

Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV053019\  
 Data File : VV011166.D  
 Acq On : 31 May 2019 07:05  
 Operator : SY/MD  
 Sample : K3017-14RE  
 Misc : 5.87G/10ML/MSVOA V/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 A51E7RE

## 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\SOM2VLM053019S.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         | 1.110       | 3             | 6           | 24           | rVB2     | 39250          | 45575         | 3.46%           | 0.361%        |
| 2         | 1.200       | 30            | 34          | 45           | rVB4     | 19716          | 29742         | 2.26%           | 0.235%        |
| 3         | 1.309       | 60            | 68          | 75           | rBV      | 210994         | 198826        | 15.11%          | 1.574%        |
| 4         | 1.380       | 84            | 90          | 98           | rBV      | 113648         | 116002        | 8.82%           | 0.918%        |
| 5         | 1.553       | 138           | 144         | 153          | rVB      | 146928         | 175863        | 13.37%          | 1.392%        |
| 6         | 1.801       | 215           | 221         | 238          | rVB      | 70946          | 95002         | 7.22%           | 0.752%        |
| 7         | 2.113       | 308           | 318         | 330          | rVB2     | 301003         | 450059        | 34.21%          | 3.562%        |
| 8         | 2.183       | 331           | 340         | 351          | rVV      | 156548         | 229375        | 17.44%          | 1.816%        |
| 9         | 2.450       | 410           | 423         | 438          | rBV      | 117699         | 191406        | 14.55%          | 1.515%        |
| 10        | 2.524       | 441           | 446         | 459          | rVB3     | 14956          | 27103         | 2.06%           | 0.215%        |
| 11        | 2.630       | 476           | 479         | 481          | rBV5     | 2001           | 1176          | 0.09%           | 0.009%        |
| 12        | 2.736       | 508           | 512         | 515          | rBV3     | 1517           | 1180          | 0.09%           | 0.009%        |
| 13        | 2.958       | 578           | 581         | 582          | rBV3     | 2748           | 1619          | 0.12%           | 0.013%        |
| 14        | 2.984       | 582           | 589         | 600          | rVV2     | 8230           | 16283         | 1.24%           | 0.129%        |
| 15        | 3.058       | 602           | 612         | 622          | rVB3     | 11835          | 22837         | 1.74%           | 0.181%        |
| 16        | 3.199       | 646           | 656         | 667          | rBV4     | 6549           | 14637         | 1.11%           | 0.116%        |
| 17        | 3.544       | 756           | 763         | 764          | rBV5     | 1343           | 1303          | 0.10%           | 0.010%        |
| 18        | 3.740       | 814           | 824         | 846          | rBV2     | 32967          | 80679         | 6.13%           | 0.639%        |
| 19        | 3.929       | 871           | 883         | 902          | rBV      | 60090          | 157124        | 11.94%          | 1.244%        |
| 20        | 4.151       | 948           | 952         | 955          | rBV6     | 1603           | 1359          | 0.10%           | 0.011%        |
| 21        | 4.389       | 1007          | 1026        | 1051         | rBV      | 204129         | 508239        | 38.63%          | 4.023%        |
| 22        | 4.695       | 1117          | 1121        | 1124         | rVV6     | 1534           | 1503          | 0.11%           | 0.012%        |
| 23        | 4.714       | 1124          | 1127        | 1132         | rVV7     | 1872           | 1631          | 0.12%           | 0.013%        |
| 24        | 5.087       | 1225          | 1243        | 1272         | rBV2     | 535387         | 1315589       | 100.00%         | 10.413%       |
| 25        | 5.367       | 1318          | 1330        | 1350         | rBV4     | 25973          | 64051         | 4.87%           | 0.507%        |
| 26        | 5.534       | 1369          | 1382        | 1384         | rBV7     | 10099          | 17128         | 1.30%           | 0.136%        |
| 27        | 5.656       | 1407          | 1420        | 1456         | rVB      | 425287         | 857794        | 65.20%          | 6.790%        |
| 28        | 5.904       | 1492          | 1497        | 1499         | rBV5     | 1851           | 1362          | 0.10%           | 0.011%        |
| 29        | 5.958       | 1503          | 1514        | 1524         | rVV5     | 11963          | 24548         | 1.87%           | 0.194%        |
| 30        | 6.113       | 1548          | 1562        | 1583         | rBV      | 303676         | 623355        | 47.38%          | 4.934%        |
| 31        | 6.232       | 1592          | 1599        | 1610         | rVB10    | 3728           | 7724          | 0.59%           | 0.061%        |
| 32        | 6.325       | 1617          | 1628        | 1653         | rBV      | 169749         | 328051        | 24.94%          | 2.597%        |
| 33        | 6.637       | 1721          | 1725        | 1727         | rBV4     | 1746           | 1487          | 0.11%           | 0.012%        |
| 34        | 6.836       | 1783          | 1787        | 1790         | rBV7     | 1462           | 1266          | 0.10%           | 0.010%        |

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 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\SOM2VLM053019S.M  
 Title : VOC Analysis

|    |        |      |      |      |      |        |         |        |         |
|----|--------|------|------|------|------|--------|---------|--------|---------|
| 35 | 6.965  | 1823 | 1827 | 1831 | rVV7 | 1510   | 1638    | 0.12%  | 0.013%  |
| 36 | 7.026  | 1831 | 1846 | 1865 | rVV  | 169163 | 304754  | 23.16% | 2.412%  |
| 37 | 7.177  | 1888 | 1893 | 1895 | rBV4 | 2803   | 2843    | 0.22%  | 0.023%  |
| 38 | 7.280  | 1917 | 1925 | 1928 | rBV7 | 2159   | 2932    | 0.22%  | 0.023%  |
| 39 | 7.354  | 1931 | 1948 | 1962 | rBV  | 656849 | 1161692 | 88.30% | 9.195%  |
| 40 | 7.604  | 2020 | 2026 | 2033 | rVB5 | 5493   | 7602    | 0.58%  | 0.060%  |
| 41 | 7.659  | 2033 | 2043 | 2060 | rBV2 | 112807 | 188755  | 14.35% | 1.494%  |
| 42 | 7.974  | 2130 | 2141 | 2155 | rBV5 | 13871  | 34276   | 2.61%  | 0.271%  |
| 43 | 8.129  | 2178 | 2189 | 2222 | rBV  | 252371 | 468374  | 35.60% | 3.707%  |
| 44 | 8.280  | 2224 | 2236 | 2264 | rBV  | 791182 | 1288286 | 97.92% | 10.197% |
| 45 | 8.524  | 2308 | 2312 | 2316 | rBV7 | 1216   | 1206    | 0.09%  | 0.010%  |
| 46 | 8.547  | 2316 | 2319 | 2326 | rVB8 | 2040   | 1851    | 0.14%  | 0.015%  |
| 47 | 8.894  | 2408 | 2427 | 2454 | rVV  | 622879 | 1050306 | 79.84% | 8.313%  |
| 48 | 9.032  | 2466 | 2470 | 2474 | rBV5 | 1760   | 1686    | 0.13%  | 0.013%  |
| 49 | 9.103  | 2488 | 2492 | 2495 | rBV5 | 2381   | 2061    | 0.16%  | 0.016%  |
| 50 | 9.183  | 2508 | 2517 | 2518 | rBV6 | 4625   | 5641    | 0.43%  | 0.045%  |
| 51 | 9.247  | 2529 | 2537 | 2542 | rBV5 | 11767  | 20794   | 1.58%  | 0.165%  |
| 52 | 9.354  | 2563 | 2570 | 2579 | rVB8 | 7721   | 11152   | 0.85%  | 0.088%  |
| 53 | 9.524  | 2614 | 2623 | 2640 | rVV2 | 26402  | 61862   | 4.70%  | 0.490%  |
| 54 | 9.746  | 2684 | 2692 | 2699 | rBV  | 10020  | 15015   | 1.14%  | 0.119%  |
| 55 | 9.849  | 2715 | 2724 | 2745 | rBV2 | 72693  | 120917  | 9.19%  | 0.957%  |
| 56 | 10.064 | 2787 | 2791 | 2794 | rBV4 | 1725   | 1318    | 0.10%  | 0.010%  |
| 57 | 10.164 | 2817 | 2822 | 2823 | rBV4 | 2342   | 1552    | 0.12%  | 0.012%  |
| 58 | 10.260 | 2839 | 2852 | 2871 | rVB  | 285965 | 459914  | 34.96% | 3.640%  |
| 59 | 10.392 | 2890 | 2893 | 2894 | rVV3 | 2650   | 1552    | 0.12%  | 0.012%  |
| 60 | 10.421 | 2895 | 2902 | 2916 | rVB2 | 17071  | 26653   | 2.03%  | 0.211%  |
| 61 | 10.563 | 2935 | 2946 | 2955 | rVV8 | 11996  | 25383   | 1.93%  | 0.201%  |
| 62 | 10.627 | 2957 | 2966 | 2984 | rVB3 | 24096  | 43608   | 3.31%  | 0.345%  |
| 63 | 10.759 | 2998 | 3007 | 3014 | rBV2 | 8891   | 13123   | 1.00%  | 0.104%  |
| 64 | 10.807 | 3014 | 3022 | 3035 | rVV8 | 8929   | 16671   | 1.27%  | 0.132%  |
| 65 | 10.868 | 3037 | 3041 | 3049 | rVB8 | 3016   | 4271    | 0.32%  | 0.034%  |
| 66 | 10.977 | 3058 | 3075 | 3087 | rVB8 | 16264  | 45917   | 3.49%  | 0.363%  |
| 67 | 11.083 | 3103 | 3108 | 3113 | rBV6 | 3845   | 4559    | 0.35%  | 0.036%  |
| 68 | 11.196 | 3131 | 3143 | 3150 | rBV2 | 56541  | 92624   | 7.04%  | 0.733%  |
| 69 | 11.292 | 3163 | 3173 | 3191 | rVB  | 404718 | 656066  | 49.87% | 5.193%  |
| 70 | 11.379 | 3196 | 3200 | 3205 | rVB6 | 2981   | 3240    | 0.25%  | 0.026%  |
| 71 | 11.434 | 3213 | 3217 | 3218 | rBV4 | 1751   | 1234    | 0.09%  | 0.010%  |

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Instrument :  
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 A51E7RE

## 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  
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 Peak Location: TOP

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 Peak separation: 5

Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM053019S.M  
 Title : VOC Analysis

|     |        |      |      |      |       |        |        |        |        |
|-----|--------|------|------|------|-------|--------|--------|--------|--------|
| 72  | 11.579 | 3254 | 3262 | 3276 | rBV6  | 7063   | 12500  | 0.95%  | 0.099% |
| 73  | 11.672 | 3278 | 3291 | 3303 | rBV   | 378933 | 612940 | 46.59% | 4.852% |
| 74  | 11.833 | 3333 | 3341 | 3346 | rBV8  | 3441   | 5166   | 0.39%  | 0.041% |
| 75  | 12.054 | 3403 | 3410 | 3424 | rVB5  | 19355  | 34695  | 2.64%  | 0.275% |
| 76  | 12.189 | 3447 | 3452 | 3459 | rBV9  | 3131   | 4664   | 0.35%  | 0.037% |
| 77  | 12.292 | 3473 | 3484 | 3495 | rBV2  | 9138   | 18459  | 1.40%  | 0.146% |
| 78  | 12.392 | 3507 | 3515 | 3532 | rVV2  | 37130  | 61864  | 4.70%  | 0.490% |
| 79  | 12.595 | 3576 | 3578 | 3585 | rVV7  | 1717   | 1817   | 0.14%  | 0.014% |
| 80  | 12.717 | 3607 | 3616 | 3627 | rBV6  | 7646   | 11886  | 0.90%  | 0.094% |
| 81  | 12.791 | 3628 | 3639 | 3646 | rVB6  | 6236   | 10594  | 0.81%  | 0.084% |
| 82  | 12.929 | 3678 | 3682 | 3689 | rVB7  | 4174   | 5217   | 0.40%  | 0.041% |
| 83  | 13.000 | 3699 | 3704 | 3708 | rBV7  | 1934   | 2067   | 0.16%  | 0.016% |
| 84  | 13.042 | 3711 | 3717 | 3718 | rBV5  | 2167   | 2027   | 0.15%  | 0.016% |
| 85  | 13.115 | 3735 | 3740 | 3743 | rVV5  | 1416   | 1758   | 0.13%  | 0.014% |
| 86  | 13.183 | 3755 | 3761 | 3774 | rVB5  | 6919   | 13408  | 1.02%  | 0.106% |
| 87  | 13.485 | 3847 | 3855 | 3861 | rBV9  | 5988   | 8039   | 0.61%  | 0.064% |
| 88  | 13.633 | 3894 | 3901 | 3907 | rBV8  | 3381   | 5350   | 0.41%  | 0.042% |
| 89  | 14.199 | 4072 | 4077 | 4080 | rBV6  | 1955   | 1804   | 0.14%  | 0.014% |
| 90  | 14.225 | 4080 | 4085 | 4092 | rBV8  | 6682   | 10422  | 0.79%  | 0.082% |
| 91  | 14.392 | 4127 | 4137 | 4142 | rBV9  | 3396   | 6012   | 0.46%  | 0.048% |
| 92  | 14.492 | 4162 | 4168 | 4173 | rBV10 | 2336   | 3084   | 0.23%  | 0.024% |
| 93  | 14.787 | 4257 | 4260 | 4262 | rBV3  | 1957   | 1242   | 0.09%  | 0.010% |
| 94  | 15.054 | 4341 | 4343 | 4345 | rVV3  | 1992   | 1290   | 0.10%  | 0.010% |
| 95  | 15.096 | 4349 | 4356 | 4361 | rBV10 | 2100   | 2480   | 0.19%  | 0.020% |
| 96  | 15.199 | 4384 | 4388 | 4391 | rBV5  | 1446   | 1280   | 0.10%  | 0.010% |
| 97  | 15.691 | 4534 | 4541 | 4548 | rVB8  | 3625   | 5438   | 0.41%  | 0.043% |
| 98  | 16.003 | 4635 | 4638 | 4650 | rVB8  | 4080   | 5925   | 0.45%  | 0.047% |
| 99  | 16.119 | 4669 | 4674 | 4683 | rVB8  | 5666   | 8603   | 0.65%  | 0.068% |
| 100 | 16.238 | 4704 | 4711 | 4716 | rBV10 | 8292   | 11505  | 0.87%  | 0.091% |

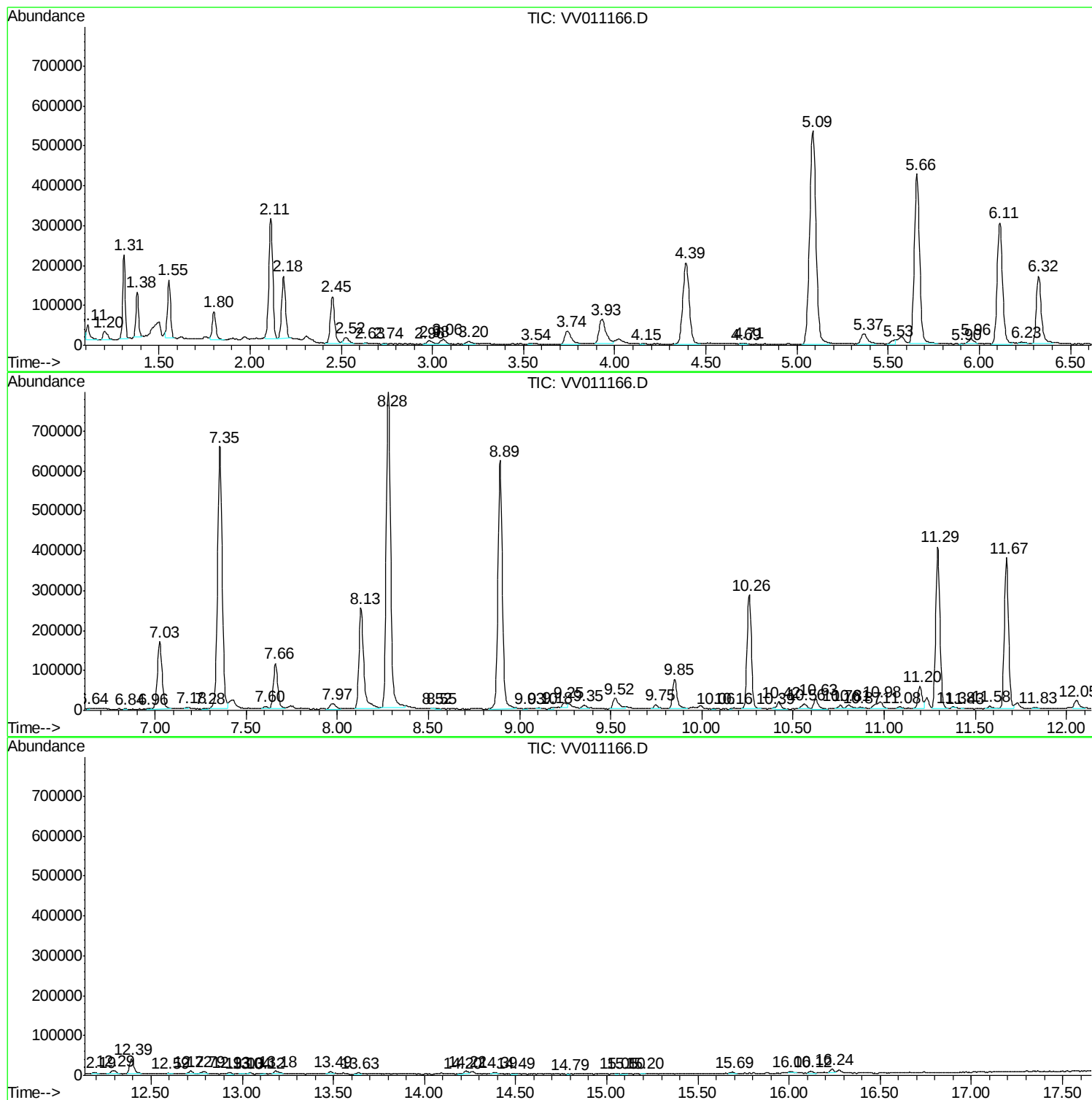
Sum of corrected areas: 12633742

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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM053019S.M  
Quant Title : VOC Analysis

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV053019\  
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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM053019S.M  
Quant Title : VOC Analysis

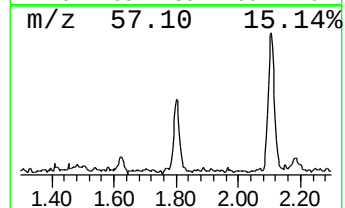
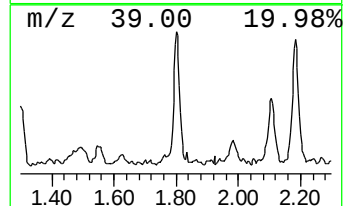
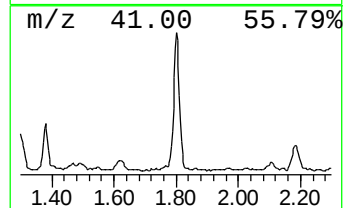
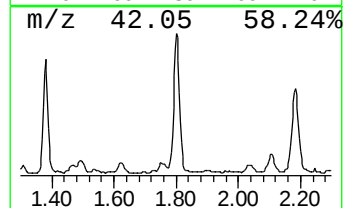
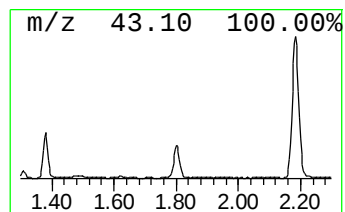
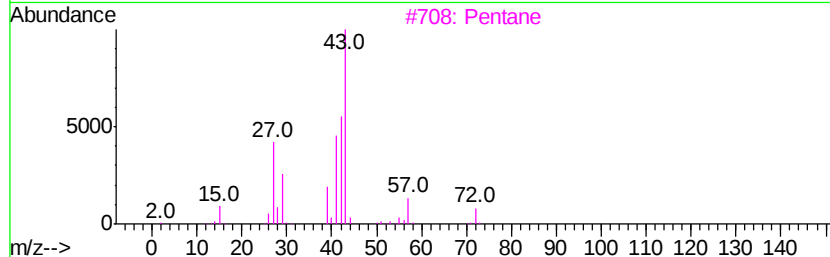
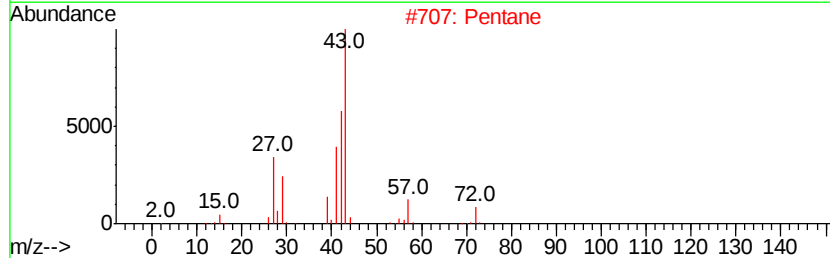
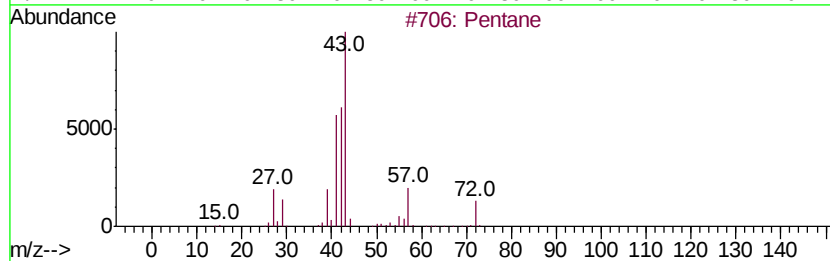
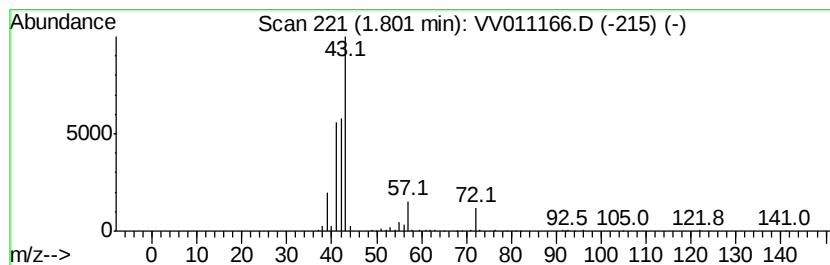
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 3 (DEL) Alkane: Straight-Chai... Concentration Rank 7

| R.T. | EstConc   | Area  | Relative to ISTD    | R.T. |
|------|-----------|-------|---------------------|------|
| 1.80 | 2.77 ug/L | 95002 | 1,4-Difluorobenzene | 5.66 |

| Hit# | of | Tentative ID    | MW | MolForm | CAS#        | Qual |
|------|----|-----------------|----|---------|-------------|------|
| 1    | 5  | Pentane         | 72 | C5H12   | 000109-66-0 | 90   |
| 2    |    | Pentane         | 72 | C5H12   | 000109-66-0 | 80   |
| 3    |    | Pentane         | 72 | C5H12   | 000109-66-0 | 80   |
| 4    |    | Pentane         | 72 | C5H12   | 000109-66-0 | 72   |
| 5    |    | Oxirane, ethyl- | 72 | C4H8O   | 000106-88-7 | 50   |



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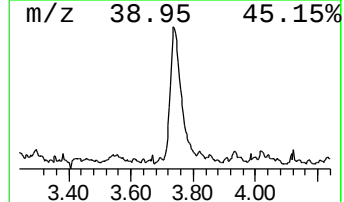
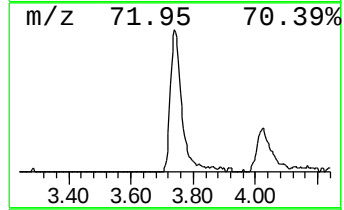
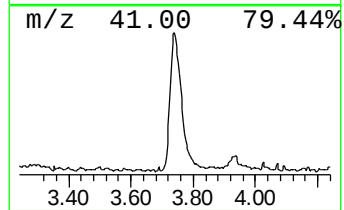
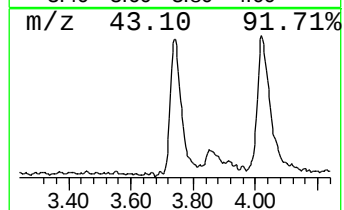
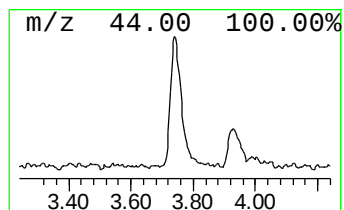
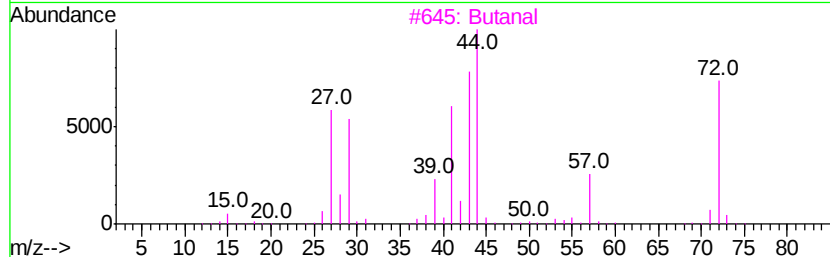
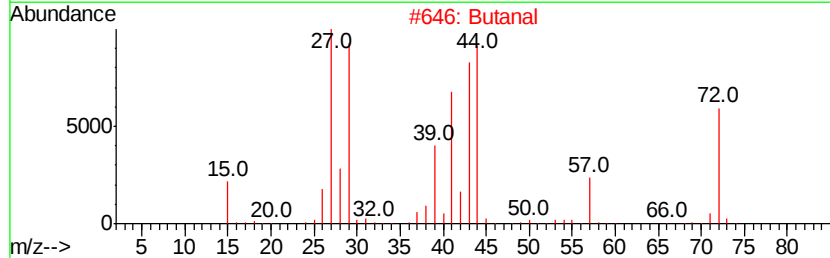
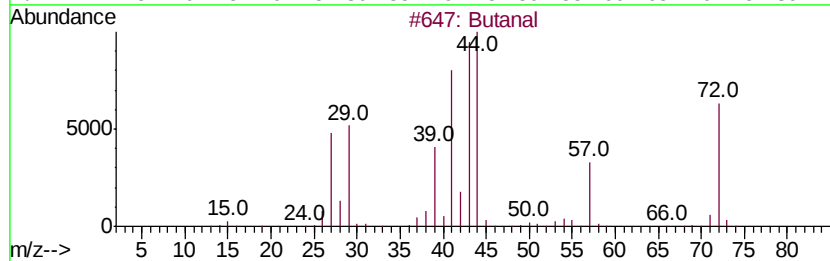
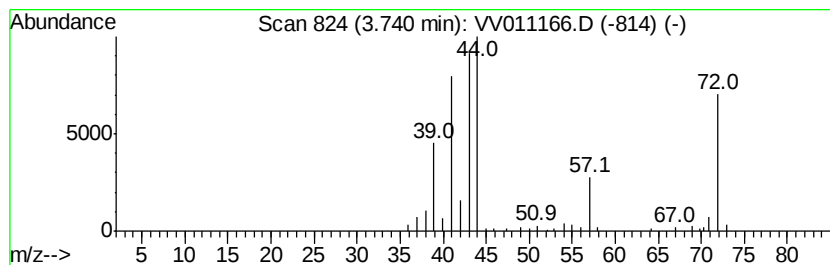
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Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 4 Butanal Concentration Rank 9

| R.T. | EstConc   | Area  | Relative to ISTD    | R.T. |
|------|-----------|-------|---------------------|------|
| 3.74 | 2.35 ug/L | 80679 | 1,4-Difluorobenzene | 5.66 |

| Hit# | of | Tentative ID | MW | MolForm | CAS#        | Qual |
|------|----|--------------|----|---------|-------------|------|
| 1    | 5  | Butanal      | 72 | C4H8O   | 000123-72-8 | 94   |
| 2    |    | Butanal      | 72 | C4H8O   | 000123-72-8 | 91   |
| 3    |    | Butanal      | 72 | C4H8O   | 000123-72-8 | 64   |
| 4    |    | Butanal      | 72 | C4H8O   | 000123-72-8 | 58   |
| 5    |    | Propane      | 44 | C3H8    | 000074-98-6 | 53   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV053019\  
Data File : VV011166.D  
Acq On : 31 May 2019 07:05  
Operator : SY/MD  
Sample : K3017-14RE  
Misc : 5.87G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
A51E7RE

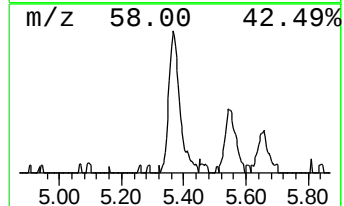
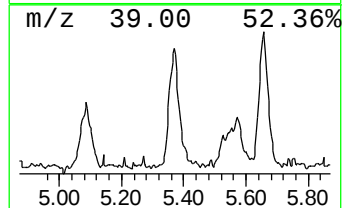
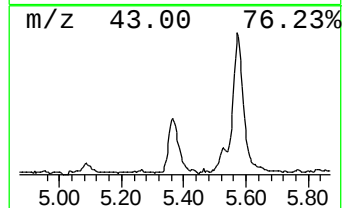
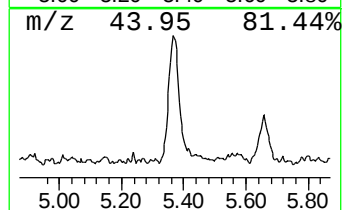
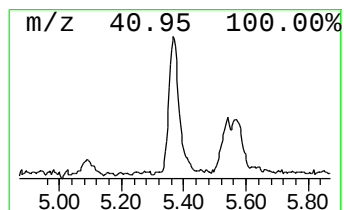
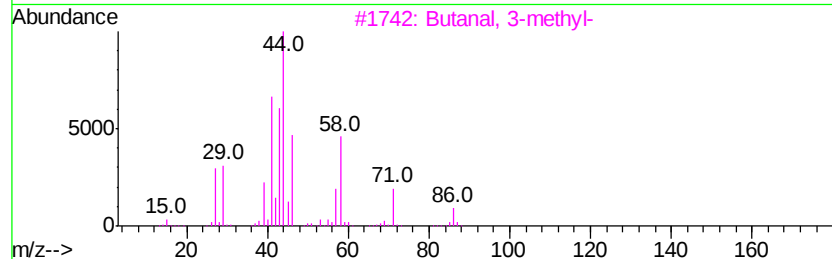
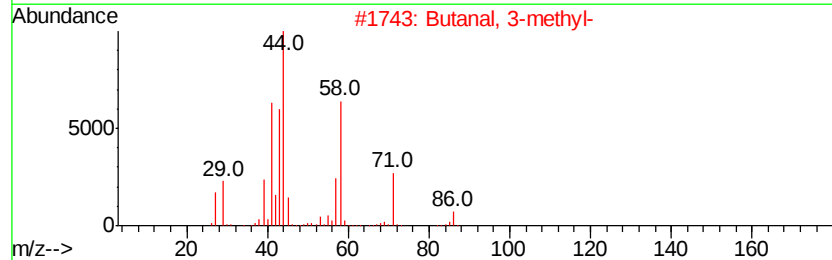
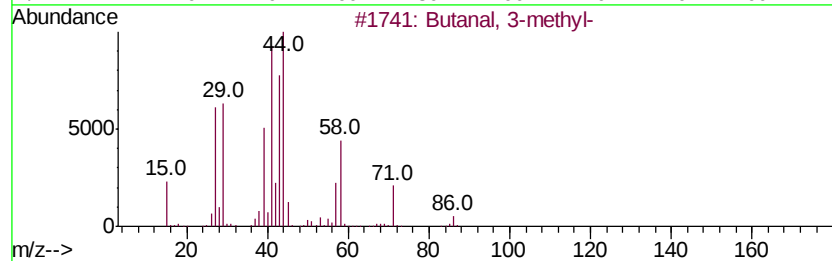
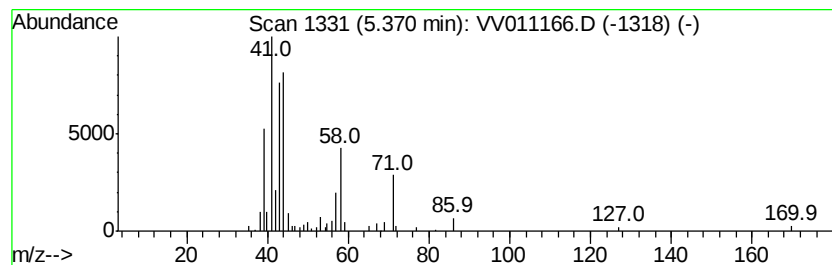
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Quant Title : VOC Analysis

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

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Peak Number 5 Butanal, 3-methyl- Concentration Rank 10

| R.T. | EstConc   | Area  | Relative to ISTD    | R.T. |
|------|-----------|-------|---------------------|------|
| 5.37 | 1.87 ug/L | 64051 | 1,4-Difluorobenzene | 5.66 |

| Hit# | of | Tentative ID       | MW | MolForm | CAS#        | Qual |
|------|----|--------------------|----|---------|-------------|------|
| 1    | 5  | Butanal, 3-methyl- | 86 | C5H10O  | 000590-86-3 | 90   |
| 2    |    | Butanal, 3-methyl- | 86 | C5H10O  | 000590-86-3 | 52   |
| 3    |    | Butanal, 3-methyl- | 86 | C5H10O  | 000590-86-3 | 52   |
| 4    |    | Pentanal           | 86 | C5H10O  | 000110-62-3 | 47   |
| 5    |    | Pentanal           | 86 | C5H10O  | 000110-62-3 | 28   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV053019\  
Data File : VV011166.D  
Acq On : 31 May 2019 07:05  
Operator : SY/MD  
Sample : K3017-14RE  
Misc : 5.87G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
A51E7RE

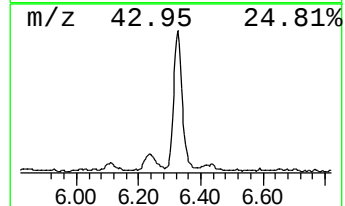
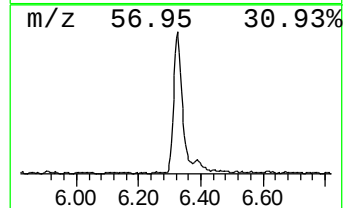
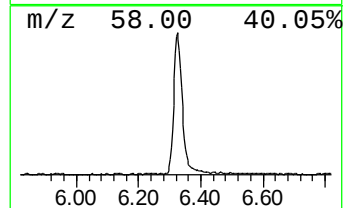
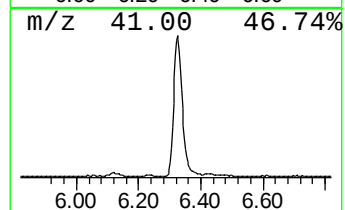
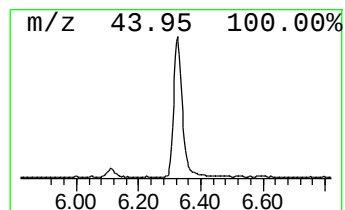
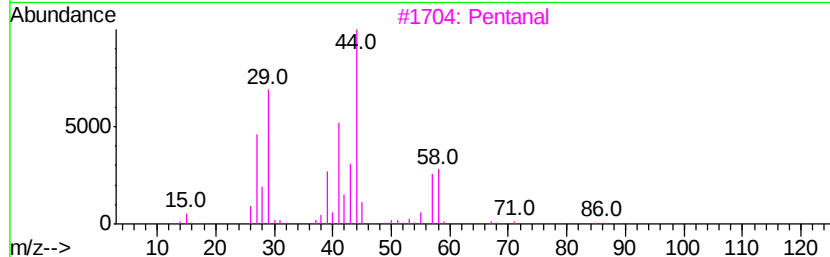
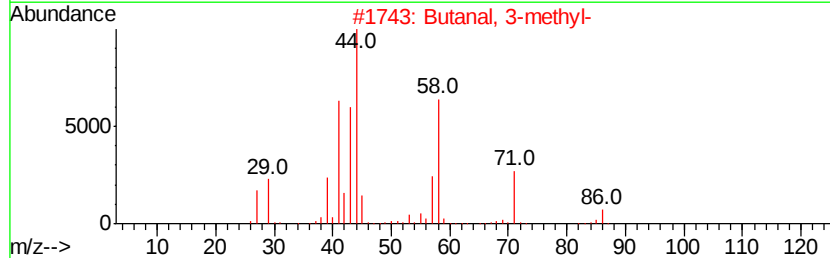
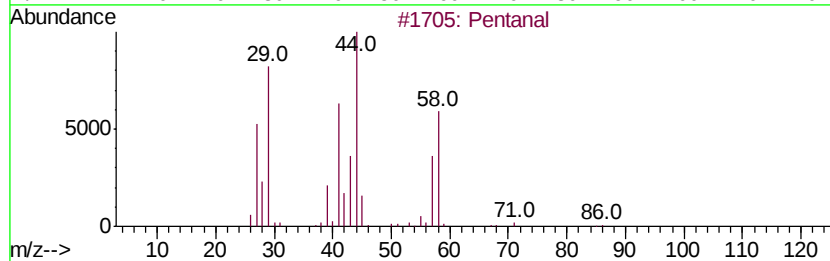
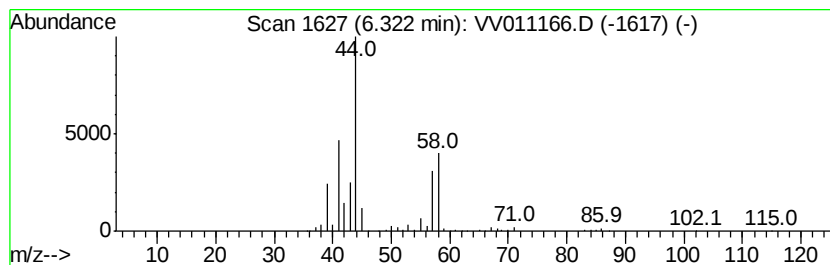
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Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 6 Pentanal Concentration Rank 2

| R.T. | EstConc   | Area   | Relative to ISTD    | R.T. |
|------|-----------|--------|---------------------|------|
| 6.32 | 9.56 ug/L | 328051 | 1,4-Difluorobenzene | 5.66 |

| Hit# | of | Tentative ID       | MW | MolForm | CAS#        | Qual |
|------|----|--------------------|----|---------|-------------|------|
| 1    | 5  | Pentanal           | 86 | C5H10O  | 000110-62-3 | 91   |
| 2    |    | Butanal, 3-methyl- | 86 | C5H10O  | 000590-86-3 | 83   |
| 3    |    | Pentanal           | 86 | C5H10O  | 000110-62-3 | 80   |
| 4    |    | Pentanal           | 86 | C5H10O  | 000110-62-3 | 78   |
| 5    |    | Butanal, 3-methyl- | 86 | C5H10O  | 000590-86-3 | 64   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV053019\  
Data File : VV011166.D  
Acq On : 31 May 2019 07:05  
Operator : SY/MD  
Sample : K3017-14RE  
Misc : 5.87G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
A51E7RE

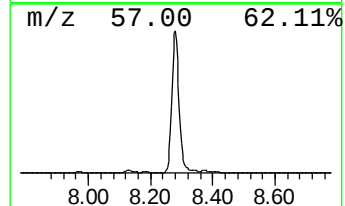
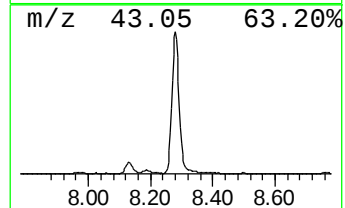
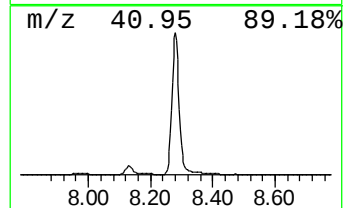
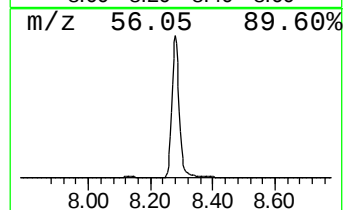
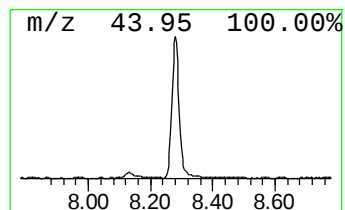
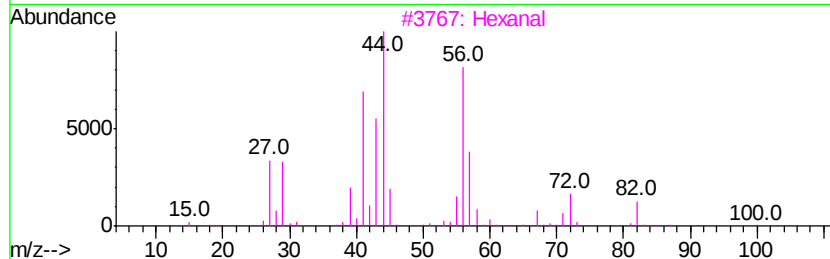
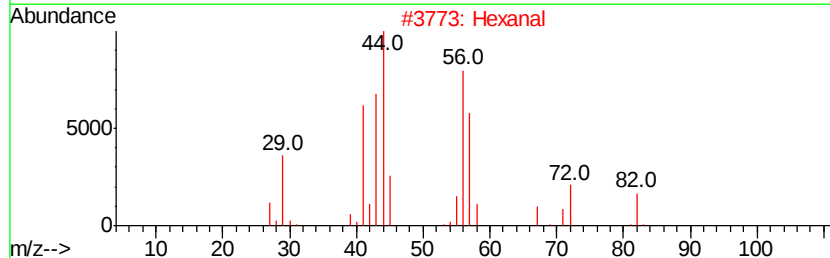
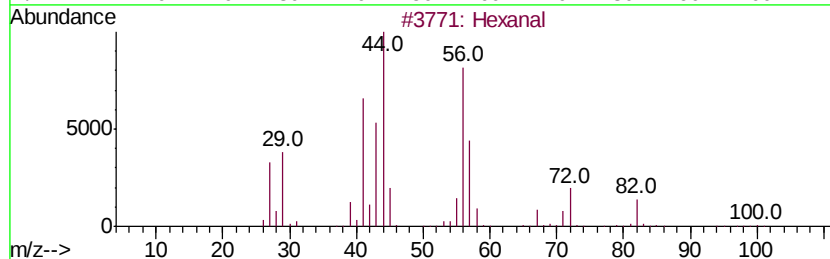
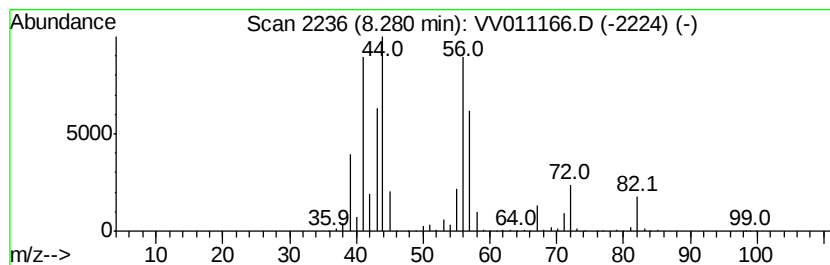
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Quant Title : VOC Analysis

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

\*\*\*\*\*  
Peak Number 8 Hexanal Concentration Rank 1

| R.T. | EstConc    | Area    | Relative to ISTD | R.T. |
|------|------------|---------|------------------|------|
| 8.28 | 30.66 ug/L | 1288290 | Chlorobenzene-d5 | 8.89 |

| Hit# | of | Tentative ID   | MW  | MolForm | CAS#        | Qual |
|------|----|----------------|-----|---------|-------------|------|
| 1    | 5  | Hexanal        | 100 | C6H12O  | 000066-25-1 | 80   |
| 2    |    | Hexanal        | 100 | C6H12O  | 000066-25-1 | 80   |
| 3    |    | Hexanal        | 100 | C6H12O  | 000066-25-1 | 80   |
| 4    |    | Hexanal        | 100 | C6H12O  | 000066-25-1 | 80   |
| 5    |    | Glutaraldehyde | 100 | C5H8O2  | 000111-30-8 | 30   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV053019\  
Data File : VV011166.D  
Acq On : 31 May 2019 07:05  
Operator : SY/MD  
Sample : K3017-14RE  
Misc : 5.87G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
A51E7RE

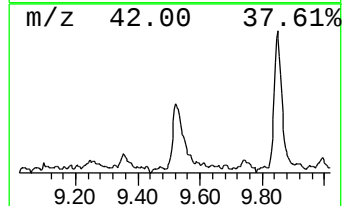
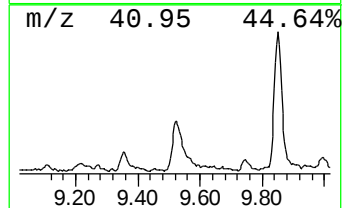
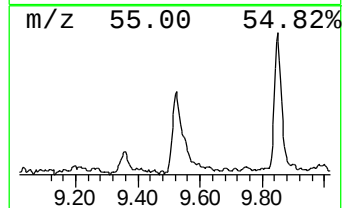
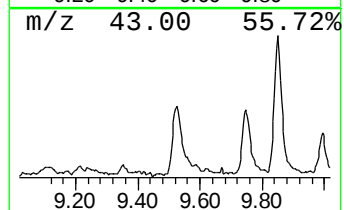
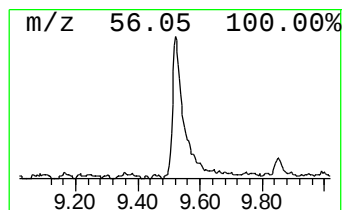
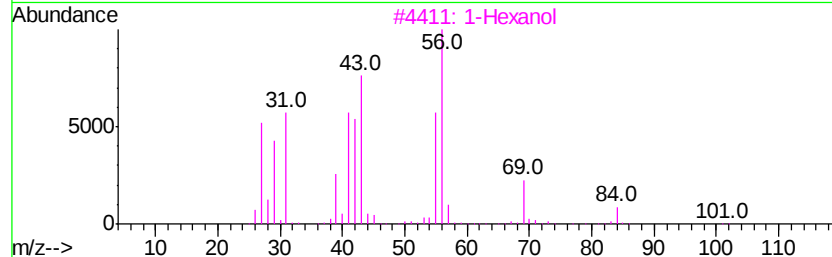
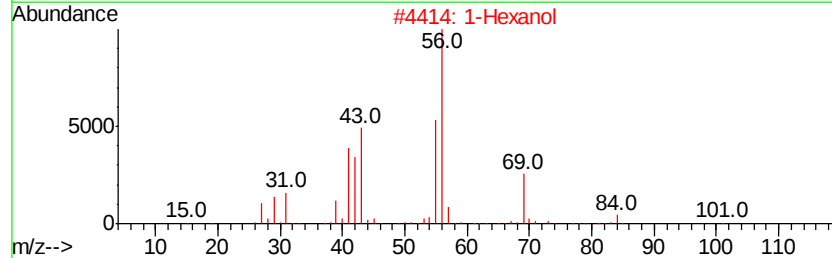
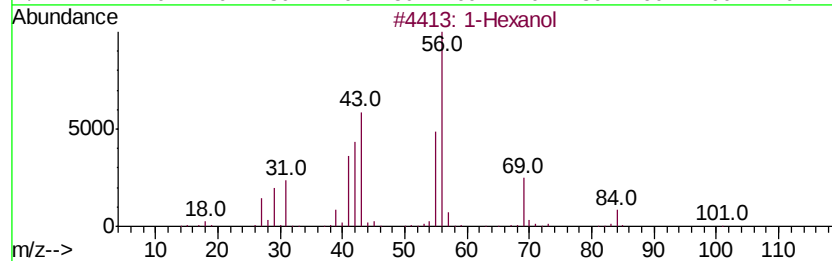
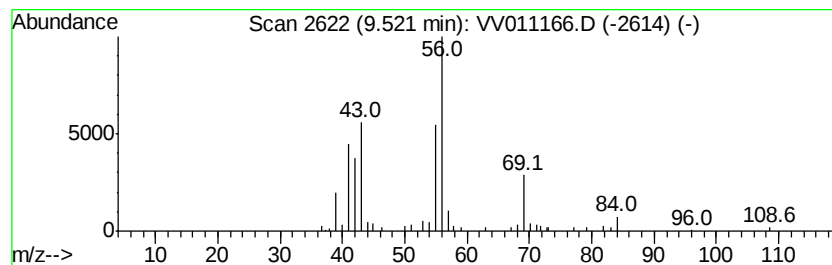
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Quant Title : VOC Analysis

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

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Peak Number 9 1-Hexanol Concentration Rank 13

| R.T. | EstConc   | Area  | Relative to ISTD | R.T. |
|------|-----------|-------|------------------|------|
| 9.52 | 1.47 ug/L | 61862 | Chlorobenzene-d5 | 8.89 |

| Hit# | of | 5 | Tentative ID        | MW  | MolForm   | CAS#        | Qual |
|------|----|---|---------------------|-----|-----------|-------------|------|
| 1    |    |   | 1-Hexanol           | 102 | C6H14O    | 000111-27-3 | 83   |
| 2    |    |   | 1-Hexanol           | 102 | C6H14O    | 000111-27-3 | 83   |
| 3    |    |   | 1-Hexanol           | 102 | C6H14O    | 000111-27-3 | 78   |
| 4    |    |   | 1-Hexanol           | 102 | C6H14O    | 000111-27-3 | 74   |
| 5    |    |   | Hexyl chloroformate | 164 | C7H13ClO2 | 006092-54-2 | 72   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV053019\  
Data File : VV011166.D  
Acq On : 31 May 2019 07:05  
Operator : SY/MD  
Sample : K3017-14RE  
Misc : 5.87G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
A51E7RE

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM053019S.M  
Quant Title : VOC Analysis

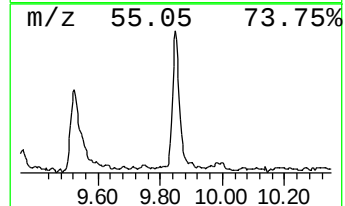
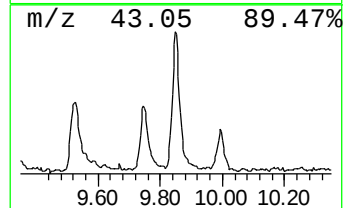
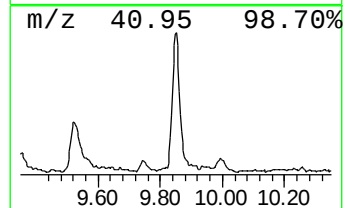
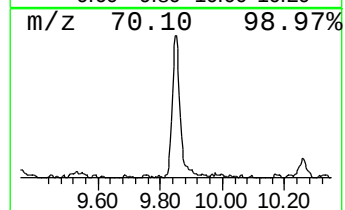
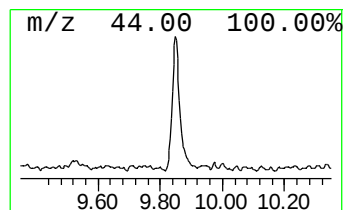
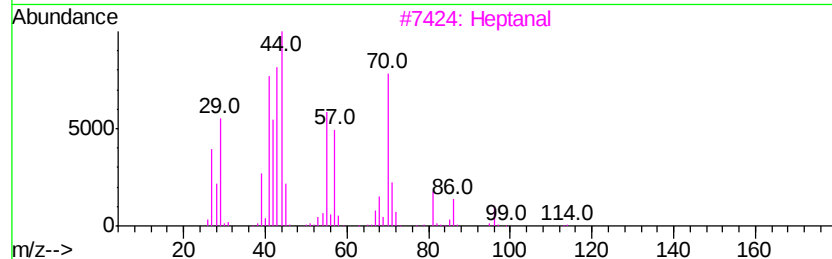
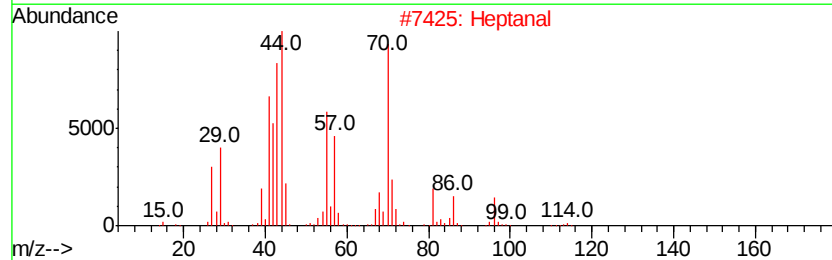
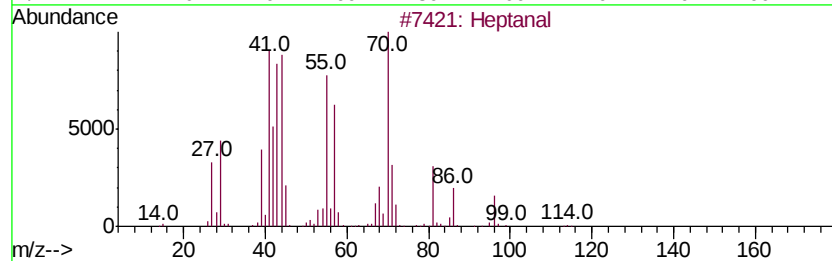
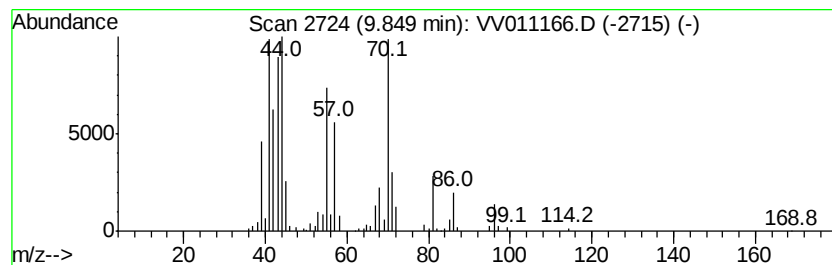
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TIC Integration Parameters: LSCINT.P

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Peak Number 10 Heptanal Concentration Rank 6

| R.T. | EstConc   | Area   | Relative to ISTD | R.T. |
|------|-----------|--------|------------------|------|
| 9.85 | 2.88 ug/L | 120917 | Chlorobenzene-d5 | 8.89 |

| Hit# | of | Tentative ID | MW  | MolForm | CAS#        | Qual |
|------|----|--------------|-----|---------|-------------|------|
| 1    | 5  | Heptanal     | 114 | C7H14O  | 000111-71-7 | 98   |
| 2    |    | Heptanal     | 114 | C7H14O  | 000111-71-7 | 96   |
| 3    |    | Heptanal     | 114 | C7H14O  | 000111-71-7 | 90   |
| 4    |    | Heptanal     | 114 | C7H14O  | 000111-71-7 | 53   |
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Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV053019\  
Data File : VV011166.D  
Acq On : 31 May 2019 07:05  
Operator : SY/MD  
Sample : K3017-14RE  
Misc : 5.87G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

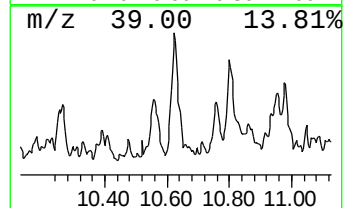
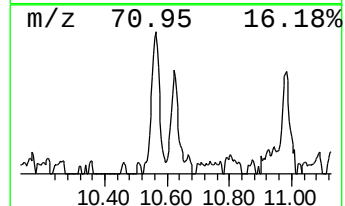
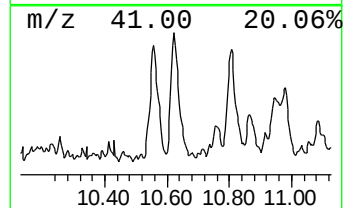
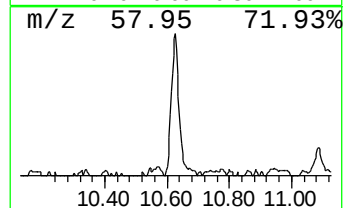
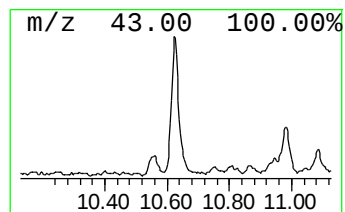
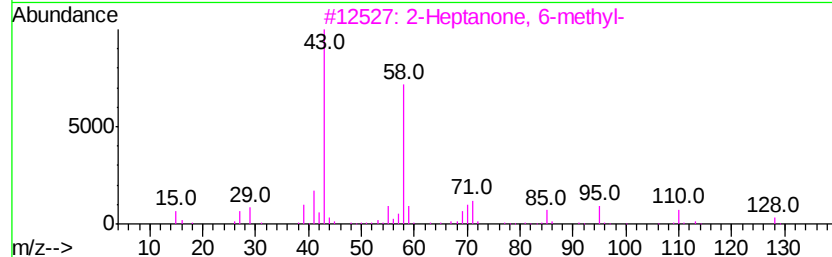
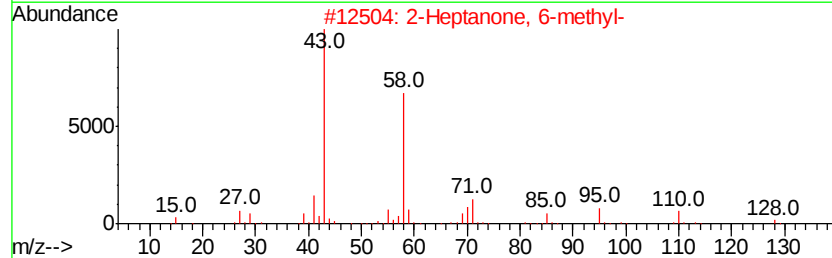
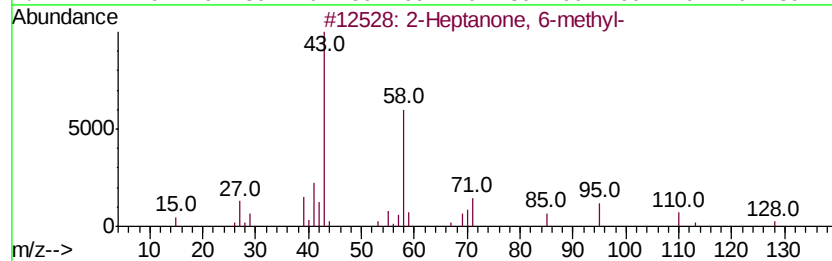
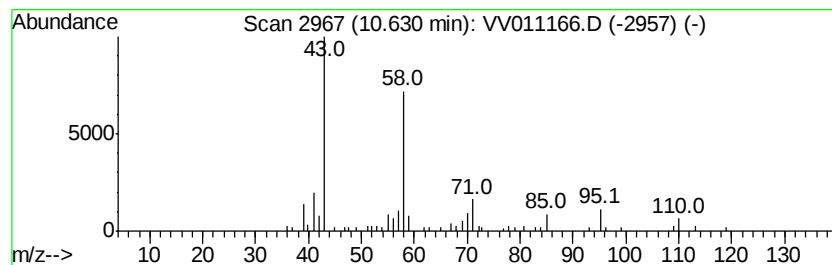
Instrument :  
MSVOA\_V  
ClientSampleId :  
A51E7RE

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM053019S.M  
Quant Title : VOC Analysis

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

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Peak Number 11 2-Heptanone, 6-methyl- Concentration Rank 12

| R.T.    | EstConc                | Area         | Relative to ISTD       | R.T.      |
|---------|------------------------|--------------|------------------------|-----------|
| 10.63   | 1.66 ug/L              | 43608        | 1,4-Dichlorobenzene-d4 | 11.29     |
| Hit# of | 5                      | Tentative ID | MW MolForm             | CAS# Qual |
| 1       | 2-Heptanone, 6-methyl- | 128 C8H16O   | 000928-68-7            | 78        |
| 2       | 2-Heptanone, 6-methyl- | 128 C8H16O   | 000928-68-7            | 72        |
| 3       | 2-Heptanone, 6-methyl- | 128 C8H16O   | 000928-68-7            | 64        |
| 4       | 2-Hexanone, 4-methyl-  | 114 C7H14O   | 000105-42-0            | 50        |
| 5       | Pentanal, 2-methyl-    | 100 C6H12O   | 000123-15-9            | 50        |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV053019\  
Data File : VV011166.D  
Acq On : 31 May 2019 07:05  
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Sample : K3017-14RE  
Misc : 5.87G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

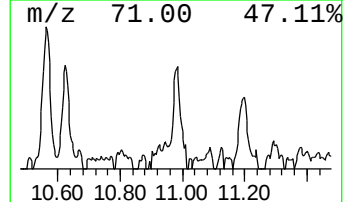
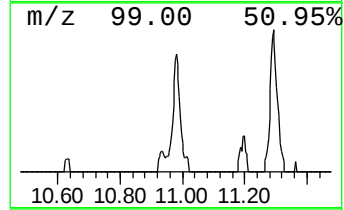
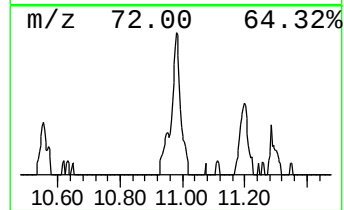
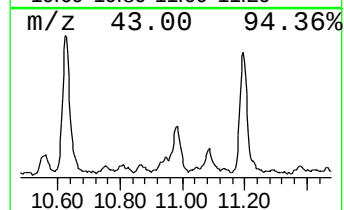
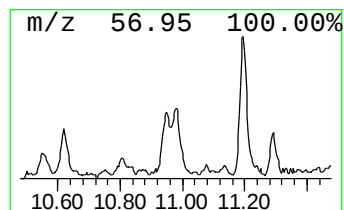
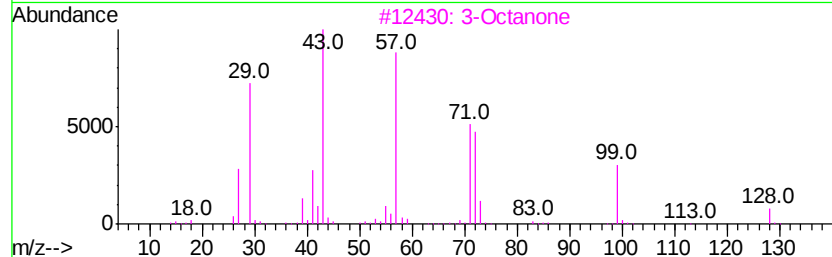
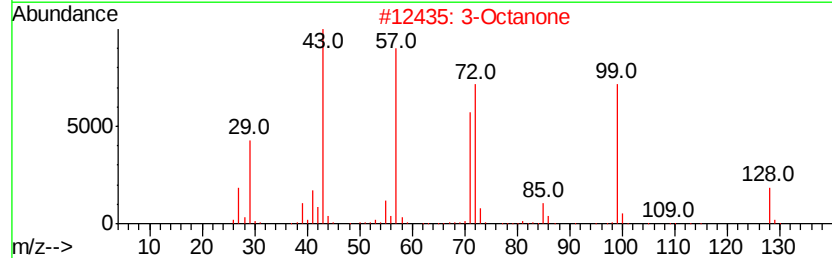
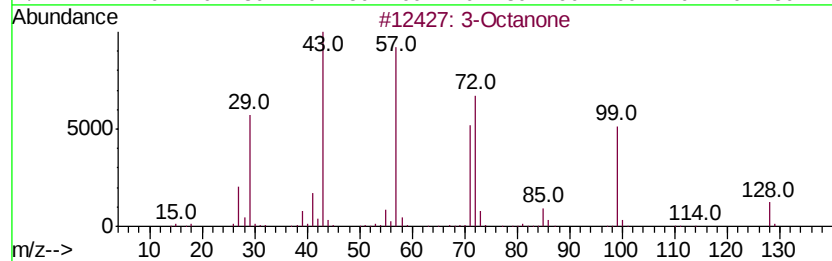
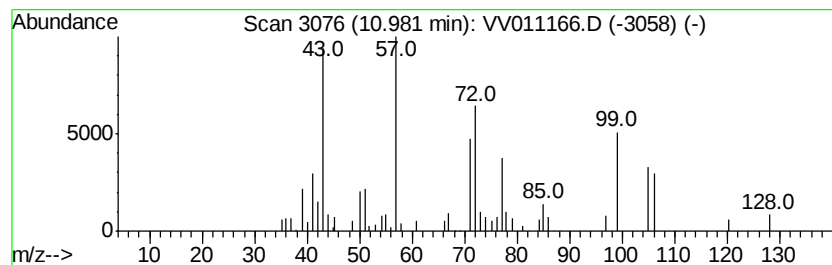
Instrument :  
MSVOA\_V  
ClientSampleId :  
A51E7RE

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM053019S.M  
Quant Title : VOC Analysis

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

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Peak Number 12 3-Octanone Concentration Rank 11

| R.T.      | EstConc                | Area  | Relative to ISTD       | R.T.        |      |
|-----------|------------------------|-------|------------------------|-------------|------|
| 10.98     | 1.75 ug/L              | 45917 | 1,4-Dichlorobenzene-d4 | 11.29       |      |
| Hit# of 5 | Tentative ID           | MW    | MolForm                | CAS#        | Qual |
| 1         | 3-Octanone             | 128   | C8H16O                 | 000106-68-3 | 60   |
| 2         | 3-Octanone             | 128   | C8H16O                 | 000106-68-3 | 47   |
| 3         | 3-Octanone             | 128   | C8H16O                 | 000106-68-3 | 43   |
| 4         | 3-Heptanone, 5-methyl- | 128   | C8H16O                 | 000541-85-5 | 30   |
| 5         | 3-Octanone             | 128   | C8H16O                 | 000106-68-3 | 27   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV053019\  
Data File : VV011166.D  
Acq On : 31 May 2019 07:05  
Operator : SY/MD  
Sample : K3017-14RE  
Misc : 5.87G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
A51E7RE

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM053019S.M  
Quant Title : VOC Analysis

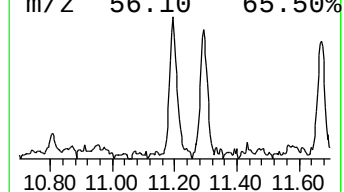
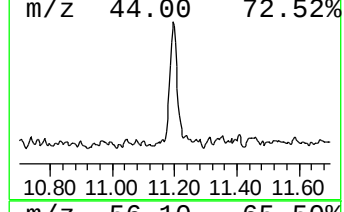
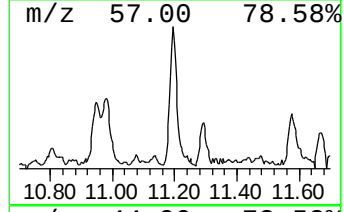
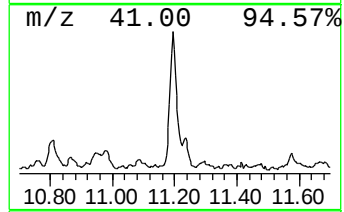
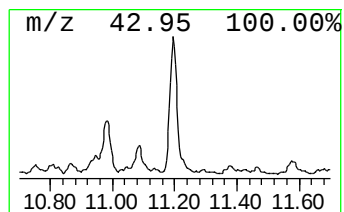
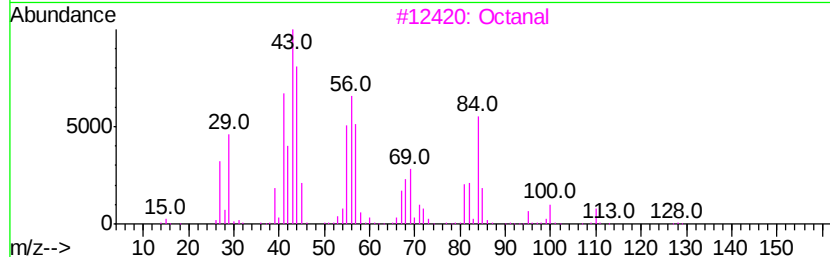
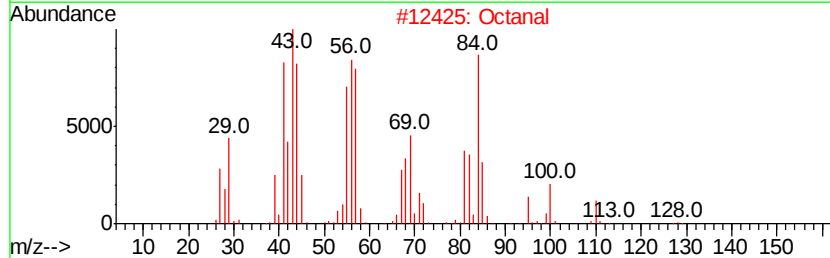
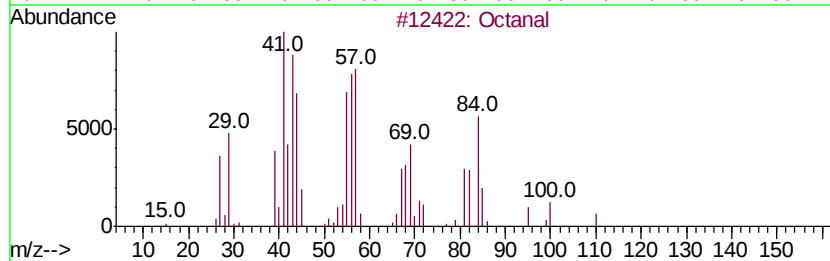
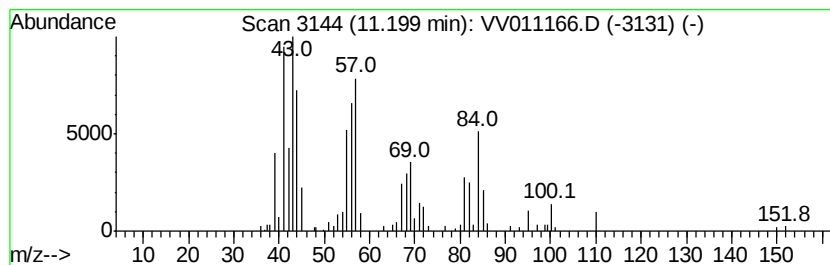
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 13 Octanal Concentration Rank 4

| R.T.  | EstConc   | Area  | Relative to ISTD       | R.T.  |
|-------|-----------|-------|------------------------|-------|
| 11.20 | 3.53 ug/L | 92624 | 1,4-Dichlorobenzene-d4 | 11.29 |

| Hit# | of | Tentative ID | MW  | MolForm | CAS#        | Qual |
|------|----|--------------|-----|---------|-------------|------|
| 1    | 5  | Octanal      | 128 | C8H16O  | 000124-13-0 | 91   |
| 2    |    | Octanal      | 128 | C8H16O  | 000124-13-0 | 91   |
| 3    |    | Octanal      | 128 | C8H16O  | 000124-13-0 | 91   |
| 4    |    | Octanal      | 128 | C8H16O  | 000124-13-0 | 91   |
| 5    |    | Octanal      | 128 | C8H16O  | 000124-13-0 | 78   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV053019\  
Data File : VV011166.D  
Acq On : 31 May 2019 07:05  
Operator : SY/MD  
Sample : K3017-14RE  
Misc : 5.87G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
A51E7RE

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM053019S.M  
Quant Title : VOC Analysis

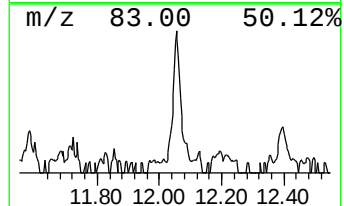
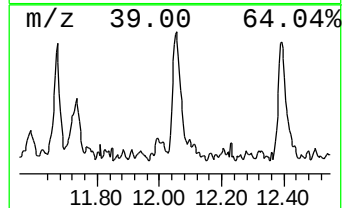
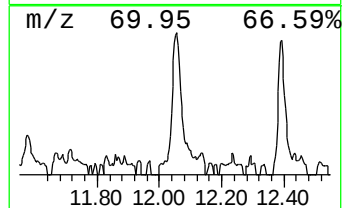
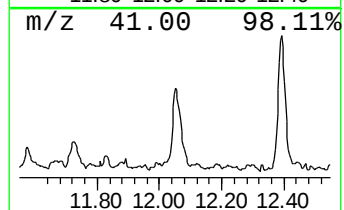
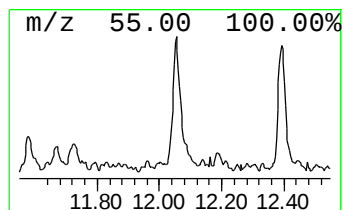
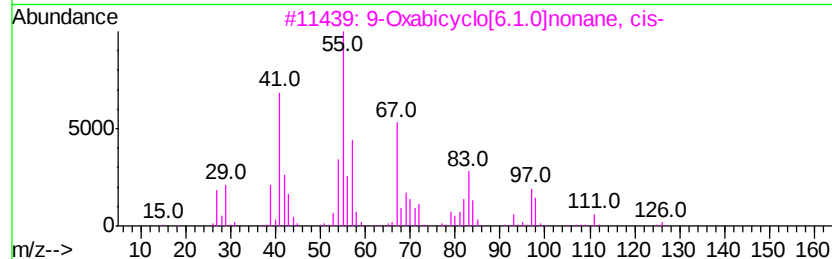
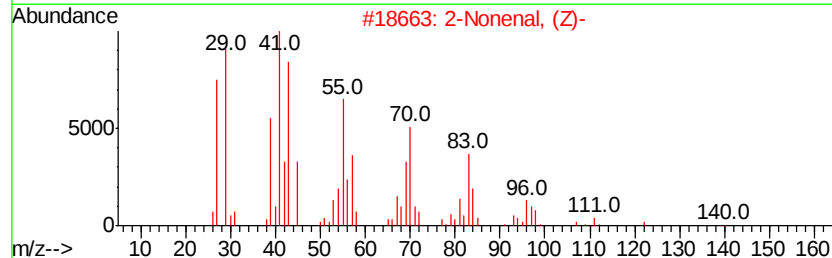
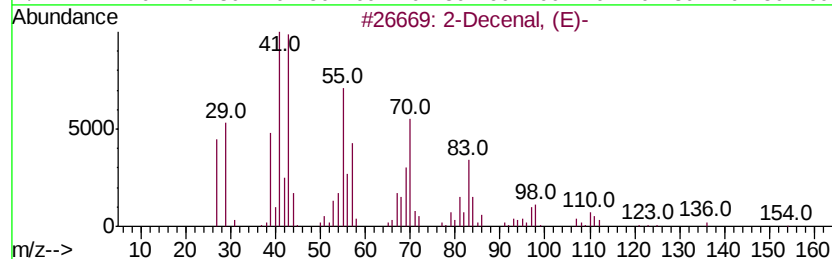
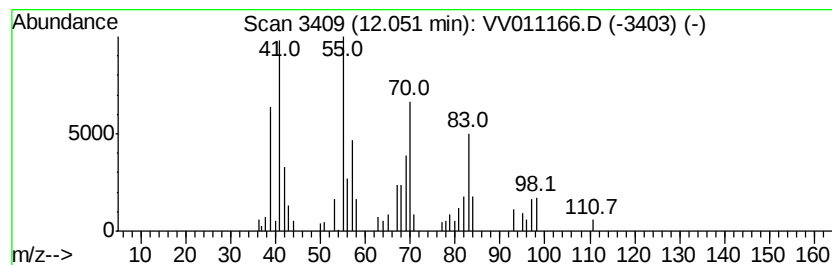
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 14 unknown-01 Concentration Rank 15

| R.T.  | EstConc   | Area  | Relative to ISTD       | R.T.  |
|-------|-----------|-------|------------------------|-------|
| 12.05 | 1.32 ug/L | 34695 | 1,4-Dichlorobenzene-d4 | 11.29 |

| Hit# | of | 5 | Tentative ID                    | MW  | MolForm | CAS#        | Qual |
|------|----|---|---------------------------------|-----|---------|-------------|------|
| 1    |    |   | 2-Decenal, (E)-                 | 154 | C10H18O | 003913-81-3 | 47   |
| 2    |    |   | 2-Nonenal, (Z)-                 | 140 | C9H16O  | 060784-31-8 | 43   |
| 3    |    |   | 9-Oxabicyclo[6.1.0]nonane, cis- | 126 | C8H14O  | 004925-71-7 | 38   |
| 4    |    |   | 2-Hexenal, (E)-                 | 98  | C6H10O  | 006728-26-3 | 38   |
| 5    |    |   | Butane, 2-cyclopropyl-          | 98  | C7H14   | 005750-02-7 | 27   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV053019\  
Data File : VV011166.D  
Acq On : 31 May 2019 07:05  
Operator : SY/MD  
Sample : K3017-14RE  
Misc : 5.87G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
A51E7RE

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM053019S.M  
Quant Title : VOC Analysis

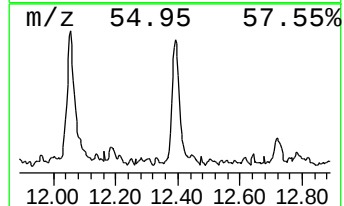
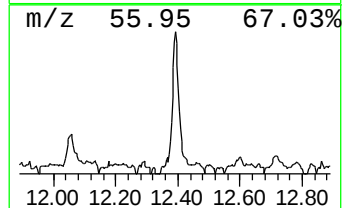
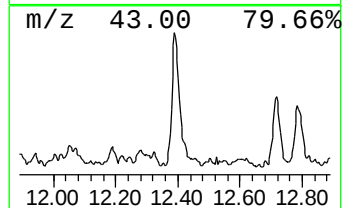
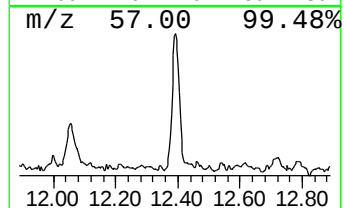
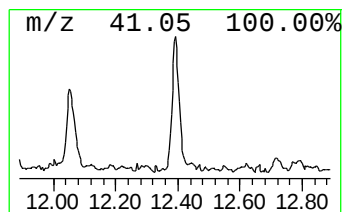
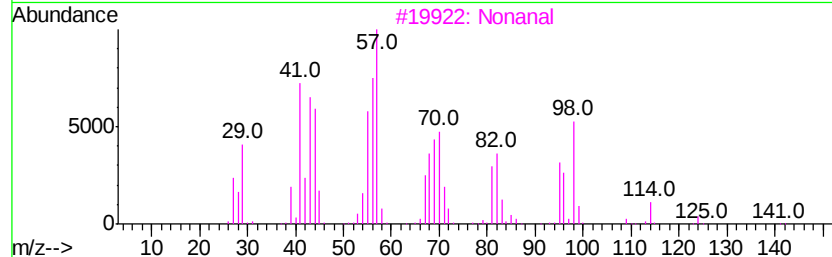
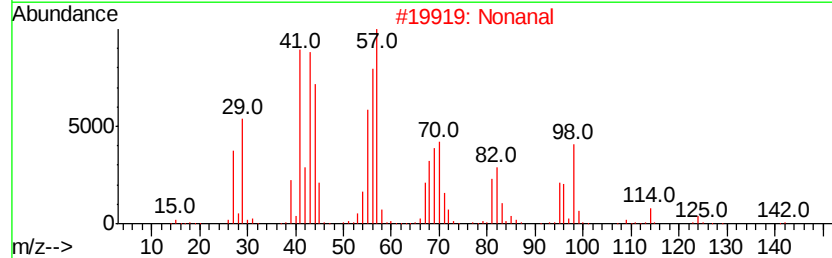
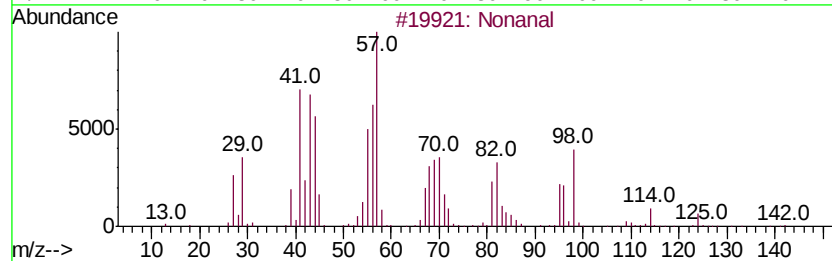
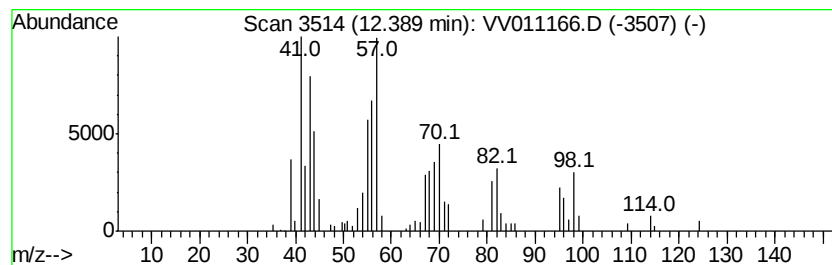
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 15 Nonanal Concentration Rank 8

| R.T.  | EstConc   | Area  | Relative to ISTD       | R.T.  |
|-------|-----------|-------|------------------------|-------|
| 12.39 | 2.36 ug/L | 61864 | 1,4-Dichlorobenzene-d4 | 11.29 |

| Hit# | of | Tentative ID | MW  | MolForm | CAS#        | Qual |
|------|----|--------------|-----|---------|-------------|------|
| 1    | 5  | Nonanal      | 142 | C9H18O  | 000124-19-6 | 90   |
| 2    |    | Nonanal      | 142 | C9H18O  | 000124-19-6 | 90   |
| 3    |    | Nonanal      | 142 | C9H18O  | 000124-19-6 | 90   |
| 4    |    | Nonanal      | 142 | C9H18O  | 000124-19-6 | 90   |
| 5    |    | Cycloheptane | 98  | C7H14   | 000291-64-5 | 38   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VV053019\  
Data File : VV011166.D  
Acq On : 31 May 2019 07:05  
Operator : SY/MD  
Sample : K3017-14RE  
Misc : 5.87G/10ML/MSVOA\_V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
A51E7RE

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM053019S.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... | 1.80  | 2.8     | ug/L  | 95002    | 1                     | 5.66  | 857794  | 25.0 |
| Butanal              | 3.74  | 2.4     | ug/L  | 80679    | 1                     | 5.66  | 857794  | 25.0 |
| Butanal, 3-methyl-   | 5.37  | 1.9     | ug/L  | 64051    | 1                     | 5.66  | 857794  | 25.0 |
| Pentanal             | 6.32  | 9.6     | ug/L  | 328051   | 1                     | 5.66  | 857794  | 25.0 |
| Hexanal              | 8.28  | 30.7    | ug/L  | 1288290  | 2                     | 8.89  | 1050310 | 25.0 |
| 1-Hexanol            | 9.52  | 1.5     | ug/L  | 61862    | 2                     | 8.89  | 1050310 | 25.0 |
| Heptanal             | 9.85  | 2.9     | ug/L  | 120917   | 2                     | 8.89  | 1050310 | 25.0 |
| 2-Heptanone, 6-me... | 10.63 | 1.7     | ug/L  | 43608    | 3                     | 11.29 | 656066  | 25.0 |
| 3-Octanone           | 10.98 | 1.8     | ug/L  | 45917    | 3                     | 11.29 | 656066  | 25.0 |
| Octanal              | 11.20 | 3.5     | ug/L  | 92624    | 3                     | 11.29 | 656066  | 25.0 |
| unknown-01           | 12.05 | 1.3     | ug/L  | 34695    | 3                     | 11.29 | 656066  | 25.0 |
| Nonanal              | 12.39 | 2.4     | ug/L  | 61864    | 3                     | 11.29 | 656066  | 25.0 |