

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
 Data File : BF119300.D  
 Acq On : 9 Mar 2020 23:26  
 Operator : CG/JU  
 Sample : L1844-02  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 GP-15-030520

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-BF022020.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         | 4.922       | 474           | 482         | 496          | rVV2     | 122134         | 213475        | 7.59%           | 0.481%        |
| 2         | 5.304       | 542           | 547         | 552          | rBV2     | 52753          | 76483         | 2.72%           | 0.172%        |
| 3         | 5.351       | 552           | 555         | 575          | rVV      | 1374850        | 1823112       | 64.86%          | 4.104%        |
| 4         | 5.563       | 588           | 591         | 595          | rBV      | 76727          | 80999         | 2.88%           | 0.182%        |
| 5         | 6.381       | 726           | 730         | 747          | rBV      | 1559602        | 1876594       | 66.76%          | 4.225%        |
| 6         | 6.551       | 756           | 759         | 762          | rBV2     | 89571          | 101231        | 3.60%           | 0.228%        |
| 7         | 6.722       | 785           | 788         | 796          | rBV      | 584668         | 553585        | 19.69%          | 1.246%        |
| 8         | 6.881       | 811           | 815         | 824          | rBV      | 1853835        | 1708689       | 60.79%          | 3.847%        |
| 9         | 7.286       | 881           | 884         | 889          | rBV      | 1189224        | 1190004       | 42.34%          | 2.679%        |
| 10        | 8.004       | 1000          | 1006        | 1008         | rBV      | 809186         | 717563        | 25.53%          | 1.615%        |
| 11        | 8.028       | 1008          | 1010        | 1015         | rVB      | 187216         | 183255        | 6.52%           | 0.413%        |
| 12        | 8.716       | 1125          | 1127        | 1135         | rVB      | 247259         | 234835        | 8.35%           | 0.529%        |
| 13        | 8.816       | 1141          | 1144        | 1147         | rBV      | 247981         | 214769        | 7.64%           | 0.483%        |
| 14        | 9.080       | 1184          | 1189        | 1192         | rBV      | 2790249        | 2459437       | 87.50%          | 5.537%        |
| 15        | 9.198       | 1205          | 1209        | 1217         | rVB2     | 101600         | 131370        | 4.67%           | 0.296%        |
| 16        | 9.345       | 1231          | 1234        | 1238         | rBV2     | 89864          | 128098        | 4.56%           | 0.288%        |
| 17        | 9.416       | 1243          | 1246        | 1249         | rBV      | 180549         | 194820        | 6.93%           | 0.439%        |
| 18        | 9.445       | 1249          | 1251        | 1253         | rVV      | 158207         | 143484        | 5.10%           | 0.323%        |
| 19        | 9.474       | 1253          | 1256        | 1263         | rVV      | 491526         | 483910        | 17.22%          | 1.089%        |
| 20        | 9.533       | 1263          | 1266        | 1274         | rVV      | 109927         | 151648        | 5.40%           | 0.341%        |
| 21        | 9.622       | 1278          | 1281        | 1285         | rVB      | 138205         | 133936        | 4.76%           | 0.302%        |
| 22        | 9.757       | 1298          | 1304        | 1307         | rBV      | 984264         | 900816        | 32.05%          | 2.028%        |
| 23        | 9.963       | 1333          | 1339        | 1343         | rBV2     | 147424         | 165767        | 5.90%           | 0.373%        |
| 24        | 10.074      | 1355          | 1358        | 1361         | rBV      | 83148          | 82781         | 2.95%           | 0.186%        |
| 25        | 10.163      | 1369          | 1373        | 1375         | rBV3     | 99914          | 123016        | 4.38%           | 0.277%        |
| 26        | 10.186      | 1375          | 1377        | 1380         | rVB2     | 109759         | 84872         | 3.02%           | 0.191%        |
| 27        | 10.298      | 1391          | 1396        | 1403         | rBV2     | 166234         | 211890        | 7.54%           | 0.477%        |
| 28        | 10.463      | 1420          | 1424        | 1427         | rVB      | 98305          | 94309         | 3.36%           | 0.212%        |
| 29        | 10.551      | 1435          | 1439        | 1450         | rVB      | 1539235        | 1699310       | 60.46%          | 3.825%        |
| 30        | 10.674      | 1455          | 1460        | 1466         | rVB      | 188931         | 256925        | 9.14%           | 0.578%        |
| 31        | 10.857      | 1480          | 1491        | 1493         | rBV4     | 72088          | 132710        | 4.72%           | 0.299%        |
| 32        | 10.980      | 1507          | 1512        | 1514         | rBV2     | 140864         | 179552        | 6.39%           | 0.404%        |
| 33        | 10.998      | 1514          | 1515        | 1518         | rVV2     | 96626          | 103171        | 3.67%           | 0.232%        |
| 34        | 11.057      | 1521          | 1525        | 1528         | rVV2     | 83078          | 112190        | 3.99%           | 0.253%        |

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 GP-15-030520

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-BF022020.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |         |        |
|----|--------|------|------|------|------|---------|---------|---------|--------|
| 35 | 11.104 | 1528 | 1533 | 1536 | rVV3 | 129112  | 227728  | 8.10%   | 0.513% |
| 36 | 11.139 | 1536 | 1539 | 1545 | rVB3 | 84942   | 108004  | 3.84%   | 0.243% |
| 37 | 11.239 | 1553 | 1556 | 1559 | rBV  | 901432  | 931326  | 33.13%  | 2.097% |
| 38 | 11.263 | 1559 | 1560 | 1564 | rVV  | 684463  | 553062  | 19.68%  | 1.245% |
| 39 | 11.321 | 1567 | 1570 | 1573 | rVV  | 310378  | 326506  | 11.62%  | 0.735% |
| 40 | 11.345 | 1573 | 1574 | 1581 | rVV2 | 70696   | 126700  | 4.51%   | 0.285% |
| 41 | 11.492 | 1593 | 1599 | 1603 | rBV6 | 110619  | 233046  | 8.29%   | 0.525% |
| 42 | 11.533 | 1603 | 1606 | 1609 | rVV  | 139383  | 128898  | 4.59%   | 0.290% |
| 43 | 11.745 | 1639 | 1642 | 1644 | rBV  | 269653  | 239739  | 8.53%   | 0.540% |
| 44 | 11.774 | 1644 | 1647 | 1650 | rVV  | 541704  | 492220  | 17.51%  | 1.108% |
| 45 | 11.821 | 1652 | 1655 | 1657 | rVV  | 253710  | 218768  | 7.78%   | 0.492% |
| 46 | 11.857 | 1657 | 1661 | 1663 | rVV2 | 483576  | 528136  | 18.79%  | 1.189% |
| 47 | 11.880 | 1663 | 1665 | 1670 | rVB  | 221892  | 193497  | 6.88%   | 0.436% |
| 48 | 11.939 | 1670 | 1675 | 1679 | rBV4 | 79516   | 94081   | 3.35%   | 0.212% |
| 49 | 12.033 | 1688 | 1691 | 1697 | rVB  | 251965  | 253672  | 9.02%   | 0.571% |
| 50 | 12.186 | 1712 | 1717 | 1720 | rBV  | 139120  | 163558  | 5.82%   | 0.368% |
| 51 | 12.221 | 1720 | 1723 | 1725 | rVV  | 132469  | 123216  | 4.38%   | 0.277% |
| 52 | 12.245 | 1725 | 1727 | 1731 | rVB  | 106000  | 88096   | 3.13%   | 0.198% |
| 53 | 12.292 | 1731 | 1735 | 1738 | rBV  | 325821  | 341364  | 12.14%  | 0.768% |
| 54 | 12.327 | 1738 | 1741 | 1744 | rVV2 | 206295  | 283569  | 10.09%  | 0.638% |
| 55 | 12.351 | 1744 | 1745 | 1747 | rVV  | 130147  | 78317   | 2.79%   | 0.176% |
| 56 | 12.392 | 1747 | 1752 | 1759 | rVB2 | 215954  | 306027  | 10.89%  | 0.689% |
| 57 | 12.457 | 1759 | 1763 | 1767 | rBV  | 2814348 | 2810851 | 100.00% | 6.328% |
| 58 | 12.521 | 1772 | 1774 | 1777 | rVB2 | 103821  | 93543   | 3.33%   | 0.211% |
| 59 | 12.557 | 1777 | 1780 | 1785 | rBV3 | 80303   | 132135  | 4.70%   | 0.297% |
| 60 | 12.604 | 1785 | 1788 | 1791 | rVB  | 122688  | 117860  | 4.19%   | 0.265% |
| 61 | 12.686 | 1796 | 1802 | 1808 | rVB2 | 2193490 | 2767280 | 98.45%  | 6.230% |
| 62 | 12.733 | 1808 | 1810 | 1816 | rVB2 | 188209  | 239679  | 8.53%   | 0.540% |
| 63 | 12.821 | 1818 | 1825 | 1829 | rBV  | 2629161 | 2498276 | 88.88%  | 5.624% |
| 64 | 12.910 | 1835 | 1840 | 1845 | rBV4 | 256949  | 483135  | 17.19%  | 1.088% |
| 65 | 12.992 | 1850 | 1854 | 1855 | rVV2 | 195005  | 226998  | 8.08%   | 0.511% |
| 66 | 13.015 | 1855 | 1858 | 1861 | rVB  | 540539  | 504656  | 17.95%  | 1.136% |
| 67 | 13.051 | 1861 | 1864 | 1866 | rBV4 | 76915   | 87343   | 3.11%   | 0.197% |
| 68 | 13.080 | 1866 | 1869 | 1871 | rVV  | 314891  | 267097  | 9.50%   | 0.601% |
| 69 | 13.115 | 1871 | 1875 | 1882 | rVV3 | 357005  | 576933  | 20.53%  | 1.299% |
| 70 | 13.174 | 1882 | 1885 | 1888 | rVB2 | 127245  | 125633  | 4.47%   | 0.283% |
| 71 | 13.210 | 1888 | 1891 | 1894 | rBV  | 176195  | 165460  | 5.89%   | 0.372% |

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 BNA\_F  
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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

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Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF022020.M

Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|     |        |      |      |      |      |         |         |        |        |
|-----|--------|------|------|------|------|---------|---------|--------|--------|
| 72  | 13.245 | 1894 | 1897 | 1900 | rBV3 | 165152  | 194355  | 6.91%  | 0.438% |
| 73  | 13.392 | 1919 | 1922 | 1924 | rBV  | 123362  | 121577  | 4.33%  | 0.274% |
| 74  | 13.533 | 1942 | 1946 | 1948 | rBV  | 274200  | 264849  | 9.42%  | 0.596% |
| 75  | 13.639 | 1959 | 1964 | 1965 | rBV2 | 224941  | 259512  | 9.23%  | 0.584% |
| 76  | 13.657 | 1965 | 1967 | 1970 | rVB  | 208940  | 162069  | 5.77%  | 0.365% |
| 77  | 13.686 | 1970 | 1972 | 1974 | rBV  | 140723  | 128446  | 4.57%  | 0.289% |
| 78  | 13.739 | 1979 | 1981 | 1987 | rVB2 | 304672  | 365474  | 13.00% | 0.823% |
| 79  | 13.874 | 1998 | 2004 | 2008 | rBV2 | 1271154 | 1944337 | 69.17% | 4.377% |
| 80  | 13.910 | 2008 | 2010 | 2014 | rVV  | 1016437 | 914462  | 32.53% | 2.059% |
| 81  | 13.992 | 2021 | 2024 | 2027 | rVB  | 153825  | 152476  | 5.42%  | 0.343% |
| 82  | 14.033 | 2027 | 2031 | 2038 | rBV5 | 128057  | 275372  | 9.80%  | 0.620% |
| 83  | 14.274 | 2067 | 2072 | 2075 | rVV  | 246432  | 303200  | 10.79% | 0.683% |
| 84  | 14.304 | 2075 | 2077 | 2080 | rVB  | 116090  | 96030   | 3.42%  | 0.216% |
| 85  | 14.339 | 2080 | 2083 | 2087 | rBV4 | 201856  | 233322  | 8.30%  | 0.525% |
| 86  | 14.398 | 2090 | 2093 | 2095 | rVV2 | 97655   | 104529  | 3.72%  | 0.235% |
| 87  | 14.598 | 2123 | 2127 | 2129 | rBV2 | 152275  | 167768  | 5.97%  | 0.378% |
| 88  | 14.633 | 2130 | 2133 | 2138 | rVB2 | 149117  | 165493  | 5.89%  | 0.373% |
| 89  | 14.762 | 2151 | 2155 | 2158 | rBV2 | 111700  | 138719  | 4.94%  | 0.312% |
| 90  | 14.909 | 2175 | 2180 | 2183 | rBV  | 761825  | 1154470 | 41.07% | 2.599% |
| 91  | 15.015 | 2194 | 2198 | 2202 | rVB  | 141074  | 163118  | 5.80%  | 0.367% |
| 92  | 15.104 | 2208 | 2213 | 2216 | rBV3 | 67174   | 127631  | 4.54%  | 0.287% |
| 93  | 15.192 | 2225 | 2228 | 2235 | rVB  | 353732  | 441967  | 15.72% | 0.995% |
| 94  | 15.256 | 2235 | 2239 | 2243 | rVV  | 498427  | 574157  | 20.43% | 1.293% |
| 95  | 15.309 | 2243 | 2248 | 2252 | rVV  | 581231  | 777652  | 27.67% | 1.751% |
| 96  | 15.345 | 2252 | 2254 | 2261 | rVB2 | 120970  | 183251  | 6.52%  | 0.413% |
| 97  | 15.704 | 2311 | 2315 | 2320 | rBV  | 75182   | 125868  | 4.48%  | 0.283% |
| 98  | 16.721 | 2480 | 2488 | 2496 | rBV3 | 206635  | 456686  | 16.25% | 1.028% |
| 99  | 16.886 | 2511 | 2516 | 2521 | rVB  | 42529   | 76248   | 2.71%  | 0.172% |
| 100 | 17.150 | 2555 | 2561 | 2573 | rBV  | 111353  | 263457  | 9.37%  | 0.593% |

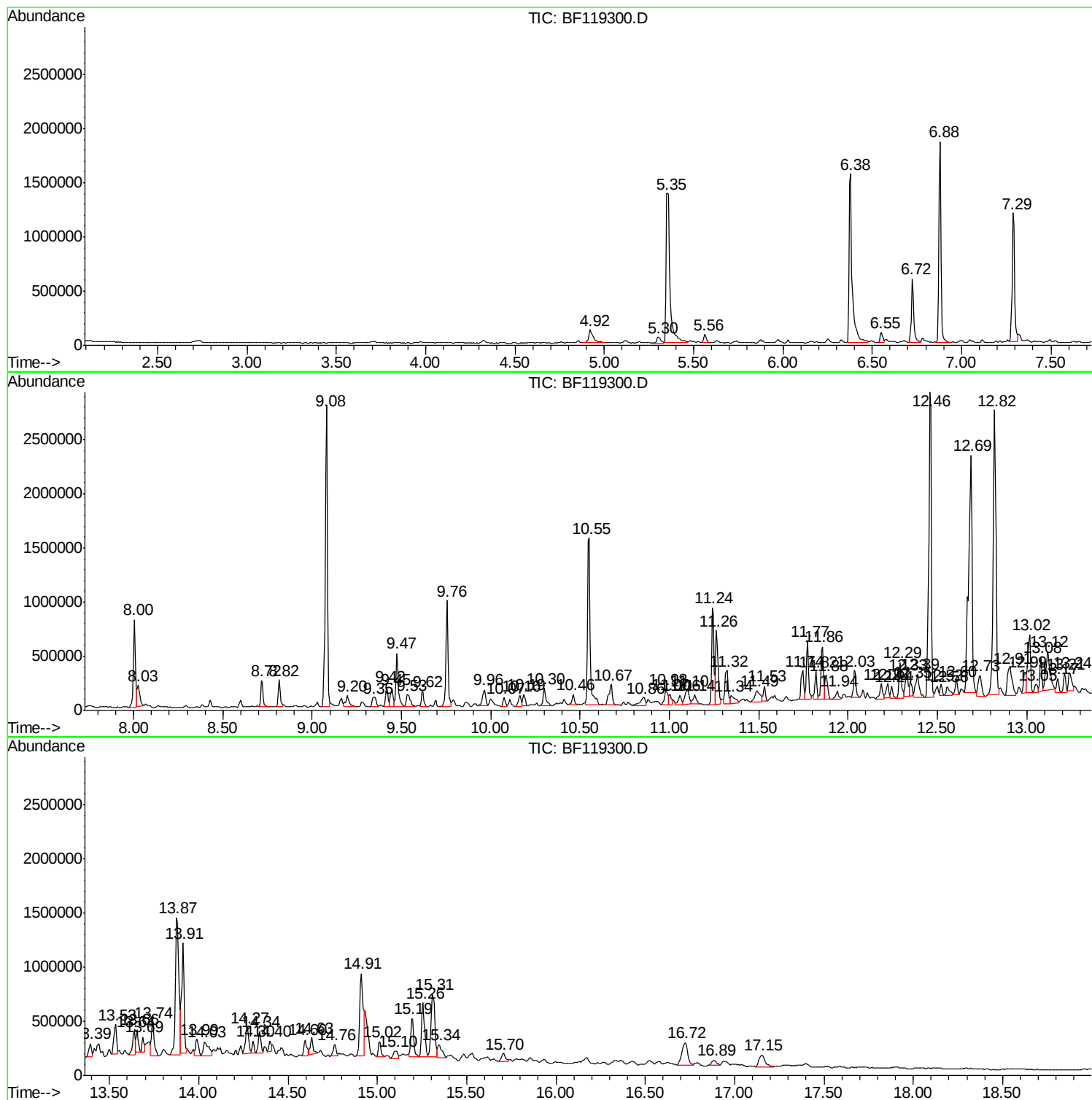
Sum of corrected areas: 44421510

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Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.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\BF030920\  
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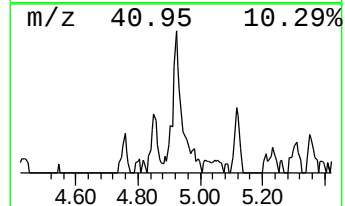
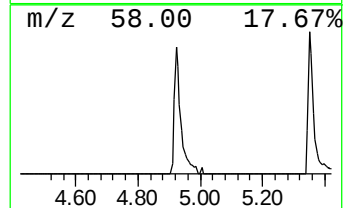
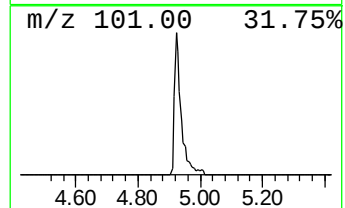
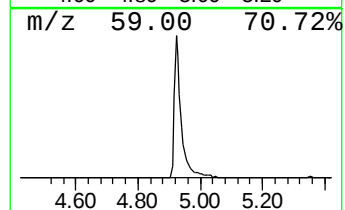
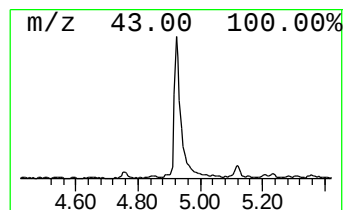
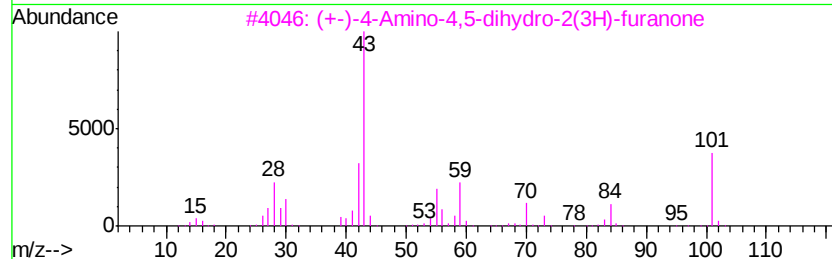
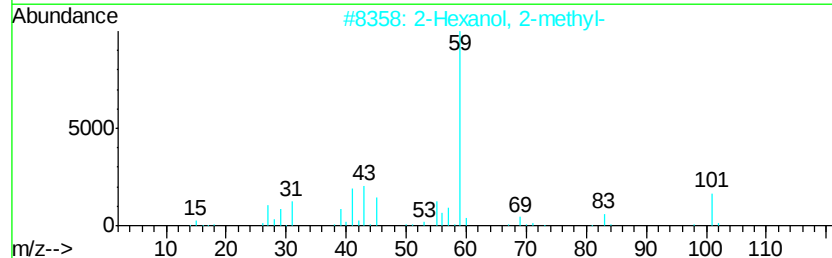
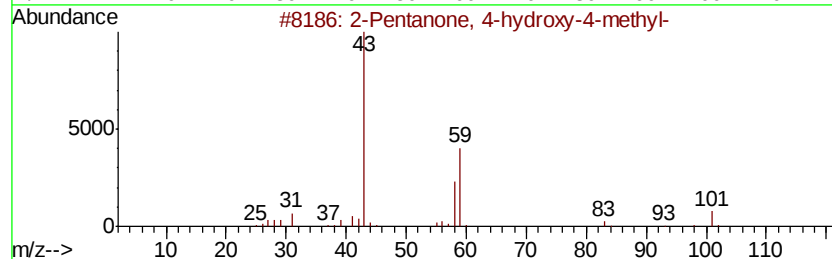
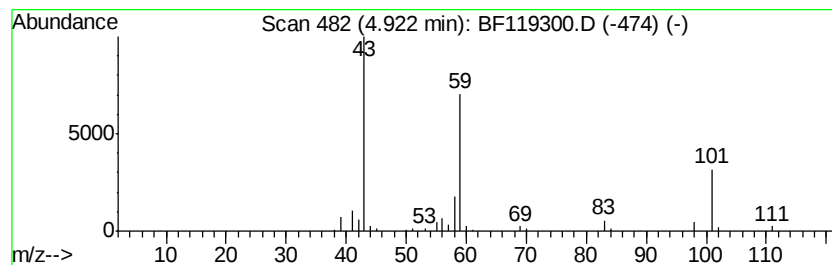
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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 5

| R.T. | EstConc | Area   | Relative to ISTD       | R.T. |
|------|---------|--------|------------------------|------|
| 4.92 | 7.71 ng | 213475 | 1,4-Dichlorobenzene-d4 | 6.72 |

| Hit# | of | Tentative ID                           | MW  | MolForm  | CAS#        | Qual |
|------|----|----------------------------------------|-----|----------|-------------|------|
| 1    | 5  | 2-Pentanone, 4-hydroxy-4-methyl-       | 116 | C6H12O2  | 000123-42-2 | 53   |
| 2    |    | 2-Hexanol, 2-methyl-                   | 116 | C7H16O   | 000625-23-0 | 50   |
| 3    |    | (+)-4-Amino-4,5-dihydro-2(3H)-furanone | 101 | C4H7NO2  | 016504-58-8 | 47   |
| 4    |    | 2-Acetoxyisobutryl chloride            | 164 | C6H9ClO3 | 040635-66-3 | 45   |
| 5    |    | Guanidine                              | 59  | CH5N3    | 000113-00-8 | 43   |



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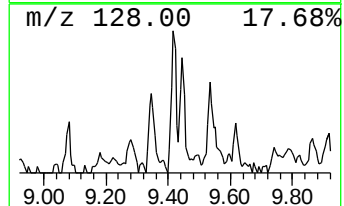
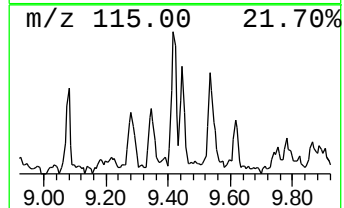
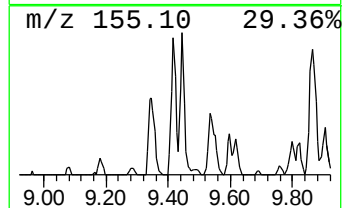
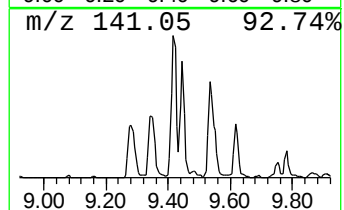
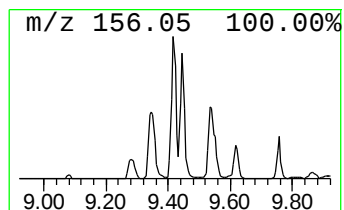
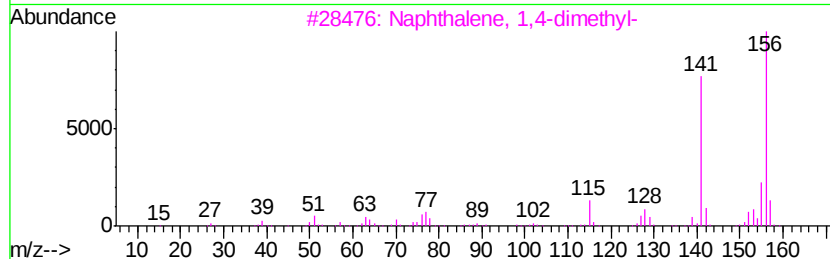
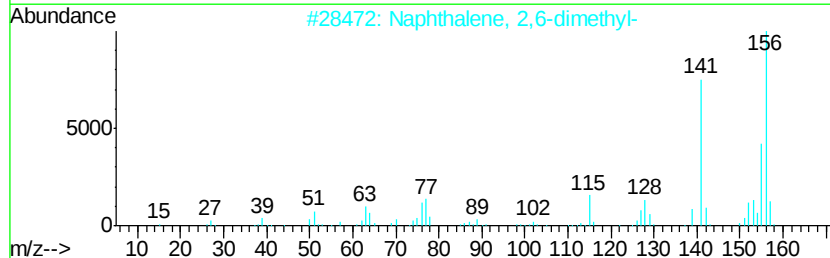
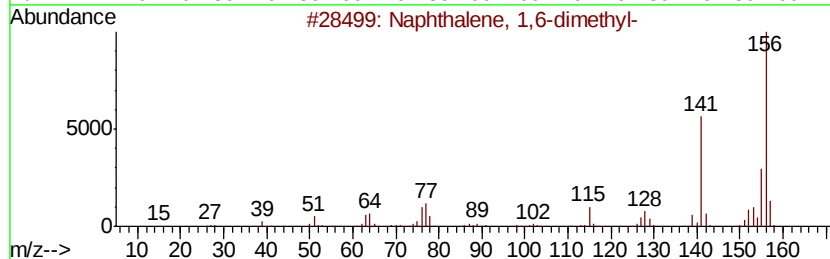
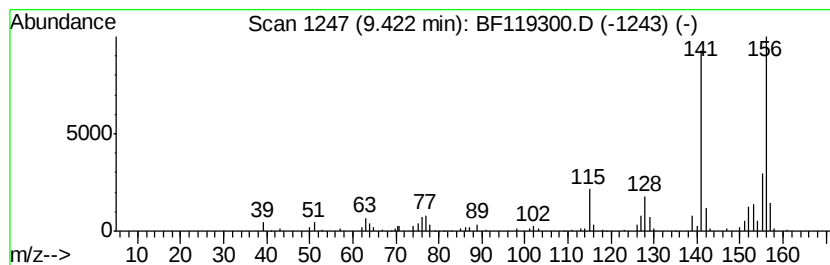
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 3 Naphthalene, 1,6-dimethyl- Concentration Rank 19

| R.T. | EstConc | Area   | Relative to ISTD | R.T. |
|------|---------|--------|------------------|------|
| 9.42 | 4.33 ng | 194820 | Acenaphthene-d10 | 9.76 |

| Hit# | of | Tentative ID               | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, 1,6-dimethyl- | 156 | C12H12  | 000575-43-9 | 97   |
| 2    |    | Naphthalene, 2,6-dimethyl- | 156 | C12H12  | 000581-42-0 | 97   |
| 3    |    | Naphthalene, 1,4-dimethyl- | 156 | C12H12  | 000571-58-4 | 97   |
| 4    |    | Naphthalene, 1,3-dimethyl- | 156 | C12H12  | 000575-41-7 | 97   |
| 5    |    | Naphthalene, 2,3-dimethyl- | 156 | C12H12  | 000581-40-8 | 96   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
Acq On : 9 Mar 2020 23:26  
Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

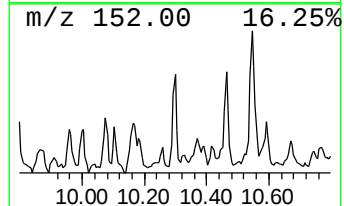
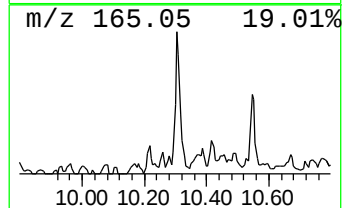
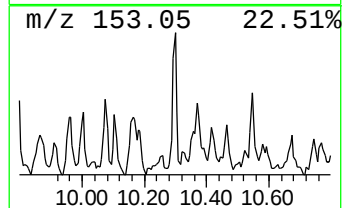
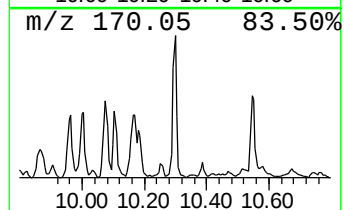
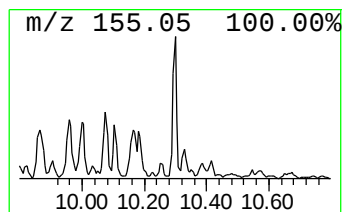
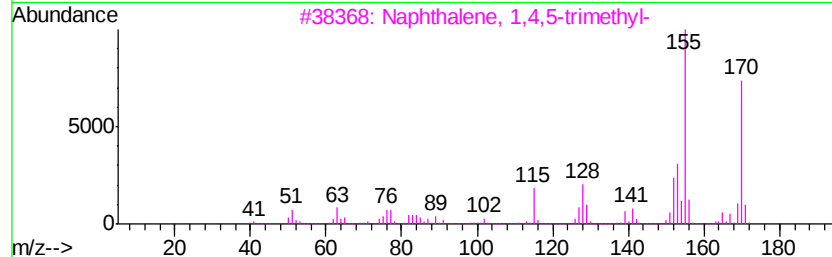
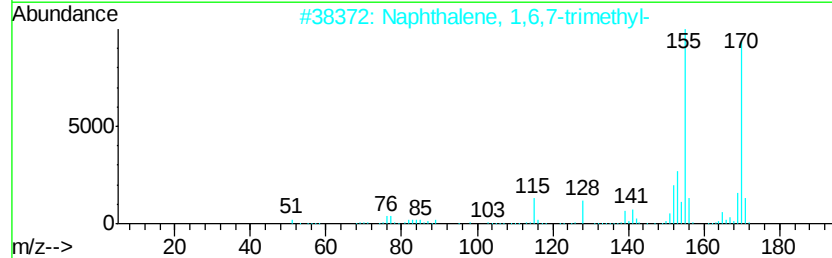
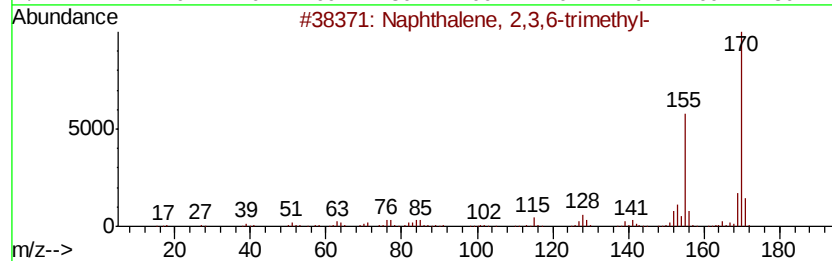
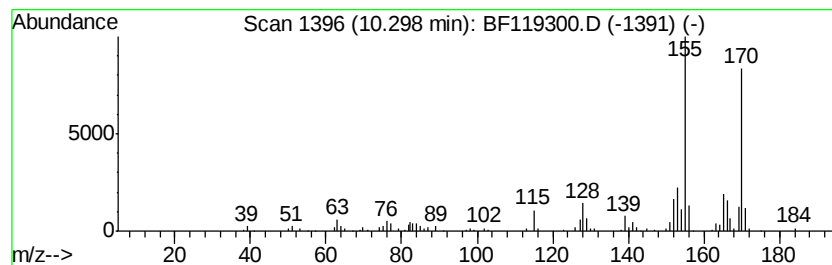
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ClientSampleId :  
GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 4 Naphthalene, 2,3,6-trimethyl- Concentration Rank 17

| R.T.      | EstConc                       | Area   | Relative to ISTD |             | R.T. |
|-----------|-------------------------------|--------|------------------|-------------|------|
| 10.30     | 4.70 ng                       | 211890 | Acenaphthene-d10 |             | 9.76 |
| Hit# of 5 | Tentative ID                  | MW     | MolForm          | CAS#        | Qual |
| 1         | Naphthalene, 2,3,6-trimethyl- | 170    | C13H14           | 000829-26-5 | 96   |
| 2         | Naphthalene, 1,6,7-trimethyl- | 170    | C13H14           | 002245-38-7 | 96   |
| 3         | Naphthalene, 1,4,5-trimethyl- | 170    | C13H14           | 002131-41-1 | 95   |
| 4         | Naphthalene, 1,4,6-trimethyl- | 170    | C13H14           | 002131-42-2 | 94   |
| 5         | 4,6,8-Trimethylazulene        | 170    | C13H14           | 000941-81-1 | 91   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
Acq On : 9 Mar 2020 23:26  
Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

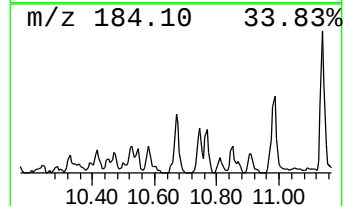
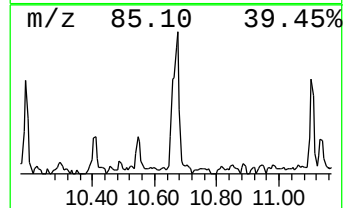
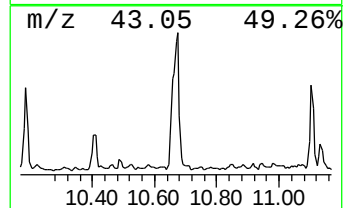
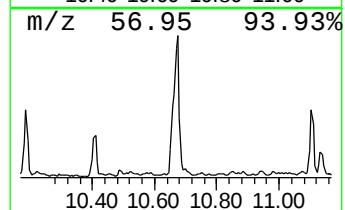
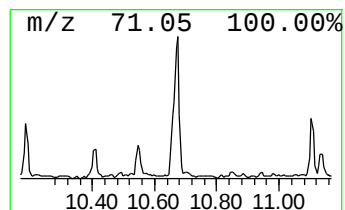
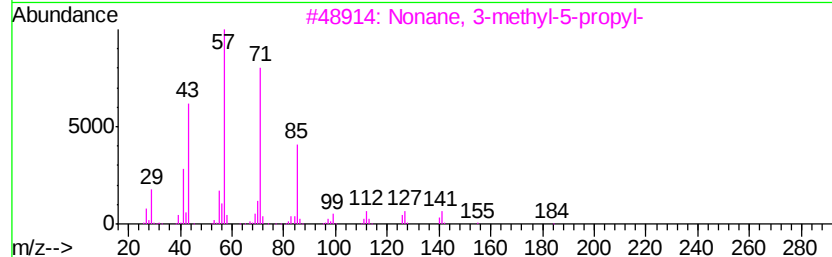
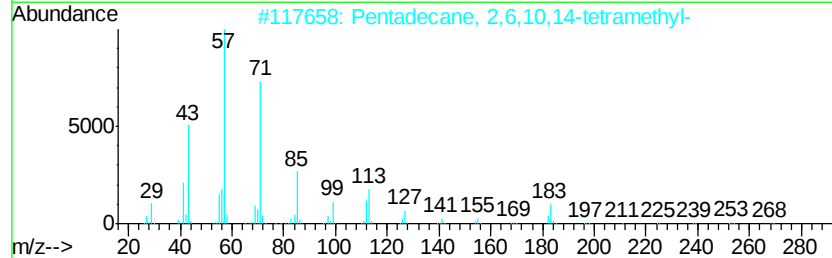
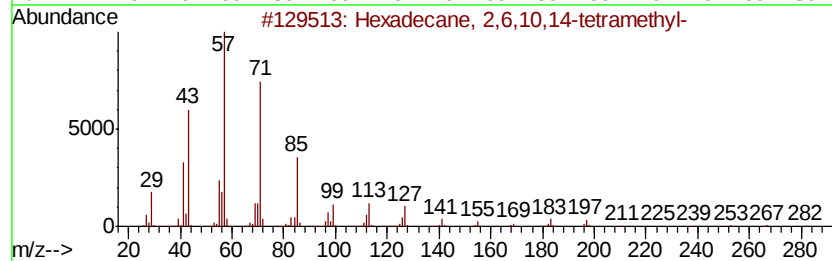
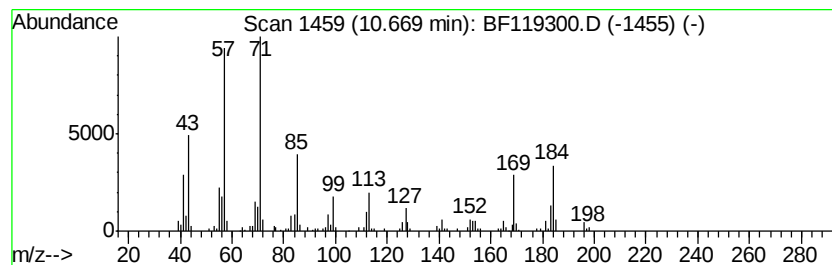
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ClientSampleId :  
GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.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 Hexadecane, 2,6,10,14-tetra... Concentration Rank 10

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------|--------|------------------|-------------|------|
| 10.67     | 5.52 ng                             | 256925 | Phenanthrene-d10 | 11.24       |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#        | Qual |
| 1         | Hexadecane, 2,6,10,14-tetramethyl-  | 282    | C20H42           | 000638-36-8 | 62   |
| 2         | Pentadecane, 2,6,10,14-tetramethyl- | 268    | C19H40           | 001921-70-6 | 53   |
| 3         | Nonane, 3-methyl-5-propyl-          | 184    | C13H28           | 031081-18-2 | 52   |
| 4         | Dodecane, 4,6-dimethyl-             | 198    | C14H30           | 061141-72-8 | 50   |
| 5         | Tridecane, 2-methyl-                | 198    | C14H30           | 001560-96-9 | 49   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
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Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

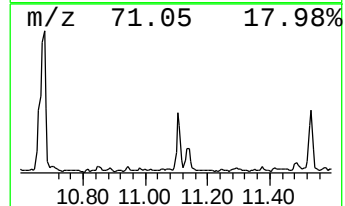
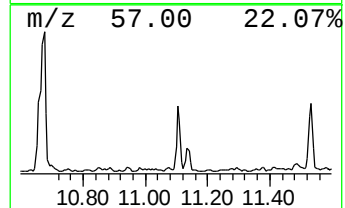
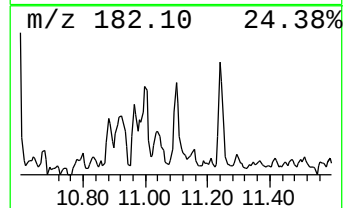
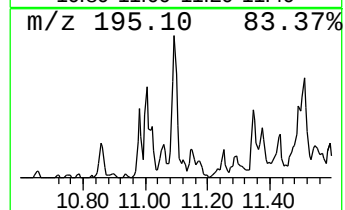
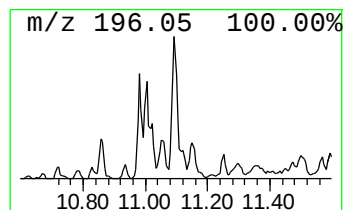
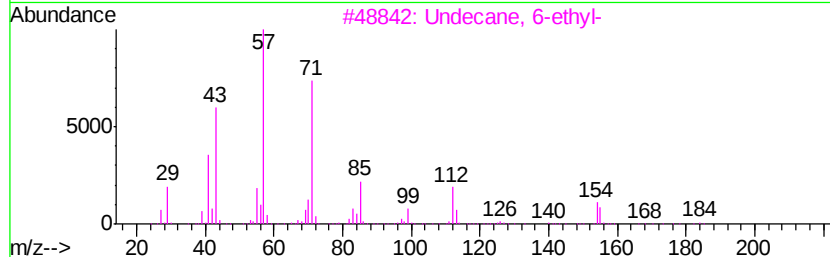
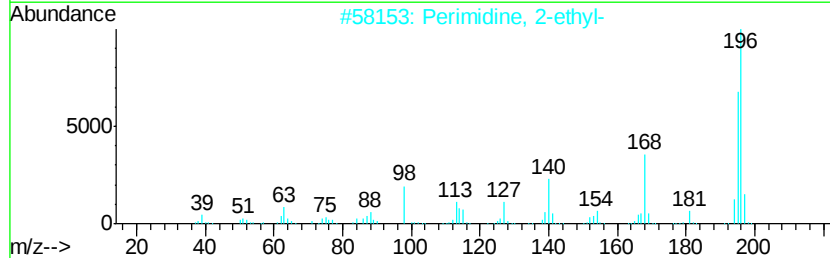
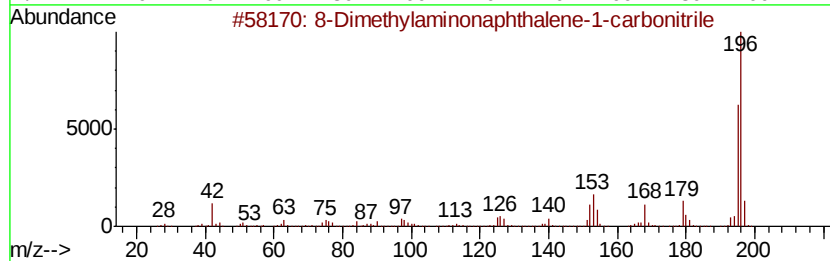
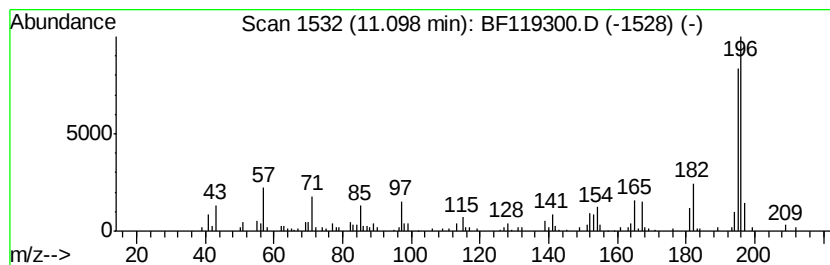
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GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 6 unknown11.10 Concentration Rank 16

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------|--------|------------------|-------------|------|
| 11.10     | 4.89 ng                             | 227728 | Phenanthrene-d10 | 11.24       |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#        | Qual |
| 1         | 8-Dimethylaminonaphthalene-1-car... | 196    | C13H12N2         | 128644-69-9 | 41   |
| 2         | Perimidine, 2-ethyl-                | 196    | C13H12N2         | 028478-13-9 | 38   |
| 3         | Undecane, 6-ethyl-                  | 184    | C13H28           | 017312-60-6 | 38   |
| 4         | Hexacosane                          | 366    | C26H54           | 000630-01-3 | 38   |
| 5         | 4-Carbomethoxy-3-methoxy-4-methy... | 196    | C10H12O4         | 120696-19-7 | 35   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
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Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

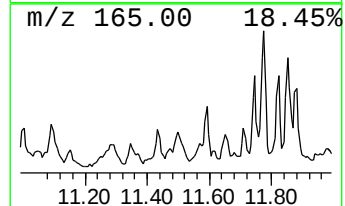
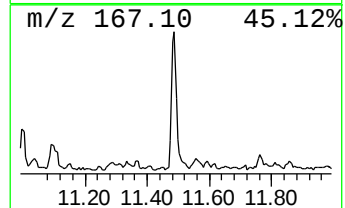
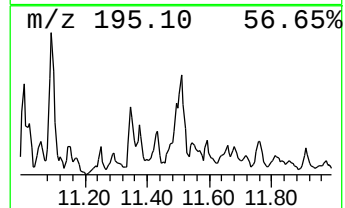
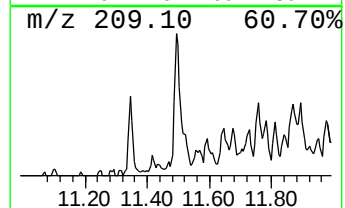
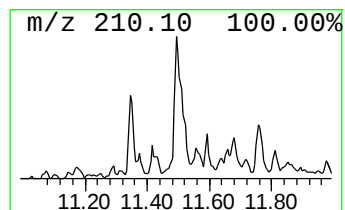
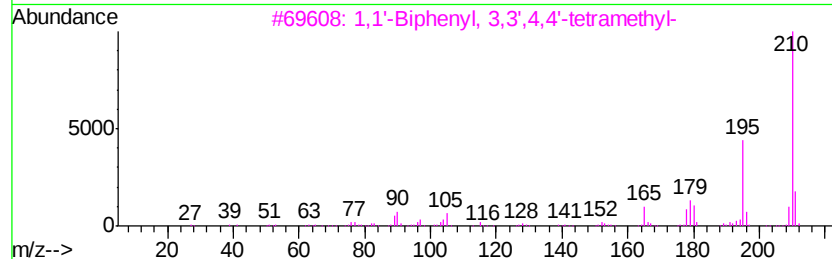
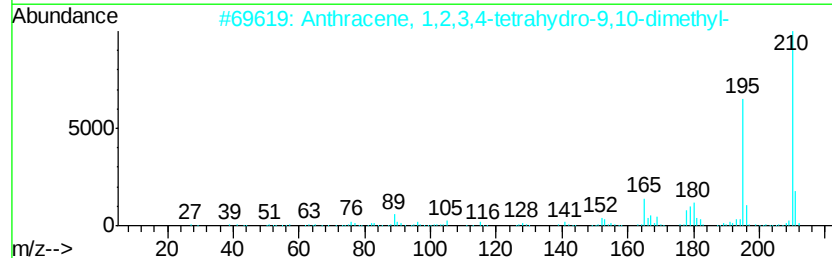
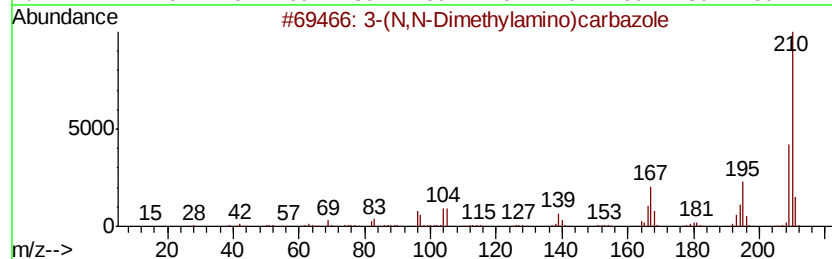
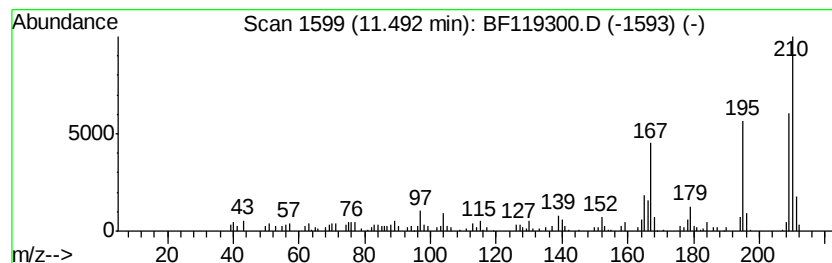
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ClientSampleId :  
GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.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 7 3-(N,N-Dimethylamino)carbazole Concentration Rank 14

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------|--------|------------------|-------------|------|
| 11.49     | 5.00 ng                             | 233046 | Phenanthrene-d10 | 11.24       |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#        | Qual |
| 1         | 3-(N,N-Dimethylamino)carbazole      | 210    | C14H14N2         | 001140-50-7 | 68   |
| 2         | Anthracene, 1,2,3,4-tetrahydro-9... | 210    | C16H18           | 094573-50-9 | 52   |
| 3         | 1,1'-Biphenyl, 3,3',4,4'-tetrame... | 210    | C16H18           | 004920-95-0 | 52   |
| 4         | 9H-Carbazol-3-amine, 9-ethyl-       | 210    | C14H14N2         | 000132-32-1 | 49   |
| 5         | 1,1'-Biphenyl, 3,4-diethyl-         | 210    | C16H18           | 061141-66-0 | 49   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
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Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

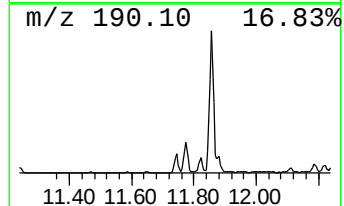
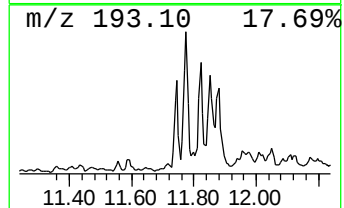
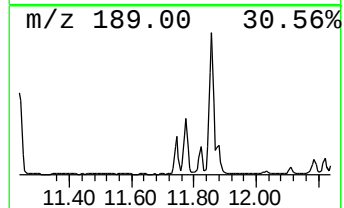
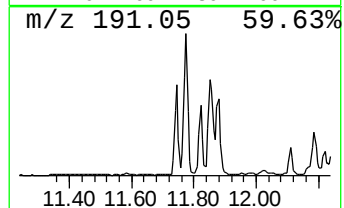
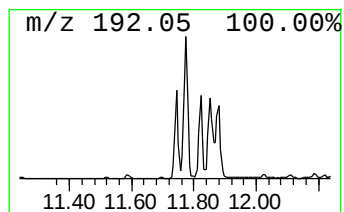
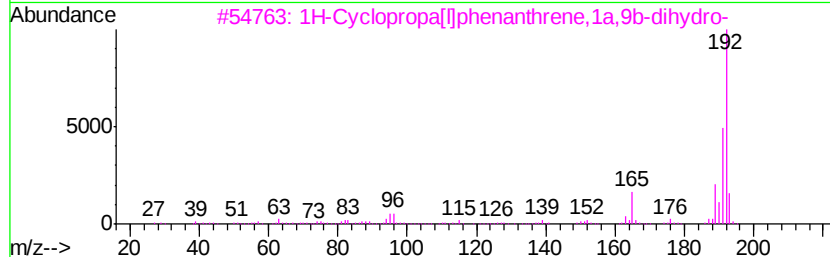
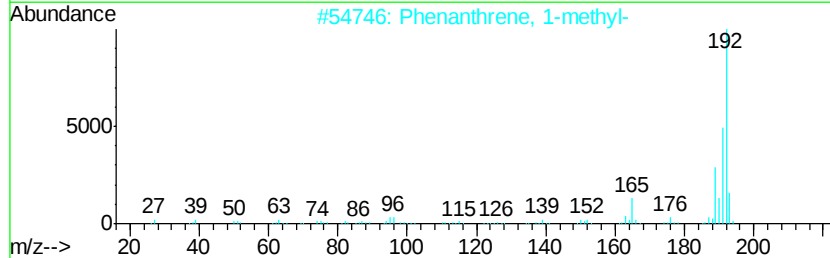
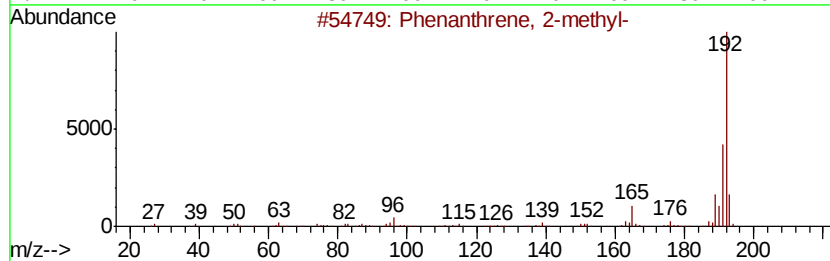
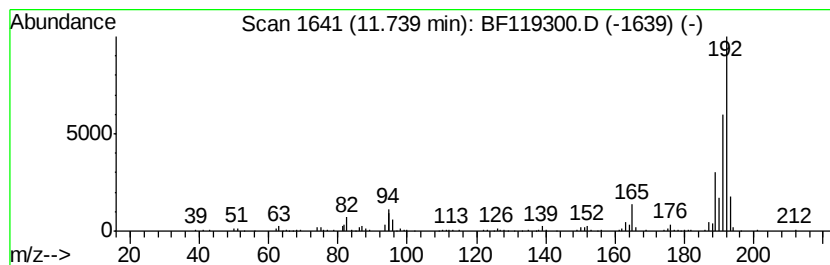
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 8 Phenanthrene, 2-methyl- Concentration Rank 13

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------|--------|------------------|-------------|------|
| 11.74     | 5.15 ng                             | 239739 | Phenanthrene-d10 | 11.24       |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#        | Qual |
| 1         | Phenanthrene, 2-methyl-             | 192    | C15H12           | 002531-84-2 | 97   |
| 2         | Phenanthrene, 1-methyl-             | 192    | C15H12           | 000832-69-9 | 97   |
| 3         | 1H-Cyclopropa[1]phenanthrene,1a,... | 192    | C15H12           | 000949-41-7 | 96   |
| 4         | Anthracene, 2-methyl-               | 192    | C15H12           | 000613-12-7 | 96   |
| 5         | 1H-Indene, 2-phenyl-                | 192    | C15H12           | 004505-48-0 | 95   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
Acq On : 9 Mar 2020 23:26  
Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GP-15-030520

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

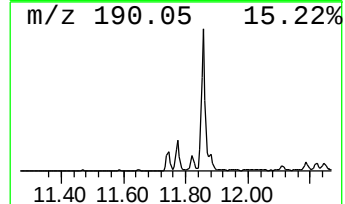
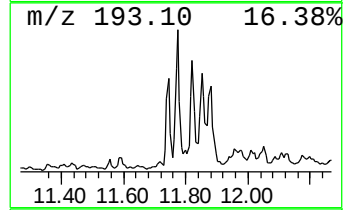
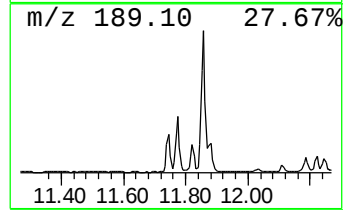
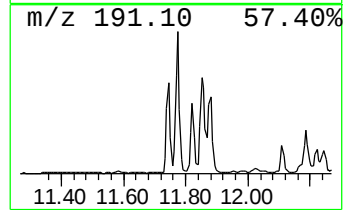
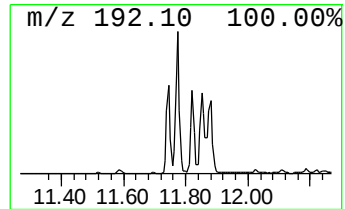
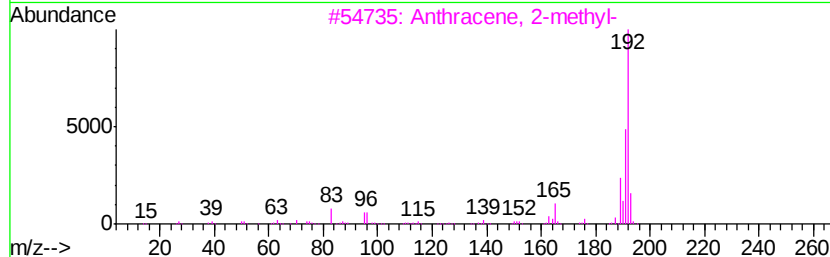
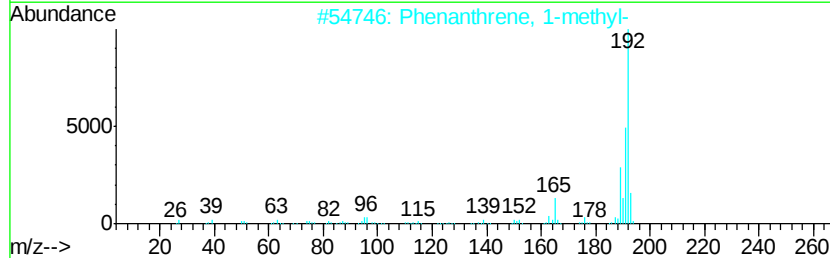
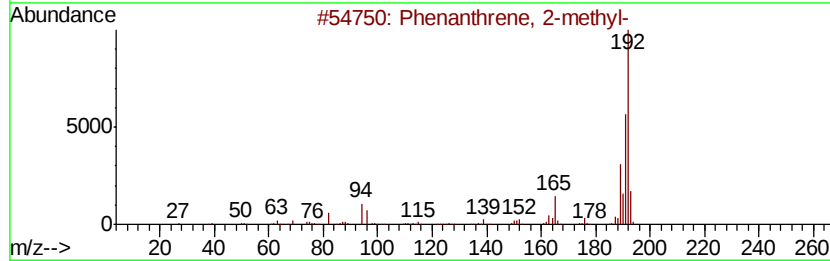
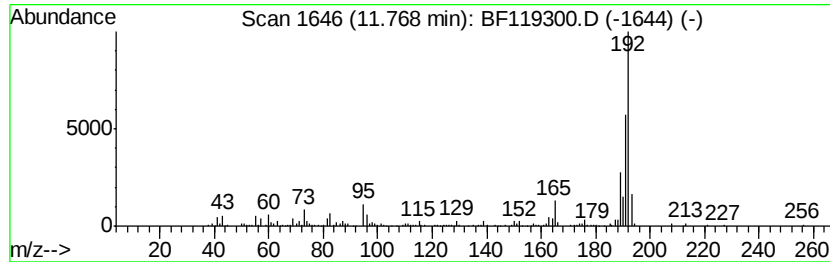
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 Phenanthrene, 1-methyl- Concentration Rank 4

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 11.77 | 10.57 ng | 492220 | Phenanthrene-d10 | 11.24 |

| Hit# of | 5 | Tentative ID                           | MW  | MolForm | CAS#        | Qual |
|---------|---|----------------------------------------|-----|---------|-------------|------|
| 1       |   | Phenanthrene, 2-methyl-                | 192 | C15H12  | 002531-84-2 | 98   |
| 2       |   | Phenanthrene, 1-methyl-                | 192 | C15H12  | 000832-69-9 | 96   |
| 3       |   | Anthracene, 2-methyl-                  | 192 | C15H12  | 000613-12-7 | 95   |
| 4       |   | 1H-Cyclopropa[1,1]phenanthrene, 1a,... | 192 | C15H12  | 000949-41-7 | 95   |
| 5       |   | Anthracene, 9-methyl-                  | 192 | C15H12  | 000779-02-2 | 95   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
Acq On : 9 Mar 2020 23:26  
Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

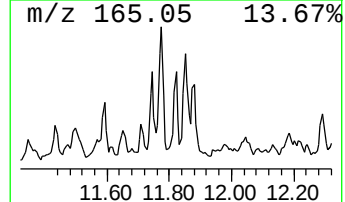
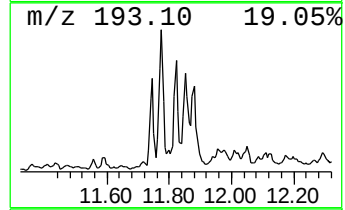
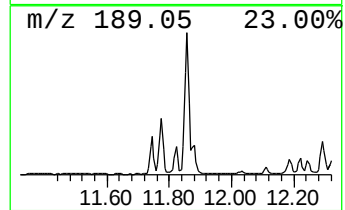
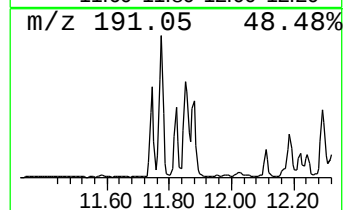
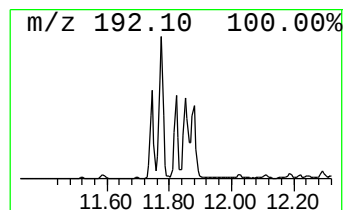
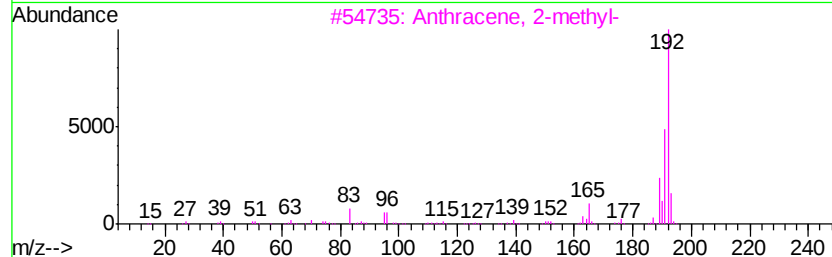
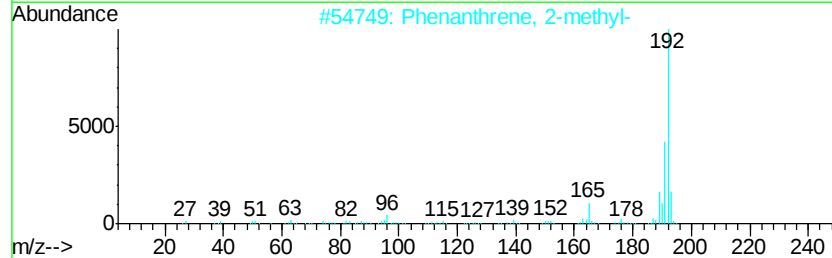
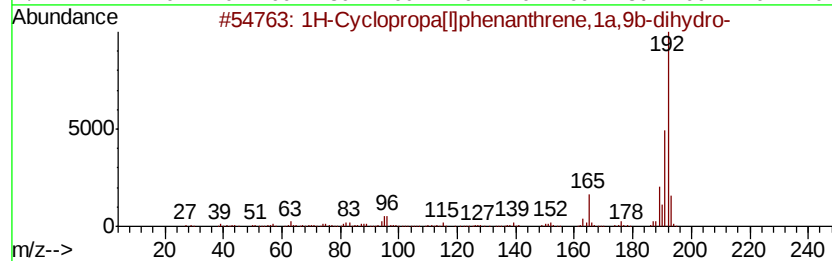
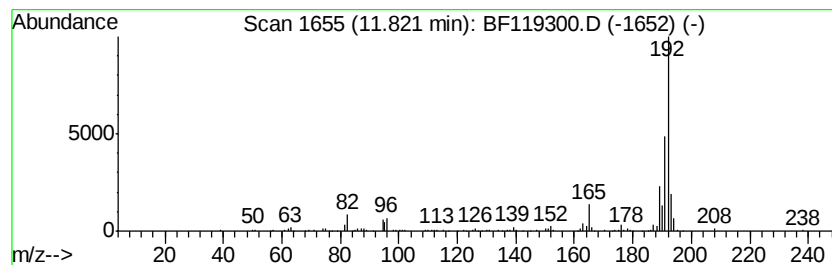
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ClientSampleId :  
GP-15-030520

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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 10 1H-Cyclopropa[l]phenanthren... Concentration Rank 18

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------|--------|------------------|-------------|------|
| 11.82     | 4.70 ng                             | 218768 | Phenanthrene-d10 | 11.24       |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#        | Qual |
| 1         | 1H-Cyclopropa[1]phenanthrene,1a,... | 192    | C15H12           | 000949-41-7 | 96   |
| 2         | Phenanthrene, 2-methyl-             | 192    | C15H12           | 002531-84-2 | 96   |
| 3         | Anthracene, 2-methyl-               | 192    | C15H12           | 000613-12-7 | 95   |
| 4         | Anthracene, 1-methyl-               | 192    | C15H12           | 000610-48-0 | 95   |
| 5         | Phenanthrene, 1-methyl-             | 192    | C15H12           | 000832-69-9 | 94   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
Acq On : 9 Mar 2020 23:26  
Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

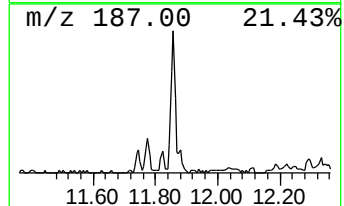
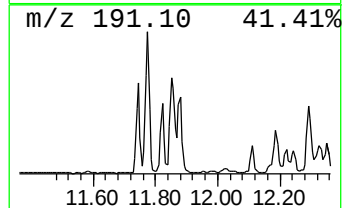
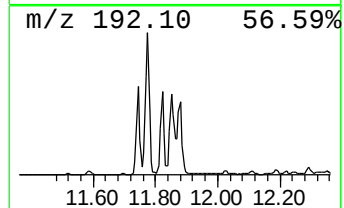
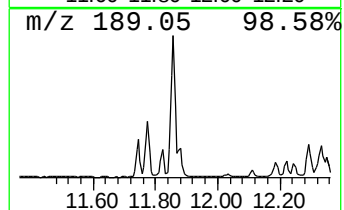
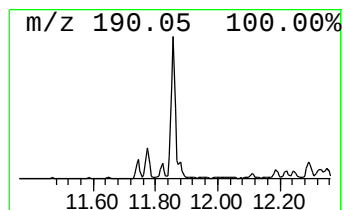
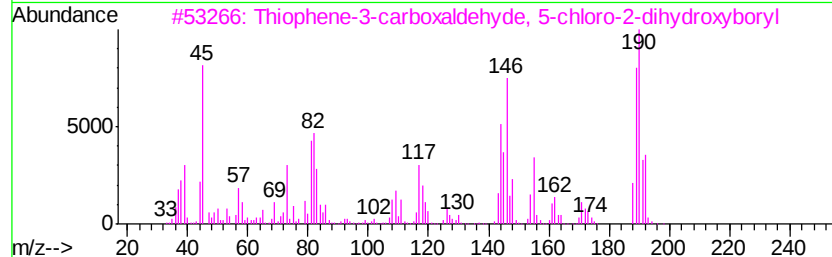
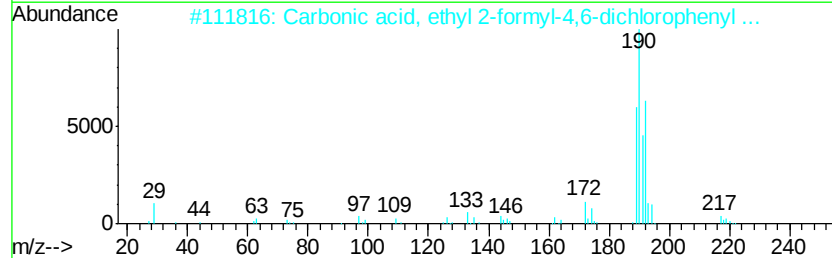
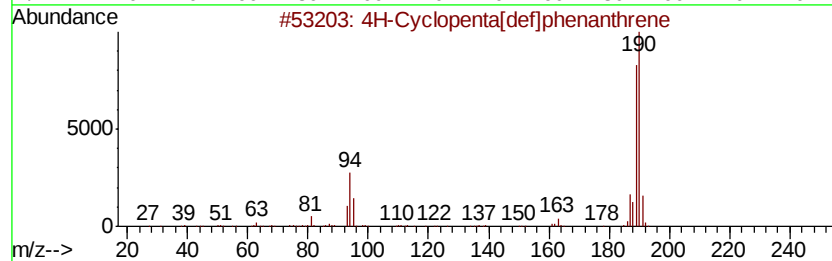
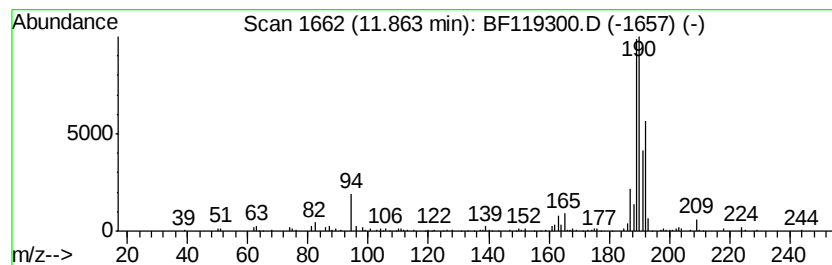
Instrument :  
BNA\_F  
ClientSampleId :  
GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.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 11 4H-Cyclopenta[def]phenanthrene Concentration Rank 3

| R.T.    | EstConc  | Area                                | Relative to ISTD | R.T.       |              |      |
|---------|----------|-------------------------------------|------------------|------------|--------------|------|
| 11.86   | 11.34 ng | 528136                              | Phenanthrene-d10 | 11.24      |              |      |
| Hit# of | 5        | Tentative ID                        | MW               | MolForm    | CAS#         | Qual |
| 1       |          | 4H-Cyclopenta[def]phenanthrene      | 190              | C15H10     | 000203-64-5  | 64   |
| 2       |          | Carbonic acid, ethyl 2-formyl-4,... | 262              | C10H8Cl2O4 | 1000331-34-4 | 50   |
| 3       |          | Thiophene-3-carboxaldehyde, 5-ch... | 190              | C5H4BClO3S | 036155-87-0  | 50   |
| 4       |          | 2,3,5,6-Tetramethylterephthalald... | 190              | C12H14O2   | 007072-01-7  | 43   |
| 5       |          | 6H-Cyclobuta[jk]phenanthrene        | 190              | C15H10     | 083469-43-6  | 40   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
Acq On : 9 Mar 2020 23:26  
Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

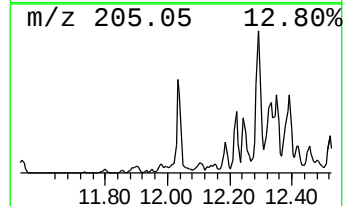
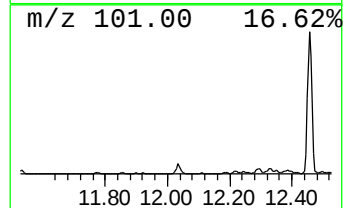
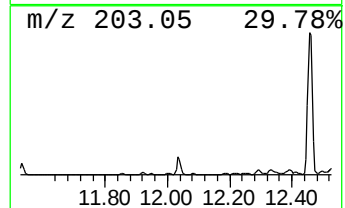
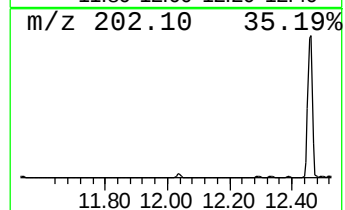
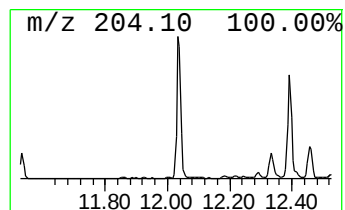
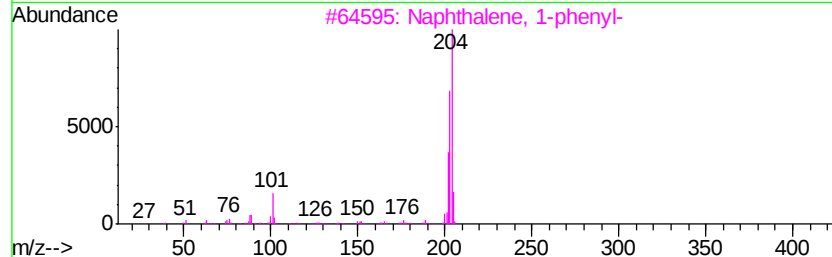
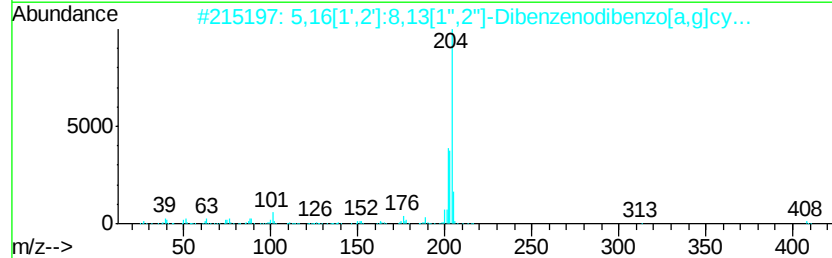
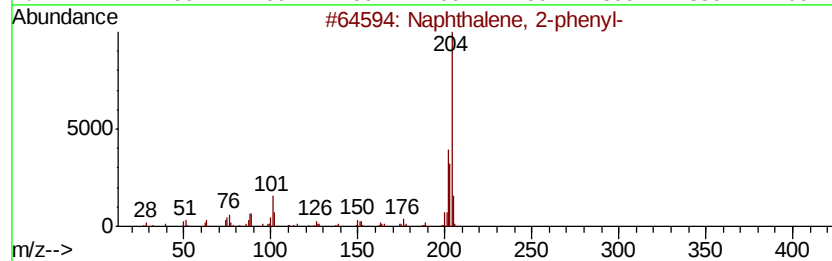
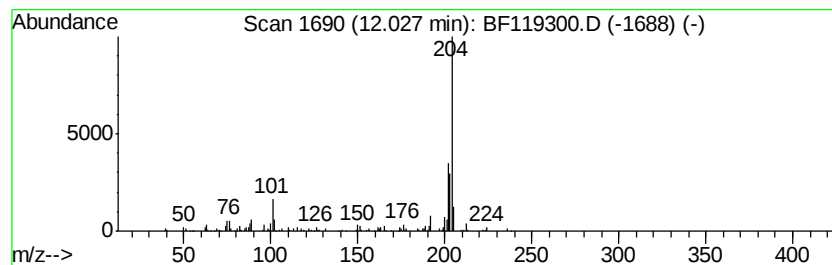
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 12 Naphthalene, 2-phenyl- Concentration Rank 11

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 12.03 | 5.45 ng | 253672 | Phenanthrene-d10 | 11.24 |

| Hit# | of | Tentative ID                          | MW  | MolForm   | CAS#        | Qual |
|------|----|---------------------------------------|-----|-----------|-------------|------|
| 1    | 5  | Naphthalene, 2-phenyl-                | 204 | C16H12    | 000612-94-2 | 96   |
| 2    |    | 5,16[1',2'] : 8,13[1'',2'']-Dibenz... | 408 | C32H24    | 005672-97-9 | 87   |
| 3    |    | Naphthalene, 1-phenyl-                | 204 | C16H12    | 000605-02-7 | 86   |
| 4    |    | Tricyclo[8.2.2.2(4,7)]hexadeca-2...   | 204 | C16H12    | 006572-60-7 | 72   |
| 5    |    | 9,10-Bis(bromomethyl)anthracene       | 362 | C16H12Br2 | 034373-96-1 | 62   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
Acq On : 9 Mar 2020 23:26  
Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

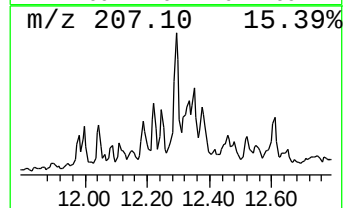
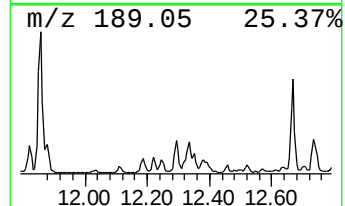
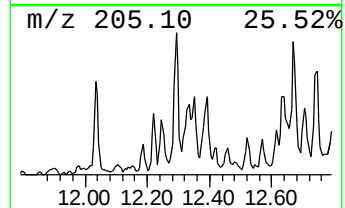
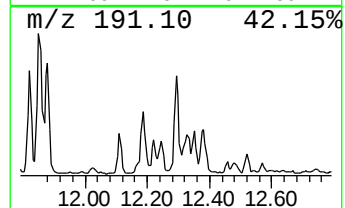
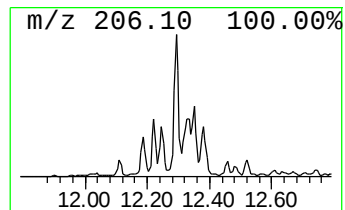
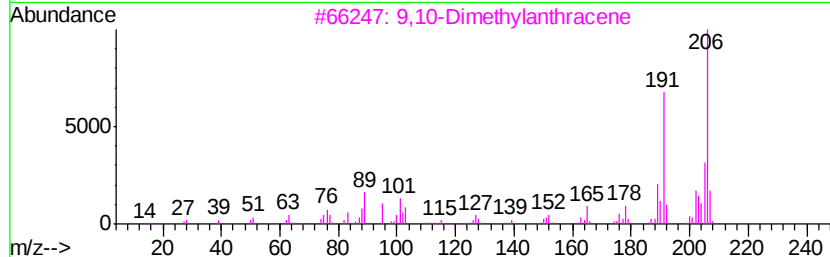
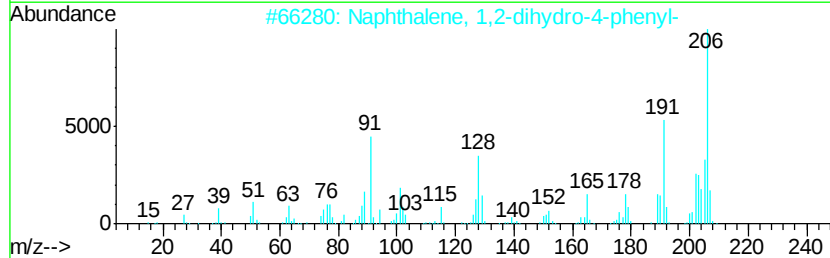
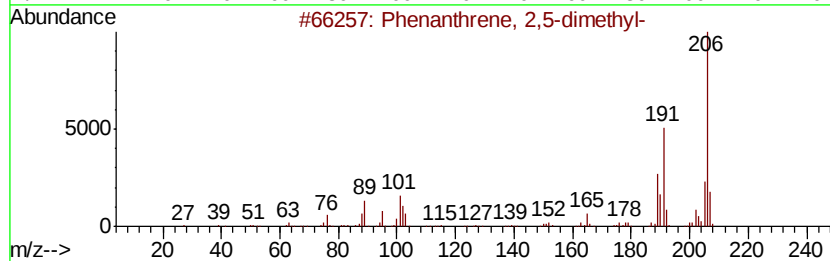
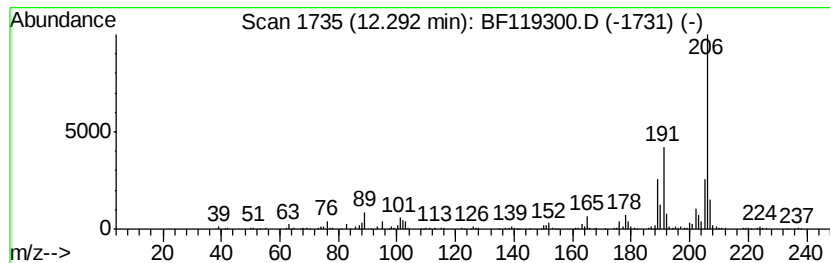
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 13 Phenanthrene, 2,5-dimethyl- Concentration Rank 6

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 12.29 | 7.33 ng | 341364 | Phenanthrene-d10 | 11.24 |

| Hit# | of | Tentative ID                       | MW  | MolForm | CAS#        | Qual |
|------|----|------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Phenanthrene, 2,5-dimethyl-        | 206 | C16H14  | 003674-66-6 | 95   |
| 2    |    | Naphthalene, 1,2-dihydro-4-phenyl- | 206 | C16H14  | 007469-40-1 | 91   |
| 3    |    | 9,10-Dimethylanthracene            | 206 | C16H14  | 000781-43-1 | 91   |
| 4    |    | di-p-Tolylacetylene                | 206 | C16H14  | 002789-88-0 | 91   |
| 5    |    | Phenanthrene, 3,6-dimethyl-        | 206 | C16H14  | 001576-67-6 | 90   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
Acq On : 9 Mar 2020 23:26  
Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

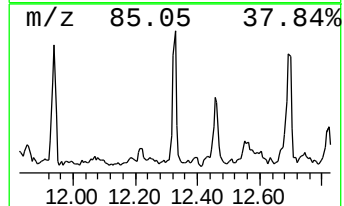
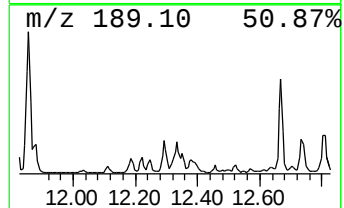
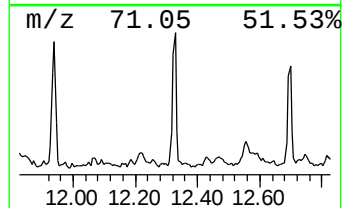
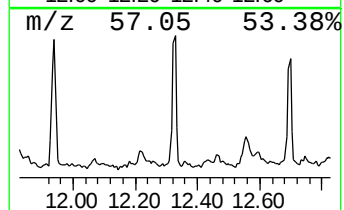
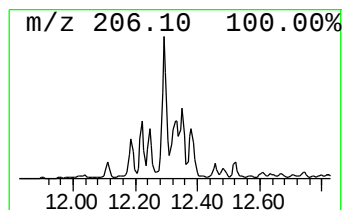
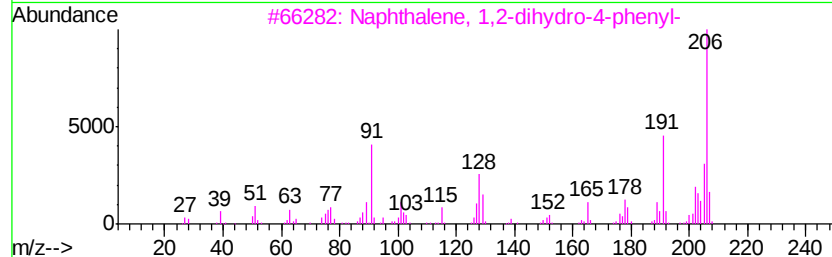
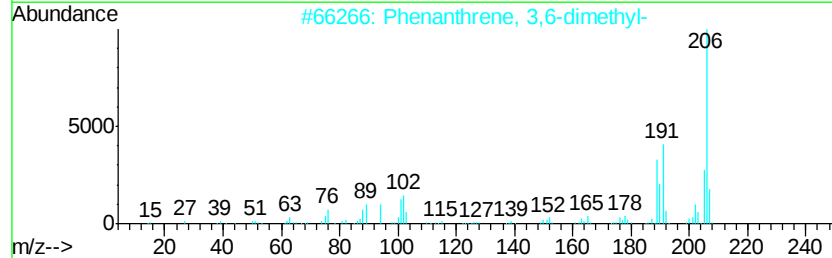
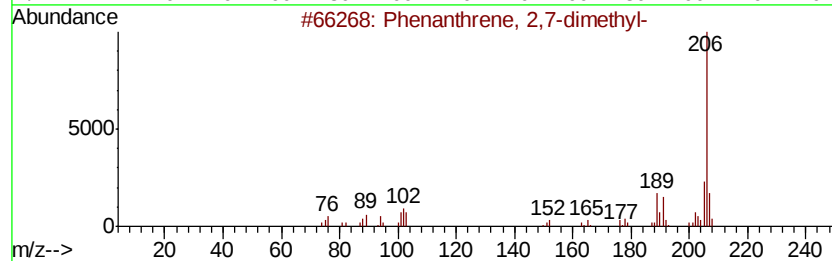
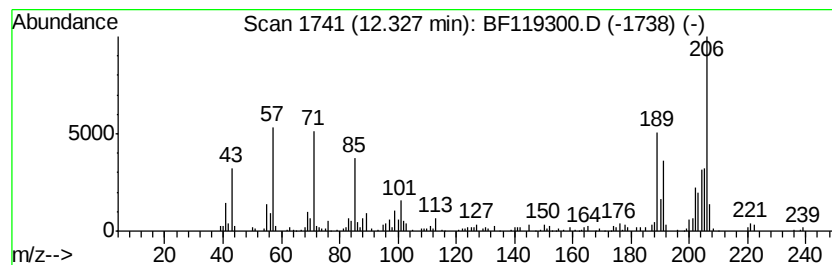
Instrument :  
BNA\_F  
ClientSampleId :  
GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.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 Phenanthrene, 2,7-dimethyl- Concentration Rank 8

| R.T.      | EstConc                            | Area   | Relative to ISTD | R.T.        |      |
|-----------|------------------------------------|--------|------------------|-------------|------|
| 12.33     | 6.09 ng                            | 283569 | Phenanthrene-d10 | 11.24       |      |
| Hit# of 5 | Tentative ID                       | MW     | MolForm          | CAS#        | Qual |
| 1         | Phenanthrene, 2,7-dimethyl-        | 206    | C16H14           | 001576-69-8 | 62   |
| 2         | Phenanthrene, 3,6-dimethyl-        | 206    | C16H14           | 001576-67-6 | 45   |
| 3         | Naphthalene, 1,2-dihydro-4-phenyl- | 206    | C16H14           | 007469-40-1 | 43   |
| 4         | 1,4-Diphenyl-1,3-butadiene         | 206    | C16H14           | 000886-65-7 | 38   |
| 5         | 9,10-Dimethylantracene             | 206    | C16H14           | 000781-43-1 | 35   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
Acq On : 9 Mar 2020 23:26  
Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

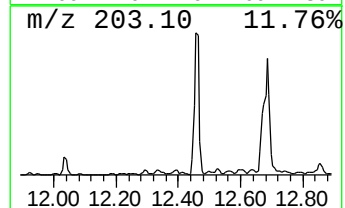
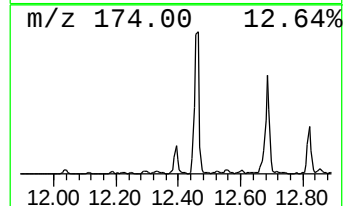
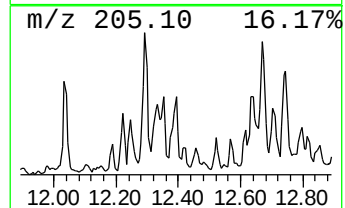
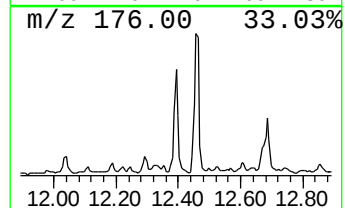
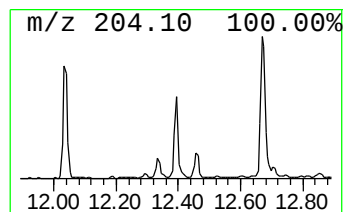
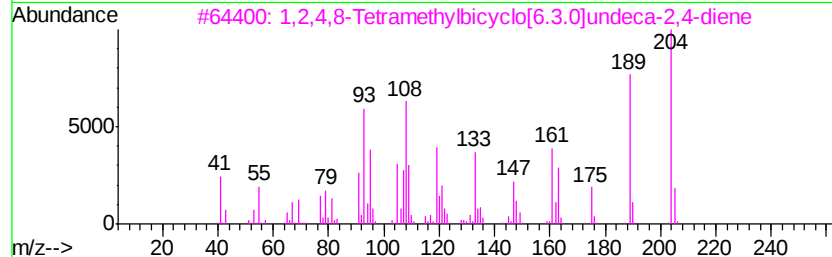
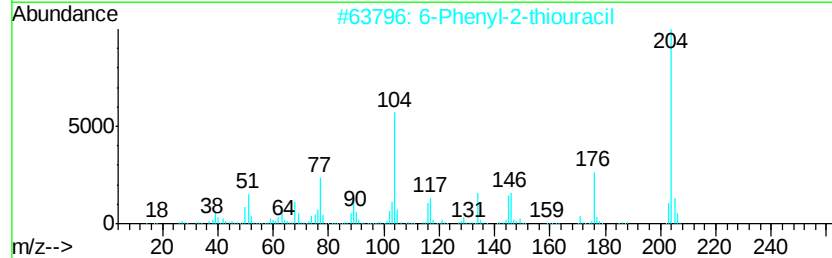
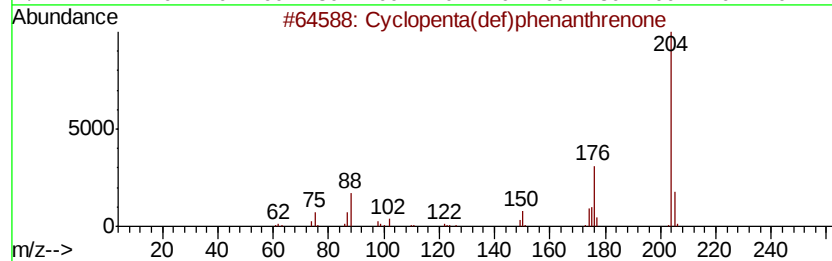
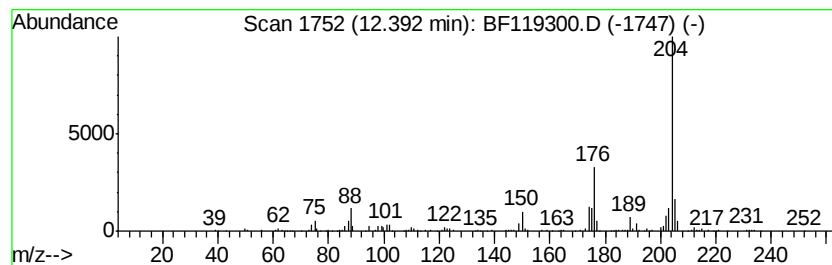
Instrument :  
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ClientSampleId :  
GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 15 Cyclopenta(def)phenanthrenone Concentration Rank 7

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------------------|--------|------------------|-------------|------|
| 12.39     | 6.57 ng                             | 306027 | Phenanthrene-d10 | 11.24       |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#        | Qual |
| 1         | Cvclopenta(def)phenanthrenone       | 204    | C15H8O           | 005737-13-3 | 93   |
| 2         | 6-Phenyl-2-thiouracil               | 204    | C10H8N2OS        | 005590-94-3 | 64   |
| 3         | 1,2,4,8-Tetramethylbicvclo[6.3.0... | 204    | C15H24           | 137235-51-9 | 60   |
| 4         | 3,4-Biphenyldicarbonitrile          | 204    | C14H8N2          | 004128-63-6 | 56   |
| 5         | [1,1'-Biphenyl]-4,4'-dicarbonitrile | 204    | C14H8N2          | 001591-30-6 | 53   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
Acq On : 9 Mar 2020 23:26  
Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

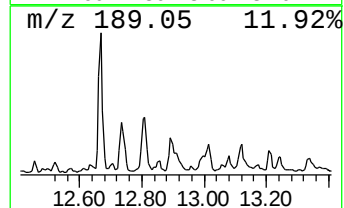
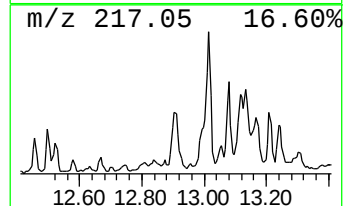
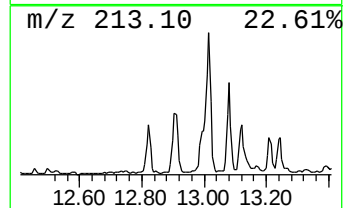
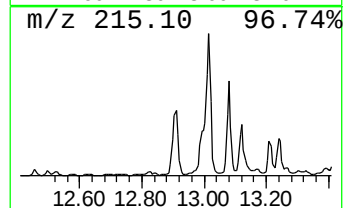
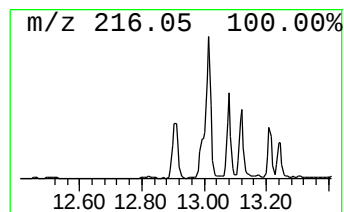
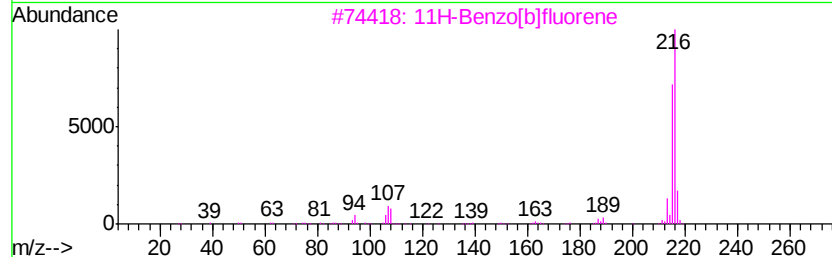
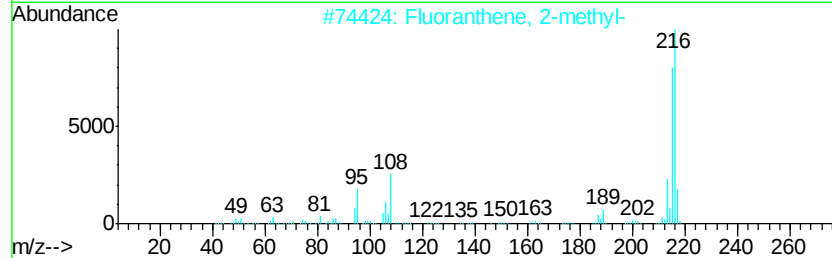
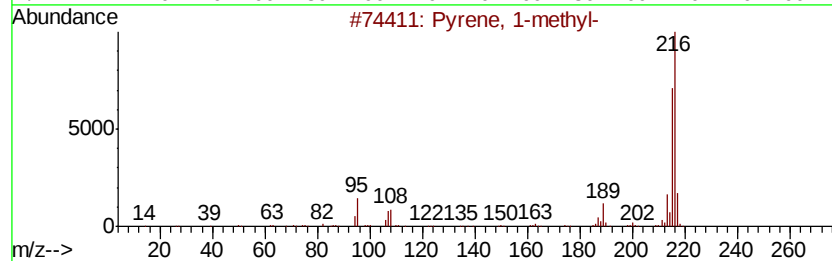
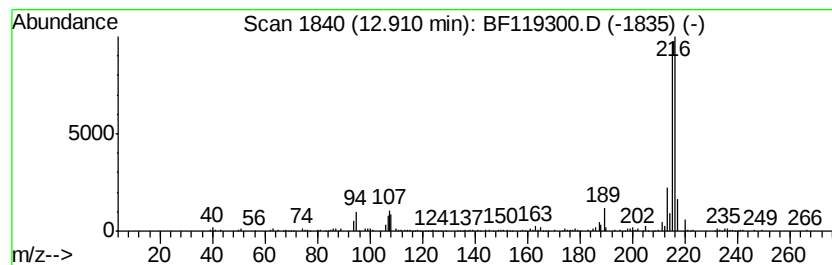
Instrument :  
BNA\_F  
ClientSampleId :  
GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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Peak Number 16 Pyrene, 1-methyl- Concentration Rank 15

| R.T.    | EstConc | Area                    | Relative to ISTD |         | R.T.        |      |
|---------|---------|-------------------------|------------------|---------|-------------|------|
| 12.91   | 4.97 ng | 483135                  | Chrysene-d12     |         | 13.89       |      |
| Hit# of | 5       | Tentative ID            | MW               | MolForm | CAS#        | Qual |
| 1       |         | Pyrene, 1-methyl-       | 216              | C17H12  | 002381-21-7 | 93   |
| 2       |         | Fluoranthene, 2-methyl- | 216              | C17H12  | 033543-31-6 | 91   |
| 3       |         | 11H-Benzo[b]fluorene    | 216              | C17H12  | 000243-17-4 | 90   |
| 4       |         | 7H-Benzo[c]fluorene     | 216              | C17H12  | 000205-12-9 | 87   |
| 5       |         | 11H-Benzo[a]fluorene    | 216              | C17H12  | 000238-84-6 | 87   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
Acq On : 9 Mar 2020 23:26  
Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

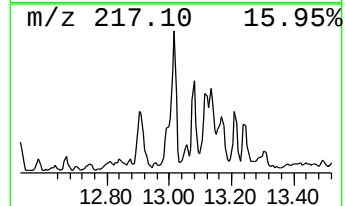
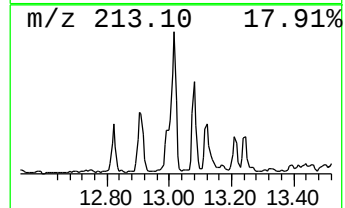
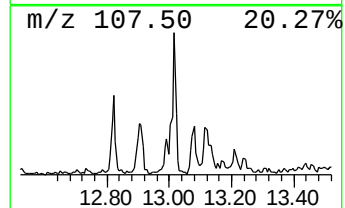
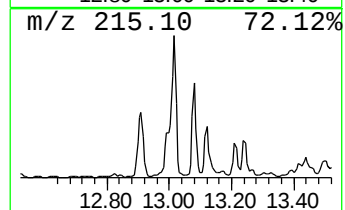
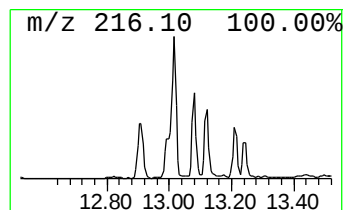
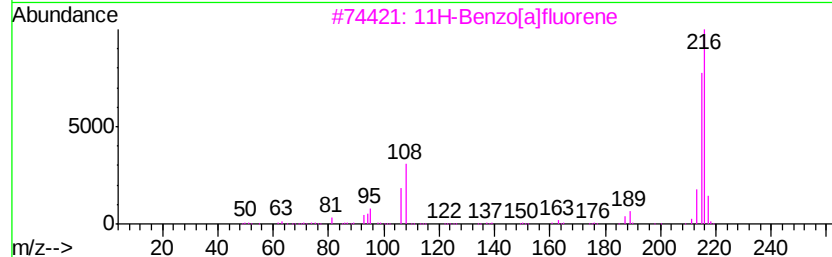
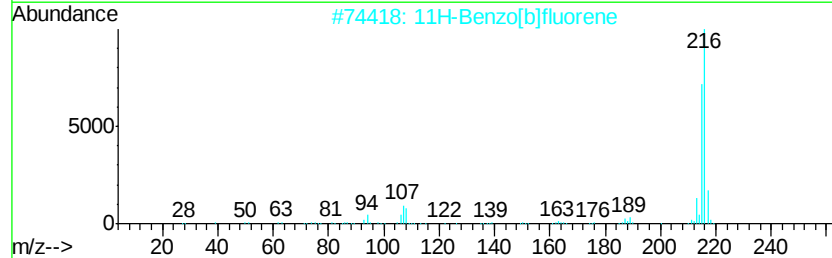
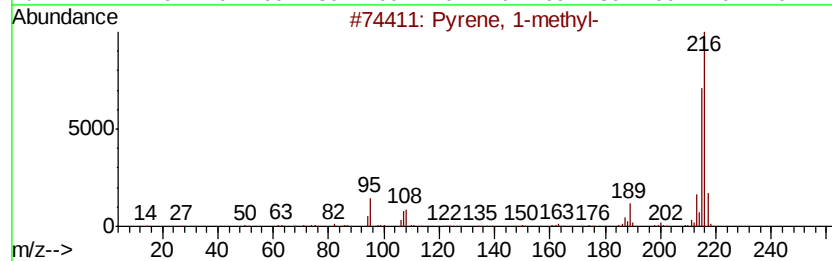
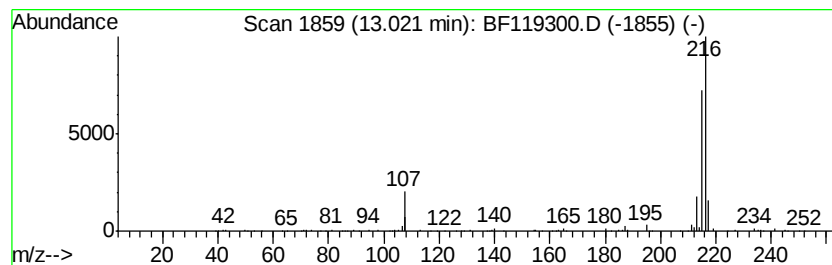
Instrument :  
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ClientSampleId :  
GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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Peak Number 17 11H-Benzo[b]fluorene Concentration Rank 12

| R.T.      | EstConc                 | Area   | Relative to ISTD | R.T.        |      |
|-----------|-------------------------|--------|------------------|-------------|------|
| 13.02     | 5.19 ng                 | 504656 | Chrysene-d12     | 13.89       |      |
| Hit# of 5 | Tentative ID            | MW     | MolForm          | CAS#        | Qual |
| 1         | Pyrene, 1-methyl-       | 216    | C17H12           | 002381-21-7 | 90   |
| 2         | 11H-Benzo[b]fluorene    | 216    | C17H12           | 000243-17-4 | 87   |
| 3         | 11H-Benzo[a]fluorene    | 216    | C17H12           | 000238-84-6 | 83   |
| 4         | Fluoranthene, 2-methyl- | 216    | C17H12           | 033543-31-6 | 74   |
| 5         | Pyrene, 2-methyl-       | 216    | C17H12           | 003442-78-2 | 62   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
Acq On : 9 Mar 2020 23:26  
Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

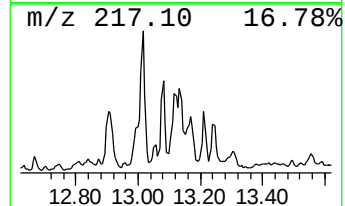
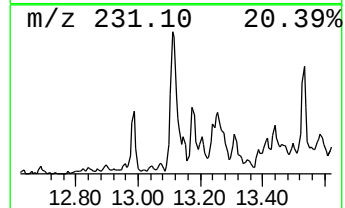
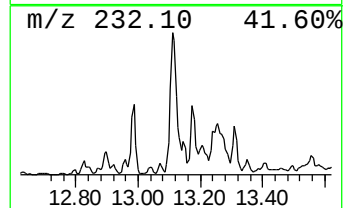
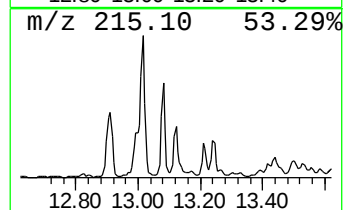
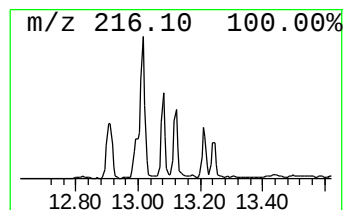
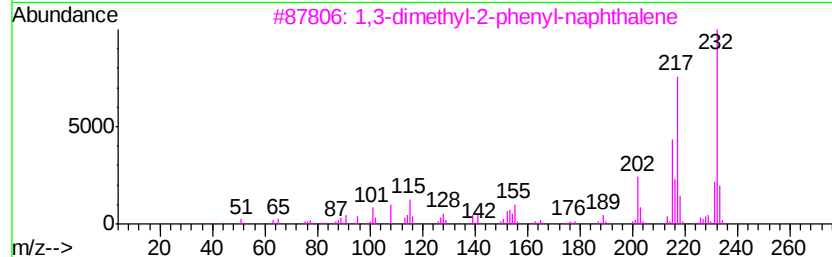
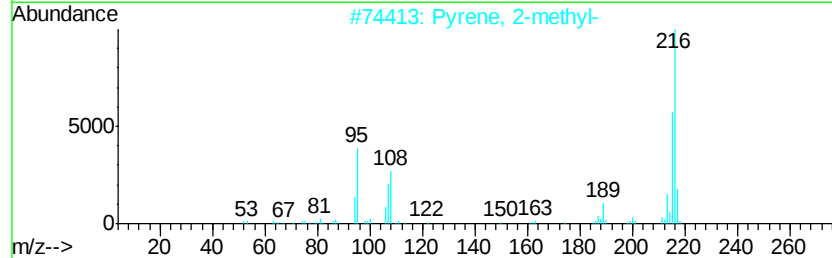
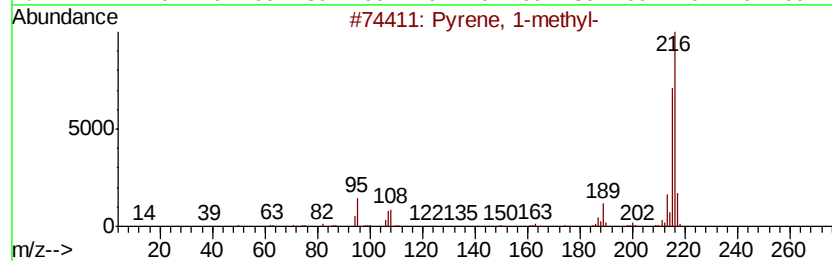
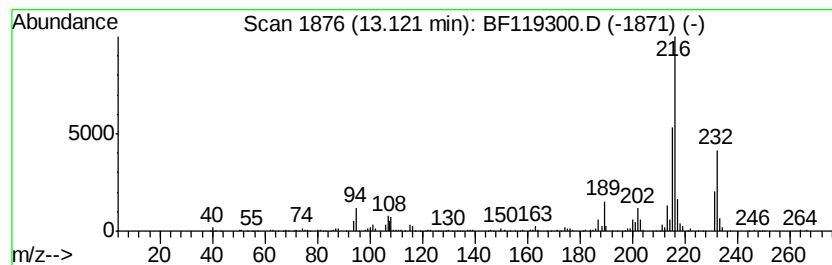
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 18 unknown13.12 Concentration Rank 9

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 13.12 | 5.93 ng | 576933 | Chrysene-d12     | 13.89 |

| Hit# | of | Tentative ID                      | MW  | MolForm | CAS#         | Qual |
|------|----|-----------------------------------|-----|---------|--------------|------|
| 1    | 5  | Pyrene, 1-methyl-                 | 216 | C17H12  | 002381-21-7  | 80   |
| 2    |    | Pyrene, 2-methyl-                 | 216 | C17H12  | 003442-78-2  | 46   |
| 3    |    | 1,3-dimethyl-2-phenyl-naphthalene | 232 | C18H16  | 1000379-93-4 | 46   |
| 4    |    | 1-benzyl-3-methylnaphthalene      | 232 | C18H16  | 1000379-93-5 | 43   |
| 5    |    | 1-Pyrenemethanol                  | 232 | C17H12O | 024463-15-8  | 43   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
Acq On : 9 Mar 2020 23:26  
Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

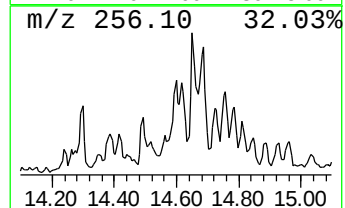
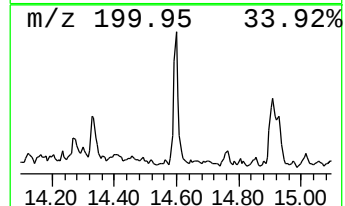
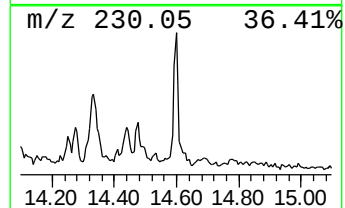
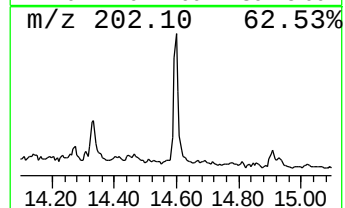
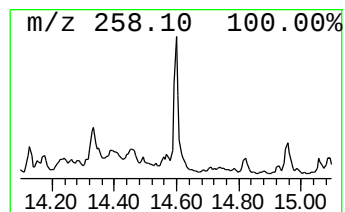
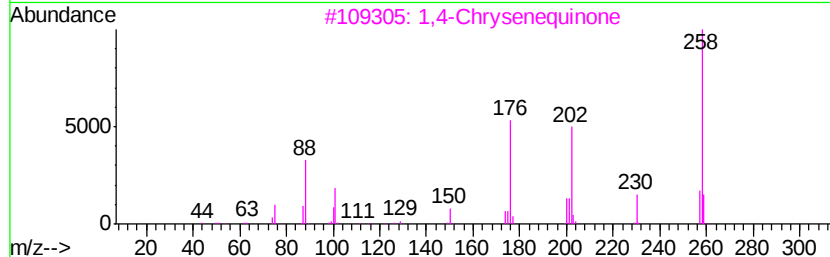
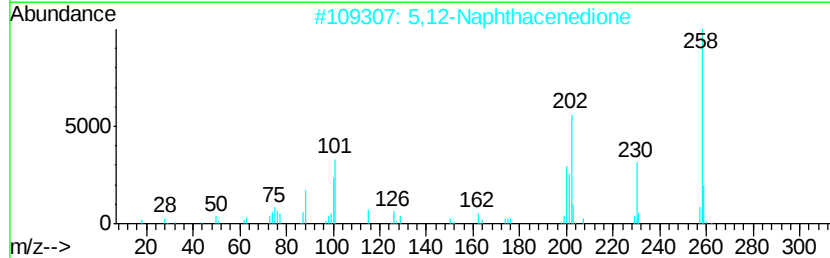
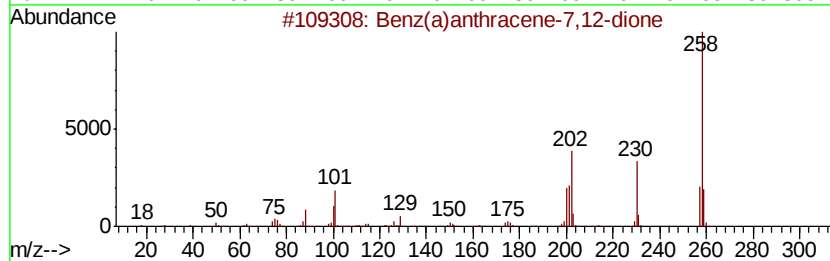
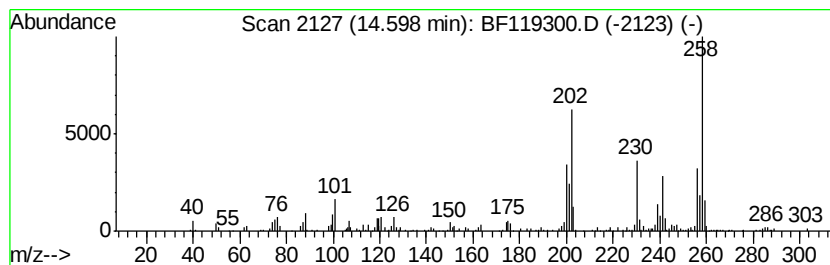
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 19 Benz(a)anthracene-7,12-dione Concentration Rank 20

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 14.60 | 4.31 ng | 167768 | Perylene-d12     | 15.31 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|----------|-------------|------|
| 1    |    |   | Benz(a)anthracene-7,12-dione        | 258 | C18H10O2 | 002498-66-0 | 94   |
| 2    |    |   | 5,12-Naphthacenedione               | 258 | C18H10O2 | 001090-13-7 | 90   |
| 3    |    |   | 1,4-Chrysenequinone                 | 258 | C18H10O2 | 100900-16-1 | 47   |
| 4    |    |   | 6H-Dibenzo[b,d]pyran-6-one, 3,7,... | 258 | C14H10O5 | 000641-38-3 | 46   |
| 5    |    |   | 4,5,7,8,9,10-Hexahydrobenzo[a]py... | 258 | C20H18   | 073712-75-1 | 38   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF030920\  
Data File : BF119300.D  
Acq On : 9 Mar 2020 23:26  
Operator : CG/JU  
Sample : L1844-02  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF022020.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

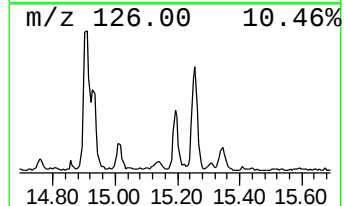
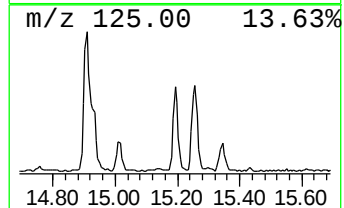
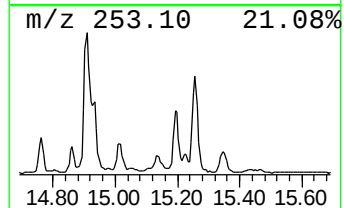
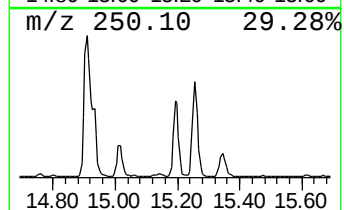
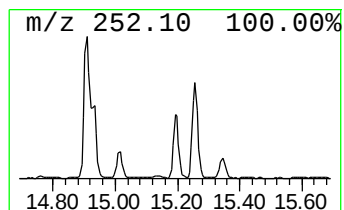
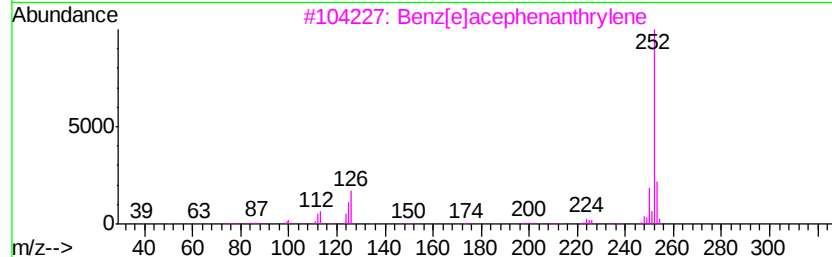
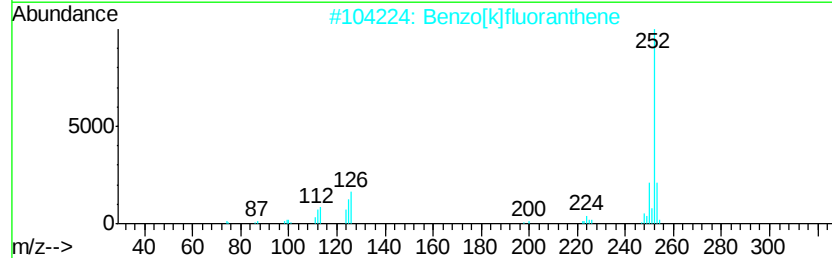
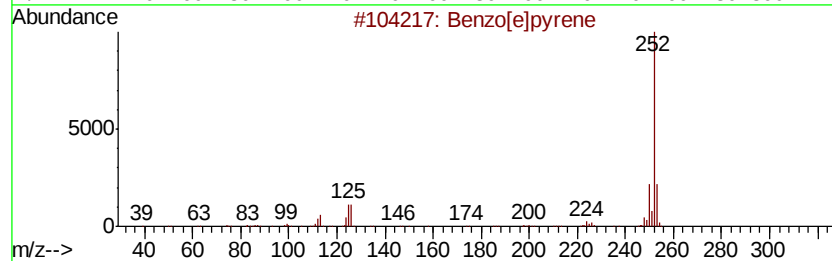
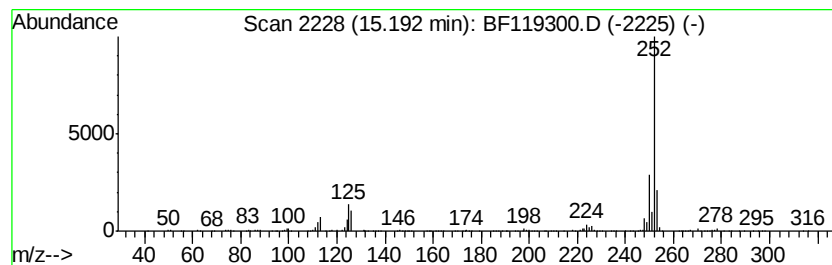
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 20 Benzo[e]pyrene Concentration Rank 2

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 15.19 | 11.37 ng | 441967 | Perylene-d12     | 15.31 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[e]pyrene            | 252 | C20H12  | 000192-97-2 | 99   |
| 2    |    | Benzo[k]fluoranthene      | 252 | C20H12  | 000207-08-9 | 97   |
| 3    |    | Benzo[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 95   |
| 4    |    | Benzo[a]pyrene            | 252 | C20H12  | 000050-32-8 | 94   |
| 5    |    | Benzo[j]fluoranthene      | 252 | C20H12  | 000205-82-3 | 94   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF030920\  
 Data File : BF119300.D  
 Acq On : 9 Mar 2020 23:26  
 Operator : CG/JU  
 Sample : L1844-02  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 GP-15-030520

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF022020.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... | 4.92  | 7.7     | ng    | 213475   | 1                     | 6.72  | 553585  | 20.0 |
| Naphthalene, 1,6-... | 9.42  | 4.3     | ng    | 194820   | 3                     | 9.76  | 900816  | 20.0 |
| Naphthalene, 2,3,... | 10.30 | 4.7     | ng    | 211890   | 3                     | 9.76  | 900816  | 20.0 |
| Hexadecane, 2,6,1... | 10.67 | 5.5     | ng    | 256925   | 4                     | 11.24 | 931326  | 20.0 |
| unknown11.10         | 11.10 | 4.9     | ng    | 227728   | 4                     | 11.24 | 931326  | 20.0 |
| 3-(N,N-Dimethylam... | 11.49 | 5.0     | ng    | 233046   | 4                     | 11.24 | 931326  | 20.0 |
| Phenanthrene, 2-m... | 11.74 | 5.2     | ng    | 239739   | 4                     | 11.24 | 931326  | 20.0 |
| Phenanthrene, 1-m... | 11.77 | 10.6    | ng    | 492220   | 4                     | 11.24 | 931326  | 20.0 |
| 1H-Cyclopropa[l]p... | 11.82 | 4.7     | ng    | 218768   | 4                     | 11.24 | 931326  | 20.0 |
| 4H-Cyclopenta[def... | 11.86 | 11.3    | ng    | 528136   | 4                     | 11.24 | 931326  | 20.0 |
| Naphthalene, 2-ph... | 12.03 | 5.5     | ng    | 253672   | 4                     | 11.24 | 931326  | 20.0 |
| Phenanthrene, 2,5... | 12.29 | 7.3     | ng    | 341364   | 4                     | 11.24 | 931326  | 20.0 |
| Phenanthrene, 2,7... | 12.33 | 6.1     | ng    | 283569   | 4                     | 11.24 | 931326  | 20.0 |
| Cyclopenta(def)ph... | 12.39 | 6.6     | ng    | 306027   | 4                     | 11.24 | 931326  | 20.0 |
| Pyrene, 1-methyl-    | 12.91 | 5.0     | ng    | 483135   | 5                     | 13.89 | 1944340 | 20.0 |
| 11H-Benzo[b]fluorene | 13.02 | 5.2     | ng    | 504656   | 5                     | 13.89 | 1944340 | 20.0 |
| unknown13.12         | 13.12 | 5.9     | ng    | 576933   | 5                     | 13.89 | 1944340 | 20.0 |
| Benz(a)anthracene... | 14.60 | 4.3     | ng    | 167768   | 6                     | 15.31 | 777652  | 20.0 |
| Benzo[e]pyrene       | 15.19 | 11.4    | ng    | 441967   | 6                     | 15.31 | 777652  | 20.0 |