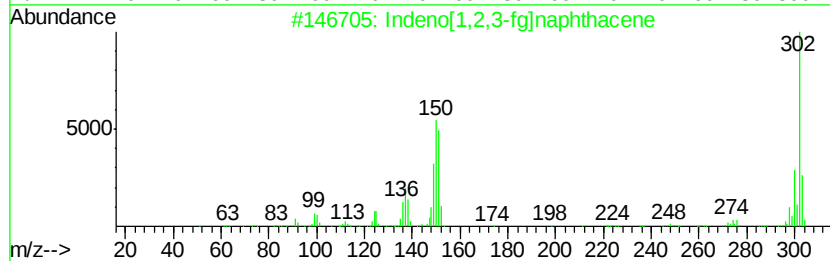
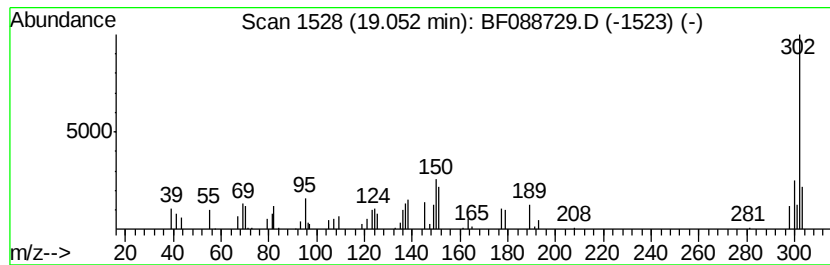
TIC Library : C:\Database\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 11 Indeno[1,2,3-fg]naphthacene Concentration Rank 9

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 19.05 | 2.48 ng | 67653 | Perylene-d12     | 15.30 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#         | Qual |
|------|----|-------------------------------------|-----|----------|--------------|------|
| 1    | 5  | Indeno[1,2,3-fg]naphthacene         | 302 | C24H14   | 000203-11-2  | 70   |
| 2    |    | 1,2:4,5-Dibenzopyrene               | 302 | C24H14   | 000192-65-4  | 70   |
| 3    |    | 3,4:8,9-Dibenzopyrene               | 302 | C24H14   | 000189-64-0  | 50   |
| 4    |    | 1,2,9,10-Dibenzopyrene              | 302 | C24H14   | 000191-30-0  | 47   |
| 5    |    | Benzo[a]anthracene, 5,6-dihydro-... | 302 | C18H10F4 | 1000116-65-8 | 46   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF070516\  
Data File : BF088729.D  
Acq On : 6 Jul 2016 4:01  
Operator : UM/SJ  
Sample : H3881-16  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
Q6-B5-0-11-C

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF063016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

| TIC Top Hit name     | RT    | EstConc | Units | Response | ---Internal Standard--- |       |        |      |
|----------------------|-------|---------|-------|----------|-------------------------|-------|--------|------|
|                      |       |         |       |          | #                       | RT    | Resp   | Conc |
| 2-Pentanone, 4-hy... | 4.94  | 4.0     | ng    | 124747   | 1                       | 6.78  | 616923 | 20.0 |
| unknown6.54          | 6.54  | 64.9    | ng    | 2001790  | 1                       | 6.78  | 616923 | 20.0 |
| Hexadecane           | 15.75 | 2.9     | ng    | 78626    | 6                       | 15.30 | 545716 | 20.0 |
| unknown16.47         | 16.47 | 2.1     | ng    | 56258    | 6                       | 15.30 | 545716 | 20.0 |
| Indeno[1,2,3-fg]n... | 19.05 | 2.5     | ng    | 67653    | 6                       | 15.30 | 545716 | 20.0 |