

Data Path : Z:\HPCHEM1\BNA F\DATA\BF081817\  
 Data File : BF097849.D  
 Acq On : 18 Aug 2017 22:56  
 Operator : SJ/JU  
 Sample : I4811-07  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 DUP

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-BF081517.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         | 4.963       | 485           | 489         | 499          | rVB      | 354765         | 443941        | 12.96%          | 1.281%        |
| 2         | 5.375       | 554           | 559         | 562          | rBV      | 2955317        | 3161093       | 92.26%          | 9.119%        |
| 3         | 6.404       | 728           | 734         | 737          | rBV      | 3129527        | 3302749       | 96.40%          | 9.527%        |
| 4         | 6.539       | 752           | 757         | 760          | rBV      | 3180007        | 3163215       | 92.32%          | 9.125%        |
| 5         | 6.769       | 793           | 796         | 800          | rBV      | 976000         | 774517        | 22.61%          | 2.234%        |
| 6         | 6.928       | 819           | 823         | 826          | rBV      | 2684450        | 2329008       | 67.98%          | 6.718%        |
| 7         | 7.333       | 887           | 892         | 895          | rBV      | 2162329        | 2085537       | 60.87%          | 6.016%        |
| 8         | 8.051       | 1010          | 1014        | 1018         | rBV      | 1161258        | 1013887       | 29.59%          | 2.925%        |
| 9         | 9.133       | 1193          | 1198        | 1201         | rBV      | 3563412        | 3426175       | 100.00%         | 9.884%        |
| 10        | 9.522       | 1261          | 1264        | 1268         | rBV      | 502134         | 412259        | 12.03%          | 1.189%        |
| 11        | 9.804       | 1308          | 1312        | 1316         | rBV      | 1163993        | 1078163       | 31.47%          | 3.110%        |
| 12        | 9.839       | 1316          | 1318        | 1321         | rVB      | 80670          | 62250         | 1.82%           | 0.180%        |
| 13        | 10.351      | 1402          | 1405        | 1408         | rBV      | 67018          | 52626         | 1.54%           | 0.152%        |
| 14        | 10.592      | 1441          | 1446        | 1450         | rBV      | 2055902        | 2148265       | 62.70%          | 6.197%        |
| 15        | 10.716      | 1464          | 1467        | 1475         | rBV      | 33021          | 35069         | 1.02%           | 0.101%        |
| 16        | 11.186      | 1545          | 1547        | 1553         | rVB      | 40101          | 37767         | 1.10%           | 0.109%        |
| 17        | 11.286      | 1560          | 1564        | 1567         | rBV      | 1212493        | 1248199       | 36.43%          | 3.601%        |
| 18        | 11.310      | 1567          | 1568        | 1572         | rVV      | 781283         | 520726        | 15.20%          | 1.502%        |
| 19        | 11.363      | 1572          | 1577        | 1580         | rVB      | 203674         | 179443        | 5.24%           | 0.518%        |
| 20        | 11.516      | 1598          | 1603        | 1606         | rBV2     | 75672          | 71003         | 2.07%           | 0.205%        |
| 21        | 11.786      | 1644          | 1649        | 1652         | rBV      | 59881          | 57772         | 1.69%           | 0.167%        |
| 22        | 11.816      | 1652          | 1654        | 1658         | rVB      | 98278          | 76198         | 2.22%           | 0.220%        |
| 23        | 11.863      | 1658          | 1662        | 1665         | rBV2     | 45849          | 36381         | 1.06%           | 0.105%        |
| 24        | 11.898      | 1665          | 1668        | 1671         | rBV      | 97168          | 106883        | 3.12%           | 0.308%        |
| 25        | 12.086      | 1695          | 1700        | 1702         | rBV      | 59781          | 58713         | 1.71%           | 0.169%        |
| 26        | 12.339      | 1739          | 1743        | 1746         | rBV2     | 34597          | 37264         | 1.09%           | 0.107%        |
| 27        | 12.498      | 1766          | 1770        | 1773         | rBV      | 774602         | 649135        | 18.95%          | 1.873%        |
| 28        | 12.727      | 1802          | 1809        | 1812         | rBV      | 576908         | 665091        | 19.41%          | 1.919%        |
| 29        | 12.774      | 1815          | 1817        | 1823         | rVB2     | 33360          | 37613         | 1.10%           | 0.109%        |
| 30        | 12.880      | 1830          | 1835        | 1838         | rVB      | 3442099        | 3411704       | 99.58%          | 9.842%        |
| 31        | 12.945      | 1841          | 1846        | 1849         | rBV3     | 26997          | 44700         | 1.30%           | 0.129%        |
| 32        | 13.051      | 1862          | 1864        | 1868         | rVB      | 67324          | 61249         | 1.79%           | 0.177%        |
| 33        | 13.115      | 1872          | 1875        | 1878         | rVB2     | 52335          | 52675         | 1.54%           | 0.152%        |
| 34        | 13.157      | 1878          | 1882        | 1884         | rBV2     | 58654          | 61850         | 1.81%           | 0.178%        |

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Misc :  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
BNA\_F  
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DUP

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

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

Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF081517.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |        |        |
|----|--------|------|------|------|------|---------|---------|--------|--------|
| 35 | 13.457 | 1928 | 1933 | 1935 | rBV3 | 32233   | 34536   | 1.01%  | 0.100% |
| 36 | 13.557 | 1947 | 1950 | 1956 | rVB  | 34259   | 40986   | 1.20%  | 0.118% |
| 37 | 13.668 | 1965 | 1969 | 1972 | rBV2 | 34249   | 45953   | 1.34%  | 0.133% |
| 38 | 13.774 | 1982 | 1987 | 1994 | rVB3 | 151310  | 179080  | 5.23%  | 0.517% |
| 39 | 13.921 | 2004 | 2012 | 2015 | rBV2 | 1279043 | 1449014 | 42.29% | 4.180% |
| 40 | 13.945 | 2015 | 2016 | 2019 | rVB  | 259646  | 153186  | 4.47%  | 0.442% |
| 41 | 14.027 | 2027 | 2030 | 2032 | rVB  | 40835   | 35491   | 1.04%  | 0.102% |
| 42 | 14.304 | 2074 | 2077 | 2079 | rBV  | 34834   | 38219   | 1.12%  | 0.110% |
| 43 | 14.557 | 2117 | 2120 | 2126 | rVB  | 188351  | 169454  | 4.95%  | 0.489% |
| 44 | 14.939 | 2180 | 2185 | 2194 | rBV  | 146968  | 294622  | 8.60%  | 0.850% |
| 45 | 15.039 | 2198 | 2202 | 2209 | rVB2 | 39850   | 53991   | 1.58%  | 0.156% |
| 46 | 15.227 | 2230 | 2234 | 2240 | rVB  | 88553   | 103419  | 3.02%  | 0.298% |
| 47 | 15.286 | 2240 | 2244 | 2250 | rVB  | 125319  | 148777  | 4.34%  | 0.429% |
| 48 | 15.351 | 2250 | 2255 | 2259 | rBV  | 725409  | 860202  | 25.11% | 2.481% |
| 49 | 16.739 | 2486 | 2491 | 2499 | rVB3 | 44776   | 81096   | 2.37%  | 0.234% |
| 50 | 17.156 | 2556 | 2562 | 2571 | rVB2 | 33240   | 74457   | 2.17%  | 0.215% |

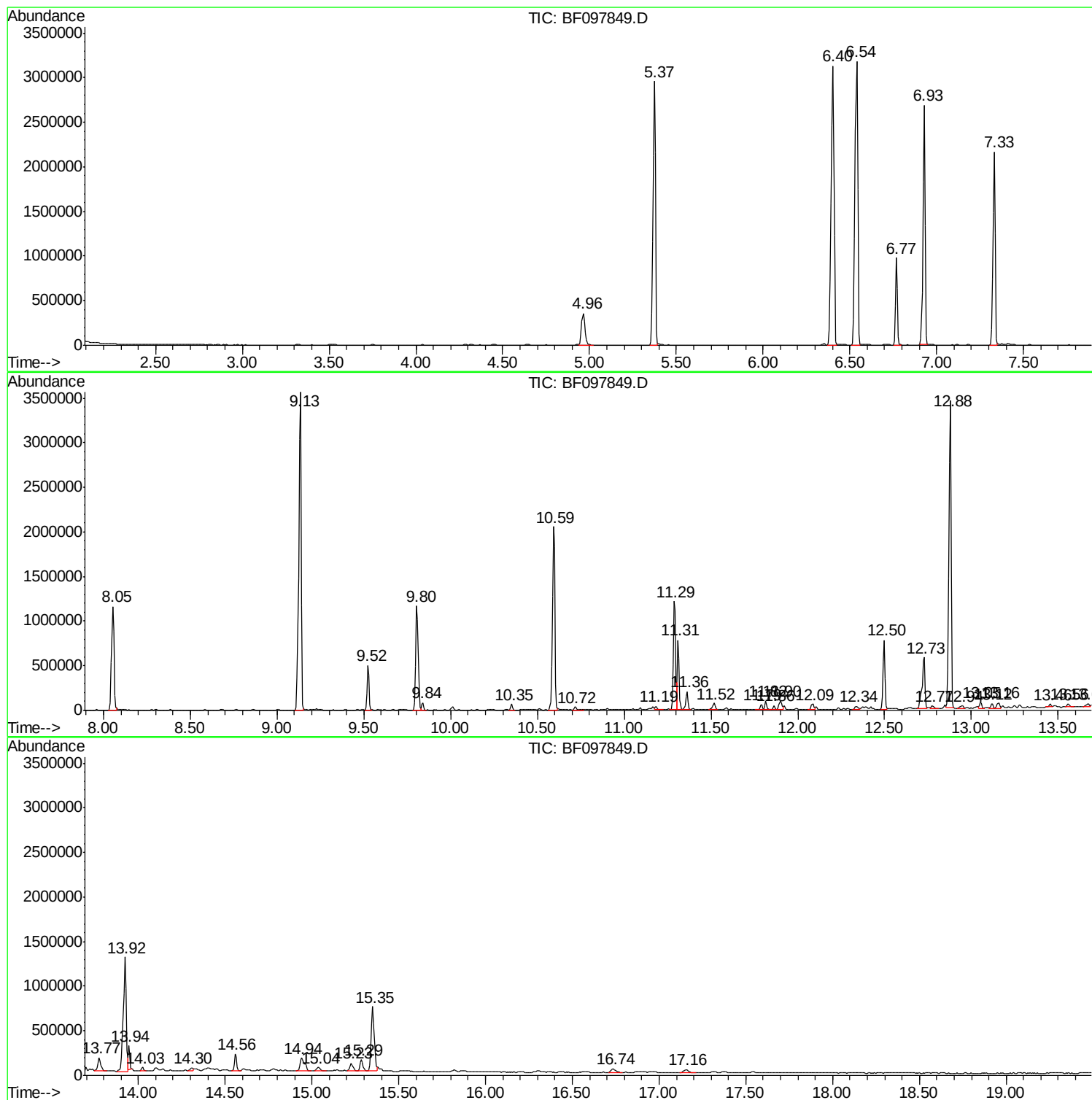
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ALS Vial : 13 Sample Multiplier: 1

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ClientSampled :  
DUP

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF081517.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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DUP

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF081517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

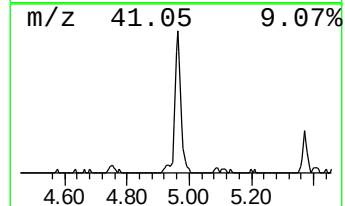
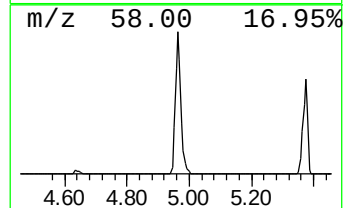
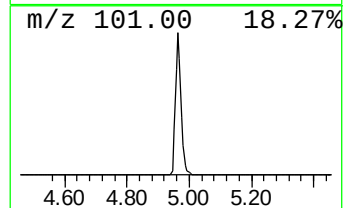
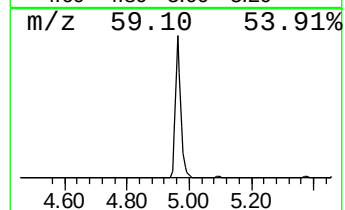
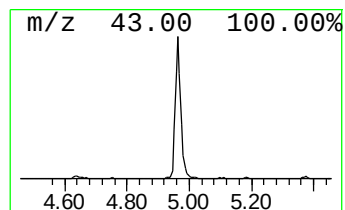
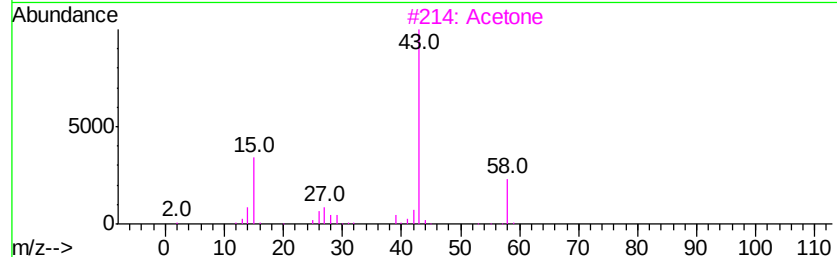
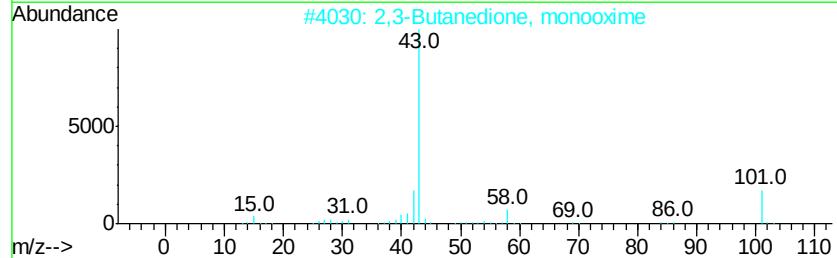
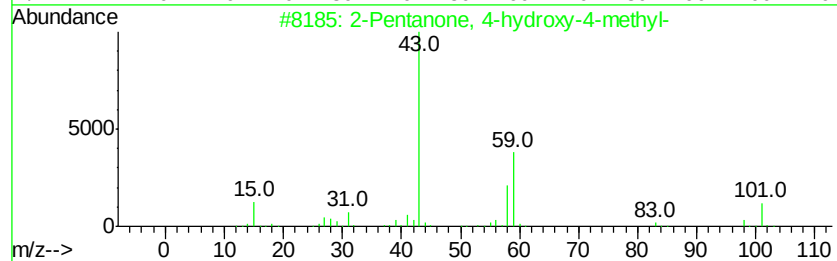
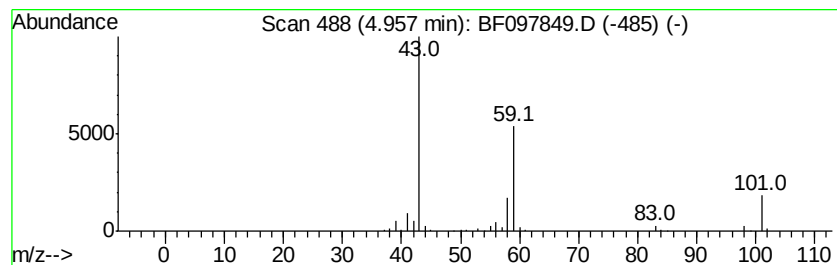
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 3

| R.T. | EstConc  | Area   | Relative to ISTD       | R.T. |
|------|----------|--------|------------------------|------|
| 4.96 | 11.46 ng | 443941 | 1,4-Dichlorobenzene-d4 | 6.77 |

| Hit# | of | Tentative ID                     | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------------|-----|---------|-------------|------|
| 1    | 5  | 2-Pentanone, 4-hydroxy-4-methyl- | 116 | C6H12O2 | 000123-42-2 | 59   |
| 2    |    | 2,3-Butanedione, monooxime       | 101 | C4H7NO2 | 000057-71-6 | 27   |
| 3    |    | Acetone                          | 58  | C3H6O   | 000067-64-1 | 12   |
| 4    |    | 1-Propen-2-ol, acetate           | 100 | C5H8O2  | 000108-22-5 | 10   |
| 5    |    | Morpholine, 4-methyl-            | 101 | C5H11NO | 000109-02-4 | 9    |



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Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF081517.M  
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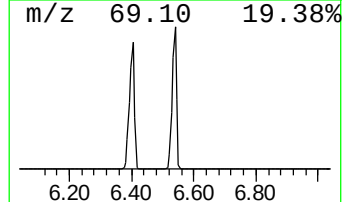
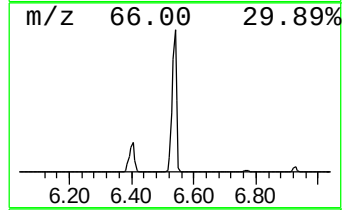
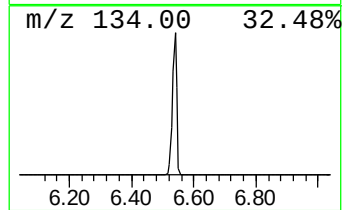
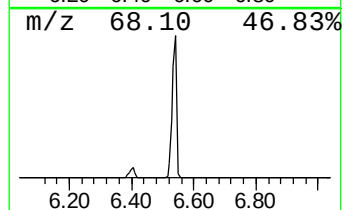
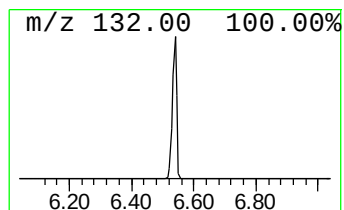
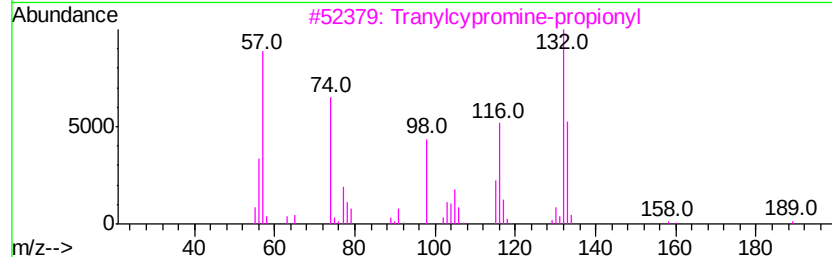
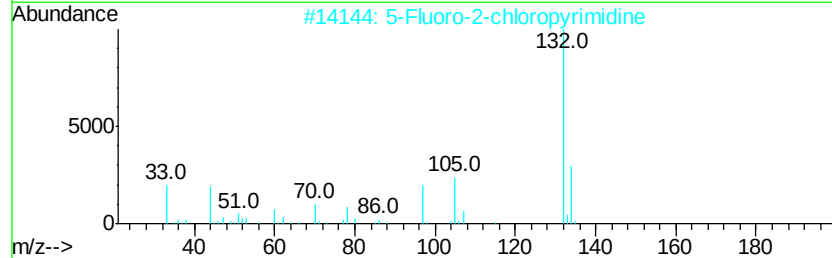
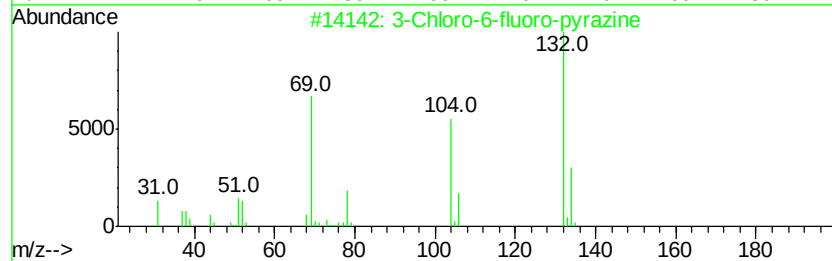
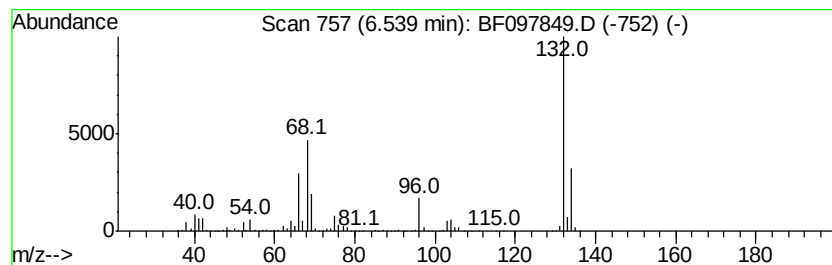
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 2 unknown6.54 Concentration Rank 1

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 6.54 | 81.68 ng | 3163220 | 1,4-Dichlorobenzene-d4 | 6.77 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | 3-Chloro-6-fluoro-pyrazine          | 132 | C4H2ClFN2 | 1000146-10-7 | 27   |
| 2    |    | 5-Fluoro-2-chloropyrimidine         | 132 | C4H2ClFN2 | 062802-42-0  | 12   |
| 3    |    | Tranvlcypropine-propionyl           | 189 | C12H15NO  | 1000123-86-3 | 10   |
| 4    |    | Bicyclo[4.2.0]octa-1,3,5-triene,... | 132 | C10H12    | 028749-81-7  | 9    |
| 5    |    | 1-Methylpyrrolo[1,2-a]pyrazine      | 132 | C8H8N2    | 064608-59-9  | 9    |



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Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF081517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

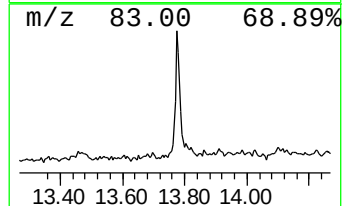
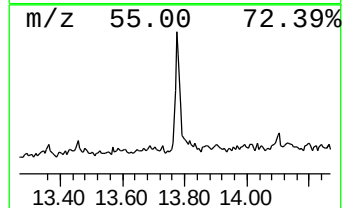
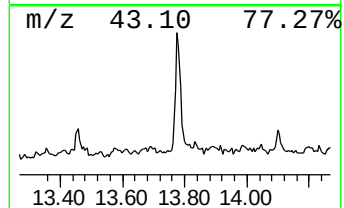
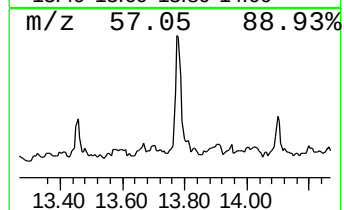
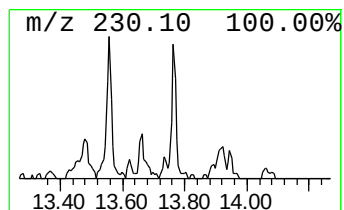
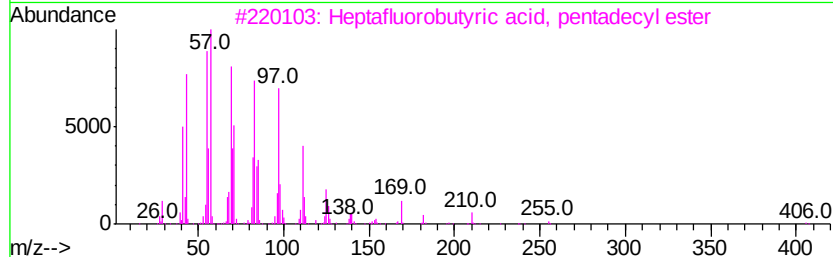
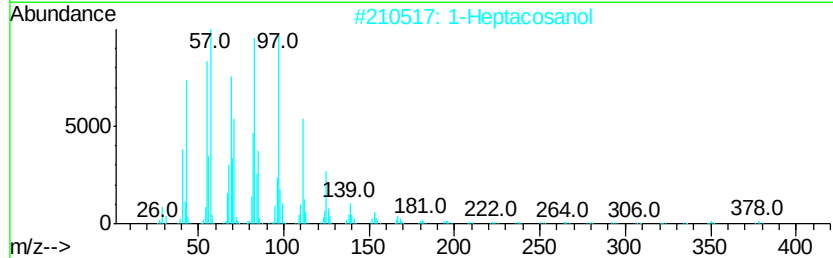
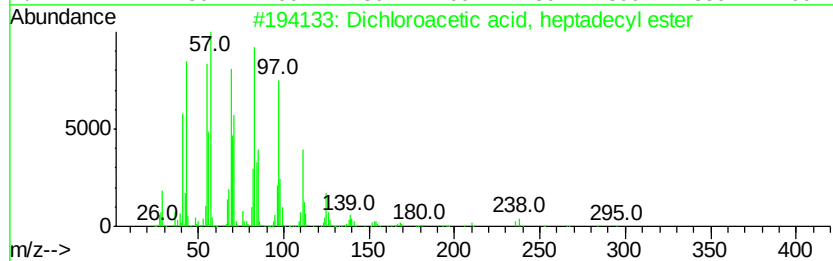
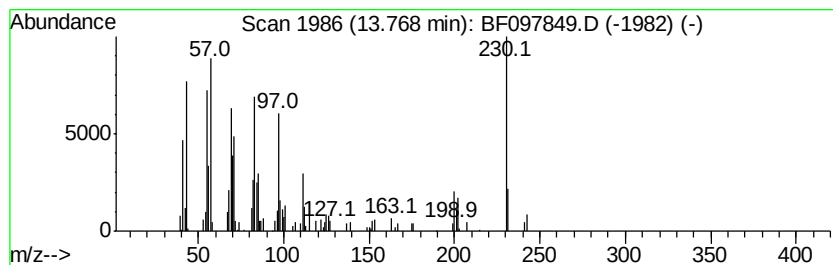
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 4 Dichloroacetic acid, heptad... Concentration Rank 4

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 13.77 | 2.47 ng | 179080 | Chrysene-d12     | 13.92 |

| Hit# | of | Tentative ID                        | MW  | MolForm     | CAS#         | Qual |
|------|----|-------------------------------------|-----|-------------|--------------|------|
| 1    | 5  | Dichloroacetic acid, heptadecyl ... | 366 | C19H36Cl2O2 | 1000282-98-2 | 93   |
| 2    |    | 1-Heptacosanol                      | 396 | C27H56O     | 002004-39-9  | 93   |
| 3    |    | Heptafluorobutyric acid, pentade... | 424 | C19H31F7O2  | 959261-23-5  | 91   |
| 4    |    | Pentafluoropropionic acid, penta... | 374 | C18H31F5O2  | 959092-08-1  | 90   |
| 5    |    | Trifluoroacetoxy hexadecane         | 338 | C18H33F3O2  | 006222-03-3  | 90   |



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Instrument :  
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DUP

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF081517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

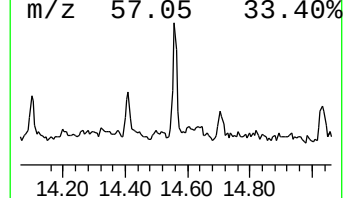
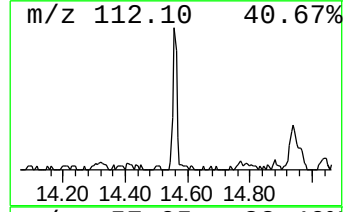
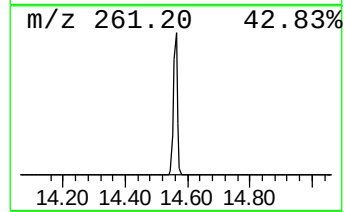
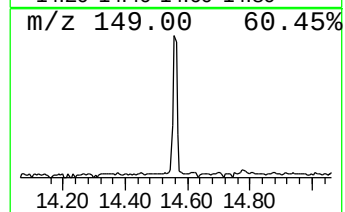
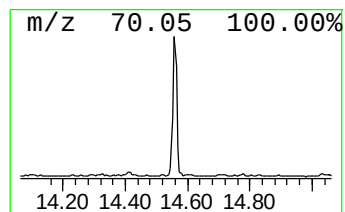
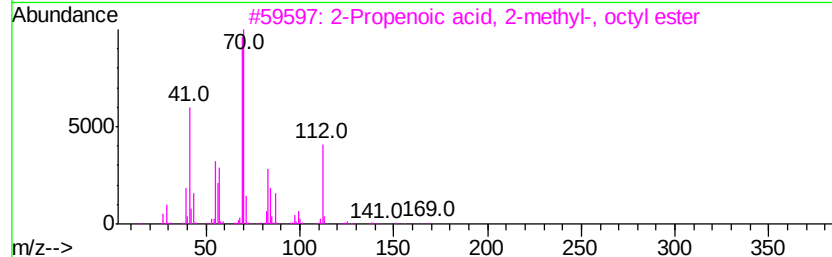
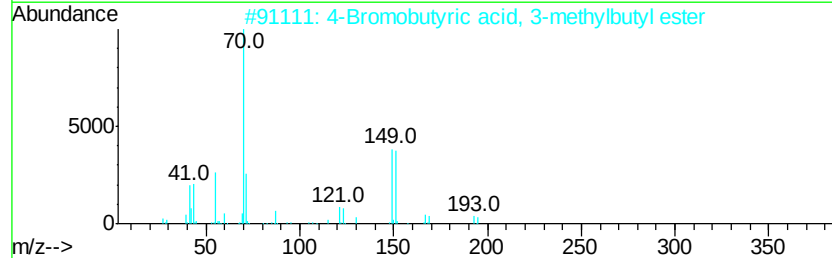
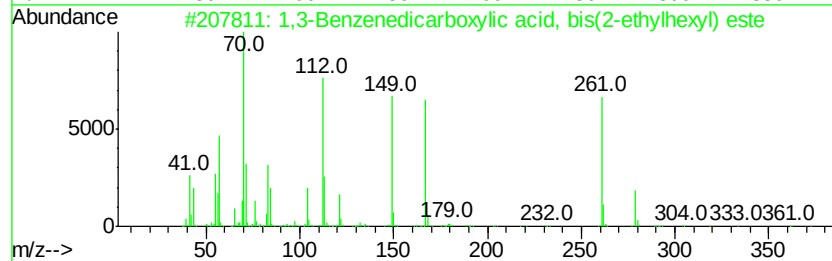
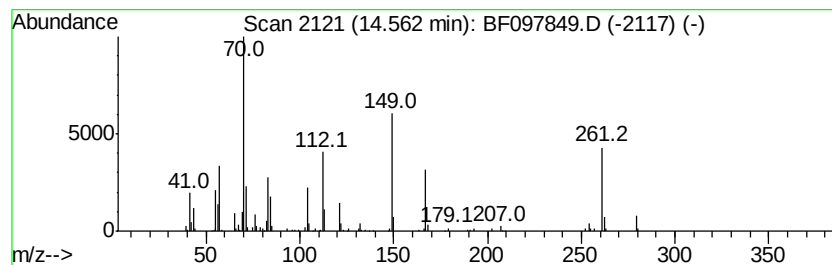
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 5 unknown14.56 Concentration Rank 6

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 14.56 | 2.34 ng | 169454 | Chrysene-d12     | 13.92 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|-------------------------------------|-----|------------|--------------|------|
| 1    | 5  | 1,3-Benzenedicarboxylic acid, bi... | 390 | C24H38O4   | 000137-89-3  | 47   |
| 2    |    | 4-Bromobutyric acid, 3-methylbut... | 236 | C9H17BrO2  | 1000354-68-4 | 37   |
| 3    |    | 2-Propenoic acid, 2-methyl-, oct... | 198 | C12H22O2   | 002157-01-9  | 25   |
| 4    |    | 1-(2-Hydroxymethylpyrrolidin-1-y... | 143 | C7H13NO2   | 1000192-83-2 | 17   |
| 5    |    | Dimethylmalonic acid, monochlori... | 262 | C13H23ClO3 | 1000361-64-8 | 17   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF081817\  
Data File : BF097849.D  
Acq On : 18 Aug 2017 22:56  
Operator : SJ/JU  
Sample : I4811-07  
Misc :  
ALS Vial : 13 Sample Multiplier: 1

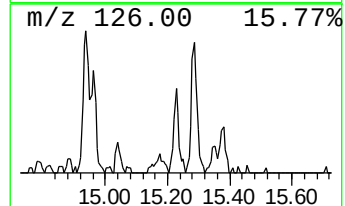
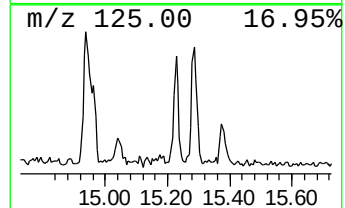
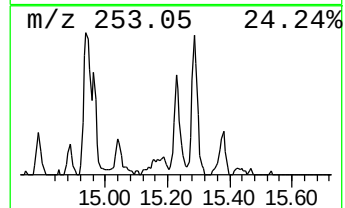
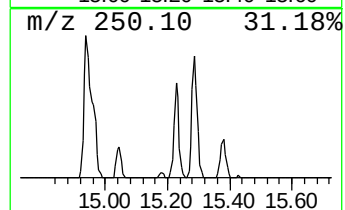
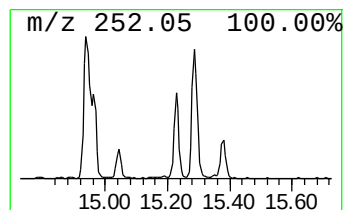
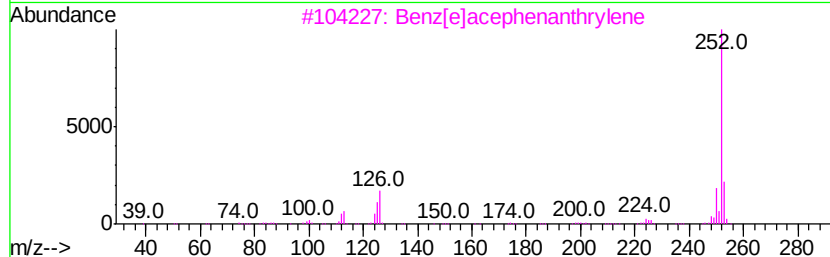
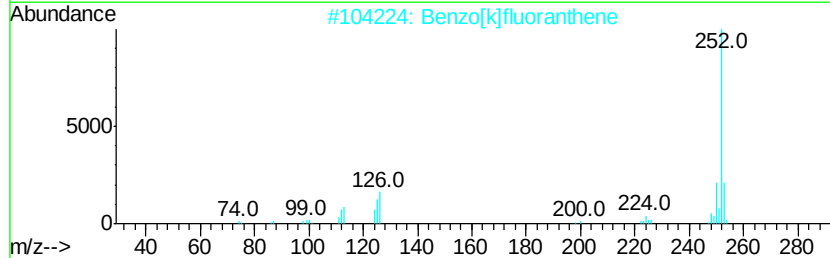
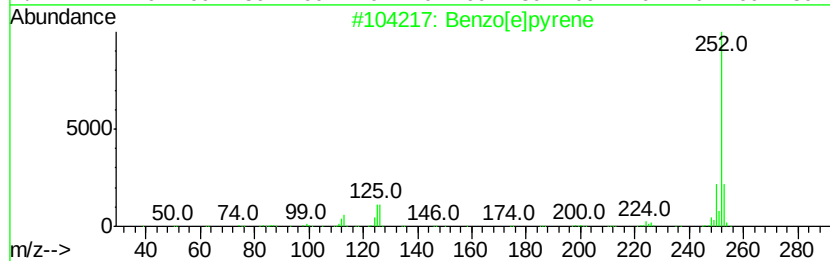
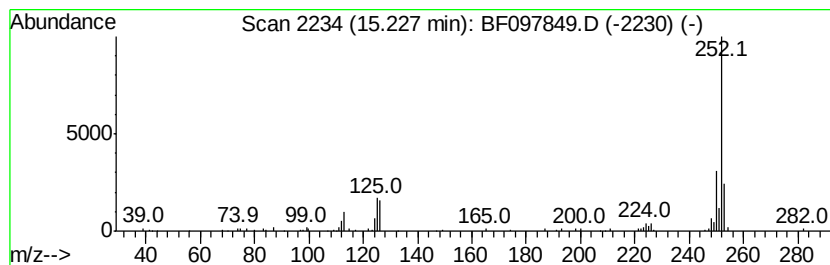
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BNA\_F  
ClientSampleId :  
DUP

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF081517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 6 Benzo[e]pyrene Concentration Rank 5

| R.T.      | EstConc                   | Area   | Relative to ISTD | R.T.        |      |
|-----------|---------------------------|--------|------------------|-------------|------|
| 15.23     | 2.40 ng                   | 103419 | Perylene-d12     | 15.35       |      |
| Hit# of 5 | Tentative ID              | MW     | MolForm          | CAS#        | Qual |
| 1         | Benzo[e]pyrene            | 252    | C20H12           | 000192-97-2 | 98   |
| 2         | Benzo[k]fluoranthene      | 252    | C20H12           | 000207-08-9 | 95   |
| 3         | Benzo[elacephenanthrylene | 252    | C20H12           | 000205-99-2 | 95   |
| 4         | Perylene                  | 252    | C20H12           | 000198-55-0 | 94   |
| 5         | Benzo[j]fluoranthene      | 252    | C20H12           | 000205-82-3 | 93   |





Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF081817\  
Data File : BF097849.D  
Acq On : 18 Aug 2017 22:56  
Operator : SJ/JU  
Sample : I4811-07  
Misc :  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
DUP

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF081517.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... | 4.96  | 11.5    | ng    | 443941   | 1                     | 6.77  | 774517  | 20.0 |
| unknown6.54          | 6.54  | 81.7    | ng    | 3163220  | 1                     | 6.77  | 774517  | 20.0 |
| Dichloroacetic ac... | 13.77 | 2.5     | ng    | 179080   | 5                     | 13.92 | 1449010 | 20.0 |
| unknown14.56         | 14.56 | 2.3     | ng    | 169454   | 5                     | 13.92 | 1449010 | 20.0 |
| Benzo[e]pyrene       | 15.23 | 2.4     | ng    | 103419   | 6                     | 15.35 | 860202  | 20.0 |