

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF091118\  
 Data File : BF108940.D  
 Acq On : 11 Sep 2018 17:30  
 Operator : JU/SJ  
 Sample : J4842-01 5X  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SG-SOIL

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-BF090518.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 5.337       | 506           | 510         | 520          | rVB      | 485252         | 439421        | 19.22%          | 0.892%        |
| 2         | 5.995       | 619           | 622         | 628          | rVB2     | 88928          | 100334        | 4.39%           | 0.204%        |
| 3         | 6.278       | 667           | 670         | 678          | rVB4     | 99504          | 149782        | 6.55%           | 0.304%        |
| 4         | 6.360       | 678           | 684         | 688          | rBV      | 603459         | 541665        | 23.70%          | 1.100%        |
| 5         | 6.501       | 702           | 708         | 711          | rBV      | 611109         | 646507        | 28.28%          | 1.312%        |
| 6         | 6.590       | 720           | 723         | 725          | rBV      | 111750         | 95701         | 4.19%           | 0.194%        |
| 7         | 6.737       | 743           | 748         | 751          | rVV      | 1360269        | 1135386       | 49.67%          | 2.305%        |
| 8         | 6.766       | 751           | 753         | 756          | rVB      | 292911         | 236077        | 10.33%          | 0.479%        |
| 9         | 6.801       | 756           | 759         | 763          | rBV2     | 163556         | 208417        | 9.12%           | 0.423%        |
| 10        | 6.895       | 772           | 775         | 779          | rVV3     | 576132         | 593024        | 25.95%          | 1.204%        |
| 11        | 7.019       | 793           | 796         | 800          | rVB3     | 187913         | 268194        | 11.73%          | 0.544%        |
| 12        | 7.060       | 800           | 803         | 806          | rVB2     | 227209         | 177923        | 7.78%           | 0.361%        |
| 13        | 7.095       | 806           | 809         | 812          | rBV3     | 180246         | 197822        | 8.65%           | 0.402%        |
| 14        | 7.137       | 813           | 816         | 819          | rBV      | 393741         | 335212        | 14.67%          | 0.681%        |
| 15        | 7.289       | 835           | 842         | 845          | rBV3     | 549251         | 834133        | 36.49%          | 1.693%        |
| 16        | 7.331       | 846           | 849         | 850          | rVV2     | 133245         | 118622        | 5.19%           | 0.241%        |
| 17        | 7.348       | 850           | 852         | 855          | rVB2     | 166145         | 154918        | 6.78%           | 0.315%        |
| 18        | 7.389       | 855           | 859         | 863          | rBV4     | 328980         | 507558        | 22.21%          | 1.030%        |
| 19        | 7.431       | 863           | 866         | 867          | rBV2     | 146154         | 141621        | 6.20%           | 0.288%        |
| 20        | 7.466       | 869           | 872         | 874          | rVB2     | 186573         | 181124        | 7.92%           | 0.368%        |
| 21        | 7.513       | 876           | 880         | 882          | rBV3     | 219353         | 262311        | 11.48%          | 0.533%        |
| 22        | 7.554       | 882           | 887         | 891          | rVB3     | 396241         | 592204        | 25.91%          | 1.202%        |
| 23        | 7.648       | 895           | 903         | 905          | rBV5     | 353307         | 635158        | 27.79%          | 1.289%        |
| 24        | 7.666       | 905           | 906         | 911          | rVB3     | 464415         | 475942        | 20.82%          | 0.966%        |
| 25        | 7.713       | 911           | 914         | 918          | rBV2     | 280217         | 378945        | 16.58%          | 0.769%        |
| 26        | 7.754       | 918           | 921         | 925          | rBV3     | 281803         | 412412        | 18.04%          | 0.837%        |
| 27        | 7.789       | 925           | 927         | 930          | rVB3     | 294658         | 301169        | 13.18%          | 0.611%        |
| 28        | 7.831       | 932           | 934         | 936          | rBV2     | 267375         | 229618        | 10.05%          | 0.466%        |
| 29        | 7.854       | 936           | 938         | 942          | rVB4     | 270390         | 318279        | 13.92%          | 0.646%        |
| 30        | 7.895       | 942           | 945         | 947          | rBV      | 261976         | 263127        | 11.51%          | 0.534%        |
| 31        | 7.919       | 947           | 949         | 950          | rBV2     | 128663         | 95478         | 4.18%           | 0.194%        |
| 32        | 7.972       | 955           | 958         | 959          | rBV      | 220795         | 192356        | 8.42%           | 0.391%        |
| 33        | 7.984       | 959           | 960         | 962          | rVB      | 187245         | 117102        | 5.12%           | 0.238%        |
| 34        | 8.019       | 962           | 966         | 969          | rBV      | 1964282        | 1830916       | 80.10%          | 3.717%        |

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF091118\  
 Data File : BF108940.D  
 Acq On : 11 Sep 2018 17:30  
 Operator : JU/SJ  
 Sample : J4842-01 5X  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SG-SOIL

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-BF090518.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |       |      |      |      |      |         |         |         |        |
|----|-------|------|------|------|------|---------|---------|---------|--------|
| 35 | 8.078 | 974  | 976  | 978  | rVV3 | 207804  | 145520  | 6.37%   | 0.295% |
| 36 | 8.101 | 978  | 980  | 982  | rVB  | 1002436 | 680026  | 29.75%  | 1.381% |
| 37 | 8.119 | 982  | 983  | 987  | rVB3 | 200178  | 173242  | 7.58%   | 0.352% |
| 38 | 8.154 | 987  | 989  | 991  | rVB2 | 254018  | 197986  | 8.66%   | 0.402% |
| 39 | 8.201 | 991  | 997  | 1001 | rBV6 | 318369  | 577717  | 25.28%  | 1.173% |
| 40 | 8.236 | 1001 | 1003 | 1006 | rBV  | 373533  | 275385  | 12.05%  | 0.559% |
| 41 | 8.325 | 1013 | 1018 | 1021 | rBV6 | 664492  | 915532  | 40.05%  | 1.859% |
| 42 | 8.348 | 1021 | 1022 | 1025 | rVB2 | 273819  | 189948  | 8.31%   | 0.386% |
| 43 | 8.378 | 1025 | 1027 | 1030 | rBV2 | 500470  | 402668  | 17.62%  | 0.817% |
| 44 | 8.413 | 1030 | 1033 | 1037 | rVB5 | 277486  | 355038  | 15.53%  | 0.721% |
| 45 | 8.460 | 1038 | 1041 | 1045 | rBV  | 1781786 | 1794425 | 78.51%  | 3.643% |
| 46 | 8.489 | 1045 | 1046 | 1049 | rVB3 | 404753  | 339188  | 14.84%  | 0.689% |
| 47 | 8.531 | 1050 | 1053 | 1056 | rBV3 | 313646  | 310615  | 13.59%  | 0.631% |
| 48 | 8.572 | 1058 | 1060 | 1066 | rBV5 | 261206  | 308689  | 13.51%  | 0.627% |
| 49 | 8.625 | 1066 | 1069 | 1070 | rBV2 | 203826  | 190717  | 8.34%   | 0.387% |
| 50 | 8.719 | 1082 | 1085 | 1089 | rVB3 | 747291  | 1018582 | 44.56%  | 2.068% |
| 51 | 8.772 | 1092 | 1094 | 1096 | rBV3 | 270396  | 269666  | 11.80%  | 0.547% |
| 52 | 8.907 | 1115 | 1117 | 1119 | rBV3 | 374845  | 385502  | 16.87%  | 0.783% |
| 53 | 8.936 | 1120 | 1122 | 1127 | rVB3 | 541198  | 661167  | 28.93%  | 1.342% |
| 54 | 9.060 | 1139 | 1143 | 1145 | rVB  | 1967212 | 1697352 | 74.26%  | 3.446% |
| 55 | 9.095 | 1145 | 1149 | 1152 | rVB2 | 648043  | 603807  | 26.42%  | 1.226% |
| 56 | 9.183 | 1161 | 1164 | 1166 | rBV2 | 610035  | 742490  | 32.48%  | 1.507% |
| 57 | 9.272 | 1177 | 1179 | 1181 | rVB3 | 262965  | 177424  | 7.76%   | 0.360% |
| 58 | 9.354 | 1190 | 1193 | 1196 | rBV  | 601645  | 749692  | 32.80%  | 1.522% |
| 59 | 9.407 | 1200 | 1202 | 1204 | rBV3 | 308340  | 309621  | 13.55%  | 0.629% |
| 60 | 9.431 | 1204 | 1206 | 1209 | rVV  | 723035  | 766903  | 33.55%  | 1.557% |
| 61 | 9.460 | 1209 | 1211 | 1214 | rVB  | 791191  | 651705  | 28.51%  | 1.323% |
| 62 | 9.489 | 1214 | 1216 | 1217 | rBV2 | 702808  | 548039  | 23.98%  | 1.113% |
| 63 | 9.513 | 1217 | 1220 | 1222 | rVB  | 2329364 | 1855203 | 81.17%  | 3.766% |
| 64 | 9.548 | 1222 | 1226 | 1228 | rBV3 | 351994  | 367868  | 16.09%  | 0.747% |
| 65 | 9.619 | 1236 | 1238 | 1240 | rBV2 | 182480  | 168653  | 7.38%   | 0.342% |
| 66 | 9.689 | 1248 | 1250 | 1253 | rVB  | 854588  | 730171  | 31.95%  | 1.482% |
| 67 | 9.725 | 1253 | 1256 | 1259 | rBV4 | 219950  | 299062  | 13.08%  | 0.607% |
| 68 | 9.772 | 1259 | 1264 | 1267 | rBV2 | 1841063 | 2285695 | 100.00% | 4.640% |
| 69 | 9.878 | 1279 | 1282 | 1287 | rVB  | 459380  | 744309  | 32.56%  | 1.511% |
| 70 | 9.919 | 1287 | 1289 | 1290 | rBV  | 172368  | 124504  | 5.45%   | 0.253% |
| 71 | 9.978 | 1296 | 1299 | 1302 | rVB2 | 649523  | 626822  | 27.42%  | 1.273% |

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF091118\  
 Data File : BF108940.D  
 Acq On : 11 Sep 2018 17:30  
 Operator : JU/SJ  
 Sample : J4842-01 5X  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SG-SOIL

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-BF090518.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|     |        |      |      |      |      |         |         |        |        |
|-----|--------|------|------|------|------|---------|---------|--------|--------|
| 72  | 10.013 | 1302 | 1305 | 1307 | rVB  | 591228  | 516098  | 22.58% | 1.048% |
| 73  | 10.042 | 1307 | 1310 | 1315 | rVB2 | 770894  | 686904  | 30.05% | 1.395% |
| 74  | 10.089 | 1315 | 1318 | 1320 | rBV  | 520935  | 514745  | 22.52% | 1.045% |
| 75  | 10.113 | 1320 | 1322 | 1325 | rVB  | 473942  | 408314  | 17.86% | 0.829% |
| 76  | 10.142 | 1325 | 1327 | 1329 | rBV2 | 190041  | 198566  | 8.69%  | 0.403% |
| 77  | 10.236 | 1341 | 1343 | 1345 | rBV2 | 172782  | 177223  | 7.75%  | 0.360% |
| 78  | 10.313 | 1353 | 1356 | 1358 | rBV2 | 345369  | 298654  | 13.07% | 0.606% |
| 79  | 10.336 | 1358 | 1360 | 1363 | rVV2 | 323842  | 365288  | 15.98% | 0.742% |
| 80  | 10.378 | 1365 | 1367 | 1369 | rVB2 | 236211  | 181602  | 7.95%  | 0.369% |
| 81  | 10.436 | 1374 | 1377 | 1380 | rVB  | 1198986 | 1148530 | 50.25% | 2.332% |
| 82  | 10.548 | 1393 | 1396 | 1400 | rVB4 | 484754  | 492189  | 21.53% | 0.999% |
| 83  | 10.595 | 1401 | 1404 | 1407 | rVV3 | 186482  | 211639  | 9.26%  | 0.430% |
| 84  | 10.642 | 1410 | 1412 | 1414 | rBV2 | 89076   | 88018   | 3.85%  | 0.179% |
| 85  | 10.701 | 1417 | 1422 | 1427 | rVV  | 1989182 | 2054311 | 89.88% | 4.171% |
| 86  | 10.754 | 1429 | 1431 | 1434 | rVB  | 162720  | 128263  | 5.61%  | 0.260% |
| 87  | 10.889 | 1451 | 1454 | 1456 | rVV4 | 159974  | 158185  | 6.92%  | 0.321% |
| 88  | 10.913 | 1456 | 1458 | 1461 | rVB3 | 158830  | 137011  | 5.99%  | 0.278% |
| 89  | 11.166 | 1497 | 1501 | 1507 | rVB  | 558758  | 609752  | 26.68% | 1.238% |
| 90  | 11.248 | 1511 | 1515 | 1517 | rVV  | 1539011 | 1321356 | 57.81% | 2.683% |
| 91  | 11.513 | 1557 | 1560 | 1565 | rVB2 | 118224  | 125129  | 5.47%  | 0.254% |
| 92  | 11.607 | 1573 | 1576 | 1581 | rVB6 | 75189   | 103990  | 4.55%  | 0.211% |
| 93  | 11.772 | 1602 | 1604 | 1609 | rVB  | 117046  | 110212  | 4.82%  | 0.224% |
| 94  | 12.295 | 1690 | 1693 | 1696 | rVV  | 81832   | 93349   | 4.08%  | 0.190% |
| 95  | 12.501 | 1725 | 1728 | 1731 | rVB  | 401277  | 306088  | 13.39% | 0.621% |
| 96  | 12.824 | 1780 | 1783 | 1790 | rVB  | 419846  | 385892  | 16.88% | 0.783% |
| 97  | 13.871 | 1957 | 1961 | 1964 | rBV  | 1330728 | 1198379 | 52.43% | 2.433% |
| 98  | 15.283 | 2196 | 2201 | 2205 | rVV  | 1072744 | 1220245 | 53.39% | 2.477% |
| 99  | 15.336 | 2207 | 2210 | 2214 | rVB  | 90595   | 107223  | 4.69%  | 0.218% |
| 100 | 15.742 | 2276 | 2279 | 2284 | rBV2 | 72928   | 101324  | 4.43%  | 0.206% |

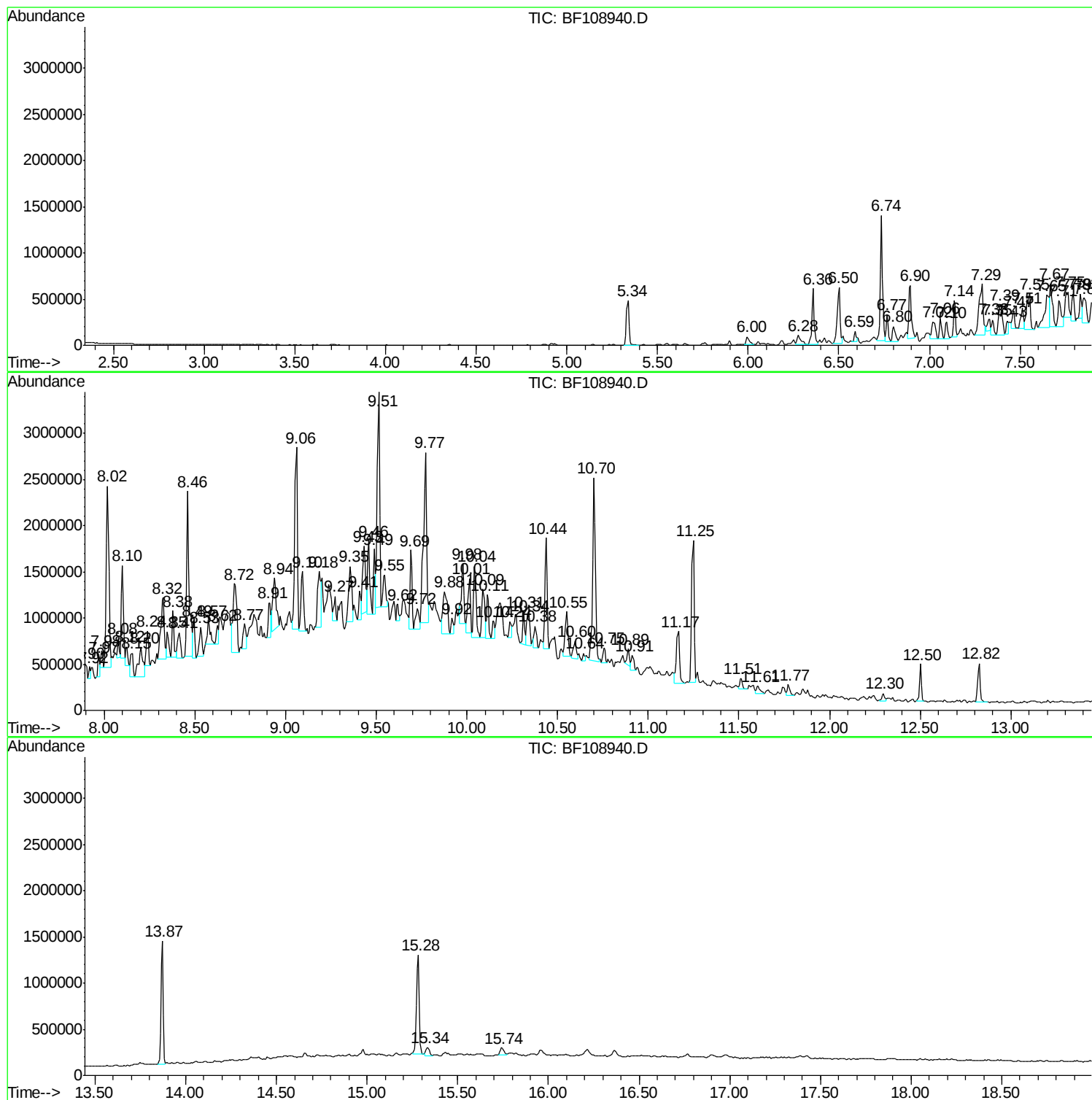
Sum of corrected areas: 49257870

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampled :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.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\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

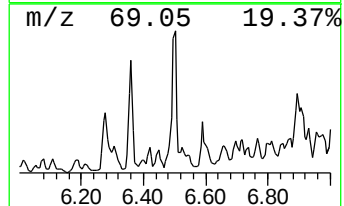
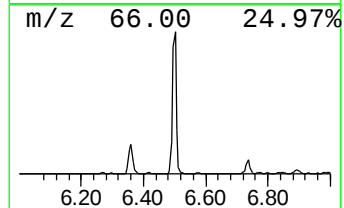
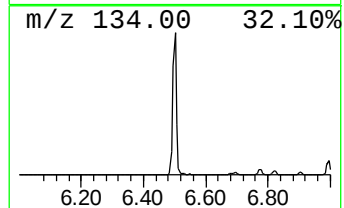
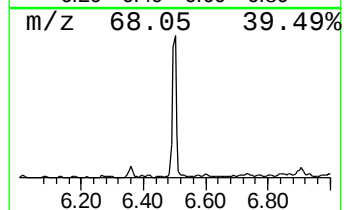
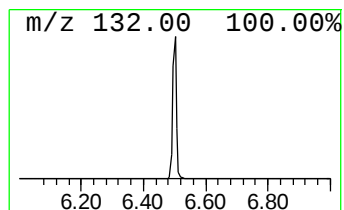
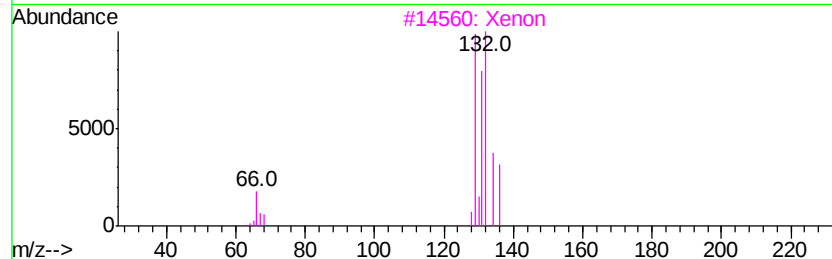
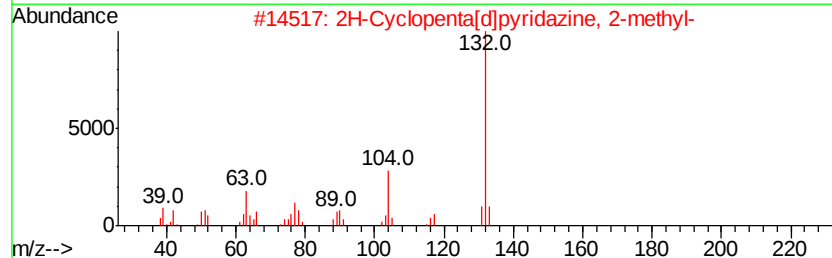
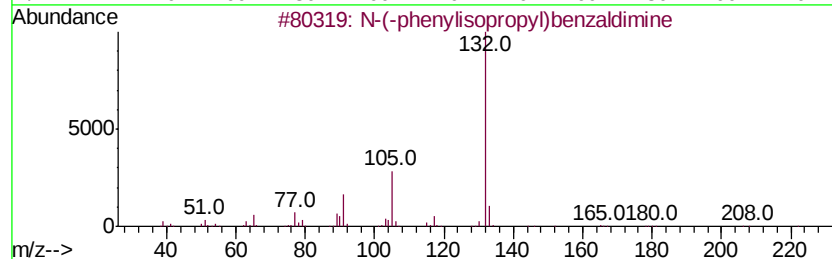
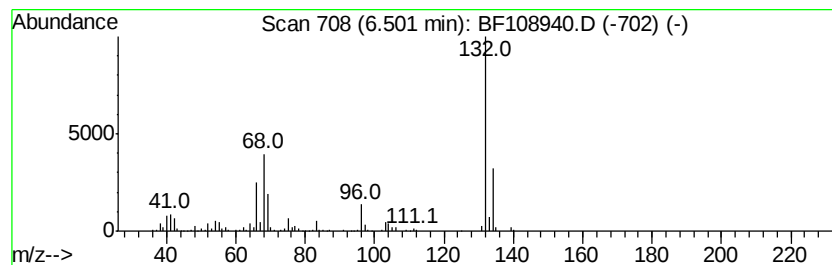
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 1 unknown6.50 Concentration Rank 3

| R.T. | EstConc  | Area   | Relative to ISTD       | R.T. |
|------|----------|--------|------------------------|------|
| 6.50 | 11.39 ng | 646507 | 1,4-Dichlorobenzene-d4 | 6.74 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | N-(-phenylisopropyl)benzalimine     | 223 | C16H17N   | 1000379-01-3 | 10   |
| 2    |    | 2H-Cyclopenta[d]pyridazine, 2-me... | 132 | C8H8N2    | 022291-85-6  | 9    |
| 3    |    | Xenon                               | 132 | Xe        | 007440-63-3  | 9    |
| 4    |    | 4-Chloro-6-fluoro-pyrimidine        | 132 | C4H2ClFN2 | 051422-01-6  | 9    |
| 5    |    | (E)-3-Chloro-2-methyl-2-pentenal    | 132 | C6H9ClO   | 031357-76-3  | 9    |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampled :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

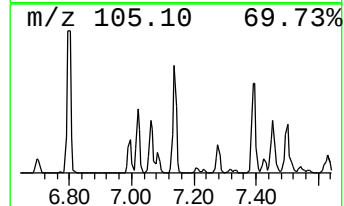
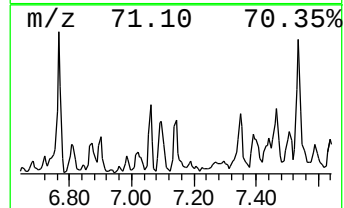
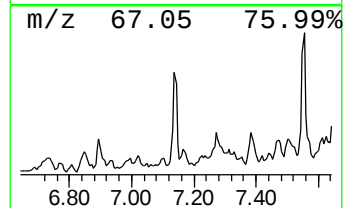
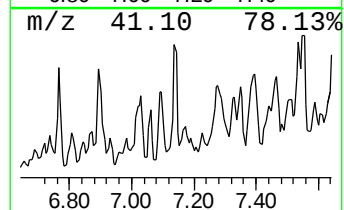
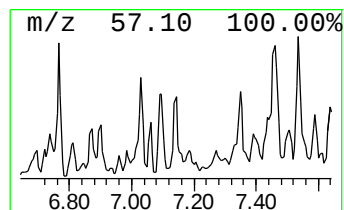
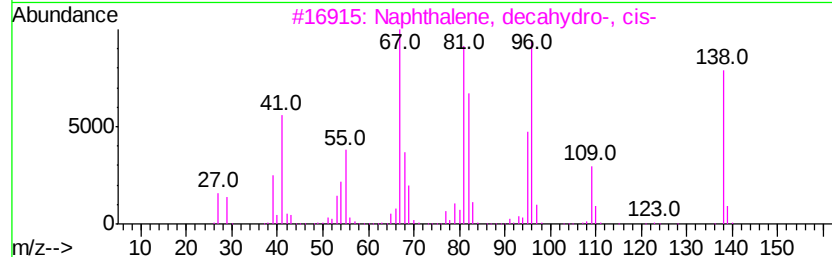
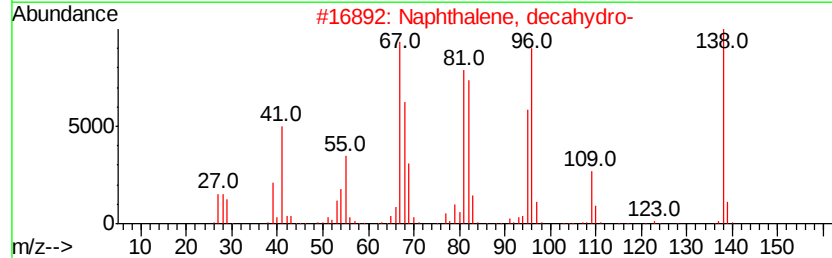
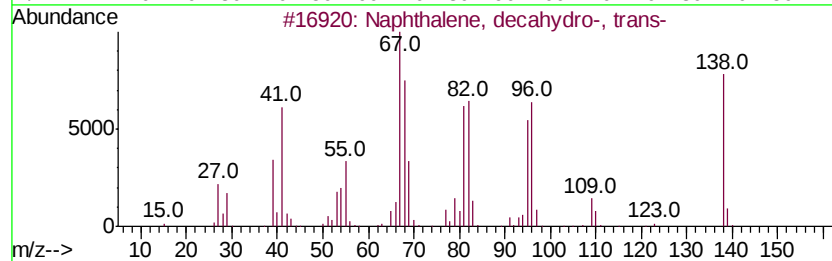
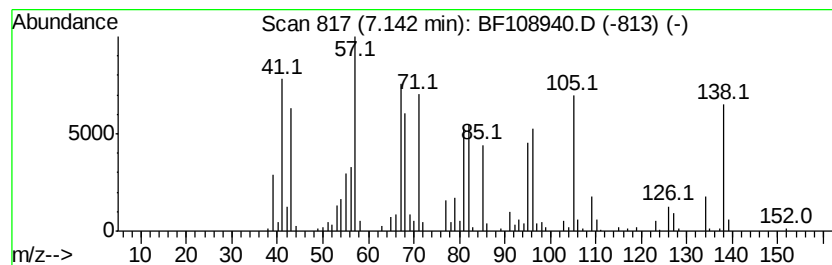
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 3 Naphthalene, decahydro-, tr... Concentration Rank 19

| R.T. | EstConc | Area   | Relative to ISTD       | R.T. |
|------|---------|--------|------------------------|------|
| 7.14 | 5.90 ng | 335212 | 1,4-Dichlorobenzene-d4 | 6.74 |

| Hit# | of | Tentative ID                    | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, decahydro-, trans- | 138 | C10H18  | 000493-02-7 | 89   |
| 2    |    | Naphthalene, decahydro-         | 138 | C10H18  | 000091-17-8 | 70   |
| 3    |    | Naphthalene, decahydro-, cis-   | 138 | C10H18  | 000493-01-6 | 70   |
| 4    |    | Cyclodecene                     | 138 | C10H18  | 003618-12-0 | 62   |
| 5    |    | 1,1'-Bicyclopentyl              | 138 | C10H18  | 001636-39-1 | 53   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

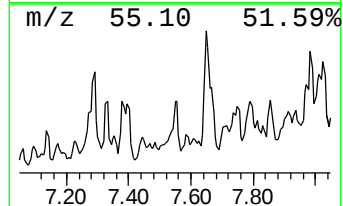
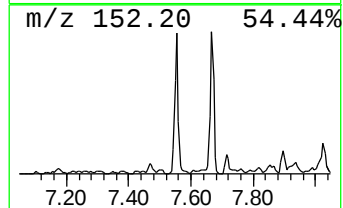
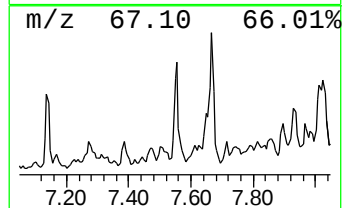
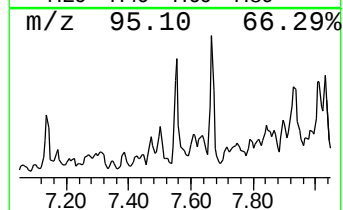
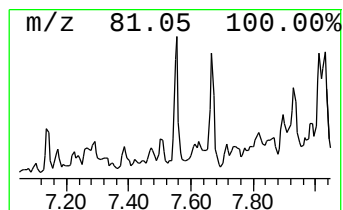
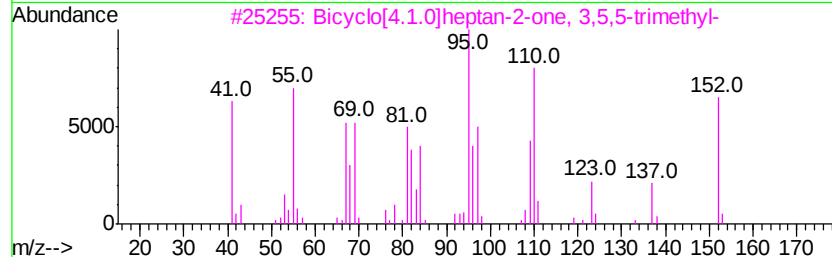
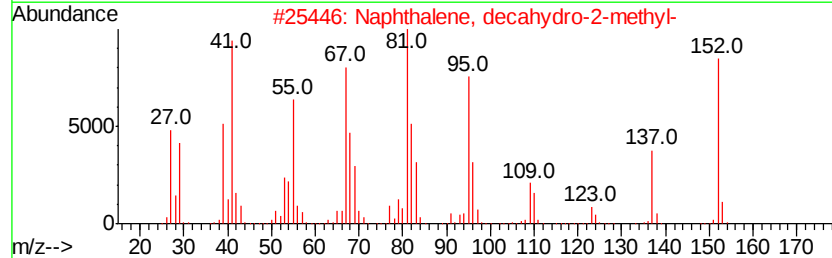
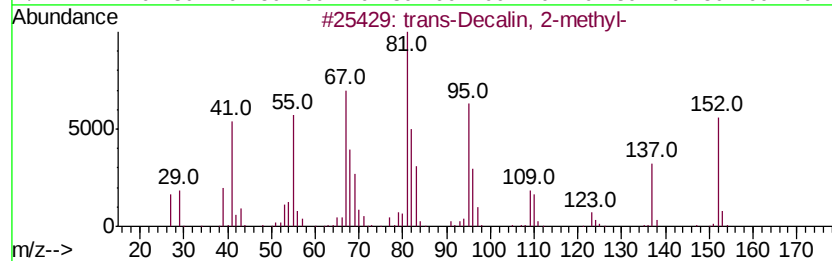
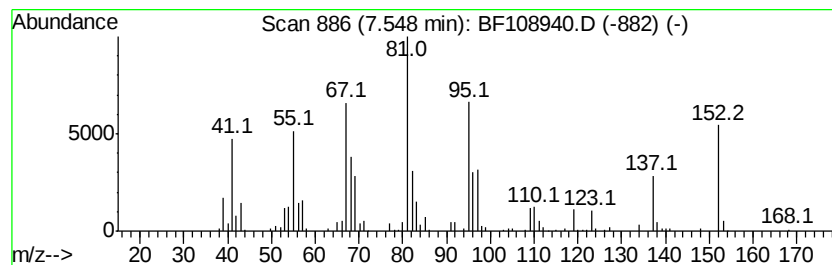
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 4 trans-Decalin, 2-methyl- Concentration Rank 15

| R.T. | EstConc | Area   | Relative to ISTD | R.T. |
|------|---------|--------|------------------|------|
| 7.55 | 6.47 ng | 592204 | Naphthalene-d8   | 8.02 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|---------|--------------|------|
| 1    |    |   | trans-Decalin, 2-methyl-            | 152 | C11H20  | 1000152-47-3 | 91   |
| 2    |    |   | Naphthalene, decahydro-2-methyl-    | 152 | C11H20  | 002958-76-1  | 64   |
| 3    |    |   | Bicyclo[4.1.0]heptan-2-one, 3,5,... | 152 | C10H16O | 029750-24-1  | 60   |
| 4    |    |   | Bicyclo[4.1.0]heptan-3-one, 4,7,... | 152 | C10H16O | 004176-04-9  | 59   |
| 5    |    |   | cis, cis-2-Ethylbicyclo[4.4.0]de... | 166 | C12H22  | 066660-40-0  | 59   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

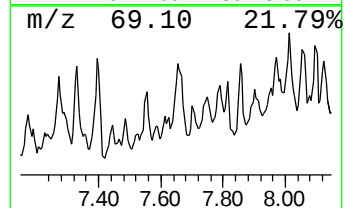
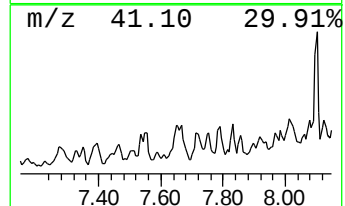
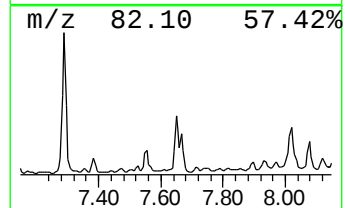
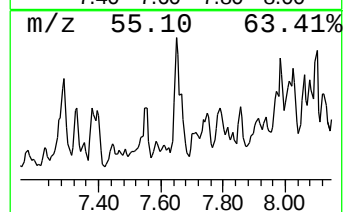
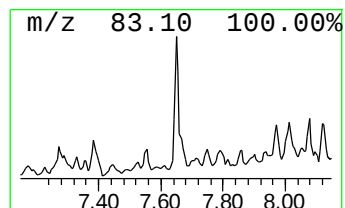
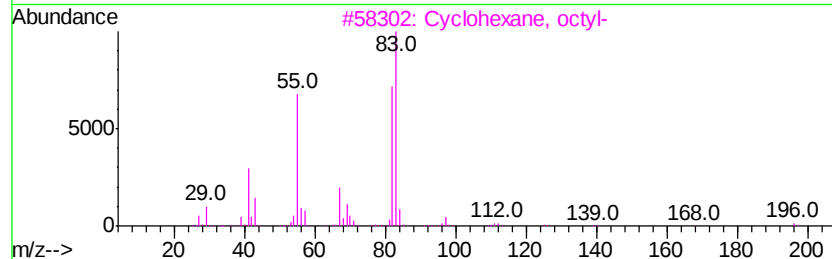
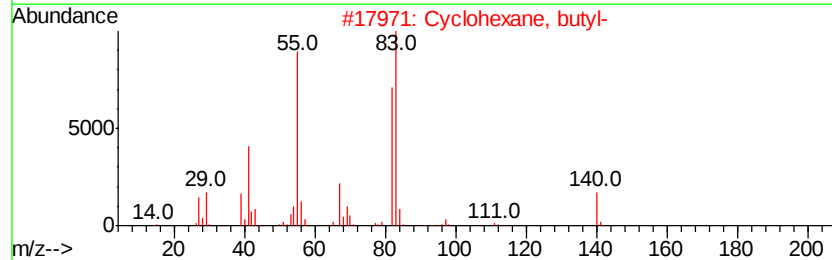
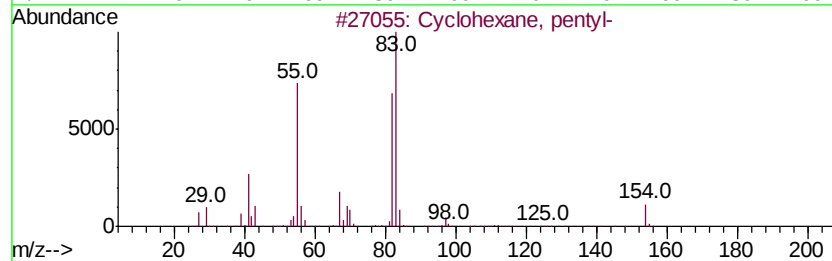
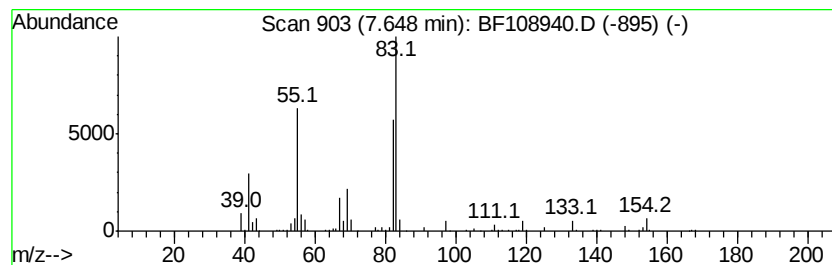
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 5 Cyclohexane, pentyl- Concentration Rank 10

| R.T. | EstConc | Area   | Relative to ISTD | R.T. |
|------|---------|--------|------------------|------|
| 7.65 | 6.94 ng | 635158 | Naphthalene-d8   | 8.02 |

| Hit# | of | 5 | Tentative ID                       | MW  | MolForm | CAS#        | Qual |
|------|----|---|------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Cyclohexane, pentyl-               | 154 | C11H22  | 004292-92-6 | 90   |
| 2    |    |   | Cyclohexane, butyl-                | 140 | C10H20  | 001678-93-9 | 72   |
| 3    |    |   | Cyclohexane, octyl-                | 196 | C14H28  | 001795-15-9 | 72   |
| 4    |    |   | Cyclohexane, propyl-               | 126 | C9H18   | 001678-92-8 | 72   |
| 5    |    |   | Cyclohexane, 1,1'-(1,4-butanedi... | 222 | C16H30  | 006165-44-2 | 72   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

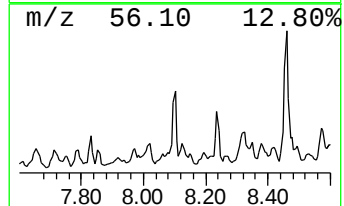
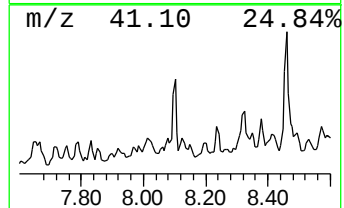
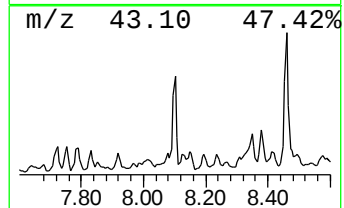
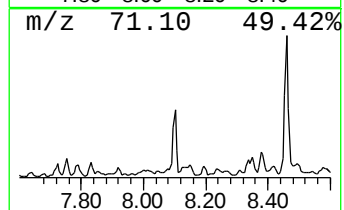
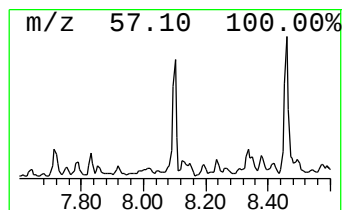
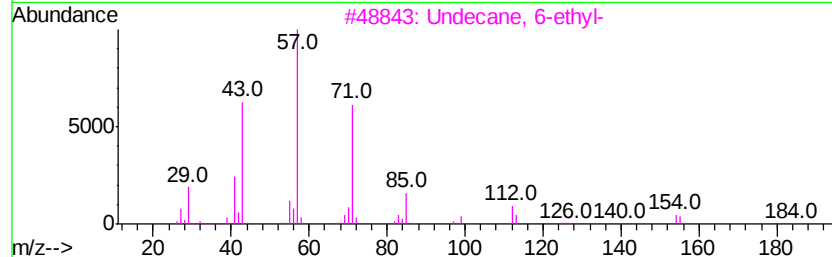
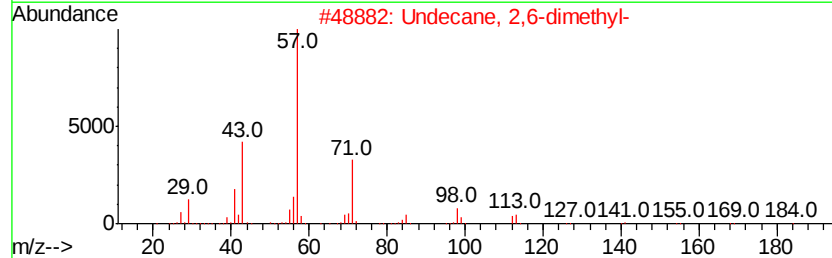
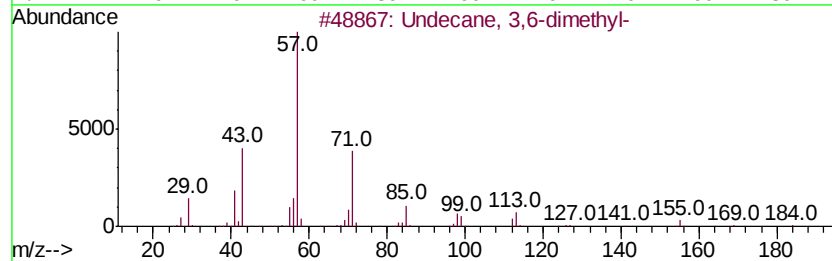
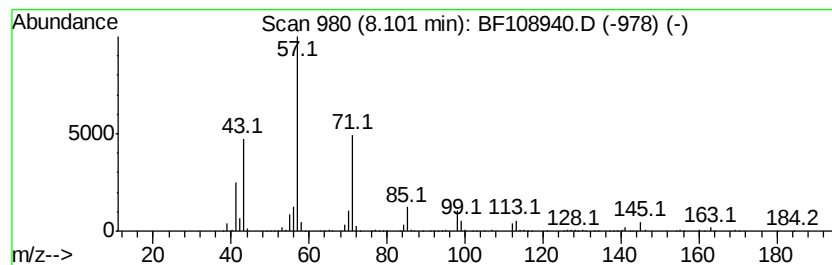
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 6 Undecane, 3,6-dimethyl- Concentration Rank 9

| R.T. | EstConc | Area   | Relative to ISTD | R.T. |
|------|---------|--------|------------------|------|
| 8.10 | 7.43 ng | 680026 | Napthalene-d8    | 8.02 |

| Hit# | of | Tentative ID                      | MW  | MolForm   | CAS#         | Qual |
|------|----|-----------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Undecane, 3,6-dimethyl-           | 184 | C13H28    | 017301-28-9  | 70   |
| 2    |    | Undecane, 2,6-dimethyl-           | 184 | C13H28    | 017301-23-4  | 70   |
| 3    |    | Undecane, 6-ethyl-                | 184 | C13H28    | 017312-60-6  | 64   |
| 4    |    | Dodecane, 2,6,10-trimethyl-       | 212 | C15H32    | 003891-98-3  | 59   |
| 5    |    | Sulfurous acid, butyl octyl ester | 250 | C12H26O3S | 1000309-17-5 | 59   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

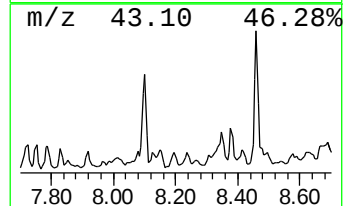
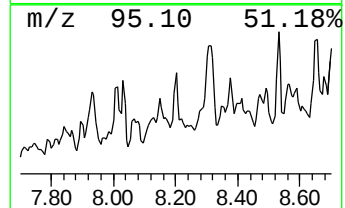
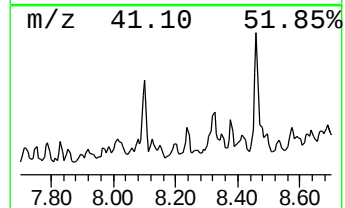
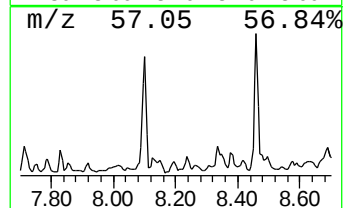
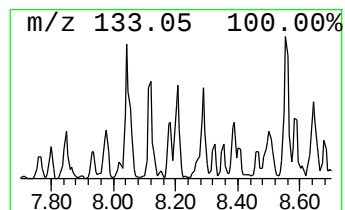
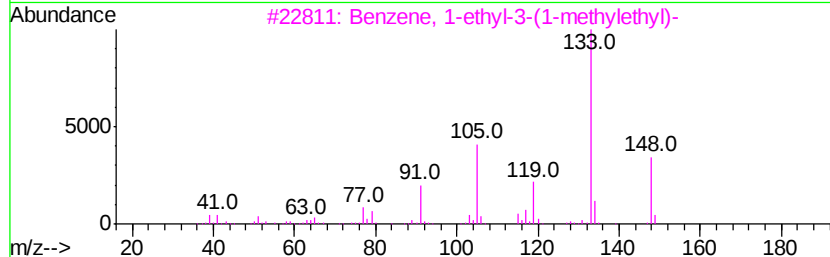
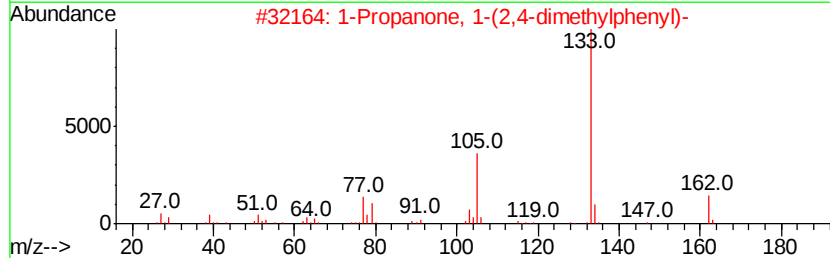
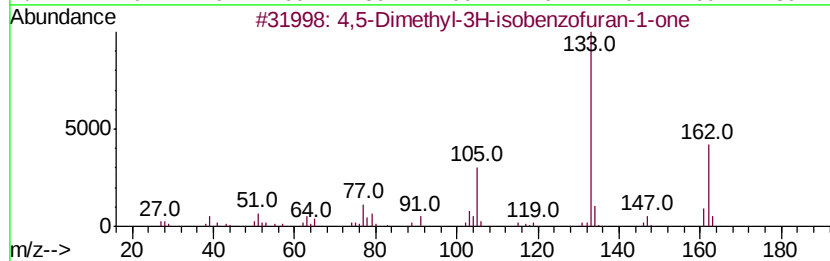
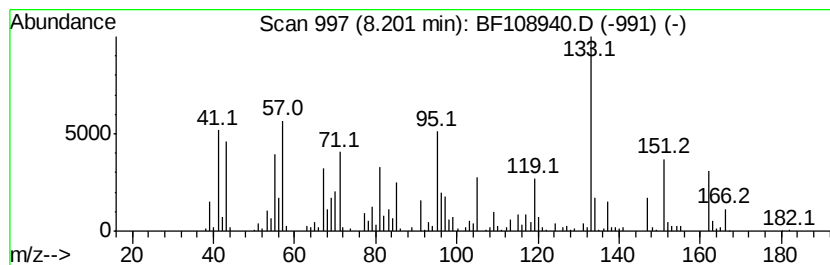
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 7 unknown8.20 Concentration Rank 17

| R.T. | EstConc | Area   | Relative to ISTD | R.T. |
|------|---------|--------|------------------|------|
| 8.20 | 6.31 ng | 577717 | Naphthalene-d8   | 8.02 |

| Hit# | of                                       | 5   | Tentative ID | MW           | MolForm | CAS# | Qual |
|------|------------------------------------------|-----|--------------|--------------|---------|------|------|
| 1    | 4,5-Dimethyl-3H-isobenzofuran-1-one      | 162 | C10H10O2     | 1000188-08-0 | 25      |      |      |
| 2    | 1-Propanone, 1-(2,4-dimethylphenyl)-     | 162 | C11H14O      | 035031-55-1  | 25      |      |      |
| 3    | Benzene, 1-ethyl-3-(1-methylethyl)-      | 148 | C11H16       | 004920-99-4  | 22      |      |      |
| 4    | 4-Ethylbenzoic acid, 6-ethyl-3-oxo-      | 290 | C19H30O2     | 1000293-32-3 | 22      |      |      |
| 5    | Benzene, 1,3-dimethyl-5-(1-methylethyl)- | 148 | C11H16       | 004706-90-5  | 18      |      |      |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampled :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

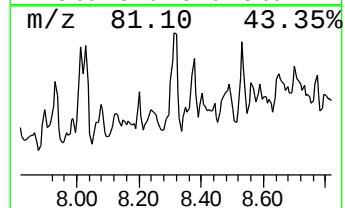
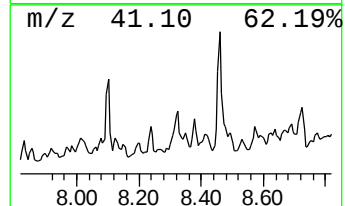
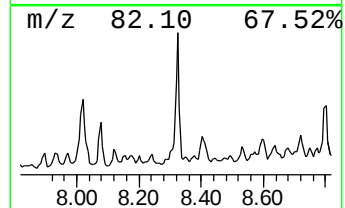
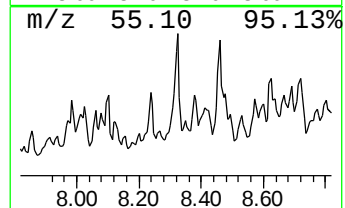
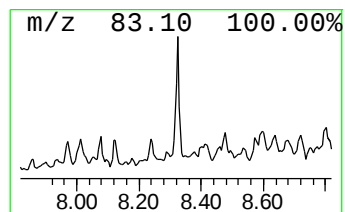
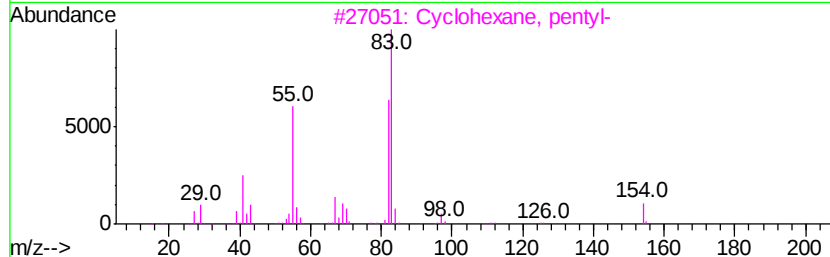
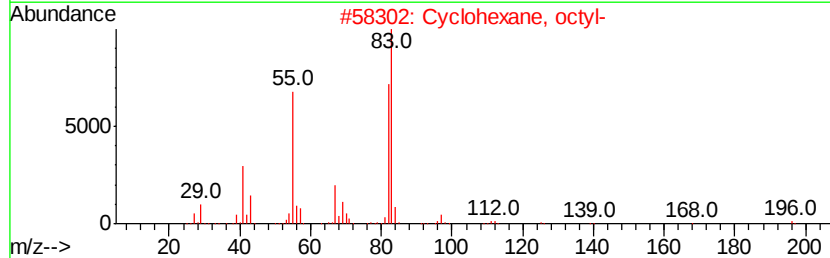
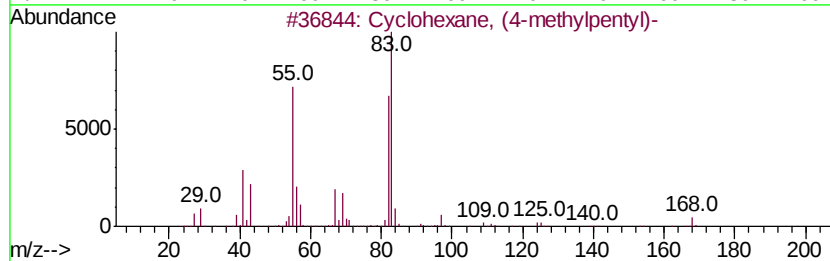
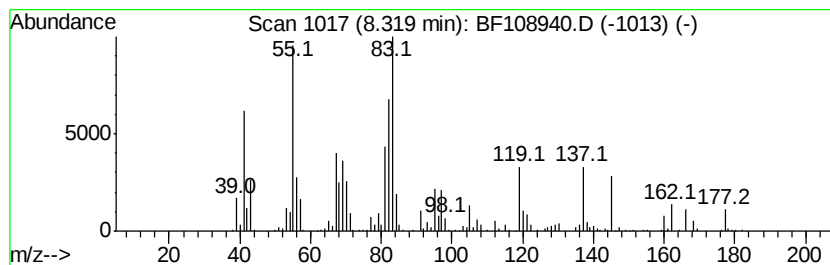
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 8 Cyclohexane, (4-methylpentyl)- Concentration Rank 7

| R.T. | EstConc  | Area   | Relative to ISTD | R.T. |
|------|----------|--------|------------------|------|
| 8.32 | 10.00 ng | 915532 | Napthalene-d8    | 8.02 |

| Hit# | of | Tentative ID                   | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclohexane, (4-methylpentyl)- | 168 | C12H24  | 061142-20-9 | 76   |
| 2    |    | Cyclohexane, octyl-            | 196 | C14H28  | 001795-15-9 | 58   |
| 3    |    | Cyclohexane, pentyl-           | 154 | C11H22  | 004292-92-6 | 58   |
| 4    |    | Cyclohexane, propyl-           | 126 | C9H18   | 001678-92-8 | 53   |
| 5    |    | Cyclohexane, (1-methylethyl)-  | 126 | C9H18   | 000696-29-7 | 53   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

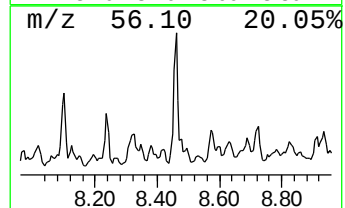
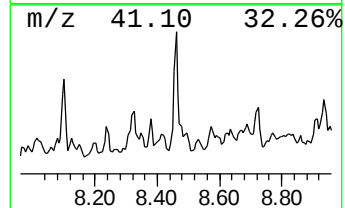
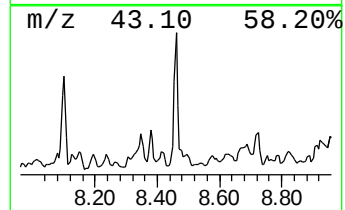
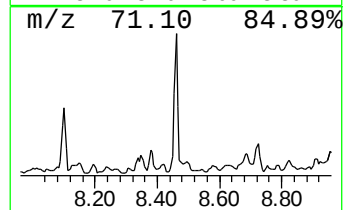
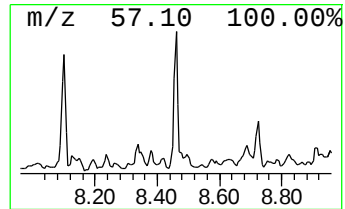
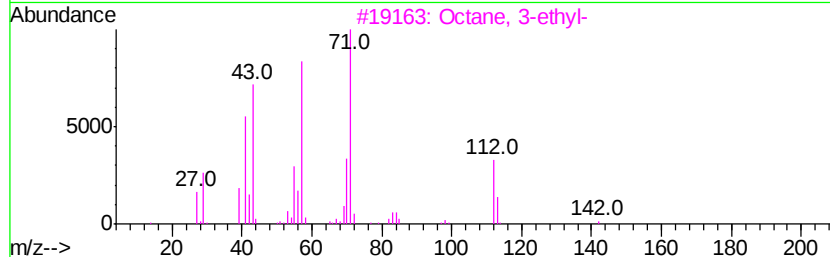
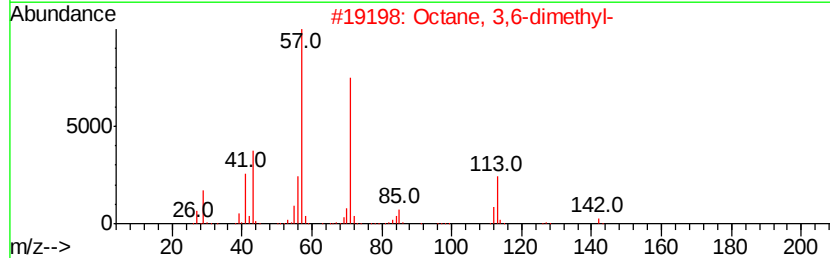
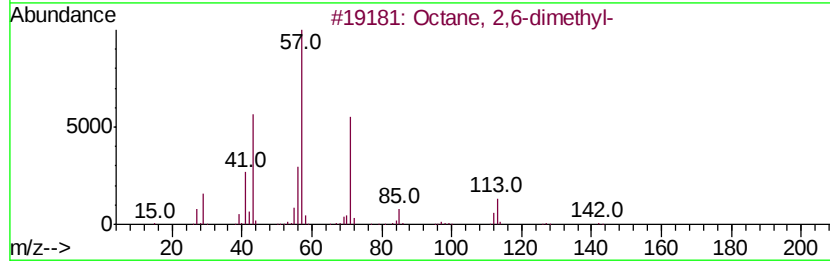
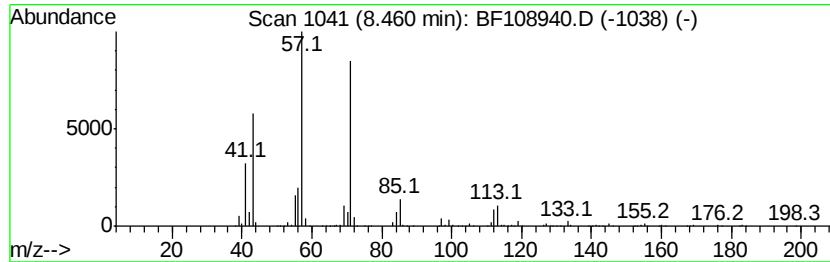
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 9 Octane, 2,6-dimethyl- Concentration Rank 2

| R.T. | EstConc  | Area    | Relative to ISTD | R.T. |
|------|----------|---------|------------------|------|
| 8.46 | 19.60 ng | 1794430 | Napthalene-d8    | 8.02 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Octane, 2,6-dimethyl-               | 142 | C10H22    | 002051-30-1  | 86   |
| 2    |    | Octane, 3,6-dimethyl-               | 142 | C10H22    | 015869-94-0  | 78   |
| 3    |    | Octane, 3-ethyl-                    | 142 | C10H22    | 005881-17-4  | 72   |
| 4    |    | Sulfurous acid, pentyl undecyl e... | 306 | C16H34O3S | 1000309-14-4 | 64   |
| 5    |    | Sulfurous acid, 2-ethylhexyl und... | 348 | C19H40O3S | 1000309-19-4 | 64   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

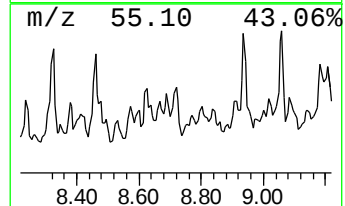
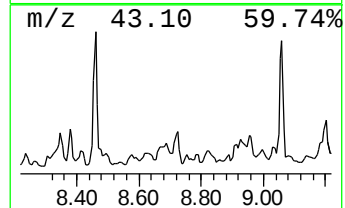
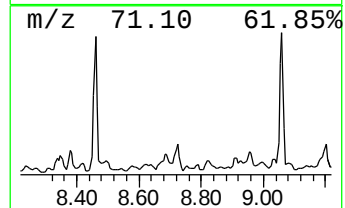
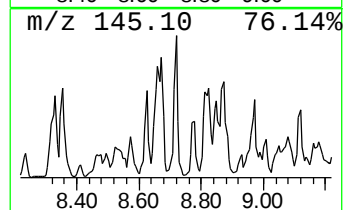
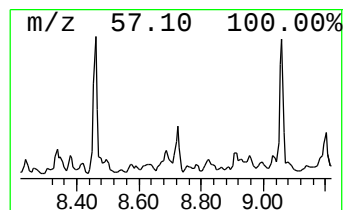
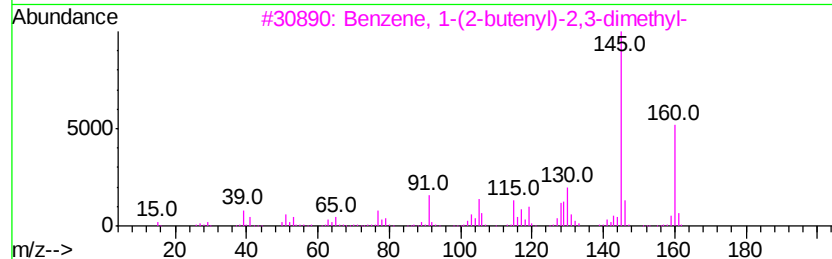
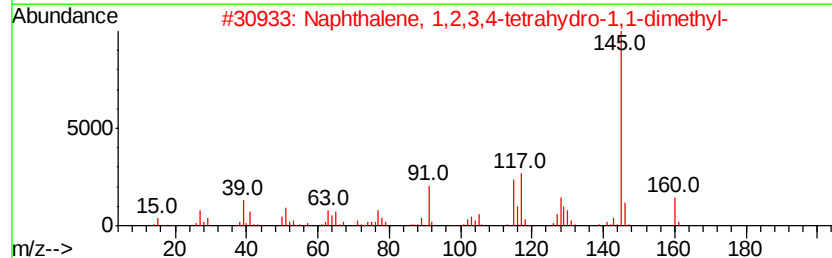
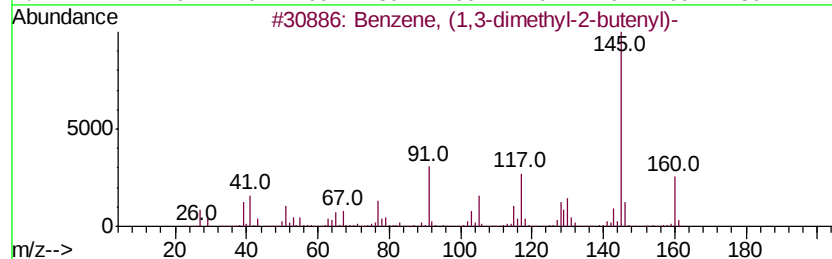
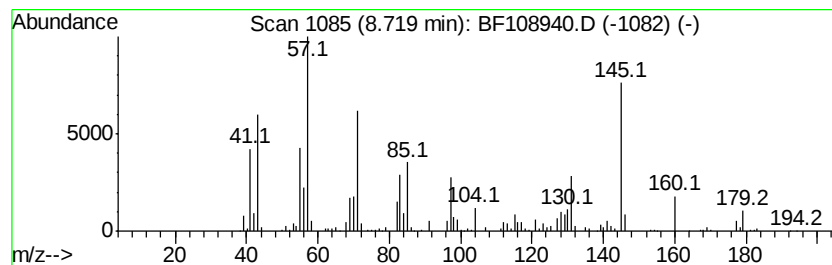
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 10 unknown8.72 Concentration Rank 4

| R.T. | EstConc  | Area    | Relative to ISTD | R.T. |
|------|----------|---------|------------------|------|
| 8.72 | 11.13 ng | 1018580 | Naphthalene-d8   | 8.02 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzene, (1,3-dimethyl-2-butenyl)-  | 160 | C12H16  | 050704-01-3 | 46   |
| 2    |    | Naphthalene, 1,2,3,4-tetrahydro-... | 160 | C12H16  | 001985-59-7 | 41   |
| 3    |    | Benzene, 1-(2-butenyl)-2,3-dimet... | 160 | C12H16  | 054340-85-1 | 38   |
| 4    |    | Naphthalene, 1,2,3,4-tetrahydro-... | 160 | C12H16  | 021564-91-0 | 38   |
| 5    |    | Naphthalene, 1,2,3,4-tetrahydro-... | 160 | C12H16  | 020027-77-4 | 35   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
 Data File : BF108940.D  
 Acq On : 11 Sep 2018 17:30  
 Operator : JU/SJ  
 Sample : J4842-01 5X  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

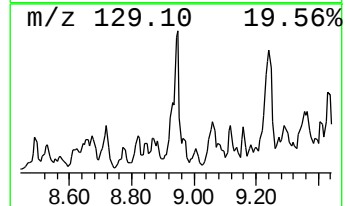
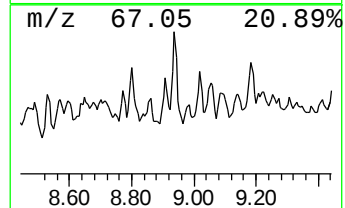
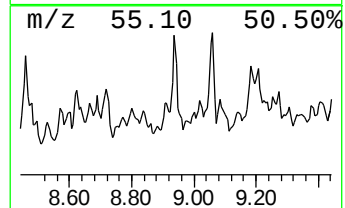
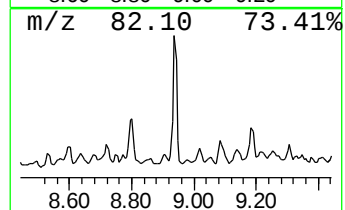
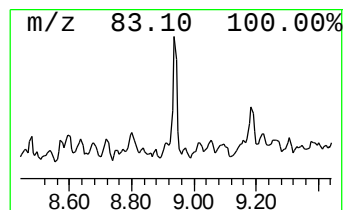
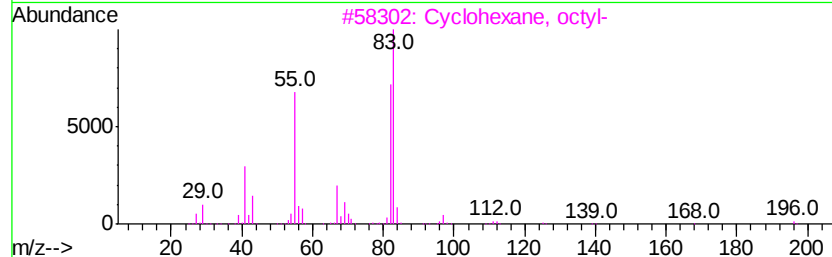
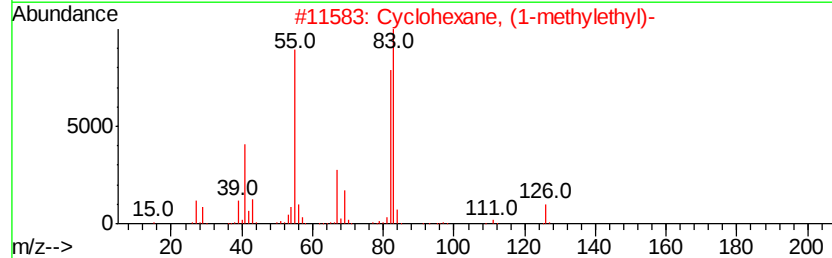
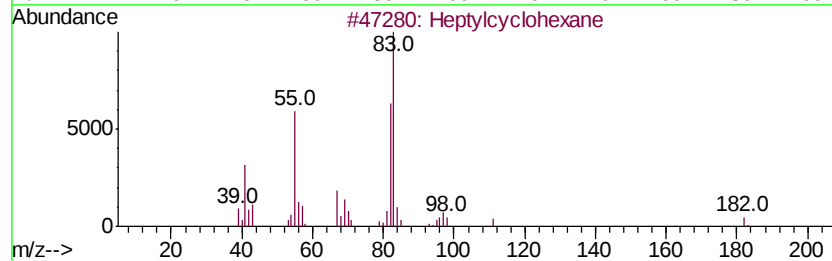
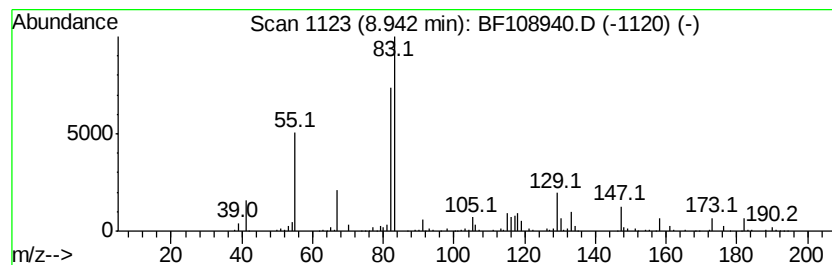
TIC Library : C:\DATABASE\NIST11.L  
 TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
 Peak Number 11 Heptylcyclohexane Concentration Rank 20

| R.T. | EstConc | Area   | Relative to ISTD | R.T. |
|------|---------|--------|------------------|------|
| 8.94 | 5.79 ng | 661167 | Acenaphthene-d10 | 9.77 |

| Hit# | of | 5 | Tentative ID                  | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------|-----|---------|-------------|------|
| 1    |    |   | Heptylcyclohexane             | 182 | C13H26  | 005617-41-4 | 86   |
| 2    |    |   | Cyclohexane, (1-methylethyl)- | 126 | C9H18   | 000696-29-7 | 72   |
| 3    |    |   | Cyclohexane, octyl-           | 196 | C14H28  | 001795-15-9 | 72   |
| 4    |    |   | Cyclohexane, butyl-           | 140 | C10H20  | 001678-93-9 | 64   |
| 5    |    |   | Cyclohexane, propyl-          | 126 | C9H18   | 001678-92-8 | 64   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

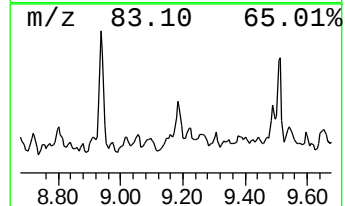
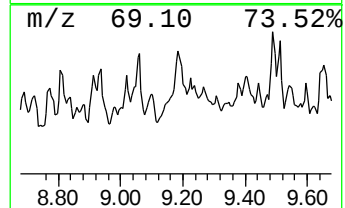
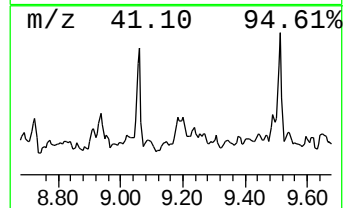
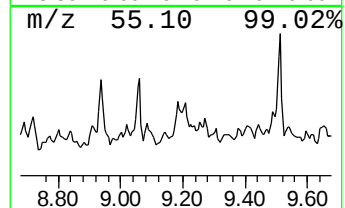
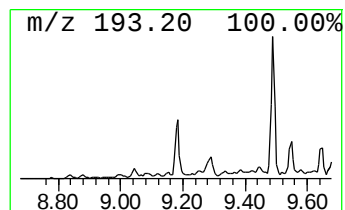
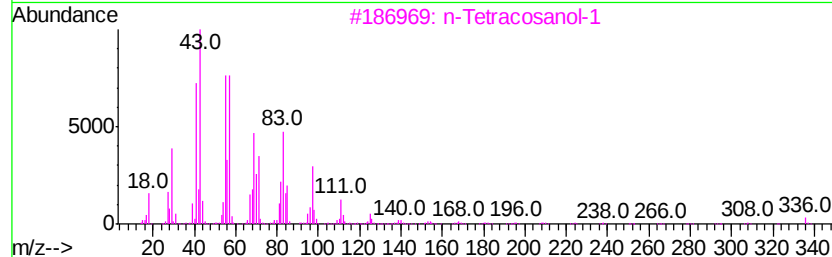
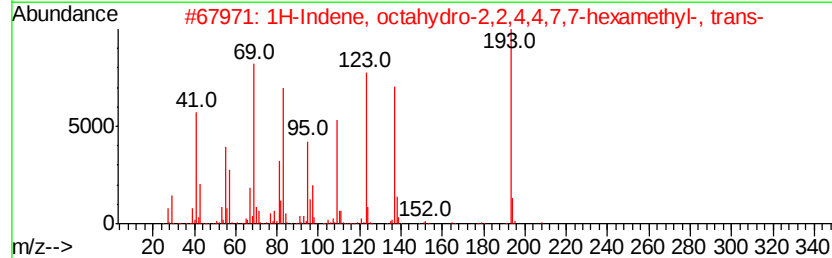
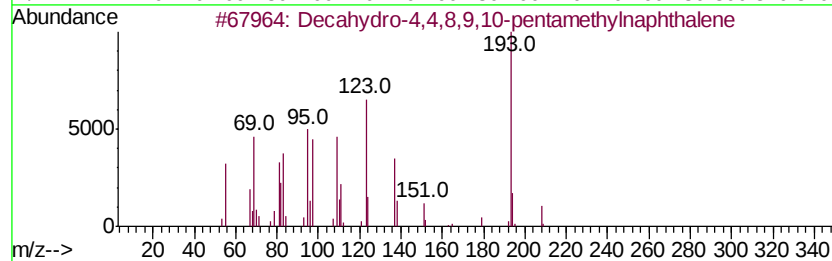
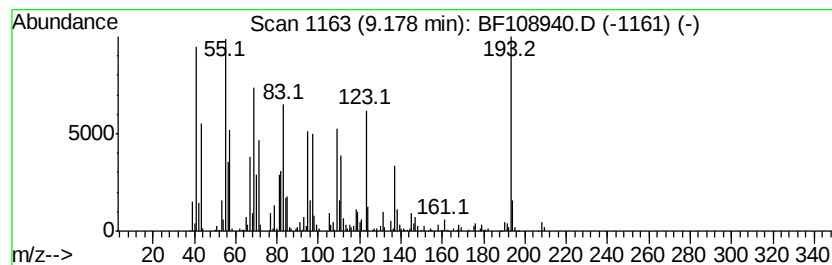
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 12 unknown9.18 Concentration Rank 14

| R.T. | EstConc | Area   | Relative to ISTD | R.T. |
|------|---------|--------|------------------|------|
| 9.18 | 6.50 ng | 742490 | Acenaphthene-d10 | 9.77 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm     | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|-------------|-------------|------|
| 1    |    |   | Decahydro-4,4,8,9,10-pentamethyl... | 208 | C15H28      | 080655-44-3 | 49   |
| 2    |    |   | 1H-Indene, octahydro-2,2,4,4,7,7... | 208 | C15H28      | 054832-83-6 | 46   |
| 3    |    |   | n-Tetracosanol-1                    | 354 | C24H50O     | 000506-51-4 | 43   |
| 4    |    |   | 1-Eicosanol                         | 298 | C20H42O     | 000629-96-9 | 30   |
| 5    |    |   | Trichloroacetic acid, hexadecyl ... | 386 | C18H33Cl3O2 | 074339-54-1 | 30   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

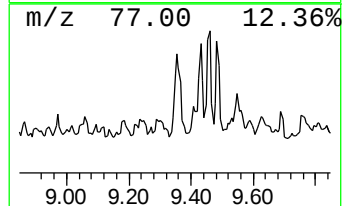
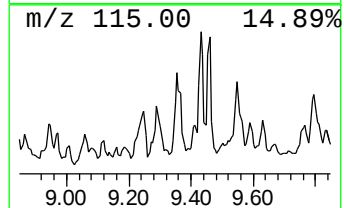
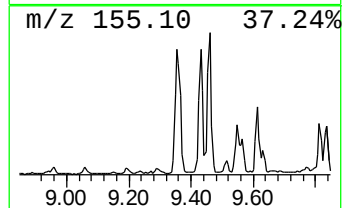
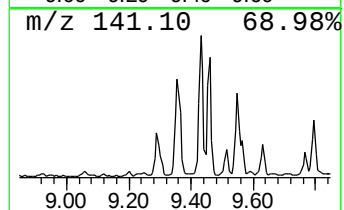
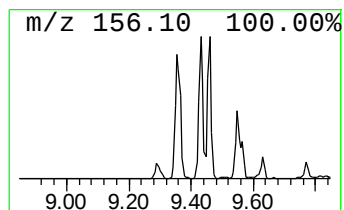
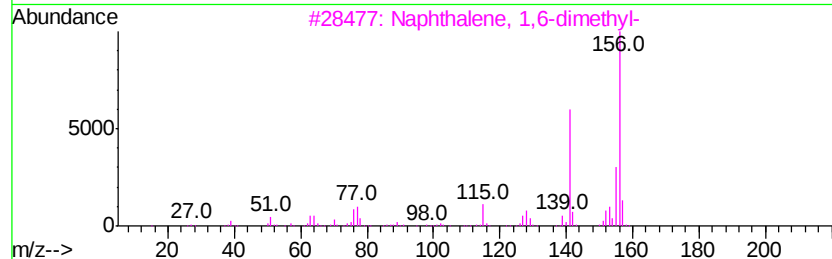
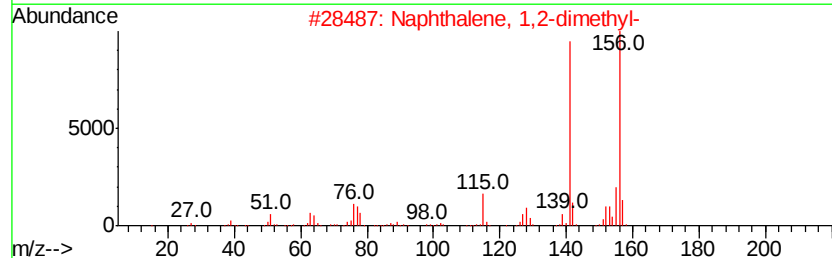
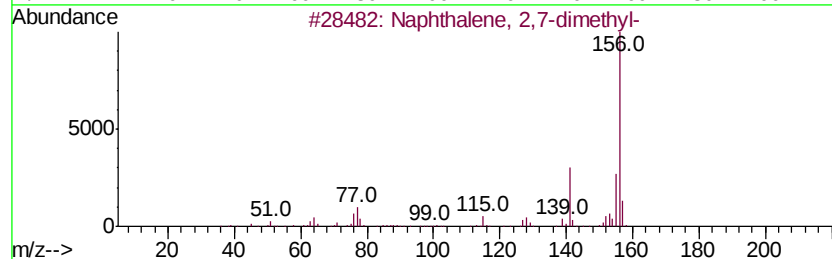
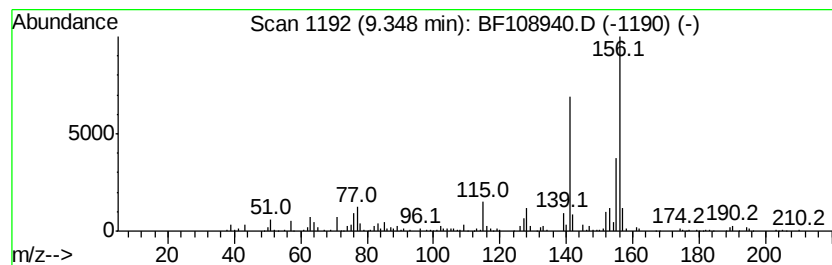
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 13 Naphthalene, 2,7-dimethyl- Concentration Rank 12

| R.T. | EstConc | Area   | Relative to ISTD | R.T. |
|------|---------|--------|------------------|------|
| 9.35 | 6.56 ng | 749692 | Acenaphthene-d10 | 9.77 |

| Hit# | of | Tentative ID               | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, 2,7-dimethyl- | 156 | C12H12  | 000582-16-1 | 97   |
| 2    |    | Naphthalene, 1,2-dimethyl- | 156 | C12H12  | 000573-98-8 | 96   |
| 3    |    | Naphthalene, 1,6-dimethyl- | 156 | C12H12  | 000575-43-9 | 95   |
| 4    |    | Naphthalene, 1,4-dimethyl- | 156 | C12H12  | 000571-58-4 | 95   |
| 5    |    | Naphthalene, 2,3-dimethyl- | 156 | C12H12  | 000581-40-8 | 95   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

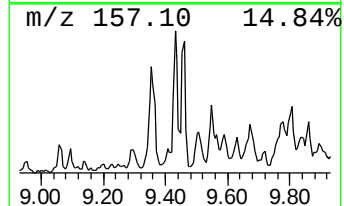
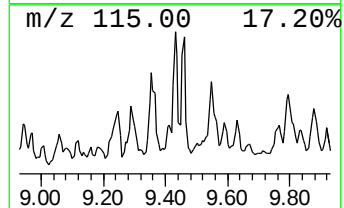
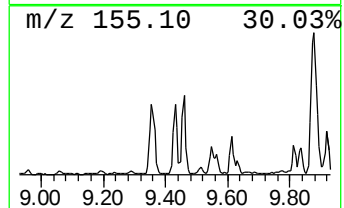
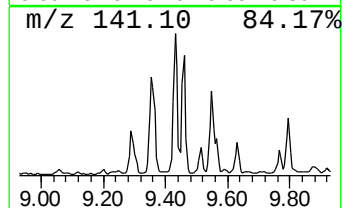
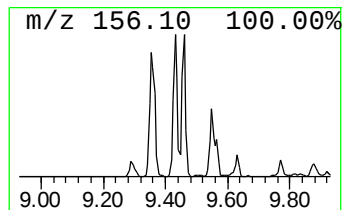
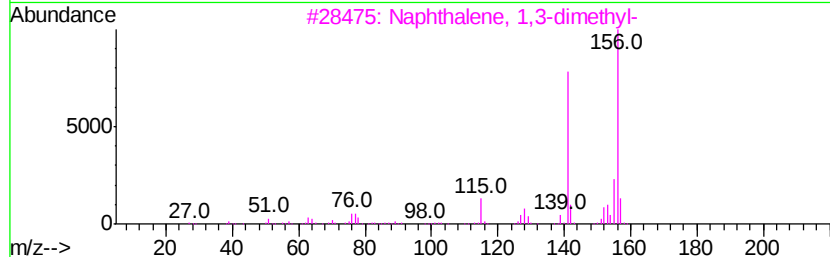
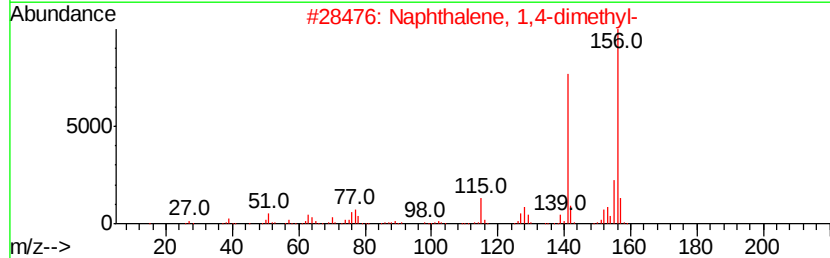
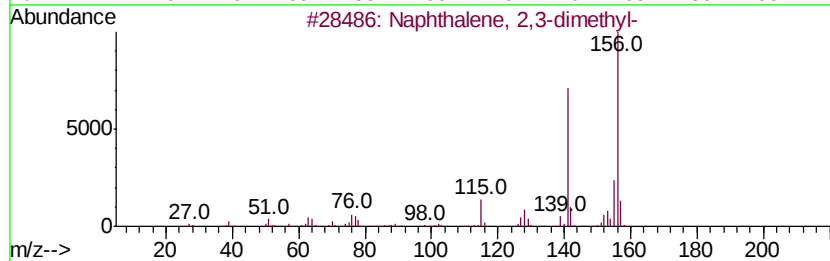
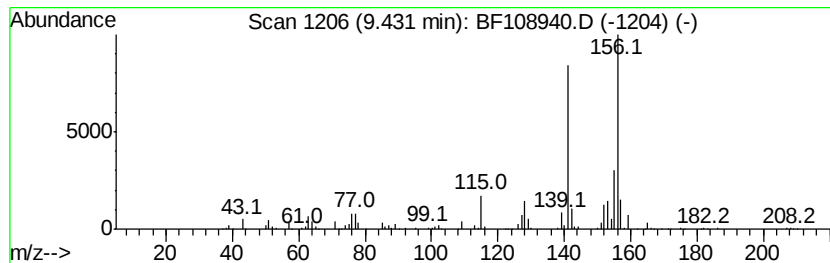
Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 14 Naphthalene, 2,3-dimethyl- Concentration Rank 11

| R.T.      | EstConc                    | Area   | Relative to ISTD | R.T.        |      |
|-----------|----------------------------|--------|------------------|-------------|------|
| 9.43      | 6.71 ng                    | 766903 | Acenaphthene-d10 | 9.77        |      |
| Hit# of 5 | Tentative ID               | MW     | MolForm          | CAS#        | Qual |
| 1         | Naphthalene, 2,3-dimethyl- | 156    | C12H12           | 000581-40-8 | 97   |
| 2         | Naphthalene, 1,4-dimethyl- | 156    | C12H12           | 000571-58-4 | 97   |
| 3         | Naphthalene, 1,3-dimethyl- | 156    | C12H12           | 000575-41-7 | 97   |
| 4         | Naphthalene, 1,6-dimethyl- | 156    | C12H12           | 000575-43-9 | 96   |
| 5         | Naphthalene, 2,7-dimethyl- | 156    | C12H12           | 000582-16-1 | 96   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

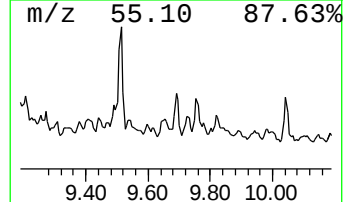
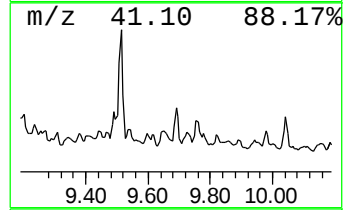
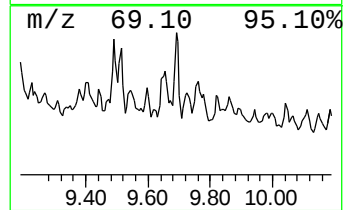
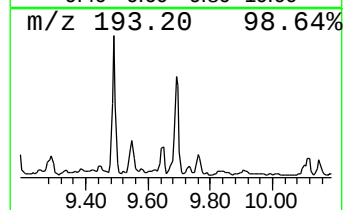
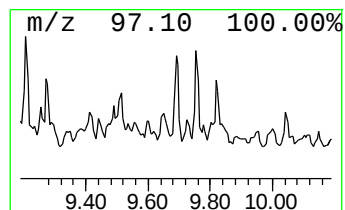
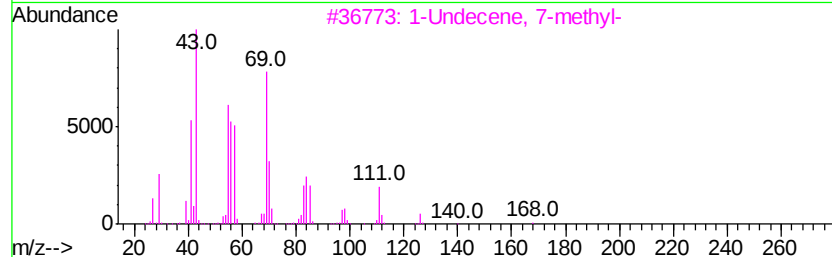
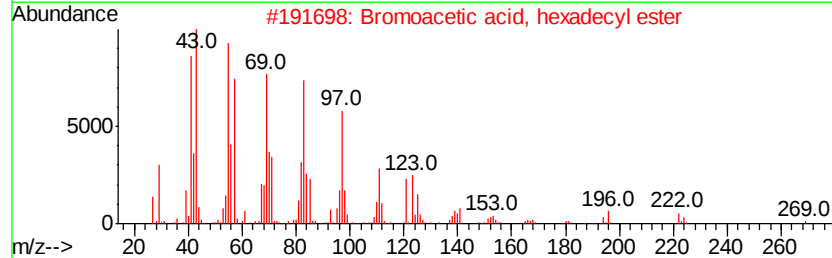
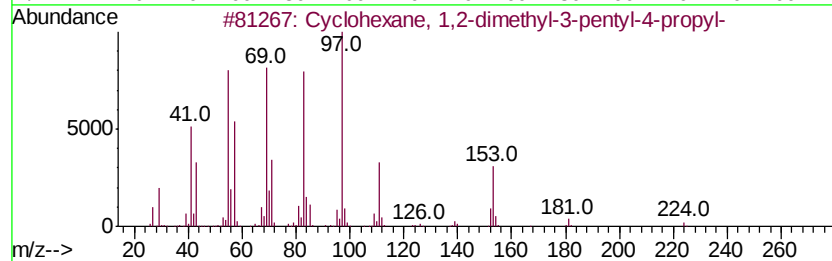
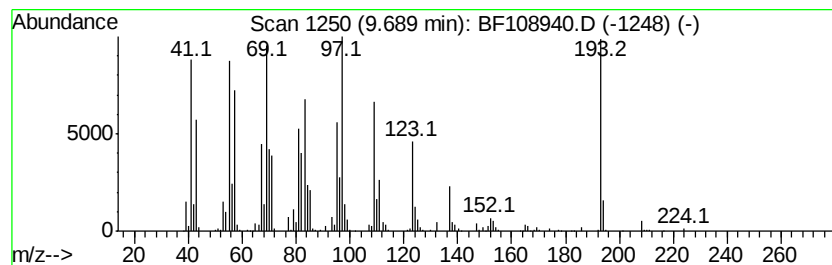
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 15 unknown9.69 Concentration Rank 16

| R.T. | EstConc | Area   | Relative to ISTD | R.T. |
|------|---------|--------|------------------|------|
| 9.69 | 6.39 ng | 730171 | Acenaphthene-d10 | 9.77 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|------------|--------------|------|
| 1    |    |   | Cyclohexane, 1,2-dimethyl-3-pent... | 224 | C16H32     | 062376-17-4  | 30   |
| 2    |    |   | Bromoacetic acid, hexadecyl ester   | 362 | C18H35BrO2 | 005454-48-8  | 30   |
| 3    |    |   | 1-Undecene, 7-methyl-               | 168 | C12H24     | 074630-42-5  | 25   |
| 4    |    |   | Cyclopentanecarboxylic acid, 3-p... | 324 | C21H40O2   | 1000280-59-1 | 22   |
| 5    |    |   | 1-Hexyne, 3-ethoxy-3,4-dimethyl-    | 154 | C10H18O    | 054244-91-6  | 22   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

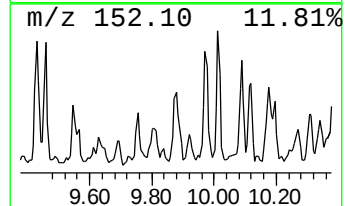
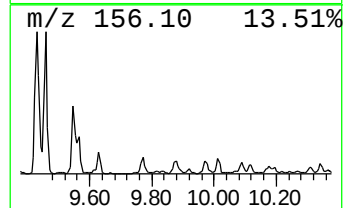
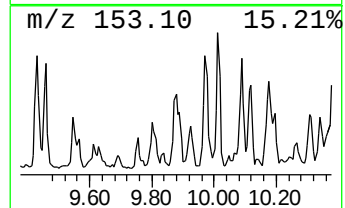
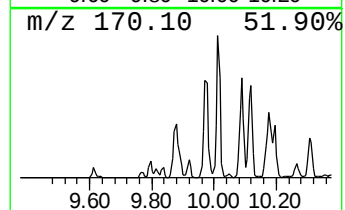
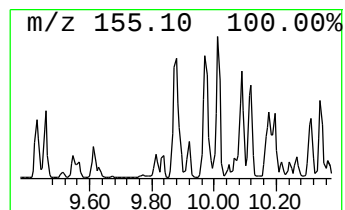
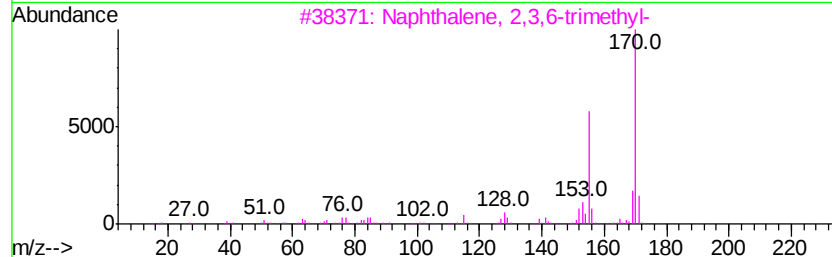
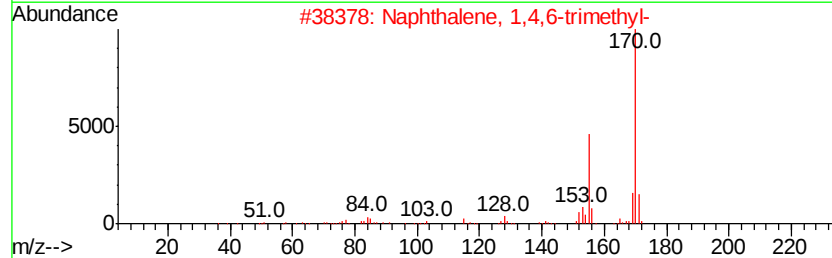
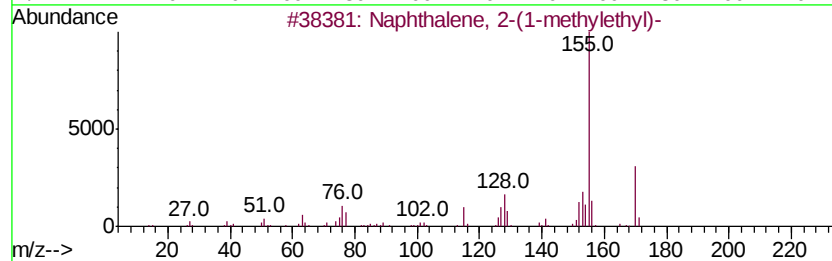
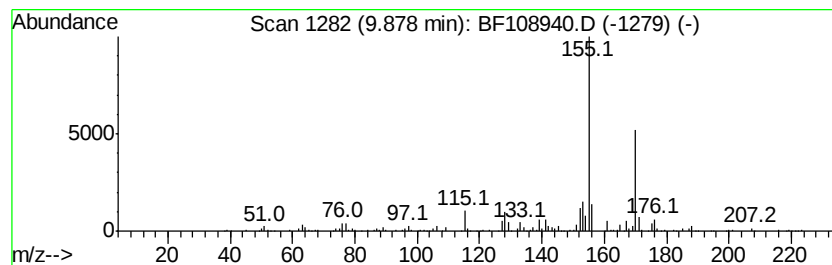
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 16 Naphthalene, 2-(1-methyleth... Concentration Rank 13

| R.T. | EstConc | Area   | Relative to ISTD | R.T. |
|------|---------|--------|------------------|------|
| 9.88 | 6.51 ng | 744309 | Acenaphthene-d10 | 9.77 |

| Hit# | of | 5 | Tentative ID                    | MW  | MolForm | CAS#        | Qual |
|------|----|---|---------------------------------|-----|---------|-------------|------|
| 1    |    |   | Naphthalene, 2-(1-methylethyl)- | 170 | C13H14  | 002027-17-0 | 94   |
| 2    |    |   | Naphthalene, 1,4,6-trimethyl-   | 170 | C13H14  | 002131-42-2 | 93   |
| 3    |    |   | Naphthalene, 2,3,6-trimethyl-   | 170 | C13H14  | 000829-26-5 | 93   |
| 4    |    |   | Naphthalene, 1,6,7-trimethyl-   | 170 | C13H14  | 002245-38-7 | 90   |
| 5    |    |   | 2-Naphthyl methyl ketone        | 170 | C12H10O | 000093-08-3 | 72   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

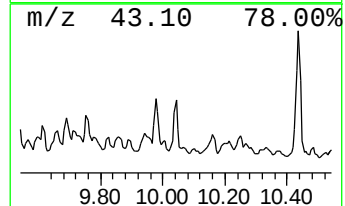
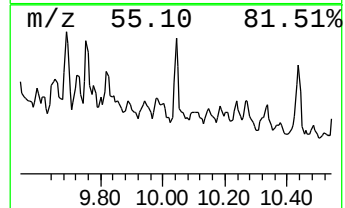
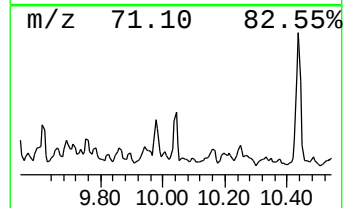
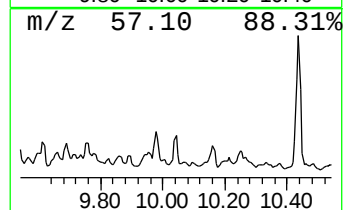
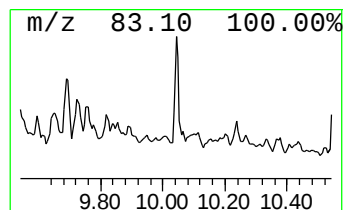
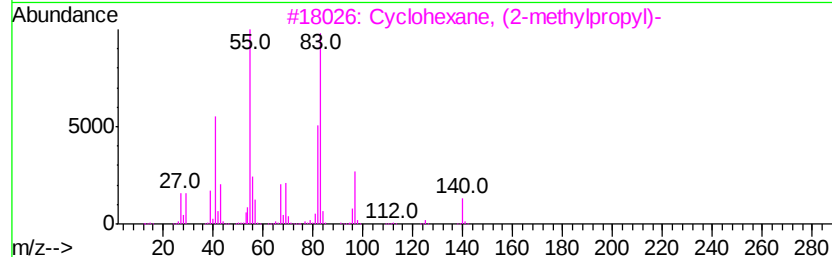
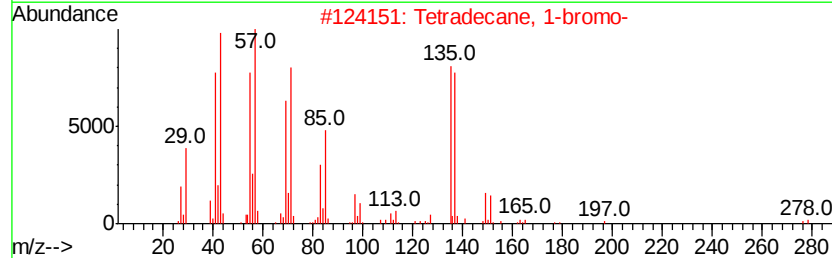
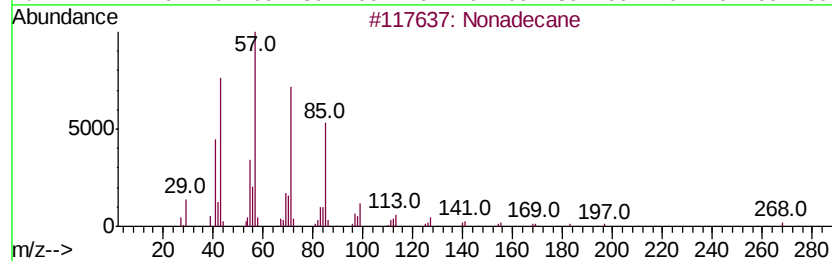
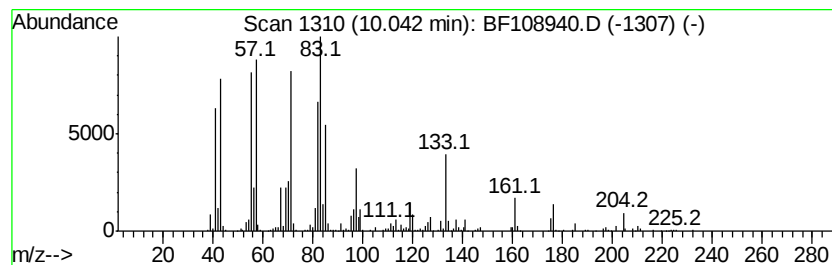
Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 17 unknown10.04 Concentration Rank 18

| R.T.      | EstConc                        | Area   | Relative to ISTD |             | R.T. |
|-----------|--------------------------------|--------|------------------|-------------|------|
| 10.04     | 6.01 ng                        | 686904 | Acenaphthene-d10 |             | 9.77 |
| Hit# of 5 | Tentative ID                   | MW     | MolForm          | CAS#        | Qual |
| 1         | Nonadecane                     | 268    | C19H40           | 000629-92-5 | 38   |
| 2         | Tetradecane, 1-bromo-          | 276    | C14H29Br         | 000112-71-0 | 35   |
| 3         | Cyclohexane, (2-methylpropyl)- | 140    | C10H20           | 001678-98-4 | 30   |
| 4         | Hexacosane                     | 366    | C26H54           | 000630-01-3 | 27   |
| 5         | Cyclohexane, propyl-           | 126    | C9H18            | 001678-92-8 | 25   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

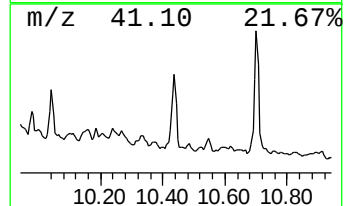
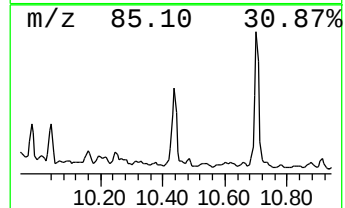
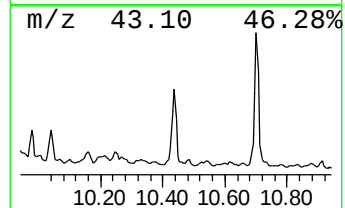
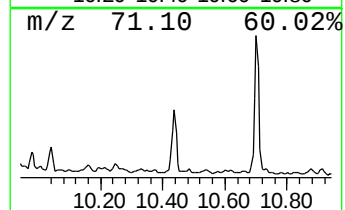
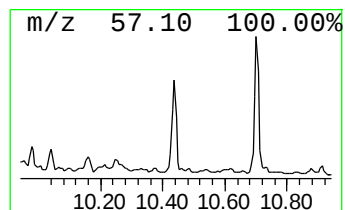
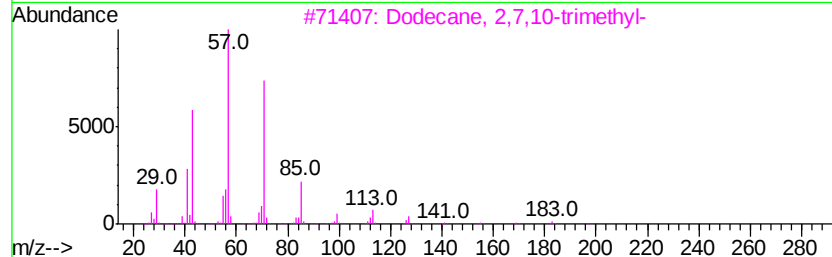
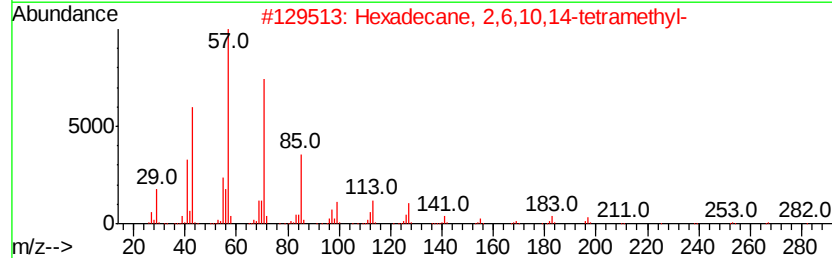
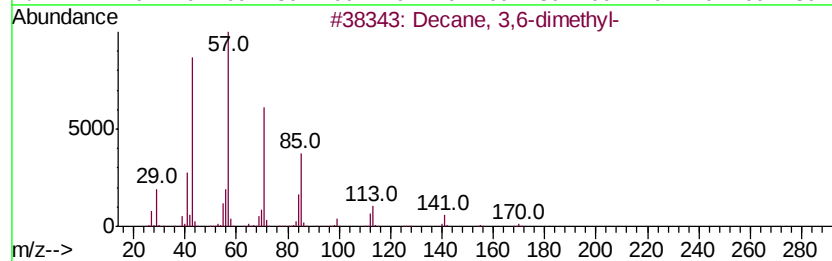
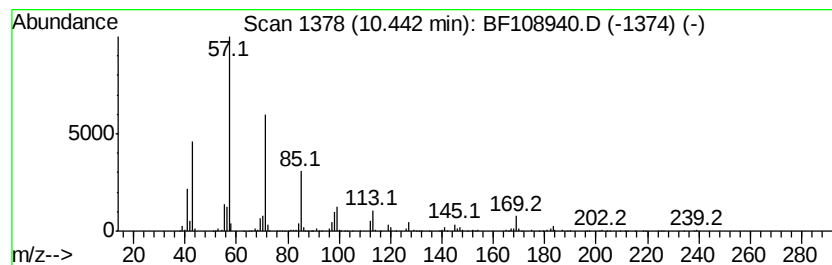
Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 18 Decane, 3,6-dimethyl- Concentration Rank 6

| R.T.    | EstConc                            | Area         | Relative to ISTD | R.T.      |
|---------|------------------------------------|--------------|------------------|-----------|
| 10.44   | 10.05 ng                           | 1148530      | Acenaphthene-d10 | 9.77      |
| Hit# of | 5                                  | Tentative ID | MW MolForm       | CAS# Qual |
| 1       | Decane, 3,6-dimethyl-              | 170 C12H26   | 017312-53-7      | 68        |
| 2       | Hexadecane, 2,6,10,14-tetramethyl- | 282 C20H42   | 000638-36-8      | 64        |
| 3       | Dodecane, 2,7,10-trimethyl-        | 212 C15H32   | 074645-98-0      | 59        |
| 4       | 5,5-Dibutylnonane                  | 240 C17H36   | 006008-17-9      | 59        |
| 5       | Tridecane                          | 184 C13H28   | 000629-50-5      | 58        |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

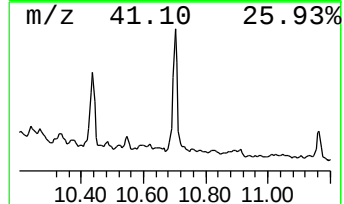
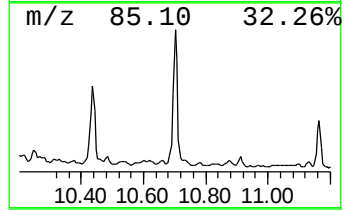
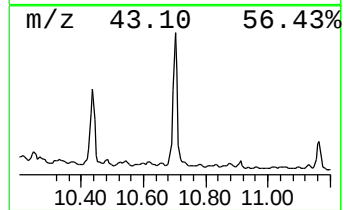
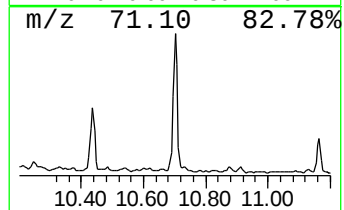
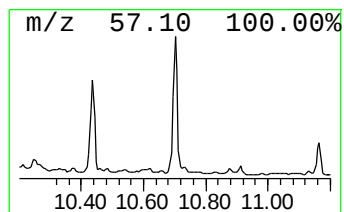
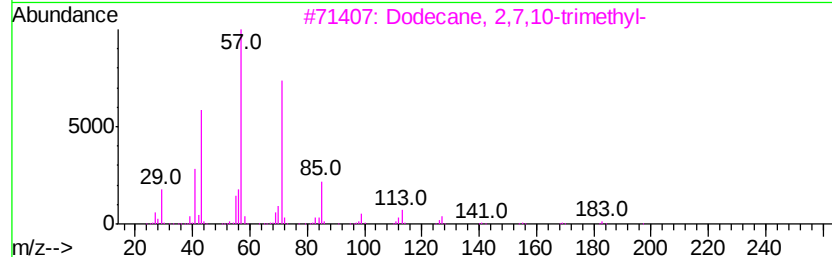
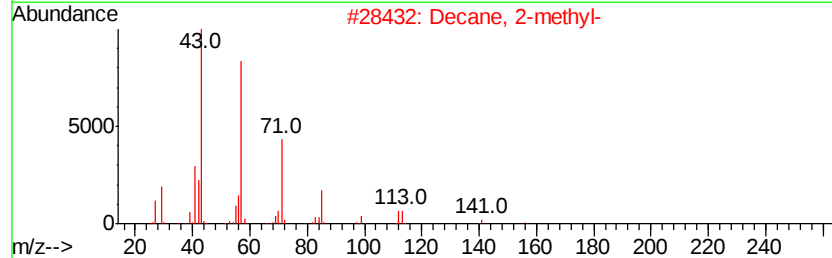
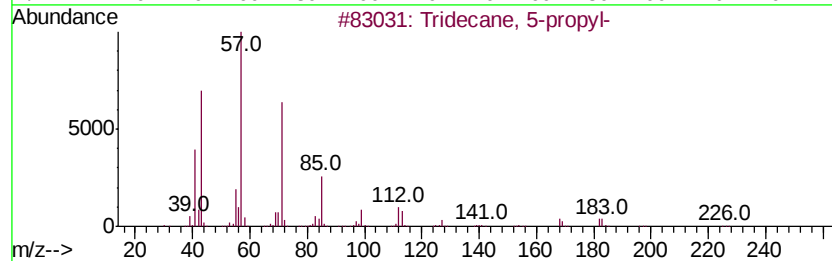
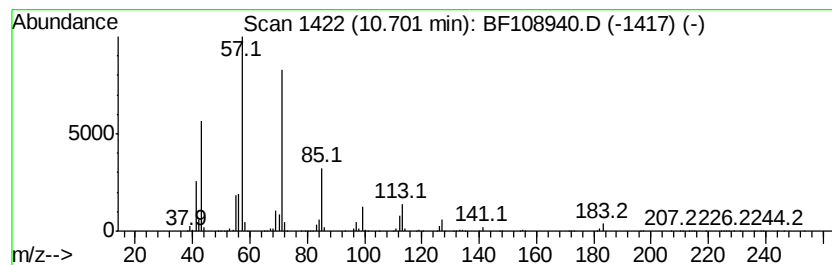
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 19 Tridecane, 5-propyl- Concentration Rank 1

| R.T.  | EstConc  | Area    | Relative to ISTD | R.T.  |
|-------|----------|---------|------------------|-------|
| 10.70 | 31.09 ng | 2054310 | Phenanthrene-d10 | 11.25 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Tridecane, 5-propyl-                | 226 | C16H34    | 055045-11-9  | 90   |
| 2    |    | Decane, 2-methyl-                   | 156 | C11H24    | 006975-98-0  | 86   |
| 3    |    | Dodecane, 2,7,10-trimethyl-         | 212 | C15H32    | 074645-98-0  | 86   |
| 4    |    | Sulfurous acid, decyl 2-ethylhex... | 334 | C18H38O3S | 1000309-19-3 | 80   |
| 5    |    | Dodecane, 2-methyl-6-propyl-        | 226 | C16H34    | 055045-08-4  | 72   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091118\  
Data File : BF108940.D  
Acq On : 11 Sep 2018 17:30  
Operator : JU/SJ  
Sample : J4842-01 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF090518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

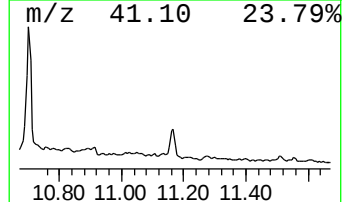
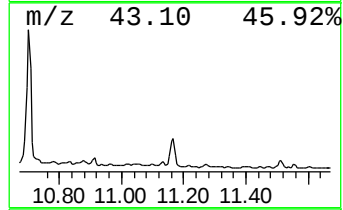
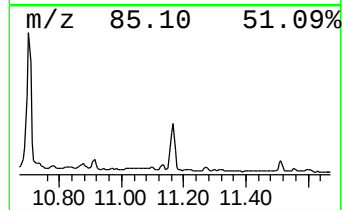
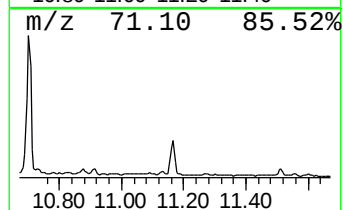
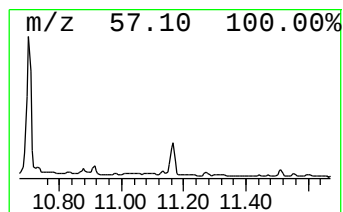
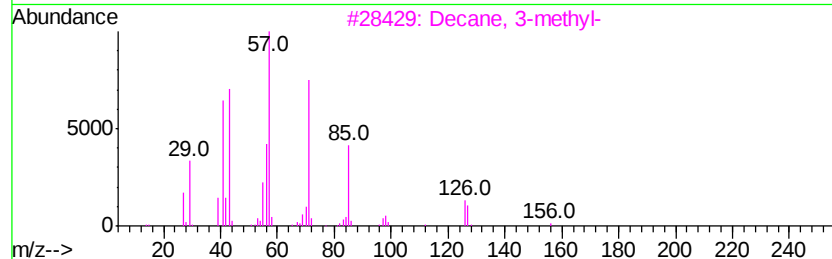
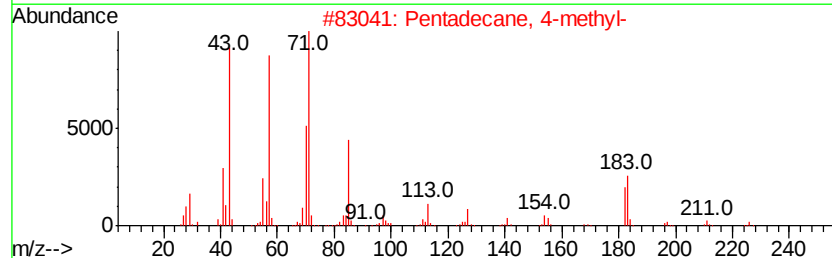
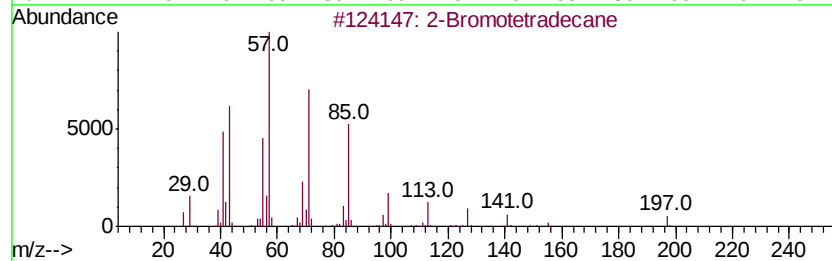
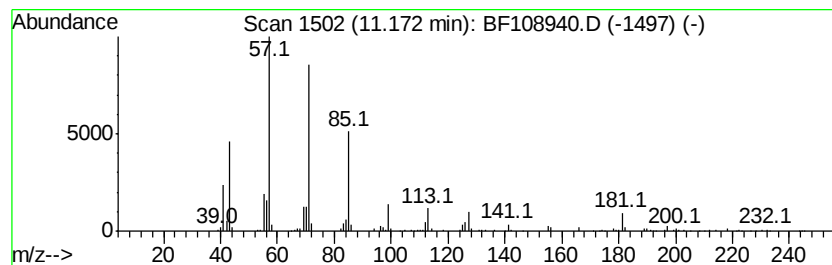
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 20 2-Bromotetradecane Concentration Rank 8

| R.T.  | EstConc | Area   | Relative to ISTD | R.T.  |
|-------|---------|--------|------------------|-------|
| 11.17 | 9.23 ng | 609752 | Phenanthrene-d10 | 11.25 |

| Hit# | of | 5 | Tentative ID           | MW  | MolForm  | CAS#        | Qual |
|------|----|---|------------------------|-----|----------|-------------|------|
| 1    |    |   | 2-Bromotetradecane     | 276 | C14H29Br | 074036-95-6 | 87   |
| 2    |    |   | Pentadecane, 4-methyl- | 226 | C16H34   | 002801-87-8 | 86   |
| 3    |    |   | Decane, 3-methyl-      | 156 | C11H24   | 013151-34-3 | 80   |
| 4    |    |   | Tridecane, 1-iodo-     | 310 | C13H27I  | 035599-77-0 | 78   |
| 5    |    |   | Hexadecane             | 226 | C16H34   | 000544-76-3 | 58   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF091118\  
 Data File : BF108940.D  
 Acq On : 11 Sep 2018 17:30  
 Operator : JU/SJ  
 Sample : J4842-01 5X  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SG-SOIL

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF090518.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 |
| unknown6.50          | 6.50  | 11.4    | ng    | 646507   | 1                     | 6.74  | 1135390 | 20.0 |
| Naphthalene, deca... | 7.14  | 5.9     | ng    | 335212   | 1                     | 6.74  | 1135390 | 20.0 |
| trans-Decalin, 2-... | 7.55  | 6.5     | ng    | 592204   | 2                     | 8.02  | 1830920 | 20.0 |
| Cyclohexane, pentyl- | 7.65  | 6.9     | ng    | 635158   | 2                     | 8.02  | 1830920 | 20.0 |
| Undecane, 3,6-dim... | 8.10  | 7.4     | ng    | 680026   | 2                     | 8.02  | 1830920 | 20.0 |
| unknown8.20          | 8.20  | 6.3     | ng    | 577717   | 2                     | 8.02  | 1830920 | 20.0 |
| Cyclohexane, (4-m... | 8.32  | 10.0    | ng    | 915532   | 2                     | 8.02  | 1830920 | 20.0 |
| Octane, 2,6-dimet... | 8.46  | 19.6    | ng    | 1794430  | 2                     | 8.02  | 1830920 | 20.0 |
| unknown8.72          | 8.72  | 11.1    | ng    | 1018580  | 2                     | 8.02  | 1830920 | 20.0 |
| Heptylcyclohexane    | 8.94  | 5.8     | ng    | 661167   | 3                     | 9.77  | 2285700 | 20.0 |
| unknown9.18          | 9.18  | 6.5     | ng    | 742490   | 3                     | 9.77  | 2285700 | 20.0 |
| Naphthalene, 2,7-... | 9.35  | 6.6     | ng    | 749692   | 3                     | 9.77  | 2285700 | 20.0 |
| Naphthalene, 2,3-... | 9.43  | 6.7     | ng    | 766903   | 3                     | 9.77  | 2285700 | 20.0 |
| unknown9.69          | 9.69  | 6.4     | ng    | 730171   | 3                     | 9.77  | 2285700 | 20.0 |
| Naphthalene, 2-(1... | 9.88  | 6.5     | ng    | 744309   | 3                     | 9.77  | 2285700 | 20.0 |
| unknown10.04         | 10.04 | 6.0     | ng    | 686904   | 3                     | 9.77  | 2285700 | 20.0 |
| Decane, 3,6-dimet... | 10.44 | 10.1    | ng    | 1148530  | 3                     | 9.77  | 2285700 | 20.0 |
| Tridecane, 5-propyl- | 10.70 | 31.1    | ng    | 2054310  | 4                     | 11.25 | 1321360 | 20.0 |
| 2-Bromotetradecane   | 11.17 | 9.2     | ng    | 609752   | 4                     | 11.25 | 1321360 | 20.0 |