

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
 Data File : BM005598.D  
 Acq On : 22 May 2016 22:04  
 Operator : UM/SJ  
 Sample : H3087-16  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 JHGK9

## Integration Parameters: LSCINT.P

Integrator: RTE  
 Smoothing : OFF  
 Sampling : 1  
 Start Thrs: 0.2  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 1 % 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\_M\METHODS\SOM02.2-EPA-BM052016.M  
 Title : SVOA 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         | 5.451       | 475           | 487         | 494          | rBV      | 335186         | 602372        | 4.82%           | 0.250%        |
| 2         | 5.704       | 522           | 530         | 533          | rBV      | 788656         | 1435353       | 11.49%          | 0.595%        |
| 3         | 5.816       | 542           | 549         | 555          | rBV2     | 329857         | 577082        | 4.62%           | 0.239%        |
| 4         | 5.916       | 560           | 566         | 580          | rBV4     | 599700         | 1802657       | 14.44%          | 0.748%        |
| 5         | 6.075       | 587           | 593         | 600          | rBV      | 2148962        | 3492452       | 27.97%          | 1.448%        |
| 6         | 6.134       | 600           | 603         | 609          | rVB3     | 92041          | 154870        | 1.24%           | 0.064%        |
| 7         | 6.222       | 609           | 618         | 624          | rVB2     | 587111         | 1154914       | 9.25%           | 0.479%        |
| 8         | 6.287       | 624           | 629         | 637          | rBV3     | 357540         | 696218        | 5.58%           | 0.289%        |
| 9         | 6.369       | 637           | 643         | 647          | rBV      | 2219186        | 3777189       | 30.25%          | 1.567%        |
| 10        | 6.410       | 647           | 650         | 655          | rVB      | 601098         | 923731        | 7.40%           | 0.383%        |
| 11        | 6.504       | 655           | 666         | 673          | rBV3     | 2021851        | 4785728       | 38.32%          | 1.985%        |
| 12        | 6.634       | 682           | 688         | 693          | rVB      | 1207002        | 1971184       | 15.79%          | 0.818%        |
| 13        | 6.698       | 693           | 699         | 703          | rBV6     | 378824         | 784586        | 6.28%           | 0.325%        |
| 14        | 6.740       | 703           | 706         | 709          | rVV2     | 216604         | 287215        | 2.30%           | 0.119%        |
| 15        | 6.781       | 709           | 713         | 717          | rVV      | 731000         | 1074937       | 8.61%           | 0.446%        |
| 16        | 6.845       | 717           | 724         | 731          | rVB3     | 1621588        | 3577480       | 28.65%          | 1.484%        |
| 17        | 6.916       | 731           | 736         | 741          | rVB2     | 366145         | 706029        | 5.65%           | 0.293%        |
| 18        | 6.975       | 741           | 746         | 750          | rBV2     | 703790         | 1334940       | 10.69%          | 0.554%        |
| 19        | 7.057       | 757           | 760         | 762          | rBV      | 206872         | 236208        | 1.89%           | 0.098%        |
| 20        | 7.098       | 762           | 767         | 771          | rVV2     | 1403487        | 2787495       | 22.32%          | 1.156%        |
| 21        | 7.151       | 771           | 776         | 782          | rVV2     | 3060038        | 5798181       | 46.43%          | 2.405%        |
| 22        | 7.198       | 782           | 784         | 788          | rVV2     | 437606         | 588153        | 4.71%           | 0.244%        |
| 23        | 7.322       | 788           | 805         | 810          | rVV3     | 3336497        | 10273472      | 82.27%          | 4.261%        |
| 24        | 7.410       | 810           | 820         | 826          | rVB4     | 3476387        | 9432586       | 75.54%          | 3.912%        |
| 25        | 7.492       | 826           | 834         | 839          | rVB3     | 1126554        | 2298577       | 18.41%          | 0.953%        |
| 26        | 7.557       | 839           | 845         | 852          | rBV3     | 1415187        | 3242970       | 25.97%          | 1.345%        |
| 27        | 7.639       | 852           | 859         | 865          | rVB5     | 1869877        | 4220766       | 33.80%          | 1.751%        |
| 28        | 7.745       | 865           | 877         | 883          | rBV3     | 4426265        | 10409666      | 83.36%          | 4.317%        |
| 29        | 7.810       | 884           | 888         | 891          | rVV5     | 913484         | 1653544       | 13.24%          | 0.686%        |
| 30        | 7.839       | 891           | 893         | 897          | rVV3     | 835355         | 1223546       | 9.80%           | 0.507%        |
| 31        | 7.892       | 897           | 902         | 906          | rVV4     | 1100373        | 2109454       | 16.89%          | 0.875%        |
| 32        | 7.939       | 906           | 910         | 913          | rVV      | 868176         | 1536851       | 12.31%          | 0.637%        |
| 33        | 7.992       | 913           | 919         | 926          | rVB4     | 3026933        | 7185415       | 57.54%          | 2.980%        |
| 34        | 8.051       | 926           | 929         | 932          | rBV2     | 489253         | 633143        | 5.07%           | 0.263%        |

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 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 JHKG9

## Integration Parameters: LSCINT.P

Integrator: RTE  
 Smoothing : OFF  
 Sampling : 1  
 Start Thrs: 0.2  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 1 % 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\_M\METHODS\SOM02.2-EPA-BM052016.M  
 Title : SVOA CALIBRATION

|    |        |      |      |      |      |         |         |        |        |
|----|--------|------|------|------|------|---------|---------|--------|--------|
| 35 | 8.092  | 932  | 936  | 946  | rVB5 | 1098714 | 2423211 | 19.41% | 1.005% |
| 36 | 8.181  | 946  | 951  | 954  | rBV3 | 631245  | 1184881 | 9.49%  | 0.491% |
| 37 | 8.222  | 955  | 958  | 962  | rVB3 | 844551  | 1288196 | 10.32% | 0.534% |
| 38 | 8.298  | 968  | 971  | 976  | rVB4 | 249726  | 377856  | 3.03%  | 0.157% |
| 39 | 8.369  | 976  | 983  | 986  | rBV4 | 919201  | 1831754 | 14.67% | 0.760% |
| 40 | 8.451  | 994  | 997  | 999  | rBV2 | 161282  | 216213  | 1.73%  | 0.090% |
| 41 | 8.486  | 999  | 1003 | 1004 | rBV4 | 313876  | 404549  | 3.24%  | 0.168% |
| 42 | 8.522  | 1005 | 1009 | 1011 | rBV  | 388990  | 619511  | 4.96%  | 0.257% |
| 43 | 8.610  | 1021 | 1024 | 1030 | rVB2 | 695540  | 1063937 | 8.52%  | 0.441% |
| 44 | 8.692  | 1032 | 1038 | 1041 | rBV3 | 1278906 | 2430892 | 19.47% | 1.008% |
| 45 | 8.781  | 1050 | 1053 | 1056 | rVB3 | 439605  | 493103  | 3.95%  | 0.205% |
| 46 | 8.869  | 1063 | 1068 | 1071 | rBV2 | 1051999 | 1896796 | 15.19% | 0.787% |
| 47 | 9.069  | 1097 | 1102 | 1108 | rVB7 | 784904  | 1936782 | 15.51% | 0.803% |
| 48 | 9.151  | 1108 | 1116 | 1125 | rBV5 | 964404  | 2362639 | 18.92% | 0.980% |
| 49 | 9.269  | 1126 | 1136 | 1143 | rBV4 | 971572  | 2454827 | 19.66% | 1.018% |
| 50 | 9.345  | 1143 | 1149 | 1153 | rBV2 | 850331  | 1663852 | 13.32% | 0.690% |
| 51 | 9.398  | 1153 | 1158 | 1167 | rVB2 | 663455  | 1456100 | 11.66% | 0.604% |
| 52 | 9.481  | 1168 | 1172 | 1174 | rBV4 | 387054  | 643340  | 5.15%  | 0.267% |
| 53 | 9.645  | 1193 | 1200 | 1203 | rBV3 | 1055984 | 2305136 | 18.46% | 0.956% |
| 54 | 9.686  | 1203 | 1207 | 1218 | rVB8 | 1407685 | 4047829 | 32.42% | 1.679% |
| 55 | 9.786  | 1218 | 1224 | 1229 | rBV6 | 607301  | 1341765 | 10.75% | 0.556% |
| 56 | 9.892  | 1238 | 1242 | 1244 | rBV3 | 371090  | 579052  | 4.64%  | 0.240% |
| 57 | 10.063 | 1267 | 1271 | 1275 | rVB5 | 779512  | 1367473 | 10.95% | 0.567% |
| 58 | 10.310 | 1308 | 1313 | 1314 | rBV4 | 707143  | 1137082 | 9.11%  | 0.472% |
| 59 | 10.339 | 1315 | 1318 | 1322 | rVV3 | 1013766 | 1854279 | 14.85% | 0.769% |
| 60 | 10.392 | 1323 | 1327 | 1331 | rVB  | 981305  | 1804127 | 14.45% | 0.748% |
| 61 | 10.575 | 1353 | 1358 | 1362 | rBV2 | 1868376 | 3711047 | 29.72% | 1.539% |
| 62 | 10.622 | 1363 | 1366 | 1373 | rVB4 | 2370114 | 4228995 | 33.87% | 1.754% |
| 63 | 10.692 | 1374 | 1378 | 1381 | rBV3 | 706085  | 1147105 | 9.19%  | 0.476% |
| 64 | 10.816 | 1396 | 1399 | 1403 | rBV4 | 637200  | 956868  | 7.66%  | 0.397% |
| 65 | 11.022 | 1427 | 1434 | 1442 | rBV5 | 1347197 | 3194751 | 25.58% | 1.325% |
| 66 | 11.104 | 1442 | 1448 | 1453 | rVB2 | 2564379 | 4433961 | 35.51% | 1.839% |
| 67 | 11.286 | 1473 | 1479 | 1487 | rVB5 | 2105961 | 5122684 | 41.02% | 2.125% |
| 68 | 11.369 | 1487 | 1493 | 1499 | rBV4 | 1414293 | 3620932 | 29.00% | 1.502% |
| 69 | 11.445 | 1501 | 1506 | 1509 | rBV3 | 1298412 | 2612009 | 20.92% | 1.083% |
| 70 | 11.669 | 1539 | 1544 | 1548 | rBV3 | 2478676 | 4411205 | 35.33% | 1.829% |
| 71 | 11.804 | 1561 | 1567 | 1574 | rBV2 | 2293882 | 4673595 | 37.43% | 1.938% |

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|----|--------|------|------|------|------|---------|----------|---------|--------|
| 72 | 11.904 | 1578 | 1584 | 1588 | rVB  | 3532826 | 6364605  | 50.97%  | 2.640% |
| 73 | 12.039 | 1603 | 1607 | 1610 | rBV2 | 923098  | 1427097  | 11.43%  | 0.592% |
| 74 | 12.351 | 1655 | 1660 | 1666 | rBV4 | 1354879 | 2861639  | 22.92%  | 1.187% |
| 75 | 12.439 | 1671 | 1675 | 1679 | rBV2 | 1340978 | 2322725  | 18.60%  | 0.963% |
| 76 | 12.663 | 1708 | 1713 | 1718 | rBV4 | 1316404 | 2546666  | 20.39%  | 1.056% |
| 77 | 12.810 | 1734 | 1738 | 1742 | rBV5 | 666722  | 1280092  | 10.25%  | 0.531% |
| 78 | 12.892 | 1748 | 1752 | 1758 | rVB3 | 1885004 | 3240611  | 25.95%  | 1.344% |
| 79 | 13.263 | 1812 | 1815 | 1820 | rVB  | 2205119 | 3233944  | 25.90%  | 1.341% |
| 80 | 13.857 | 1913 | 1916 | 1921 | rBV2 | 780691  | 1252613  | 10.03%  | 0.520% |
| 81 | 14.145 | 1962 | 1965 | 1968 | rBV  | 837788  | 1107120  | 8.87%   | 0.459% |
| 82 | 14.286 | 1985 | 1989 | 1995 | rVB3 | 1065479 | 1837002  | 14.71%  | 0.762% |
| 83 | 14.451 | 2014 | 2017 | 2025 | rVB2 | 1181138 | 1793269  | 14.36%  | 0.744% |
| 84 | 15.439 | 2182 | 2185 | 2190 | rVB  | 1399911 | 1946642  | 15.59%  | 0.807% |
| 85 | 15.492 | 2191 | 2194 | 2200 | rVV3 | 670159  | 1177288  | 9.43%   | 0.488% |
| 86 | 17.198 | 2481 | 2484 | 2487 | rBV2 | 646564  | 928510   | 7.44%   | 0.385% |
| 87 | 17.239 | 2487 | 2491 | 2496 | rVB  | 2667827 | 3792030  | 30.37%  | 1.573% |
| 88 | 18.956 | 2780 | 2783 | 2786 | rVB  | 1748381 | 2095387  | 16.78%  | 0.869% |
| 89 | 19.274 | 2831 | 2837 | 2842 | rBV  | 6671904 | 10276629 | 82.30%  | 4.262% |
| 90 | 19.639 | 2895 | 2899 | 2906 | rVB  | 7411026 | 12487294 | 100.00% | 5.179% |
| 91 | 21.380 | 3192 | 3195 | 3200 | rVV2 | 2925074 | 4141547  | 33.17%  | 1.718% |
| 92 | 21.433 | 3201 | 3204 | 3211 | rVB  | 3791622 | 4935461  | 39.52%  | 2.047% |

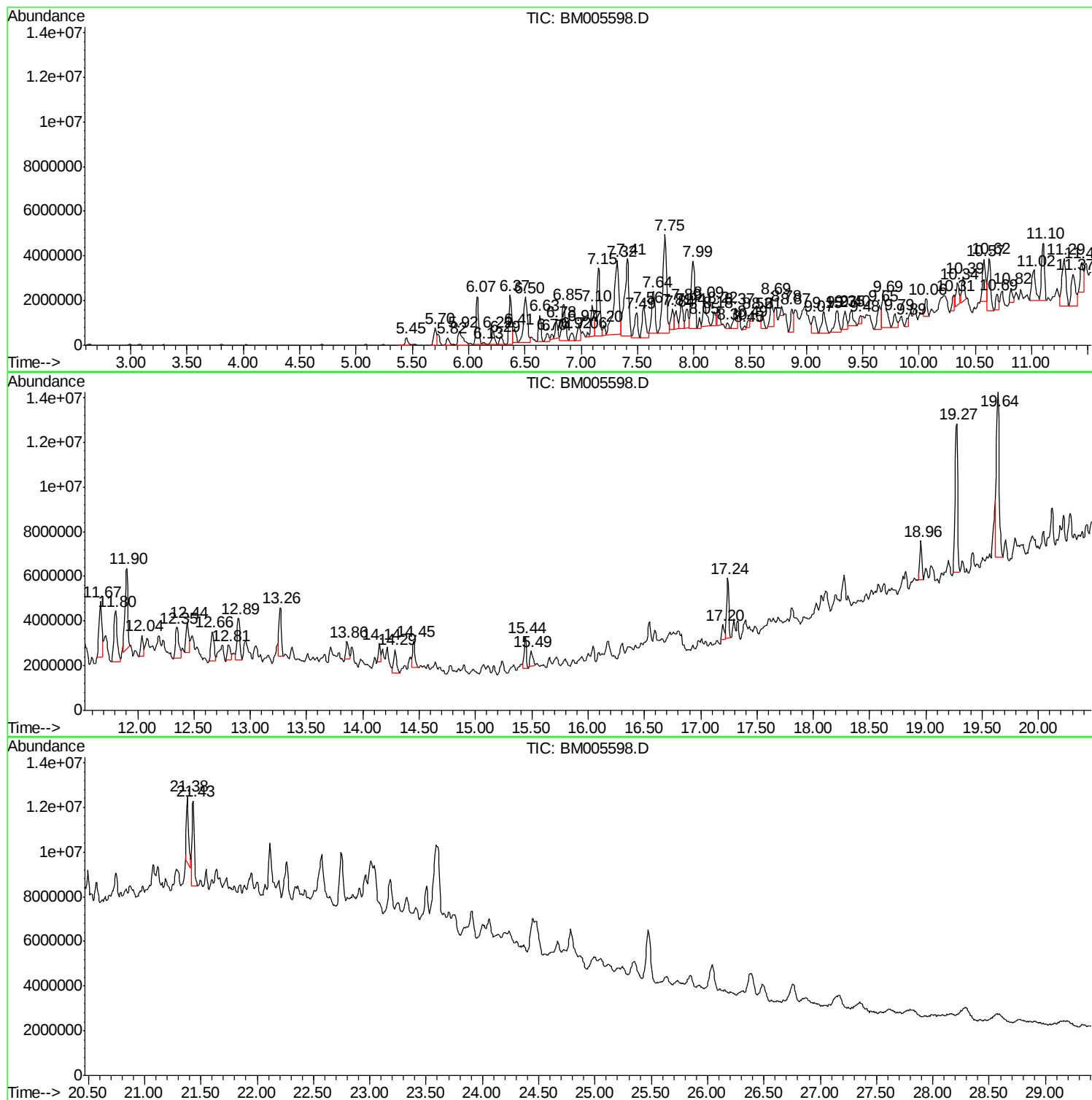
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Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
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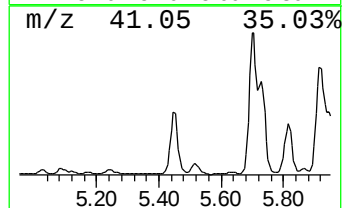
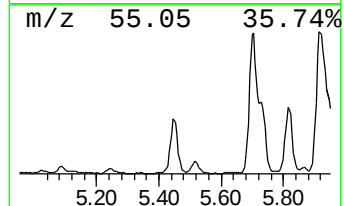
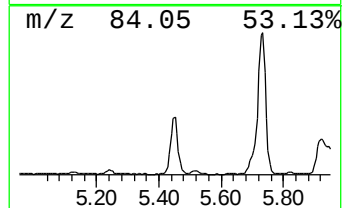
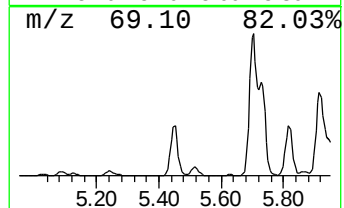
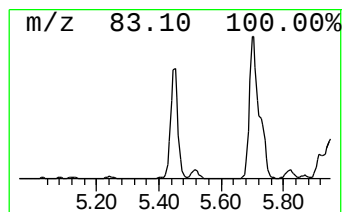
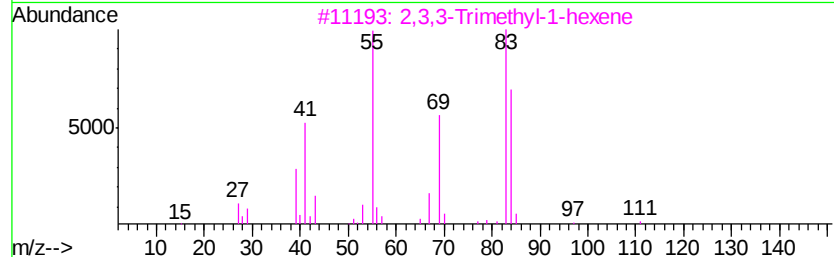
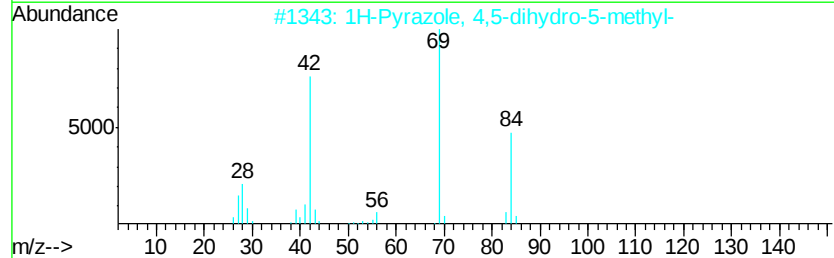
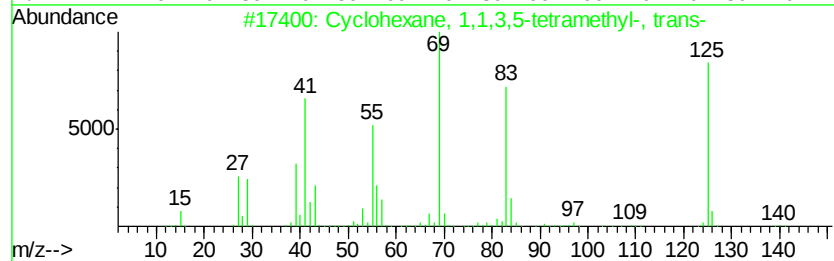
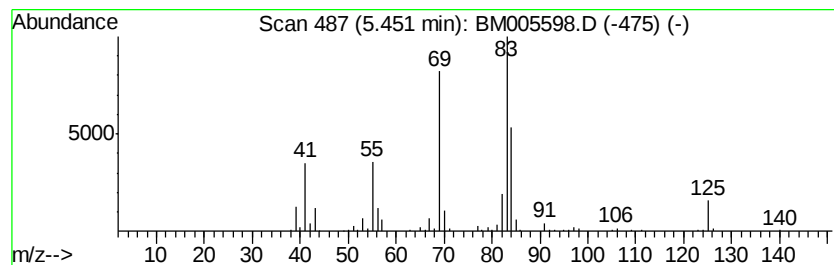
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 1 (DEL) Alkane: Cyclic-5.45 Concentration Rank 50

| R.T. | EstConc    | Area   | Relative to ISTD       | R.T. |
|------|------------|--------|------------------------|------|
| 5.45 | 7.29 ng/ul | 602372 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20  | 050876-31-8  | 43   |
| 2    |    | 1H-Pyrazole, 4,5-dihydro-5-methyl-  | 84  | C4H8N2  | 001568-20-3  | 38   |
| 3    |    | 2,3,3-Trimethyl-1-hexene            | 126 | C9H18   | 1000113-52-1 | 38   |
| 4    |    | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20  | 050876-31-8  | 37   |
| 5    |    | Bicyclo[2.2.2]octan-1-amine         | 125 | C8H15N  | 001193-42-6  | 35   |



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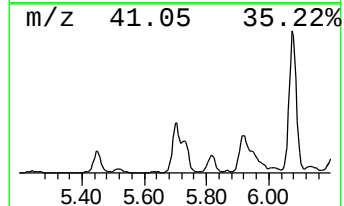
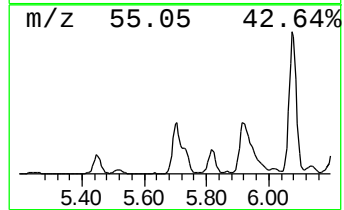
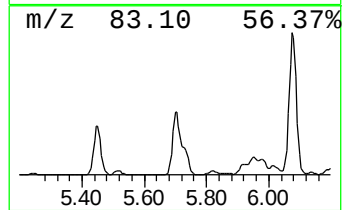
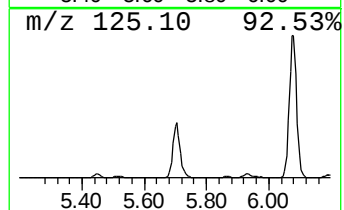
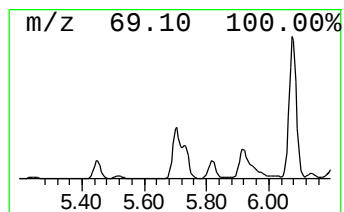
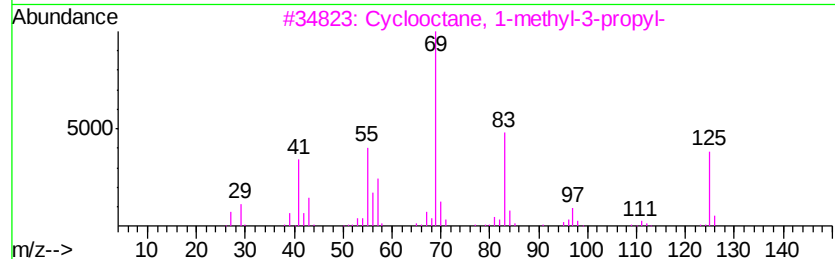
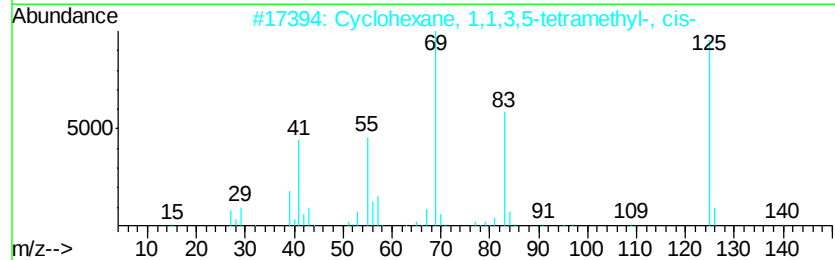
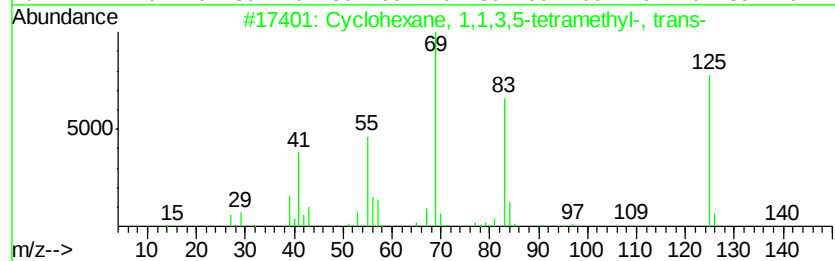
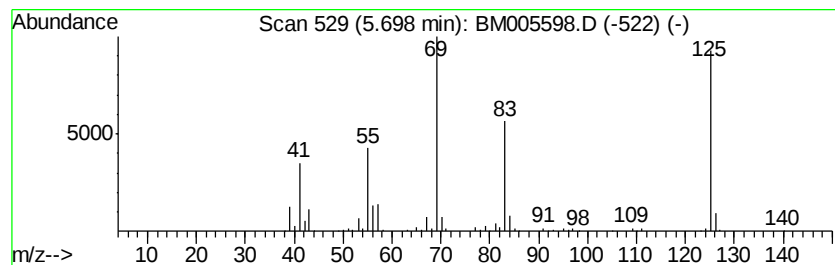
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 2 (DEL) Alkane: Cyclic-5.70 Concentration Rank 30

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 5.70 | 17.36 ng/ul | 1435350 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20  | 050876-31-8 | 94   |
| 2    |    | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20  | 050876-32-9 | 90   |
| 3    |    | Cyclooctane, 1-methyl-3-propyl-     | 168 | C12H24  | 255885-37-1 | 74   |
| 4    |    | Cyclohexane, 1,1,4,4-tetramethyl-   | 140 | C10H20  | 002223-52-1 | 72   |
| 5    |    | Cyclohexane, 1,3,5-trimethyl-2-o... | 378 | C27H54  | 055282-34-3 | 56   |



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Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

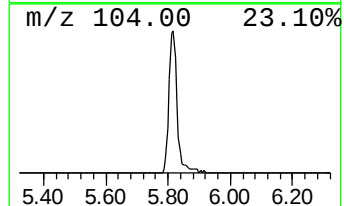
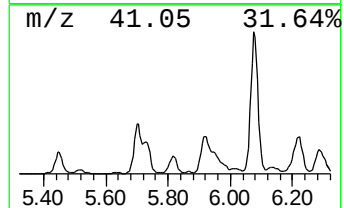
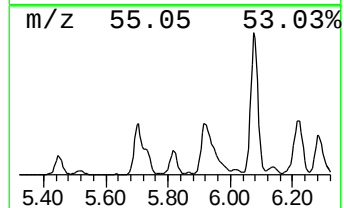
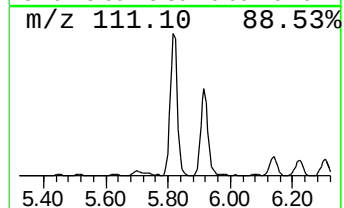
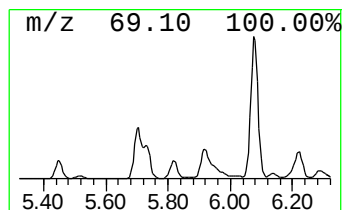
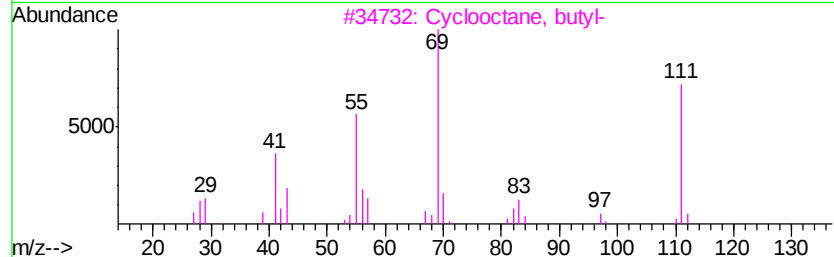
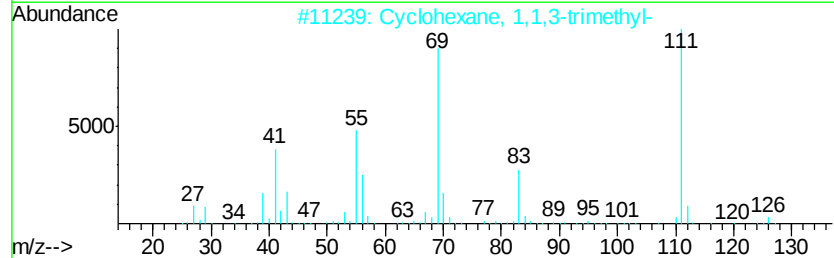
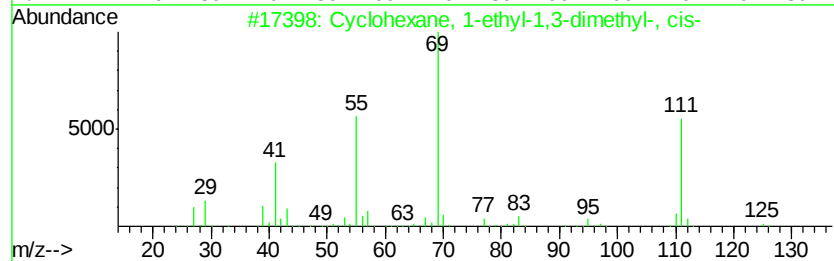
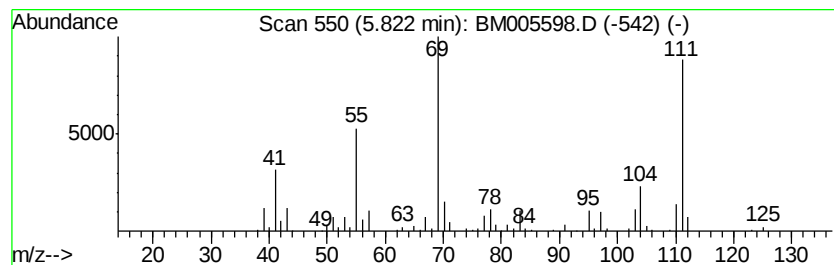
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TIC Integration Parameters: LSCINT.P

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Peak Number 3 (DEL) Alkane: Cyclic-5.82 Concentration Rank 52

| R.T. | EstConc    | Area   | Relative to ISTD       | R.T. |
|------|------------|--------|------------------------|------|
| 5.82 | 6.98 ng/ul | 577082 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                         | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclohexane, 1-ethyl-1,3-dimethyl... | 140 | C10H20  | 062238-31-7 | 59   |
| 2    |    | Cyclohexane, 1,1,3-trimethyl-        | 126 | C9H18   | 003073-66-3 | 53   |
| 3    |    | Cyclooctane, butyl-                  | 168 | C12H24  | 016538-93-5 | 53   |
| 4    |    | 3-Isopropyl-5-methyl-hex-4-en-2-one  | 154 | C10H18O | 077142-85-9 | 53   |
| 5    |    | Cyclopentane, 1,1,3-trimethyl-3-...  | 166 | C12H22  | 074421-09-3 | 53   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

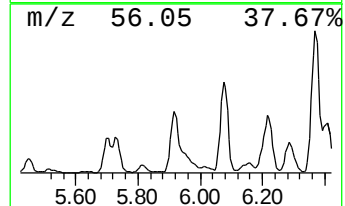
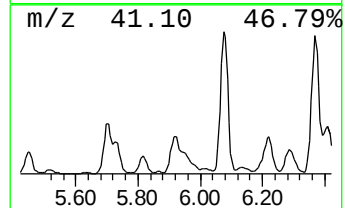
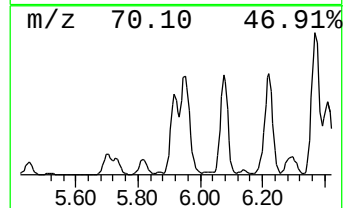
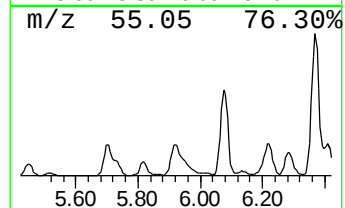
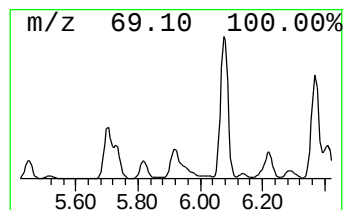
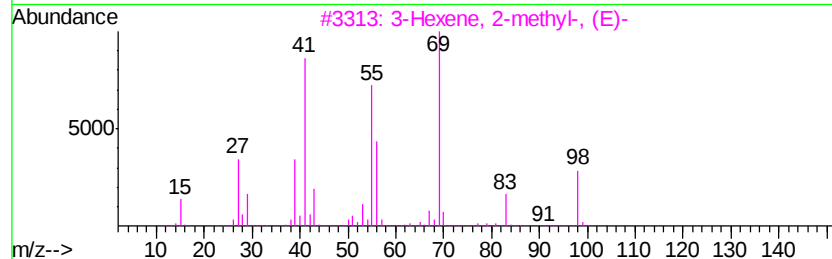
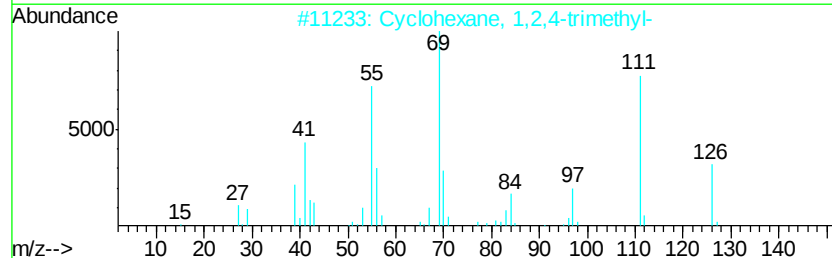
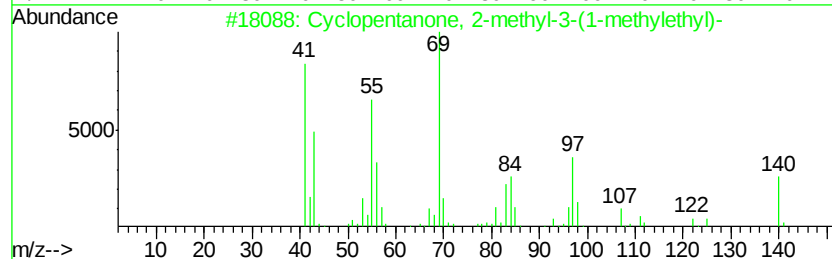
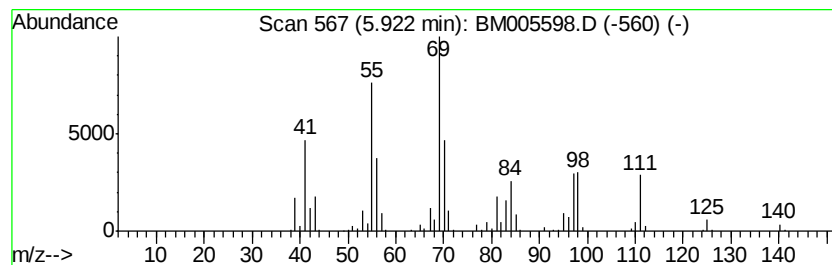
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TIC Integration Parameters: LSCINT.P

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Peak Number 4 Cyclopentanone, 2-methyl-3-... Concentration Rank 25

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 5.92 | 21.80 ng/ul | 1802660 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclopentanone, 2-methyl-3-(1-me... | 140 | C9H16O  | 054549-81-4 | 64   |
| 2    |    | Cyclohexane, 1,2,4-trimethyl-       | 126 | C9H18   | 002234-75-5 | 59   |
| 3    |    | 3-Hexene, 2-methyl-, (E)-           | 98  | C7H14   | 000692-24-0 | 55   |
| 4    |    | Cyclopropane, 1,2-dimethyl-1-pen... | 140 | C10H20  | 062238-04-4 | 53   |
| 5    |    | 3-Hexene, 2-methyl-, (Z)-           | 98  | C7H14   | 015840-60-5 | 53   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

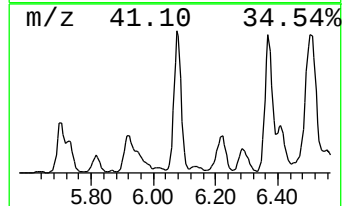
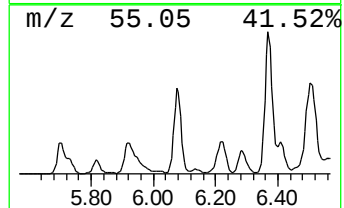
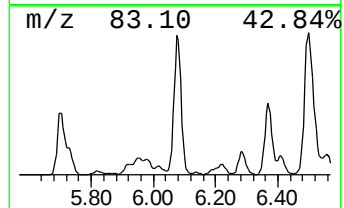
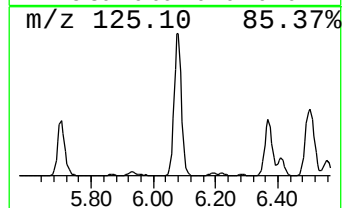
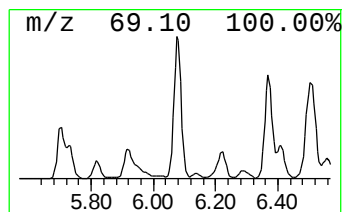
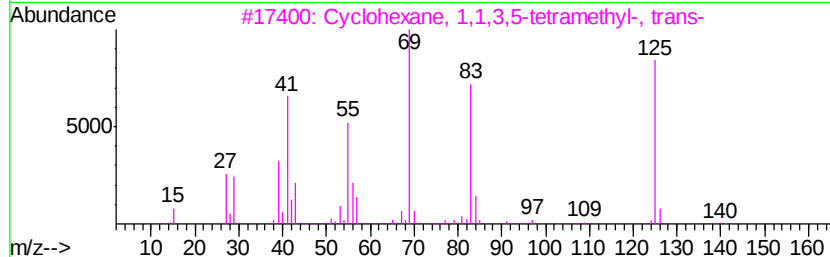
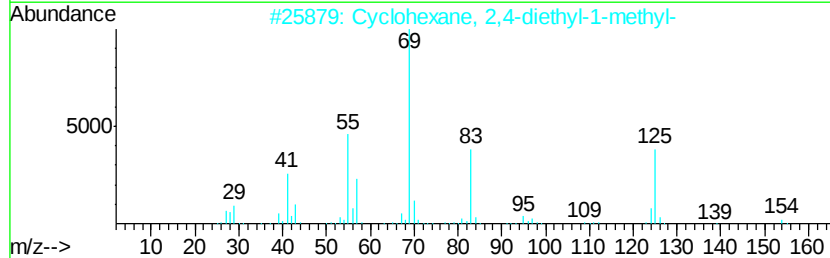
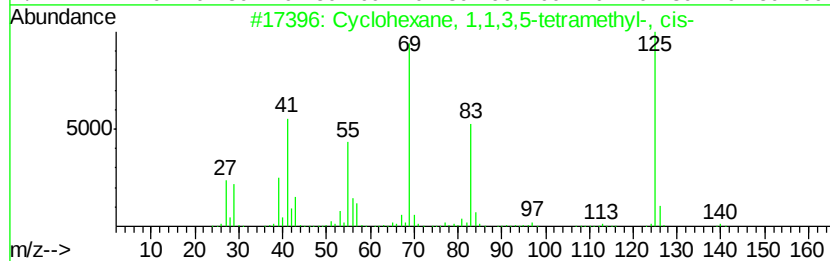
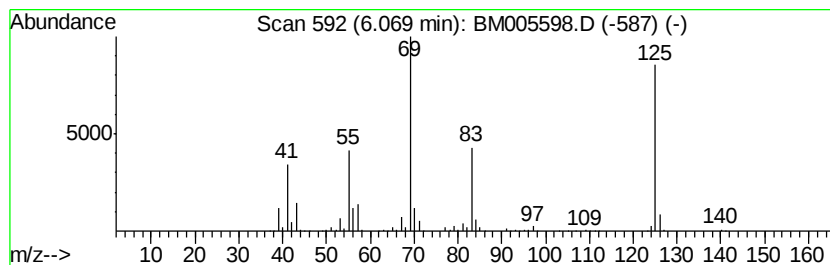
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Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 5 (DEL) Alkane: Cyclic-6.07 Concentration Rank 9

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 6.07 | 42.24 ng/ul | 3492450 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20  | 050876-32-9 | 87   |
| 2    |    | Cyclohexane, 2,4-diethyl-1-methyl-  | 154 | C11H22  | 061142-70-9 | 74   |
| 3    |    | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20  | 050876-31-8 | 59   |
| 4    |    | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20  | 050876-31-8 | 58   |
| 5    |    | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20  | 050876-32-9 | 43   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

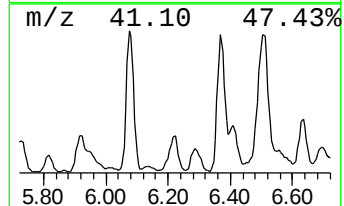
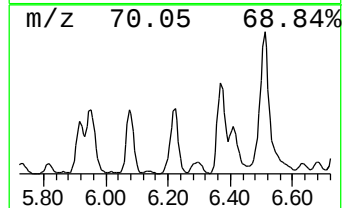
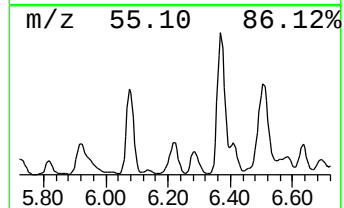
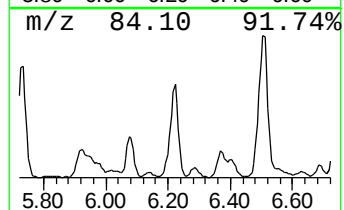
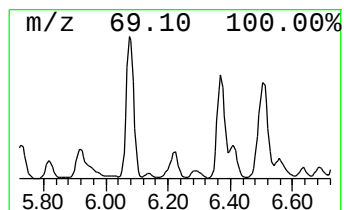
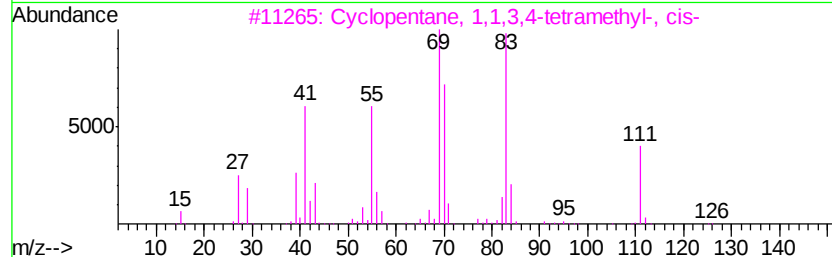
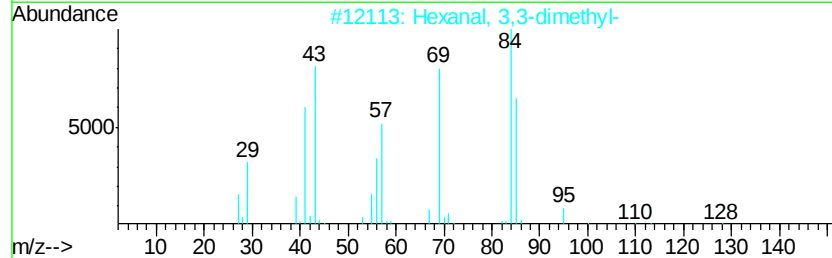
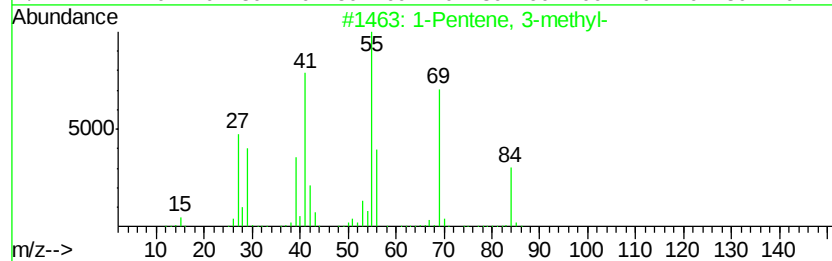
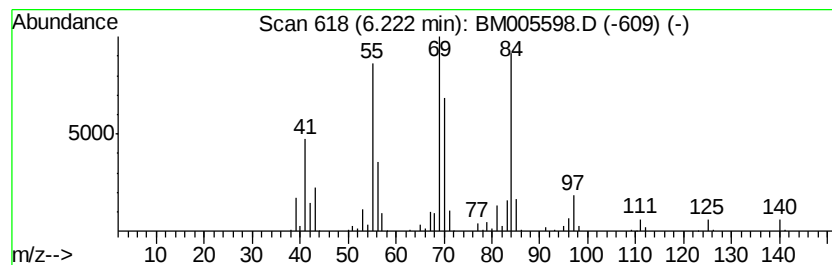
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 6 (DEL) Alkane: Cyclic-6.22 Concentration Rank 36

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 6.22 | 13.97 ng/ul | 1154910 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 1-Pentene, 3-methyl-                | 84  | C6H12   | 000760-20-3 | 59   |
| 2    |    | Hexanal, 3,3-dimethyl-              | 128 | C8H16O  | 055320-57-5 | 50   |
| 3    |    | Cyclopentane, 1,1,3,4-tetramethy... | 126 | C9H18   | 053907-60-1 | 49   |
| 4    |    | 3-Octene, 4-ethyl-                  | 140 | C10H20  | 053966-51-1 | 49   |
| 5    |    | Cyclopentane, 1,1,3,4-tetramethy... | 126 | C9H18   | 053907-60-1 | 46   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

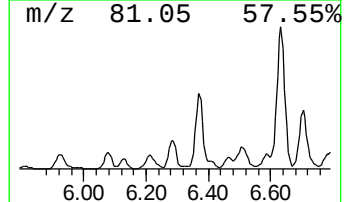
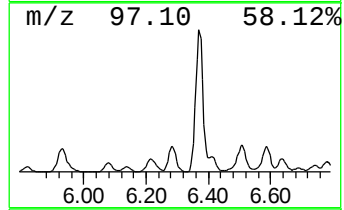
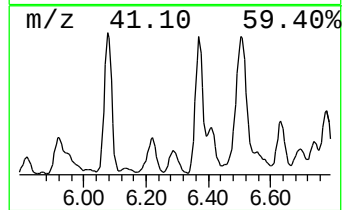
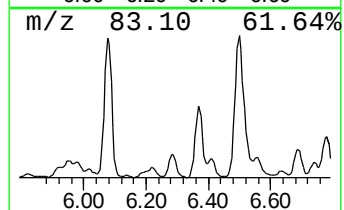
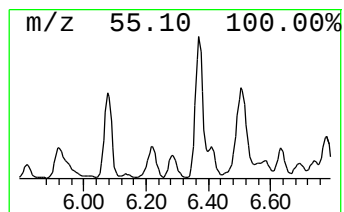
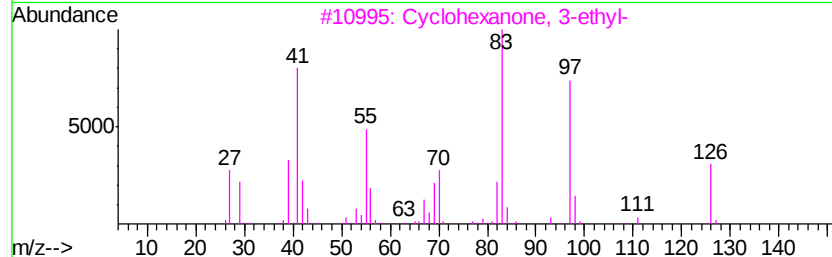
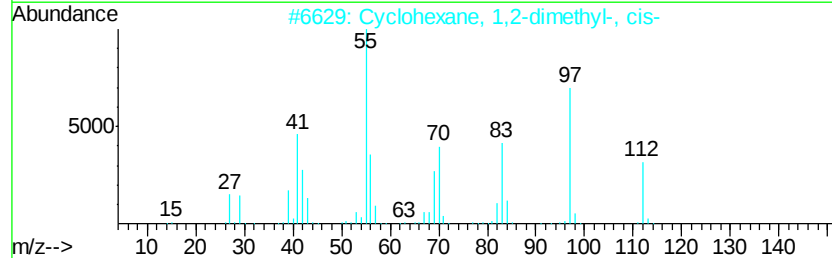
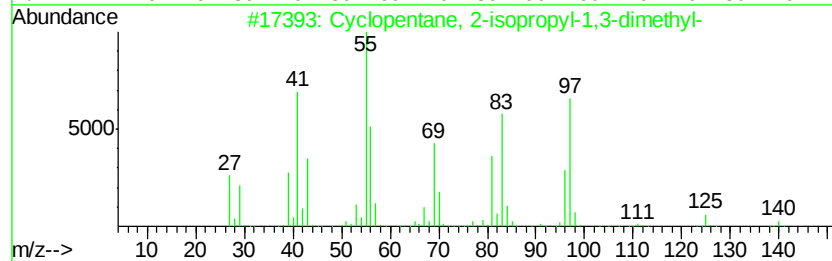
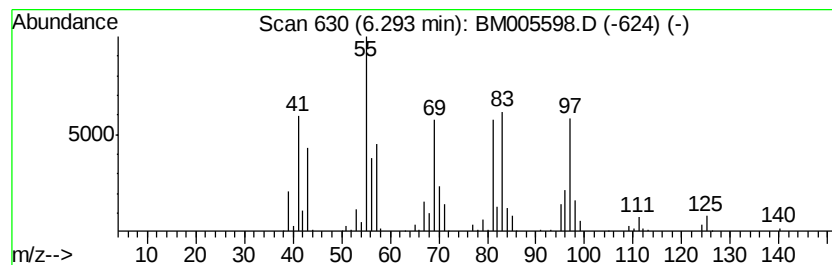
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 7 (DEL) Alkane: Cyclic-6.29 Concentration Rank 47

| R.T. | EstConc    | Area   | Relative to ISTD       | R.T. |
|------|------------|--------|------------------------|------|
| 6.29 | 8.42 ng/ul | 696218 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclopentane, 2-isopropyl-1,3-di... | 140 | C10H20  | 032281-85-9 | 90   |
| 2    |    | Cyclohexane, 1,2-dimethyl-, cis-    | 112 | C8H16   | 002207-01-4 | 59   |
| 3    |    | Cyclohexanone, 3-ethyl-             | 126 | C8H14O  | 022461-89-8 | 47   |
| 4    |    | Cyclohexane, 1-ethyl-4-methyl-, ... | 126 | C9H18   | 004926-78-7 | 43   |
| 5    |    | 2,5-Dimethyl-1-pyrroline            | 97  | C6H11N  | 000822-64-0 | 38   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

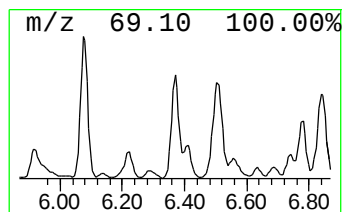
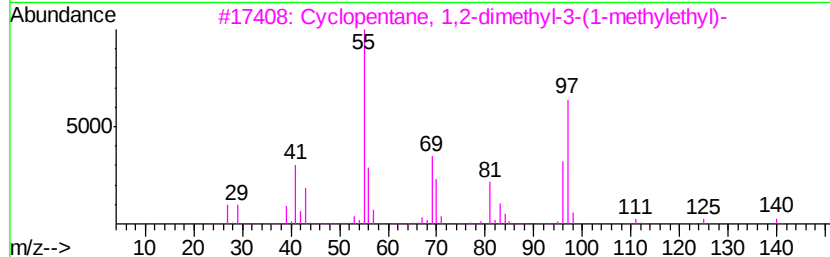
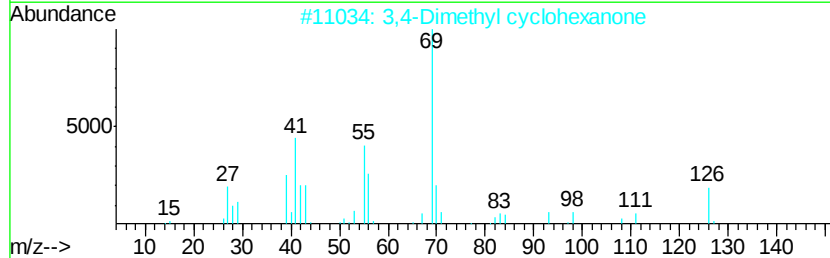
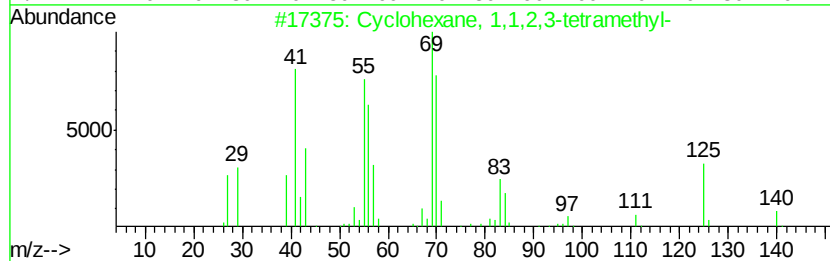
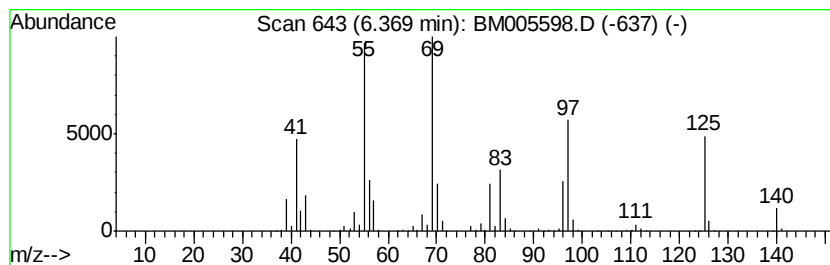
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Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 8 (DEL) Alkane: Cyclic-6.37 Concentration Rank 6

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 6.37 | 45.69 ng/ul | 3777190 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|---------|--------------|------|
| 1    |    |   | Cyclohexane, 1,1,2,3-tetramethyl-   | 140 | C10H20  | 006783-92-2  | 46   |
| 2    |    |   | 3,4-Dimethyl cyclohexanone          | 126 | C8H14O  | 005465-09-8  | 43   |
| 3    |    |   | Cyclopentane, 1,2-dimethyl-3-(1-... | 140 | C10H20  | 000489-20-3  | 38   |
| 4    |    |   | 2-Pentene, 3-ethyl-                 | 98  | C7H14   | 000816-79-5  | 38   |
| 5    |    |   | Cyclohexane, 1-isopropyl-3-methy... | 140 | C10H20  | 1000158-54-3 | 30   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

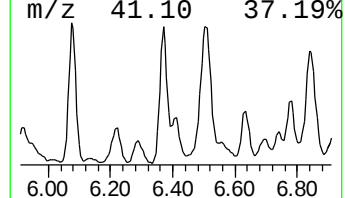
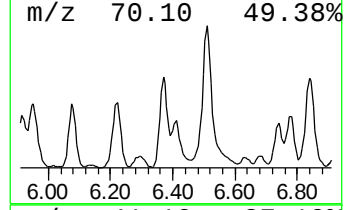
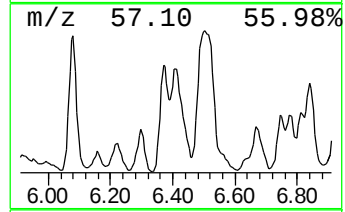
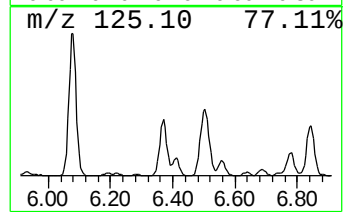
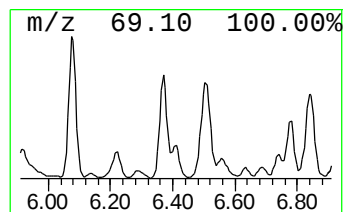
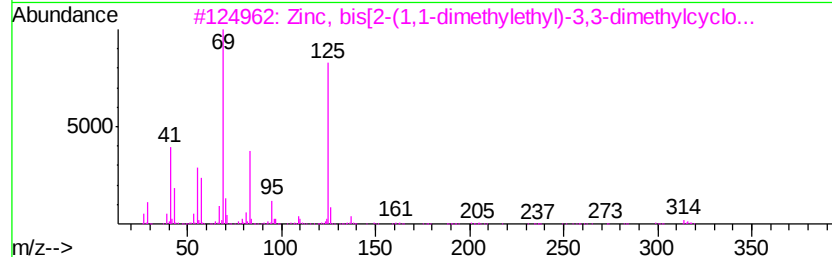
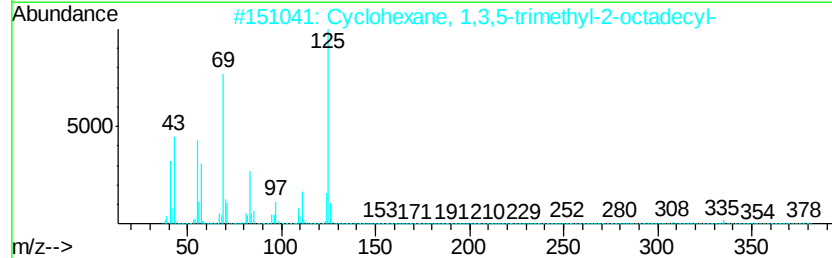
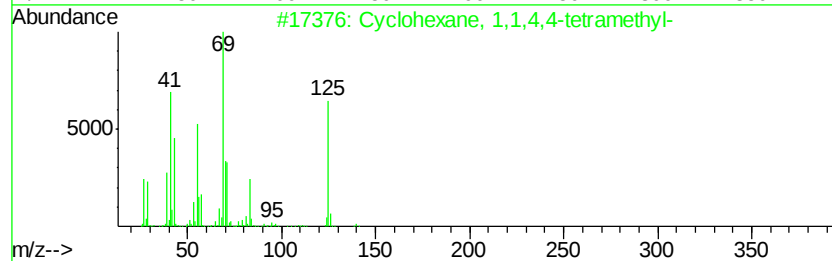
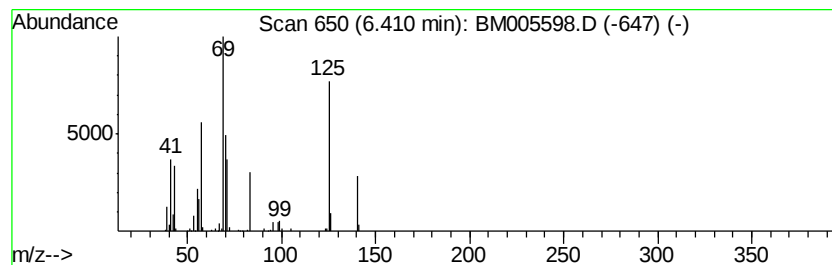
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ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 9 (DEL) Alkane: Cyclic-6.41 Concentration Rank 41

| R.T.    | EstConc                             | Area         | Relative to ISTD       | R.T.      |
|---------|-------------------------------------|--------------|------------------------|-----------|
| 6.41    | 11.17 ng/ul                         | 923731       | 1,4-Dichlorobenzene-d4 | 7.82      |
| Hit# of | 5                                   | Tentative ID | MW MolForm             | CAS# Qual |
| 1       | Cyclohexane, 1,1,4,4-tetramethyl-   | 140 C10H20   | 002223-52-1            | 64        |
| 2       | Cyclohexane, 1,3,5-trimethyl-2-o... | 378 C27H54   | 055282-34-3            | 45        |
| 3       | Zinc, bis[2-(1,1-dimethylethyl)-... | 314 C18H34Zn | 074793-36-5            | 42        |
| 4       | Cyclohexane, 1,1,3,5-tetramethyl... | 140 C10H20   | 050876-31-8            | 38        |
| 5       | 2-Octene, 2,6-dimethyl-             | 140 C10H20   | 004057-42-5            | 37        |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

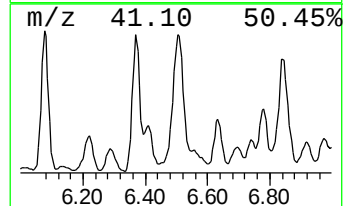
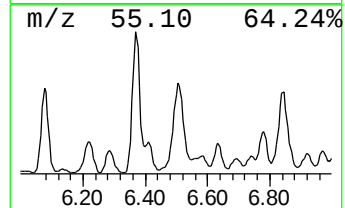
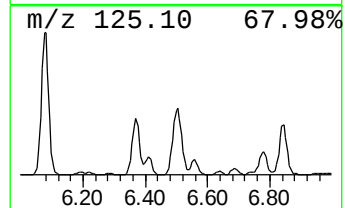
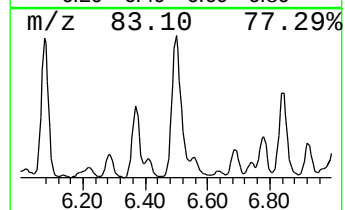
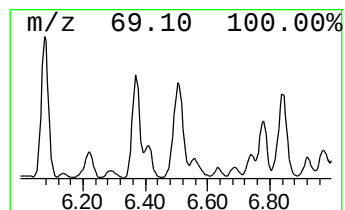
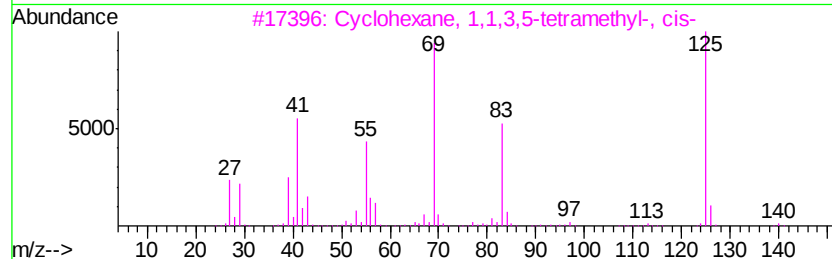
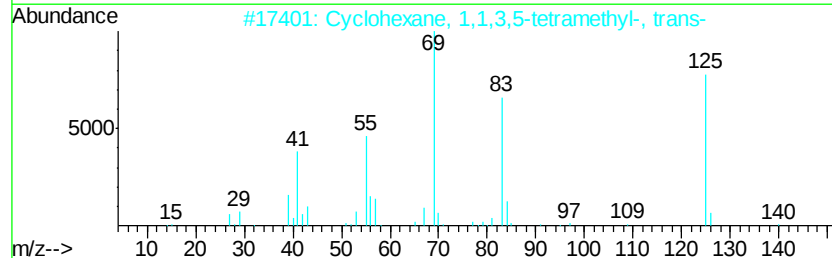
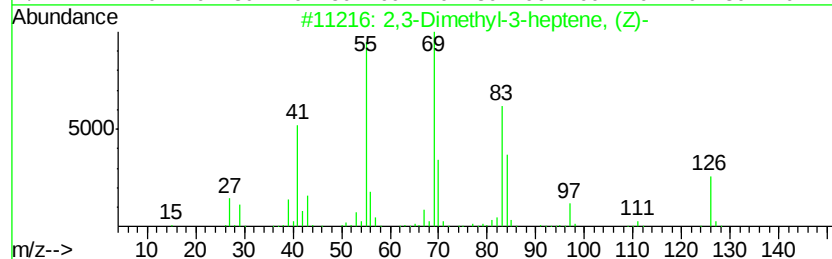
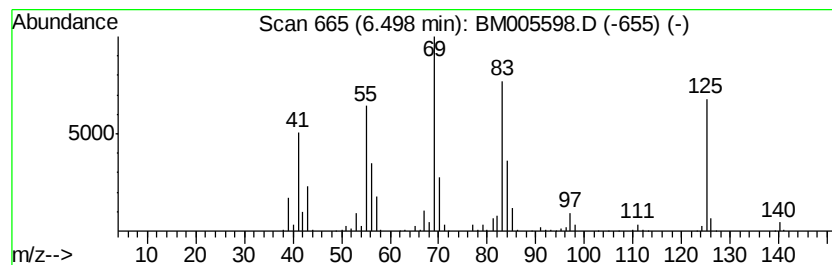
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 10 (DEL) Alkane: Cyclic-6.50 Concentration Rank 4

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 6.50 | 57.88 ng/ul | 4785730 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of                                  | 5 | Tentative ID | MW     | MolForm | CAS#        | Qual |
|------|-------------------------------------|---|--------------|--------|---------|-------------|------|
| 1    | 2,3-Dimethyl-3-heptene, (Z)-        |   | 126          | C9H18  |         | 059643-73-1 | 68   |
| 2    | Cyclohexane, 1,1,3,5-tetramethyl... |   | 140          | C10H20 |         | 050876-31-8 | 59   |
| 3    | Cyclohexane, 1,1,3,5-tetramethyl... |   | 140          | C10H20 |         | 050876-32-9 | 53   |
| 4    | Cyclopropane, 1,2-dimethyl-1-pen... |   | 140          | C10H20 |         | 062238-04-4 | 53   |
| 5    | 1-Octene, 3,3-dimethyl-             |   | 140          | C10H20 |         | 074511-51-6 | 52   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

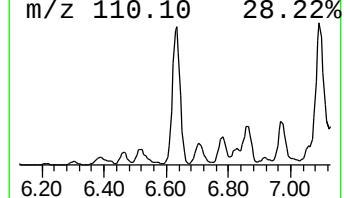
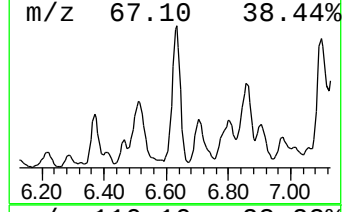
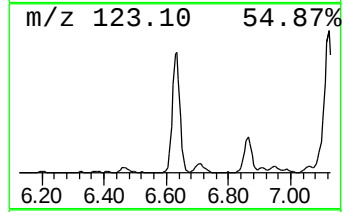
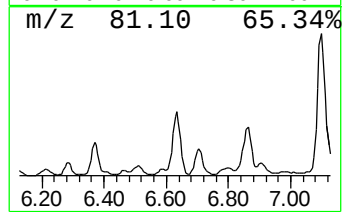
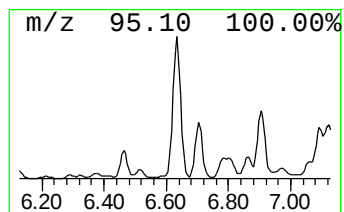
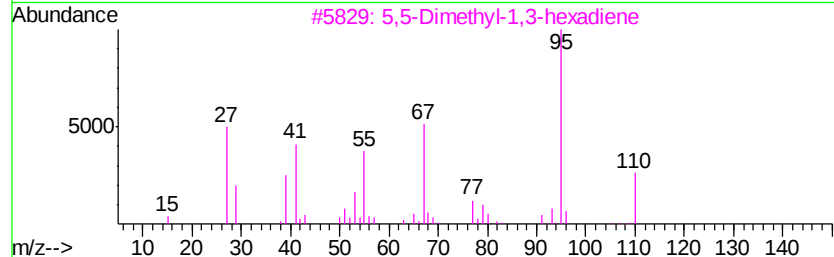
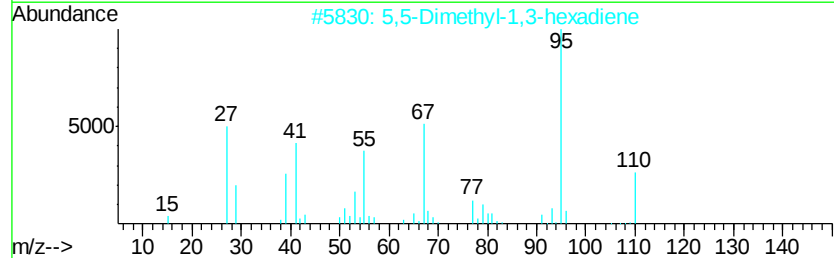
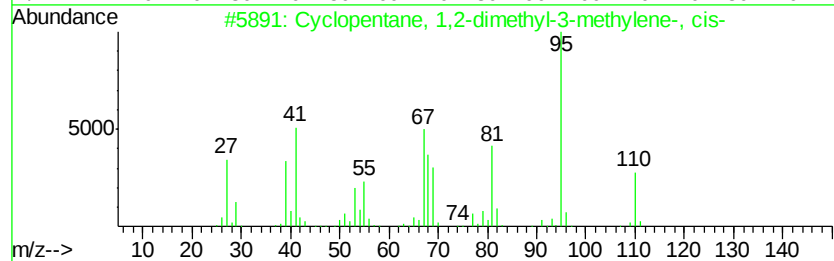
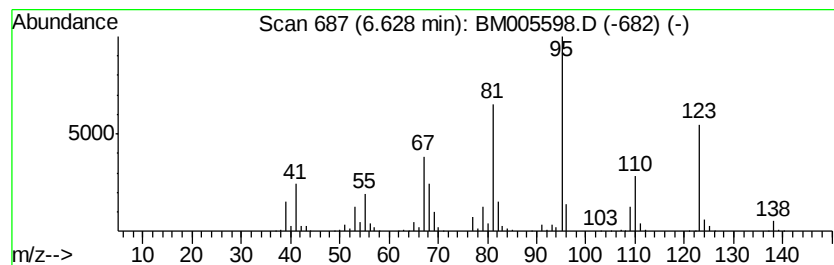
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TIC Integration Parameters: LSCINT.P

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Peak Number 11 (DEL) Alkane: Branched-6.63 Concentration Rank 20

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 6.63 | 23.84 ng/ul | 1971180 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclopentane, 1,2-dimethyl-3-met... | 110 | C8H14   | 091884-67-2 | 58   |
| 2    |    | 5,5-Dimethyl-1,3-hexadiene          | 110 | C8H14   | 001515-79-3 | 53   |
| 3    |    | 5,5-Dimethyl-1,3-hexadiene          | 110 | C8H14   | 001515-79-3 | 53   |
| 4    |    | 1,4-Pentadiene, 2,3,3-trimethyl-    | 110 | C8H14   | 000756-02-5 | 53   |
| 5    |    | Cyclopentene, 1,2,3-trimethyl-      | 110 | C8H14   | 000473-91-6 | 53   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

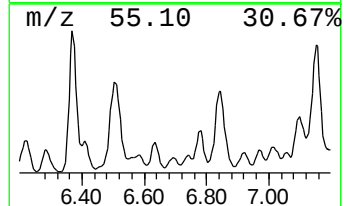
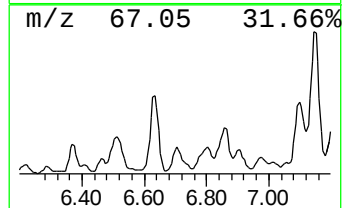
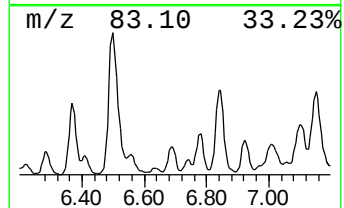
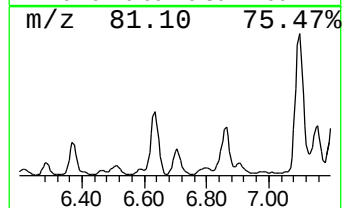
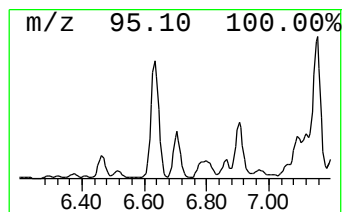
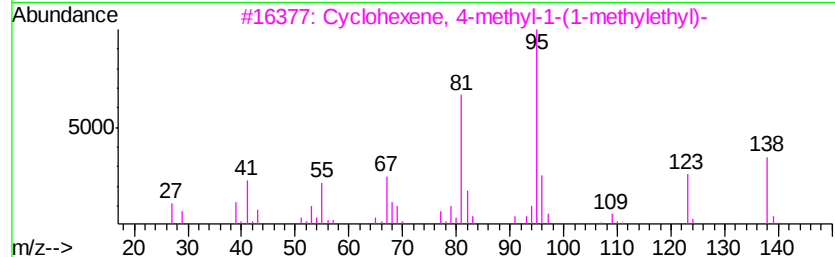
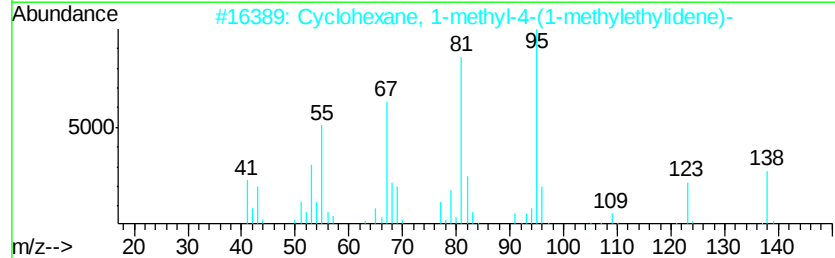
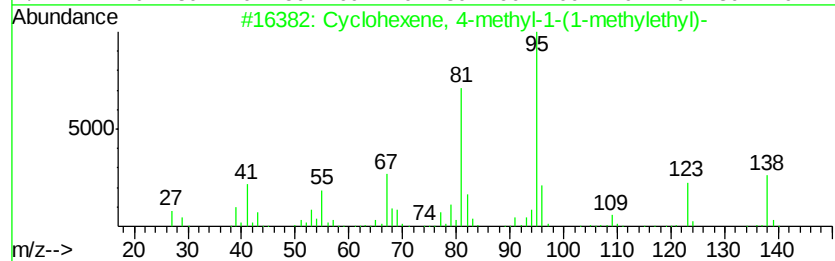
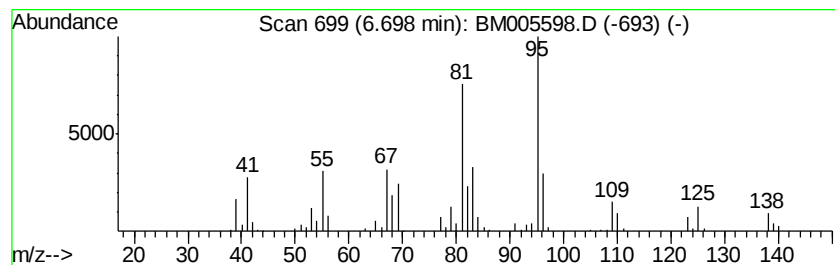
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 12 (DEL) Alkane: Branched-6.70 Concentration Rank 43

| R.T. | EstConc    | Area   | Relative to ISTD       | R.T. |
|------|------------|--------|------------------------|------|
| 6.70 | 9.49 ng/ul | 784586 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | Cyclohexene, 4-methyl-1-(1-methy... | 138 | C10H18  | 000500-00-5  | 80   |
| 2    |    | Cyclohexane, 1-methyl-4-(1-methy... | 138 | C10H18  | 001124-27-2  | 74   |
| 3    |    | Cyclohexene, 4-methyl-1-(1-methy... | 138 | C10H18  | 000500-00-5  | 74   |
| 4    |    | Spiro[3.4]octan-1-one, 5-methyl-... | 138 | C9H14O  | 065147-55-9  | 52   |
| 5    |    | 2,6-Dimethylbicyclo[3.2.1]octane    | 138 | C10H18  | 1000215-28-2 | 52   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

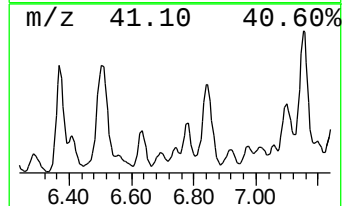
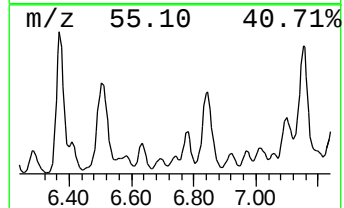
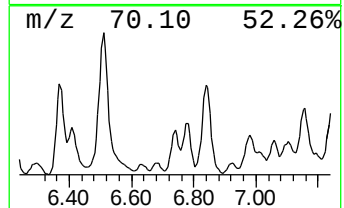
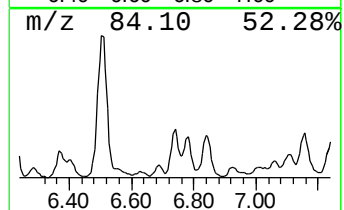
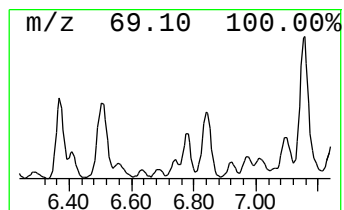
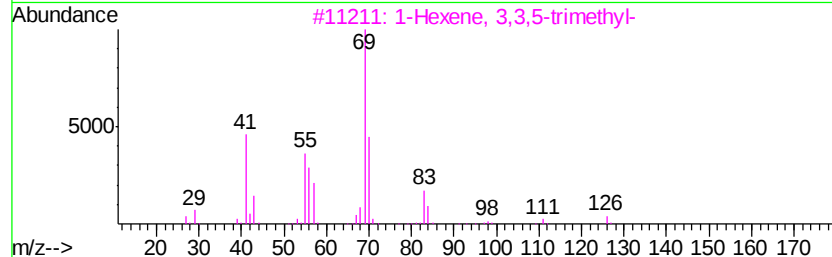
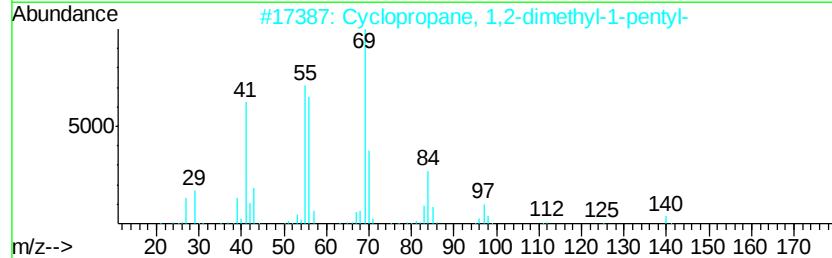
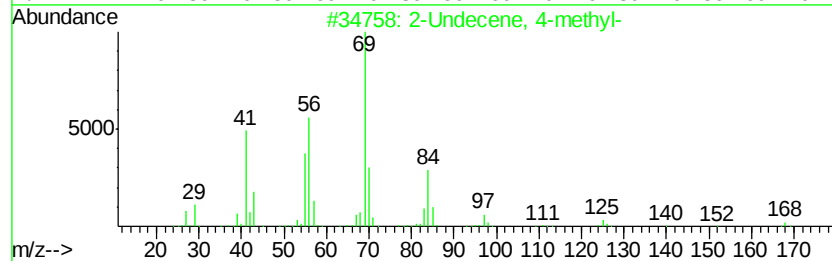
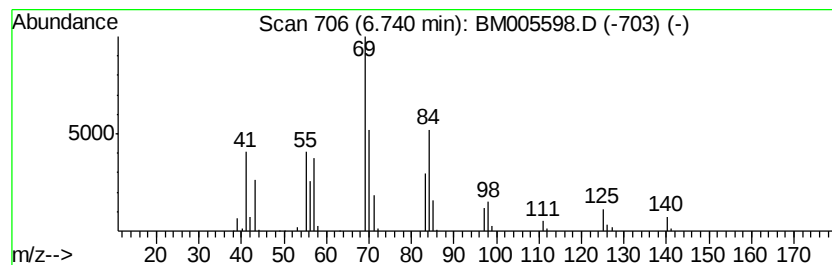
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 13 (DEL) Alkane: Cyclic-6.74 Concentration Rank 60

| R.T. | EstConc    | Area   | Relative to ISTD       | R.T. |
|------|------------|--------|------------------------|------|
| 6.74 | 3.47 ng/ul | 287215 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | 2-Undecene, 4-methyl-               | 168 | C12H24  | 091695-32-8 | 59   |
| 2    |    |   | Cyclopropane, 1,2-dimethyl-1-pen... | 140 | C10H20  | 062238-04-4 | 53   |
| 3    |    |   | 1-Hexene, 3,3,5-trimethyl-          | 126 | C9H18   | 013427-43-5 | 52   |
| 4    |    |   | Cyclopentanone, 2-methyl-3-(1-me... | 140 | C9H16O  | 054549-81-4 | 50   |
| 5    |    |   | Heptane, 2-methyl-3-methylene-      | 126 | C9H18   | 062187-11-5 | 50   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

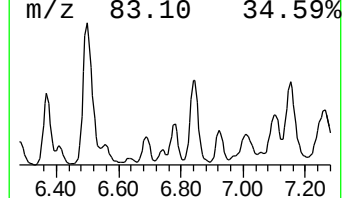
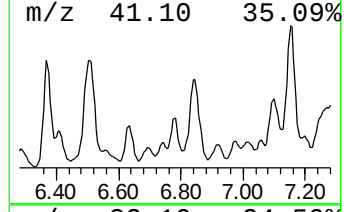
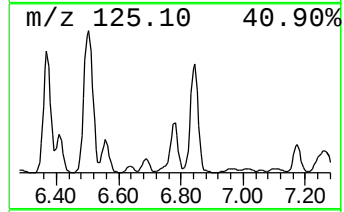
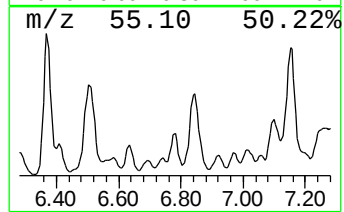
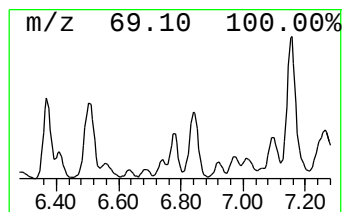
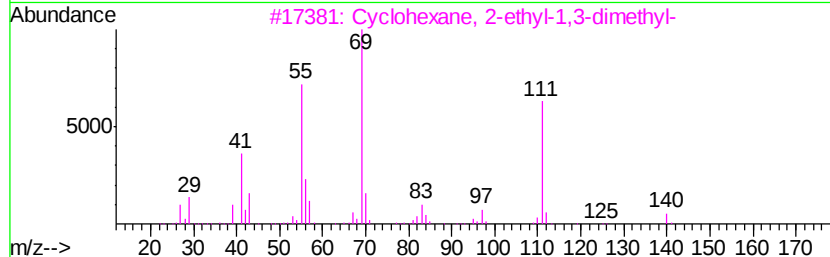
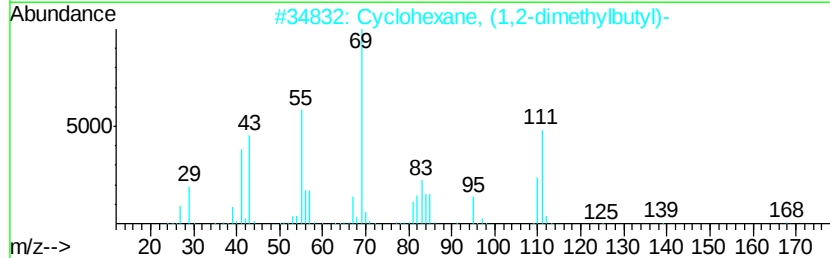
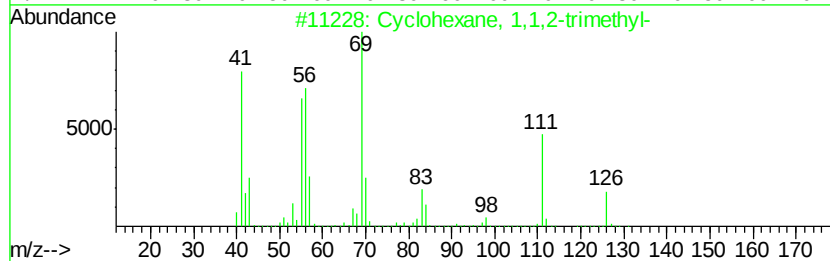
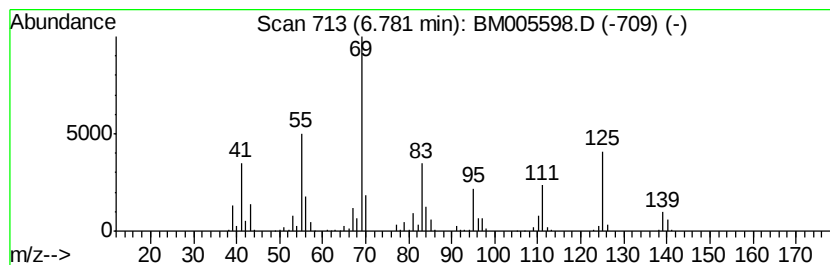
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 14 (DEL) Alkane: Cyclic-6.78 Concentration Rank 38

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 6.78 | 13.00 ng/ul | 1074940 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                       | MW  | MolForm | CAS#         | Qual |
|------|----|------------------------------------|-----|---------|--------------|------|
| 1    | 5  | Cyclohexane, 1,1,2-trimethyl-      | 126 | C9H18   | 007094-26-0  | 46   |
| 2    |    | Cyclohexane, (1,2-dimethylbutyl)-  | 168 | C12H24  | 061142-37-8  | 43   |
| 3    |    | Cyclohexane, 2-ethyl-1,3-dimethyl- | 140 | C10H20  | 007045-67-2  | 43   |
| 4    |    | 3-Ethyl-4-octene                   | 140 | C10H20  | 019781-32-9  | 43   |
| 5    |    | 3,4-Diethyl-2-hexene               | 140 | C10H20  | 1000113-54-8 | 43   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

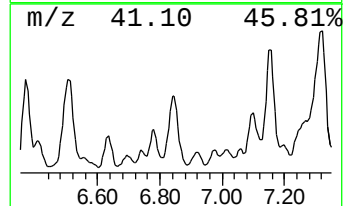
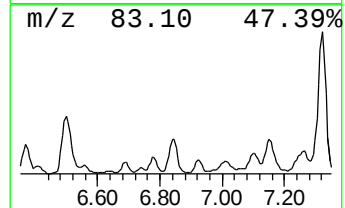
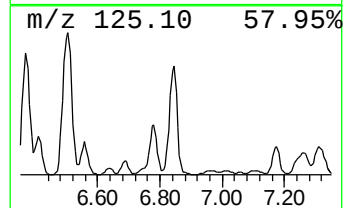
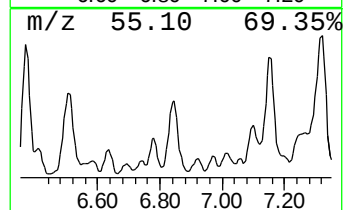
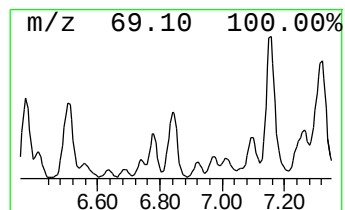
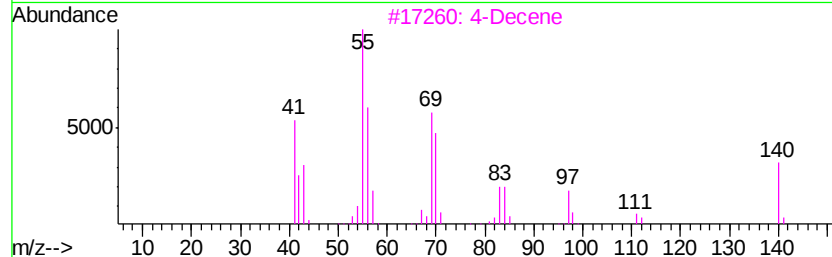
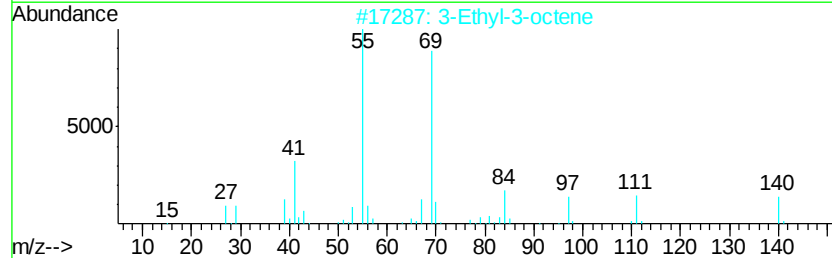
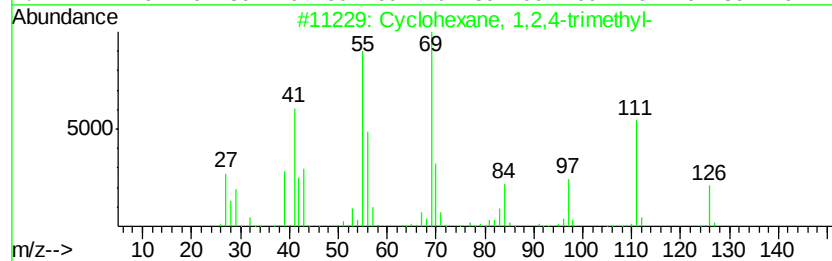
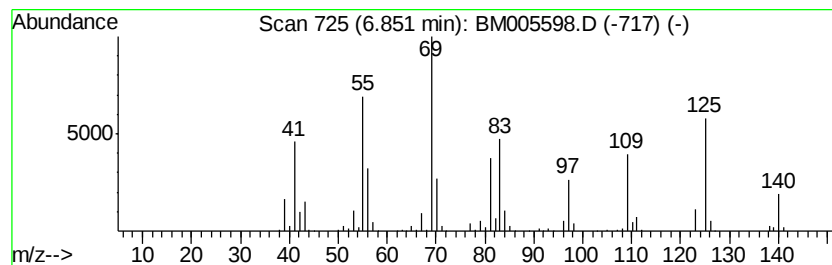
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TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 15 (DEL) Alkane: Cyclic-6.85 Concentration Rank 8

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 6.85 | 43.27 ng/ul | 3577480 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                  | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclohexane, 1,2,4-trimethyl- | 126 | C9H18   | 002234-75-5 | 46   |
| 2    |    | 3-Ethyl-3-octene              | 140 | C10H20  | 019781-31-8 | 38   |
| 3    |    | 4-Decene                      | 140 | C10H20  | 019689-18-0 | 25   |
| 4    |    | 5-Decene, (E)-                | 140 | C10H20  | 007433-56-9 | 25   |
| 5    |    | 1-Butene, 3,3-dimethyl-       | 84  | C6H12   | 000558-37-2 | 22   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

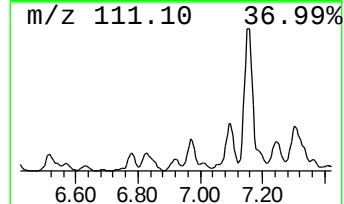
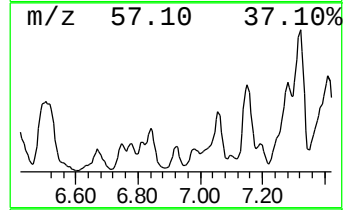
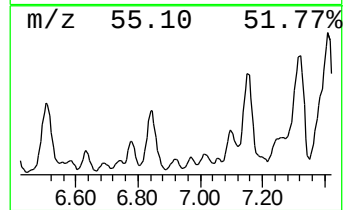
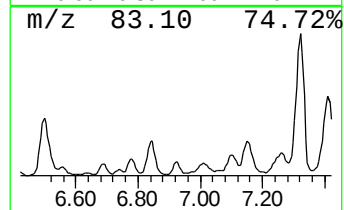
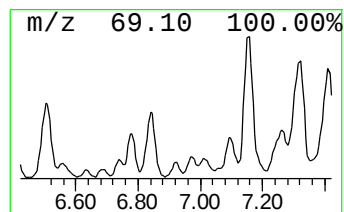
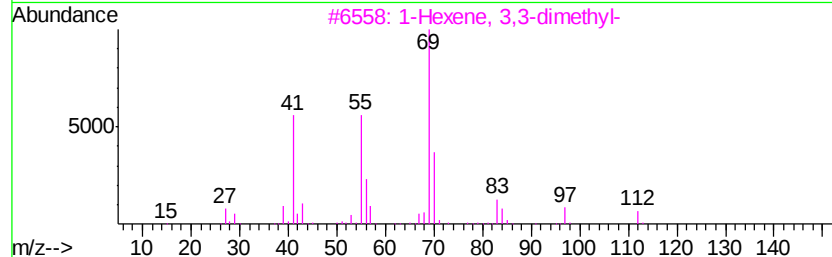
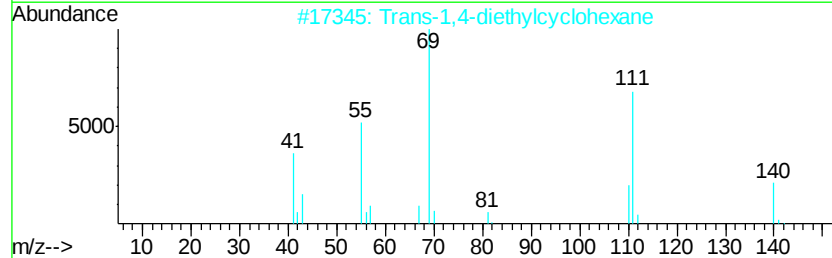
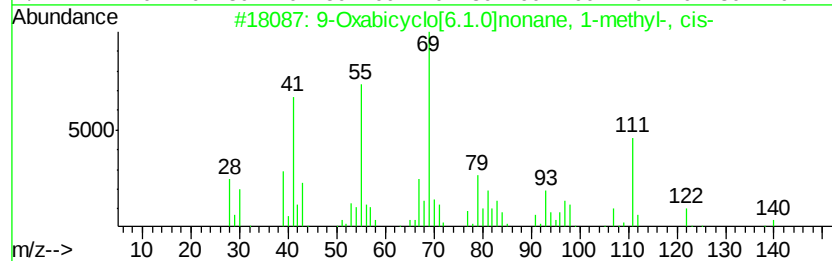
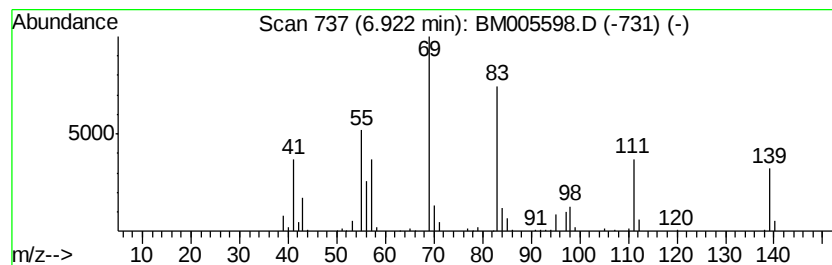
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TIC Integration Parameters: LSCINT.P

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Peak Number 16 unknown-01 Concentration Rank 45

| R.T. | EstConc    | Area   | Relative to ISTD       | R.T. |
|------|------------|--------|------------------------|------|
| 6.92 | 8.54 ng/ul | 706029 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | 9-Oxabicyclo[6.1.0]nonane, 1-met... | 140 | C9H16O  | 052954-47-9 | 38   |
| 2    |    |   | Trans-1,4-diethylcyclohexane        | 140 | C10H20  | 013990-93-7 | 38   |
| 3    |    |   | 1-Hexene, 3,3-dimethyl-             | 112 | C8H16   | 003404-77-1 | 38   |
| 4    |    |   | 1-Hexyn-3-ol, 3,5-dimethyl-         | 126 | C8H14O  | 000107-54-0 | 38   |
| 5    |    |   | 1-Pentene, 3,3-dimethyl-            | 98  | C7H14   | 003404-73-7 | 27   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

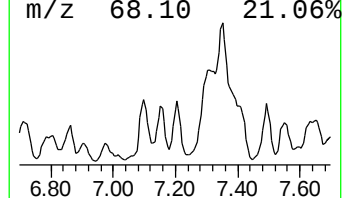
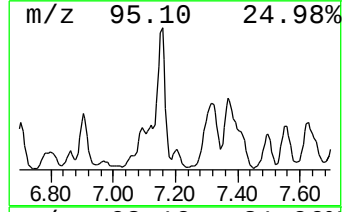
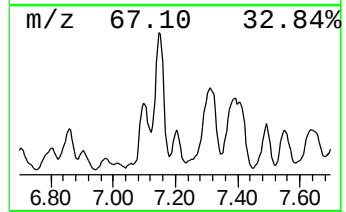
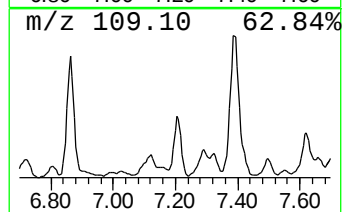
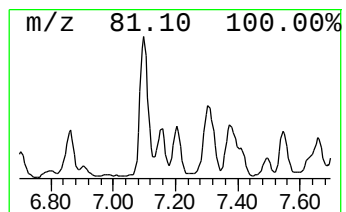
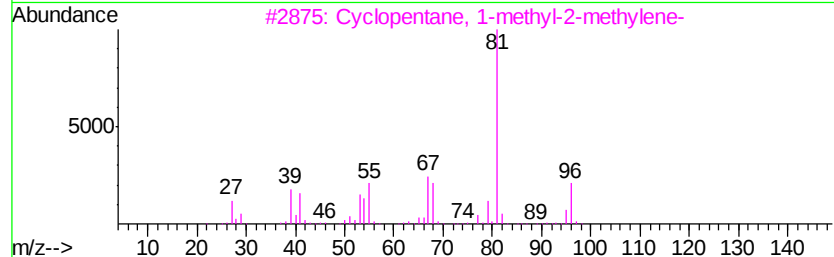
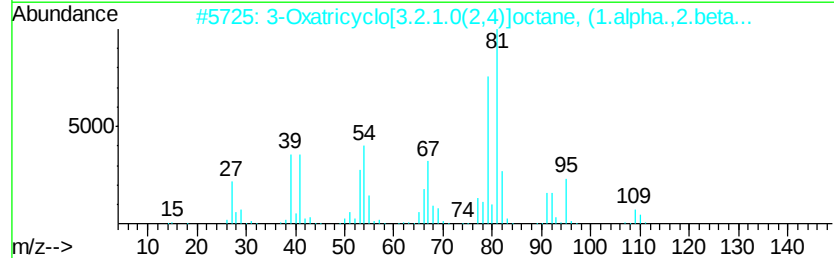
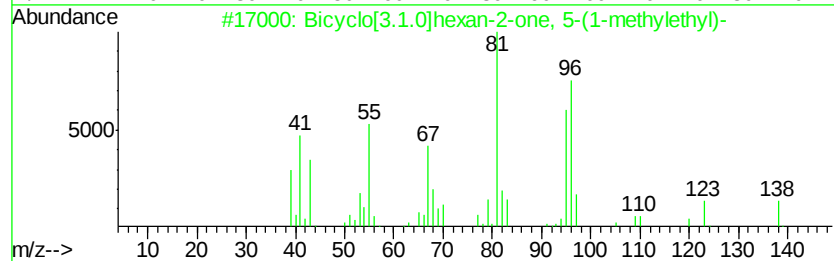
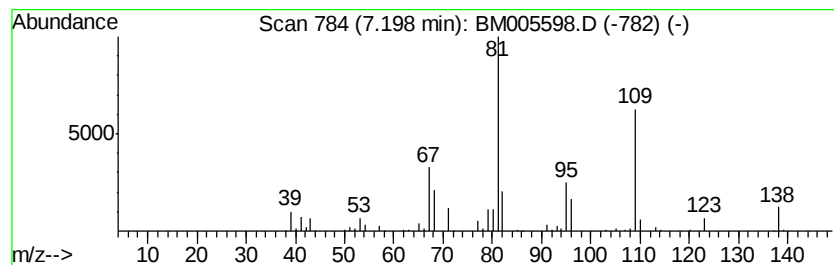
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 17 Bicyclo[3.1.0]hexan-2-one, ... Concentration Rank 51

| R.T. | EstConc    | Area   | Relative to ISTD       | R.T. |
|------|------------|--------|------------------------|------|
| 7.20 | 7.11 ng/ul | 588153 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Bicyclo[3.1.0]hexan-2-one, 5-(1-... | 138 | C9H14O  | 000513-20-2 | 52   |
| 2    |    |   | 3-Oxatricyclo[3.2.1.0(2,4)]octan... | 110 | C7H10O  | 003146-39-2 | 50   |
| 3    |    |   | Cyclopentane, 1-methyl-2-methylene- | 96  | C7H12   | 041158-41-2 | 47   |
| 4    |    |   | 2,4-Nonadienal, (E,E)-              | 138 | C9H14O  | 005910-87-2 | 38   |
| 5    |    |   | Cyclohexane, 1-methyl-4-(1-methy... | 138 | C10H18  | 001124-25-0 | 35   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

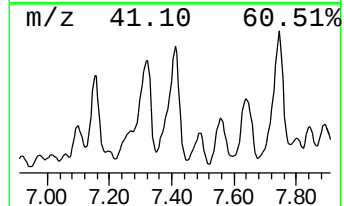
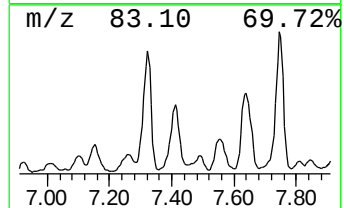
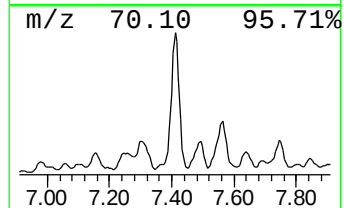
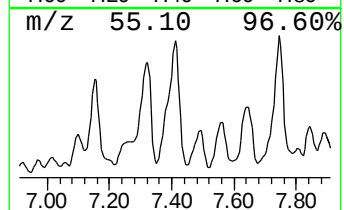
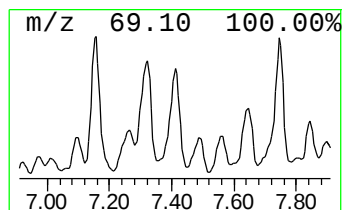
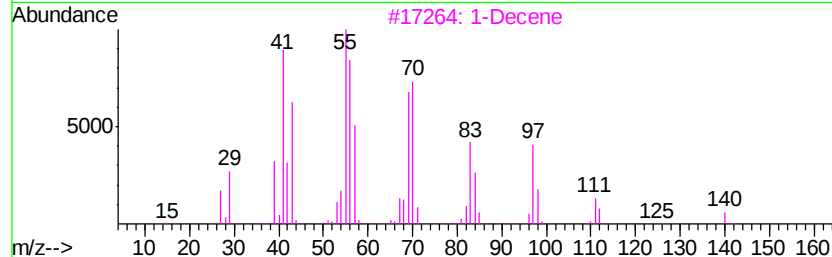
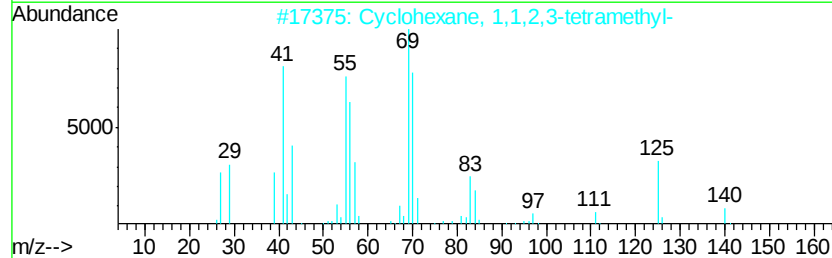
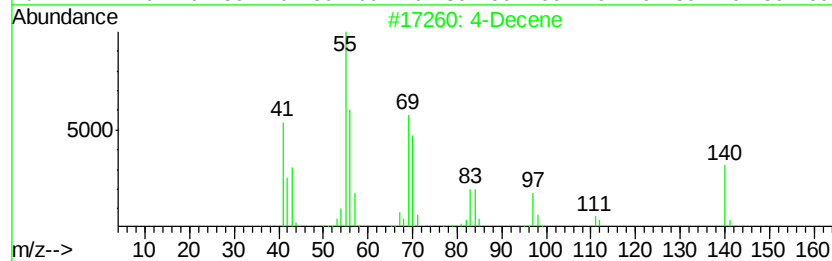
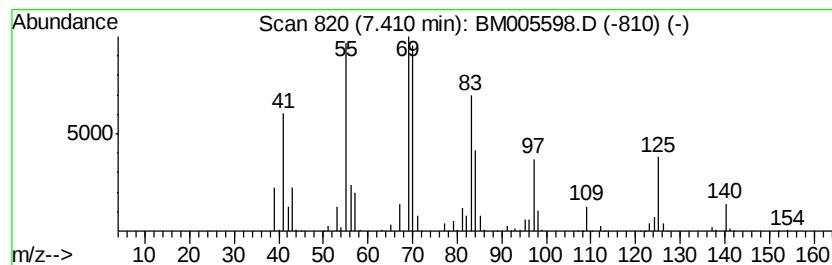
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 18 (DEL) Alkane: Cyclic-7.41 Concentration Rank 2

| R.T. | EstConc      | Area    | Relative to ISTD       | R.T. |
|------|--------------|---------|------------------------|------|
| 7.41 | 114.09 ng/ul | 9432590 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 4-Decene                            | 140 | C10H20  | 019689-18-0 | 64   |
| 2    |    | Cyclohexane, 1,1,2,3-tetramethyl-   | 140 | C10H20  | 006783-92-2 | 62   |
| 3    |    | 1-Decene                            | 140 | C10H20  | 000872-05-9 | 58   |
| 4    |    | 3-Nonene, 3-methyl-, (E)-           | 140 | C10H20  | 069405-42-1 | 43   |
| 5    |    | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20  | 050876-31-8 | 38   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

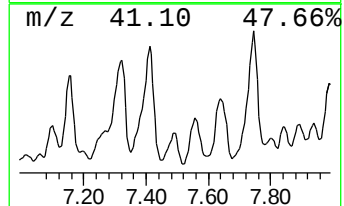
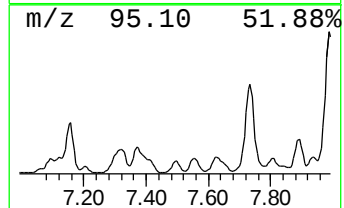
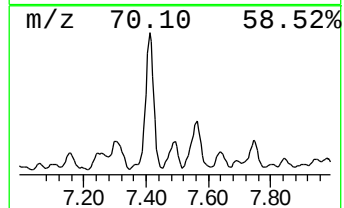
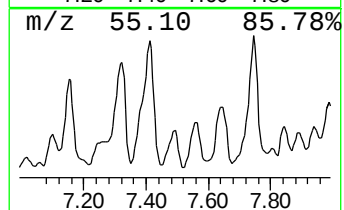
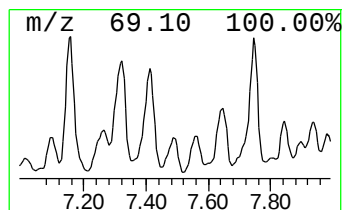
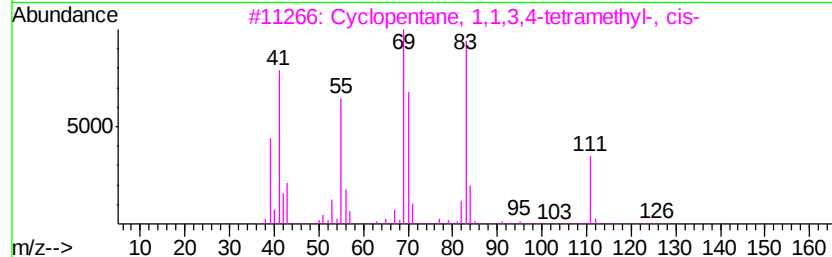
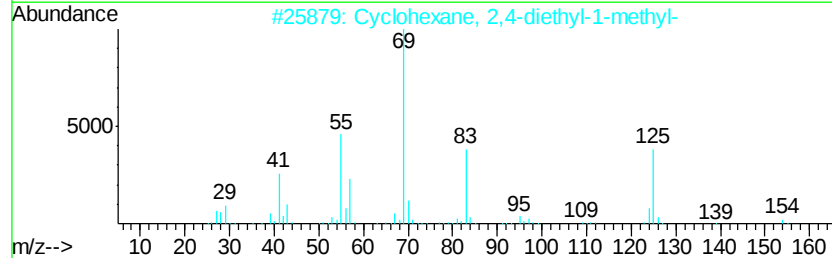
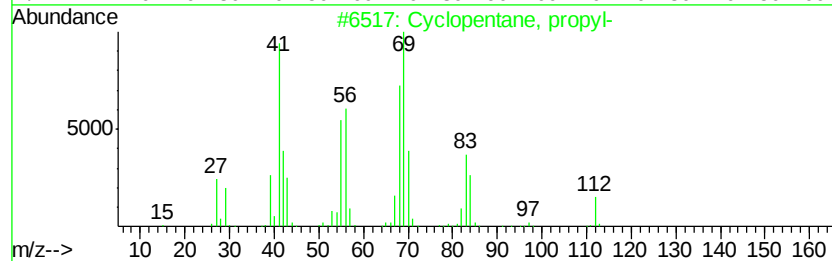
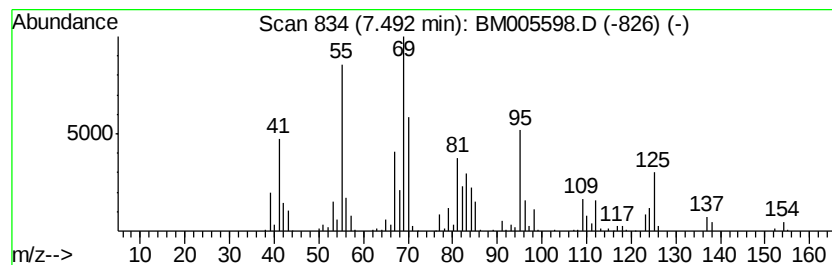
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 19 (DEL) Alkane: Cyclic-7.49 Concentration Rank 17

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 7.49 | 27.80 ng/ul | 2298580 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Cyclopentane, propyl-               | 112 | C8H16   | 002040-96-2 | 38   |
| 2    |    |   | Cyclohexane, 2,4-diethyl-1-methyl-  | 154 | C11H22  | 061142-70-9 | 35   |
| 3    |    |   | Cyclopentane, 1,1,3,4-tetramethy... | 126 | C9H18   | 053907-60-1 | 35   |
| 4    |    |   | Cyclopropane, 1,1-diethyl-          | 98  | C7H14   | 001003-19-6 | 30   |
| 5    |    |   | 3-Hexene, 3-methyl-, (Z)-           | 98  | C7H14   | 004914-89-0 | 30   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

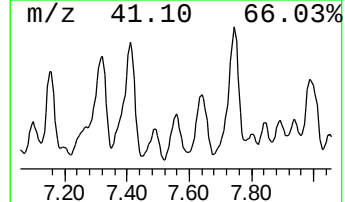
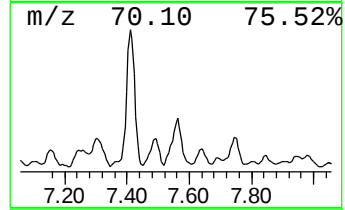
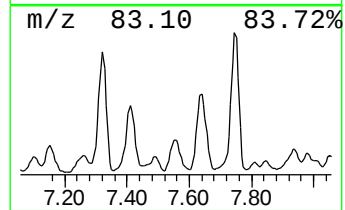
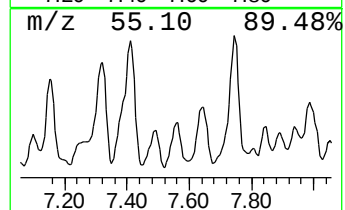
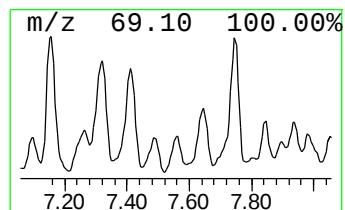
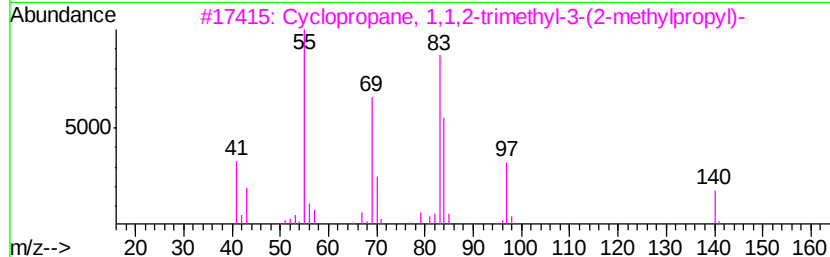
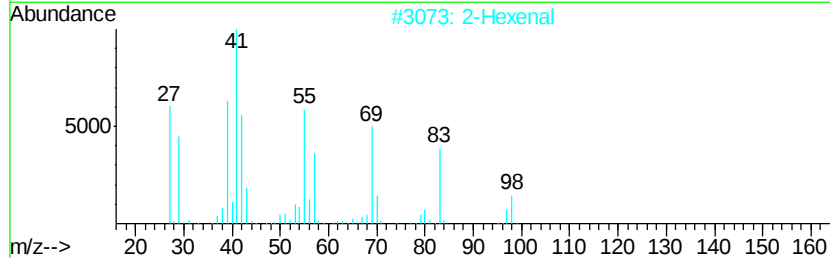
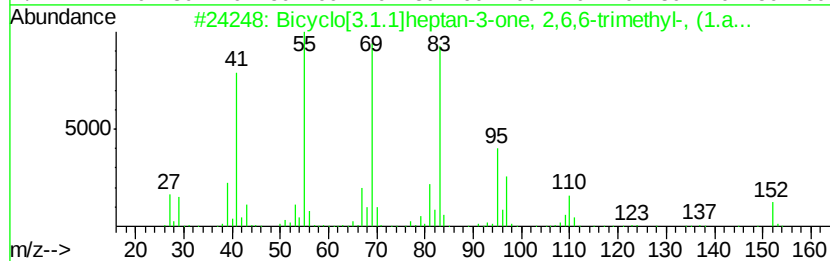
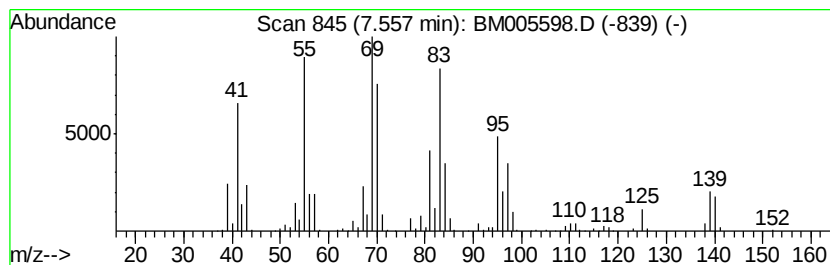
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 20 unknown-02 Concentration Rank 10

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 7.56 | 39.22 ng/ul | 3242970 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Bicyclo[3.1.1]heptan-3-one, 2,6,... | 152 | C10H16O | 000547-60-4 | 47   |
| 2    |    |   | 2-Hexenal                           | 98  | C6H10O  | 000505-57-7 | 38   |
| 3    |    |   | Cyclopropane, 1,1,2-trimethyl-3-... | 140 | C10H20  | 041977-43-9 | 38   |
| 4    |    |   | Cyclodecane                         | 140 | C10H20  | 000293-96-9 | 38   |
| 5    |    |   | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20  | 050876-31-8 | 35   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

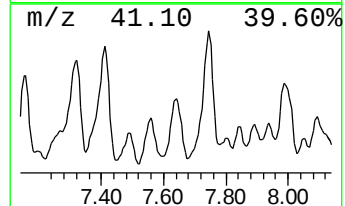
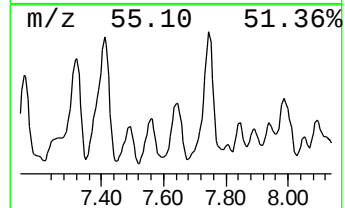
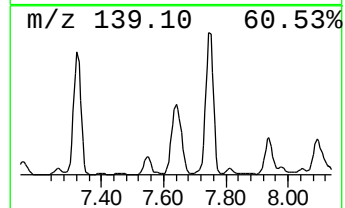
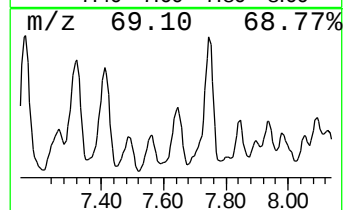
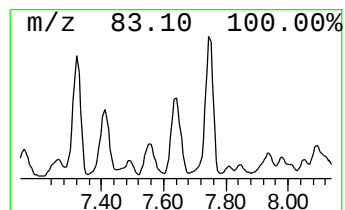
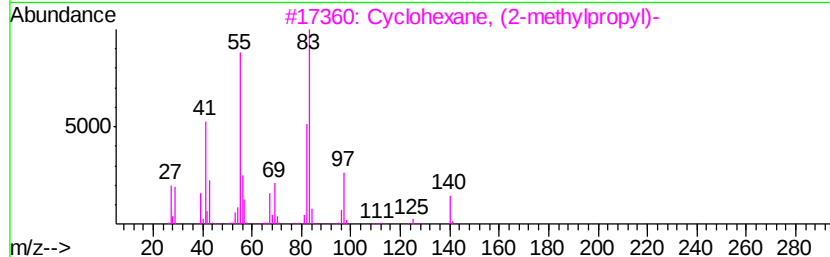
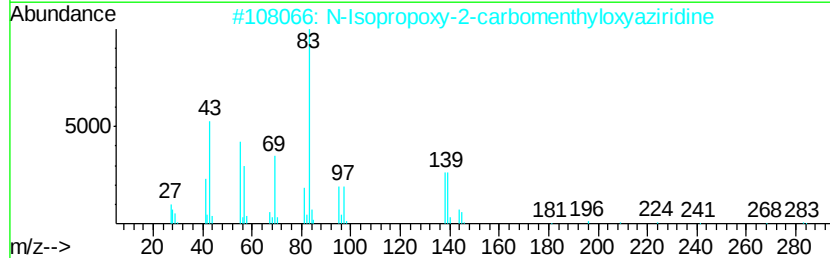
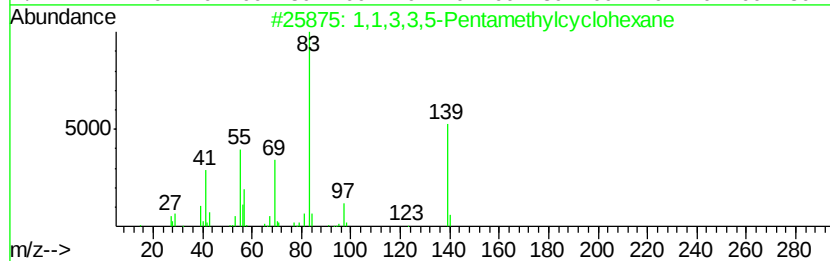
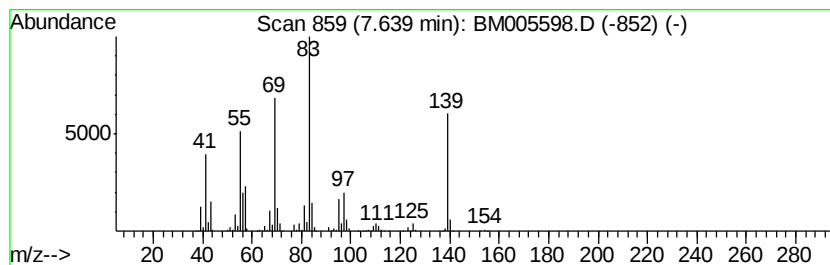
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TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 21 (DEL) Alkane: Cyclic-7.64 Concentration Rank 5

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 7.64 | 51.05 ng/ul | 4220770 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#        | Qual |
|------|----|-------------------------------------|-----|-----------|-------------|------|
| 1    | 5  | 1,1,3,3,5-Pentamethylcyclohexane    | 154 | C11H22    | 070810-19-4 | 64   |
| 2    |    | N-Isopropoxy-2-carbomethyloxyaz...  | 283 | C16H29NO3 | 060999-69-1 | 50   |
| 3    |    | Cyclohexane, (2-methylpropyl)-      | 140 | C10H20    | 001678-98-4 | 50   |
| 4    |    | Cyclohexane, 1,5-diethyl-2,3-dim... | 168 | C12H24    | 074663-66-4 | 47   |
| 5    |    | 3-Methyl-2-butenic acid, allyl ...  | 140 | C8H12O2   | 051552-26-2 | 43   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

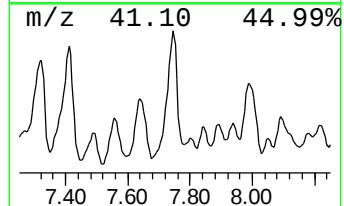
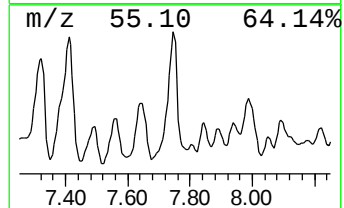
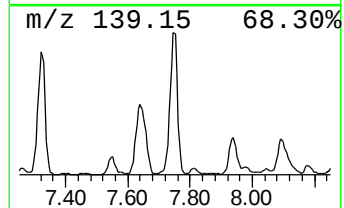
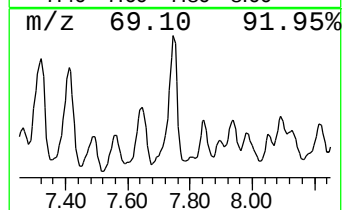
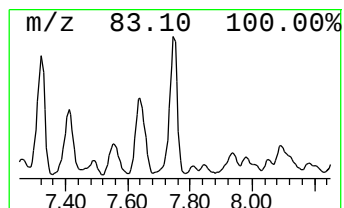
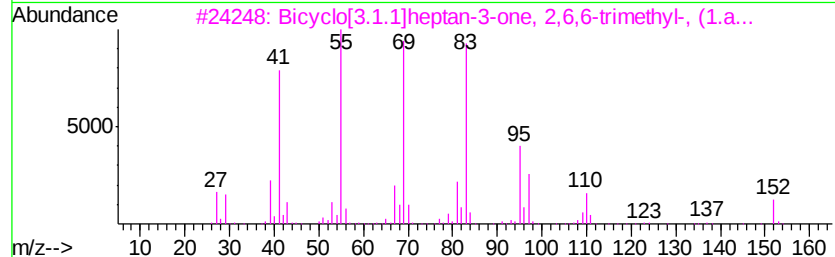
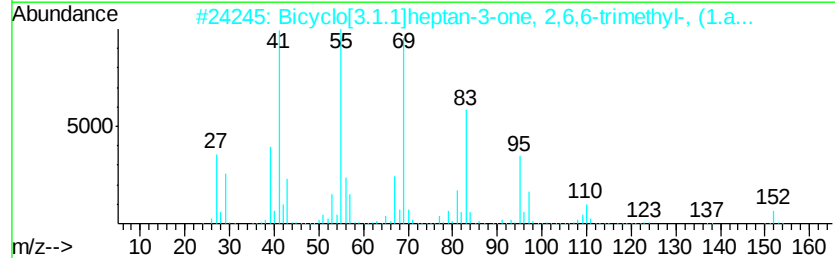
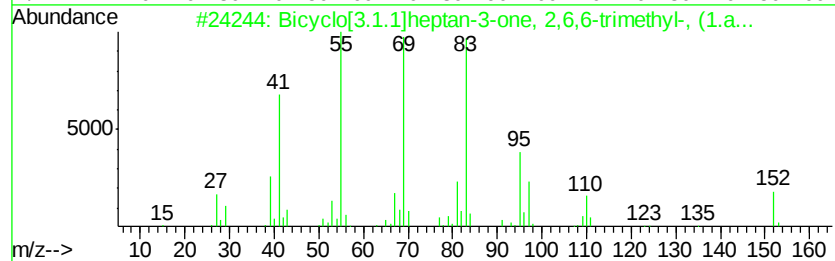
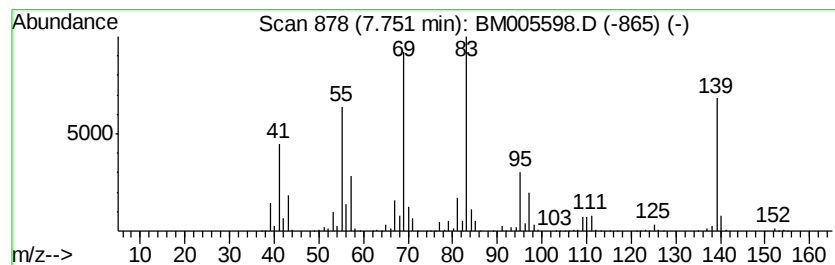
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TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 22 Bicyclo[3.1.1]heptan-3-one,... Concentration Rank 1

| R.T. | EstConc      | Area     | Relative to ISTD       | R.T. |
|------|--------------|----------|------------------------|------|
| 7.75 | 125.91 ng/ul | 10409700 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Bicyclo[3.1.1]heptan-3-one, 2,6,... | 152 | C10H16O | 015358-88-0 | 70   |
| 2    |    | Bicyclo[3.1.1]heptan-3-one, 2,6,... | 152 | C10H16O | 015358-88-0 | 50   |
| 3    |    | Bicyclo[3.1.1]heptan-3-one, 2,6,... | 152 | C10H16O | 000547-60-4 | 43   |
| 4    |    | 1,1,3,3,5-Pentamethylcyclohexane    | 154 | C11H22  | 070810-19-4 | 38   |
| 5    |    | Bicyclo[3.1.1]heptan-3-one, 2,6,... | 152 | C10H16O | 000547-60-4 | 35   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

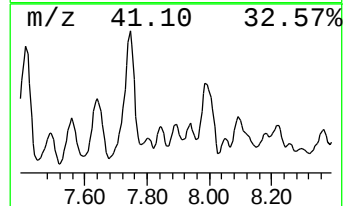
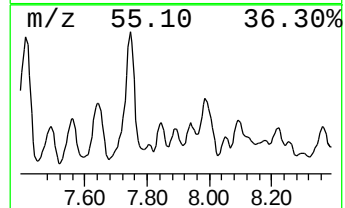
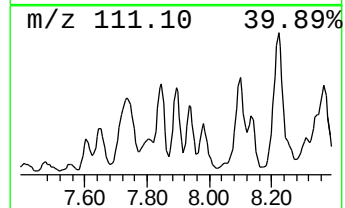
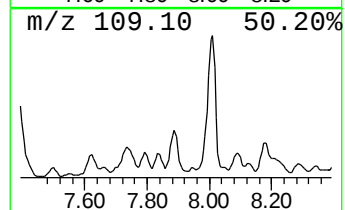
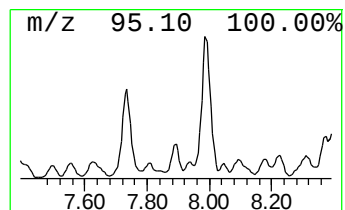
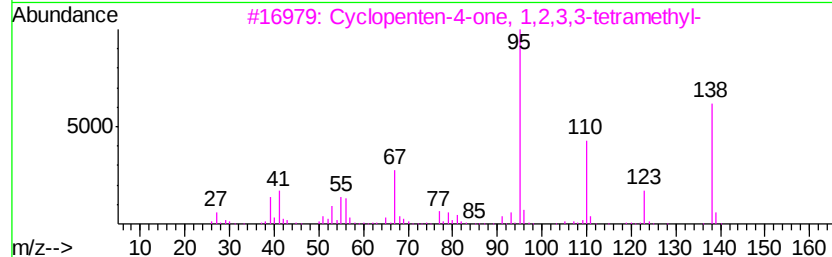
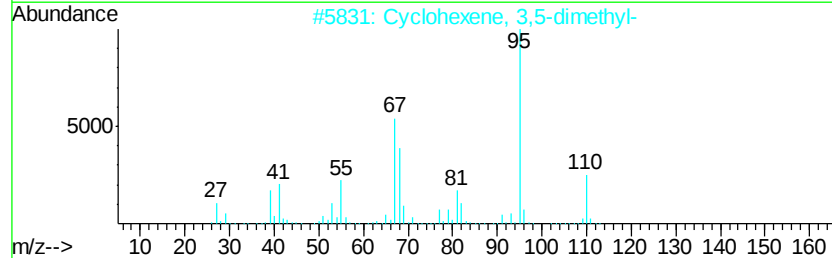
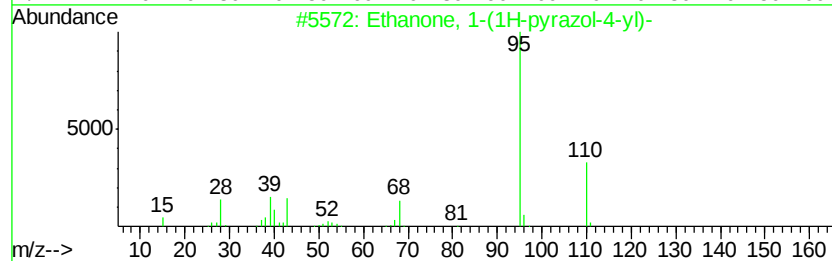
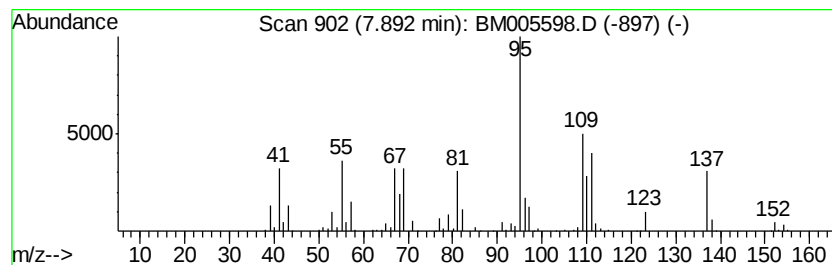
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 23 unknown-03 Concentration Rank 18

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 7.89 | 25.51 ng/ul | 2109450 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|---------|--------------|------|
| 1    |    |   | Ethanone, 1-(1H-pyrazol-4-yl)-      | 110 | C5H6N2O | 025016-16-4  | 43   |
| 2    |    |   | Cyclohexene, 3,5-dimethyl-          | 110 | C8H14   | 000823-17-6  | 43   |
| 3    |    |   | Cyclopenten-4-one, 1,2,3,3-tetra... | 138 | C9H14O  | 1000163-38-6 | 38   |
| 4    |    |   | dl-6-Methyl-5-hepten-2-ol           | 128 | C8H16O  | 004630-06-2  | 38   |
| 5    |    |   | Bicyclo[3.1.0]hexane, 1,5-dimethyl- | 110 | C8H14   | 1000142-17-5 | 38   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

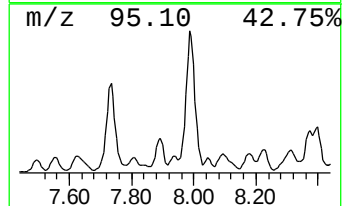
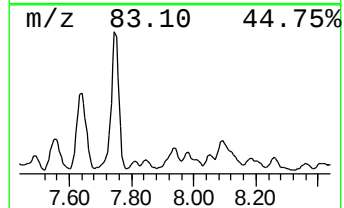
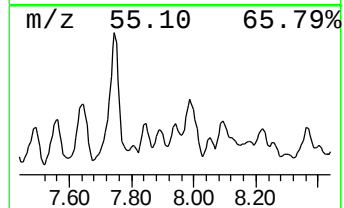
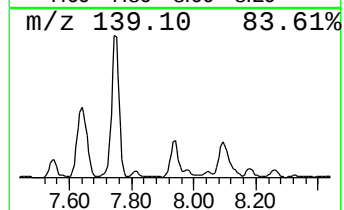
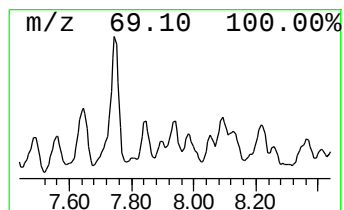
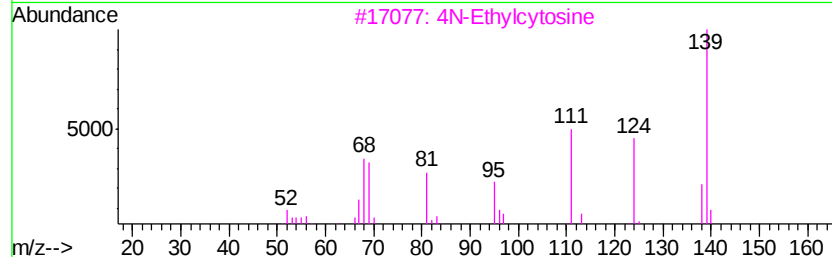
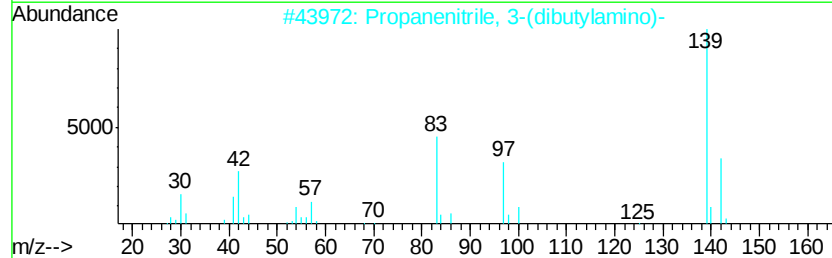
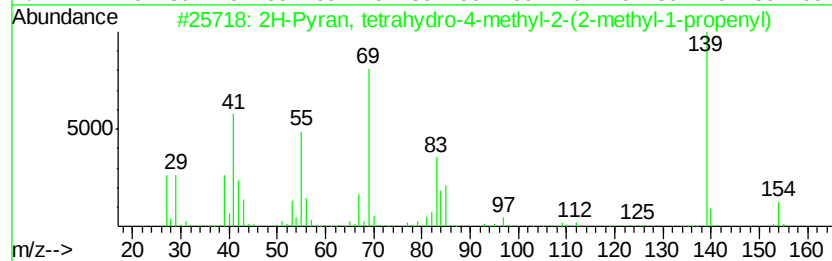
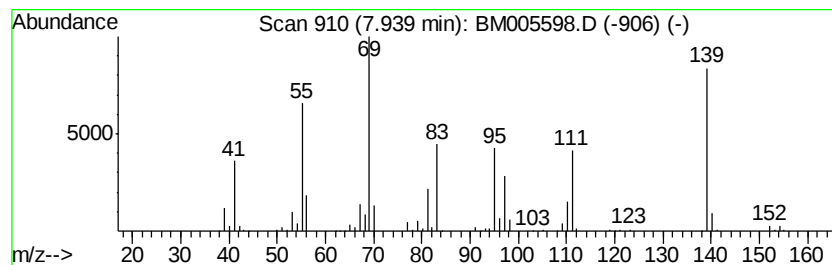
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 24 2H-Pyran, tetrahydro-4-meth... Concentration Rank 29

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 7.94 | 18.59 ng/ul | 1536850 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#         | Qual |
|------|----|-------------------------------------|-----|----------|--------------|------|
| 1    | 5  | 2H-Pyran, tetrahydro-4-methyl-2-... | 154 | C10H18O  | 016409-43-1  | 50   |
| 2    |    | Propanenitrile, 3-(dibutylamino)-   | 182 | C11H22N2 | 025726-99-2  | 35   |
| 3    |    | 4N-Ethylcytosine                    | 139 | C6H9N3O  | 089711-97-7  | 35   |
| 4    |    | 2(1H)Pyrimidinone,4-amino-1,N-di... | 139 | C6H9N3O  | 006220-49-1  | 27   |
| 5    |    | Methoxyacetic acid, 2-ethylcyclo... | 200 | C11H20O3 | 1000282-69-7 | 27   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

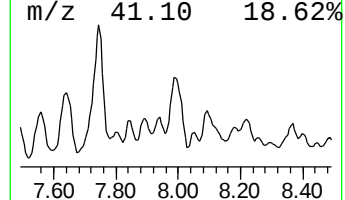
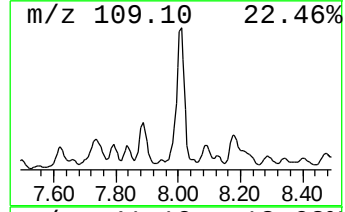
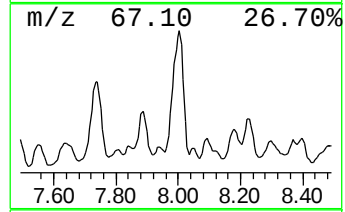
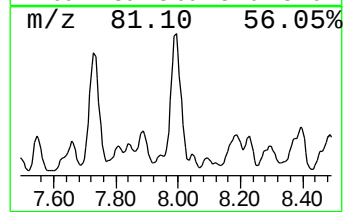
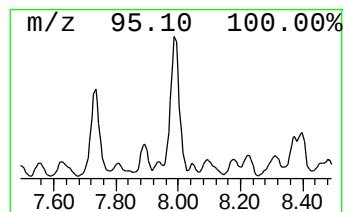
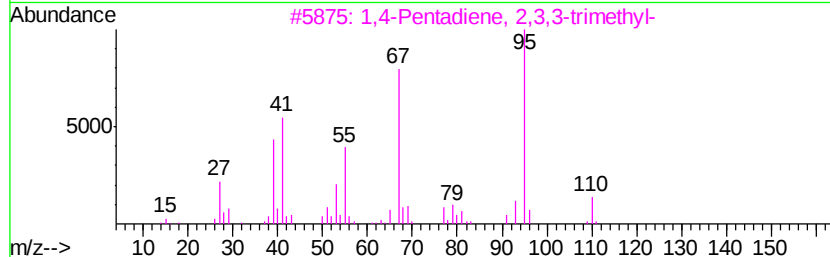
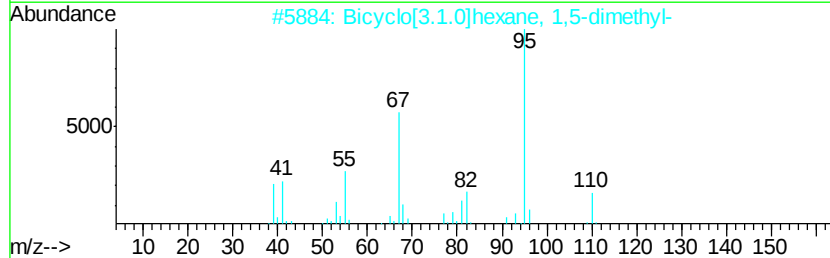
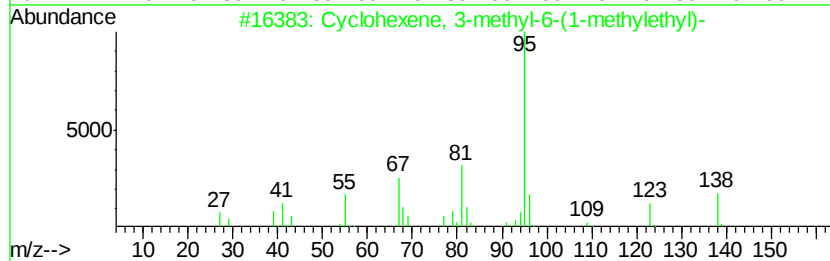
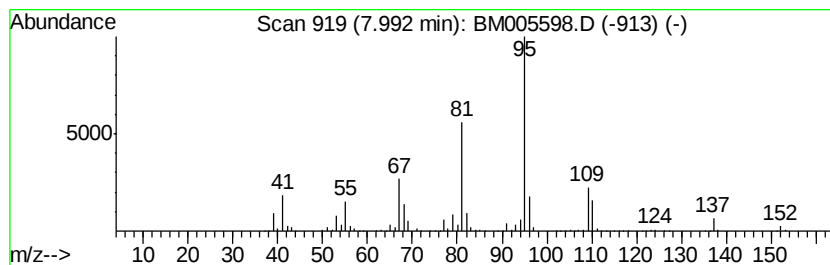
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 25 (DEL) Alkane: Branched-7.99 Concentration Rank 3

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 7.99 | 86.91 ng/ul | 7185420 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | Cyclohexene, 3-methyl-6-(1-methy... | 138 | C10H18  | 005256-65-5  | 64   |
| 2    |    | Bicyclo[3.1.0]hexane, 1,5-dimethyl- | 110 | C8H14   | 1000142-17-5 | 52   |
| 3    |    | 1,4-Pentadiene, 2,3,3-trimethyl-    | 110 | C8H14   | 000756-02-5  | 52   |
| 4    |    | Cyclopentane, 1,2-dimethyl-3-met... | 110 | C8H14   | 091884-67-2  | 43   |
| 5    |    | Cyclohexene, 3,5-dimethyl-          | 110 | C8H14   | 000823-17-6  | 43   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

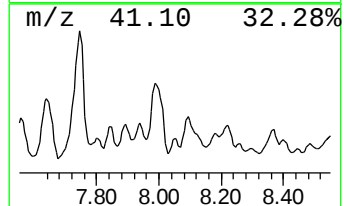
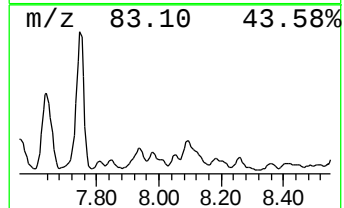
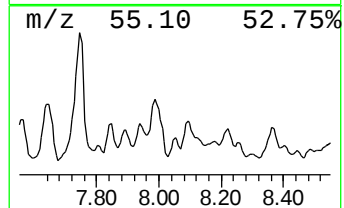
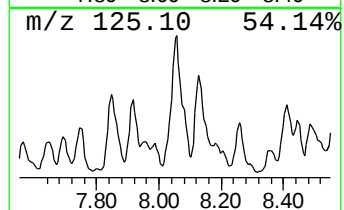
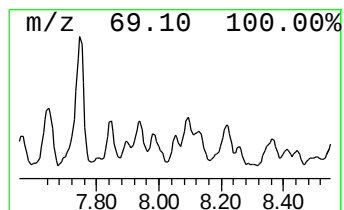
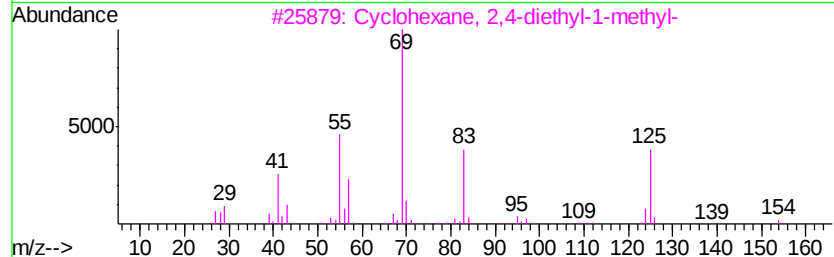
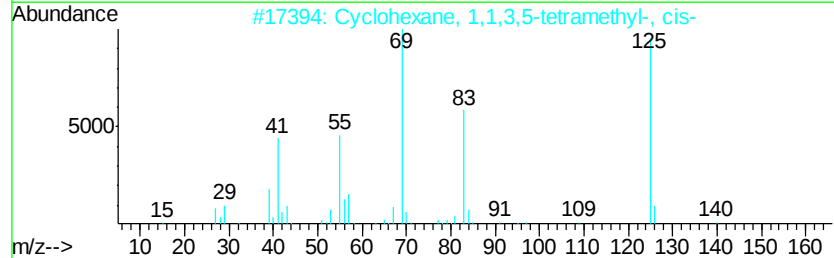
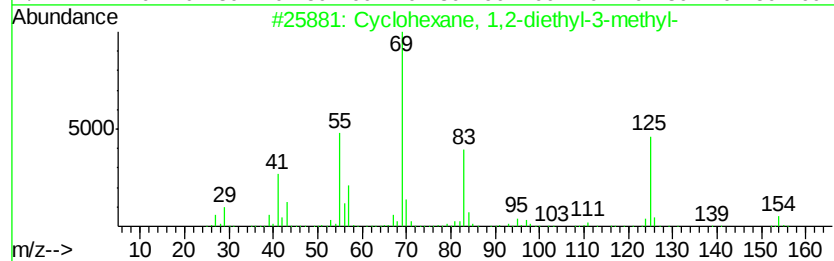
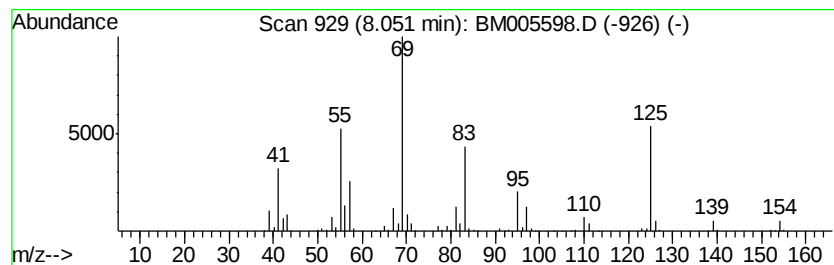
Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 26 (DEL) Alkane: Cyclic-8.05 Concentration Rank 49

| R.T.    | EstConc    | Area                                | Relative to ISTD       | R.T.      |             |      |
|---------|------------|-------------------------------------|------------------------|-----------|-------------|------|
| 8.05    | 7.66 ng/ul | 633143                              | 1,4-Dichlorobenzene-d4 | 7.82      |             |      |
| Hit# of | 5          | Tentative ID                        | MW                     | MolForm   | CAS#        | Qual |
| 1       |            | Cyclohexane, 1,2-diethyl-3-methyl-  | 154                    | C11H22    | 061141-80-8 | 83   |
| 2       |            | Cyclohexane, 1,1,3,5-tetramethyl... | 140                    | C10H20    | 050876-32-9 | 64   |
| 3       |            | Cyclohexane, 2,4-diethyl-1-methyl-  | 154                    | C11H22    | 061142-70-9 | 64   |
| 4       |            | Cyclohexanecarboxylic acid, 4-pr... | 271                    | C17H21NO2 | 062439-33-2 | 59   |
| 5       |            | Cyclohexane, 1-ethyl-2-propyl-      | 154                    | C11H22    | 062238-33-9 | 47   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

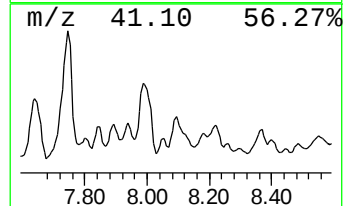
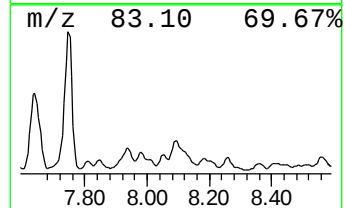
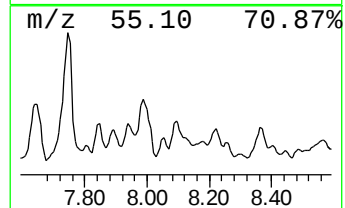
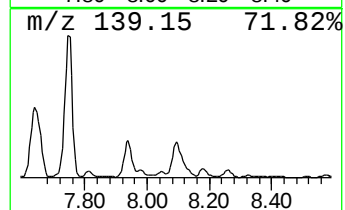
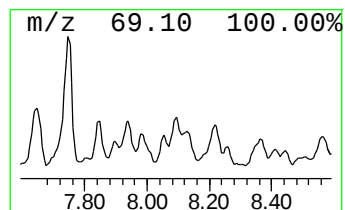
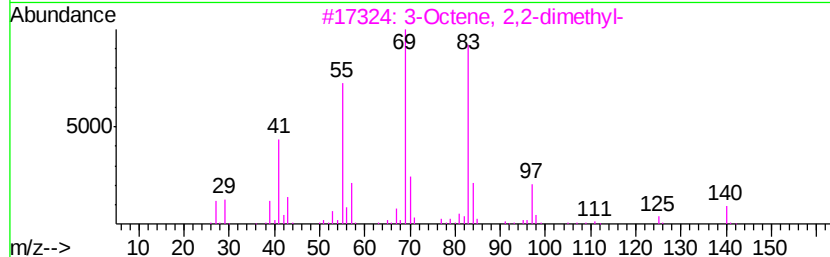
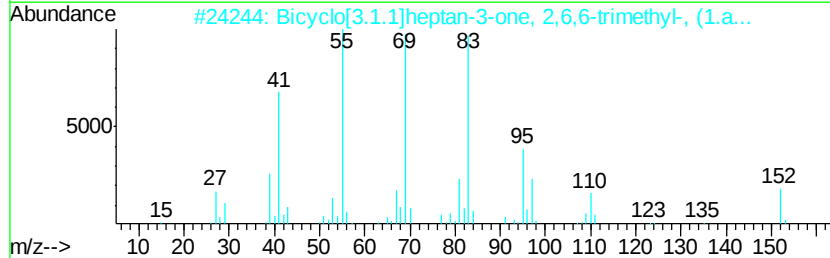
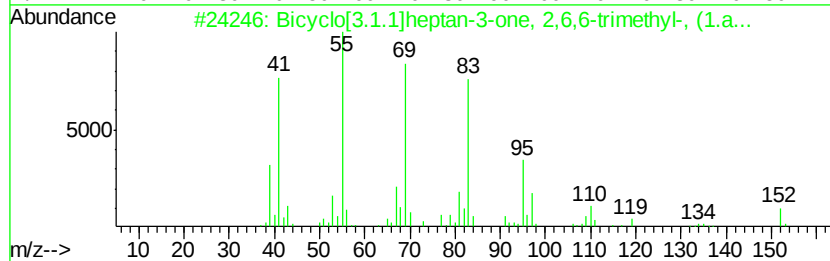
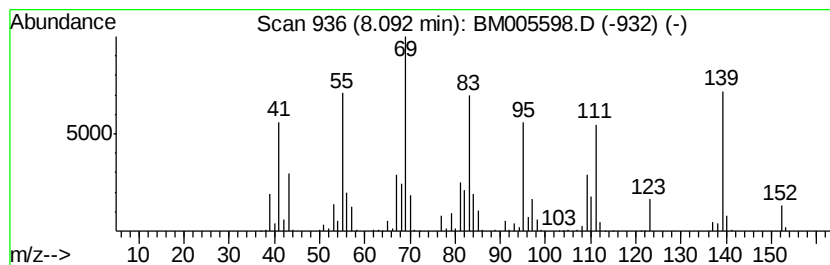
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TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 27 unknown-04 Concentration Rank 14

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 8.09 | 29.31 ng/ul | 2423210 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Bicyclo[3.1.1]heptan-3-one, 2,6,... | 152 | C10H16O | 015358-88-0 | 49   |
| 2    |    | Bicyclo[3.1.1]heptan-3-one, 2,6,... | 152 | C10H16O | 015358-88-0 | 49   |
| 3    |    | 3-Octene, 2,2-dimethyl-             | 140 | C10H20  | 086869-76-3 | 46   |
| 4    |    | Cyclohexane, 2-ethyl-1,3-dimethyl-  | 140 | C10H20  | 007045-67-2 | 41   |
| 5    |    | Cyclooctane, butyl-                 | 168 | C12H24  | 016538-93-5 | 35   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

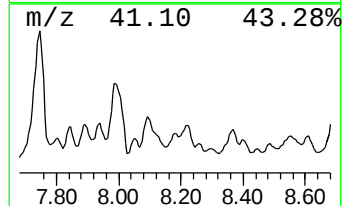
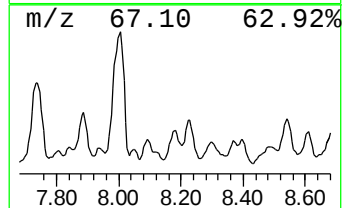
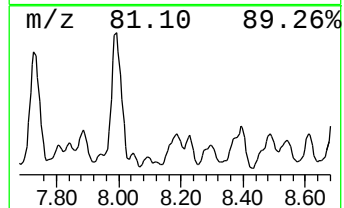
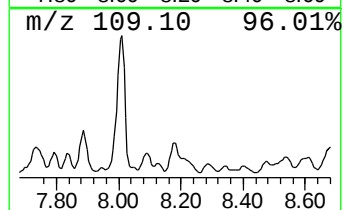
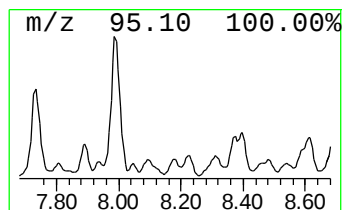
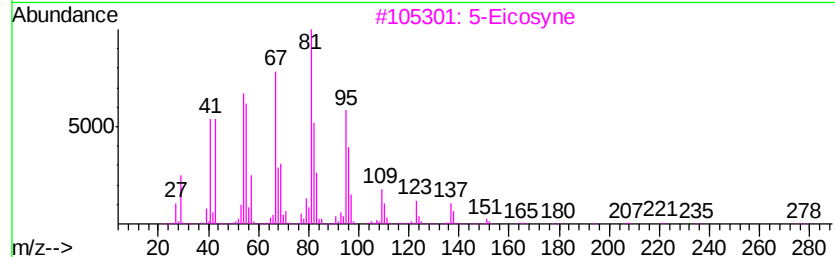
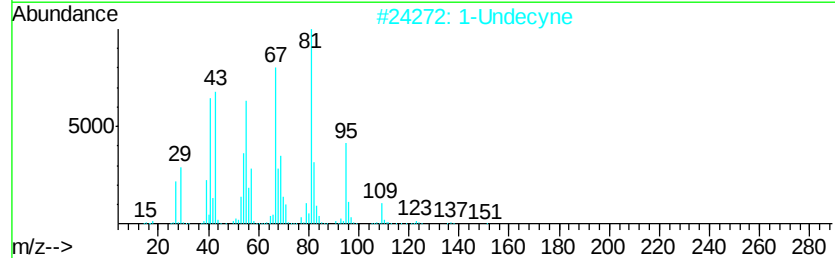
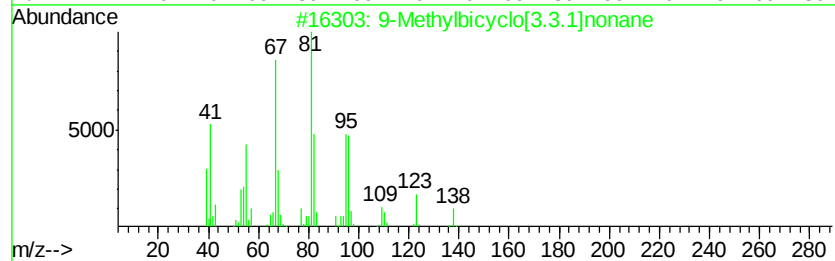
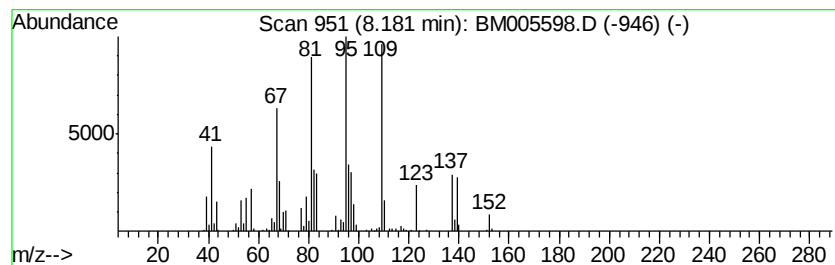
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TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 28 (DEL) Alkane: Branched-8.18 Concentration Rank 34

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 8.18 | 14.33 ng/ul | 1184880 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | 9-Methylbicyclo[3.3.1]nonane        | 138 | C10H18  | 025107-01-1 | 46   |
| 2    |    |   | 1-Undecyne                          | 152 | C11H20  | 002243-98-3 | 43   |
| 3    |    |   | 5-Eicosyne                          | 278 | C20H38  | 074685-31-7 | 38   |
| 4    |    |   | Pentylidenecyclohexane              | 152 | C11H20  | 039546-79-7 | 38   |
| 5    |    |   | Ethanone, 1-(1,4-dimethyl-3-cycl... | 152 | C10H16O | 043219-68-7 | 30   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

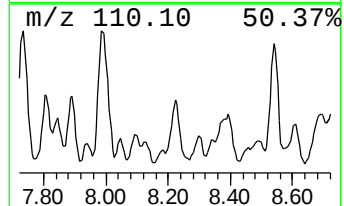
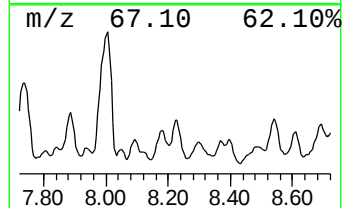
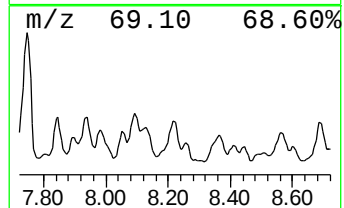
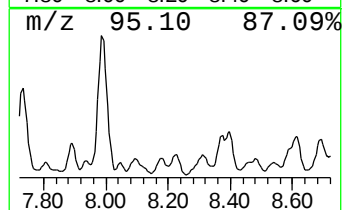
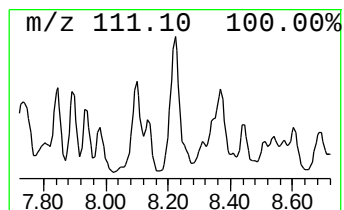
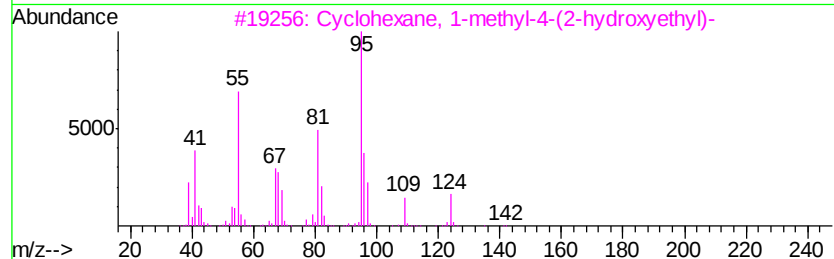
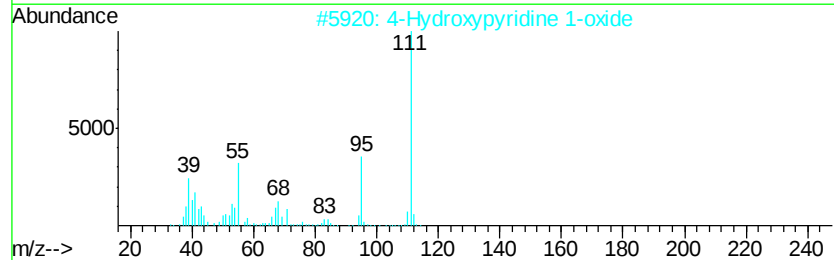
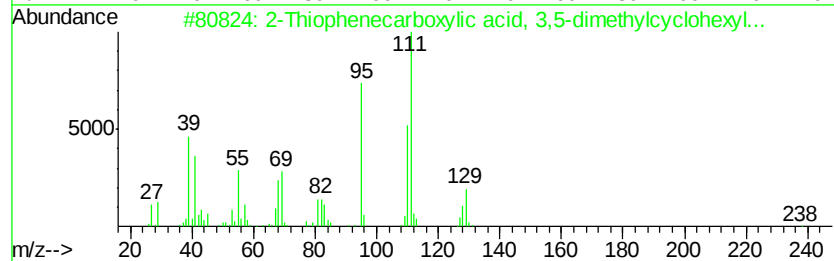
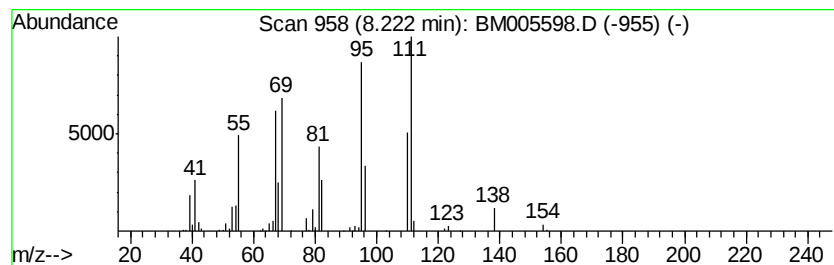
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 29 2-Thiophenecarboxylic acid,... Concentration Rank 32

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 8.22 | 15.58 ng/ul | 1288200 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | 2-Thiophenecarboxylic acid, 3,5-... | 238 | C13H18O2S | 1000278-87-5 | 59   |
| 2    |    | 4-Hydroxypyridine 1-oxide           | 111 | C5H5NO2   | 006890-62-6  | 47   |
| 3    |    | Cyclohexane, 1-methyl-4-(2-hydro... | 142 | C9H18O    | 004916-87-4  | 43   |
| 4    |    | 3-Cyclopenten-1-one, 2,2,5,5-tet... | 138 | C9H14O    | 081396-36-3  | 38   |
| 5    |    | 1-Methylcycloheptene                | 110 | C8H14     | 055308-20-8  | 35   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

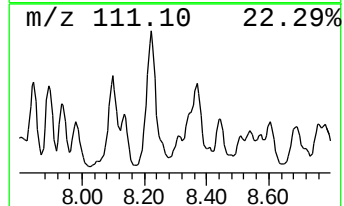
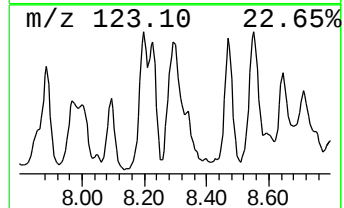
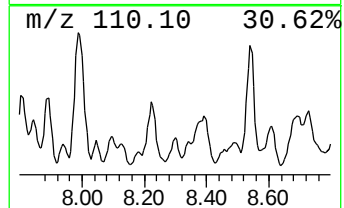
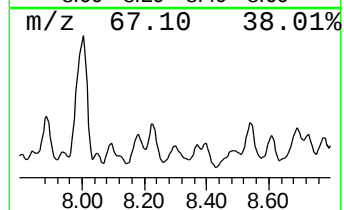
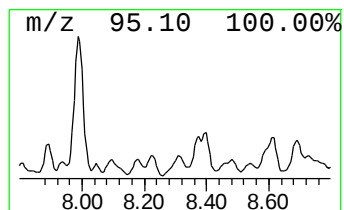
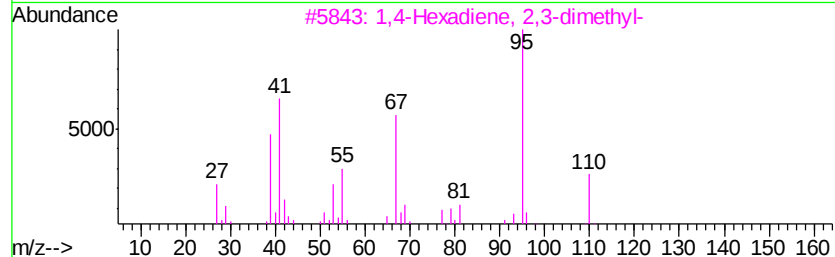
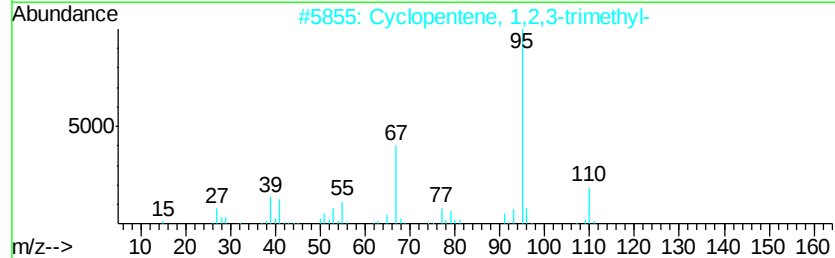
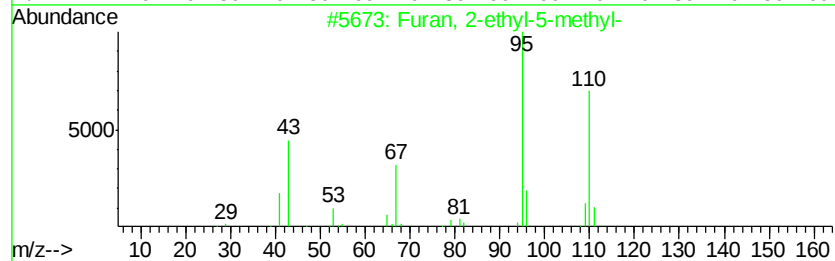
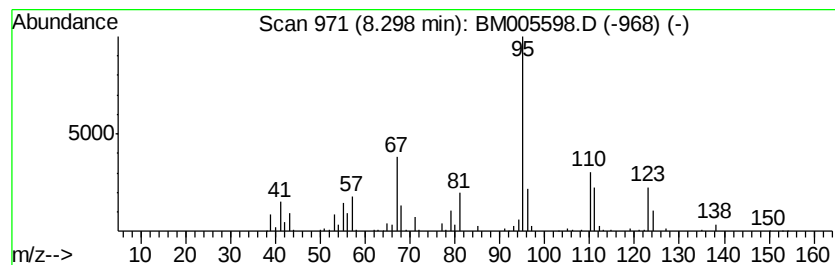
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 30 Furan, 2-ethyl-5-methyl- Concentration Rank 58

| R.T. | EstConc    | Area   | Relative to ISTD       | R.T. |
|------|------------|--------|------------------------|------|
| 8.30 | 4.57 ng/ul | 377856 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm   | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|-----------|-------------|------|
| 1    |    |   | Furan, 2-ethyl-5-methyl-            | 110 | C7H10O    | 001703-52-2 | 53   |
| 2    |    |   | Cyclopentene, 1,2,3-trimethyl-      | 110 | C8H14     | 000473-91-6 | 50   |
| 3    |    |   | 1,4-Hexadiene, 2,3-dimethyl-        | 110 | C8H14     | 018669-52-8 | 50   |
| 4    |    |   | Silane, diethyldifluoro-            | 124 | C4H10F2Si | 000358-06-5 | 50   |
| 5    |    |   | Bicyclo[4.1.0]heptane, 3,7,7-tri... | 138 | C10H18    | 000554-59-6 | 50   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

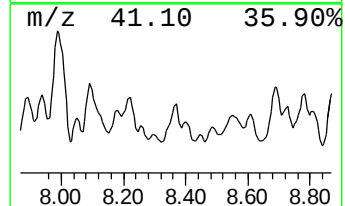
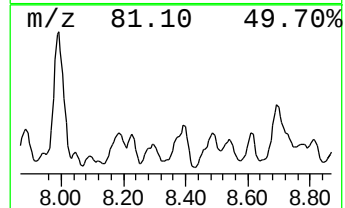
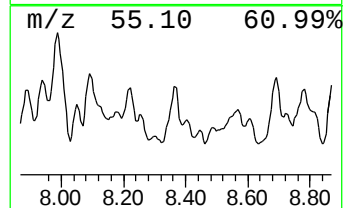
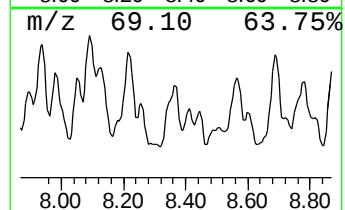
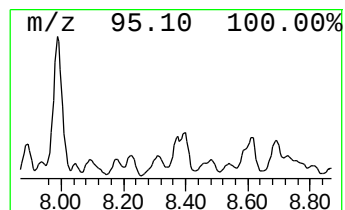
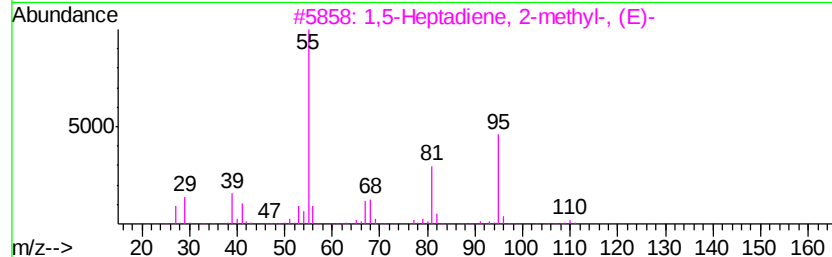
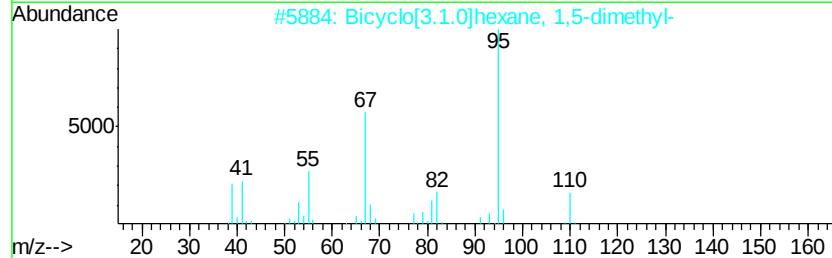
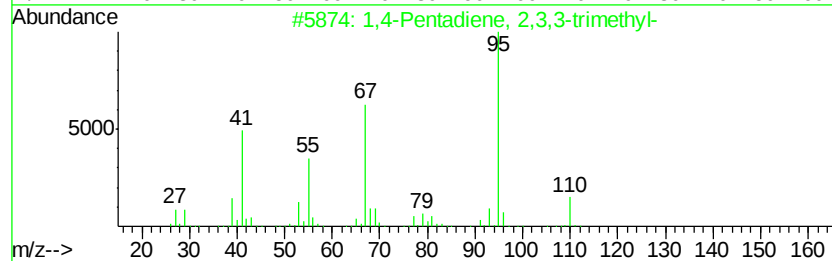
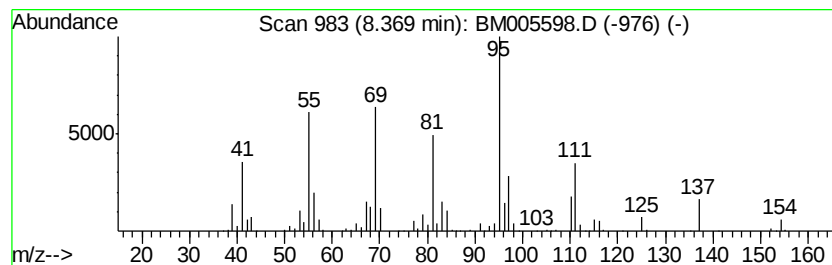
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 31 (DEL) Alkane: Branched-8.37 Concentration Rank 23

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 8.37 | 22.16 ng/ul | 1831750 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | 1,4-Pentadiene, 2,3,3-trimethyl-    | 110 | C8H14   | 000756-02-5  | 46   |
| 2    |    | Bicyclo[3.1.0]hexane, 1,5-dimethyl- | 110 | C8H14   | 1000142-17-5 | 43   |
| 3    |    | 1,5-Heptadiene, 2-methyl-, (E)-     | 110 | C8H14   | 041044-63-7  | 38   |
| 4    |    | 1,3-Dimethyl-1-cyclohexene          | 110 | C8H14   | 002808-76-6  | 38   |
| 5    |    | 6-Methyl-2-heptyne                  | 110 | C8H14   | 051065-64-6  | 38   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

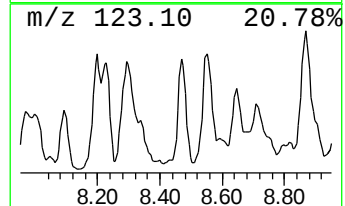
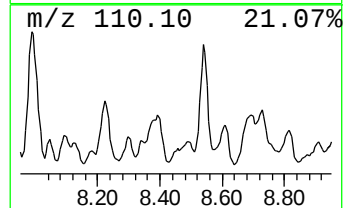
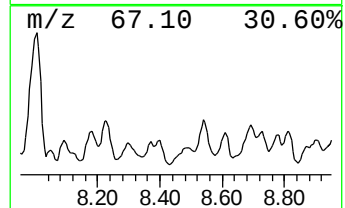
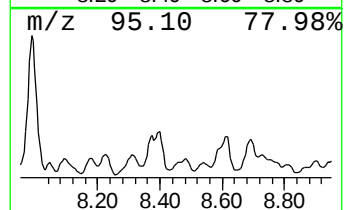
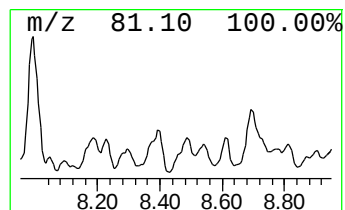
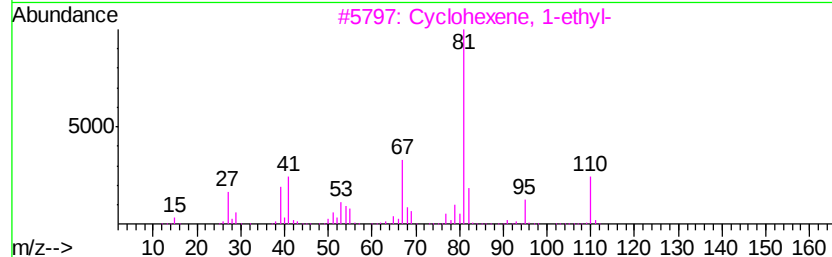
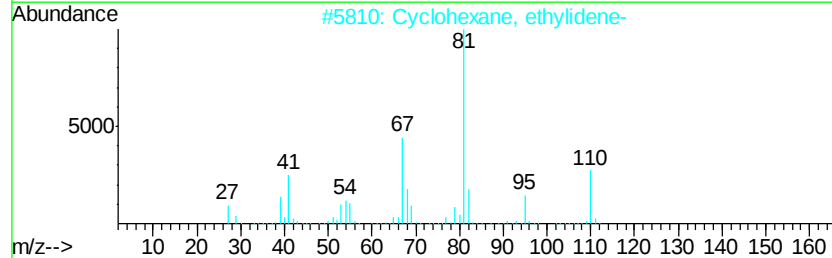
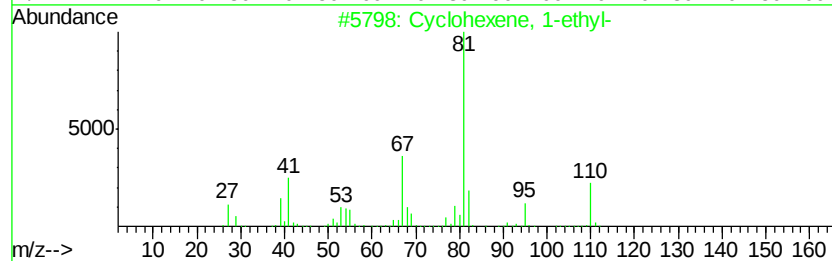
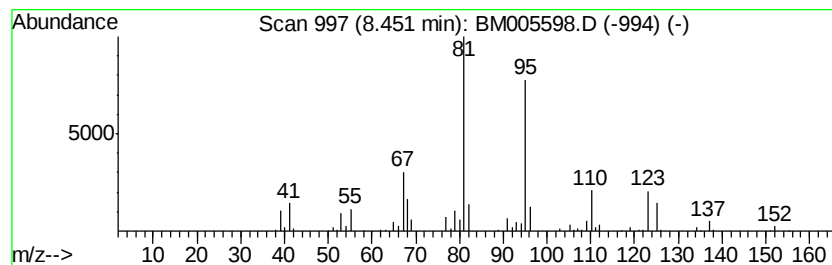
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 32 (DEL) Alkane: Branched-8.45 Concentration Rank 63

| R.T. | EstConc    | Area   | Relative to ISTD       | R.T. |
|------|------------|--------|------------------------|------|
| 8.45 | 2.62 ng/ul | 216213 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | 5 | Tentative ID             | MW  | MolForm | CAS#        | Qual |
|------|----|---|--------------------------|-----|---------|-------------|------|
| 1    |    |   | Cyclohexene, 1-ethyl-    | 110 | C8H14   | 001453-24-3 | 50   |
| 2    |    |   | Cyclohexane, ethylidene- | 110 | C8H14   | 001003-64-1 | 50   |
| 3    |    |   | Cyclohexene, 1-ethyl-    | 110 | C8H14   | 001453-24-3 | 50   |
| 4    |    |   | Cyclohexene, 1-ethyl-    | 110 | C8H14   | 001453-24-3 | 50   |
| 5    |    |   | Cyclohexene, 4-ethyl-    | 110 | C8H14   | 003742-42-5 | 45   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleID :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

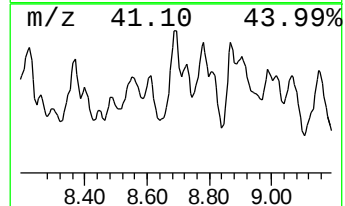
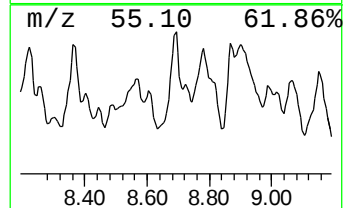
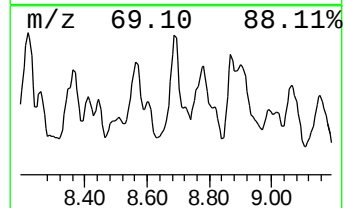
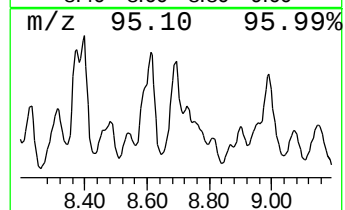
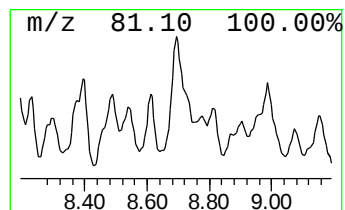
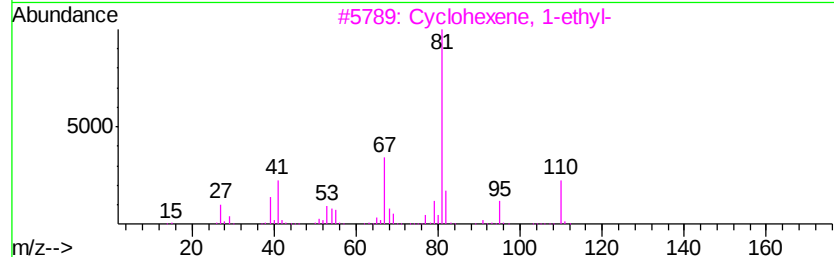
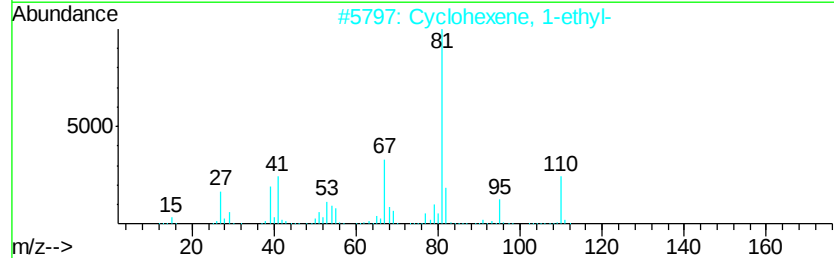
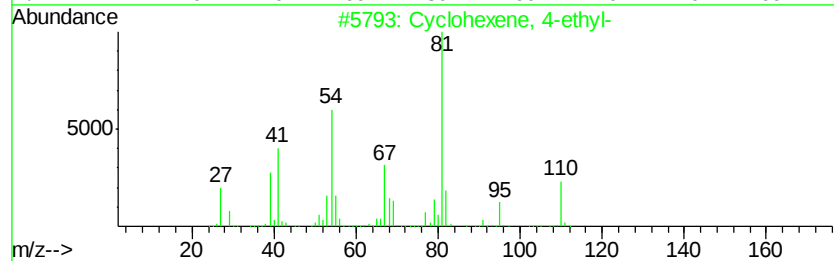
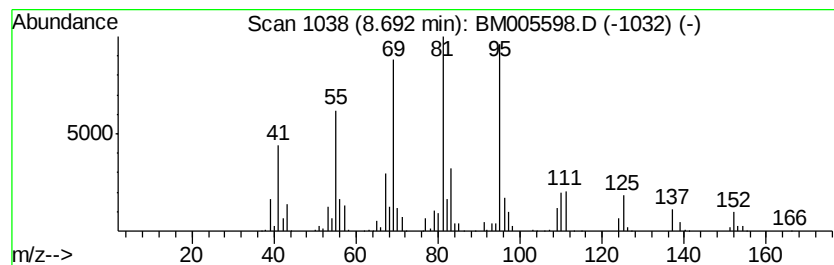
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 33 (DEL) Alkane: Branched-8.69 Concentration Rank 13

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 8.69 | 29.40 ng/ul | 2430890 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclohexene, 4-ethyl-               | 110 | C8H14   | 003742-42-5 | 38   |
| 2    |    | Cyclohexene, 1-ethyl-               | 110 | C8H14   | 001453-24-3 | 30   |
| 3    |    | Cyclohexene, 1-ethyl-               | 110 | C8H14   | 001453-24-3 | 30   |
| 4    |    | Cyclohexane, 1,1'-(1,2-dimethyl-... | 222 | C16H30  | 074663-71-1 | 27   |
| 5    |    | 1,3-Dimethyl-1-cyclohexene          | 110 | C8H14   | 002808-76-6 | 25   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

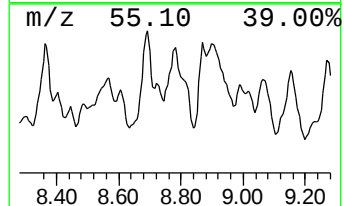
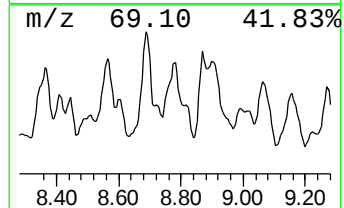
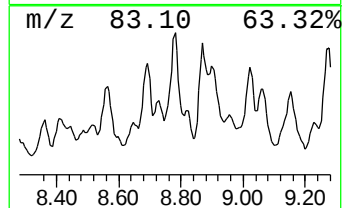
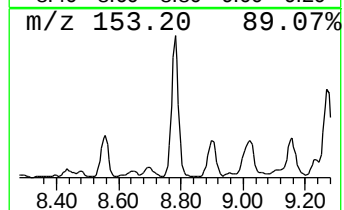
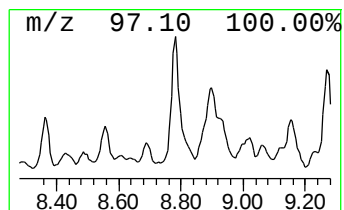
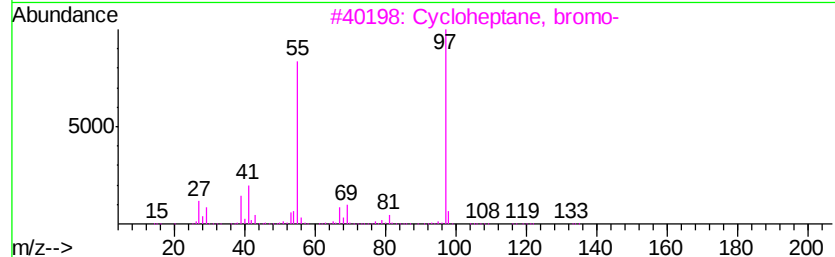
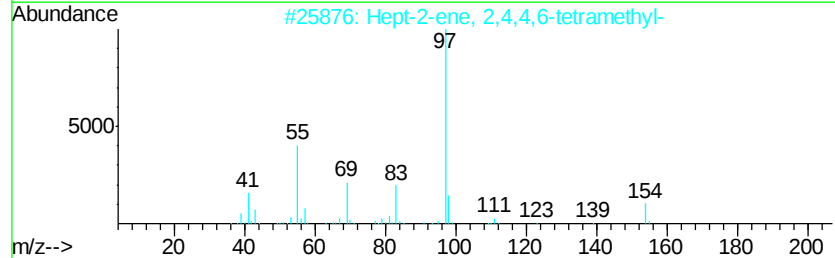
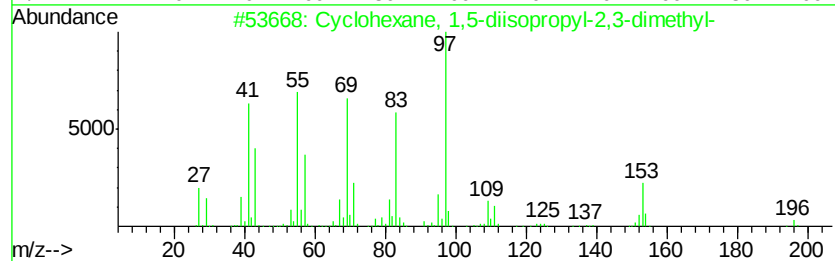
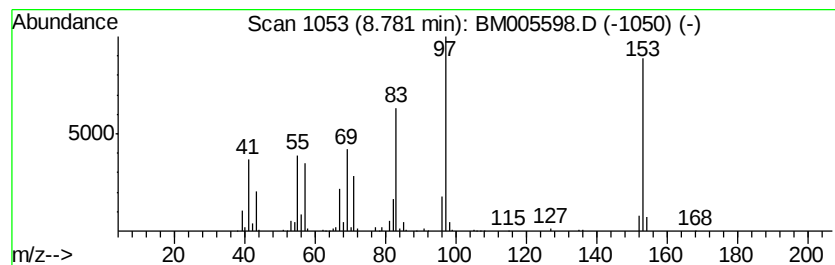
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TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 34 (DEL) Alkane: Cyclic-8.78 Concentration Rank 56

| R.T. | EstConc    | Area   | Relative to ISTD       | R.T. |
|------|------------|--------|------------------------|------|
| 8.78 | 5.96 ng/ul | 493103 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | Cyclohexane, 1,5-diisopropyl-2,3... | 196 | C14H28  | 1000149-58-8 | 33   |
| 2    |    | Hept-2-ene, 2,4,4,6-tetramethyl-    | 154 | C11H22  | 103982-58-7  | 22   |
| 3    |    | Cycloheptane, bromo-                | 176 | C7H13Br | 002404-35-5  | 14   |
| 4    |    | 2H-Inden-2-one, octahydro-, oxime   | 153 | C9H15NO | 067886-74-2  | 12   |
| 5    |    | 2,4-Dimethyl-1,5-diazabicyclo[3.... | 112 | C6H12N2 | 1000283-20-9 | 10   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

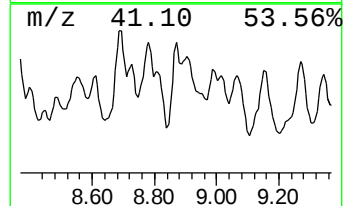
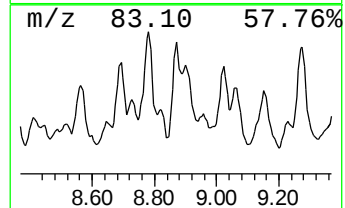
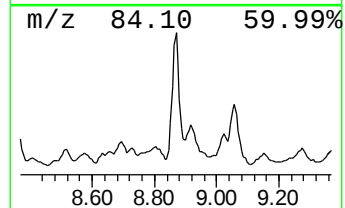
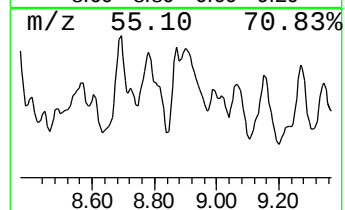
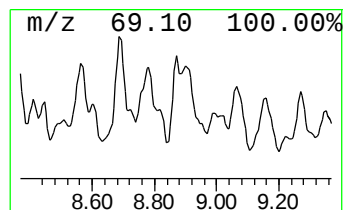
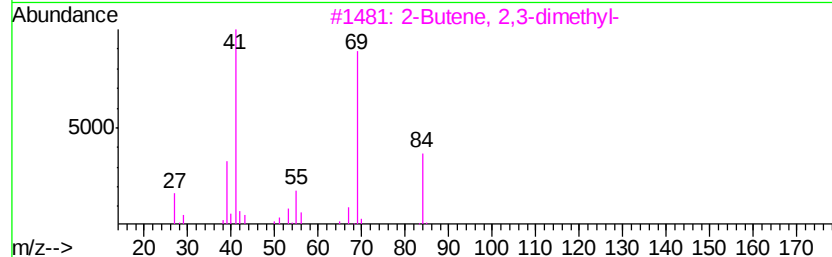
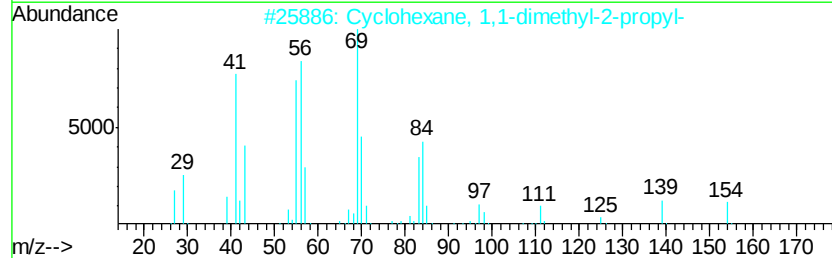
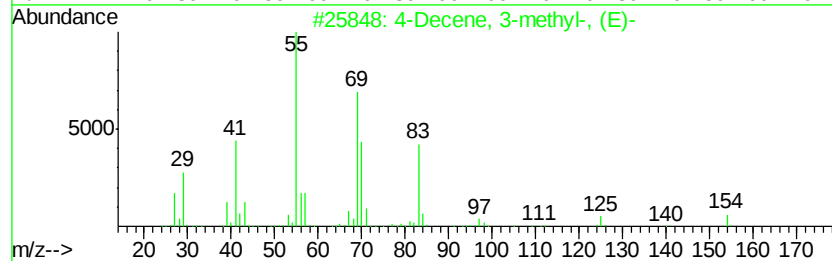
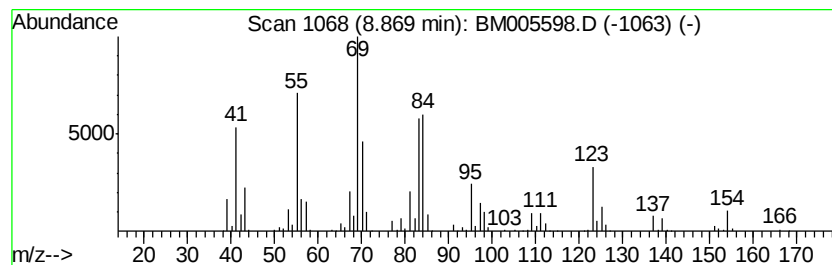
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 35 (DEL) Alkane: Cyclic-8.87 Concentration Rank 22

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 8.87 | 22.94 ng/ul | 1896800 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 4-Decene, 3-methyl-, (E)-           | 154 | C11H22  | 062338-47-0 | 58   |
| 2    |    | Cyclohexane, 1,1-dimethyl-2-propyl- | 154 | C11H22  | 081983-71-3 | 58   |
| 3    |    | 2-Butene, 2,3-dimethyl-             | 84  | C6H12   | 000563-79-1 | 38   |
| 4    |    | Heptane, 4-methylene-               | 112 | C8H16   | 015918-08-8 | 30   |
| 5    |    | 4-Isopropyl-1,3-cyclohexanedione    | 154 | C9H14O2 | 062831-62-3 | 30   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

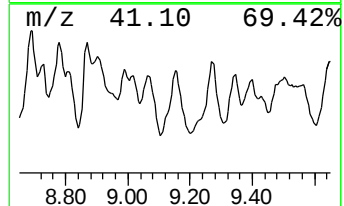
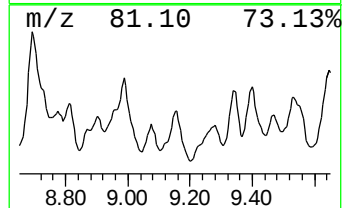
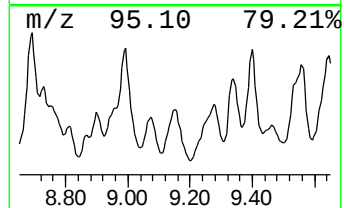
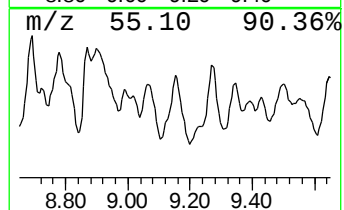
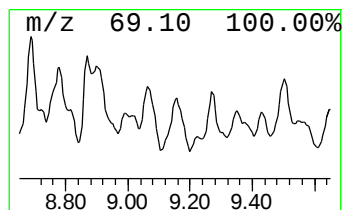
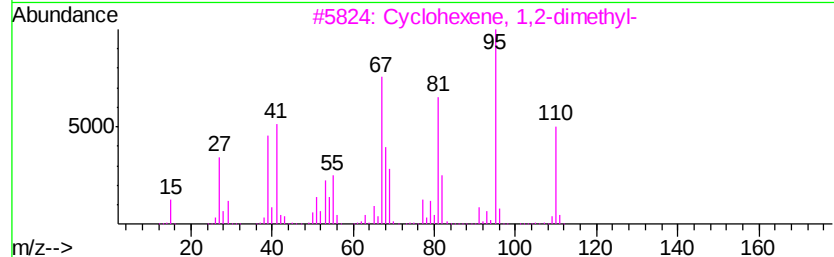
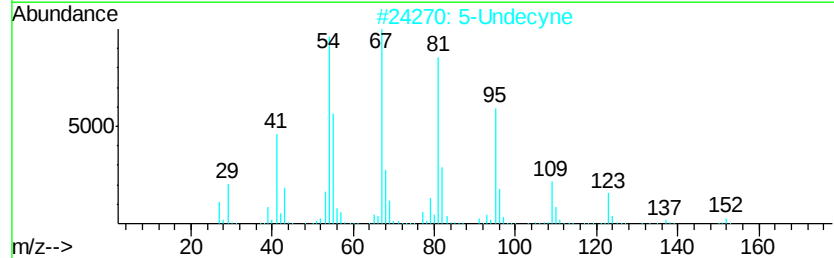
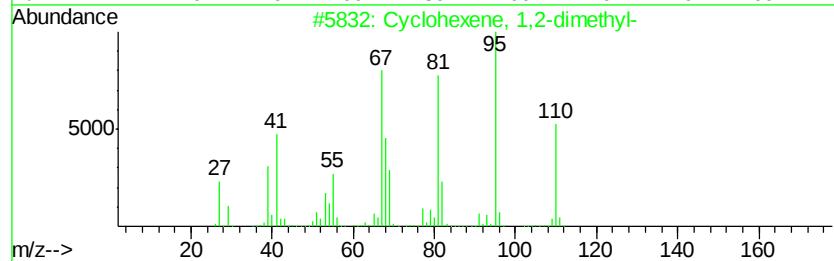
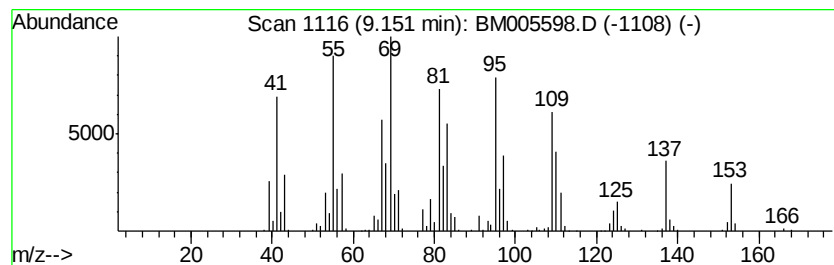
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 37 (DEL) Alkane: Branched-9.15 Concentration Rank 15

| R.T. | EstConc     | Area    | Relative to ISTD       | R.T. |
|------|-------------|---------|------------------------|------|
| 9.15 | 28.58 ng/ul | 2362640 | 1,4-Dichlorobenzene-d4 | 7.82 |

| Hit# | of | Tentative ID                 | MW  | MolForm | CAS#        | Qual |
|------|----|------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclohexene, 1,2-dimethyl-   | 110 | C8H14   | 001674-10-8 | 46   |
| 2    |    | 5-Undecyne                   | 152 | C11H20  | 002294-72-6 | 41   |
| 3    |    | Cyclohexene, 1,2-dimethyl-   | 110 | C8H14   | 001674-10-8 | 38   |
| 4    |    | 1-Methylcycloheptene         | 110 | C8H14   | 055308-20-8 | 35   |
| 5    |    | 2,4-Hexadiene, 2,5-dimethyl- | 110 | C8H14   | 000764-13-6 | 35   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

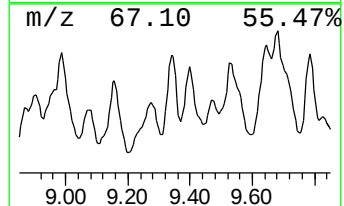
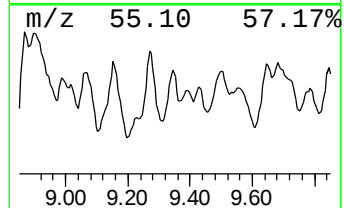
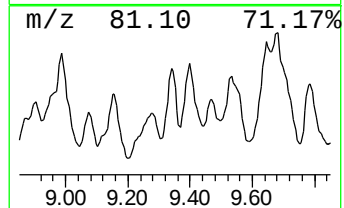
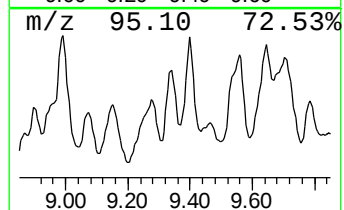
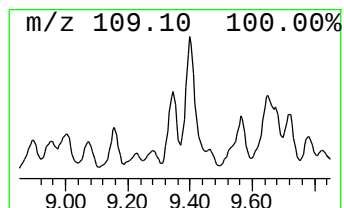
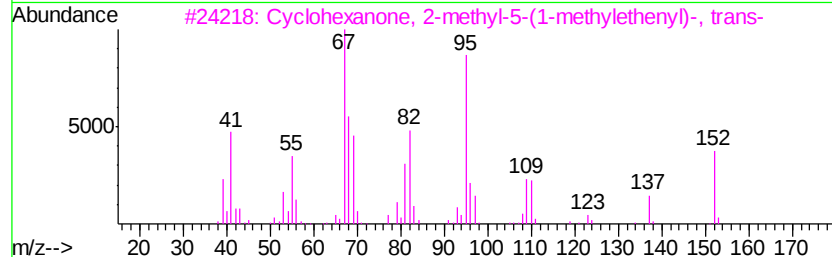
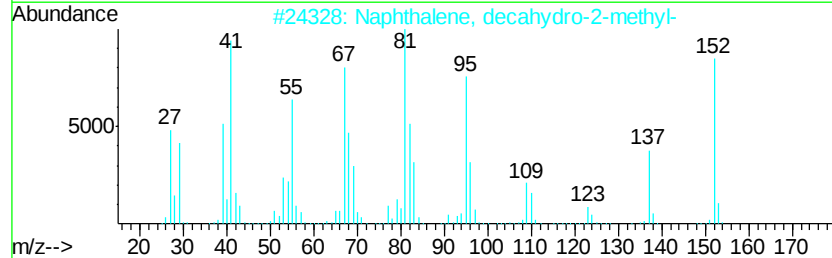
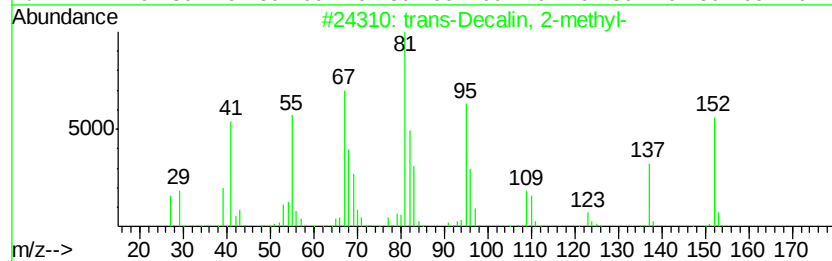
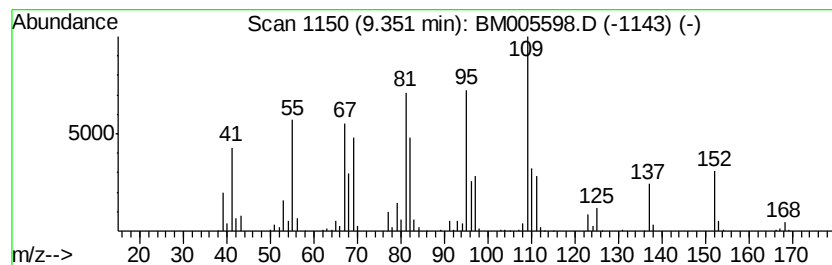
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 39 (DEL) Alkane: Branched-9.35 Concentration Rank 48

| R.T. | EstConc    | Area    | Relative to ISTD | R.T.  |
|------|------------|---------|------------------|-------|
| 9.35 | 7.87 ng/ul | 1663850 | Naphthalene-d8   | 10.61 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | trans-Decalin, 2-methyl-            | 152 | C11H20  | 1000152-47-3 | 86   |
| 2    |    | Naphthalene, decahydro-2-methyl-    | 152 | C11H20  | 002958-76-1  | 70   |
| 3    |    | Cyclohexanone, 2-methyl-5-(1-met... | 152 | C10H16O | 005948-04-9  | 55   |
| 4    |    | Cyclohexanone, 2-methyl-5-(1-met... | 152 | C10H16O | 005948-04-9  | 53   |
| 5    |    | Bicyclo[4.1.0]heptane, 3-methyl-    | 110 | C8H14   | 041977-47-3  | 46   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

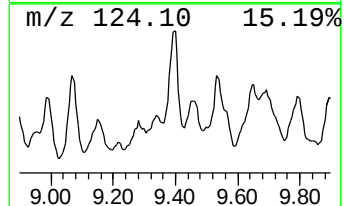
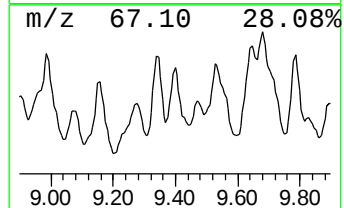
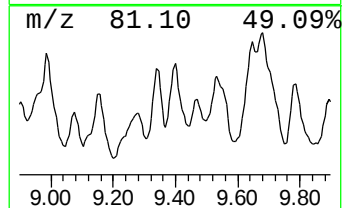
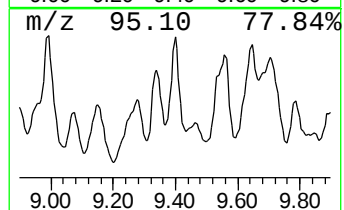
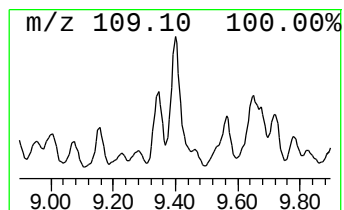
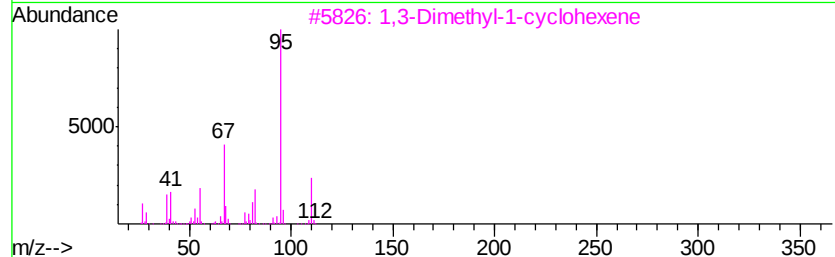
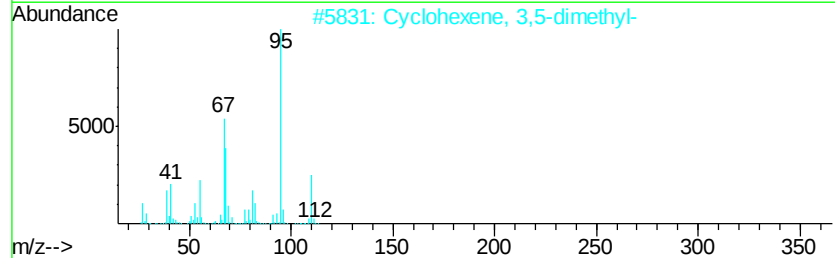
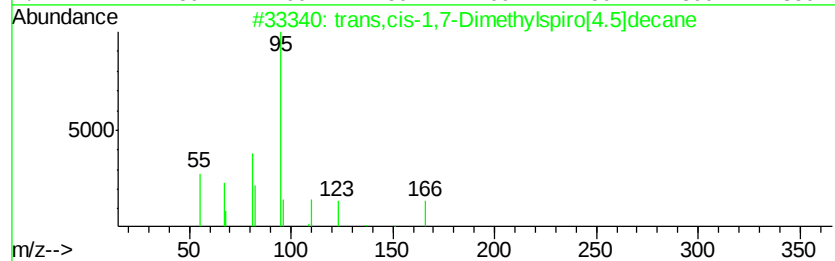
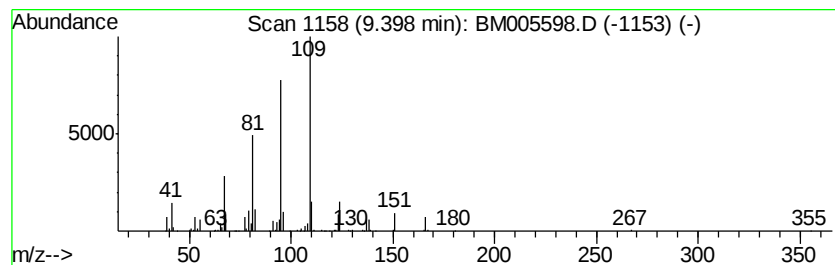
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 40 (DEL) Alkane: Branched-9.40 Concentration Rank 53

| R.T. | EstConc    | Area    | Relative to ISTD | R.T.  |
|------|------------|---------|------------------|-------|
| 9.40 | 6.89 ng/ul | 1456100 | Napthalene-d8    | 10.61 |

| Hit# | of                                  | 5   | Tentative ID | MW           | MolForm | CAS# | Qual |
|------|-------------------------------------|-----|--------------|--------------|---------|------|------|
| 1    | trans,cis-1,7-Dimethylspiro[4.5]... | 166 | C12H22       | 1000111-72-7 | 43      |      |      |
| 2    | Cyclohexene, 3,5-dimethyl-          | 110 | C8H14        | 000823-17-6  | 43      |      |      |
| 3    | 1,3-Dimethyl-1-cyclohexene          | 110 | C8H14        | 002808-76-6  | 43      |      |      |
| 4    | Cyclopentene, 1,2,3-trimethyl-      | 110 | C8H14        | 000473-91-6  | 43      |      |      |
| 5    | Furan, 4-methyl-2-propyl-           | 124 | C8H12O       | 006148-37-4  | 43      |      |      |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

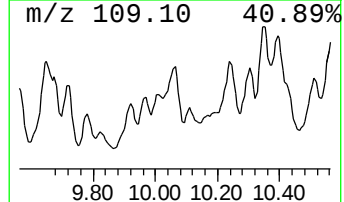
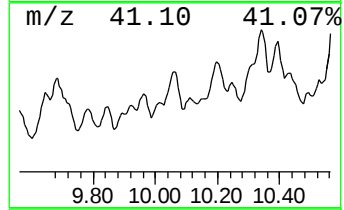
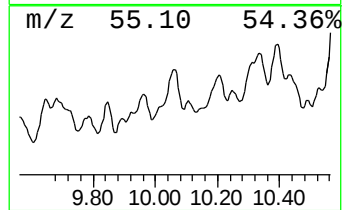
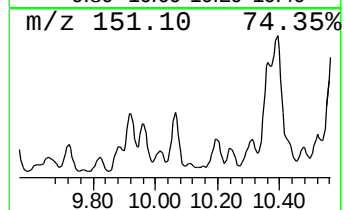
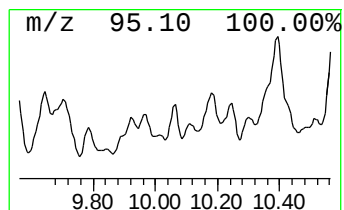
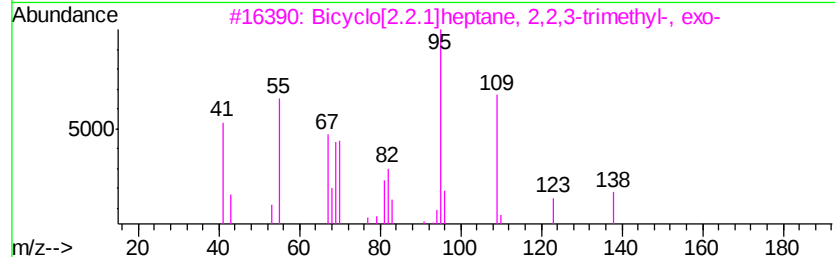
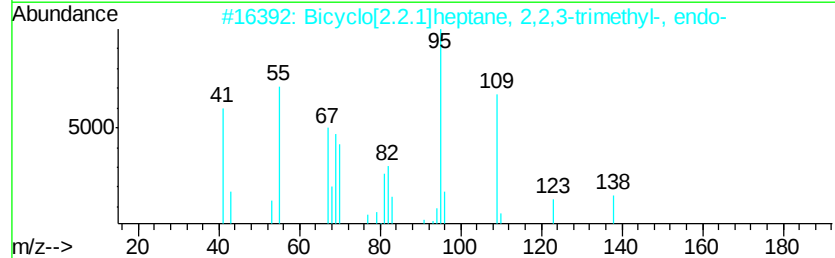
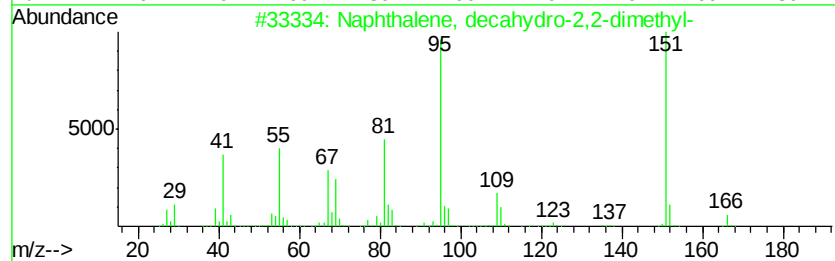
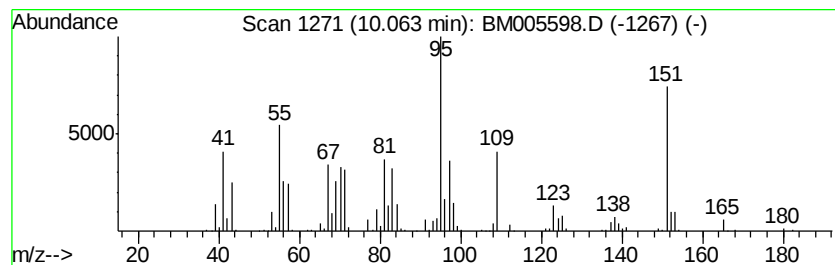
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 43 (DEL) Alkane: Branched-10.06 Concentration Rank 55

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 10.06 | 6.47 ng/ul | 1367470 | Naphthalene-d8   | 10.61 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, decahydro-2,2-dimet... | 166 | C12H22  | 031124-85-3 | 53   |
| 2    |    | Bicyclo[2.2.1]heptane, 2,2,3-tri... | 138 | C10H18  | 020536-40-7 | 43   |
| 3    |    | Bicyclo[2.2.1]heptane, 2,2,3-tri... | 138 | C10H18  | 020536-41-8 | 43   |
| 4    |    | Cyclohexene, 3-methyl-6-(1-methy... | 138 | C10H18  | 005256-65-5 | 38   |
| 5    |    | Imidazo(1,2-a)pyrimidine, 6-meth... | 151 | C7H9N3O | 026955-11-3 | 27   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleID :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

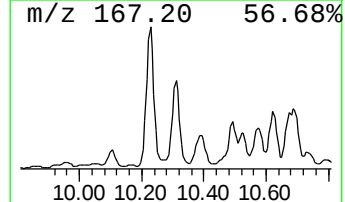
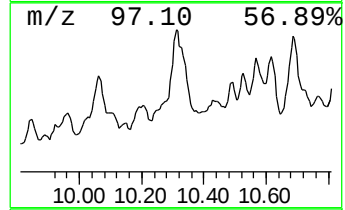
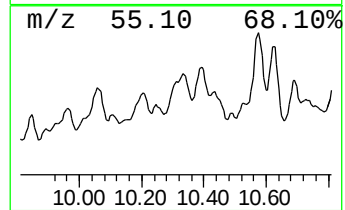
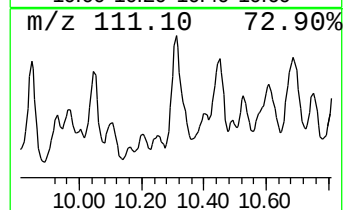
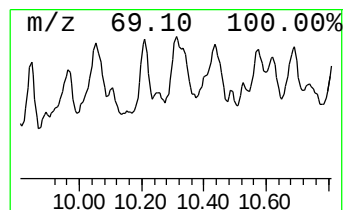
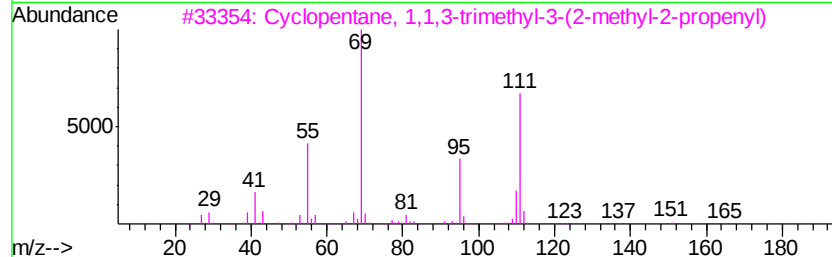
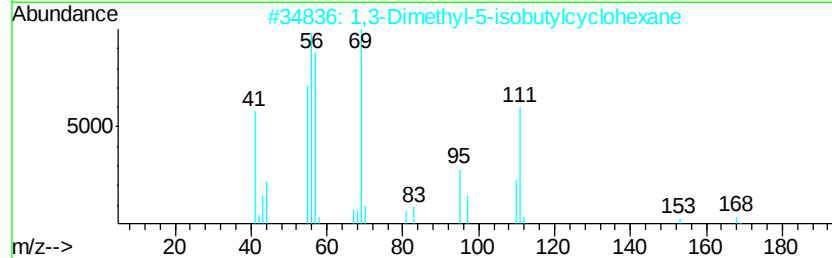
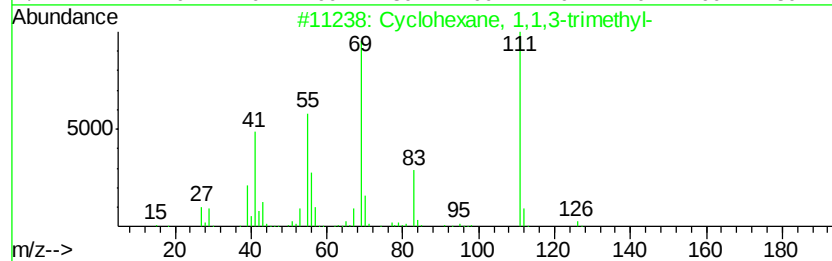
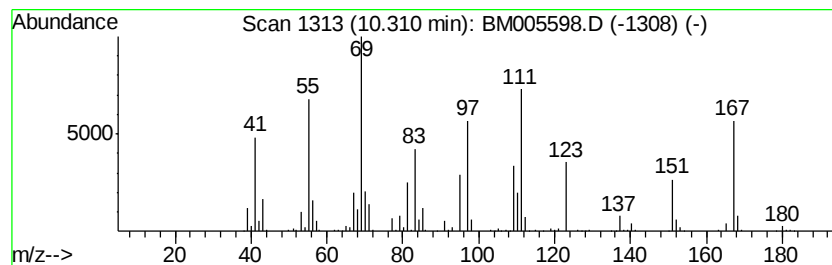
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TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 44 (DEL) Alkane: Cyclic-10.31 Concentration Rank 57

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 10.31 | 5.38 ng/ul | 1137080 | Napthalene-d8    | 10.61 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | Cyclohexane, 1,1,3-trimethyl-       | 126 | C9H18   | 003073-66-3  | 41   |
| 2    |    | 1,3-Dimethyl-5-isobutylcyclohexane  | 168 | C12H24  | 013131-76-5  | 35   |
| 3    |    | Cyclopentane, 1,1,3-trimethyl-3-... | 166 | C12H22  | 074421-09-3  | 35   |
| 4    |    | cis,cis,cis-1-Isobutyl-2,5-dimet... | 168 | C12H24  | 1000113-60-0 | 35   |
| 5    |    | Cyclooctane, ethyl-                 | 140 | C10H20  | 013152-02-8  | 30   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

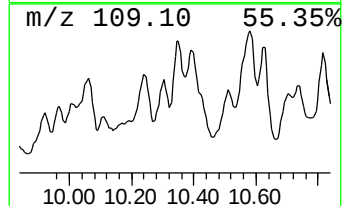
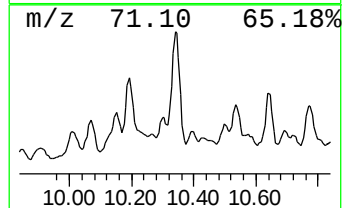
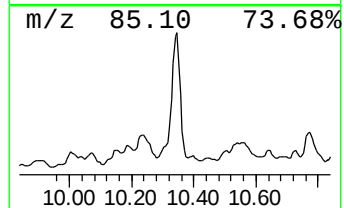
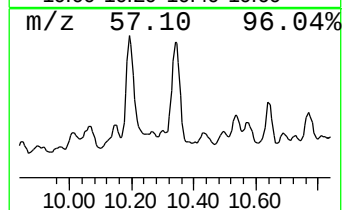
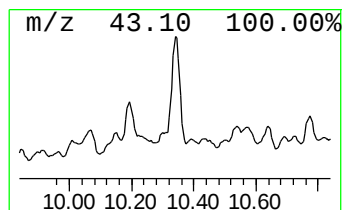
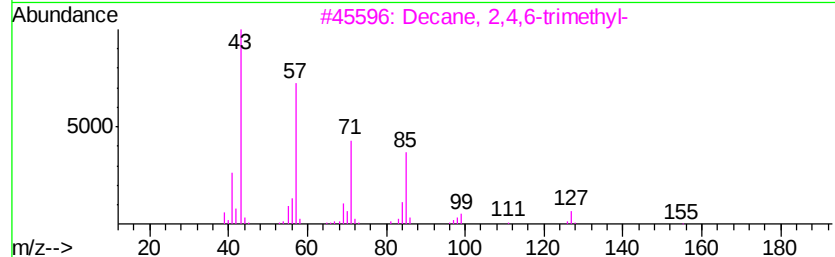
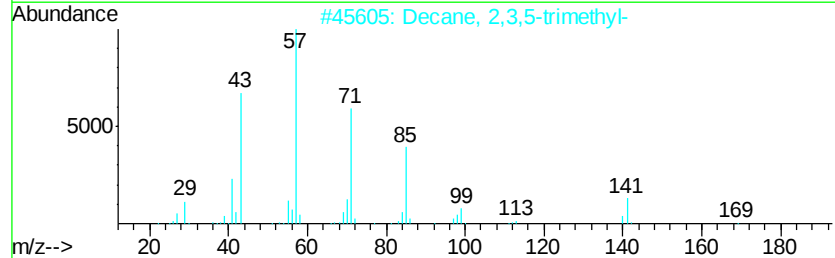
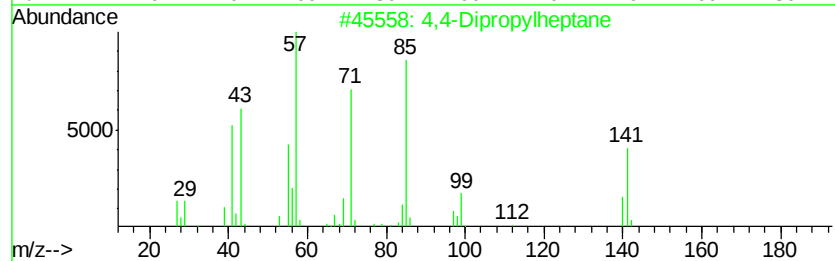
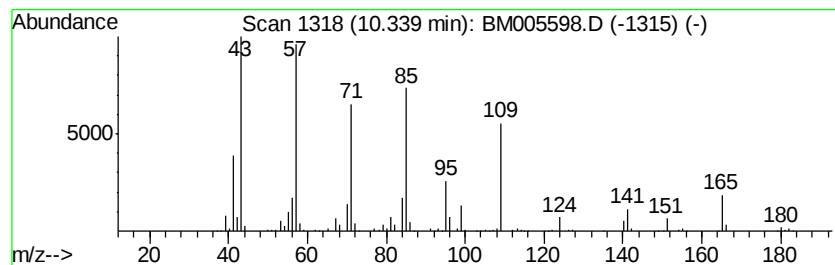
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TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 45 (DEL) Alkane: Straight-Chai... Concentration Rank 44

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 10.34 | 8.77 ng/ul | 1854280 | Napthalene-d8    | 10.61 |

| Hit# | of | Tentative ID             | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------|-----|---------|-------------|------|
| 1    | 5  | 4,4-Dipropylheptane      | 184 | C13H28  | 017312-72-0 | 53   |
| 2    |    | Decane, 2,3,5-trimethyl- | 184 | C13H28  | 062238-11-3 | 50   |
| 3    |    | Decane, 2,4,6-trimethyl- | 184 | C13H28  | 062108-27-4 | 50   |
| 4    |    | Tridecane, 7-propyl-     | 226 | C16H34  | 055045-09-5 | 50   |
| 5    |    | Decane, 2,3,6-trimethyl- | 184 | C13H28  | 062238-12-4 | 38   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

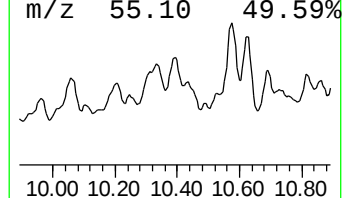
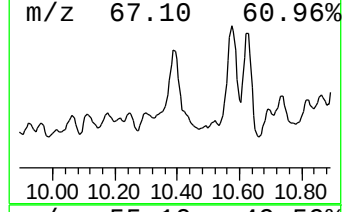
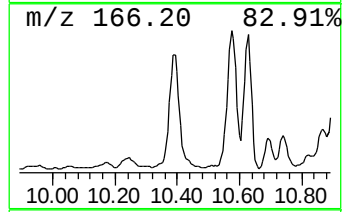
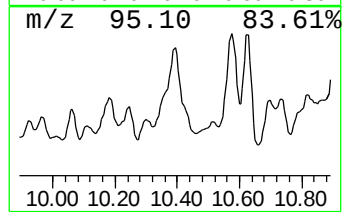
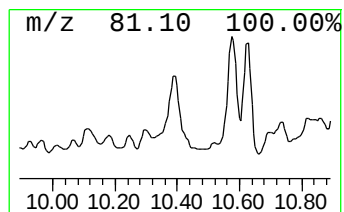
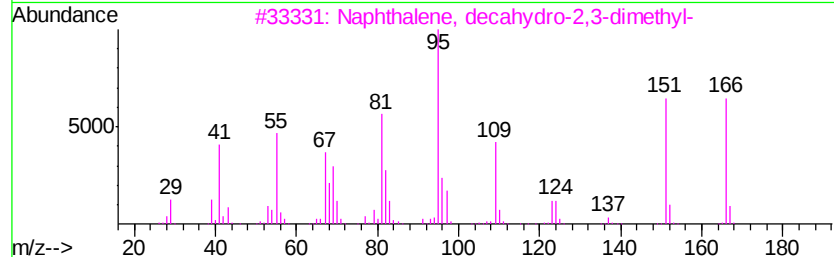
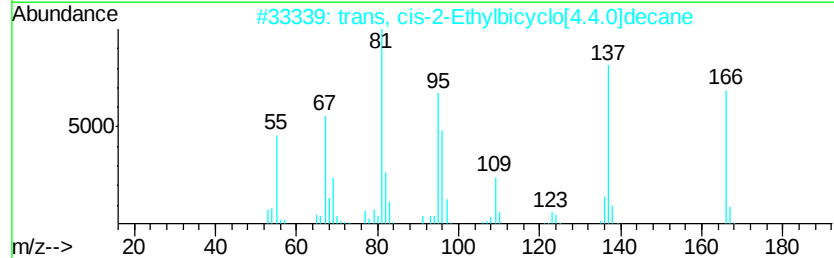
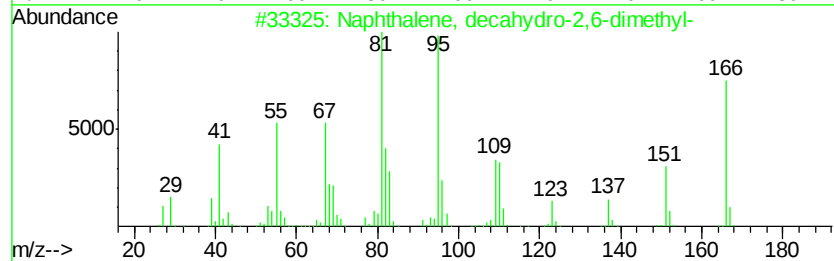
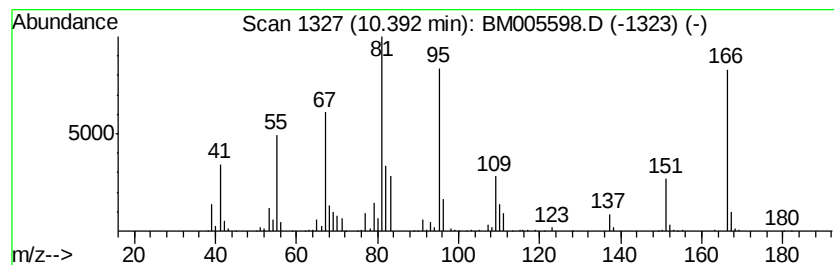
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 46 (DEL) Alkane: Branched-10.39 Concentration Rank 46

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 10.39 | 8.53 ng/ul | 1804130 | Naphthalene-d8   | 10.61 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Naphthalene, decahydro-2,6-dimet... | 166 | C12H22  | 001618-22-0 | 94   |
| 2    |    | trans, cis-2-Ethylbicyclo[4.4.0]... | 166 | C12H22  | 066660-39-7 | 83   |
| 3    |    | Naphthalene, decahydro-2,3-dimet... | 166 | C12H22  | 001008-80-6 | 52   |
| 4    |    | Tricyclo[4.3.1.1(3,8)]undecan-3-ol  | 166 | C11H18O | 014504-80-4 | 49   |
| 5    |    | Cyclohexanone, 5-methyl-2-(1-met... | 152 | C10H16O | 000529-00-0 | 42   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

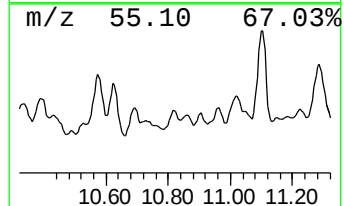
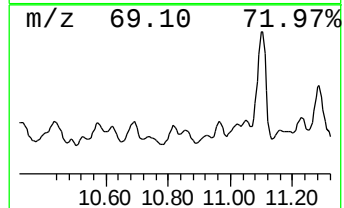
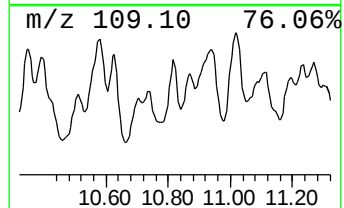
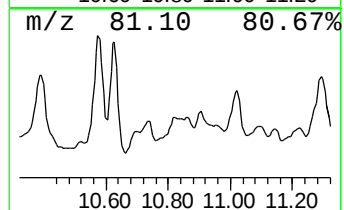
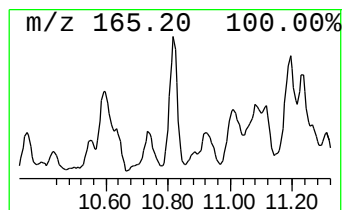
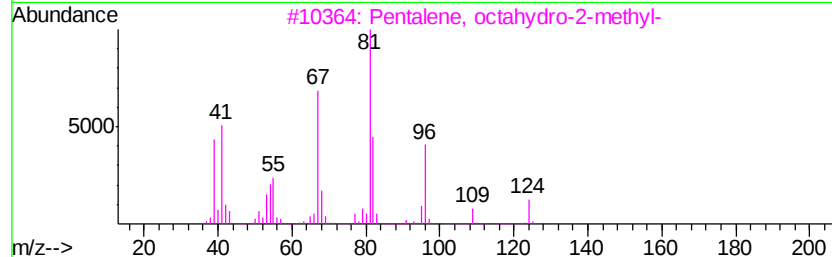
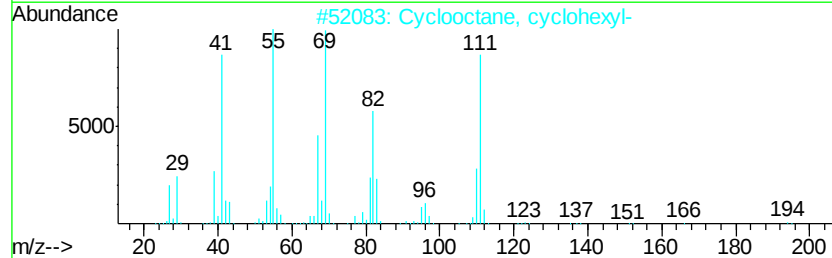
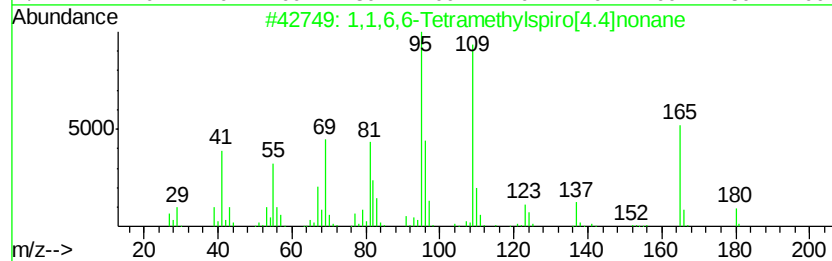
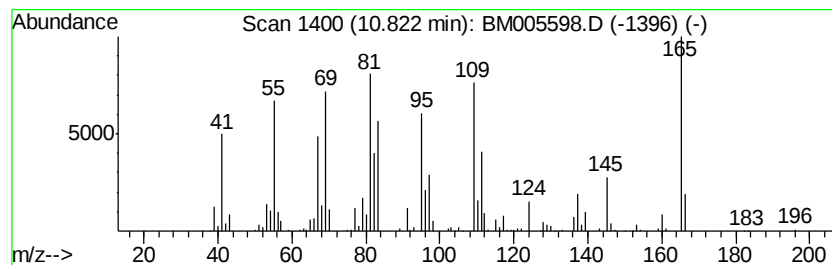
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TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 47 (DEL) Alkane: Branched-10.82 Concentration Rank 59

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 10.82 | 4.53 ng/ul | 956868 | Naphthalene-d8   | 10.61 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|----------|-------------|------|
| 1    |    |   | 1,1,6,6-Tetramethylspiro[4.4]nonane | 180 | C13H24   | 074054-92-5 | 38   |
| 2    |    |   | Cyclooctane, cyclohexyl-            | 194 | C14H26   | 092369-78-3 | 35   |
| 3    |    |   | Pentalene, octahydro-2-methyl-      | 124 | C9H16    | 003868-64-2 | 25   |
| 4    |    |   | 2'-Ethoxyformanilide                | 165 | C9H11NO2 | 086796-85-2 | 25   |
| 5    |    |   | Bicyclo[3.1.1]heptane, 2,6,6-tri... | 138 | C10H18   | 000473-55-2 | 25   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampled :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

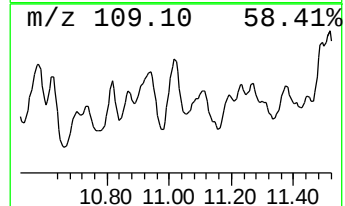
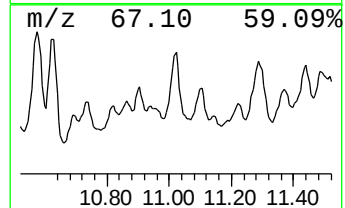
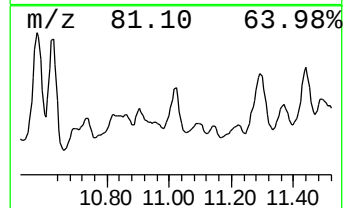
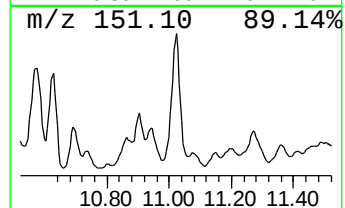
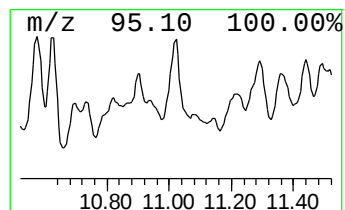
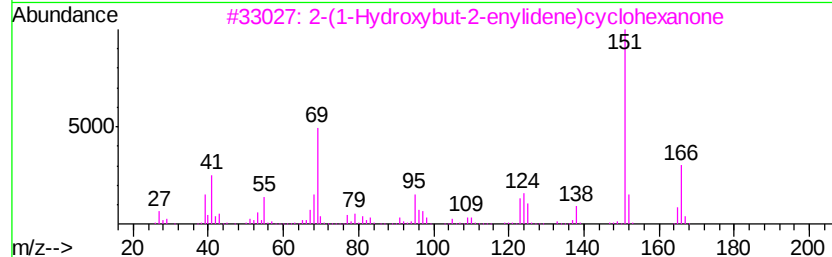
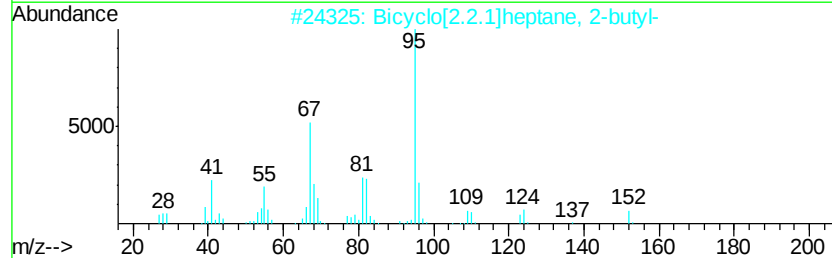
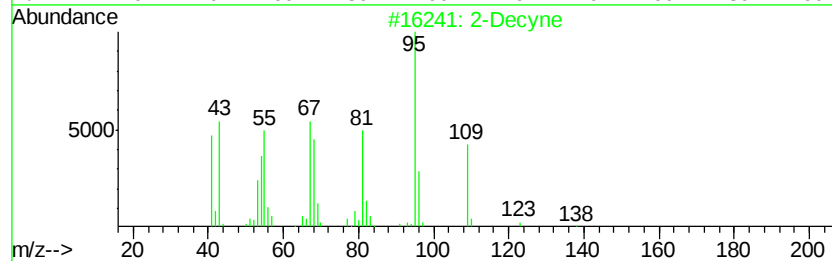
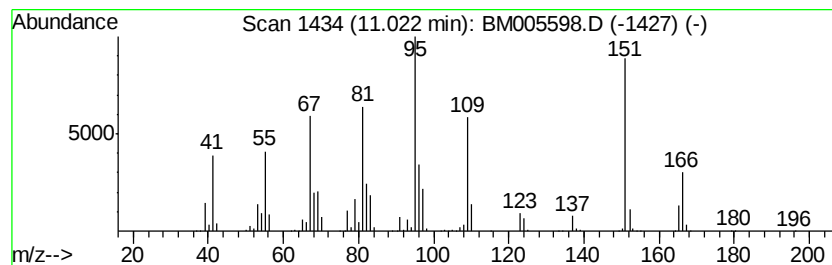
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 48 (DEL) Alkane: Branched-11.02 Concentration Rank 33

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 11.02 | 15.11 ng/ul | 3194750 | Napthalene-d8    | 10.61 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#         | Qual |
|------|----|-------------------------------------|-----|----------|--------------|------|
| 1    | 5  | 2-Decyne                            | 138 | C10H18   | 002384-70-5  | 49   |
| 2    |    | Bicyclo[2.2.1]heptane, 2-butyl-     | 152 | C11H20   | 061177-16-0  | 45   |
| 3    |    | 2-(1-Hydroxybut-2-enylidene)cycl... | 166 | C10H14O2 | 1000186-18-9 | 43   |
| 4    |    | cis,cis-1,6-Dimethylspiro[4.5]de... | 166 | C12H22   | 1000111-72-4 | 35   |
| 5    |    | Norbornane, 2-isobutyl-             | 152 | C11H20   | 018127-14-5  | 30   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

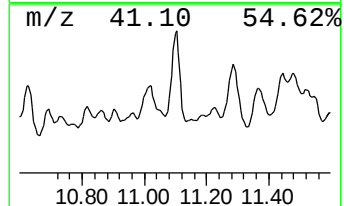
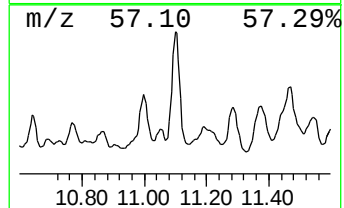
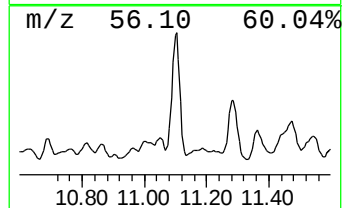
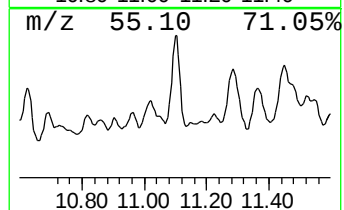
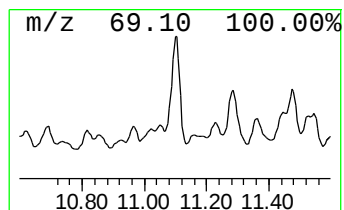
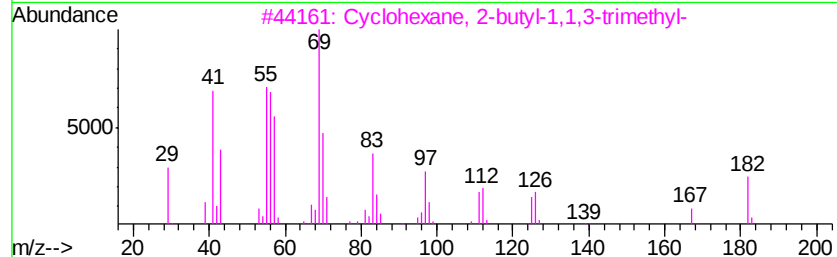
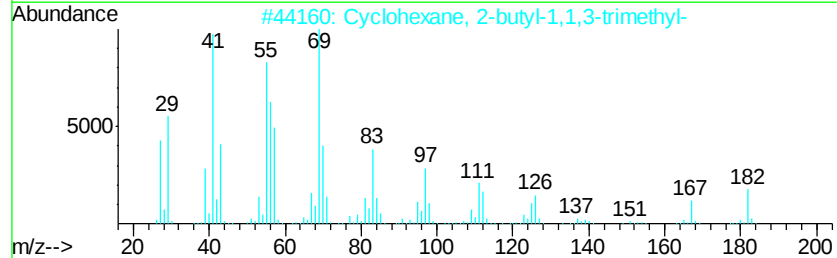
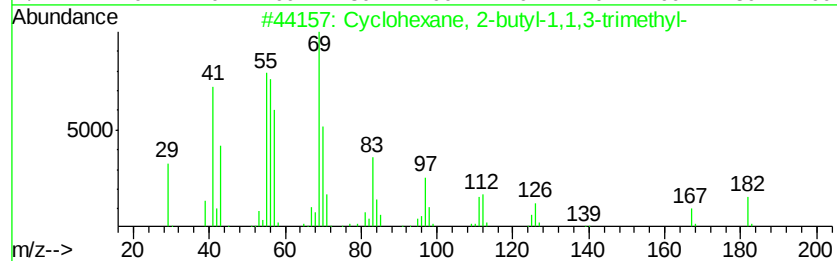
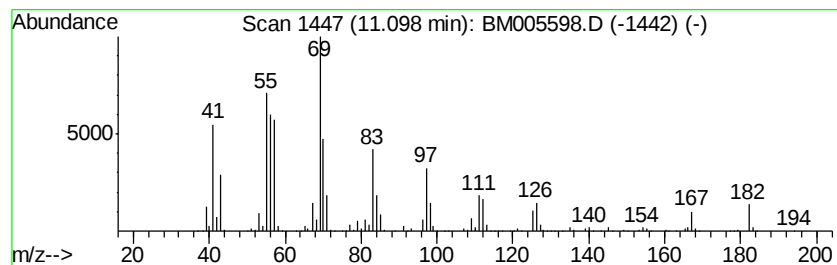
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 49 (DEL) Alkane: Cyclic-11.10 Concentration Rank 26

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 11.10 | 20.97 ng/ul | 4433960 | Naphthalene-d8   | 10.61 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclohexane, 2-butyl-1,1,3-trime... | 182 | C13H26  | 054676-39-0 | 95   |
| 2    |    | Cyclohexane, 2-butyl-1,1,3-trime... | 182 | C13H26  | 054676-39-0 | 94   |
| 3    |    | Cyclohexane, 2-butyl-1,1,3-trime... | 182 | C13H26  | 054676-39-0 | 90   |
| 4    |    | Cyclopentane, butyl-                | 126 | C9H18   | 002040-95-1 | 87   |
| 5    |    | 3-Dodecene, (E)-                    | 168 | C12H24  | 007206-14-6 | 64   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

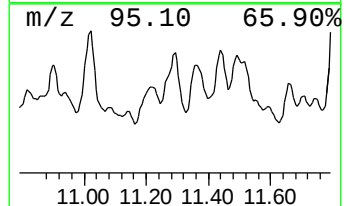
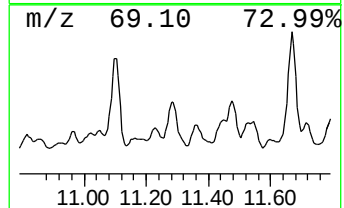
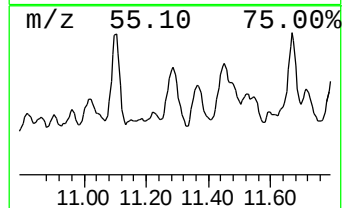
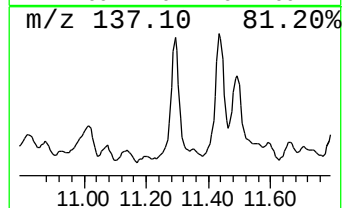
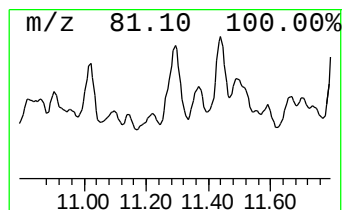
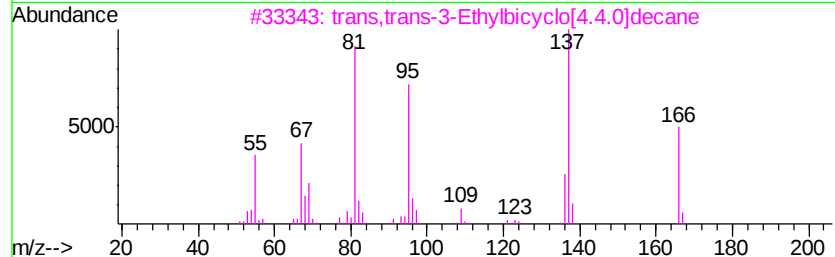
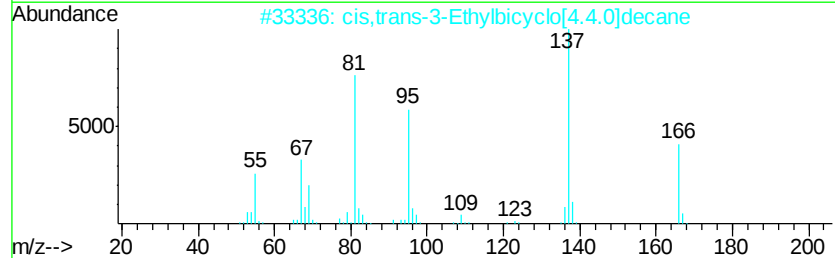
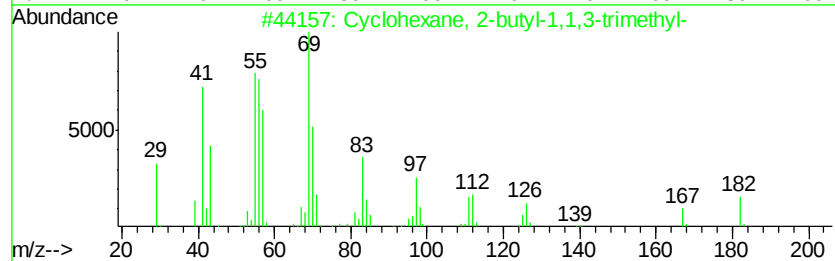
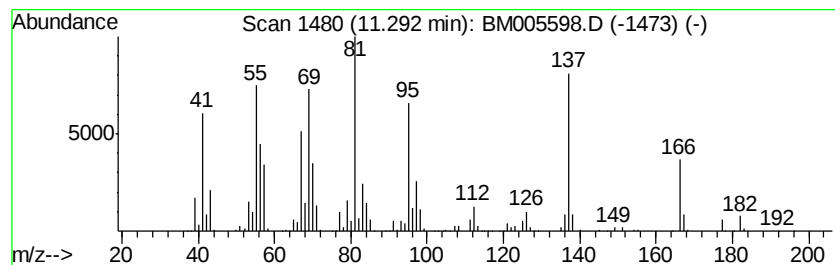
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 50 (DEL) Alkane: Cyclic-11.29 Concentration Rank 19

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 11.29 | 24.23 ng/ul | 5122680 | Naphthalene-d8   | 10.61 |

| Hit# | of | Tentative ID                         | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclohexane, 2-butyl-1,1,3-trime...  | 182 | C13H26  | 054676-39-0 | 94   |
| 2    |    | cis,trans-3-Ethylbicyclo[4.4.0]d...  | 166 | C12H22  | 066660-41-1 | 55   |
| 3    |    | trans,trans-3-Ethylbicyclo[4.4.0]... | 166 | C12H22  | 058462-32-1 | 50   |
| 4    |    | cis, cis-2-Ethylbicyclo[4.4.0]de...  | 166 | C12H22  | 066660-40-0 | 46   |
| 5    |    | 4a(2H)-Naphthalenemethanol, octa...  | 168 | C11H20O | 099992-19-5 | 38   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

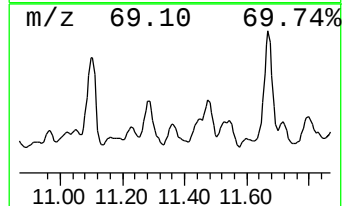
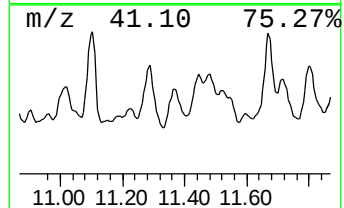
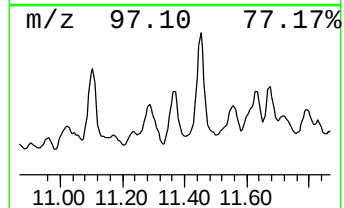
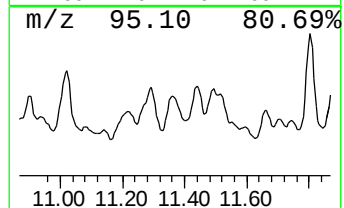
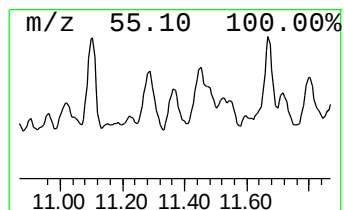
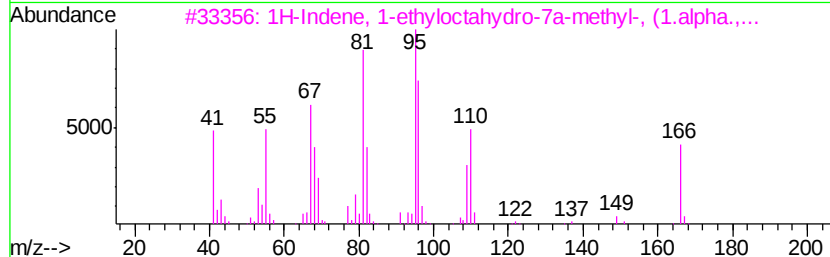
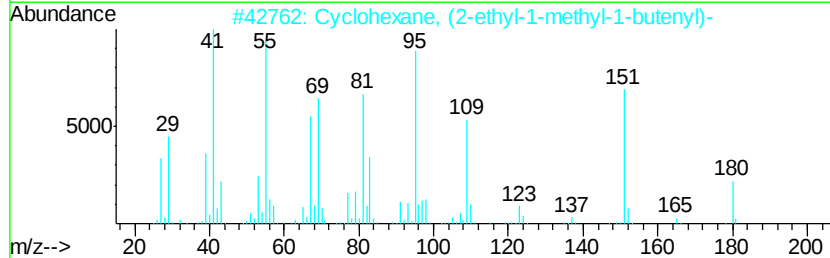
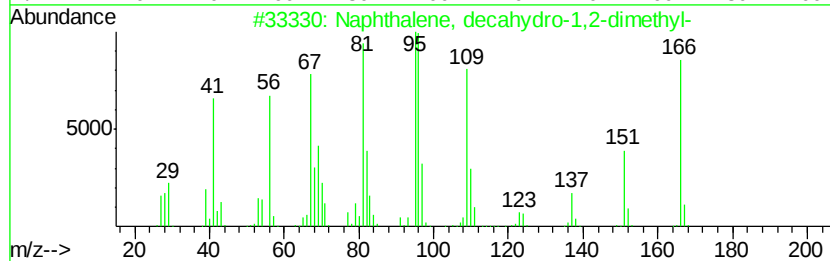
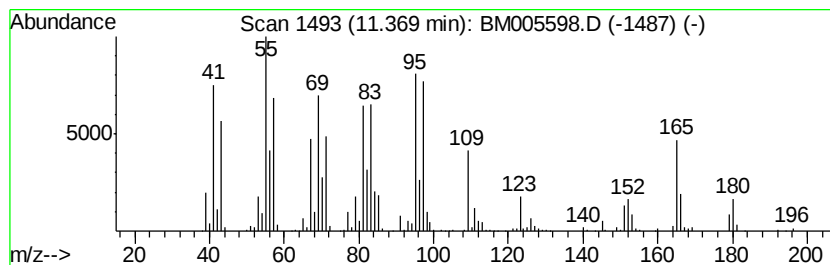
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 51 (DEL) Alkane: Branched-11.37 Concentration Rank 31

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 11.37 | 17.12 ng/ul | 3620930 | Naphthalene-d8   | 10.61 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | Naphthalene, decahydro-1,2-dimet... | 166 | C12H22  | 003604-14-6  | 46   |
| 2    |    | Cyclohexane, (2-ethyl-1-methyl-1... | 180 | C13H24  | 074810-42-7  | 38   |
| 3    |    | 1H-Indene, 1-ethyloctahydro-7a-m... | 166 | C12H22  | 056324-71-1  | 30   |
| 4    |    | trans,cis-1,8-Dimethylspiro[4.5]... | 166 | C12H22  | 1000111-72-9 | 30   |
| 5    |    | Cyclopentane, 1-methyl-3-(2-meth... | 140 | C10H20  | 029053-04-1  | 22   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

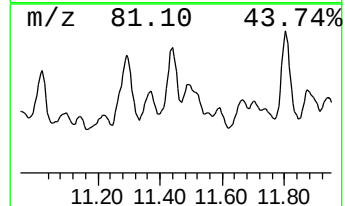
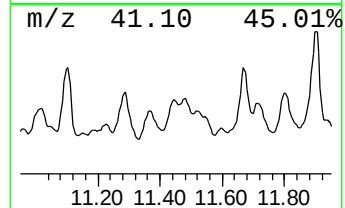
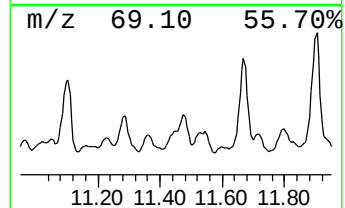
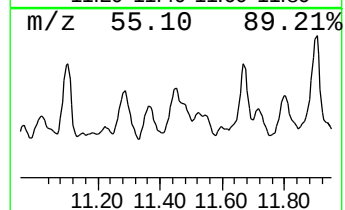
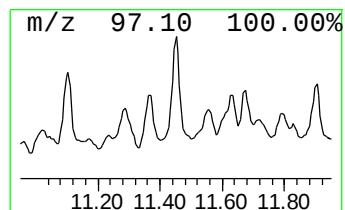
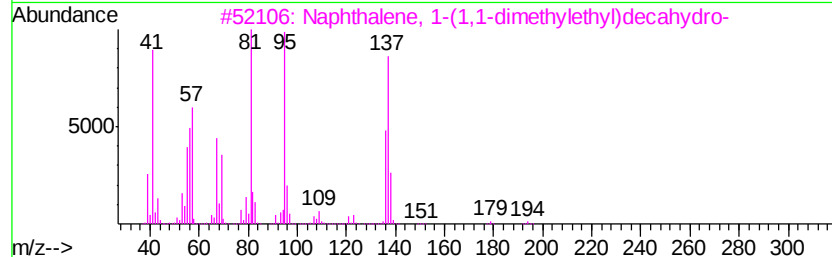
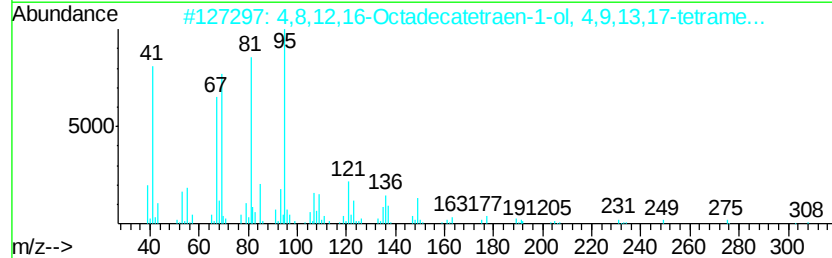
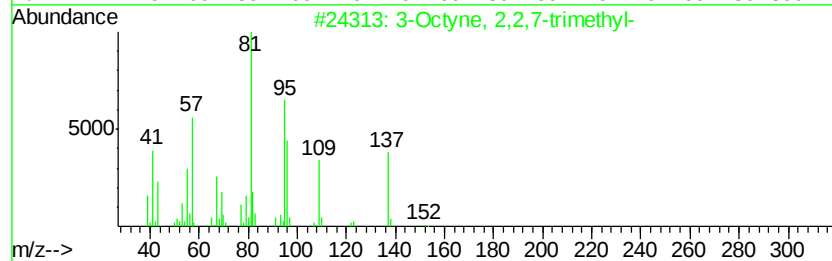
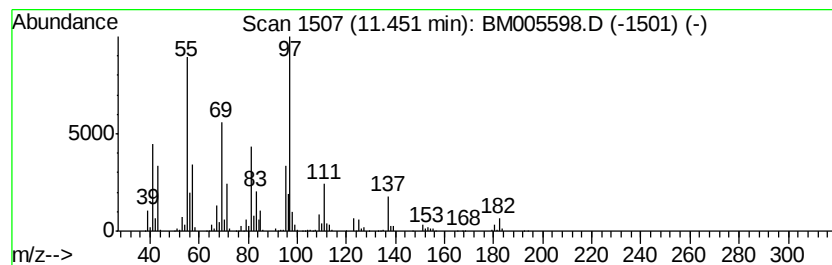
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 52 (DEL) Alkane: Branched-11.45 Concentration Rank 39

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 11.45 | 12.35 ng/ul | 2612010 | Naphthalene-d8   | 10.61 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | 3-Octyne, 2,2,7-trimethyl-          | 152 | C11H20  | 055402-13-6  | 43   |
| 2    |    | 4,8,12,16-Octadecatetraen-1-ol, ... | 318 | C22H38O | 1000142-00-0 | 35   |
| 3    |    | Naphthalene, 1-(1,1-dimethylethy... | 194 | C14H26  | 056292-64-9  | 25   |
| 4    |    | Cyclobutane, (1-methylethylidene)-  | 96  | C7H12   | 001528-22-9  | 18   |
| 5    |    | Cyclopentene, 4,4-dimethyl-         | 96  | C7H12   | 019037-72-0  | 18   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

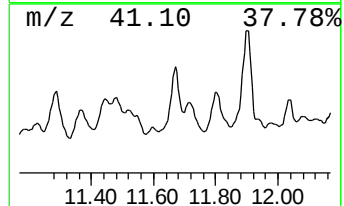
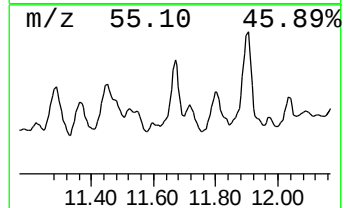
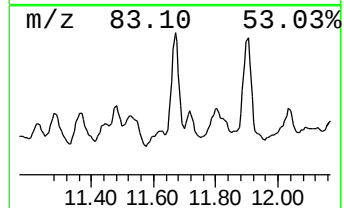
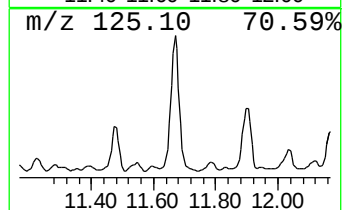
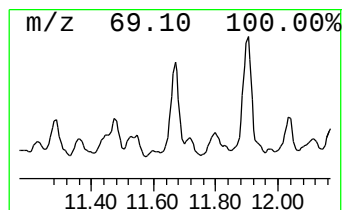
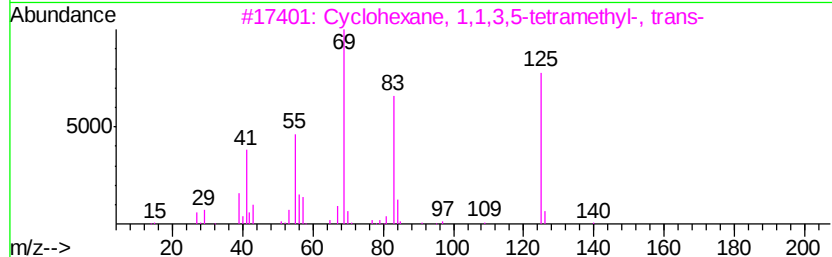
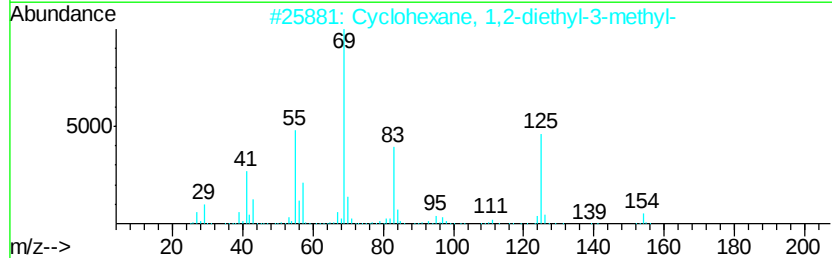
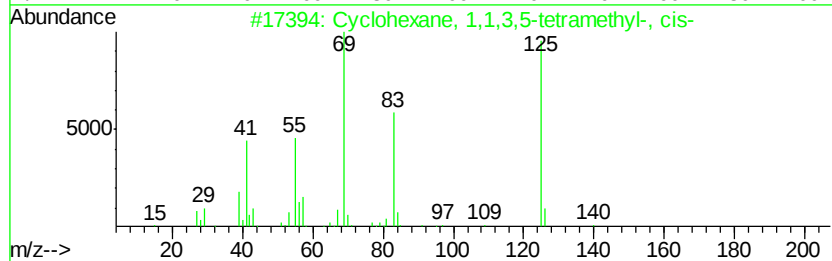
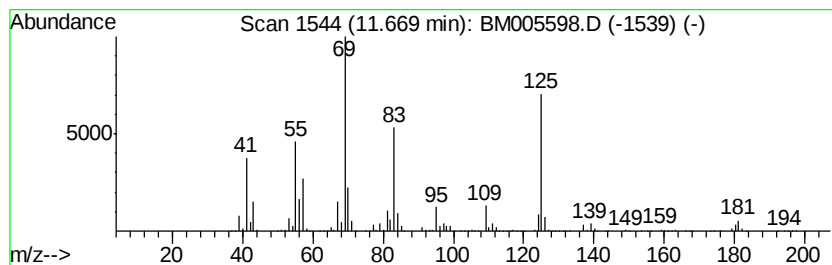
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 53 (DEL) Alkane: Cyclic-11.67 Concentration Rank 27

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 11.67 | 20.86 ng/ul | 4411210 | Napthalene-d8    | 10.61 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20   | 050876-32-9 | 72   |
| 2    |    | Cyclohexane, 1,2-diethyl-3-methyl-  | 154 | C11H22   | 061141-80-8 | 72   |
| 3    |    | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20   | 050876-31-8 | 64   |
| 4    |    | Zinc, bis[2-(1,1-dimethylethyl)-... | 314 | C18H34Zn | 074793-36-5 | 59   |
| 5    |    | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20   | 050876-32-9 | 59   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

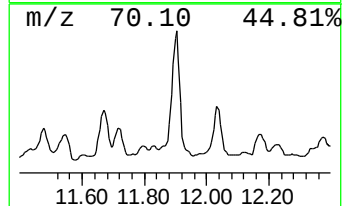
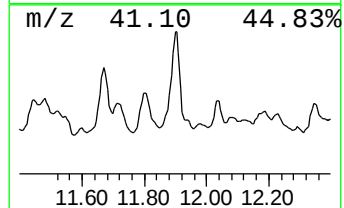
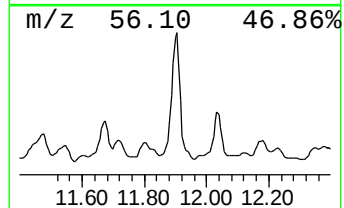
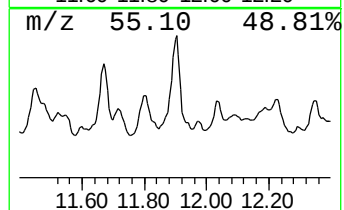
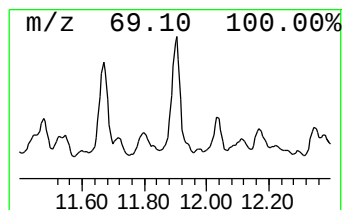
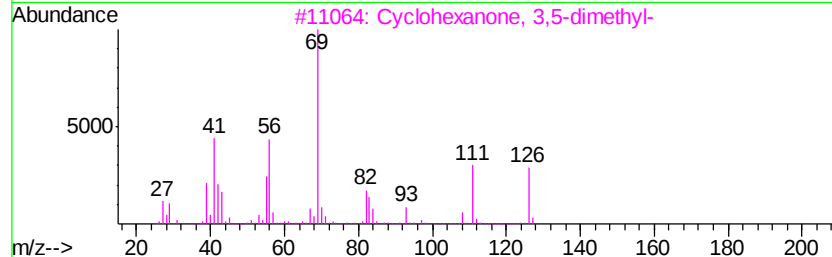
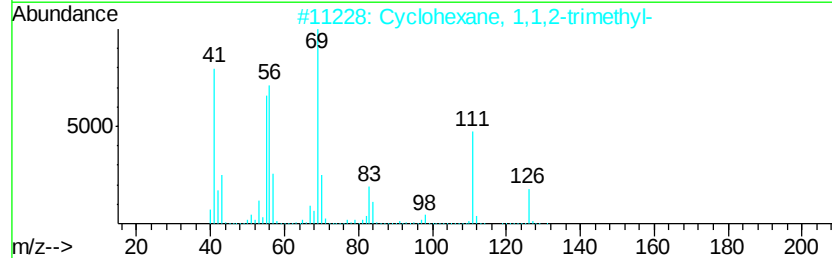
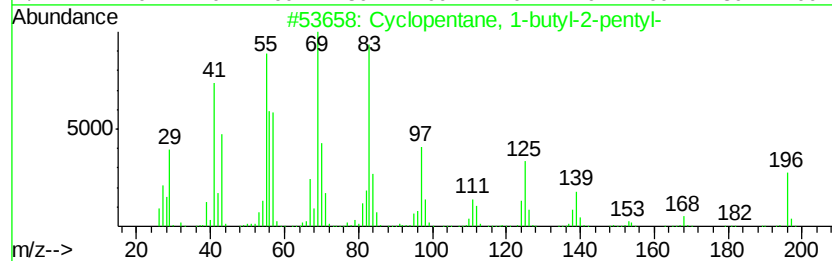
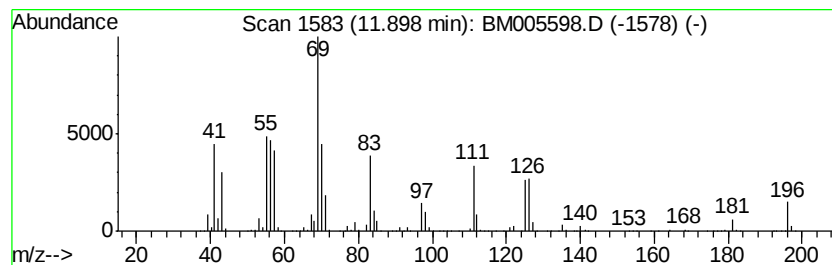
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 55 (DEL) Alkane: Cyclic-11.90 Concentration Rank 12

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 11.90 | 30.10 ng/ul | 6364610 | Naphthalene-d8   | 10.61 |

| Hit# | of | Tentative ID                    | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclopentane, 1-butyl-2-pentyl- | 196 | C14H28  | 061142-52-7 | 59   |
| 2    |    | Cyclohexane, 1,1,2-trimethyl-   | 126 | C9H18   | 007094-26-0 | 53   |
| 3    |    | Cyclohexanone, 3,5-dimethyl-    | 126 | C8H14O  | 002320-30-1 | 50   |
| 4    |    | cis-3,5-Dimethylcyclohexanone   | 126 | C8H14O  | 007214-49-5 | 47   |
| 5    |    | Cyclopentane, ethyl-            | 98  | C7H14   | 001640-89-7 | 47   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

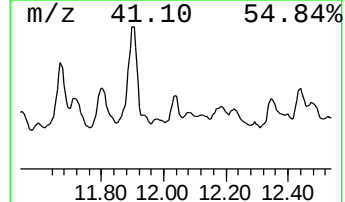
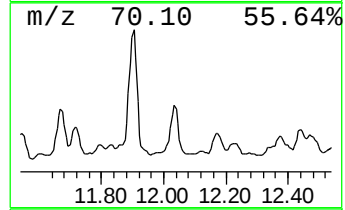
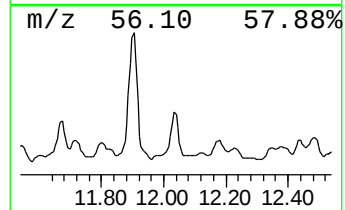
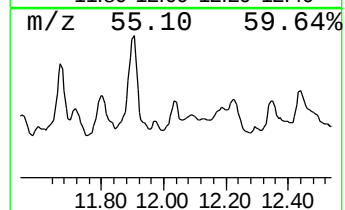
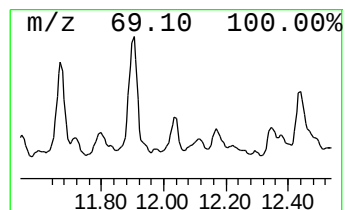
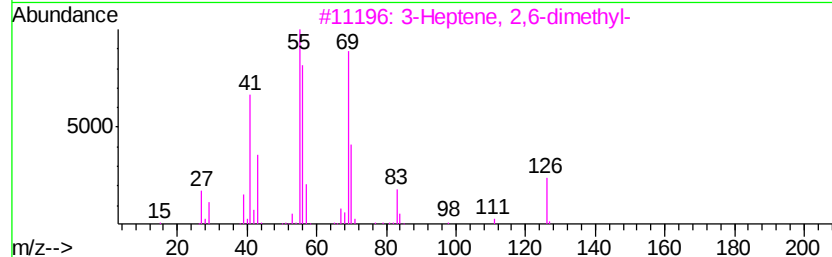
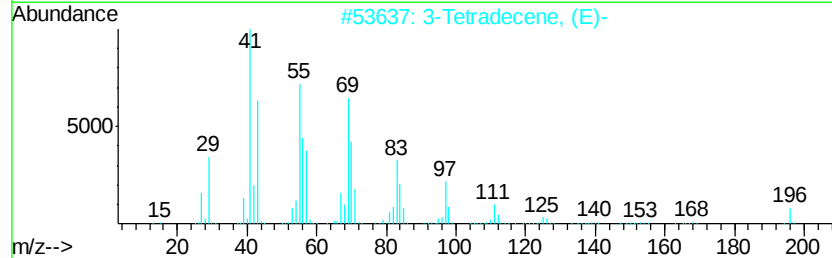
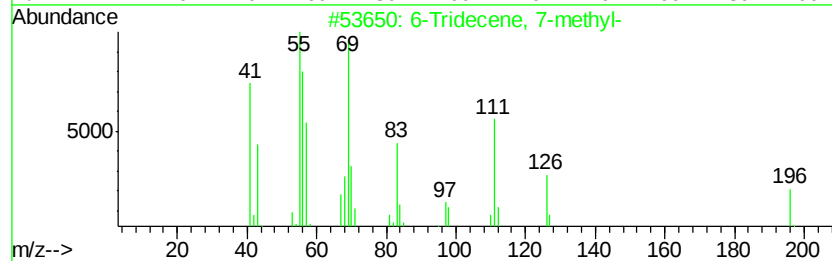
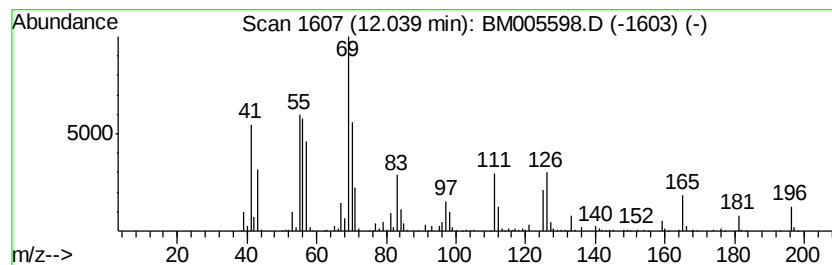
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 56 (DEL) Alkane: Cyclic-12.04 Concentration Rank 54

| R.T.  | EstConc    | Area    | Relative to ISTD | R.T.  |
|-------|------------|---------|------------------|-------|
| 12.04 | 6.75 ng/ul | 1427100 | Naphthalene-d8   | 10.61 |

| Hit# | of | Tentative ID                  | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------|-----|---------|-------------|------|
| 1    | 5  | 6-Tridecene, 7-methyl-        | 196 | C14H28  | 024949-42-6 | 66   |
| 2    |    | 3-Tetradecene, (E)-           | 196 | C14H28  | 041446-68-8 | 64   |
| 3    |    | 3-Heptene, 2,6-dimethyl-      | 126 | C9H18   | 002738-18-3 | 62   |
| 4    |    | Cyclohexane, 1,2,3-trimethyl- | 126 | C9H18   | 001678-97-3 | 52   |
| 5    |    | 3-Heptene, 2,6-dimethyl-      | 126 | C9H18   | 002738-18-3 | 52   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

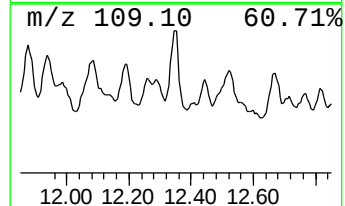
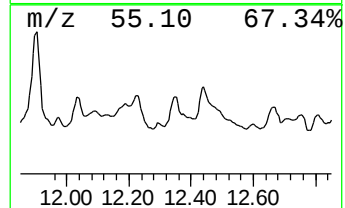
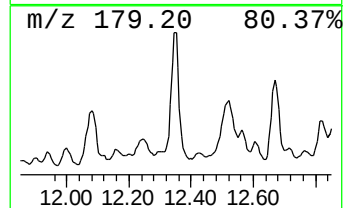
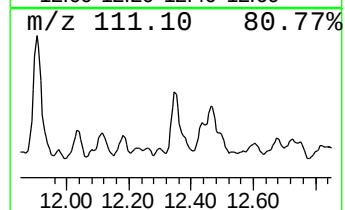
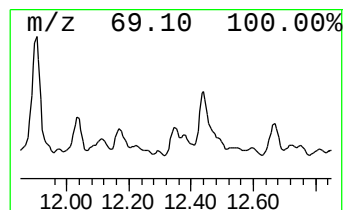
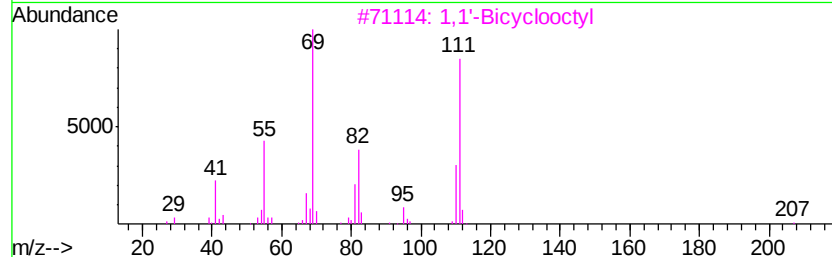
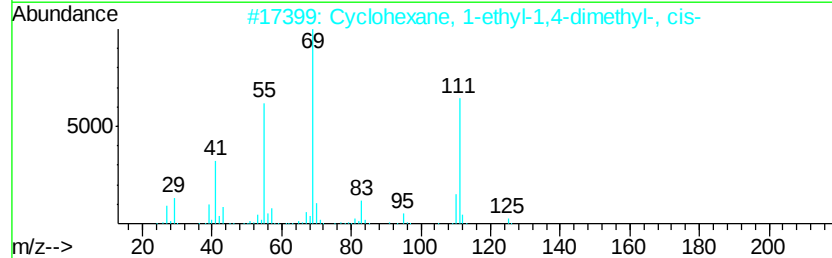
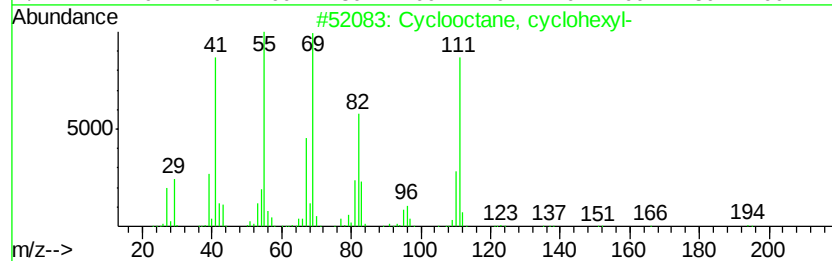
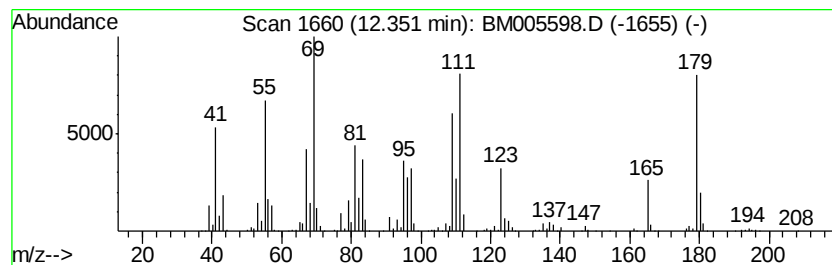
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TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 57 (DEL) Alkane: Branched-12.35 Concentration Rank 37

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 12.35 | 13.53 ng/ul | 2861640 | Napthalene-d8    | 10.61 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------|--------------|------|
| 1    | 5  | Cyclooctane, cyclohexyl-            | 194 | C14H26  | 092369-78-3  | 46   |
| 2    |    | Cyclohexane, 1-ethyl-1,4-dimethy... | 140 | C10H20  | 062238-30-6  | 35   |
| 3    |    | 1,1'-Bicyclooctyl                   | 222 | C16H30  | 006708-17-4  | 35   |
| 4    |    | Cyclopentane, 1,1,3-trimethyl-3-... | 166 | C12H22  | 074421-09-3  | 35   |
| 5    |    | cis,cis,cis-1-Isobutyl-2,5-dimet... | 168 | C12H24  | 1000113-60-0 | 35   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

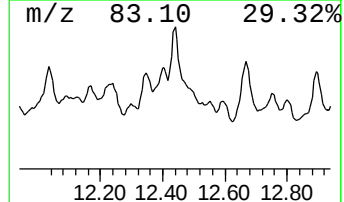
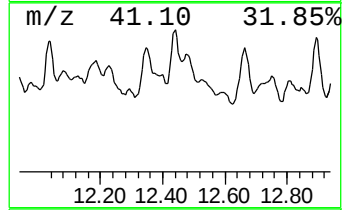
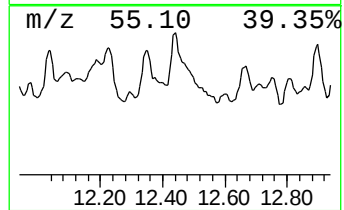
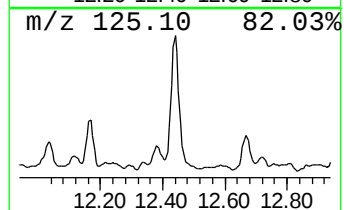
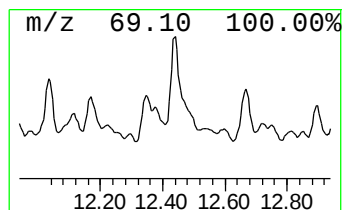
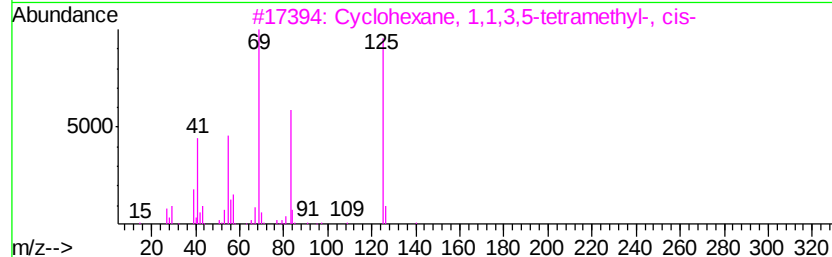
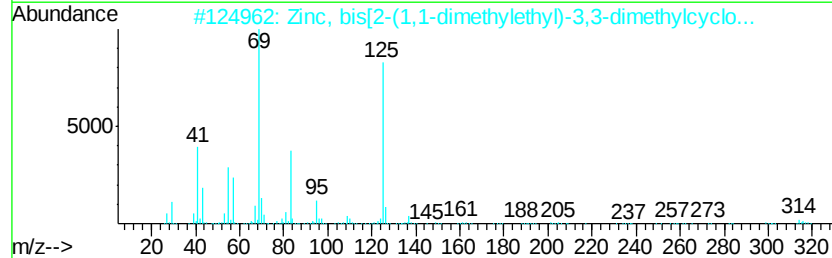
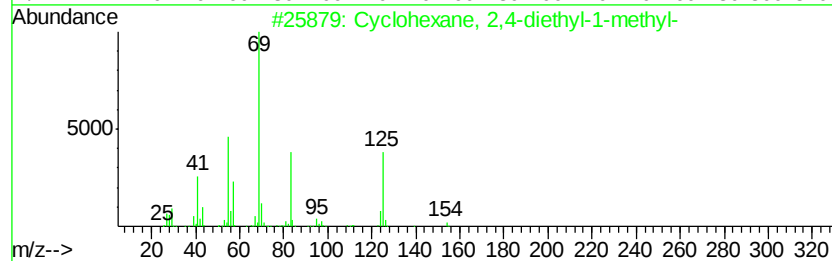
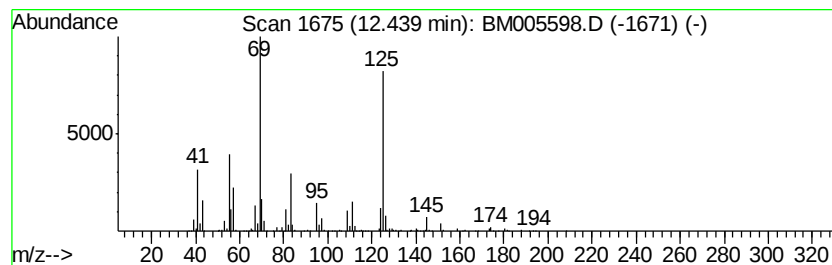
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TIC Integration Parameters: LSCINT.P

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Peak Number 58 (DEL) Alkane: Cyclic-12.44 Concentration Rank 42

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 12.44 | 10.98 ng/ul | 2322730 | Naphthalene-d8   | 10.61 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | Cyclohexane, 2,4-diethyl-1-methyl-  | 154 | C11H22   | 061142-70-9 | 72   |
| 2    |    | Zinc, bis[2-(1,1-dimethylethyl)-... | 314 | C18H34Zn | 074793-36-5 | 72   |
| 3    |    | Cyclohexane, 1,1,3,5-tetramethyl... | 140 | C10H20   | 050876-32-9 | 58   |
| 4    |    | 4-Nonene, 2,3,3-trimethyl-, (Z)-    | 168 | C12H24   | 063830-68-2 | 56   |
| 5    |    | 4N-Methylcytosine                   | 125 | C5H7N3O  | 006220-47-9 | 50   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

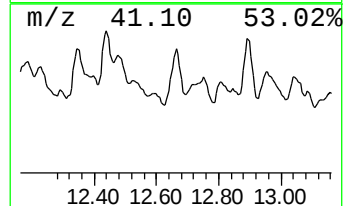
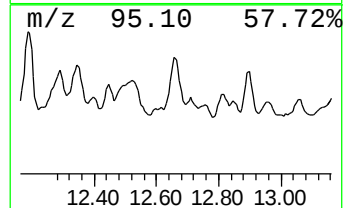
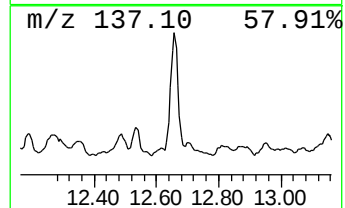
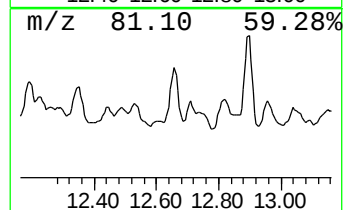
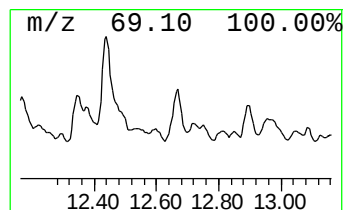
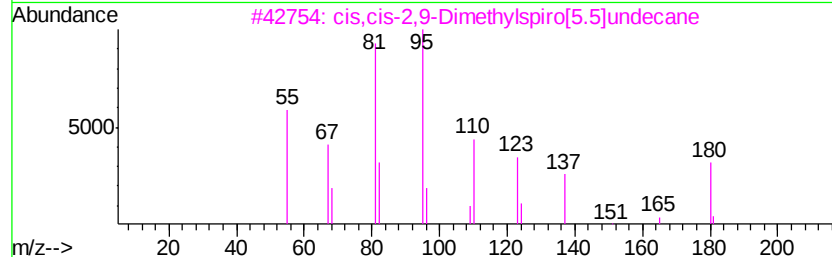
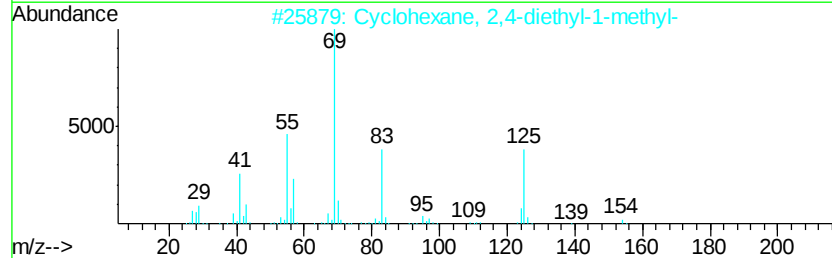
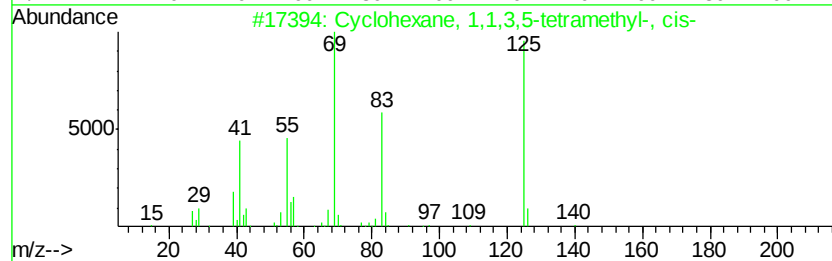
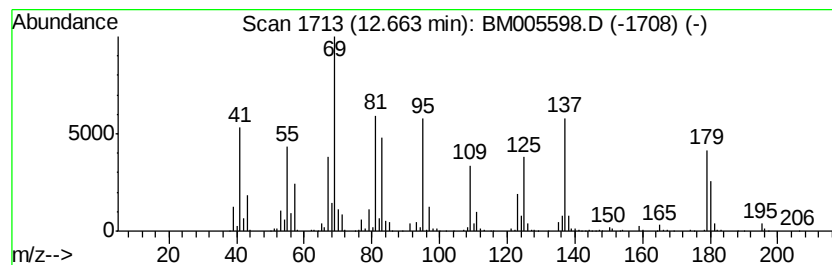
Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 59 (DEL) Alkane: Cyclic-12.66 Concentration Rank 16

| R.T.    | EstConc     | Area                                | Relative to ISTD | R.T.    |             |      |
|---------|-------------|-------------------------------------|------------------|---------|-------------|------|
| 12.66   | 28.40 ng/ul | 2546670                             | Acenaphthene-d10 | 14.45   |             |      |
| Hit# of | 5           | Tentative ID                        | MW               | MolForm | CAS#        | Qual |
| 1       |             | Cyclohexane, 1,1,3,5-tetramethyl... | 140              | C10H20  | 050876-32-9 | 27   |
| 2       |             | Cyclohexane, 2,4-diethyl-1-methyl-  | 154              | C11H22  | 061142-70-9 | 27   |
| 3       |             | cis,cis-2,9-Dimethylspiro[5.5]un... | 180              | C13H24  | 095472-51-8 | 25   |
| 4       |             | Cyclopropane, 1,1-dimethyl-2-(2-... | 110              | C8H14   | 036939-15-8 | 22   |
| 5       |             | Cyclohexane, 1,2-diethyl-3-methyl-  | 154              | C11H22  | 061141-80-8 | 22   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

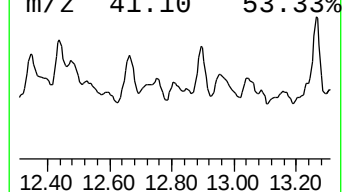
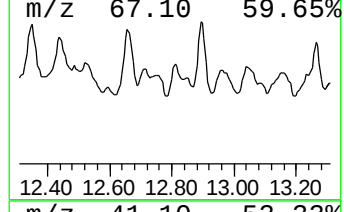
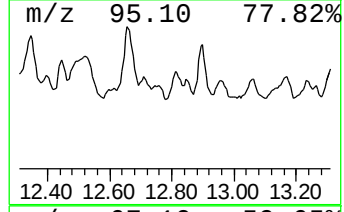
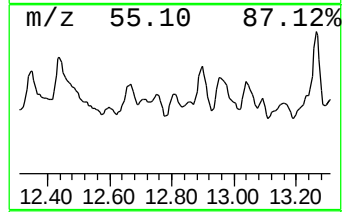
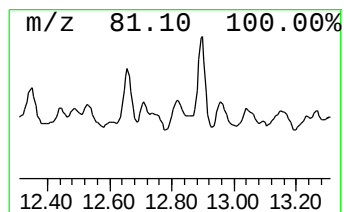
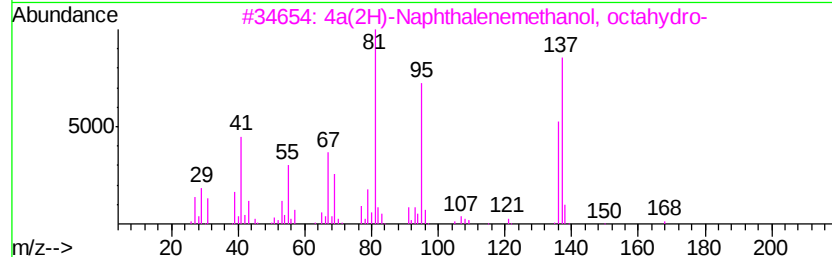
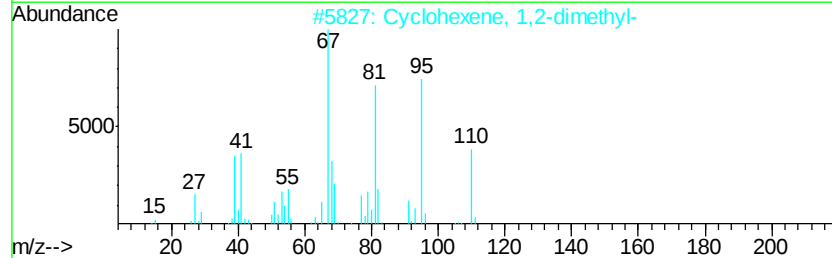
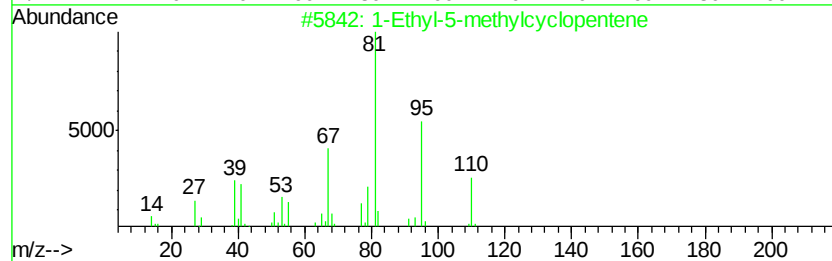
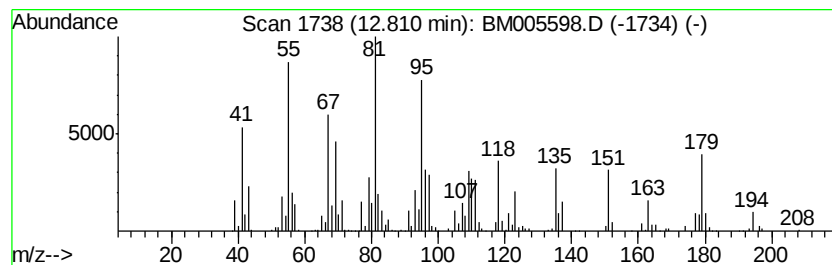
Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 60 (DEL) Alkane: Branched-12.81 Concentration Rank 35

| R.T.    | EstConc     | Area                                | Relative to ISTD | R.T.           |
|---------|-------------|-------------------------------------|------------------|----------------|
| 12.81   | 14.28 ng/ul | 1280090                             | Acenaphthene-d10 | 14.45          |
| Hit# of | 5           | Tentative ID                        | MW MolForm       | CAS# Qual      |
| 1       |             | 1-Ethyl-5-methylcyclopentene        | 110 C8H14        | 097797-57-4 55 |
| 2       |             | Cyclohexene, 1,2-dimethyl-          | 110 C8H14        | 001674-10-8 49 |
| 3       |             | 4a(2H)-Naphthalenemethanol, octa... | 168 C11H20O      | 099992-19-5 35 |
| 4       |             | Methyl ethyl cyclopentene           | 110 C8H14        | 019780-56-4 30 |
| 5       |             | 1,4-Hexadiene, 3-ethyl-             | 110 C8H14        | 002080-89-9 25 |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

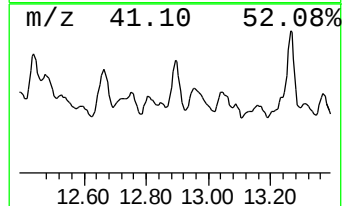
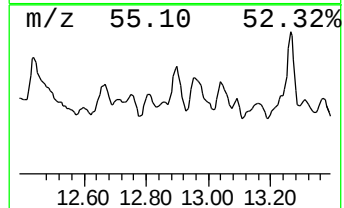
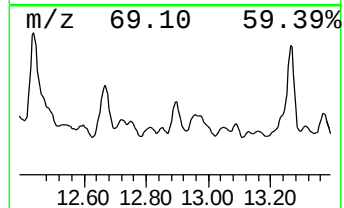
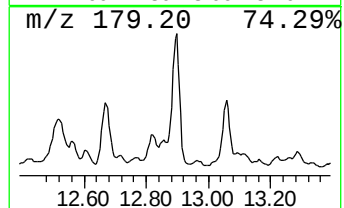
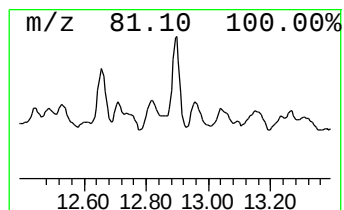
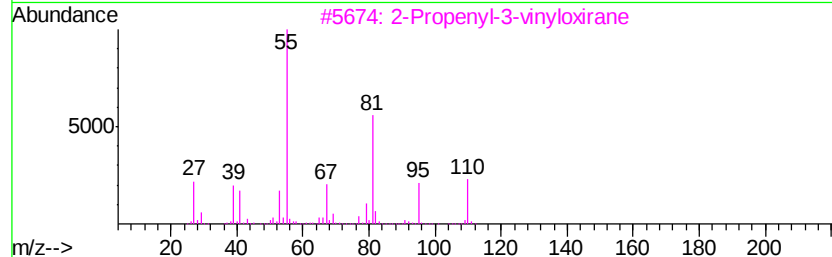
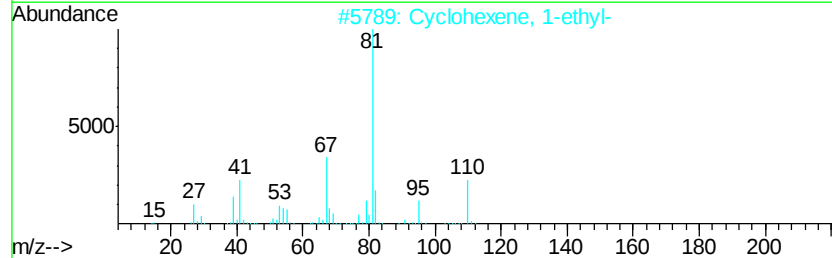
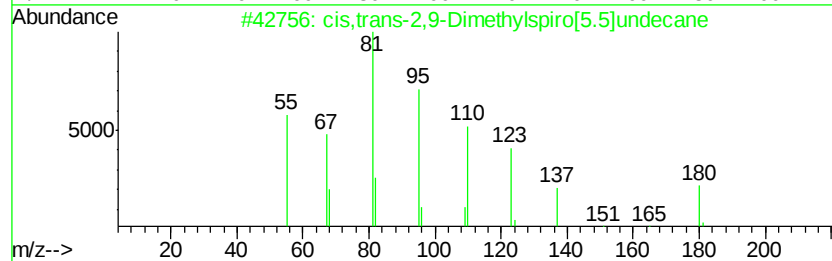
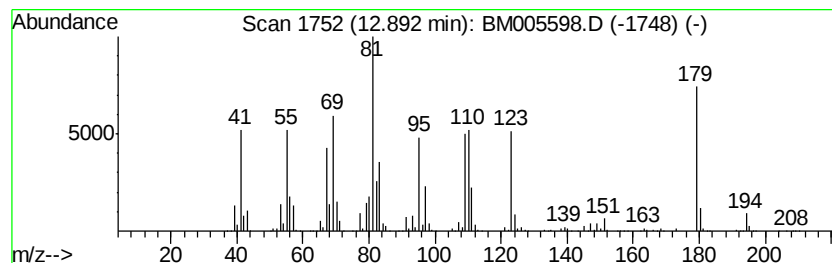
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 61 (DEL) Alkane: Branched-12.89 Concentration Rank 11

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 12.89 | 36.14 ng/ul | 3240610 | Acenaphthene-d10 | 14.45 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | cis,trans-2,9-Dimethylspiro[5.5]... | 180 | C13H24  | 095530-74-8 | 49   |
| 2    |    | Cyclohexene, 1-ethyl-               | 110 | C8H14   | 001453-24-3 | 30   |
| 3    |    | 2-Propenyl-3-vinylloxirane          | 110 | C7H10O  | 070597-49-8 | 27   |
| 4    |    | 1-Ethyl-5-methylcyclopentene        | 110 | C8H14   | 097797-57-4 | 27   |
| 5    |    | Cyclohexene,3-(1-methylpropyl)-     | 138 | C10H18  | 015232-91-4 | 27   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

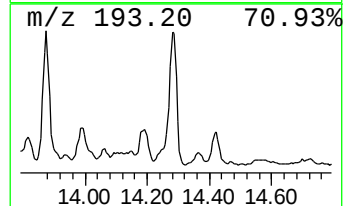
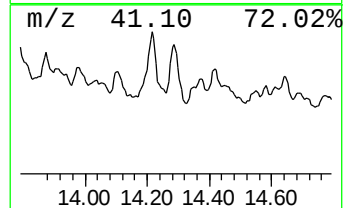
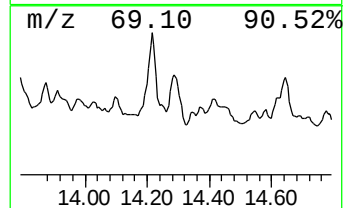
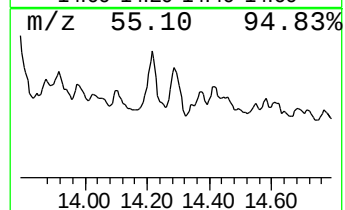
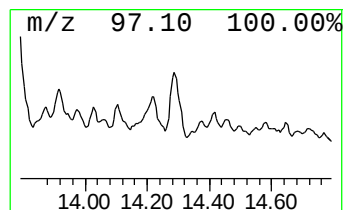
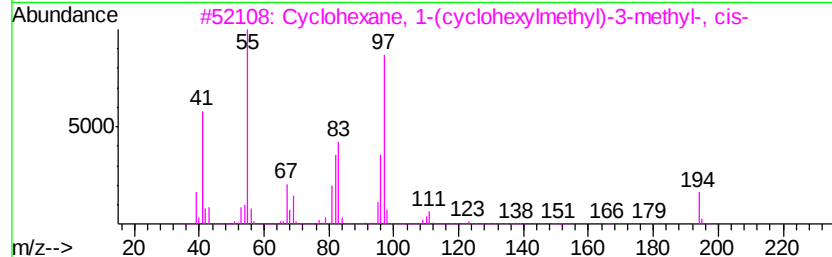
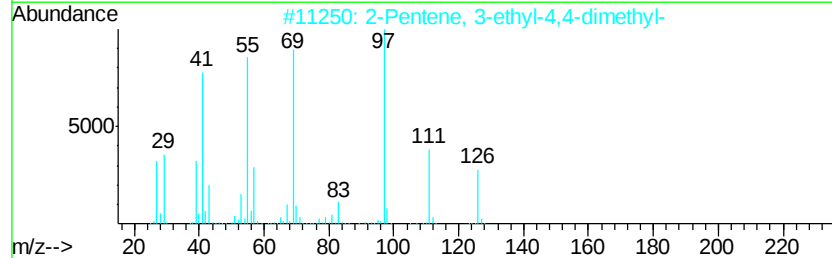
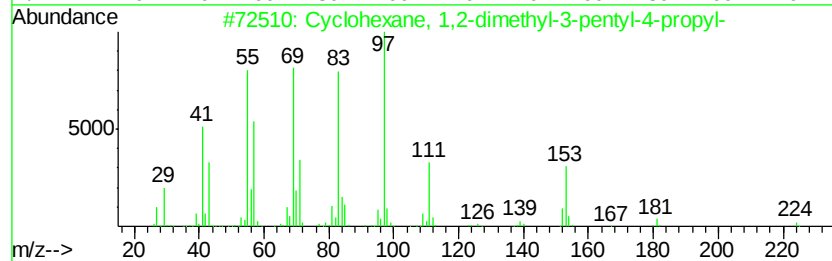
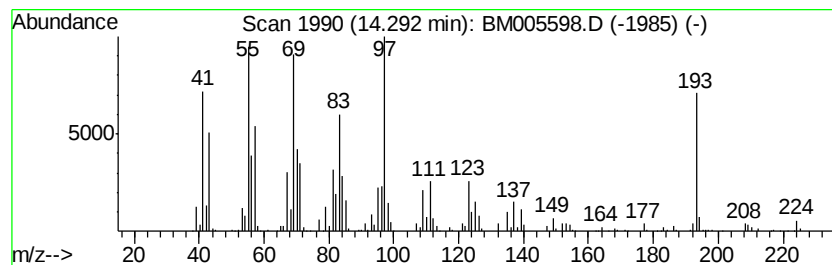
Instrument :  
BNA\_M  
ClientSampleId :  
JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 62 (DEL) Alkane: Cyclic-14.29 Concentration Rank 28

| R.T.    | EstConc     | Area                                | Relative to ISTD | R.T.           |
|---------|-------------|-------------------------------------|------------------|----------------|
| 14.29   | 20.49 ng/ul | 1837000                             | Acenaphthene-d10 | 14.45          |
| Hit# of | 5           | Tentative ID                        | MW MolForm       | CAS# Qual      |
| 1       |             | Cyclohexane, 1,2-dimethyl-3-pent... | 224 C16H32       | 062376-17-4 38 |
| 2       |             | 2-Pentene, 3-ethyl-4,4-dimethyl-    | 126 C9H18        | 053907-59-8 27 |
| 3       |             | Cyclohexane, 1-(cyclohexylmethyl... | 194 C14H26       | 054823-96-0 18 |
| 4       |             | Bicyclo[3.1.1]heptan-3-one, 2,6,... | 152 C10H16O      | 015358-88-0 18 |
| 5       |             | Cyclohexane, 1-(cyclohexylmethyl... | 194 C14H26       | 054824-04-3 18 |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005598.D  
Acq On : 22 May 2016 22:04  
Operator : UM/SJ  
Sample : H3087-16  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
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Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION

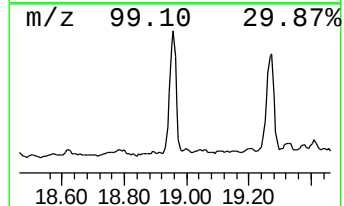
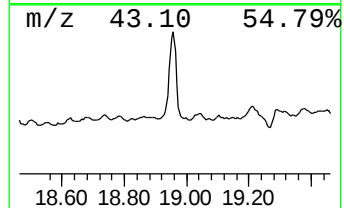
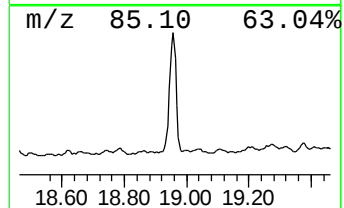
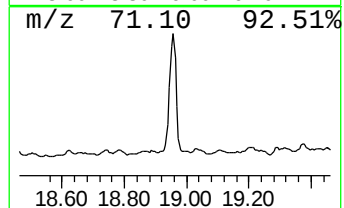
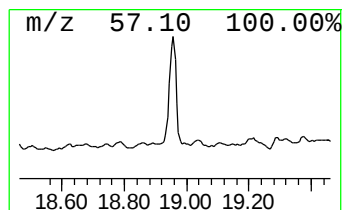
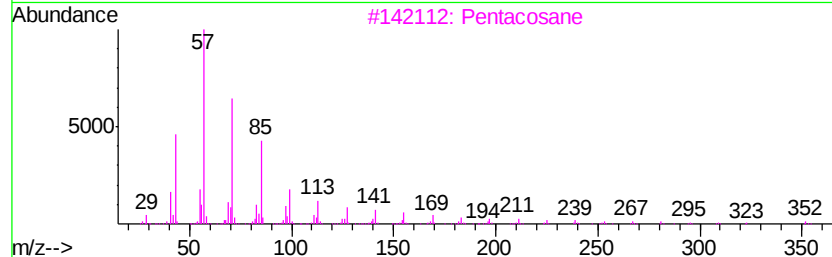
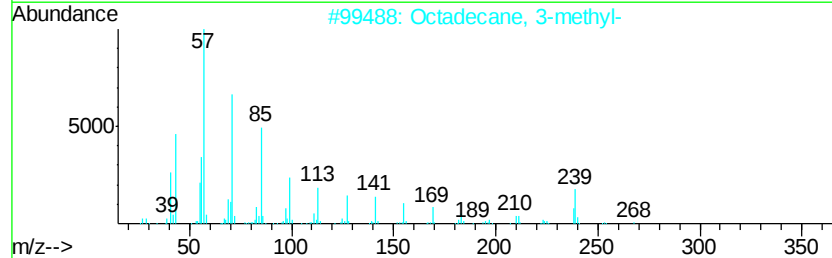
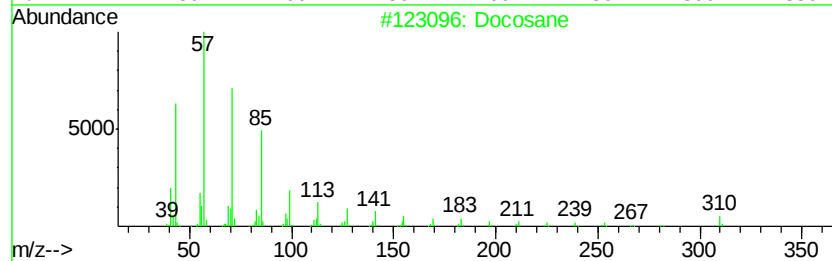
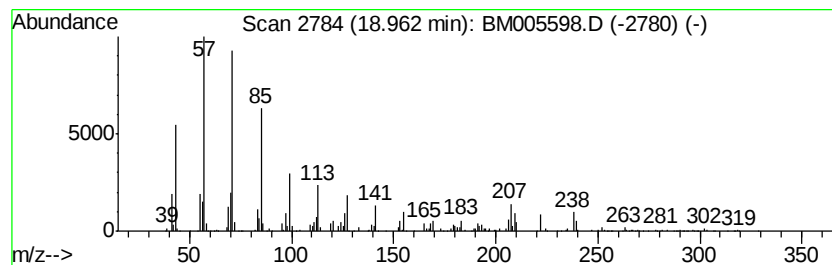
TIC Library : C:\DATABASE\NIST02.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 63 (DEL) Alkane: Straight-Chai... Concentration Rank 7

| R.T.  | EstConc     | Area    | Relative to ISTD | R.T.  |
|-------|-------------|---------|------------------|-------|
| 18.96 | 45.13 ng/ul | 2095390 | Phenanthrene-d10 | 17.19 |

| Hit# | of | Tentative ID          | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------|-----|---------|-------------|------|
| 1    | 5  | Docosane              | 310 | C22H46  | 000629-97-0 | 86   |
| 2    |    | Octadecane, 3-methyl- | 268 | C19H40  | 006561-44-0 | 86   |
| 3    |    | Pentacosane           | 352 | C25H52  | 000629-99-2 | 68   |
| 4    |    | Tridecane, 3-methyl-  | 198 | C14H30  | 006418-41-3 | 64   |
| 5    |    | Heneicosane           | 296 | C21H44  | 000629-94-7 | 64   |



Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
 Data File : BM005598.D  
 Acq On : 22 May 2016 22:04  
 Operator : UM/SJ  
 Sample : H3087-16  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 JHGK9

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
 Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L  
 TIC Integration Parameters: LSCINT.P

| TIC Top Hit name     | RT    | EstConc | Units | Response | --Internal Standard-- |       |         |      |
|----------------------|-------|---------|-------|----------|-----------------------|-------|---------|------|
|                      |       |         |       |          | #                     | RT    | Resp    | Conc |
| (DEL) Alkane: Cyc... | 5.45  | 7.3     | ng/ul | 602372   | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 5.70  | 17.4    | ng/ul | 1435350  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 5.82  | 7.0     | ng/ul | 577082   | 1                     | 7.82  | 1653540 | 20.0 |
| Cyclopentanone, 2... | 5.92  | 21.8    | ng/ul | 1802660  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 6.07  | 42.2    | ng/ul | 3492450  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 6.22  | 14.0    | ng/ul | 1154910  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 6.29  | 8.4     | ng/ul | 696218   | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 6.37  | 45.7    | ng/ul | 3777190  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 6.41  | 11.2    | ng/ul | 923731   | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 6.50  | 57.9    | ng/ul | 4785730  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Bra... | 6.63  | 23.8    | ng/ul | 1971180  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Bra... | 6.70  | 9.5     | ng/ul | 784586   | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 6.74  | 3.5     | ng/ul | 287215   | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 6.78  | 13.0    | ng/ul | 1074940  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 6.85  | 43.3    | ng/ul | 3577480  | 1                     | 7.82  | 1653540 | 20.0 |
| unknown-01           | 6.92  | 8.5     | ng/ul | 706029   | 1                     | 7.82  | 1653540 | 20.0 |
| Bicyclo[3.1.0]hex... | 7.20  | 7.1     | ng/ul | 588153   | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 7.41  | 114.1   | ng/ul | 9432590  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 7.49  | 27.8    | ng/ul | 2298580  | 1                     | 7.82  | 1653540 | 20.0 |
| unknown-02           | 7.56  | 39.2    | ng/ul | 3242970  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 7.64  | 51.0    | ng/ul | 4220770  | 1                     | 7.82  | 1653540 | 20.0 |
| Bicyclo[3.1.1]hep... | 7.75  | 125.9   | ng/ul | 10409700 | 1                     | 7.82  | 1653540 | 20.0 |
| unknown-03           | 7.89  | 25.5    | ng/ul | 2109450  | 1                     | 7.82  | 1653540 | 20.0 |
| 2H-Pyran, tetrahy... | 7.94  | 18.6    | ng/ul | 1536850  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Bra... | 7.99  | 86.9    | ng/ul | 7185420  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 8.05  | 7.7     | ng/ul | 633143   | 1                     | 7.82  | 1653540 | 20.0 |
| unknown-04           | 8.09  | 29.3    | ng/ul | 2423210  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Bra... | 8.18  | 14.3    | ng/ul | 1184880  | 1                     | 7.82  | 1653540 | 20.0 |
| 2-Thiophenecarbox... | 8.22  | 15.6    | ng/ul | 1288200  | 1                     | 7.82  | 1653540 | 20.0 |
| Furan, 2-ethyl-5-... | 8.30  | 4.6     | ng/ul | 377856   | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Bra... | 8.37  | 22.2    | ng/ul | 1831750  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Bra... | 8.45  | 2.6     | ng/ul | 216213   | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Bra... | 8.69  | 29.4    | ng/ul | 2430890  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 8.78  | 6.0     | ng/ul | 493103   | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Cyc... | 8.87  | 22.9    | ng/ul | 1896800  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Bra... | 9.15  | 28.6    | ng/ul | 2362640  | 1                     | 7.82  | 1653540 | 20.0 |
| (DEL) Alkane: Bra... | 9.35  | 7.9     | ng/ul | 1663850  | 2                     | 10.61 | 4229000 | 20.0 |
| (DEL) Alkane: Bra... | 9.40  | 6.9     | ng/ul | 1456100  | 2                     | 10.61 | 4229000 | 20.0 |
| (DEL) Alkane: Bra... | 10.06 | 6.5     | ng/ul | 1367470  | 2                     | 10.61 | 4229000 | 20.0 |
| (DEL) Alkane: Cyc... | 10.31 | 5.4     | ng/ul | 1137080  | 2                     | 10.61 | 4229000 | 20.0 |
| (DEL) Alkane: Str... | 10.34 | 8.8     | ng/ul | 1854280  | 2                     | 10.61 | 4229000 | 20.0 |
| (DEL) Alkane: Bra... | 10.39 | 8.5     | ng/ul | 1804130  | 2                     | 10.61 | 4229000 | 20.0 |
| (DEL) Alkane: Bra... | 10.82 | 4.5     | ng/ul | 956868   | 2                     | 10.61 | 4229000 | 20.0 |
| (DEL) Alkane: Bra... | 11.02 | 15.1    | ng/ul | 3194750  | 2                     | 10.61 | 4229000 | 20.0 |
| (DEL) Alkane: Cyc... | 11.10 | 21.0    | ng/ul | 4433960  | 2                     | 10.61 | 4229000 | 20.0 |
| (DEL) Alkane: Cyc... | 11.29 | 24.2    | ng/ul | 5122680  | 2                     | 10.61 | 4229000 | 20.0 |
| (DEL) Alkane: Bra... | 11.37 | 17.1    | ng/ul | 3620930  | 2                     | 10.61 | 4229000 | 20.0 |
| (DEL) Alkane: Bra... | 11.45 | 12.4    | ng/ul | 2612010  | 2                     | 10.61 | 4229000 | 20.0 |
| (DEL) Alkane: Cyc... | 11.67 | 20.9    | ng/ul | 4411210  | 2                     | 10.61 | 4229000 | 20.0 |

|       |                |       |      |       |         |   |       |         |      |
|-------|----------------|-------|------|-------|---------|---|-------|---------|------|
| (DEL) | Alkane: Cyc... | 11.90 | 30.1 | ng/ul | 6364610 | 2 | 10.61 | 4229000 | 20.0 |
| (DEL) | Alkane: Cyc... | 12.04 | 6.8  | ng/ul | 1427100 | 2 | 10.61 | 4229000 | 20.0 |
| (DEL) | Alkane: Bra... | 12.35 | 13.5 | ng/ul | 2861640 | 2 | 10.61 | 4229000 | 20.0 |
| (DEL) | Alkane: Cyc... | 12.44 | 11.0 | ng/ul | 2322730 | 2 | 10.61 | 4229000 | 20.0 |
| (DEL) | Alkane: Cyc... | 12.66 | 28.4 | ng/ul | 2546670 | 3 | 14.45 | 1793270 | 20.0 |
| (DEL) | Alkane: Bra... | 12.81 | 14.3 | ng/ul | 1280090 | 3 | 14.45 | 1793270 | 20.0 |
| (DEL) | Alkane: Bra... | 12.89 | 36.1 | ng/ul | 3240610 | 3 | 14.45 | 1793270 | 20.0 |
| (DEL) | Alkane: Cyc... | 14.29 | 20.5 | ng/ul | 1837000 | 3 | 14.45 | 1793270 | 20.0 |
| (DEL) | Alkane: Str... | 18.96 | 45.1 | ng/ul | 2095390 | 4 | 17.19 | 928510  | 20.0 |

Instrument :

BNA\_M

ClientSampleId :

JHGK9