

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF070718\  
 Data File : BF107214.D  
 Acq On : 7 Jul 2018 18:39  
 Operator : JU/SJ  
 Sample : J3880-05  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SURCHARGE-SP-13

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:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF061918.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         | 5.184       | 480           | 484         | 496          | rBV      | 110774         | 134211        | 11.53%          | 1.011%        |
| 2         | 5.595       | 550           | 554         | 571          | rBV      | 996741         | 951784        | 81.74%          | 7.172%        |
| 3         | 6.595       | 720           | 724         | 741          | rBV      | 871850         | 983804        | 84.49%          | 7.414%        |
| 4         | 6.731       | 743           | 747         | 750          | rBV      | 1039543        | 952881        | 81.83%          | 7.181%        |
| 5         | 6.948       | 780           | 784         | 788          | rBV      | 343231         | 276110        | 23.71%          | 2.081%        |
| 6         | 7.107       | 807           | 811         | 814          | rBV      | 848071         | 765682        | 65.76%          | 5.770%        |
| 7         | 7.513       | 876           | 880         | 890          | rBV      | 570602         | 563908        | 48.43%          | 4.249%        |
| 8         | 8.231       | 999           | 1002        | 1012         | rBV      | 323662         | 331212        | 28.44%          | 2.496%        |
| 9         | 8.948       | 1120          | 1124        | 1129         | rBB      | 16034          | 14615         | 1.26%           | 0.110%        |
| 10        | 9.307       | 1180          | 1185        | 1188         | rBV      | 1144588        | 1041067       | 89.41%          | 7.845%        |
| 11        | 9.695       | 1245          | 1251        | 1257         | rBV      | 202268         | 187443        | 16.10%          | 1.413%        |
| 12        | 9.854       | 1272          | 1278        | 1282         | rBV      | 43829          | 40194         | 3.45%           | 0.303%        |
| 13        | 9.989       | 1298          | 1301        | 1305         | rBV      | 336996         | 325866        | 27.99%          | 2.456%        |
| 14        | 10.025      | 1305          | 1307        | 1312         | rVB      | 22304          | 18116         | 1.56%           | 0.137%        |
| 15        | 10.201      | 1332          | 1337        | 1339         | rBV2     | 15411          | 17707         | 1.52%           | 0.133%        |
| 16        | 10.395      | 1367          | 1370        | 1373         | rBV2     | 21880          | 18053         | 1.55%           | 0.136%        |
| 17        | 10.542      | 1391          | 1395        | 1400         | rVB2     | 22932          | 26482         | 2.27%           | 0.200%        |
| 18        | 10.613      | 1400          | 1407        | 1411         | rBV5     | 8611           | 17808         | 1.53%           | 0.134%        |
| 19        | 10.789      | 1433          | 1437        | 1443         | rBV      | 711101         | 651387        | 55.94%          | 4.909%        |
| 20        | 10.872      | 1448          | 1451        | 1455         | rVB3     | 15858          | 23249         | 2.00%           | 0.175%        |
| 21        | 11.295      | 1519          | 1523        | 1525         | rBV      | 20763          | 19474         | 1.67%           | 0.147%        |
| 22        | 11.324      | 1525          | 1528        | 1530         | rVV2     | 14812          | 16215         | 1.39%           | 0.122%        |
| 23        | 11.383      | 1535          | 1538        | 1543         | rVB      | 16795          | 15926         | 1.37%           | 0.120%        |
| 24        | 11.489      | 1552          | 1556        | 1558         | rBV      | 430050         | 375290        | 32.23%          | 2.828%        |
| 25        | 11.513      | 1558          | 1560        | 1564         | rVV      | 285965         | 219129        | 18.82%          | 1.651%        |
| 26        | 11.566      | 1566          | 1569        | 1573         | rBV      | 88033          | 74301         | 6.38%           | 0.560%        |
| 27        | 11.724      | 1591          | 1596        | 1598         | rBV2     | 39710          | 40009         | 3.44%           | 0.301%        |
| 28        | 11.742      | 1598          | 1599        | 1603         | rVB      | 16777          | 14996         | 1.29%           | 0.113%        |
| 29        | 11.989      | 1638          | 1641        | 1644         | rBV      | 45454          | 43429         | 3.73%           | 0.327%        |
| 30        | 12.019      | 1644          | 1646        | 1650         | rVB      | 59344          | 44910         | 3.86%           | 0.338%        |
| 31        | 12.066      | 1651          | 1654        | 1657         | rBV      | 26119          | 21882         | 1.88%           | 0.165%        |
| 32        | 12.107      | 1657          | 1661        | 1663         | rBV2     | 68375          | 79905         | 6.86%           | 0.602%        |
| 33        | 12.283      | 1688          | 1691        | 1695         | rBV      | 40834          | 40342         | 3.46%           | 0.304%        |
| 34        | 12.324      | 1695          | 1698        | 1702         | rVB      | 34512          | 33016         | 2.84%           | 0.249%        |

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Misc :  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SURCHARGE-SP-13

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:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF061918.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |         |        |
|----|--------|------|------|------|------|---------|---------|---------|--------|
| 35 | 12.466 | 1719 | 1722 | 1724 | rBV  | 20038   | 15847   | 1.36%   | 0.119% |
| 36 | 12.542 | 1731 | 1735 | 1737 | rBV2 | 55622   | 58077   | 4.99%   | 0.438% |
| 37 | 12.636 | 1747 | 1751 | 1760 | rBV3 | 41250   | 68890   | 5.92%   | 0.519% |
| 38 | 12.713 | 1760 | 1764 | 1767 | rBV  | 522206  | 514553  | 44.19%  | 3.878% |
| 39 | 12.771 | 1771 | 1774 | 1777 | rVV3 | 15296   | 17473   | 1.50%   | 0.132% |
| 40 | 12.807 | 1777 | 1780 | 1782 | rVV  | 21176   | 19493   | 1.67%   | 0.147% |
| 41 | 12.919 | 1796 | 1799 | 1800 | rBV  | 113958  | 97923   | 8.41%   | 0.738% |
| 42 | 12.942 | 1800 | 1803 | 1808 | rVV  | 526015  | 479243  | 41.16%  | 3.611% |
| 43 | 12.989 | 1808 | 1811 | 1815 | rVB  | 32404   | 38927   | 3.34%   | 0.293% |
| 44 | 13.071 | 1821 | 1825 | 1828 | rBV  | 1309242 | 1164395 | 100.00% | 8.775% |
| 45 | 13.107 | 1828 | 1831 | 1835 | rVB  | 34690   | 37342   | 3.21%   | 0.281% |
| 46 | 13.166 | 1835 | 1841 | 1844 | rBV4 | 38687   | 77701   | 6.67%   | 0.586% |
| 47 | 13.271 | 1851 | 1859 | 1861 | rBV2 | 85732   | 147687  | 12.68%  | 1.113% |
| 48 | 13.336 | 1867 | 1870 | 1872 | rBV  | 42443   | 38289   | 3.29%   | 0.289% |
| 49 | 13.466 | 1890 | 1892 | 1895 | rBV  | 33985   | 35457   | 3.05%   | 0.267% |
| 50 | 13.618 | 1915 | 1918 | 1920 | rBV  | 38949   | 41101   | 3.53%   | 0.310% |
| 51 | 13.783 | 1944 | 1946 | 1949 | rVB  | 48589   | 39684   | 3.41%   | 0.299% |
| 52 | 13.895 | 1962 | 1965 | 1967 | rBV  | 47965   | 46107   | 3.96%   | 0.347% |
| 53 | 13.918 | 1967 | 1969 | 1971 | rVB  | 37948   | 27773   | 2.39%   | 0.209% |
| 54 | 13.948 | 1971 | 1974 | 1979 | rBV3 | 101626  | 124427  | 10.69%  | 0.938% |
| 55 | 14.142 | 2003 | 2007 | 2010 | rBV2 | 393798  | 552426  | 47.44%  | 4.163% |
| 56 | 14.171 | 2010 | 2012 | 2015 | rVB  | 232213  | 183458  | 15.76%  | 1.382% |
| 57 | 14.571 | 2078 | 2080 | 2083 | rBV  | 65412   | 68438   | 5.88%   | 0.516% |
| 58 | 15.230 | 2188 | 2192 | 2202 | rVB2 | 197839  | 442491  | 38.00%  | 3.334% |
| 59 | 15.554 | 2245 | 2247 | 2251 | rVB  | 100212  | 104696  | 8.99%   | 0.789% |
| 60 | 15.624 | 2255 | 2259 | 2265 | rBV2 | 134690  | 251868  | 21.63%  | 1.898% |
| 61 | 15.689 | 2266 | 2270 | 2273 | rBV  | 155781  | 195944  | 16.83%  | 1.477% |

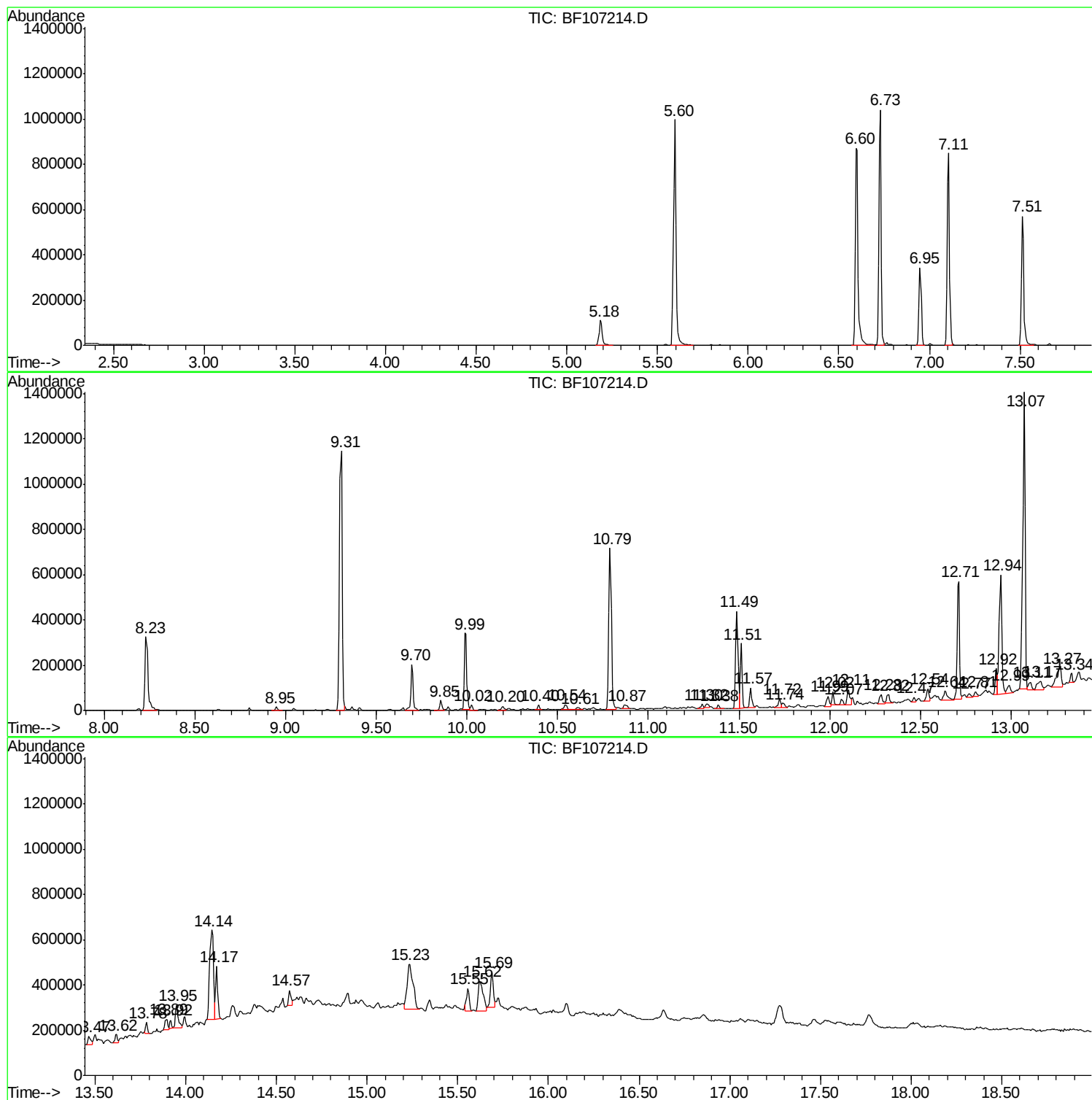
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ClientSampleId :  
SURCHARGE-SP-13

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.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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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

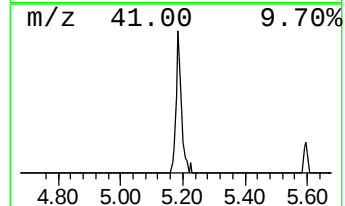
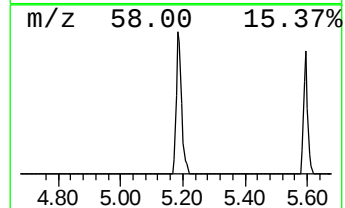
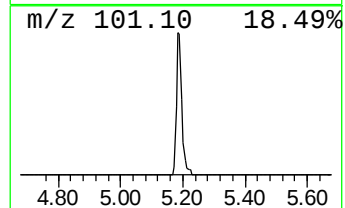
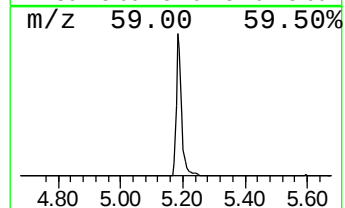
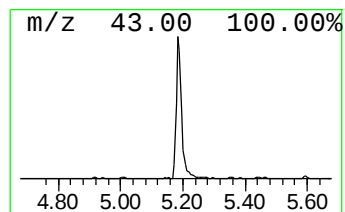
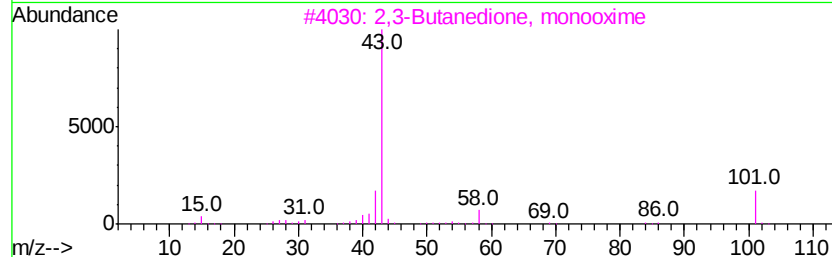
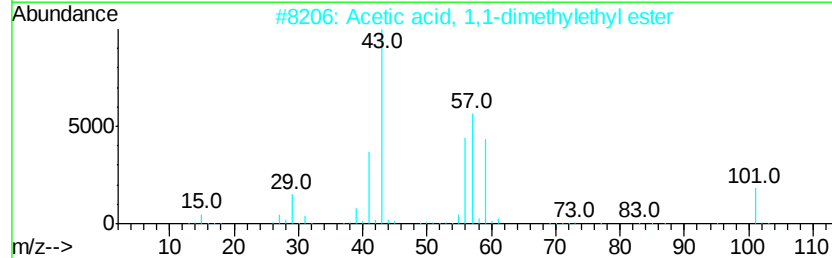
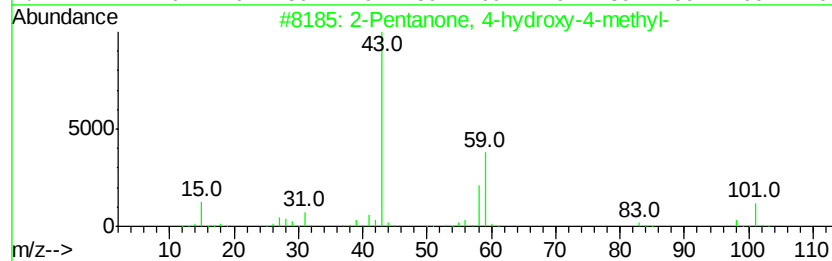
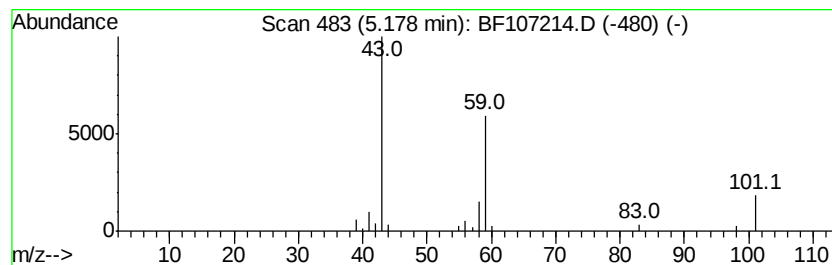
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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

| R.T. | EstConc | Area   | Relative to ISTD       | R.T. |
|------|---------|--------|------------------------|------|
| 5.18 | 9.72 ng | 134211 | 1,4-Dichlorobenzene-d4 | 6.95 |

| Hit# | of                                  | 5   | Tentative ID | MW          | MolForm | CAS# | Qual |
|------|-------------------------------------|-----|--------------|-------------|---------|------|------|
| 1    | 2-Pentanone, 4-hydroxy-4-methyl-    | 116 | C6H12O2      | 000123-42-2 | 56      |      |      |
| 2    | Acetic acid, 1,1-dimethylethyl e... | 116 | C6H12O2      | 000540-88-5 | 39      |      |      |
| 3    | 2,3-Butanedione, monooxime          | 101 | C4H7NO2      | 000057-71-6 | 38      |      |      |
| 4    | 3-Hexanol                           | 102 | C6H14O       | 000623-37-0 | 28      |      |      |
| 5    | 3-Hexanol, 4-methyl-                | 116 | C7H16O       | 000615-29-2 | 28      |      |      |



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Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

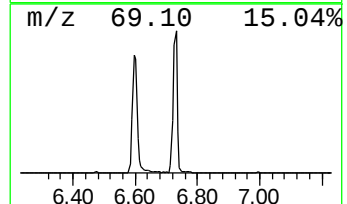
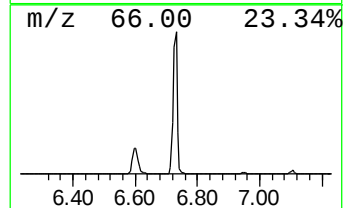
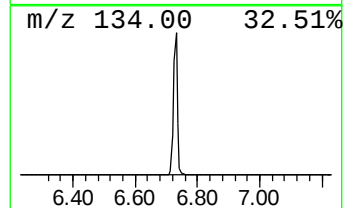
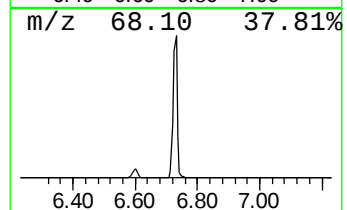
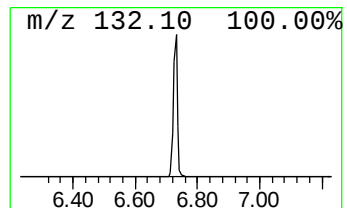
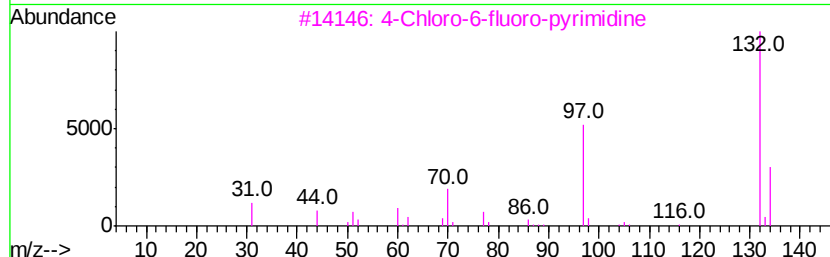
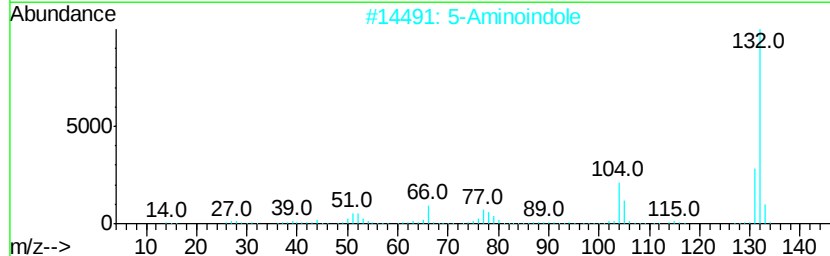
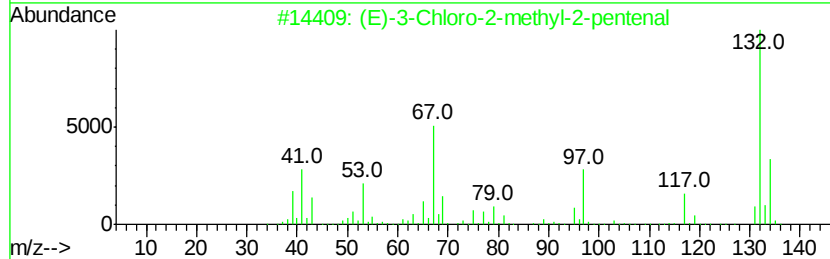
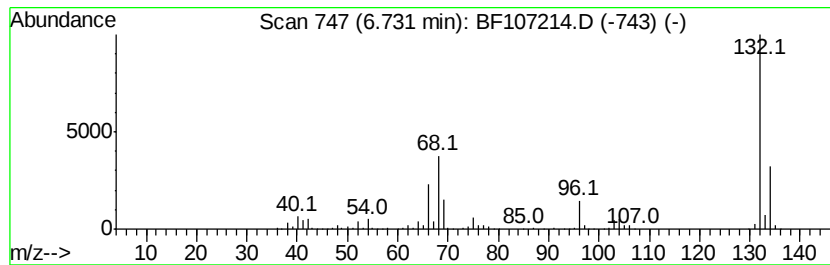
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 2 unknown6.73 Concentration Rank 1

| R.T. | EstConc  | Area   | Relative to ISTD       | R.T. |
|------|----------|--------|------------------------|------|
| 6.73 | 69.02 ng | 952881 | 1,4-Dichlorobenzene-d4 | 6.95 |

| Hit# | of | Tentative ID                     | MW  | MolForm   | CAS#        | Qual |
|------|----|----------------------------------|-----|-----------|-------------|------|
| 1    | 5  | (E)-3-Chloro-2-methyl-2-pentenal | 132 | C6H9ClO   | 031357-76-3 | 25   |
| 2    |    | 5-Aminoindole                    | 132 | C8H8N2    | 005192-03-0 | 12   |
| 3    |    | 4-Chloro-6-fluoro-pyrimidine     | 132 | C4H2ClFN2 | 051422-01-6 | 9    |
| 4    |    | 4-Chloro-2-fluoro-pyrimidine     | 132 | C4H2ClFN2 | 051422-00-5 | 9    |
| 5    |    | 1H-Benzimidazole, 2-methyl-      | 132 | C8H8N2    | 000615-15-6 | 9    |



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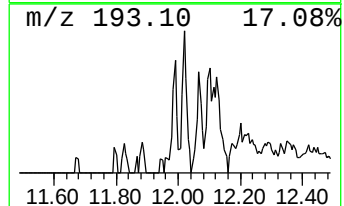
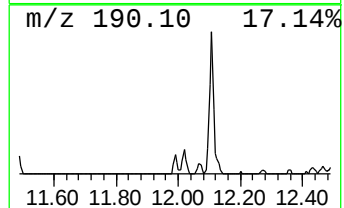
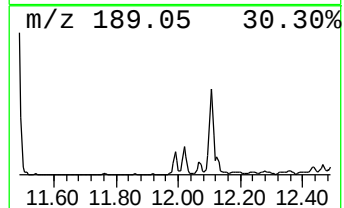
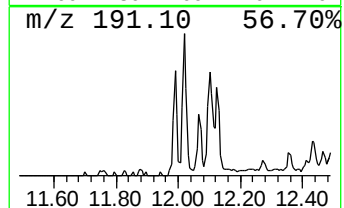
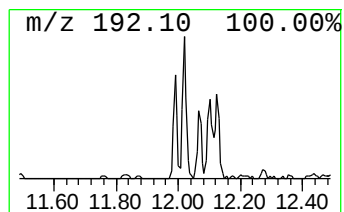
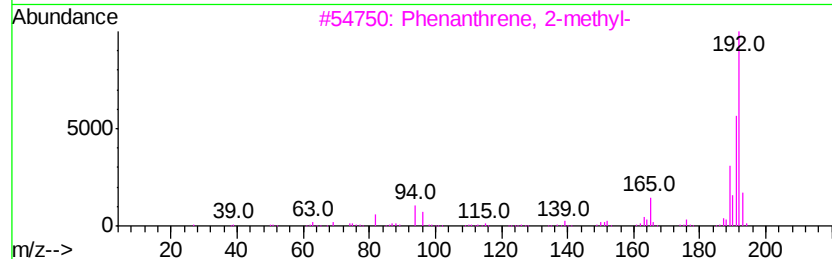
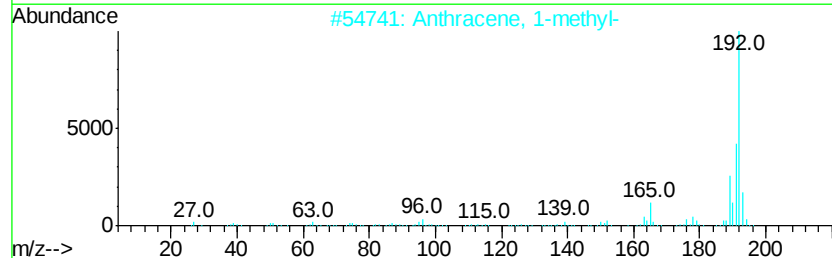
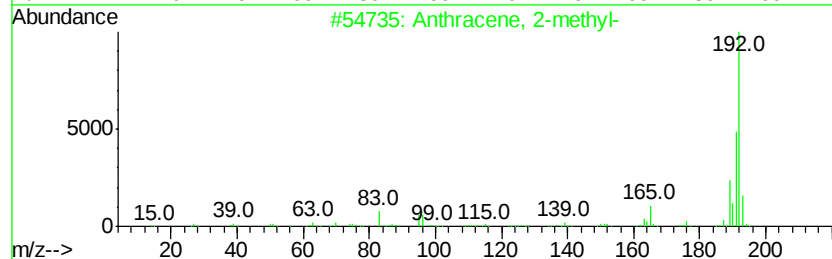
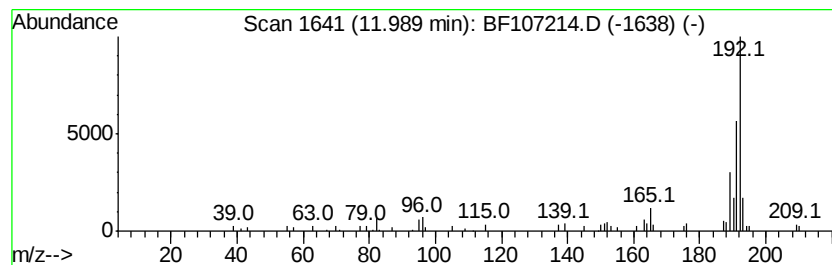
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 4 Anthracene, 2-methyl- Concentration Rank 13

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 11.99 | 2.31 ng | 43429 | Phenanthrene-d10 | 11.49 |

| Hit# of 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|-----------|-------------------------|-----|---------|-------------|------|
| 1         | Anthracene, 2-methyl-   | 192 | C15H12  | 000613-12-7 | 95   |
| 2         | Anthracene, 1-methyl-   | 192 | C15H12  | 000610-48-0 | 95   |
| 3         | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 94   |
| 4         | Phenanthrene, 1-methyl- | 192 | C15H12  | 000832-69-9 | 94   |
| 5         | Phenanthrene, 3-methyl- | 192 | C15H12  | 000832-71-3 | 93   |



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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

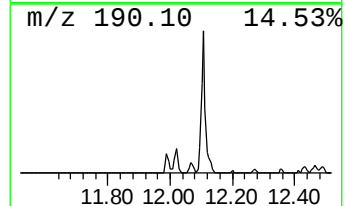
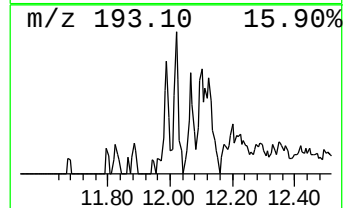
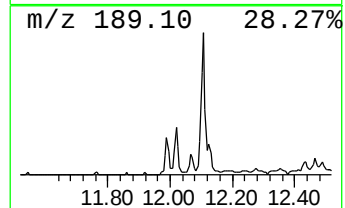
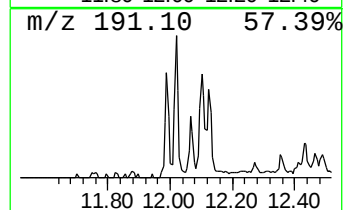
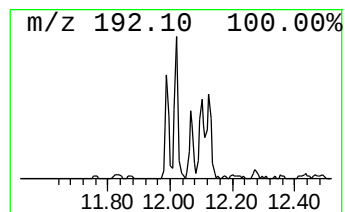
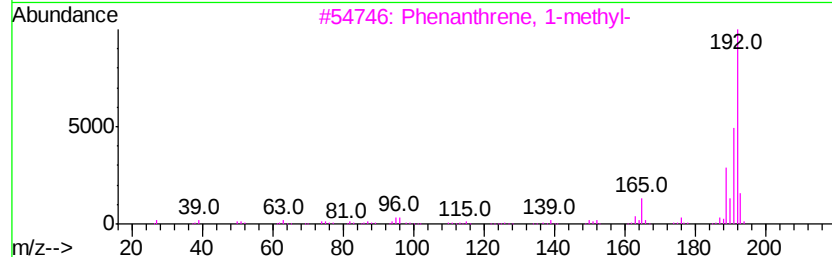
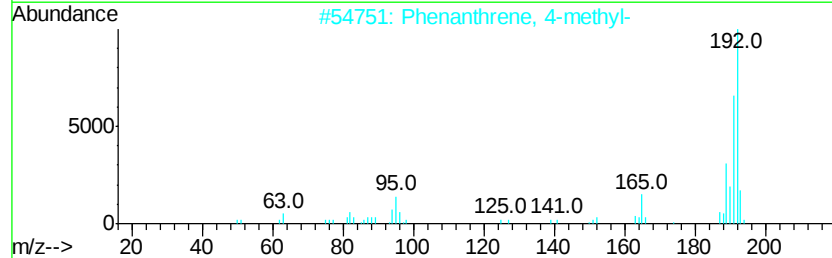
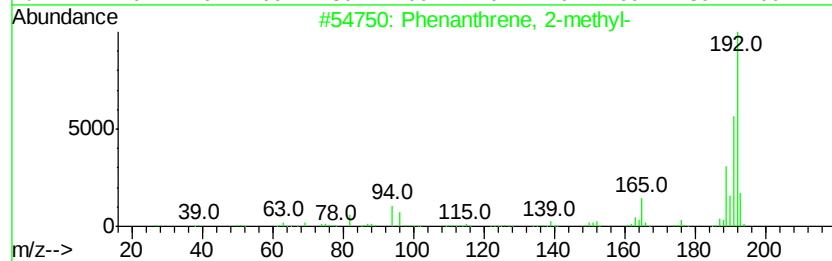
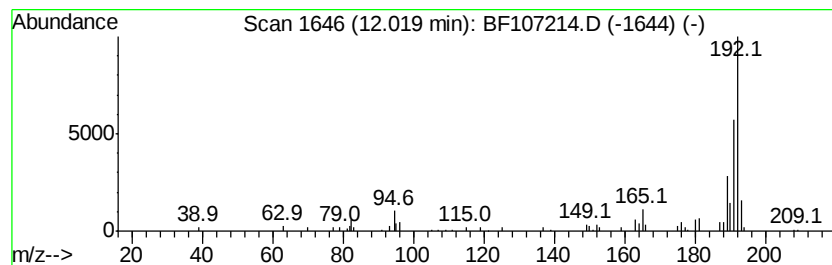
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 5 Phenanthrene, 2-methyl- Concentration Rank 12

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 12.02 | 2.39 ng | 44910 | Phenanthrene-d10 | 11.49 |

| Hit# of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|---------|---|-------------------------|-----|---------|-------------|------|
| 1       |   | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 95   |
| 2       |   | Phenanthrene, 4-methyl- | 192 | C15H12  | 000832-64-4 | 93   |
| 3       |   | Phenanthrene, 1-methyl- | 192 | C15H12  | 000832-69-9 | 93   |
| 4       |   | Anthracene, 2-methyl-   | 192 | C15H12  | 000613-12-7 | 91   |
| 5       |   | Anthracene, 9-methyl-   | 192 | C15H12  | 000779-02-2 | 91   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070718\  
Data File : BF107214.D  
Acq On : 7 Jul 2018 18:39  
Operator : JU/SJ  
Sample : J3880-05  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SURCHARGE-SP-13

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

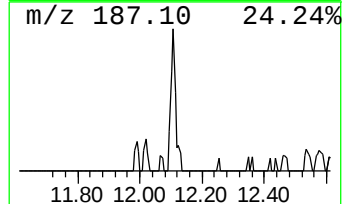
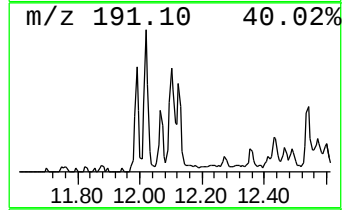
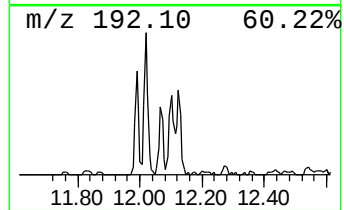
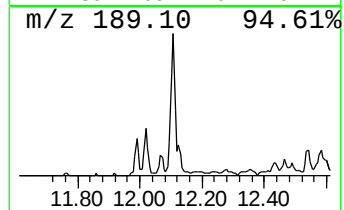
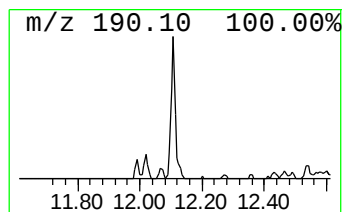
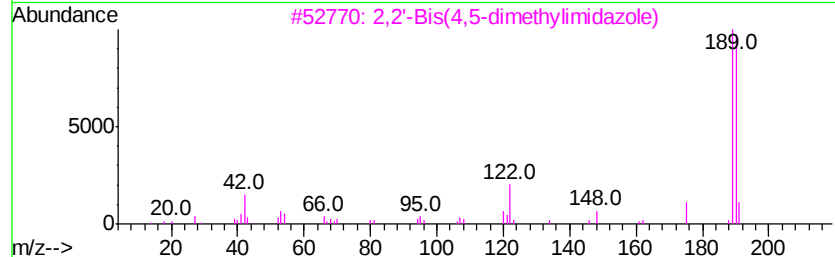
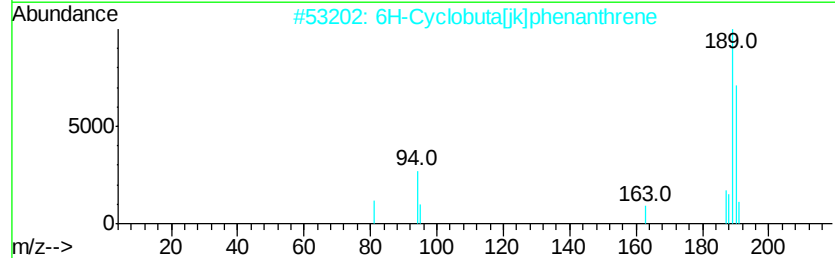
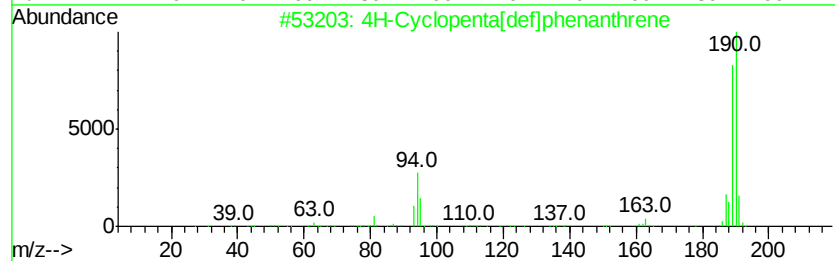
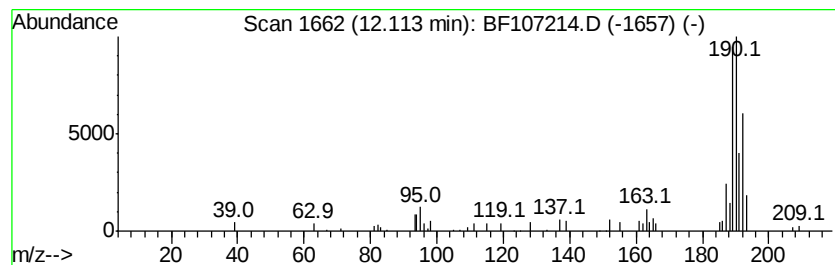
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 6 4H-Cyclopenta[def]phenanthrene Concentration Rank 7

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 12.11 | 4.26 ng | 79905 | Phenanthrene-d10 | 11.49 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10   | 000203-64-5 | 87   |
| 2    |    | 6H-Cyclobuta[ik]phenanthrene        | 190 | C15H10   | 083469-43-6 | 42   |
| 3    |    | 2,2'-Bis(4,5-dimethylimidazole)     | 190 | C10H14N4 | 069286-06-2 | 40   |
| 4    |    | 1,4-Naphthalenedione, 2,5-dihydr... | 190 | C10H6O4  | 004923-55-1 | 17   |
| 5    |    | Hydrazinecarboxaldehyde, 2-[3-(m... | 190 | C4H6N4O5 | 038362-25-3 | 14   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070718\  
Data File : BF107214.D  
Acq On : 7 Jul 2018 18:39  
Operator : JU/SJ  
Sample : J3880-05  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SURCHARGE-SP-13

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

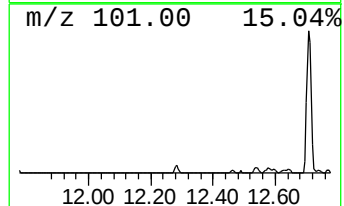
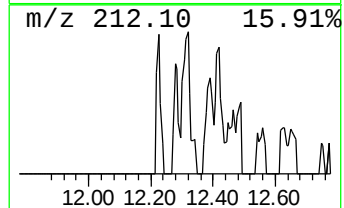
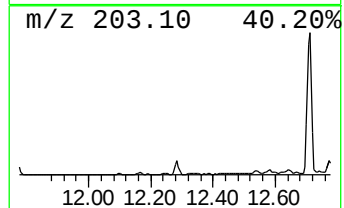
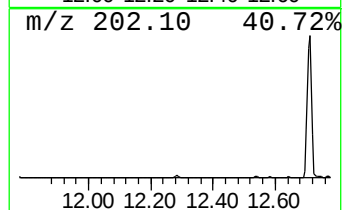
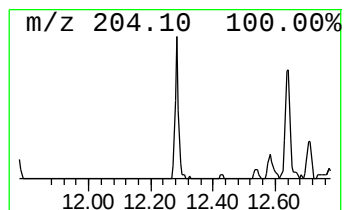
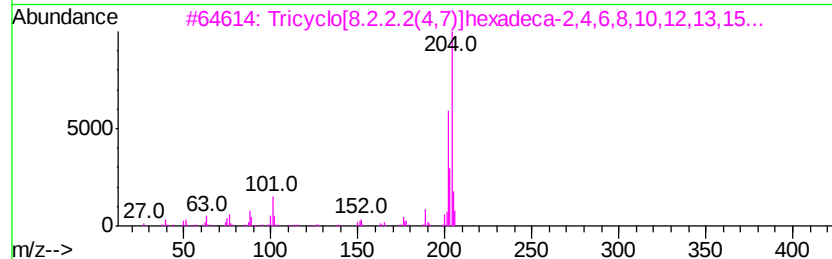
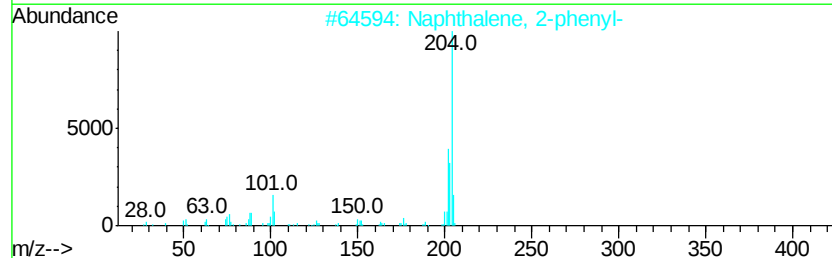
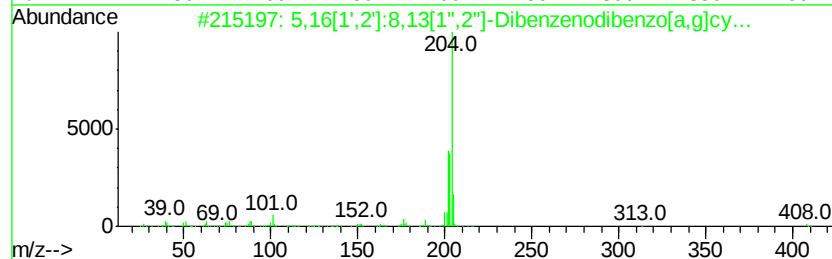
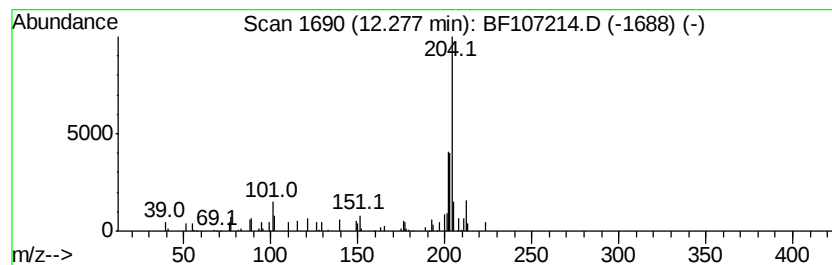
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 7 5,16[1',2']:8,13[1'',2'']-D... Concentration Rank 14

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 12.28 | 2.15 ng | 40342 | Phenanthrene-d10 | 11.49 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#        | Qual |
|------|----|-------------------------------------|-----|-----------|-------------|------|
| 1    | 5  | 5,16[1',2']:8,13[1'',2'']-Dibenz... | 408 | C32H24    | 005672-97-9 | 72   |
| 2    |    | Naphthalene, 2-phenyl-              | 204 | C16H12    | 000612-94-2 | 64   |
| 3    |    | Tricyclo[8.2.2.2(4,7)]hexadeca-2... | 204 | C16H12    | 006572-60-7 | 58   |
| 4    |    | Naphthalene, 1-phenyl-              | 204 | C16H12    | 000605-02-7 | 55   |
| 5    |    | 9,10-Bis(bromomethyl)anthracene     | 362 | C16H12Br2 | 034373-96-1 | 52   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070718\  
Data File : BF107214.D  
Acq On : 7 Jul 2018 18:39  
Operator : JU/SJ  
Sample : J3880-05  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

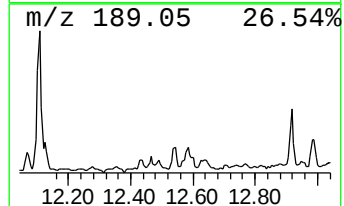
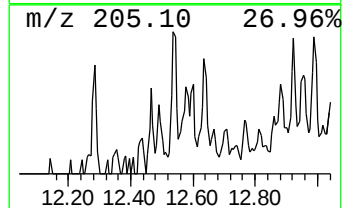
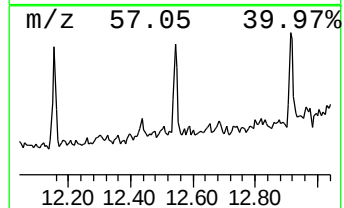
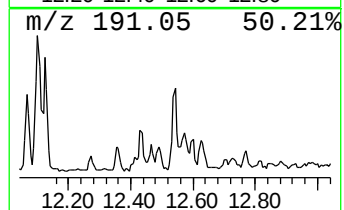
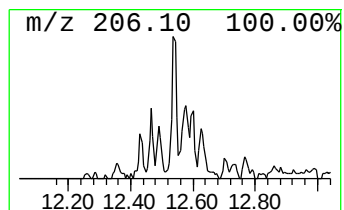
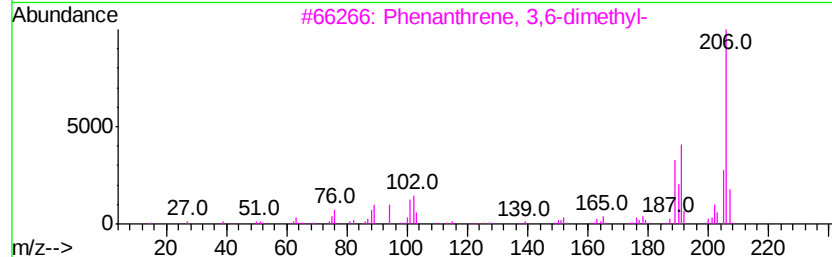
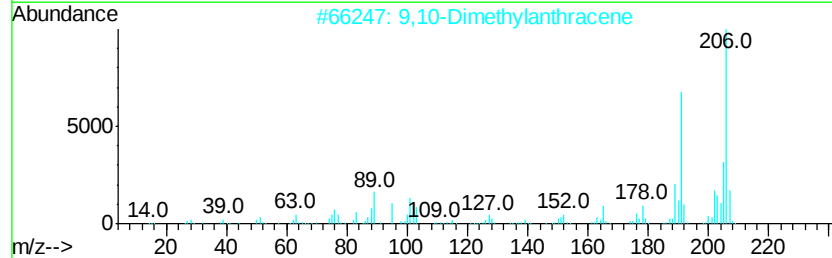
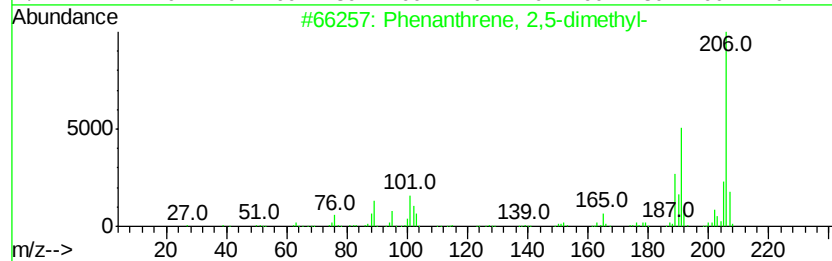
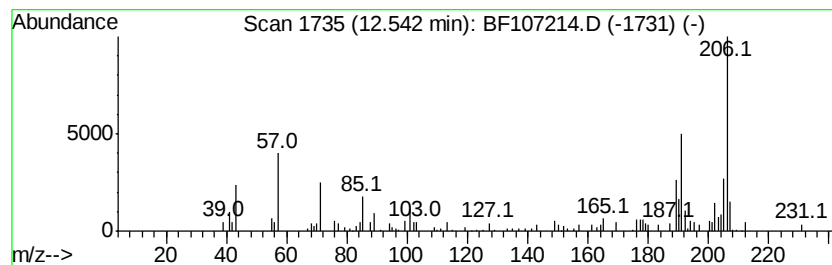
Instrument :  
BNA\_F  
ClientSampleId :  
SURCHARGE-SP-13

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 8 Phenanthrene, 2,5-dimethyl- Concentration Rank 9

| R.T.    | EstConc | Area                        | Relative to ISTD |         | R.T.        |      |
|---------|---------|-----------------------------|------------------|---------|-------------|------|
| 12.54   | 3.10 ng | 58077                       | Phenanthrene-d10 |         | 11.49       |      |
| Hit# of | 5       | Tentative ID                | MW               | MolForm | CAS#        | Qual |
| 1       |         | Phenanthrene, 2,5-dimethyl- | 206              | C16H14  | 003674-66-6 | 91   |
| 2       |         | 9,10-Dimethylantracene      | 206              | C16H14  | 000781-43-1 | 91   |
| 3       |         | Phenanthrene, 3,6-dimethyl- | 206              | C16H14  | 001576-67-6 | 90   |
| 4       |         | di-p-Tolylacetylene         | 206              | C16H14  | 002789-88-0 | 83   |
| 5       |         | Phenanthrene, 2,3-dimethyl- | 206              | C16H14  | 003674-65-5 | 83   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070718\  
Data File : BF107214.D  
Acq On : 7 Jul 2018 18:39  
Operator : JU/SJ  
Sample : J3880-05  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SURCHARGE-SP-13

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

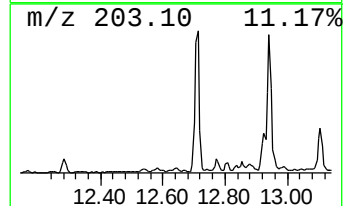
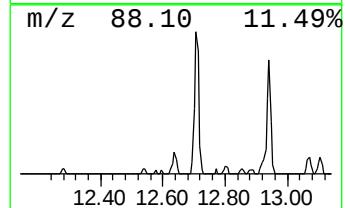
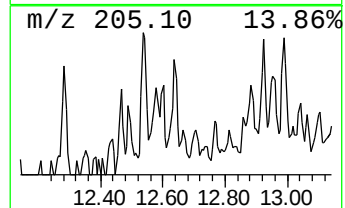
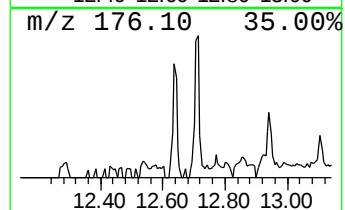
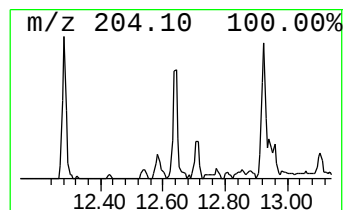
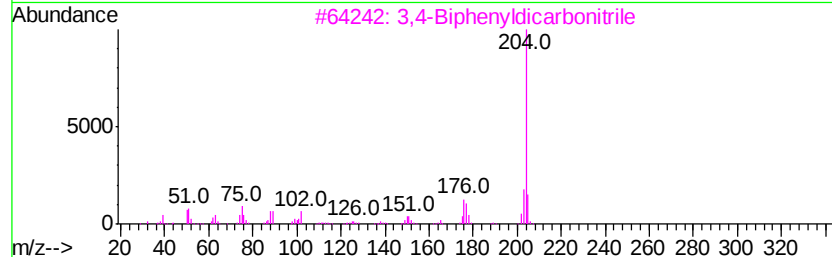
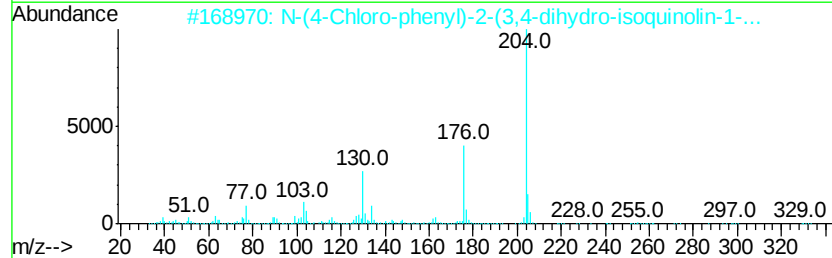
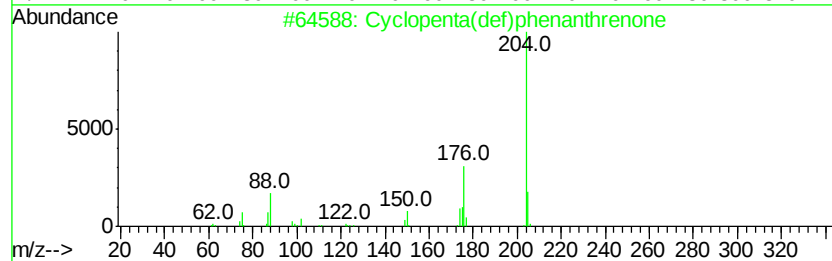
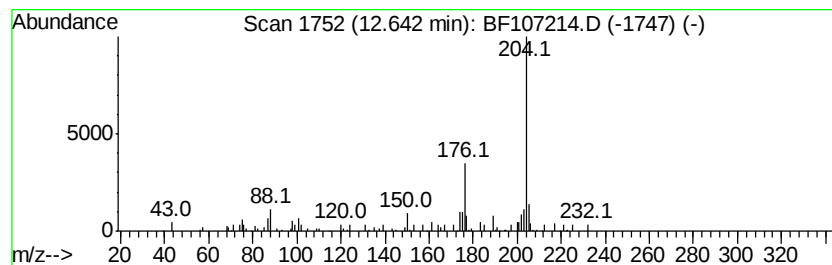
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 Cyclopenta(def)phenanthrenone Concentration Rank 8

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 12.64 | 3.67 ng | 68890 | Phenanthrene-d10 | 11.49 |

| Hit# | of | Tentative ID                        | MW  | MolForm      | CAS#         | Qual |
|------|----|-------------------------------------|-----|--------------|--------------|------|
| 1    | 5  | Cyclopenta(def)phenanthrenone       | 204 | C15H8O       | 005737-13-3  | 93   |
| 2    |    | N-(4-Chloro-phenyl)-2-(3,4-dihyd... | 330 | C17H15ClN2OS | 1000296-34-3 | 59   |
| 3    |    | 3,4-Biphenyldicarbonitrile          | 204 | C14H8N2      | 004128-63-6  | 53   |
| 4    |    | [1,1'-Biphenyl]-4,4'-dicarbonitrile | 204 | C14H8N2      | 001591-30-6  | 50   |
| 5    |    | [1,1'-Biphenyl]-2,2'-dicarbonitrile | 204 | C14H8N2      | 004341-02-0  | 47   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070718\  
Data File : BF107214.D  
Acq On : 7 Jul 2018 18:39  
Operator : JU/SJ  
Sample : J3880-05  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SURCHARGE-SP-13

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

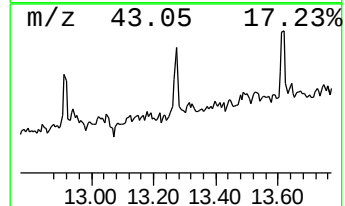
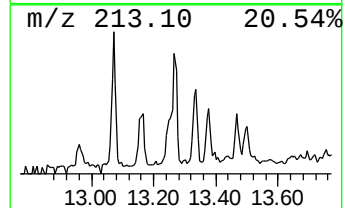
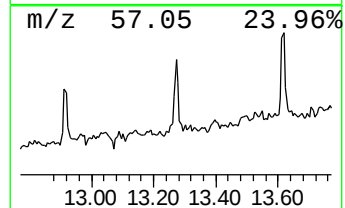
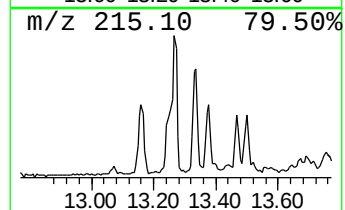
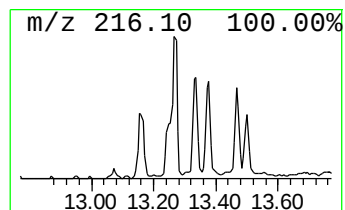
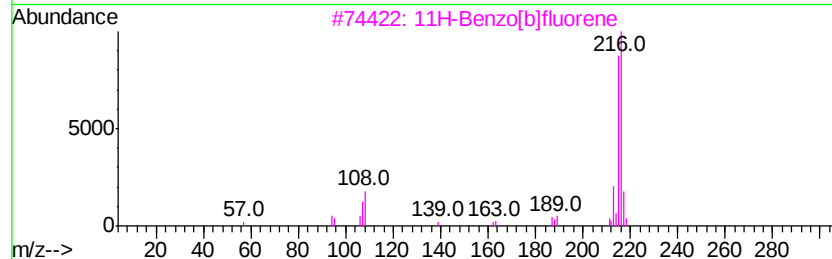
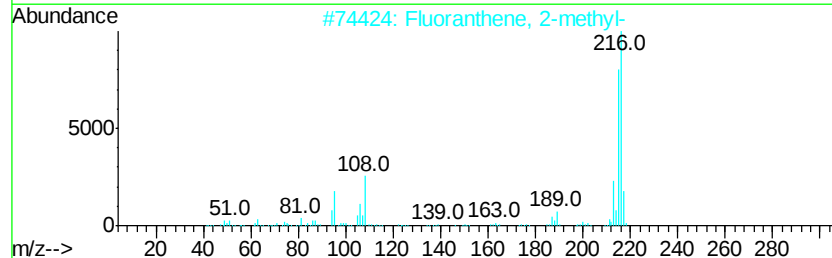
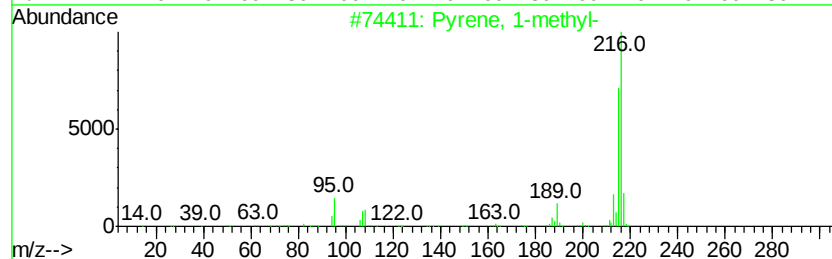
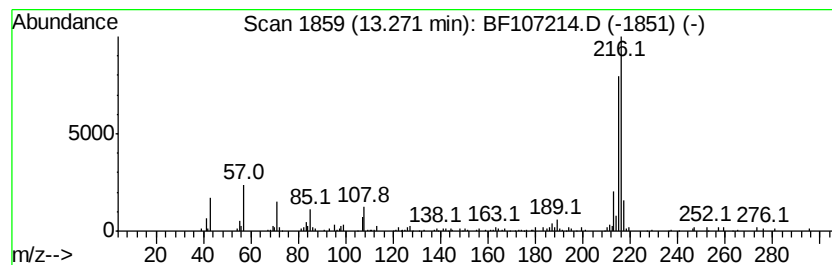
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 11 Pyrene, 1-methyl- Concentration Rank 5

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 13.27 | 5.35 ng | 147687 | Chrysene-d12     | 14.15 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Pyrene, 1-methyl-                   | 216 | C17H12   | 002381-21-7 | 91   |
| 2    |    | Fluoranthene, 2-methyl-             | 216 | C17H12   | 033543-31-6 | 90   |
| 3    |    | 11H-Benzo[b]fluorene                | 216 | C17H12   | 000243-17-4 | 90   |
| 4    |    | 11H-Benzo[a]fluorene                | 216 | C17H12   | 000238-84-6 | 89   |
| 5    |    | 1,3,5-Triazine-2,4,6-triamine, N... | 216 | C10H12N6 | 046731-79-7 | 64   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070718\  
Data File : BF107214.D  
Acq On : 7 Jul 2018 18:39  
Operator : JU/SJ  
Sample : J3880-05  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

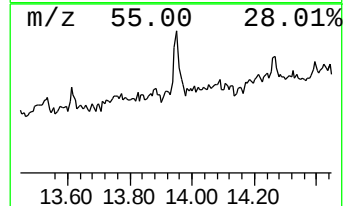
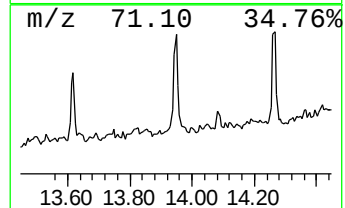
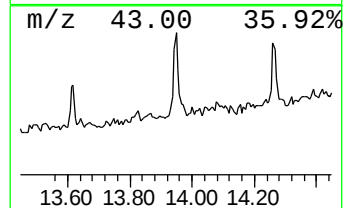
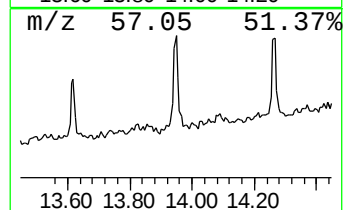
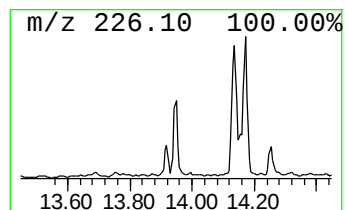
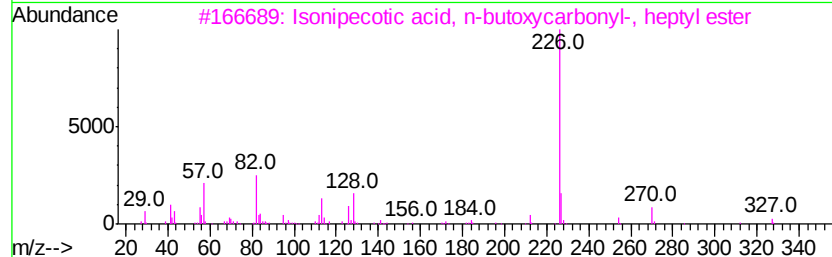
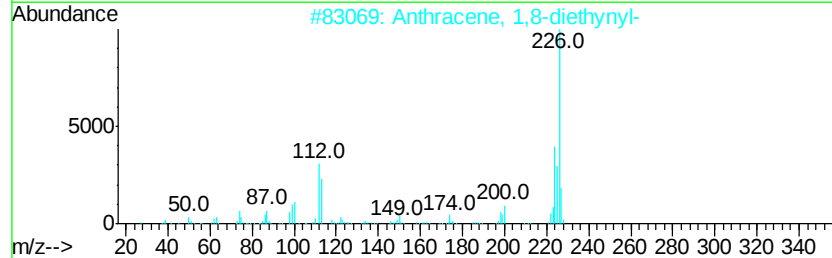
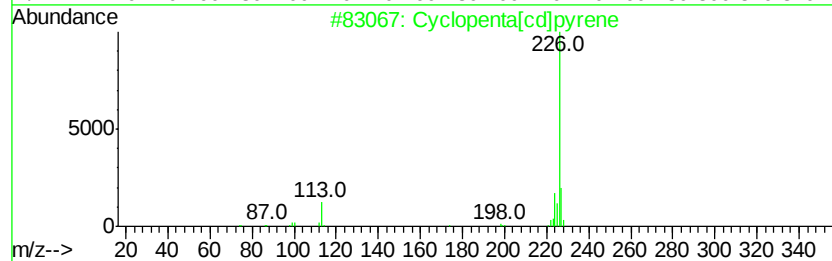
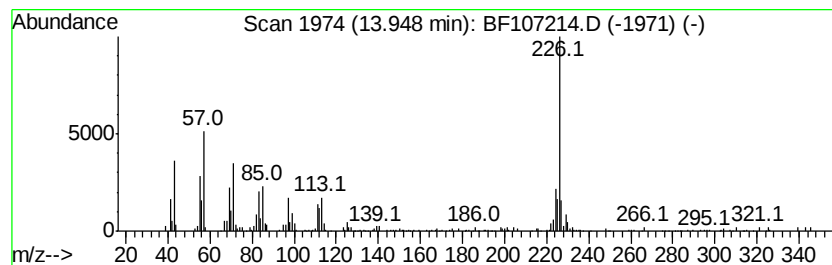
Instrument :  
BNA\_F  
ClientSampleId :  
SURCHARGE-SP-13

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.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 Cyclopenta[cd]pyrene Concentration Rank 6

| R.T.    | EstConc | Area                                | Relative to ISTD | R.T.      |              |      |
|---------|---------|-------------------------------------|------------------|-----------|--------------|------|
| 13.95   | 4.50 ng | 124427                              | Chrysene-d12     | 14.15     |              |      |
| Hit# of | 5       | Tentative ID                        | MW               | MolForm   | CAS#         | Qual |
| 1       |         | Cvclopenta[cd]pvrene                | 226              | C18H10    | 027208-37-3  | 53   |
| 2       |         | Anthracene, 1,8-diethynyl-          | 226              | C18H10    | 078053-58-4  | 47   |
| 3       |         | Isonipecotic acid, n-butoxycarbo... | 327              | C18H33NO4 | 1000322-05-2 | 47   |
| 4       |         | Benzene, [4-(3-ethynylphenyl)-1,... | 226              | C18H10    | 1000115-87-3 | 43   |
| 5       |         | Tetraheptylammonium bromide         | 489              | C28H60BrN | 004368-51-8  | 43   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070718\  
Data File : BF107214.D  
Acq On : 7 Jul 2018 18:39  
Operator : JU/SJ  
Sample : J3880-05  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SURCHARGE-SP-13

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

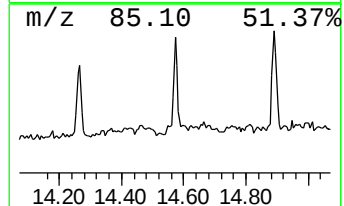
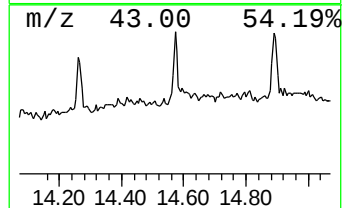
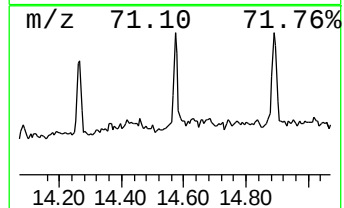
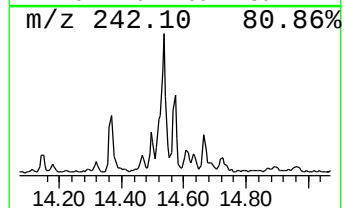
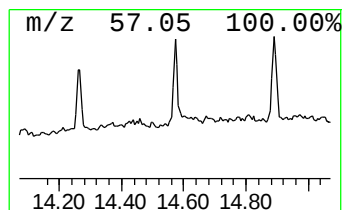
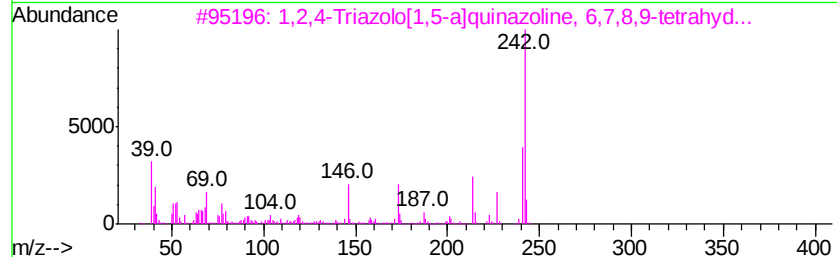
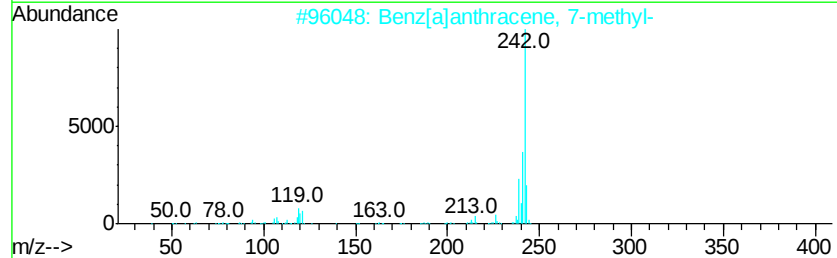
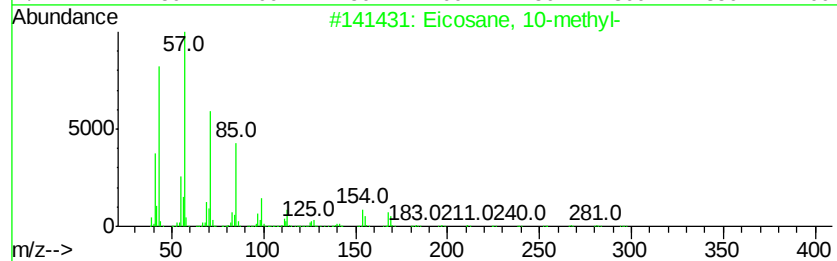
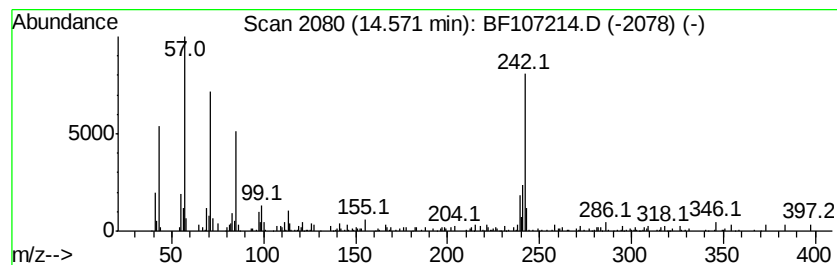
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 13 Eicosane, 10-methyl- Concentration Rank 11

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 14.57 | 2.48 ng | 68438 | Chrysene-d12     | 14.15 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Eicosane, 10-methyl-                | 296 | C21H44    | 054833-23-7  | 52   |
| 2    |    | Benz[a]anthracene, 7-methyl-        | 242 | C19H14    | 002541-69-7  | 45   |
| 3    |    | 1,2,4-Triazolo[1,5-a]quinazoline... | 242 | C10H9F3N4 | 1000264-95-5 | 43   |
| 4    |    | Benzo[c]phenanthrene, 3-methyl-     | 242 | C19H14    | 002381-19-3  | 38   |
| 5    |    | Hexadecane                          | 226 | C16H34    | 000544-76-3  | 38   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF070718\  
Data File : BF107214.D  
Acq On : 7 Jul 2018 18:39  
Operator : JU/SJ  
Sample : J3880-05  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SURCHARGE-SP-13

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

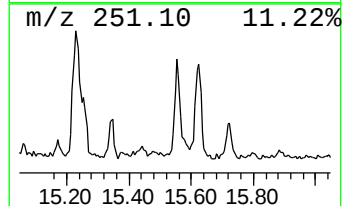
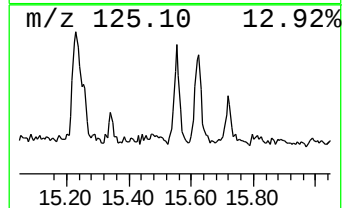
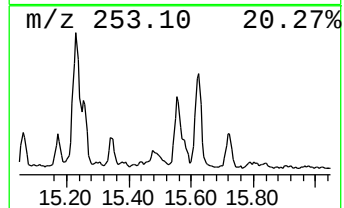
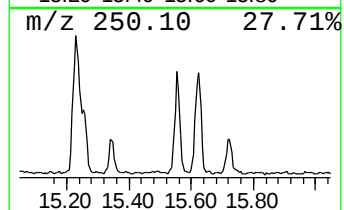
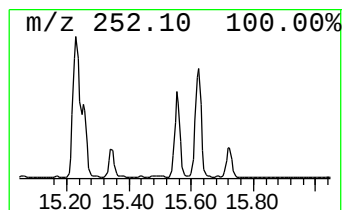
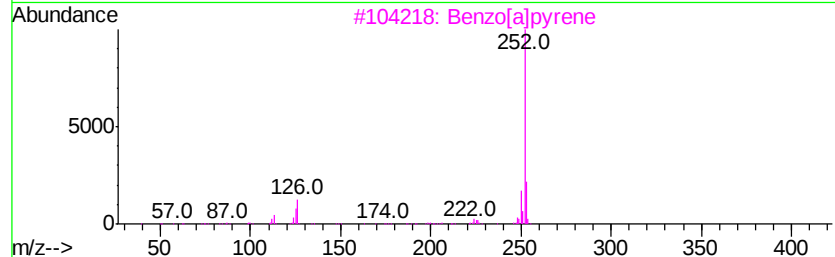
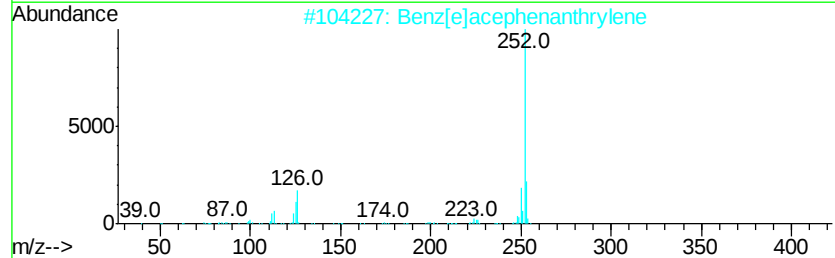
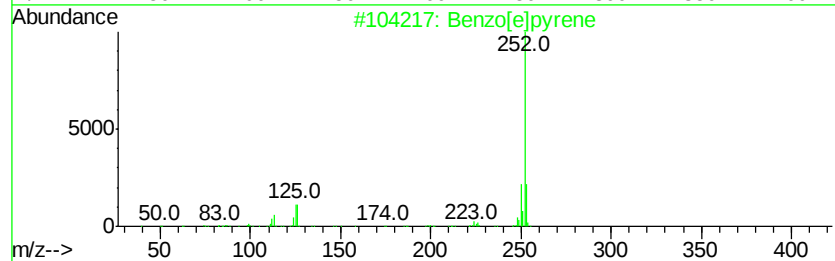
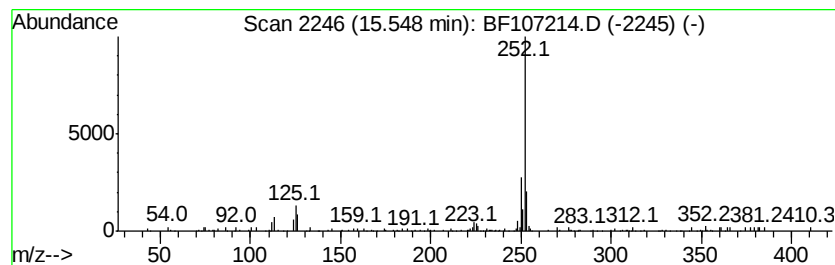
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 14 Benzo[e]pyrene Concentration Rank 3

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 15.55 | 10.69 ng | 104696 | Perylene-d12     | 15.69 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[e]pyrene            | 252 | C20H12  | 000192-97-2 | 98   |
| 2    |    | Benzo[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 93   |
| 3    |    | Benzo[a]pyrene            | 252 | C20H12  | 000050-32-8 | 93   |
| 4    |    | Perylene                  | 252 | C20H12  | 000198-55-0 | 91   |
| 5    |    | Benzo[k]fluoranthene      | 252 | C20H12  | 000207-08-9 | 90   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF070718\  
Data File : BF107214.D  
Acq On : 7 Jul 2018 18:39  
Operator : JU/SJ  
Sample : J3880-05  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SURCHARGE-SP-13

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF061918.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... | 5.18  | 9.7     | ng    | 134211   | 1                     | 6.95  | 276110 | 20.0 |
| unknown6.73          | 6.73  | 69.0    | ng    | 952881   | 1                     | 6.95  | 276110 | 20.0 |
| Anthracene, 2-met... | 11.99 | 2.3     | ng    | 43429    | 4                     | 11.49 | 375290 | 20.0 |
| Phenanthrene, 2-m... | 12.02 | 2.4     | ng    | 44910    | 4                     | 11.49 | 375290 | 20.0 |
| 4H-Cyclopenta[def... | 12.11 | 4.3     | ng    | 79905    | 4                     | 11.49 | 375290 | 20.0 |
| 5,16[1',2']:8,13[... | 12.28 | 2.1     | ng    | 40342    | 4                     | 11.49 | 375290 | 20.0 |
| Phenanthrene, 2,5... | 12.54 | 3.1     | ng    | 58077    | 4                     | 11.49 | 375290 | 20.0 |
| Cyclopenta(def)ph... | 12.64 | 3.7     | ng    | 68890    | 4                     | 11.49 | 375290 | 20.0 |
| Pyrene, 1-methyl-    | 13.27 | 5.3     | ng    | 147687   | 5                     | 14.15 | 552426 | 20.0 |
| Cyclopenta[cd]pyrene | 13.95 | 4.5     | ng    | 124427   | 5                     | 14.15 | 552426 | 20.0 |
| Eicosane, 10-methyl- | 14.57 | 2.5     | ng    | 68438    | 5                     | 14.15 | 552426 | 20.0 |
| Benzo[e]pyrene       | 15.55 | 10.7    | ng    | 104696   | 6                     | 15.69 | 195944 | 20.0 |