

Data Path : Z:\HPCHEM1\BNA F\DATA\BF093016\  
 Data File : BF090314.D  
 Acq On : 30 Sep 2016 15:19  
 Operator : UM/SJ  
 Sample : H4998-13  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SUP-B046-6-9

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-BF092016.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BF090316.D

| 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         | 1.633       | 3             | 4           | 53           | rVB      | 3244025        | 9012752       | 100.00%         | 14.067%       |
| 2         | 4.524       | 254           | 257         | 265          | rBV      | 362474         | 672105        | 7.46%           | 1.049%        |
| 3         | 5.004       | 296           | 299         | 302          | rBV      | 2032960        | 3121309       | 34.63%          | 4.872%        |
| 4         | 6.113       | 393           | 396         | 398          | rBV      | 2704131        | 3305610       | 36.68%          | 5.159%        |
| 5         | 6.216       | 402           | 405         | 407          | rVV      | 2933219        | 3051386       | 33.86%          | 4.763%        |
| 6         | 6.444       | 423           | 425         | 428          | rBV      | 685947         | 676275        | 7.50%           | 1.056%        |
| 7         | 6.605       | 436           | 439         | 441          | rBV      | 2534468        | 2333971       | 25.90%          | 3.643%        |
| 8         | 7.027       | 473           | 476         | 478          | rBV      | 1881063        | 2286809       | 25.37%          | 3.569%        |
| 9         | 7.176       | 485           | 489         | 495          | rVB      | 96196          | 163079        | 1.81%           | 0.255%        |
| 10        | 7.736       | 535           | 538         | 541          | rBV      | 1041450        | 964936        | 10.71%          | 1.506%        |
| 11        | 8.822       | 630           | 633         | 635          | rBV      | 3357304        | 3471155       | 38.51%          | 5.418%        |
| 12        | 8.959       | 644           | 645         | 652          | rVB      | 82017          | 126762        | 1.41%           | 0.198%        |
| 13        | 9.222       | 665           | 668         | 671          | rBV      | 1619741        | 1623532       | 18.01%          | 2.534%        |
| 14        | 9.485       | 688           | 691         | 693          | rVB      | 936835         | 1147379       | 12.73%          | 1.791%        |
| 15        | 10.262      | 756           | 759         | 762          | rBV2     | 1710041        | 2319071       | 25.73%          | 3.620%        |
| 16        | 10.411      | 770           | 772         | 778          | rVB      | 117828         | 142735        | 1.58%           | 0.223%        |
| 17        | 10.639      | 785           | 792         | 796          | rBV4     | 52170          | 137953        | 1.53%           | 0.215%        |
| 18        | 10.948      | 816           | 819         | 821          | rBV      | 1267414        | 1120234       | 12.43%          | 1.748%        |
| 19        | 11.211      | 839           | 842         | 846          | rBV2     | 65316          | 93549         | 1.04%           | 0.146%        |
| 20        | 11.519      | 866           | 869         | 871          | rBV      | 142373         | 158409        | 1.76%           | 0.247%        |
| 21        | 12.011      | 910           | 912         | 914          | rVV      | 180058         | 157408        | 1.75%           | 0.246%        |
| 22        | 12.068      | 916           | 917         | 919          | rVB      | 578584         | 515642        | 5.72%           | 0.805%        |
| 23        | 12.445      | 947           | 950         | 952          | rBV      | 92104          | 121814        | 1.35%           | 0.190%        |
| 24        | 12.537      | 955           | 958         | 960          | rBV      | 2209698        | 2541647       | 28.20%          | 3.967%        |
| 25        | 12.765      | 976           | 978         | 979          | rBV      | 131842         | 138507        | 1.54%           | 0.216%        |
| 26        | 12.799      | 979           | 981         | 988          | rVB2     | 796677         | 1170156       | 12.98%          | 1.826%        |
| 27        | 13.108      | 1004          | 1008        | 1009         | rBV3     | 112578         | 186822        | 2.07%           | 0.292%        |
| 28        | 13.131      | 1009          | 1010        | 1012         | rVV2     | 107745         | 111555        | 1.24%           | 0.174%        |
| 29        | 13.245      | 1019          | 1020        | 1022         | rVB      | 126798         | 96268         | 1.07%           | 0.150%        |
| 30        | 13.302      | 1022          | 1025        | 1026         | rBV      | 134091         | 165868        | 1.84%           | 0.259%        |
| 31        | 13.337      | 1026          | 1028        | 1031         | rVB      | 94212          | 133879        | 1.49%           | 0.209%        |
| 32        | 13.451      | 1035          | 1038        | 1042         | rBV2     | 1668890        | 2362200       | 26.21%          | 3.687%        |
| 33        | 13.554      | 1045          | 1047        | 1050         | rBV      | 733709         | 893988        | 9.92%           | 1.395%        |
| 34        | 13.771      | 1063          | 1066        | 1069         | rBV      | 169763         | 221545        | 2.46%           | 0.346%        |

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Instrument :  
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 ClientSampleId :  
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Integration Parameters: rteint.p  
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 Smoothing : ON  
 Sampling : 1  
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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-BF092016.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |        |        |
|----|--------|------|------|------|------|---------|---------|--------|--------|
| 35 | 13.885 | 1073 | 1076 | 1079 | rVV2 | 122596  | 171061  | 1.90%  | 0.267% |
| 36 | 14.011 | 1084 | 1087 | 1090 | rBV  | 232207  | 217929  | 2.42%  | 0.340% |
| 37 | 14.080 | 1090 | 1093 | 1096 | rVV  | 2120805 | 2420784 | 26.86% | 3.778% |
| 38 | 14.377 | 1116 | 1119 | 1122 | rBV2 | 145520  | 242682  | 2.69%  | 0.379% |
| 39 | 14.491 | 1127 | 1129 | 1132 | rVB  | 250516  | 228287  | 2.53%  | 0.356% |
| 40 | 14.662 | 1140 | 1144 | 1147 | rBV  | 1177813 | 2071043 | 22.98% | 3.232% |
| 41 | 14.708 | 1147 | 1148 | 1153 | rVV2 | 96945   | 162600  | 1.80%  | 0.254% |
| 42 | 14.880 | 1160 | 1163 | 1167 | rVV2 | 596815  | 812614  | 9.02%  | 1.268% |
| 43 | 14.948 | 1167 | 1169 | 1170 | rVV  | 100127  | 137006  | 1.52%  | 0.214% |
| 44 | 14.971 | 1170 | 1171 | 1178 | rVV3 | 81113   | 164738  | 1.83%  | 0.257% |
| 45 | 15.097 | 1180 | 1182 | 1185 | rBV  | 131844  | 190909  | 2.12%  | 0.298% |
| 46 | 15.188 | 1188 | 1190 | 1195 | rVB2 | 91860   | 143534  | 1.59%  | 0.224% |
| 47 | 15.291 | 1196 | 1199 | 1200 | rBV  | 366043  | 572540  | 6.35%  | 0.894% |
| 48 | 15.325 | 1200 | 1202 | 1205 | rVV  | 863818  | 1336074 | 14.82% | 2.085% |
| 49 | 15.371 | 1205 | 1206 | 1211 | rVV2 | 103699  | 207930  | 2.31%  | 0.325% |
| 50 | 15.485 | 1211 | 1216 | 1219 | rVB2 | 111203  | 266302  | 2.95%  | 0.416% |
| 51 | 15.634 | 1226 | 1229 | 1231 | rBV2 | 45470   | 112399  | 1.25%  | 0.175% |
| 52 | 15.885 | 1248 | 1251 | 1254 | rBV  | 80029   | 162932  | 1.81%  | 0.254% |
| 53 | 16.114 | 1268 | 1271 | 1274 | rVV  | 83851   | 239395  | 2.66%  | 0.374% |
| 54 | 16.183 | 1274 | 1277 | 1281 | rVV  | 212452  | 488408  | 5.42%  | 0.762% |
| 55 | 16.263 | 1281 | 1284 | 1293 | rVB4 | 165875  | 428695  | 4.76%  | 0.669% |
| 56 | 16.457 | 1297 | 1301 | 1303 | rBV  | 156599  | 392133  | 4.35%  | 0.612% |
| 57 | 16.514 | 1303 | 1306 | 1312 | rVV2 | 629217  | 1699946 | 18.86% | 2.653% |
| 58 | 16.617 | 1312 | 1315 | 1318 | rVV2 | 101552  | 237631  | 2.64%  | 0.371% |
| 59 | 16.697 | 1318 | 1322 | 1326 | rVV  | 312075  | 751851  | 8.34%  | 1.173% |
| 60 | 16.754 | 1326 | 1327 | 1329 | rVV2 | 69701   | 129034  | 1.43%  | 0.201% |
| 61 | 16.880 | 1333 | 1338 | 1342 | rVB  | 1403434 | 3028649 | 33.60% | 4.727% |
| 62 | 17.051 | 1349 | 1353 | 1358 | rBV  | 454871  | 1118271 | 12.41% | 1.745% |
| 63 | 17.143 | 1358 | 1361 | 1365 | rVB  | 168155  | 352581  | 3.91%  | 0.550% |
| 64 | 17.223 | 1365 | 1368 | 1374 | rVB2 | 87415   | 251170  | 2.79%  | 0.392% |
| 65 | 17.451 | 1385 | 1388 | 1398 | rVB2 | 40942   | 146002  | 1.62%  | 0.228% |
| 66 | 17.874 | 1419 | 1425 | 1431 | rBV7 | 47527   | 197509  | 2.19%  | 0.308% |
| 67 | 18.000 | 1431 | 1436 | 1443 | rVB3 | 78369   | 241908  | 2.68%  | 0.378% |

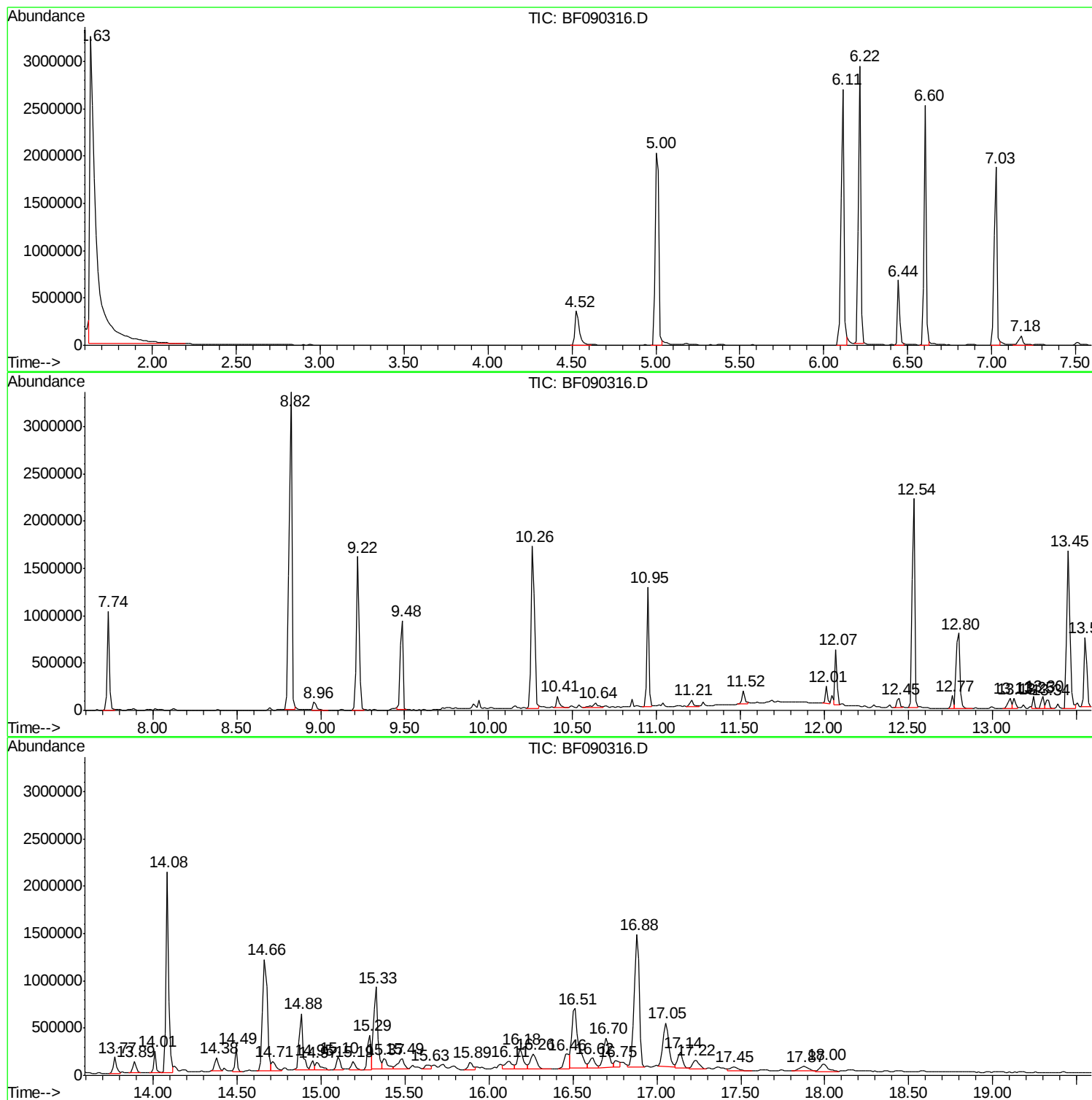
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Sample : H4998-13  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampled :  
SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF092016.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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Data File : BF090314.D  
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Instrument :  
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SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

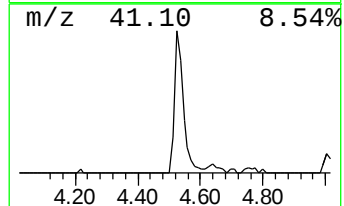
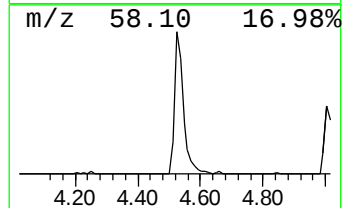
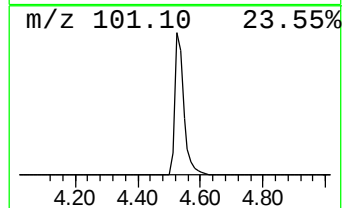
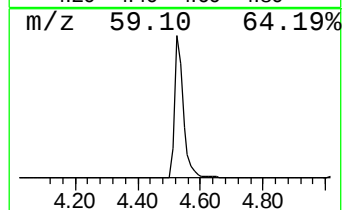
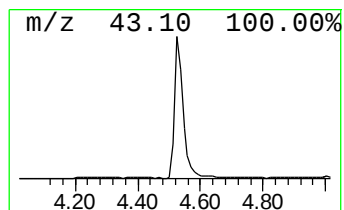
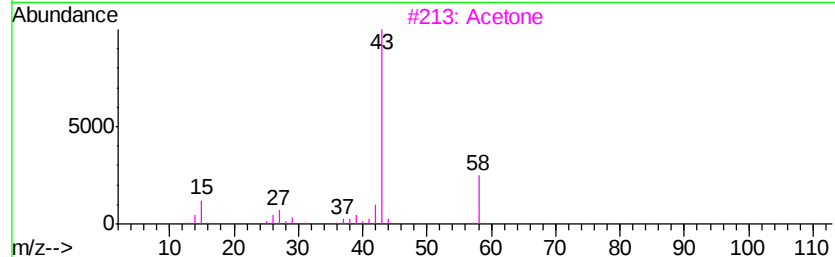
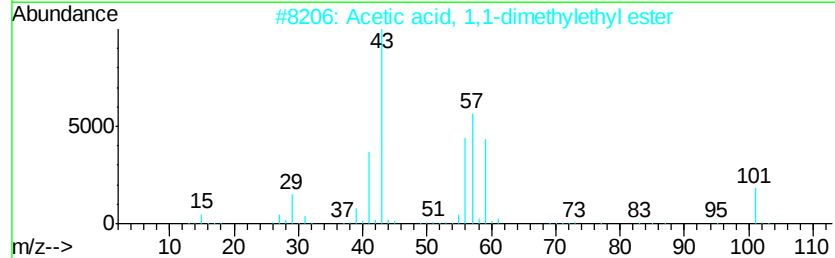
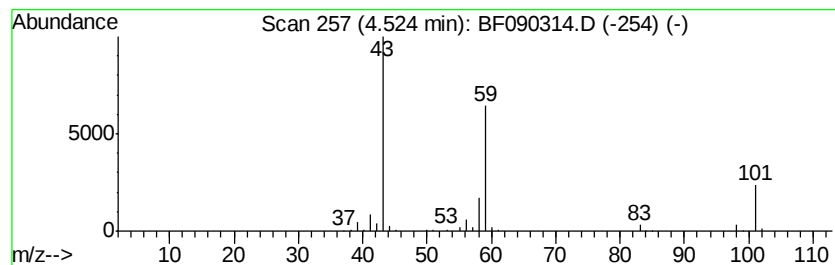
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 12

| R.T. | EstConc  | Area   | Relative to ISTD       | R.T. |
|------|----------|--------|------------------------|------|
| 4.52 | 19.88 ng | 672105 | 1,4-Dichlorobenzene-d4 | 6.44 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 2-Pentanone, 4-hydroxy-4-methyl-    | 116 | C6H12O2 | 000123-42-2 | 72   |
| 2    |    | Acetic acid, 1,1-dimethylethyl e... | 116 | C6H12O2 | 000540-88-5 | 39   |
| 3    |    | Acetone                             | 58  | C3H6O   | 000067-64-1 | 9    |
| 4    |    | Morpholine, 4-methyl-               | 101 | C5H11NO | 000109-02-4 | 9    |
| 5    |    | Butane, 1-ethoxy-                   | 102 | C6H14O  | 000628-81-9 | 9    |



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ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

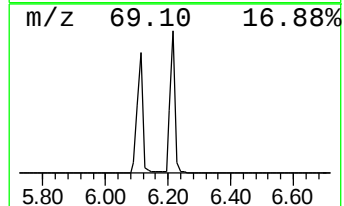
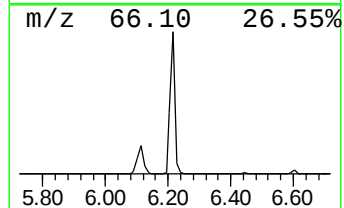
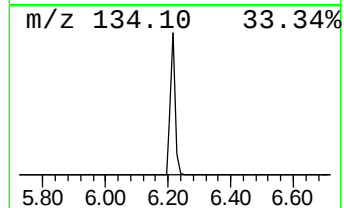
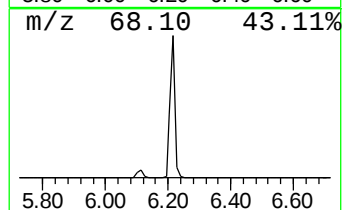
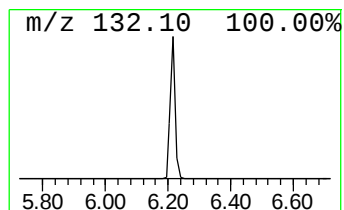
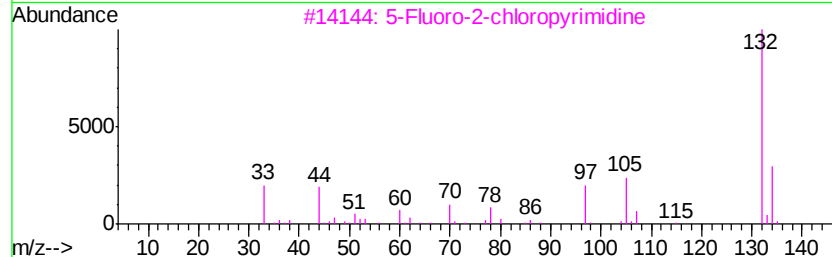
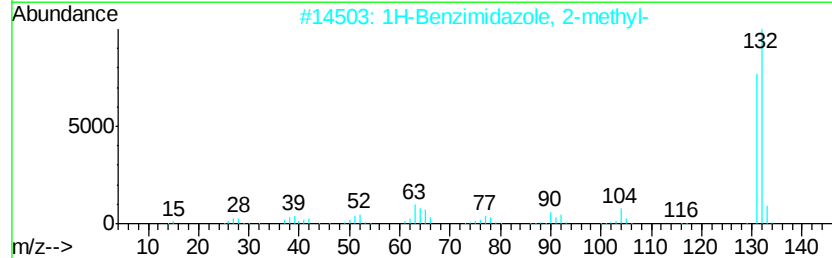
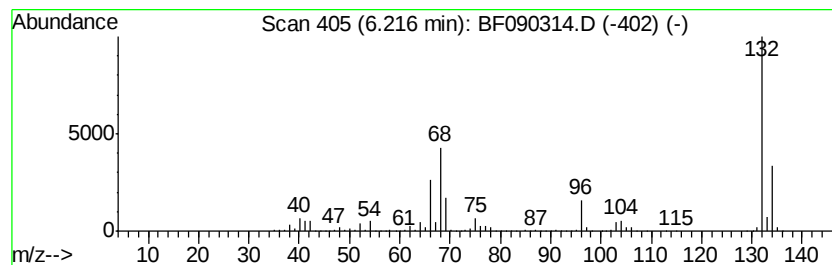
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 3 unknown6.22 Concentration Rank 2

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 6.22 | 90.24 ng | 3051390 | 1,4-Dichlorobenzene-d4 | 6.44 |

| Hit# | of                               | 5 | Tentative ID | MW  | MolForm   | CAS#         | Qual |
|------|----------------------------------|---|--------------|-----|-----------|--------------|------|
| 1    | 3-Chloro-6-fluoro-pyrazine       |   |              | 132 | C4H2ClFN2 | 1000146-10-7 | 27   |
| 2    | 1H-Benzimidazole, 2-methyl-      |   |              | 132 | C8H8N2    | 000615-15-6  | 10   |
| 3    | 5-Fluoro-2-chloropyrimidine      |   |              | 132 | C4H2ClFN2 | 062802-42-0  | 9    |
| 4    | 4-Methylpyrrolo[1,2-a]pyrazine   |   |              | 132 | C8H8N2    | 064608-60-2  | 9    |
| 5    | (5-Methyl-2-pyridyl)acetonitrile |   |              | 132 | C8H8N2    | 1000241-93-9 | 9    |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF090316\  
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Sample : H4998-13  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
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ClientSampleId :  
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Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

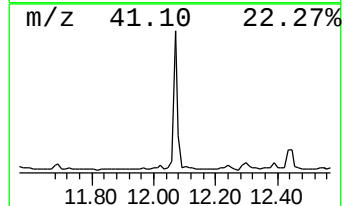
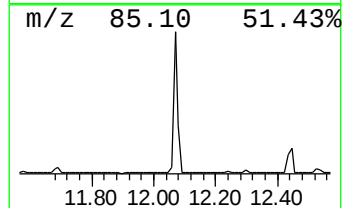
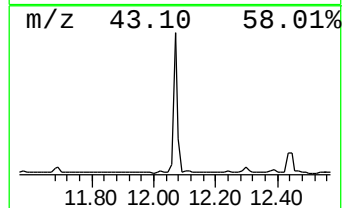
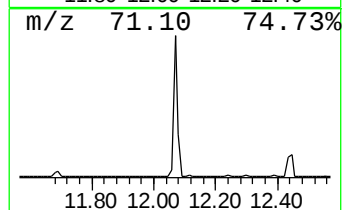
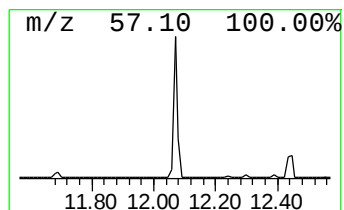
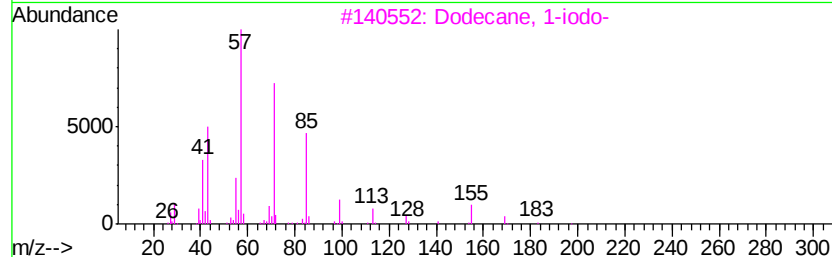
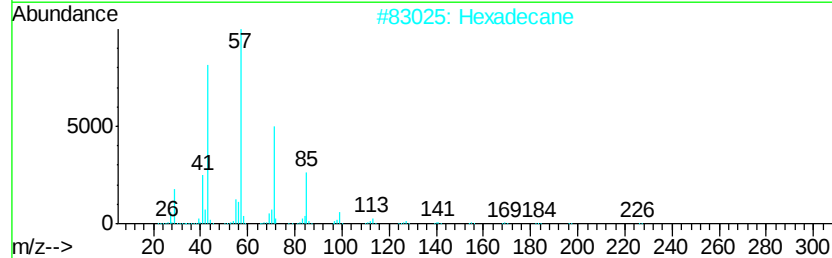
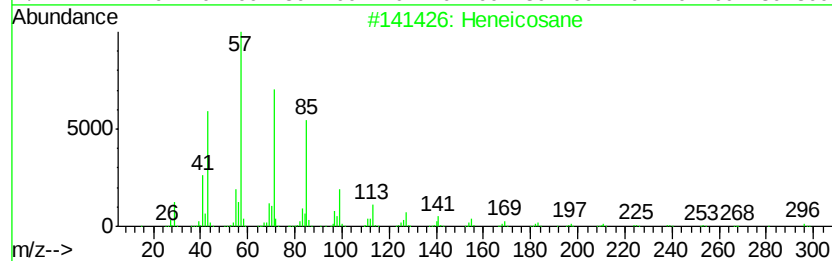
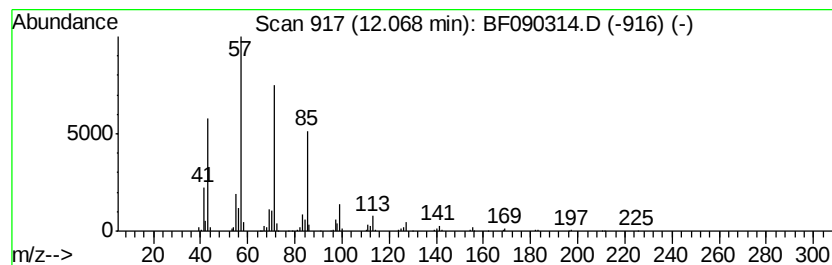
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 5 Heneicosane Concentration Rank 18

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 12.07 | 9.21 ng | 515642 | Phenanthrene-d10 | 10.95 |

| Hit# of | 5                                   | Tentative ID | MW  | MolForm   | CAS#         | Qual |
|---------|-------------------------------------|--------------|-----|-----------|--------------|------|
| 1       | Heneicosane                         |              | 296 | C21H44    | 000629-94-7  | 91   |
| 2       | Hexadecane                          |              | 226 | C16H34    | 000544-76-3  | 90   |
| 3       | Dodecane, 1-iodo-                   |              | 296 | C12H25I   | 004292-19-7  | 87   |
| 4       | Sulfurous acid, 2-ethylhexyl iso... |              | 278 | C14H30O3S | 1000309-19-0 | 80   |
| 5       | Heptacosane                         |              | 380 | C27H56    | 000593-49-7  | 80   |



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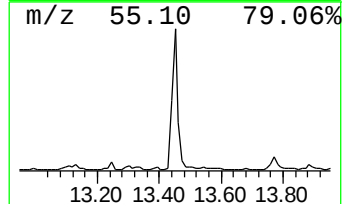
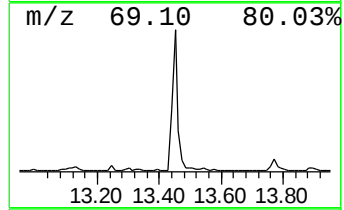
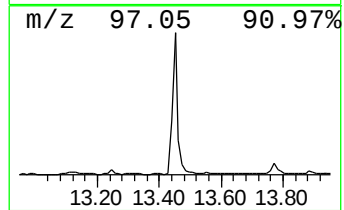
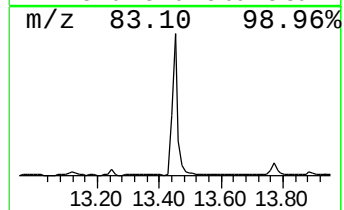
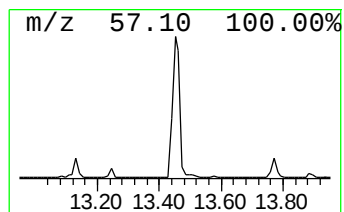
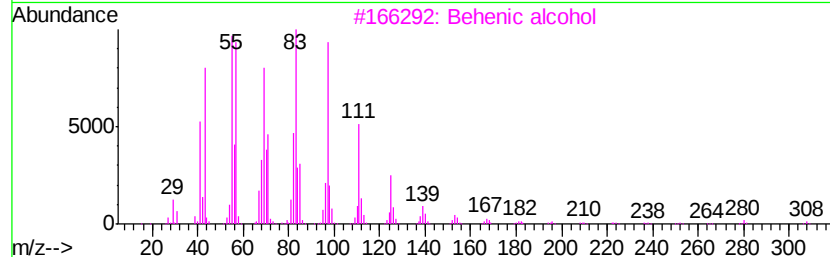
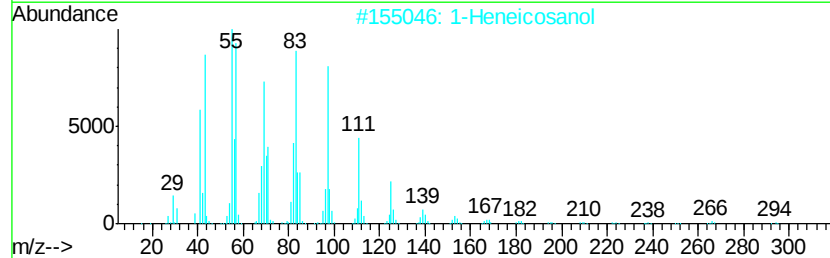
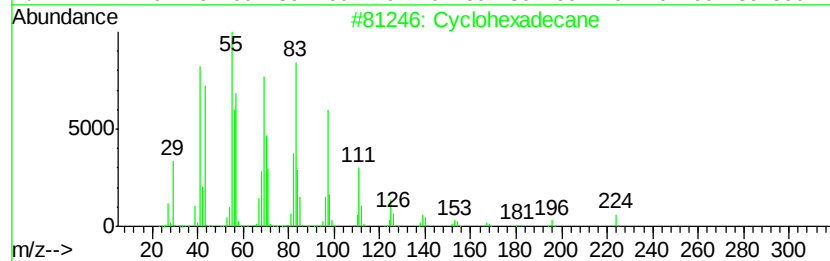
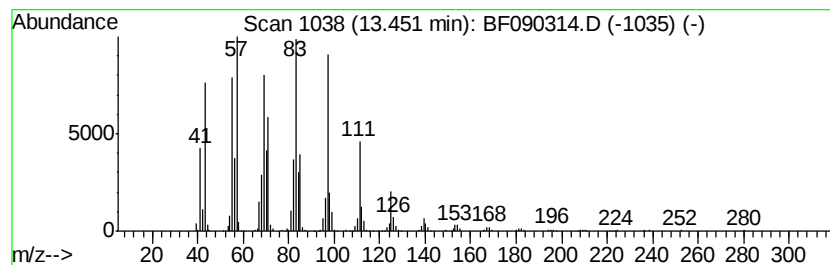
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 7 Cyclohexadecane Concentration Rank 6

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 13.45 | 52.85 ng | 2362200 | Chrysene-d12     | 13.55 |

| Hit# of | 5 | Tentative ID                | MW  | MolForm    | CAS#        | Qual |
|---------|---|-----------------------------|-----|------------|-------------|------|
| 1       |   | Cyclohexadecane             | 224 | C16H32     | 000295-65-8 | 94   |
| 2       |   | 1-Heneicosanol              | 312 | C21H44O    | 015594-90-8 | 93   |
| 3       |   | Behenic alcohol             | 326 | C22H46O    | 000661-19-8 | 93   |
| 4       |   | n-Nonadecanol-1             | 284 | C19H40O    | 001454-84-8 | 93   |
| 5       |   | Trifluoroacetoxy hexadecane | 338 | C18H33F3O2 | 006222-03-3 | 91   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF093016\  
Data File : BF090314.D  
Acq On : 30 Sep 2016 15:19  
Operator : UM/SJ  
Sample : H4998-13  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

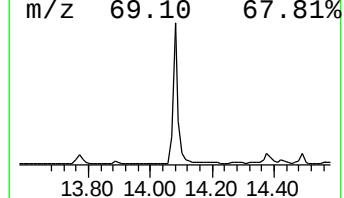
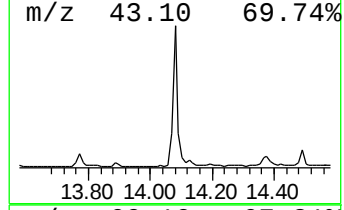
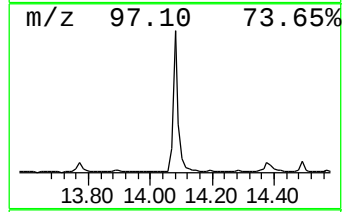
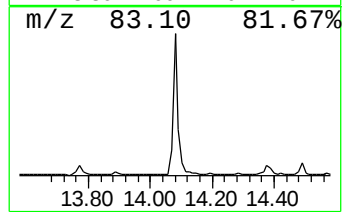
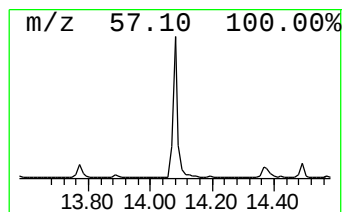
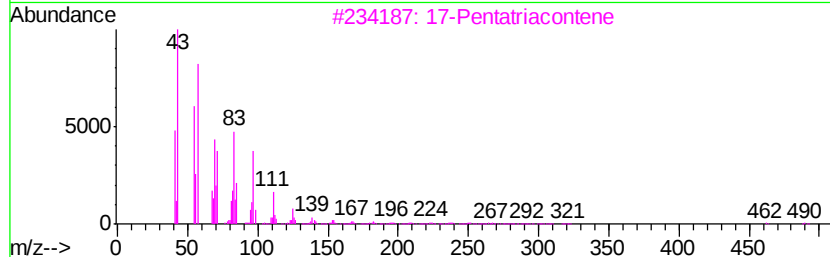
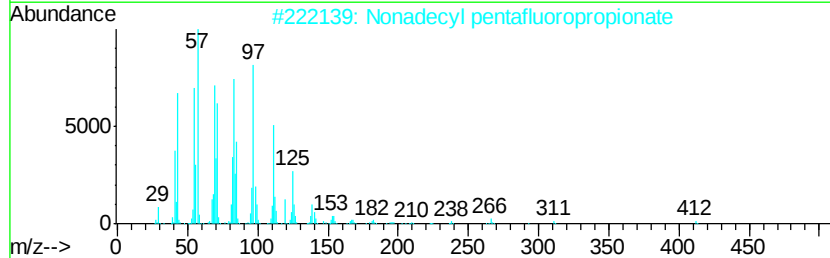
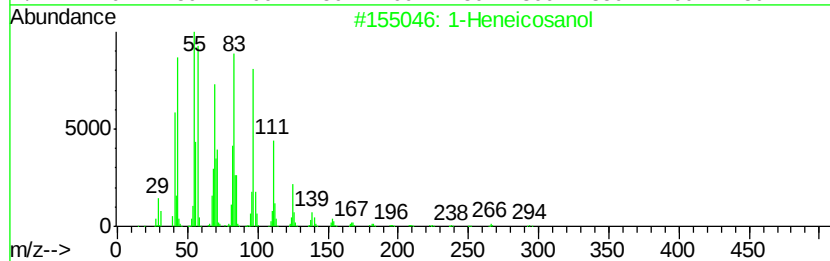
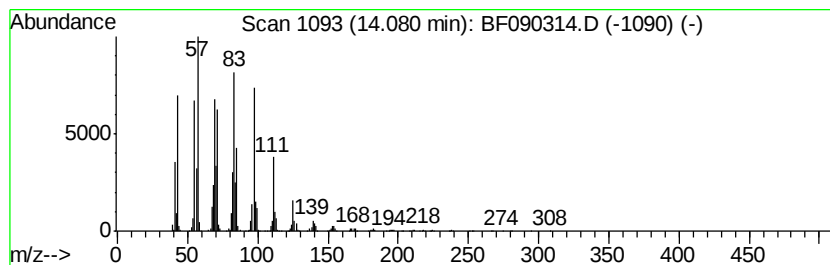
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 8 1-Heneicosanol Concentration Rank 5

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 14.08 | 54.16 ng | 2420780 | Chrysene-d12     | 13.55 |

| Hit# of | 5 | Tentative ID                    | MW  | MolForm    | CAS#         | Qual |
|---------|---|---------------------------------|-----|------------|--------------|------|
| 1       |   | 1-Heneicosanol                  | 312 | C21H44O    | 015594-90-8  | 93   |
| 2       |   | Nonadecyl pentafluoropropionate | 430 | C22H39F5O2 | 1000351-88-8 | 91   |
| 3       |   | 17-Pentatriacontene             | 491 | C35H70     | 006971-40-0  | 91   |
| 4       |   | Behenic alcohol                 | 326 | C22H46O    | 000661-19-8  | 90   |
| 5       |   | Ethanol, 2-(tetradecyloxy)-     | 258 | C16H34O2   | 002136-70-1  | 87   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF090316\  
Data File : BF090314.D  
Acq On : 30 Sep 2016 15:19  
Operator : UM/SJ  
Sample : H4998-13  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

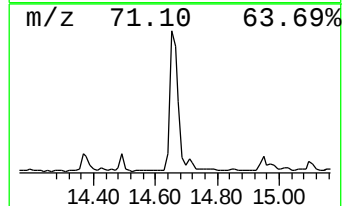
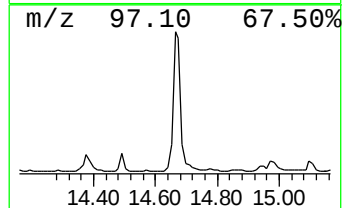
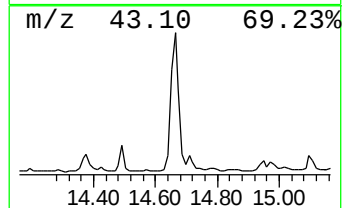
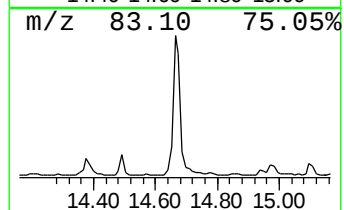
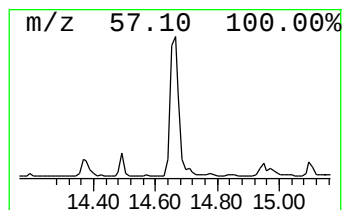
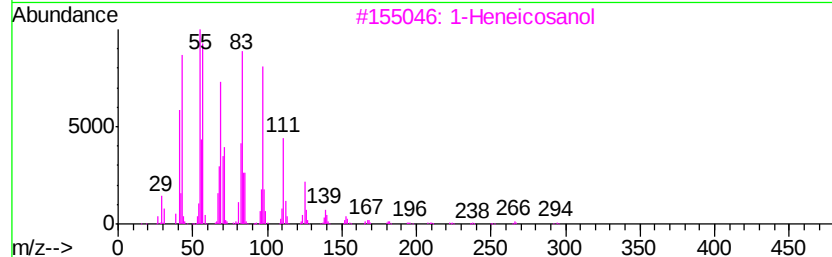
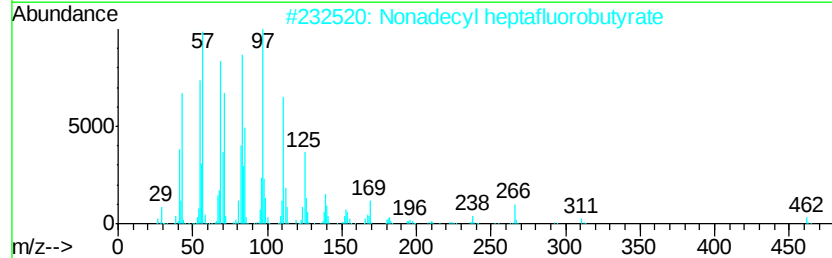
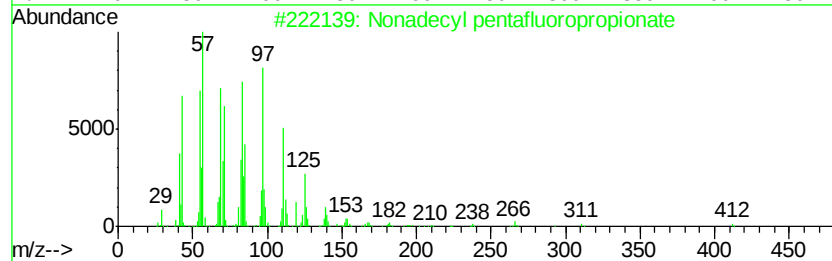
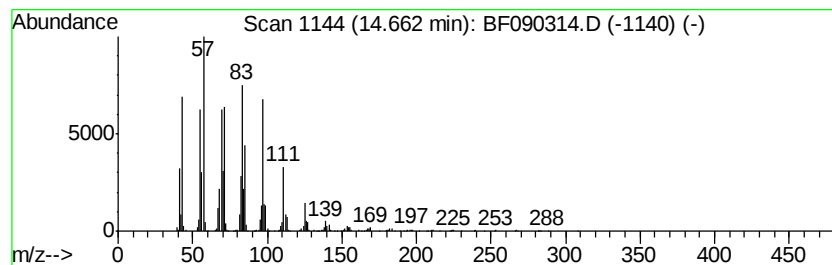
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 Nonadecyl pentafluoropropio... Concentration Rank 7

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 14.66 | 50.97 ng | 2071040 | Perylene-d12     | 14.88 |

| Hit# of | 5 | Tentative ID                    | MW  | MolForm    | CAS#         | Qual |
|---------|---|---------------------------------|-----|------------|--------------|------|
| 1       |   | Nonadecyl pentafluoropropionate | 430 | C22H39F5O2 | 1000351-88-8 | 91   |
| 2       |   | Nonadecyl heptafluorobutyrate   | 480 | C23H39F7O2 | 1000351-83-9 | 91   |
| 3       |   | 1-Heneicosanol                  | 312 | C21H44O    | 015594-90-8  | 89   |
| 4       |   | Behenic alcohol                 | 326 | C22H46O    | 000661-19-8  | 89   |
| 5       |   | 17-Pentatriacontene             | 491 | C35H70     | 006971-40-0  | 87   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF093016\  
Data File : BF090314.D  
Acq On : 30 Sep 2016 15:19  
Operator : UM/SJ  
Sample : H4998-13  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

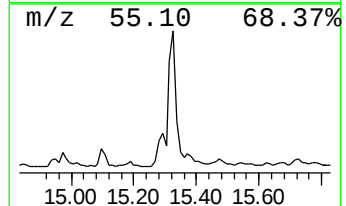
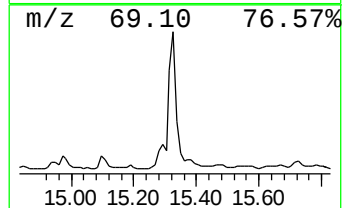
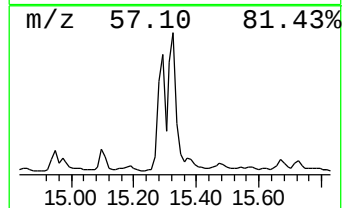
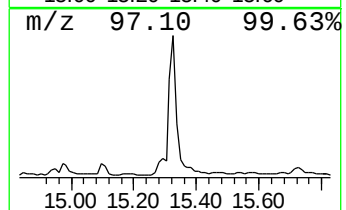
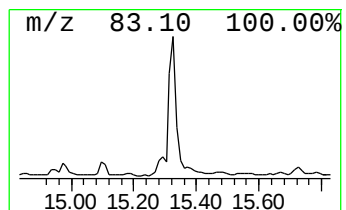
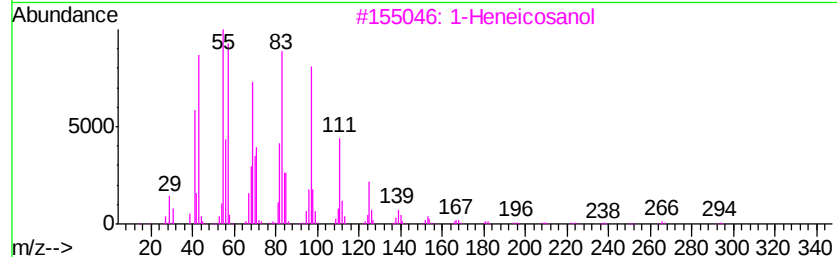
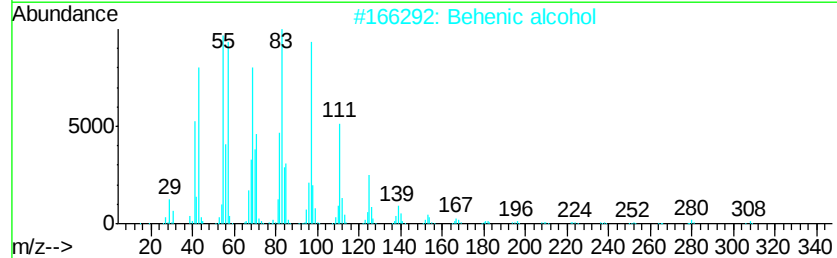
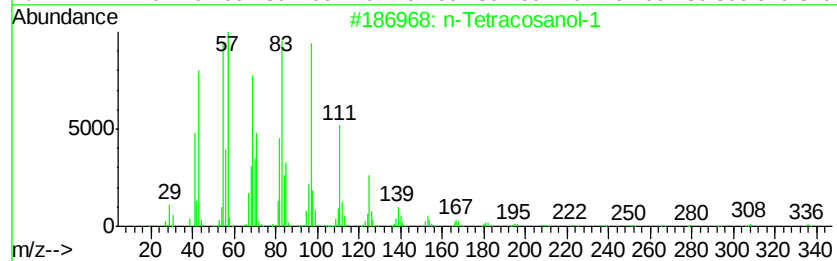
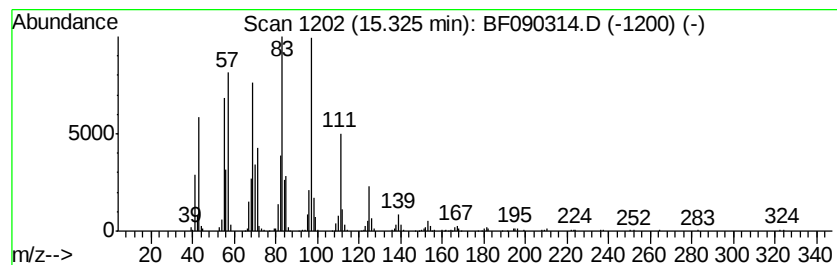
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 11 n-Tetracosanol-1 Concentration Rank 9

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 15.33 | 32.88 ng | 1336070 | Perylene-d12     | 14.88 |

| Hit# | of | Tentative ID      | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------|-----|---------|-------------|------|
| 1    | 5  | n-Tetracosanol-1  | 354 | C24H50O | 000506-51-4 | 95   |
| 2    |    | Behenic alcohol   | 326 | C22H46O | 000661-19-8 | 93   |
| 3    |    | 1-Heneicosanol    | 312 | C21H44O | 015594-90-8 | 91   |
| 4    |    | 9-Tricosene, (Z)- | 322 | C23H46  | 027519-02-4 | 91   |
| 5    |    | Cyclopentadecane  | 210 | C15H30  | 000295-48-7 | 90   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF093016\  
Data File : BF090314.D  
Acq On : 30 Sep 2016 15:19  
Operator : UM/SJ  
Sample : H4998-13  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

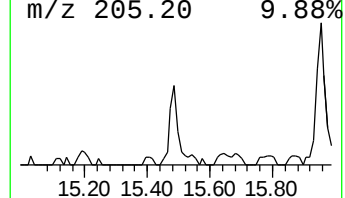
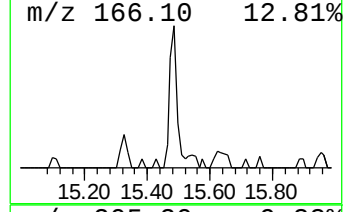
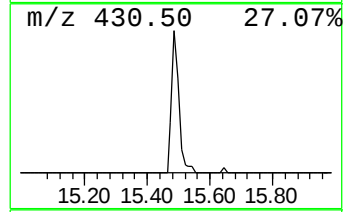
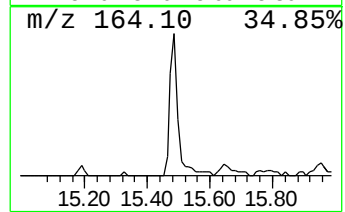
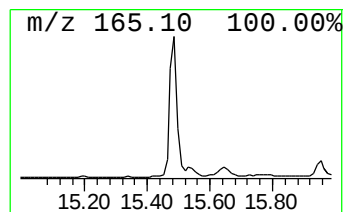
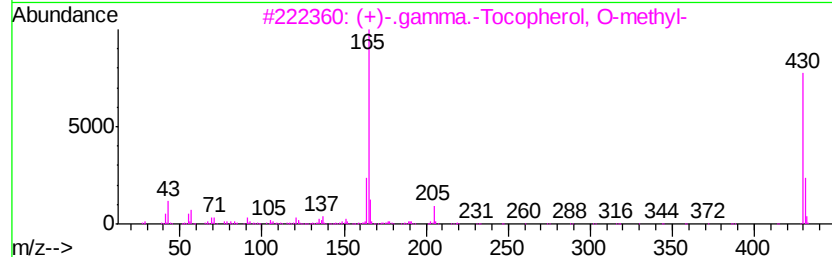
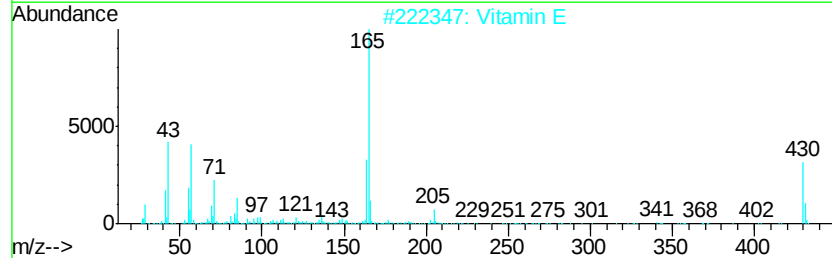
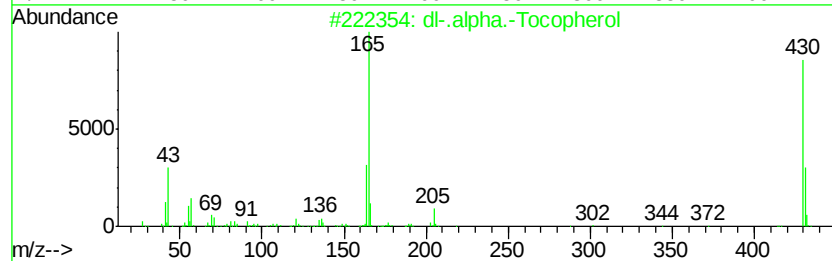
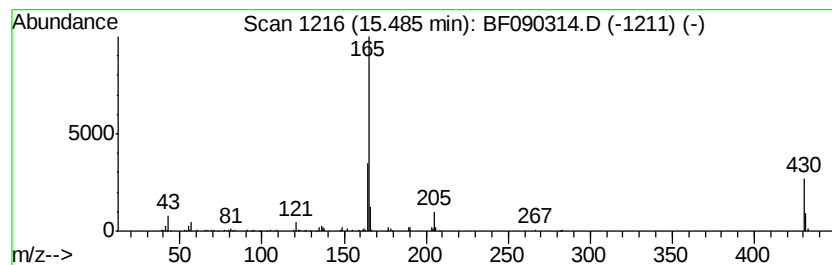
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 12 dl-.alpha.-Tocopherol Concentration Rank 20

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 15.49 | 6.55 ng | 266302 | Perylene-d12     | 14.88 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|------------|--------------|------|
| 1    |    |   | dl-.alpha.-Tocopherol               | 430 | C29H50O2   | 010191-41-0  | 97   |
| 2    |    |   | Vitamin E                           | 430 | C29H50O2   | 000059-02-9  | 94   |
| 3    |    |   | (+)-.gamma.-Tocopherol, O-methyl-   | 430 | C29H50O2   | 1000374-72-2 | 94   |
| 4    |    |   | .alpha.-Tocopherol-.beta.-D-mann... | 592 | C35H60O7   | 1000156-68-2 | 90   |
| 5    |    |   | Piperazine, 1-(3,4-dimethoxybenz... | 430 | C26H26N2O4 | 333756-87-9  | 59   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF093016\  
Data File : BF090314.D  
Acq On : 30 Sep 2016 15:19  
Operator : UM/SJ  
Sample : H4998-13  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

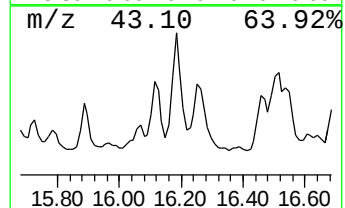
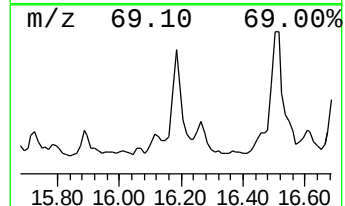
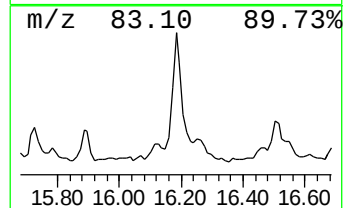
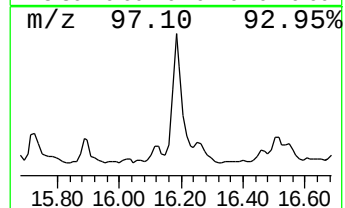
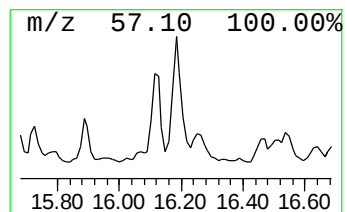
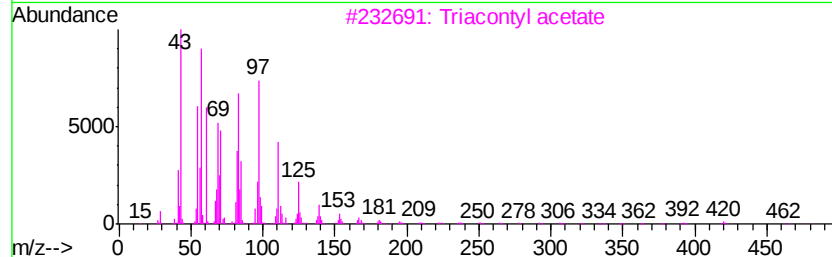
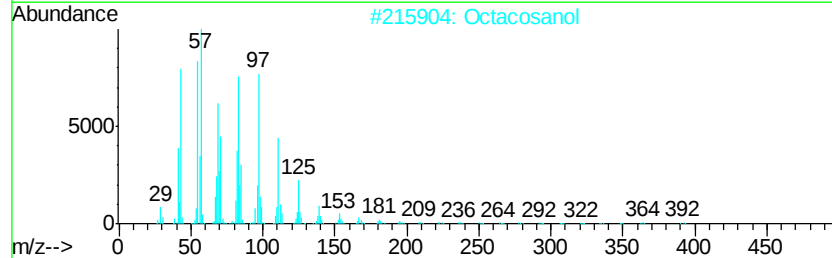
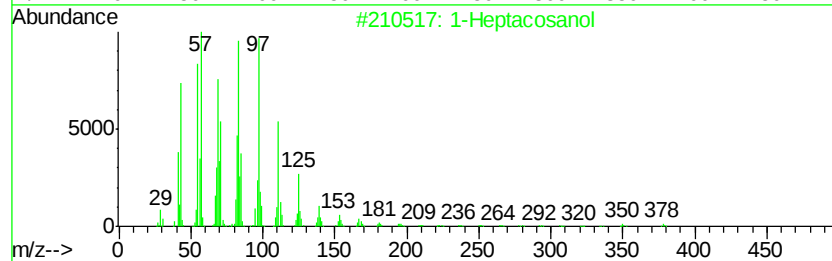
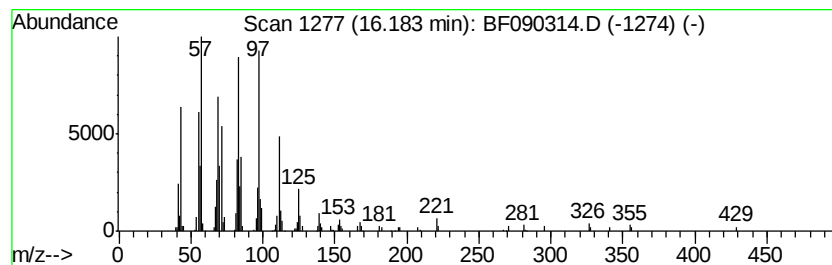
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 13 1-Heptacosanol Concentration Rank 15

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 16.18 | 12.02 ng | 488408 | Perylene-d12     | 14.88 |

| Hit# | of | Tentative ID        | MW  | MolForm  | CAS#         | Qual |
|------|----|---------------------|-----|----------|--------------|------|
| 1    | 5  | 1-Heptacosanol      | 396 | C27H56O  | 002004-39-9  | 95   |
| 2    |    | Octacosanol         | 410 | C28H58O  | 000557-61-9  | 94   |
| 3    |    | Triaccontyl acetate | 480 | C32H64O2 | 041755-58-2  | 94   |
| 4    |    | 1-Triacontanol      | 438 | C30H62O  | 000593-50-0  | 94   |
| 5    |    | Heptacosyl acetate  | 438 | C29H58O2 | 1000351-78-2 | 94   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF093016\  
Data File : BF090314.D  
Acq On : 30 Sep 2016 15:19  
Operator : UM/SJ  
Sample : H4998-13  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

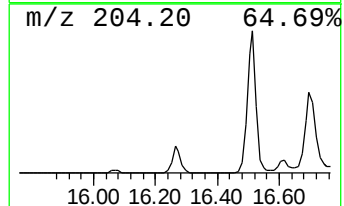
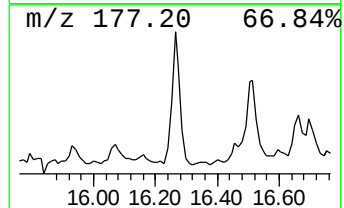
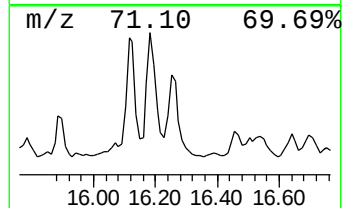
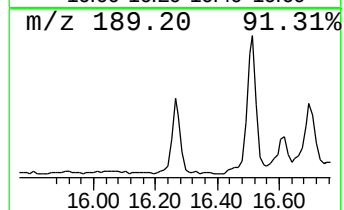
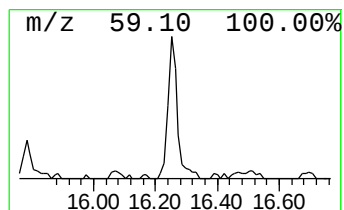
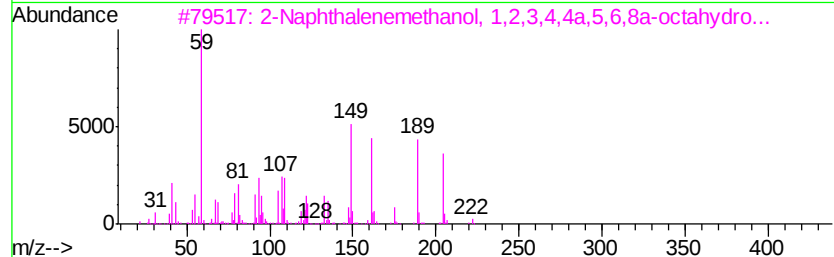
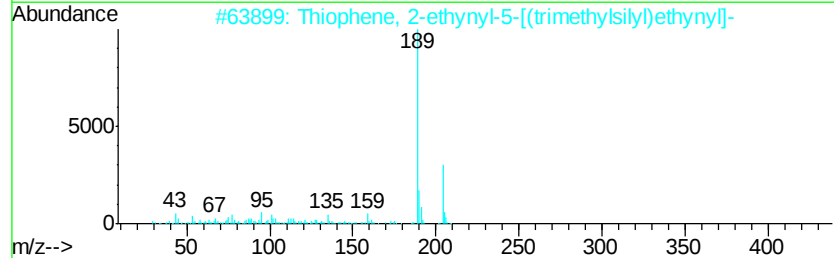
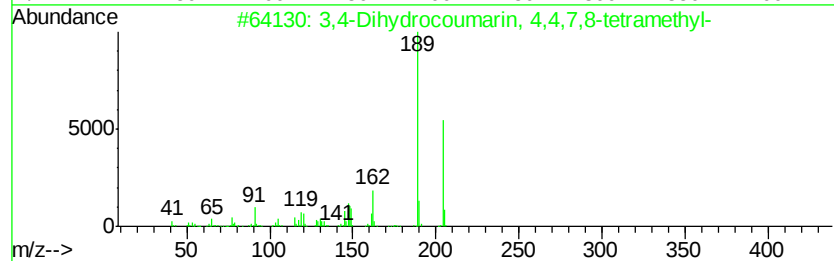
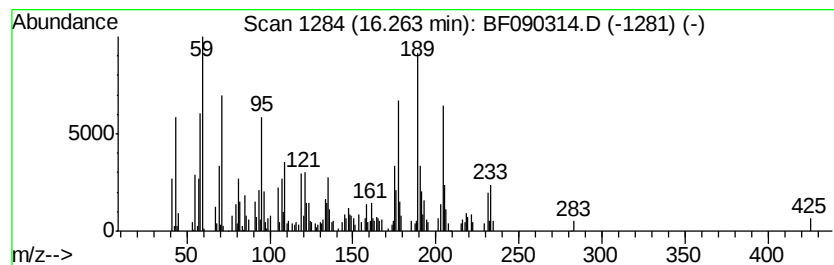
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 14 unknown16.26 Concentration Rank 16

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 16.26 | 10.55 ng | 428695 | Perylene-d12     | 14.88 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#        | Qual |
|------|----|-------------------------------------|-----|-----------|-------------|------|
| 1    | 5  | 3,4-Dihydrocoumarin, 4,4,7,8-tet... | 204 | C13H16O2  | 040614-36-6 | 38   |
| 2    |    | Thiophene, 2-ethynyl-5-[(trimeth... | 204 | C11H12SSi | 182323-29-1 | 38   |
| 3    |    | 2-Naphthalenemethanol, 1,2,3,4,4... | 222 | C15H26O   | 000473-16-5 | 30   |
| 4    |    | 1H-Cyclopropafalnaphthalene, 1a,... | 204 | C15H24    | 000489-29-2 | 30   |
| 5    |    | Naphthalene, decahydro-4a-methyl... | 204 | C15H24    | 000515-17-3 | 25   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF093016\  
Data File : BF090314.D  
Acq On : 30 Sep 2016 15:19  
Operator : UM/SJ  
Sample : H4998-13  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

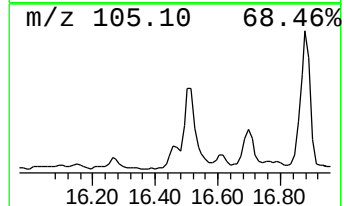
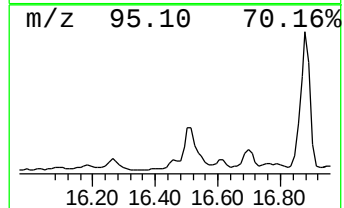
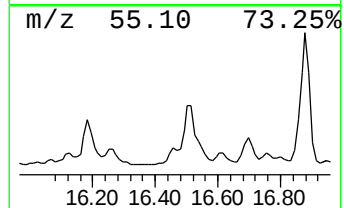
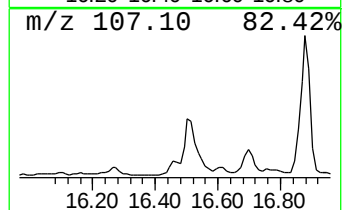
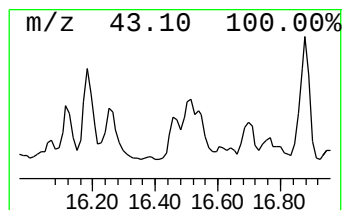
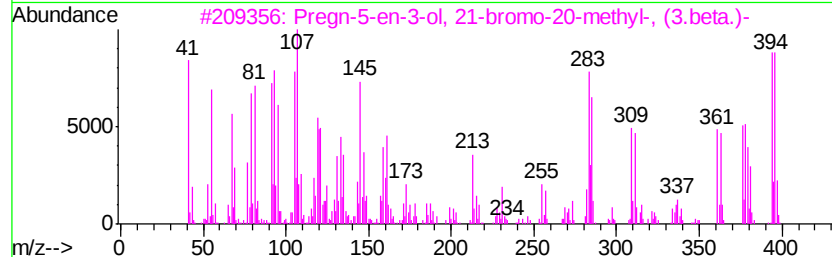
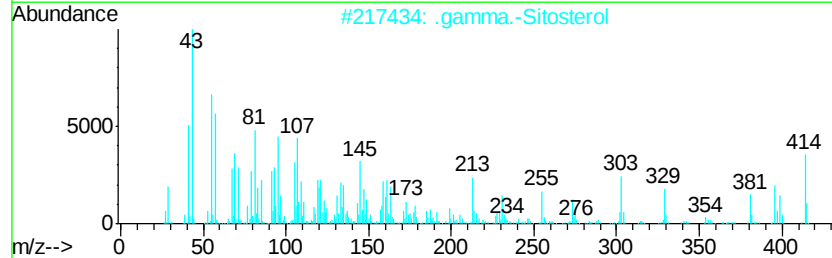
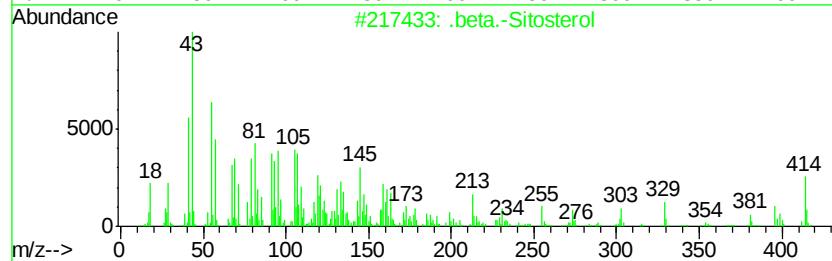
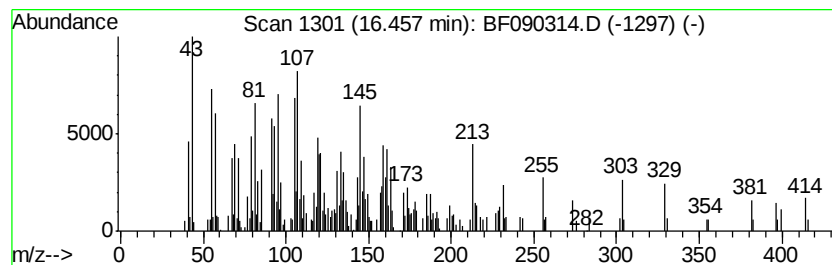
Instrument :  
BNA\_F  
ClientSampleId :  
SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 15 .beta.-Sitosterol Concentration Rank 17

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.         |      |
|-----------|-------------------------------------|--------|------------------|--------------|------|
| 16.46     | 9.65 ng                             | 392133 | Perylene-d12     | 14.88        |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#         | Qual |
| 1         | .beta.-Sitosterol                   | 414    | C29H50O          | 000083-46-5  | 99   |
| 2         | .gamma.-Sitosterol                  | 414    | C29H50O          | 000083-47-6  | 90   |
| 3         | Pregn-5-en-3-ol, 21-bromo-20-met... | 394    | C22H35BrO        | 055103-80-5  | 58   |
| 4         | 1,4-Methanocycloocta[d]pyridazin... | 204    | C13H20N2         | 1000221-85-9 | 38   |
| 5         | Silane, chlorodiisopropylethyl-     | 178    | C8H19ClSi        | 1000305-87-7 | 25   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF093016\  
Data File : BF090314.D  
Acq On : 30 Sep 2016 15:19  
Operator : UM/SJ  
Sample : H4998-13  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

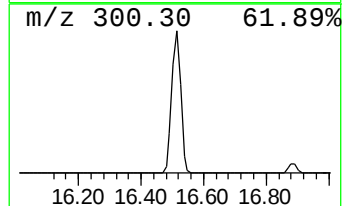
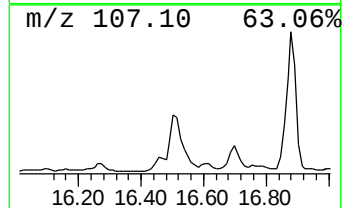
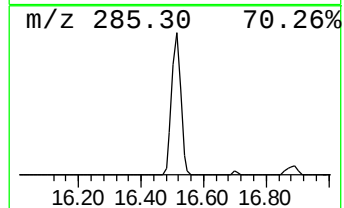
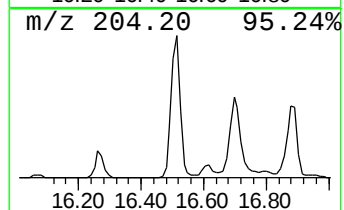
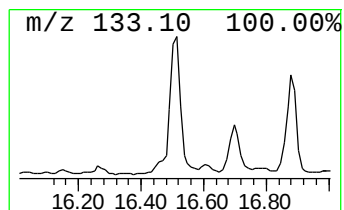
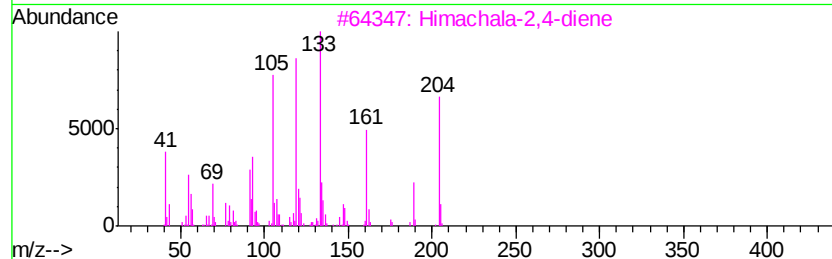
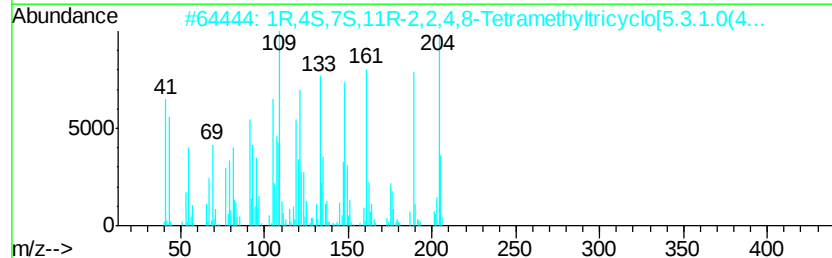
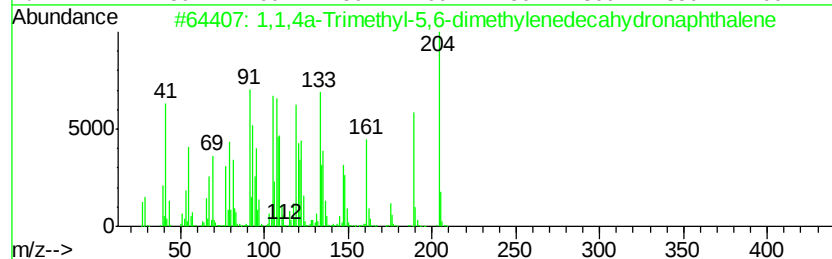
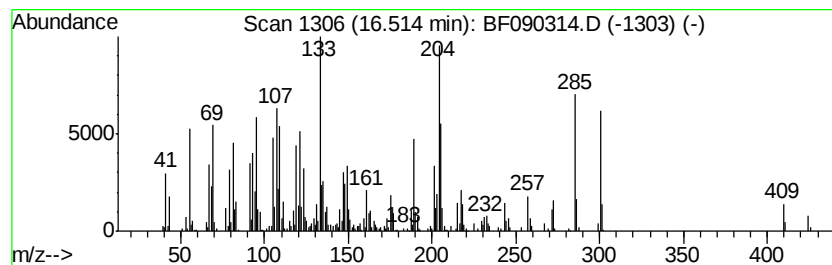
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 16 unknown16.51 Concentration Rank 8

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 16.51 | 41.84 ng | 1699950 | Perylene-d12     | 14.88 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | 1,1,4a-Trimethyl-5,6-dimethylene... | 204 | C15H24  | 1000193-60-8 | 49   |
| 2    |    | 1R,4S,7S,11R-2,2,4,8-Tetramethyl... | 204 | C15H24  | 1000140-07-6 | 35   |
| 3    |    | Himachala-2,4-diene                 | 204 | C15H24  | 060909-27-5  | 35   |
| 4    |    | 1,4-Dimethyl-8-isopropylidenetri... | 204 | C15H24  | 1000140-07-7 | 27   |
| 5    |    | Phenanthrene, 1,2,3,4,4a,9,10,10... | 300 | C21H32O | 010064-26-3  | 25   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF0903016\  
Data File : BF090314.D  
Acq On : 30 Sep 2016 15:19  
Operator : UM/SJ  
Sample : H4998-13  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

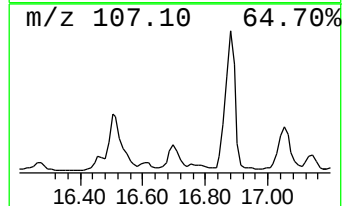
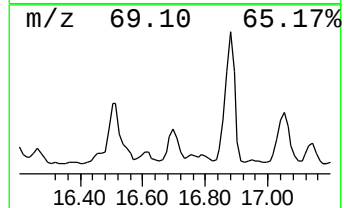
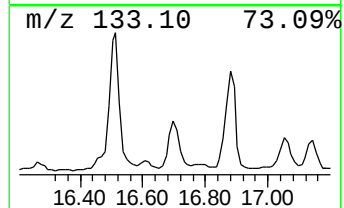
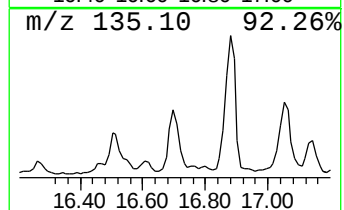
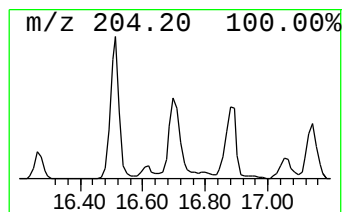
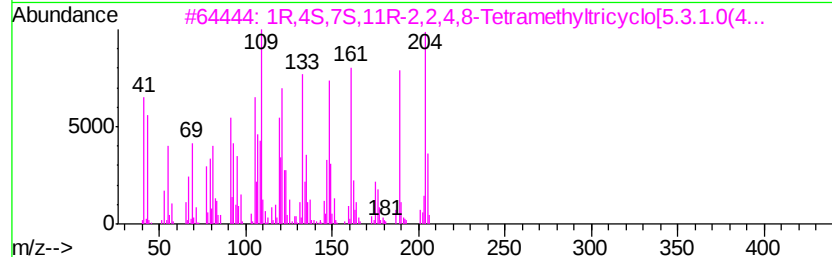
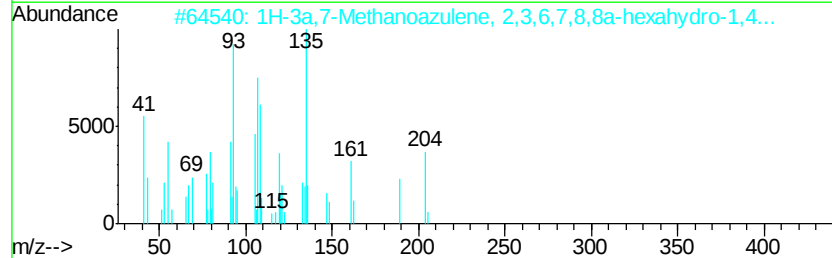
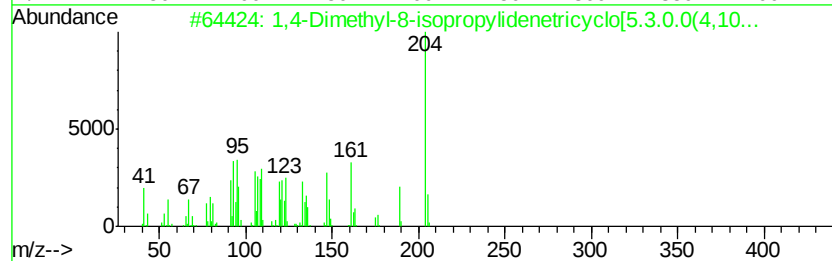
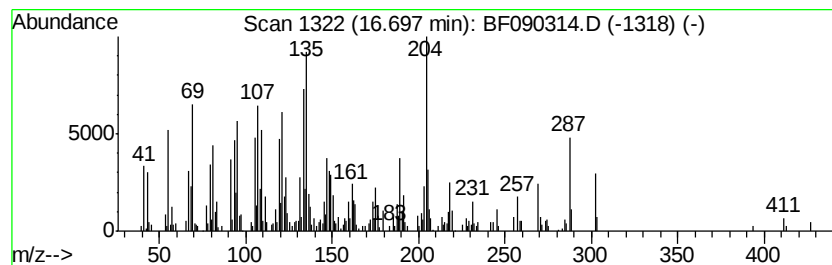
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 17 1,4-Dimethyl-8-isopropylide... Concentration Rank 13

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 16.70 | 18.50 ng | 751851 | Perylene-d12     | 14.88 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | 1,4-Dimethyl-8-isopropylidenetri... | 204 | C15H24  | 1000140-07-7 | 58   |
| 2    |    | 1H-3a,7-Methanoazulene, 2,3,6,7,... | 204 | C15H24  | 000560-32-7  | 46   |
| 3    |    | 1R,4S,7S,11R-2,2,4,8-Tetramethyl... | 204 | C15H24  | 1000140-07-6 | 45   |
| 4    |    | 2H-Cyclopentacyclooctene, 4,5,6,... | 204 | C15H24  | 1000221-85-8 | 43   |
| 5    |    | 2,5,5,8a-Tetramethyl-6,7,8,8a-te... | 204 | C14H20O | 124957-09-1  | 43   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF090316\  
Data File : BF090314.D  
Acq On : 30 Sep 2016 15:19  
Operator : UM/SJ  
Sample : H4998-13  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

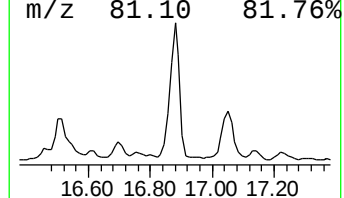
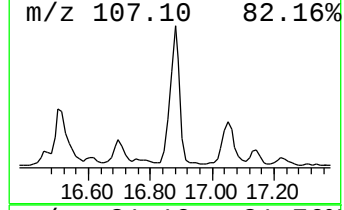
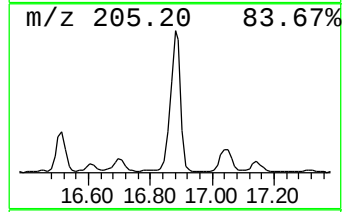
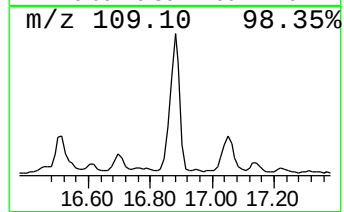
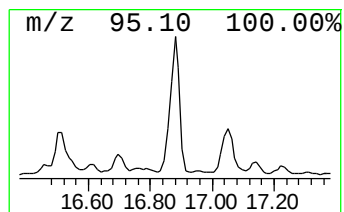
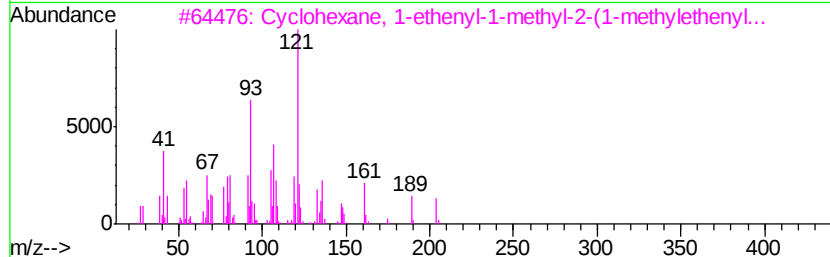
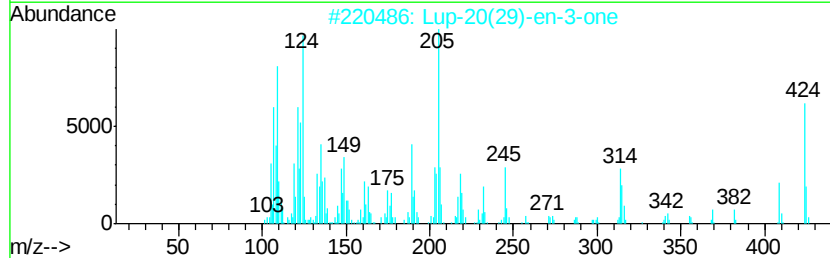
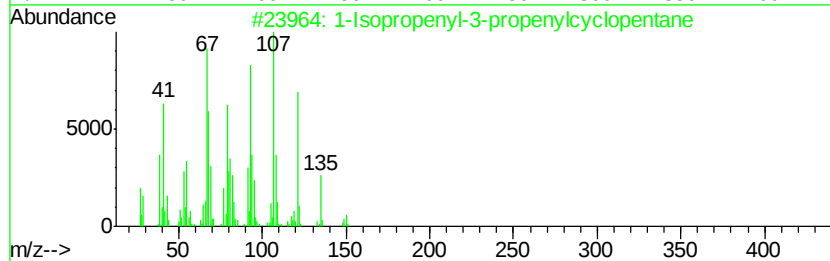
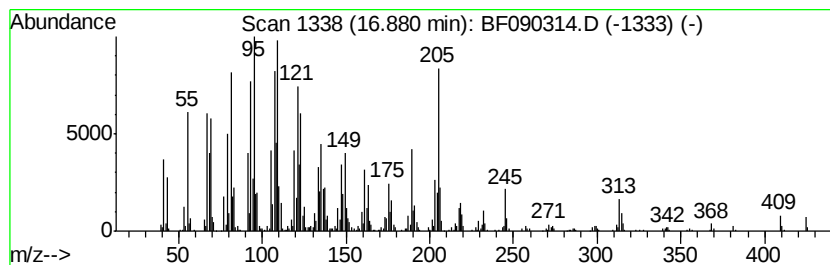
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 18 1-Isopropenyl-3-propenylcyc... Concentration Rank 3

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 16.88 | 74.54 ng | 3028650 | Perylene-d12     | 14.88 |

| Hit# | of | 5 | Tentative ID                         | MW  | MolForm | CAS#         | Qual |
|------|----|---|--------------------------------------|-----|---------|--------------|------|
| 1    |    |   | 1-Isopropenyl-3-propenylcyclopent... | 150 | C11H18  | 1000192-81-2 | 58   |
| 2    |    |   | Lup-20(29)-en-3-one                  | 424 | C30H48O | 001617-70-5  | 53   |
| 3    |    |   | Cyclohexane, 1-ethenyl-1-methyl-...  | 204 | C15H24  | 003242-08-8  | 46   |
| 4    |    |   | Guaia-9,11-diene                     | 204 | C15H24  | 1000374-19-8 | 45   |
| 5    |    |   | But-3-enal, 2-methyl-4-(2,6,6-tr...  | 206 | C14H22O | 104900-59-6  | 38   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF093016\  
Data File : BF090314.D  
Acq On : 30 Sep 2016 15:19  
Operator : UM/SJ  
Sample : H4998-13  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

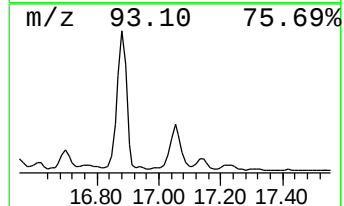
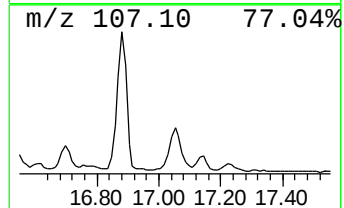
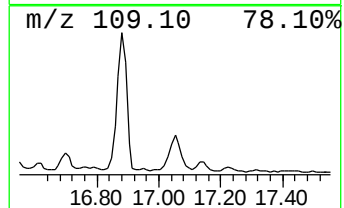
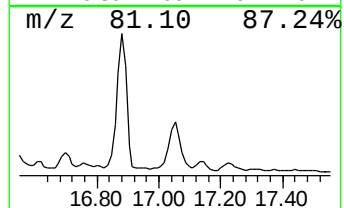
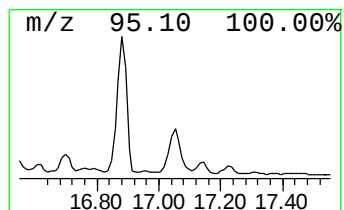
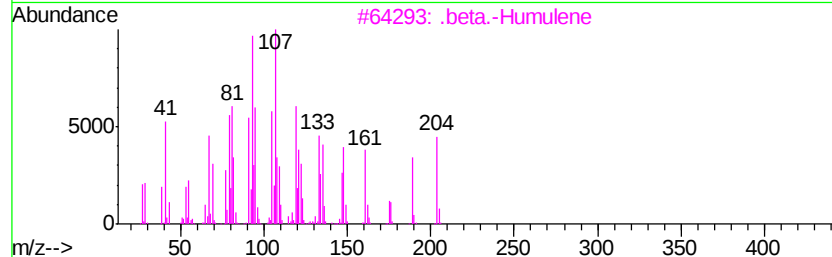
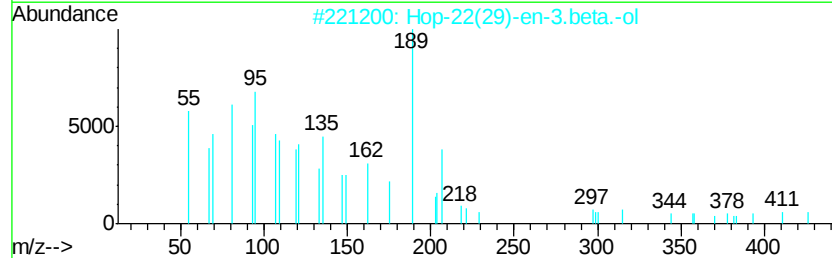
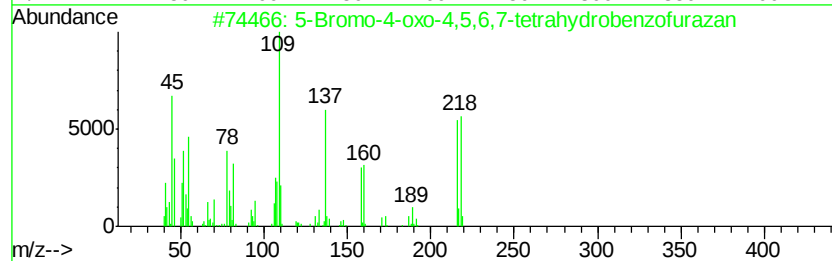
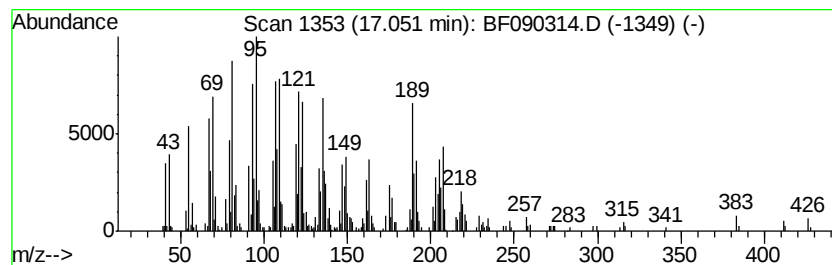
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 19 5-Bromo-4-oxo-4,5,6,7-tetra... Concentration Rank 10

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 17.05 | 27.52 ng | 1118270 | Perylene-d12     | 14.88 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|-------------------------------------|-----|------------|--------------|------|
| 1    | 5  | 5-Bromo-4-oxo-4,5,6,7-tetrahydro... | 216 | C6H5BrN2O2 | 300574-36-1  | 86   |
| 2    |    | Hop-22(29)-en-3.beta.-ol            | 426 | C30H50O    | 058801-23-3  | 86   |
| 3    |    | .beta.-Humulene                     | 204 | C15H24     | 000116-04-1  | 74   |
| 4    |    | Guaia-9,11-diene                    | 204 | C15H24     | 1000374-19-8 | 55   |
| 5    |    | 2-Isopropenyl-4a,8-dimethyl-1,2,... | 204 | C15H24     | 1000193-57-0 | 38   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF093016\  
Data File : BF090314.D  
Acq On : 30 Sep 2016 15:19  
Operator : UM/SJ  
Sample : H4998-13  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF092016.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

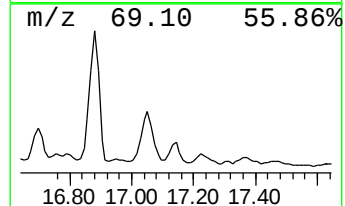
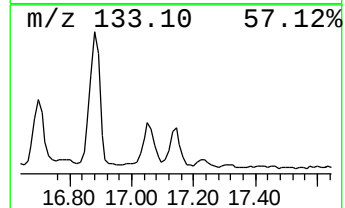
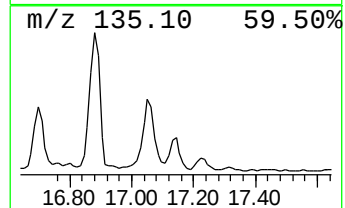
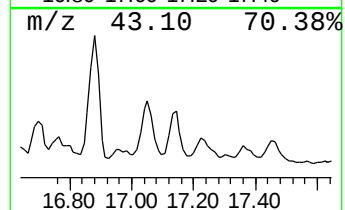
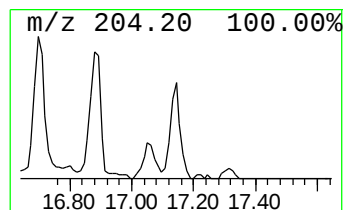
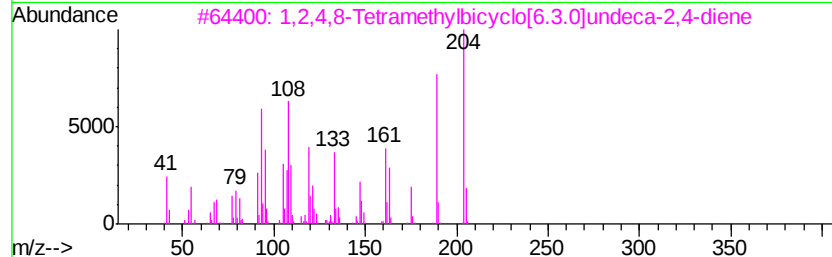
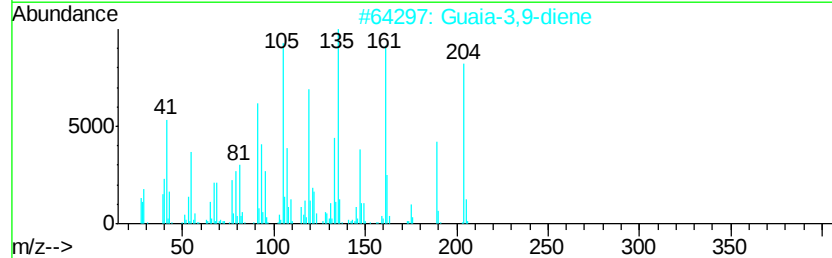
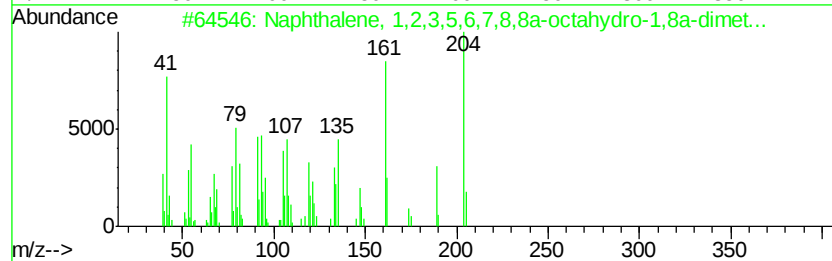
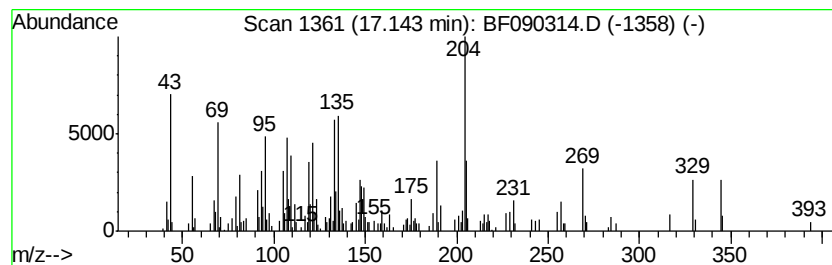
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 20 unknown17.14 Concentration Rank 19

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 17.14 | 8.68 ng | 352581 | Perylene-d12     | 14.88 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Naphthalene, 1,2,3,5,6,7,8,8a-oc... | 204 | C15H24    | 004630-07-3  | 49   |
| 2    |    | Guaia-3,9-diene                     | 204 | C15H24    | 000489-83-8  | 43   |
| 3    |    | 1,2,4,8-Tetramethylbicyclo[6.3.0... | 204 | C15H24    | 137235-51-9  | 43   |
| 4    |    | 2H-Cyclopentacyclooctene, 4,5,6,... | 204 | C15H24    | 1000221-85-8 | 43   |
| 5    |    | [1,2,4]Triazolo[5,1-b]quinazolin... | 204 | C10H12N4O | 1000337-56-5 | 30   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF093016\  
 Data File : BF090314.D  
 Acq On : 30 Sep 2016 15:19  
 Operator : UM/SJ  
 Sample : H4998-13  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SUP-B046-6-9

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF092016.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... | 4.52  | 19.9    | ng    | 672105   | 1                     | 6.44  | 676275  | 20.0 |
| unknown6.22          | 6.22  | 90.2    | ng    | 3051390  | 1                     | 6.44  | 676275  | 20.0 |
| Heneicosane          | 12.07 | 9.2     | ng    | 515642   | 4                     | 10.95 | 1120230 | 20.0 |
| Cyclohexadecane      | 13.45 | 52.9    | ng    | 2362200  | 5                     | 13.55 | 893988  | 20.0 |
| 1-Heneicosanol       | 14.08 | 54.2    | ng    | 2420780  | 5                     | 13.55 | 893988  | 20.0 |
| Nonadecyl pentafl... | 14.66 | 51.0    | ng    | 2071040  | 6                     | 14.88 | 812614  | 20.0 |
| n-Tetracosanol-1     | 15.33 | 32.9    | ng    | 1336070  | 6                     | 14.88 | 812614  | 20.0 |
| dl-.alpha.-Tocoph... | 15.49 | 6.5     | ng    | 266302   | 6                     | 14.88 | 812614  | 20.0 |
| 1-Heptacosanol       | 16.18 | 12.0    | ng    | 488408   | 6                     | 14.88 | 812614  | 20.0 |
| unknown16.26         | 16.26 | 10.6    | ng    | 428695   | 6                     | 14.88 | 812614  | 20.0 |
| .beta.-Sitosterol    | 16.46 | 9.7     | ng    | 392133   | 6                     | 14.88 | 812614  | 20.0 |
| unknown16.51         | 16.51 | 41.8    | ng    | 1699950  | 6                     | 14.88 | 812614  | 20.0 |
| 1,4-Dimethyl-8-is... | 16.70 | 18.5    | ng    | 751851   | 6                     | 14.88 | 812614  | 20.0 |
| 1-Isopropenyl-3-p... | 16.88 | 74.5    | ng    | 3028650  | 6                     | 14.88 | 812614  | 20.0 |
| 5-Bromo-4-oxo-4,5... | 17.05 | 27.5    | ng    | 1118270  | 6                     | 14.88 | 812614  | 20.0 |
| unknown17.14         | 17.14 | 8.7     | ng    | 352581   | 6                     | 14.88 | 812614  | 20.0 |