

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121718\  
 Data File : BF111556.D  
 Acq On : 17 Dec 2018 23:12  
 Operator : JU/SJ  
 Sample : J6403-29  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-4-B

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-BF121418.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         | 3.263       | 198           | 200         | 213          | rBV2     | 20240          | 53938         | 1.35%           | 0.121%        |
| 2         | 4.998       | 491           | 495         | 501          | rBV      | 140654         | 180961        | 4.52%           | 0.408%        |
| 3         | 5.422       | 563           | 567         | 579          | rVB      | 2804337        | 2500605       | 62.40%          | 5.631%        |
| 4         | 6.439       | 735           | 740         | 752          | rBV      | 2921873        | 2853092       | 71.20%          | 6.425%        |
| 5         | 6.563       | 757           | 761         | 764          | rBV      | 3065309        | 2657086       | 66.31%          | 5.984%        |
| 6         | 6.787       | 796           | 799         | 802          | rBV      | 904960         | 708553        | 17.68%          | 1.596%        |
| 7         | 6.945       | 822           | 826         | 829          | rBV      | 2454338        | 2034430       | 50.77%          | 4.582%        |
| 8         | 7.345       | 885           | 894         | 900          | rBV      | 1690529        | 1741649       | 43.46%          | 3.922%        |
| 9         | 8.069       | 1013          | 1017        | 1019         | rBV      | 1149093        | 963583        | 24.05%          | 2.170%        |
| 10        | 8.086       | 1019          | 1020        | 1024         | rVB      | 129366         | 105545        | 2.63%           | 0.238%        |
| 11        | 8.781       | 1135          | 1138        | 1143         | rVB      | 85520          | 73400         | 1.83%           | 0.165%        |
| 12        | 8.881       | 1152          | 1155        | 1158         | rBV      | 64400          | 51152         | 1.28%           | 0.115%        |
| 13        | 9.145       | 1195          | 1200        | 1203         | rBV      | 4552096        | 4007217       | 100.00%         | 9.024%        |
| 14        | 9.233       | 1210          | 1215        | 1221         | rBV3     | 50299          | 87346         | 2.18%           | 0.197%        |
| 15        | 9.410       | 1240          | 1245        | 1249         | rBV3     | 31013          | 48018         | 1.20%           | 0.108%        |
| 16        | 9.480       | 1254          | 1257        | 1260         | rBV      | 64373          | 65069         | 1.62%           | 0.147%        |
| 17        | 9.539       | 1264          | 1267        | 1271         | rVV      | 486493         | 450536        | 11.24%          | 1.015%        |
| 18        | 9.686       | 1288          | 1292        | 1296         | rBV      | 75457          | 88667         | 2.21%           | 0.200%        |
| 19        | 9.822       | 1309          | 1315        | 1319         | rBV2     | 1733595        | 1639806       | 40.92%          | 3.693%        |
| 20        | 9.857       | 1319          | 1321        | 1324         | rVB      | 165770         | 142193        | 3.55%           | 0.320%        |
| 21        | 10.028      | 1346          | 1350        | 1353         | rBV      | 128910         | 119944        | 2.99%           | 0.270%        |
| 22        | 10.139      | 1364          | 1369        | 1372         | rBV5     | 41747          | 67809         | 1.69%           | 0.153%        |
| 23        | 10.233      | 1382          | 1385        | 1387         | rBV3     | 59301          | 48216         | 1.20%           | 0.109%        |
| 24        | 10.369      | 1405          | 1408        | 1414         | rBV      | 180017         | 169800        | 4.24%           | 0.382%        |
| 25        | 10.527      | 1432          | 1435        | 1439         | rVB      | 59230          | 61141         | 1.53%           | 0.138%        |
| 26        | 10.610      | 1445          | 1449        | 1453         | rBV      | 2343259        | 2325003       | 58.02%          | 5.236%        |
| 27        | 10.745      | 1468          | 1472        | 1477         | rVB4     | 101387         | 167908        | 4.19%           | 0.378%        |
| 28        | 10.916      | 1496          | 1501        | 1504         | rBV3     | 50148          | 81941         | 2.04%           | 0.185%        |
| 29        | 11.110      | 1532          | 1534        | 1539         | rVB2     | 68119          | 62379         | 1.56%           | 0.140%        |
| 30        | 11.157      | 1539          | 1542        | 1545         | rVV2     | 50405          | 73866         | 1.84%           | 0.166%        |
| 31        | 11.204      | 1548          | 1550        | 1555         | rVB2     | 94728          | 121219        | 3.03%           | 0.273%        |
| 32        | 11.310      | 1564          | 1568        | 1570         | rBV      | 1480669        | 1473374       | 36.77%          | 3.318%        |
| 33        | 11.327      | 1570          | 1571        | 1575         | rVV      | 1152179        | 938938        | 23.43%          | 2.115%        |
| 34        | 11.380      | 1577          | 1580        | 1584         | rVV      | 291176         | 252466        | 6.30%           | 0.569%        |

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 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-4-B

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-BF121418.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |        |        |
|----|--------|------|------|------|------|---------|---------|--------|--------|
| 35 | 11.416 | 1584 | 1586 | 1590 | rVV2 | 59215   | 63685   | 1.59%  | 0.143% |
| 36 | 11.539 | 1604 | 1607 | 1609 | rBV  | 84555   | 78447   | 1.96%  | 0.177% |
| 37 | 11.604 | 1616 | 1618 | 1621 | rVB2 | 73250   | 57933   | 1.45%  | 0.130% |
| 38 | 11.639 | 1622 | 1624 | 1630 | rVB3 | 46337   | 51167   | 1.28%  | 0.115% |
| 39 | 11.810 | 1650 | 1653 | 1655 | rBV  | 181798  | 145480  | 3.63%  | 0.328% |
| 40 | 11.839 | 1655 | 1658 | 1663 | rBV2 | 847878  | 834891  | 20.83% | 1.880% |
| 41 | 11.886 | 1663 | 1666 | 1668 | rVB  | 81632   | 75866   | 1.89%  | 0.171% |
| 42 | 11.922 | 1668 | 1672 | 1674 | rBV2 | 259993  | 282235  | 7.04%  | 0.636% |
| 43 | 12.016 | 1685 | 1688 | 1690 | rVB2 | 69683   | 59389   | 1.48%  | 0.134% |
| 44 | 12.104 | 1700 | 1703 | 1705 | rBV  | 133472  | 110161  | 2.75%  | 0.248% |
| 45 | 12.127 | 1705 | 1707 | 1711 | rVV2 | 80792   | 74722   | 1.86%  | 0.168% |
| 46 | 12.169 | 1711 | 1714 | 1720 | rVB6 | 83194   | 89912   | 2.24%  | 0.202% |
| 47 | 12.257 | 1726 | 1729 | 1732 | rVB2 | 85873   | 75680   | 1.89%  | 0.170% |
| 48 | 12.286 | 1732 | 1734 | 1736 | rBV  | 51685   | 55102   | 1.38%  | 0.124% |
| 49 | 12.363 | 1744 | 1747 | 1750 | rVB  | 132547  | 131167  | 3.27%  | 0.295% |
| 50 | 12.404 | 1750 | 1754 | 1759 | rVB3 | 119087  | 165598  | 4.13%  | 0.373% |
| 51 | 12.445 | 1759 | 1761 | 1766 | rBV2 | 81203   | 82019   | 2.05%  | 0.185% |
| 52 | 12.521 | 1770 | 1774 | 1777 | rBV  | 1810434 | 1497705 | 37.38% | 3.373% |
| 53 | 12.563 | 1779 | 1781 | 1783 | rVB  | 123813  | 88232   | 2.20%  | 0.199% |
| 54 | 12.621 | 1788 | 1791 | 1795 | rBV2 | 215778  | 236766  | 5.91%  | 0.533% |
| 55 | 12.745 | 1807 | 1812 | 1815 | rBV  | 1331177 | 1465787 | 36.58% | 3.301% |
| 56 | 12.892 | 1833 | 1837 | 1844 | rVB  | 3065011 | 2790309 | 69.63% | 6.284% |
| 57 | 12.968 | 1846 | 1850 | 1853 | rBV3 | 90515   | 130434  | 3.25%  | 0.294% |
| 58 | 13.074 | 1866 | 1868 | 1871 | rVB  | 209035  | 181470  | 4.53%  | 0.409% |
| 59 | 13.139 | 1875 | 1879 | 1882 | rBV2 | 158428  | 181801  | 4.54%  | 0.409% |
| 60 | 13.180 | 1883 | 1886 | 1889 | rVV2 | 138168  | 132539  | 3.31%  | 0.298% |
| 61 | 13.268 | 1899 | 1901 | 1904 | rVB  | 70852   | 61722   | 1.54%  | 0.139% |
| 62 | 13.304 | 1905 | 1907 | 1911 | rVB2 | 76752   | 63208   | 1.58%  | 0.142% |
| 63 | 13.580 | 1952 | 1954 | 1959 | rVB  | 92211   | 107801  | 2.69%  | 0.243% |
| 64 | 13.692 | 1970 | 1973 | 1976 | rBV2 | 96127   | 118495  | 2.96%  | 0.267% |
| 65 | 13.721 | 1976 | 1978 | 1980 | rVV  | 115022  | 92516   | 2.31%  | 0.208% |
| 66 | 13.745 | 1980 | 1982 | 1986 | rVV2 | 102074  | 127377  | 3.18%  | 0.287% |
| 67 | 13.792 | 1987 | 1990 | 2000 | rVB3 | 473391  | 571363  | 14.26% | 1.287% |
| 68 | 13.945 | 2011 | 2016 | 2019 | rBV2 | 1323817 | 1827392 | 45.60% | 4.115% |
| 69 | 13.968 | 2019 | 2020 | 2029 | rVB  | 683303  | 558294  | 13.93% | 1.257% |
| 70 | 14.051 | 2032 | 2034 | 2036 | rVB  | 115999  | 80824   | 2.02%  | 0.182% |
| 71 | 14.115 | 2042 | 2045 | 2047 | rBV2 | 119508  | 116142  | 2.90%  | 0.262% |

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ALS Vial : 17 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4-B

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

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

Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF121418.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |        |        |        |        |
|----|--------|------|------|------|------|--------|--------|--------|--------|
| 72 | 14.333 | 2079 | 2082 | 2085 | rVB2 | 127132 | 114365 | 2.85%  | 0.258% |
| 73 | 14.363 | 2085 | 2087 | 2090 | rVB  | 95533  | 82499  | 2.06%  | 0.186% |
| 74 | 14.421 | 2094 | 2097 | 2101 | rBV3 | 248827 | 245905 | 6.14%  | 0.554% |
| 75 | 14.721 | 2145 | 2148 | 2151 | rBV2 | 202499 | 186709 | 4.66%  | 0.420% |
| 76 | 14.968 | 2186 | 2190 | 2193 | rBV  | 606325 | 867918 | 21.66% | 1.955% |
| 77 | 15.051 | 2200 | 2204 | 2206 | rBV  | 196189 | 240923 | 6.01%  | 0.543% |
| 78 | 15.074 | 2206 | 2208 | 2212 | rVB  | 147412 | 151763 | 3.79%  | 0.342% |
| 79 | 15.262 | 2236 | 2240 | 2246 | rVB  | 358338 | 478598 | 11.94% | 1.078% |
| 80 | 15.321 | 2246 | 2250 | 2256 | rVB  | 516430 | 635155 | 15.85% | 1.430% |
| 81 | 15.386 | 2257 | 2261 | 2264 | rVV  | 772640 | 938798 | 23.43% | 2.114% |
| 82 | 15.415 | 2264 | 2266 | 2276 | rVB3 | 326765 | 395790 | 9.88%  | 0.891% |
| 83 | 15.839 | 2335 | 2338 | 2344 | rVB2 | 122986 | 161963 | 4.04%  | 0.365% |
| 84 | 16.798 | 2497 | 2501 | 2510 | rVB2 | 193100 | 368529 | 9.20%  | 0.830% |
| 85 | 17.221 | 2571 | 2573 | 2584 | rVB  | 143407 | 254675 | 6.36%  | 0.574% |

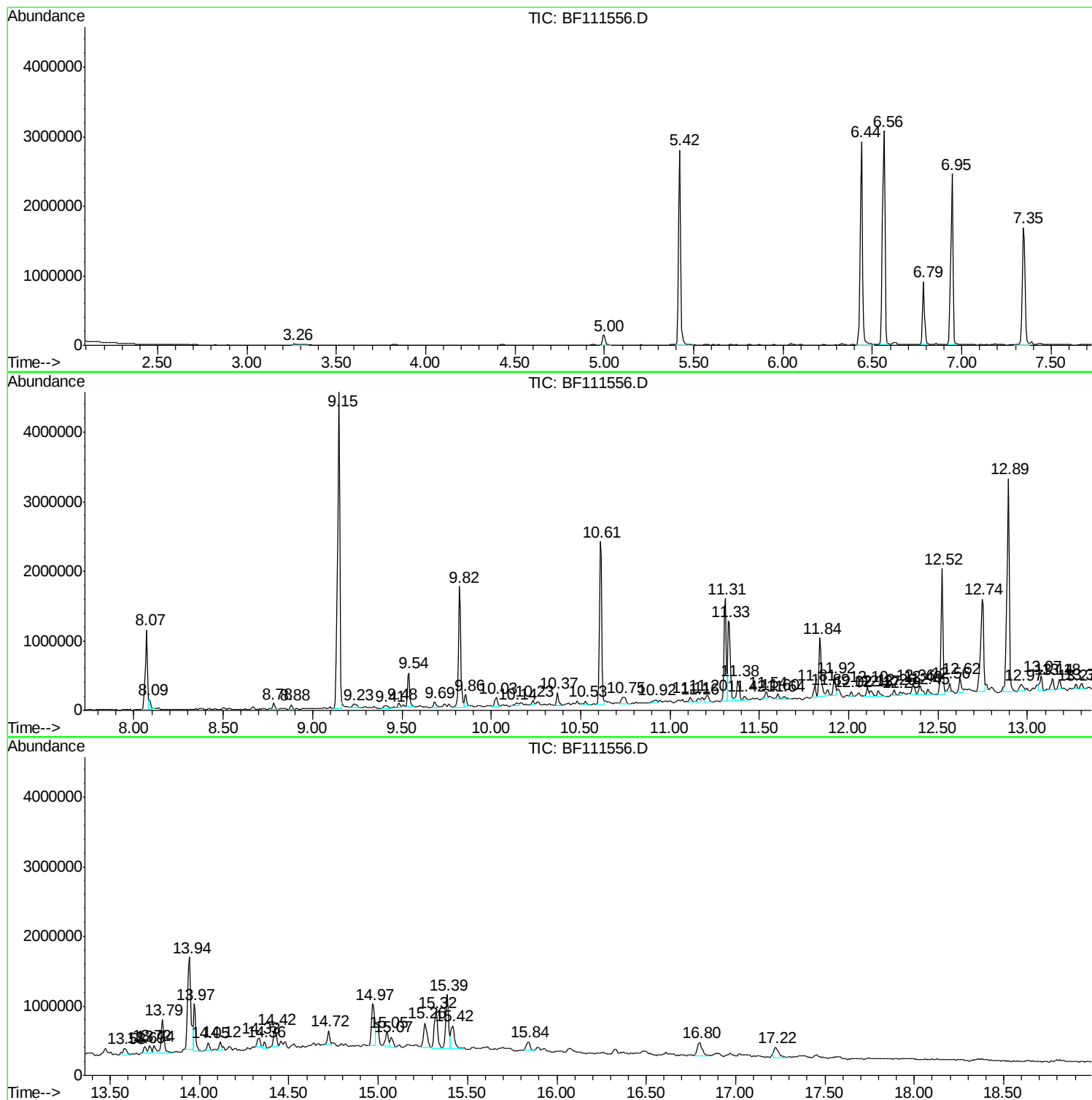
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Data File : BF111556.D  
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ALS Vial : 17 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampled :  
TP-4-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.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\BF121718\  
Data File : BF111556.D  
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Operator : JU/SJ  
Sample : J6403-29  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

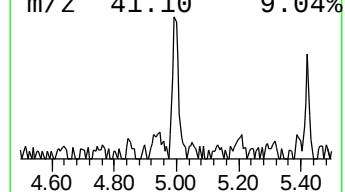
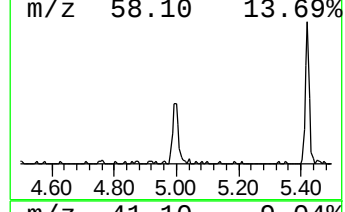
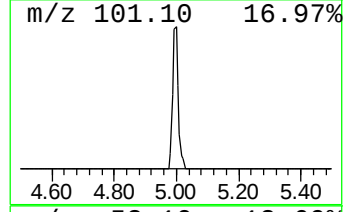
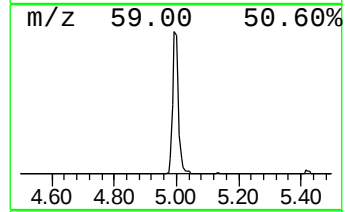
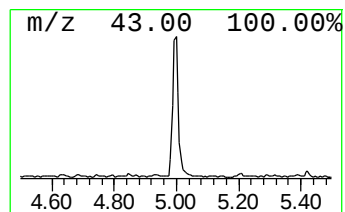
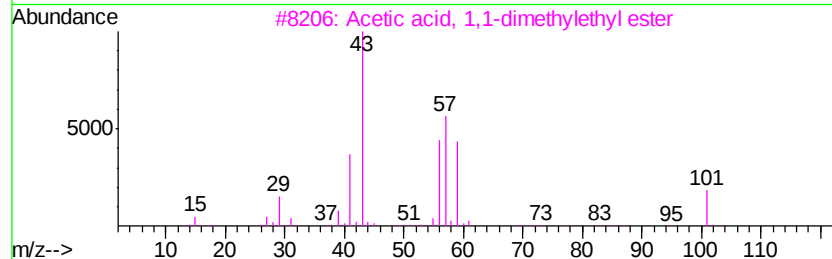
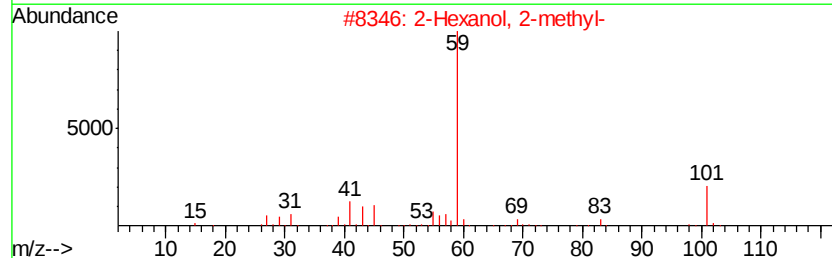
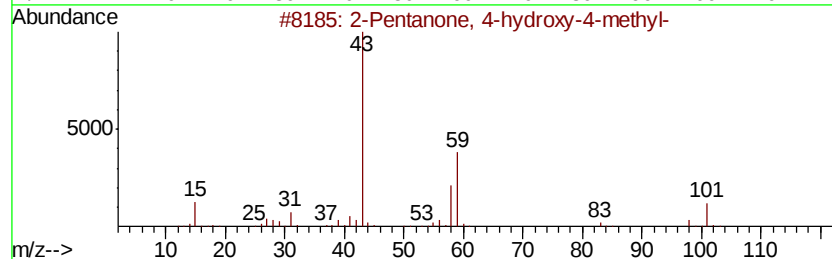
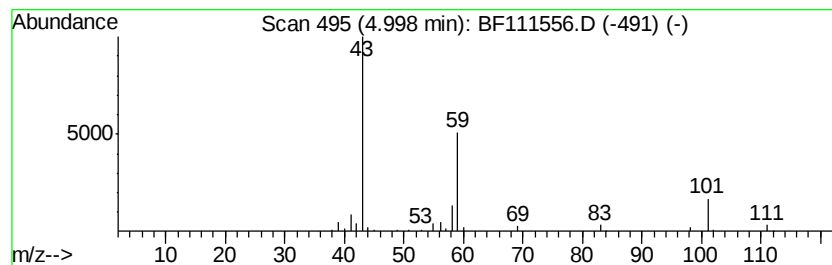
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 7

| R.T. | EstConc | Area   | Relative to ISTD       | R.T. |
|------|---------|--------|------------------------|------|
| 5.00 | 5.11 ng | 180961 | 1,4-Dichlorobenzene-d4 | 6.79 |

| Hit# | of 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|------|-------------------------------------|-----|---------|-------------|------|
| 1    |      | 2-Pentanone, 4-hydroxy-4-methyl-    | 116 | C6H12O2 | 000123-42-2 | 64   |
| 2    |      | 2-Hexanol, 2-methyl-                | 116 | C7H16O  | 000625-23-0 | 40   |
| 3    |      | Acetic acid, 1,1-dimethylethyl e... | 116 | C6H12O2 | 000540-88-5 | 38   |
| 4    |      | 3-Pentanol, 2-methyl-               | 102 | C6H14O  | 000565-67-3 | 25   |
| 5    |      | 5-Oxohexanenitrile                  | 111 | C6H9NO  | 010412-98-3 | 12   |



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ALS Vial : 17 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4-B

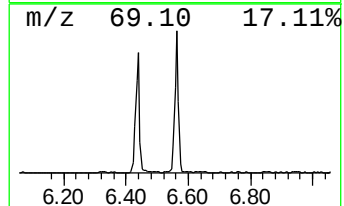
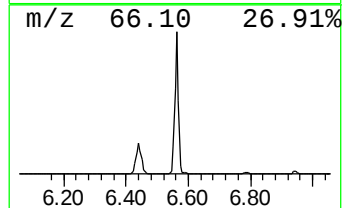
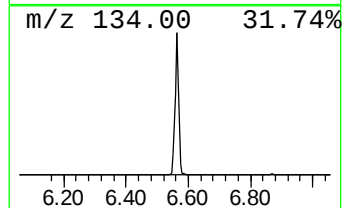
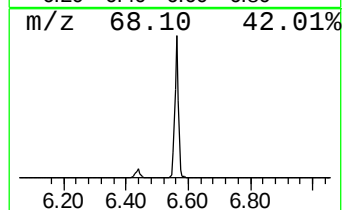
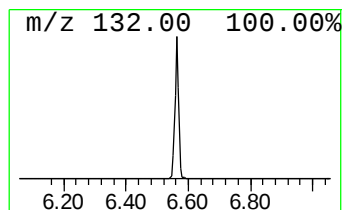
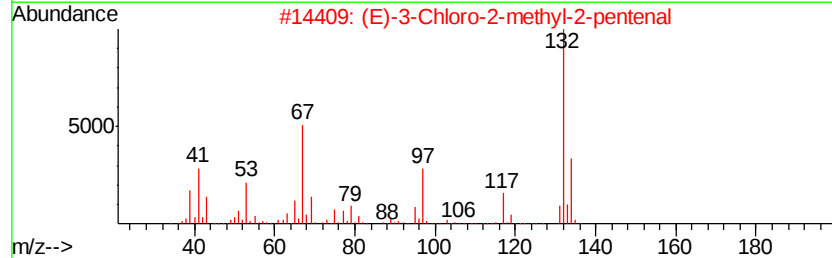
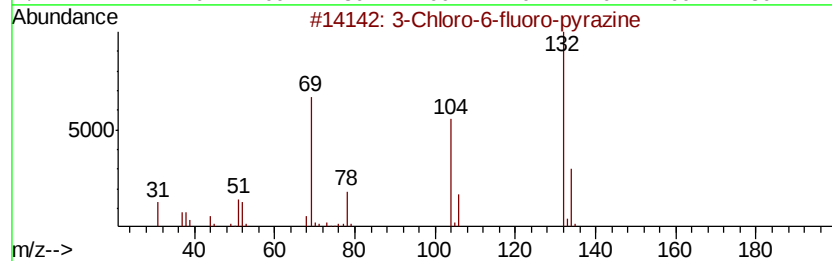
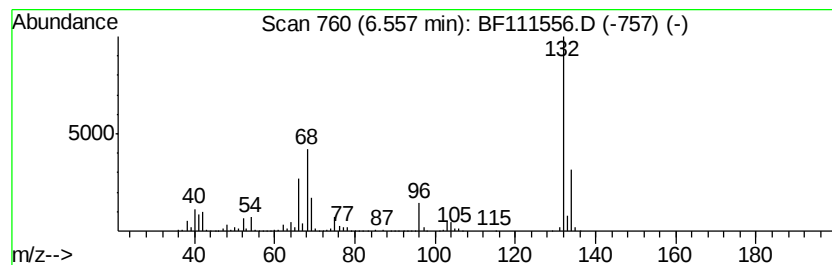
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 2 unknown6.56 Concentration Rank 1

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 6.56 | 75.00 ng | 2657090 | 1,4-Dichlorobenzene-d4 | 6.79 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | 3-Chloro-6-fluoro-pyrazine          | 132 | C4H2ClFN2 | 1000146-10-7 | 27   |
| 2    |    | (E)-3-Chloro-2-methyl-2-pentenal    | 132 | C6H9ClO   | 031357-76-3  | 17   |
| 3    |    | Tranvlcypromine-propionyl           | 189 | C12H15NO  | 1000123-86-3 | 10   |
| 4    |    | Bicyclo[4.2.0]octa-1,3,5-triene,... | 132 | C10H12    | 028749-81-7  | 9    |
| 5    |    | 1-Methylpyrrolo[1,2-a]pyrazine      | 132 | C8H8N2    | 064608-59-9  | 9    |



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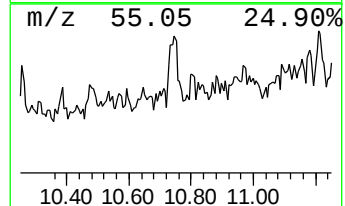
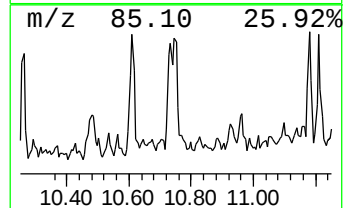
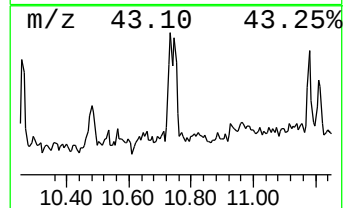
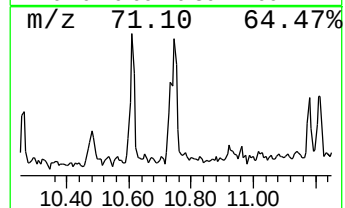
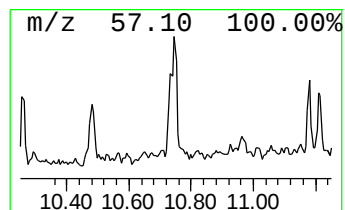
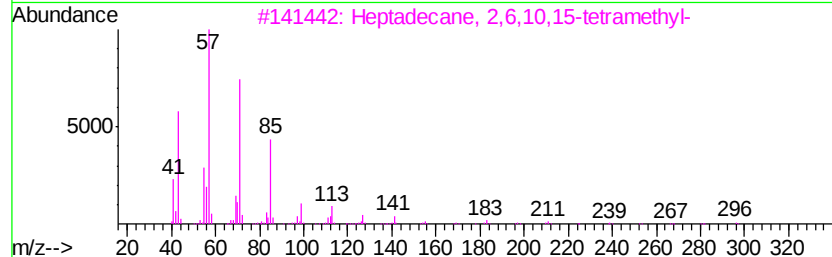
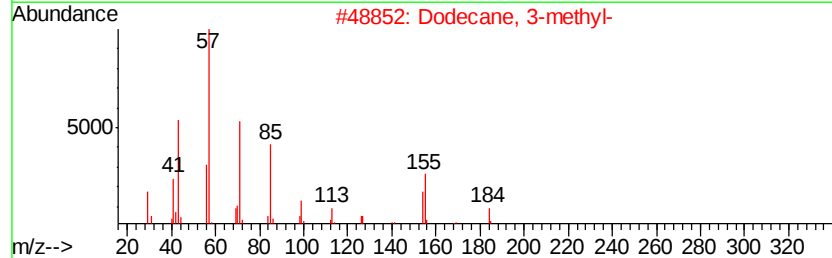
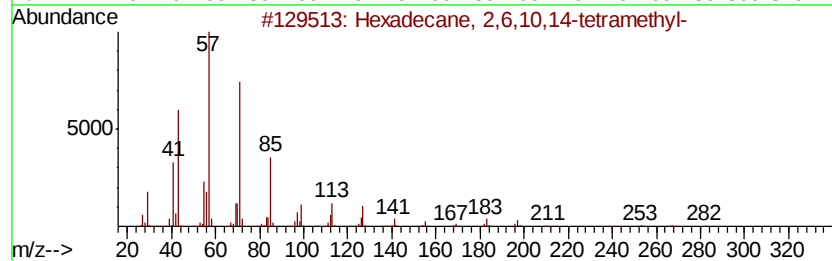
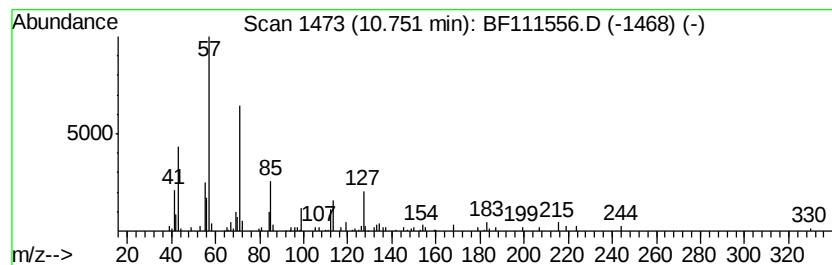
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ClientSampleId :  
TP-4-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 5 Hexadecane, 2,6,10,14-tetra... Concentration Rank 14

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.         |      |
|-----------|-------------------------------------|--------|------------------|--------------|------|
| 10.75     | 2.28 ng                             | 167908 | Phenanthrene-d10 | 11.31        |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#         | Qual |
| 1         | Hexadecane, 2,6,10,14-tetramethyl-  | 282    | C20H42           | 000638-36-8  | 64   |
| 2         | Dodecane, 3-methyl-                 | 184    | C13H28           | 017312-57-1  | 64   |
| 3         | Heptadecane, 2,6,10,15-tetramethyl- | 296    | C21H44           | 054833-48-6  | 64   |
| 4         | Sulfurous acid, decyl 2-ethylhex... | 334    | C18H38O3S        | 1000309-19-3 | 62   |
| 5         | Undecane, 3,6-dimethyl-             | 184    | C13H28           | 017301-28-9  | 59   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121718\  
Data File : BF111556.D  
Acq On : 17 Dec 2018 23:12  
Operator : JU/SJ  
Sample : J6403-29  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

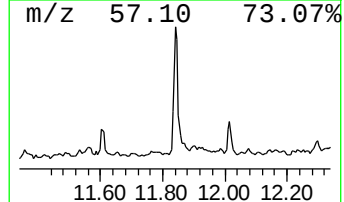
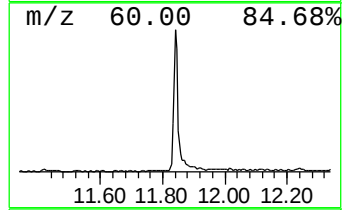
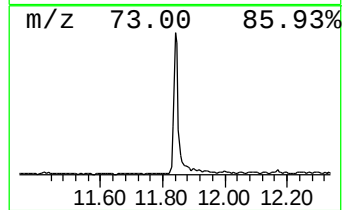
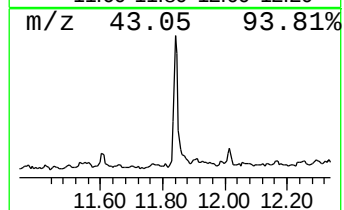
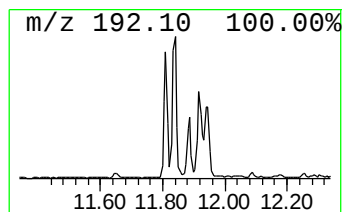
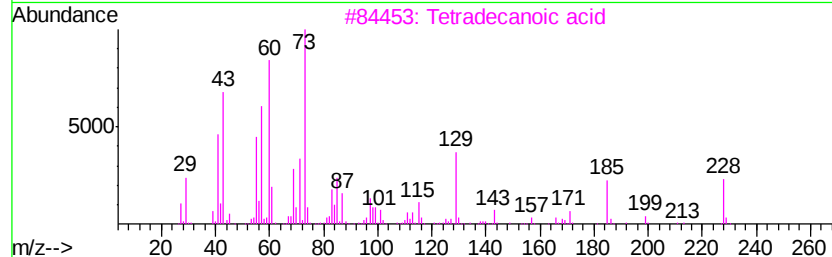
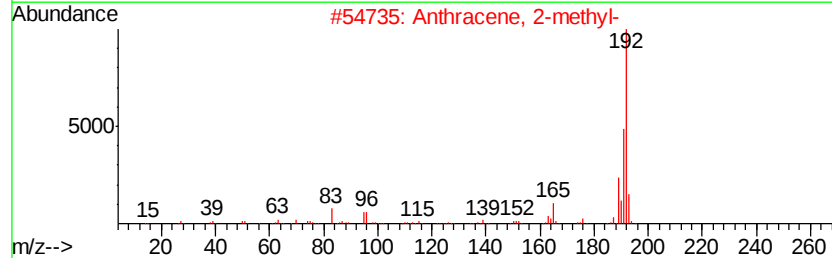
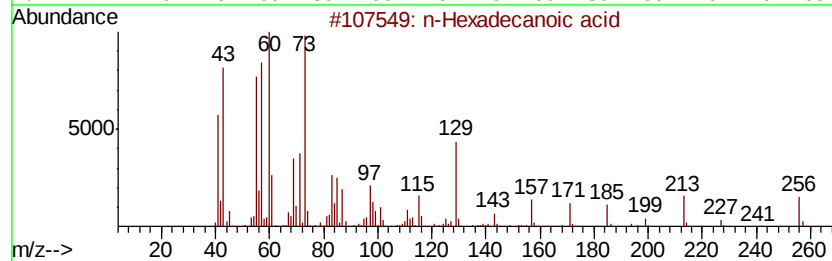
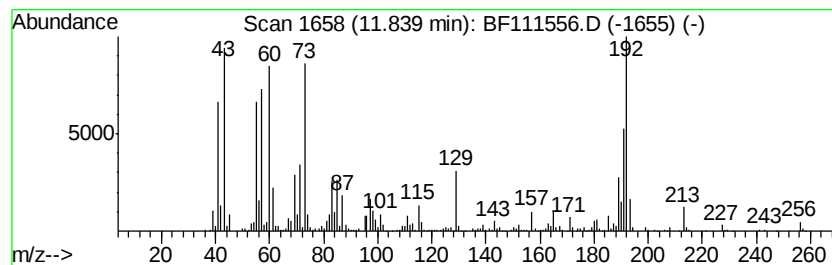
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 6 n-Hexadecanoic acid Concentration Rank 3

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 11.84 | 11.33 ng | 834891 | Phenanthrene-d10 | 11.31 |

| Hit# of 5 | Tentative ID                         | MW  | MolForm  | CAS#        | Qual |
|-----------|--------------------------------------|-----|----------|-------------|------|
| 1         | n-Hexadecanoic acid                  | 256 | C16H32O2 | 000057-10-3 | 97   |
| 2         | Anthracene, 2-methyl-                | 192 | C15H12   | 000613-12-7 | 93   |
| 3         | Tetradecanoic acid                   | 228 | C14H28O2 | 000544-63-8 | 84   |
| 4         | Phenanthrene, 1-methyl-              | 192 | C15H12   | 000832-69-9 | 83   |
| 5         | 1H-Cyclopropa[1]phenanthrene, 1a,... | 192 | C15H12   | 000949-41-7 | 81   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121718\  
Data File : BF111556.D  
Acq On : 17 Dec 2018 23:12  
Operator : JU/SJ  
Sample : J6403-29  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

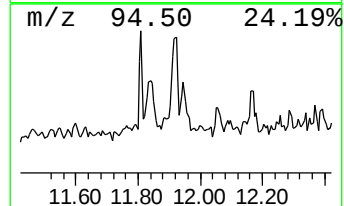
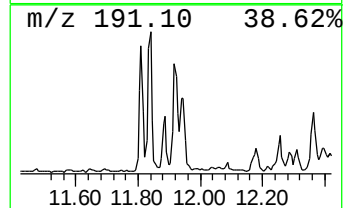
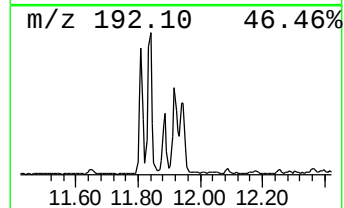
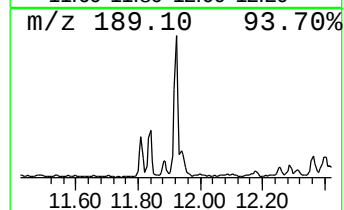
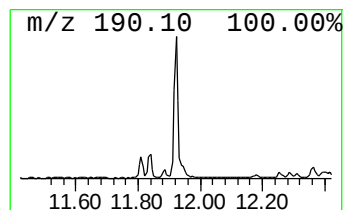
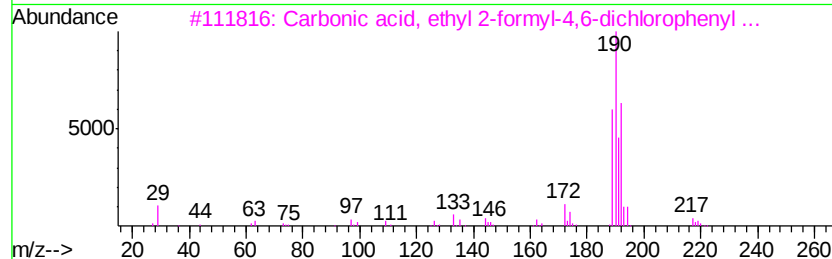
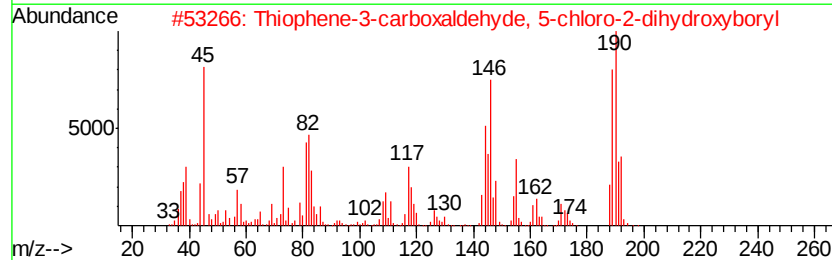
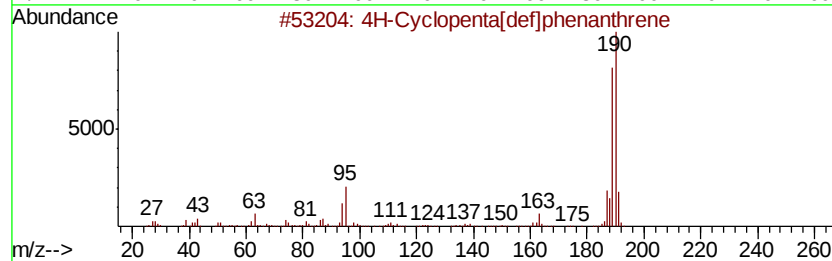
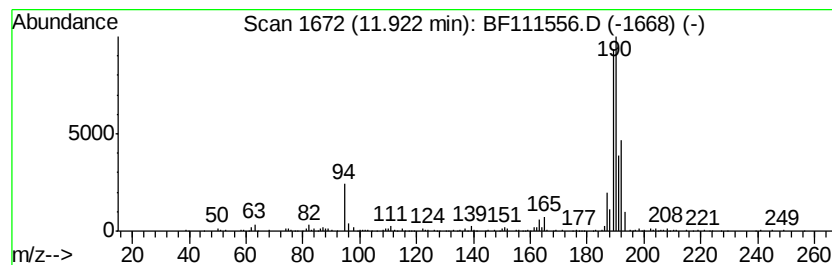
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 7 4H-Cyclopenta[def]phenanthrene Concentration Rank 9

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 11.92 | 3.83 ng | 282235 | Phenanthrene-d10 | 11.31 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|-------------------------------------|-----|------------|--------------|------|
| 1    | 5  | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10     | 000203-64-5  | 53   |
| 2    |    | Thiophene-3-carboxaldehyde, 5-ch... | 190 | C5H4BClO3S | 036155-87-0  | 50   |
| 3    |    | Carbonic acid, ethyl 2-formyl-4,... | 262 | C10H8Cl2O4 | 1000331-34-4 | 40   |
| 4    |    | 2,2'-Bis(4,5-dimethylimidazole)     | 190 | C10H14N4   | 069286-06-2  | 38   |
| 5    |    | 1,4-Naphthalenedione, 2,5-dihydr... | 190 | C10H6O4    | 004923-55-1  | 25   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121718\  
Data File : BF111556.D  
Acq On : 17 Dec 2018 23:12  
Operator : JU/SJ  
Sample : J6403-29  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

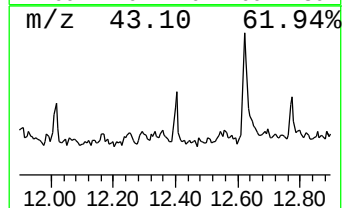
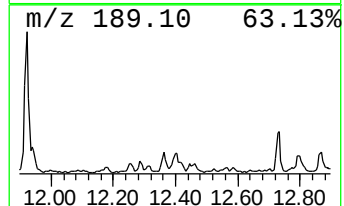
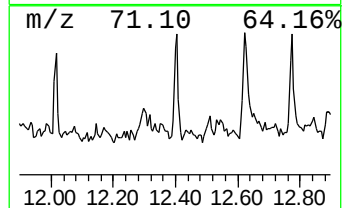
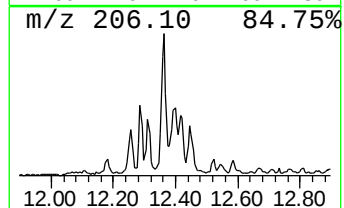
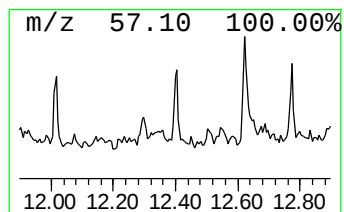
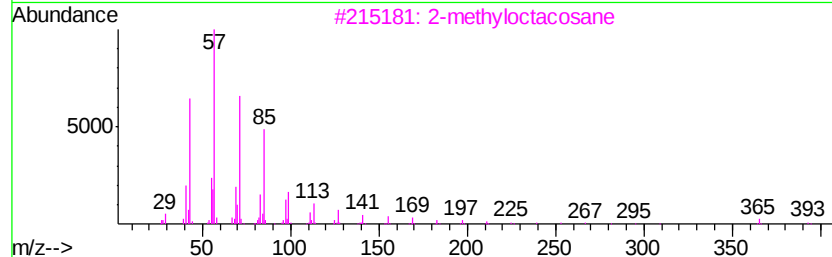
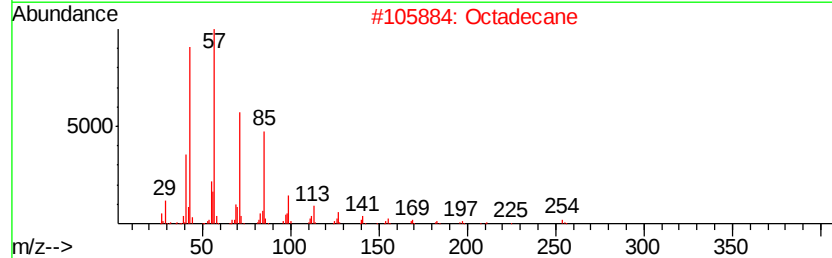
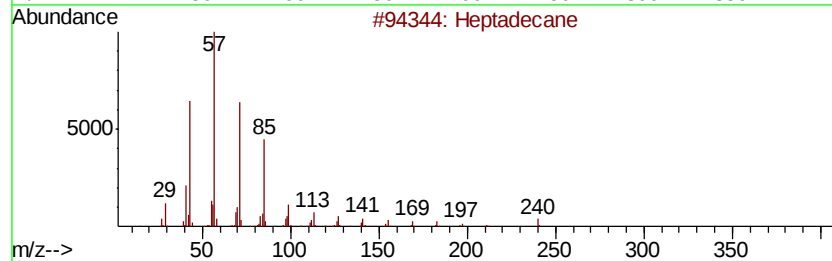
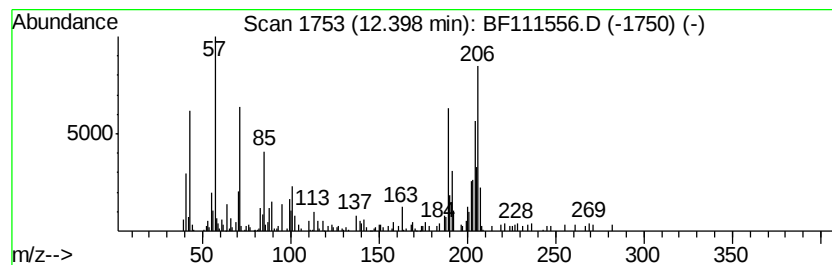
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 8 Heptadecane Concentration Rank 15

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 12.40 | 2.25 ng | 165598 | Phenanthrene-d10 | 11.31 |

| Hit# of | 5                  | Tentative ID | MW  | MolForm | CAS#         | Qual |
|---------|--------------------|--------------|-----|---------|--------------|------|
| 1       | Heptadecane        |              | 240 | C17H36  | 000629-78-7  | 62   |
| 2       | Octadecane         |              | 254 | C18H38  | 000593-45-3  | 30   |
| 3       | 2-methyloctacosane |              | 408 | C29H60  | 1000376-72-8 | 30   |
| 4       | Hentriacontane     |              | 437 | C31H64  | 000630-04-6  | 30   |
| 5       | Heneicosane        |              | 296 | C21H44  | 000629-94-7  | 30   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121718\  
Data File : BF111556.D  
Acq On : 17 Dec 2018 23:12  
Operator : JU/SJ  
Sample : J6403-29  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

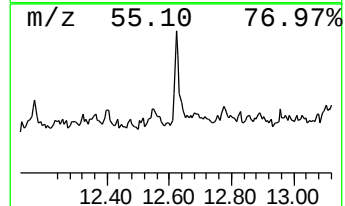
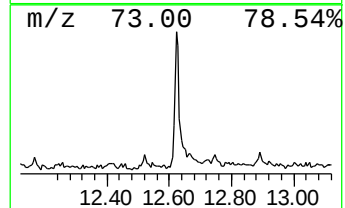
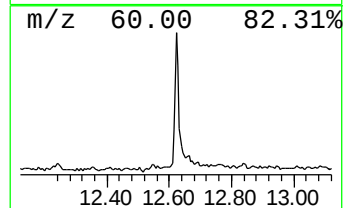
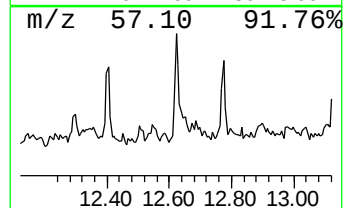
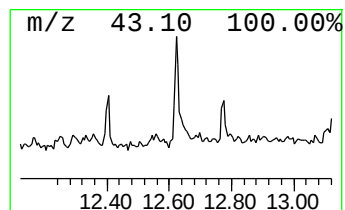
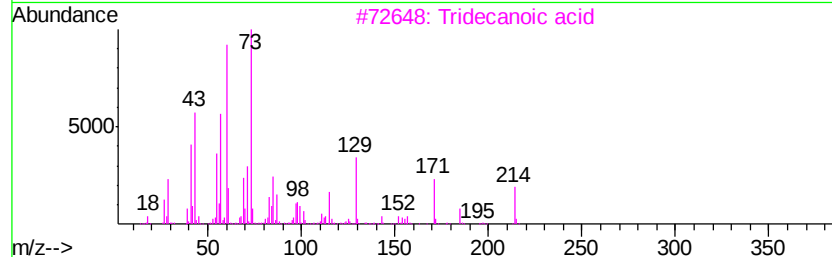
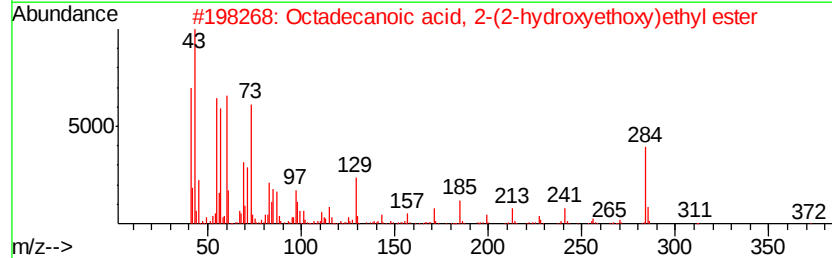
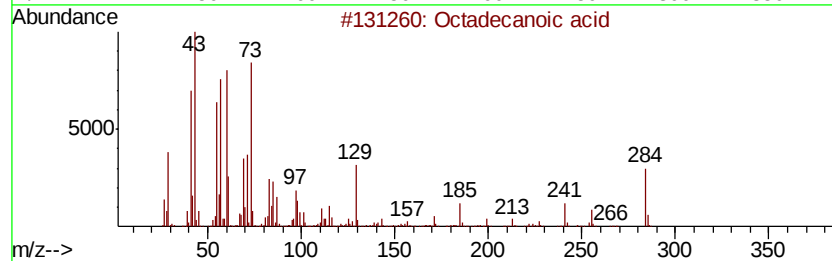
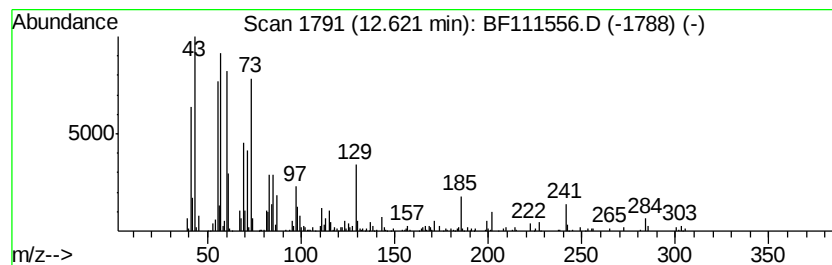
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 Octadecanoic acid Concentration Rank 12

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 12.62 | 3.21 ng | 236766 | Phenanthrene-d10 | 11.31 |

| Hit# | of | Tentative ID                         | MW  | MolForm  | CAS#        | Qual |
|------|----|--------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Octadecanoic acid                    | 284 | C18H36O2 | 000057-11-4 | 95   |
| 2    |    | Octadecanoic acid, 2-(2-hydroxyve... | 372 | C22H44O4 | 000106-11-6 | 83   |
| 3    |    | Tridecanoic acid                     | 214 | C13H26O2 | 000638-53-9 | 62   |
| 4    |    | Dodecanoic acid                      | 200 | C12H24O2 | 000143-07-7 | 52   |
| 5    |    | n-Hexadecanoic acid                  | 256 | C16H32O2 | 000057-10-3 | 50   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121718\  
Data File : BF111556.D  
Acq On : 17 Dec 2018 23:12  
Operator : JU/SJ  
Sample : J6403-29  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

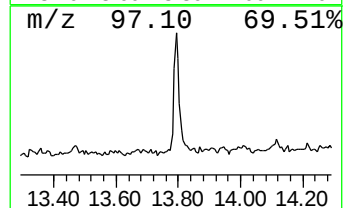
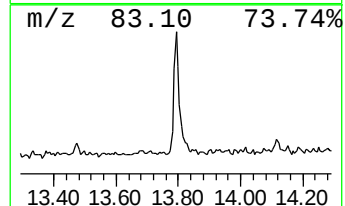
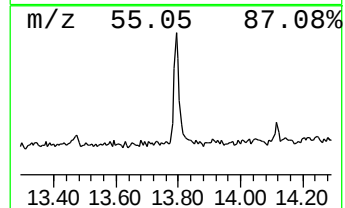
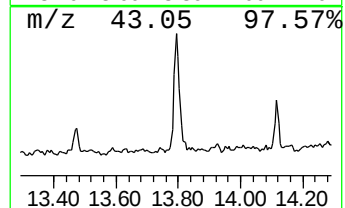
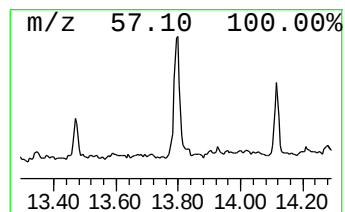
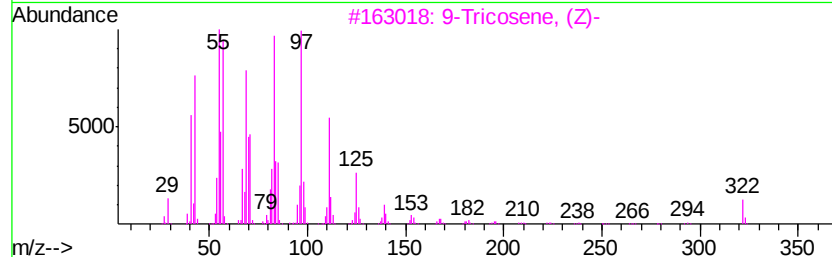
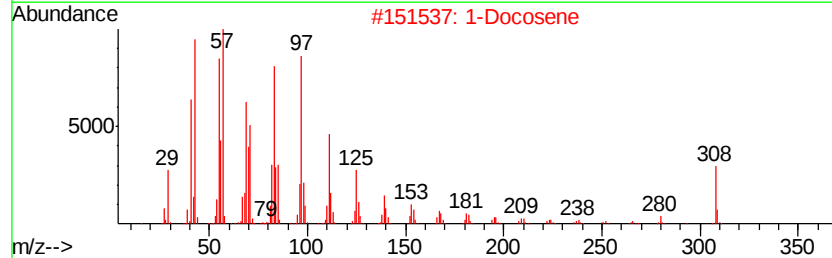
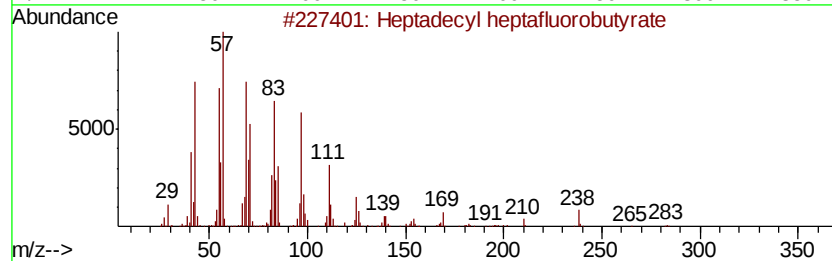
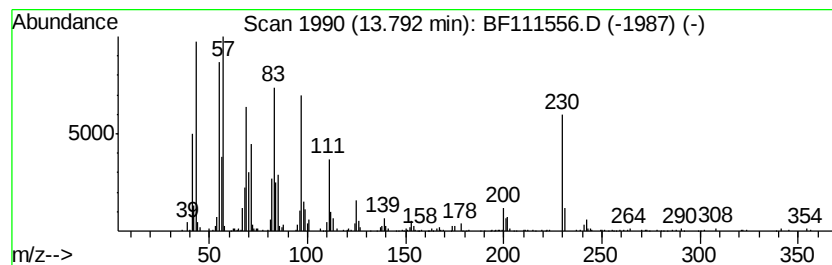
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TIC Integration Parameters: LSCINT.P

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Peak Number 10 Heptadecyl heptafluorobutyrate Concentration Rank 5

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 13.79 | 6.25 ng | 571363 | Chrysene-d12     | 13.94 |

| Hit# | of | Tentative ID                        | MW  | MolForm     | CAS#         | Qual |
|------|----|-------------------------------------|-----|-------------|--------------|------|
| 1    | 5  | Heptadecyl heptafluorobutvrate      | 452 | C21H35F7O2  | 959085-66-6  | 90   |
| 2    |    | 1-Docosene                          | 308 | C22H44      | 001599-67-3  | 90   |
| 3    |    | 9-Tricosene, (Z)-                   | 322 | C23H46      | 027519-02-4  | 86   |
| 4    |    | Dichloroacetic acid, heptadecyl ... | 366 | C19H36Cl2O2 | 1000282-98-2 | 81   |
| 5    |    | Pentafluoropropionic acid, octad... | 416 | C21H37F5O2  | 959261-25-7  | 81   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121718\  
Data File : BF111556.D  
Acq On : 17 Dec 2018 23:12  
Operator : JU/SJ  
Sample : J6403-29  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

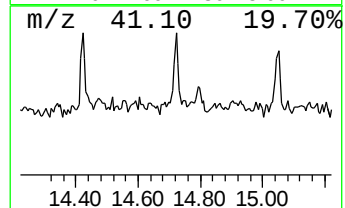
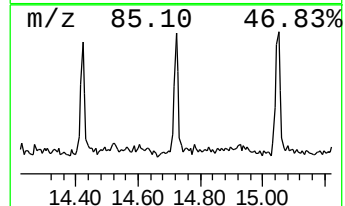
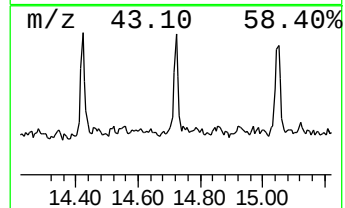
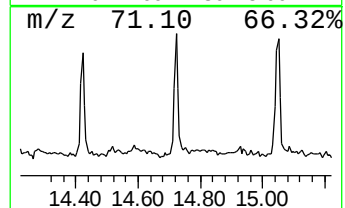
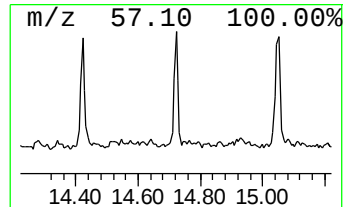
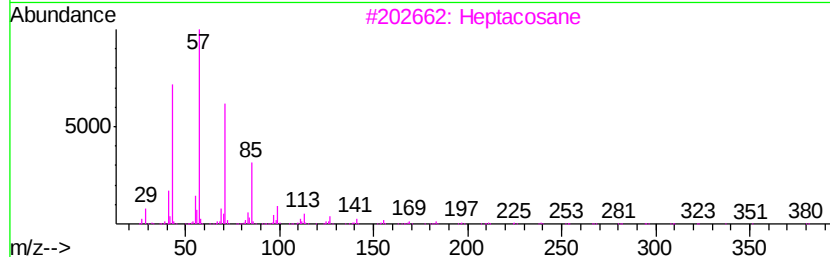
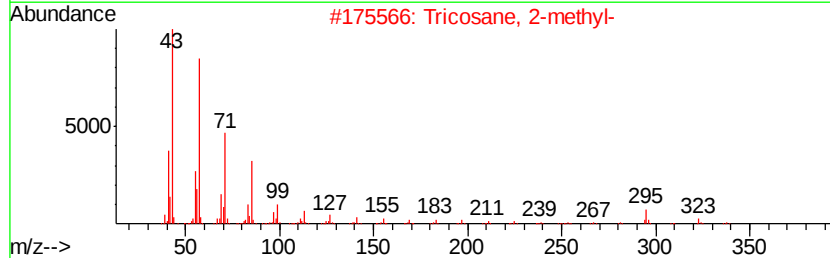
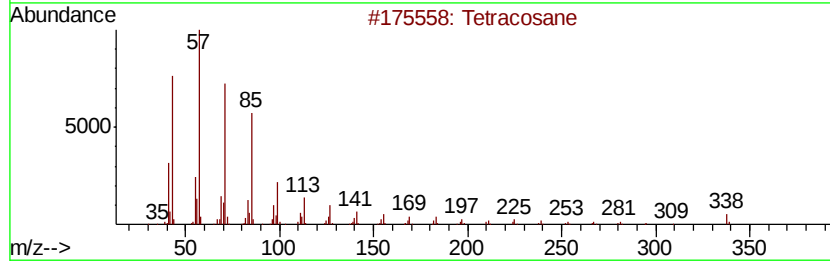
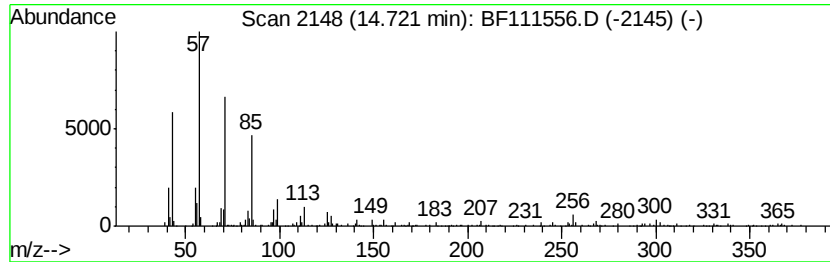
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 12 Tetracosane Concentration Rank 8

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 14.72 | 3.98 ng | 186709 | Perylene-d12     | 15.39 |

| Hit# | of | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------|-----|---------|-------------|------|
| 1    | 5  | Tetracosane          | 338 | C24H50  | 000646-31-1 | 95   |
| 2    |    | Tricosane, 2-methyl- | 338 | C24H50  | 001928-30-9 | 87   |
| 3    |    | Heptacosane          | 380 | C27H56  | 000593-49-7 | 87   |
| 4    |    | Octadecane           | 254 | C18H38  | 000593-45-3 | 86   |
| 5    |    | Dodecane, 1-iodo-    | 296 | C12H25I | 004292-19-7 | 86   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121718\  
Data File : BF111556.D  
Acq On : 17 Dec 2018 23:12  
Operator : JU/SJ  
Sample : J6403-29  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

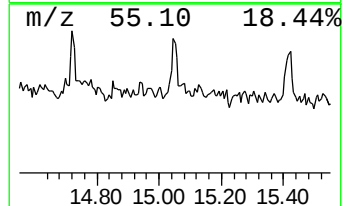
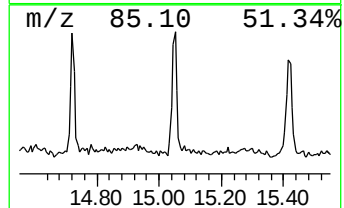
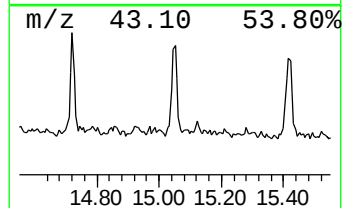
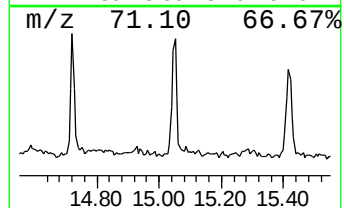
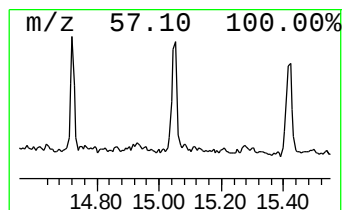
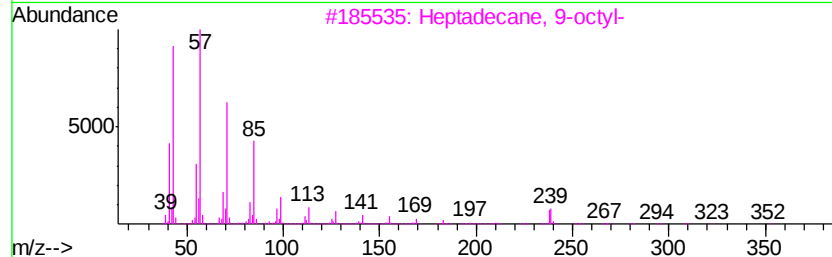
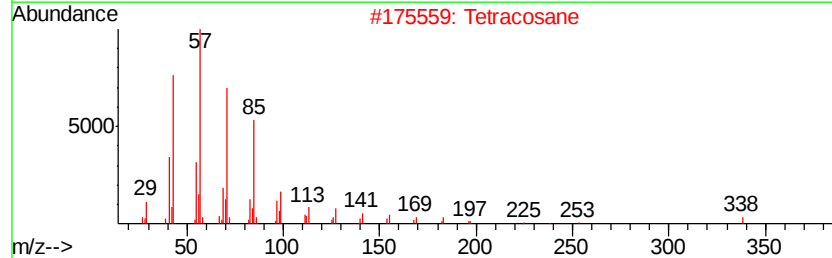
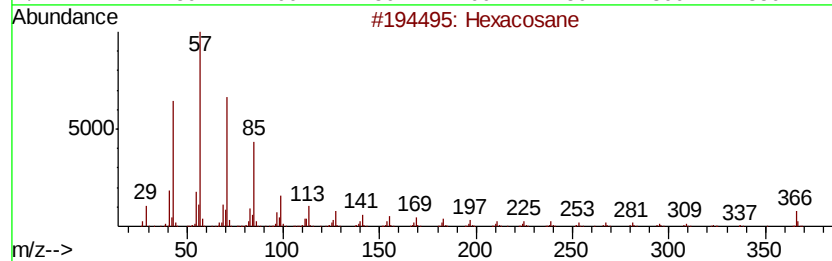
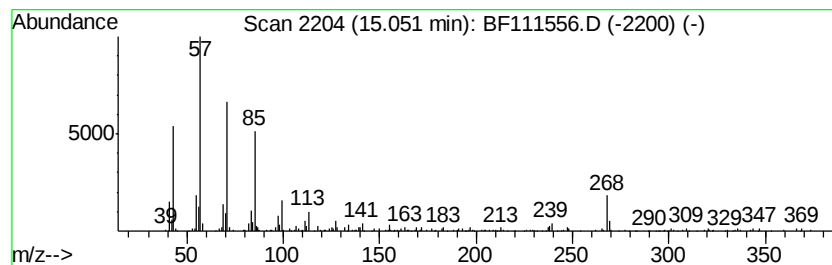
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 13 Hexacosane Concentration Rank 6

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 15.05 | 5.13 ng | 240923 | Perylene-d12     | 15.39 |

| Hit# | of | Tentative ID          | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------|-----|---------|-------------|------|
| 1    | 5  | Hexacosane            | 366 | C26H54  | 000630-01-3 | 86   |
| 2    |    | Tetracosane           | 338 | C24H50  | 000646-31-1 | 80   |
| 3    |    | Heptadecane, 9-octyl- | 352 | C25H52  | 007225-64-1 | 80   |
| 4    |    | Octadecane, 1-iodo-   | 380 | C18H37I | 000629-93-6 | 80   |
| 5    |    | Hexadecane            | 226 | C16H34  | 000544-76-3 | 64   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121718\  
Data File : BF111556.D  
Acq On : 17 Dec 2018 23:12  
Operator : JU/SJ  
Sample : J6403-29  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
TP-4-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

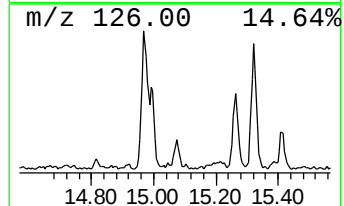
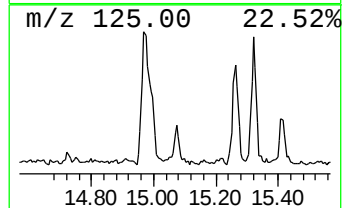
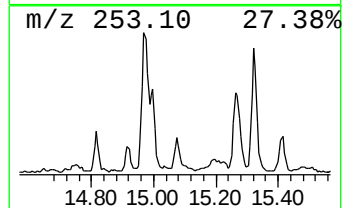
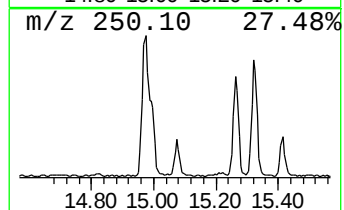
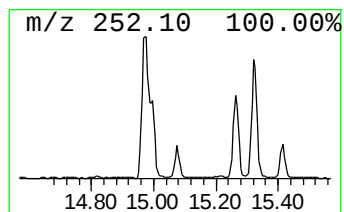
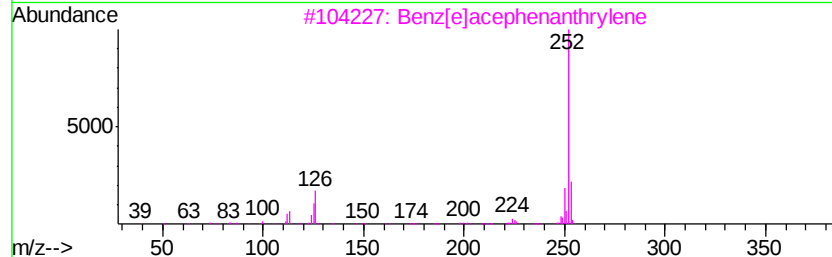
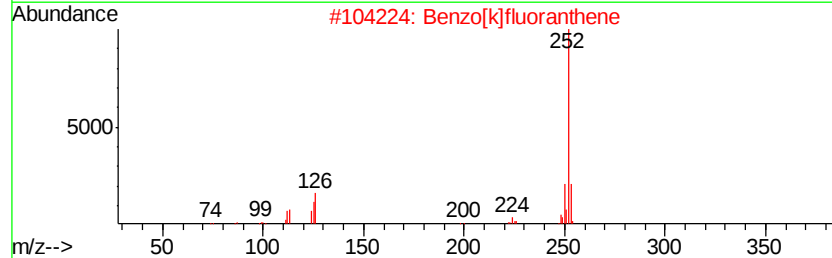
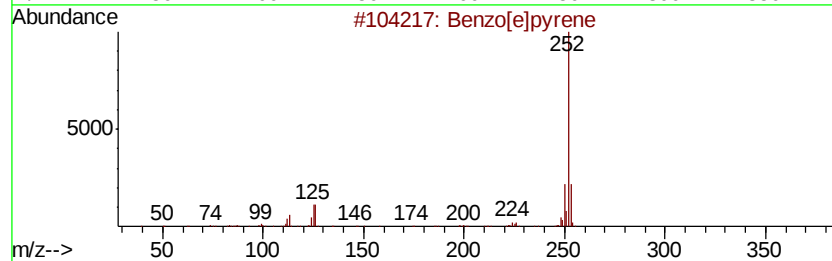
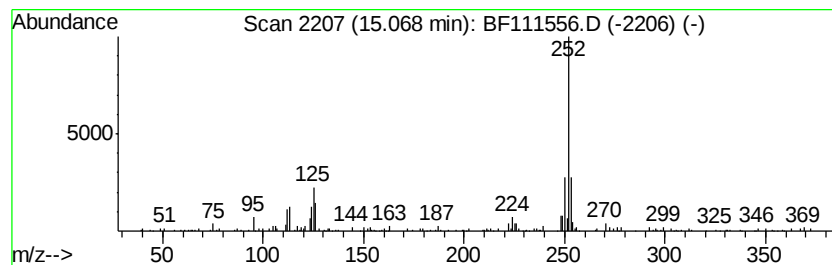
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 14 Benzo[e]pyrene Concentration Rank 11

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 15.07 | 3.23 ng | 151763 | Perylene-d12     | 15.39 |

| Hit# | of | Tentative ID             | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[e]pyrene           | 252 | C20H12  | 000192-97-2 | 95   |
| 2    |    | Benzo[k]fluoranthene     | 252 | C20H12  | 000207-08-9 | 94   |
| 3    |    | Benz[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 90   |
| 4    |    | Perylene                 | 252 | C20H12  | 000198-55-0 | 90   |
| 5    |    | Benzo[j]fluoranthene     | 252 | C20H12  | 000205-82-3 | 89   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF121718\  
 Data File : BF111556.D  
 Acq On : 17 Dec 2018 23:12  
 Operator : JU/SJ  
 Sample : J6403-29  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-4-B

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF121418.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

| TIC Top Hit name     | RT    | EstConc | Units | Response | --Internal Standard-- |       |         |      |
|----------------------|-------|---------|-------|----------|-----------------------|-------|---------|------|
|                      |       |         |       |          | #                     | RT    | Resp    | Conc |
| 2-Pentanone, 4-hy... | 5.00  | 5.1 ng  |       | 180961   | 1                     | 6.79  | 708553  | 20.0 |
| unknown6.56          | 6.56  | 75.0 ng |       | 2657090  | 1                     | 6.79  | 708553  | 20.0 |
| Hexadecane, 2,6,1... | 10.75 | 2.3 ng  |       | 167908   | 4                     | 11.31 | 1473370 | 20.0 |
| n-Hexadecanoic acid  | 11.84 | 11.3 ng |       | 834891   | 4                     | 11.31 | 1473370 | 20.0 |
| 4H-Cyclopenta[def... | 11.92 | 3.8 ng  |       | 282235   | 4                     | 11.31 | 1473370 | 20.0 |
| Heptadecane          | 12.40 | 2.3 ng  |       | 165598   | 4                     | 11.31 | 1473370 | 20.0 |
| Octadecanoic acid    | 12.62 | 3.2 ng  |       | 236766   | 4                     | 11.31 | 1473370 | 20.0 |
| Heptadecyl heptaf... | 13.79 | 6.3 ng  |       | 571363   | 5                     | 13.94 | 1827390 | 20.0 |
| Tetracosane          | 14.72 | 4.0 ng  |       | 186709   | 6                     | 15.39 | 938798  | 20.0 |
| Hexacosane           | 15.05 | 5.1 ng  |       | 240923   | 6                     | 15.39 | 938798  | 20.0 |
| Benzo[e]pyrene       | 15.07 | 3.2 ng  |       | 151763   | 6                     | 15.39 | 938798  | 20.0 |