

Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\  
 Data File : BF103212.D  
 Acq On : 26 Feb 2018 12:21  
 Operator : SJ/JU  
 Sample : J1648-01  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 RO-124031-RO124035

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

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

Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF022218.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         | 2.146       | 4             | 10          | 19           | rVB      | 1083502        | 1469113       | 40.51%          | 3.865%        |
| 2         | 5.104       | 510           | 513         | 524          | rVB      | 153220         | 196287        | 5.41%           | 0.516%        |
| 3         | 5.492       | 575           | 579         | 593          | rBV      | 3526916        | 3626771       | 100.00%         | 9.542%        |
| 4         | 6.504       | 746           | 751         | 754          | rBV      | 3184822        | 3343168       | 92.18%          | 8.796%        |
| 5         | 6.639       | 770           | 774         | 778          | rBV      | 3581048        | 3469237       | 95.66%          | 9.127%        |
| 6         | 6.869       | 809           | 813         | 818          | rBV      | 1199119        | 959038        | 26.44%          | 2.523%        |
| 7         | 7.028       | 835           | 840         | 843          | rBV      | 2803577        | 2637391       | 72.72%          | 6.939%        |
| 8         | 7.433       | 904           | 909         | 912          | rBV      | 2355516        | 2288557       | 63.10%          | 6.021%        |
| 9         | 8.151       | 1027          | 1031        | 1051         | rVB      | 1392795        | 1316577       | 36.30%          | 3.464%        |
| 10        | 9.222       | 1209          | 1213        | 1223         | rBV      | 3041744        | 3131162       | 86.33%          | 8.238%        |
| 11        | 9.298       | 1223          | 1226        | 1229         | rVB      | 69187          | 63136         | 1.74%           | 0.166%        |
| 12        | 9.563       | 1265          | 1271        | 1274         | rBV4     | 32286          | 52737         | 1.45%           | 0.139%        |
| 13        | 9.616       | 1277          | 1280        | 1288         | rVB      | 268318         | 265563        | 7.32%           | 0.699%        |
| 14        | 9.769       | 1303          | 1306        | 1311         | rBV2     | 53610          | 54871         | 1.51%           | 0.144%        |
| 15        | 9.827       | 1311          | 1316        | 1319         | rVV      | 177069         | 145133        | 4.00%           | 0.382%        |
| 16        | 9.910       | 1324          | 1330        | 1333         | rVV      | 1234535        | 1217703       | 33.58%          | 3.204%        |
| 17        | 9.939       | 1333          | 1335        | 1338         | rVB      | 70005          | 58777         | 1.62%           | 0.155%        |
| 18        | 10.057      | 1351          | 1355        | 1358         | rBV2     | 29484          | 42341         | 1.17%           | 0.111%        |
| 19        | 10.110      | 1361          | 1364        | 1368         | rVV2     | 44868          | 52032         | 1.43%           | 0.137%        |
| 20        | 10.145      | 1368          | 1370        | 1374         | rVB3     | 53996          | 53278         | 1.47%           | 0.140%        |
| 21        | 10.327      | 1394          | 1401        | 1404         | rBV      | 202283         | 201822        | 5.56%           | 0.531%        |
| 22        | 10.457      | 1420          | 1423        | 1427         | rVB      | 54598          | 54481         | 1.50%           | 0.143%        |
| 23        | 10.545      | 1432          | 1438        | 1440         | rBV2     | 75469          | 89295         | 2.46%           | 0.235%        |
| 24        | 10.698      | 1460          | 1464        | 1474         | rBV      | 1727285        | 1705316       | 47.02%          | 4.487%        |
| 25        | 10.798      | 1478          | 1481        | 1487         | rVV      | 164940         | 202251        | 5.58%           | 0.532%        |
| 26        | 11.004      | 1511          | 1516        | 1518         | rBV5     | 32482          | 52162         | 1.44%           | 0.137%        |
| 27        | 11.245      | 1554          | 1557        | 1560         | rBV2     | 75302          | 71133         | 1.96%           | 0.187%        |
| 28        | 11.274      | 1560          | 1562        | 1564         | rBV      | 46863          | 41216         | 1.14%           | 0.108%        |
| 29        | 11.398      | 1579          | 1583        | 1585         | rBV      | 1064048        | 974713        | 26.88%          | 2.564%        |
| 30        | 11.421      | 1585          | 1587        | 1592         | rVV      | 559370         | 456896        | 12.60%          | 1.202%        |
| 31        | 11.474      | 1593          | 1596        | 1599         | rVB      | 99519          | 89167         | 2.46%           | 0.235%        |
| 32        | 11.633      | 1618          | 1623        | 1628         | rBV3     | 52922          | 95221         | 2.63%           | 0.251%        |
| 33        | 11.898      | 1666          | 1668        | 1671         | rBV2     | 76487          | 102028        | 2.81%           | 0.268%        |
| 34        | 11.927      | 1671          | 1673        | 1675         | rVV      | 107135         | 81984         | 2.26%           | 0.216%        |

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF022618\  
 Data File : BF103212.D  
 Acq On : 26 Feb 2018 12:21  
 Operator : SJ/JU  
 Sample : J1648-01  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 RO-124031-RO124035

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

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

Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF022218.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |         |         |        |        |
|----|--------|------|------|------|------|---------|---------|--------|--------|
| 35 | 11.974 | 1679 | 1681 | 1684 | rBV  | 50267   | 39662   | 1.09%  | 0.104% |
| 36 | 12.010 | 1684 | 1687 | 1690 | rBV  | 131057  | 155881  | 4.30%  | 0.410% |
| 37 | 12.080 | 1696 | 1699 | 1702 | rBV2 | 55576   | 53471   | 1.47%  | 0.141% |
| 38 | 12.192 | 1716 | 1718 | 1721 | rVV  | 58520   | 46324   | 1.28%  | 0.122% |
| 39 | 12.227 | 1721 | 1724 | 1729 | rVB5 | 54768   | 63998   | 1.76%  | 0.168% |
| 40 | 12.339 | 1738 | 1743 | 1746 | rBV3 | 64043   | 94104   | 2.59%  | 0.248% |
| 41 | 12.445 | 1759 | 1761 | 1764 | rBV  | 64485   | 56234   | 1.55%  | 0.148% |
| 42 | 12.539 | 1774 | 1777 | 1780 | rVB  | 49178   | 54819   | 1.51%  | 0.144% |
| 43 | 12.610 | 1786 | 1789 | 1793 | rBV  | 759121  | 697115  | 19.22% | 1.834% |
| 44 | 12.792 | 1817 | 1820 | 1823 | rVB  | 164877  | 147105  | 4.06%  | 0.387% |
| 45 | 12.845 | 1823 | 1829 | 1831 | rBV  | 834077  | 900372  | 24.83% | 2.369% |
| 46 | 12.892 | 1835 | 1837 | 1840 | rVB2 | 48571   | 50716   | 1.40%  | 0.133% |
| 47 | 12.980 | 1844 | 1852 | 1855 | rBV  | 2270868 | 2089620 | 57.62% | 5.498% |
| 48 | 13.004 | 1855 | 1856 | 1860 | rVB  | 66455   | 44373   | 1.22%  | 0.117% |
| 49 | 13.057 | 1862 | 1865 | 1869 | rVV3 | 60250   | 93573   | 2.58%  | 0.246% |
| 50 | 13.168 | 1882 | 1884 | 1887 | rVB  | 93722   | 84106   | 2.32%  | 0.221% |
| 51 | 13.233 | 1893 | 1895 | 1898 | rVB  | 63316   | 53100   | 1.46%  | 0.140% |
| 52 | 13.274 | 1899 | 1902 | 1904 | rVV2 | 88054   | 78924   | 2.18%  | 0.208% |
| 53 | 13.368 | 1915 | 1918 | 1920 | rBV  | 58230   | 51021   | 1.41%  | 0.134% |
| 54 | 13.398 | 1920 | 1923 | 1925 | rBV2 | 72568   | 66016   | 1.82%  | 0.174% |
| 55 | 13.498 | 1937 | 1940 | 1943 | rVB  | 101352  | 96428   | 2.66%  | 0.254% |
| 56 | 13.680 | 1969 | 1971 | 1975 | rVB  | 74508   | 68403   | 1.89%  | 0.180% |
| 57 | 13.815 | 1992 | 1994 | 1996 | rBV  | 51313   | 41942   | 1.16%  | 0.110% |
| 58 | 13.862 | 2000 | 2002 | 2010 | rVB4 | 406020  | 532977  | 14.70% | 1.402% |
| 59 | 14.004 | 2024 | 2026 | 2028 | rBV  | 60242   | 70100   | 1.93%  | 0.184% |
| 60 | 14.045 | 2028 | 2033 | 2035 | rVV2 | 951883  | 1272882 | 35.10% | 3.349% |
| 61 | 14.068 | 2035 | 2037 | 2045 | rVB  | 414657  | 384168  | 10.59% | 1.011% |
| 62 | 15.098 | 2209 | 2212 | 2216 | rBV  | 308492  | 479714  | 13.23% | 1.262% |
| 63 | 15.409 | 2262 | 2265 | 2271 | rVB  | 222702  | 279650  | 7.71%  | 0.736% |
| 64 | 15.474 | 2272 | 2276 | 2281 | rBV  | 293977  | 385208  | 10.62% | 1.013% |
| 65 | 15.539 | 2282 | 2287 | 2290 | rBV  | 604560  | 817325  | 22.54% | 2.150% |

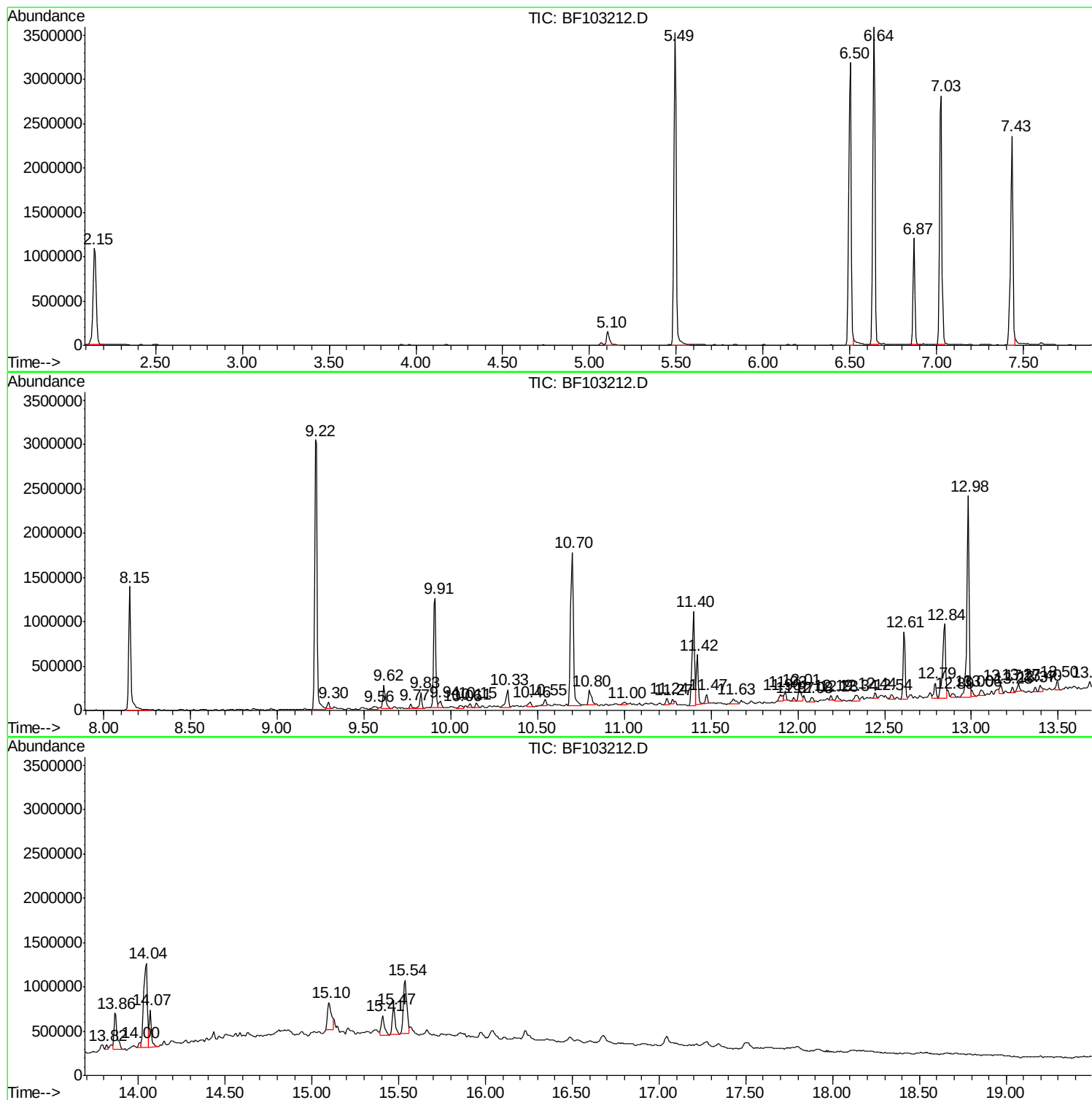
Sum of corrected areas: 38009888

Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\  
Data File : BF103212.D  
Acq On : 26 Feb 2018 12:21  
Operator : SJ/JU  
Sample : J1648-01  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
RO-124031-RO124035

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF022218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\  
Data File : BF103212.D  
Acq On : 26 Feb 2018 12:21  
Operator : SJ/JU  
Sample : J1648-01  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
RO-124031-RO124035

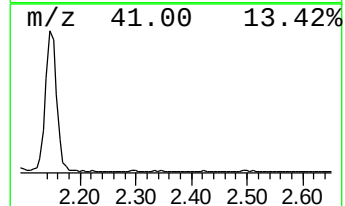
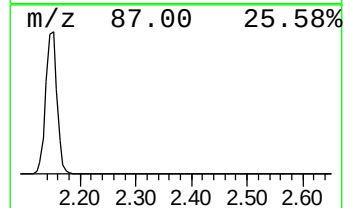
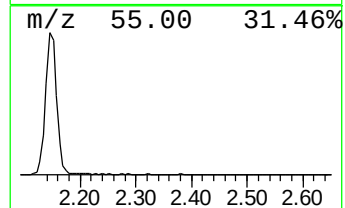
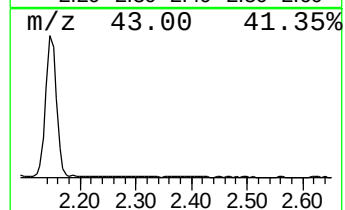
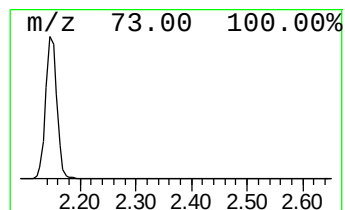
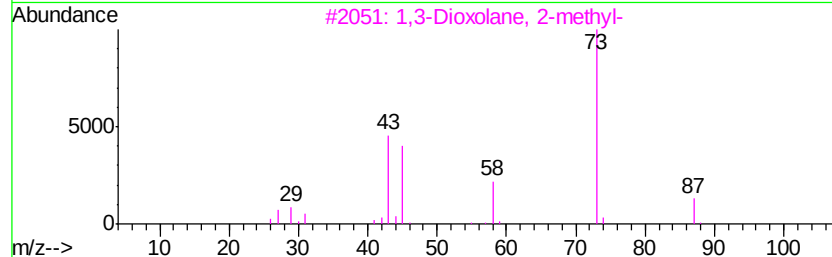
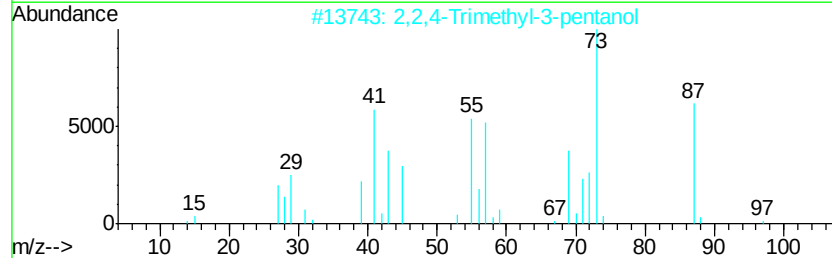
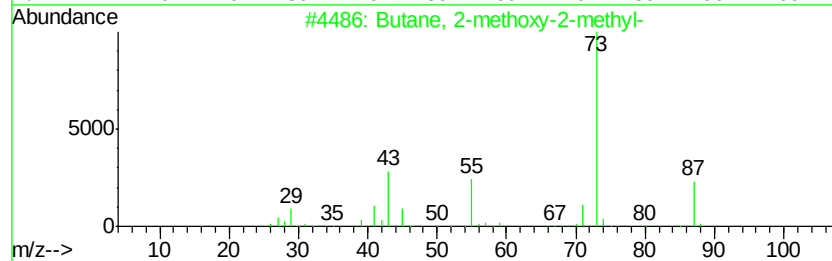
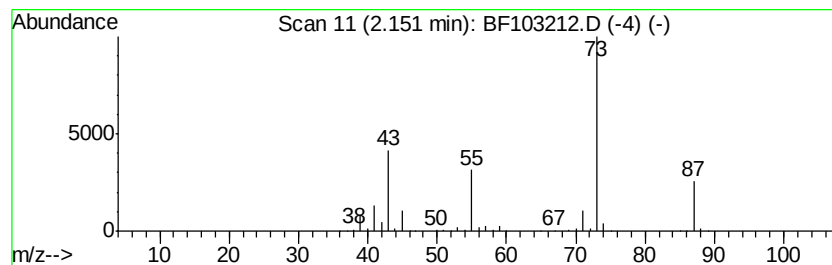
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF022218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 3

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 2.15 | 30.64 ng | 1469110 | 1,4-Dichlorobenzene-d4 | 6.87 |

| Hit# | of | Tentative ID                | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------------|-----|---------|-------------|------|
| 1    | 5  | Butane, 2-methoxy-2-methyl- | 102 | C6H14O  | 000994-05-8 | 83   |
| 2    |    | 2,2,4-Trimethyl-3-pentanol  | 130 | C8H18O  | 005162-48-1 | 40   |
| 3    |    | 1,3-Dioxolane, 2-methyl-    | 88  | C4H8O2  | 000497-26-7 | 23   |
| 4    |    | 3-Pentanol, 2,4-dimethyl-   | 116 | C7H16O  | 000600-36-2 | 23   |
| 5    |    | Pentane, 3-methoxy-         | 102 | C6H14O  | 036839-67-5 | 12   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF022618\  
Data File : BF103212.D  
Acq On : 26 Feb 2018 12:21  
Operator : SJ/JU  
Sample : J1648-01  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
RO-124031-RO124035

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF022218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

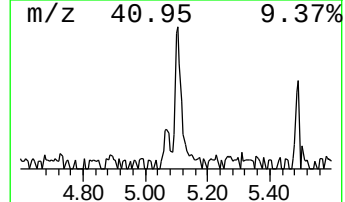
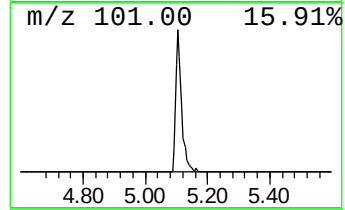
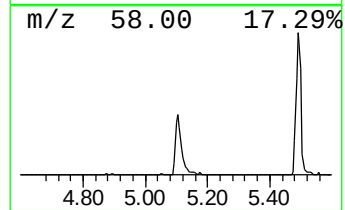
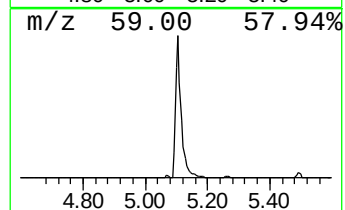
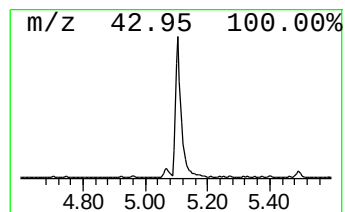
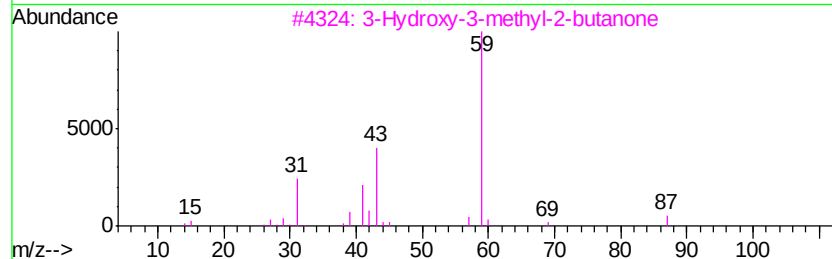
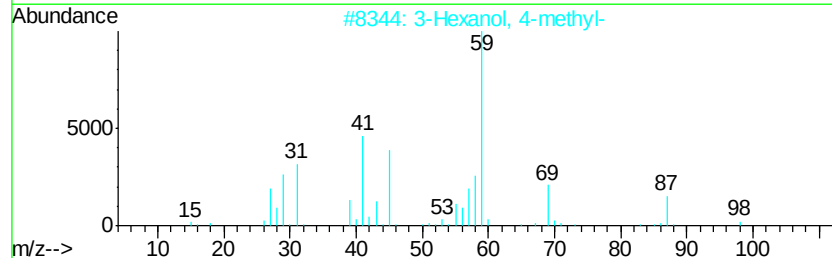
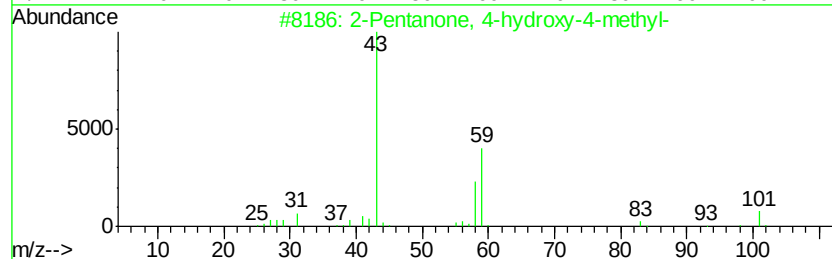
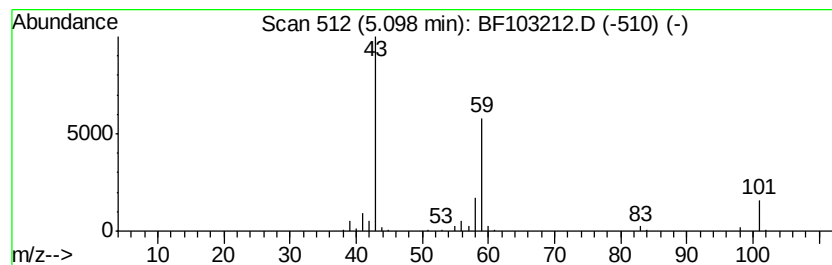
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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

| R.T. | EstConc | Area   | Relative to ISTD       | R.T. |
|------|---------|--------|------------------------|------|
| 5.10 | 4.09 ng | 196287 | 1,4-Dichlorobenzene-d4 | 6.87 |

| Hit# | of | 5 | Tentative ID                         | MW  | MolForm  | CAS#        | Qual |
|------|----|---|--------------------------------------|-----|----------|-------------|------|
| 1    |    |   | 2-Pentanone, 4-hydroxy-4-methyl-     | 116 | C6H12O2  | 000123-42-2 | 50   |
| 2    |    |   | 3-Hexanol, 4-methyl-                 | 116 | C7H16O   | 000615-29-2 | 33   |
| 3    |    |   | 3-Hydroxy-3-methyl-2-butanone        | 102 | C5H10O2  | 000115-22-0 | 23   |
| 4    |    |   | Acetic acid, cyano-, 1,1-dimethyl... | 141 | C7H11NO2 | 001116-98-9 | 23   |
| 5    |    |   | 2,3-Butanedione, monooxime           | 101 | C4H7NO2  | 000057-71-6 | 16   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF022618\  
Data File : BF103212.D  
Acq On : 26 Feb 2018 12:21  
Operator : SJ/JU  
Sample : J1648-01  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
RO-124031-RO124035

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF022218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

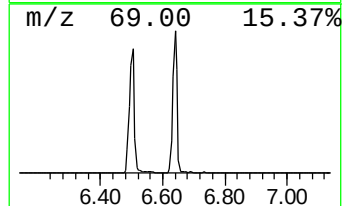
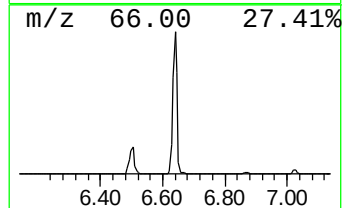
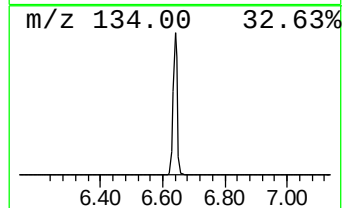
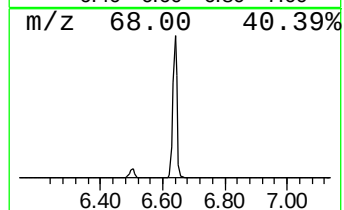
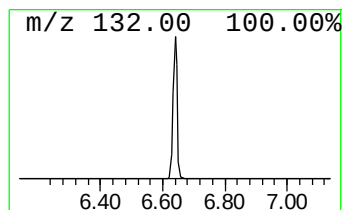
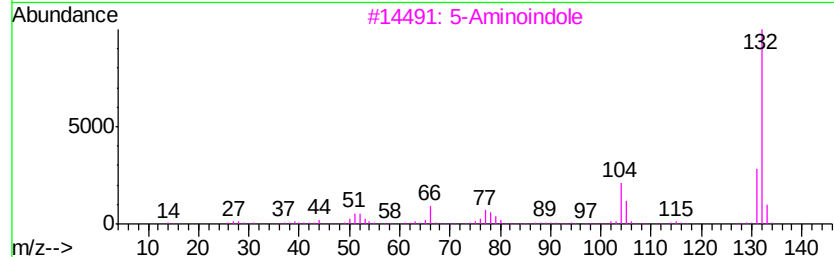
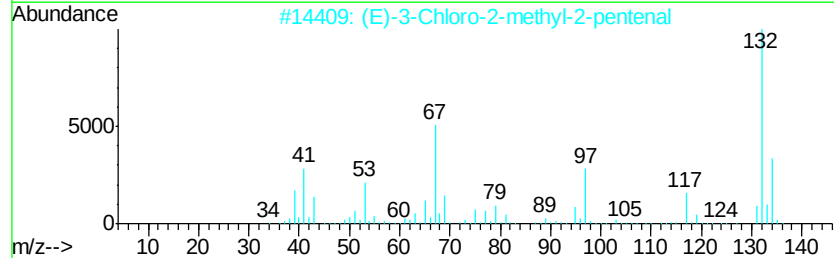
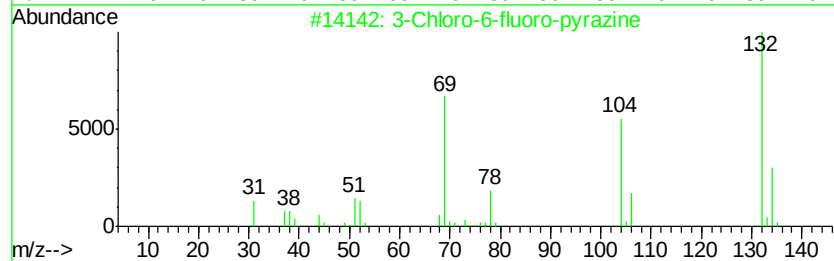
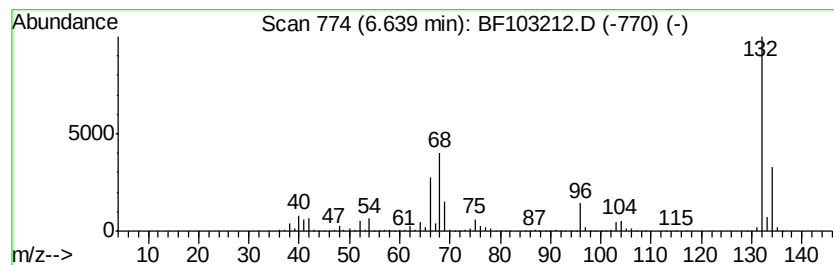
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 3 unknown6.64 Concentration Rank 1

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 6.64 | 72.35 ng | 3469240 | 1,4-Dichlorobenzene-d4 | 6.87 |

| 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    |    | 5-Aminoindole                    | 132 | C8H8N2    | 005192-03-0  | 12   |
| 4    |    | Tranylcypromine-propionyl        | 189 | C12H15NO  | 1000123-86-3 | 10   |
| 5    |    | 1-Methylpyrrolo[1,2-a]pyrazine   | 132 | C8H8N2    | 064608-59-9  | 9    |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF022618\  
Data File : BF103212.D  
Acq On : 26 Feb 2018 12:21  
Operator : SJ/JU  
Sample : J1648-01  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
RO-124031-RO124035

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF022218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

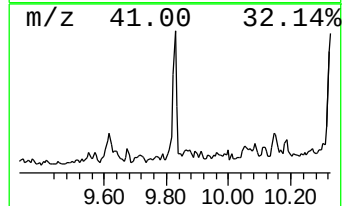
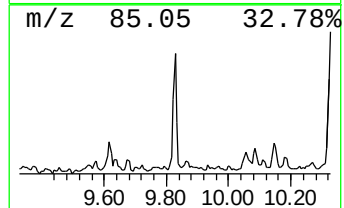
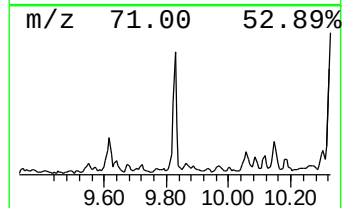
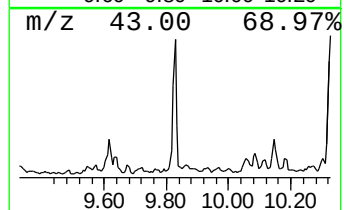
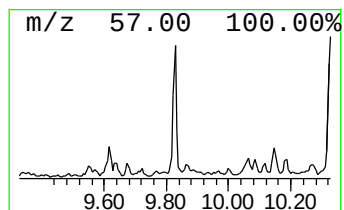
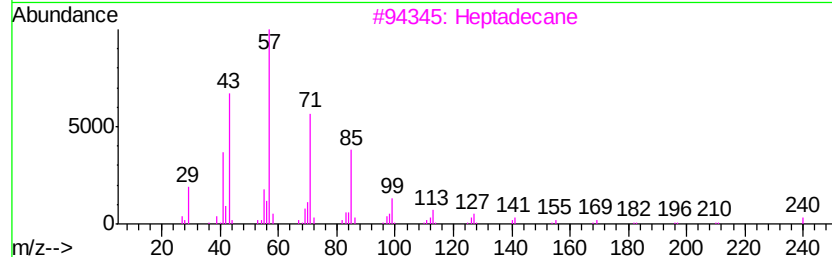
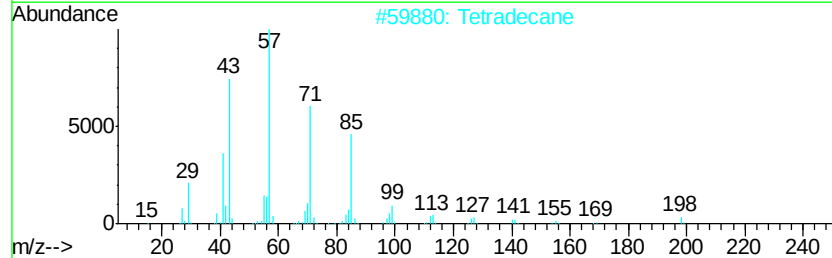
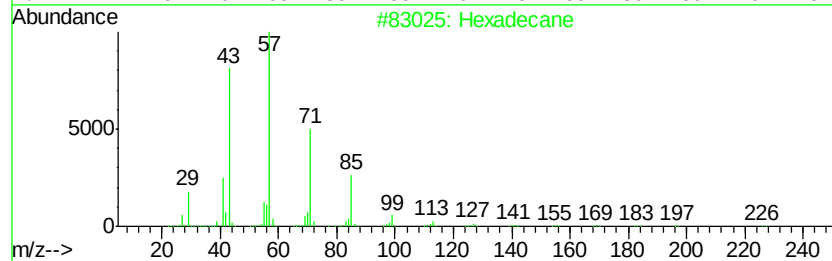
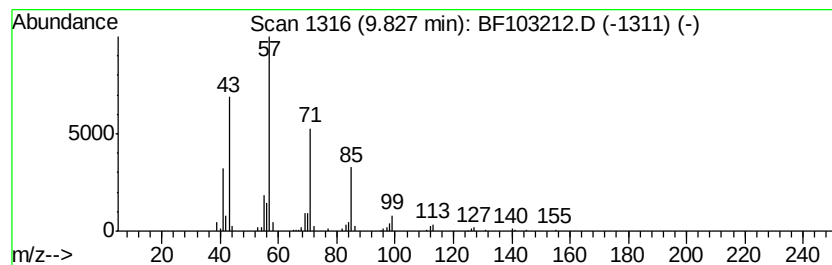
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 5 Hexadecane Concentration Rank 10

| R.T. | EstConc | Area   | Relative to ISTD | R.T. |
|------|---------|--------|------------------|------|
| 9.83 | 2.38 ng | 145133 | Acenaphthene-d10 | 9.91 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Hexadecane                          | 226 | C16H34  | 000544-76-3 | 91   |
| 2    |    | Tetradecane                         | 198 | C14H30  | 000629-59-4 | 86   |
| 3    |    | Heptadecane                         | 240 | C17H36  | 000629-78-7 | 86   |
| 4    |    | Decane, 2,3,5-trimethyl-            | 184 | C13H28  | 062238-11-3 | 83   |
| 5    |    | Heptadecane, 2,6,10,14-tetramethyl- | 296 | C21H44  | 018344-37-1 | 80   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\  
Data File : BF103212.D  
Acq On : 26 Feb 2018 12:21  
Operator : SJ/JU  
Sample : J1648-01  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

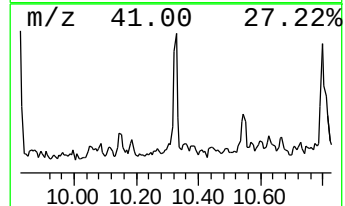
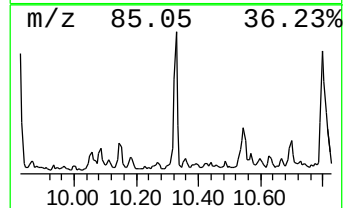
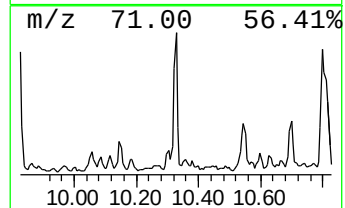
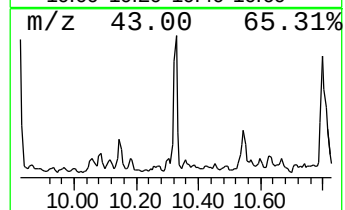
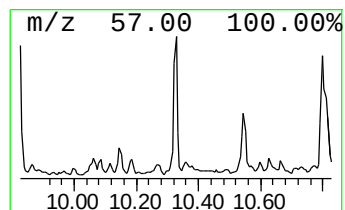
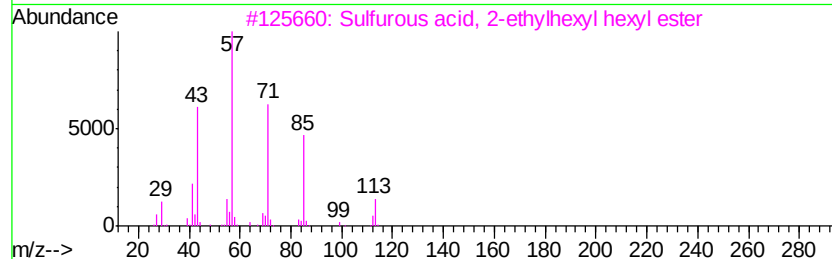
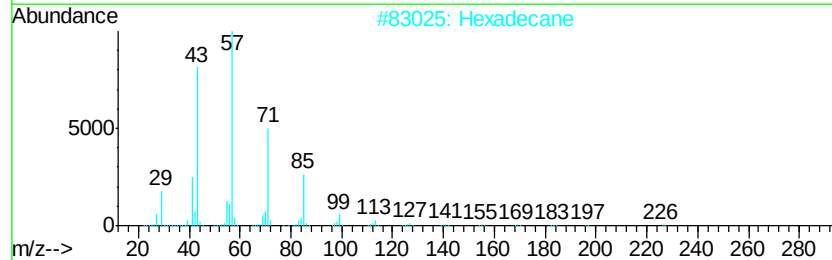
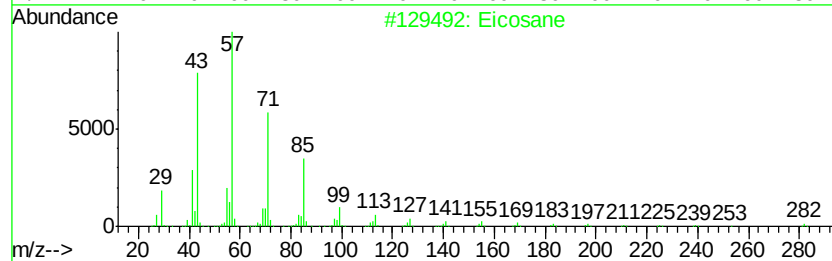
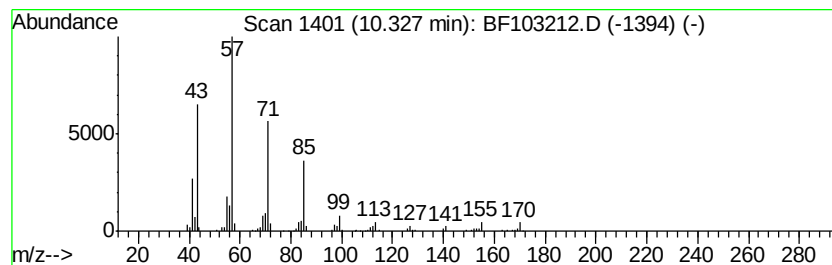
Instrument :  
BNA\_F  
ClientSampleId :  
RO-124031-RO124035

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF022218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 6 Eicosane Concentration Rank 8

| R.T.    | EstConc                             | Area          | Relative to ISTD | R.T.      |
|---------|-------------------------------------|---------------|------------------|-----------|
| 10.33   | 3.31 ng                             | 201822        | Acenaphthene-d10 | 9.91      |
| Hit# of | 5                                   | Tentative ID  | MW MolForm       | CAS# Qual |
| 1       | Eicosane                            | 282 C20H42    | 000112-95-8      | 86        |
| 2       | Hexadecane                          | 226 C16H34    | 000544-76-3      | 86        |
| 3       | Sulfurous acid, 2-ethylhexyl hex... | 278 C14H30O3S | 1000309-20-2     | 80        |
| 4       | Tetradecane                         | 198 C14H30    | 000629-59-4      | 80        |
| 5       | Dodecane                            | 170 C12H26    | 000112-40-3      | 68        |





Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\  
Data File : BF103212.D  
Acq On : 26 Feb 2018 12:21  
Operator : SJ/JU  
Sample : J1648-01  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

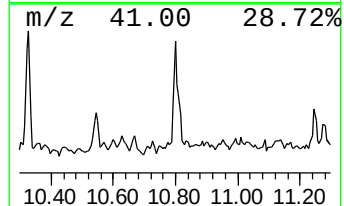
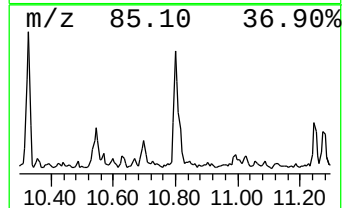
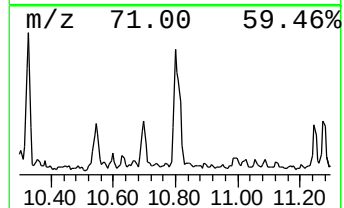
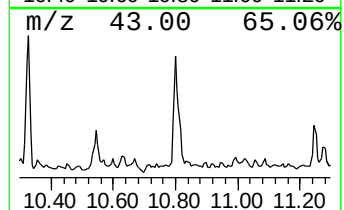
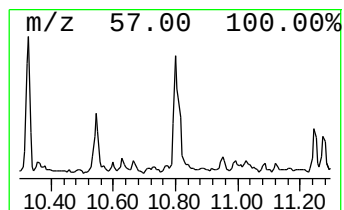
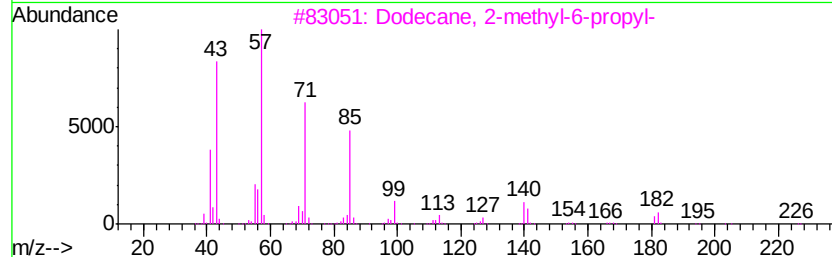
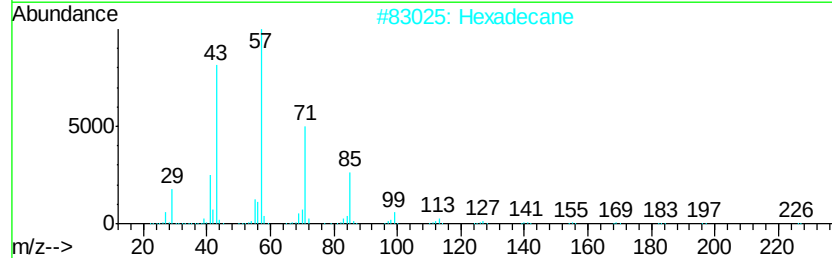
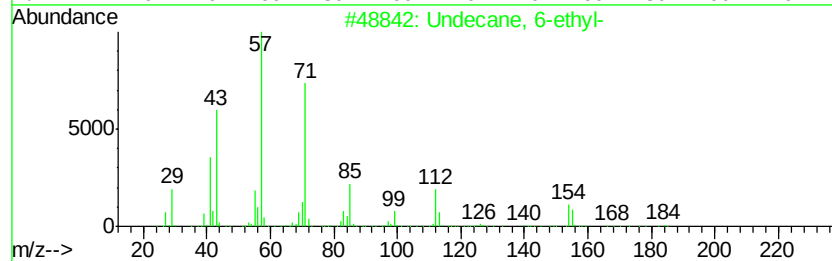
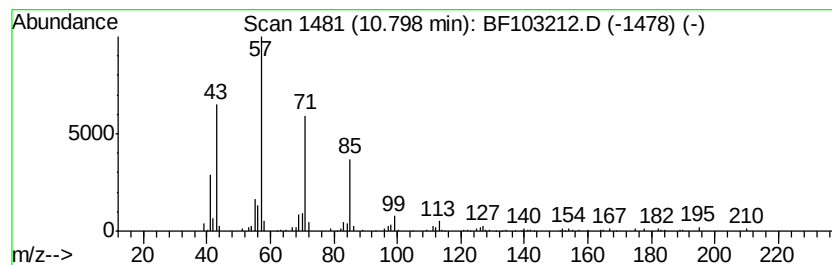
Instrument :  
BNA\_F  
ClientSampleId :  
RO-124031-RO124035

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF022218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 7 Undecane, 6-ethyl- Concentration Rank 6

| R.T.      | EstConc                      | Area   | Relative to ISTD |             | R.T.  |
|-----------|------------------------------|--------|------------------|-------------|-------|
| 10.80     | 4.15 ng                      | 202251 | Phenanthrene-d10 |             | 11.40 |
| Hit# of 5 | Tentative ID                 | MW     | MolForm          | CAS#        | Qual  |
| 1         | Undecane, 6-ethyl-           | 184    | C13H28           | 017312-60-6 | 90    |
| 2         | Hexadecane                   | 226    | C16H34           | 000544-76-3 | 90    |
| 3         | Dodecane, 2-methyl-6-propyl- | 226    | C16H34           | 055045-08-4 | 80    |
| 4         | Heptacosane                  | 380    | C27H56           | 000593-49-7 | 80    |
| 5         | Pentadecane                  | 212    | C15H32           | 000629-62-9 | 78    |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\  
Data File : BF103212.D  
Acq On : 26 Feb 2018 12:21  
Operator : SJ/JU  
Sample : J1648-01  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

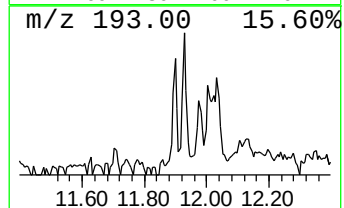
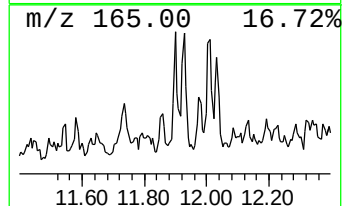
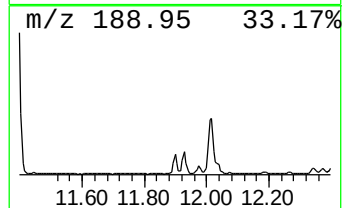
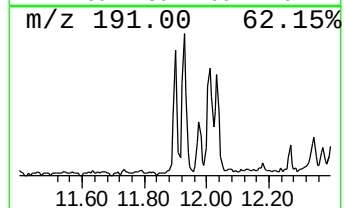
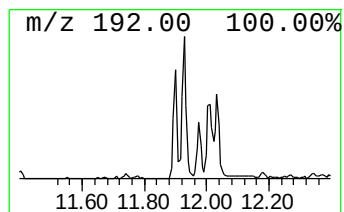
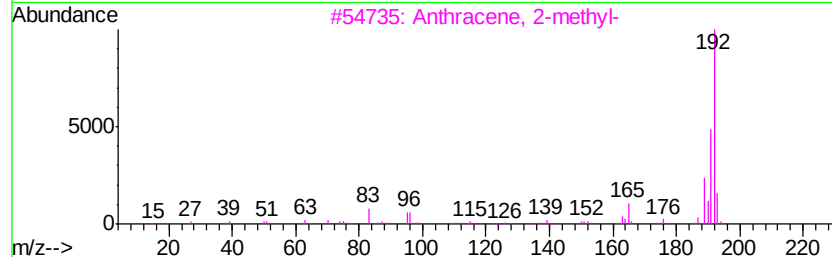
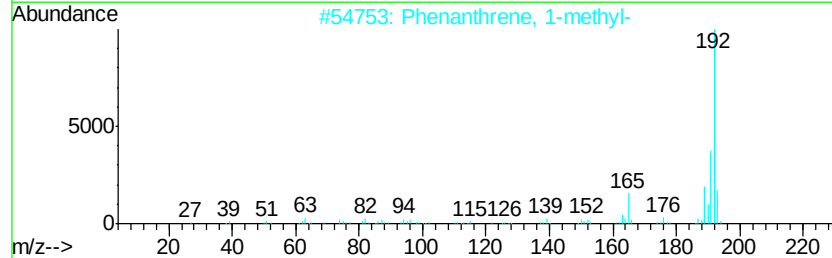
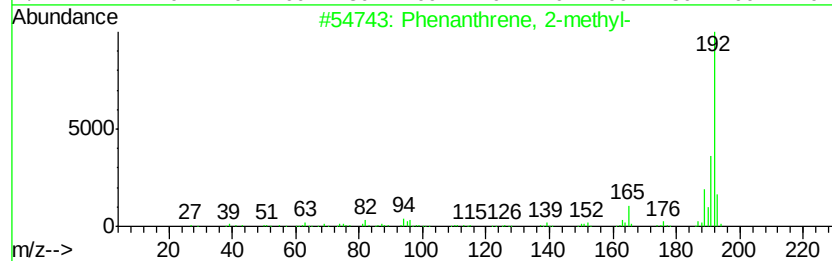
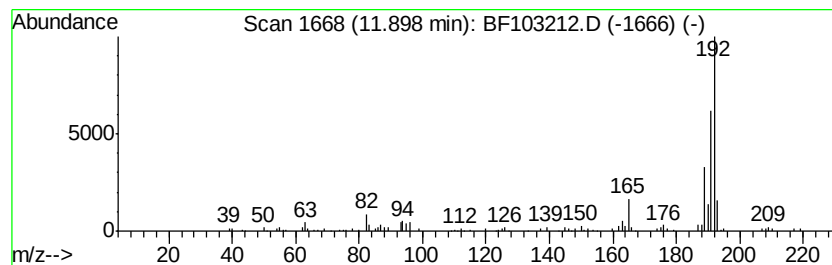
Instrument :  
BNA\_F  
ClientSampleId :  
RO-124031-RO124035

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF022218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 8 Phenanthrene, 2-methyl- Concentration Rank 12

| R.T.      | EstConc                 | Area   | Relative to ISTD |             | R.T.  |
|-----------|-------------------------|--------|------------------|-------------|-------|
| 11.90     | 2.09 ng                 | 102028 | Phenanthrene-d10 |             | 11.40 |
| Hit# of 5 | Tentative ID            | MW     | MolForm          | CAS#        | Qual  |
| 1         | Phenanthrene, 2-methyl- | 192    | C15H12           | 002531-84-2 | 93    |
| 2         | Phenanthrene, 1-methyl- | 192    | C15H12           | 000832-69-9 | 93    |
| 3         | Anthracene, 2-methyl-   | 192    | C15H12           | 000613-12-7 | 92    |
| 4         | 1H-Indene, 2-phenyl-    | 192    | C15H12           | 004505-48-0 | 91    |
| 5         | Anthracene, 9-methyl-   | 192    | C15H12           | 000779-02-2 | 91    |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\  
Data File : BF103212.D  
Acq On : 26 Feb 2018 12:21  
Operator : SJ/JU  
Sample : J1648-01  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

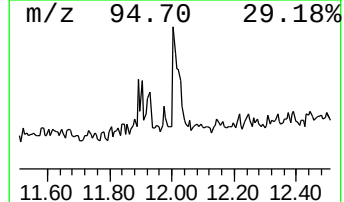
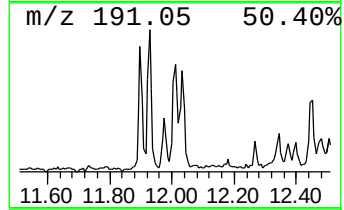
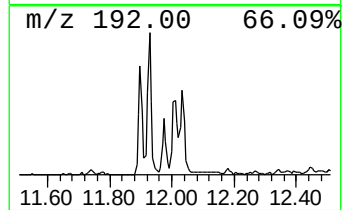
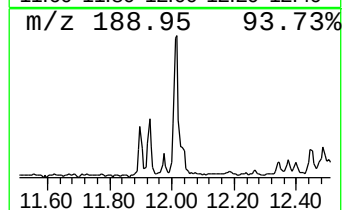
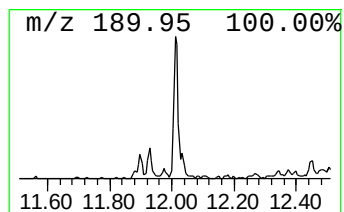
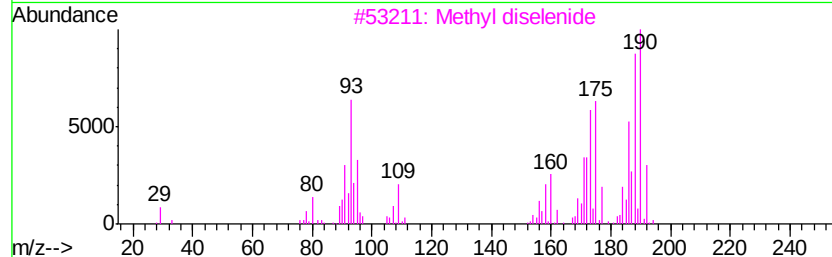
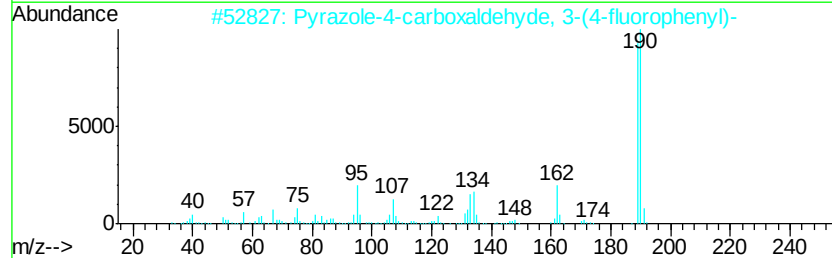
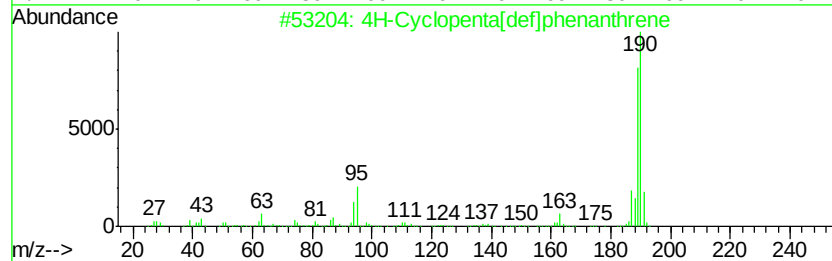
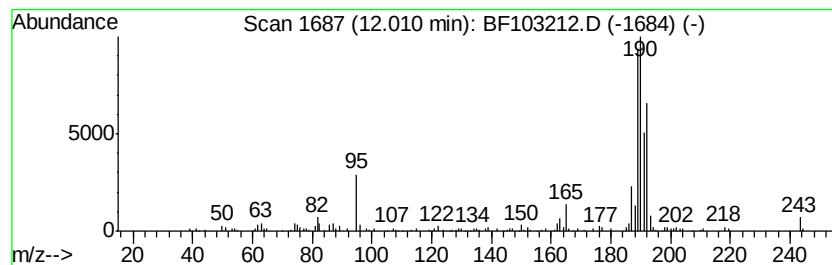
Instrument :  
BNA\_F  
ClientSampleId :  
RO-124031-RO124035

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF022218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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

| R.T.    | EstConc | Area                                | Relative to ISTD |            | R.T.         |      |
|---------|---------|-------------------------------------|------------------|------------|--------------|------|
| 12.01   | 3.20 ng | 155881                              | Phenanthrene-d10 |            | 11.40        |      |
| Hit# of | 5       | Tentative ID                        | MW               | MolForm    | CAS#         | Qual |
| 1       |         | 4H-Cyclopenta[def]phenanthrene      | 190              | C15H10     | 000203-64-5  | 64   |
| 2       |         | Pyrazole-4-carboxaldehyde, 3-(4-... | 190              | C10H7FN2O  | 306936-57-2  | 47   |
| 3       |         | Methyl diselenide                   | 190              | C2H6Se2    | 007101-31-7  | 43   |
| 4       |         | Carbonic acid, ethyl 2-formyl-4,... | 262              | C10H8Cl2O4 | 1000331-34-4 | 40   |
| 5       |         | 9-(Chloromethyl)anthracene          | 226              | C15H11Cl   | 024463-19-2  | 38   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF022618\  
Data File : BF103212.D  
Acq On : 26 Feb 2018 12:21  
Operator : SJ/JU  
Sample : J1648-01  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
RO-124031-RO124035

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF022218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

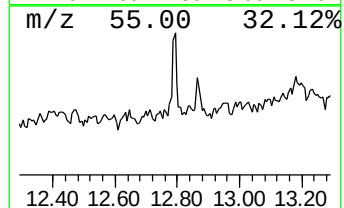
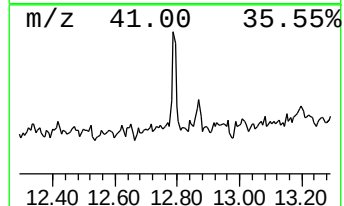
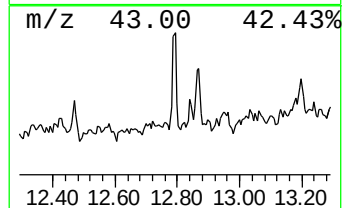
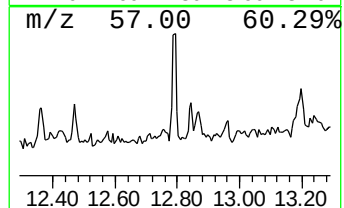
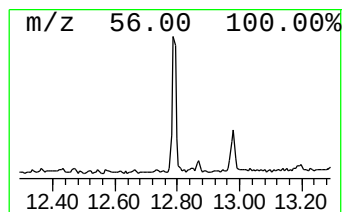
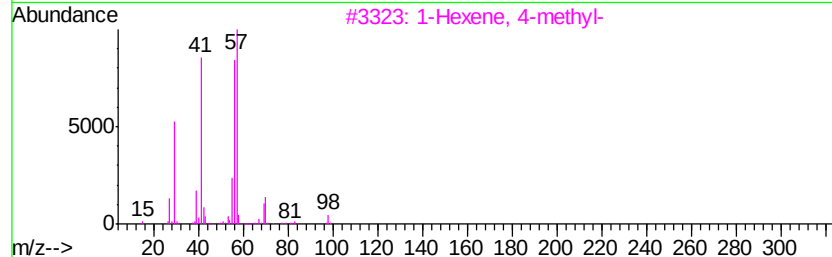
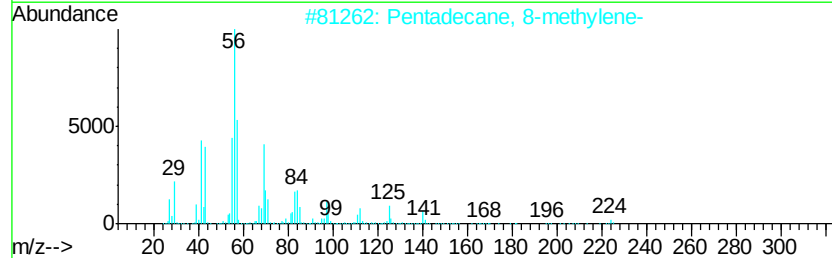
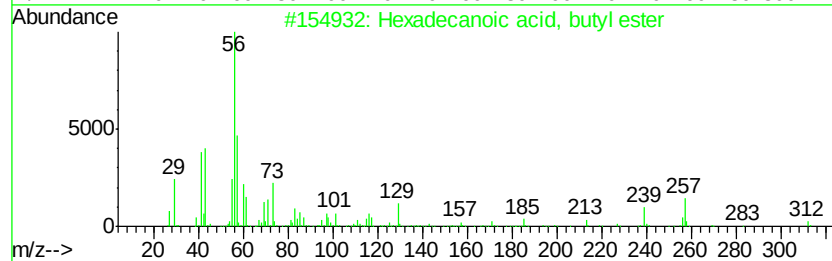
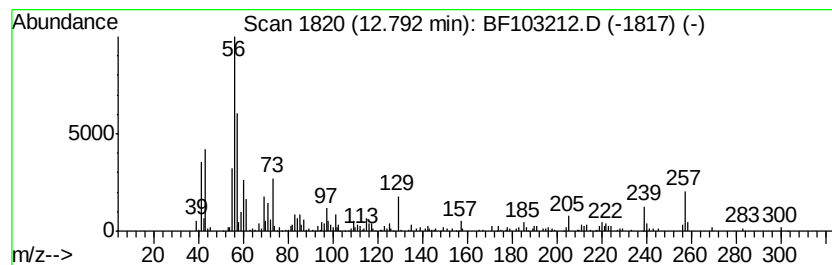
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 10 Hexadecanoic acid, butyl ester Concentration Rank 11

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 12.79 | 2.31 ng | 147105 | Chrysene-d12     | 14.04 |

| Hit# | of | 5 | Tentative ID                     | MW  | MolForm  | CAS#        | Qual |
|------|----|---|----------------------------------|-----|----------|-------------|------|
| 1    |    |   | Hexadecanoic acid, butyl ester   | 312 | C20H40O2 | 000111-06-8 | 90   |
| 2    |    |   | Pentadecane, 8-methylene-        | 224 | C16H32   | 055668-09-2 | 38   |
| 3    |    |   | 1-Hexene, 4-methyl-              | 98  | C7H14    | 003769-23-1 | 38   |
| 4    |    |   | 2,4-Dipropyl-5-ethyl-1,3-dioxane | 200 | C12H24O2 | 006413-83-8 | 37   |
| 5    |    |   | Pentanal, 3-methyl-              | 100 | C6H12O   | 015877-57-3 | 35   |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\  
Data File : BF103212.D  
Acq On : 26 Feb 2018 12:21  
Operator : SJ/JU  
Sample : J1648-01  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

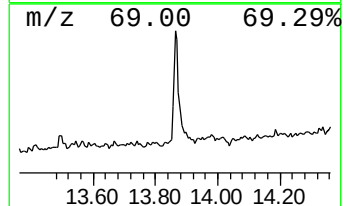
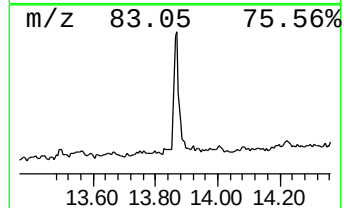
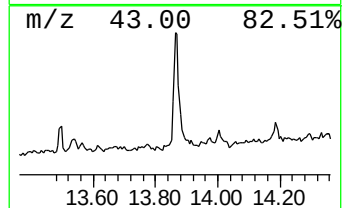
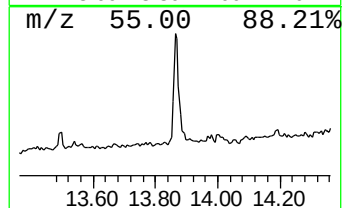
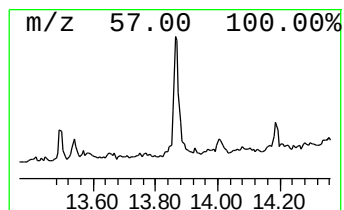
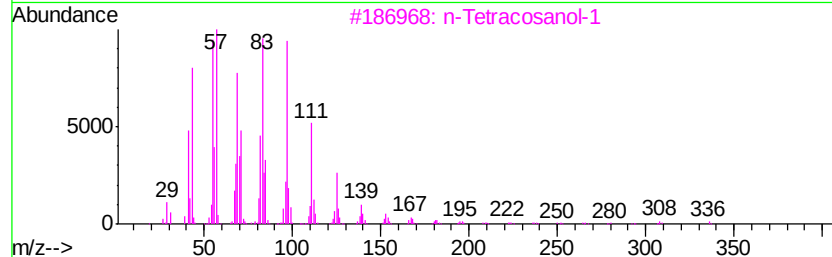
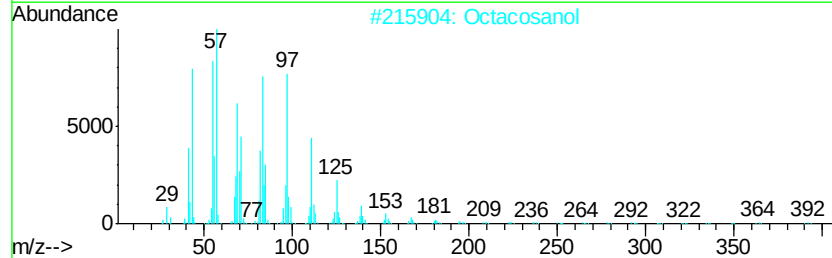
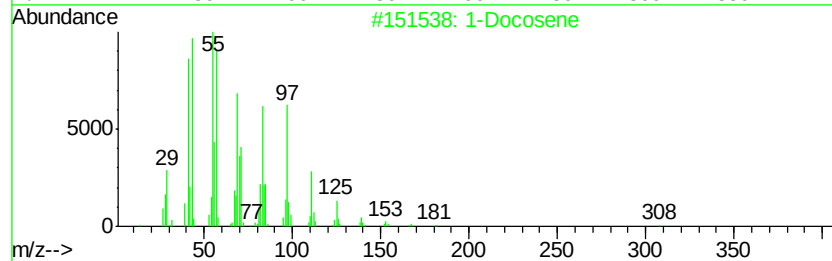
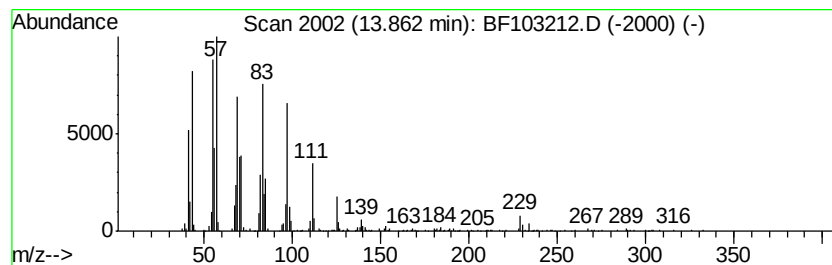
Instrument :  
BNA\_F  
ClientSampleId :  
RO-124031-RO124035

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF022218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 11 1-Docosene Concentration Rank 4

| R.T.      | EstConc          | Area   | Relative to ISTD |             | R.T.  |
|-----------|------------------|--------|------------------|-------------|-------|
| 13.86     | 8.37 ng          | 532977 | Chrysene-d12     |             | 14.04 |
| Hit# of 5 | Tentative ID     | MW     | MolForm          | CAS#        | Qual  |
| 1         | 1-Docosene       | 308    | C22H44           | 001599-67-3 | 98    |
| 2         | Octacosanol      | 410    | C28H58O          | 000557-61-9 | 91    |
| 3         | n-Tetracosanol-1 | 354    | C24H50O          | 000506-51-4 | 91    |
| 4         | Behenic alcohol  | 326    | C22H46O          | 000661-19-8 | 91    |
| 5         | 5-Eicosene, (E)- | 280    | C20H40           | 074685-30-6 | 90    |



Data Path : Z:\HPCHEM1\BNA F\DATA\BF022618\  
Data File : BF103212.D  
Acq On : 26 Feb 2018 12:21  
Operator : SJ/JU  
Sample : J1648-01  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
RO-124031-RO124035

Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF022218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

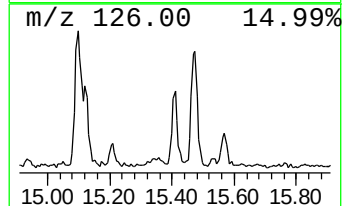
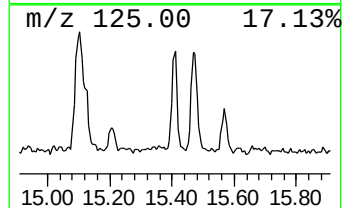
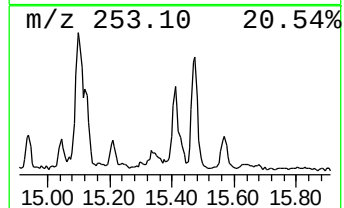
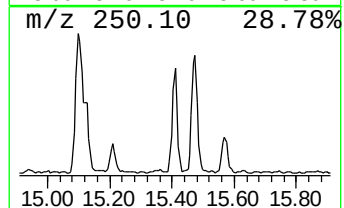
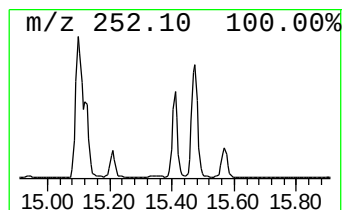
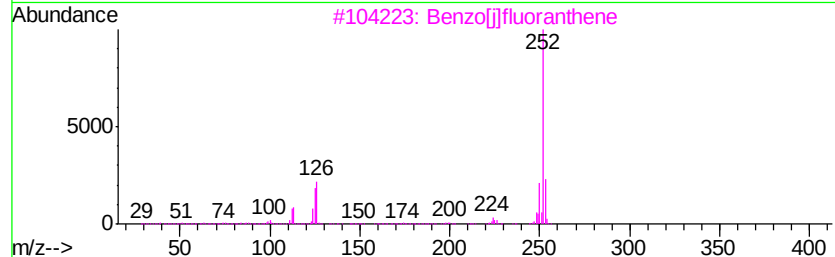
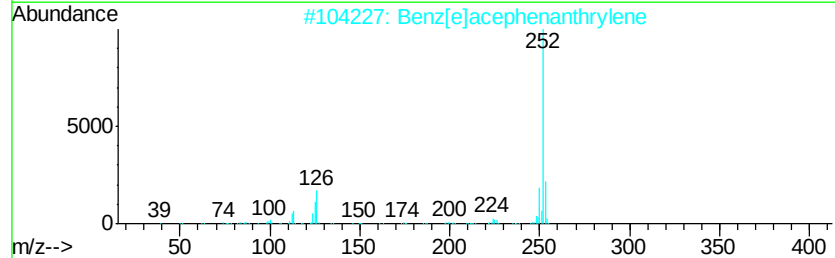
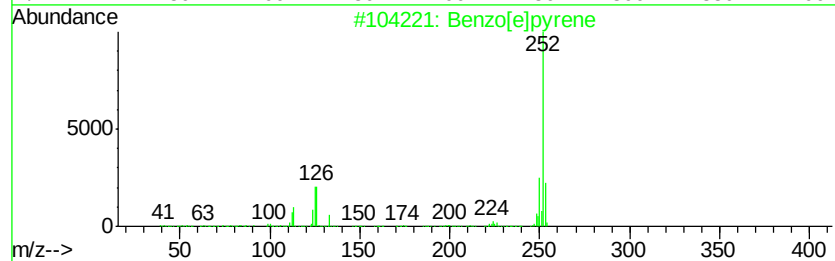
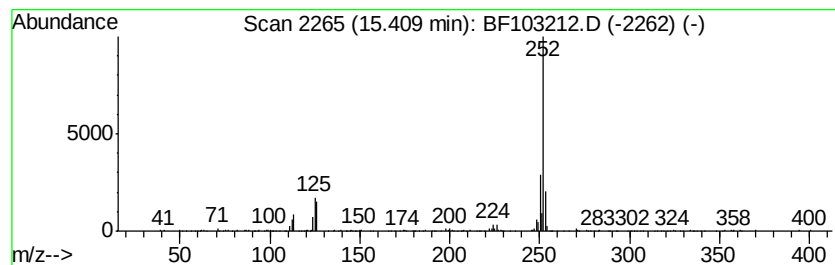
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 12 Benzo[e]pyrene Concentration Rank 5

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 15.41 | 6.84 ng | 279650 | Perylene-d12     | 15.54 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzo[e]pyrene            | 252 | C20H12  | 000192-97-2 | 98   |
| 2    |    | Benzo[e]acephenanthrylene | 252 | C20H12  | 000205-99-2 | 98   |
| 3    |    | Benzo[i]fluoranthene      | 252 | C20H12  | 000205-82-3 | 96   |
| 4    |    | Benzo[a]pyrene            | 252 | C20H12  | 000050-32-8 | 95   |
| 5    |    | Benzo[k]fluoranthene      | 252 | C20H12  | 000207-08-9 | 94   |



Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF022618\  
Data File : BF103212.D  
Acq On : 26 Feb 2018 12:21  
Operator : SJ/JU  
Sample : J1648-01  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
RO-124031-RO124035

Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF022218.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 |
| Butane, 2-methoxy... | 2.15  | 30.6    | ng    | 1469110  | 1                     | 6.87  | 959038  | 20.0 |
| 2-Pentanone, 4-hy... | 5.10  | 4.1     | ng    | 196287   | 1                     | 6.87  | 959038  | 20.0 |
| unknown6.64          | 6.64  | 72.3    | ng    | 3469240  | 1                     | 6.87  | 959038  | 20.0 |
| Hexadecane           | 9.83  | 2.4     | ng    | 145133   | 3                     | 9.91  | 1217700 | 20.0 |
| Eicosane             | 10.33 | 3.3     | ng    | 201822   | 3                     | 9.91  | 1217700 | 20.0 |
| Undecane, 6-ethyl-   | 10.80 | 4.2     | ng    | 202251   | 4                     | 11.40 | 974713  | 20.0 |
| Phenanthrene, 2-m... | 11.90 | 2.1     | ng    | 102028   | 4                     | 11.40 | 974713  | 20.0 |
| 4H-Cyclopenta[def... | 12.01 | 3.2     | ng    | 155881   | 4                     | 11.40 | 974713  | 20.0 |
| Hexadecanoic acid... | 12.79 | 2.3     | ng    | 147105   | 5                     | 14.04 | 1272880 | 20.0 |
| 1-Docosene           | 13.86 | 8.4     | ng    | 532977   | 5                     | 14.04 | 1272880 | 20.0 |
| Benzo[e]pyrene       | 15.41 | 6.8     | ng    | 279650   | 6                     | 15.54 | 817325  | 20.0 |