

Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
 Data File : VV009104.D  
 Acq On : 21 Dec 2018 01:04  
 Operator : SY/MD  
 Sample : J6468-16  
 Misc : 4.77 G/10ML/MSVOA V/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 C0JH2

## Integration Parameters: LSCINT.P

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

Filtering: 5  
 Min Area: 0 % 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:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
 Title : VOC Analysis

Signal : TIC

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|--------|----------|------------|----------|-----------|-------|-------------|------------|--------------|------------|
| 1      | 1.203    | 29         | 35       | 46        | rVB2  | 20352       | 22617      | 0.62%        | 0.119%     |
| 2      | 1.319    | 58         | 71       | 81        | rBV   | 694001      | 744265     | 20.41%       | 3.912%     |
| 3      | 1.524    | 128        | 135      | 139       | rBV   | 3093        | 4174       | 0.11%        | 0.022%     |
| 4      | 1.576    | 144        | 151      | 165       | rVV   | 61476       | 75841      | 2.08%        | 0.399%     |
| 5      | 1.640    | 166        | 171      | 183       | rVB4  | 4396        | 8687       | 0.24%        | 0.046%     |
| 6      | 1.766    | 203        | 210      | 218       | rBV7  | 3474        | 5287       | 0.14%        | 0.028%     |
| 7      | 1.820    | 219        | 227      | 239       | rVB4  | 4136        | 7286       | 0.20%        | 0.038%     |
| 8      | 2.129    | 310        | 323      | 335       | rBV2  | 112841      | 172570     | 4.73%        | 0.907%     |
| 9      | 2.203    | 335        | 346      | 365       | rVB   | 15261       | 40200      | 1.10%        | 0.211%     |
| 10     | 2.319    | 374        | 382      | 393       | rVB   | 4962        | 7414       | 0.20%        | 0.039%     |
| 11     | 2.534    | 440        | 449      | 463       | rVB   | 11643       | 19848      | 0.54%        | 0.104%     |
| 12     | 2.647    | 475        | 484      | 496       | rVV   | 2177        | 4147       | 0.11%        | 0.022%     |
| 13     | 2.791    | 512        | 529      | 547       | rBV   | 352080      | 624715     | 17.13%       | 3.284%     |
| 14     | 3.074    | 606        | 617      | 629       | rVB4  | 4529        | 8676       | 0.24%        | 0.046%     |
| 15     | 3.962    | 871        | 893      | 933       | rBV   | 1447026     | 3646348    | 100.00%      | 19.166%    |
| 16     | 4.399    | 1011       | 1029     | 1053      | rBV2  | 86794       | 217570     | 5.97%        | 1.144%     |
| 17     | 5.097    | 1228       | 1246     | 1261      | rBV2  | 180443      | 459298     | 12.60%       | 2.414%     |
| 18     | 5.663    | 1409       | 1422     | 1444      | rBV2  | 126173      | 253214     | 6.94%        | 1.331%     |
| 19     | 5.958    | 1485       | 1514     | 1543      | rBV2  | 721175      | 1642314    | 45.04%       | 8.632%     |
| 20     | 6.116    | 1549       | 1563     | 1576      | rBV2  | 121475      | 252725     | 6.93%        | 1.328%     |
| 21     | 6.238    | 1590       | 1601     | 1615      | rVB3  | 57587       | 116156     | 3.19%        | 0.611%     |
| 22     | 6.441    | 1652       | 1664     | 1667      | rBV7  | 2047        | 3918       | 0.11%        | 0.021%     |
| 23     | 6.598    | 1701       | 1713     | 1725      | rVB7  | 4816        | 9477       | 0.26%        | 0.050%     |
| 24     | 6.679    | 1729       | 1738     | 1753      | rVB7  | 3758        | 8456       | 0.23%        | 0.044%     |
| 25     | 6.894    | 1792       | 1805     | 1817      | rBV2  | 23731       | 45429      | 1.25%        | 0.239%     |
| 26     | 7.029    | 1833       | 1847     | 1860      | rBV   | 31221       | 55802      | 1.53%        | 0.293%     |
| 27     | 7.126    | 1869       | 1877     | 1886      | rBV5  | 3848        | 6243       | 0.17%        | 0.033%     |
| 28     | 7.360    | 1920       | 1950     | 1962      | rBV   | 153520      | 328035     | 9.00%        | 1.724%     |
| 29     | 7.431    | 1962       | 1972     | 1984      | rVV   | 101848      | 172508     | 4.73%        | 0.907%     |
| 30     | 7.560    | 2006       | 2012     | 2020      | rVB5  | 2908        | 4626       | 0.13%        | 0.024%     |
| 31     | 7.662    | 2034       | 2044     | 2049      | rBV4  | 14248       | 24435      | 0.67%        | 0.128%     |
| 32     | 7.701    | 2050       | 2056     | 2068      | rVB4  | 16778       | 28993      | 0.80%        | 0.152%     |
| 33     | 7.833    | 2082       | 2097     | 2106      | rBV4  | 8470        | 15387      | 0.42%        | 0.081%     |
| 34     | 8.019    | 2145       | 2155     | 2166      | rVB4  | 17940       | 31517      | 0.86%        | 0.166%     |

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Instrument :  
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 ClientSampleId :  
 C0JH2

## Integration Parameters: LSCINT.P

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

Filtering: 5  
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 Max Peaks: 100  
 Peak Location: TOP

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

Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
 Title : VOC Analysis

|    |        |      |      |      |      |        |        |        |        |
|----|--------|------|------|------|------|--------|--------|--------|--------|
| 35 | 8.135  | 2170 | 2191 | 2217 | rBV5 | 57602  | 161836 | 4.44%  | 0.851% |
| 36 | 8.251  | 2218 | 2227 | 2230 | rBV3 | 14268  | 20978  | 0.58%  | 0.110% |
| 37 | 8.335  | 2243 | 2253 | 2262 | rVB4 | 21586  | 38544  | 1.06%  | 0.203% |
| 38 | 8.396  | 2262 | 2272 | 2281 | rBV  | 53020  | 92434  | 2.53%  | 0.486% |
| 39 | 8.437  | 2282 | 2285 | 2291 | rVB3 | 4797   | 5833   | 0.16%  | 0.031% |
| 40 | 8.553  | 2311 | 2321 | 2329 | rBV6 | 7180   | 11923  | 0.33%  | 0.063% |
| 41 | 8.614  | 2330 | 2340 | 2342 | rBV  | 23895  | 34170  | 0.94%  | 0.180% |
| 42 | 8.707  | 2362 | 2369 | 2381 | rVB  | 35248  | 57364  | 1.57%  | 0.302% |
| 43 | 8.830  | 2394 | 2407 | 2417 | rBV2 | 38981  | 66622  | 1.83%  | 0.350% |
| 44 | 8.897  | 2417 | 2428 | 2443 | rBV  | 91569  | 164476 | 4.51%  | 0.865% |
| 45 | 9.048  | 2462 | 2475 | 2486 | rBV7 | 22857  | 54146  | 1.48%  | 0.285% |
| 46 | 9.106  | 2486 | 2493 | 2496 | rVV4 | 4713   | 5854   | 0.16%  | 0.031% |
| 47 | 9.151  | 2496 | 2507 | 2512 | rVV3 | 41097  | 80638  | 2.21%  | 0.424% |
| 48 | 9.196  | 2513 | 2521 | 2529 | rVV5 | 70983  | 151396 | 4.15%  | 0.796% |
| 49 | 9.244  | 2529 | 2536 | 2560 | rVB5 | 52786  | 113359 | 3.11%  | 0.596% |
| 50 | 9.363  | 2560 | 2573 | 2585 | rBV3 | 37374  | 70023  | 1.92%  | 0.368% |
| 51 | 9.453  | 2592 | 2601 | 2605 | rBV4 | 17973  | 27435  | 0.75%  | 0.144% |
| 52 | 9.518  | 2606 | 2621 | 2637 | rVV4 | 116107 | 278049 | 7.63%  | 1.461% |
| 53 | 9.595  | 2638 | 2645 | 2647 | rBV2 | 27205  | 33768  | 0.93%  | 0.177% |
| 54 | 9.621  | 2648 | 2653 | 2662 | rVB2 | 40513  | 58026  | 1.59%  | 0.305% |
| 55 | 9.720  | 2675 | 2684 | 2685 | rBV3 | 49989  | 54203  | 1.49%  | 0.285% |
| 56 | 9.752  | 2687 | 2694 | 2703 | rVB2 | 198835 | 304164 | 8.34%  | 1.599% |
| 57 | 9.842  | 2703 | 2722 | 2730 | rBV6 | 177260 | 399306 | 10.95% | 2.099% |
| 58 | 9.891  | 2731 | 2737 | 2748 | rVB2 | 159614 | 263640 | 7.23%  | 1.386% |
| 59 | 9.952  | 2749 | 2756 | 2768 | rVB6 | 59897  | 111941 | 3.07%  | 0.588% |
| 60 | 10.023 | 2768 | 2778 | 2783 | rBV6 | 71456  | 127545 | 3.50%  | 0.670% |
| 61 | 10.061 | 2783 | 2790 | 2799 | rVB3 | 118286 | 172243 | 4.72%  | 0.905% |
| 62 | 10.129 | 2799 | 2811 | 2816 | rBV4 | 94117  | 161035 | 4.42%  | 0.846% |
| 63 | 10.167 | 2816 | 2823 | 2833 | rVB5 | 172275 | 314305 | 8.62%  | 1.652% |
| 64 | 10.264 | 2834 | 2853 | 2856 | rBV4 | 255897 | 493757 | 13.54% | 2.595% |
| 65 | 10.434 | 2897 | 2906 | 2916 | rBV5 | 112826 | 236208 | 6.48%  | 1.242% |
| 66 | 10.498 | 2918 | 2926 | 2935 | rVB6 | 137973 | 241257 | 6.62%  | 1.268% |
| 67 | 10.556 | 2935 | 2944 | 2953 | rBV  | 223886 | 377277 | 10.35% | 1.983% |
| 68 | 10.621 | 2954 | 2964 | 2972 | rVV4 | 321655 | 516511 | 14.17% | 2.715% |
| 69 | 10.772 | 3004 | 3011 | 3017 | rBV3 | 73167  | 127714 | 3.50%  | 0.671% |
| 70 | 10.817 | 3020 | 3025 | 3033 | rVB5 | 112172 | 149541 | 4.10%  | 0.786% |
| 71 | 10.878 | 3037 | 3044 | 3050 | rVB4 | 122345 | 172084 | 4.72%  | 0.904% |

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 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 C0JH2

## Integration Parameters: LSCINT.P

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

Filtering: 5  
 Min Area: 0 % 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:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
 Title : VOC Analysis

|     |        |      |      |      |       |        |        |        |        |
|-----|--------|------|------|------|-------|--------|--------|--------|--------|
| 72  | 10.923 | 3050 | 3058 | 3065 | rBV   | 364978 | 597201 | 16.38% | 3.139% |
| 73  | 11.077 | 3098 | 3106 | 3112 | rBV2  | 165465 | 264690 | 7.26%  | 1.391% |
| 74  | 11.196 | 3135 | 3143 | 3152 | rBV3  | 296658 | 463826 | 12.72% | 2.438% |
| 75  | 11.293 | 3166 | 3173 | 3178 | rBV5  | 79525  | 127682 | 3.50%  | 0.671% |
| 76  | 11.379 | 3194 | 3200 | 3206 | rBV3  | 85795  | 129042 | 3.54%  | 0.678% |
| 77  | 11.421 | 3207 | 3213 | 3223 | rVV3  | 160345 | 364903 | 10.01% | 1.918% |
| 78  | 11.469 | 3224 | 3228 | 3235 | rVV3  | 155428 | 214898 | 5.89%  | 1.130% |
| 79  | 11.511 | 3235 | 3241 | 3252 | rVB4  | 142064 | 211464 | 5.80%  | 1.111% |
| 80  | 11.659 | 3278 | 3287 | 3307 | rVB4  | 254479 | 673185 | 18.46% | 3.538% |
| 81  | 11.833 | 3333 | 3341 | 3348 | rBV3  | 186607 | 280278 | 7.69%  | 1.473% |
| 82  | 12.096 | 3418 | 3423 | 3433 | rVB4  | 49743  | 73592  | 2.02%  | 0.387% |
| 83  | 12.167 | 3441 | 3445 | 3451 | rVB3  | 26003  | 26386  | 0.72%  | 0.139% |
| 84  | 12.299 | 3476 | 3486 | 3497 | rBV3  | 118454 | 261495 | 7.17%  | 1.374% |
| 85  | 12.421 | 3514 | 3524 | 3526 | rBV4  | 65155  | 98633  | 2.70%  | 0.518% |
| 86  | 12.521 | 3546 | 3555 | 3570 | rBV8  | 74130  | 159179 | 4.37%  | 0.837% |
| 87  | 12.640 | 3587 | 3592 | 3603 | rVB4  | 24182  | 38621  | 1.06%  | 0.203% |
| 88  | 12.846 | 3649 | 3656 | 3663 | rVB9  | 10800  | 15281  | 0.42%  | 0.080% |
| 89  | 12.932 | 3675 | 3683 | 3699 | rVB6  | 37992  | 72200  | 1.98%  | 0.379% |
| 90  | 13.055 | 3715 | 3721 | 3725 | rBV2  | 17027  | 22568  | 0.62%  | 0.119% |
| 91  | 13.260 | 3780 | 3785 | 3792 | rVB8  | 7650   | 9980   | 0.27%  | 0.052% |
| 92  | 13.527 | 3863 | 3868 | 3879 | rVB10 | 10490  | 15817  | 0.43%  | 0.083% |
| 93  | 13.585 | 3881 | 3886 | 3895 | rVB10 | 8016   | 11535  | 0.32%  | 0.061% |
| 94  | 13.794 | 3947 | 3951 | 3961 | rVB4  | 5971   | 7383   | 0.20%  | 0.039% |
| 95  | 14.701 | 4227 | 4233 | 4240 | rBV9  | 3959   | 5893   | 0.16%  | 0.031% |
| 96  | 15.463 | 4467 | 4470 | 4480 | rVB10 | 4406   | 5004   | 0.14%  | 0.026% |
| 97  | 15.640 | 4517 | 4525 | 4537 | rVB7  | 13645  | 24986  | 0.69%  | 0.131% |
| 98  | 15.987 | 4627 | 4633 | 4643 | rVB7  | 11508  | 19443  | 0.53%  | 0.102% |
| 99  | 16.106 | 4664 | 4670 | 4680 | rVB7  | 5204   | 7915   | 0.22%  | 0.042% |
| 100 | 16.228 | 4701 | 4708 | 4715 | rBV10 | 2653   | 4700   | 0.13%  | 0.025% |

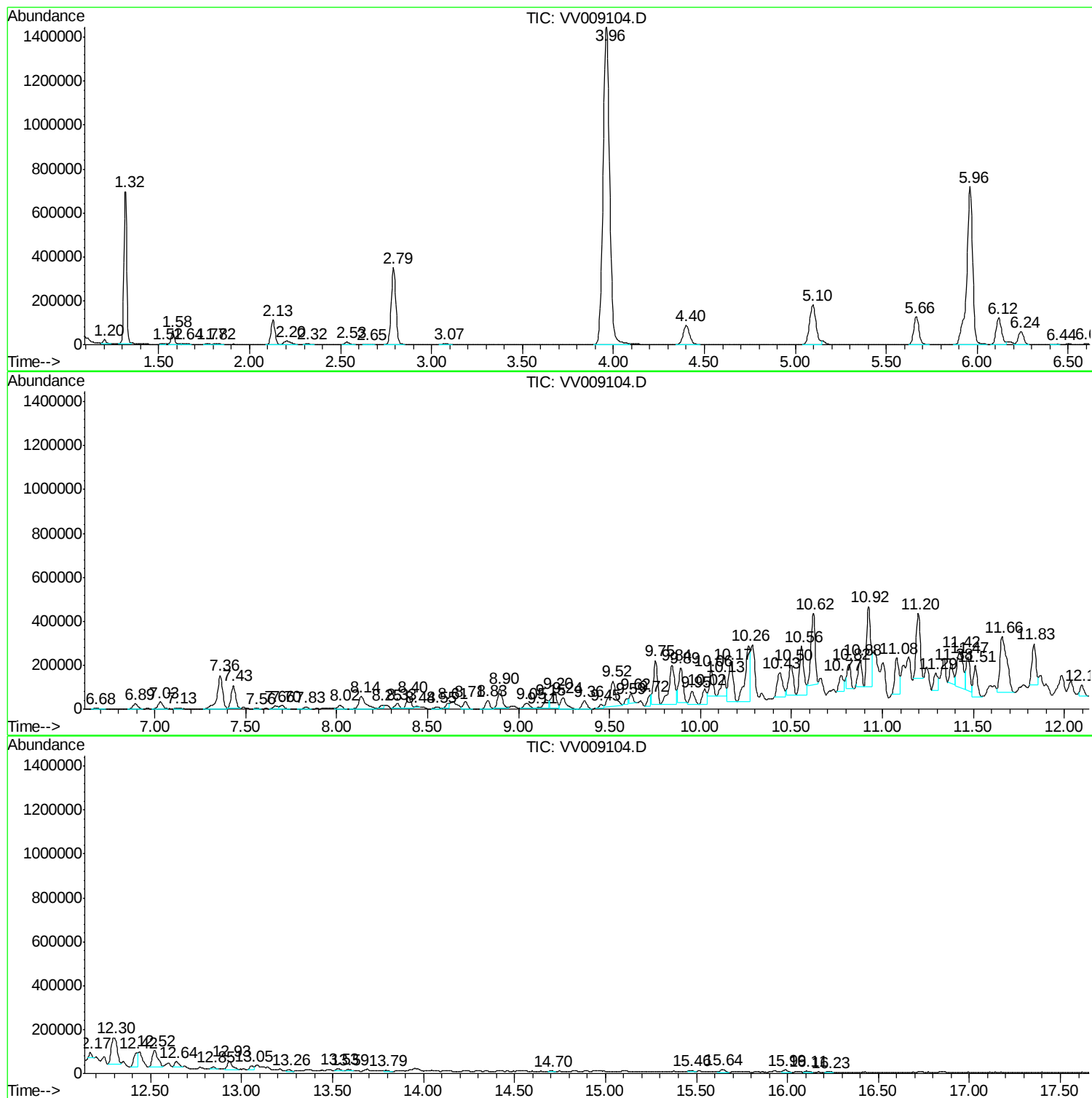
Sum of corrected areas: 19025563

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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
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C0JH2

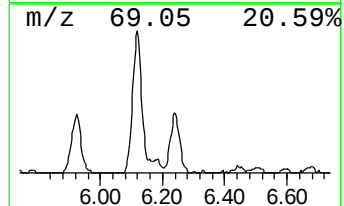
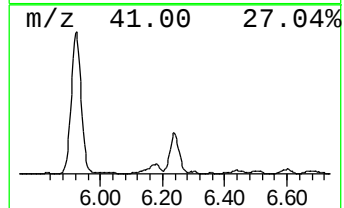
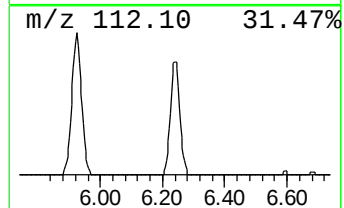
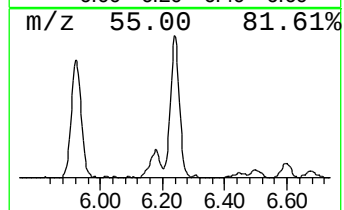
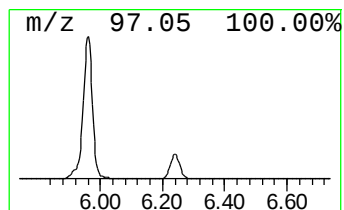
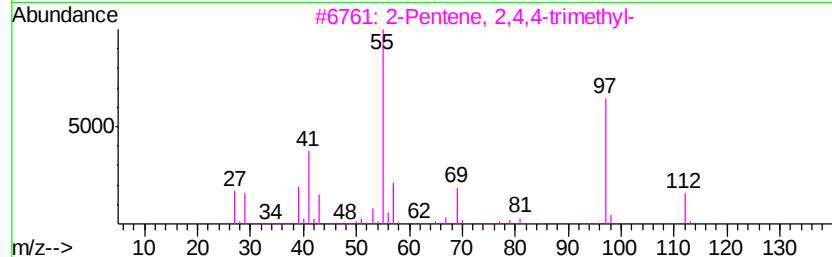
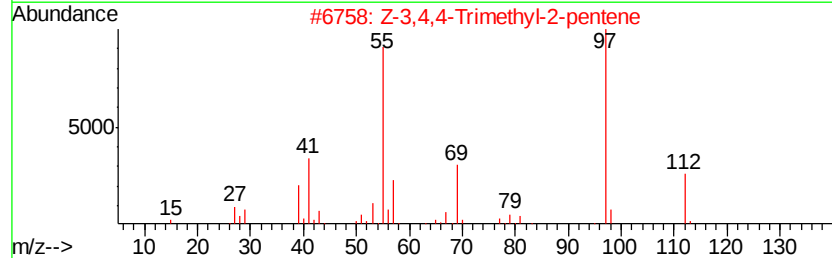
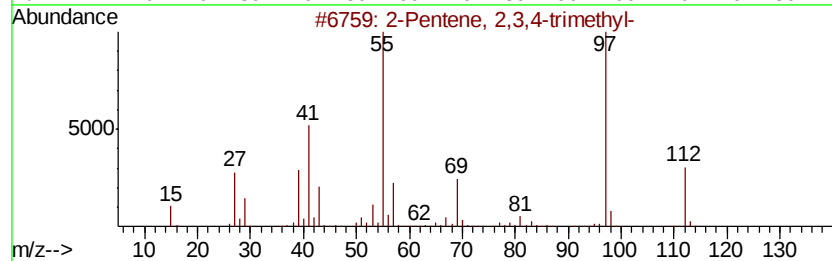
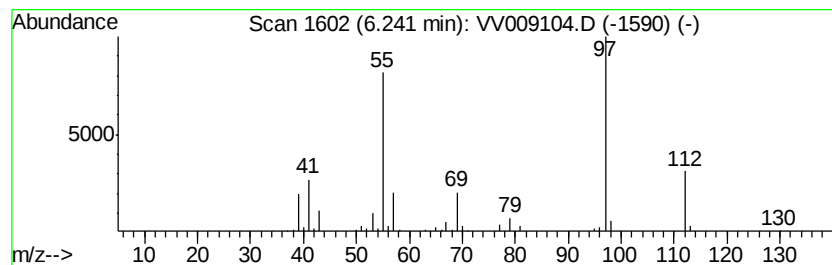
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

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Peak Number 2 (DEL) Alkane: Cyclic6.24 Concentration Rank 32

| R.T. | EstConc    | Area   | Relative to ISTD    | R.T. |
|------|------------|--------|---------------------|------|
| 6.24 | 11.47 ug/L | 116156 | 1,4-Difluorobenzene | 5.67 |

| Hit# | of | Tentative ID                     | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------------|-----|---------|-------------|------|
| 1    | 5  | 2-Pentene, 2,3,4-trimethyl-      | 112 | C8H16   | 000565-77-5 | 91   |
| 2    |    | Z-3,4,4-Trimethyl-2-pentene      | 112 | C8H16   | 039761-64-3 | 91   |
| 3    |    | 2-Pentene, 2,4,4-trimethyl-      | 112 | C8H16   | 000107-40-4 | 91   |
| 4    |    | Cyclohexane, 1,3-dimethyl-, cis- | 112 | C8H16   | 000638-04-0 | 86   |
| 5    |    | 2-Pentene, 2,4,4-trimethyl-      | 112 | C8H16   | 000107-40-4 | 86   |



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ALS Vial : 1 Sample Multiplier: 1

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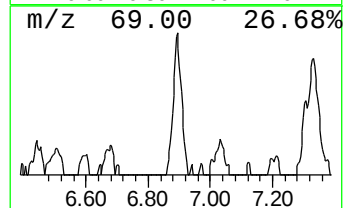
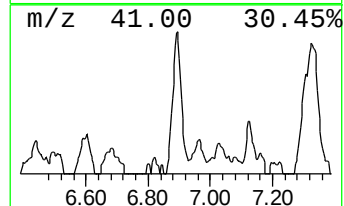
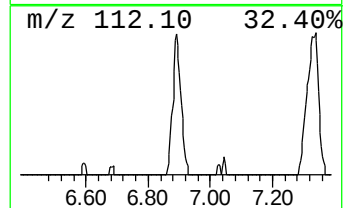
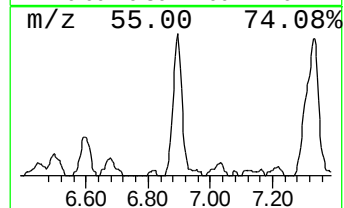
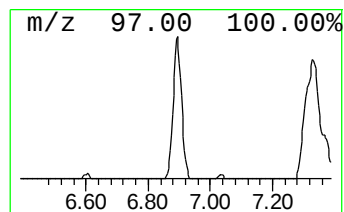
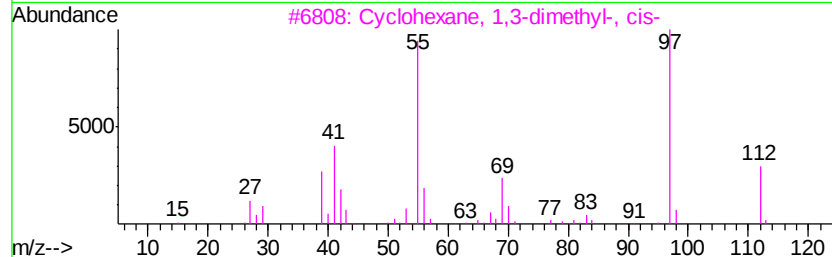
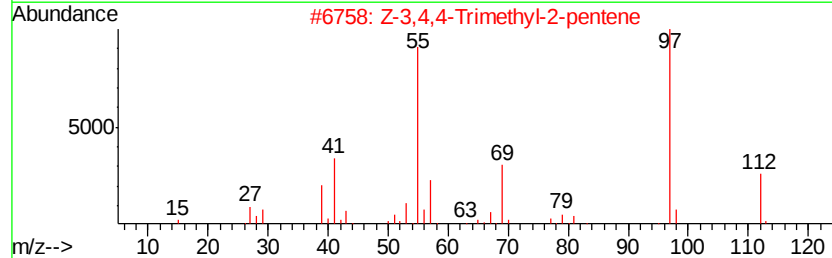
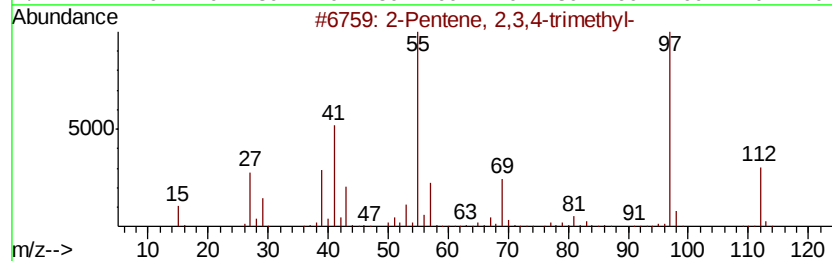
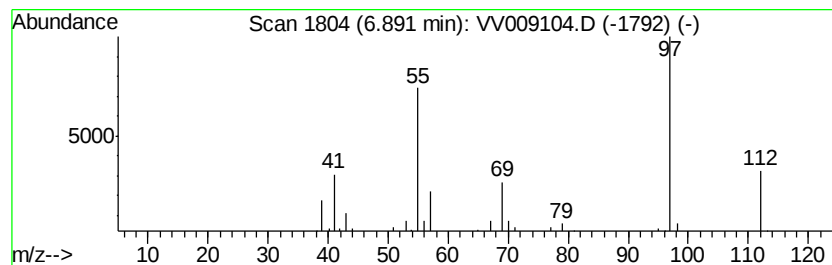
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Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 3 (DEL) Alkane: Cyclic6.89 Concentration Rank 43

| R.T. | EstConc   | Area  | Relative to ISTD    | R.T. |
|------|-----------|-------|---------------------|------|
| 6.89 | 4.49 ug/L | 45429 | 1,4-Difluorobenzene | 5.67 |

| Hit# | of | Tentative ID                     | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------------|-----|---------|-------------|------|
| 1    | 5  | 2-Pentene, 2,3,4-trimethyl-      | 112 | C8H16   | 000565-77-5 | 90   |
| 2    |    | Z-3,4,4-Trimethyl-2-pentene      | 112 | C8H16   | 039761-64-3 | 90   |
| 3    |    | Cyclohexane, 1,3-dimethyl-, cis- | 112 | C8H16   | 000638-04-0 | 90   |
| 4    |    | Cyclohexane, 1,3-dimethyl-       | 112 | C8H16   | 000591-21-9 | 90   |
| 5    |    | 2-Pentene, 2,4,4-trimethyl-      | 112 | C8H16   | 000107-40-4 | 86   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

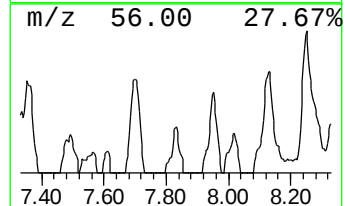
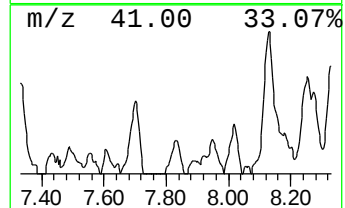
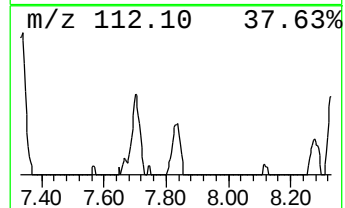
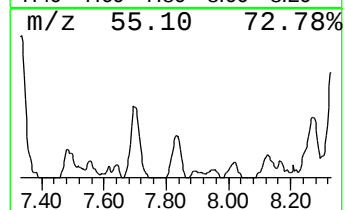
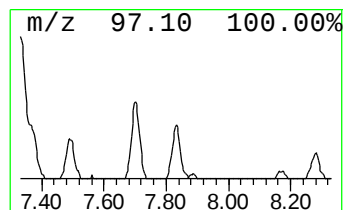
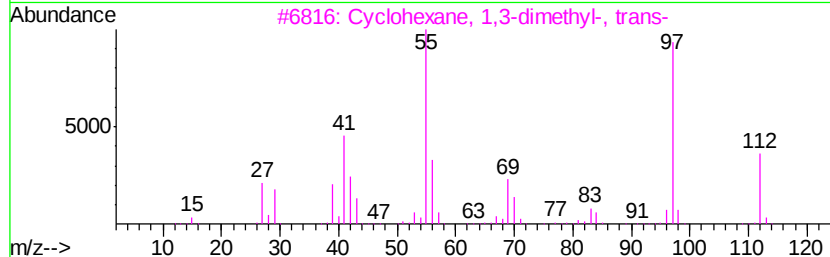
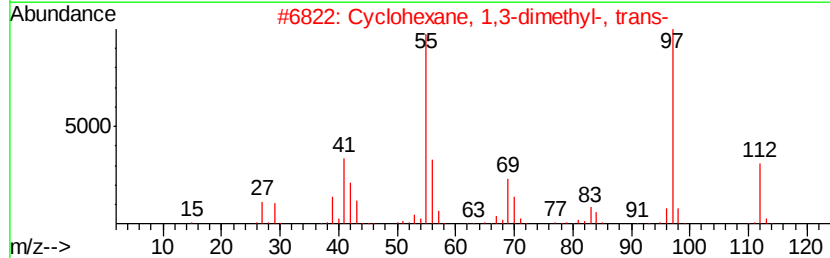
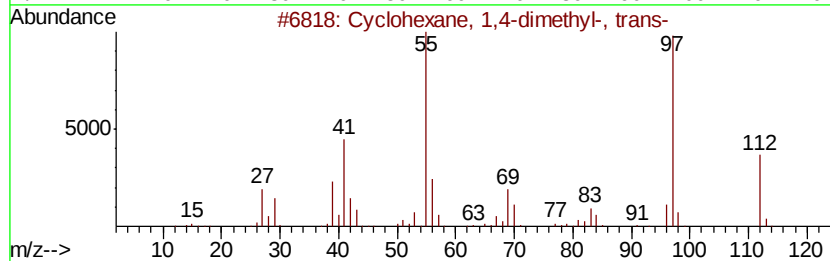
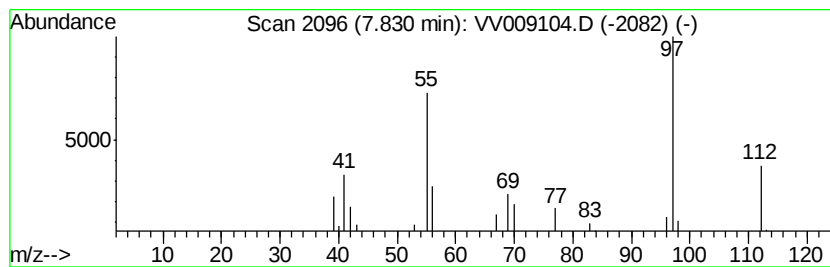
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 5 (DEL) Alkane: Cyclic7.83 Concentration Rank 50

| R.T. | EstConc   | Area  | Relative to ISTD | R.T. |
|------|-----------|-------|------------------|------|
| 7.83 | 2.34 ug/L | 15387 | Chlorobenzene-d5 | 8.90 |

| Hit# | of | Tentative ID                       | MW  | MolForm | CAS#        | Qual |
|------|----|------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclohexane, 1,4-dimethyl-, trans- | 112 | C8H16   | 002207-04-7 | 90   |
| 2    |    | Cyclohexane, 1,3-dimethyl-, trans- | 112 | C8H16   | 002207-03-6 | 90   |
| 3    |    | Cyclohexane, 1,3-dimethyl-, trans- | 112 | C8H16   | 002207-03-6 | 90   |
| 4    |    | Cyclohexane, 1,3-dimethyl-, trans- | 112 | C8H16   | 002207-03-6 | 90   |
| 5    |    | Cyclohexane, 1,3-dimethyl-, trans- | 112 | C8H16   | 002207-03-6 | 90   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

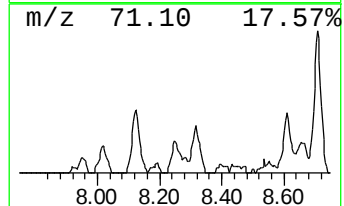
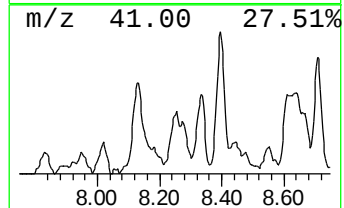
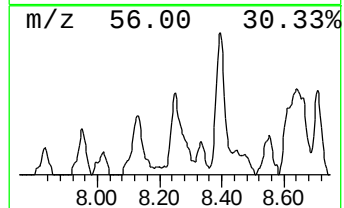
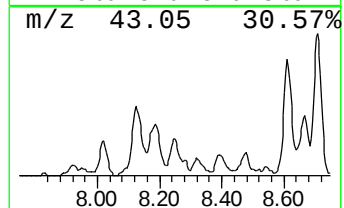
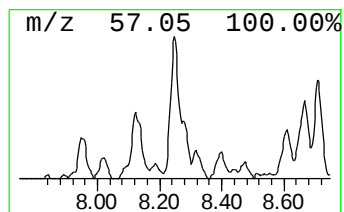
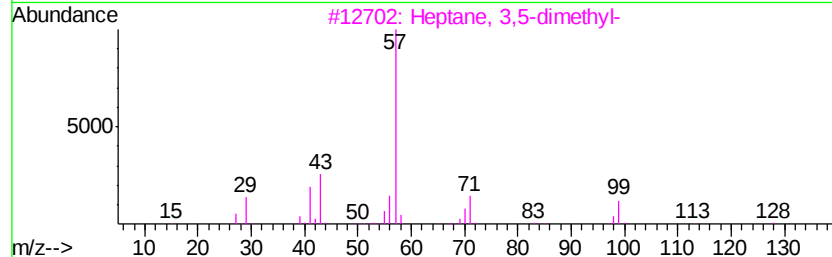
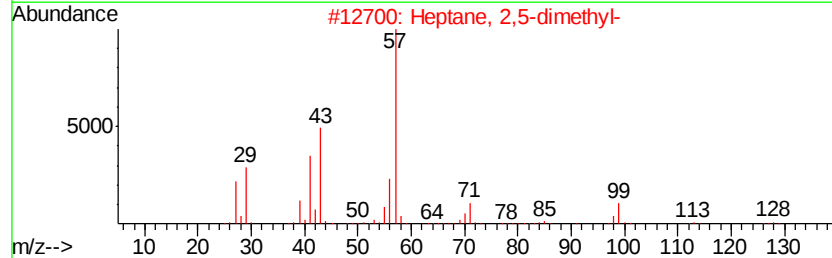
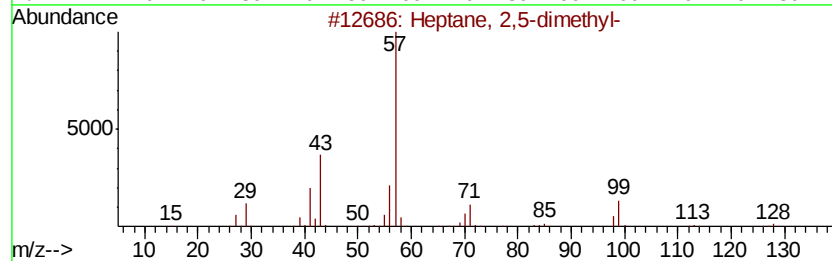
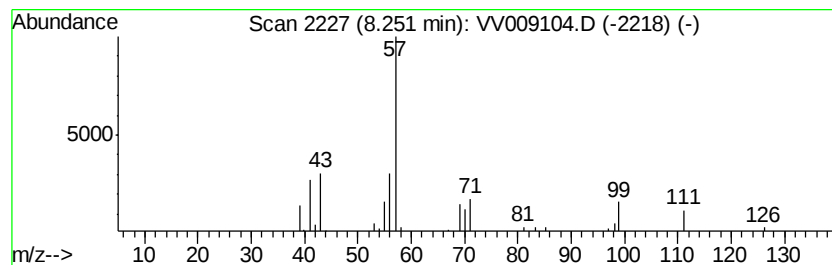
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 6 (DEL) Alkane: Straight-Chai... Concentration Rank 47

| R.T. | EstConc   | Area  | Relative to ISTD | R.T. |
|------|-----------|-------|------------------|------|
| 8.25 | 3.19 ug/L | 20978 | Chlorobenzene-d5 | 8.90 |

| Hit# | of | Tentative ID           | MW  | MolForm | CAS#        | Qual |
|------|----|------------------------|-----|---------|-------------|------|
| 1    | 5  | Heptane, 2,5-dimethyl- | 128 | C9H20   | 002216-30-0 | 59   |
| 2    |    | Heptane, 2,5-dimethyl- | 128 | C9H20   | 002216-30-0 | 59   |
| 3    |    | Heptane, 3,5-dimethyl- | 128 | C9H20   | 000926-82-9 | 50   |
| 4    |    | Heptane, 3,5-dimethyl- | 128 | C9H20   | 000926-82-9 | 50   |
| 5    |    | Heptane, 2,5-dimethyl- | 128 | C9H20   | 002216-30-0 | 45   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

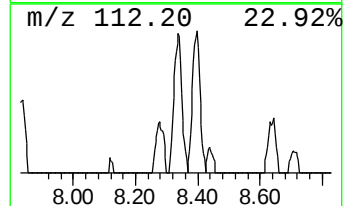
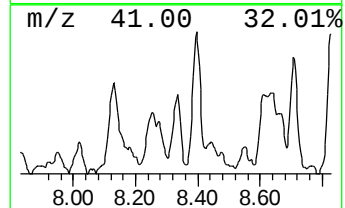
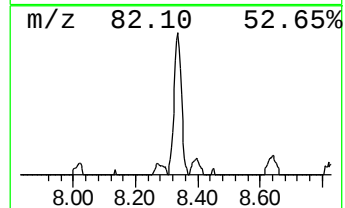
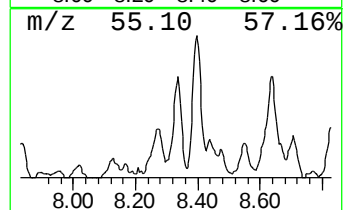
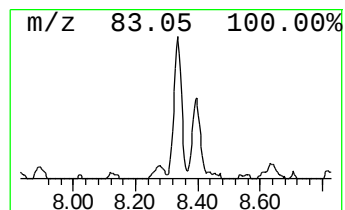
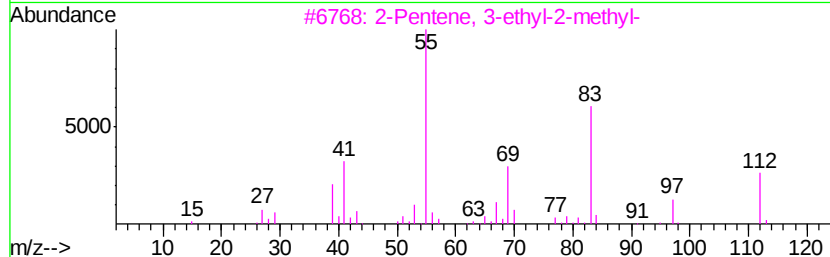
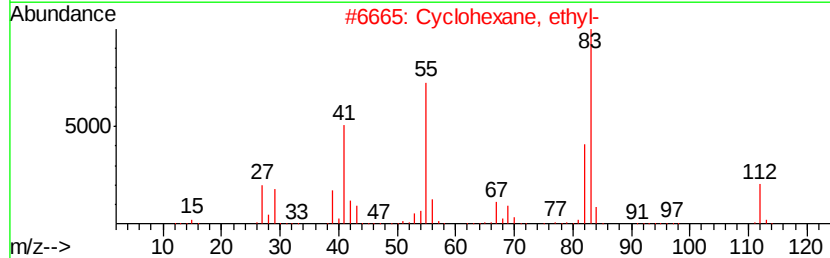
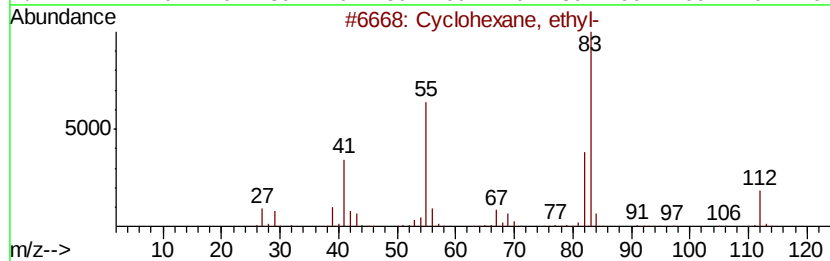
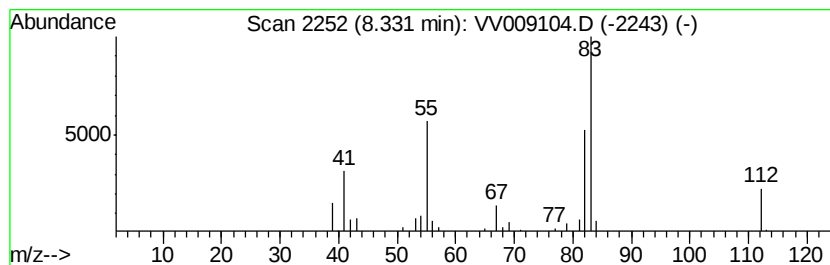
Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

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Peak Number 7 (DEL) Alkane: Cyclic8.33 Concentration Rank 38

| R.T.    | EstConc   | Area                         | Relative to ISTD | R.T.    |             |      |
|---------|-----------|------------------------------|------------------|---------|-------------|------|
| 8.33    | 5.86 ug/L | 38544                        | Chlorobenzene-d5 | 8.90    |             |      |
| Hit# of | 5         | Tentative ID                 | MW               | MolForm | CAS#        | Qual |
| 1       |           | Cyclohexane, ethyl-          | 112              | C8H16   | 001678-91-7 | 78   |
| 2       |           | Cyclohexane, ethyl-          | 112              | C8H16   | 001678-91-7 | 72   |
| 3       |           | 2-Pentene, 3-ethyl-2-methyl- | 112              | C8H16   | 019780-67-7 | 58   |
| 4       |           | 2-Hexene, 2,3-dimethyl-      | 112              | C8H16   | 007145-20-2 | 53   |
| 5       |           | Cyclohexane, ethyl-          | 112              | C8H16   | 001678-91-7 | 53   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

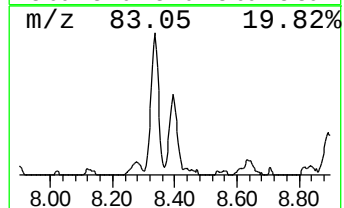
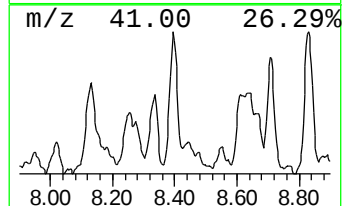
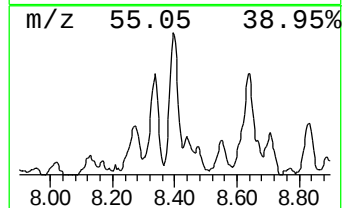
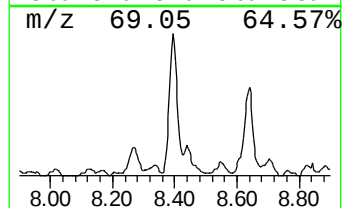
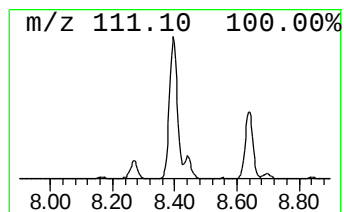
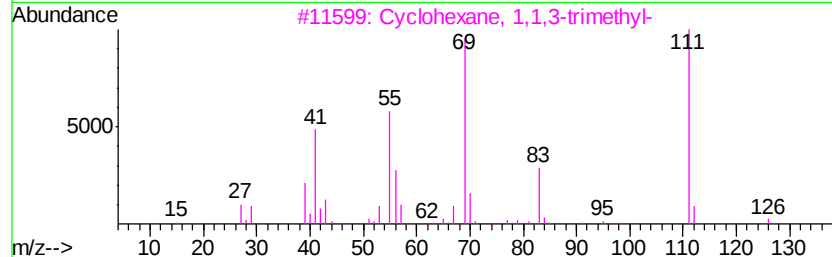
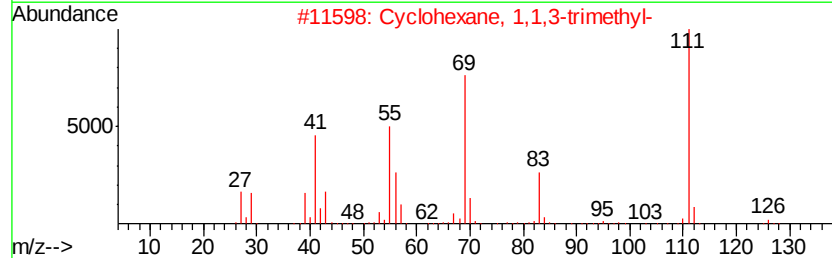
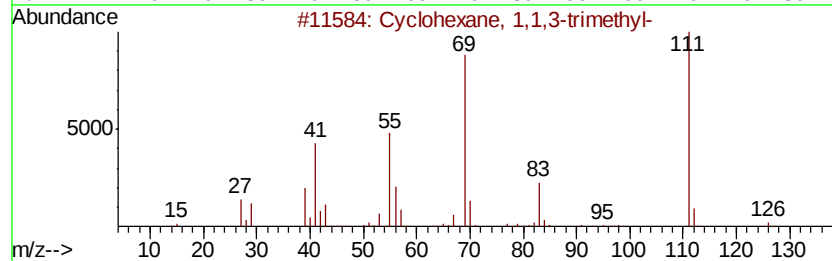
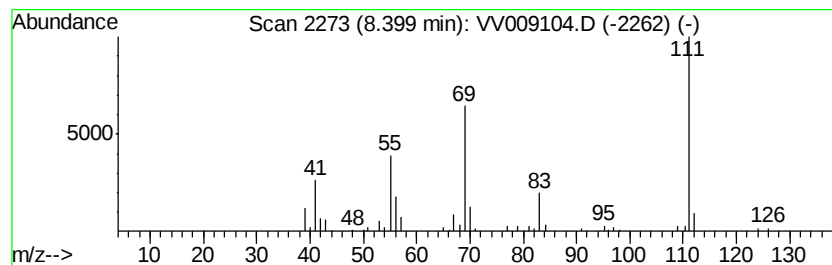
Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

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Peak Number 8 (DEL) Alkane: Cyclic8.40 Concentration Rank 31

| R.T.    | EstConc    | Area                          | Relative to ISTD | R.T.    |             |      |
|---------|------------|-------------------------------|------------------|---------|-------------|------|
| 8.40    | 14.05 ug/L | 92434                         | Chlorobenzene-d5 | 8.90    |             |      |
| Hit# of | 5          | Tentative ID                  | MW               | MolForm | CAS#        | Qual |
| 1       |            | Cvclohexane, 1,1,3-trimethyl- | 126              | C9H18   | 003073-66-3 | 95   |
| 2       |            | Cvclohexane, 1,1,3-trimethyl- | 126              | C9H18   | 003073-66-3 | 70   |
| 3       |            | Cvclohexane, 1,1,3-trimethyl- | 126              | C9H18   | 003073-66-3 | 70   |
| 4       |            | 4-Amino-6-hydroxvpurimidine   | 111              | C4H5N3O | 001193-22-2 | 64   |
| 5       |            | Cyclohexane, 1,3,5-trimethyl- | 126              | C9H18   | 001839-63-0 | 59   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

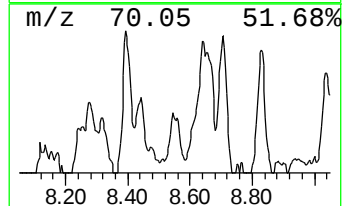
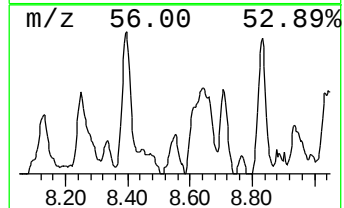
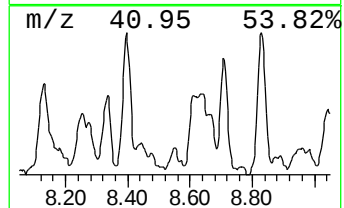
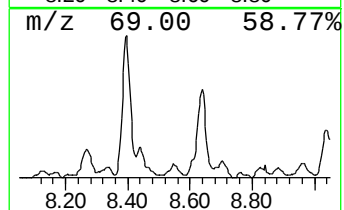
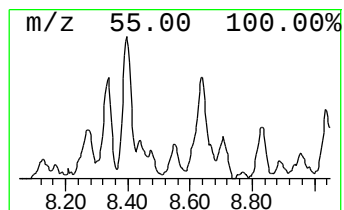
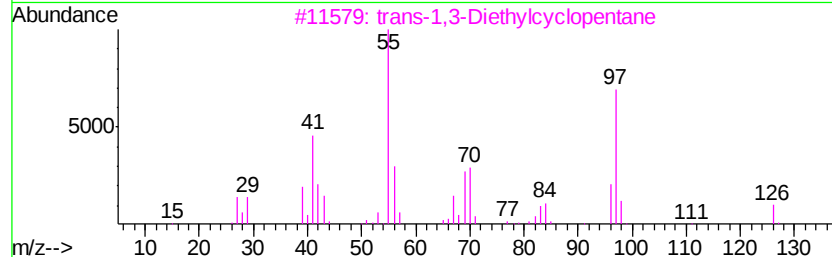
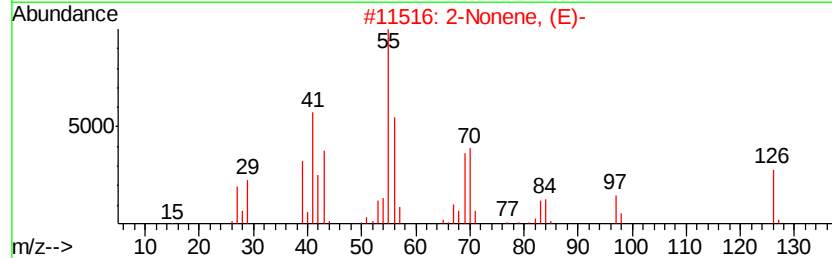
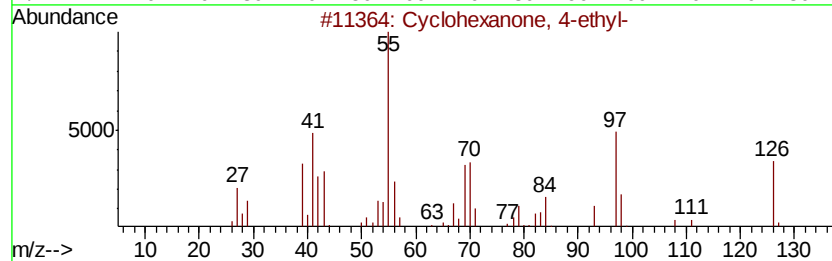
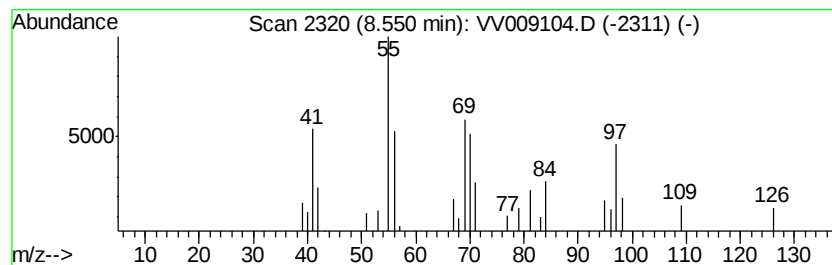
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TIC Integration Parameters: LSCINT.P

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Peak Number 9 (DEL) Alkane: Cyclic8.55 Concentration Rank 54

| R.T. | EstConc   | Area  | Relative to ISTD | R.T. |
|------|-----------|-------|------------------|------|
| 8.55 | 1.81 ug/L | 11923 | Chlorobenzene-d5 | 8.90 |

| Hit# | of | Tentative ID                  | MW  | MolForm | CAS#         | Qual |
|------|----|-------------------------------|-----|---------|--------------|------|
| 1    | 5  | Cyclohexanone, 4-ethyl-       | 126 | C8H14O  | 005441-51-0  | 52   |
| 2    |    | 2-Nonene, (E)-                | 126 | C9H18   | 006434-78-2  | 43   |
| 3    |    | trans-1,3-Diethylcyclopentane | 126 | C9H18   | 1000113-87-1 | 38   |
| 4    |    | 1-Heptene                     | 98  | C7H14   | 000592-76-7  | 30   |
| 5    |    | Bicyclo[2.2.2]octan-1-ol      | 126 | C8H14O  | 020534-58-1  | 30   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

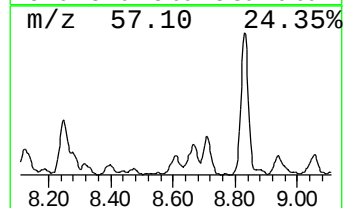
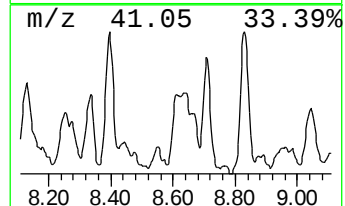
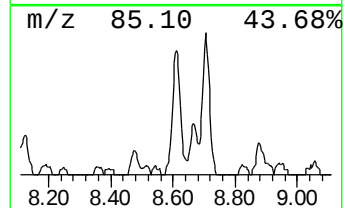
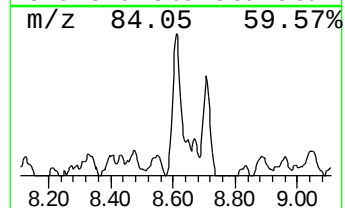
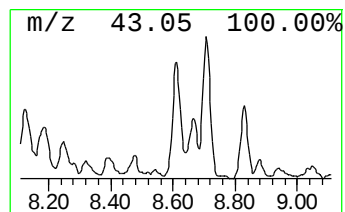
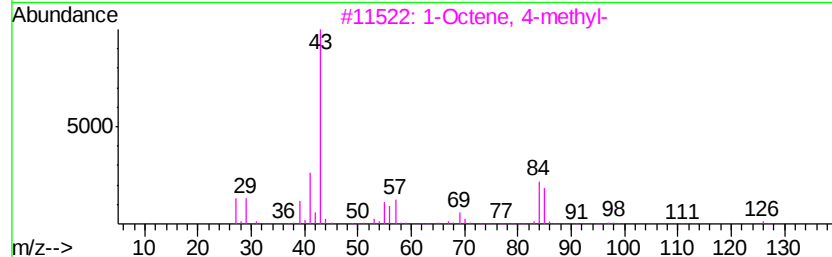
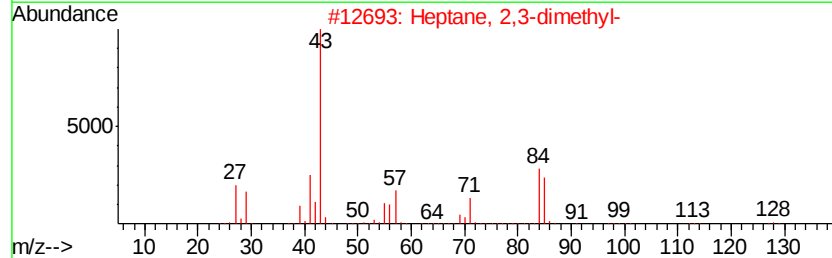
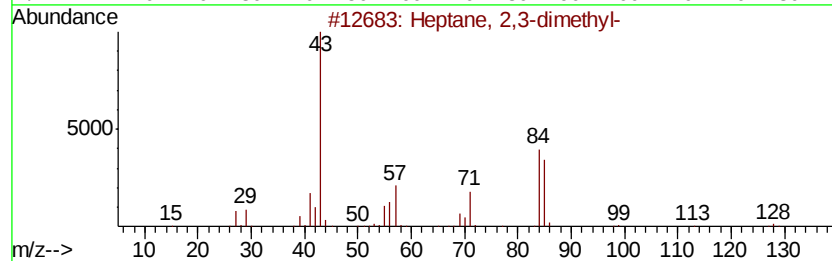
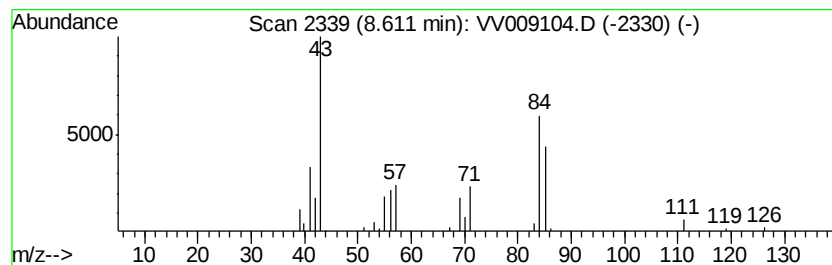
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 10 (DEL) Alkane: Straight-Chai... Concentration Rank 40

| R.T. | EstConc   | Area  | Relative to ISTD | R.T. |
|------|-----------|-------|------------------|------|
| 8.61 | 5.19 ug/L | 34170 | Chlorobenzene-d5 | 8.90 |

| Hit# | of | 5 | Tentative ID           | MW  | MolForm | CAS#        | Qual |
|------|----|---|------------------------|-----|---------|-------------|------|
| 1    |    |   | Heptane, 2,3-dimethyl- | 128 | C9H20   | 003074-71-3 | 64   |
| 2    |    |   | Heptane, 2,3-dimethyl- | 128 | C9H20   | 003074-71-3 | 64   |
| 3    |    |   | 1-Octene, 4-methyl-    | 126 | C9H18   | 013151-12-7 | 58   |
| 4    |    |   | Decane, 5,6-dimethyl-  | 170 | C12H26  | 001636-43-7 | 56   |
| 5    |    |   | Hexane, 3-ethyl-       | 114 | C8H18   | 000619-99-8 | 56   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

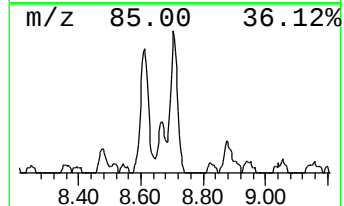
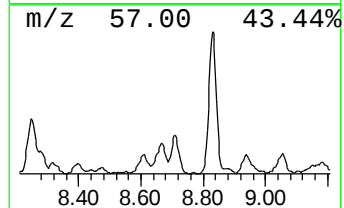
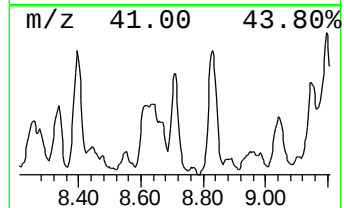
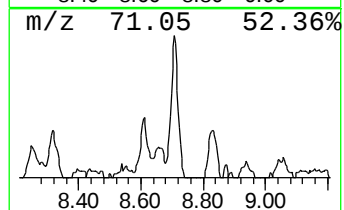
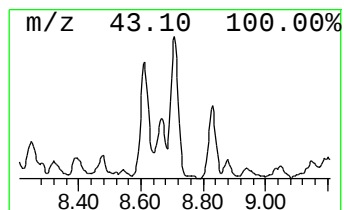
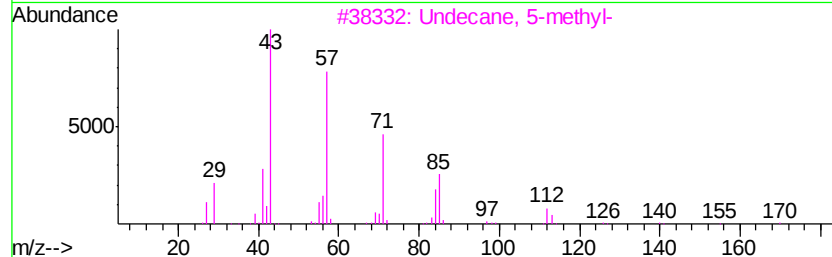
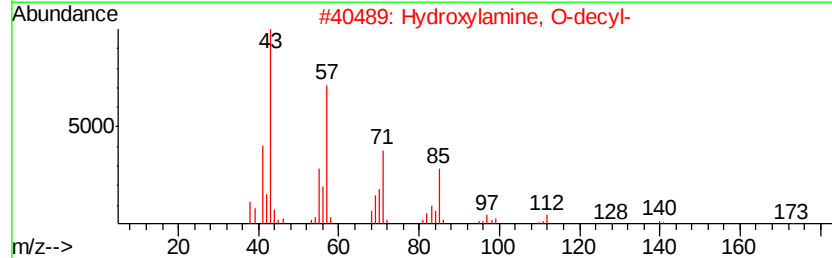
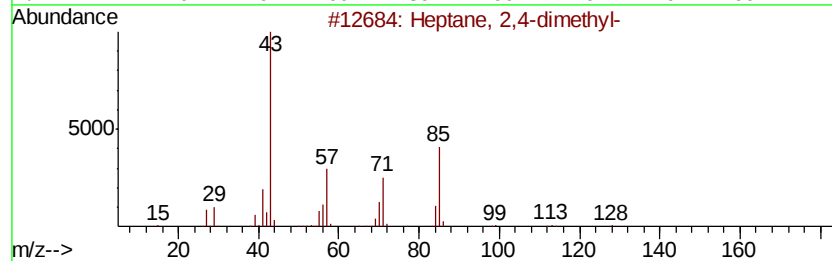
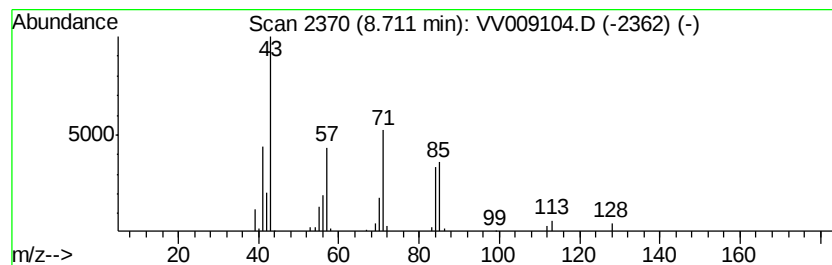
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 11 (DEL) Alkane: Straight-Chai... Concentration Rank 35

| R.T. | EstConc   | Area  | Relative to ISTD | R.T. |
|------|-----------|-------|------------------|------|
| 8.71 | 8.72 ug/L | 57364 | Chlorobenzene-d5 | 8.90 |

| Hit# | of | Tentative ID            | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------|-----|----------|-------------|------|
| 1    | 5  | Heptane, 2,4-dimethyl-  | 128 | C9H20    | 002213-23-2 | 64   |
| 2    |    | Hydroxylamine, O-decyl- | 173 | C10H23NO | 029812-79-1 | 64   |
| 3    |    | Undecane, 5-methyl-     | 170 | C12H26   | 001632-70-8 | 53   |
| 4    |    | Octane, 4-methyl-       | 128 | C9H20    | 002216-34-4 | 52   |
| 5    |    | Hexane, 3,3-dimethyl-   | 114 | C8H18    | 000563-16-6 | 50   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

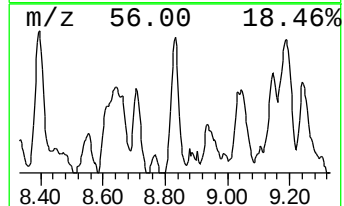
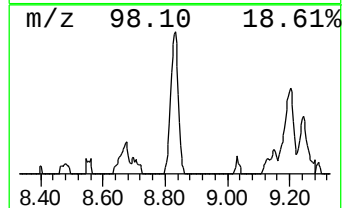
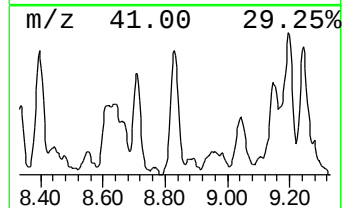
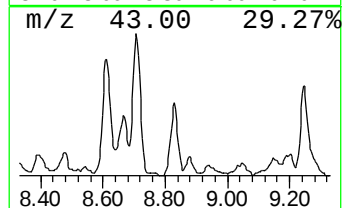
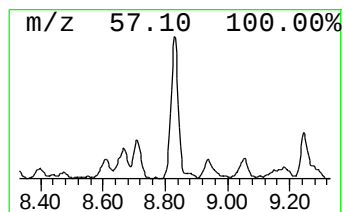
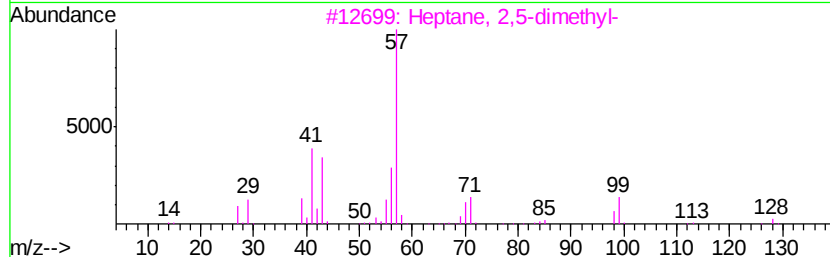
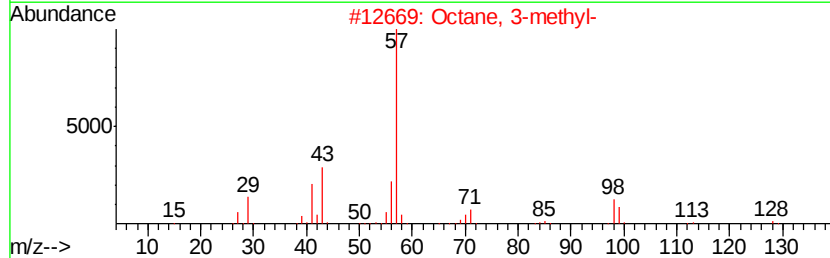
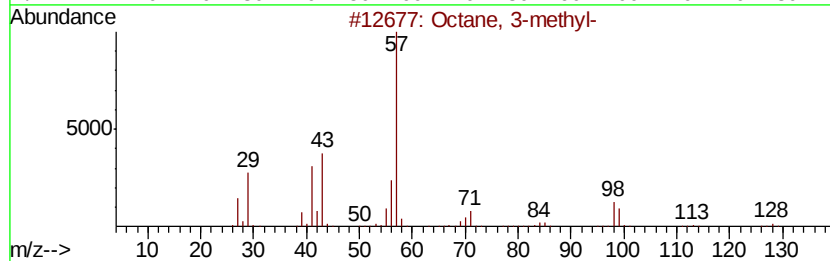
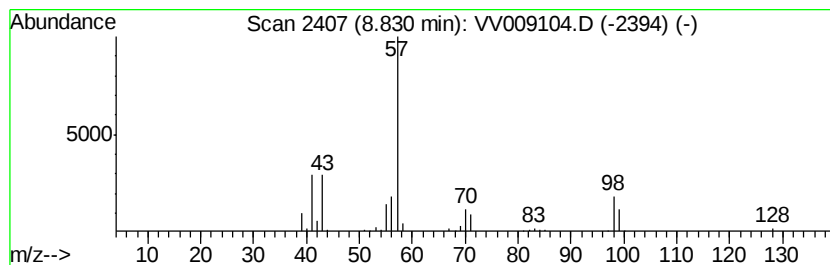
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 12 (DEL) Alkane: Straight-Chai... Concentration Rank 34

| R.T. | EstConc    | Area  | Relative to ISTD | R.T. |
|------|------------|-------|------------------|------|
| 8.83 | 10.13 ug/L | 66622 | Chlorobenzene-d5 | 8.90 |

| Hit# | of | Tentative ID           | MW  | MolForm | CAS#        | Qual |
|------|----|------------------------|-----|---------|-------------|------|
| 1    | 5  | Octane, 3-methyl-      | 128 | C9H20   | 002216-33-3 | 87   |
| 2    |    | Octane, 3-methyl-      | 128 | C9H20   | 002216-33-3 | 83   |
| 3    |    | Heptane, 2,5-dimethyl- | 128 | C9H20   | 002216-30-0 | 76   |
| 4    |    | Heptane, 2,5-dimethyl- | 128 | C9H20   | 002216-30-0 | 74   |
| 5    |    | Undecane, 6-methyl-    | 170 | C12H26  | 017302-33-9 | 64   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

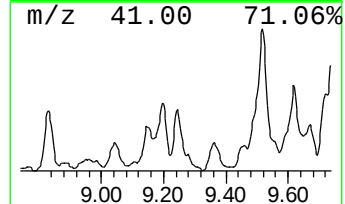
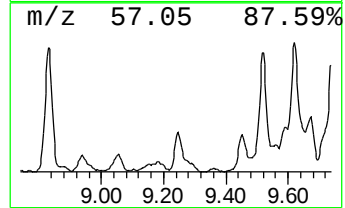
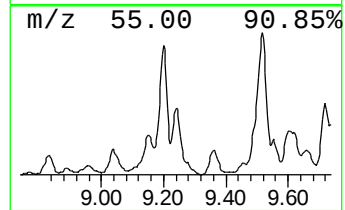
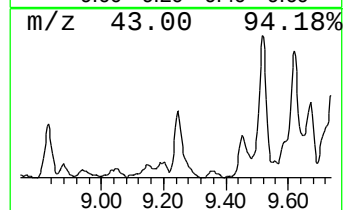
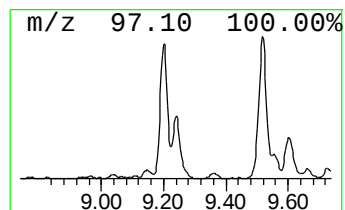
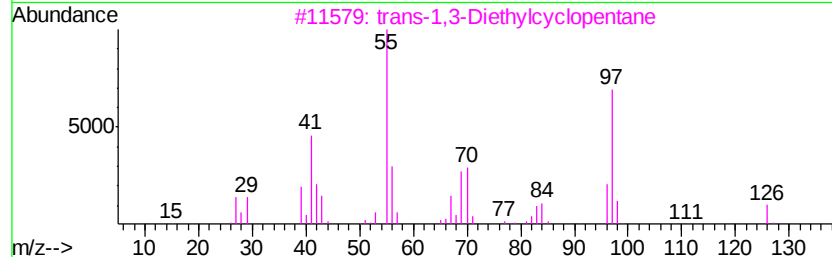
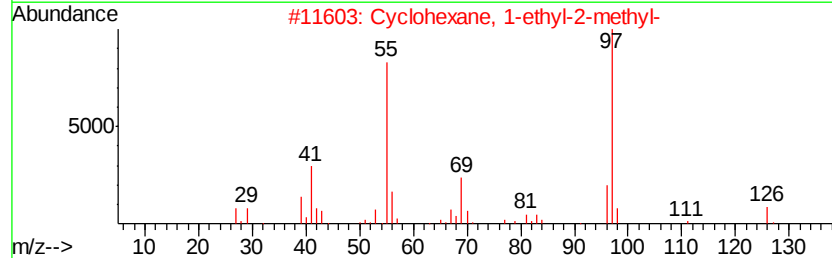
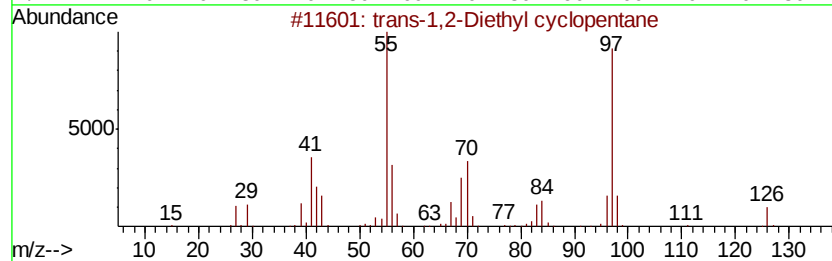
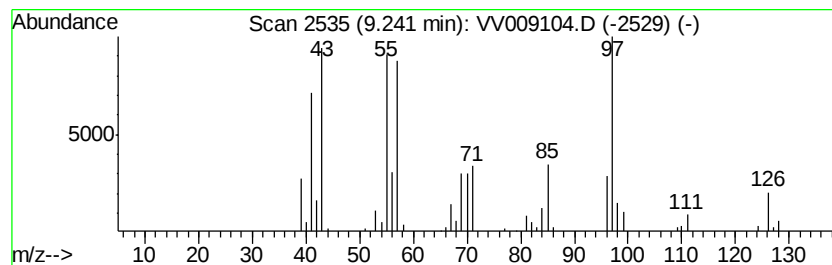
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 13 (DEL) Alkane: Cyclic9.24 Concentration Rank 27

| R.T. | EstConc    | Area   | Relative to ISTD | R.T. |
|------|------------|--------|------------------|------|
| 9.24 | 17.23 ug/L | 113359 | Chlorobenzene-d5 | 8.90 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#         | Qual |
|------|----|-------------------------------------|-----|----------|--------------|------|
| 1    | 5  | trans-1,2-Diethyl cyclopentane      | 126 | C9H18    | 000932-40-1  | 64   |
| 2    |    | Cyclohexane, 1-ethyl-2-methyl-      | 126 | C9H18    | 003728-54-9  | 46   |
| 3    |    | trans-1,3-Diethylcyclopentane       | 126 | C9H18    | 1000113-87-1 | 46   |
| 4    |    | Cyclohexane, 1-ethyl-4-methyl-, ... | 126 | C9H18    | 006236-88-0  | 43   |
| 5    |    | Oxalic acid, cyclohexylmethyl is... | 270 | C15H26O4 | 1000309-68-3 | 43   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

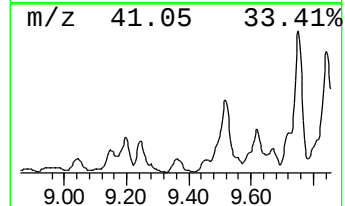
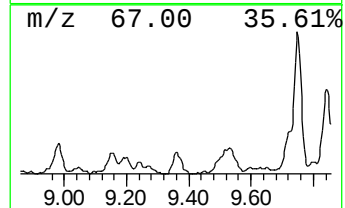
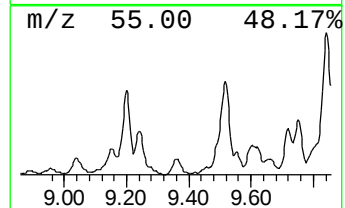
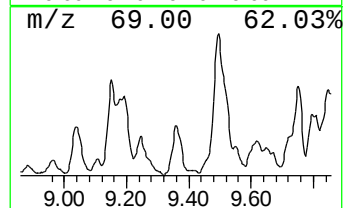
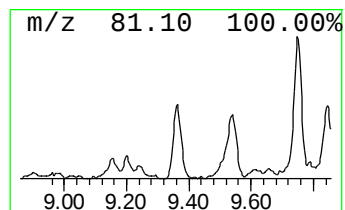
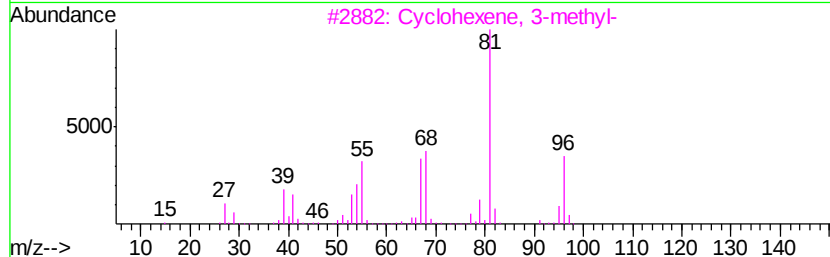
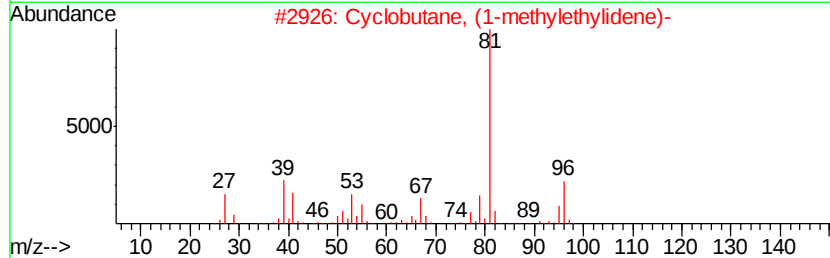
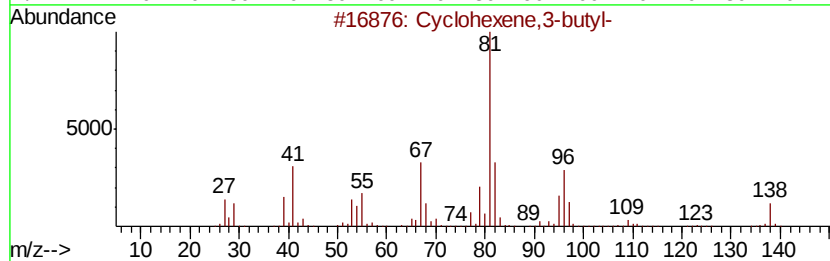
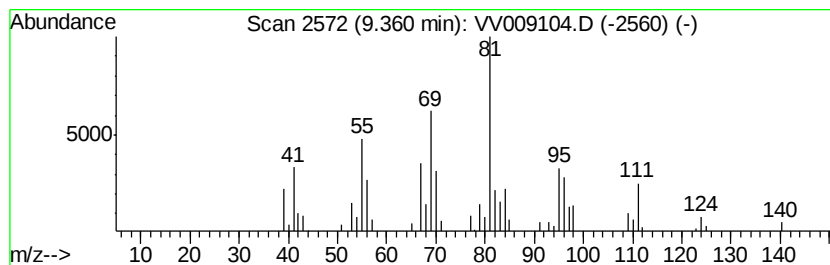
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 14 unknown-01 Concentration Rank 33

| R.T. | EstConc    | Area  | Relative to ISTD | R.T. |
|------|------------|-------|------------------|------|
| 9.36 | 10.64 ug/L | 70023 | Chlorobenzene-d5 | 8.90 |

| Hit# | of | Tentative ID                       | MW  | MolForm | CAS#        | Qual |
|------|----|------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclohexene, 3-butyl-              | 138 | C10H18  | 003983-07-1 | 47   |
| 2    |    | Cyclobutane, (1-methylethylidene)- | 96  | C7H12   | 001528-22-9 | 43   |
| 3    |    | Cyclohexene, 3-methyl-             | 96  | C7H12   | 000591-48-0 | 43   |
| 4    |    | Cyclohexene, 4-methyl-             | 96  | C7H12   | 000591-47-9 | 41   |
| 5    |    | Cyclohexene, 4-methyl-             | 96  | C7H12   | 000591-47-9 | 38   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

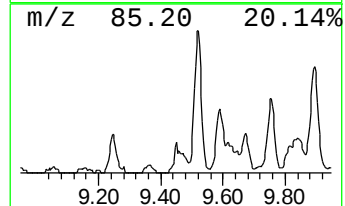
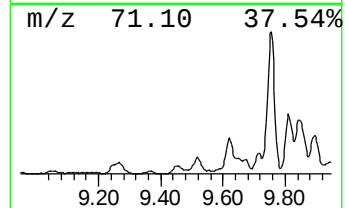
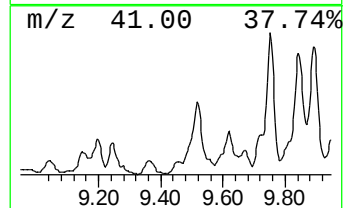
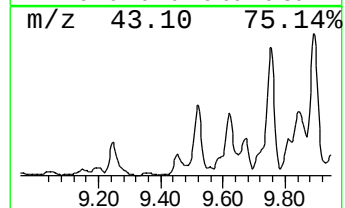
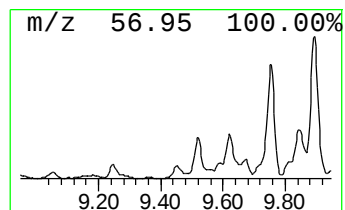
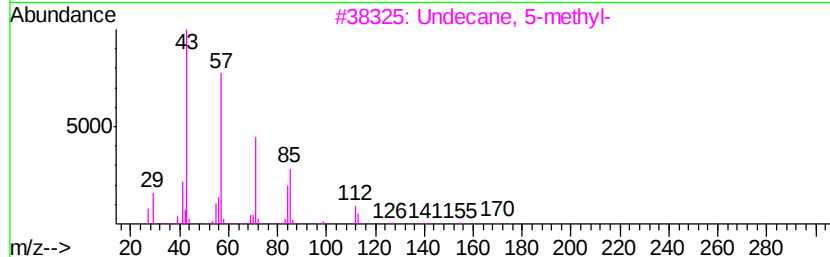
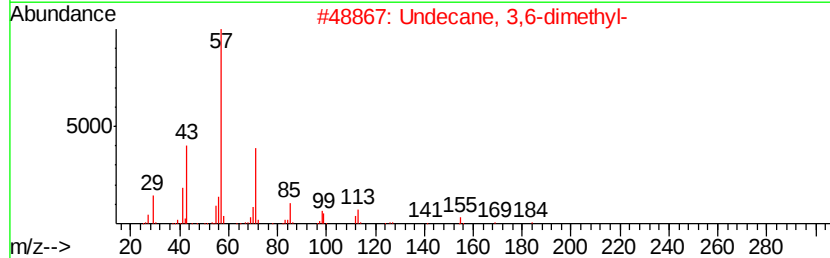
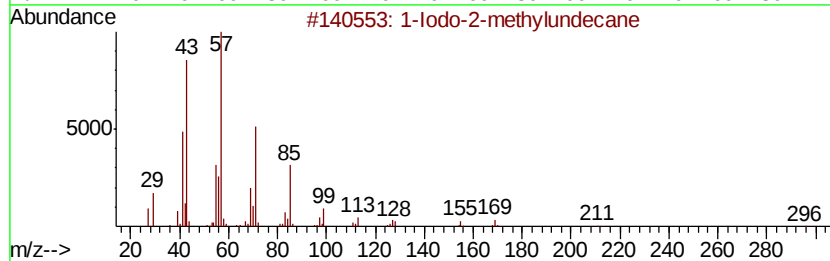
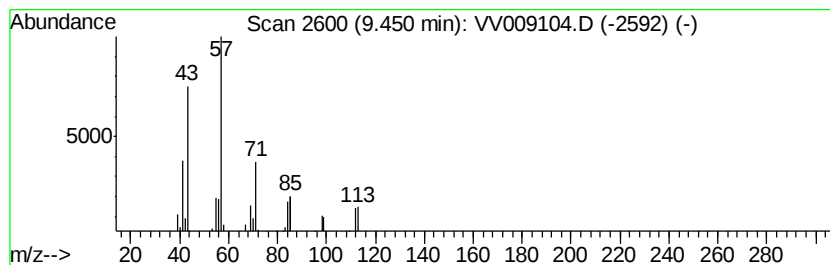
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 15 1-Iodo-2-methylundecane Concentration Rank 45

| R.T. | EstConc   | Area  | Relative to ISTD | R.T. |
|------|-----------|-------|------------------|------|
| 9.45 | 4.17 ug/L | 27435 | Chlorobenzene-d5 | 8.90 |

| Hit# | of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------|-----|---------|-------------|------|
| 1    |    |   | 1-Iodo-2-methylundecane | 296 | C12H25I | 073105-67-6 | 50   |
| 2    |    |   | Undecane, 3,6-dimethyl- | 184 | C13H28  | 017301-28-9 | 50   |
| 3    |    |   | Undecane, 5-methyl-     | 170 | C12H26  | 001632-70-8 | 50   |
| 4    |    |   | 2,6-Dimethyldecane      | 170 | C12H26  | 013150-81-7 | 50   |
| 5    |    |   | Octane, 1,1'-oxybis-    | 242 | C16H34O | 000629-82-3 | 46   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

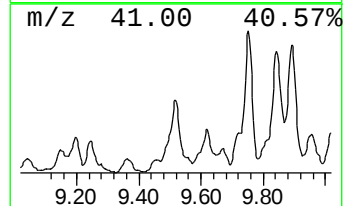
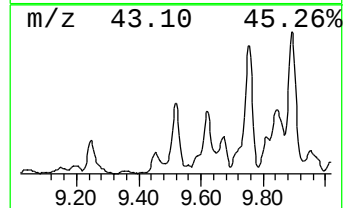
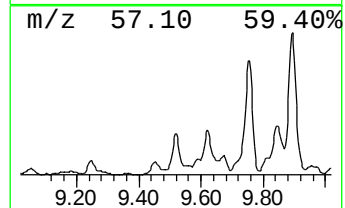
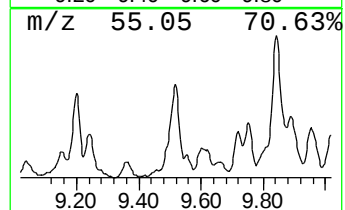
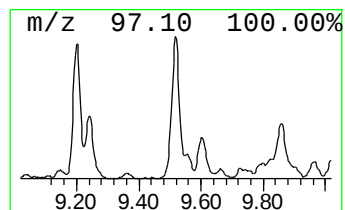
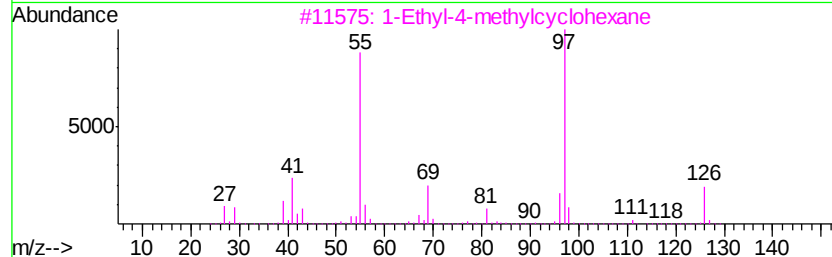
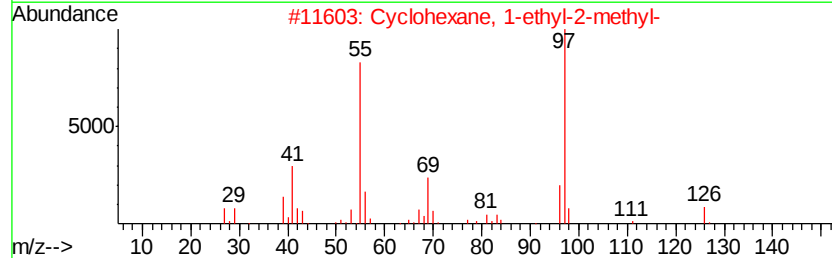
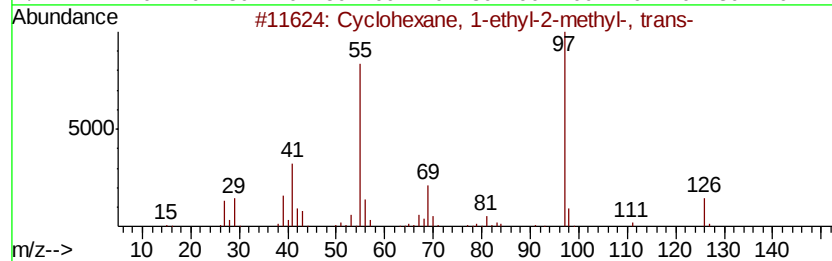
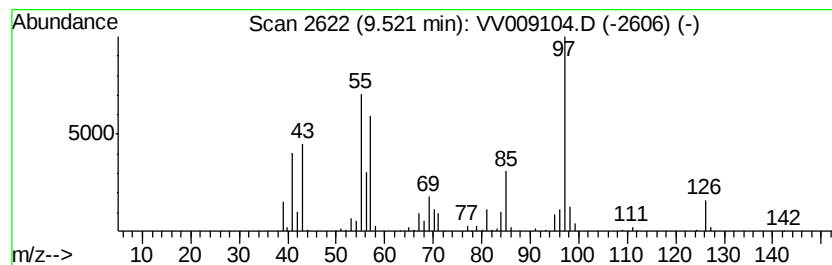
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 16 (DEL) Alkane: Cyclic9.52 Concentration Rank 14

| R.T. | EstConc    | Area   | Relative to ISTD | R.T. |
|------|------------|--------|------------------|------|
| 9.52 | 42.26 ug/L | 278049 | Chlorobenzene-d5 | 8.90 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclohexane, 1-ethyl-2-methyl-, ... | 126 | C9H18   | 004923-78-8 | 64   |
| 2    |    | Cyclohexane, 1-ethyl-2-methyl-      | 126 | C9H18   | 003728-54-9 | 58   |
| 3    |    | 1-Ethyl-4-methylcyclohexane         | 126 | C9H18   | 003728-56-1 | 58   |
| 4    |    | Cyclohexane, 1,3-dimethyl-, trans-  | 112 | C8H16   | 002207-03-6 | 53   |
| 5    |    | Cyclohexane, 1-ethyl-4-methyl-, ... | 126 | C9H18   | 004926-78-7 | 52   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

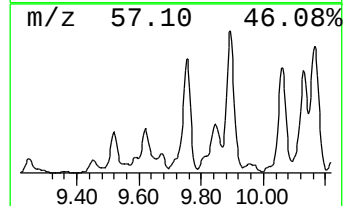
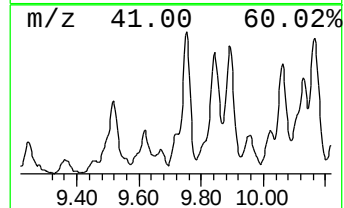
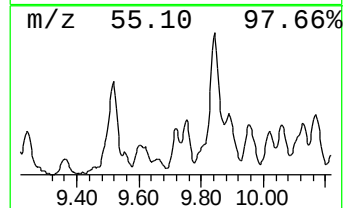
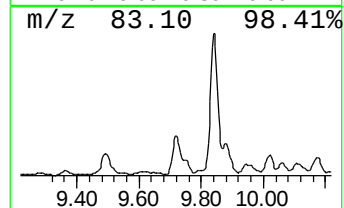
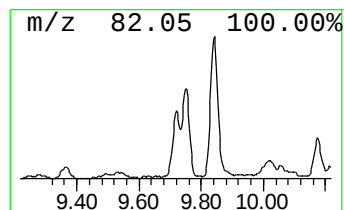
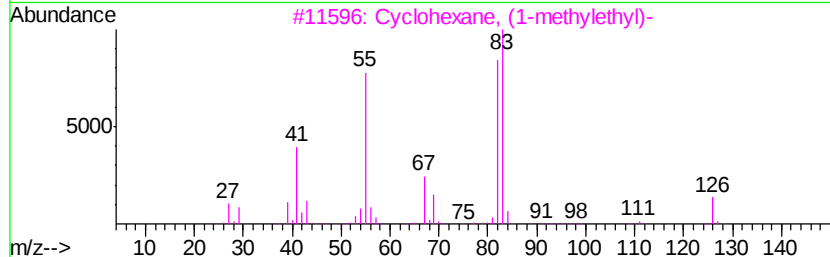
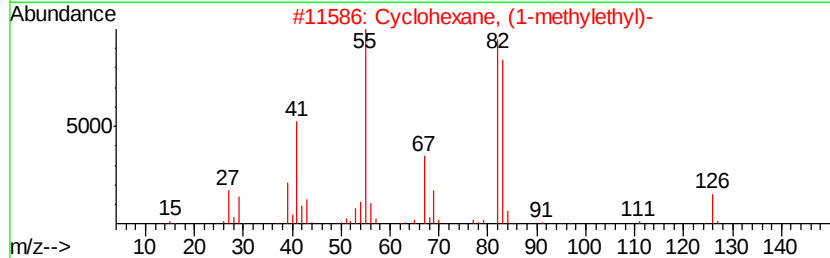
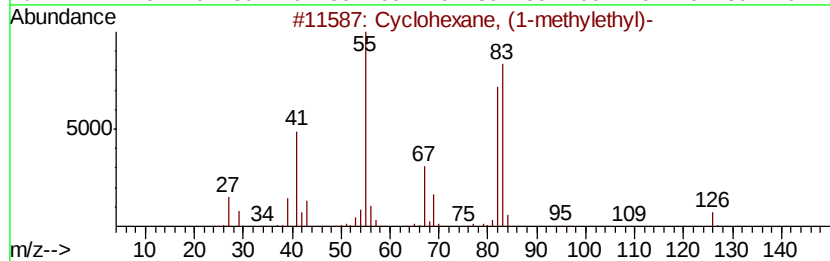
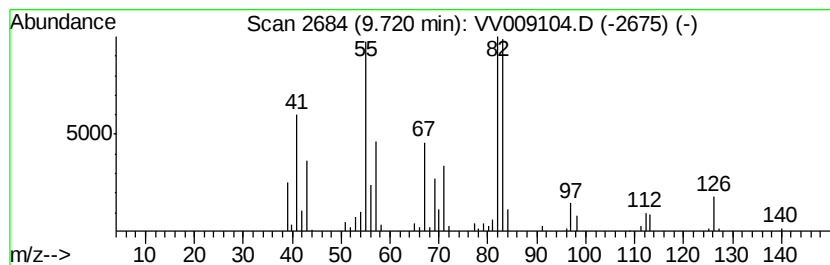
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 17 (DEL) Alkane: Cyclic9.72 Concentration Rank 36

| R.T. | EstConc   | Area  | Relative to ISTD | R.T. |
|------|-----------|-------|------------------|------|
| 9.72 | 8.24 ug/L | 54203 | Chlorobenzene-d5 | 8.90 |

| Hit# | of | 5 | Tentative ID                  | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------|-----|---------|-------------|------|
| 1    |    |   | Cyclohexane, (1-methylethyl)- | 126 | C9H18   | 000696-29-7 | 81   |
| 2    |    |   | Cyclohexane, (1-methylethyl)- | 126 | C9H18   | 000696-29-7 | 81   |
| 3    |    |   | Cyclohexane, (1-methylethyl)- | 126 | C9H18   | 000696-29-7 | 70   |
| 4    |    |   | Cyclohexane, (1-methylethyl)- | 126 | C9H18   | 000696-29-7 | 64   |
| 5    |    |   | Cyclohexane, butyl-           | 140 | C10H20  | 001678-93-9 | 53   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

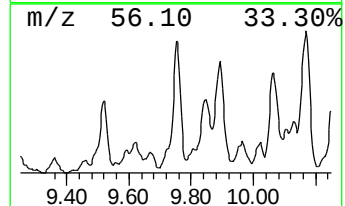
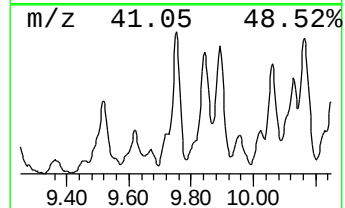
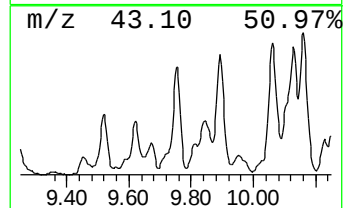
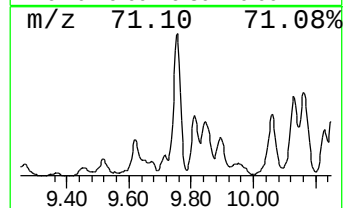
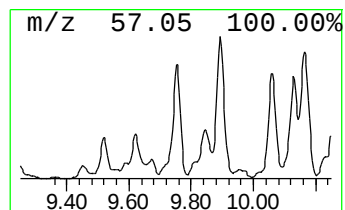
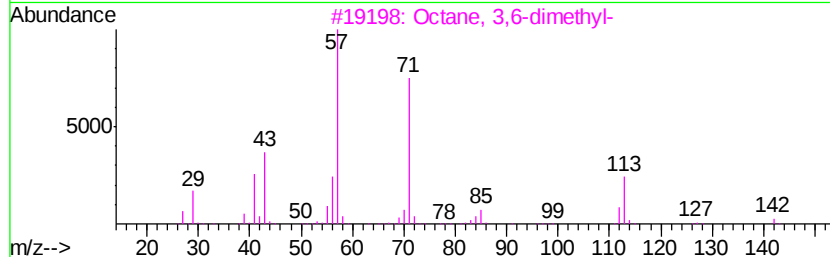
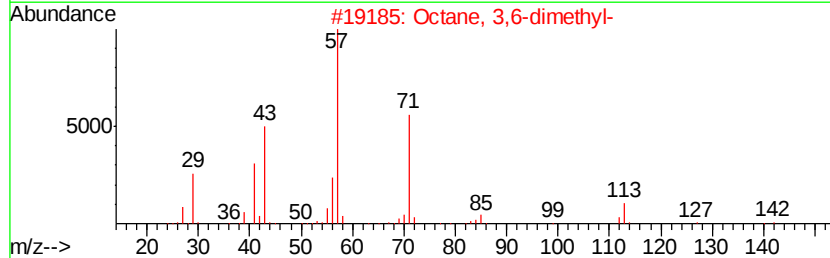
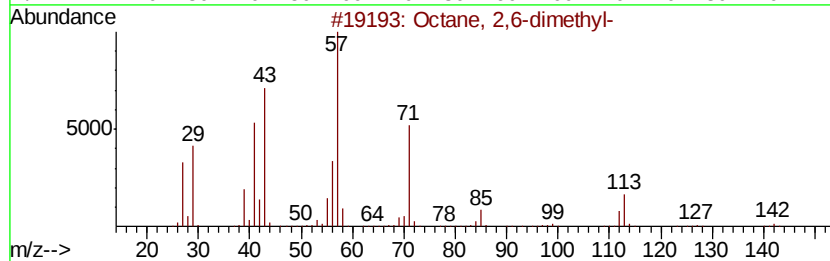
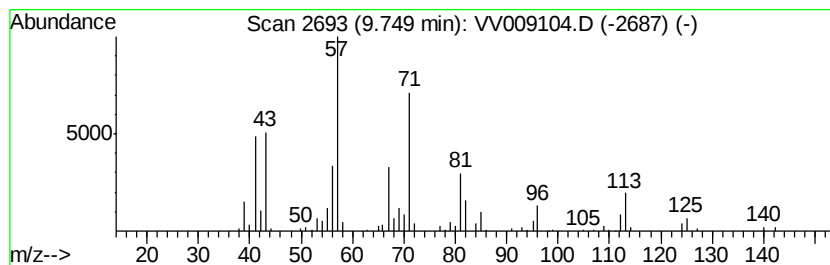
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 18 (DEL) Alkane: Straight-Chai... Concentration Rank 13

| R.T. | EstConc    | Area   | Relative to ISTD | R.T. |
|------|------------|--------|------------------|------|
| 9.75 | 46.23 ug/L | 304164 | Chlorobenzene-d5 | 8.90 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Octane, 2,6-dimethyl-               | 142 | C10H22    | 002051-30-1  | 76   |
| 2    |    | Octane, 3,6-dimethyl-               | 142 | C10H22    | 015869-94-0  | 68   |
| 3    |    | Octane, 3,6-dimethyl-               | 142 | C10H22    | 015869-94-0  | 64   |
| 4    |    | Nonane, 3-methyl-                   | 142 | C10H22    | 005911-04-6  | 52   |
| 5    |    | Sulfurous acid, 2-ethylhexyl hex... | 418 | C24H50O3S | 1000309-19-9 | 52   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

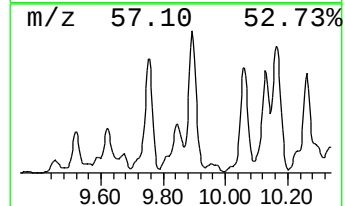
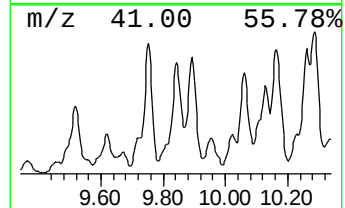
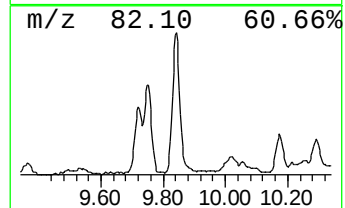
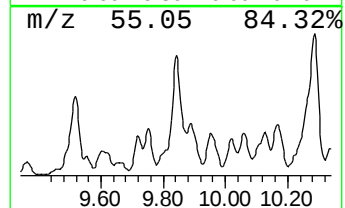
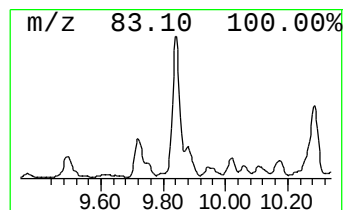
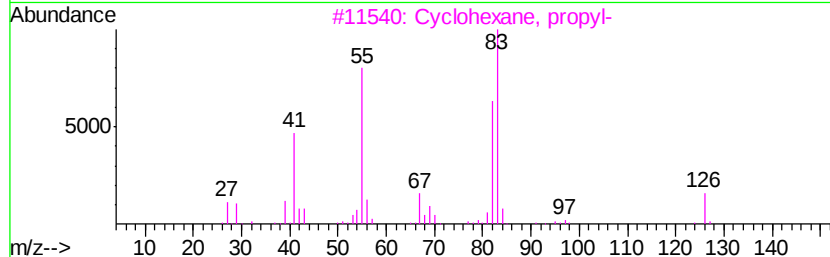
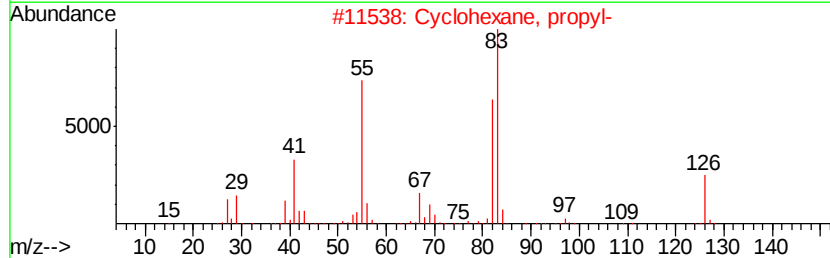
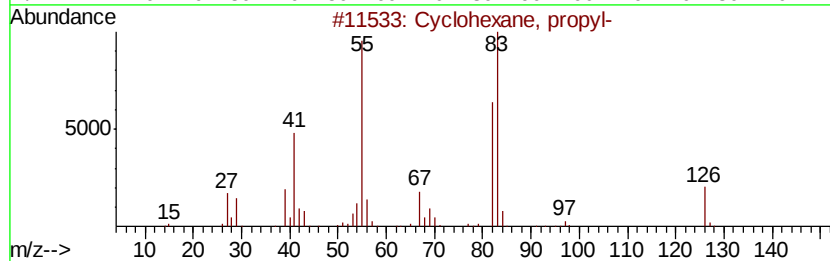
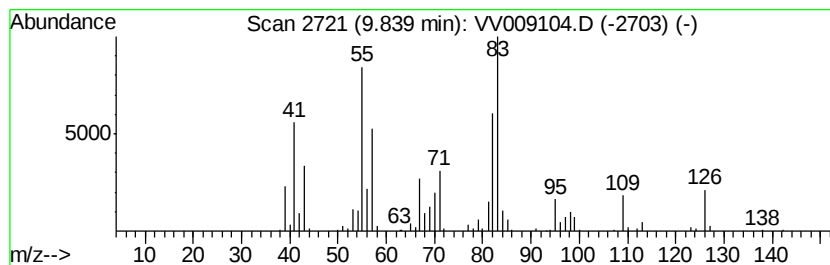
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 19 (DEL) Alkane: Cyclic9.84 Concentration Rank 7

| R.T. | EstConc    | Area   | Relative to ISTD | R.T. |
|------|------------|--------|------------------|------|
| 9.84 | 60.69 ug/L | 399306 | Chlorobenzene-d5 | 8.90 |

| Hit# | of | 5 | Tentative ID                  | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------|-----|---------|-------------|------|
| 1    |    |   | Cyclohexane, propyl-          | 126 | C9H18   | 001678-92-8 | 64   |
| 2    |    |   | Cyclohexane, propyl-          | 126 | C9H18   | 001678-92-8 | 58   |
| 3    |    |   | Cyclohexane, propyl-          | 126 | C9H18   | 001678-92-8 | 58   |
| 4    |    |   | Cyclohexane, (1-methylethyl)- | 126 | C9H18   | 000696-29-7 | 58   |
| 5    |    |   | Cyclohexanone, 2,3-dimethyl-  | 126 | C8H14O  | 013395-76-1 | 58   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

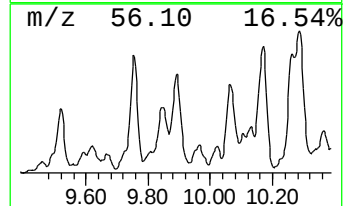
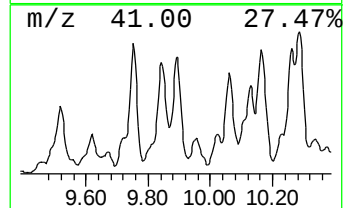
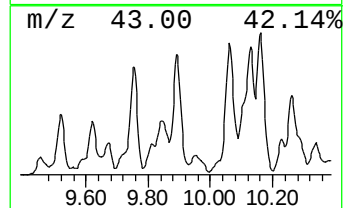
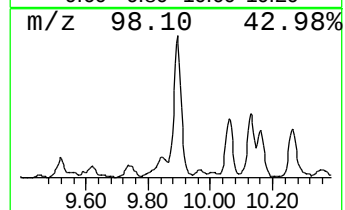
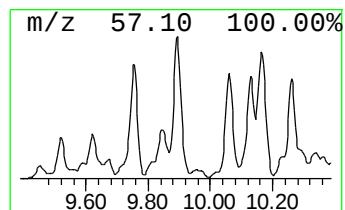
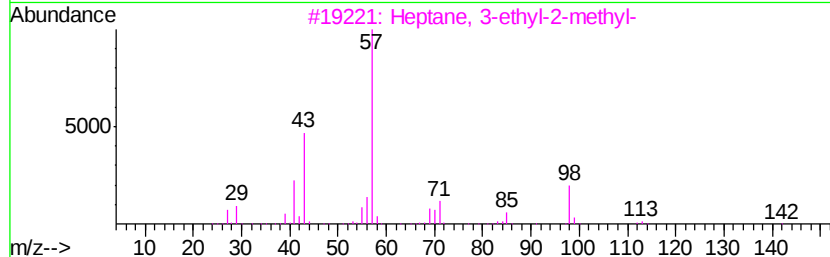
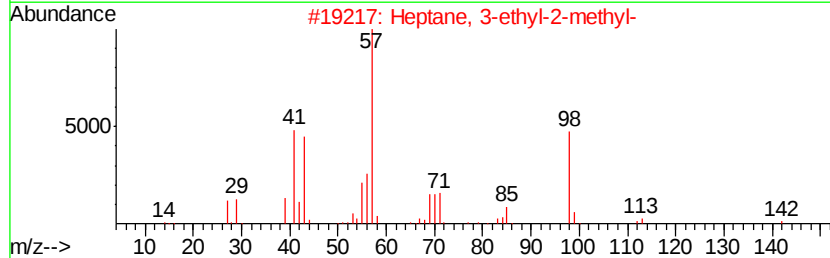
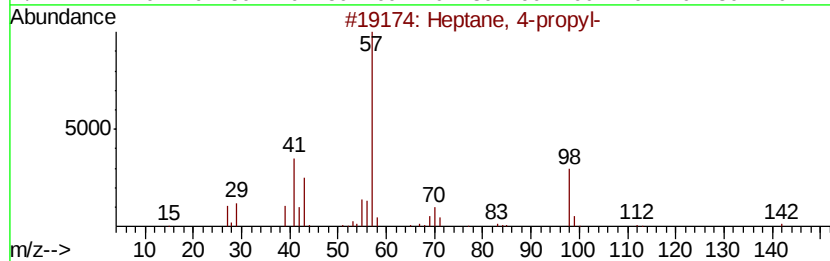
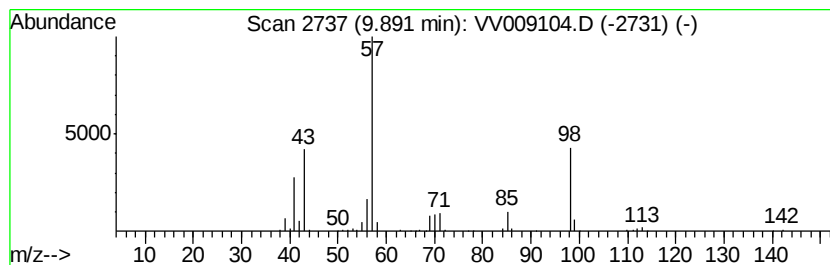
Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 20 (DEL) Alkane: Straight-Chai... Concentration Rank 17

| R.T.      | EstConc                     | Area   | Relative to ISTD | R.T.        |      |
|-----------|-----------------------------|--------|------------------|-------------|------|
| 9.89      | 40.07 ug/L                  | 263640 | Chlorobenzene-d5 | 8.90        |      |
| Hit# of 5 | Tentative ID                | MW     | MolForm          | CAS#        | Qual |
| 1         | Heptane, 4-propyl-          | 142    | C10H22           | 003178-29-8 | 72   |
| 2         | Heptane, 3-ethyl-2-methyl-  | 142    | C10H22           | 014676-29-0 | 49   |
| 3         | Heptane, 3-ethyl-2-methyl-  | 142    | C10H22           | 014676-29-0 | 47   |
| 4         | Octane, 3-methyl-           | 128    | C9H20            | 002216-33-3 | 47   |
| 5         | Heptane, 4-(1-methylethyl)- | 142    | C10H22           | 052896-87-4 | 43   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

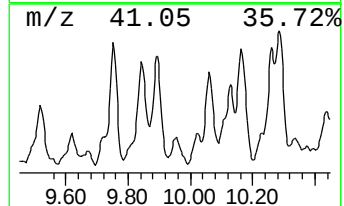
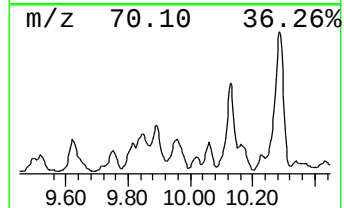
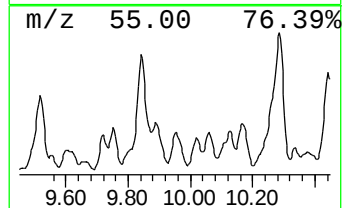
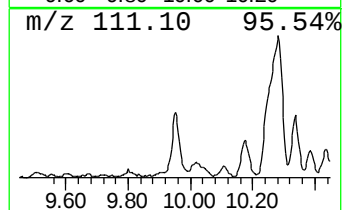
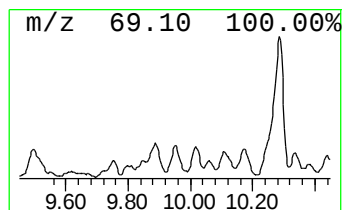
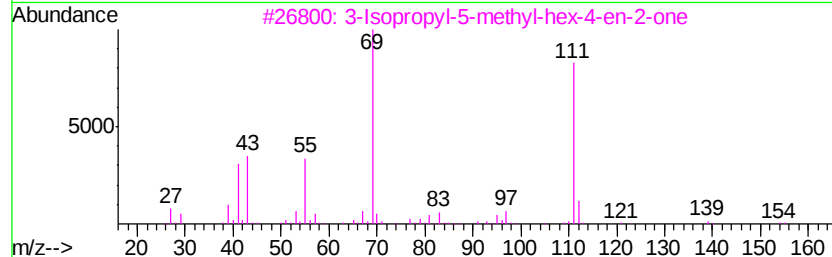
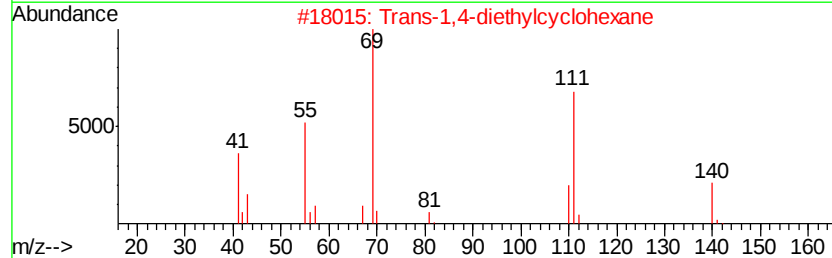
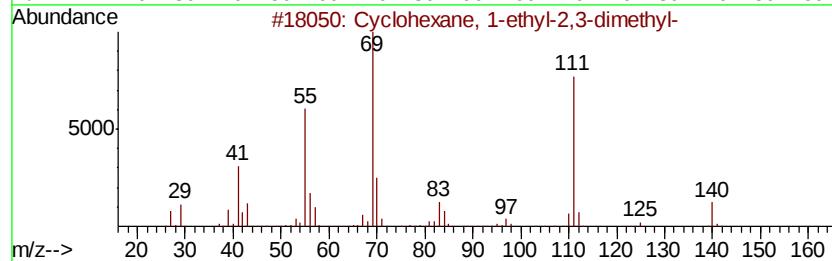
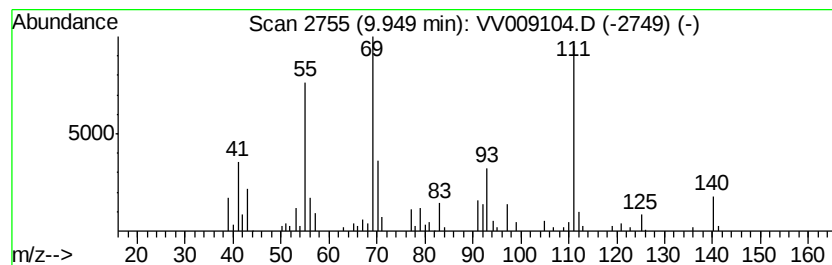
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 21 (DEL) Alkane: Cyclic9.95 Concentration Rank 28

| R.T. | EstConc    | Area   | Relative to ISTD | R.T. |
|------|------------|--------|------------------|------|
| 9.95 | 17.01 ug/L | 111941 | Chlorobenzene-d5 | 8.90 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclohexane, 1-ethyl-2,3-dimethyl-  | 140 | C10H20  | 007058-05-1 | 80   |
| 2    |    | Trans-1,4-diethylcyclohexane        | 140 | C10H20  | 013990-93-7 | 58   |
| 3    |    | 3-Isopropyl-5-methyl-hex-4-en-2-one | 154 | C10H18O | 077142-85-9 | 53   |
| 4    |    | Cyclooctane, (1-methylpropyl)-      | 168 | C12H24  | 016538-89-9 | 53   |
| 5    |    | Cyclohexane, 1,1,3-trimethyl-       | 126 | C9H18   | 003073-66-3 | 53   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

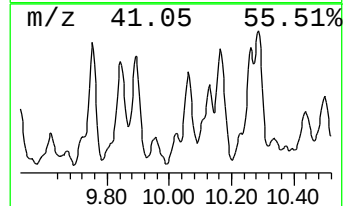
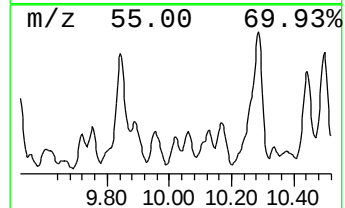
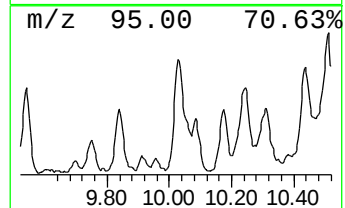
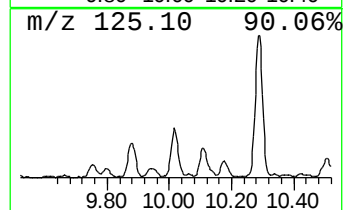
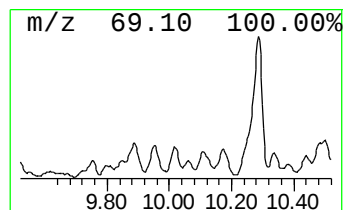
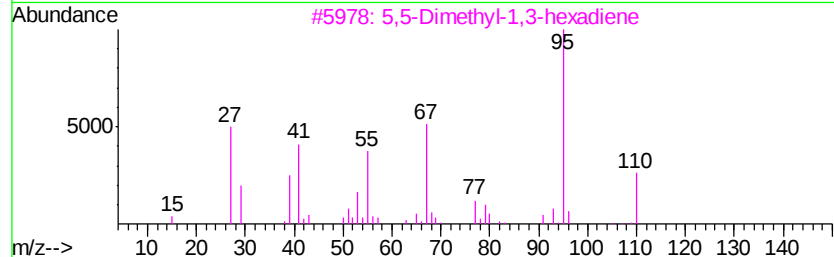
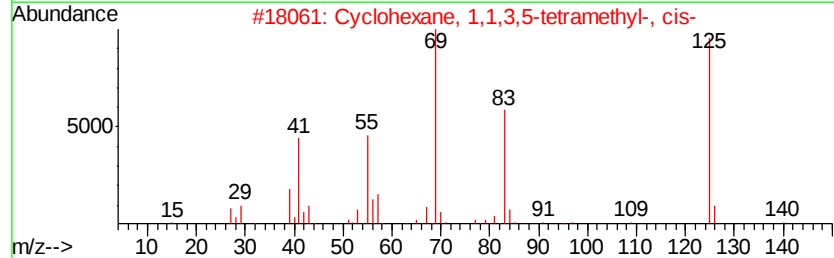
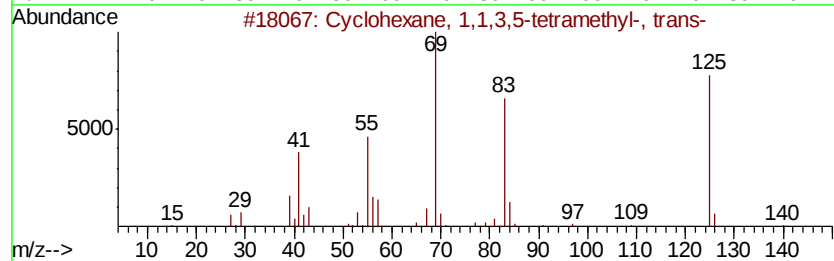
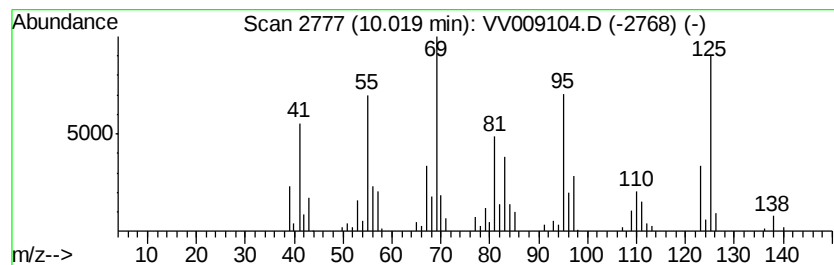
Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 22 (DEL) Alkane: Cyclic10.02 Concentration Rank 25

| R.T.    | EstConc    | Area                                | Relative to ISTD | R.T.    |             |      |
|---------|------------|-------------------------------------|------------------|---------|-------------|------|
| 10.02   | 19.39 ug/L | 127545                              | Chlorobenzene-d5 | 8.90    |             |      |
| Hit# of | 5          | Tentative ID                        | MW               | MolForm | CAS#        | Qual |
| 1       |            | Cyclohexane, 1,1,3,5-tetramethyl... | 140              | C10H20  | 050876-31-8 | 46   |
| 2       |            | Cyclohexane, 1,1,3,5-tetramethyl... | 140              | C10H20  | 050876-32-9 | 38   |
| 3       |            | 5,5-Dimethyl-1,3-hexadiene          | 110              | C8H14   | 001515-79-3 | 35   |
| 4       |            | 5,5-Dimethyl-1,3-hexadiene          | 110              | C8H14   | 001515-79-3 | 35   |
| 5       |            | Cyclopentane, butyl-                | 126              | C9H18   | 002040-95-1 | 30   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

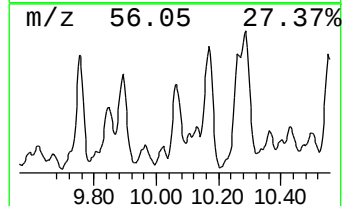
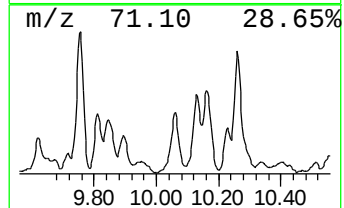
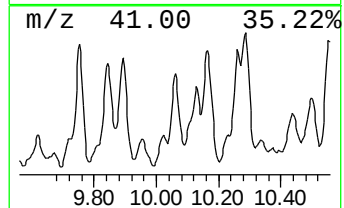
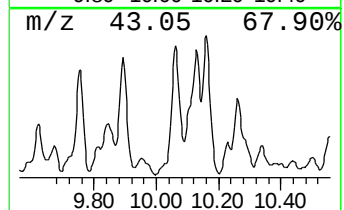
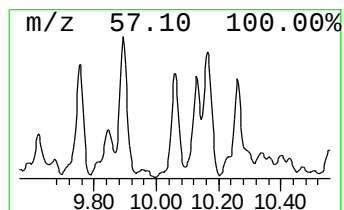
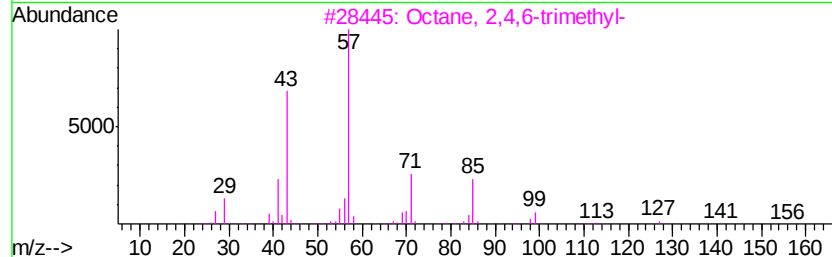
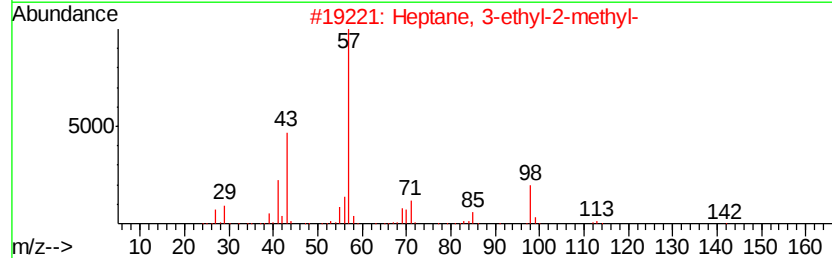
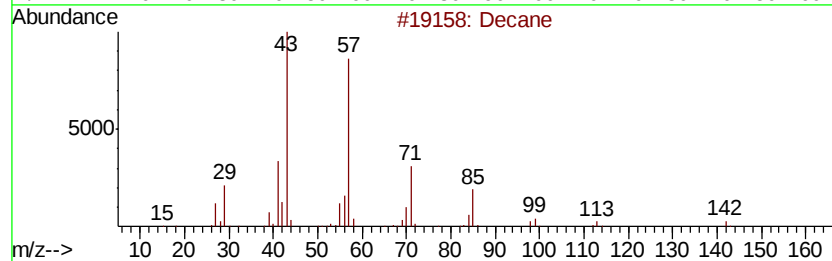
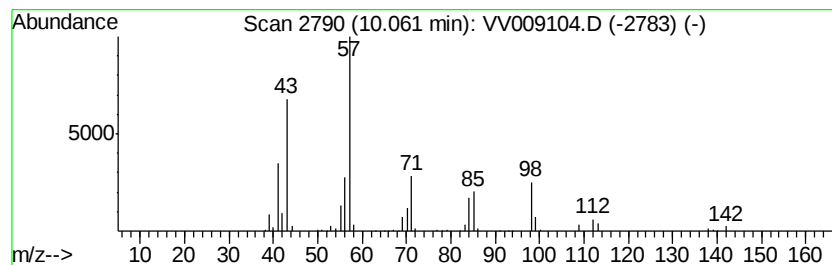
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MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 23 (DEL) Alkane: Straight-Chai... Concentration Rank 22

| R.T.    | EstConc                    | Area         | Relative to ISTD | R.T.    |             |      |
|---------|----------------------------|--------------|------------------|---------|-------------|------|
| 10.06   | 26.18 ug/L                 | 172243       | Chlorobenzene-d5 | 8.90    |             |      |
| Hit# of | 5                          | Tentative ID | MW               | MolForm | CAS#        | Qual |
| 1       | Decane                     |              | 142              | C10H22  | 000124-18-5 | 58   |
| 2       | Heptane, 3-ethyl-2-methyl- |              | 142              | C10H22  | 014676-29-0 | 50   |
| 3       | Octane, 2,4,6-trimethyl-   |              | 156              | C11H24  | 062016-37-9 | 50   |
| 4       | Decane, 2,5,6-trimethyl-   |              | 184              | C13H28  | 062108-23-0 | 50   |
| 5       | Heptane, 3-ethyl-2-methyl- |              | 142              | C10H22  | 014676-29-0 | 47   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

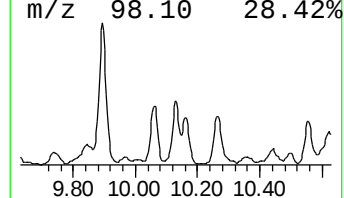
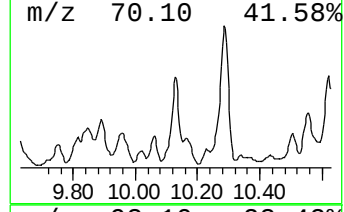
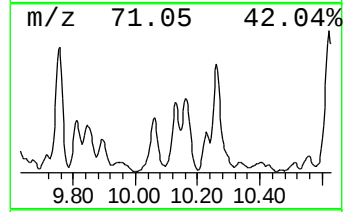
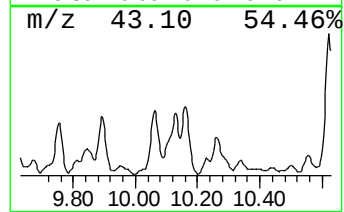
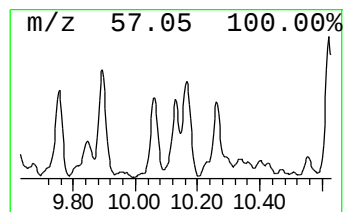
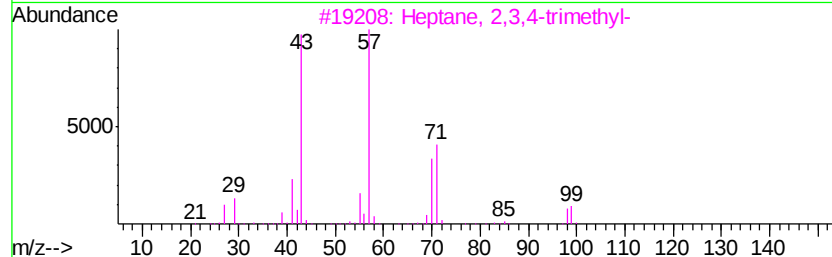
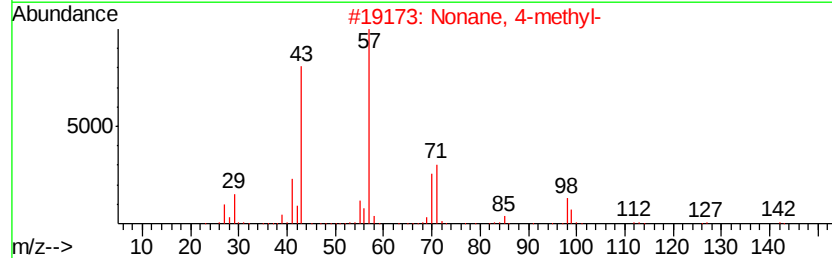
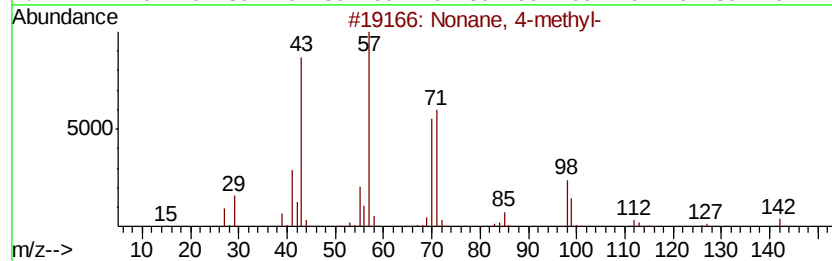
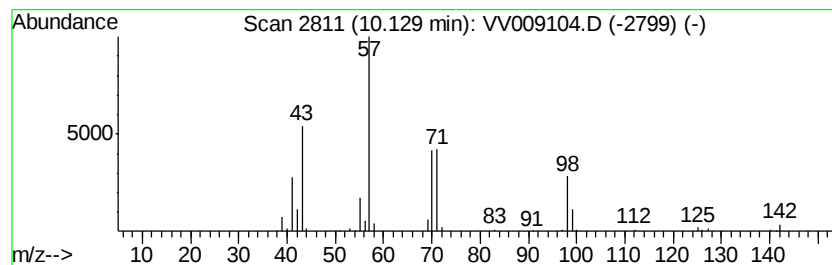
Instrument :  
MSVOA\_V  
ClientSampled :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 24 (DEL) Alkane: Straight-Chai... Concentration Rank 19

| R.T.    | EstConc    | Area                          | Relative to ISTD       | R.T.           |
|---------|------------|-------------------------------|------------------------|----------------|
| 10.13   | 31.53 ug/L | 161035                        | 1,4-Dichlorobenzene-d4 | 11.30          |
| Hit# of | 5          | Tentative ID                  | MW MolForm             | CAS# Qual      |
| 1       |            | Nonane, 4-methyl-             | 142 C10H22             | 017301-94-9 86 |
| 2       |            | Nonane, 4-methyl-             | 142 C10H22             | 017301-94-9 72 |
| 3       |            | Heptane, 2,3,4-trimethyl-     | 142 C10H22             | 052896-95-4 64 |
| 4       |            | Octane, 2,5-dimethyl-         | 142 C10H22             | 015869-89-3 59 |
| 5       |            | Pentane, 2,2,3,3-tetramethyl- | 128 C9H20              | 007154-79-2 59 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

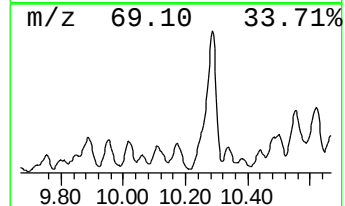
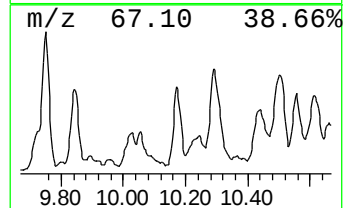
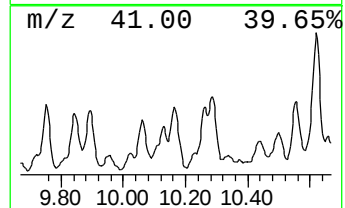
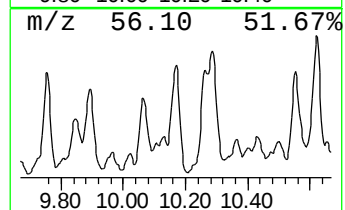
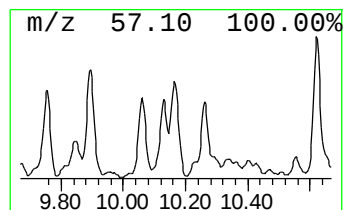
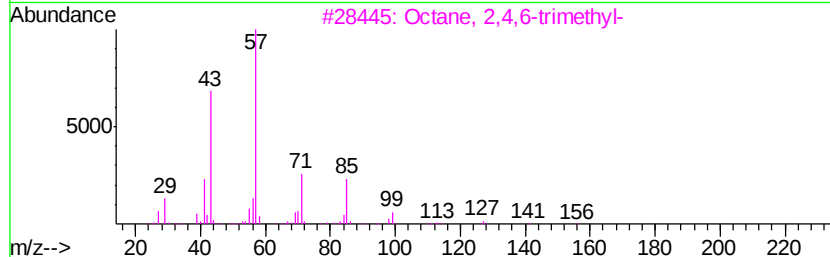
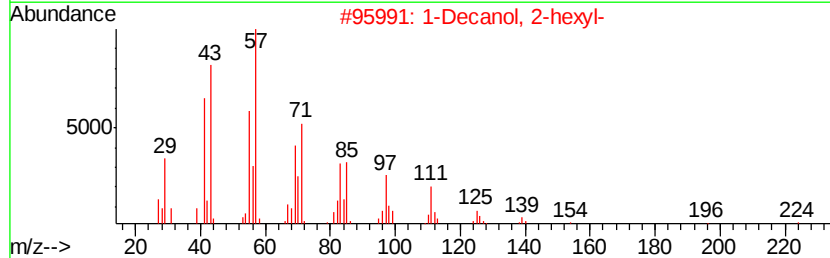
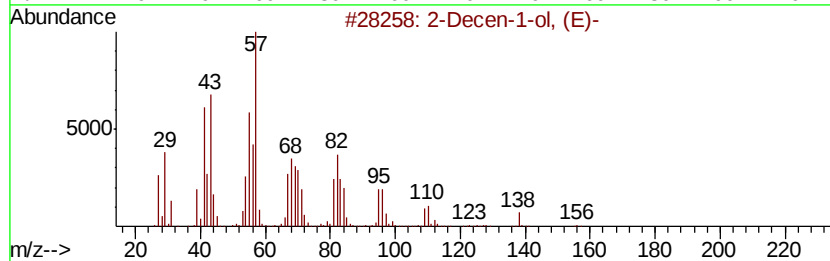
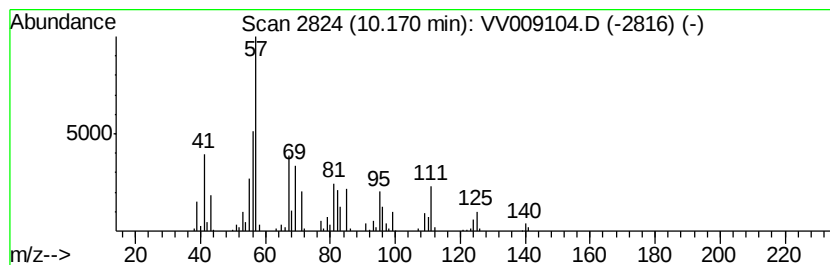
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 25 unknown-02 Concentration Rank 6

| R.T.  | EstConc    | Area   | Relative to ISTD       | R.T.  |
|-------|------------|--------|------------------------|-------|
| 10.17 | 61.54 ug/L | 314305 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | 5 | Tentative ID             | MW  | MolForm  | CAS#        | Qual |
|------|----|---|--------------------------|-----|----------|-------------|------|
| 1    |    |   | 2-Decen-1-ol, (E)-       | 156 | C10H20O  | 018409-18-2 | 38   |
| 2    |    |   | 1-Decanol, 2-hexyl-      | 242 | C16H34O  | 002425-77-6 | 37   |
| 3    |    |   | Octane, 2,4,6-trimethyl- | 156 | C11H24   | 062016-37-9 | 35   |
| 4    |    |   | Ether, heptyl hexyl      | 200 | C13H28O  | 007289-40-9 | 35   |
| 5    |    |   | Hexyl isobutyl carbonate | 202 | C11H22O3 | 959067-98-2 | 35   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

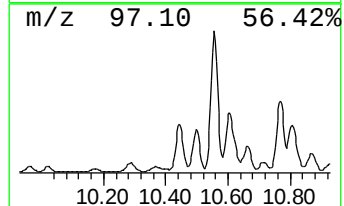
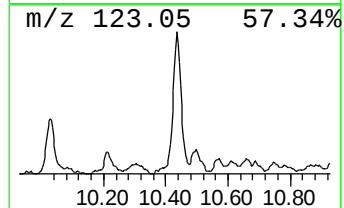
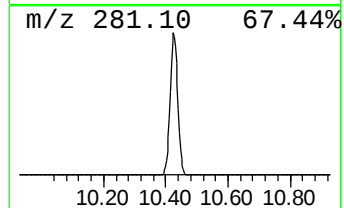
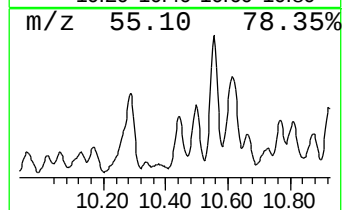
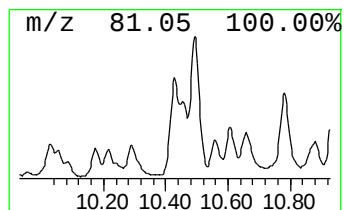
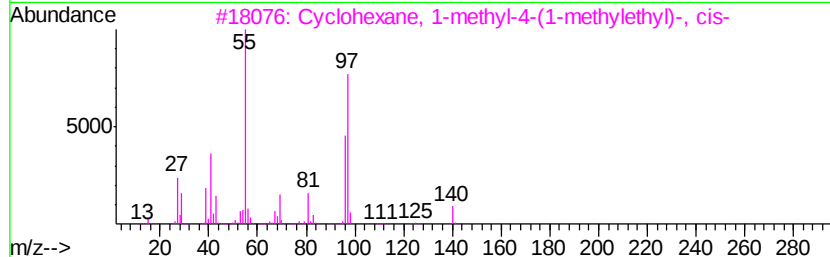
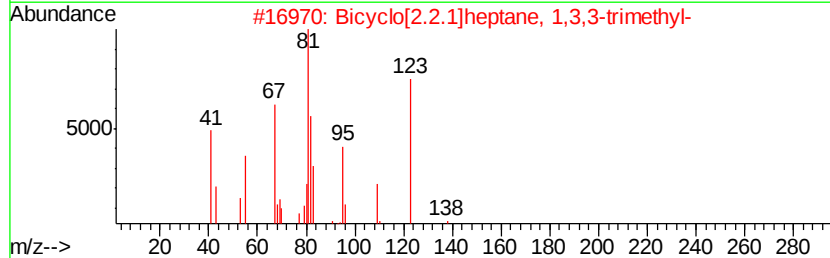
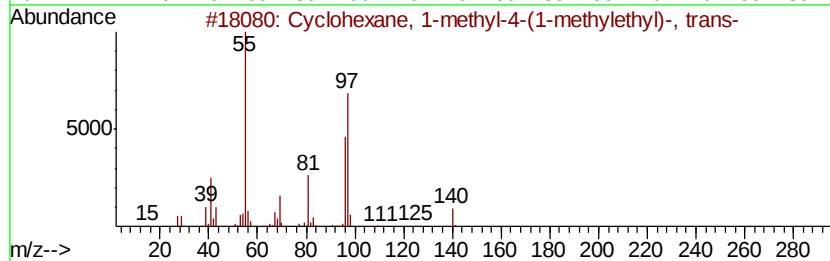
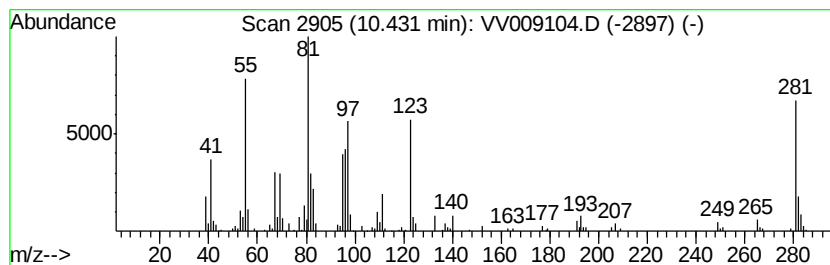
Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 26 (DEL) Alkane: Cyclic10.43 Concentration Rank 12

| R.T.    | EstConc    | Area                                  | Relative to ISTD       | R.T.    |             |      |
|---------|------------|---------------------------------------|------------------------|---------|-------------|------|
| 10.43   | 46.25 ug/L | 236208                                | 1,4-Dichlorobenzene-d4 | 11.30   |             |      |
| Hit# of | 5          | Tentative ID                          | MW                     | MolForm | CAS#        | Qual |
| 1       |            | Cyclohexane, 1-methyl-4-(1-methyl-... | 140                    | C10H20  | 001678-82-6 | 38   |
| 2       |            | Bicyclo[2.2.1]heptane, 1,3,3-tri...   | 138                    | C10H18  | 006248-88-0 | 38   |
| 3       |            | Cyclohexane, 1-methyl-4-(1-methyl-... | 140                    | C10H20  | 006069-98-3 | 30   |
| 4       |            | 1-Methyl-4-(1-methylethyl)-cyclo...   | 140                    | C10H20  | 000099-82-1 | 30   |
| 5       |            | Cyclohexene, 4-methyl-                | 96                     | C7H12   | 000591-47-9 | 25   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

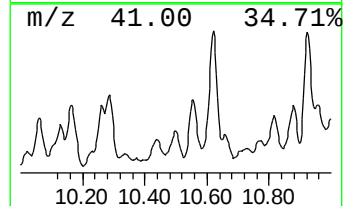
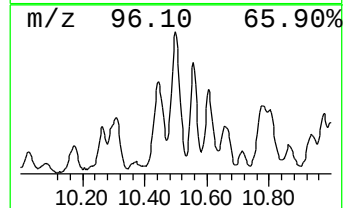
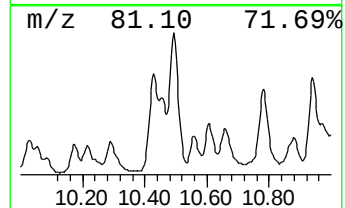
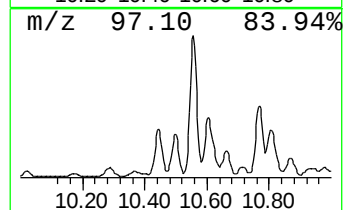
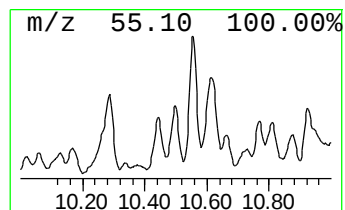
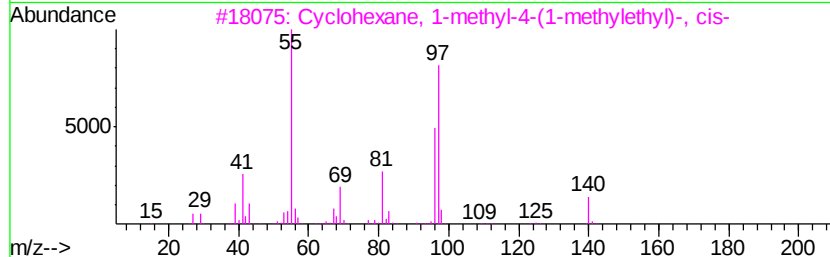
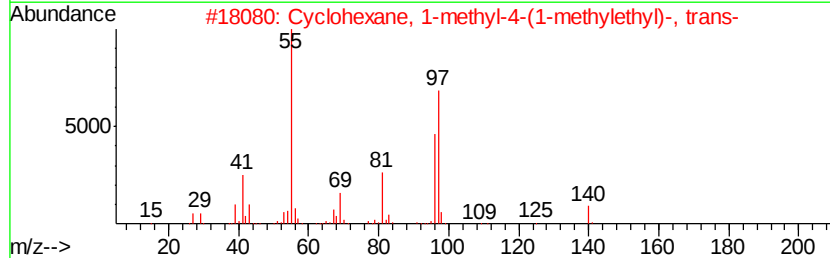
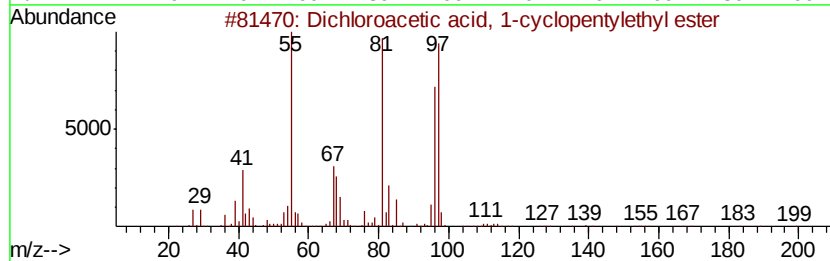
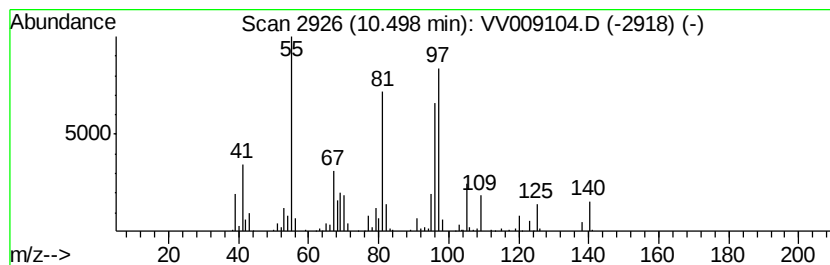
Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 27 Dichloroacetic acid, 1-cycl... Concentration Rank 11

| R.T.    | EstConc                             | Area         | Relative to ISTD       | R.T.         |      |      |
|---------|-------------------------------------|--------------|------------------------|--------------|------|------|
| 10.50   | 47.24 ug/L                          | 241257       | 1,4-Dichlorobenzene-d4 | 11.30        |      |      |
| Hit# of | 5                                   | Tentative ID | MW                     | MolForm      | CAS# | Qual |
| 1       | Dichloroacetic acid, 1-cyclopent... | 224          | C9H14Cl2O2             | 1000282-56-3 | 53   |      |
| 2       | Cyclohexane, 1-methyl-4-(1-methv... | 140          | C10H20                 | 001678-82-6  | 52   |      |
| 3       | Cyclohexane, 1-methyl-4-(1-methv... | 140          | C10H20                 | 006069-98-3  | 52   |      |
| 4       | Cyclohexane, 1-methyl-4-(1-methv... | 140          | C10H20                 | 006069-98-3  | 52   |      |
| 5       | m-Menthane, (1S,3S)-(+)-            | 140          | C10H20                 | 013837-67-7  | 50   |      |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

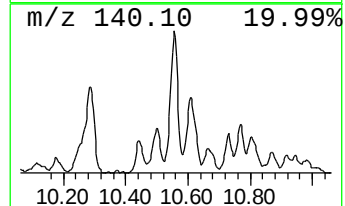
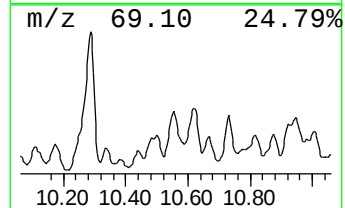
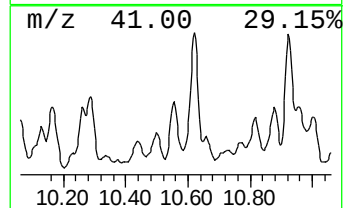
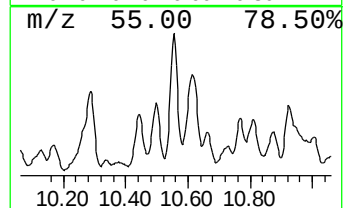
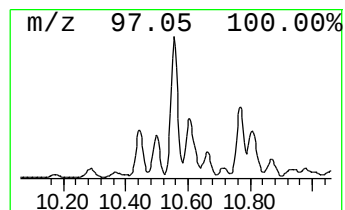
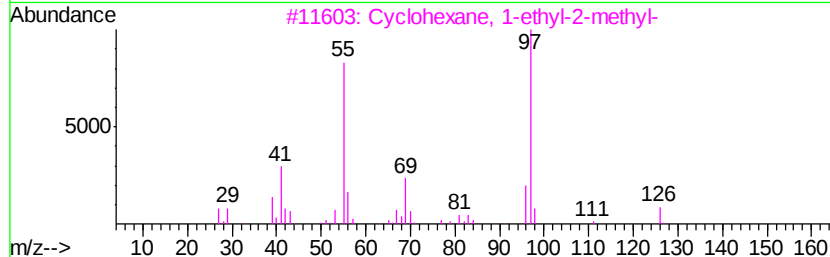
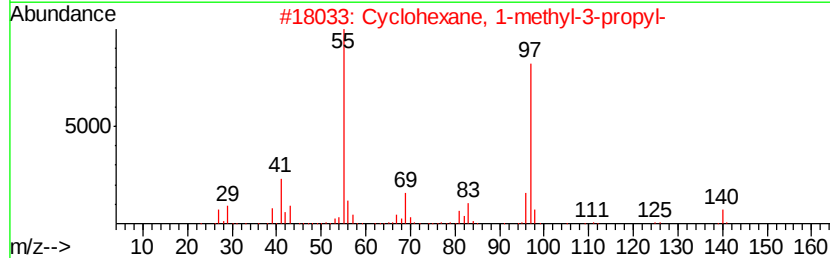
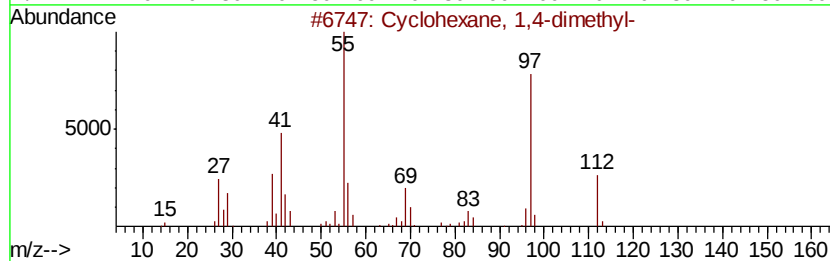
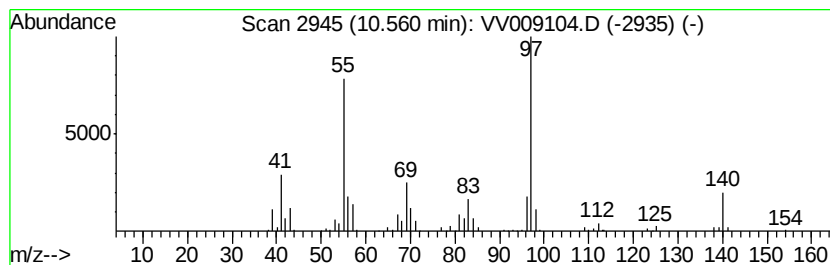
Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 28 (DEL) Alkane: Cyclic10.56 Concentration Rank 4

| R.T.      | EstConc                             | Area   | Relative to ISTD       | R.T.         |      |
|-----------|-------------------------------------|--------|------------------------|--------------|------|
| 10.56     | 73.87 ug/L                          | 377277 | 1,4-Dichlorobenzene-d4 | 11.30        |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm                | CAS#         | Qual |
| 1         | Cvclohexane, 1,4-dimethyl-          | 112    | C8H16                  | 000589-90-2  | 72   |
| 2         | Cvclohexane, 1-methyl-3-propyl-     | 140    | C10H20                 | 004291-80-9  | 72   |
| 3         | Cvclohexane, 1-ethyl-2-methyl-      | 126    | C9H18                  | 003728-54-9  | 72   |
| 4         | Sulfurous acid, cyclohexylmethyl... | 430    | C25H50O3S              | 1000309-22-6 | 64   |
| 5         | Cyclohexane, 1,1-dimethyl-          | 112    | C8H16                  | 000590-66-9  | 62   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

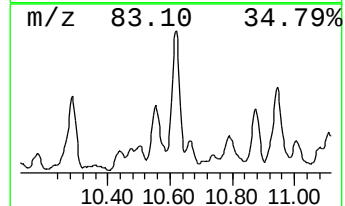
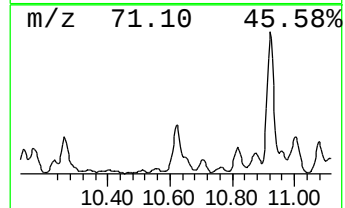
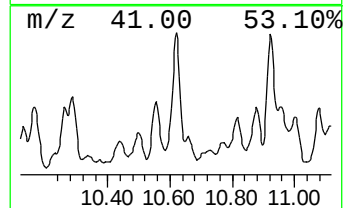
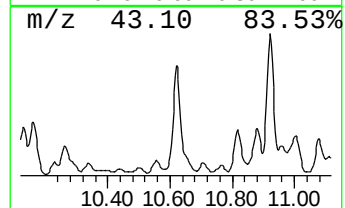
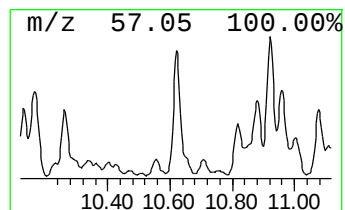
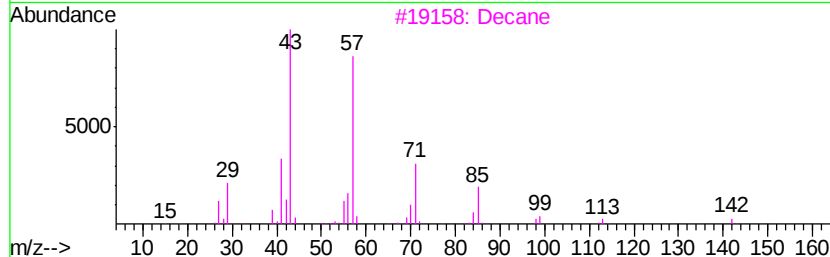
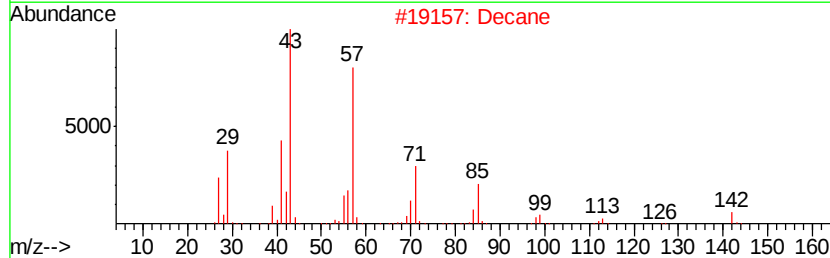
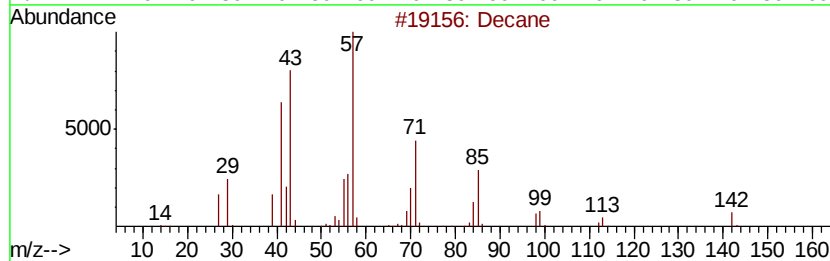
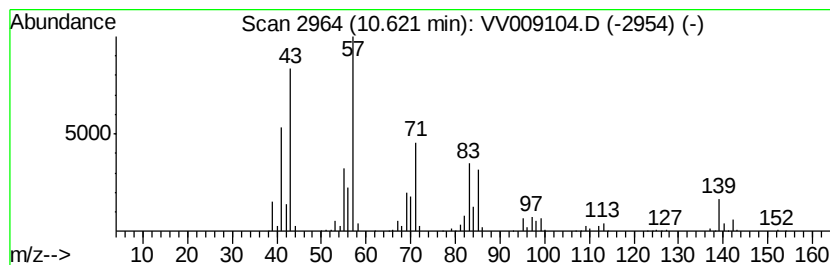
Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 29 (DEL) Alkane: Straight-Chai... Concentration Rank 2

| R.T.    | EstConc     | Area         | Relative to ISTD       | R.T.           |
|---------|-------------|--------------|------------------------|----------------|
| 10.62   | 101.13 ug/L | 516511       | 1,4-Dichlorobenzene-d4 | 11.30          |
| Hit# of | 5           | Tentative ID | MW MolForm             | CAS# Qual      |
| 1       | Decane      |              | 142 C10H22             | 000124-18-5 95 |
| 2       | Decane      |              | 142 C10H22             | 000124-18-5 93 |
| 3       | Decane      |              | 142 C10H22             | 000124-18-5 89 |
| 4       | Decane      |              | 142 C10H22             | 000124-18-5 76 |
| 5       | Tetradecane |              | 198 C14H30             | 000629-59-4 53 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

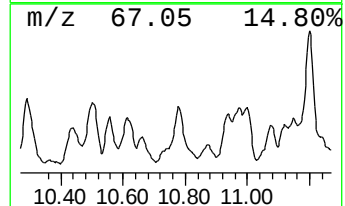
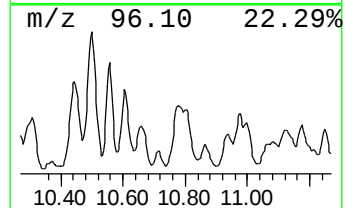
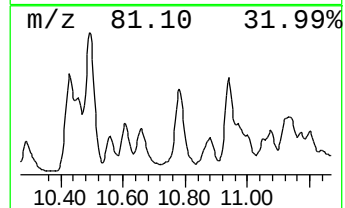
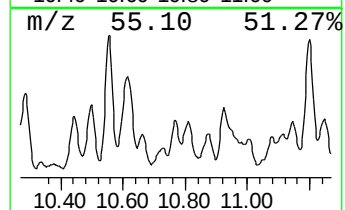
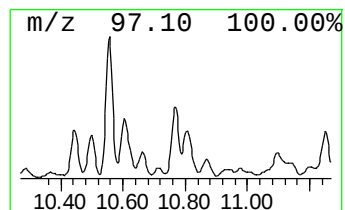
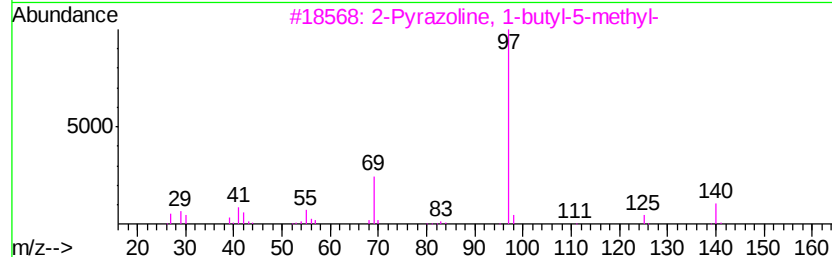
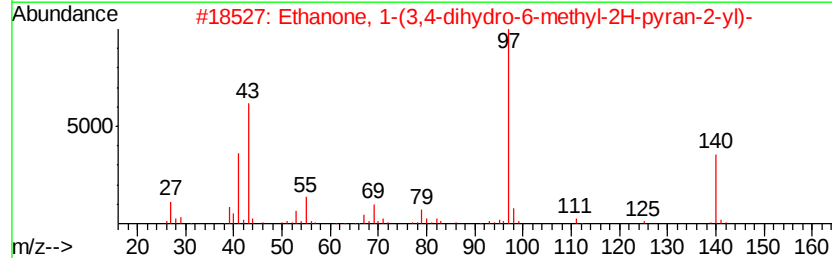
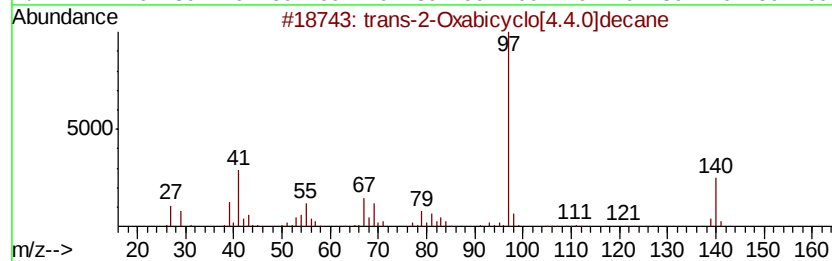
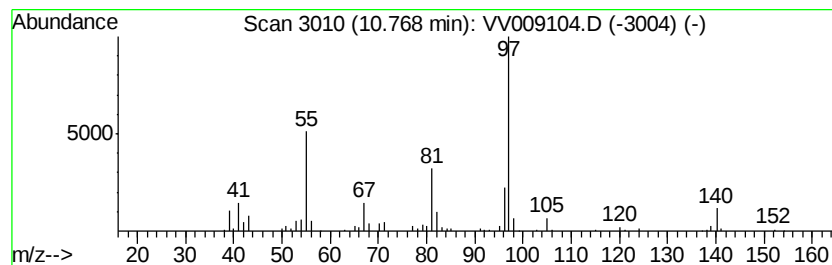
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 30 trans-2-Oxabicyclo[4.4.0]de... Concentration Rank 24

| R.T.  | EstConc    | Area   | Relative to ISTD       | R.T.  |
|-------|------------|--------|------------------------|-------|
| 10.77 | 25.01 ug/L | 127714 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | trans-2-Oxabicyclo[4.4.0]decane     | 140 | C9H16O  | 059958-46-2 | 53   |
| 2    |    | Ethanone, 1-(3,4-dihydro-6-methy... | 140 | C8H12O2 | 028450-02-4 | 46   |
| 3    |    | 2-Pyrazoline, 1-butyl-5-methyl-     | 140 | C8H16N2 | 022581-50-6 | 43   |
| 4    |    | Cyclopentane, 1,1'-ethylidenebis-   | 166 | C12H22  | 004413-21-2 | 42   |
| 5    |    | Cyclohexane, 1-methyl-2-propyl-     | 140 | C10H20  | 004291-79-6 | 42   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

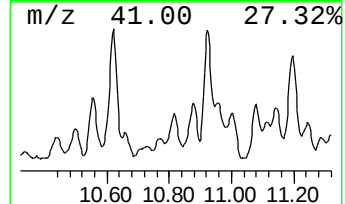
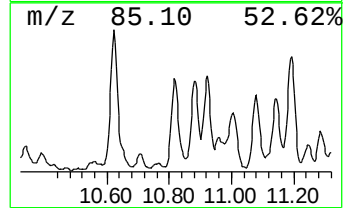
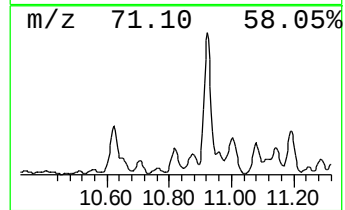
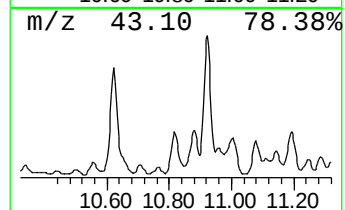
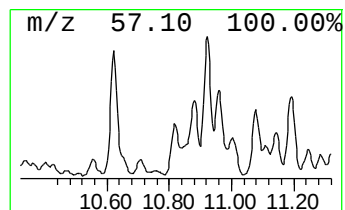
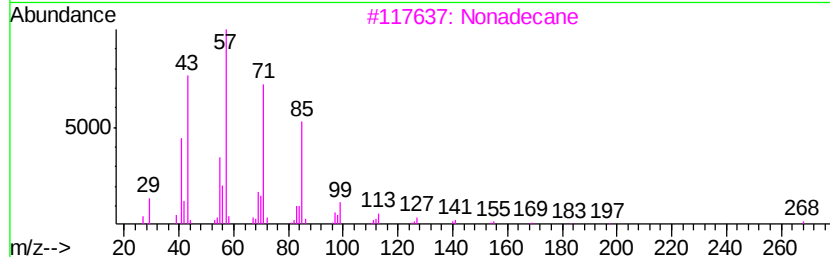
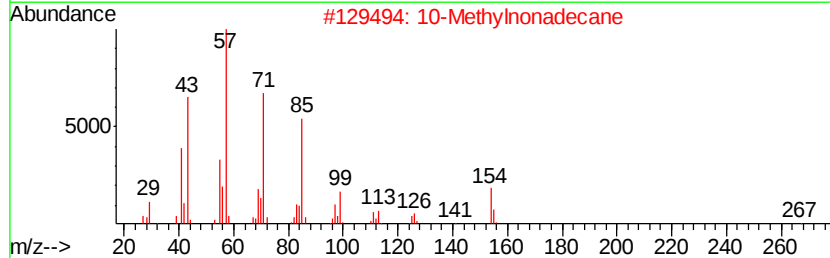
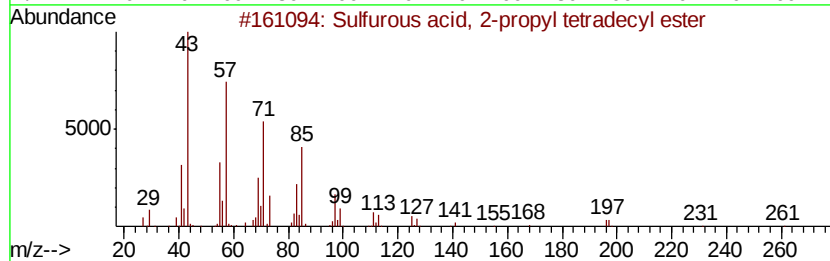
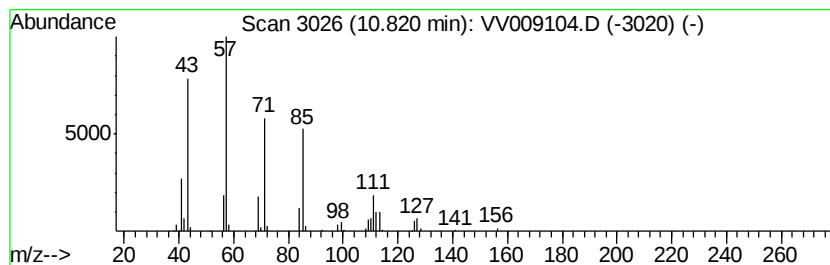
Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

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Peak Number 31 Sulfurous acid, 2-propyl te... Concentration Rank 21

| R.T.    | EstConc    | Area                                 | Relative to ISTD       | R.T.            |
|---------|------------|--------------------------------------|------------------------|-----------------|
| 10.82   | 29.28 ug/L | 149541                               | 1,4-Dichlorobenzene-d4 | 11.30           |
| Hit# of | 5          | Tentative ID                         | MW MolForm             | CAS# Qual       |
| 1       |            | Sulfurous acid, 2-propyl tetradec... | 320 C17H36O3S          | 1000309-12-5 72 |
| 2       |            | 10-Methylnonadecane                  | 282 C20H42             | 056862-62-5 72  |
| 3       |            | Nonadecane                           | 268 C19H40             | 000629-92-5 72  |
| 4       |            | Tetratetracontane                    | 619 C44H90             | 007098-22-8 72  |
| 5       |            | Nonane, 4,5-dimethyl-                | 156 C11H24             | 017302-23-7 70  |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

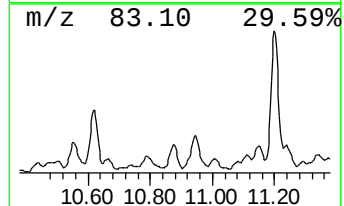
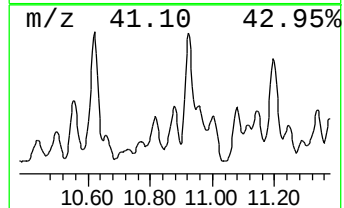
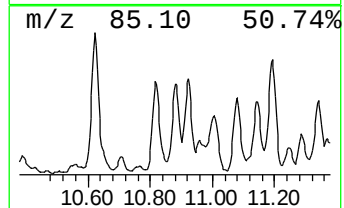
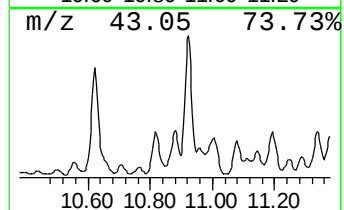
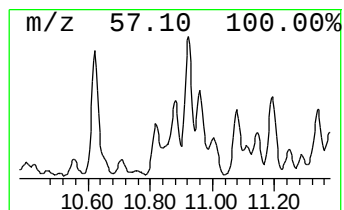
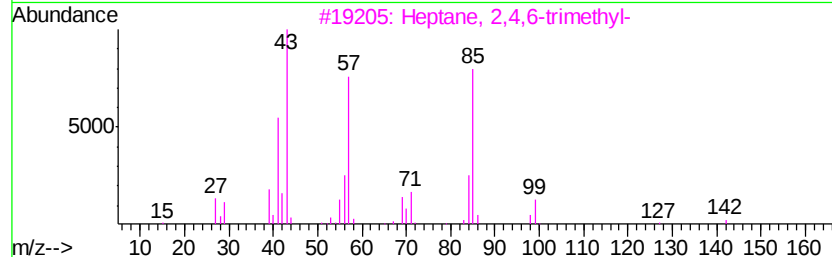
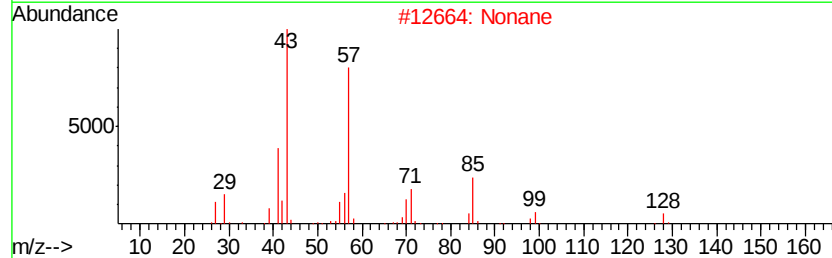
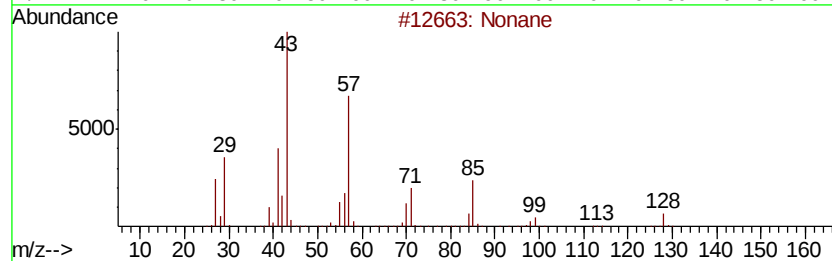
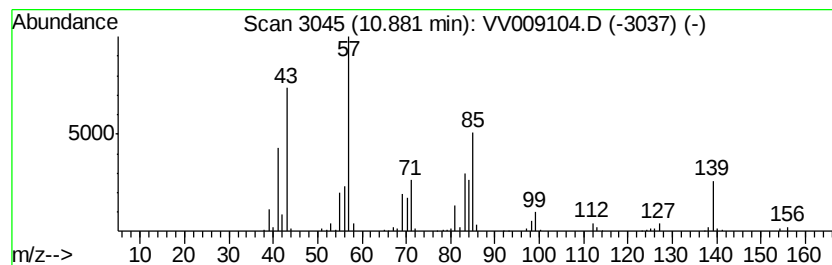
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 32 (DEL) Alkane: Straight-Chai... Concentration Rank 18

| R.T.  | EstConc    | Area   | Relative to ISTD       | R.T.  |
|-------|------------|--------|------------------------|-------|
| 10.88 | 33.69 ug/L | 172084 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | Nonane                    | 128 | C9H20   | 000111-84-2 | 47   |
| 2    |    | Nonane                    | 128 | C9H20   | 000111-84-2 | 47   |
| 3    |    | Heptane, 2,4,6-trimethyl- | 142 | C10H22  | 002613-61-8 | 43   |
| 4    |    | Octane                    | 114 | C8H18   | 000111-65-9 | 43   |
| 5    |    | Hexane, 2,4-dimethyl-     | 114 | C8H18   | 000589-43-5 | 43   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

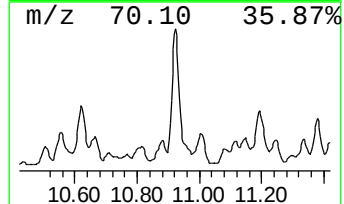
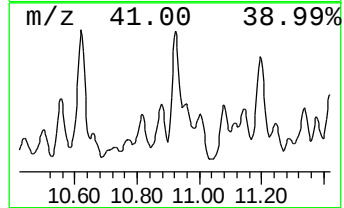
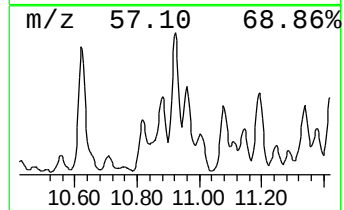
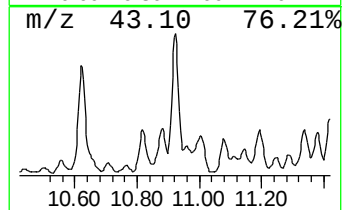
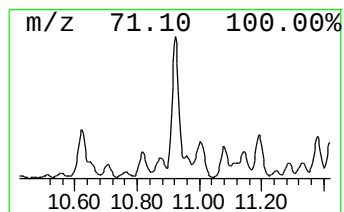
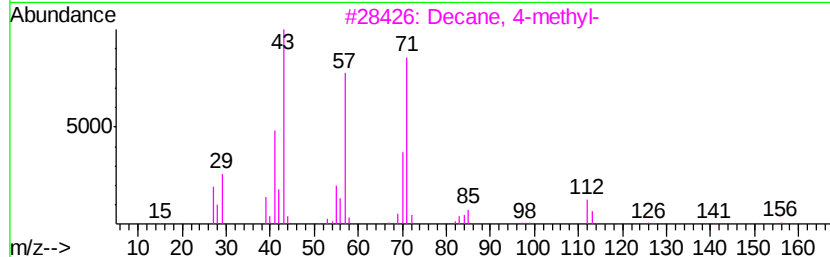
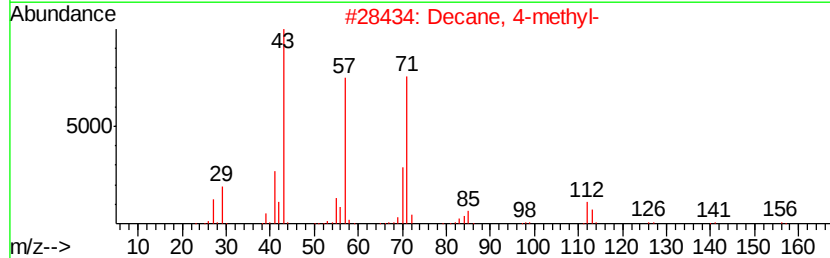
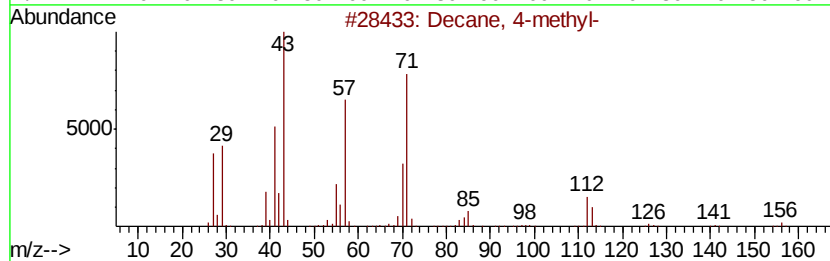
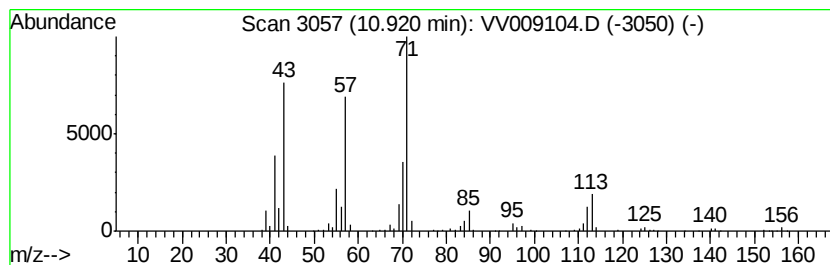
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 33 (DEL) Alkane: Straight-Chai... Concentration Rank 1

| R.T.  | EstConc     | Area   | Relative to ISTD       | R.T.  |
|-------|-------------|--------|------------------------|-------|
| 10.92 | 116.93 ug/L | 597201 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | Tentative ID              | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------|-----|---------|-------------|------|
| 1    | 5  | Decane, 4-methyl-         | 156 | C11H24  | 002847-72-5 | 90   |
| 2    |    | Decane, 4-methyl-         | 156 | C11H24  | 002847-72-5 | 87   |
| 3    |    | Decane, 4-methyl-         | 156 | C11H24  | 002847-72-5 | 83   |
| 4    |    | Nonane, 2,6-dimethyl-     | 156 | C11H24  | 017302-28-2 | 83   |
| 5    |    | Heptane, 3,3,5-trimethyl- | 142 | C10H22  | 007154-80-5 | 72   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

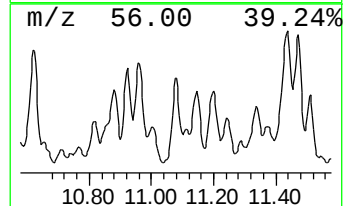
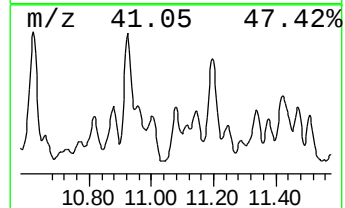
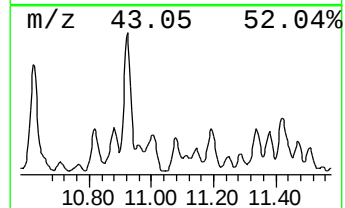
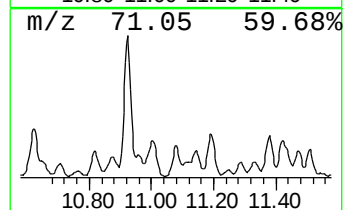
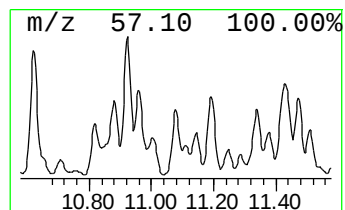
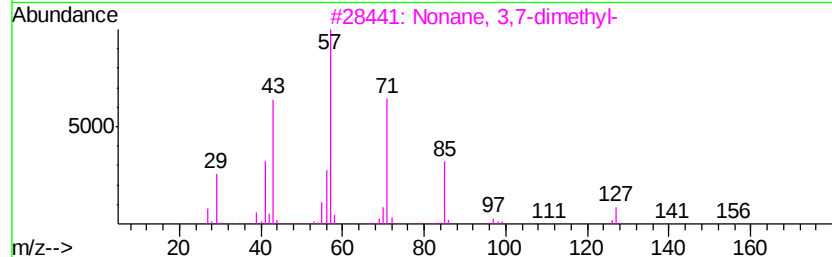
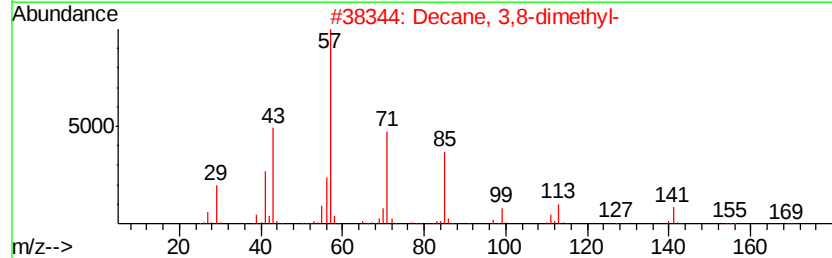
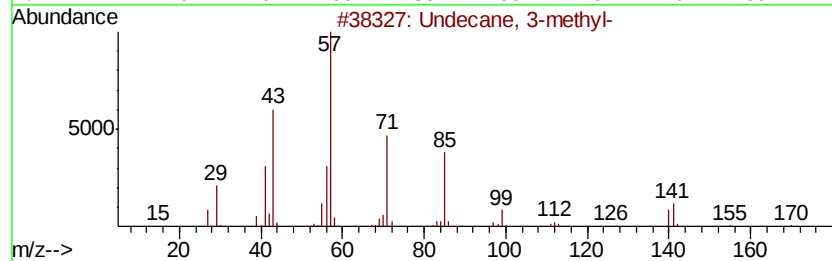
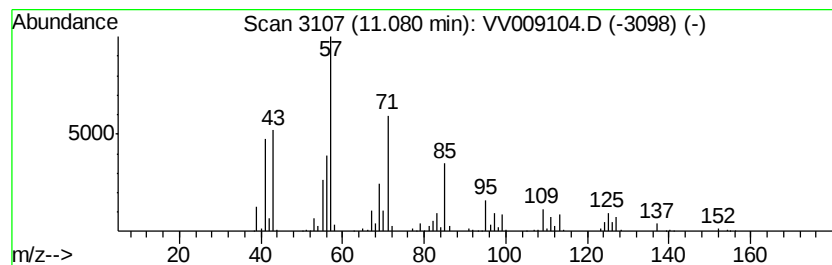
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 34 (DEL) Alkane: Straight-Chai... Concentration Rank 9

| R.T.  | EstConc    | Area   | Relative to ISTD       | R.T.  |
|-------|------------|--------|------------------------|-------|
| 11.08 | 51.83 ug/L | 264690 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | 5 | Tentative ID          | MW  | MolForm | CAS#        | Qual |
|------|----|---|-----------------------|-----|---------|-------------|------|
| 1    |    |   | Undecane, 3-methyl-   | 170 | C12H26  | 001002-43-3 | 53   |
| 2    |    |   | Decane, 3,8-dimethyl- | 170 | C12H26  | 017312-55-9 | 53   |
| 3    |    |   | Nonane, 3,7-dimethyl- | 156 | C11H24  | 017302-32-8 | 53   |
| 4    |    |   | Undecane, 5-ethyl-    | 184 | C13H28  | 017453-94-0 | 50   |
| 5    |    |   | Tridecane, 6-methyl-  | 198 | C14H30  | 013287-21-3 | 50   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

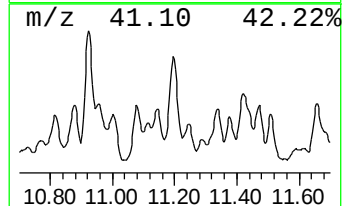
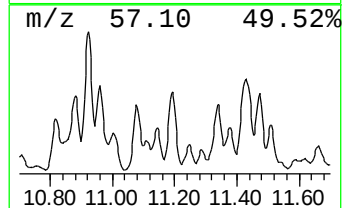
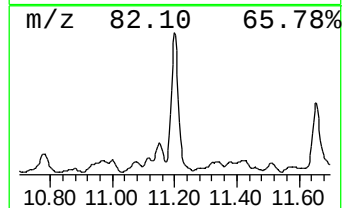
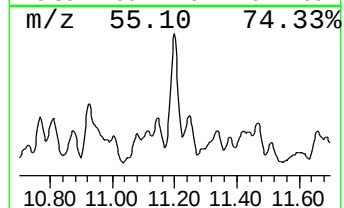
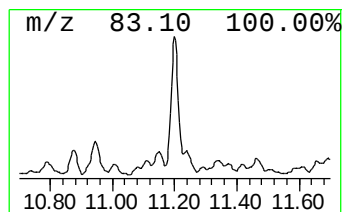
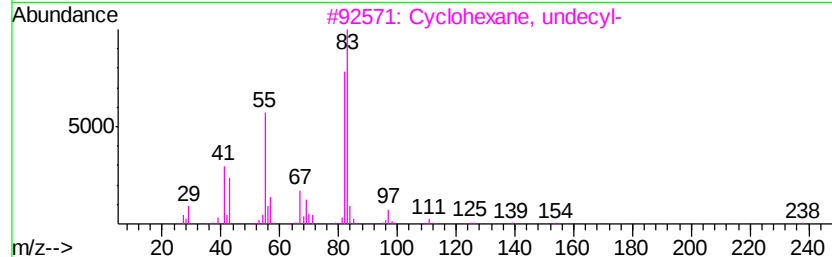
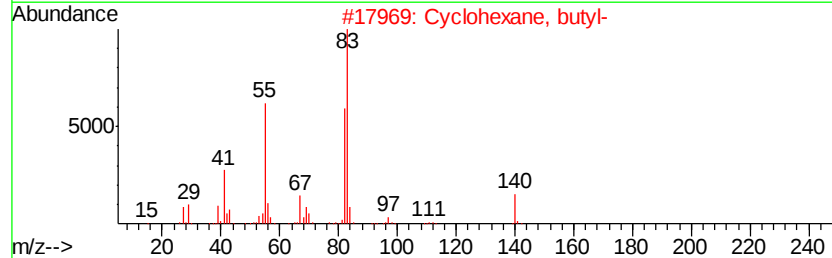
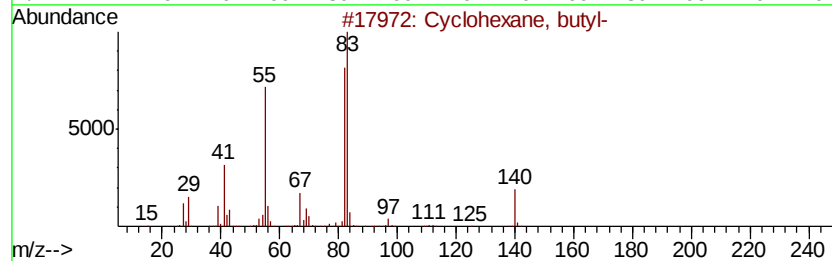
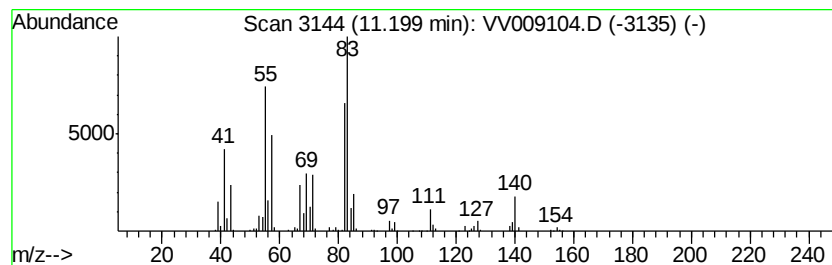
Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 35 (DEL) Alkane: Cyclic11.20 Concentration Rank 3

| R.T.    | EstConc    | Area                          | Relative to ISTD       | R.T.    |             |      |
|---------|------------|-------------------------------|------------------------|---------|-------------|------|
| 11.20   | 90.82 ug/L | 463826                        | 1,4-Dichlorobenzene-d4 | 11.30   |             |      |
| Hit# of | 5          | Tentative ID                  | MW                     | MolForm | CAS#        | Qual |
| 1       |            | Cvclohexane, butyl-           | 140                    | C10H20  | 001678-93-9 | 58   |
| 2       |            | Cvclohexane, butyl-           | 140                    | C10H20  | 001678-93-9 | 58   |
| 3       |            | Cvclohexane, undecvl-         | 238                    | C17H34  | 054105-66-7 | 53   |
| 4       |            | Cvclohexane, butyl-           | 140                    | C10H20  | 001678-93-9 | 53   |
| 5       |            | Cyclohexane, (1-methylethyl)- | 126                    | C9H18   | 000696-29-7 | 50   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

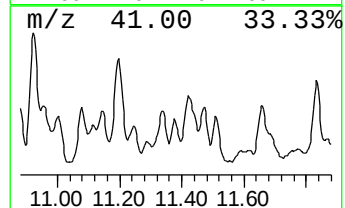
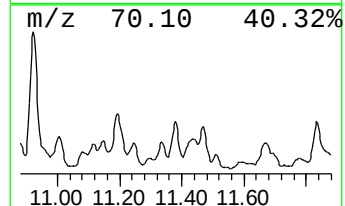
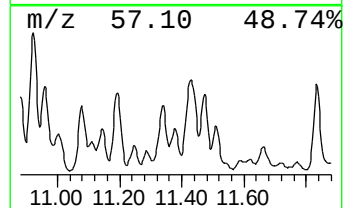
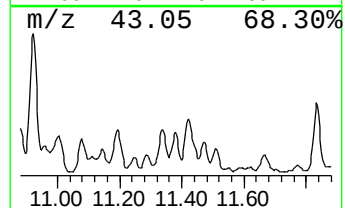
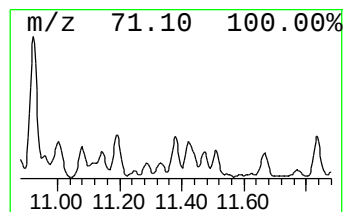
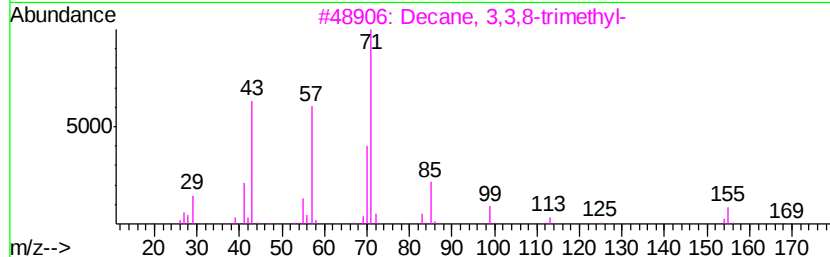
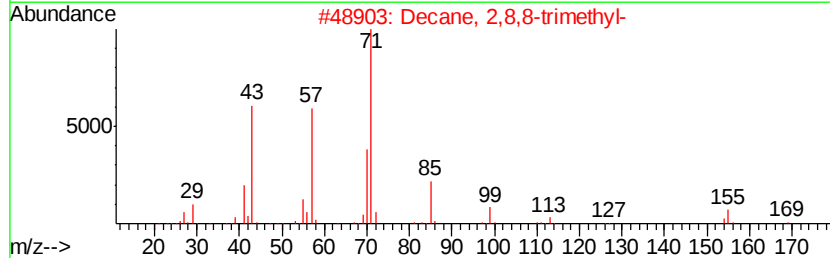
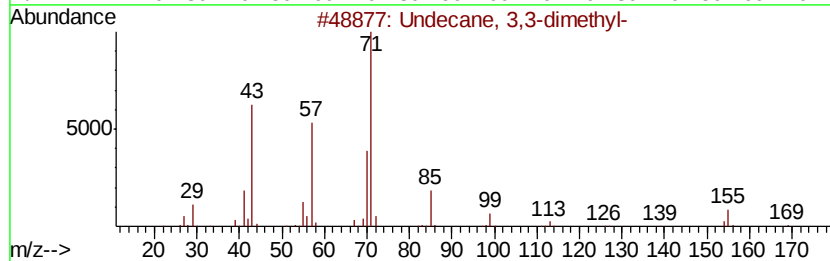
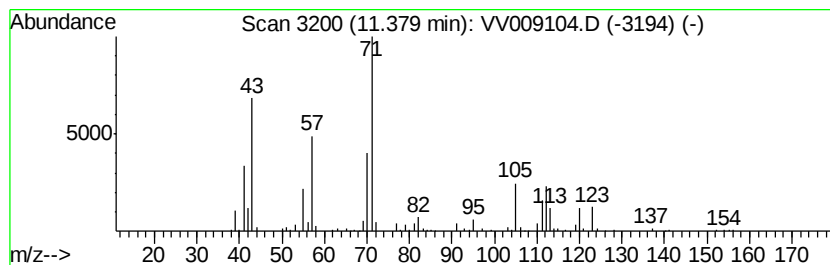
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 36 (DEL) Alkane: Straight-Chai... Concentration Rank 23

| R.T.  | EstConc    | Area   | Relative to ISTD       | R.T.  |
|-------|------------|--------|------------------------|-------|
| 11.38 | 25.27 ug/L | 129042 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | Tentative ID                       | MW  | MolForm | CAS#         | Qual |
|------|----|------------------------------------|-----|---------|--------------|------|
| 1    | 5  | Undecane, 3,3-dimethyl-            | 184 | C13H28  | 017312-65-1  | 47   |
| 2    |    | Decane, 2,8,8-trimethyl-           | 184 | C13H28  | 1000060-81-2 | 47   |
| 3    |    | Decane, 3,3,8-trimethyl-           | 184 | C13H28  | 062338-16-3  | 47   |
| 4    |    | Butanoic acid, 2-methylbutyl ester | 158 | C9H18O2 | 051115-64-1  | 43   |
| 5    |    | Heptane, 3,3,5-trimethyl-          | 142 | C10H22  | 007154-80-5  | 43   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

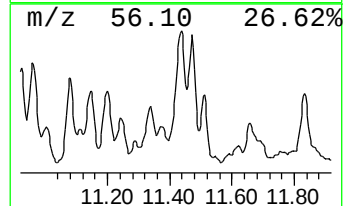
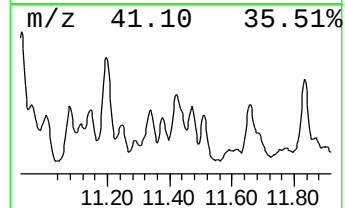
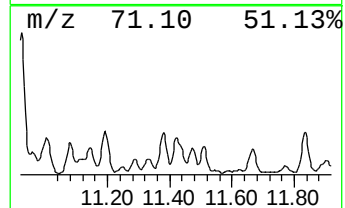
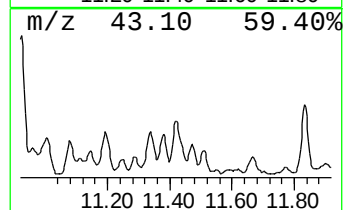
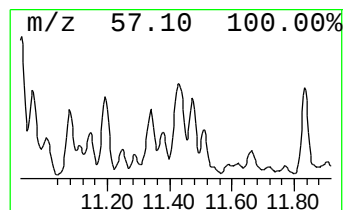
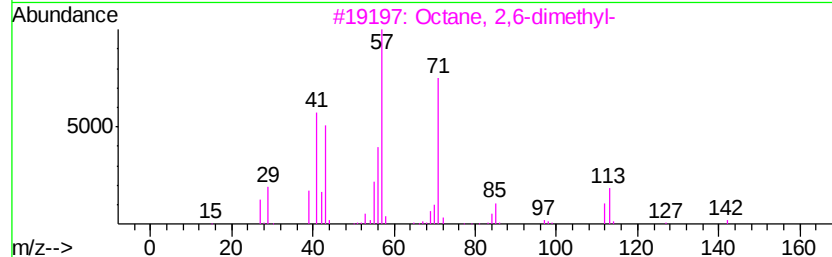
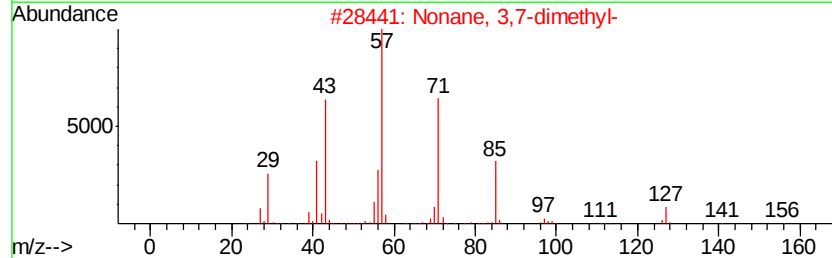
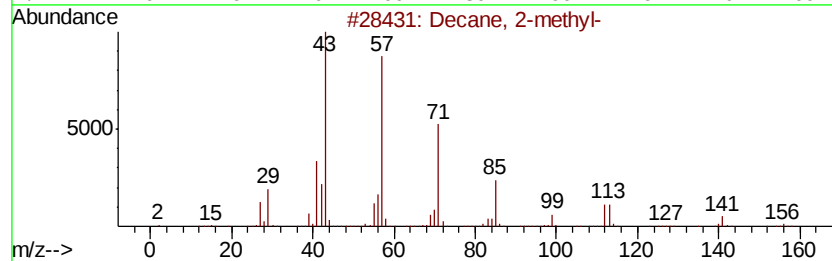
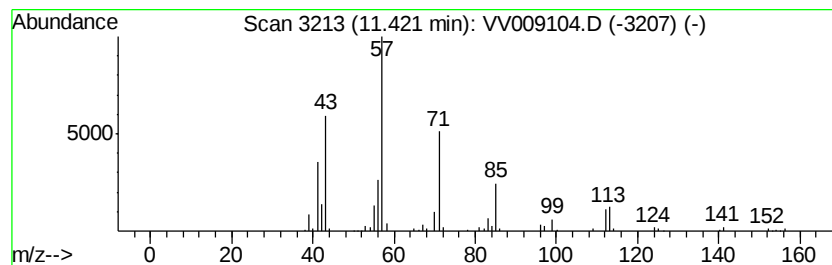
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 37 (DEL) Alkane: Straight-Chai... Concentration Rank 5

| R.T.  | EstConc    | Area   | Relative to ISTD       | R.T.  |
|-------|------------|--------|------------------------|-------|
| 11.42 | 71.45 ug/L | 364903 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | 5 | Tentative ID                | MW  | MolForm | CAS#        | Qual |
|------|----|---|-----------------------------|-----|---------|-------------|------|
| 1    |    |   | Decane, 2-methyl-           | 156 | C11H24  | 006975-98-0 | 80   |
| 2    |    |   | Nonane, 3,7-dimethyl-       | 156 | C11H24  | 017302-32-8 | 59   |
| 3    |    |   | Octane, 2,6-dimethyl-       | 142 | C10H22  | 002051-30-1 | 59   |
| 4    |    |   | Dodecane, 2,7,10-trimethyl- | 212 | C15H32  | 074645-98-0 | 59   |
| 5    |    |   | Octane, 3,6-dimethyl-       | 142 | C10H22  | 015869-94-0 | 59   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

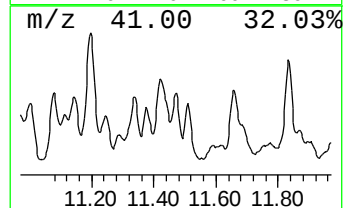
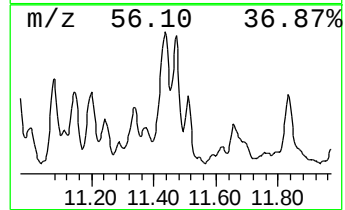
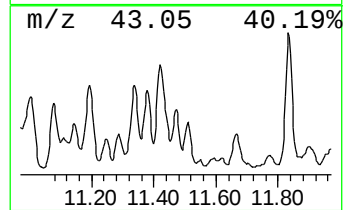
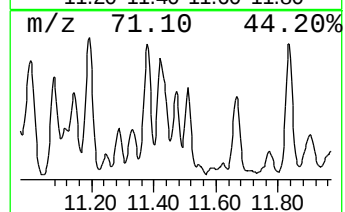
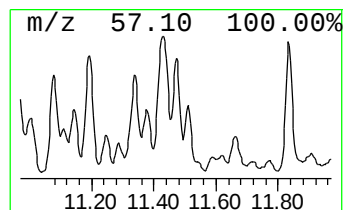
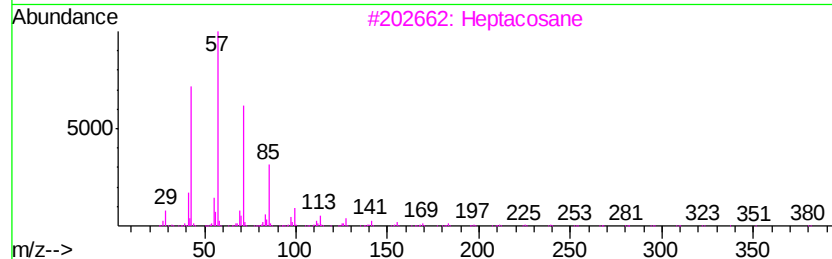
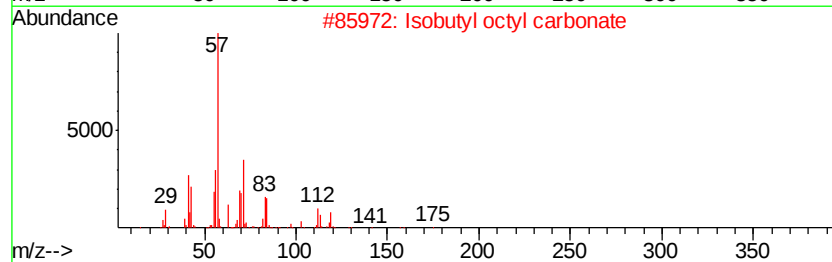
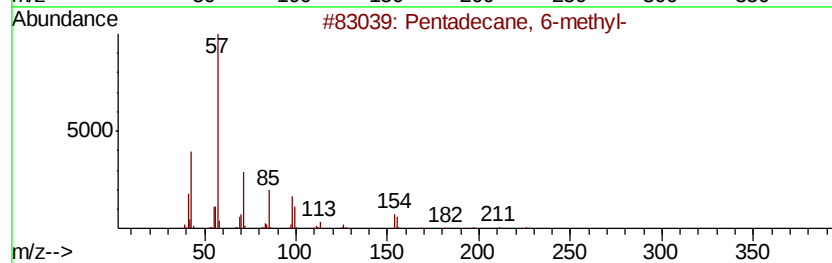
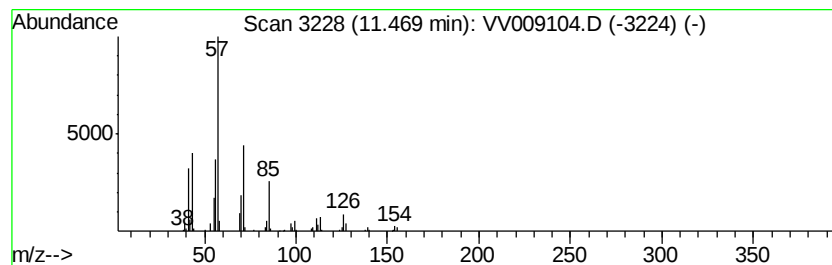
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 38 (DEL) Alkane: Straight-Chai... Concentration Rank 15

| R.T.  | EstConc    | Area   | Relative to ISTD       | R.T.  |
|-------|------------|--------|------------------------|-------|
| 11.47 | 42.08 ug/L | 214898 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|-------------------------------------|-----|-----------|--------------|------|
| 1    | 5  | Pentadecane, 6-methyl-              | 226 | C16H34    | 010105-38-1  | 64   |
| 2    |    | Isobutyl octyl carbonate            | 230 | C13H26O3  | 1000372-74-6 | 53   |
| 3    |    | Heptacosane                         | 380 | C27H56    | 000593-49-7  | 53   |
| 4    |    | Undecane, 3,8-dimethyl-             | 184 | C13H28    | 017301-30-3  | 50   |
| 5    |    | Sulfurous acid, 2-ethylhexyl hep... | 432 | C25H52O3S | 1000309-20-0 | 50   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampled :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

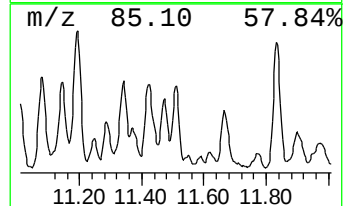
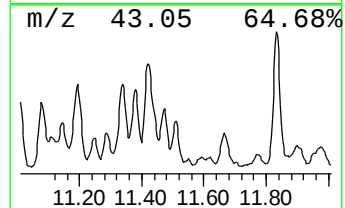
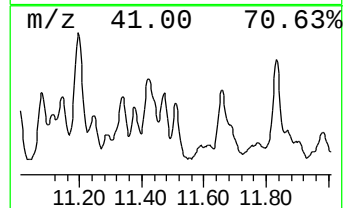
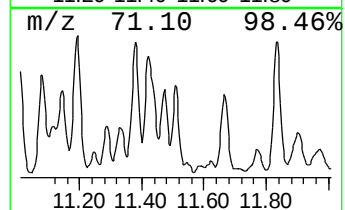
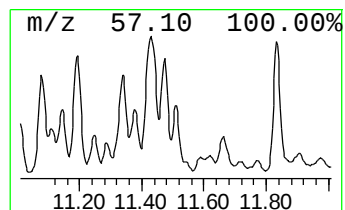
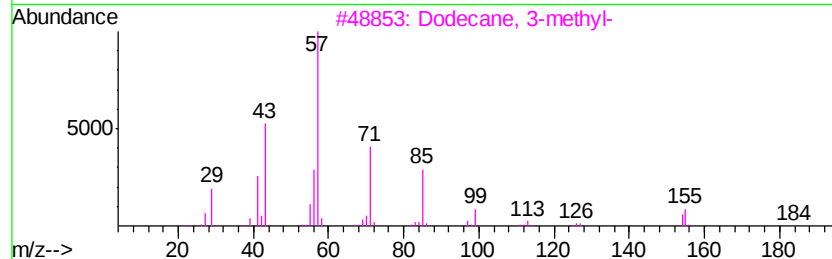
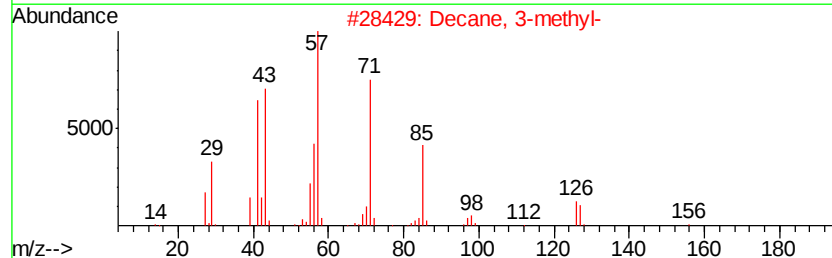
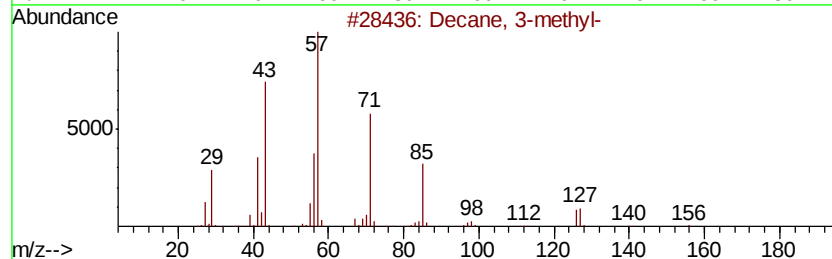
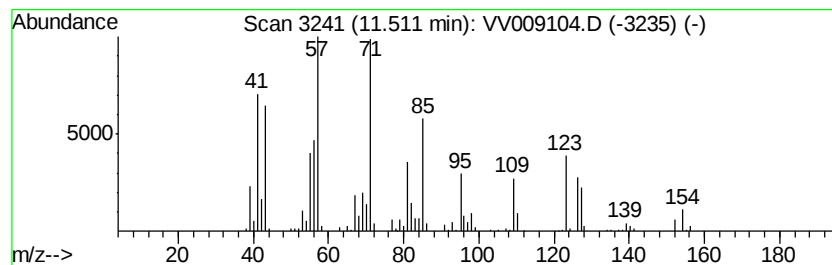
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 39 (DEL) Alkane: Straight-Chai... Concentration Rank 16

| R.T.  | EstConc    | Area   | Relative to ISTD       | R.T.  |
|-------|------------|--------|------------------------|-------|
| 11.51 | 41.40 ug/L | 211464 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | 5 | Tentative ID           | MW  | MolForm | CAS#        | Qual |
|------|----|---|------------------------|-----|---------|-------------|------|
| 1    |    |   | Decane, 3-methyl-      | 156 | C11H24  | 013151-34-3 | 91   |
| 2    |    |   | Decane, 3-methyl-      | 156 | C11H24  | 013151-34-3 | 58   |
| 3    |    |   | Dodecane, 3-methyl-    | 184 | C13H28  | 017312-57-1 | 43   |
| 4    |    |   | Nonane, 5-butyl-       | 184 | C13H28  | 017312-63-9 | 38   |
| 5    |    |   | Heptadecane, 8-methyl- | 254 | C18H38  | 013287-23-5 | 38   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

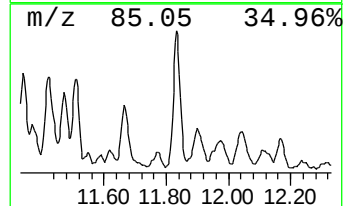
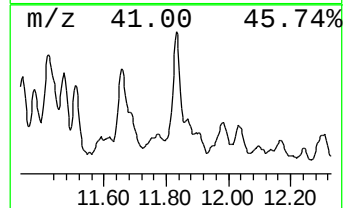
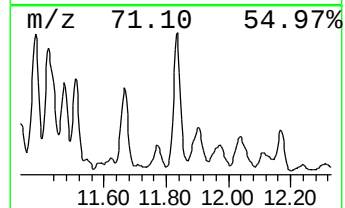
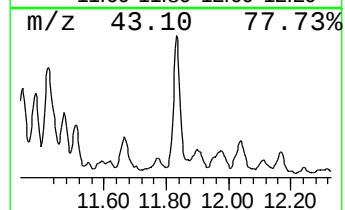
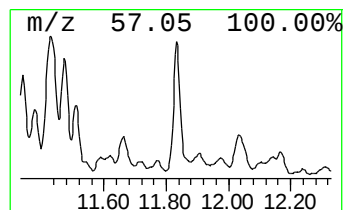
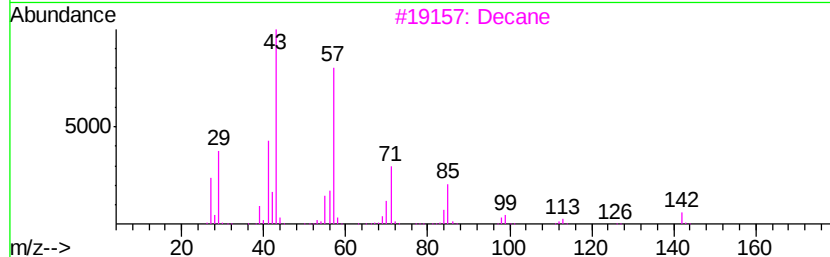
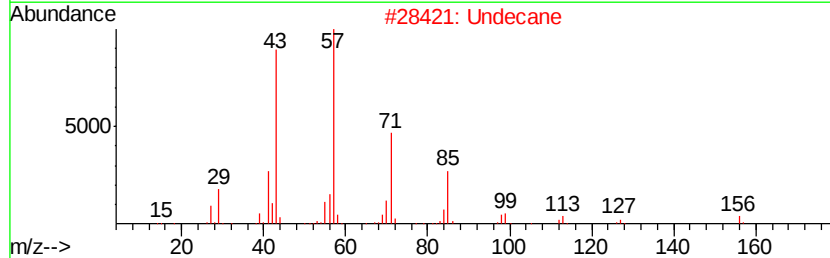
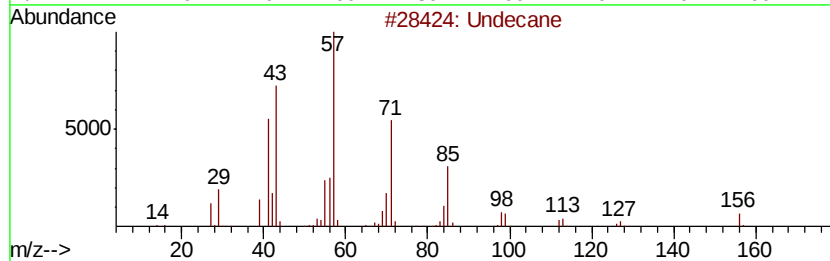
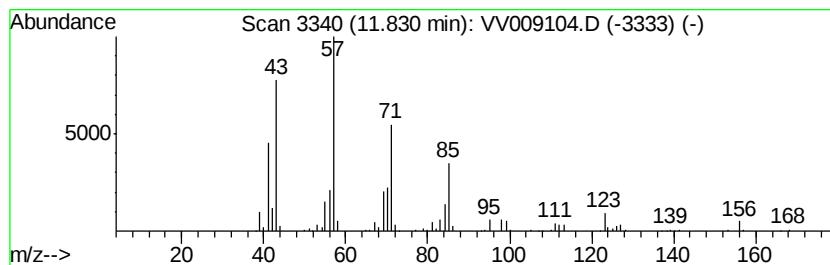
Instrument :  
MSVOA\_V  
ClientSampled :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 40 (DEL) Alkane: Straight-Chai... Concentration Rank 8

| R.T.    | EstConc                | Area         | Relative to ISTD       | R.T.    |             |      |
|---------|------------------------|--------------|------------------------|---------|-------------|------|
| 11.83   | 54.88 ug/L             | 280278       | 1,4-Dichlorobenzene-d4 | 11.30   |             |      |
| Hit# of | 5                      | Tentative ID | MW                     | MolForm | CAS#        | Qual |
| 1       | Undecane               |              | 156                    | C11H24  | 001120-21-4 | 90   |
| 2       | Undecane               |              | 156                    | C11H24  | 001120-21-4 | 81   |
| 3       | Decane                 |              | 142                    | C10H22  | 000124-18-5 | 78   |
| 4       | Undecane               |              | 156                    | C11H24  | 001120-21-4 | 76   |
| 5       | Heptane, 2,4-dimethyl- |              | 128                    | C9H20   | 002213-23-2 | 72   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

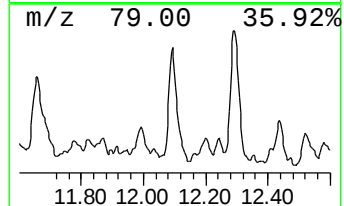
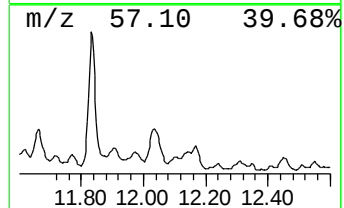
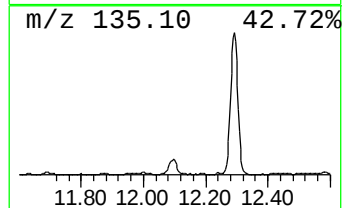
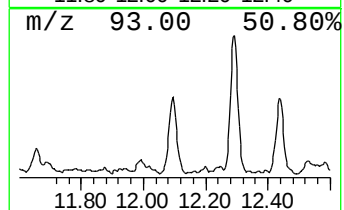
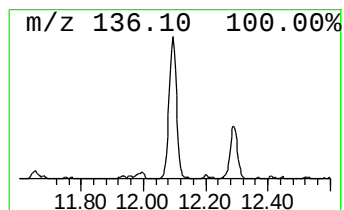
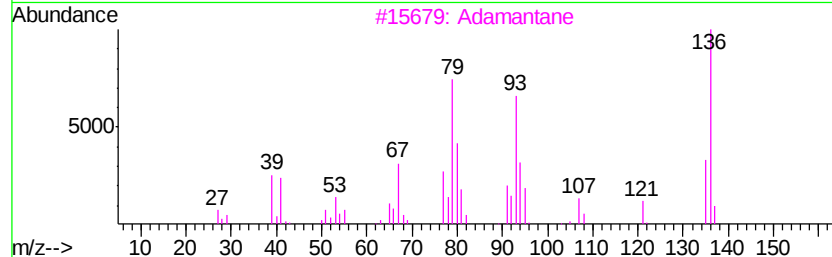
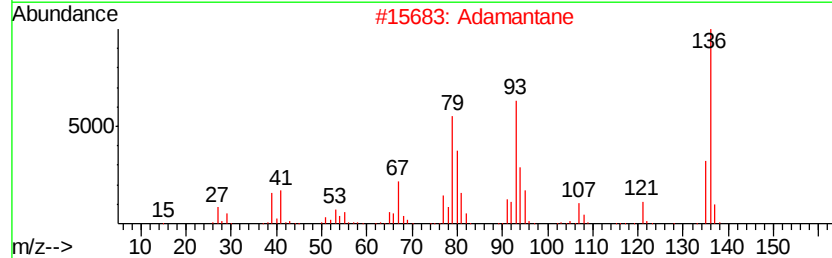
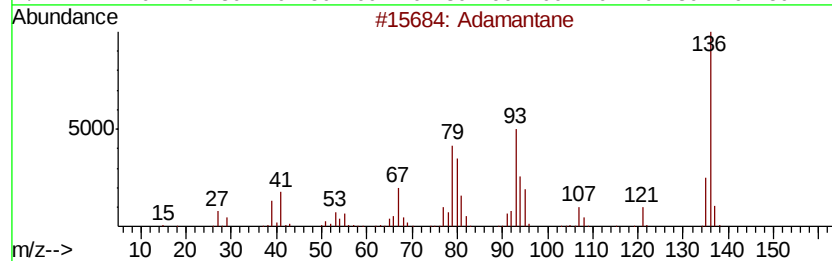
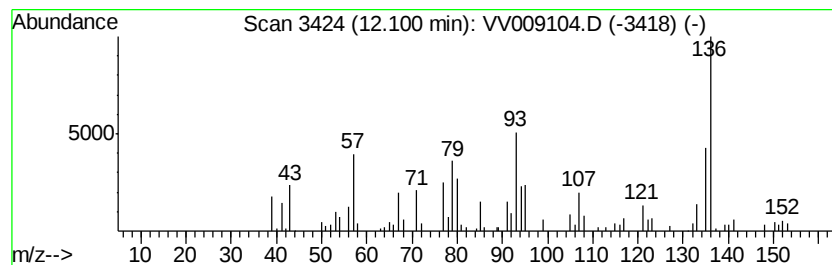
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 41 Adamantane Concentration Rank 29

| R.T.  | EstConc    | Area  | Relative to ISTD       | R.T.  |
|-------|------------|-------|------------------------|-------|
| 12.10 | 14.41 ug/L | 73592 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of                                  | 5 | Tentative ID | MW  | MolForm | CAS#        | Qual |
|------|-------------------------------------|---|--------------|-----|---------|-------------|------|
| 1    | Adamantane                          |   |              | 136 | C10H16  | 000281-23-2 | 94   |
| 2    | Adamantane                          |   |              | 136 | C10H16  | 000281-23-2 | 93   |
| 3    | Adamantane                          |   |              | 136 | C10H16  | 000281-23-2 | 90   |
| 4    | Cyclohexane, 1-methylene-4-(1-me... |   |              | 136 | C10H16  | 000499-97-8 | 58   |
| 5    | 3-Carene                            |   |              | 136 | C10H16  | 013466-78-9 | 53   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

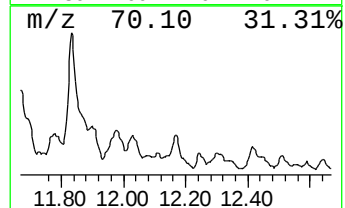
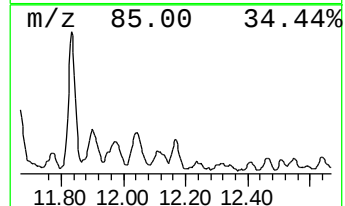
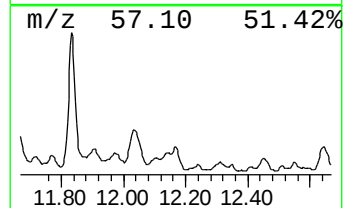
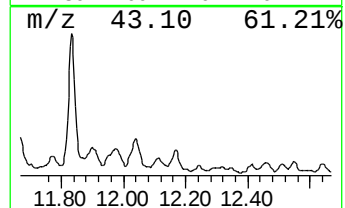
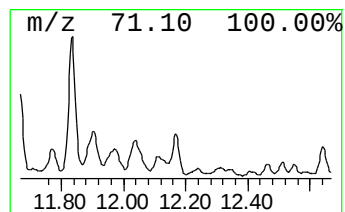
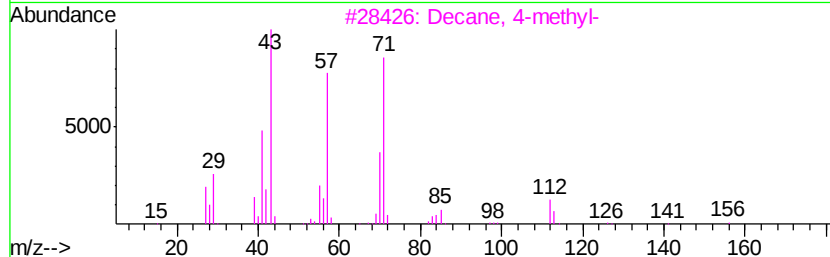
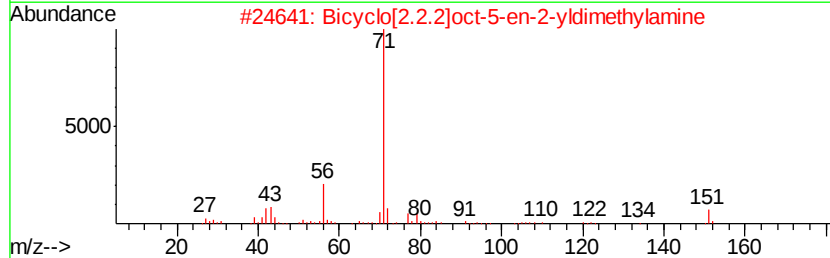
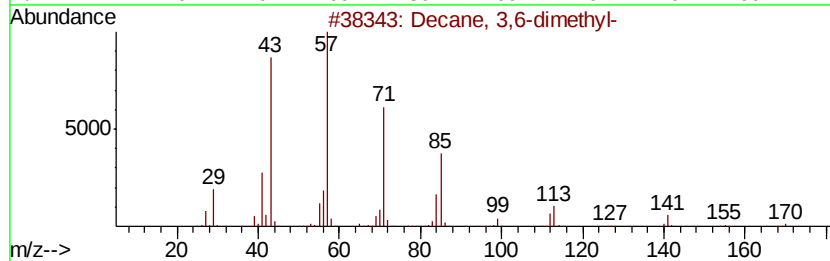
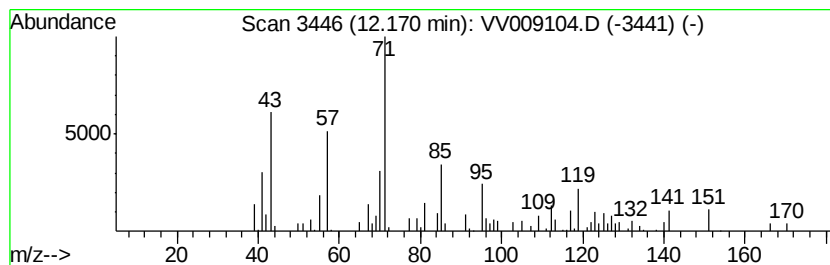
Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 42 (DEL) Alkane: Straight-Chai... Concentration Rank 41

| R.T.    | EstConc                              | Area         | Relative to ISTD       | R.T.           |
|---------|--------------------------------------|--------------|------------------------|----------------|
| 12.17   | 5.17 ug/L                            | 26386        | 1,4-Dichlorobenzene-d4 | 11.30          |
| Hit# of | 5                                    | Tentative ID | MW MolForm             | CAS# Qual      |
| 1       | Decane, 3,6-dimethyl-                | 170          | C12H26                 | 017312-53-7 38 |
| 2       | Bicyclo[2.2.2]oct-5-en-2-yl dimet... | 151          | C10H17N                | 033162-94-6 35 |
| 3       | Decane, 4-methyl-                    | 156          | C11H24                 | 002847-72-5 22 |
| 4       | Hexadecane, 7,9-dimethyl-            | 254          | C18H38                 | 021164-95-4 22 |
| 5       | Nonane, 2-methyl-5-propyl-           | 184          | C13H28                 | 031081-17-1 22 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

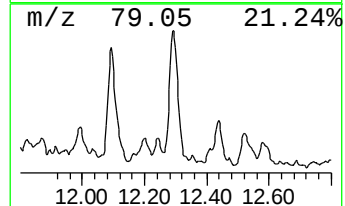
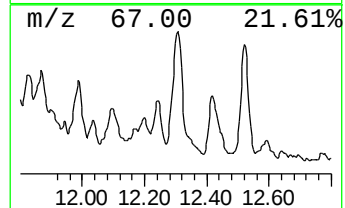
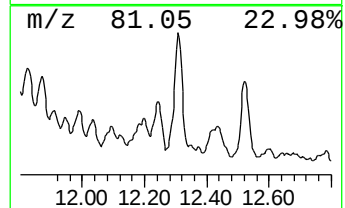
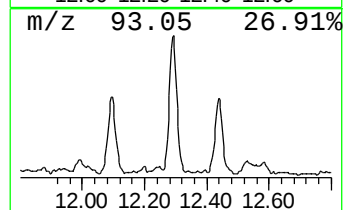
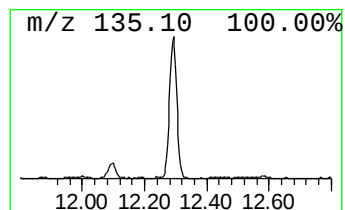
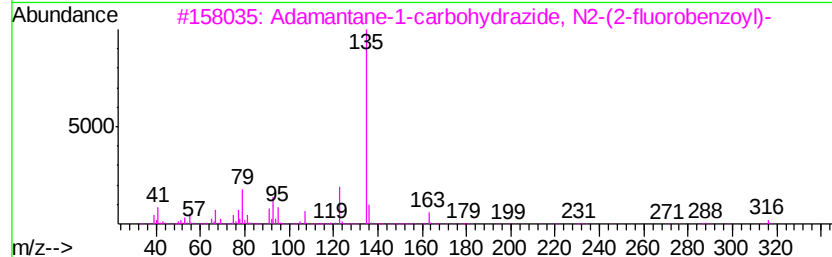
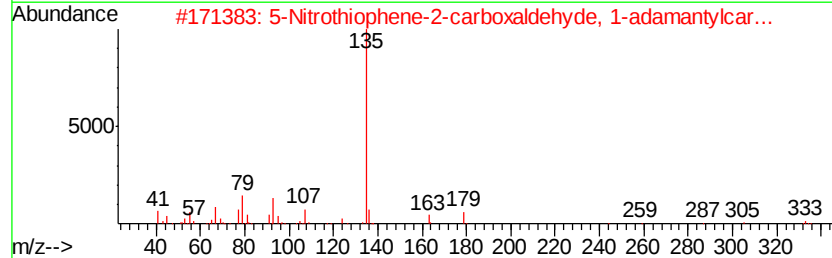
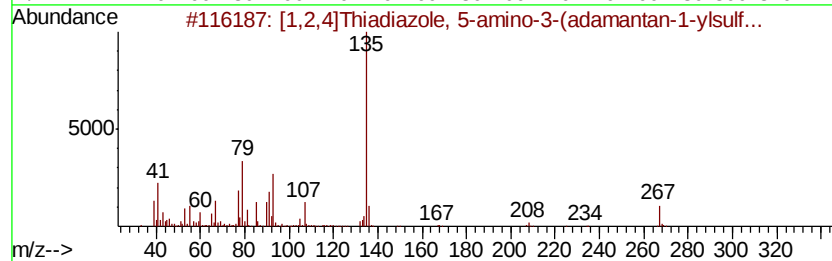
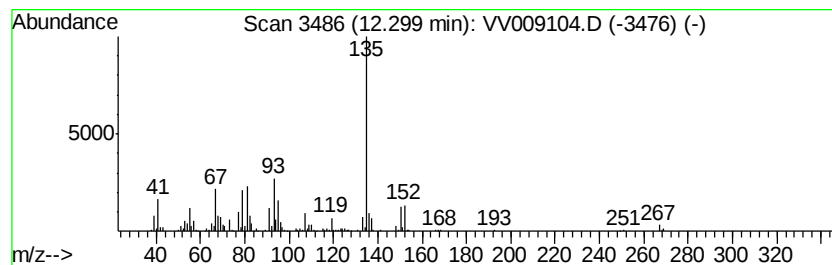
Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 43 [1,2,4]Thiadiazole, 5-amino... Concentration Rank 10

| R.T.    | EstConc    | Area                                | Relative to ISTD       | R.T.        |              |      |
|---------|------------|-------------------------------------|------------------------|-------------|--------------|------|
| 12.30   | 51.20 ug/L | 261495                              | 1,4-Dichlorobenzene-d4 | 11.30       |              |      |
| Hit# of | 5          | Tentative ID                        | MW                     | MolForm     | CAS#         | Qual |
| 1       |            | [1,2,4]Thiadiazole, 5-amino-3-(a... | 267                    | C12H17N3S2  | 1000316-42-5 | 64   |
| 2       |            | 5-Nitrothiophene-2-carboxaldehd...  | 333                    | C16H19N3O3S | 042826-31-3  | 59   |
| 3       |            | Adamantane-1-carbohydrazide, N2-... | 316                    | C18H21FN2O2 | 332037-11-3  | 59   |
| 4       |            | Adamantan-1-ylaminoacetic acid      | 209                    | C12H19NO2   | 1000316-74-7 | 59   |
| 5       |            | 1-Adamantanethiol                   | 168                    | C10H16S     | 034301-54-7  | 58   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

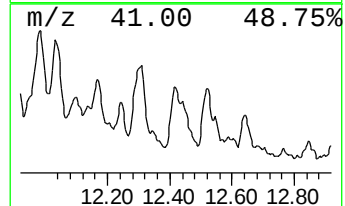
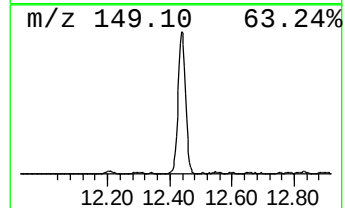
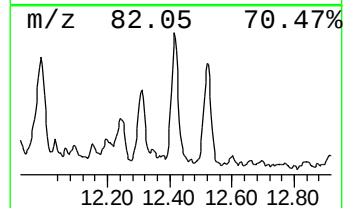
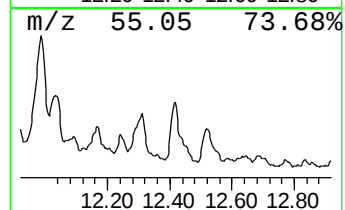
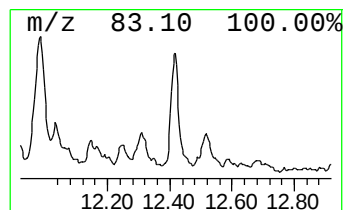
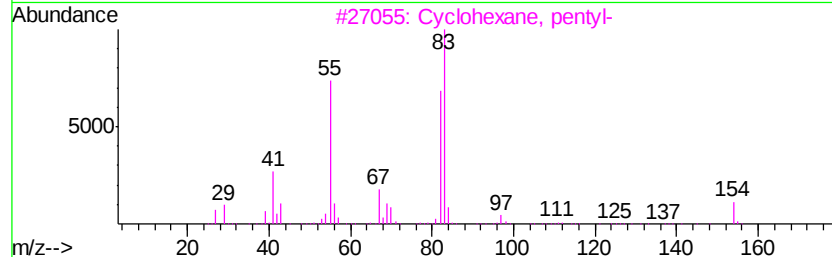
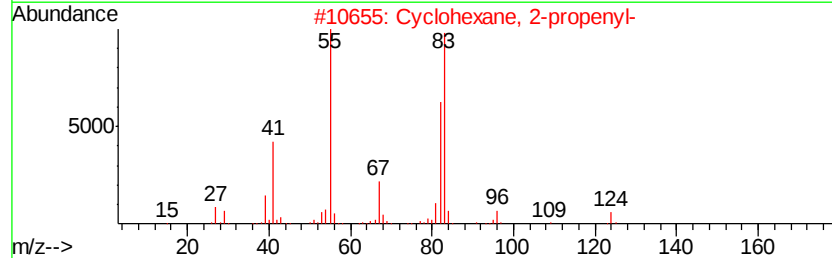
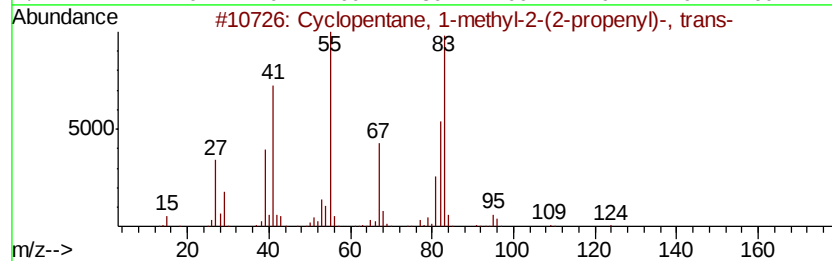
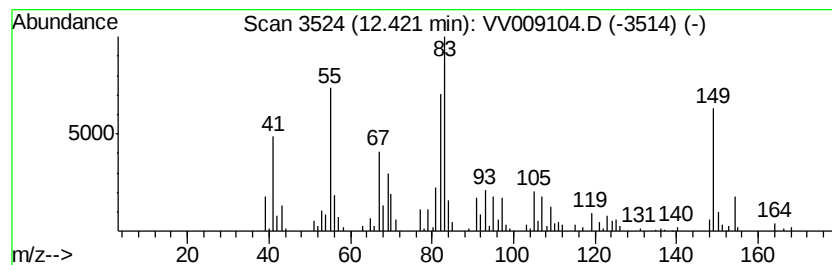
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 44 unknown-03 Concentration Rank 26

| R.T.  | EstConc    | Area  | Relative to ISTD       | R.T.  |
|-------|------------|-------|------------------------|-------|
| 12.42 | 19.31 ug/L | 98633 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Cyclopentane, 1-methyl-2-(2-prop... | 124 | C9H16   | 050746-53-7 | 47   |
| 2    |    |   | Cyclohexane, 2-propenyl-            | 124 | C9H16   | 002114-42-3 | 43   |
| 3    |    |   | Cyclohexane, pentyl-                | 154 | C11H22  | 004292-92-6 | 43   |
| 4    |    |   | Cyclohexane, (4-methylpentyl)-      | 168 | C12H24  | 061142-20-9 | 43   |
| 5    |    |   | Cyclohexane, pentyl-                | 154 | C11H22  | 004292-92-6 | 38   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

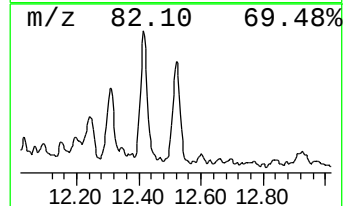
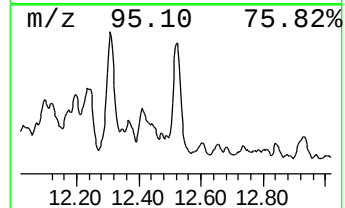
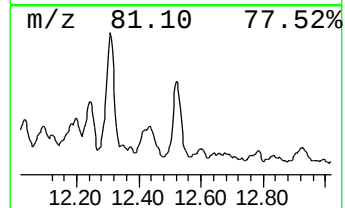
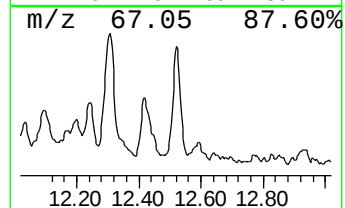
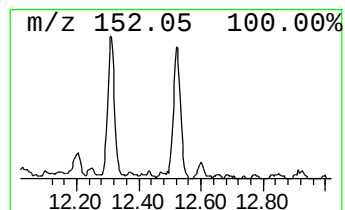
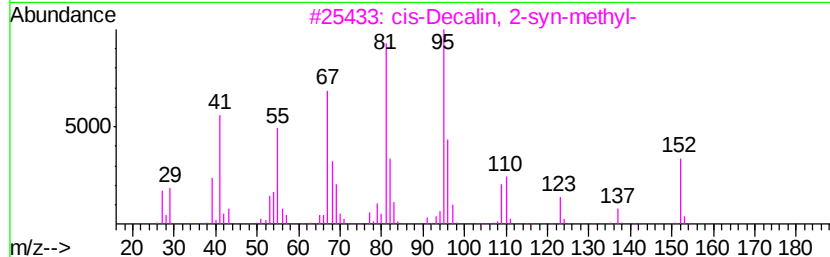
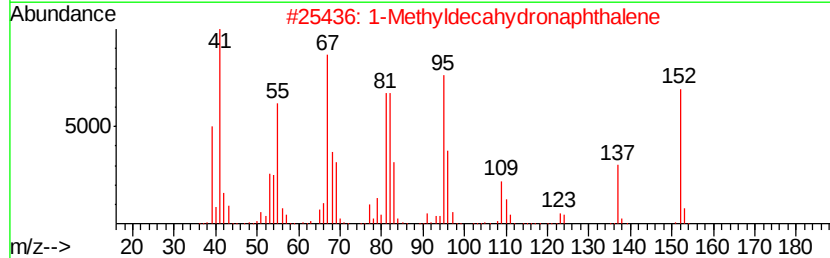
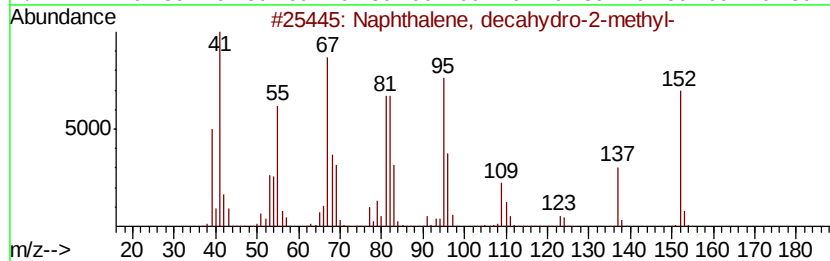
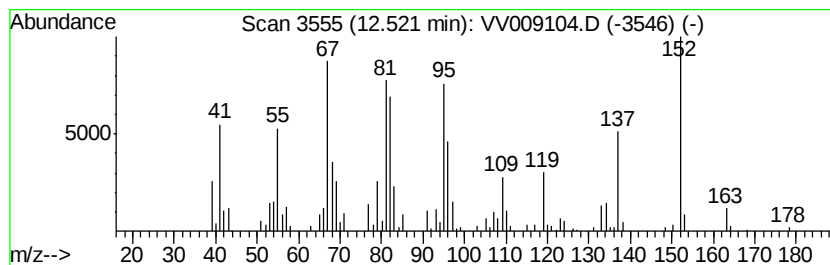
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 45 Naphthalene, decahydro-2-me... Concentration Rank 20

| R.T.  | EstConc    | Area   | Relative to ISTD       | R.T.  |
|-------|------------|--------|------------------------|-------|
| 12.52 | 31.17 ug/L | 159179 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | Tentative ID                     | MW  | MolForm | CAS#         | Qual |
|------|----|----------------------------------|-----|---------|--------------|------|
| 1    | 5  | Naphthalene, decahydro-2-methyl- | 152 | C11H20  | 002958-76-1  | 89   |
| 2    |    | 1-Methyldecahydronaphthalene     | 152 | C11H20  | 002958-75-0  | 89   |
| 3    |    | cis-Decalin, 2-syn-methyl-       | 152 | C11H20  | 1000155-85-6 | 74   |
| 4    |    | Decalin, syn-1-methyl-, cis-     | 152 | C11H20  | 1000158-89-1 | 68   |
| 5    |    | Naphthalene, decahydro-2-methyl- | 152 | C11H20  | 002958-76-1  | 64   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

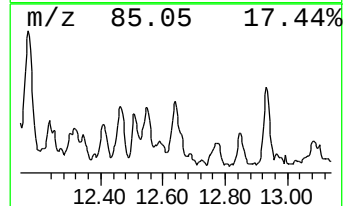
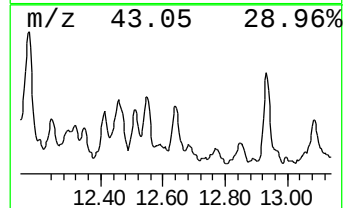
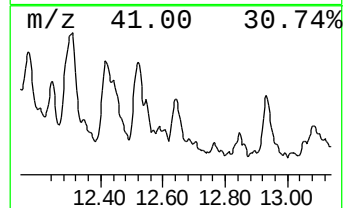
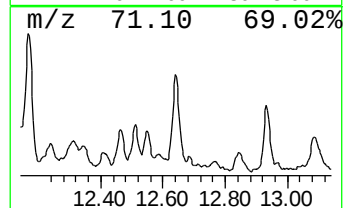
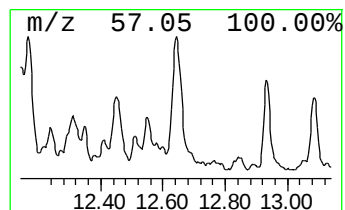
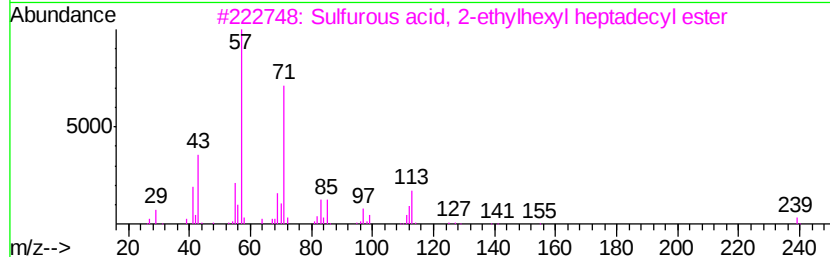
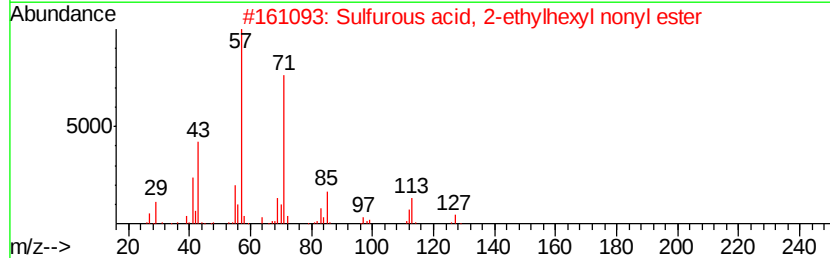
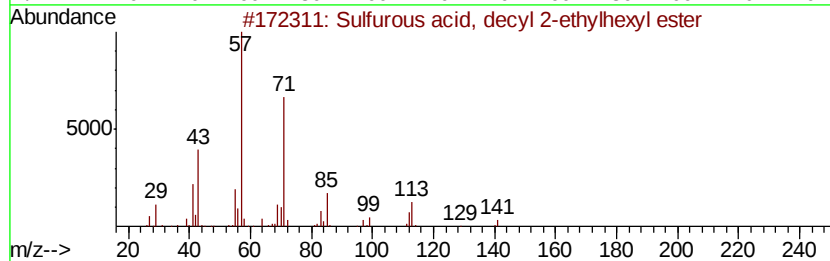
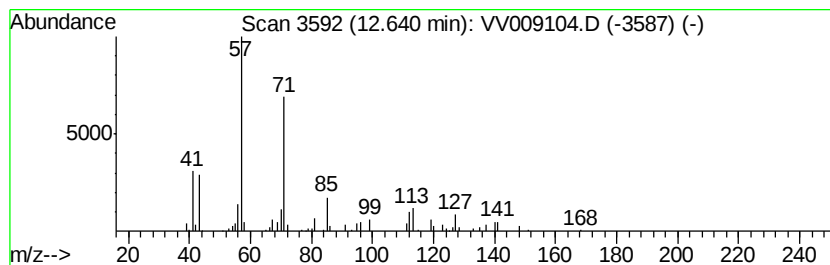
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 46 Sulfurous acid, decyl 2-eth... Concentration Rank 37

| R.T.  | EstConc   | Area  | Relative to ISTD       | R.T.  |
|-------|-----------|-------|------------------------|-------|
| 12.64 | 7.56 ug/L | 38621 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|-----------|--------------|------|
| 1    |    |   | Sulfurous acid, decyl 2-ethylhex... | 334 | C18H38O3S | 1000309-19-3 | 72   |
| 2    |    |   | Sulfurous acid, 2-ethylhexyl non... | 320 | C17H36O3S | 1000309-19-2 | 72   |
| 3    |    |   | Sulfurous acid, 2-ethylhexyl hep... | 432 | C25H52O3S | 1000309-20-0 | 64   |
| 4    |    |   | Dodecane, 4,6-dimethyl-             | 198 | C14H30    | 061141-72-8  | 59   |
| 5    |    |   | Dodecane, 2,7,10-trimethyl-         | 212 | C15H32    | 074645-98-0  | 59   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

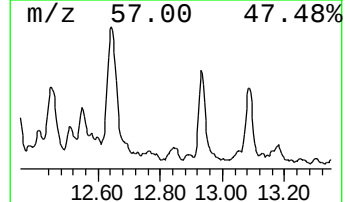
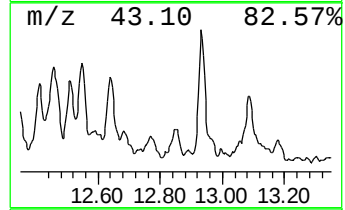
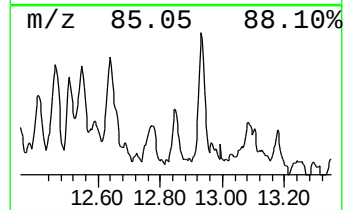
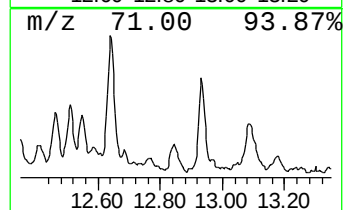
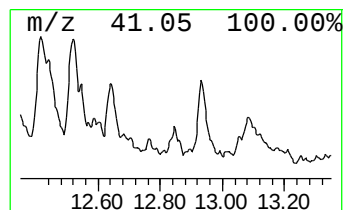
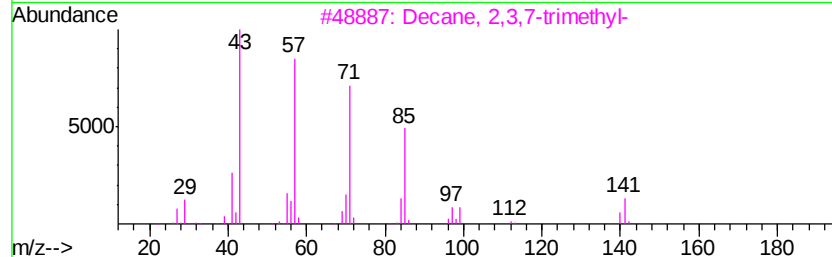
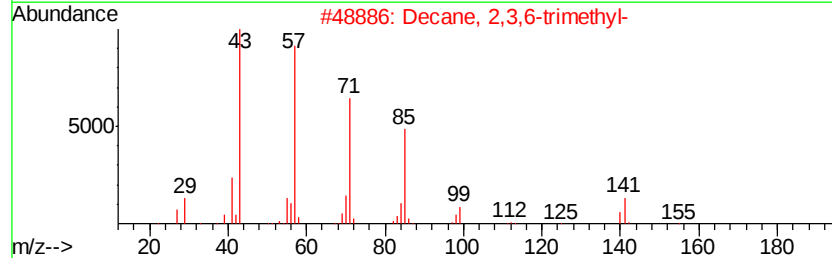
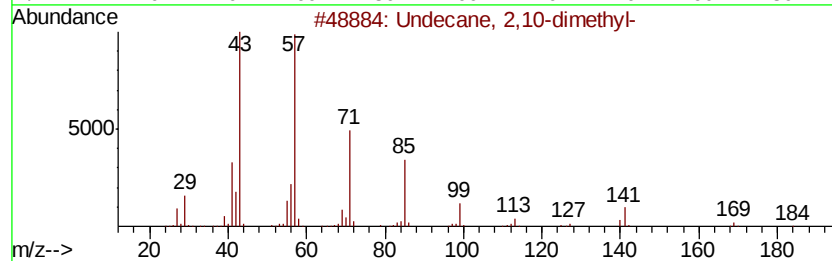
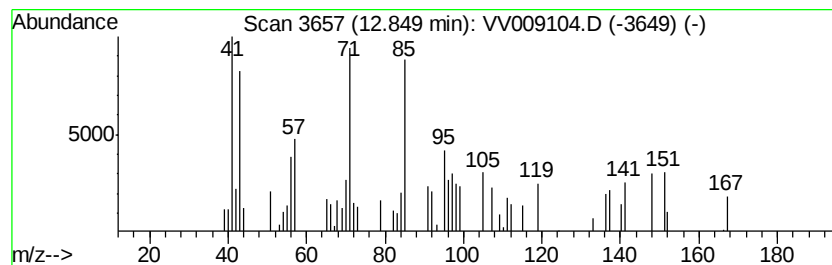
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 47 (DEL) Alkane: Straight-Chai... Concentration Rank 49

| R.T.  | EstConc   | Area  | Relative to ISTD       | R.T.  |
|-------|-----------|-------|------------------------|-------|
| 12.85 | 2.99 ug/L | 15281 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|-----------|--------------|------|
| 1    |    |   | Undecane, 2,10-dimethyl-            | 184 | C13H28    | 017301-27-8  | 38   |
| 2    |    |   | Decane, 2,3,6-trimethyl-            | 184 | C13H28    | 062238-12-4  | 37   |
| 3    |    |   | Decane, 2,3,7-trimethyl-            | 184 | C13H28    | 062238-13-5  | 37   |
| 4    |    |   | Oxalic acid, 6-ethyloct-3-yl pro... | 272 | C15H28O4  | 1000309-34-0 | 37   |
| 5    |    |   | Sulfurous acid, decyl pentyl ester  | 292 | C15H32O3S | 1000309-14-3 | 35   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

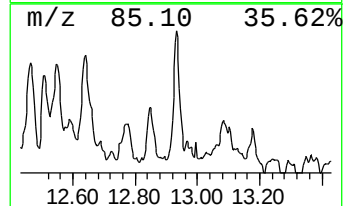
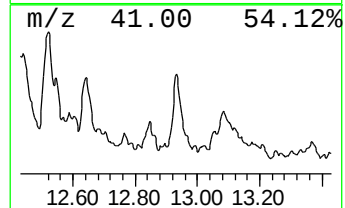
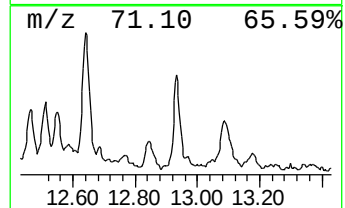
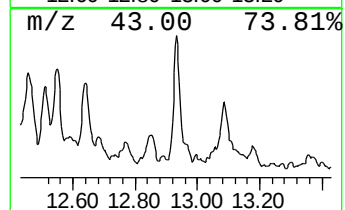
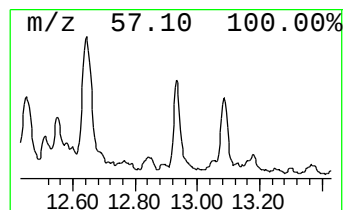
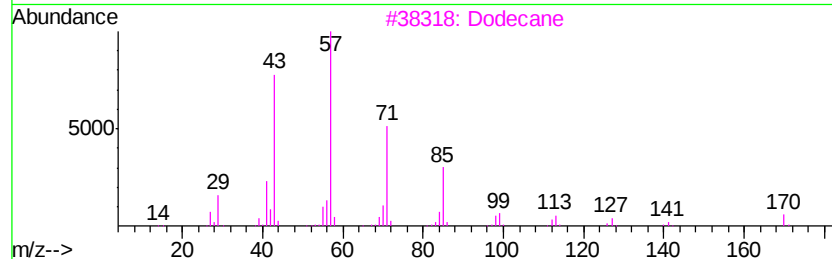
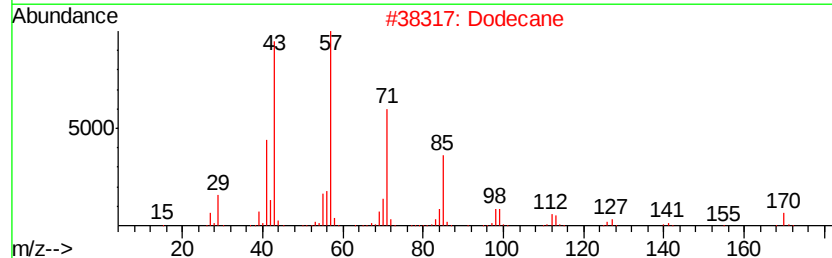
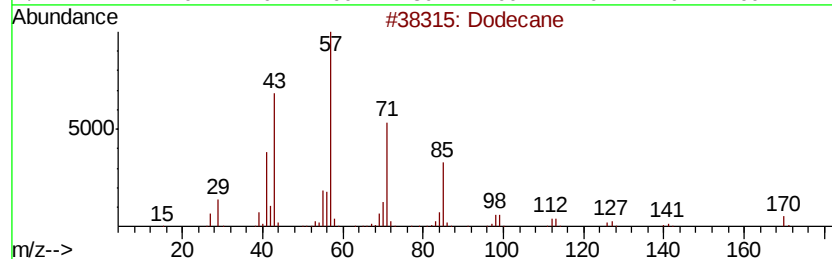
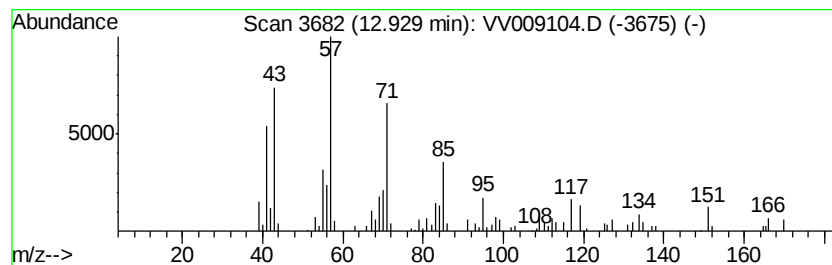
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 48 (DEL) Alkane: Straight-Chai... Concentration Rank 30

| R.T.  | EstConc    | Area  | Relative to ISTD       | R.T.  |
|-------|------------|-------|------------------------|-------|
| 12.93 | 14.14 ug/L | 72200 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | Tentative ID            | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------|-----|----------|-------------|------|
| 1    | 5  | Dodecane                | 170 | C12H26   | 000112-40-3 | 91   |
| 2    |    | Dodecane                | 170 | C12H26   | 000112-40-3 | 64   |
| 3    |    | Dodecane                | 170 | C12H26   | 000112-40-3 | 58   |
| 4    |    | Hydroxylamine, O-decyl- | 173 | C10H23NO | 029812-79-1 | 53   |
| 5    |    | Hexadecane              | 226 | C16H34   | 000544-76-3 | 52   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

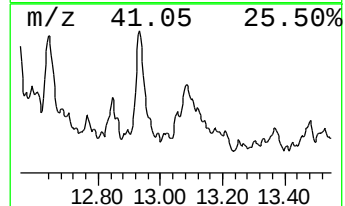
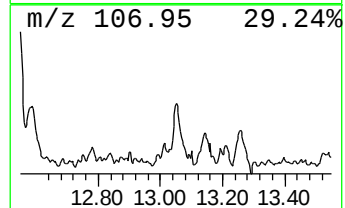
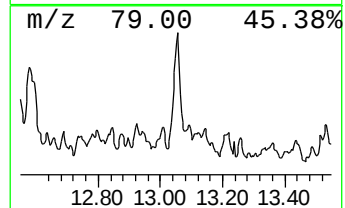
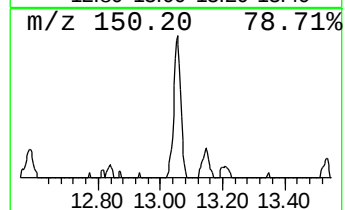
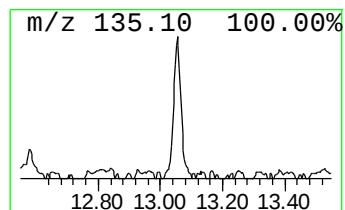
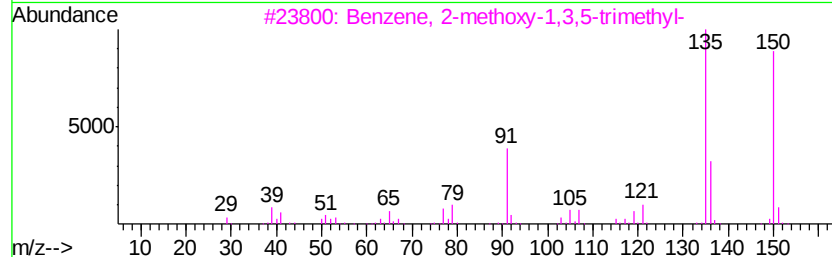
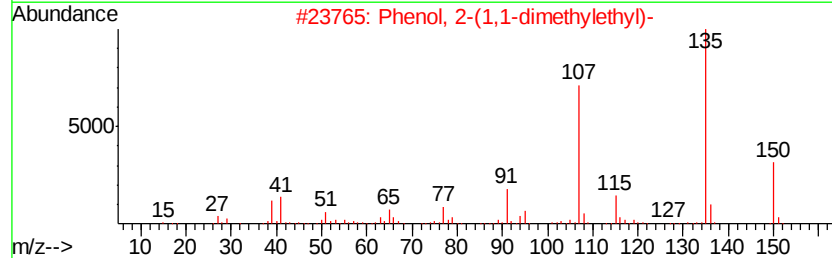
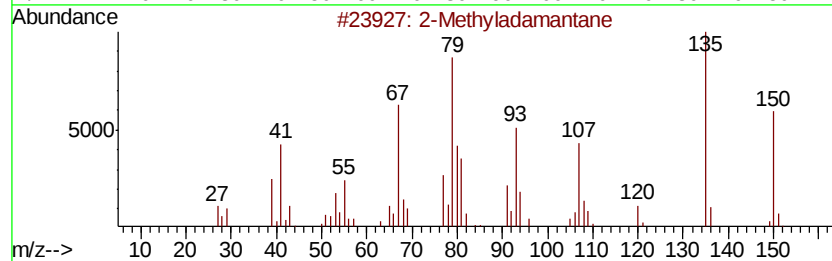
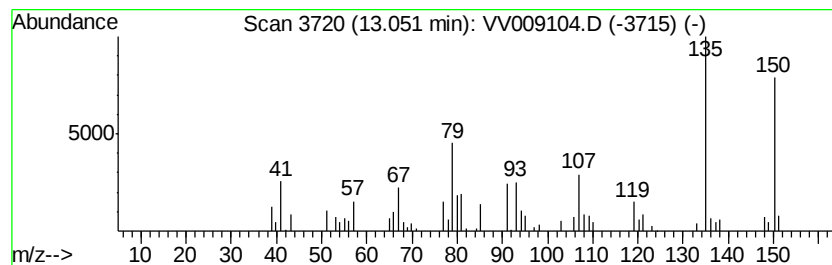
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 49 2-Methyladamantane Concentration Rank 44

| R.T.  | EstConc   | Area  | Relative to ISTD       | R.T.  |
|-------|-----------|-------|------------------------|-------|
| 13.05 | 4.42 ug/L | 22568 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | 2-Methyladamantane                  | 150 | C11H18  | 000700-56-1 | 94   |
| 2    |    |   | Phenol, 2-(1,1-dimethylethyl)-      | 150 | C10H14O | 000088-18-6 | 53   |
| 3    |    |   | Benzene, 2-methoxy-1,3,5-trimethyl- | 150 | C10H14O | 004028-66-4 | 52   |
| 4    |    |   | Phenol, 2,3,5,6-tetramethyl-        | 150 | C10H14O | 000527-35-5 | 50   |
| 5    |    |   | 4-Hydroxy-2-methylacetophenone      | 150 | C9H10O2 | 000875-59-2 | 50   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

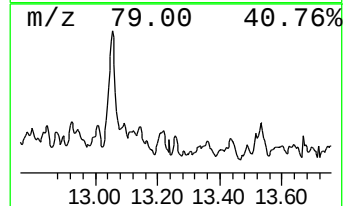
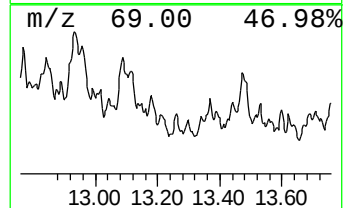
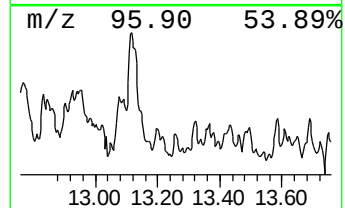
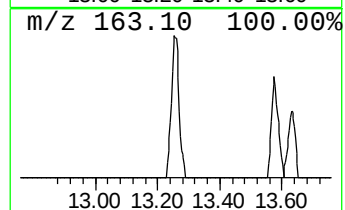
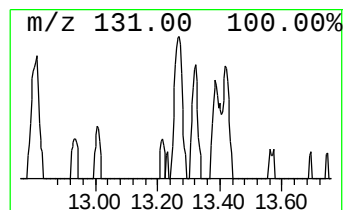
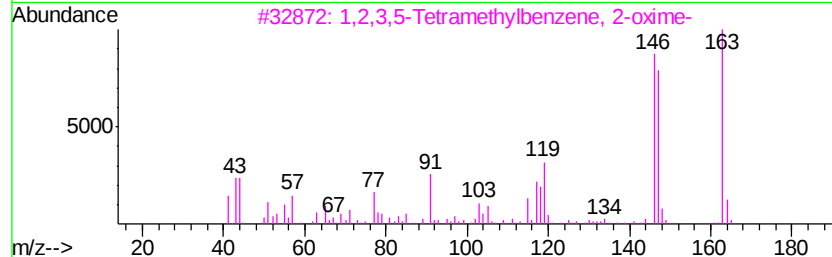
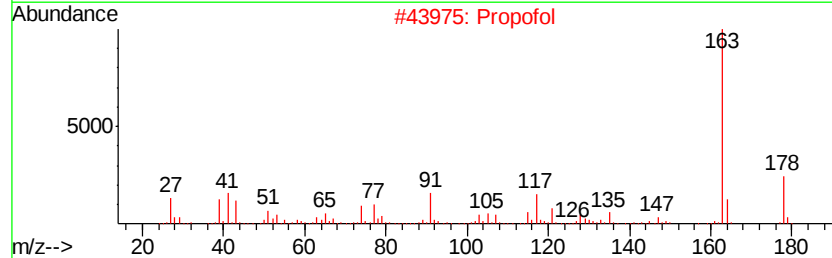
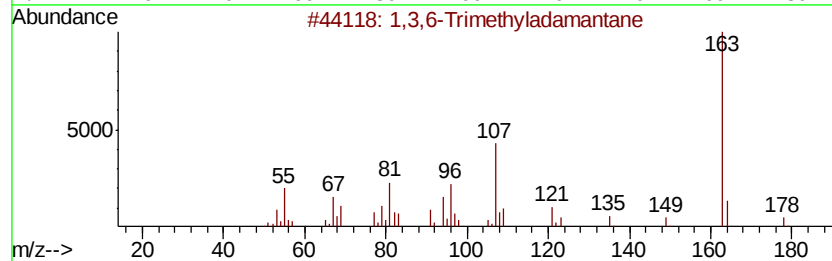
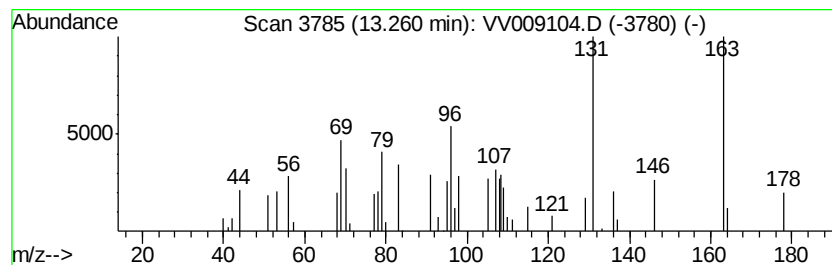
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 50 unknown-04 Concentration Rank 53

| R.T.  | EstConc   | Area | Relative to ISTD       | R.T.  |
|-------|-----------|------|------------------------|-------|
| 13.26 | 1.95 ug/L | 9980 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm  | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|----------|--------------|------|
| 1    |    |   | 1,3,6-Trimethyladamantane           | 178 | C13H22   | 024139-37-5  | 22   |
| 2    |    |   | Propofol                            | 178 | C12H18O  | 002078-54-8  | 14   |
| 3    |    |   | 1,2,3,5-Tetramethylbenzene, 2-ox... | 163 | C10H13NO | 1000127-21-8 | 11   |
| 4    |    |   | 1,4-Dimethyltricvclo[5.3.0.0(4.1... | 178 | C12H18O  | 138041-97-1  | 10   |
| 5    |    |   | Methanol, (1-amino-2-benzimidazo... | 163 | C8H9N3O  | 156576-15-7  | 10   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

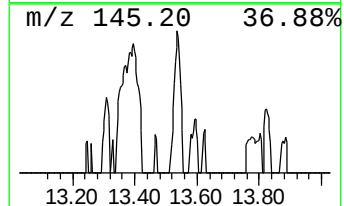
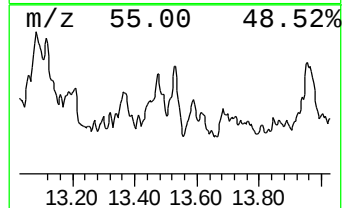
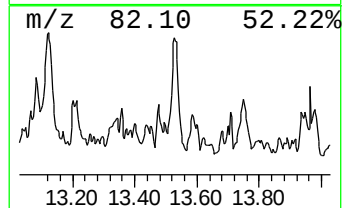
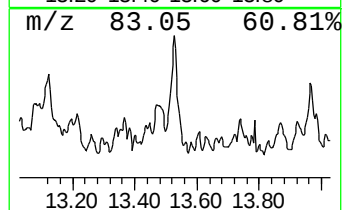
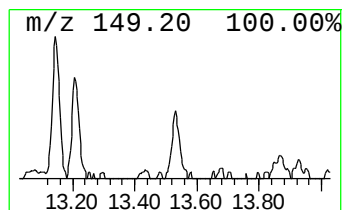
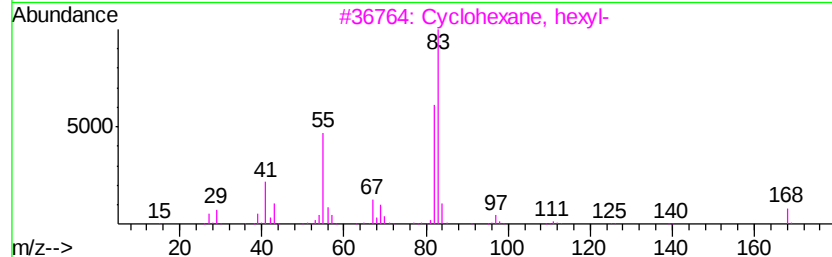
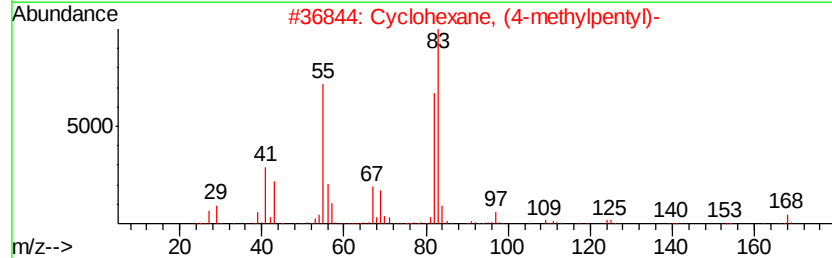
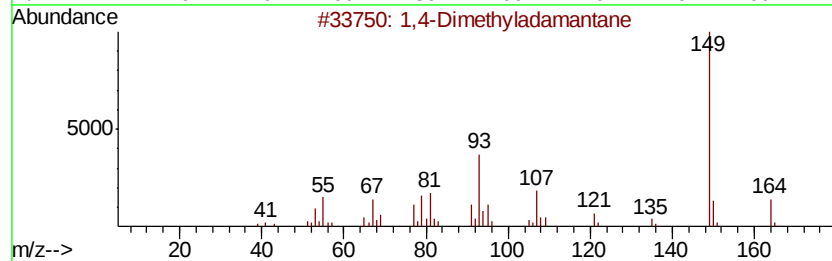
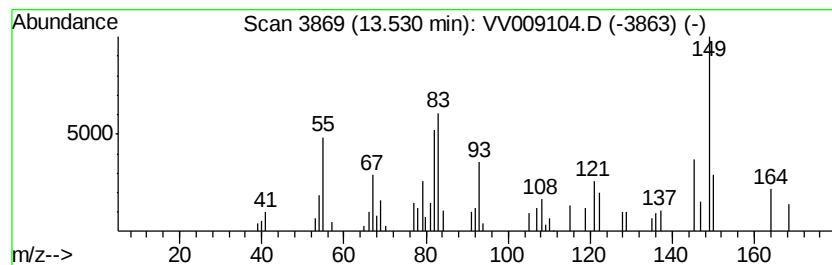
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 51 unknown-05 Concentration Rank 48

| R.T.  | EstConc   | Area  | Relative to ISTD       | R.T.  |
|-------|-----------|-------|------------------------|-------|
| 13.53 | 3.10 ug/L | 15817 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | 5 | Tentative ID                                  | MW  | MolForm | CAS#        | Qual |
|------|----|---|-----------------------------------------------|-----|---------|-------------|------|
| 1    |    |   | 1,4-Dimethyladamantane                        | 164 | C12H20  | 024145-89-9 | 27   |
| 2    |    |   | Cyclohexane, (4-methylpentyl)-                | 168 | C12H24  | 061142-20-9 | 27   |
| 3    |    |   | Cyclohexane, hexyl-                           | 168 | C12H24  | 004292-75-5 | 27   |
| 4    |    |   | Cyclohexane, 1,1'-(1,4-butanediol-2,2'-diyl)- | 222 | C16H30  | 006165-44-2 | 22   |
| 5    |    |   | Cyclohexane, (1-methylethyl)-                 | 126 | C9H18   | 000696-29-7 | 22   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

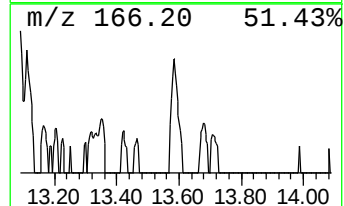
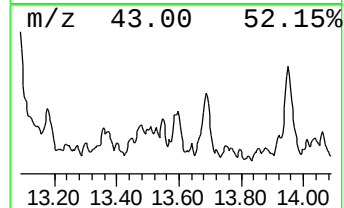
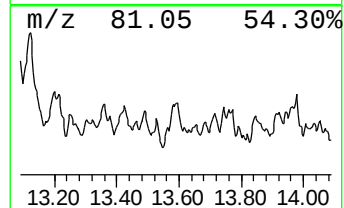
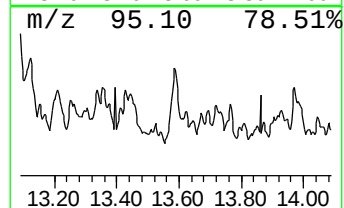
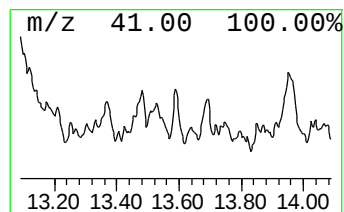
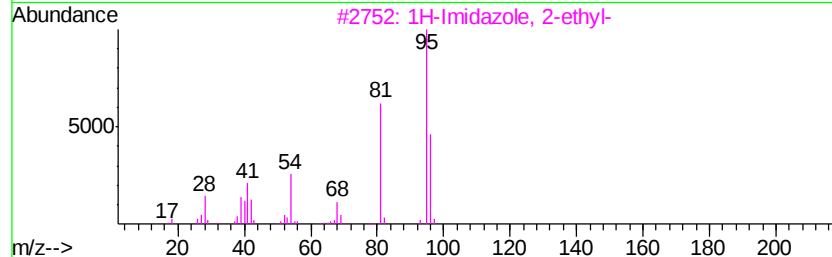
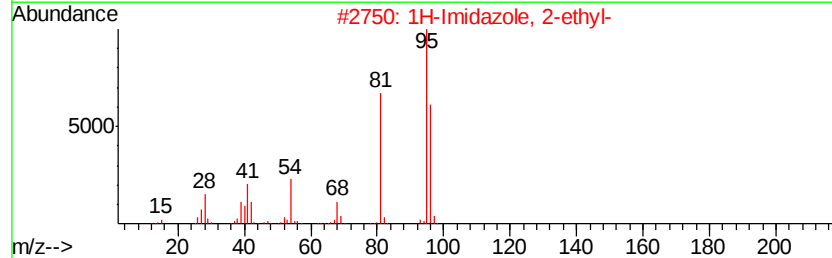
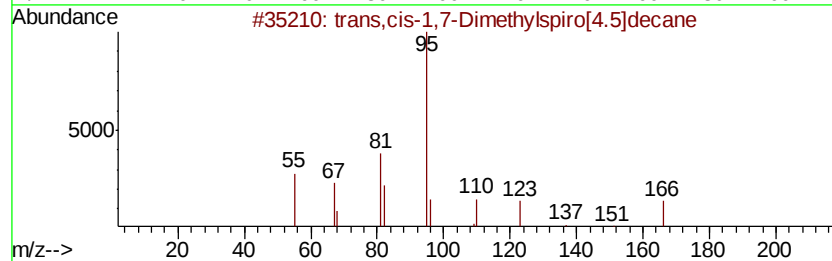
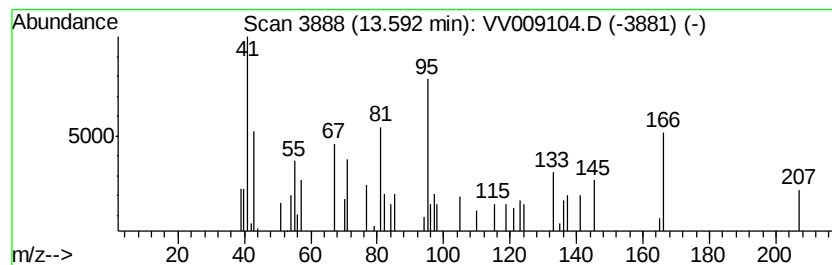
Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 52 unknown-06 Concentration Rank 51

| R.T.    | EstConc                             | Area         | Relative to ISTD       | R.T.      |
|---------|-------------------------------------|--------------|------------------------|-----------|
| 13.59   | 2.26 ug/L                           | 11535        | 1,4-Dichlorobenzene-d4 | 11.30     |
| Hit# of | 5                                   | Tentative ID | MW MolForm             | CAS# Qual |
| 1       | trans,cis-1,7-Dimethylspiro[4.5]... | 166 C12H22   | 1000111-72-7           | 41        |
| 2       | 1H-Imidazole, 2-ethyl-              | 96 C5H8N2    | 001072-62-4            | 14        |
| 3       | 1H-Imidazole, 2-ethyl-              | 96 C5H8N2    | 001072-62-4            | 14        |
| 4       | 1,4-Pentadiene, 2,3,3-trimethyl-    | 110 C8H14    | 000756-02-5            | 11        |
| 5       | 5-Hydroxy-2-pyridinecarbaldehyde    | 123 C6H5NO2  | 031191-08-9            | 10        |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

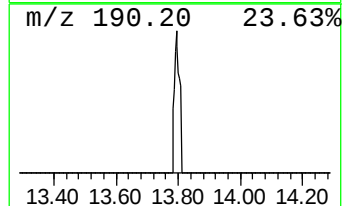
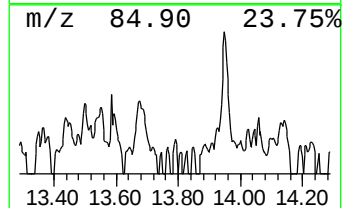
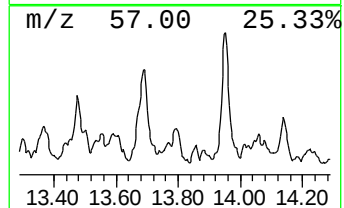
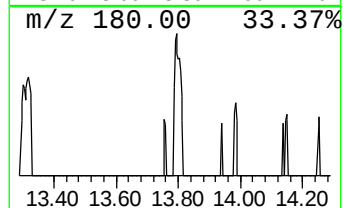
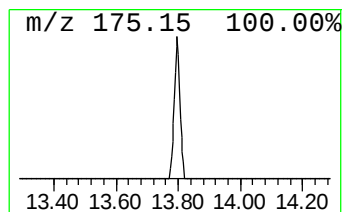
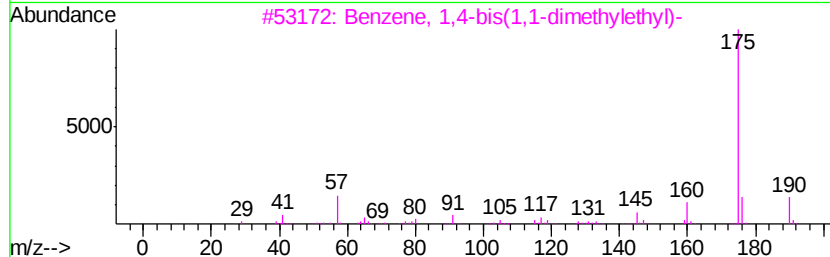
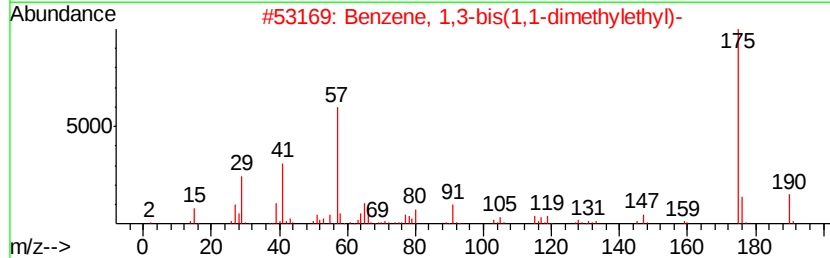
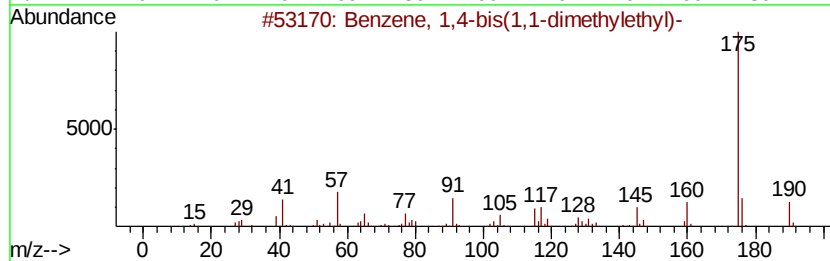
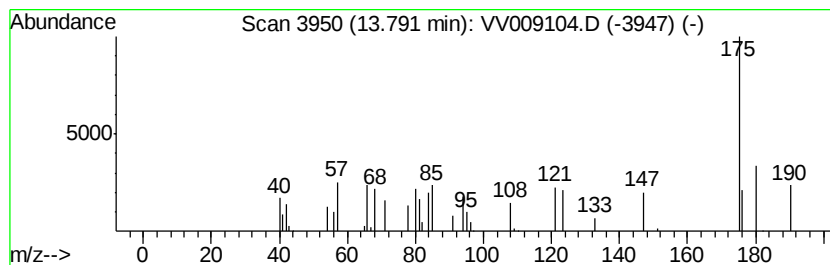
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 53 unknown-07 Concentration Rank 56

| R.T.  | EstConc   | Area | Relative to ISTD       | R.T.  |
|-------|-----------|------|------------------------|-------|
| 13.79 | 1.45 ug/L | 7383 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | Benzene, 1,4-bis(1,1-dimethyleth... | 190 | C14H22  | 001012-72-2 | 47   |
| 2    |    |   | Benzene, 1,3-bis(1,1-dimethyleth... | 190 | C14H22  | 001014-60-4 | 38   |
| 3    |    |   | Benzene, 1,4-bis(1,1-dimethyleth... | 190 | C14H22  | 001012-72-2 | 37   |
| 4    |    |   | Benzene, 1,3-bis(1,1-dimethyleth... | 190 | C14H22  | 001014-60-4 | 37   |
| 5    |    |   | Benzene, 1,4-dimethyl-2,5-bis(1-... | 190 | C14H22  | 010375-96-9 | 33   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

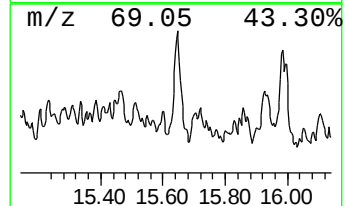
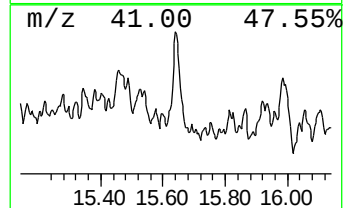
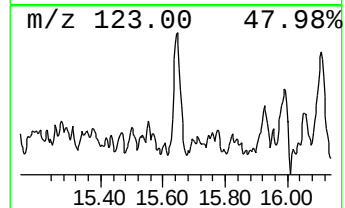
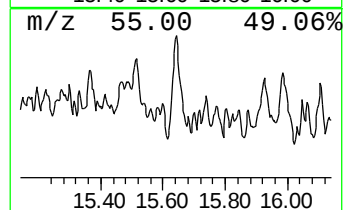
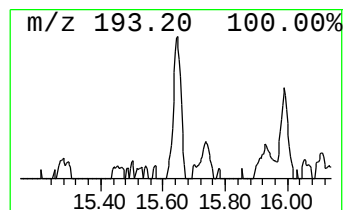
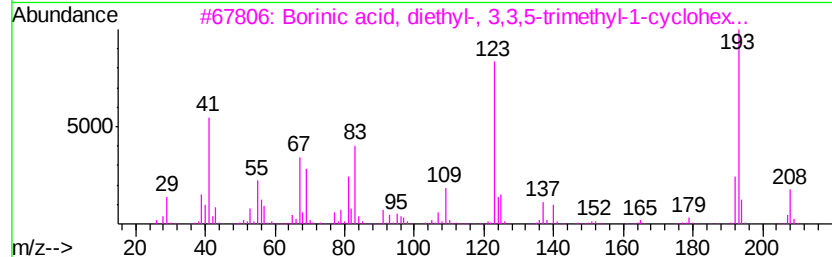
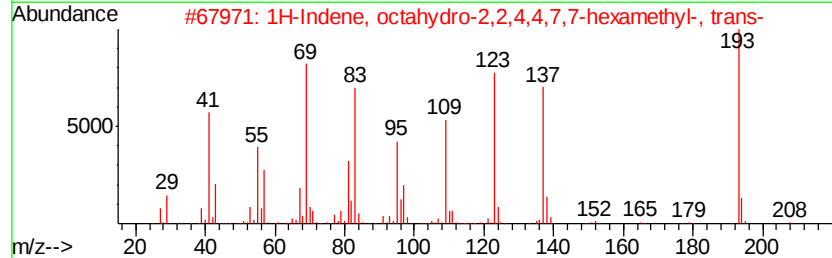
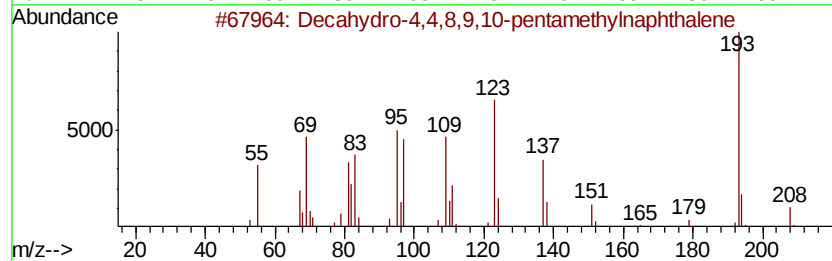
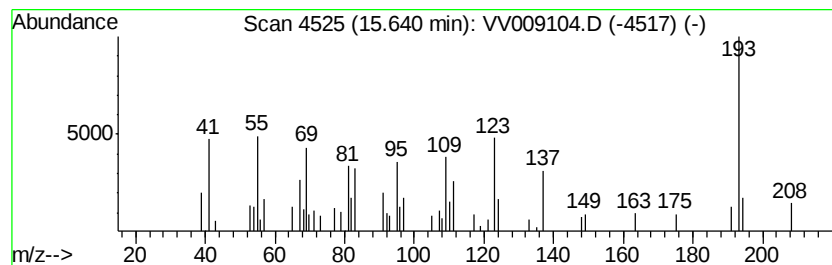
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 54 Decahydro-4,4,8,9,10-pentam... Concentration Rank 42

| R.T.  | EstConc   | Area  | Relative to ISTD       | R.T.  |
|-------|-----------|-------|------------------------|-------|
| 15.64 | 4.89 ug/L | 24986 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|-----------|--------------|------|
| 1    |    |   | Decahydro-4,4,8,9,10-pentamethyl... | 208 | C15H28    | 080655-44-3  | 91   |
| 2    |    |   | 1H-Indene, octahydro-2,2,4,4,7,7... | 208 | C15H28    | 054832-83-6  | 53   |
| 3    |    |   | Borinic acid, diethyl-, 3,3,5-tr... | 208 | C13H25BO  | 057387-76-5  | 47   |
| 4    |    |   | 2-Pentanone, 4-cyclohexylidene-3... | 222 | C15H26O   | 313253-65-5  | 40   |
| 5    |    |   | 2-Diethylamino-4-phenylthiooct-2... | 302 | C18H26N2S | 1000090-57-0 | 38   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV122018\  
Data File : VV009104.D  
Acq On : 21 Dec 2018 01:04  
Operator : SY/MD  
Sample : J6468-16  
Misc : 4.77 G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
Quant Title : VOC Analysis

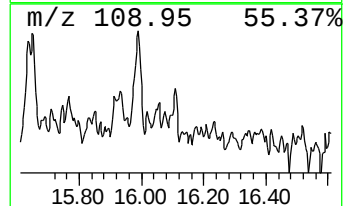
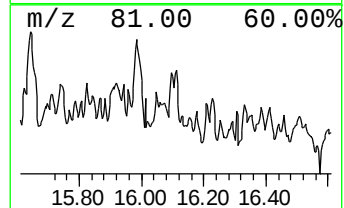
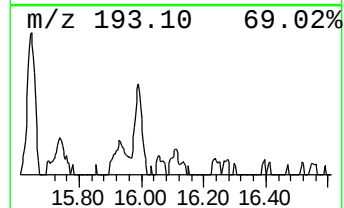
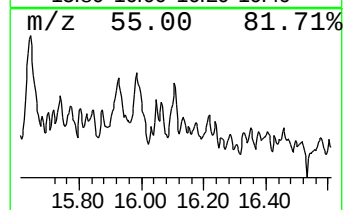
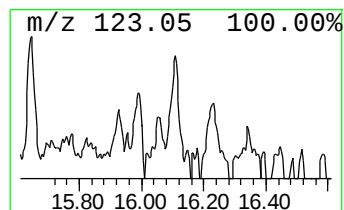
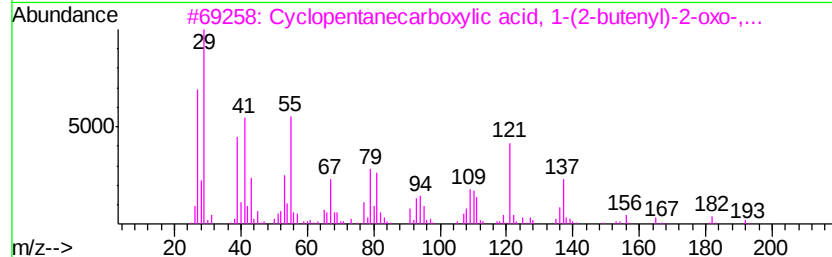
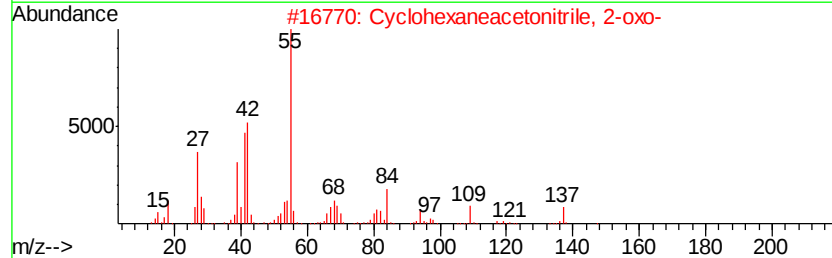
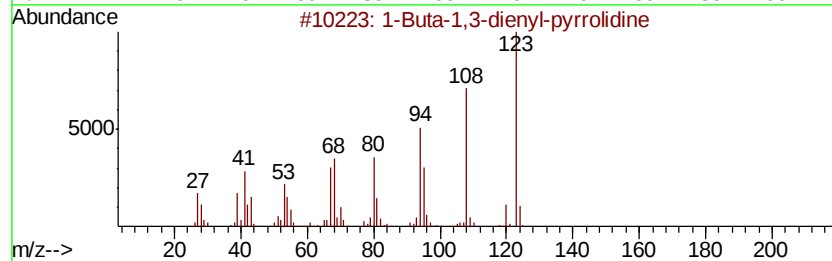
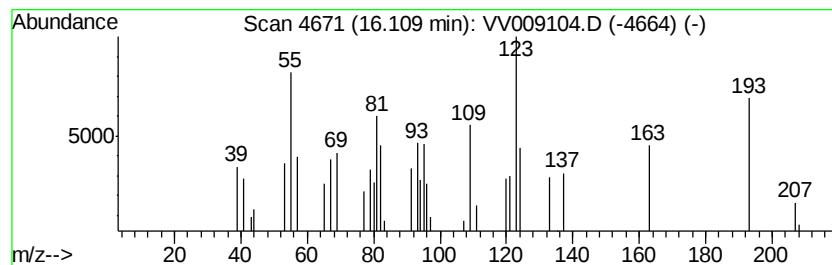
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 56 unknown-08 Concentration Rank 55

| R.T.  | EstConc   | Area | Relative to ISTD       | R.T.  |
|-------|-----------|------|------------------------|-------|
| 16.11 | 1.55 ug/L | 7915 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm  | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|----------|--------------|------|
| 1    |    |   | 1-Buta-1,3-dienyl-pyrrolidine       | 123 | C8H13N   | 1000192-47-6 | 38   |
| 2    |    |   | Cyclohexaneacetonitrile, 2-oxo-     | 137 | C8H11NO  | 042185-27-3  | 27   |
| 3    |    |   | Cyclopentanecarboxylic acid, 1-(... | 210 | C12H18O3 | 131534-41-3  | 17   |
| 4    |    |   | Decahydro-4,4,8,9,10-pentamethyl... | 208 | C15H28   | 080655-44-3  | 16   |
| 5    |    |   | Phorone                             | 138 | C9H14O   | 000504-20-1  | 12   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VV122018\  
 Data File : VV009104.D  
 Acq On : 21 Dec 2018 01:04  
 Operator : SY/MD  
 Sample : J6468-16  
 Misc : 4.77 G/10ML/MSVOA\_V/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 C0JH2

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
 Quant Title : VOC Analysis

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

|                      |       |         |       |          |   | --Internal Standard-- |        |      |  |
|----------------------|-------|---------|-------|----------|---|-----------------------|--------|------|--|
| TIC Top Hit name     | RT    | EstConc | Units | Response | # | RT                    | Resp   | Conc |  |
| (DEL) Alkane: Cyc... | 6.24  | 11.5    | ug/L  | 116156   | 1 | 5.67                  | 253214 | 25.0 |  |
| (DEL) Alkane: Cyc... | 6.89  | 4.5     | ug/L  | 45429    | 1 | 5.67                  | 253214 | 25.0 |  |
| (DEL) Alkane: Cyc... | 7.83  | 2.3     | ug/L  | 15387    | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Str... | 8.25  | 3.2     | ug/L  | 20978    | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Cyc... | 8.33  | 5.9     | ug/L  | 38544    | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Cyc... | 8.40  | 14.1    | ug/L  | 92434    | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Cyc... | 8.55  | 1.8     | ug/L  | 11923    | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Str... | 8.61  | 5.2     | ug/L  | 34170    | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Str... | 8.71  | 8.7     | ug/L  | 57364    | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Str... | 8.83  | 10.1    | ug/L  | 66622    | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Cyc... | 9.24  | 17.2    | ug/L  | 113359   | 2 | 8.90                  | 164476 | 25.0 |  |
| unknown-01           | 9.36  | 10.6    | ug/L  | 70023    | 2 | 8.90                  | 164476 | 25.0 |  |
| 1-Iodo-2-methylun... | 9.45  | 4.2     | ug/L  | 27435    | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Cyc... | 9.52  | 42.3    | ug/L  | 278049   | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Cyc... | 9.72  | 8.2     | ug/L  | 54203    | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Str... | 9.75  | 46.2    | ug/L  | 304164   | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Cyc... | 9.84  | 60.7    | ug/L  | 399306   | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Str... | 9.89  | 40.1    | ug/L  | 263640   | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Cyc... | 9.95  | 17.0    | ug/L  | 111941   | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Cyc... | 10.02 | 19.4    | ug/L  | 127545   | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Str... | 10.06 | 26.2    | ug/L  | 172243   | 2 | 8.90                  | 164476 | 25.0 |  |
| (DEL) Alkane: Str... | 10.13 | 31.5    | ug/L  | 161035   | 3 | 11.30                 | 127682 | 25.0 |  |
| unknown-02           | 10.17 | 61.5    | ug/L  | 314305   | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Cyc... | 10.43 | 46.3    | ug/L  | 236208   | 3 | 11.30                 | 127682 | 25.0 |  |
| Dichloroacetic ac... | 10.50 | 47.2    | ug/L  | 241257   | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Cyc... | 10.56 | 73.9    | ug/L  | 377277   | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Str... | 10.62 | 101.1   | ug/L  | 516511   | 3 | 11.30                 | 127682 | 25.0 |  |
| trans-2-Oxabicycl... | 10.77 | 25.0    | ug/L  | 127714   | 3 | 11.30                 | 127682 | 25.0 |  |
| Sulfurous acid, 2... | 10.82 | 29.3    | ug/L  | 149541   | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Str... | 10.88 | 33.7    | ug/L  | 172084   | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Str... | 10.92 | 116.9   | ug/L  | 597201   | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Str... | 11.08 | 51.8    | ug/L  | 264690   | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Cyc... | 11.20 | 90.8    | ug/L  | 463826   | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Str... | 11.38 | 25.3    | ug/L  | 129042   | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Str... | 11.42 | 71.5    | ug/L  | 364903   | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Str... | 11.47 | 42.1    | ug/L  | 214898   | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Str... | 11.51 | 41.4    | ug/L  | 211464   | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Str... | 11.83 | 54.9    | ug/L  | 280278   | 3 | 11.30                 | 127682 | 25.0 |  |
| Adamantane           | 12.10 | 14.4    | ug/L  | 73592    | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Str... | 12.17 | 5.2     | ug/L  | 26386    | 3 | 11.30                 | 127682 | 25.0 |  |
| [1,2,4]Thiadiazol... | 12.30 | 51.2    | ug/L  | 261495   | 3 | 11.30                 | 127682 | 25.0 |  |
| unknown-03           | 12.42 | 19.3    | ug/L  | 98633    | 3 | 11.30                 | 127682 | 25.0 |  |
| Naphthalene, deca... | 12.52 | 31.2    | ug/L  | 159179   | 3 | 11.30                 | 127682 | 25.0 |  |
| Sulfurous acid, d... | 12.64 | 7.6     | ug/L  | 38621    | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Str... | 12.85 | 3.0     | ug/L  | 15281    | 3 | 11.30                 | 127682 | 25.0 |  |
| (DEL) Alkane: Str... | 12.93 | 14.1    | ug/L  | 72200    | 3 | 11.30                 | 127682 | 25.0 |  |
| 2-Methyladamantane   | 13.05 | 4.4     | ug/L  | 22568    | 3 | 11.30                 | 127682 | 25.0 |  |
| unknown-04           | 13.26 | 2.0     | ug/L  | 9980     | 3 | 11.30                 | 127682 | 25.0 |  |
| unknown-05           | 13.53 | 3.1     | ug/L  | 15817    | 3 | 11.30                 | 127682 | 25.0 |  |

|                      |       |          |       |   |       |        |      |
|----------------------|-------|----------|-------|---|-------|--------|------|
| unknown-06           | 13.59 | 2.3 ug/L | 11535 | 3 | 11.30 | 127682 | 25.0 |
| unknown-07           | 13.79 | 1.5 ug/L | 7383  | 3 | 11.30 | 127682 | 25.0 |
| Decahydro-4,4,8,9... | 15.64 | 4.9 ug/L | 24986 | 3 | 11.30 | 127682 | 25.0 |
| unknown-08           | 16.11 | 1.6 ug/L | 7915  | 3 | 11.30 | 127682 | 25.0 |

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JH2