

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF012420\  
 Data File : BF118691.D  
 Acq On : 24 Jan 2020 17:49  
 Operator : CG/JU  
 Sample : L1243-07 2X  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 CTY-SB-04-0-5

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-BF012020.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         | 5.475       | 572           | 576         | 580          | rBV      | 2912922        | 2734908       | 59.37%          | 5.597%        |
| 2         | 5.699       | 611           | 614         | 619          | rBV      | 65361          | 63696         | 1.38%           | 0.130%        |
| 3         | 6.487       | 743           | 748         | 754          | rBV      | 3475664        | 3216913       | 69.84%          | 6.583%        |
| 4         | 6.698       | 780           | 784         | 788          | rBV2     | 86157          | 100213        | 2.18%           | 0.205%        |
| 5         | 6.863       | 808           | 812         | 815          | rBV      | 2192144        | 1771063       | 38.45%          | 3.624%        |
| 6         | 7.022       | 835           | 839         | 842          | rVB      | 2769789        | 2570667       | 55.81%          | 5.261%        |
| 7         | 7.122       | 852           | 856         | 862          | rBV      | 52679          | 59730         | 1.30%           | 0.122%        |
| 8         | 7.416       | 900           | 906         | 909          | rBV      | 2444976        | 2090292       | 45.38%          | 4.278%        |
| 9         | 7.716       | 955           | 957         | 961          | rVB      | 99618          | 77253         | 1.68%           | 0.158%        |
| 10        | 8.145       | 1026          | 1030        | 1033         | rBV      | 2654058        | 2234514       | 48.51%          | 4.573%        |
| 11        | 8.357       | 1063          | 1066        | 1070         | rBV      | 72710          | 58939         | 1.28%           | 0.121%        |
| 12        | 8.416       | 1073          | 1076        | 1079         | rBV      | 93541          | 77531         | 1.68%           | 0.159%        |
| 13        | 8.851       | 1146          | 1150        | 1154         | rVB3     | 61043          | 69473         | 1.51%           | 0.142%        |
| 14        | 9.216       | 1208          | 1212        | 1216         | rBV      | 5340457        | 4606390       | 100.00%         | 9.427%        |
| 15        | 9.304       | 1224          | 1227        | 1231         | rBV2     | 73780          | 93504         | 2.03%           | 0.191%        |
| 16        | 9.557       | 1267          | 1270        | 1272         | rBV      | 63106          | 56647         | 1.23%           | 0.116%        |
| 17        | 9.610       | 1276          | 1279        | 1284         | rVV      | 554840         | 541823        | 11.76%          | 1.109%        |
| 18        | 9.757       | 1301          | 1304        | 1309         | rBV      | 135691         | 145749        | 3.16%           | 0.298%        |
| 19        | 9.834       | 1315          | 1317        | 1322         | rVB      | 69461          | 56395         | 1.22%           | 0.115%        |
| 20        | 9.898       | 1324          | 1328        | 1331         | rVV      | 3331528        | 2746949       | 59.63%          | 5.622%        |
| 21        | 9.928       | 1331          | 1333        | 1337         | rVB      | 120009         | 95039         | 2.06%           | 0.194%        |
| 22        | 10.098      | 1358          | 1362        | 1365         | rVB      | 101590         | 91488         | 1.99%           | 0.187%        |
| 23        | 10.439      | 1418          | 1420        | 1426         | rVB      | 126164         | 125365        | 2.72%           | 0.257%        |
| 24        | 10.681      | 1457          | 1461        | 1465         | rBV      | 3603452        | 3084105       | 66.95%          | 6.312%        |
| 25        | 10.804      | 1479          | 1482        | 1490         | rVB4     | 122517         | 177249        | 3.85%           | 0.363%        |
| 26        | 11.181      | 1544          | 1546        | 1550         | rVB2     | 57490          | 56348         | 1.22%           | 0.115%        |
| 27        | 11.251      | 1552          | 1558        | 1560         | rVV4     | 105123         | 181914        | 3.95%           | 0.372%        |
| 28        | 11.280      | 1560          | 1563        | 1570         | rVB2     | 93677          | 125610        | 2.73%           | 0.257%        |
| 29        | 11.380      | 1576          | 1580        | 1582         | rBV      | 2930248        | 2551492       | 55.39%          | 5.222%        |
| 30        | 11.404      | 1582          | 1584        | 1587         | rVV      | 1298583        | 987803        | 21.44%          | 2.022%        |
| 31        | 11.451      | 1589          | 1592        | 1596         | rVB      | 314236         | 309288        | 6.71%           | 0.633%        |
| 32        | 11.486      | 1596          | 1598        | 1602         | rBV2     | 47425          | 58720         | 1.27%           | 0.120%        |
| 33        | 11.604      | 1615          | 1618        | 1621         | rBV      | 81768          | 78015         | 1.69%           | 0.160%        |
| 34        | 11.675      | 1628          | 1630        | 1634         | rVB      | 85955          | 73346         | 1.59%           | 0.150%        |

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BNA\_F  
ClientSampleId :  
CTY-SB-04-0-5

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-BF012020.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |        |        |
|----|--------|------|------|------|------|---------|---------|--------|--------|
| 35 | 11.880 | 1662 | 1665 | 1667 | rBV  | 155521  | 150273  | 3.26%  | 0.308% |
| 36 | 11.904 | 1667 | 1669 | 1673 | rVV2 | 641106  | 607018  | 13.18% | 1.242% |
| 37 | 11.939 | 1673 | 1675 | 1680 | rVV2 | 193854  | 239016  | 5.19%  | 0.489% |
| 38 | 11.992 | 1681 | 1684 | 1686 | rVV  | 271004  | 299669  | 6.51%  | 0.613% |
| 39 | 12.016 | 1686 | 1688 | 1692 | rVB  | 123693  | 106327  | 2.31%  | 0.218% |
| 40 | 12.080 | 1697 | 1699 | 1702 | rVB2 | 71761   | 65196   | 1.42%  | 0.133% |
| 41 | 12.175 | 1712 | 1715 | 1717 | rBV  | 115186  | 85655   | 1.86%  | 0.175% |
| 42 | 12.357 | 1744 | 1746 | 1748 | rBV2 | 54797   | 53839   | 1.17%  | 0.110% |
| 43 | 12.427 | 1755 | 1758 | 1761 | rBV  | 142658  | 148514  | 3.22%  | 0.304% |
| 44 | 12.469 | 1762 | 1765 | 1770 | rVV2 | 117637  | 167491  | 3.64%  | 0.343% |
| 45 | 12.510 | 1770 | 1772 | 1777 | rVV4 | 97633   | 109095  | 2.37%  | 0.223% |
| 46 | 12.592 | 1782 | 1786 | 1789 | rBV  | 1668257 | 1489928 | 32.34% | 3.049% |
| 47 | 12.686 | 1799 | 1802 | 1805 | rBV3 | 209473  | 234329  | 5.09%  | 0.480% |
| 48 | 12.816 | 1819 | 1824 | 1827 | rBV  | 1432684 | 1543468 | 33.51% | 3.159% |
| 49 | 12.963 | 1845 | 1849 | 1852 | rVB  | 4398989 | 3955641 | 85.87% | 8.095% |
| 50 | 13.145 | 1878 | 1880 | 1883 | rVB2 | 197548  | 174051  | 3.78%  | 0.356% |
| 51 | 13.251 | 1895 | 1898 | 1901 | rBV2 | 156312  | 153121  | 3.32%  | 0.313% |
| 52 | 13.339 | 1911 | 1913 | 1916 | rVB  | 120220  | 92786   | 2.01%  | 0.190% |
| 53 | 13.857 | 1998 | 2001 | 2008 | rVB3 | 506884  | 556310  | 12.08% | 1.138% |
| 54 | 14.016 | 2023 | 2028 | 2030 | rBV2 | 2046885 | 2612263 | 56.71% | 5.346% |
| 55 | 14.039 | 2030 | 2032 | 2035 | rVB  | 669390  | 508546  | 11.04% | 1.041% |
| 56 | 15.051 | 2200 | 2204 | 2213 | rBV  | 641182  | 1328068 | 28.83% | 2.718% |
| 57 | 15.351 | 2252 | 2255 | 2260 | rVB  | 472442  | 632087  | 13.72% | 1.294% |
| 58 | 15.416 | 2263 | 2266 | 2269 | rBV  | 490796  | 538270  | 11.69% | 1.102% |
| 59 | 15.480 | 2273 | 2277 | 2280 | rBV  | 1391958 | 1644699 | 35.70% | 3.366% |

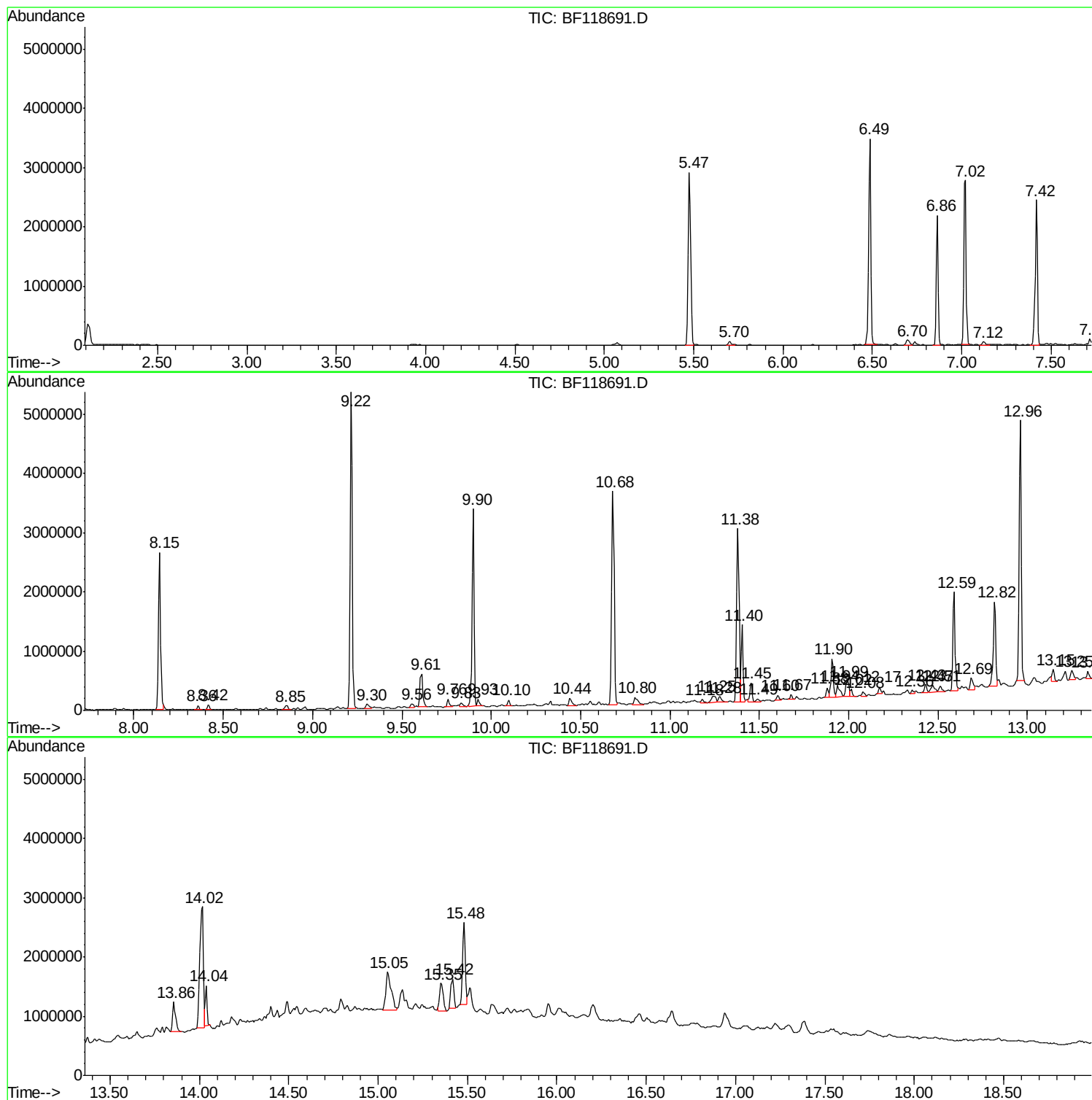
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ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampled :  
CTY-SB-04-0-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF012020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF012420\  
Data File : BF118691.D  
Acq On : 24 Jan 2020 17:49  
Operator : CG/JU  
Sample : L1243-07 2X  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

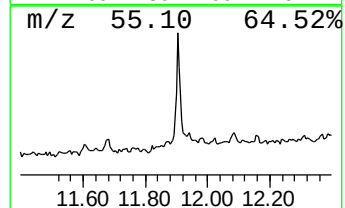
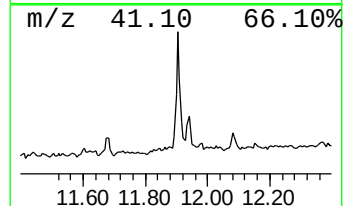
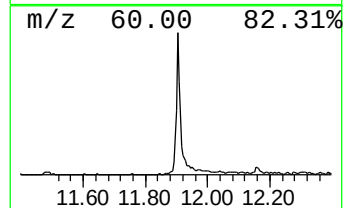
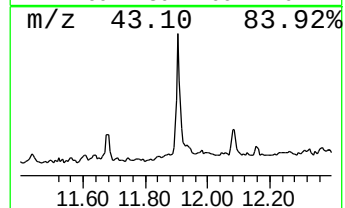
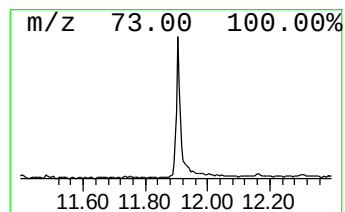
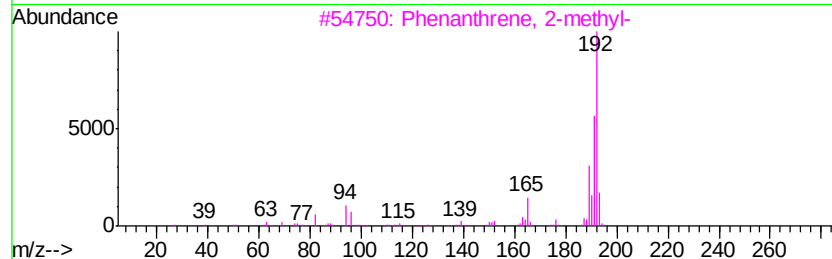
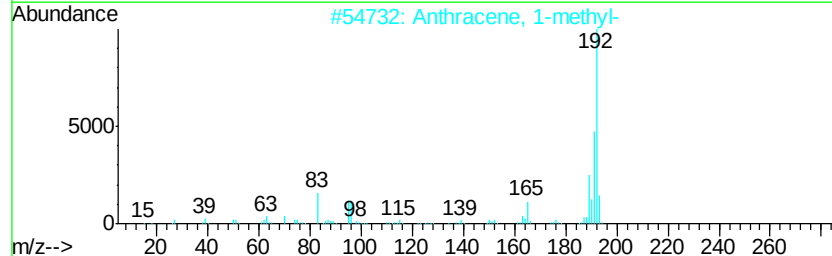
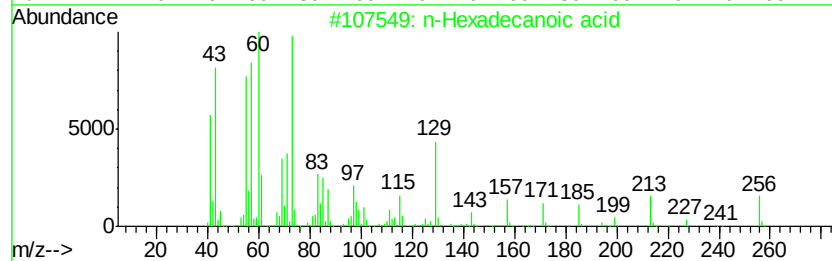
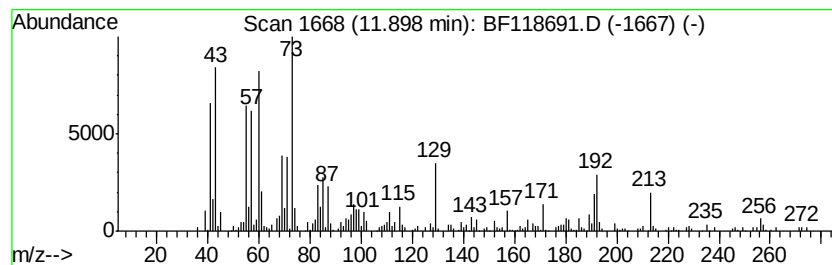
Instrument :  
BNA\_F  
ClientSampleId :  
CTY-SB-04-0-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF012020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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Peak Number 2 n-Hexadecanoic acid Concentration Rank 3

| R.T.      | EstConc                 | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------|--------|------------------|-------------|------|
| 11.90     | 4.76 ng                 | 607018 | Phenanthrene-d10 | 11.38       |      |
| Hit# of 5 | Tentative ID            | MW     | MolForm          | CAS#        | Qual |
| 1         | n-Hexadecanoic acid     | 256    | C16H32O2         | 000057-10-3 | 96   |
| 2         | Anthracene, 1-methyl-   | 192    | C15H12           | 000610-48-0 | 94   |
| 3         | Phenanthrene, 2-methyl- | 192    | C15H12           | 002531-84-2 | 93   |
| 4         | Phenanthrene, 1-methyl- | 192    | C15H12           | 000832-69-9 | 93   |
| 5         | Anthracene, 9-methyl-   | 192    | C15H12           | 000779-02-2 | 93   |



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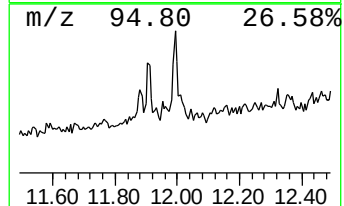
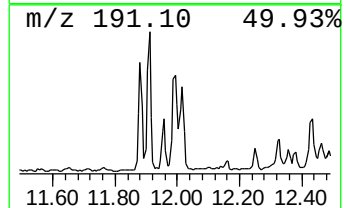
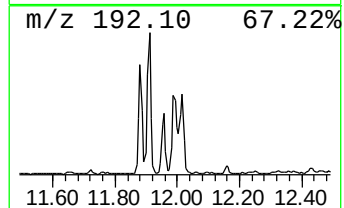
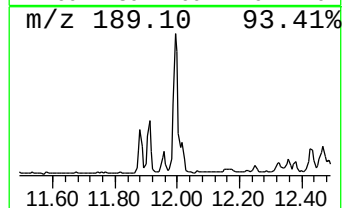
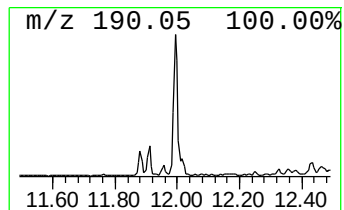
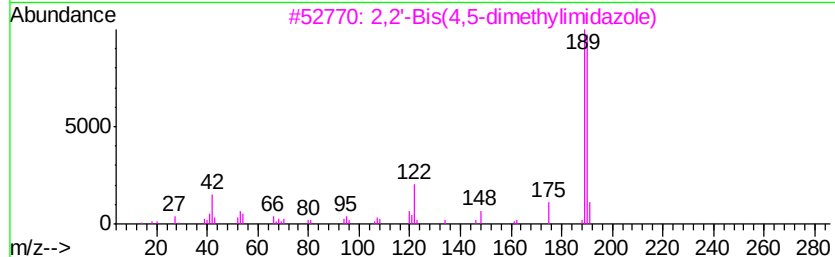
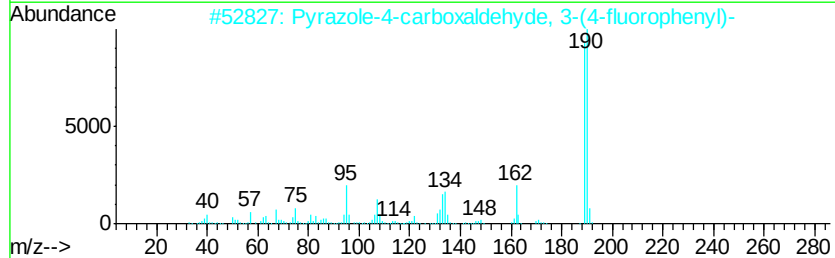
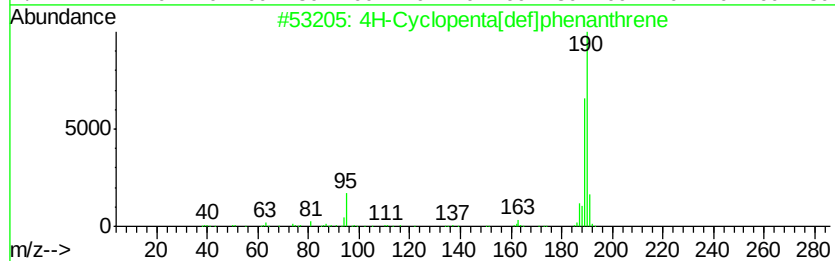
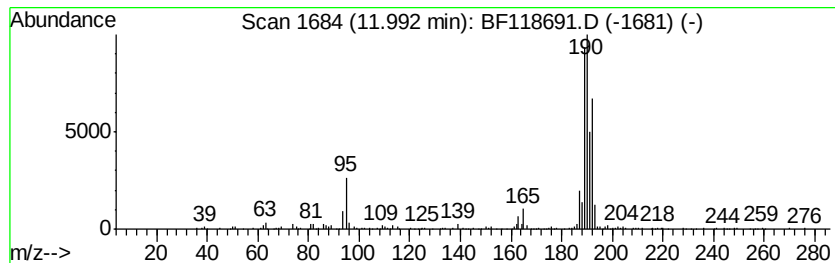
Instrument :  
BNA\_F  
ClientSampleId :  
CTY-SB-04-0-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF012020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 3 4H-Cyclopenta[def]phenanthrene Concentration Rank 5

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------|--------|------------------|-------------|------|
| 11.99     | 2.35 ng                             | 299669 | Phenanthrene-d10 | 11.38       |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#        | Qual |
| 1         | 4H-Cyclopenta[def]phenanthrene      | 190    | C15H10           | 000203-64-5 | 70   |
| 2         | Pyrazole-4-carboxaldehyde, 3-(4-... | 190    | C10H7FN2O        | 306936-57-2 | 49   |
| 3         | 2,2'-Bis(4,5-dimethylimidazole)     | 190    | C10H14N4         | 069286-06-2 | 46   |
| 4         | 1H-Indene, 2-phenyl-                | 192    | C15H12           | 004505-48-0 | 38   |
| 5         | 5H-Dibenzo[a,d]cycloheptene         | 192    | C15H12           | 000256-81-5 | 30   |



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Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF012020.M  
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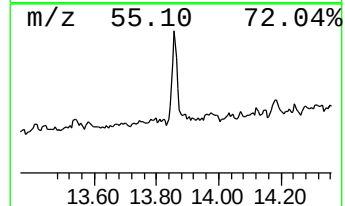
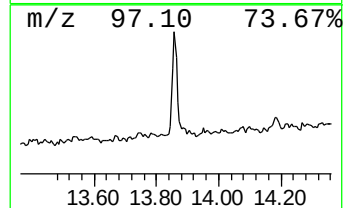
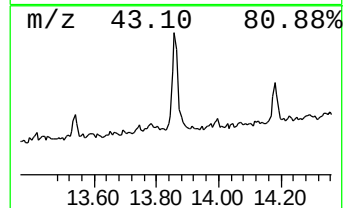
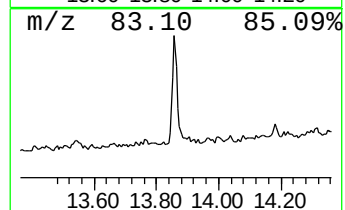
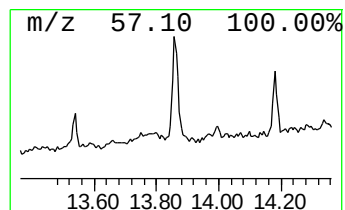
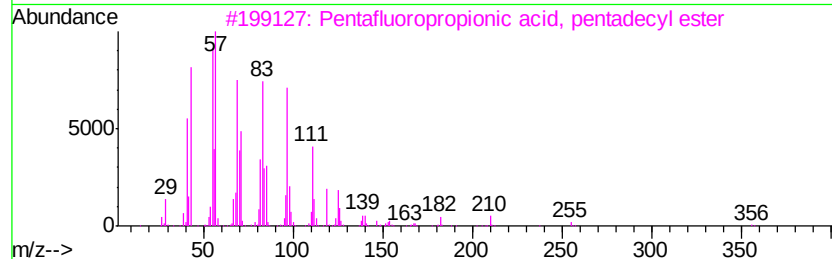
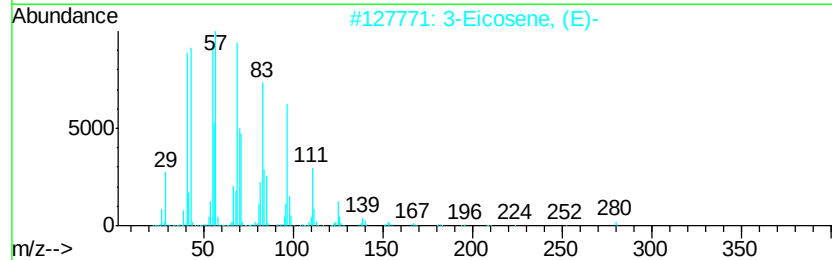
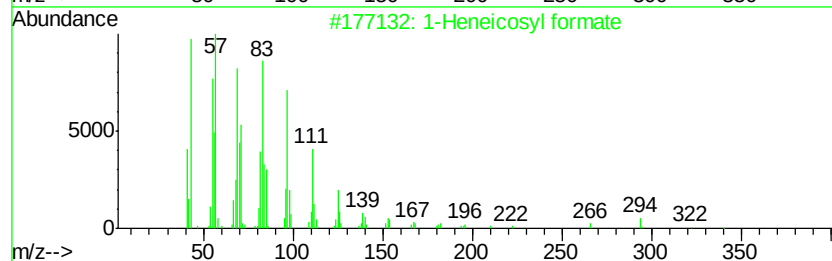
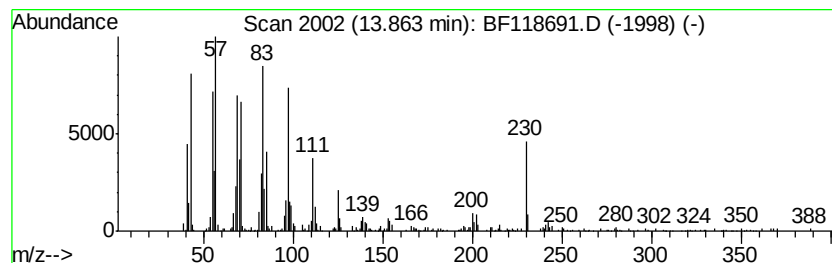
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 4 1-Heneicosyl formate Concentration Rank 4

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 13.86 | 4.26 ng | 556310 | Chrysene-d12     | 14.02 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#        | Qual |
|------|----|-------------------------------------|-----|------------|-------------|------|
| 1    | 5  | 1-Heneicosyl formate                | 340 | C22H44O2   | 077899-03-7 | 95   |
| 2    |    | 3-Eicosene, (E)-                    | 280 | C20H40     | 074685-33-9 | 89   |
| 3    |    | Pentafluoropropionic acid, penta... | 374 | C18H31F5O2 | 959092-08-1 | 89   |
| 4    |    | 1-Heneicosanol                      | 312 | C21H44O    | 015594-90-8 | 89   |
| 5    |    | Heptafluorobutyric acid, n-tetra... | 410 | C18H29F7O2 | 007365-36-8 | 89   |



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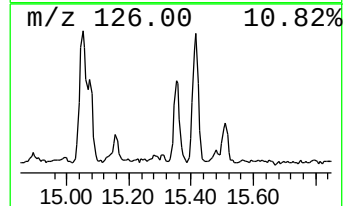
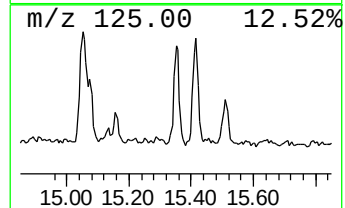
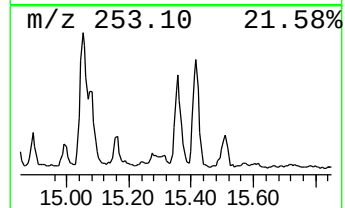
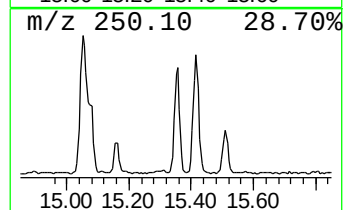
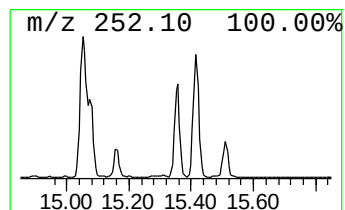
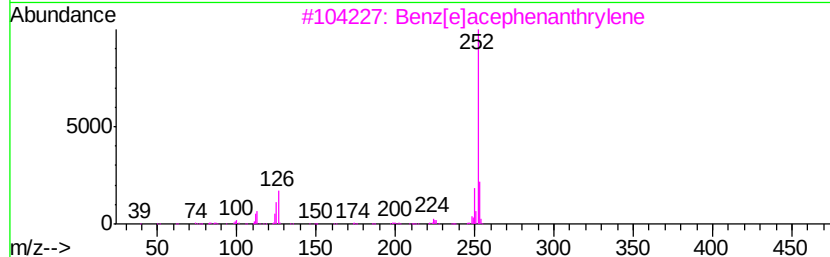
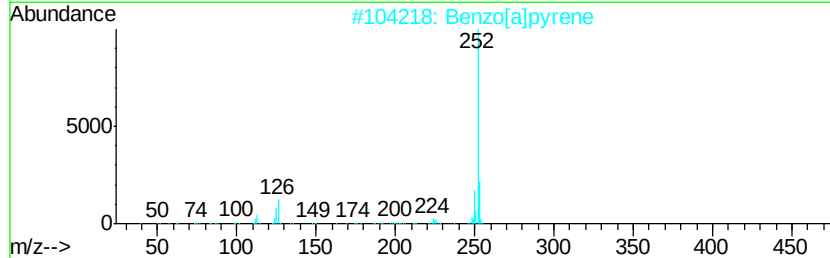
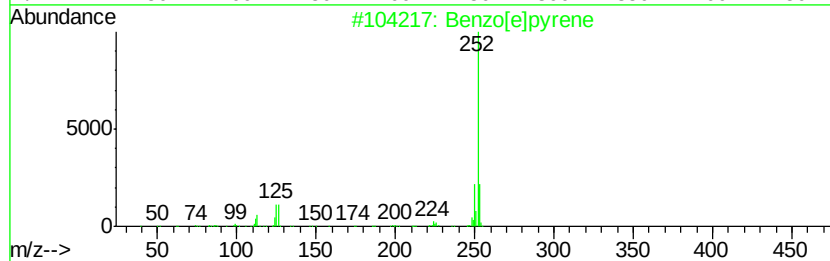
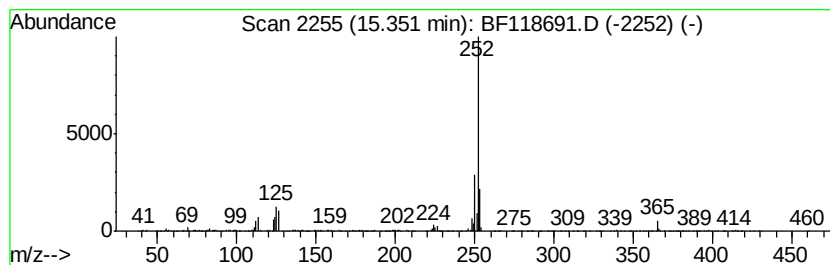
Instrument :  
BNA\_F  
ClientSampleId :  
CTY-SB-04-0-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF012020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 5 Benzo[e]pyrene Concentration Rank 2

| R.T.      | EstConc                   | Area   | Relative to ISTD | R.T.        |      |
|-----------|---------------------------|--------|------------------|-------------|------|
| 15.35     | 7.69 ng                   | 632087 | Perylene-d12     | 15.48       |      |
| Hit# of 5 | Tentative ID              | MW     | MolForm          | CAS#        | Qual |
| 1         | Benzo[e]pyrene            | 252    | C20H12           | 000192-97-2 | 99   |
| 2         | Benzo[a]pyrene            | 252    | C20H12           | 000050-32-8 | 96   |
| 3         | Benzo[e]acephenanthrylene | 252    | C20H12           | 000205-99-2 | 95   |
| 4         | Benzo[i]fluoranthene      | 252    | C20H12           | 000205-82-3 | 94   |
| 5         | Benzo[k]fluoranthene      | 252    | C20H12           | 000207-08-9 | 93   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF012420\  
Data File : BF118691.D  
Acq On : 24 Jan 2020 17:49  
Operator : CG/JU  
Sample : L1243-07 2X  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
CTY-SB-04-0-5

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF012020.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 |
| n-Hexadecanoic acid  | 11.90 | 4.8     | ng    | 607018   | 4                     | 11.38 | 2551490 | 20.0 |
| 4H-Cyclopenta[def... | 11.99 | 2.4     | ng    | 299669   | 4                     | 11.38 | 2551490 | 20.0 |
| 1-Heneicosyl formate | 13.86 | 4.3     | ng    | 556310   | 5                     | 14.02 | 2612260 | 20.0 |
| Benzo[e]pyrene       | 15.35 | 7.7     | ng    | 632087   | 6                     | 15.48 | 1644700 | 20.0 |