

Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
 Data File : VV016547.D  
 Acq On : 05 Jun 2020 19:39  
 Operator : SY/MD  
 Sample : L2861-19  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 F9E67

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\SOMVLM060320WMA.M  
 Title : VOC Analysis

Signal : TIC

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 1.312       | 60            | 69          | 78           | rBV3     | 694165         | 854416        | 0.32%           | 0.194%        |
| 2         | 1.364       | 78            | 85          | 96           | rVB      | 348076         | 338225        | 0.13%           | 0.077%        |
| 3         | 1.422       | 96            | 103         | 110          | rBV      | 329933         | 295690        | 0.11%           | 0.067%        |
| 4         | 1.553       | 135           | 144         | 157          | rVV2     | 157642         | 256789        | 0.10%           | 0.058%        |
| 5         | 1.624       | 158           | 166         | 182          | rVB      | 215920         | 282776        | 0.11%           | 0.064%        |
| 6         | 1.766       | 201           | 210         | 217          | rBV      | 245114         | 308426        | 0.12%           | 0.070%        |
| 7         | 1.807       | 217           | 223         | 235          | rVB      | 196190         | 260980        | 0.10%           | 0.059%        |
| 8         | 1.904       | 241           | 253         | 268          | rVV      | 422347         | 546409        | 0.21%           | 0.124%        |
| 9         | 1.987       | 270           | 279         | 286          | rVV      | 242954         | 333797        | 0.13%           | 0.076%        |
| 10        | 2.032       | 286           | 293         | 308          | rVV2     | 232222         | 360513        | 0.14%           | 0.082%        |
| 11        | 2.116       | 308           | 319         | 330          | rVV      | 312263         | 468914        | 0.18%           | 0.106%        |
| 12        | 2.489       | 411           | 435         | 455          | rBV      | 774769         | 1410251       | 0.53%           | 0.319%        |
| 13        | 2.589       | 455           | 466         | 480          | rVV      | 507167         | 949823        | 0.36%           | 0.215%        |
| 14        | 3.454       | 720           | 735         | 749          | rBV3     | 91034          | 232914        | 0.09%           | 0.053%        |
| 15        | 3.785       | 823           | 838         | 845          | rBV2     | 164349         | 390564        | 0.15%           | 0.088%        |
| 16        | 3.901       | 864           | 874         | 903          | rVB      | 119658         | 317783        | 0.12%           | 0.072%        |
| 17        | 4.373       | 1003          | 1021        | 1041         | rBV      | 247909         | 611430        | 0.23%           | 0.138%        |
| 18        | 4.704       | 1101          | 1124        | 1144         | rBV      | 329740         | 840482        | 0.32%           | 0.190%        |
| 19        | 5.171       | 1218          | 1269        | 1284         | rBV3     | 76698336       | 264305011     | 100.00%         | 59.862%       |
| 20        | 5.254       | 1288          | 1295        | 1311         | rVV      | 520841         | 1135726       | 0.43%           | 0.257%        |
| 21        | 5.341       | 1313          | 1322        | 1326         | rVV4     | 126019         | 239138        | 0.09%           | 0.054%        |
| 22        | 5.389       | 1327          | 1337        | 1359         | rVB      | 667997         | 1394108       | 0.53%           | 0.316%        |
| 23        | 5.547       | 1375          | 1386        | 1403         | rVB2     | 89199          | 185893        | 0.07%           | 0.042%        |
| 24        | 5.643       | 1403          | 1416        | 1436         | rBV      | 520168         | 1020105       | 0.39%           | 0.231%        |
| 25        | 5.968       | 1494          | 1517        | 1535         | rBV      | 225731         | 461867        | 0.17%           | 0.105%        |
| 26        | 6.093       | 1536          | 1556        | 1568         | rVV      | 342260         | 734494        | 0.28%           | 0.166%        |
| 27        | 6.158       | 1568          | 1576        | 1581         | rVV3     | 83292          | 164887        | 0.06%           | 0.037%        |
| 28        | 6.200       | 1582          | 1589        | 1601         | rVV2     | 127305         | 253777        | 0.10%           | 0.057%        |
| 29        | 6.354       | 1628          | 1637        | 1666         | rVV      | 79267          | 184843        | 0.07%           | 0.042%        |
| 30        | 7.010       | 1825          | 1841        | 1861         | rBV2     | 378248         | 725940        | 0.27%           | 0.164%        |
| 31        | 7.248       | 1905          | 1915        | 1930         | rVB      | 392365         | 680571        | 0.26%           | 0.154%        |
| 32        | 7.338       | 1931          | 1943        | 1952         | rBV      | 723478         | 1261581       | 0.48%           | 0.286%        |
| 33        | 7.412       | 1952          | 1966        | 1980         | rVV      | 17845595       | 31911064      | 12.07%          | 7.228%        |
| 34        | 7.489       | 1980          | 1990        | 1997         | rVV      | 356839         | 613569        | 0.23%           | 0.139%        |

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Integrator: RTE  
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 Sampling : 1  
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 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\SOMVLM060320WMA.M  
 Title : VOC Analysis

|    |        |      |      |      |      |          |          |       |        |
|----|--------|------|------|------|------|----------|----------|-------|--------|
| 35 | 7.544  | 1997 | 2007 | 2020 | rVB  | 1489972  | 2517867  | 0.95% | 0.570% |
| 36 | 7.643  | 2031 | 2038 | 2049 | rVB  | 130539   | 212303   | 0.08% | 0.048% |
| 37 | 7.717  | 2050 | 2061 | 2072 | rBV  | 830642   | 1373476  | 0.52% | 0.311% |
| 38 | 7.871  | 2097 | 2109 | 2128 | rVB4 | 155708   | 358350   | 0.14% | 0.081% |
| 39 | 8.019  | 2144 | 2155 | 2171 | rBV  | 964955   | 1567643  | 0.59% | 0.355% |
| 40 | 8.106  | 2172 | 2182 | 2192 | rVV2 | 536307   | 914577   | 0.35% | 0.207% |
| 41 | 8.161  | 2192 | 2199 | 2211 | rVV  | 255652   | 437829   | 0.17% | 0.099% |
| 42 | 8.235  | 2211 | 2222 | 2236 | rVV4 | 262742   | 529493   | 0.20% | 0.120% |
| 43 | 8.656  | 2341 | 2353 | 2364 | rBV7 | 60967    | 138545   | 0.05% | 0.031% |
| 44 | 8.746  | 2372 | 2381 | 2388 | rBV  | 157463   | 261730   | 0.10% | 0.059% |
| 45 | 8.846  | 2397 | 2412 | 2417 | rBV2 | 1152662  | 2384537  | 0.90% | 0.540% |
| 46 | 8.916  | 2426 | 2434 | 2448 | rVB2 | 3754366  | 6241775  | 2.36% | 1.414% |
| 47 | 9.035  | 2459 | 2471 | 2484 | rBV  | 11770772 | 19810006 | 7.50% | 4.487% |
| 48 | 9.090  | 2484 | 2488 | 2494 | rVV  | 672901   | 947053   | 0.36% | 0.214% |
| 49 | 9.129  | 2494 | 2500 | 2501 | rVV2 | 609477   | 667391   | 0.25% | 0.151% |
| 50 | 9.161  | 2502 | 2510 | 2529 | rVB  | 4478180  | 7643287  | 2.89% | 1.731% |
| 51 | 9.283  | 2530 | 2548 | 2555 | rBV3 | 1008531  | 2206325  | 0.83% | 0.500% |
| 52 | 9.328  | 2555 | 2562 | 2575 | rVB3 | 829350   | 1456300  | 0.55% | 0.330% |
| 53 | 9.402  | 2575 | 2585 | 2597 | rBV2 | 3526198  | 5456231  | 2.06% | 1.236% |
| 54 | 9.473  | 2597 | 2607 | 2616 | rBV3 | 1202931  | 2135778  | 0.81% | 0.484% |
| 55 | 9.521  | 2616 | 2622 | 2627 | rVV  | 392856   | 539519   | 0.20% | 0.122% |
| 56 | 9.566  | 2627 | 2636 | 2645 | rVV  | 5576683  | 8616004  | 3.26% | 1.951% |
| 57 | 9.617  | 2645 | 2652 | 2664 | rVB  | 2997745  | 4375996  | 1.66% | 0.991% |
| 58 | 9.695  | 2667 | 2676 | 2683 | rBV3 | 403963   | 669936   | 0.25% | 0.152% |
| 59 | 9.740  | 2683 | 2690 | 2701 | rVB3 | 441229   | 696515   | 0.26% | 0.158% |
| 60 | 9.826  | 2711 | 2717 | 2725 | rVB2 | 497229   | 769652   | 0.29% | 0.174% |
| 61 | 9.881  | 2725 | 2734 | 2745 | rVB3 | 1808373  | 2918257  | 1.10% | 0.661% |
| 62 | 9.961  | 2745 | 2759 | 2773 | rVB3 | 557638   | 1382987  | 0.52% | 0.313% |
| 63 | 10.093 | 2788 | 2800 | 2815 | rBV3 | 1337255  | 2908202  | 1.10% | 0.659% |
| 64 | 10.167 | 2816 | 2823 | 2829 | rBV2 | 262049   | 422806   | 0.16% | 0.096% |
| 65 | 10.238 | 2833 | 2845 | 2853 | rVB8 | 985458   | 1996512  | 0.76% | 0.452% |
| 66 | 10.286 | 2853 | 2860 | 2871 | rVB  | 988477   | 1349993  | 0.51% | 0.306% |
| 67 | 10.379 | 2873 | 2889 | 2898 | rBV6 | 1698330  | 3416441  | 1.29% | 0.774% |
| 68 | 10.431 | 2898 | 2905 | 2912 | rVB  | 931920   | 1243464  | 0.47% | 0.282% |
| 69 | 10.537 | 2930 | 2938 | 2950 | rVB5 | 841371   | 1403925  | 0.53% | 0.318% |
| 70 | 10.601 | 2950 | 2958 | 2970 | rVB  | 1027417  | 1596953  | 0.60% | 0.362% |
| 71 | 10.672 | 2973 | 2980 | 2982 | rBV3 | 119673   | 144030   | 0.05% | 0.033% |

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## Integration Parameters: LSCINT.P

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 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

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 Peak separation: 5

Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
 Title : VOC Analysis

|     |        |      |      |      |      |         |         |       |        |
|-----|--------|------|------|------|------|---------|---------|-------|--------|
| 72  | 10.704 | 2983 | 2990 | 2999 | rVB5 | 377637  | 640971  | 0.24% | 0.145% |
| 73  | 10.778 | 2999 | 3013 | 3032 | rBV4 | 1653365 | 4317740 | 1.63% | 0.978% |
| 74  | 10.868 | 3033 | 3041 | 3050 | rVV4 | 745904  | 1286790 | 0.49% | 0.291% |
| 75  | 10.936 | 3051 | 3062 | 3076 | rVV2 | 1007078 | 2540748 | 0.96% | 0.575% |
| 76  | 11.006 | 3077 | 3084 | 3094 | rVB2 | 758837  | 1140828 | 0.43% | 0.258% |
| 77  | 11.119 | 3109 | 3119 | 3125 | rBV4 | 784919  | 1624399 | 0.61% | 0.368% |
| 78  | 11.270 | 3159 | 3166 | 3177 | rVB  | 988257  | 1546372 | 0.59% | 0.350% |
| 79  | 11.357 | 3183 | 3193 | 3202 | rBV3 | 2035023 | 3264300 | 1.24% | 0.739% |
| 80  | 11.415 | 3204 | 3211 | 3233 | rVB7 | 636913  | 1892680 | 0.72% | 0.429% |
| 81  | 11.550 | 3241 | 3253 | 3262 | rBV6 | 714954  | 1536290 | 0.58% | 0.348% |
| 82  | 11.646 | 3278 | 3283 | 3294 | rVB  | 704173  | 1061761 | 0.40% | 0.240% |
| 83  | 11.775 | 3313 | 3323 | 3338 | rBV4 | 983084  | 2039180 | 0.77% | 0.462% |
| 84  | 11.846 | 3339 | 3345 | 3359 | rVV7 | 377045  | 842866  | 0.32% | 0.191% |
| 85  | 11.939 | 3360 | 3374 | 3384 | rVV3 | 1049747 | 2517912 | 0.95% | 0.570% |
| 86  | 11.990 | 3384 | 3390 | 3401 | rVB4 | 373267  | 612251  | 0.23% | 0.139% |
| 87  | 12.116 | 3419 | 3429 | 3441 | rBV3 | 962322  | 1663704 | 0.63% | 0.377% |
| 88  | 12.325 | 3483 | 3494 | 3504 | rBV7 | 247811  | 608061  | 0.23% | 0.138% |
| 89  | 12.428 | 3518 | 3526 | 3534 | rBV7 | 294644  | 481500  | 0.18% | 0.109% |
| 90  | 12.534 | 3552 | 3559 | 3573 | rVB4 | 170803  | 367733  | 0.14% | 0.083% |
| 91  | 12.733 | 3614 | 3621 | 3633 | rBV6 | 158044  | 297481  | 0.11% | 0.067% |
| 92  | 12.801 | 3634 | 3642 | 3650 | rVB3 | 174821  | 268613  | 0.10% | 0.061% |
| 93  | 12.858 | 3654 | 3660 | 3668 | rVV5 | 117205  | 173767  | 0.07% | 0.039% |
| 94  | 12.987 | 3690 | 3700 | 3715 | rVB2 | 453267  | 805441  | 0.30% | 0.182% |
| 95  | 13.244 | 3771 | 3780 | 3785 | rBV2 | 297462  | 456134  | 0.17% | 0.103% |
| 96  | 13.318 | 3796 | 3803 | 3821 | rVB  | 213212  | 393292  | 0.15% | 0.089% |
| 97  | 13.460 | 3838 | 3847 | 3857 | rBV  | 671341  | 1005962 | 0.38% | 0.228% |
| 98  | 13.524 | 3858 | 3867 | 3883 | rVB  | 796968  | 1295760 | 0.49% | 0.293% |
| 99  | 13.617 | 3887 | 3896 | 3902 | rBV  | 394587  | 637349  | 0.24% | 0.144% |
| 100 | 14.202 | 4071 | 4078 | 4089 | rVB2 | 94811   | 156801  | 0.06% | 0.036% |

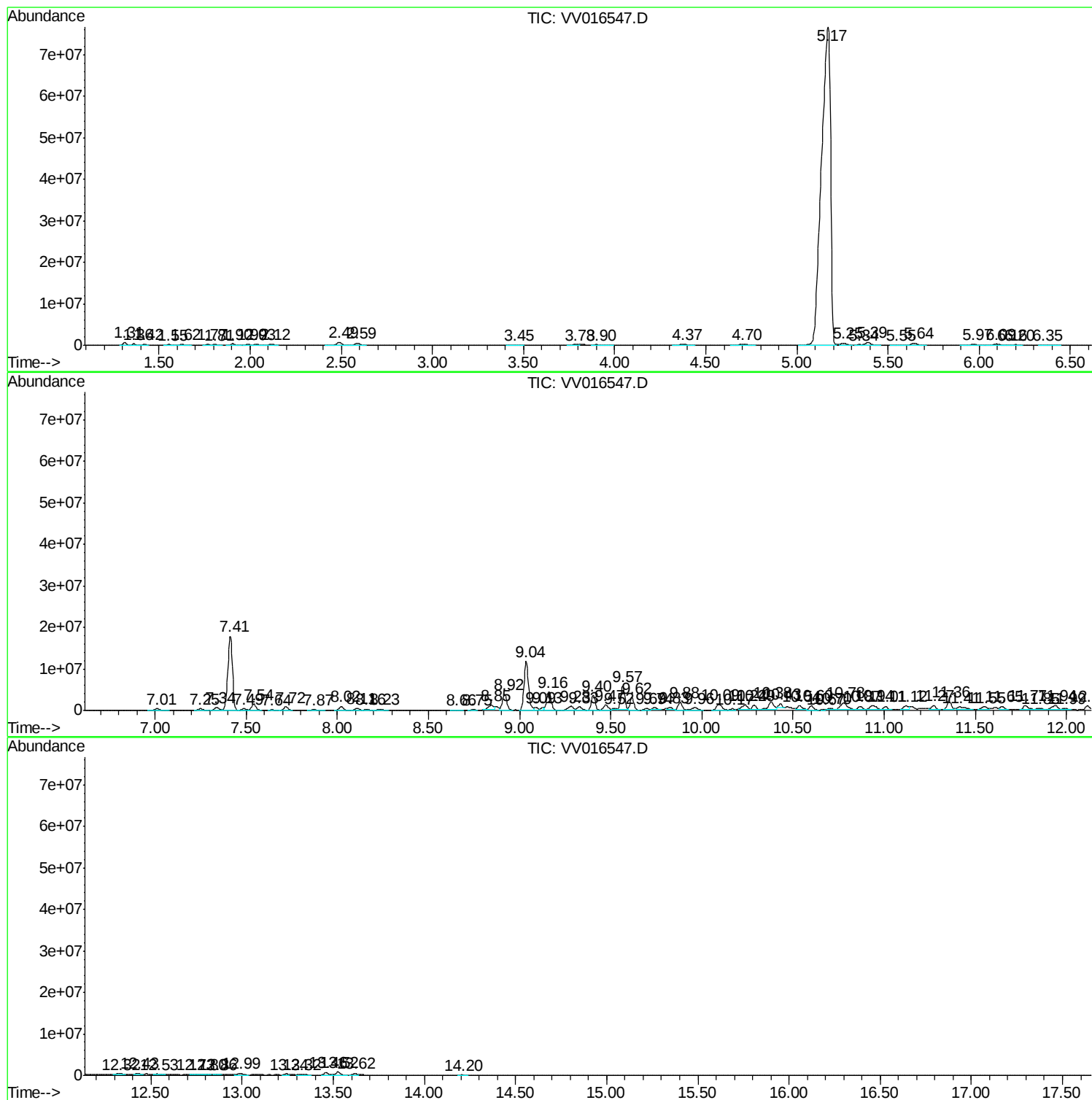
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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

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



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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
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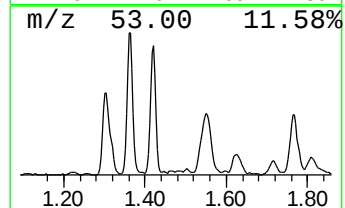
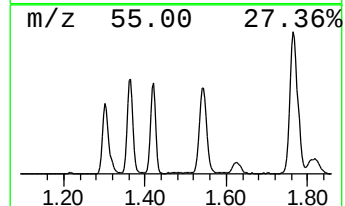
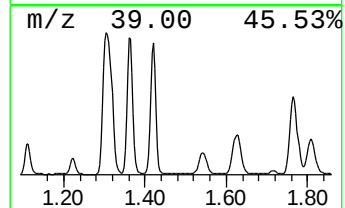
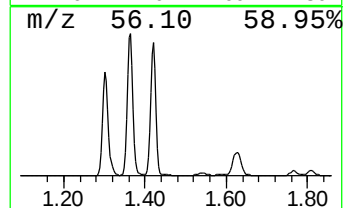
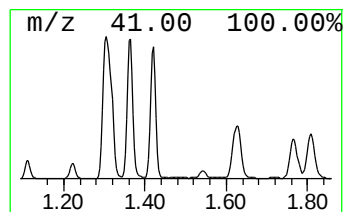
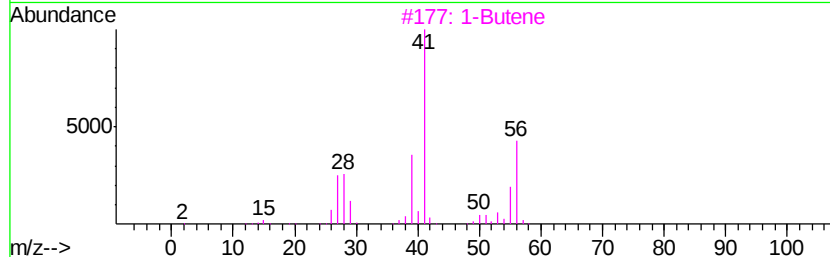
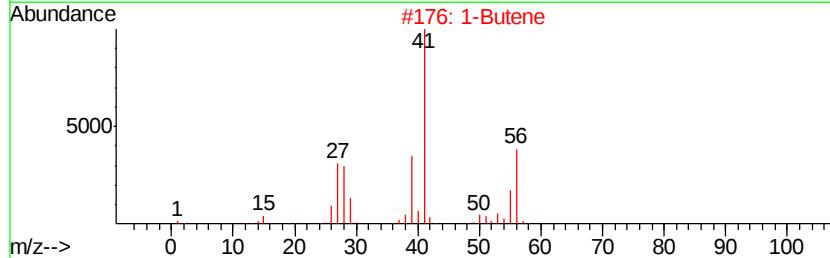
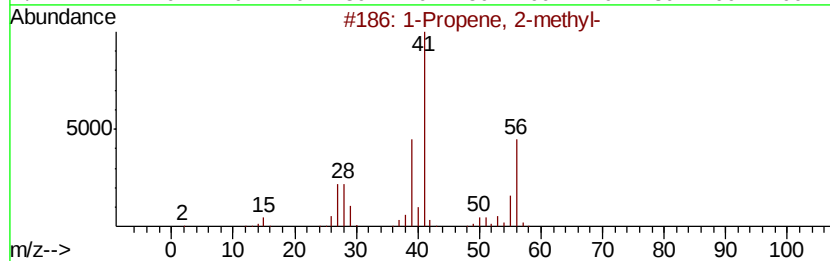
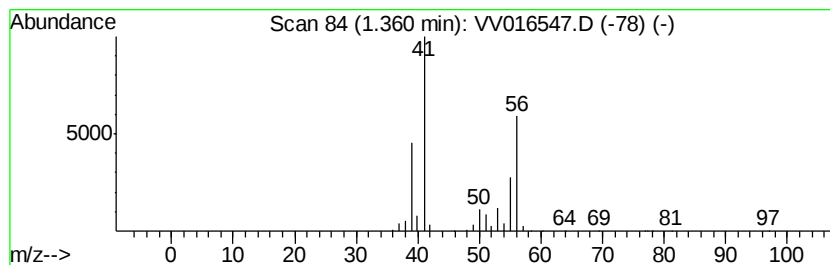
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 1 (DEL) Alkane: Straight-Chai... Concentration Rank 45

| R.T. | EstConc    | Area   | Relative to ISTD    | R.T. |
|------|------------|--------|---------------------|------|
| 1.36 | 16.58 ug/L | 338225 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID         | MW | MolForm | CAS#        | Qual |
|------|----|----------------------|----|---------|-------------|------|
| 1    | 5  | 1-Propene, 2-methyl- | 56 | C4H8    | 000115-11-7 | 87   |
| 2    |    | 1-Butene             | 56 | C4H8    | 000106-98-9 | 87   |
| 3    |    | 1-Butene             | 56 | C4H8    | 000106-98-9 | 86   |
| 4    |    | 1-Propene, 2-methyl- | 56 | C4H8    | 000115-11-7 | 80   |
| 5    |    | 2-Butene, (Z)-       | 56 | C4H8    | 000590-18-1 | 74   |



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Quant Title : VOC Analysis

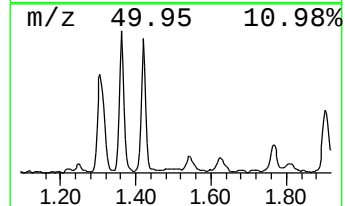
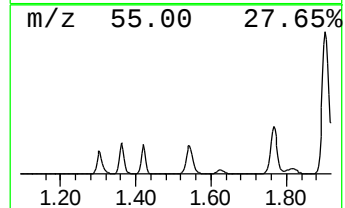
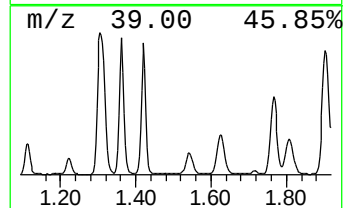
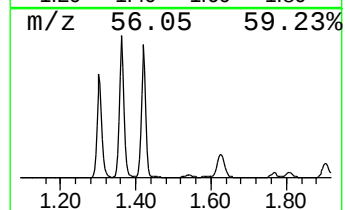
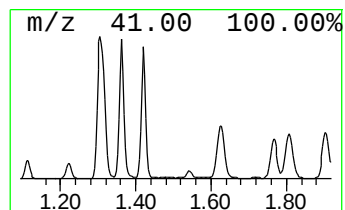
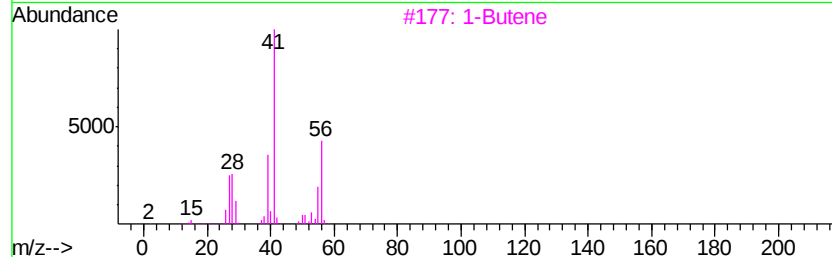
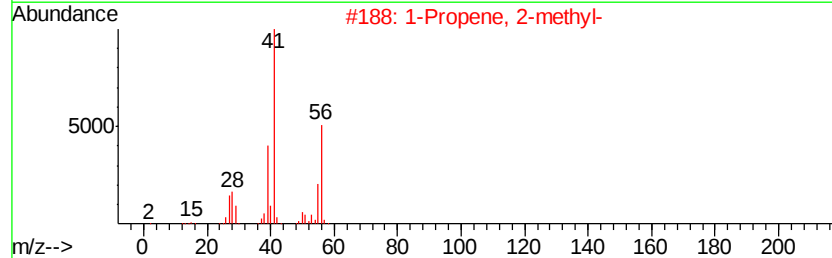
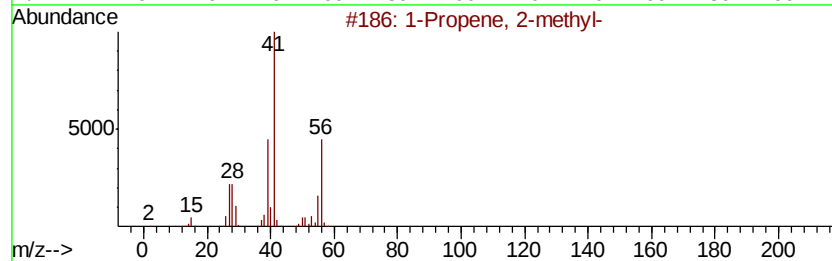
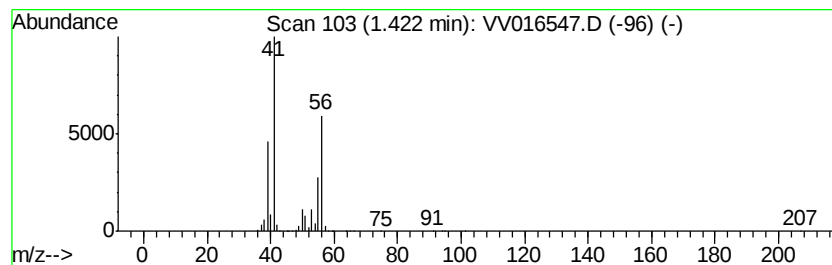
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 2 (DEL) Alkane: Straight-Chai... Concentration Rank 52

| R.T. | EstConc    | Area   | Relative to ISTD    | R.T. |
|------|------------|--------|---------------------|------|
| 1.42 | 14.49 ug/L | 295690 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID         | MW | MolForm | CAS#        | Qual |
|------|----|----------------------|----|---------|-------------|------|
| 1    | 5  | 1-Propene, 2-methyl- | 56 | C4H8    | 000115-11-7 | 87   |
| 2    |    | 1-Propene, 2-methyl- | 56 | C4H8    | 000115-11-7 | 87   |
| 3    |    | 1-Butene             | 56 | C4H8    | 000106-98-9 | 86   |
| 4    |    | 2-Butene, (Z)-       | 56 | C4H8    | 000590-18-1 | 74   |
| 5    |    | 2-Butene, (Z)-       | 56 | C4H8    | 000590-18-1 | 74   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

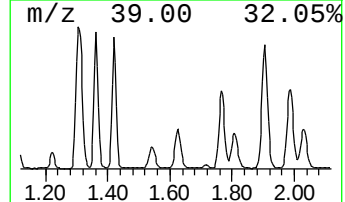
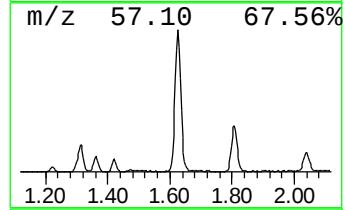
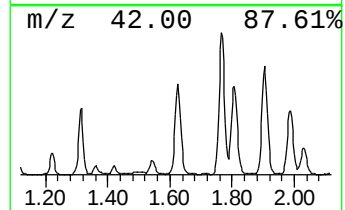
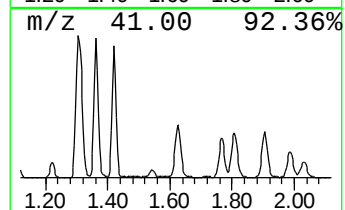
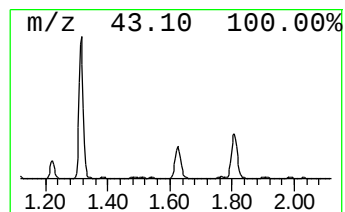
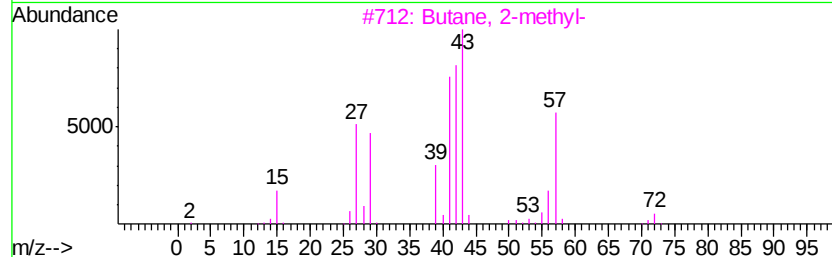
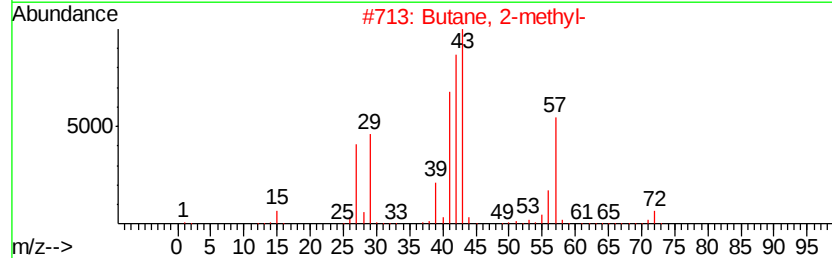
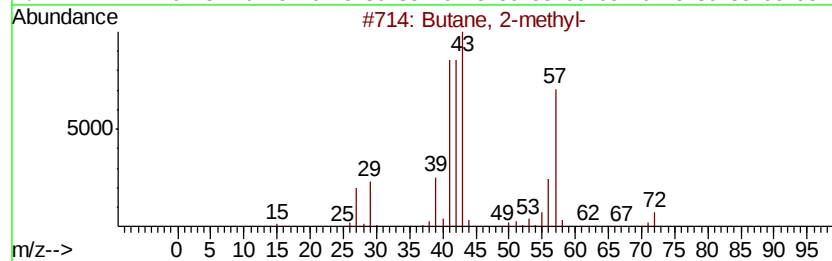
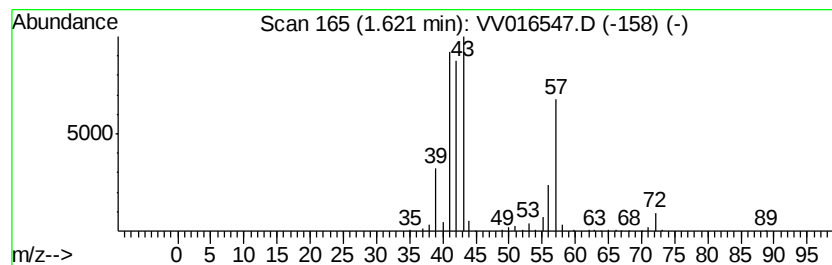
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 3 (DEL) Alkane: Straight-Chai... Concentration Rank 54

| R.T. | EstConc    | Area   | Relative to ISTD    | R.T. |
|------|------------|--------|---------------------|------|
| 1.62 | 13.86 ug/L | 282776 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID      | MW | MolForm | CAS#        | Qual |
|------|----|-------------------|----|---------|-------------|------|
| 1    | 5  | Butane, 2-methyl- | 72 | C5H12   | 000078-78-4 | 91   |
| 2    |    | Butane, 2-methyl- | 72 | C5H12   | 000078-78-4 | 91   |
| 3    |    | Butane, 2-methyl- | 72 | C5H12   | 000078-78-4 | 91   |
| 4    |    | 3-Buten-1-ol      | 72 | C4H8O   | 000627-27-0 | 47   |
| 5    |    | Pentane           | 72 | C5H12   | 000109-66-0 | 33   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

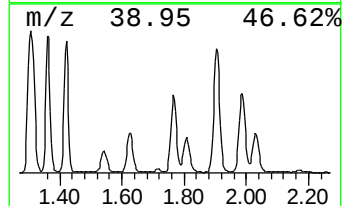
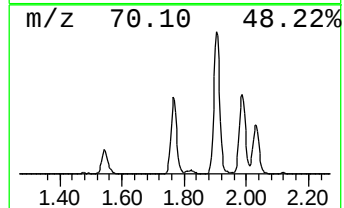
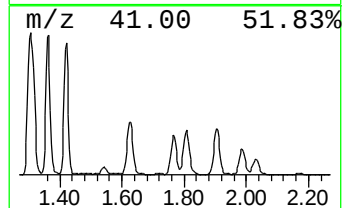
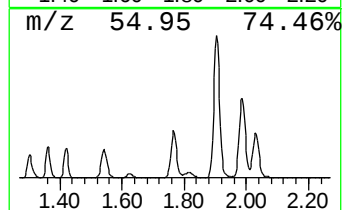
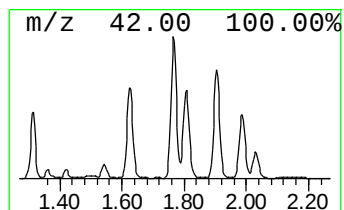
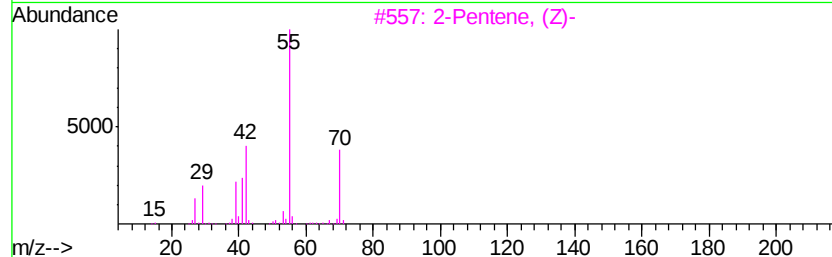
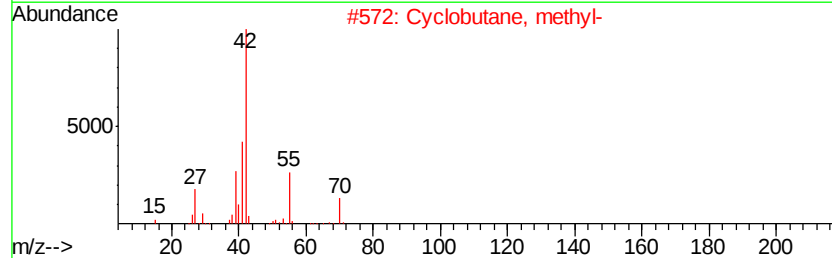
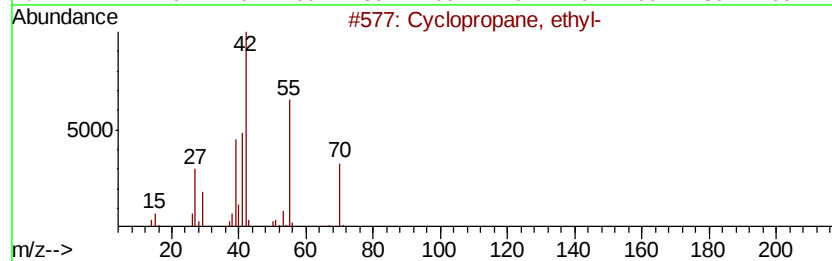
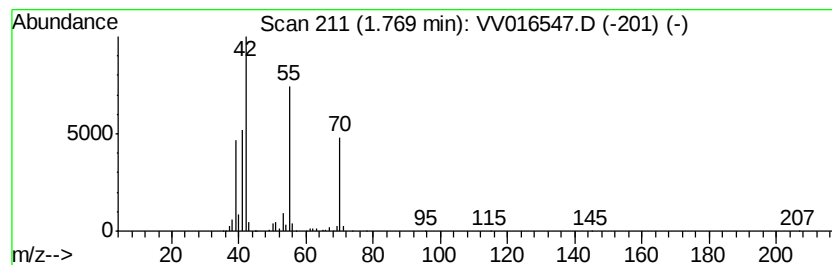
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 4 (DEL) Alkane: Cyclic1.77 Concentration Rank 49

| R.T. | EstConc    | Area   | Relative to ISTD    | R.T. |
|------|------------|--------|---------------------|------|
| 1.77 | 15.12 ug/L | 308426 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID         | MW | MolForm | CAS#        | Qual |
|------|----|----------------------|----|---------|-------------|------|
| 1    | 5  | Cyclopropane, ethyl- | 70 | C5H10   | 001191-96-4 | 87   |
| 2    |    | Cyclobutane, methyl- | 70 | C5H10   | 000598-61-8 | 74   |
| 3    |    | 2-Pentene, (Z)-      | 70 | C5H10   | 000627-20-3 | 74   |
| 4    |    | 1-Pentene            | 70 | C5H10   | 000109-67-1 | 70   |
| 5    |    | Cyclopropane, ethyl- | 70 | C5H10   | 001191-96-4 | 68   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

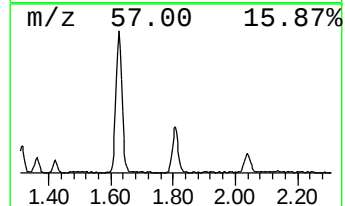
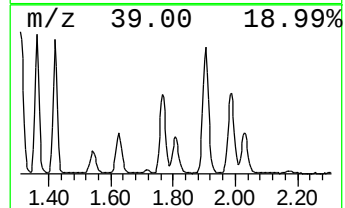
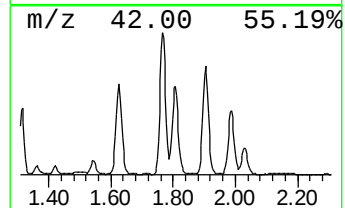
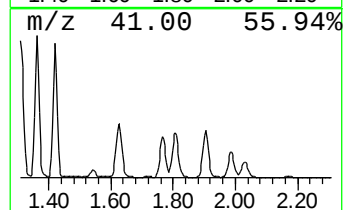
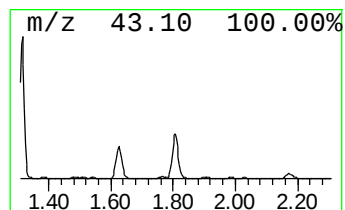
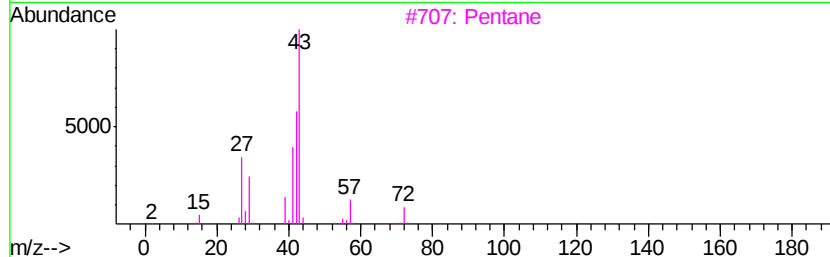
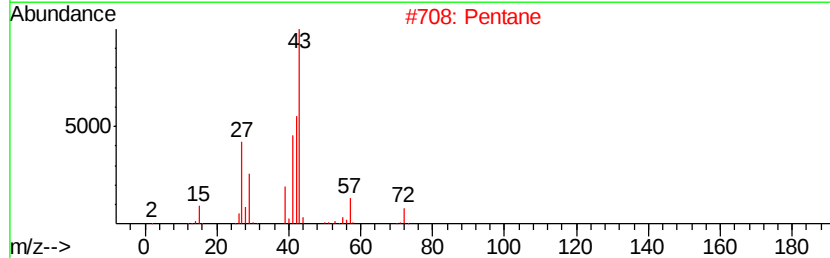
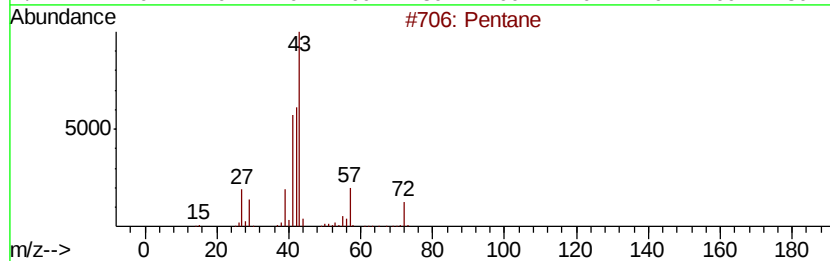
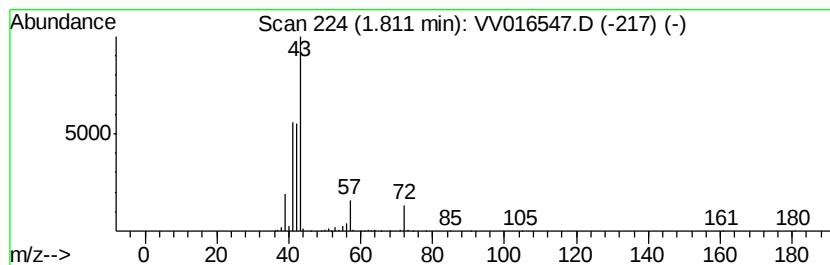
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 5 (DEL) Alkane: Straight-Chai... Concentration Rank 57

| R.T. | EstConc    | Area   | Relative to ISTD    | R.T. |
|------|------------|--------|---------------------|------|
| 1.81 | 12.79 ug/L | 260980 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID    | MW | MolForm | CAS#        | Qual |
|------|----|-----------------|----|---------|-------------|------|
| 1    | 5  | Pentane         | 72 | C5H12   | 000109-66-0 | 87   |
| 2    |    | Pentane         | 72 | C5H12   | 000109-66-0 | 86   |
| 3    |    | Pentane         | 72 | C5H12   | 000109-66-0 | 72   |
| 4    |    | Oxirane, ethyl- | 72 | C4H8O   | 000106-88-7 | 50   |
| 5    |    | Oxirane, ethyl- | 72 | C4H8O   | 000106-88-7 | 50   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

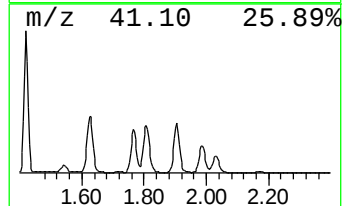
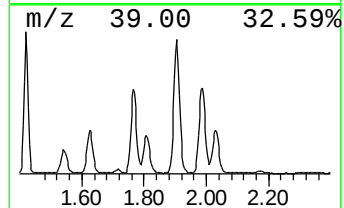
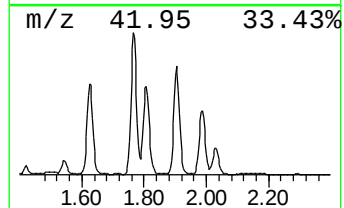
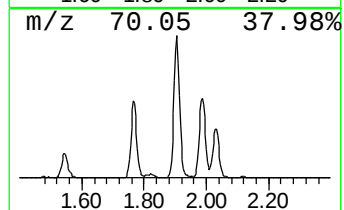
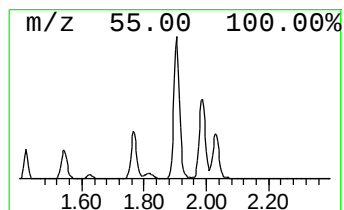
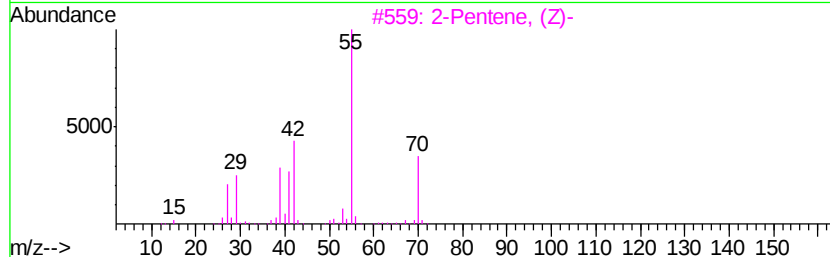
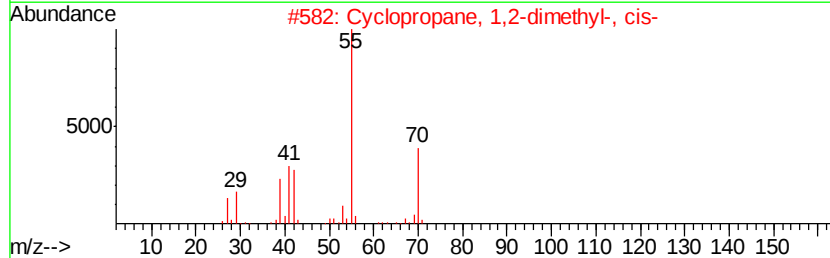
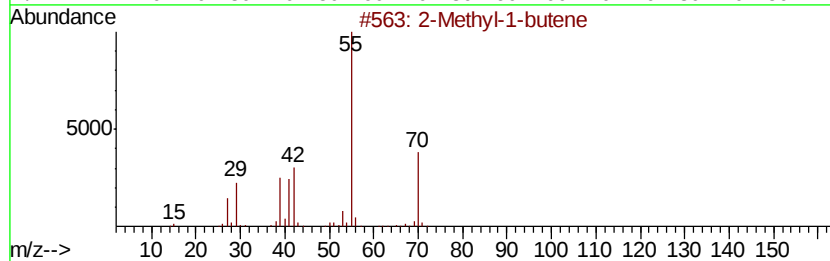
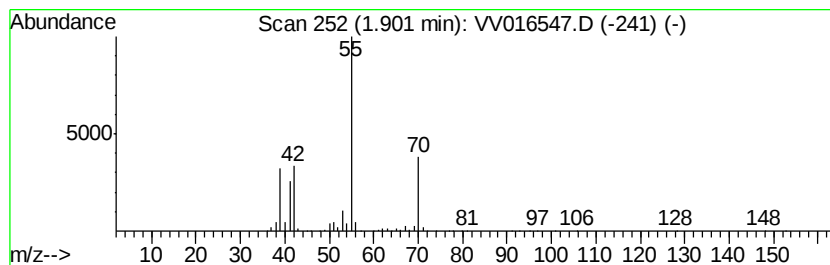
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 6 (DEL) Alkane: Straight-Chai... Concentration Rank 35

| R.T. | EstConc    | Area   | Relative to ISTD    | R.T. |
|------|------------|--------|---------------------|------|
| 1.90 | 26.78 ug/L | 546409 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID                      | MW | MolForm | CAS#        | Qual |
|------|----|-----------------------------------|----|---------|-------------|------|
| 1    | 5  | 2-Methyl-1-butene                 | 70 | C5H10   | 000563-46-2 | 90   |
| 2    |    | Cyclopropane, 1,2-dimethyl-, cis- | 70 | C5H10   | 000930-18-7 | 90   |
| 3    |    | 2-Pentene, (Z)-                   | 70 | C5H10   | 000627-20-3 | 90   |
| 4    |    | 2-Methyl-1-butene                 | 70 | C5H10   | 000563-46-2 | 90   |
| 5    |    | 2-Butene, 2-methyl-               | 70 | C5H10   | 000513-35-9 | 87   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

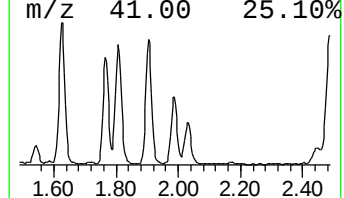
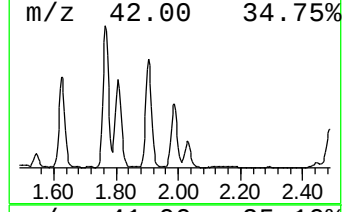
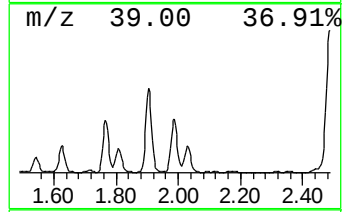
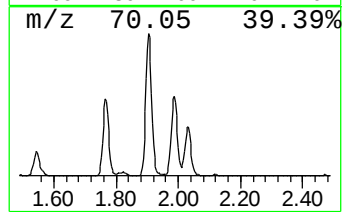
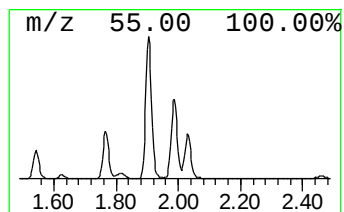
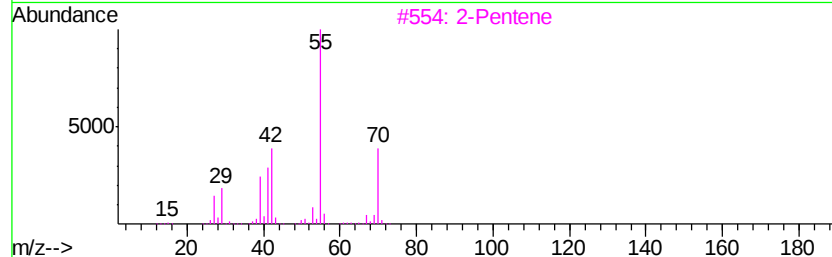
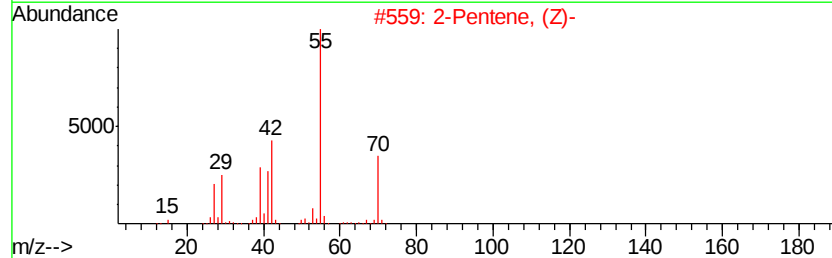
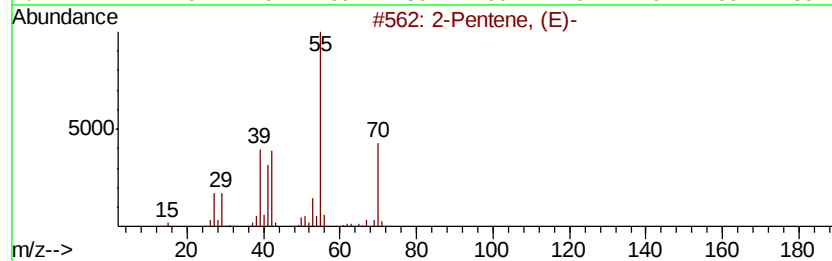
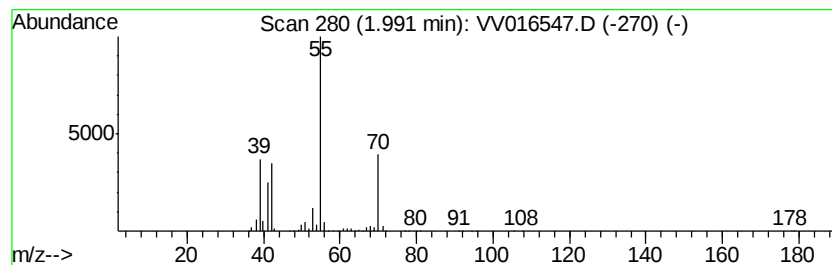
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 7 (DEL) Alkane: Straight-Chai... Concentration Rank 46

| R.T. | EstConc    | Area   | Relative to ISTD    | R.T. |
|------|------------|--------|---------------------|------|
| 1.99 | 16.36 ug/L | 333797 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID      | MW | MolForm | CAS#        | Qual |
|------|----|-------------------|----|---------|-------------|------|
| 1    | 5  | 2-Pentene, (E)-   | 70 | C5H10   | 000646-04-8 | 94   |
| 2    |    | 2-Pentene, (Z)-   | 70 | C5H10   | 000627-20-3 | 90   |
| 3    |    | 2-Pentene         | 70 | C5H10   | 000109-68-2 | 90   |
| 4    |    | 2-Methyl-1-butene | 70 | C5H10   | 000563-46-2 | 87   |
| 5    |    | 2-Methyl-1-butene | 70 | C5H10   | 000563-46-2 | 87   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

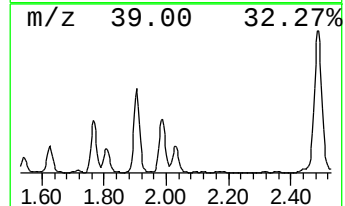
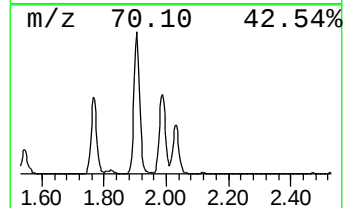
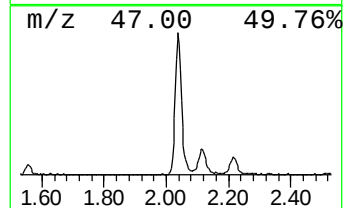
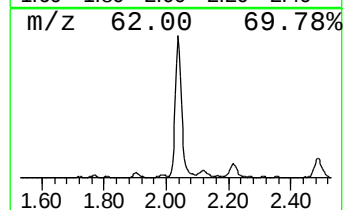
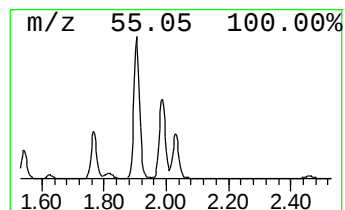
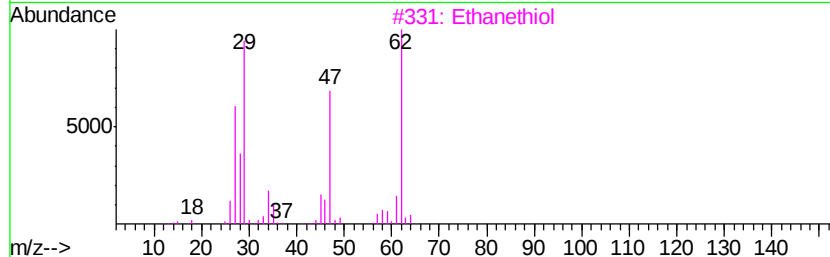
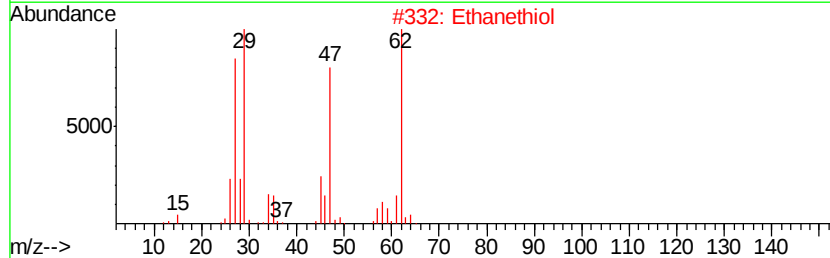
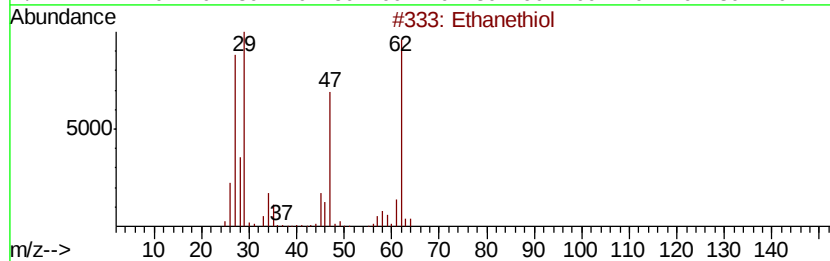
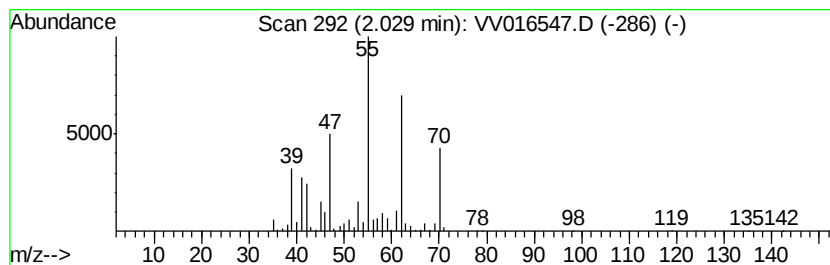
Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

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

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Peak Number 8 Ethanethiol Concentration Rank 44

| R.T.    | EstConc     | Area         | Relative to ISTD    | R.T.      |
|---------|-------------|--------------|---------------------|-----------|
| 2.03    | 17.67 ug/L  | 360513       | 1,4-Difluorobenzene | 5.64      |
| Hit# of | 5           | Tentative ID | MW MolForm          | CAS# Qual |
| 1       | Ethanethiol | 62 C2H6S     | 000075-08-1         | 87        |
| 2       | Ethanethiol | 62 C2H6S     | 000075-08-1         | 87        |
| 3       | Ethanethiol | 62 C2H6S     | 000075-08-1         | 87        |
| 4       | Ethanethiol | 62 C2H6S     | 000075-08-1         | 87        |
| 5       | Ethanethiol | 62 C2H6S     | 000075-08-1         | 87        |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

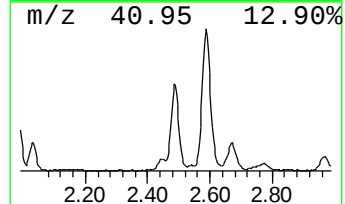
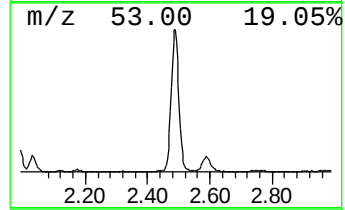
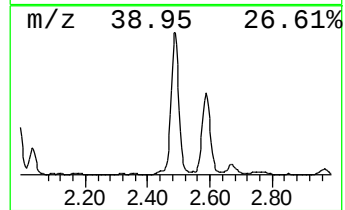
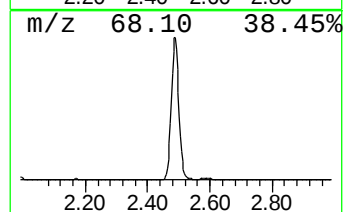
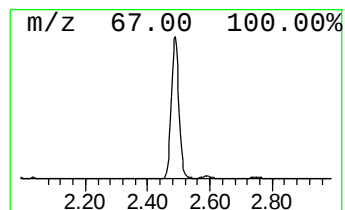
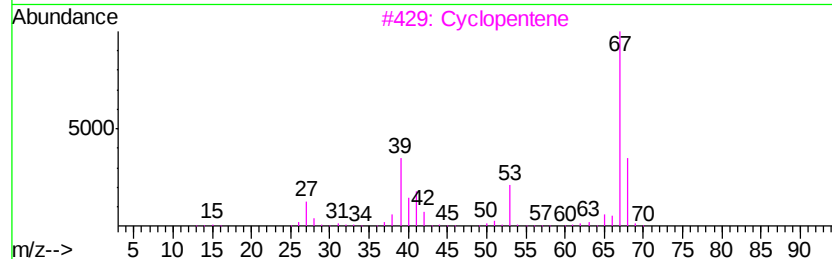
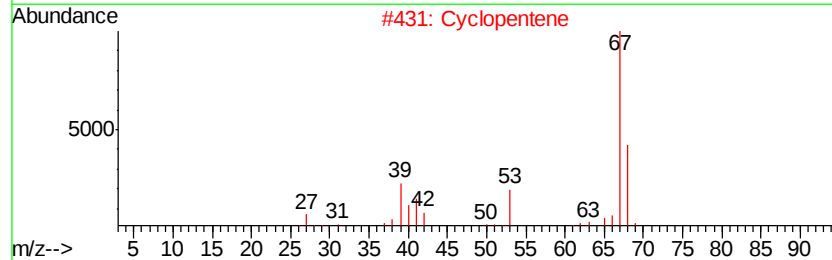
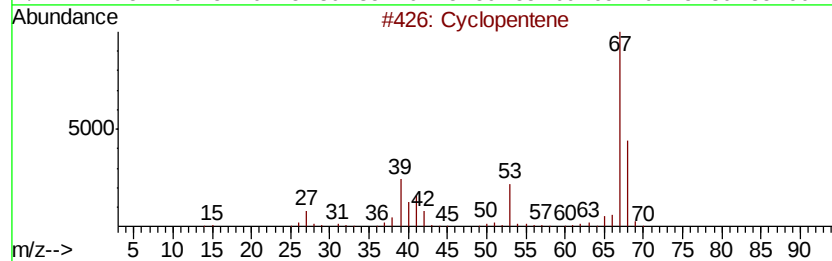
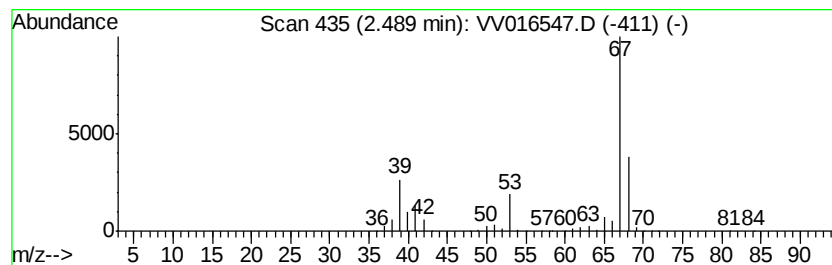
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 Cyclopentene Concentration Rank 10

| R.T. | EstConc    | Area    | Relative to ISTD    | R.T. |
|------|------------|---------|---------------------|------|
| 2.49 | 69.12 ug/L | 1410250 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID                    | MW | MolForm | CAS#        | Qual |
|------|----|---------------------------------|----|---------|-------------|------|
| 1    | 5  | Cyclopentene                    | 68 | C5H8    | 000142-29-0 | 91   |
| 2    |    | Cyclopentene                    | 68 | C5H8    | 000142-29-0 | 91   |
| 3    |    | Cyclopentene                    | 68 | C5H8    | 000142-29-0 | 91   |
| 4    |    | Cyclopropane, methylnmethylene- | 68 | C5H8    | 018631-84-0 | 91   |
| 5    |    | Cyclopentene                    | 68 | C5H8    | 000142-29-0 | 90   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

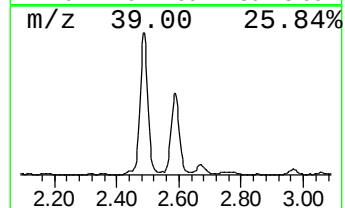
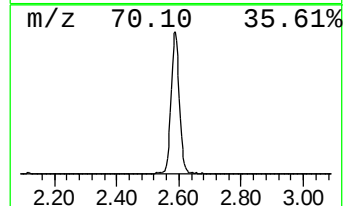
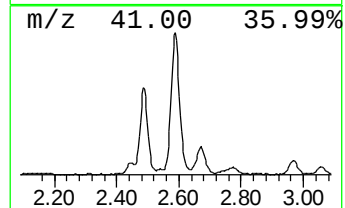
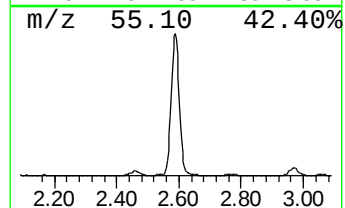
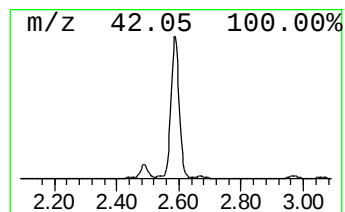
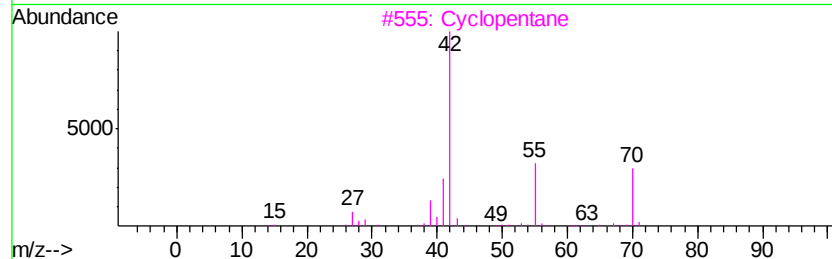
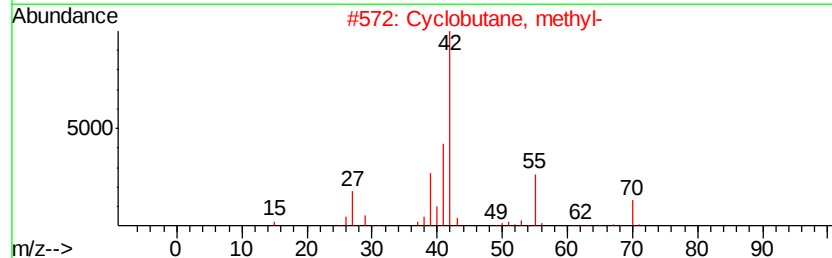
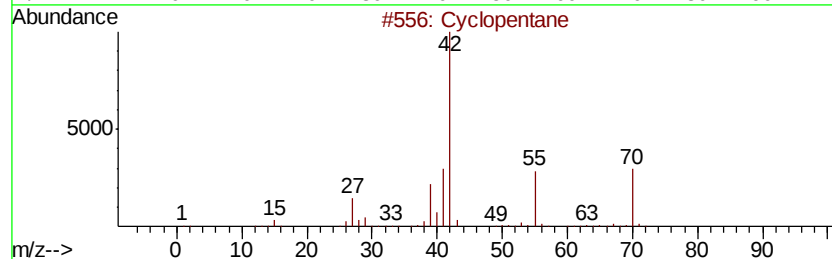
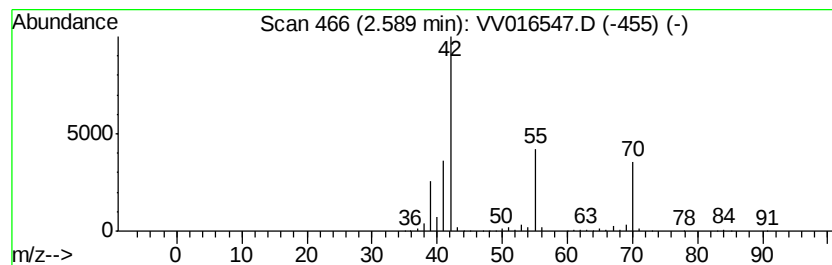
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 10 (DEL) Alkane: Cyclic2.59 Concentration Rank 21

| R.T. | EstConc    | Area   | Relative to ISTD    | R.T. |
|------|------------|--------|---------------------|------|
| 2.59 | 46.56 ug/L | 949823 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID         | MW | MolForm | CAS#        | Qual |
|------|----|----------------------|----|---------|-------------|------|
| 1    | 5  | Cyclopentane         | 70 | C5H10   | 000287-92-3 | 86   |
| 2    |    | Cyclobutane, methyl- | 70 | C5H10   | 000598-61-8 | 78   |
| 3    |    | Cyclopentane         | 70 | C5H10   | 000287-92-3 | 78   |
| 4    |    | Cyclobutane, methyl- | 70 | C5H10   | 000598-61-8 | 72   |
| 5    |    | 1-Pentene            | 70 | C5H10   | 000109-67-1 | 56   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

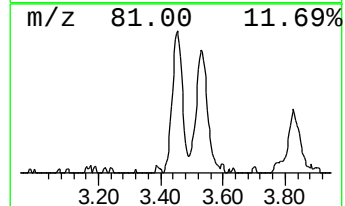
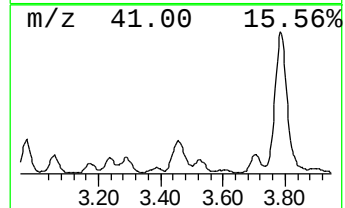
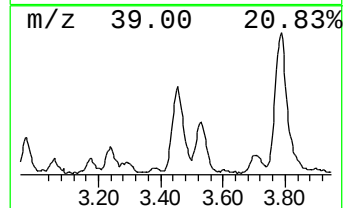
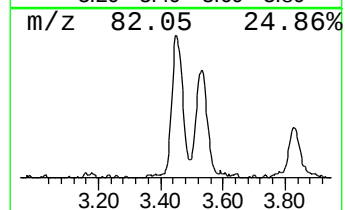
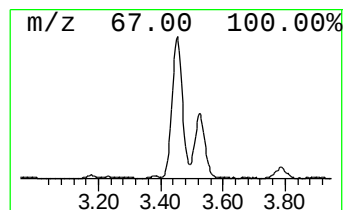
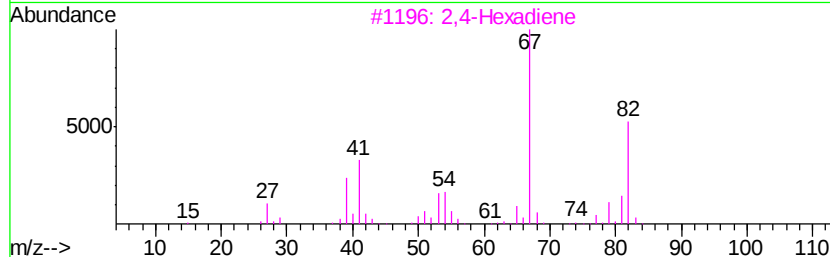
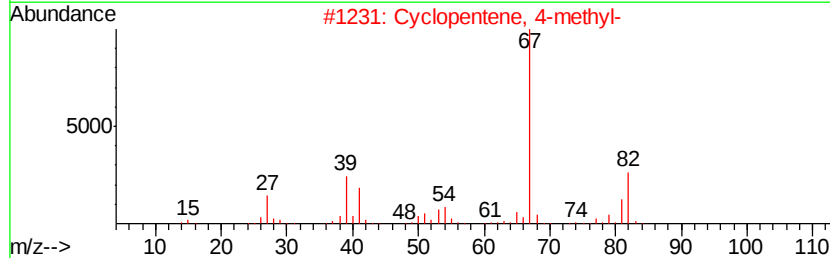
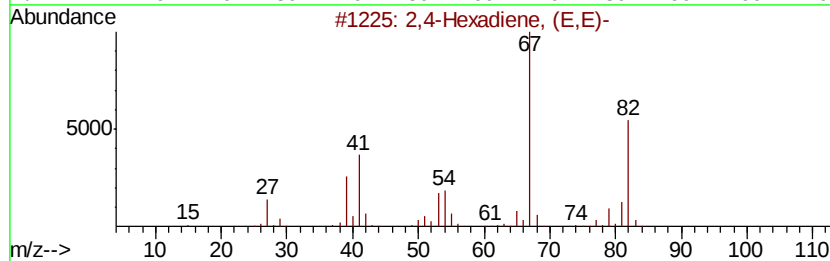
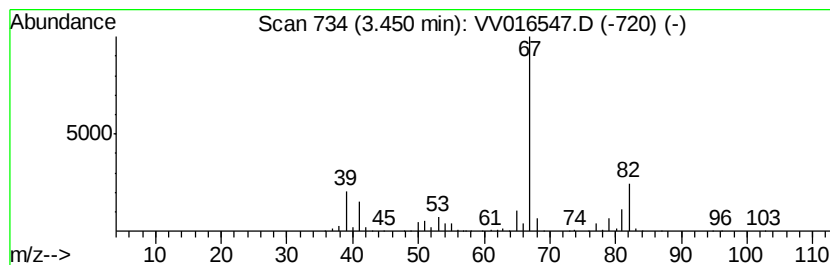
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 11 2,4-Hexadiene, (E,E)- Concentration Rank 61

| R.T. | EstConc    | Area   | Relative to ISTD    | R.T. |
|------|------------|--------|---------------------|------|
| 3.45 | 11.42 ug/L | 232914 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID            | MW | MolForm | CAS#        | Qual |
|------|----|-------------------------|----|---------|-------------|------|
| 1    | 5  | 2,4-Hexadiene, (E,E)-   | 82 | C6H10   | 005194-51-4 | 90   |
| 2    |    | Cyclopentene, 4-methyl- | 82 | C6H10   | 001759-81-5 | 90   |
| 3    |    | 2,4-Hexadiene           | 82 | C6H10   | 000592-46-1 | 90   |
| 4    |    | Cyclopentene, 3-methyl- | 82 | C6H10   | 001120-62-3 | 90   |
| 5    |    | Cyclopentene, 3-methyl- | 82 | C6H10   | 001120-62-3 | 87   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

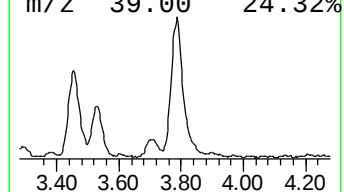
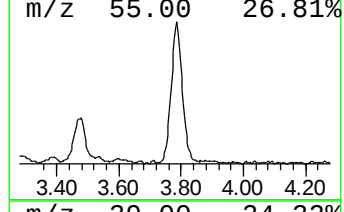
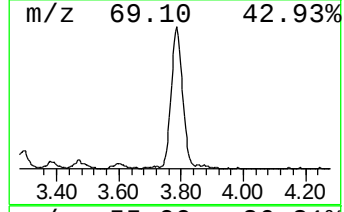
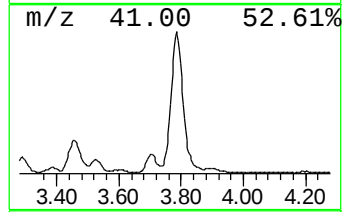
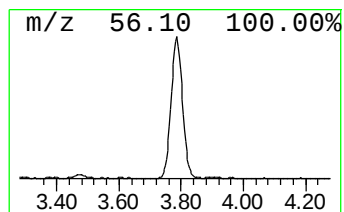
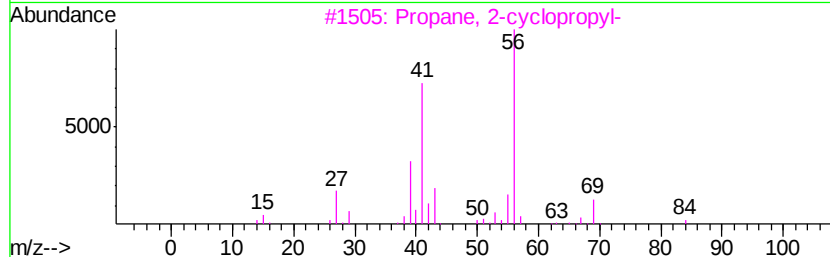
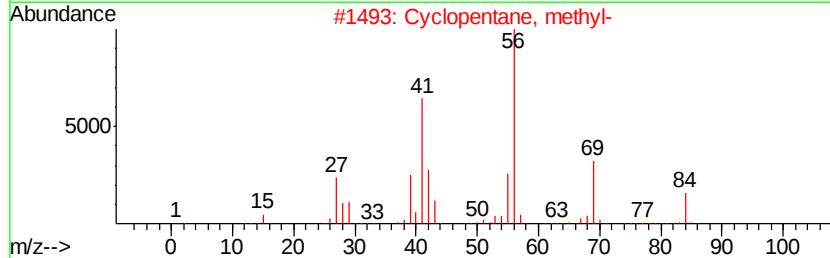
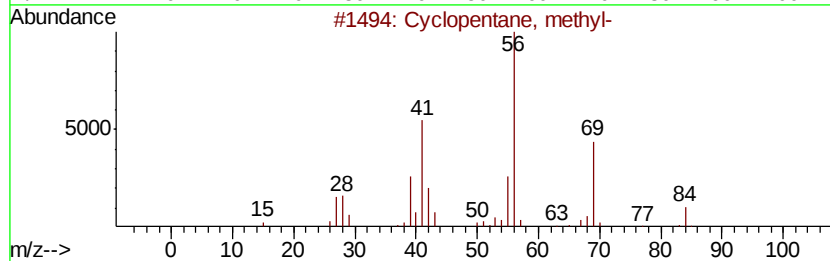
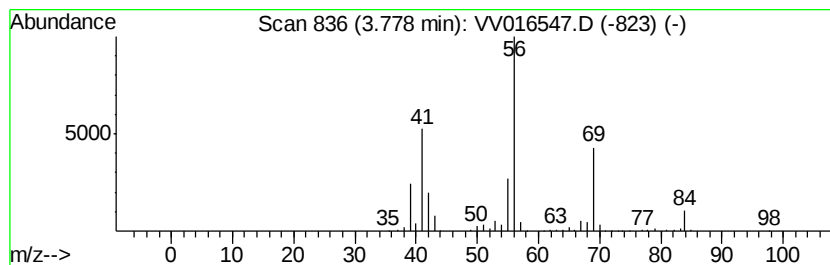
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 12 (DEL) Alkane: Cyclic3.78 Concentration Rank 43

| R.T. | EstConc    | Area   | Relative to ISTD    | R.T. |
|------|------------|--------|---------------------|------|
| 3.78 | 19.14 ug/L | 390564 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID            | MW | MolForm | CAS#        | Qual |
|------|----|-------------------------|----|---------|-------------|------|
| 1    | 5  | Cyclopentane, methyl-   | 84 | C6H12   | 000096-37-7 | 94   |
| 2    |    | Cyclopentane, methyl-   | 84 | C6H12   | 000096-37-7 | 86   |
| 3    |    | Propane, 2-cyclopropyl- | 84 | C6H12   | 003638-35-5 | 86   |
| 4    |    | Cyclohexane             | 84 | C6H12   | 000110-82-7 | 78   |
| 5    |    | 1H-Tetrazole, 5-methyl- | 84 | C2H4N4  | 004076-36-2 | 72   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
 Data File : VV016547.D  
 Acq On : 05 Jun 2020 19:39  
 Operator : SY/MD  
 Sample : L2861-19  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
 Quant Title : VOC Analysis

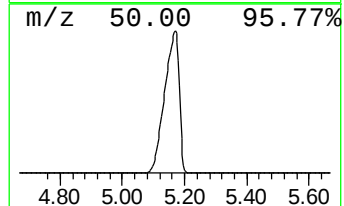
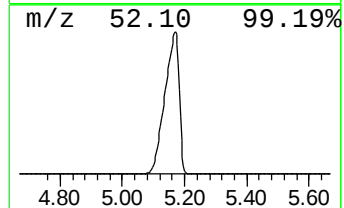
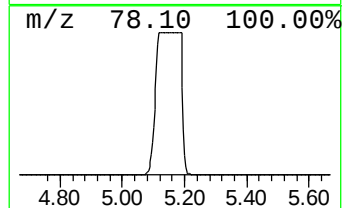
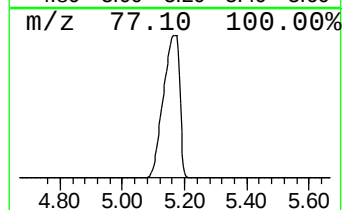
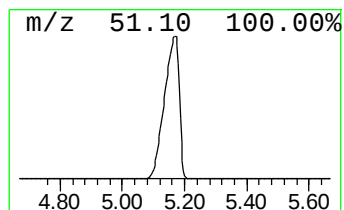
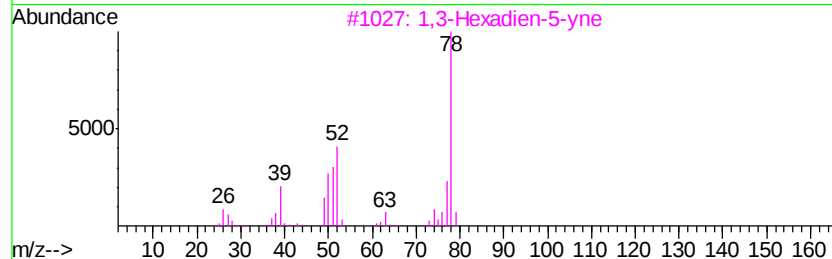
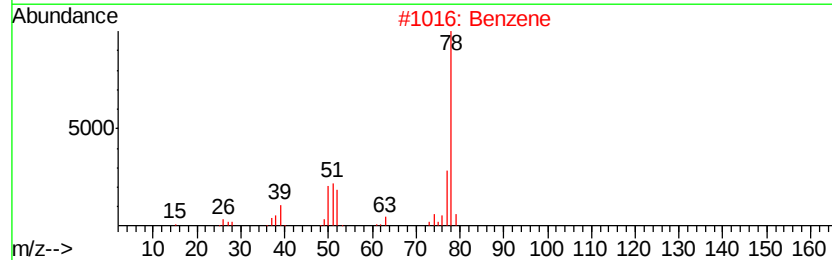
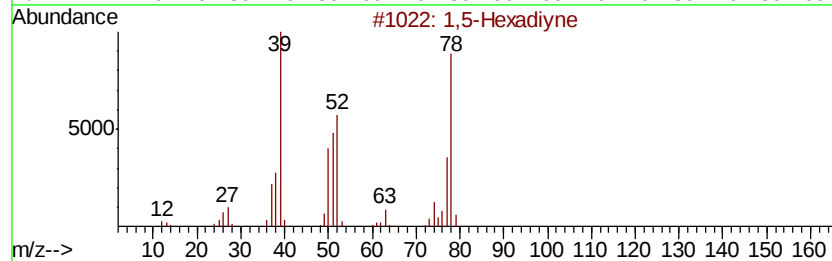
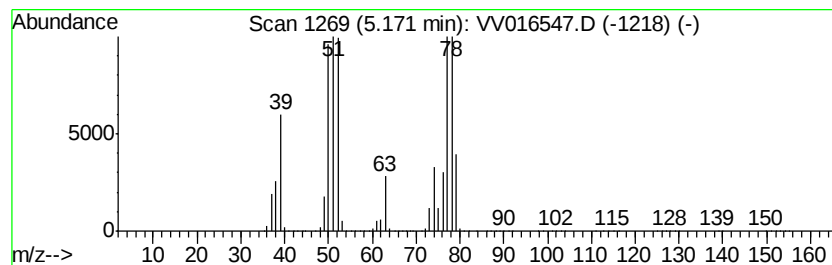
TIC Library : C:\DATABASE\NIST11.L  
 TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
 Peak Number 13 1,5-Hexadiyne Concentration Rank 1

| R.T. | EstConc       | Area      | Relative to ISTD    | R.T. |
|------|---------------|-----------|---------------------|------|
| 5.17 | 12954.80 ug/L | 264305000 | 1,4-Difluorobenzene | 5.64 |

| Hit# of | 5                  | Tentative ID | MW | MolForm | CAS#        | Qual |
|---------|--------------------|--------------|----|---------|-------------|------|
| 1       | 1,5-Hexadiyne      |              | 78 | C6H6    | 000628-16-0 | 91   |
| 2       | Benzene            |              | 78 | C6H6    | 000071-43-2 | 87   |
| 3       | 1,3-Hexadien-5-yne |              | 78 | C6H6    | 010420-90-3 | 83   |
| 4       | 1,5-Hexadiyne      |              | 78 | C6H6    | 000628-16-0 | 81   |
| 5       | 1,5-Hexadien-3-yne |              | 78 | C6H6    | 000821-08-9 | 81   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

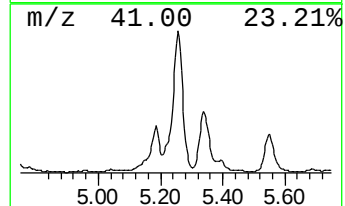
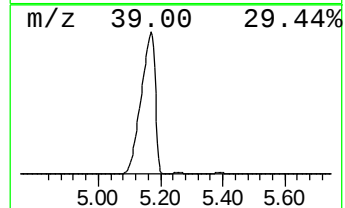
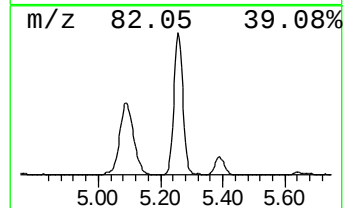
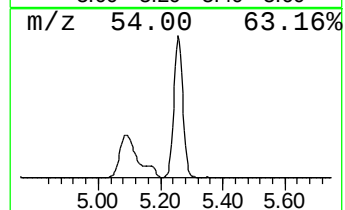
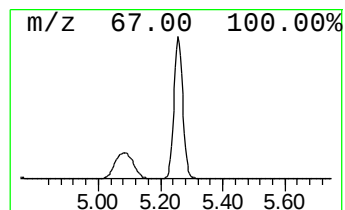
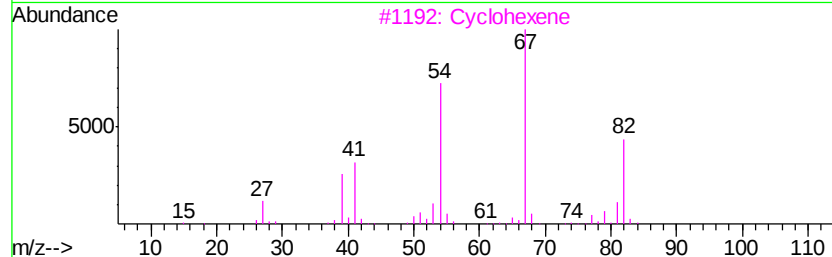
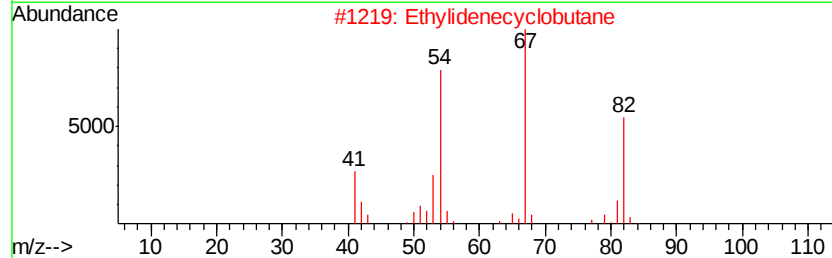
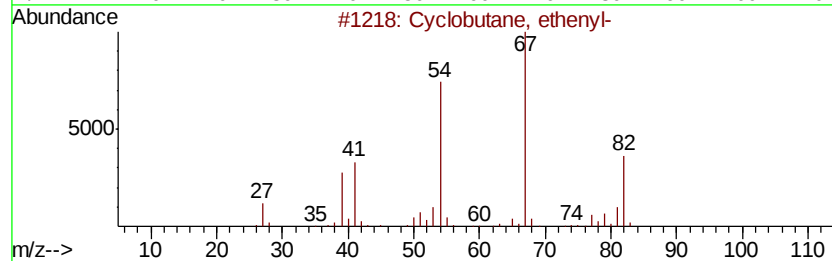
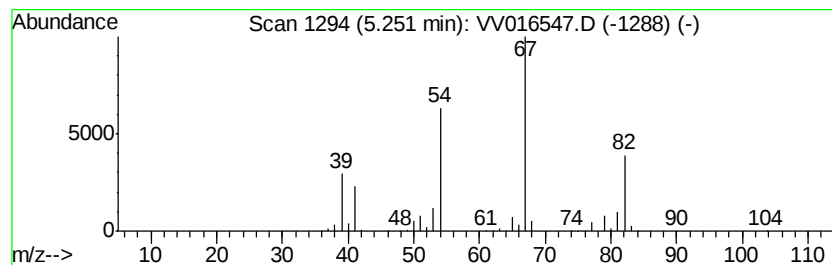
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 14 Cyclobutane, ethenyl- Concentration Rank 15

| R.T. | EstConc    | Area    | Relative to ISTD    | R.T. |
|------|------------|---------|---------------------|------|
| 5.25 | 55.67 ug/L | 1135730 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID          | MW | MolForm | CAS#        | Qual |
|------|----|-----------------------|----|---------|-------------|------|
| 1    | 5  | Cyclobutane, ethenyl- | 82 | C6H10   | 002597-49-1 | 91   |
| 2    |    | Ethylidenecyclobutane | 82 | C6H10   | 001528-21-8 | 90   |
| 3    |    | Cyclohexene           | 82 | C6H10   | 000110-83-8 | 90   |
| 4    |    | Cyclohexene           | 82 | C6H10   | 000110-83-8 | 86   |
| 5    |    | C2H5CH=CHCH=CH2       | 82 | C6H10   | 000592-48-3 | 74   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampled :  
F9E67

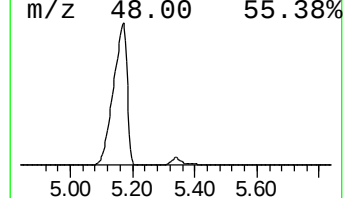
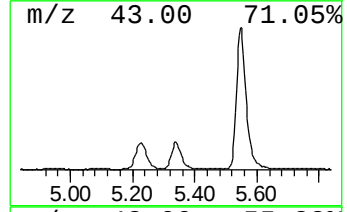
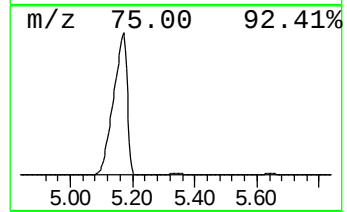
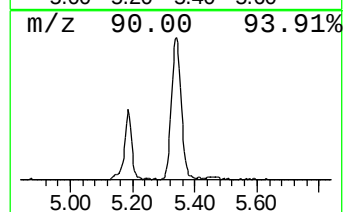
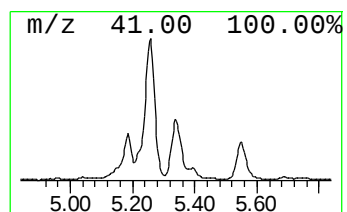
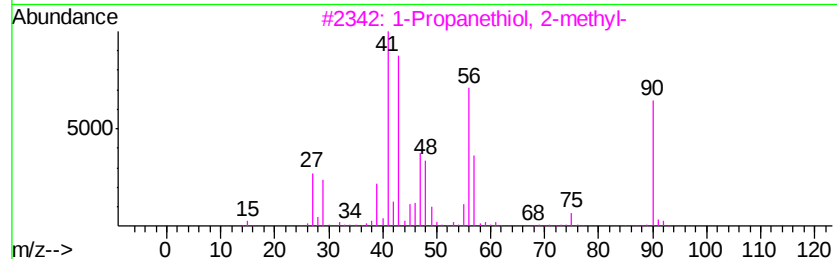
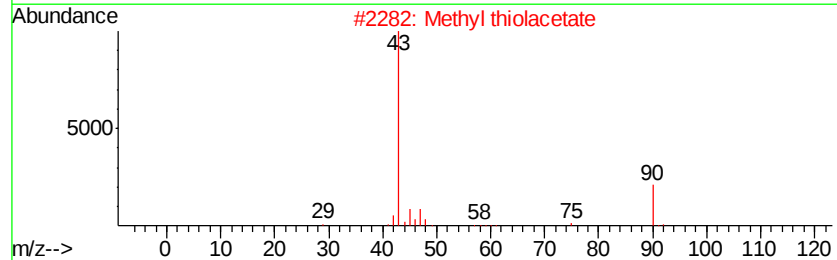
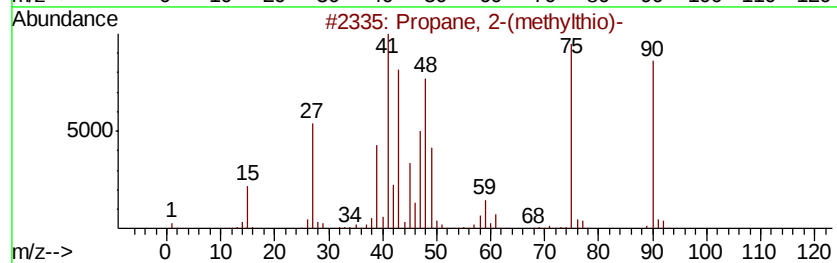
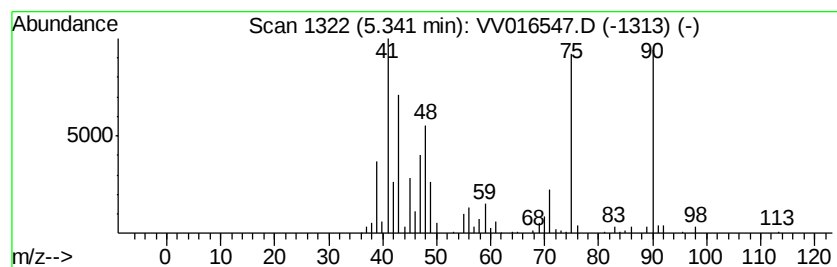
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Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 15 Propane, 2-(methylthio)- Concentration Rank 60

| R.T. | EstConc    | Area   | Relative to ISTD    | R.T. |
|------|------------|--------|---------------------|------|
| 5.34 | 11.72 ug/L | 239138 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | 5 | Tentative ID              | MW | MolForm | CAS#        | Qual |
|------|----|---|---------------------------|----|---------|-------------|------|
| 1    |    |   | Propane, 2-(methylthio)-  | 90 | C4H10S  | 001551-21-9 | 91   |
| 2    |    |   | Methyl thiolacetate       | 90 | C3H6OS  | 001534-08-3 | 50   |
| 3    |    |   | 1-Propanethiol, 2-methyl- | 90 | C4H10S  | 000513-44-0 | 50   |
| 4    |    |   | Mercaptoacetone           | 90 | C3H6OS  | 024653-75-6 | 49   |
| 5    |    |   | Propane, 2-(methylthio)-  | 90 | C4H10S  | 001551-21-9 | 45   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

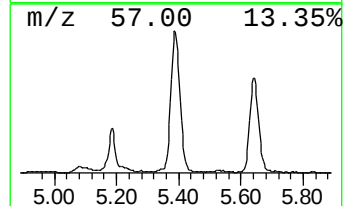
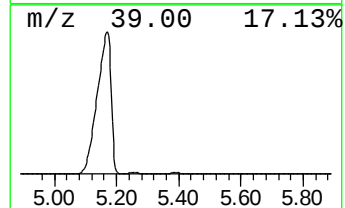
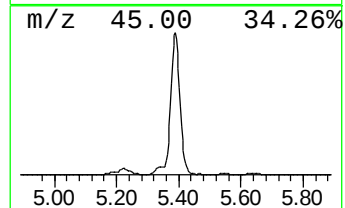
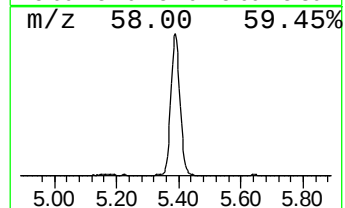
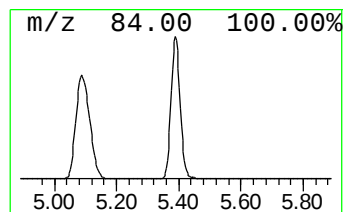
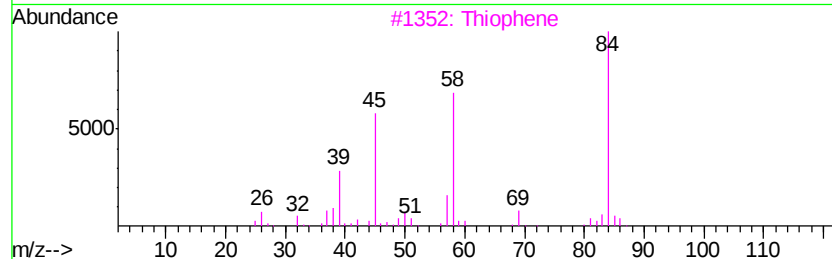
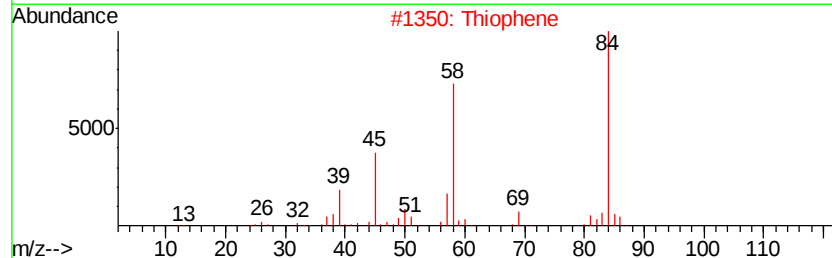
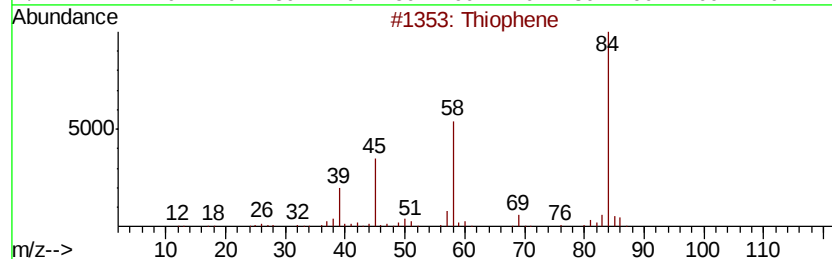
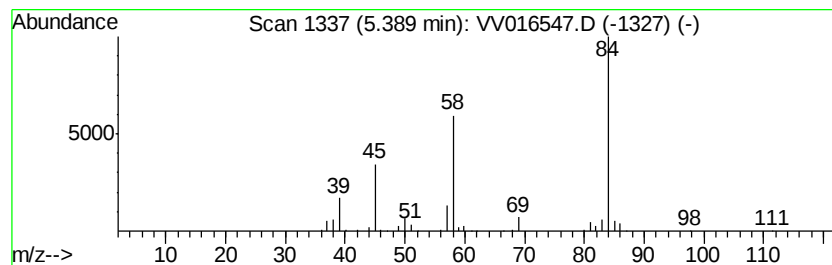
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 16 Thiophene Concentration Rank 11

| R.T. | EstConc    | Area    | Relative to ISTD    | R.T. |
|------|------------|---------|---------------------|------|
| 5.39 | 68.33 ug/L | 1394110 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID                        | MW  | MolForm       | CAS#         | Qual |
|------|----|-------------------------------------|-----|---------------|--------------|------|
| 1    | 5  | Thiophene                           | 84  | C4H4S         | 000110-02-1  | 94   |
| 2    |    | Thiophene                           | 84  | C4H4S         | 000110-02-1  | 91   |
| 3    |    | Thiophene                           | 84  | C4H4S         | 000110-02-1  | 91   |
| 4    |    | Thiophene                           | 84  | C4H4S         | 000110-02-1  | 83   |
| 5    |    | p-[4-[3-[Dimethylamino]propyl]am... | 445 | C18H22Cl3N5O2 | 1000253-90-0 | 36   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampled :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

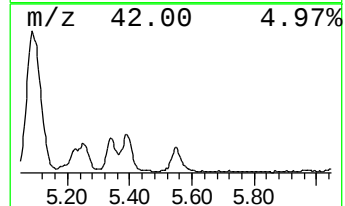
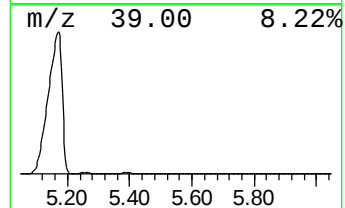
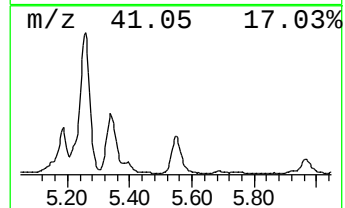
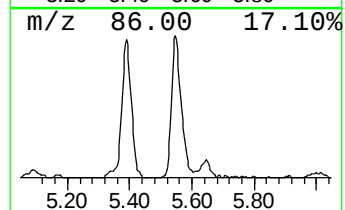
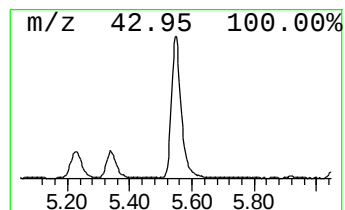
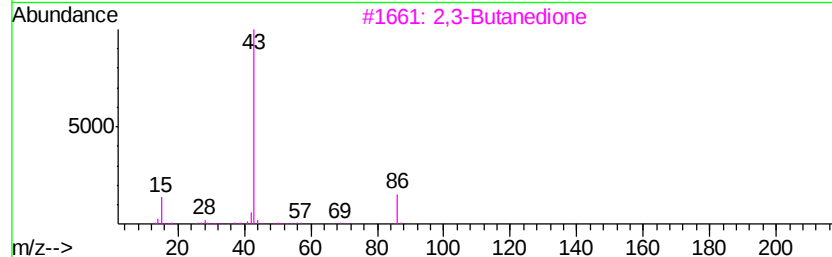
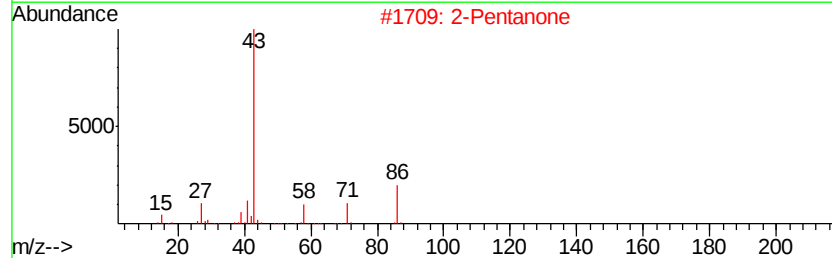
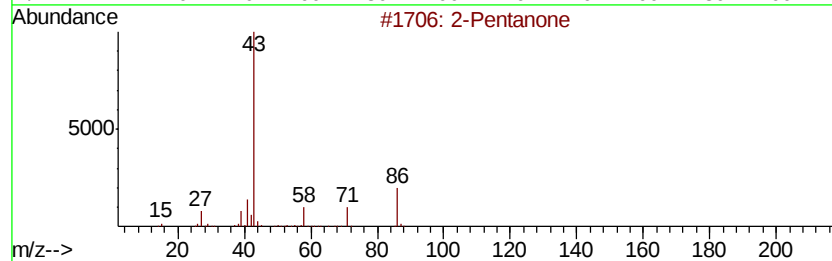
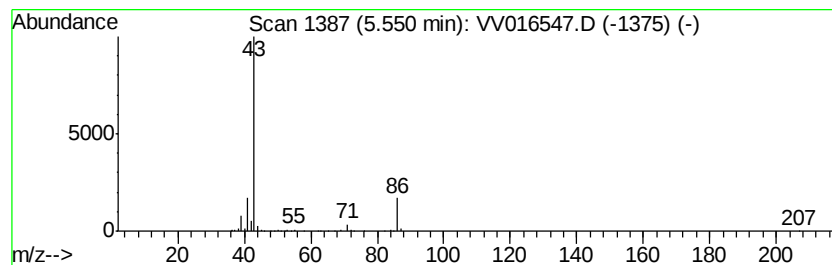
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 17 2-Pentanone Concentration Rank 64

| R.T. | EstConc   | Area   | Relative to ISTD    | R.T. |
|------|-----------|--------|---------------------|------|
| 5.55 | 9.11 ug/L | 185893 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | 5 | Tentative ID          | MW | MolForm | CAS#        | Qual |
|------|----|---|-----------------------|----|---------|-------------|------|
| 1    |    |   | 2-Pentanone           | 86 | C5H10O  | 000107-87-9 | 53   |
| 2    |    |   | 2-Pentanone           | 86 | C5H10O  | 000107-87-9 | 52   |
| 3    |    |   | 2,3-Butanedione       | 86 | C4H6O2  | 000431-03-8 | 50   |
| 4    |    |   | 2-Pentanone           | 86 | C5H10O  | 000107-87-9 | 50   |
| 5    |    |   | 2-Butanone, 3-methyl- | 86 | C5H10O  | 000563-80-4 | 38   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

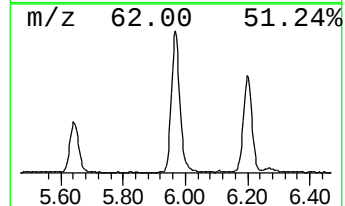
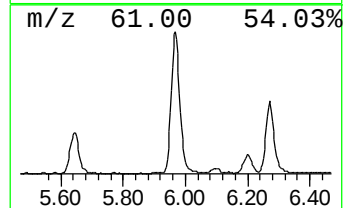
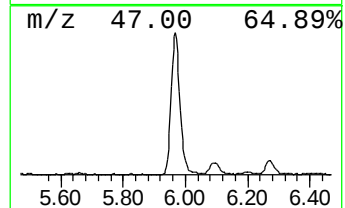
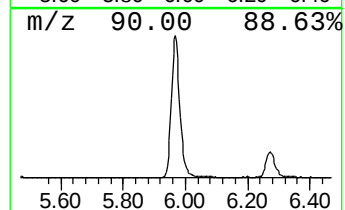
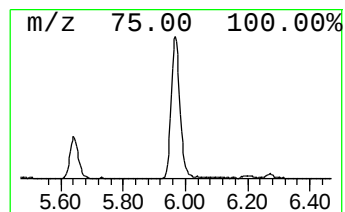
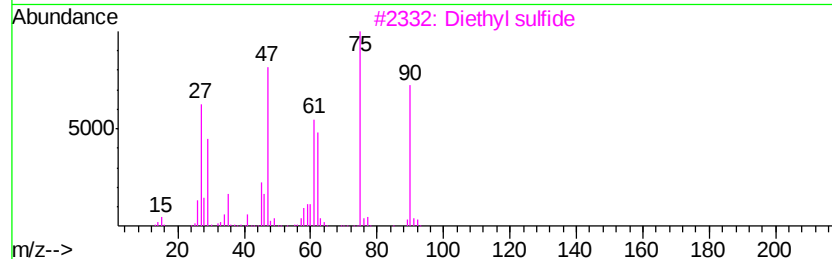
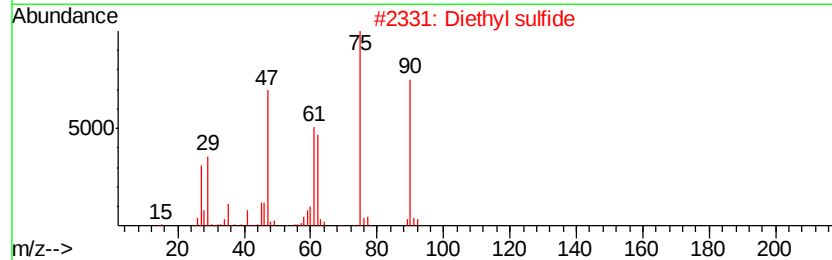
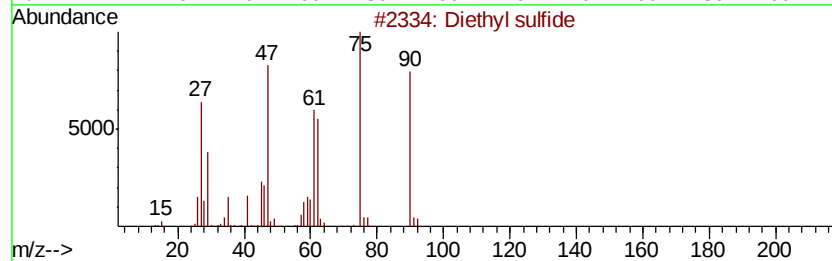
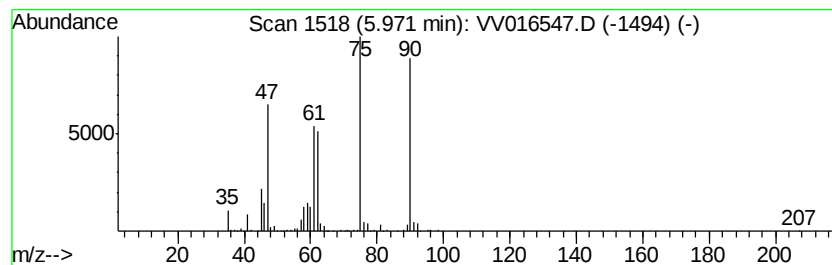
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 18 Diethyl sulfide Concentration Rank 37

| R.T. | EstConc    | Area   | Relative to ISTD    | R.T. |
|------|------------|--------|---------------------|------|
| 5.97 | 22.64 ug/L | 461867 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID        | MW | MolForm | CAS#        | Qual |
|------|----|---------------------|----|---------|-------------|------|
| 1    | 5  | Diethyl sulfide     | 90 | C4H10S  | 000352-93-2 | 97   |
| 2    |    | Diethyl sulfide     | 90 | C4H10S  | 000352-93-2 | 97   |
| 3    |    | Diethyl sulfide     | 90 | C4H10S  | 000352-93-2 | 95   |
| 4    |    | Diethyl sulfide     | 90 | C4H10S  | 000352-93-2 | 91   |
| 5    |    | Phosphine, diethyl- | 90 | C4H11P  | 000627-49-6 | 45   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

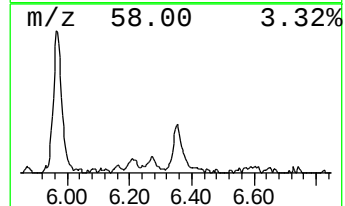
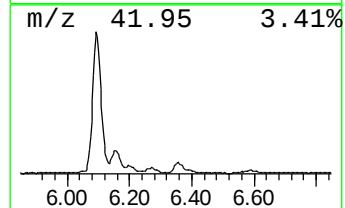
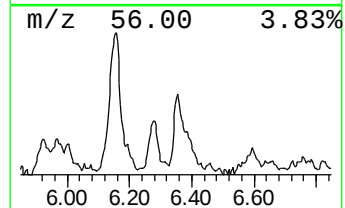
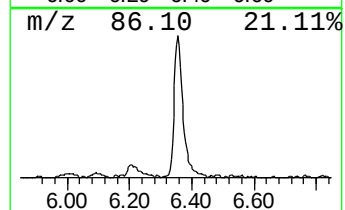
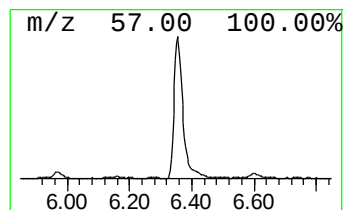
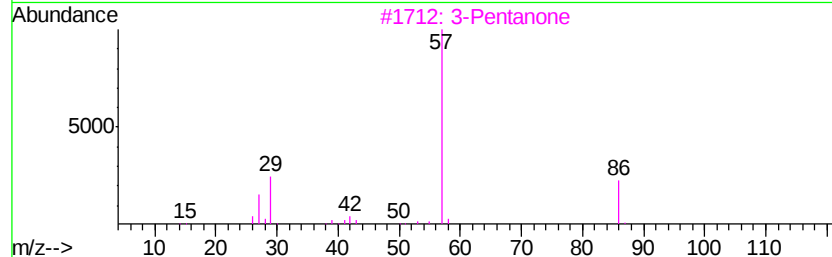
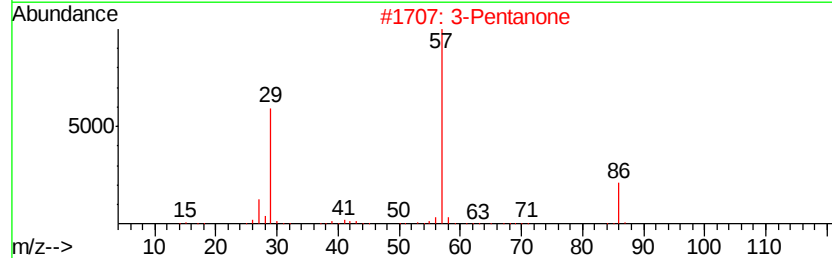
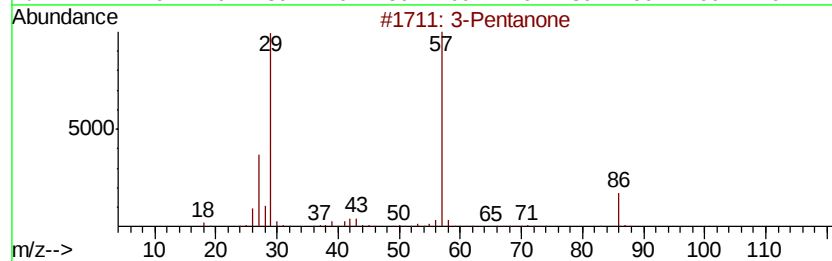
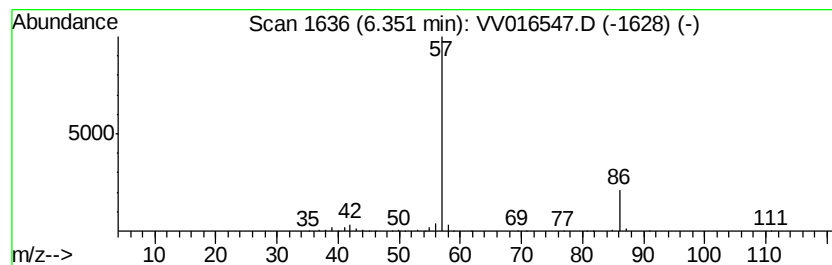
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 19 3-Pentanone Concentration Rank 65

| R.T. | EstConc   | Area   | Relative to ISTD    | R.T. |
|------|-----------|--------|---------------------|------|
| 6.35 | 9.06 ug/L | 184843 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | 5 | Tentative ID            | MW | MolForm | CAS#        | Qual |
|------|----|---|-------------------------|----|---------|-------------|------|
| 1    |    |   | 3-Pentanone             | 86 | C5H10O  | 000096-22-0 | 90   |
| 2    |    |   | 3-Pentanone             | 86 | C5H10O  | 000096-22-0 | 72   |
| 3    |    |   | 3-Pentanone             | 86 | C5H10O  | 000096-22-0 | 64   |
| 4    |    |   | Propanal, 2,2-dimethyl- | 86 | C5H10O  | 000630-19-3 | 7    |
| 5    |    |   | Ethyl-1-propenyl ether  | 86 | C5H10O  | 000928-55-2 | 7    |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

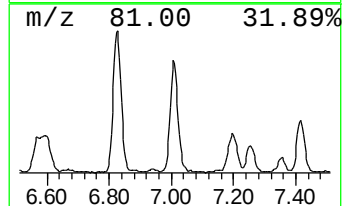
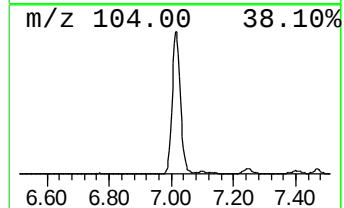
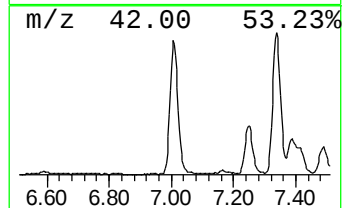
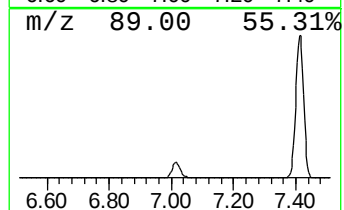
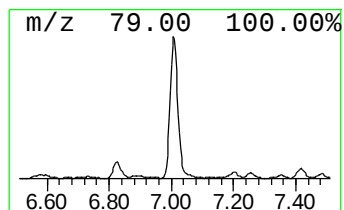
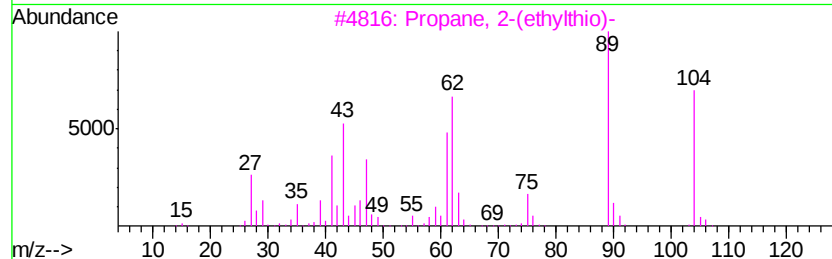
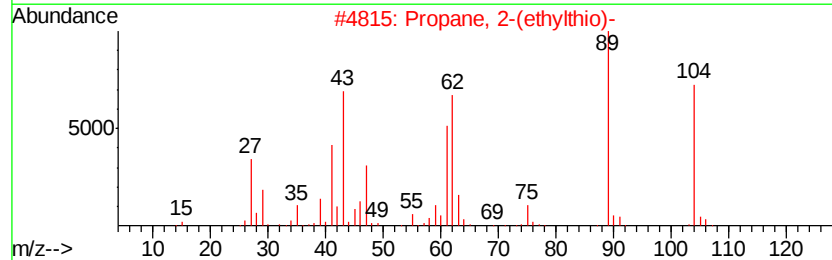
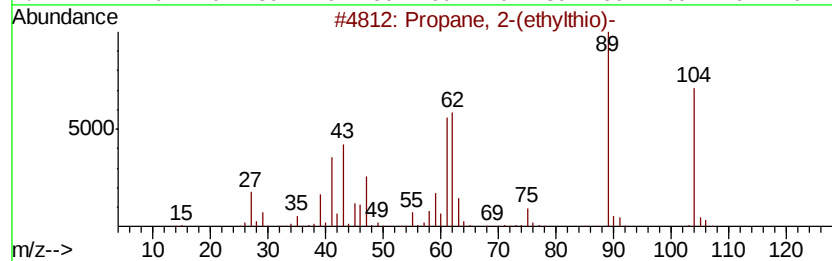
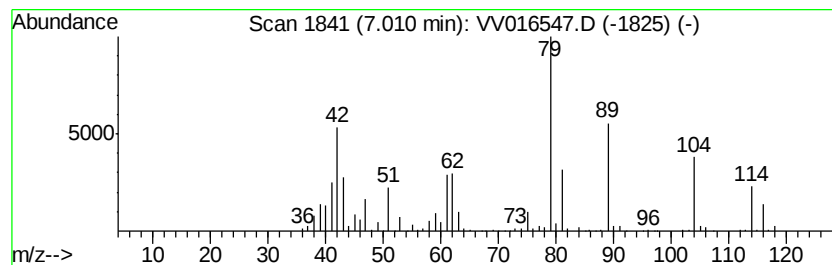
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 20 Propane, 2-(ethylthio)- Concentration Rank 29

| R.T. | EstConc    | Area   | Relative to ISTD    | R.T. |
|------|------------|--------|---------------------|------|
| 7.01 | 35.58 ug/L | 725940 | 1,4-Difluorobenzene | 5.64 |

| Hit# | of | Tentative ID                  | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------|-----|----------|-------------|------|
| 1    | 5  | Propane, 2-(ethylthio)-       | 104 | C5H12S   | 005145-99-3 | 95   |
| 2    |    | Propane, 2-(ethylthio)-       | 104 | C5H12S   | 005145-99-3 | 89   |
| 3    |    | Propane, 2-(ethylthio)-       | 104 | C5H12S   | 005145-99-3 | 45   |
| 4    |    | Thiophosgene                  | 114 | CCl2S    | 000463-71-8 | 18   |
| 5    |    | Ethanamine, N-methyl-N-nitro- | 104 | C3H8N2O2 | 019092-01-4 | 14   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

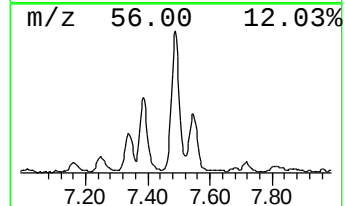
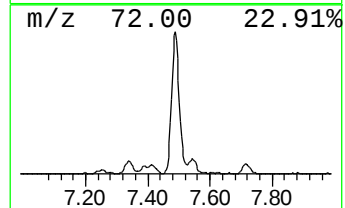
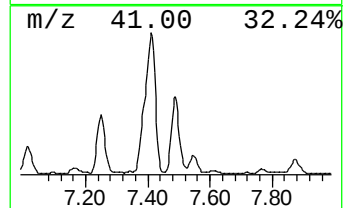
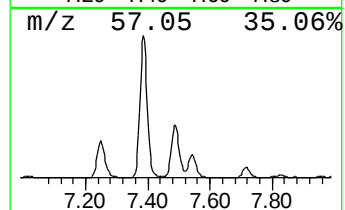
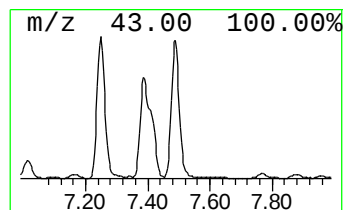
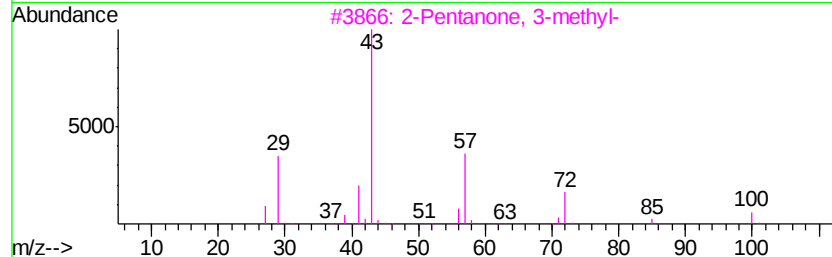
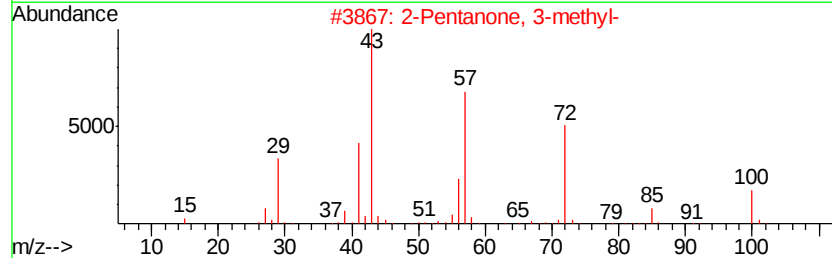
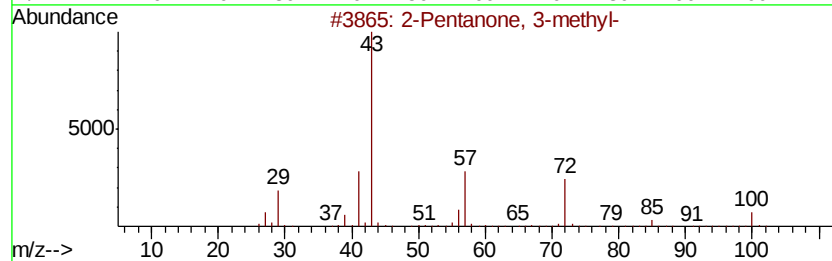
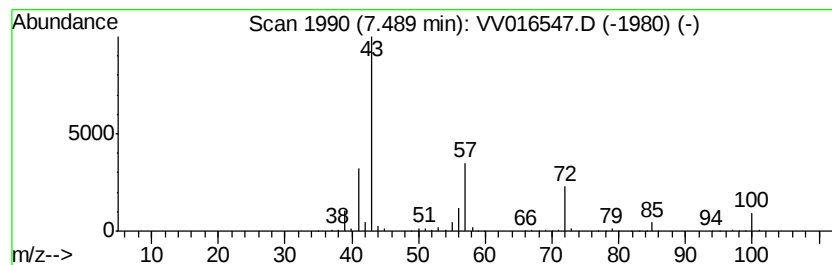
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 21 2-Pentanone, 3-methyl- Concentration Rank 56

| R.T. | EstConc    | Area   | Relative to ISTD | R.T. |
|------|------------|--------|------------------|------|
| 7.49 | 12.87 ug/L | 613569 | Chlorobenzene-d5 | 8.87 |

| Hit# | of                     | 5 | Tentative ID | MW  | MolForm | CAS#        | Qual |
|------|------------------------|---|--------------|-----|---------|-------------|------|
| 1    | 2-Pentanone, 3-methyl- |   |              | 100 | C6H12O  | 000565-61-7 | 91   |
| 2    | 2-Pentanone, 3-methyl- |   |              | 100 | C6H12O  | 000565-61-7 | 90   |
| 3    | 2-Pentanone, 3-methyl- |   |              | 100 | C6H12O  | 000565-61-7 | 86   |
| 4    | 2-Pentanone, 3-methyl- |   |              | 100 | C6H12O  | 000565-61-7 | 59   |
| 5    | 2-Pentanone, 3-methyl- |   |              | 100 | C6H12O  | 000565-61-7 | 56   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

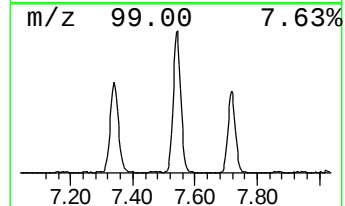
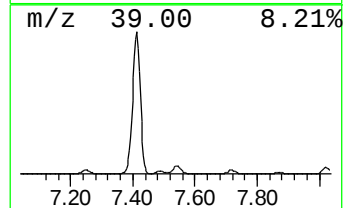
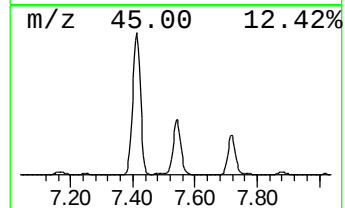
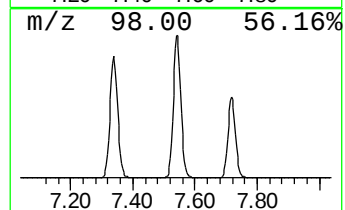
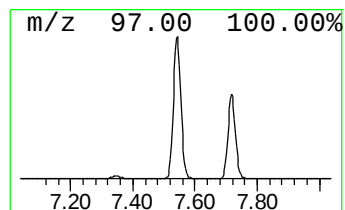
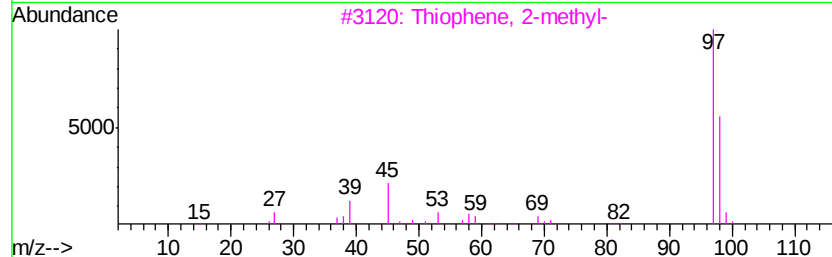
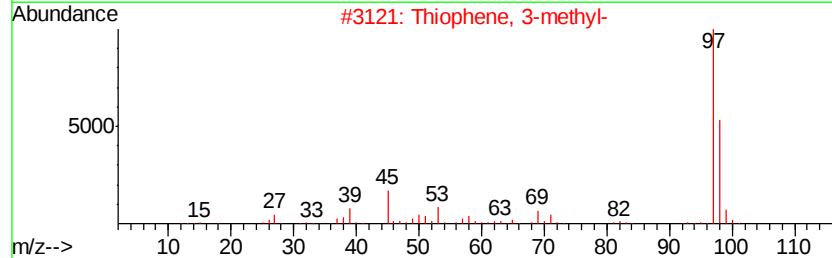
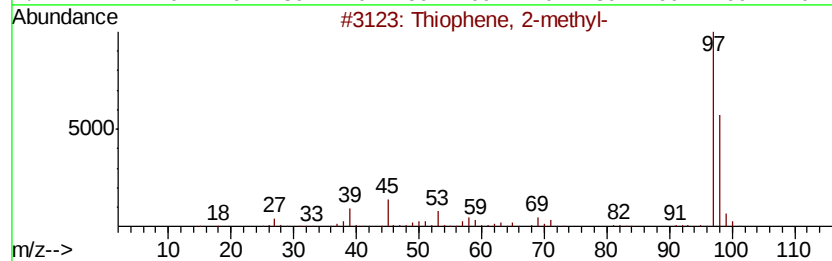
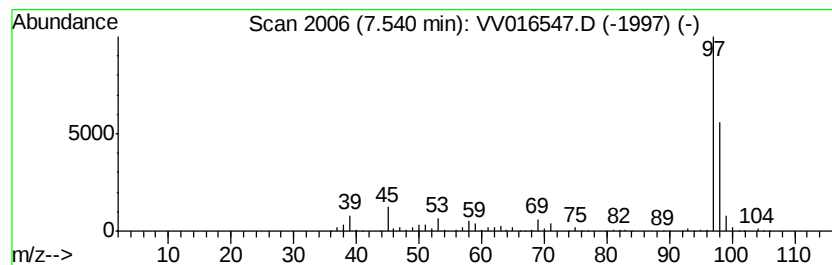
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 22 Thiophene, 2-methyl- Concentration Rank 17

| R.T. | EstConc    | Area    | Relative to ISTD | R.T. |
|------|------------|---------|------------------|------|
| 7.54 | 52.80 ug/L | 2517870 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | Tentative ID         | MW | MolForm | CAS#        | Qual |
|------|----|----------------------|----|---------|-------------|------|
| 1    | 5  | Thiophene, 2-methyl- | 98 | C5H6S   | 000554-14-3 | 94   |
| 2    |    | Thiophene, 3-methyl- | 98 | C5H6S   | 000616-44-4 | 94   |
| 3    |    | Thiophene, 2-methyl- | 98 | C5H6S   | 000554-14-3 | 91   |
| 4    |    | Thiophene, 3-methyl- | 98 | C5H6S   | 000616-44-4 | 91   |
| 5    |    | Thiophene, 2-methyl- | 98 | C5H6S   | 000554-14-3 | 91   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

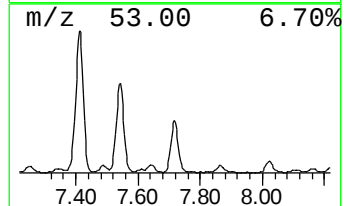
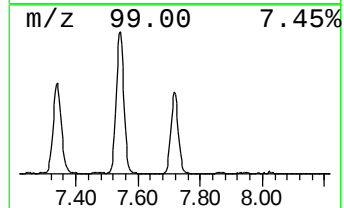
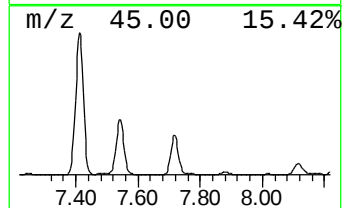
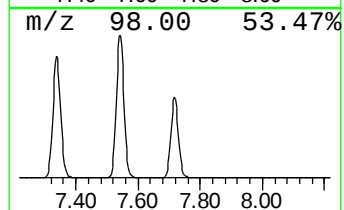
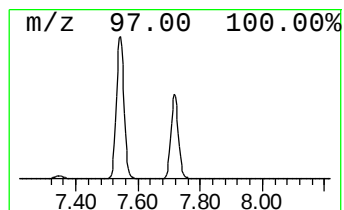
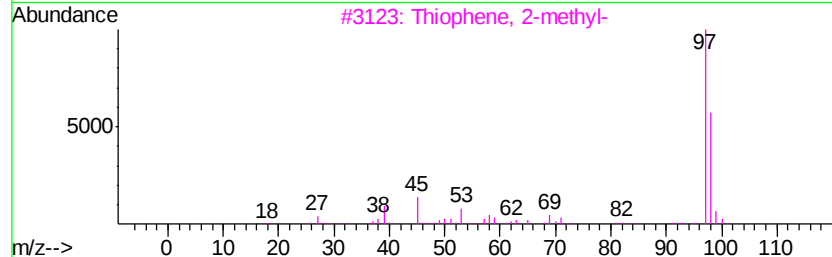
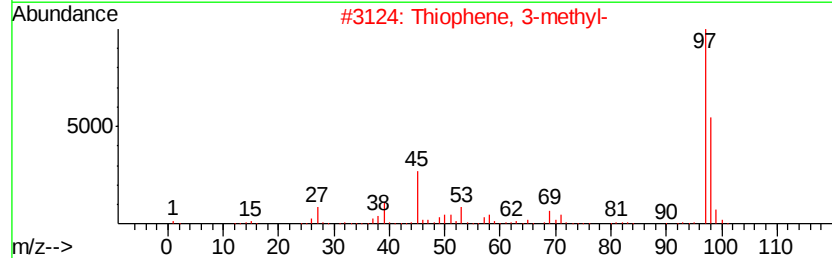
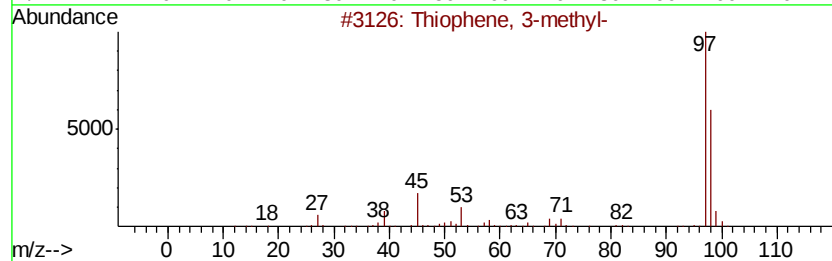
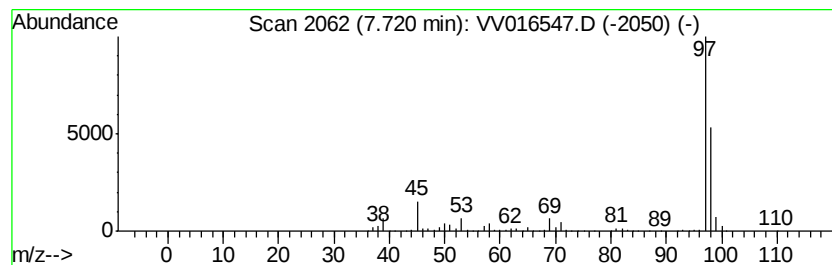
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 23 Thiophene, 3-methyl- Concentration Rank 33

| R.T. | EstConc    | Area    | Relative to ISTD | R.T. |
|------|------------|---------|------------------|------|
| 7.72 | 28.80 ug/L | 1373480 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | 5 | Tentative ID         | MW | MolForm | CAS#        | Qual |
|------|----|---|----------------------|----|---------|-------------|------|
| 1    |    |   | Thiophene, 3-methyl- | 98 | C5H6S   | 000616-44-4 | 94   |
| 2    |    |   | Thiophene, 3-methyl- | 98 | C5H6S   | 000616-44-4 | 94   |
| 3    |    |   | Thiophene, 2-methyl- | 98 | C5H6S   | 000554-14-3 | 93   |
| 4    |    |   | Thiophene, 3-methyl- | 98 | C5H6S   | 000616-44-4 | 91   |
| 5    |    |   | Thiophene, 3-methyl- | 98 | C5H6S   | 000616-44-4 | 91   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

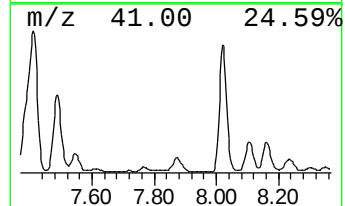
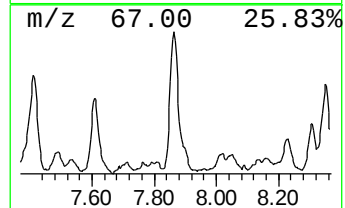
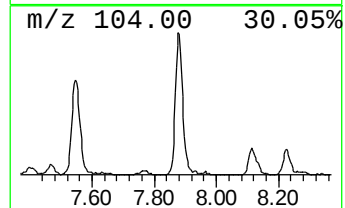
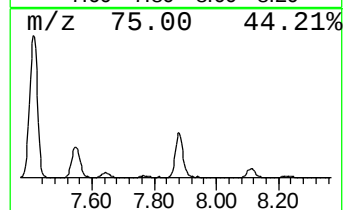
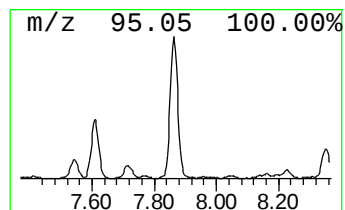
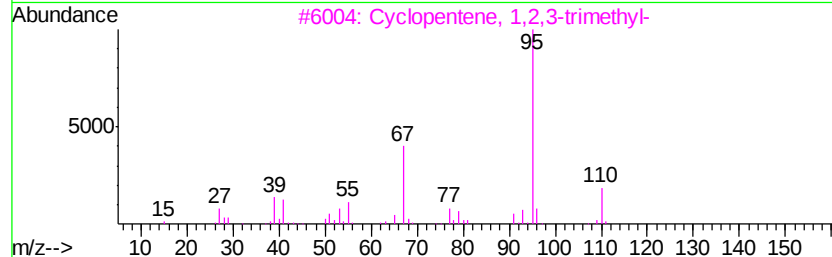
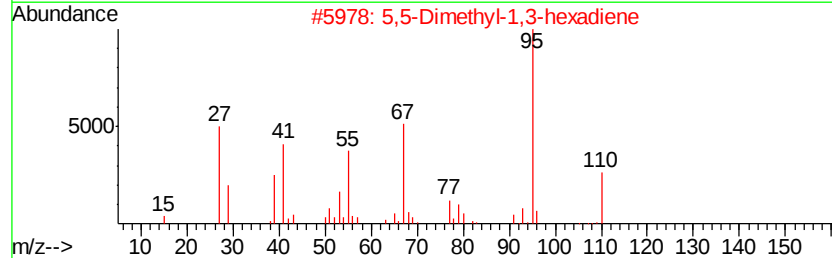
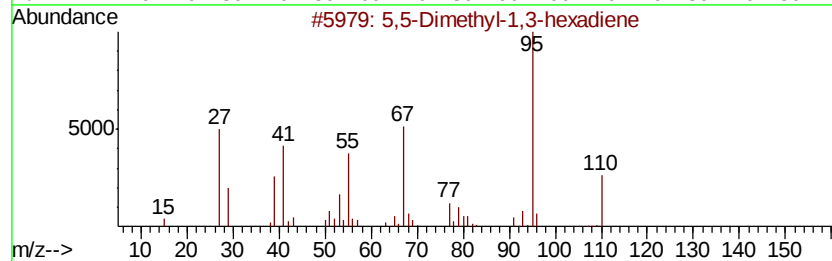
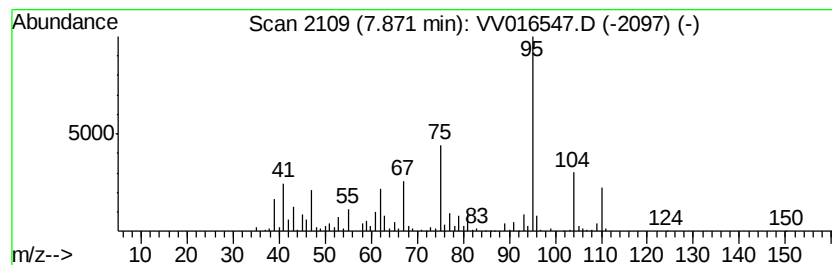
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Quant Title : VOC Analysis

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

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Peak Number 24 unknown-01 Concentration Rank 67

| R.T. | EstConc   | Area   | Relative to ISTD | R.T. |
|------|-----------|--------|------------------|------|
| 7.87 | 7.51 ug/L | 358350 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | 5 | Tentative ID                     | MW  | MolForm | CAS#        | Qual |
|------|----|---|----------------------------------|-----|---------|-------------|------|
| 1    |    |   | 5,5-Dimethyl-1,3-hexadiene       | 110 | C8H14   | 001515-79-3 | 38   |
| 2    |    |   | 5,5-Dimethyl-1,3-hexadiene       | 110 | C8H14   | 001515-79-3 | 38   |
| 3    |    |   | Cyclopentene, 1,2,3-trimethyl-   | 110 | C8H14   | 000473-91-6 | 38   |
| 4    |    |   | 1,4-Pentadiene, 2,3,3-trimethyl- | 110 | C8H14   | 000756-02-5 | 27   |
| 5    |    |   | 1,3-Dimethyl-1-cyclohexene       | 110 | C8H14   | 002808-76-6 | 27   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

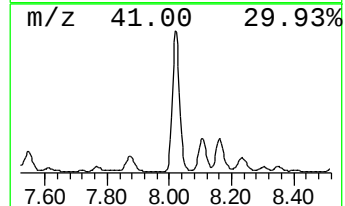
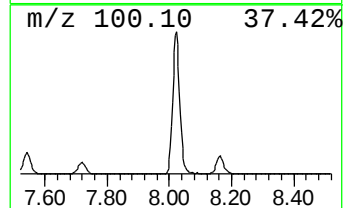
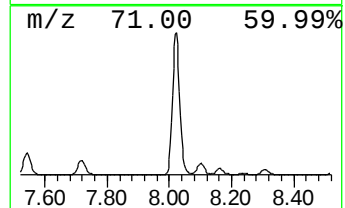
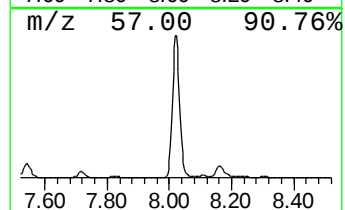
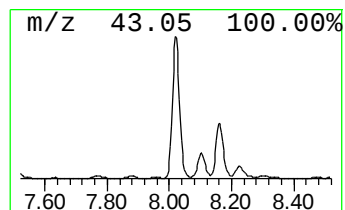
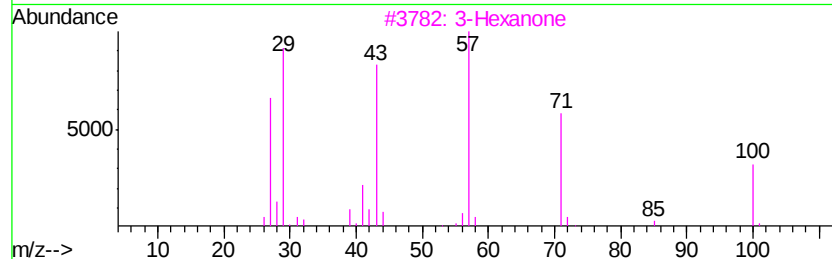
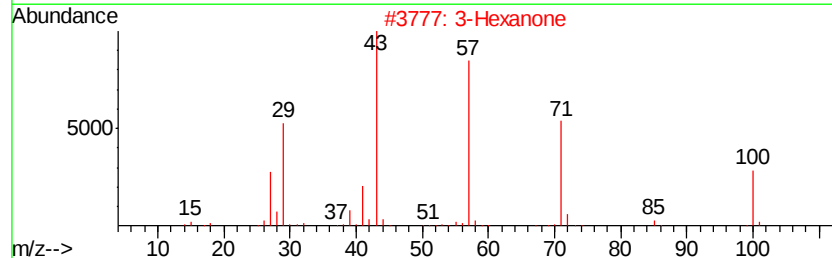
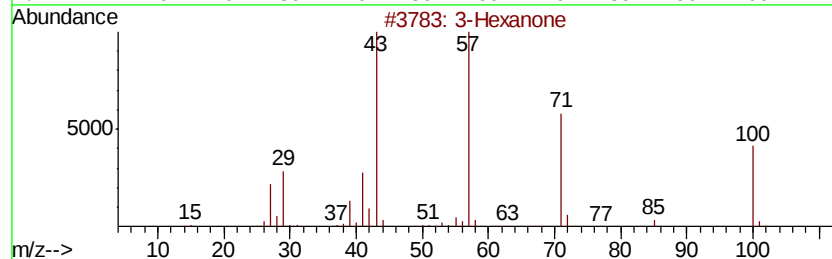
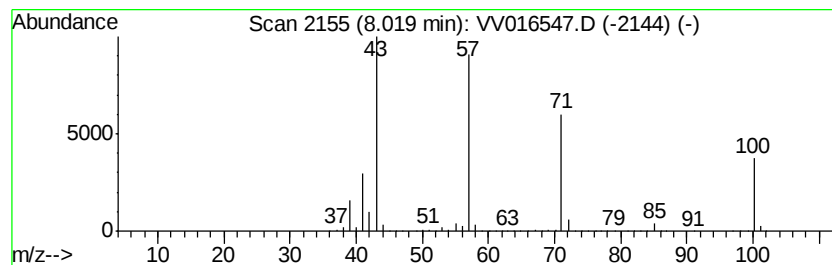
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 25 3-Hexanone Concentration Rank 30

| R.T. | EstConc    | Area    | Relative to ISTD | R.T. |
|------|------------|---------|------------------|------|
| 8.02 | 32.87 ug/L | 1567640 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | 5 | Tentative ID | MW  | MolForm | CAS#        | Qual |
|------|----|---|--------------|-----|---------|-------------|------|
| 1    |    |   | 3-Hexanone   | 100 | C6H12O  | 000589-38-8 | 94   |
| 2    |    |   | 3-Hexanone   | 100 | C6H12O  | 000589-38-8 | 91   |
| 3    |    |   | 3-Hexanone   | 100 | C6H12O  | 000589-38-8 | 86   |
| 4    |    |   | 3-Hexanone   | 100 | C6H12O  | 000589-38-8 | 86   |
| 5    |    |   | 3-Hexanone   | 100 | C6H12O  | 000589-38-8 | 72   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

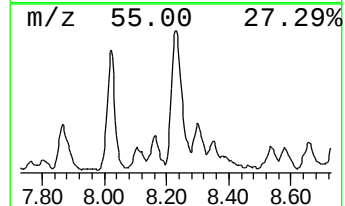
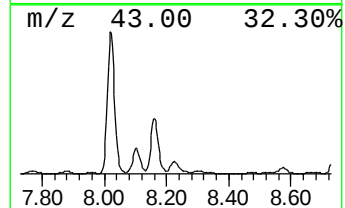
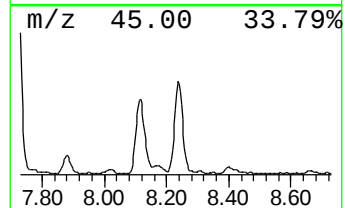
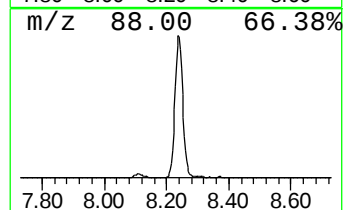
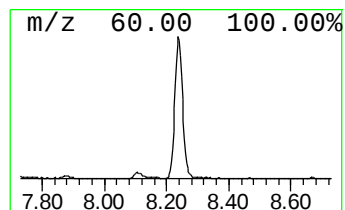
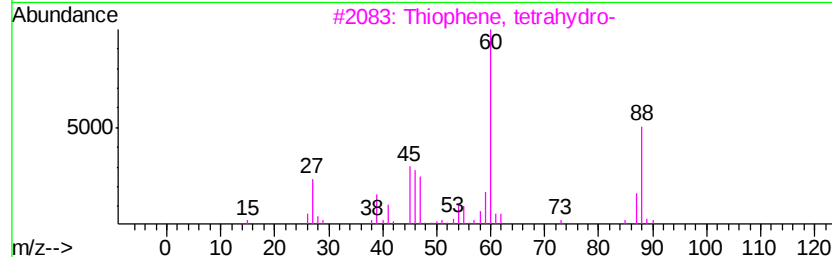
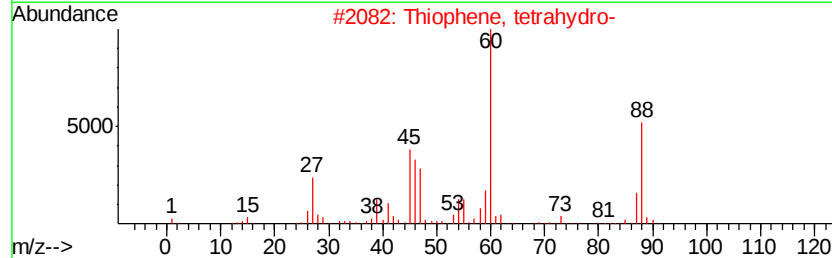
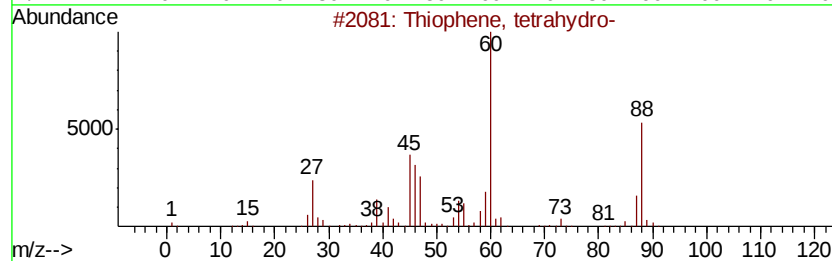
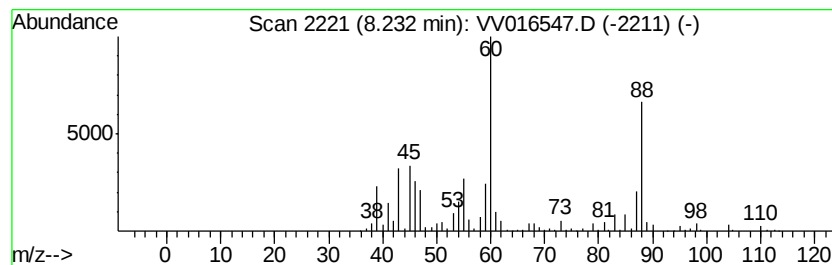
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 26 Thiophene, tetrahydro- Concentration Rank 62

| R.T. | EstConc    | Area   | Relative to ISTD | R.T. |
|------|------------|--------|------------------|------|
| 8.23 | 11.10 ug/L | 529493 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | 5 | Tentative ID           | MW | MolForm | CAS#        | Qual |
|------|----|---|------------------------|----|---------|-------------|------|
| 1    |    |   | Thiophene, tetrahydro- | 88 | C4H8S   | 000110-01-0 | 97   |
| 2    |    |   | Thiophene, tetrahydro- | 88 | C4H8S   | 000110-01-0 | 95   |
| 3    |    |   | Thiophene, tetrahydro- | 88 | C4H8S   | 000110-01-0 | 94   |
| 4    |    |   | Thietane, 2-methyl-    | 88 | C4H8S   | 017837-41-1 | 81   |
| 5    |    |   | Phospholane            | 88 | C4H9P   | 003466-00-0 | 50   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

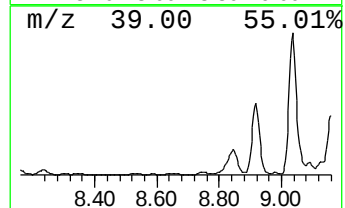
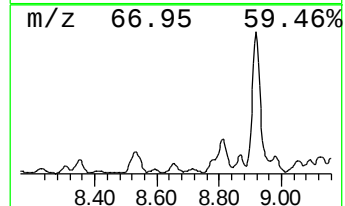
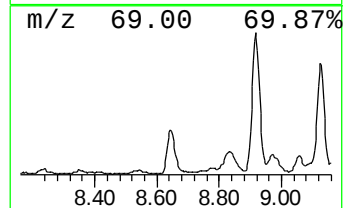
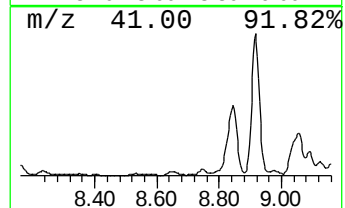
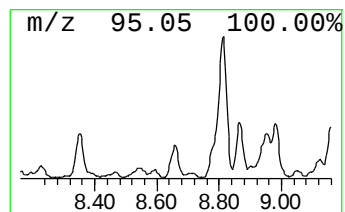
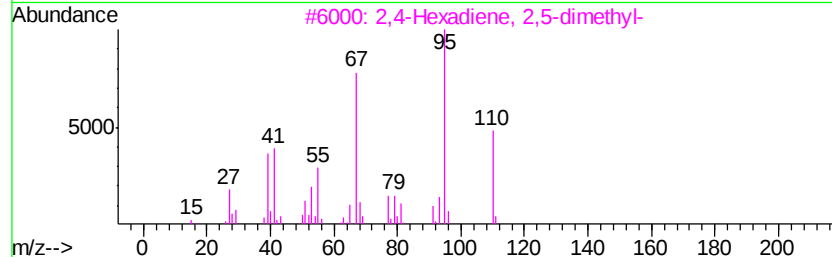
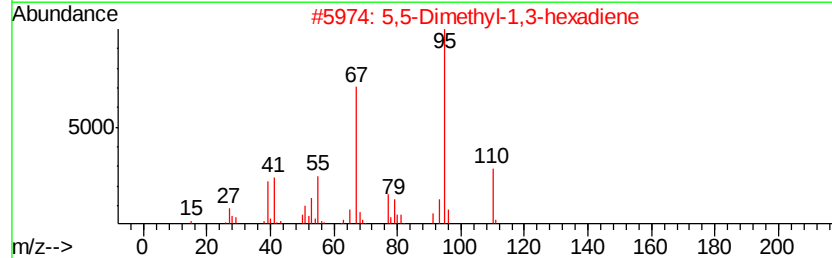
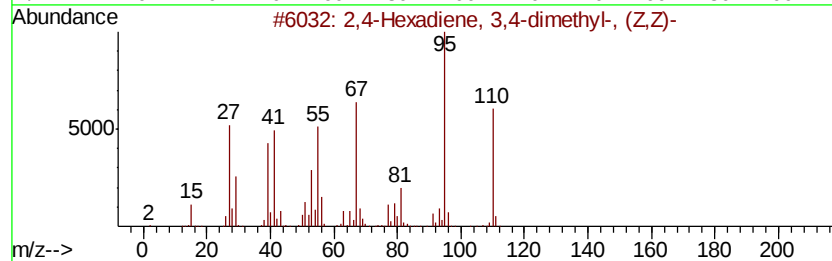
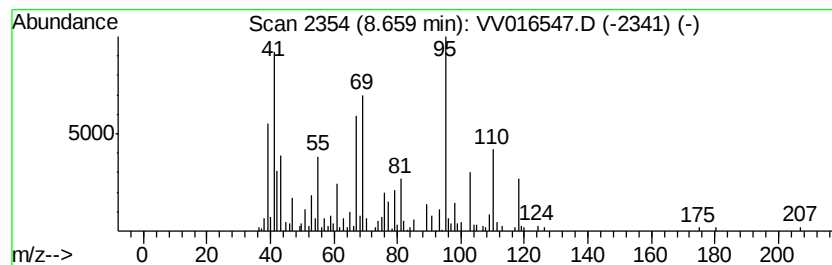
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 27 unknown-02 Concentration Rank 72

| R.T. | EstConc   | Area   | Relative to ISTD | R.T. |
|------|-----------|--------|------------------|------|
| 8.66 | 2.91 ug/L | 138545 | Chlorobenzene-d5 | 8.87 |

| Hit# | of                                  | 5   | Tentative ID | MW          | MolForm | CAS# | Qual |
|------|-------------------------------------|-----|--------------|-------------|---------|------|------|
| 1    | 2,4-Hexadiene, 3,4-dimethyl-, (Z... | 110 | C8H14        | 021293-01-6 | 46      |      |      |
| 2    | 5,5-Dimethyl-1,3-hexadiene          | 110 | C8H14        | 001515-79-3 | 46      |      |      |
| 3    | 2,4-Hexadiene, 2,5-dimethyl-        | 110 | C8H14        | 000764-13-6 | 46      |      |      |
| 4    | Cyclohexene, 1,2-dimethyl-          | 110 | C8H14        | 001674-10-8 | 45      |      |      |
| 5    | Cyclopentene, 1-(1-methylethyl)-    | 110 | C8H14        | 001462-07-3 | 43      |      |      |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

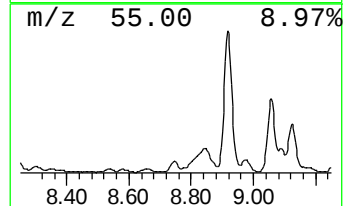
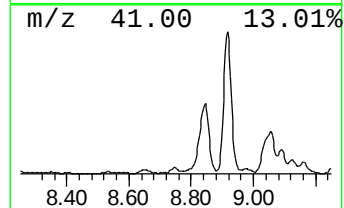
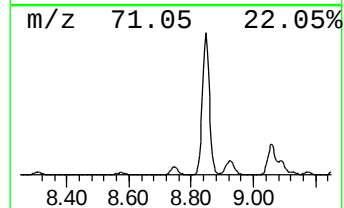
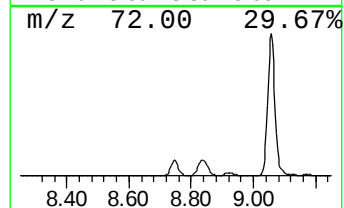
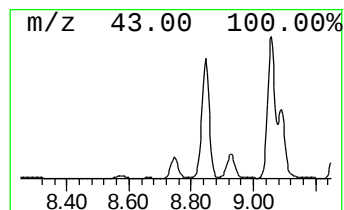
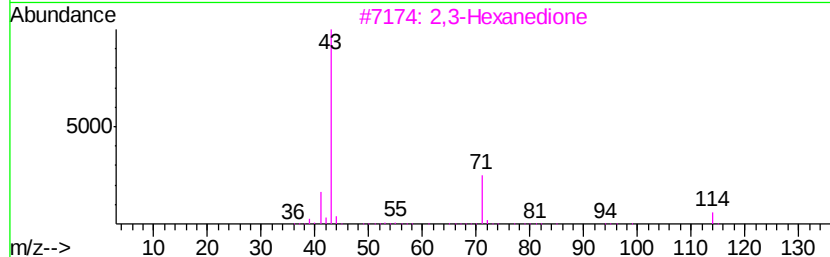
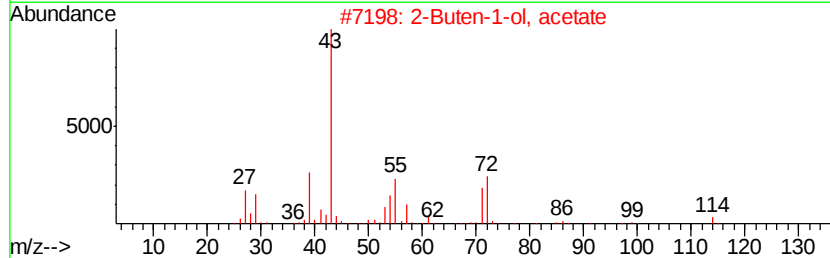
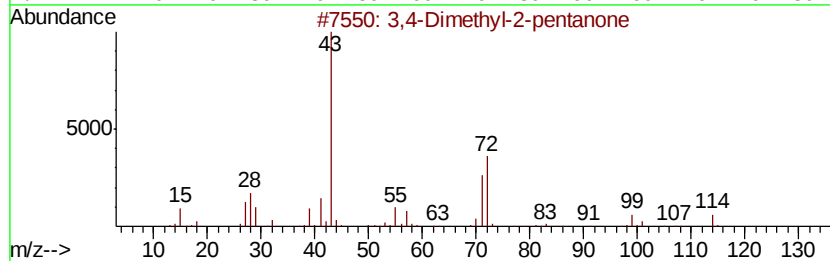
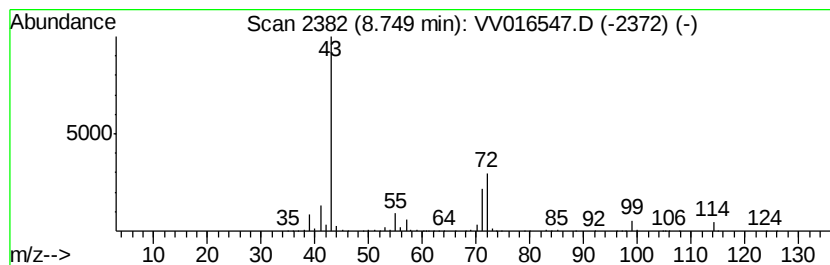
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Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 28 3,4-Dimethyl-2-pentanone Concentration Rank 69

| R.T. | EstConc   | Area   | Relative to ISTD | R.T. |
|------|-----------|--------|------------------|------|
| 8.75 | 5.49 ug/L | 261730 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | 5 | Tentative ID             | MW  | MolForm | CAS#         | Qual |
|------|----|---|--------------------------|-----|---------|--------------|------|
| 1    |    |   | 3,4-Dimethyl-2-pentanone | 114 | C7H14O  | 1000202-23-1 | 91   |
| 2    |    |   | 2-Buten-1-ol, acetate    | 114 | C6H10O2 | 000628-08-0  | 45   |
| 3    |    |   | 2,3-Hexanedione          | 114 | C6H10O2 | 003848-24-6  | 43   |
| 4    |    |   | Butanal, 2-ethyl-        | 100 | C6H12O  | 000097-96-1  | 38   |
| 5    |    |   | Butanal, 2-ethyl-        | 100 | C6H12O  | 000097-96-1  | 38   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampled :  
F9E67

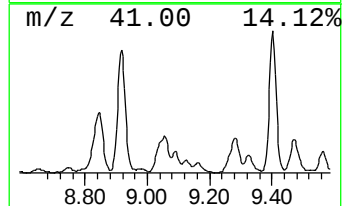
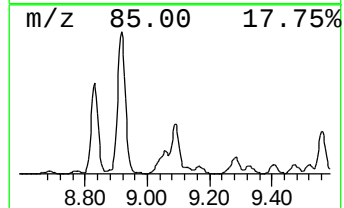
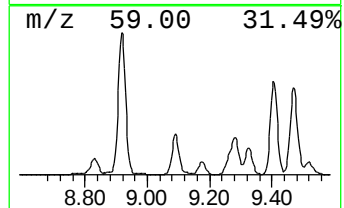
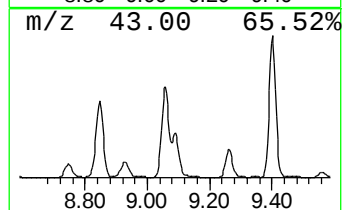
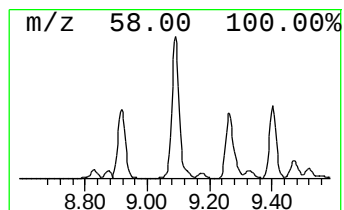
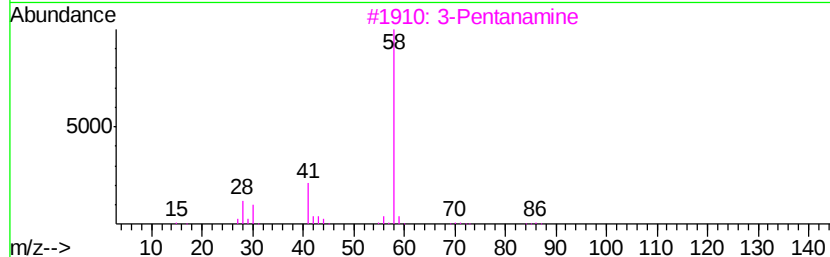
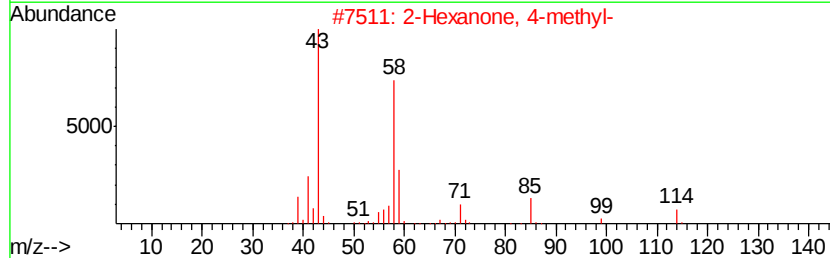
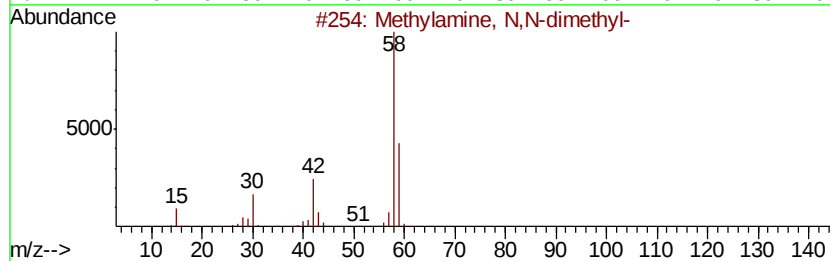
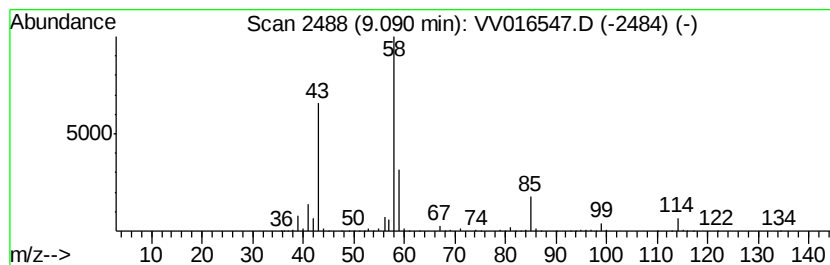
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Quant Title : VOC Analysis

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

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Peak Number 29 Methylamine, N,N-dimethyl- Concentration Rank 40

| R.T. | EstConc    | Area   | Relative to ISTD | R.T. |
|------|------------|--------|------------------|------|
| 9.09 | 19.86 ug/L | 947053 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | Tentative ID                    | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------------|-----|---------|-------------|------|
| 1    | 5  | Methylamine, N,N-dimethyl-      | 59  | C3H9N   | 000075-50-3 | 64   |
| 2    |    | 2-Hexanone, 4-methyl-           | 114 | C7H14O  | 000105-42-0 | 47   |
| 3    |    | 3-Pentanamine                   | 87  | C5H13N  | 000616-24-0 | 40   |
| 4    |    | 2-Pentanamine, 2,4,4-trimethyl- | 129 | C8H19N  | 000107-45-9 | 33   |
| 5    |    | 2-Propanamine, 2-methyl-        | 73  | C4H11N  | 000075-64-9 | 28   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

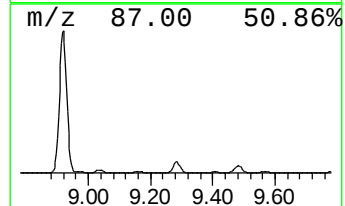
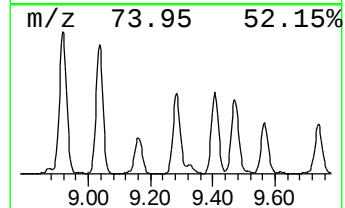
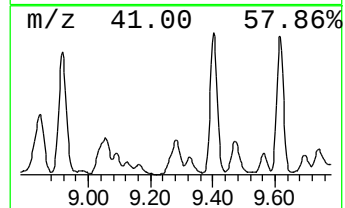
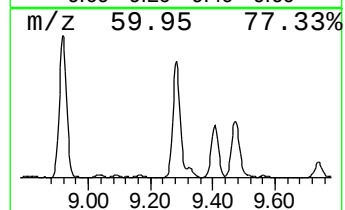
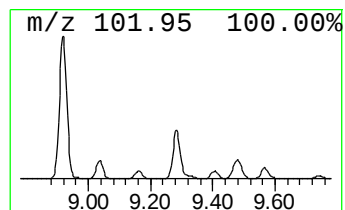
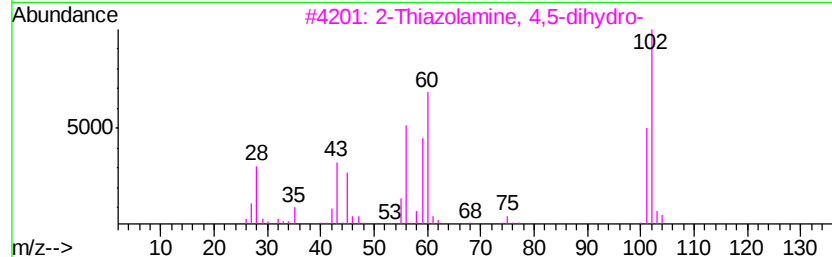
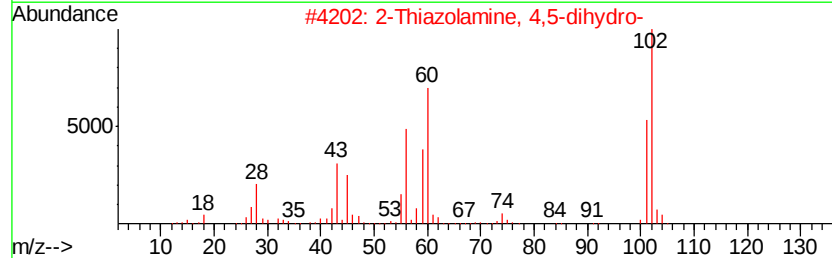
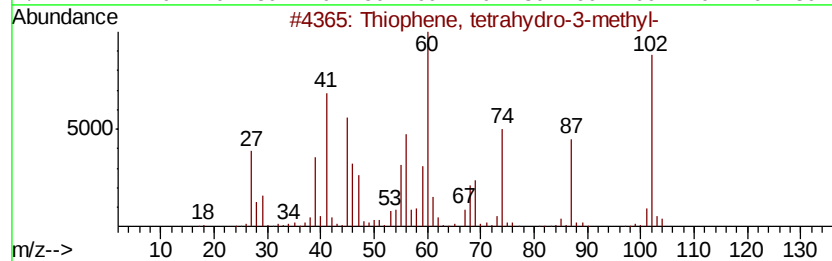
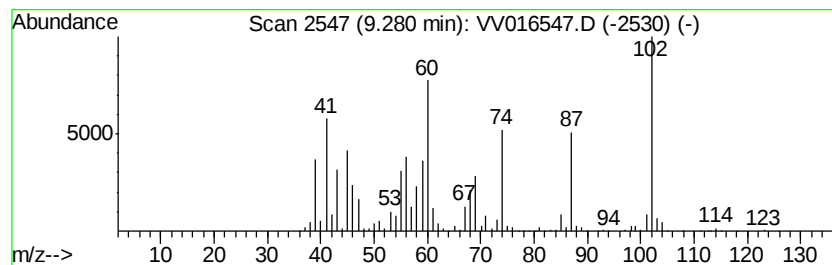
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 30 Thiophene, tetrahydro-3-met... Concentration Rank 22

| R.T. | EstConc    | Area    | Relative to ISTD | R.T. |
|------|------------|---------|------------------|------|
| 9.28 | 46.26 ug/L | 2206330 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | Tentative ID                    | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------------|-----|---------|-------------|------|
| 1    | 5  | Thiophene, tetrahydro-3-methyl- | 102 | C5H10S  | 004740-00-5 | 96   |
| 2    |    | 2-Thiazolamine, 4,5-dihydro-    | 102 | C3H6N2S | 001779-81-3 | 49   |
| 3    |    | 2-Thiazolamine, 4,5-dihydro-    | 102 | C3H6N2S | 001779-81-3 | 43   |
| 4    |    | Thiophene, tetrahydro-2-methyl- | 102 | C5H10S  | 001795-09-1 | 43   |
| 5    |    | 2-Thiazolamine, 4,5-dihydro-    | 102 | C3H6N2S | 001779-81-3 | 43   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

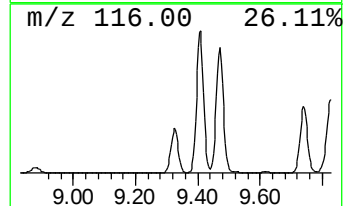
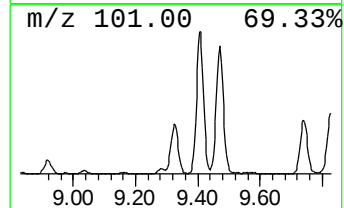
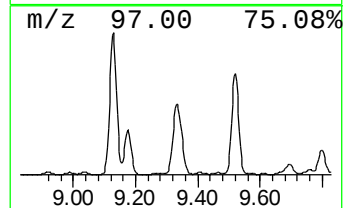
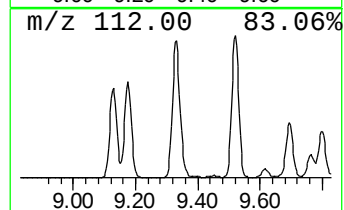
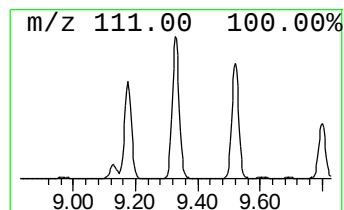
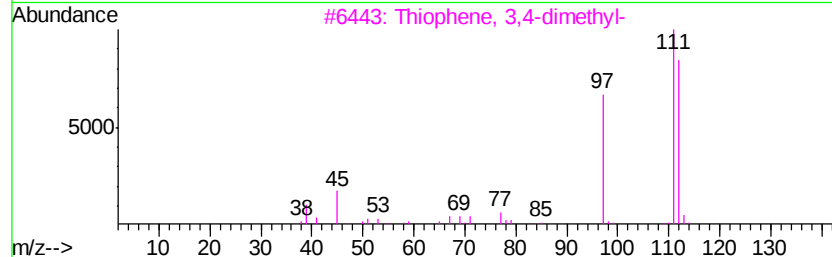
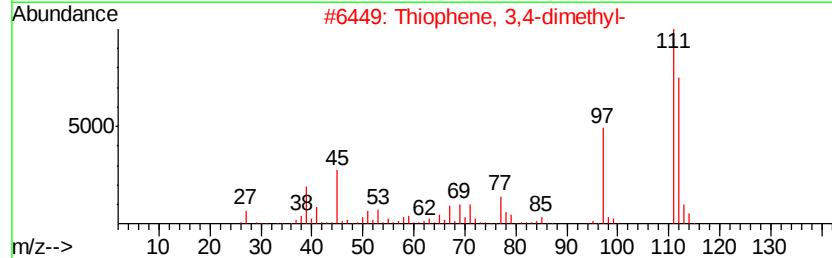
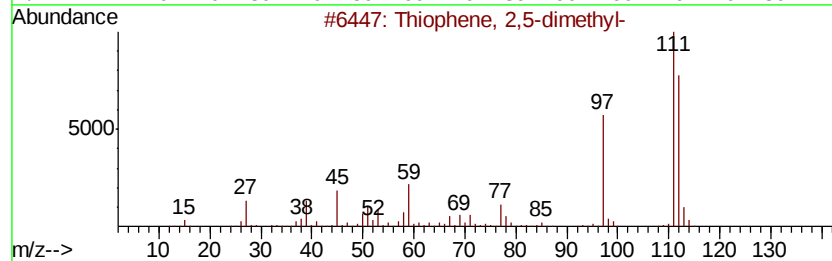
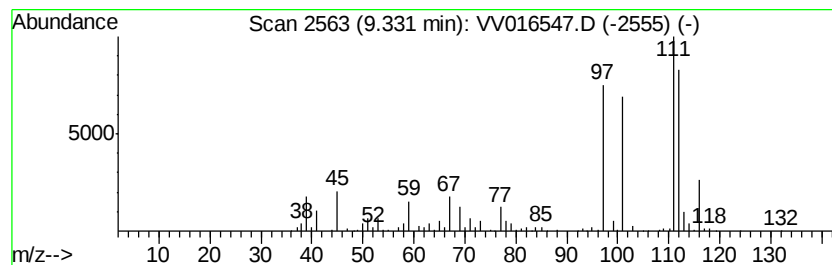
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 31 Thiophene, 2,5-dimethyl- Concentration Rank 32

| R.T. | EstConc    | Area    | Relative to ISTD | R.T. |
|------|------------|---------|------------------|------|
| 9.33 | 30.54 ug/L | 1456300 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | 5 | Tentative ID             | MW  | MolForm | CAS#        | Qual |
|------|----|---|--------------------------|-----|---------|-------------|------|
| 1    |    |   | Thiophene, 2,5-dimethyl- | 112 | C6H8S   | 000638-02-8 | 64   |
| 2    |    |   | Thiophene, 3,4-dimethyl- | 112 | C6H8S   | 000632-15-5 | 64   |
| 3    |    |   | Thiophene, 3,4-dimethyl- | 112 | C6H8S   | 000632-15-5 | 64   |
| 4    |    |   | Thiophene, 2,4-dimethyl- | 112 | C6H8S   | 000638-00-6 | 60   |
| 5    |    |   | Thiophene, 2,5-dimethyl- | 112 | C6H8S   | 000638-02-8 | 58   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

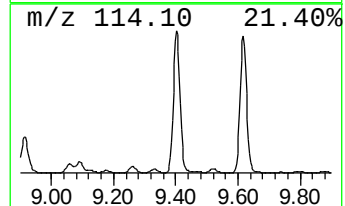
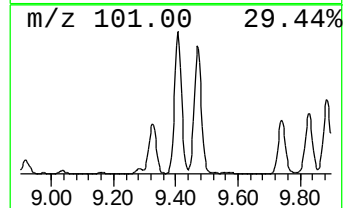
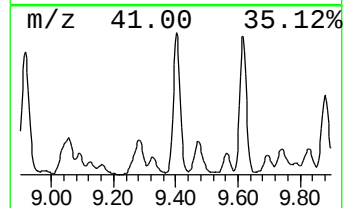
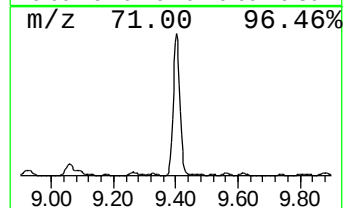
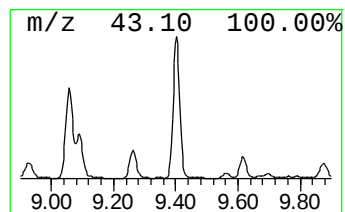
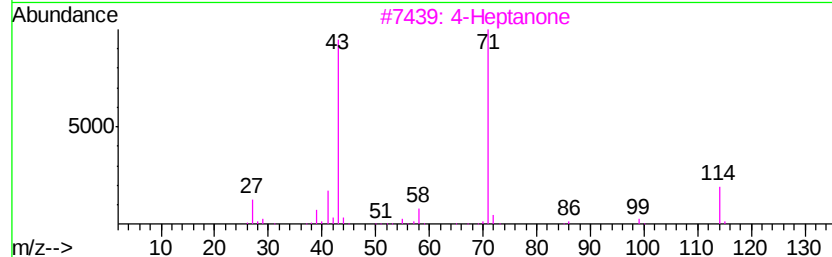
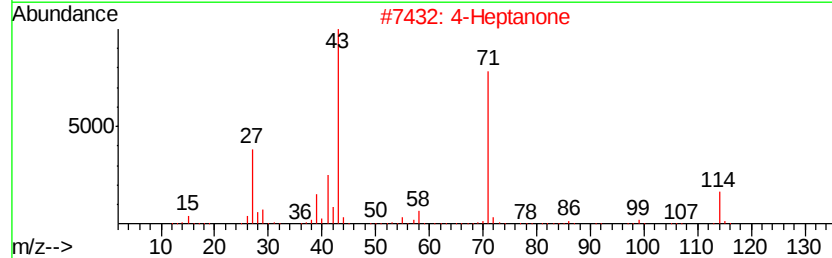
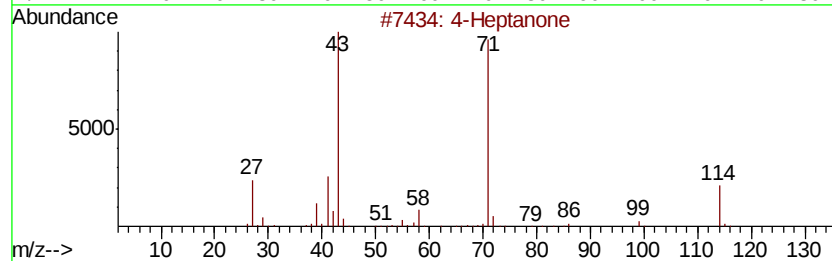
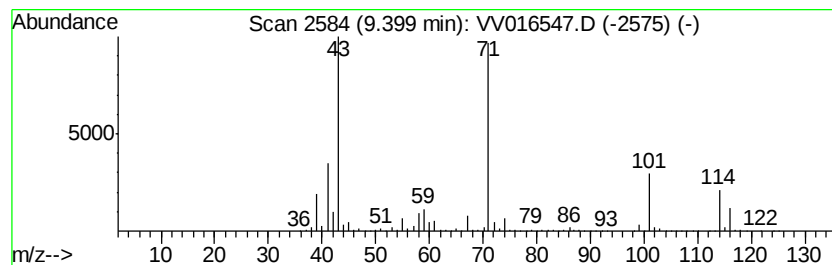
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Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 32 4-Heptanone Concentration Rank 3

| R.T. | EstConc     | Area    | Relative to ISTD | R.T. |
|------|-------------|---------|------------------|------|
| 9.40 | 114.41 ug/L | 5456230 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | Tentative ID          | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------|-----|---------|-------------|------|
| 1    | 5  | 4-Heptanone           | 114 | C7H14O  | 000123-19-3 | 64   |
| 2    |    | 4-Heptanone           | 114 | C7H14O  | 000123-19-3 | 64   |
| 3    |    | 4-Heptanone           | 114 | C7H14O  | 000123-19-3 | 58   |
| 4    |    | 3-Hexanone, 2-methyl- | 114 | C7H14O  | 007379-12-6 | 53   |
| 5    |    | 4-Heptanone           | 114 | C7H14O  | 000123-19-3 | 52   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

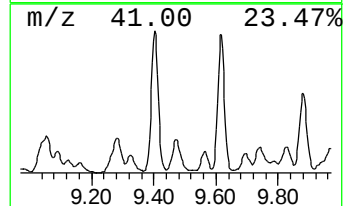
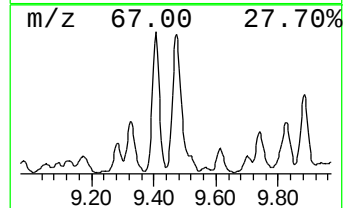
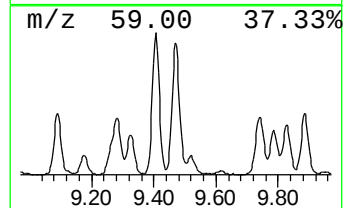
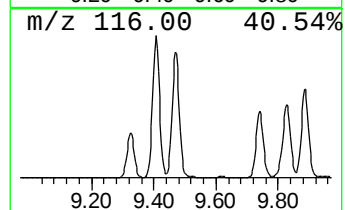
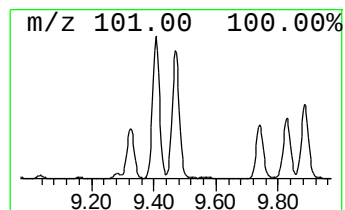
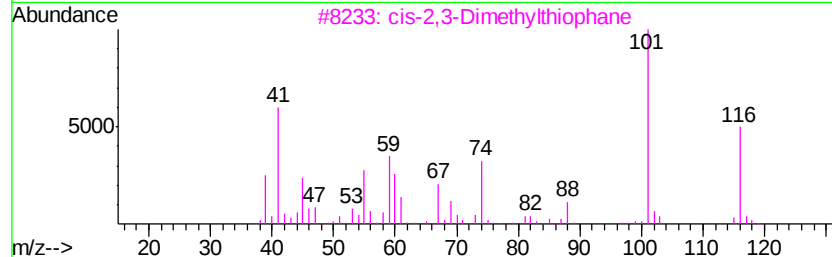
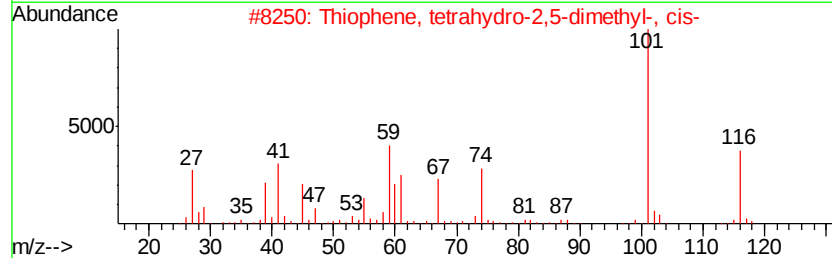
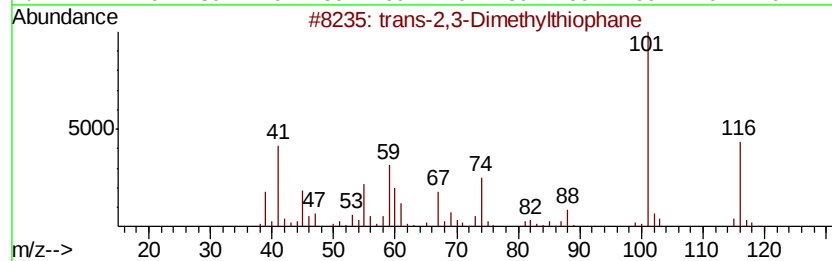
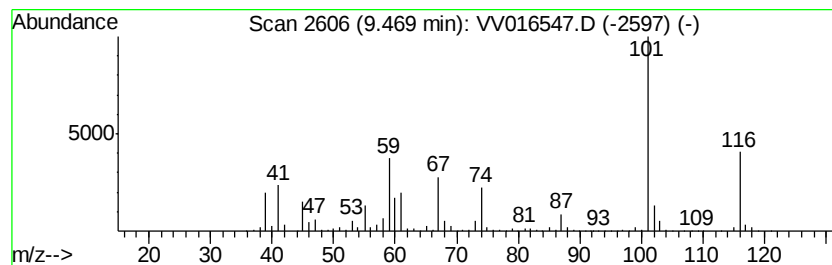
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 33 trans-2,3-Dimethylthiophane Concentration Rank 24

| R.T. | EstConc    | Area    | Relative to ISTD | R.T. |
|------|------------|---------|------------------|------|
| 9.47 | 44.78 ug/L | 2135780 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | trans-2,3-Dimethylthiophane         | 116 | C6H12S  | 005161-78-4 | 91   |
| 2    |    | Thiophene, tetrahydro-2,5-dimeth... | 116 | C6H12S  | 005161-13-7 | 90   |
| 3    |    | cis-2,3-Dimethylthiophane           | 116 | C6H12S  | 005161-77-3 | 87   |
| 4    |    | Thiophene, tetrahydro-2,5-dimeth... | 116 | C6H12S  | 005161-14-8 | 83   |
| 5    |    | Thiazole, 4,5-dihydro-4-methyl-2... | 116 | C4H8N2S | 010416-81-6 | 58   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

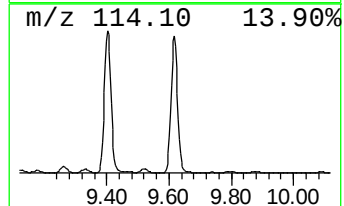
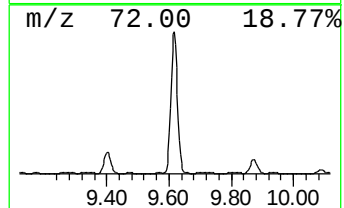
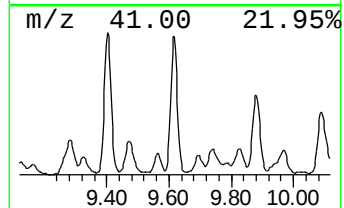
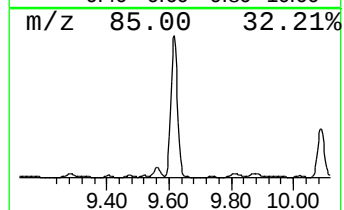
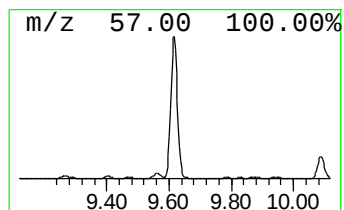
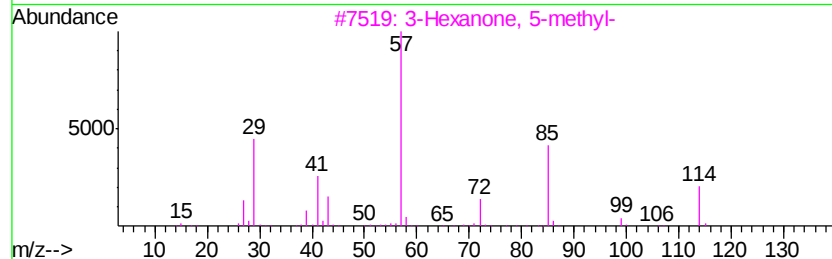
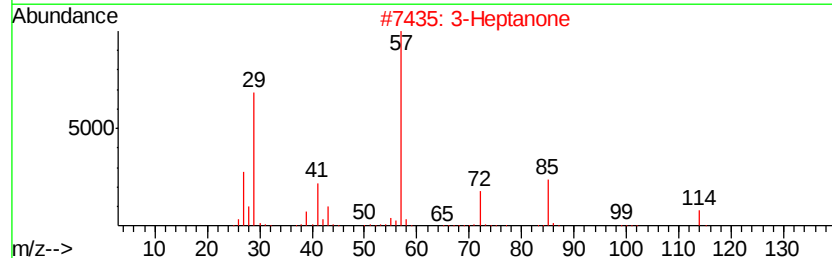
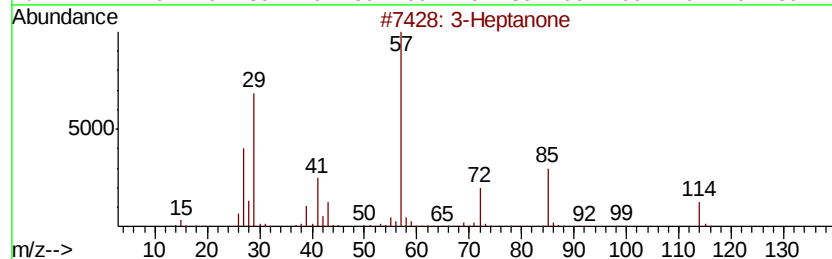
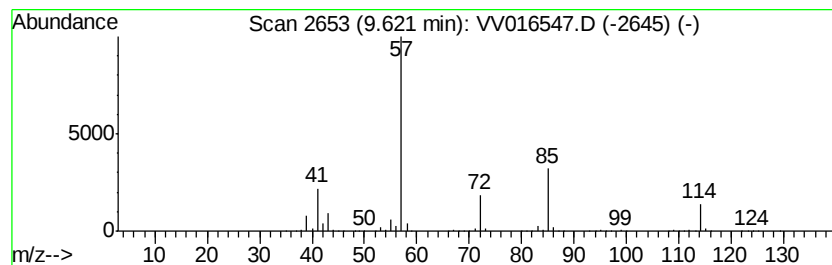
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 34 3-Heptanone Concentration Rank 7

| R.T. | EstConc    | Area    | Relative to ISTD | R.T. |
|------|------------|---------|------------------|------|
| 9.62 | 91.76 ug/L | 4376000 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | Tentative ID          | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------|-----|---------|-------------|------|
| 1    | 5  | 3-Heptanone           | 114 | C7H14O  | 000106-35-4 | 91   |
| 2    |    | 3-Heptanone           | 114 | C7H14O  | 000106-35-4 | 87   |
| 3    |    | 3-Hexanone, 5-methyl- | 114 | C7H14O  | 000623-56-3 | 86   |
| 4    |    | 3-Heptanone           | 114 | C7H14O  | 000106-35-4 | 80   |
| 5    |    | 3-Heptanone           | 114 | C7H14O  | 000106-35-4 | 80   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

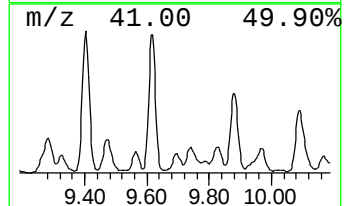
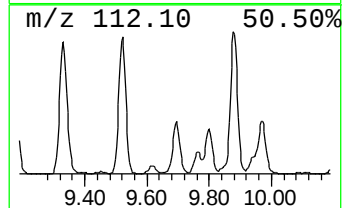
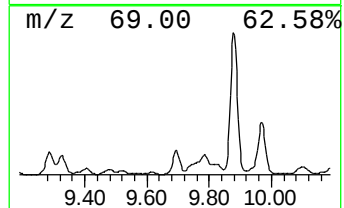
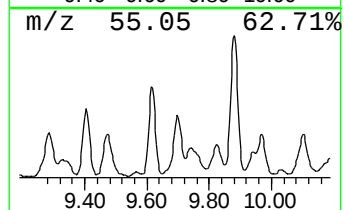
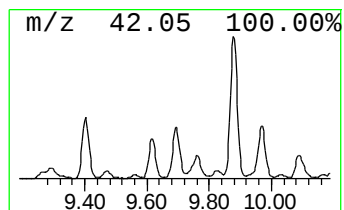
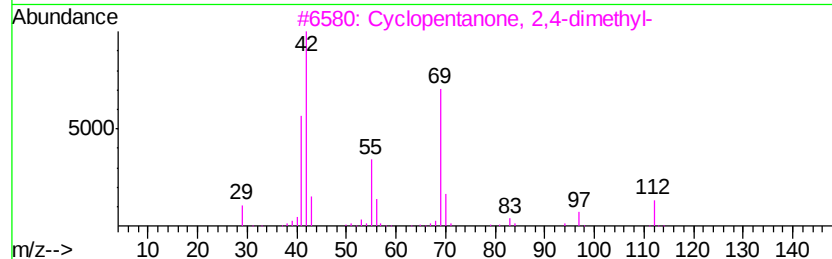
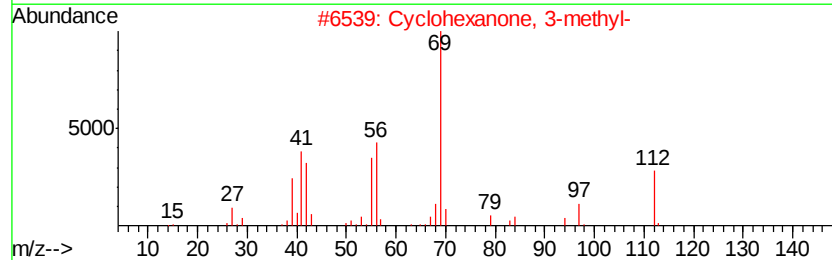
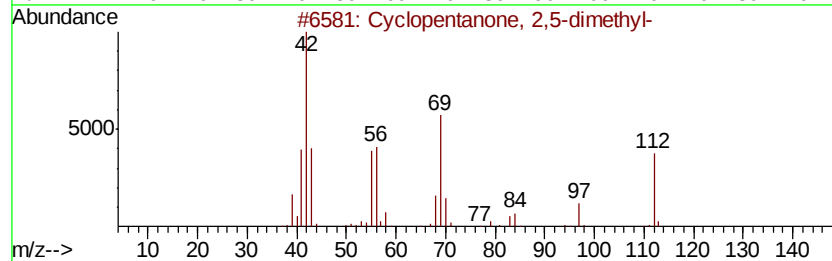
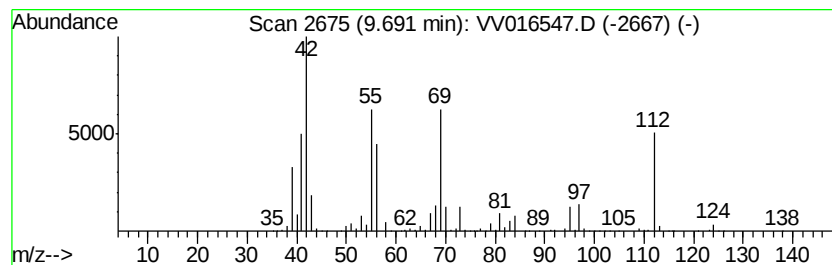
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 35 Cyclopentanone, 2,5-dimethyl- Concentration Rank 53

| R.T. | EstConc    | Area   | Relative to ISTD | R.T. |
|------|------------|--------|------------------|------|
| 9.69 | 14.05 ug/L | 669936 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | Tentative ID                   | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclopentanone, 2,5-dimethyl-  | 112 | C7H12O  | 004041-09-2 | 74   |
| 2    |    | Cyclohexanone, 3-methyl-       | 112 | C7H12O  | 000591-24-2 | 47   |
| 3    |    | Cyclopentanone, 2,4-dimethyl-  | 112 | C7H12O  | 001121-33-1 | 47   |
| 4    |    | Cyclohexanone, 3-methyl-, (R)- | 112 | C7H12O  | 013368-65-5 | 43   |
| 5    |    | 4-Morpholinecarbonitrile       | 112 | C5H8N2O | 001530-89-8 | 43   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

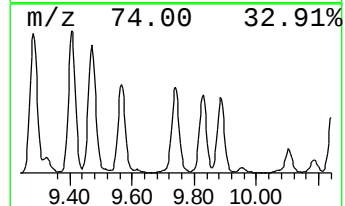
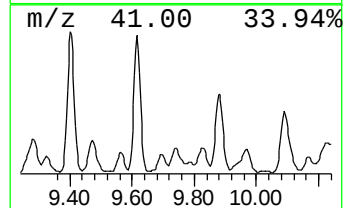
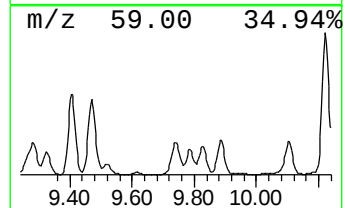
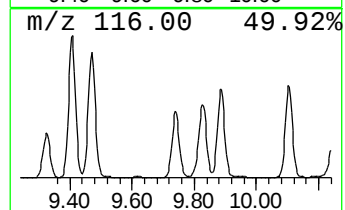
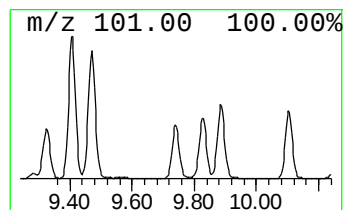
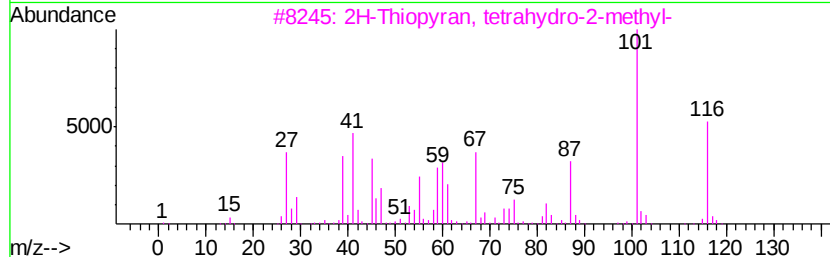
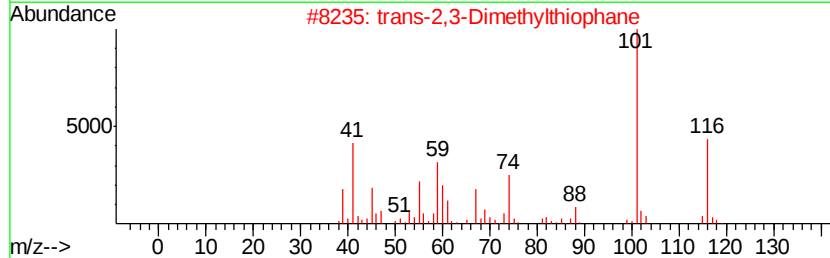
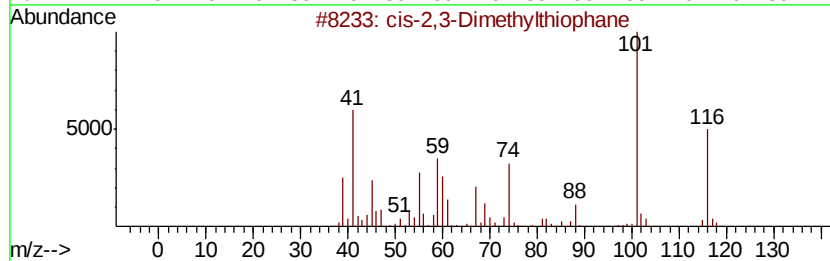
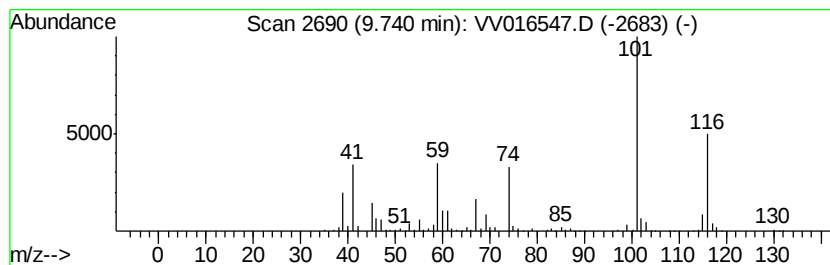
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 36 cis-2,3-Dimethylthiophane Concentration Rank 51

| R.T. | EstConc    | Area   | Relative to ISTD | R.T. |
|------|------------|--------|------------------|------|
| 9.74 | 14.60 ug/L | 696515 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | Tentative ID                        | MW  | MolForm  | CAS#        | Qual |
|------|----|-------------------------------------|-----|----------|-------------|------|
| 1    | 5  | cis-2,3-Dimethylthiophane           | 116 | C6H12S   | 005161-77-3 | 93   |
| 2    |    | trans-2,3-Dimethylthiophane         | 116 | C6H12S   | 005161-78-4 | 93   |
| 3    |    | 2H-Thiopyran, tetrahydro-2-methyl-  | 116 | C6H12S   | 005161-16-0 | 74   |
| 4    |    | Thiazole, 4,5-dihydro-4-methyl-2... | 116 | C4H8N2S  | 010416-81-6 | 59   |
| 5    |    | N-(1,3,4-Thiadiazol-2-yl)formamide  | 129 | C3H3N3OS | 026861-89-2 | 58   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

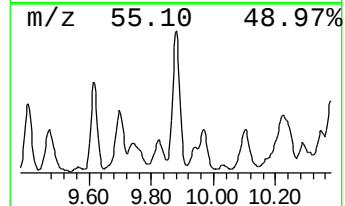
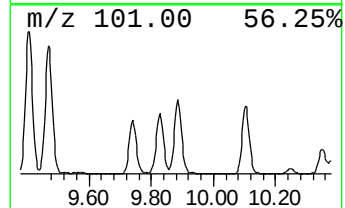
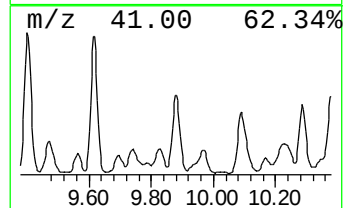
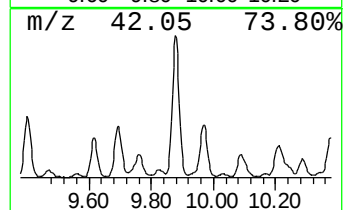
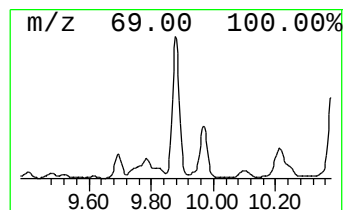
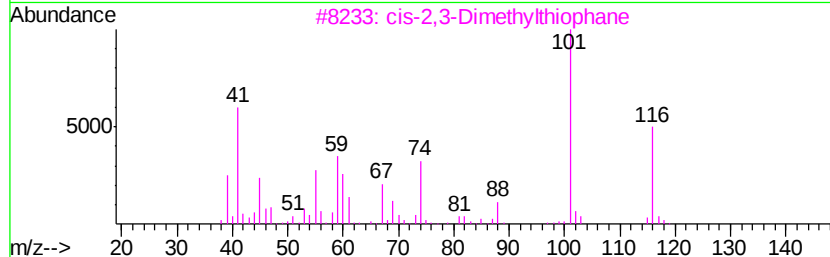
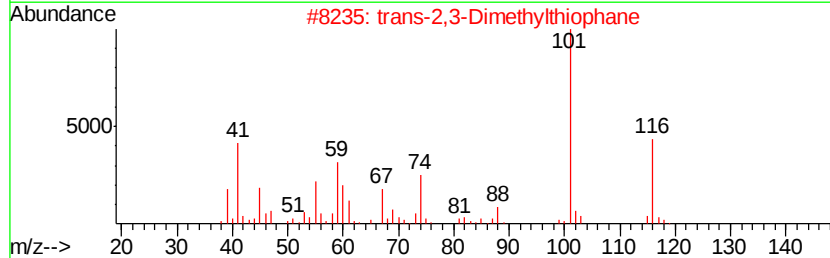
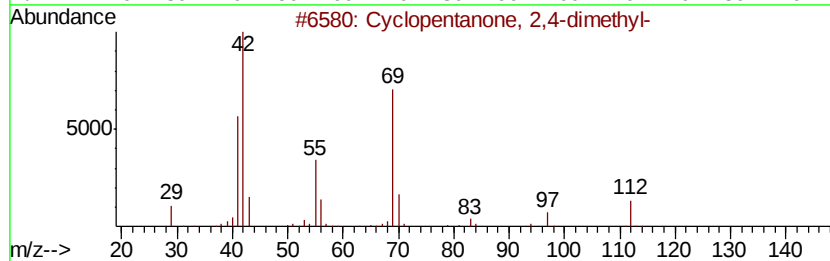
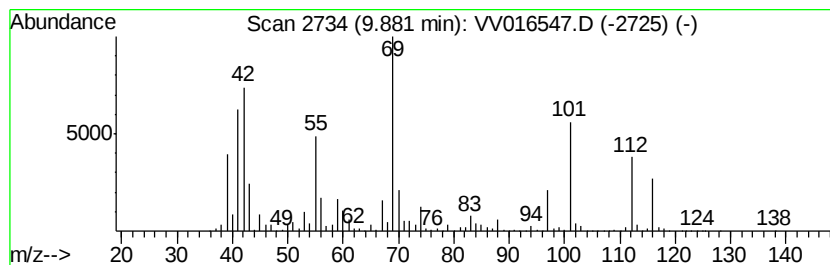
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 38 Cyclopentanone, 2,4-dimethyl- Concentration Rank 14

| R.T. | EstConc    | Area    | Relative to ISTD | R.T. |
|------|------------|---------|------------------|------|
| 9.88 | 61.19 ug/L | 2918260 | Chlorobenzene-d5 | 8.87 |

| Hit# | of | Tentative ID                     | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclopentanone, 2,4-dimethyl-    | 112 | C7H12O  | 001121-33-1 | 64   |
| 2    |    | trans-2,3-Dimethylthiophane      | 116 | C6H12S  | 005161-78-4 | 59   |
| 3    |    | cis-2,3-Dimethylthiophane        | 116 | C6H12S  | 005161-77-3 | 53   |
| 4    |    | Cyclopentanone, 2,5-dimethyl-    | 112 | C7H12O  | 004041-09-2 | 50   |
| 5    |    | trans-3,4-Dimethylcyclopentanone | 112 | C7H12O  | 019550-73-3 | 49   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

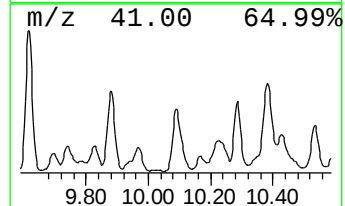
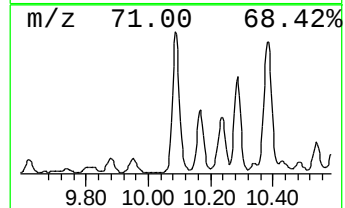
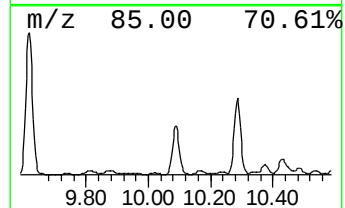
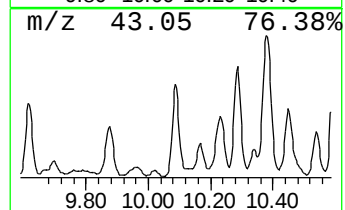
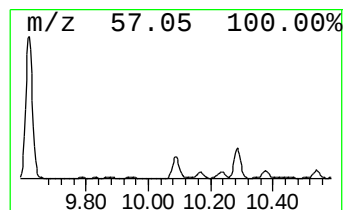
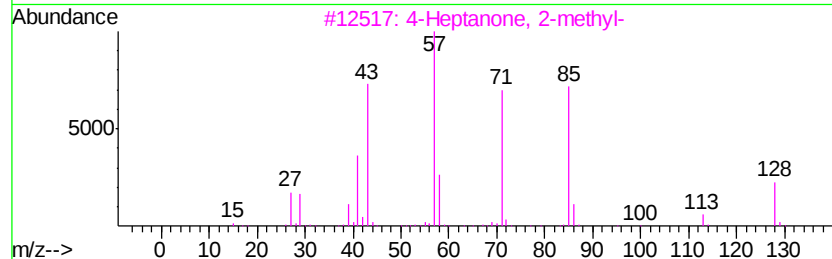
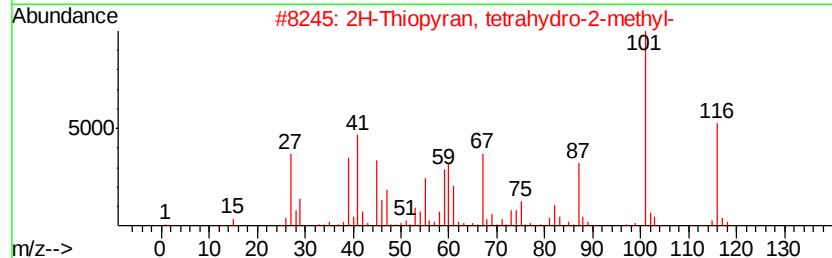
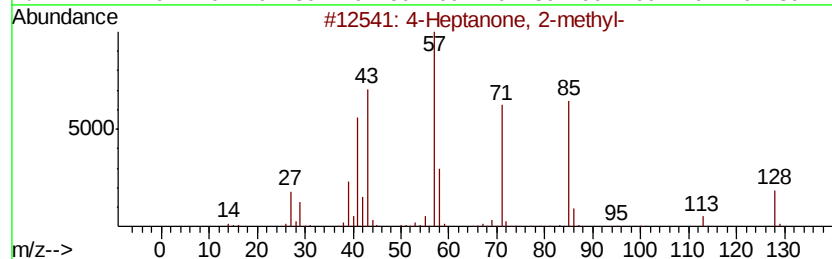
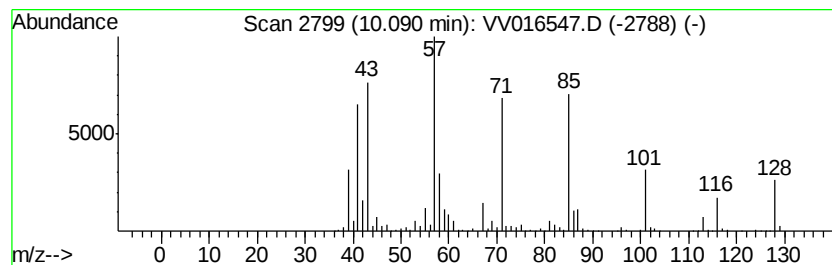
Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 39 4-Heptanone, 2-methyl- Concentration Rank 6

| R.T.      | EstConc                            | Area    | Relative to ISTD       | R.T.        |      |
|-----------|------------------------------------|---------|------------------------|-------------|------|
| 10.09     | 94.03 ug/L                         | 2908200 | 1,4-Dichlorobenzene-d4 | 11.27       |      |
| Hit# of 5 | Tentative ID                       | MW      | MolForm                | CAS#        | Qual |
| 1         | 4-Heptanone, 2-methyl-             | 128     | C8H16O                 | 000626-33-5 | 89   |
| 2         | 2H-Thiopyran, tetrahydro-2-methyl- | 116     | C6H12S                 | 005161-16-0 | 87   |
| 3         | 4-Heptanone, 2-methyl-             | 128     | C8H16O                 | 000626-33-5 | 86   |
| 4         | trans-2,3-Dimethylthiophane        | 116     | C6H12S                 | 005161-78-4 | 56   |
| 5         | 4-Heptanone, 2-methyl-             | 128     | C8H16O                 | 000626-33-5 | 50   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

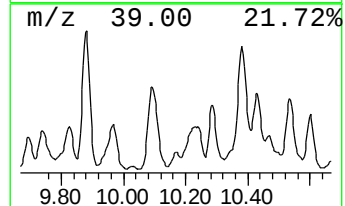
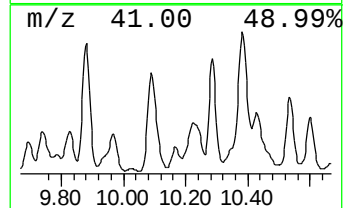
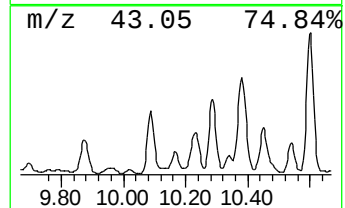
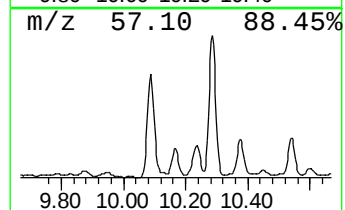
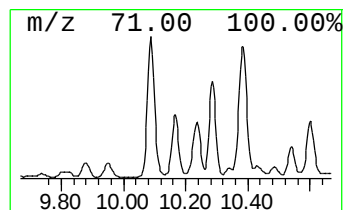
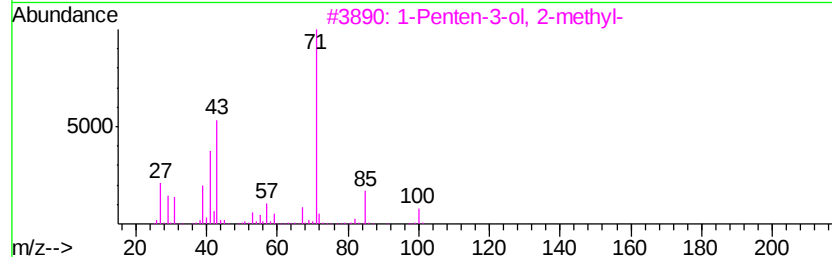
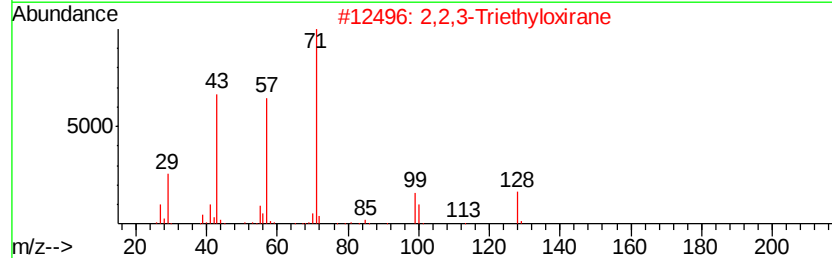
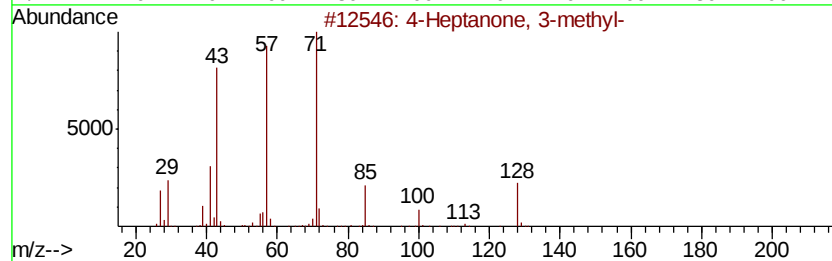
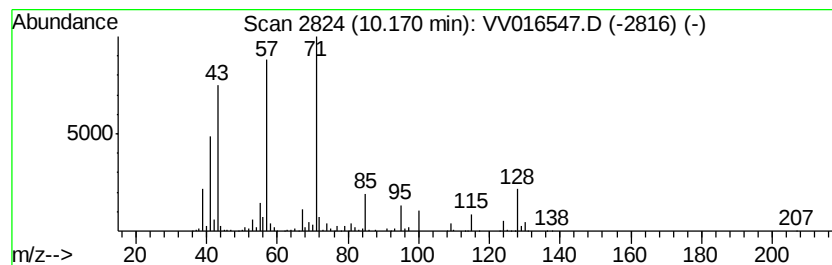
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 40 4-Heptanone, 3-methyl- Concentration Rank 55

| R.T.  | EstConc    | Area   | Relative to ISTD       | R.T.  |
|-------|------------|--------|------------------------|-------|
| 10.17 | 13.67 ug/L | 422806 | 1,4-Dichlorobenzene-d4 | 11.27 |

| Hit# | of | Tentative ID             | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------|-----|---------|-------------|------|
| 1    | 5  | 4-Heptanone, 3-methyl-   | 128 | C8H16O  | 015726-15-5 | 90   |
| 2    |    | 2,2,3-Triethyloxirane    | 128 | C8H16O  | 053229-40-6 | 74   |
| 3    |    | 1-Penten-3-ol, 2-methyl- | 100 | C6H12O  | 002088-07-5 | 59   |
| 4    |    | 4-Octanone               | 128 | C8H16O  | 000589-63-9 | 59   |
| 5    |    | 1-Penten-3-ol, 2-methyl- | 100 | C6H12O  | 002088-07-5 | 53   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

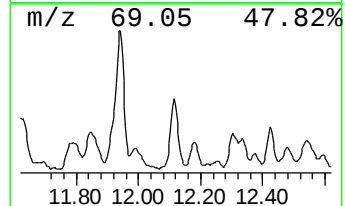
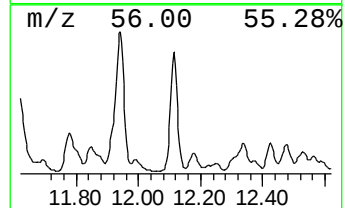
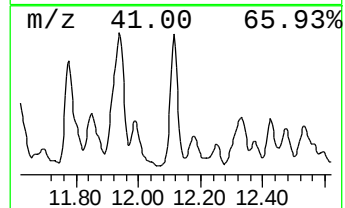
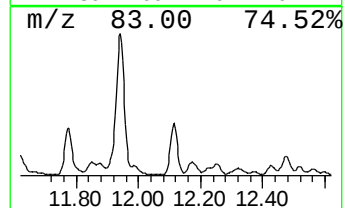
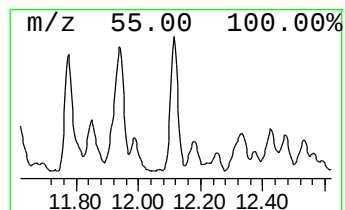
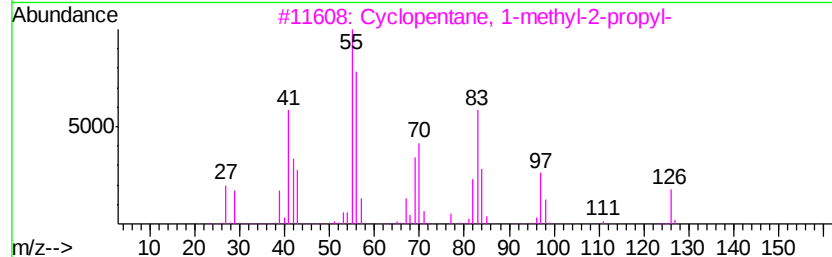
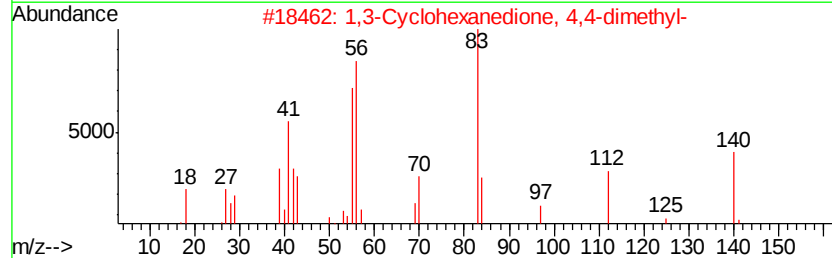
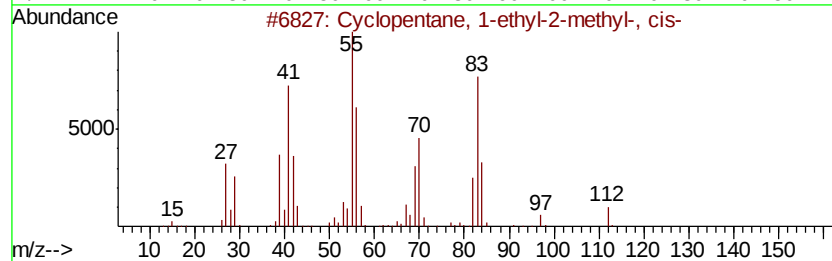
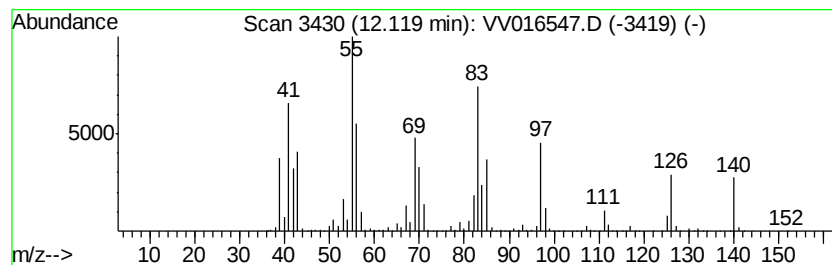
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 59 (DEL) Alkane: Cyclic12.12 Concentration Rank 16

| R.T.  | EstConc    | Area    | Relative to ISTD       | R.T.  |
|-------|------------|---------|------------------------|-------|
| 12.12 | 53.79 ug/L | 1663700 | 1,4-Dichlorobenzene-d4 | 11.27 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclopentane, 1-ethyl-2-methyl-,... | 112 | C8H16   | 000930-89-2 | 60   |
| 2    |    | 1,3-Cyclohexanedione, 4,4-dimethyl- | 140 | C8H12O2 | 000562-46-9 | 58   |
| 3    |    | Cyclopentane, 1-methyl-2-propyl-    | 126 | C9H18   | 003728-57-2 | 49   |
| 4    |    | Cyclohexanone, 3-ethyl-             | 126 | C8H14O  | 022461-89-8 | 49   |
| 5    |    | 2,3-Dimethyl-2-heptene              | 126 | C9H18   | 003074-64-4 | 43   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

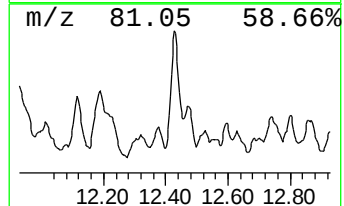
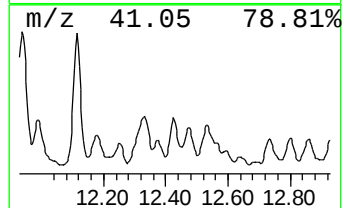
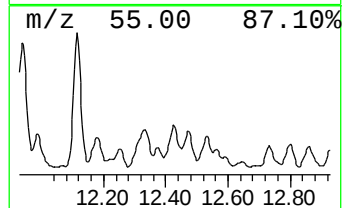
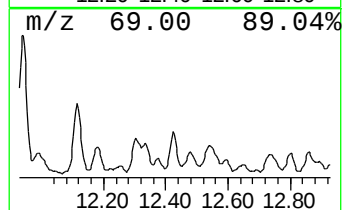
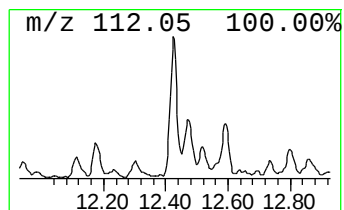
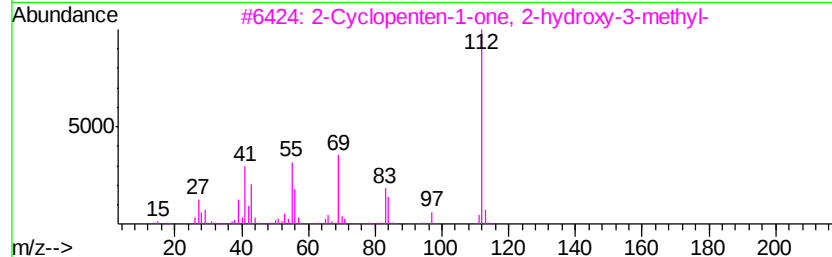
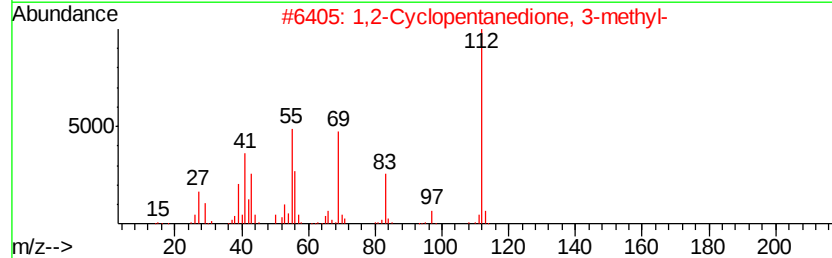
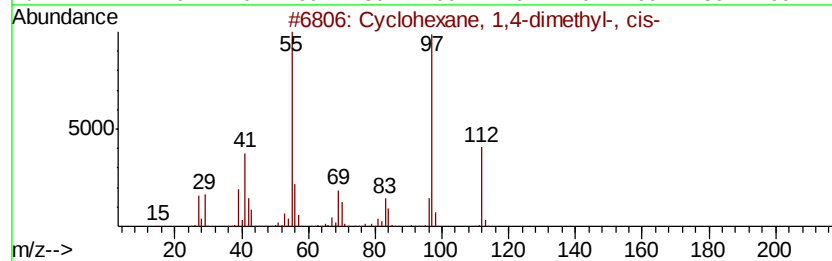
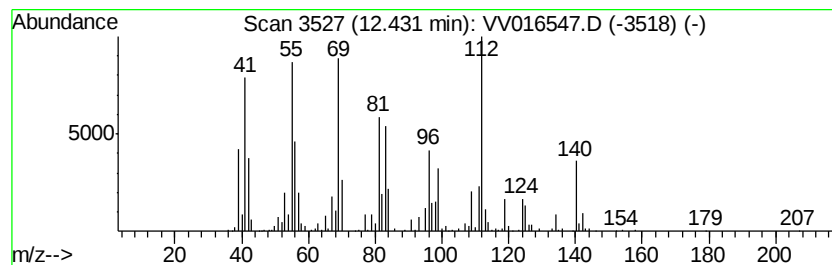
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 61 (DEL) Alkane: Cyclic12.43 Concentration Rank 48

| R.T.  | EstConc    | Area   | Relative to ISTD       | R.T.  |
|-------|------------|--------|------------------------|-------|
| 12.43 | 15.57 ug/L | 481500 | 1,4-Dichlorobenzene-d4 | 11.27 |

| Hit# | of | Tentative ID                             | MW  | MolForm | CAS#        | Qual |
|------|----|------------------------------------------|-----|---------|-------------|------|
| 1    | 5  | Cyclohexane, 1,4-dimethyl-, cis-         | 112 | C8H16   | 000624-29-3 | 60   |
| 2    |    | 1,2-Cyclopentanedione, 3-methyl-         | 112 | C6H8O2  | 000765-70-8 | 58   |
| 3    |    | 2-Cyclopenten-1-one, 2-hydroxy-3-methyl- | 112 | C6H8O2  | 000080-71-7 | 53   |
| 4    |    | 3-Octene, (E)-                           | 112 | C8H16   | 014919-01-8 | 49   |
| 5    |    | Cycloheptanone, 2-ethyl-                 | 140 | C9H16O  | 003183-41-3 | 49   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

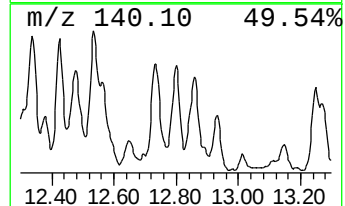
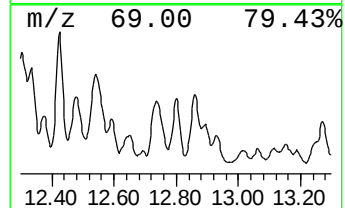
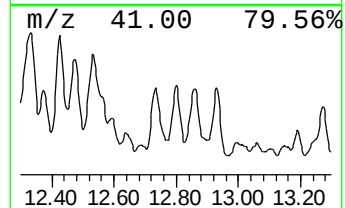
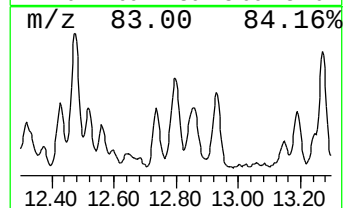
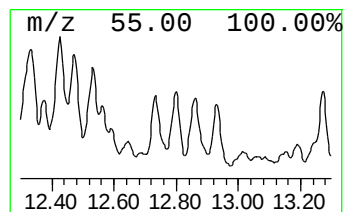
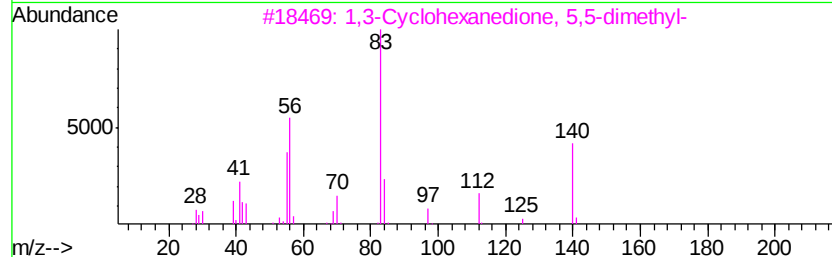
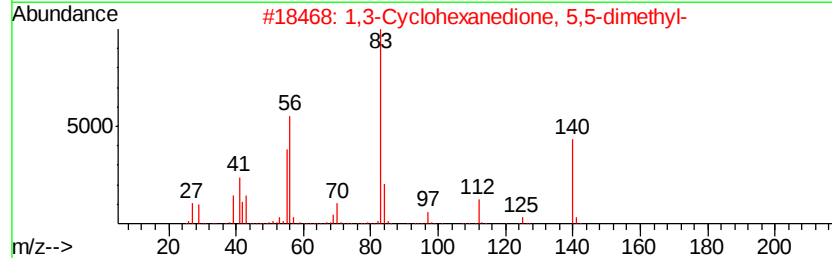
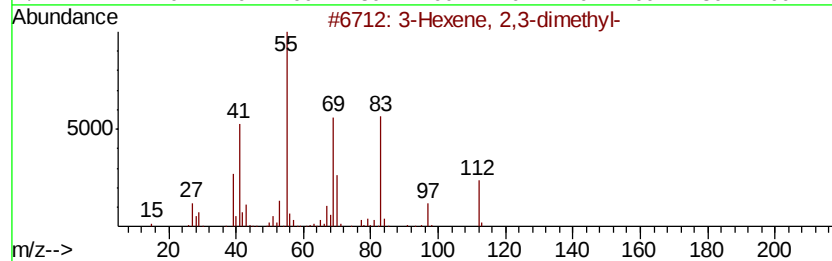
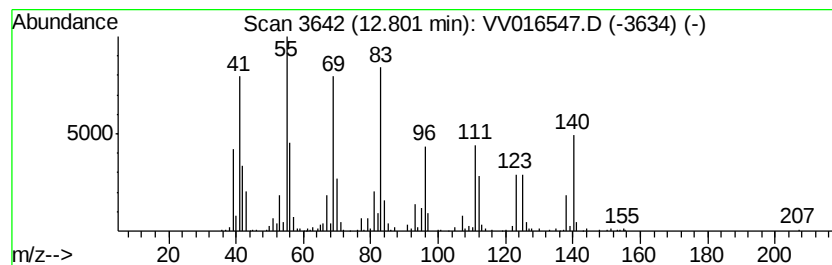
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 64 (DEL) Alkane: Straight-Chai... Concentration Rank 66

| R.T.  | EstConc   | Area   | Relative to ISTD       | R.T.  |
|-------|-----------|--------|------------------------|-------|
| 12.80 | 8.69 ug/L | 268613 | 1,4-Dichlorobenzene-d4 | 11.27 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 3-Hexene, 2,3-dimethyl-             | 112 | C8H16   | 007145-23-5 | 41   |
| 2    |    | 1,3-Cyclohexanedione, 5,5-dimethyl- | 140 | C8H12O2 | 000126-81-8 | 38   |
| 3    |    | 1,3-Cyclohexanedione, 5,5-dimethyl- | 140 | C8H12O2 | 000126-81-8 | 38   |
| 4    |    | Cyclopentane, propyl-               | 112 | C8H16   | 002040-96-2 | 30   |
| 5    |    | Imidazole, 2-acetamido-             | 125 | C5H7N3O | 052737-49-2 | 25   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV060520\  
Data File : VV016547.D  
Acq On : 05 Jun 2020 19:39  
Operator : SY/MD  
Sample : L2861-19  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
Quant Title : VOC Analysis

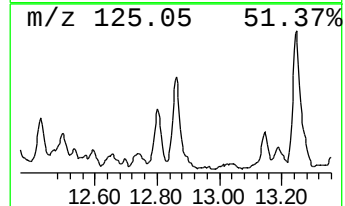
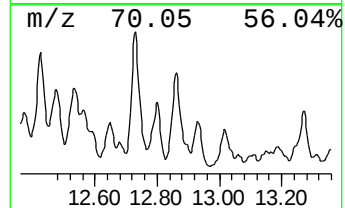
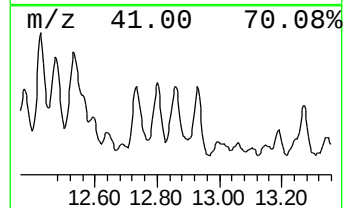
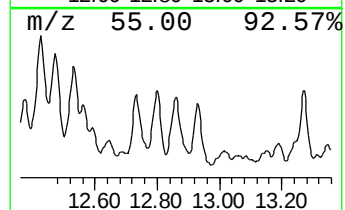
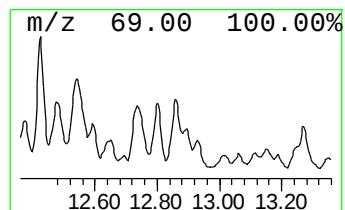
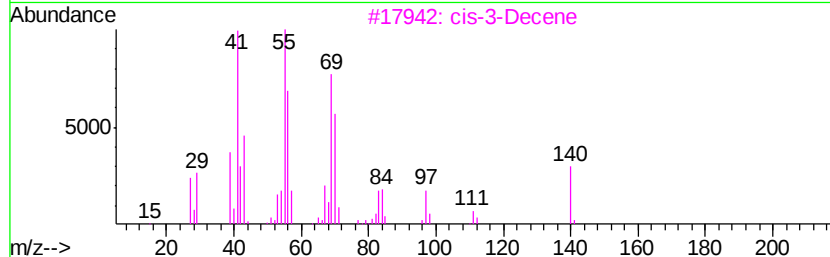
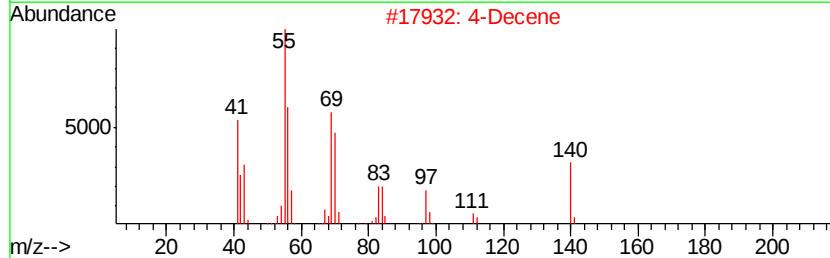
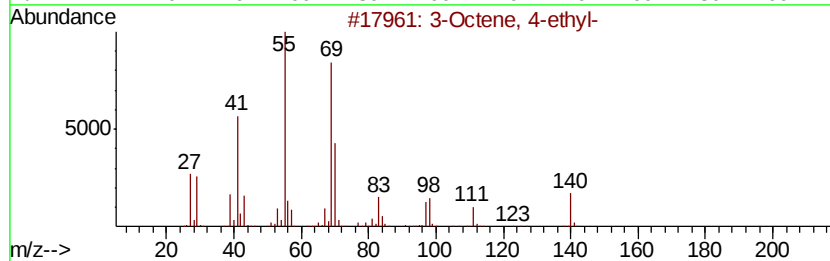
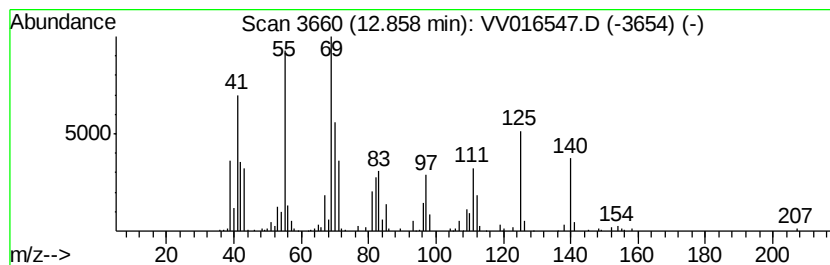
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 65 (DEL) Alkane: Straight-Chai... Concentration Rank 68

| R.T.  | EstConc   | Area   | Relative to ISTD       | R.T.  |
|-------|-----------|--------|------------------------|-------|
| 12.86 | 5.62 ug/L | 173767 | 1,4-Dichlorobenzene-d4 | 11.27 |

| Hit# | of | 5 | Tentative ID         | MW  | MolForm | CAS#         | Qual |
|------|----|---|----------------------|-----|---------|--------------|------|
| 1    |    |   | 3-Octene, 4-ethyl-   | 140 | C10H20  | 053966-51-1  | 58   |
| 2    |    |   | 4-Decene             | 140 | C10H20  | 019689-18-0  | 58   |
| 3    |    |   | cis-3-Decene         | 140 | C10H20  | 019398-86-8  | 49   |
| 4    |    |   | trans-3-Decene       | 140 | C10H20  | 019150-21-1  | 47   |
| 5    |    |   | 3,4-Diethyl-2-hexene | 140 | C10H20  | 1000113-54-8 | 43   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VV060520\  
 Data File : VV016547.D  
 Acq On : 05 Jun 2020 19:39  
 Operator : SY/MD  
 Sample : L2861-19  
 Misc : 5.0mL/MSVOA\_V/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 F9E67

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM060320WMA.M  
 Quant Title : VOC Analysis

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

| TIC Top Hit name     | RT    | EstConc | Units | Response  | --Internal Standard-- |       |         |      |
|----------------------|-------|---------|-------|-----------|-----------------------|-------|---------|------|
|                      |       |         |       |           | #                     | RT    | Resp    | Conc |
| (DEL) Alkane: Str... | 1.36  | 16.6    | ug/L  | 338225    | 1                     | 5.64  | 1020110 | 50.0 |
| (DEL) Alkane: Str... | 1.42  | 14.5    | ug/L  | 295690    | 1                     | 5.64  | 1020110 | 50.0 |
| (DEL) Alkane: Str... | 1.62  | 13.9    | ug/L  | 282776    | 1                     | 5.64  | 1020110 | 50.0 |
| (DEL) Alkane: Cyc... | 1.77  | 15.1    | ug/L  | 308426    | 1                     | 5.64  | 1020110 | 50.0 |
| (DEL) Alkane: Str... | 1.81  | 12.8    | ug/L  | 260980    | 1                     | 5.64  | 1020110 | 50.0 |
| (DEL) Alkane: Str... | 1.90  | 26.8    | ug/L  | 546409    | 1                     | 5.64  | 1020110 | 50.0 |
| (DEL) Alkane: Str... | 1.99  | 16.4    | ug/L  | 333797    | 1                     | 5.64  | 1020110 | 50.0 |
| Ethanethiol          | 2.03  | 17.7    | ug/L  | 360513    | 1                     | 5.64  | 1020110 | 50.0 |
| Cyclopentene         | 2.49  | 69.1    | ug/L  | 1410250   | 1                     | 5.64  | 1020110 | 50.0 |
| (DEL) Alkane: Cyc... | 2.59  | 46.6    | ug/L  | 949823    | 1                     | 5.64  | 1020110 | 50.0 |
| 2,4-Hexadiene, (E... | 3.45  | 11.4    | ug/L  | 232914    | 1                     | 5.64  | 1020110 | 50.0 |
| (DEL) Alkane: Cyc... | 3.78  | 19.1    | ug/L  | 390564    | 1                     | 5.64  | 1020110 | 50.0 |
| 1,5-Hexadiyne        | 5.17  | 12954.8 | ug/L  | 264305000 | 1                     | 5.64  | 1020110 | 50.0 |
| Cyclobutane, ethe... | 5.25  | 55.7    | ug/L  | 1135730   | 1                     | 5.64  | 1020110 | 50.0 |
| Propane, 2-(methy... | 5.34  | 11.7    | ug/L  | 239138    | 1                     | 5.64  | 1020110 | 50.0 |
| Thiophene            | 5.39  | 68.3    | ug/L  | 1394110   | 1                     | 5.64  | 1020110 | 50.0 |
| 2-Pentanone          | 5.55  | 9.1     | ug/L  | 185893    | 1                     | 5.64  | 1020110 | 50.0 |
| Diethyl sulfide      | 5.97  | 22.6    | ug/L  | 461867    | 1                     | 5.64  | 1020110 | 50.0 |
| 3-Pentanone          | 6.35  | 9.1     | ug/L  | 184843    | 1                     | 5.64  | 1020110 | 50.0 |
| Propane, 2-(ethyl... | 7.01  | 35.6    | ug/L  | 725940    | 1                     | 5.64  | 1020110 | 50.0 |
| 2-Pentanone, 3-me... | 7.49  | 12.9    | ug/L  | 613569    | 2                     | 8.87  | 2384540 | 50.0 |
| Thiophene, 2-methyl- | 7.54  | 52.8    | ug/L  | 2517870   | 2                     | 8.87  | 2384540 | 50.0 |
| Thiophene, 3-methyl- | 7.72  | 28.8    | ug/L  | 1373480   | 2                     | 8.87  | 2384540 | 50.0 |
| unknown-01           | 7.87  | 7.5     | ug/L  | 358350    | 2                     | 8.87  | 2384540 | 50.0 |
| 3-Hexanone           | 8.02  | 32.9    | ug/L  | 1567640   | 2                     | 8.87  | 2384540 | 50.0 |
| Thiophene, tetrah... | 8.23  | 11.1    | ug/L  | 529493    | 2                     | 8.87  | 2384540 | 50.0 |
| unknown-02           | 8.66  | 2.9     | ug/L  | 138545    | 2                     | 8.87  | 2384540 | 50.0 |
| 3,4-Dimethyl-2-pe... | 8.75  | 5.5     | ug/L  | 261730    | 2                     | 8.87  | 2384540 | 50.0 |
| Methylamine, N,N-... | 9.09  | 19.9    | ug/L  | 947053    | 2                     | 8.87  | 2384540 | 50.0 |
| Thiophene, tetrah... | 9.28  | 46.3    | ug/L  | 2206330   | 2                     | 8.87  | 2384540 | 50.0 |
| Thiophene, 2,5-di... | 9.33  | 30.5    | ug/L  | 1456300   | 2                     | 8.87  | 2384540 | 50.0 |
| 4-Heptanone          | 9.40  | 114.4   | ug/L  | 5456230   | 2                     | 8.87  | 2384540 | 50.0 |
| trans-2,3-Dimethy... | 9.47  | 44.8    | ug/L  | 2135780   | 2                     | 8.87  | 2384540 | 50.0 |
| 3-Heptanone          | 9.62  | 91.8    | ug/L  | 4376000   | 2                     | 8.87  | 2384540 | 50.0 |
| Cyclopentanone, 2... | 9.69  | 14.1    | ug/L  | 669936    | 2                     | 8.87  | 2384540 | 50.0 |
| cis-2,3-Dimethylt... | 9.74  | 14.6    | ug/L  | 696515    | 2                     | 8.87  | 2384540 | 50.0 |
| Cyclopentanone, 2... | 9.88  | 61.2    | ug/L  | 2918260   | 2                     | 8.87  | 2384540 | 50.0 |
| 4-Heptanone, 2-me... | 10.09 | 94.0    | ug/L  | 2908200   | 3                     | 11.27 | 1546370 | 50.0 |
| 4-Heptanone, 3-me... | 10.17 | 13.7    | ug/L  | 422806    | 3                     | 11.27 | 1546370 | 50.0 |
| (DEL) Alkane: Cyc... | 12.12 | 53.8    | ug/L  | 1663700   | 3                     | 11.27 | 1546370 | 50.0 |
| (DEL) Alkane: Cyc... | 12.43 | 15.6    | ug/L  | 481500    | 3                     | 11.27 | 1546370 | 50.0 |
| (DEL) Alkane: Str... | 12.80 | 8.7     | ug/L  | 268613    | 3                     | 11.27 | 1546370 | 50.0 |
| (DEL) Alkane: Str... | 12.86 | 5.6     | ug/L  | 173767    | 3                     | 11.27 | 1546370 | 50.0 |