

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF080817\  
 Data File : BF097488.D  
 Acq On : 9 Aug 2017 00:27  
 Operator : SJ/JU  
 Sample : I4657-01  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 CL-01-080717-A

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-BF072517.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         | 4.534       | 464           | 467         | 478          | rBV      | 70608          | 134399        | 8.33%           | 0.806%        |
| 2         | 4.998       | 543           | 546         | 563          | rBV      | 1194988        | 1585152       | 98.28%          | 9.501%        |
| 3         | 6.075       | 726           | 729         | 743          | rBV      | 1464742        | 1612940       | 100.00%         | 9.667%        |
| 4         | 6.181       | 743           | 747         | 753          | rVB      | 1413377        | 1490758       | 92.42%          | 8.935%        |
| 5         | 6.404       | 782           | 785         | 795          | rBV      | 692930         | 642501        | 39.83%          | 3.851%        |
| 6         | 6.557       | 808           | 811         | 826          | rBV      | 1134172        | 1087595       | 67.43%          | 6.519%        |
| 7         | 6.975       | 879           | 882         | 902          | rBV      | 879044         | 909675        | 56.40%          | 5.452%        |
| 8         | 7.686       | 1000          | 1003        | 1013         | rBV      | 943199         | 871912        | 54.06%          | 5.226%        |
| 9         | 8.763       | 1183          | 1186        | 1199         | rBV      | 1524782        | 1420826       | 88.09%          | 8.516%        |
| 10        | 9.169       | 1252          | 1255        | 1264         | rBV      | 336447         | 286512        | 17.76%          | 1.717%        |
| 11        | 9.392       | 1289          | 1293        | 1296         | rBV      | 24508          | 21768         | 1.35%           | 0.130%        |
| 12        | 9.427       | 1296          | 1299        | 1304         | rBV      | 785463         | 738175        | 45.77%          | 4.424%        |
| 13        | 9.886       | 1374          | 1377        | 1380         | rVB      | 41131          | 32171         | 1.99%           | 0.193%        |
| 14        | 10.104      | 1409          | 1414        | 1417         | rBV      | 16072          | 22378         | 1.39%           | 0.134%        |
| 15        | 10.216      | 1430          | 1433        | 1441         | rBV      | 728110         | 751549        | 46.59%          | 4.504%        |
| 16        | 10.357      | 1453          | 1457        | 1466         | rBV      | 45433          | 54908         | 3.40%           | 0.329%        |
| 17        | 10.804      | 1529          | 1533        | 1535         | rBV3     | 29352          | 30445         | 1.89%           | 0.182%        |
| 18        | 10.904      | 1547          | 1550        | 1553         | rBV      | 684085         | 605322        | 37.53%          | 3.628%        |
| 19        | 10.927      | 1553          | 1554        | 1560         | rVB      | 61391          | 43642         | 2.71%           | 0.262%        |
| 20        | 10.986      | 1561          | 1564        | 1569         | rVB      | 20630          | 19396         | 1.20%           | 0.116%        |
| 21        | 11.410      | 1631          | 1636        | 1638         | rBV2     | 25369          | 25359         | 1.57%           | 0.152%        |
| 22        | 11.463      | 1643          | 1645        | 1648         | rVV2     | 46181          | 53600         | 3.32%           | 0.321%        |
| 23        | 11.516      | 1651          | 1654        | 1657         | rVV      | 52609          | 62496         | 3.87%           | 0.375%        |
| 24        | 11.539      | 1657          | 1658        | 1664         | rVB2     | 20822          | 18708         | 1.16%           | 0.112%        |
| 25        | 11.957      | 1725          | 1729        | 1731         | rBV      | 32863          | 33203         | 2.06%           | 0.199%        |
| 26        | 12.051      | 1741          | 1745        | 1748         | rBV3     | 19837          | 29202         | 1.81%           | 0.175%        |
| 27        | 12.110      | 1752          | 1755        | 1760         | rBV      | 156722         | 149529        | 9.27%           | 0.896%        |
| 28        | 12.163      | 1761          | 1764        | 1770         | rVV6     | 10244          | 19759         | 1.23%           | 0.118%        |
| 29        | 12.333      | 1788          | 1793        | 1796         | rBV      | 172403         | 170563        | 10.57%          | 1.022%        |
| 30        | 12.486      | 1815          | 1819        | 1826         | rVB      | 1027386        | 950385        | 58.92%          | 5.696%        |
| 31        | 12.557      | 1828          | 1831        | 1834         | rBV3     | 19453          | 24562         | 1.52%           | 0.147%        |
| 32        | 12.651      | 1844          | 1847        | 1848         | rBV3     | 18155          | 18450         | 1.14%           | 0.111%        |
| 33        | 12.668      | 1848          | 1850        | 1855         | rVB      | 33051          | 33380         | 2.07%           | 0.200%        |
| 34        | 12.733      | 1857          | 1861        | 1863         | rBV3     | 33353          | 32420         | 2.01%           | 0.194%        |

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 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 CL-01-080717-A

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 Sampling : 1  
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 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-BF072517.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |        |        |        |        |
|----|--------|------|------|------|------|--------|--------|--------|--------|
| 35 | 12.768 | 1865 | 1867 | 1871 | rVB2 | 21804  | 28600  | 1.77%  | 0.171% |
| 36 | 12.863 | 1880 | 1883 | 1886 | rBV2 | 34664  | 34444  | 2.14%  | 0.206% |
| 37 | 12.892 | 1886 | 1888 | 1891 | rVV2 | 18125  | 19461  | 1.21%  | 0.117% |
| 38 | 13.527 | 1992 | 1996 | 1999 | rBV  | 609106 | 611301 | 37.90% | 3.664% |
| 39 | 13.557 | 1999 | 2001 | 2007 | rVB  | 70222  | 73020  | 4.53%  | 0.438% |
| 40 | 13.768 | 2036 | 2037 | 2039 | rBV2 | 25597  | 16402  | 1.02%  | 0.098% |
| 41 | 13.880 | 2054 | 2056 | 2060 | rBV3 | 46545  | 48043  | 2.98%  | 0.288% |
| 42 | 13.921 | 2060 | 2063 | 2066 | rVB3 | 37362  | 36491  | 2.26%  | 0.219% |
| 43 | 13.957 | 2066 | 2069 | 2072 | rBV4 | 40675  | 52876  | 3.28%  | 0.317% |
| 44 | 14.374 | 2137 | 2140 | 2147 | rBV  | 89805  | 108263 | 6.71%  | 0.649% |
| 45 | 14.439 | 2147 | 2151 | 2155 | rBV7 | 43907  | 104059 | 6.45%  | 0.624% |
| 46 | 14.633 | 2181 | 2184 | 2191 | rBV8 | 47899  | 102490 | 6.35%  | 0.614% |
| 47 | 14.768 | 2205 | 2207 | 2210 | rBV  | 57102  | 59307  | 3.68%  | 0.355% |
| 48 | 14.821 | 2213 | 2216 | 2220 | rVV  | 74403  | 109373 | 6.78%  | 0.656% |
| 49 | 14.868 | 2220 | 2224 | 2229 | rVB  | 421265 | 457646 | 28.37% | 2.743% |
| 50 | 14.962 | 2236 | 2240 | 2244 | rVB7 | 49317  | 88557  | 5.49%  | 0.531% |
| 51 | 15.009 | 2246 | 2248 | 2249 | rBV2 | 36816  | 33581  | 2.08%  | 0.201% |
| 52 | 15.403 | 2313 | 2315 | 2320 | rBV5 | 47798  | 68996  | 4.28%  | 0.414% |
| 53 | 15.739 | 2367 | 2372 | 2375 | rBV7 | 47536  | 90412  | 5.61%  | 0.542% |
| 54 | 15.827 | 2382 | 2387 | 2391 | rBV7 | 38877  | 92505  | 5.74%  | 0.554% |
| 55 | 16.139 | 2438 | 2440 | 2446 | rBV7 | 28716  | 53997  | 3.35%  | 0.324% |
| 56 | 16.198 | 2448 | 2450 | 2454 | rBV5 | 28765  | 39576  | 2.45%  | 0.237% |
| 57 | 16.339 | 2472 | 2474 | 2477 | rBV4 | 36467  | 49819  | 3.09%  | 0.299% |
| 58 | 16.962 | 2578 | 2580 | 2581 | rBV  | 26850  | 18006  | 1.12%  | 0.108% |
| 59 | 17.262 | 2627 | 2631 | 2633 | rBV5 | 33243  | 52885  | 3.28%  | 0.317% |
| 60 | 17.492 | 2665 | 2670 | 2672 | rBV6 | 28886  | 52768  | 3.27%  | 0.316% |
| 61 | 18.444 | 2830 | 2832 | 2836 | rBV4 | 17039  | 19041  | 1.18%  | 0.114% |
| 62 | 18.509 | 2840 | 2843 | 2850 | rVB8 | 22829  | 51672  | 3.20%  | 0.310% |
| 63 | 18.633 | 2861 | 2864 | 2869 | rBV6 | 23075  | 44543  | 2.76%  | 0.267% |
| 64 | 18.686 | 2871 | 2873 | 2876 | rBV4 | 14492  | 19163  | 1.19%  | 0.115% |
| 65 | 18.833 | 2894 | 2898 | 2902 | rBV7 | 18210  | 38105  | 2.36%  | 0.228% |
| 66 | 19.121 | 2944 | 2947 | 2949 | rBV3 | 21224  | 25639  | 1.59%  | 0.154% |

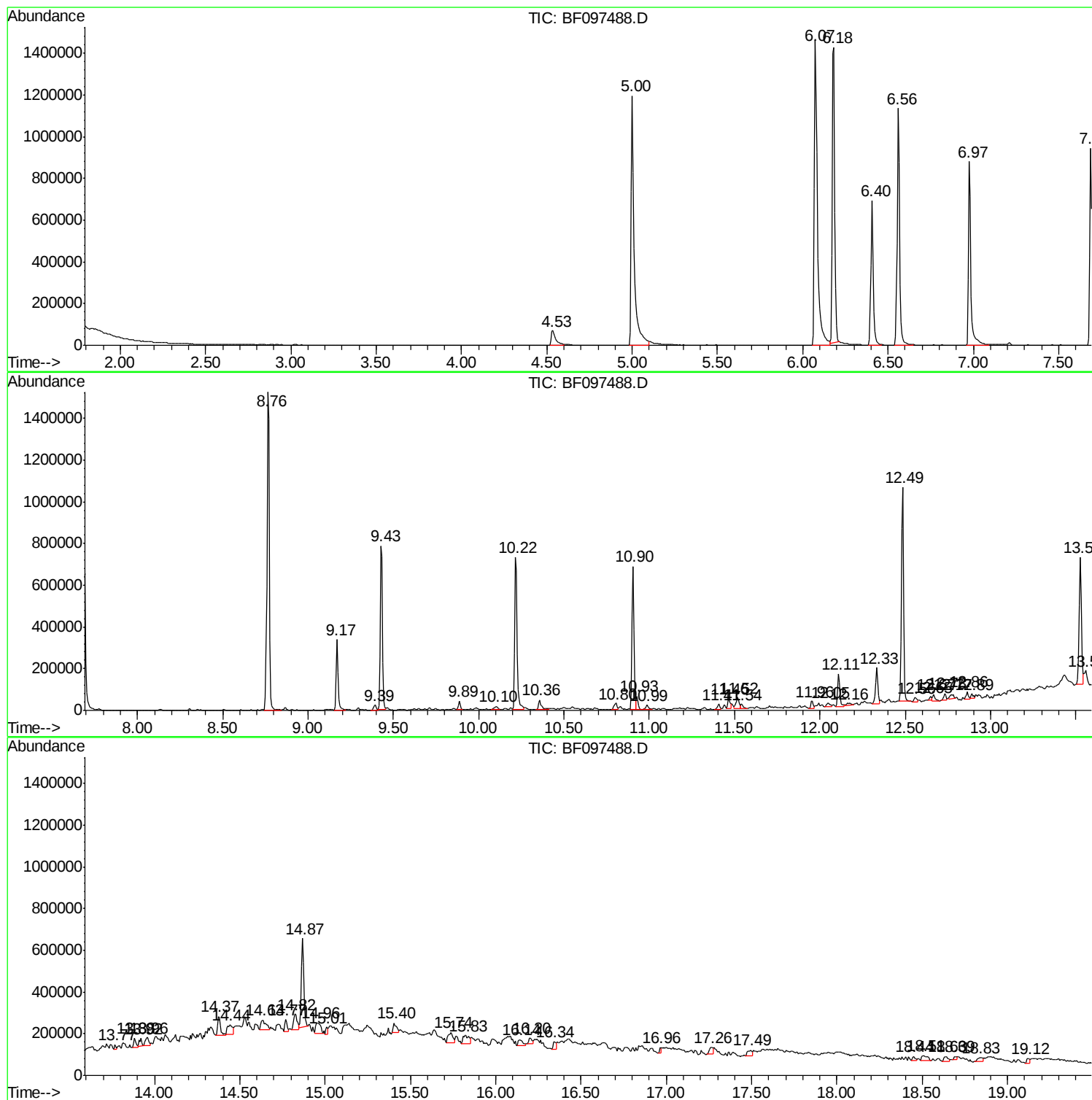
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Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.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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Instrument :  
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ClientSampleId :  
CL-01-080717-A

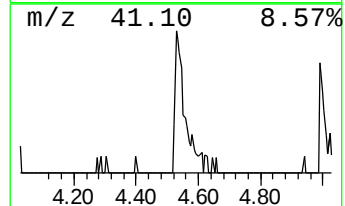
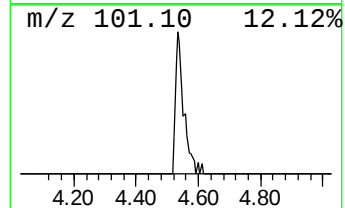
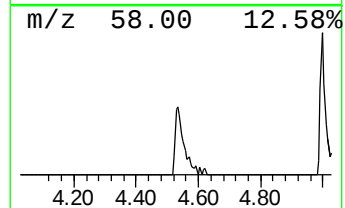
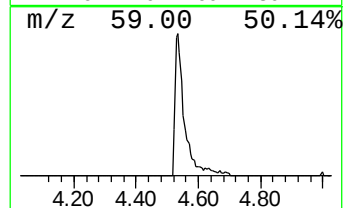
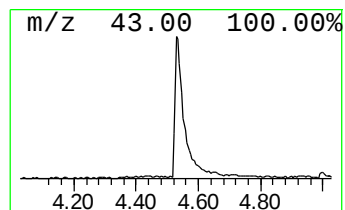
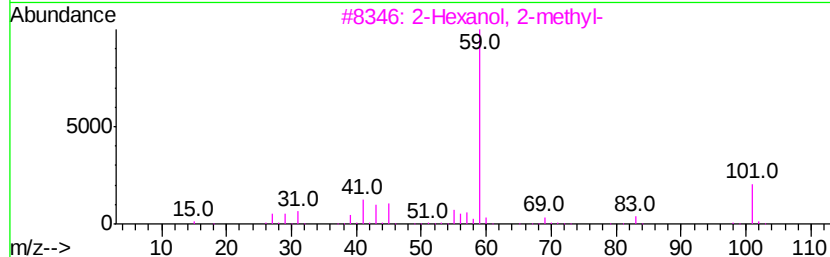
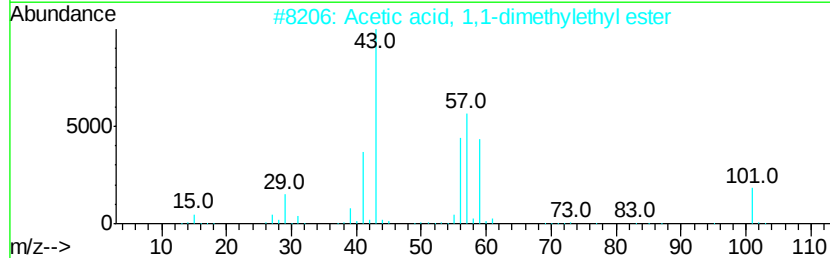
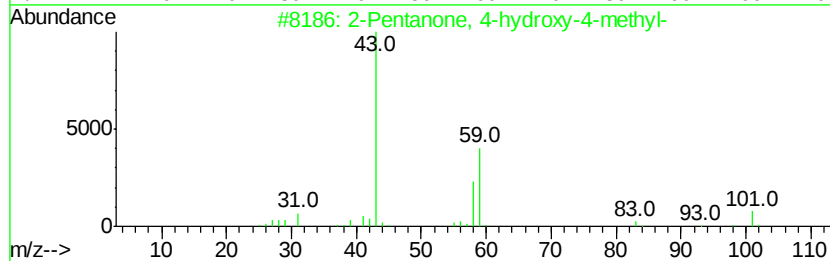
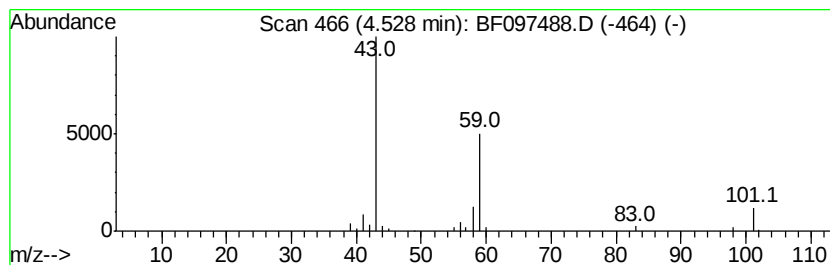
Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 6

| R.T. | EstConc | Area   | Relative to ISTD       | R.T. |
|------|---------|--------|------------------------|------|
| 4.53 | 4.18 ng | 134399 | 1,4-Dichlorobenzene-d4 | 6.40 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | 2-Pentanone, 4-hydroxy-4-methyl-    | 116 | C6H12O2 | 000123-42-2 | 50   |
| 2    |    |   | Acetic acid, 1,1-dimethylethyl e... | 116 | C6H12O2 | 000540-88-5 | 38   |
| 3    |    |   | 2-Hexanol, 2-methyl-                | 116 | C7H16O  | 000625-23-0 | 33   |
| 4    |    |   | 3-Hexanol, 4-methyl-                | 116 | C7H16O  | 000615-29-2 | 33   |
| 5    |    |   | 2,3-Butanedione, monooxime          | 101 | C4H7NO2 | 000057-71-6 | 16   |



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ClientSampleId :  
CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

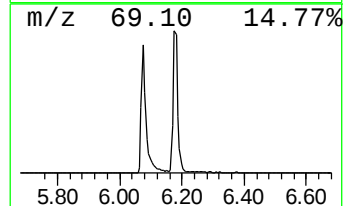
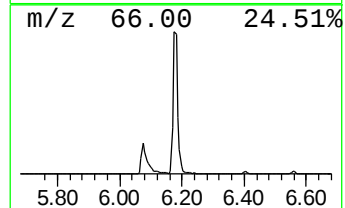
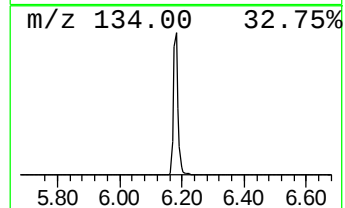
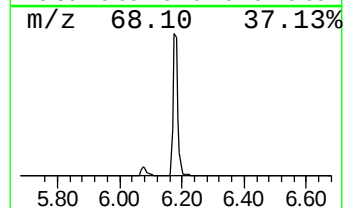
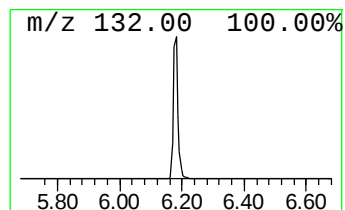
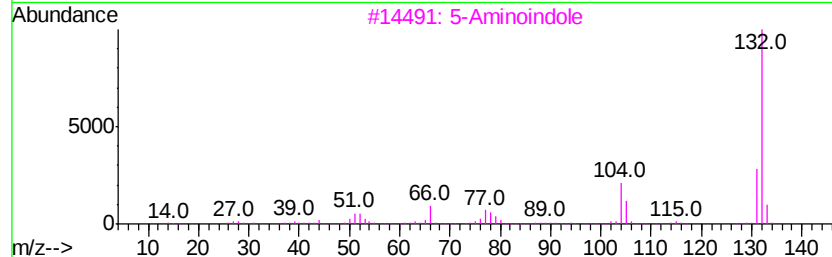
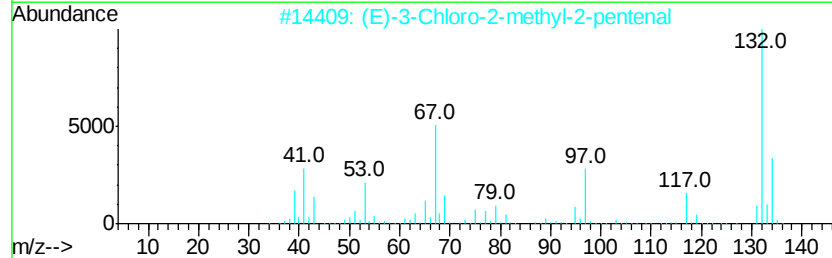
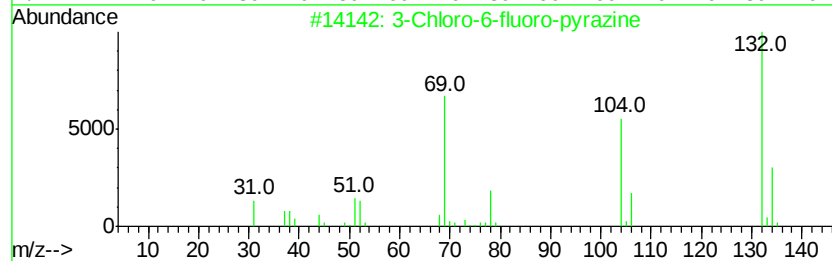
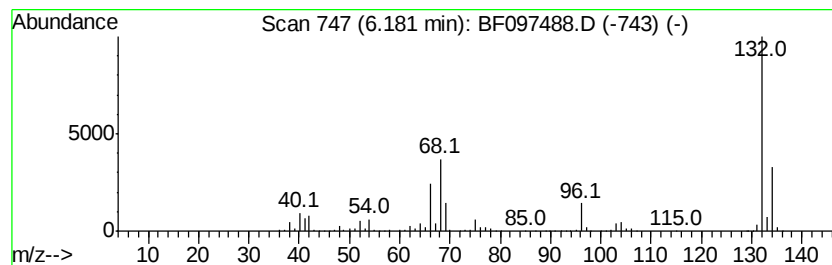
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 2 unknown6.18 Concentration Rank 1

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 6.18 | 46.40 ng | 1490760 | 1,4-Dichlorobenzene-d4 | 6.40 |

| Hit# | of | Tentative ID                     | MW  | MolForm   | CAS#         | Qual |
|------|----|----------------------------------|-----|-----------|--------------|------|
| 1    | 5  | 3-Chloro-6-fluoro-pyrazine       | 132 | C4H2ClFN2 | 1000146-10-7 | 35   |
| 2    |    | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO   | 031357-76-3  | 17   |
| 3    |    | 5-Aminoindole                    | 132 | C8H8N2    | 005192-03-0  | 12   |
| 4    |    | 1,3,5-Trifluorobenzene           | 132 | C6H3F3    | 000372-38-3  | 9    |
| 5    |    | 1-Methylpyrrolo[1,2-a]pyrazine   | 132 | C8H8N2    | 064608-59-9  | 9    |



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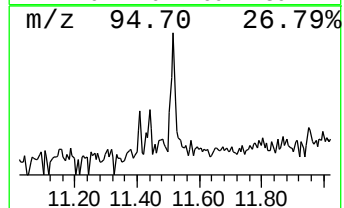
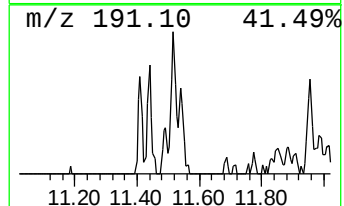
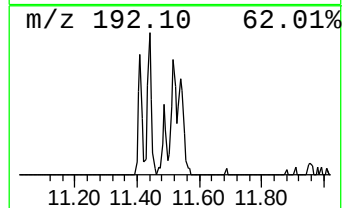
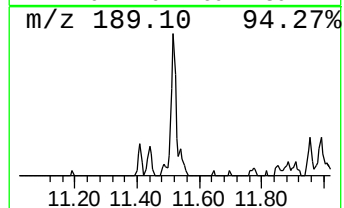
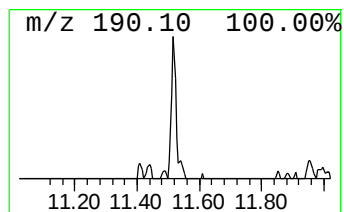
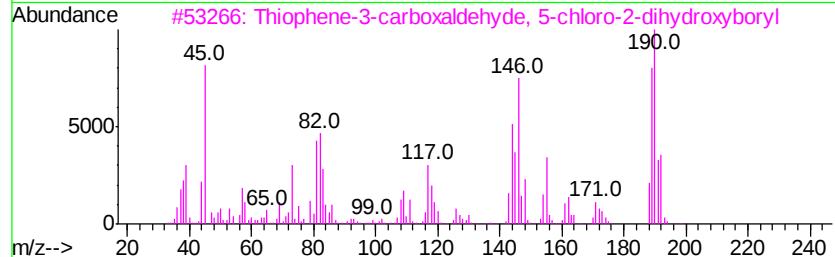
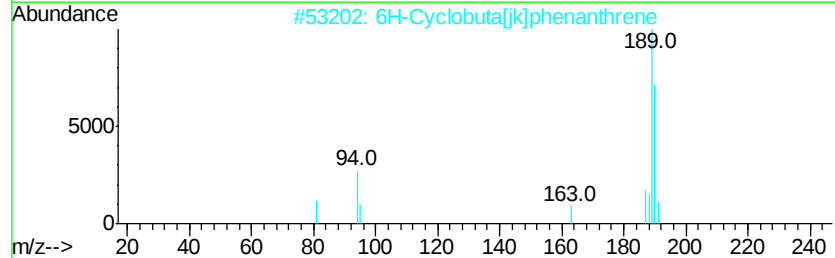
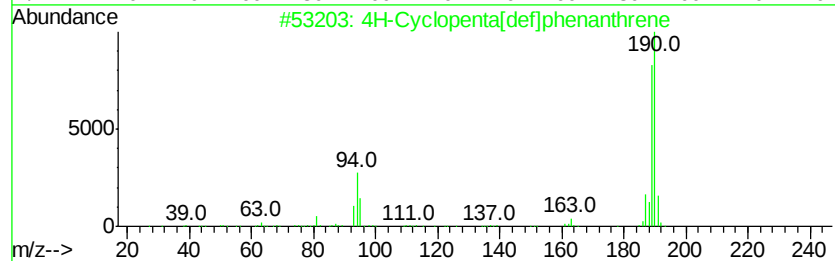
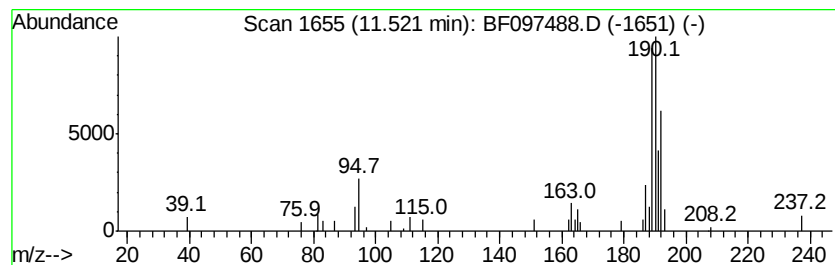
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 4 4H-Cyclopenta[def]phenanthrene Concentration Rank 17

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 11.52 | 2.06 ng | 62496 | Phenanthrene-d10 | 10.90 |

| Hit# of | 5 | Tentative ID                       | MW  | MolForm    | CAS#        | Qual |
|---------|---|------------------------------------|-----|------------|-------------|------|
| 1       |   | 4H-Cyclopenta[def]phenanthrene     | 190 | C15H10     | 000203-64-5 | 64   |
| 2       |   | 6H-Cyclobuta[ik]phenanthrene       | 190 | C15H10     | 083469-43-6 | 58   |
| 3       |   | Thiophene-3-carboxaldehyd, 5-ch... | 190 | C5H4BClO3S | 036155-87-0 | 40   |
| 4       |   | Methyl diselenide                  | 190 | C2H6Se2    | 007101-31-7 | 27   |
| 5       |   | 2,6-Dichlorobenzaldoxime           | 189 | C7H5Cl2NO  | 025185-95-9 | 25   |



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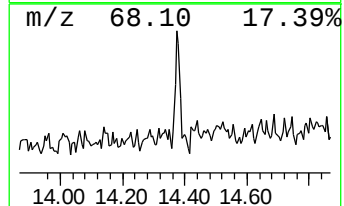
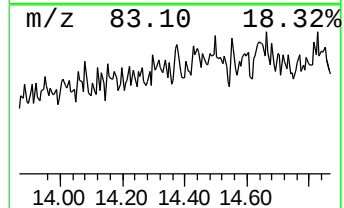
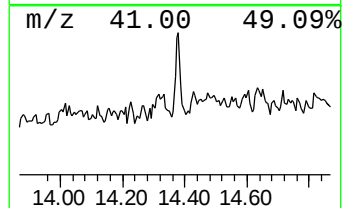
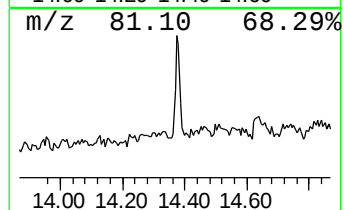
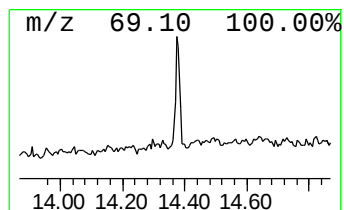
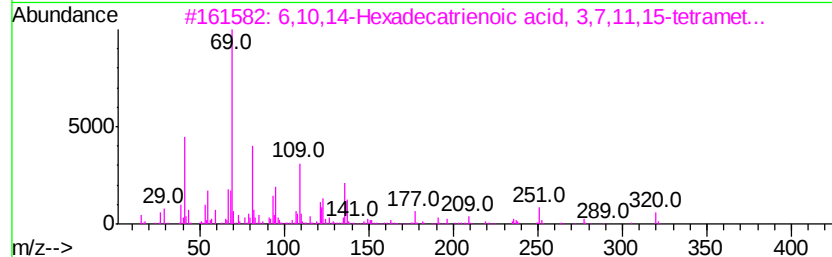
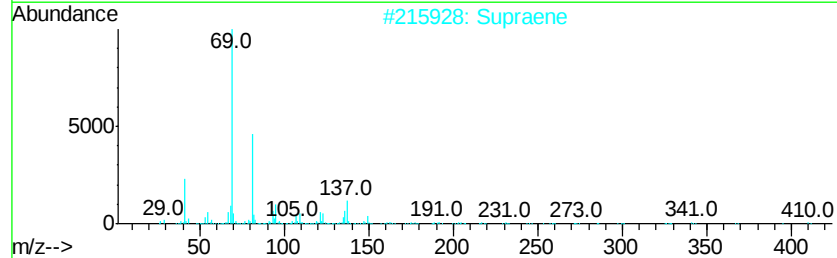
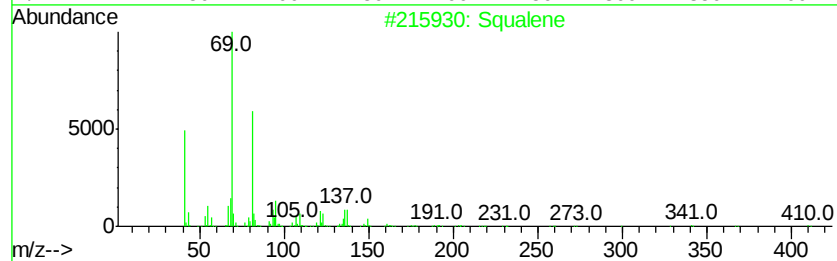
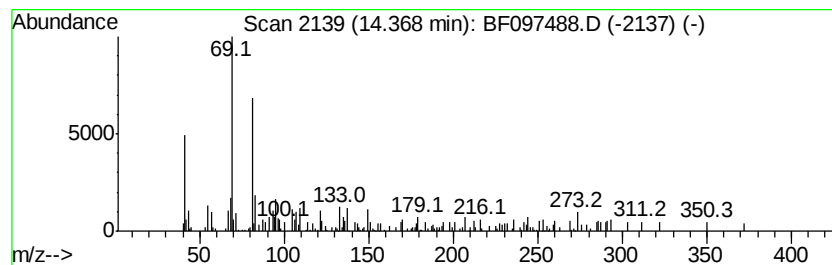
Instrument :  
BNA\_F  
ClientSampleId :  
CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 5 Squalene Concentration Rank 3

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------|--------|------------------|-------------|------|
| 14.37     | 4.73 ng                             | 108263 | Perylene-d12     | 14.87       |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#        | Qual |
| 1         | Squalene                            | 410    | C30H50           | 000111-02-4 | 83   |
| 2         | Supraene                            | 410    | C30H50           | 007683-64-9 | 80   |
| 3         | 6,10,14-Hexadecatrienoic acid, 3... | 320    | C21H36O2         | 036237-72-6 | 72   |
| 4         | 1,5,9-Undecatriene, 2,6,10-trime... | 192    | C14H24           | 062951-96-6 | 68   |
| 5         | 7,11-Dimethyldodeca-2,6,10-trien... | 208    | C14H24O          | 125529-10-4 | 64   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF080817\  
Data File : BF097488.D  
Acq On : 9 Aug 2017 00:27  
Operator : SJ/JU  
Sample : I4657-01  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

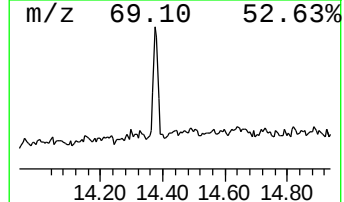
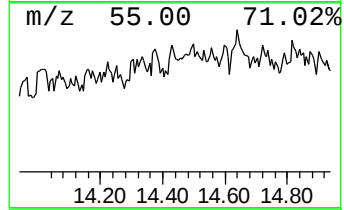
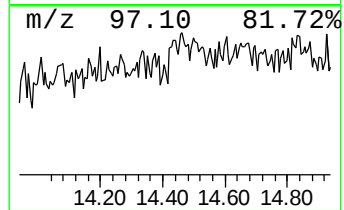
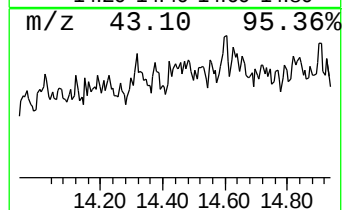
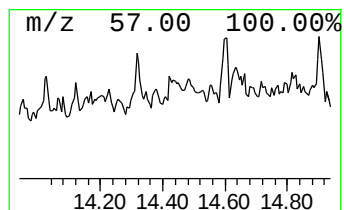
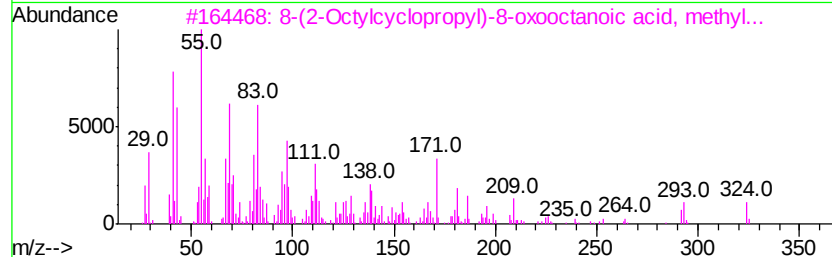
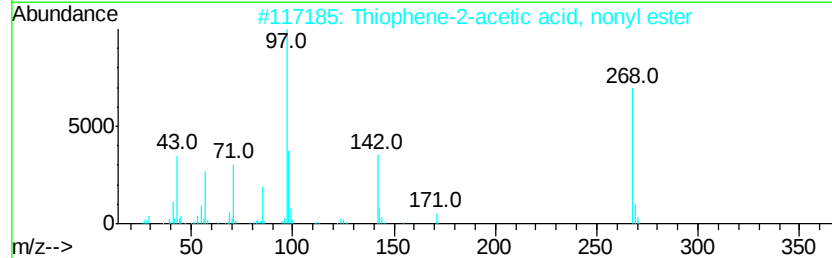
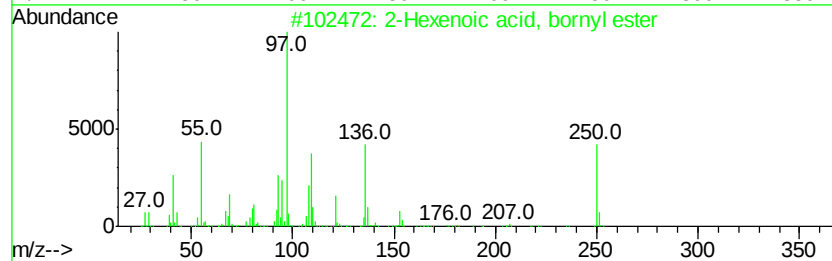
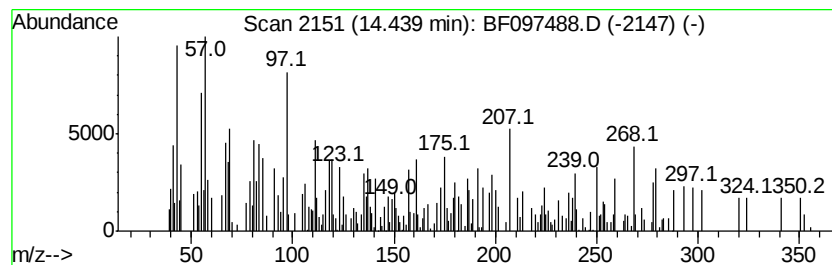
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ClientSampleId :  
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Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 6 unknown14.44 Concentration Rank 4

| R.T.    | EstConc                             | Area         | Relative to ISTD | R.T.         |      |      |
|---------|-------------------------------------|--------------|------------------|--------------|------|------|
| 14.44   | 4.55 ng                             | 104059       | Perylene-d12     | 14.87        |      |      |
| Hit# of | 5                                   | Tentative ID | MW               | MolForm      | CAS# | Qual |
| 1       | 2-Hexenoic acid, bornyl ester       | 250          | C16H26O2         | 1000163-79-6 | 30   |      |
| 2       | Thiophene-2-acetic acid, nonyl e... | 268          | C15H24O2S        | 1000282-82-3 | 27   |      |
| 3       | 8-(2-Octylcyclopropyl)-8-oxoocta... | 324          | C20H36O3         | 1000191-57-8 | 18   |      |
| 4       | Hexadecanedinitrile                 | 248          | C16H28N2         | 006812-44-8  | 15   |      |
| 5       | Cyclohexane, 1-ethyl-4-methyl-, ... | 126          | C9H18            | 004926-78-7  | 11   |      |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF080817\  
Data File : BF097488.D  
Acq On : 9 Aug 2017 00:27  
Operator : SJ/JU  
Sample : I4657-01  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

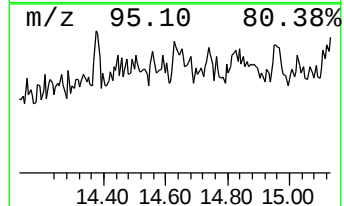
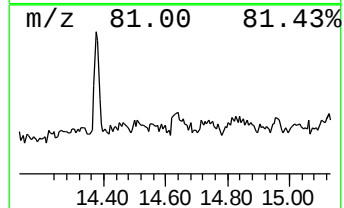
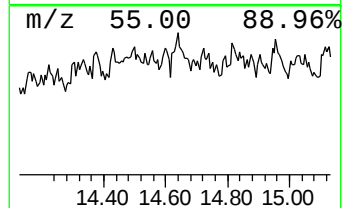
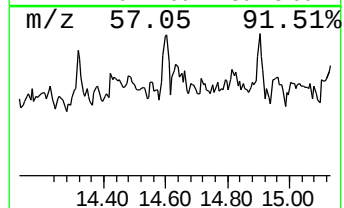
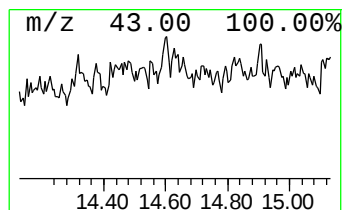
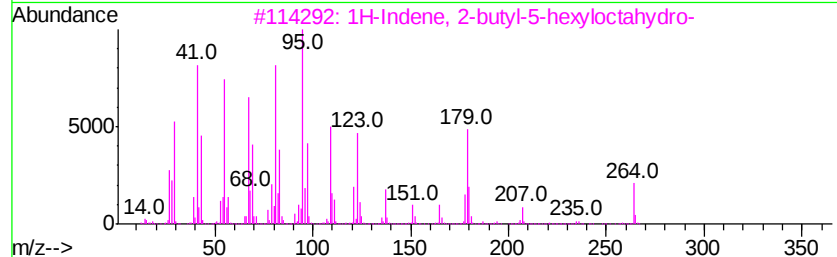
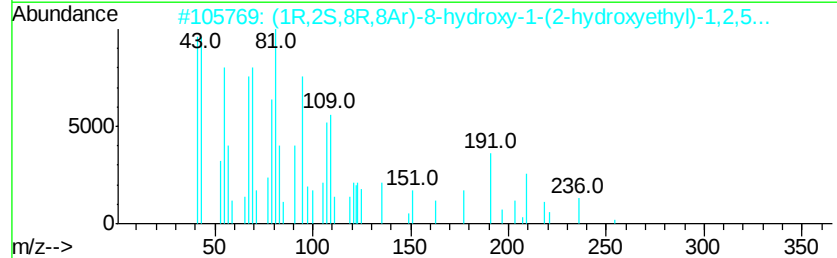
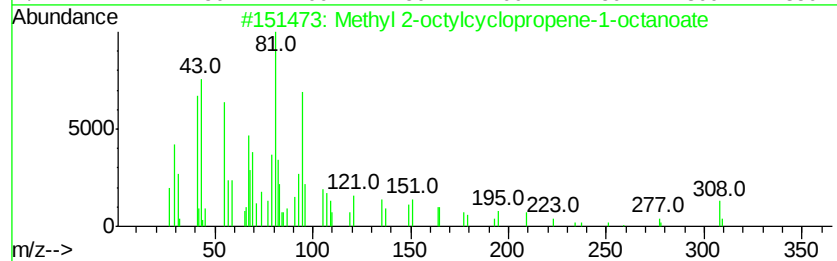
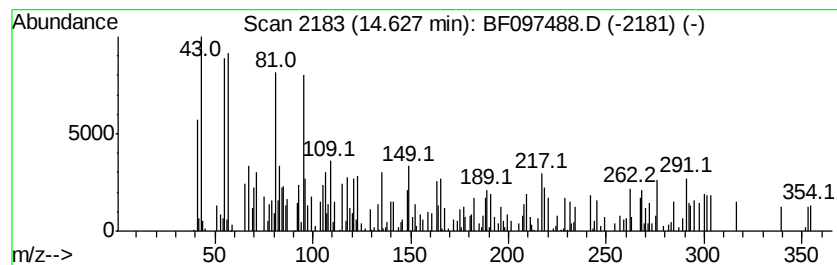
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TIC Integration Parameters: LSCINT.P

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Peak Number 7 unknown14.63 Concentration Rank 5

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 14.63 | 4.48 ng | 102490 | Perylene-d12     | 14.87 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Methyl 2-octylcyclopropene-1-oct... | 308 | C20H36O2  | 003220-60-8  | 43   |
| 2    |    | (1R,2S,8R,8Ar)-8-hydroxy-1-(2-hy... | 254 | C16H30O2  | 1000298-98-3 | 43   |
| 3    |    | 1H-Indene, 2-butyl-5-hexyloctahv... | 264 | C19H36    | 055044-33-2  | 43   |
| 4    |    | 1,1'-Bicyclohexyl, 4-propoxy-4'-... | 266 | C18H34O   | 098321-58-5  | 38   |
| 5    |    | Thioctic acid                       | 206 | C8H14O2S2 | 001077-28-7  | 38   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF080817\  
Data File : BF097488.D  
Acq On : 9 Aug 2017 00:27  
Operator : SJ/JU  
Sample : I4657-01  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

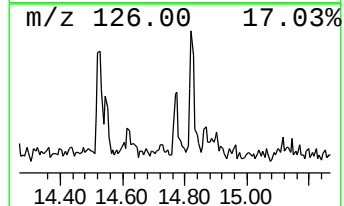
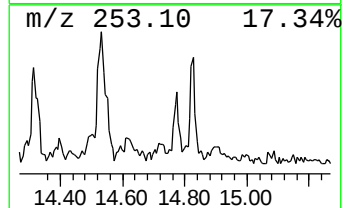
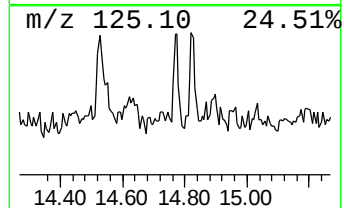
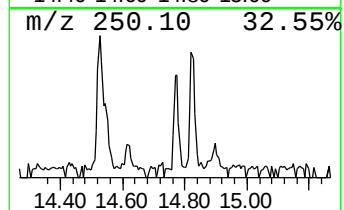
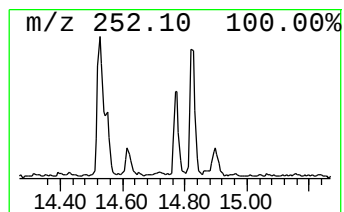
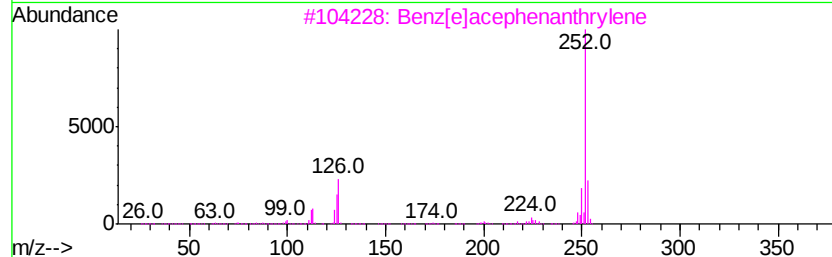
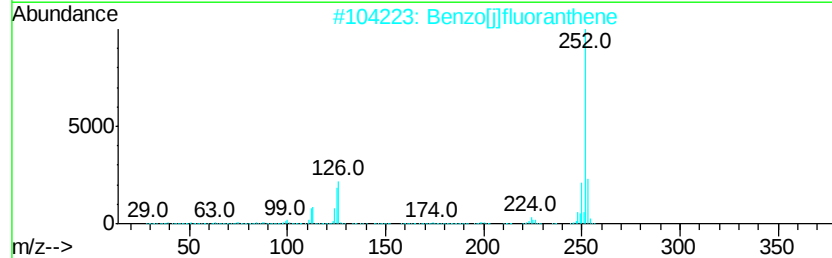
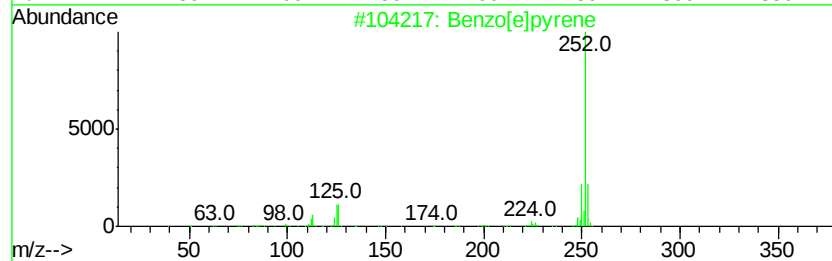
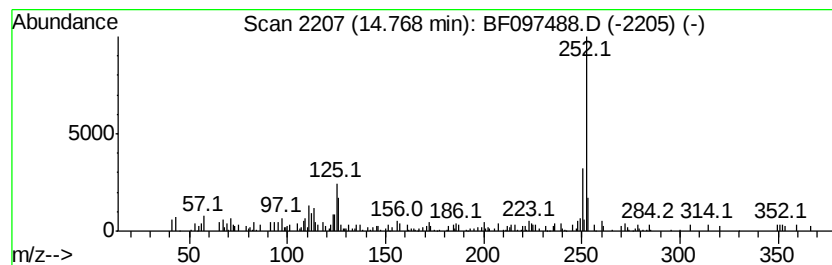
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 8 Benzo[e]pyrene Concentration Rank 11

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 14.77 | 2.59 ng | 59307 | Perylene-d12     | 14.87 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[e]pyrene            | 252 | C20H12  | 000192-97-2 | 93   |
| 2    |    | Benzo[i]fluoranthene      | 252 | C20H12  | 000205-82-3 | 92   |
| 3    |    | Benzo[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 92   |
| 4    |    | Benzo[k]fluoranthene      | 252 | C20H12  | 000207-08-9 | 86   |
| 5    |    | Benzo[a]pyrene            | 252 | C20H12  | 000050-32-8 | 83   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF080817\  
Data File : BF097488.D  
Acq On : 9 Aug 2017 00:27  
Operator : SJ/JU  
Sample : I4657-01  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

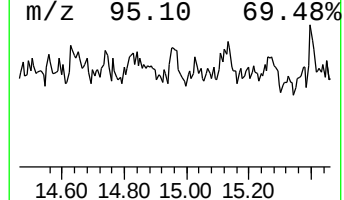
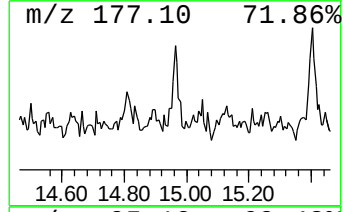
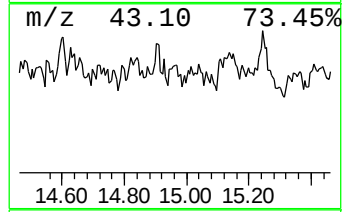
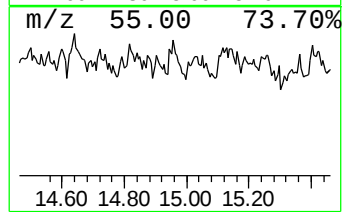
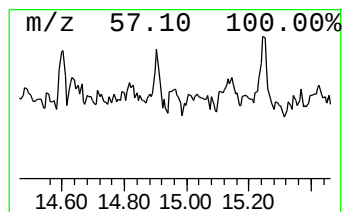
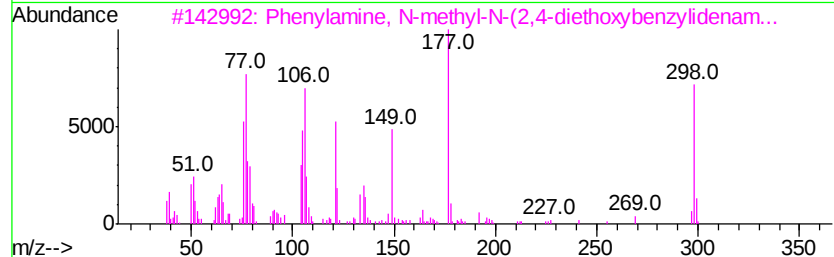
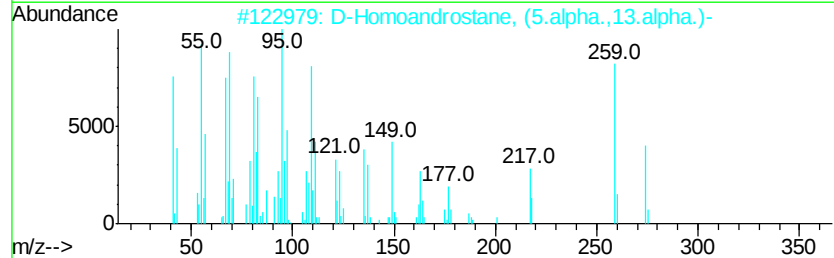
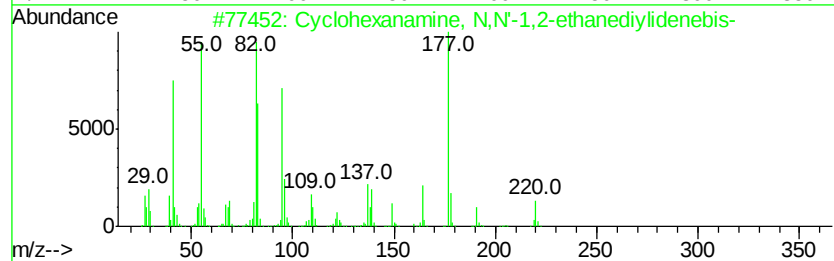
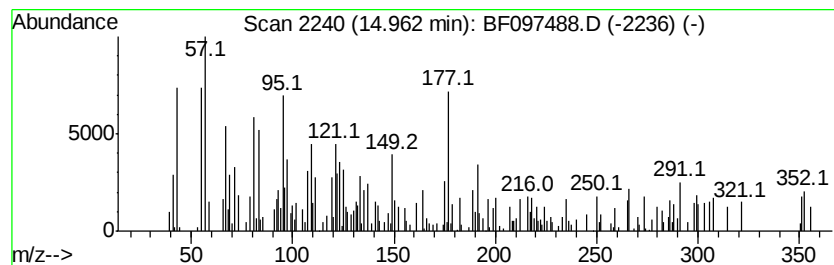
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 unknown14.96 Concentration Rank 9

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 14.96 | 3.87 ng | 88557 | Perylene-d12     | 14.87 |

| Hit# | of | Tentative ID                         | MW  | MolForm    | CAS#         | Qual |
|------|----|--------------------------------------|-----|------------|--------------|------|
| 1    | 5  | Cyclohexanamine, N,N'-1,2-ethane...  | 220 | C14H24N2   | 003673-06-1  | 38   |
| 2    |    | D-Homoandrostande, (5.alpha.,13.a... | 274 | C20H34     | 054482-31-4  | 27   |
| 3    |    | Phenvlamine, N-methvl-N-(2,4-die...  | 298 | C18H22N2O2 | 1000223-55-3 | 18   |
| 4    |    | 4-Ethyl-2-hexynal                    | 124 | C8H12O     | 071932-97-3  | 18   |
| 5    |    | 8-Methyl-9,11-tridecadienol prop...  | 266 | C17H30O2   | 1000130-96-9 | 18   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF080817\  
Data File : BF097488.D  
Acq On : 9 Aug 2017 00:27  
Operator : SJ/JU  
Sample : I4657-01  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

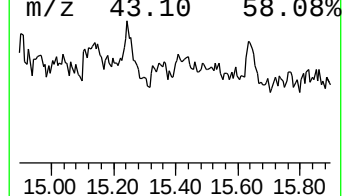
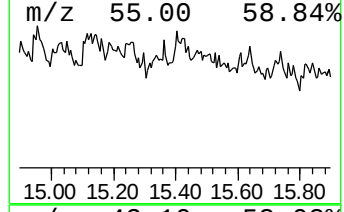
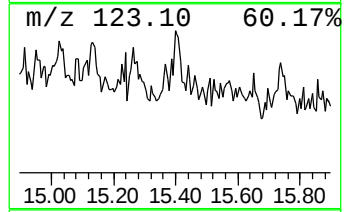
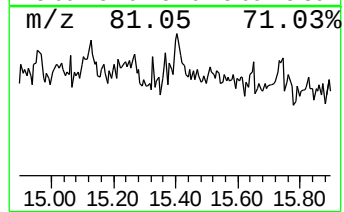
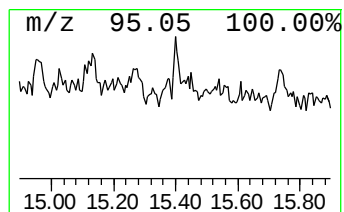
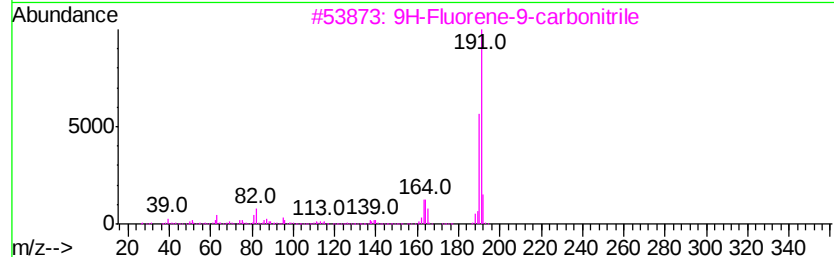
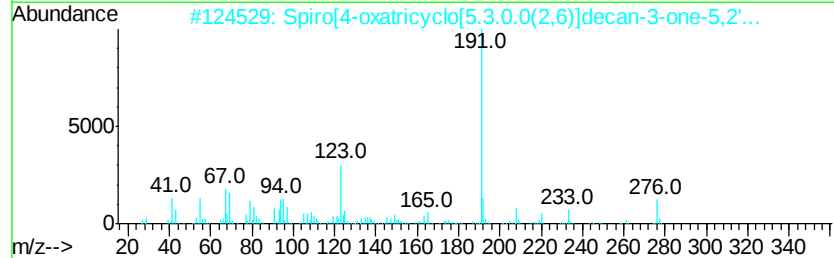
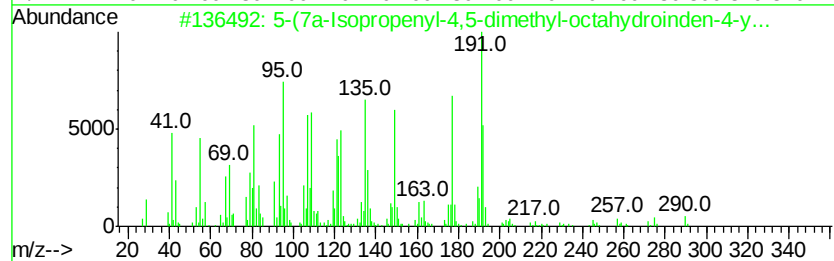
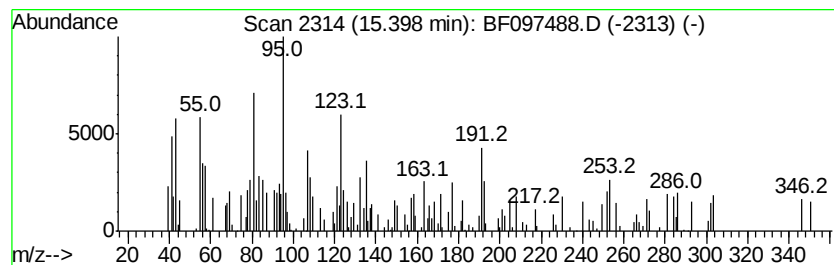
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 10 unknown15.40 Concentration Rank 10

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 15.40 | 3.02 ng | 68996 | Perylene-d12     | 14.87 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#         | Qual |
|------|----|-------------------------------------|-----|----------|--------------|------|
| 1    | 5  | 5-(7a-Isopropenyl-4,5-dimethyl-o... | 290 | C20H34O  | 1000193-54-0 | 38   |
| 2    |    | Spiro[4-oxatricyclo[5.3.0.0(2,6)... | 276 | C18H28O2 | 1000156-82-9 | 35   |
| 3    |    | 9H-Fluorene-9-carbonitrile          | 191 | C14H9N   | 001529-40-4  | 25   |
| 4    |    | Thiazole, 2-amino-4-(p-aminophen... | 191 | C9H9N3S  | 003673-53-8  | 22   |
| 5    |    | .beta.-iso-Methyl ionone            | 206 | C14H22O  | 1000285-40-2 | 22   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF080817\  
Data File : BF097488.D  
Acq On : 9 Aug 2017 00:27  
Operator : SJ/JU  
Sample : I4657-01  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

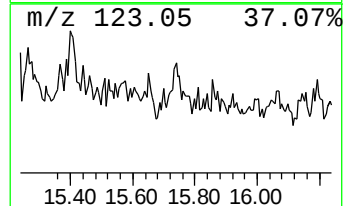
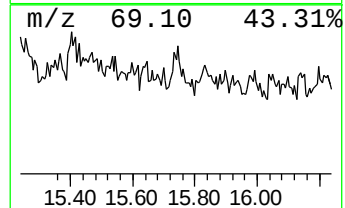
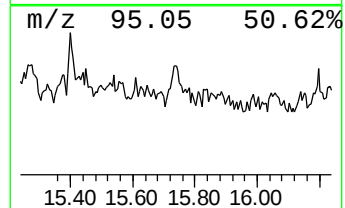
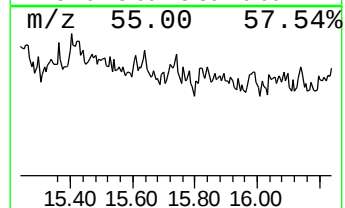
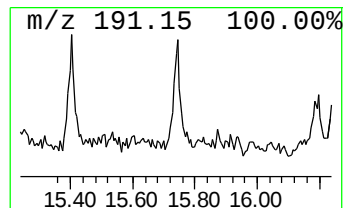
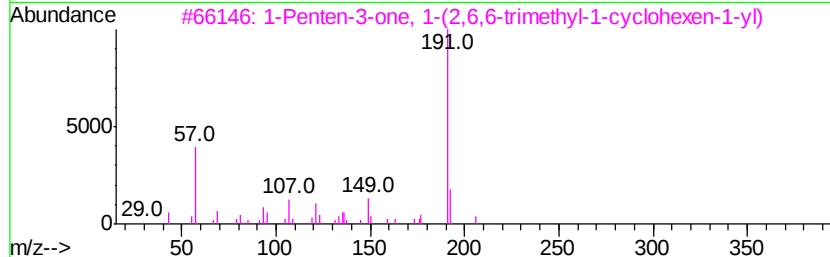
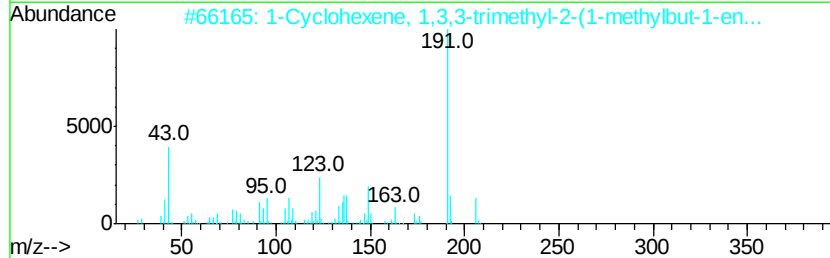
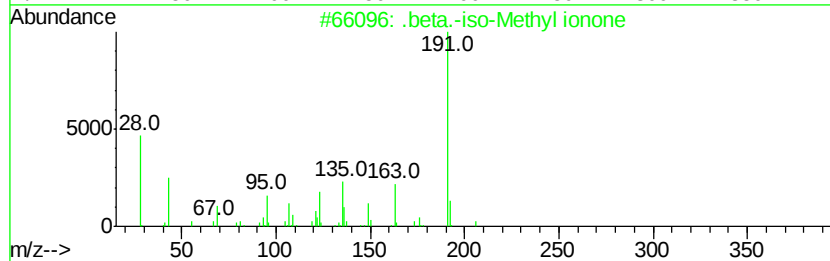
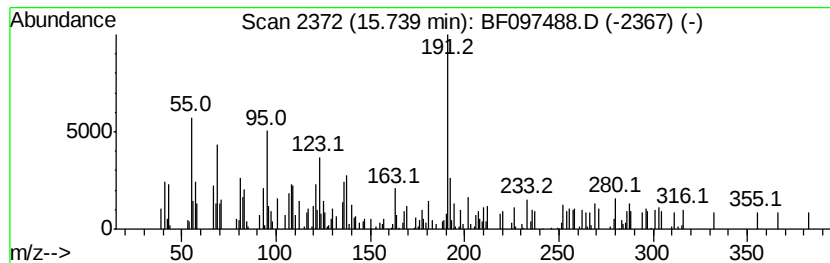
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TIC Integration Parameters: LSCINT.P

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Peak Number 11 .beta.-iso-Methyl ionone Concentration Rank 8

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 15.74 | 3.95 ng | 90412 | Perylene-d12     | 14.87 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|-------------------------------------|-----|------------|--------------|------|
| 1    | 5  | .beta.-iso-Methyl ionone            | 206 | C14H22O    | 1000285-40-2 | 53   |
| 2    |    | 1-Cyclohexene, 1,3,3-trimethyl-2... | 206 | C14H22O    | 1000197-08-4 | 47   |
| 3    |    | 1-Penten-3-one, 1-(2,6,6-trimeth... | 206 | C14H22O    | 000127-43-5  | 38   |
| 4    |    | Anthracene, 9-[2,2-bis(hydroxyme... | 280 | C19H20O2   | 144000-85-1  | 35   |
| 5    |    | Acetamide, N-[3-[(2,5-dioxo-1-p...  | 303 | C16H21N3O3 | 027550-64-7  | 35   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF080817\  
Data File : BF097488.D  
Acq On : 9 Aug 2017 00:27  
Operator : SJ/JU  
Sample : I4657-01  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

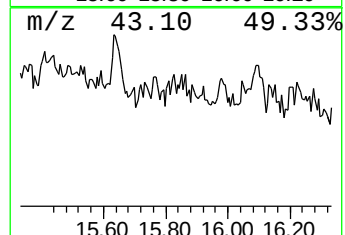
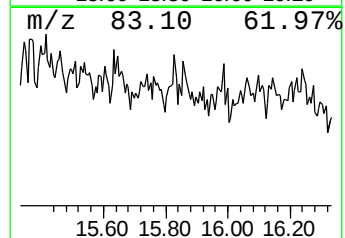
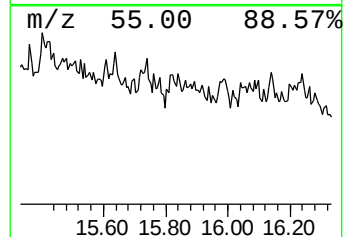
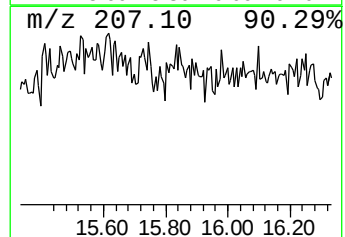
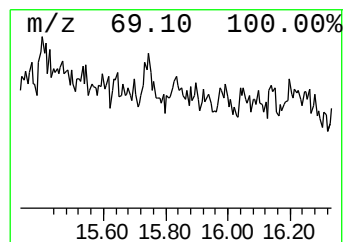
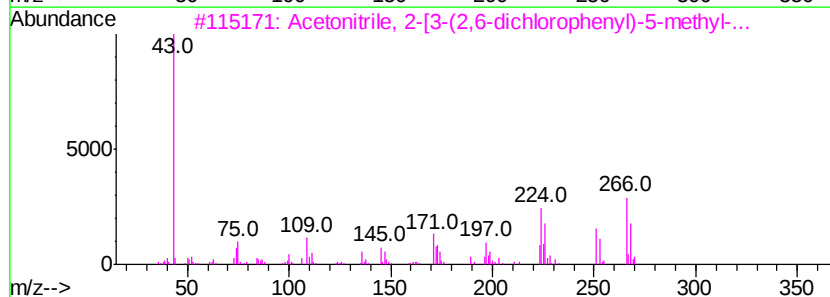
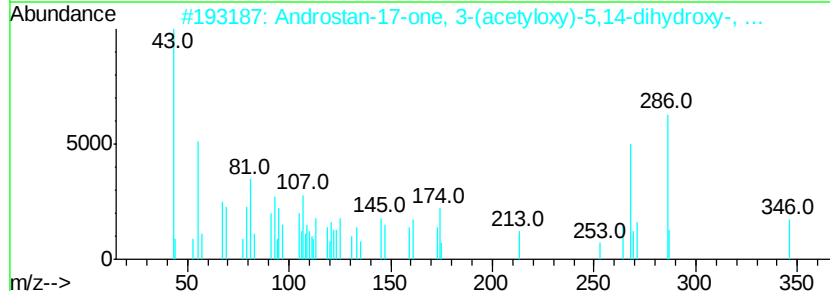
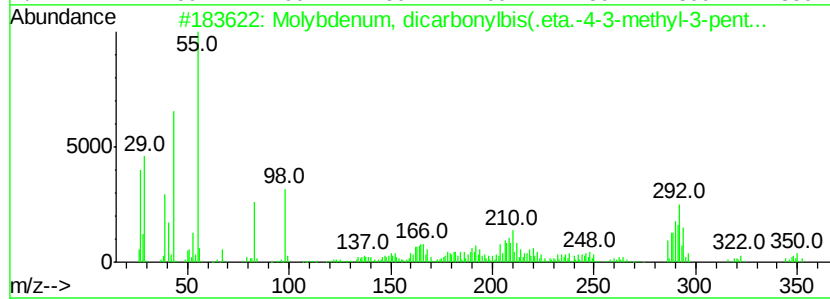
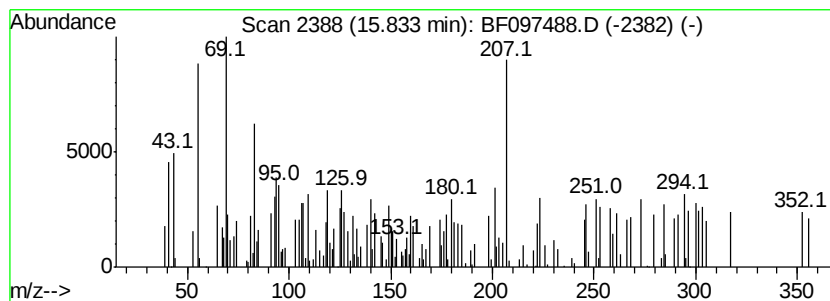
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TIC Integration Parameters: LSCINT.P

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Peak Number 12 unknown15.83 Concentration Rank 7

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 15.83 | 4.04 ng | 92505 | Perylene-d12     | 14.87 |

| Hit# | of | Tentative ID                        | MW  | MolForm     | CAS#         | Qual |
|------|----|-------------------------------------|-----|-------------|--------------|------|
| 1    | 3  | Molybdenum, dicarbonylbis(.eta.-... | 350 | C14H20MoO4  | 1000162-96-5 | 9    |
| 2    |    | Androstan-17-one, 3-(acetyloxy)-... | 364 | C21H32O5    | 041853-32-1  | 9    |
| 3    |    | Acetonitrile, 2-[3-(2,6-dichloro... | 266 | C12H8Cl2N2O | 1000264-41-5 | 2    |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF080817\  
Data File : BF097488.D  
Acq On : 9 Aug 2017 00:27  
Operator : SJ/JU  
Sample : I4657-01  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

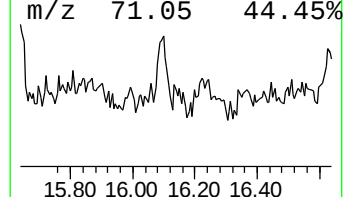
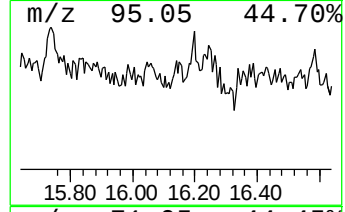
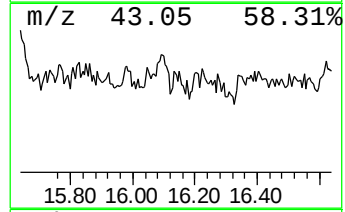
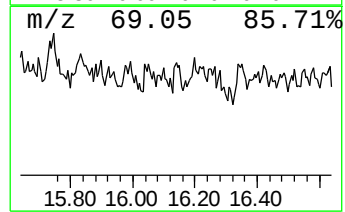
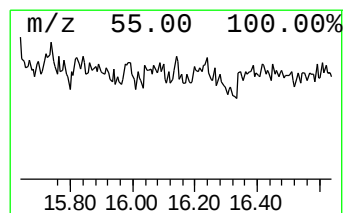
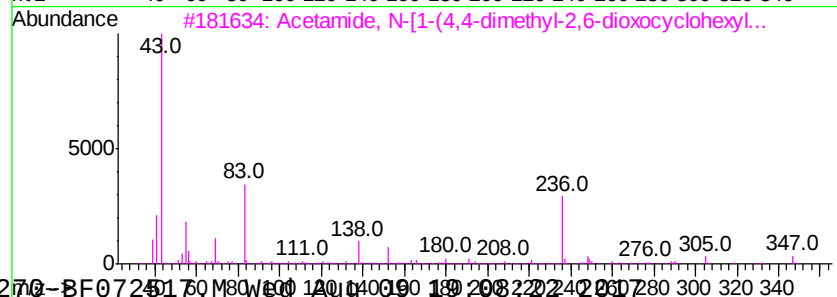
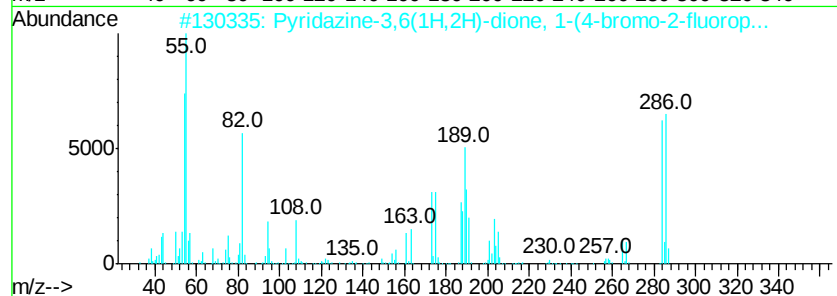
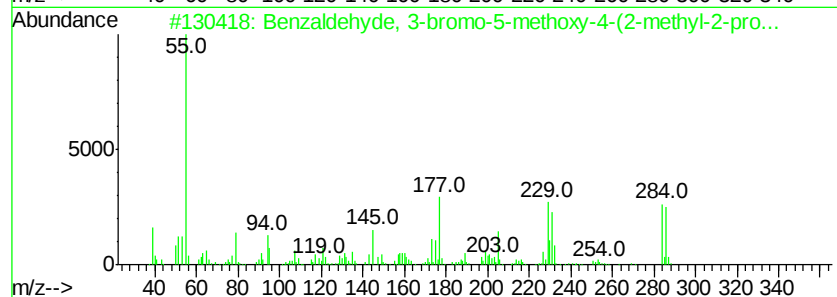
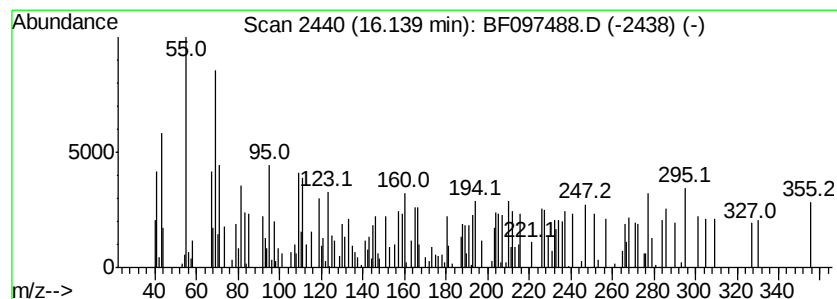
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 13 unknown16.14 Concentration Rank 12

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 16.14 | 2.36 ng | 53997 | Perylene-d12     | 14.87 |

| Hit# | of | 4 | Tentative ID                         | MW  | MolForm      | CAS#         | Qual |
|------|----|---|--------------------------------------|-----|--------------|--------------|------|
| 1    |    |   | Benzaldehyde, 3-bromo-5-methoxyv-... | 284 | C12H13BrO3   | 1000276-70-0 | 9    |
| 2    |    |   | Pyridazine-3,6(1H,2H)-dione, 1-(...  | 284 | C10H6BrFN2O2 | 1000272-67-6 | 9    |
| 3    |    |   | Acetamide, N-[1-(4,4-dimethyl-2,...  | 347 | C13H15F6N3O  | 1000362-54-7 | 4    |
| 4    |    |   | Ethyl bis(2,4-dinitrophenyl) ace...  | 420 | C16H12N4O10  | 005833-18-1  | 2    |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF080817\  
Data File : BF097488.D  
Acq On : 9 Aug 2017 00:27  
Operator : SJ/JU  
Sample : I4657-01  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

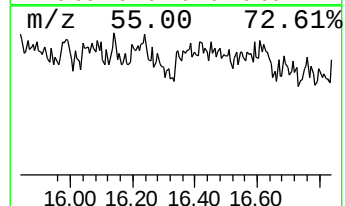
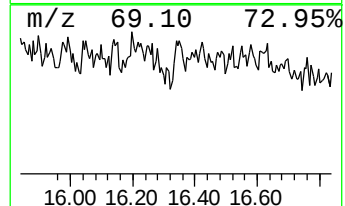
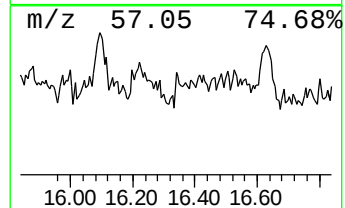
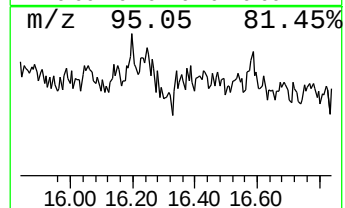
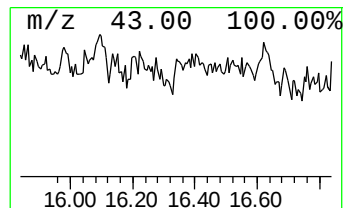
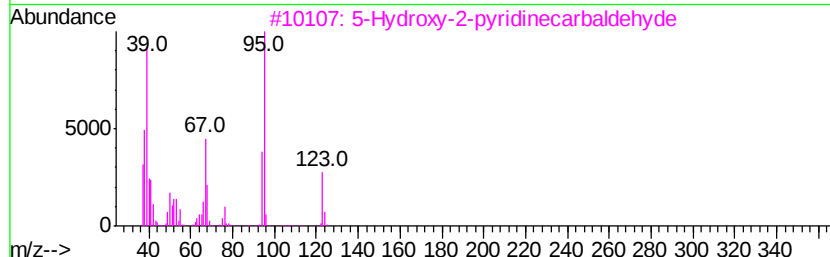
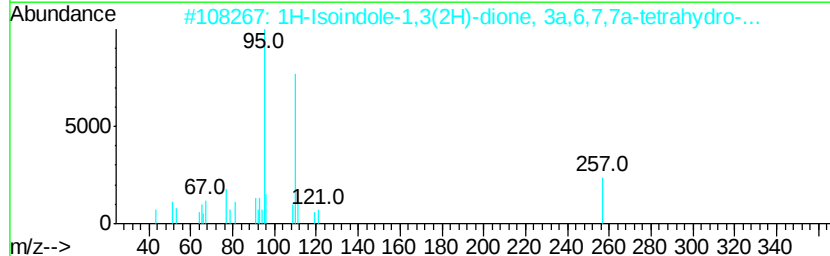
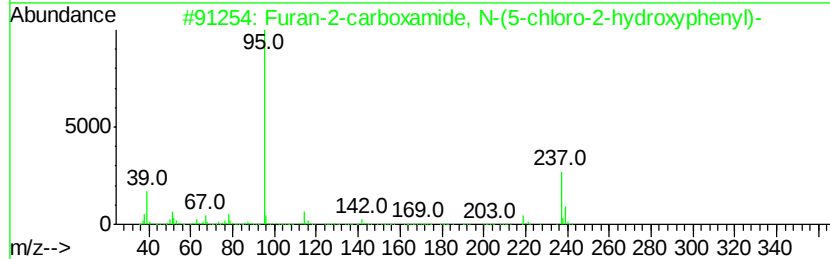
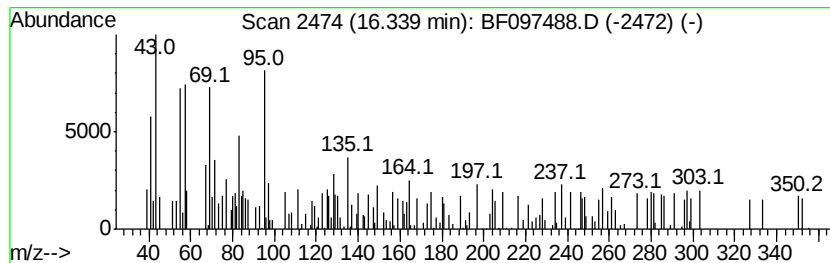
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 14 unknown16.34 Concentration Rank 16

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 16.34 | 2.18 ng | 49819 | Perylene-d12     | 14.87 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|-------------------------------------|-----|------------|--------------|------|
| 1    | 5  | Furan-2-carboxamide, N-(5-chloro... | 237 | C11H8ClN03 | 075748-60-6  | 35   |
| 2    |    | 1H-Isoindole-1,3(2H)-dione, 3a,6... | 257 | C15H15N03  | 054346-14-4  | 25   |
| 3    |    | 5-Hydroxy-2-pyridinecarbaldehyde    | 123 | C6H5N02    | 031191-08-9  | 25   |
| 4    |    | 4-(2-Methylcyclohex-1-enyl)-but-... | 164 | C11H160    | 1000188-10-0 | 22   |
| 5    |    | 5-Octen-2-yn-4-ol                   | 124 | C8H120     | 1000196-87-1 | 22   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF080817\  
Data File : BF097488.D  
Acq On : 9 Aug 2017 00:27  
Operator : SJ/JU  
Sample : I4657-01  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

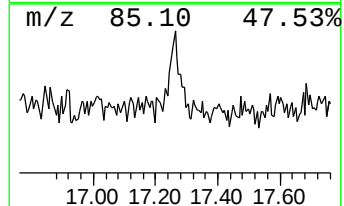
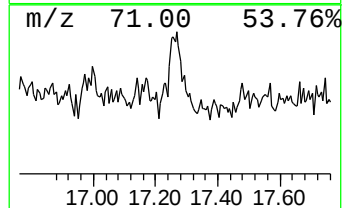
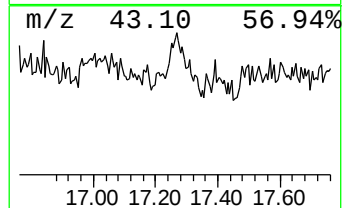
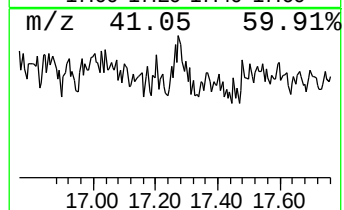
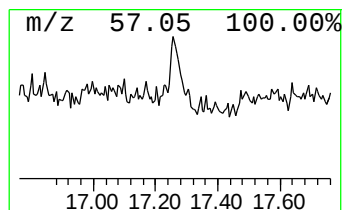
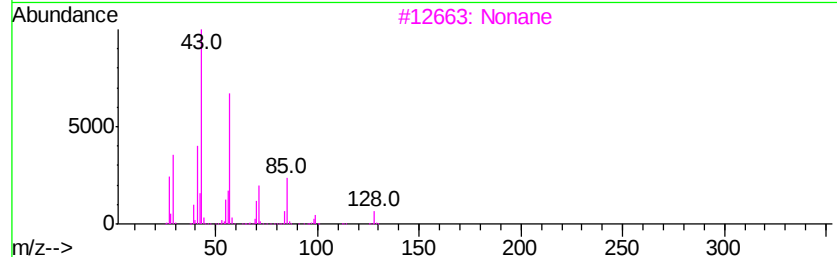
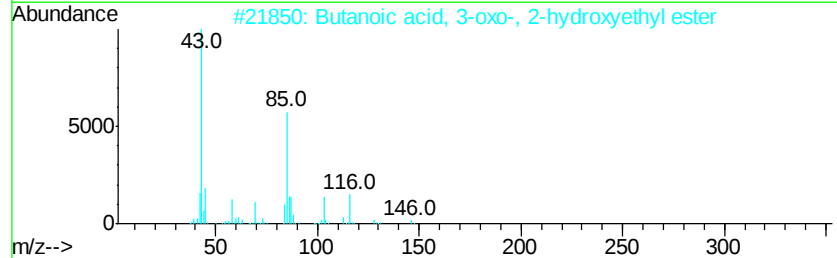
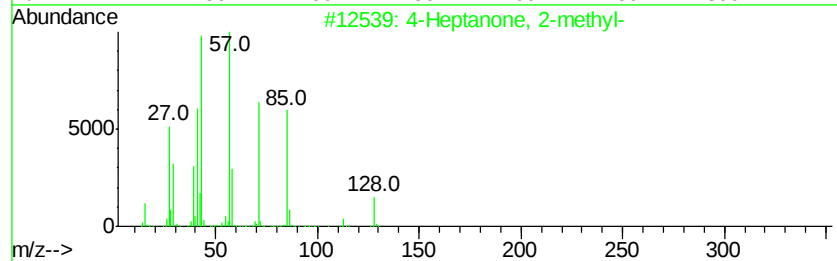
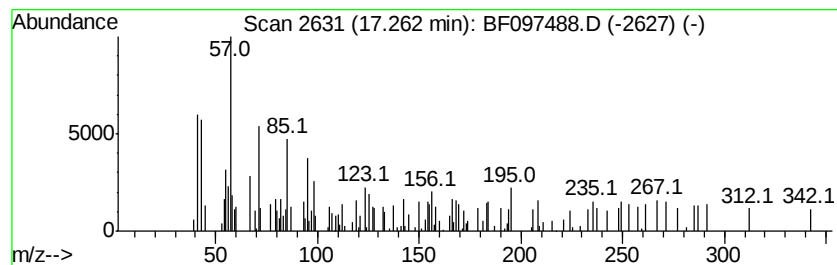
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 15 unknown17.26 Concentration Rank 13

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 17.26 | 2.31 ng | 52885 | Perylene-d12     | 14.87 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | 4-Heptanone, 2-methyl-              | 128 | C8H16O  | 000626-33-5 | 11   |
| 2    |    |   | Butanoic acid, 3-oxo-, 2-hydroxy... | 146 | C6H10O4 | 033736-01-5 | 10   |
| 3    |    |   | Nonane                              | 128 | C9H20   | 000111-84-2 | 10   |
| 4    |    |   | Hexane, 1,1'-oxybis-                | 186 | C12H26O | 000112-58-3 | 10   |
| 5    |    |   | 4,6-Dioxoheptanoic acid             | 158 | C7H10O4 | 051568-18-4 | 10   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF080817\  
Data File : BF097488.D  
Acq On : 9 Aug 2017 00:27  
Operator : SJ/JU  
Sample : I4657-01  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

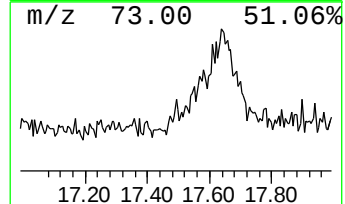
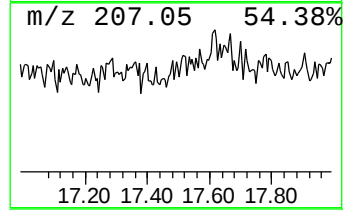
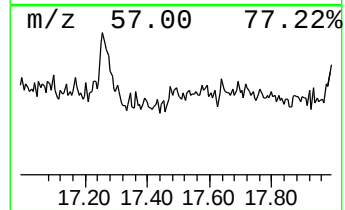
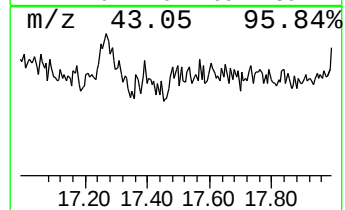
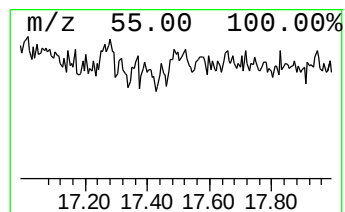
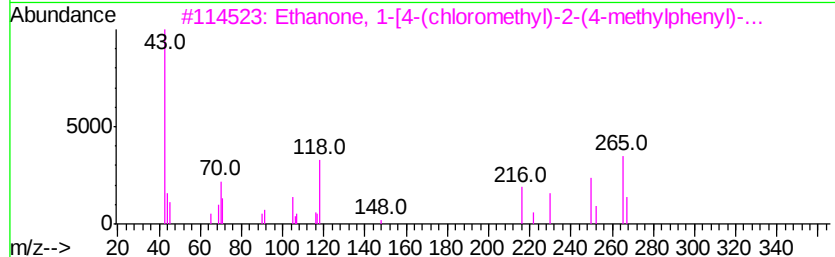
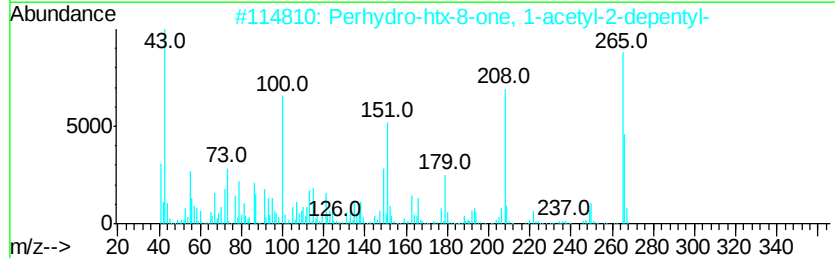
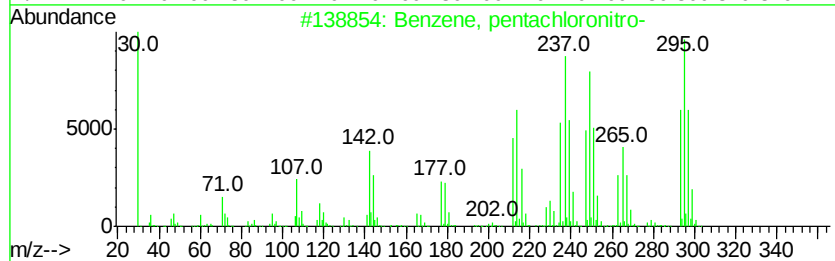
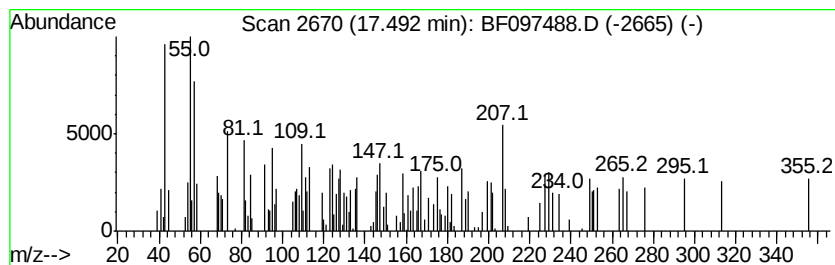
Instrument :  
BNA\_F  
ClientSampleId :  
CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.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 unknown17.49 Concentration Rank 14

| R.T.    | EstConc | Area                                | Relative to ISTD |             | R.T.        |      |
|---------|---------|-------------------------------------|------------------|-------------|-------------|------|
| 17.49   | 2.31 ng | 52768                               | Perylene-d12     |             | 14.87       |      |
| Hit# of | 5       | Tentative ID                        | MW               | MolForm     | CAS#        | Qual |
| 1       |         | Benzene, pentachloronitro-          | 293              | C6Cl5NO2    | 000082-68-8 | 14   |
| 2       |         | Perhydro-htx-8-one, 1-acetyl-2-d... | 265              | C16H27NO2   | 082267-11-6 | 10   |
| 3       |         | Ethanone, 1-[4-(chloromethyl)-2-... | 265              | C13H12ClNO5 | 041991-34-8 | 10   |
| 4       |         | 1-(5-Bromo-4-nitro-2-thienyl)eth... | 249              | C6H4BrN03S  | 002160-55-6 | 9    |
| 5       |         | 2-Aminosuccinic acid, 2-benzyl-N... | 363              | C20H29NO5   | 079435-85-1 | 9    |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF080817\  
Data File : BF097488.D  
Acq On : 9 Aug 2017 00:27  
Operator : SJ/JU  
Sample : I4657-01  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

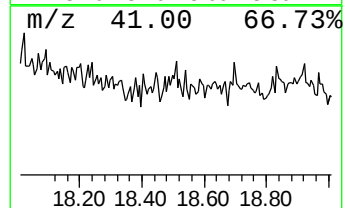
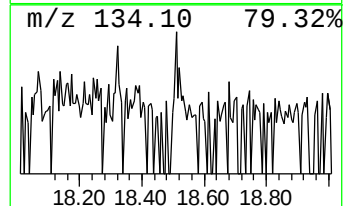
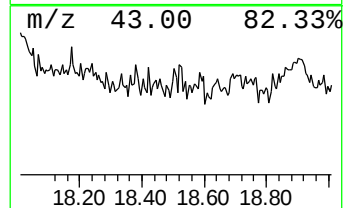
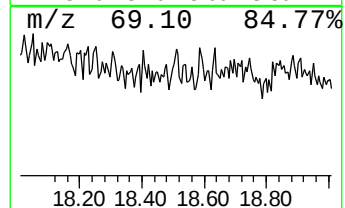
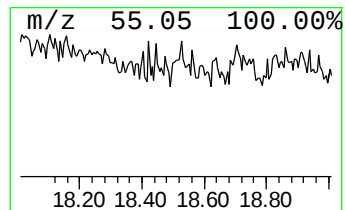
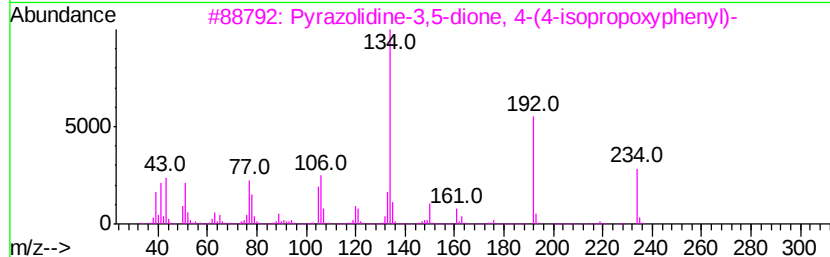
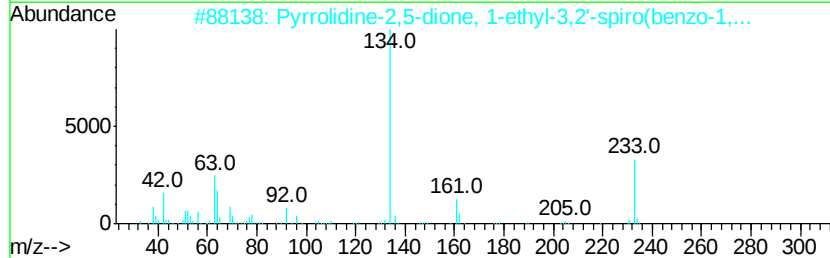
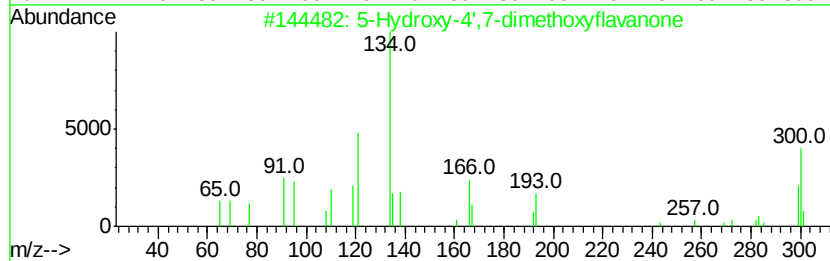
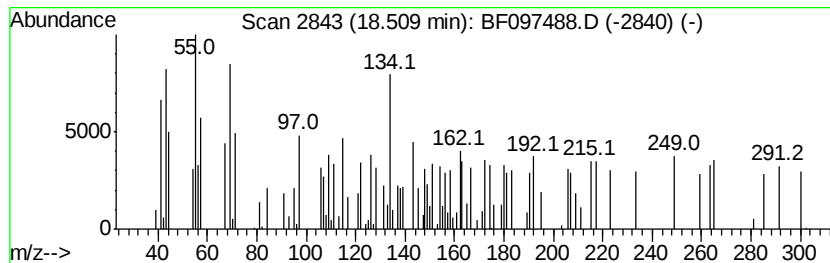
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 17 unknown18.51 Concentration Rank 15

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 18.51 | 2.26 ng | 51672 | Perylene-d12     | 14.87 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|-------------------------------------|-----|------------|--------------|------|
| 1    | 5  | 5-Hydroxy-4',7-dimethoxyflavanone   | 300 | C17H16O5   | 069097-96-7  | 27   |
| 2    |    | Pyrrolidine-2,5-dione, 1-ethyl-3... | 233 | C12H11N04  | 109163-46-4  | 22   |
| 3    |    | Pyrazolidine-3,5-dione, 4-(4-iso... | 234 | C12H14N2O3 | 1000259-14-4 | 22   |
| 4    |    | Quinoxaline, 1,4-diacetyl-1,2,3,... | 291 | C14H17N3O4 | 1000350-39-3 | 18   |
| 5    |    | Benzimidazole, 2-ethoxy-            | 162 | C9H10N2O   | 022219-23-4  | 18   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF080817\  
 Data File : BF097488.D  
 Acq On : 9 Aug 2017 00:27  
 Operator : SJ/JU  
 Sample : I4657-01  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 CL-01-080717-A

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072517.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... | 4.53  | 4.2     | ng    | 134399   | 1                     | 6.40  | 642501 | 20.0 |
| unknown6.18          | 6.18  | 46.4    | ng    | 1490760  | 1                     | 6.40  | 642501 | 20.0 |
| 4H-Cyclopenta[def... | 11.52 | 2.1     | ng    | 62496    | 4                     | 10.90 | 605322 | 20.0 |
| Squalene             | 14.37 | 4.7     | ng    | 108263   | 6                     | 14.87 | 457646 | 20.0 |
| unknown14.44         | 14.44 | 4.5     | ng    | 104059   | 6                     | 14.87 | 457646 | 20.0 |
| unknown14.63         | 14.63 | 4.5     | ng    | 102490   | 6                     | 14.87 | 457646 | 20.0 |
| Benzo[e]pyrene       | 14.77 | 2.6     | ng    | 59307    | 6                     | 14.87 | 457646 | 20.0 |
| unknown14.96         | 14.96 | 3.9     | ng    | 88557    | 6                     | 14.87 | 457646 | 20.0 |
| unknown15.40         | 15.40 | 3.0     | ng    | 68996    | 6                     | 14.87 | 457646 | 20.0 |
| .beta.-iso-Methyl... | 15.74 | 4.0     | ng    | 90412    | 6                     | 14.87 | 457646 | 20.0 |
| unknown15.83         | 15.83 | 4.0     | ng    | 92505    | 6                     | 14.87 | 457646 | 20.0 |
| unknown16.14         | 16.14 | 2.4     | ng    | 53997    | 6                     | 14.87 | 457646 | 20.0 |
| unknown16.34         | 16.34 | 2.2     | ng    | 49819    | 6                     | 14.87 | 457646 | 20.0 |
| unknown17.26         | 17.26 | 2.3     | ng    | 52885    | 6                     | 14.87 | 457646 | 20.0 |
| unknown17.49         | 17.49 | 2.3     | ng    | 52768    | 6                     | 14.87 | 457646 | 20.0 |
| unknown18.51         | 18.51 | 2.3     | ng    | 51672    | 6                     | 14.87 | 457646 | 20.0 |