

Data Path : Z:\voasrv\HPCHEM1\MSVOA W\Data\VW071719\  
 Data File : VW011324.D  
 Acq On : 17 Jul 2019 23:39  
 Operator : SY/VA  
 Sample : K3863-05  
 Misc : 2.94G/10ML/MSVOA W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 A52G1

## 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\_W\METHOD\SOM2WLM070219S.M  
 Title : VOC Analysis

Signal : TIC

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|--------|----------|------------|----------|-----------|-------|-------------|------------|--------------|------------|
| 1      | 1.989    | 6          | 14       | 27        | rVB2  | 12149       | 37343      | 0.43%        | 0.229%     |
| 2      | 2.148    | 37         | 40       | 43        | rBV2  | 1845        | 2592       | 0.03%        | 0.016%     |
| 3      | 2.349    | 66         | 73       | 85        | rVB2  | 68785       | 138651     | 1.59%        | 0.848%     |
| 4      | 2.489    | 92         | 96       | 105       | rBV   | 8982        | 18204      | 0.21%        | 0.111%     |
| 5      | 2.879    | 153        | 160      | 172       | rBV   | 30166       | 81400      | 0.93%        | 0.498%     |
| 6      | 3.385    | 235        | 243      | 251       | rVB8  | 2230        | 6605       | 0.08%        | 0.040%     |
| 7      | 3.471    | 255        | 257      | 261       | rBV5  | 449         | 783        | 0.01%        | 0.005%     |
| 8      | 3.586    | 274        | 276      | 279       | rVB3  | 832         | 720        | 0.01%        | 0.004%     |
| 9      | 3.836    | 312        | 317      | 318       | rBV4  | 807         | 874        | 0.01%        | 0.005%     |
| 10     | 4.013    | 334        | 346      | 357       | rBV3  | 79254       | 286075     | 3.27%        | 1.751%     |
| 11     | 4.117    | 358        | 363      | 378       | rVB   | 25226       | 72755      | 0.83%        | 0.445%     |
| 12     | 4.379    | 397        | 406      | 422       | rVB3  | 13627       | 45803      | 0.52%        | 0.280%     |
| 13     | 4.659    | 443        | 452      | 464       | rBV3  | 5898        | 19336      | 0.22%        | 0.118%     |
| 14     | 4.909    | 483        | 493      | 502       | rBV8  | 2805        | 12572      | 0.14%        | 0.077%     |
| 15     | 5.153    | 530        | 533      | 536       | rBV2  | 476         | 641        | 0.01%        | 0.004%     |
| 16     | 5.415    | 566        | 576      | 588       | rBV2  | 21850       | 69047      | 0.79%        | 0.423%     |
| 17     | 5.745    | 624        | 630      | 631       | rBV3  | 772         | 1336       | 0.02%        | 0.008%     |
| 18     | 5.787    | 631        | 637      | 644       | rVB4  | 1744        | 4624       | 0.05%        | 0.028%     |
| 19     | 5.940    | 653        | 662      | 666       | rBV4  | 1607        | 4304       | 0.05%        | 0.026%     |
| 20     | 6.104    | 685        | 689      | 691       | rBV2  | 993         | 1164       | 0.01%        | 0.007%     |
| 21     | 6.202    | 701        | 705      | 707       | rVV3  | 615         | 1003       | 0.01%        | 0.006%     |
| 22     | 6.909    | 813        | 821      | 826       | rBV7  | 2378        | 7206       | 0.08%        | 0.044%     |
| 23     | 7.074    | 840        | 848      | 853       | rBV   | 60499       | 162360     | 1.86%        | 0.994%     |
| 24     | 7.165    | 853        | 863      | 885       | rVB   | 3302701     | 8736381    | 100.00%      | 53.461%    |
| 25     | 7.647    | 931        | 942      | 956       | rVB   | 143800      | 358710     | 4.11%        | 2.195%     |
| 26     | 7.775    | 961        | 963      | 970       | rVB3  | 623         | 984        | 0.01%        | 0.006%     |
| 27     | 7.921    | 984        | 987      | 988       | rVV   | 867         | 790        | 0.01%        | 0.005%     |
| 28     | 7.945    | 989        | 991      | 999       | rVB5  | 1412        | 2790       | 0.03%        | 0.017%     |
| 29     | 8.147    | 1017       | 1024     | 1030      | rBV5  | 698         | 1539       | 0.02%        | 0.009%     |
| 30     | 8.275    | 1035       | 1045     | 1061      | rBV2  | 278869      | 871945     | 9.98%        | 5.336%     |
| 31     | 8.555    | 1080       | 1091     | 1098      | rBV3  | 5985        | 14510      | 0.17%        | 0.089%     |
| 32     | 8.695    | 1109       | 1114     | 1115      | rBV3  | 2644        | 3335       | 0.04%        | 0.020%     |
| 33     | 8.842    | 1129       | 1138     | 1151      | rVV   | 296269      | 594914     | 6.81%        | 3.640%     |
| 34     | 8.994    | 1159       | 1163     | 1168      | rVV6  | 1279        | 2584       | 0.03%        | 0.016%     |

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Integrator: RTE  
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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\_W\METHOD\SOM2WLM070219S.M  
 Title : VOC Analysis

|    |        |      |      |      |      |        |        |       |        |
|----|--------|------|------|------|------|--------|--------|-------|--------|
| 35 | 9.085  | 1168 | 1178 | 1196 | rVB2 | 371591 | 805173 | 9.22% | 4.927% |
| 36 | 9.274  | 1200 | 1209 | 1224 | rBV  | 214088 | 479681 | 5.49% | 2.935% |
| 37 | 9.409  | 1224 | 1231 | 1240 | rVB  | 16140  | 31356  | 0.36% | 0.192% |
| 38 | 9.659  | 1266 | 1272 | 1279 | rBV4 | 3996   | 10291  | 0.12% | 0.063% |
| 39 | 9.890  | 1302 | 1310 | 1318 | rBV2 | 6688   | 13834  | 0.16% | 0.085% |
| 40 | 10.030 | 1325 | 1333 | 1344 | rVV  | 99310  | 185887 | 2.13% | 1.138% |
| 41 | 10.128 | 1344 | 1349 | 1358 | rVB7 | 2944   | 7103   | 0.08% | 0.043% |
| 42 | 10.213 | 1358 | 1363 | 1364 | rBV3 | 491    | 724    | 0.01% | 0.004% |
| 43 | 10.323 | 1373 | 1381 | 1388 | rBV  | 341742 | 594086 | 6.80% | 3.635% |
| 44 | 10.500 | 1404 | 1410 | 1415 | rVB5 | 1480   | 2908   | 0.03% | 0.018% |
| 45 | 10.573 | 1415 | 1422 | 1430 | rBV  | 69466  | 124534 | 1.43% | 0.762% |
| 46 | 10.664 | 1435 | 1437 | 1438 | rVV  | 1105   | 1124   | 0.01% | 0.007% |
| 47 | 10.707 | 1438 | 1444 | 1450 | rVB  | 13732  | 24071  | 0.28% | 0.147% |
| 48 | 10.829 | 1460 | 1464 | 1465 | rBV3 | 1146   | 1497   | 0.02% | 0.009% |
| 49 | 10.860 | 1465 | 1469 | 1473 | rVB4 | 2534   | 4294   | 0.05% | 0.026% |
| 50 | 10.920 | 1473 | 1479 | 1497 | rBV  | 216508 | 379432 | 4.34% | 2.322% |
| 51 | 11.073 | 1497 | 1504 | 1517 | rVV  | 104767 | 180997 | 2.07% | 1.108% |
| 52 | 11.170 | 1517 | 1520 | 1527 | rVB6 | 1655   | 3145   | 0.04% | 0.019% |
| 53 | 11.396 | 1556 | 1557 | 1565 | rVB7 | 614    | 817    | 0.01% | 0.005% |
| 54 | 11.524 | 1575 | 1578 | 1579 | rBV2 | 594    | 790    | 0.01% | 0.005% |
| 55 | 11.628 | 1587 | 1595 | 1607 | rBV  | 352081 | 605569 | 6.93% | 3.706% |
| 56 | 11.725 | 1607 | 1611 | 1618 | rVB6 | 1898   | 3938   | 0.05% | 0.024% |
| 57 | 11.835 | 1623 | 1629 | 1632 | rBV3 | 13114  | 23519  | 0.27% | 0.144% |
| 58 | 11.945 | 1645 | 1647 | 1651 | rVB4 | 730    | 697    | 0.01% | 0.004% |
| 59 | 12.164 | 1680 | 1683 | 1690 | rVB4 | 2534   | 4496   | 0.05% | 0.028% |
| 60 | 12.231 | 1692 | 1694 | 1698 | rVB4 | 674    | 896    | 0.01% | 0.005% |
| 61 | 12.341 | 1706 | 1712 | 1718 | rVB5 | 6513   | 11753  | 0.13% | 0.072% |
| 62 | 12.463 | 1729 | 1732 | 1739 | rVB5 | 1817   | 2806   | 0.03% | 0.017% |
| 63 | 12.609 | 1749 | 1756 | 1762 | rVV  | 52501  | 84027  | 0.96% | 0.514% |
| 64 | 12.695 | 1762 | 1770 | 1778 | rVB  | 196801 | 326818 | 3.74% | 2.000% |
| 65 | 12.756 | 1778 | 1780 | 1783 | rBV4 | 876    | 997    | 0.01% | 0.006% |
| 66 | 12.859 | 1794 | 1797 | 1800 | rBV2 | 938    | 1527   | 0.02% | 0.009% |
| 67 | 12.896 | 1800 | 1803 | 1806 | rVV4 | 1097   | 2179   | 0.02% | 0.013% |
| 68 | 12.938 | 1806 | 1810 | 1821 | rVV7 | 3160   | 6544   | 0.07% | 0.040% |
| 69 | 13.042 | 1824 | 1827 | 1829 | rVV3 | 867    | 1021   | 0.01% | 0.006% |
| 70 | 13.103 | 1834 | 1837 | 1842 | rVV5 | 1573   | 2804   | 0.03% | 0.017% |
| 71 | 13.182 | 1842 | 1850 | 1855 | rVV8 | 1684   | 4503   | 0.05% | 0.028% |

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 A52G1

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 Start Thrs: 0.2  
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 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\_W\METHOD\SOM2WLM070219S.M  
 Title : VOC Analysis

|     |        |      |      |      |      |        |        |       |        |
|-----|--------|------|------|------|------|--------|--------|-------|--------|
| 72  | 13.280 | 1858 | 1866 | 1869 | rVV6 | 2386   | 6390   | 0.07% | 0.039% |
| 73  | 13.402 | 1877 | 1886 | 1891 | rBV7 | 5278   | 9844   | 0.11% | 0.060% |
| 74  | 13.493 | 1898 | 1901 | 1902 | rBV2 | 1288   | 1172   | 0.01% | 0.007% |
| 75  | 13.560 | 1905 | 1912 | 1922 | rVV  | 238271 | 393100 | 4.50% | 2.406% |
| 76  | 13.652 | 1922 | 1927 | 1933 | rVB3 | 5977   | 9423   | 0.11% | 0.058% |
| 77  | 13.749 | 1941 | 1943 | 1947 | rBV5 | 1559   | 2225   | 0.03% | 0.014% |
| 78  | 13.853 | 1953 | 1960 | 1968 | rBV  | 207003 | 340874 | 3.90% | 2.086% |
| 79  | 13.950 | 1974 | 1976 | 1980 | rVB3 | 923    | 892    | 0.01% | 0.005% |
| 80  | 14.024 | 1984 | 1988 | 1989 | rVV4 | 1381   | 1551   | 0.02% | 0.009% |
| 81  | 14.072 | 1991 | 1996 | 2003 | rVV2 | 17249  | 30949  | 0.35% | 0.189% |
| 82  | 14.200 | 2012 | 2017 | 2021 | rBV6 | 1676   | 3191   | 0.04% | 0.020% |
| 83  | 14.328 | 2031 | 2038 | 2046 | rBV5 | 6045   | 12394  | 0.14% | 0.076% |
| 84  | 14.420 | 2050 | 2053 | 2056 | rVV3 | 1633   | 2133   | 0.02% | 0.013% |
| 85  | 14.456 | 2057 | 2059 | 2064 | rVB4 | 2036   | 2645   | 0.03% | 0.016% |
| 86  | 14.530 | 2067 | 2071 | 2074 | rBV4 | 2129   | 2733   | 0.03% | 0.017% |
| 87  | 14.694 | 2094 | 2098 | 2099 | rBV3 | 1342   | 1522   | 0.02% | 0.009% |
| 88  | 14.725 | 2100 | 2103 | 2110 | rVB4 | 2728   | 4030   | 0.05% | 0.025% |
| 89  | 14.798 | 2110 | 2115 | 2119 | rBV5 | 2078   | 4053   | 0.05% | 0.025% |
| 90  | 14.859 | 2123 | 2125 | 2131 | rVV5 | 870    | 1302   | 0.01% | 0.008% |
| 91  | 15.188 | 2175 | 2179 | 2181 | rBV5 | 1669   | 2245   | 0.03% | 0.014% |
| 92  | 15.316 | 2199 | 2200 | 2204 | rVV4 | 499    | 739    | 0.01% | 0.005% |
| 93  | 15.365 | 2206 | 2208 | 2214 | rVV4 | 1415   | 2230   | 0.03% | 0.014% |
| 94  | 15.475 | 2223 | 2226 | 2227 | rBV2 | 580    | 617    | 0.01% | 0.004% |
| 95  | 15.548 | 2236 | 2238 | 2243 | rVB3 | 604    | 798    | 0.01% | 0.005% |
| 96  | 15.645 | 2250 | 2254 | 2255 | rBV3 | 843    | 1067   | 0.01% | 0.007% |
| 97  | 15.700 | 2261 | 2263 | 2269 | rBV5 | 706    | 1261   | 0.01% | 0.008% |
| 98  | 15.968 | 2305 | 2307 | 2312 | rVV5 | 620    | 974    | 0.01% | 0.006% |
| 99  | 16.163 | 2336 | 2339 | 2341 | rVB3 | 573    | 623    | 0.01% | 0.004% |
| 100 | 16.237 | 2348 | 2351 | 2353 | rBV4 | 671    | 853    | 0.01% | 0.005% |

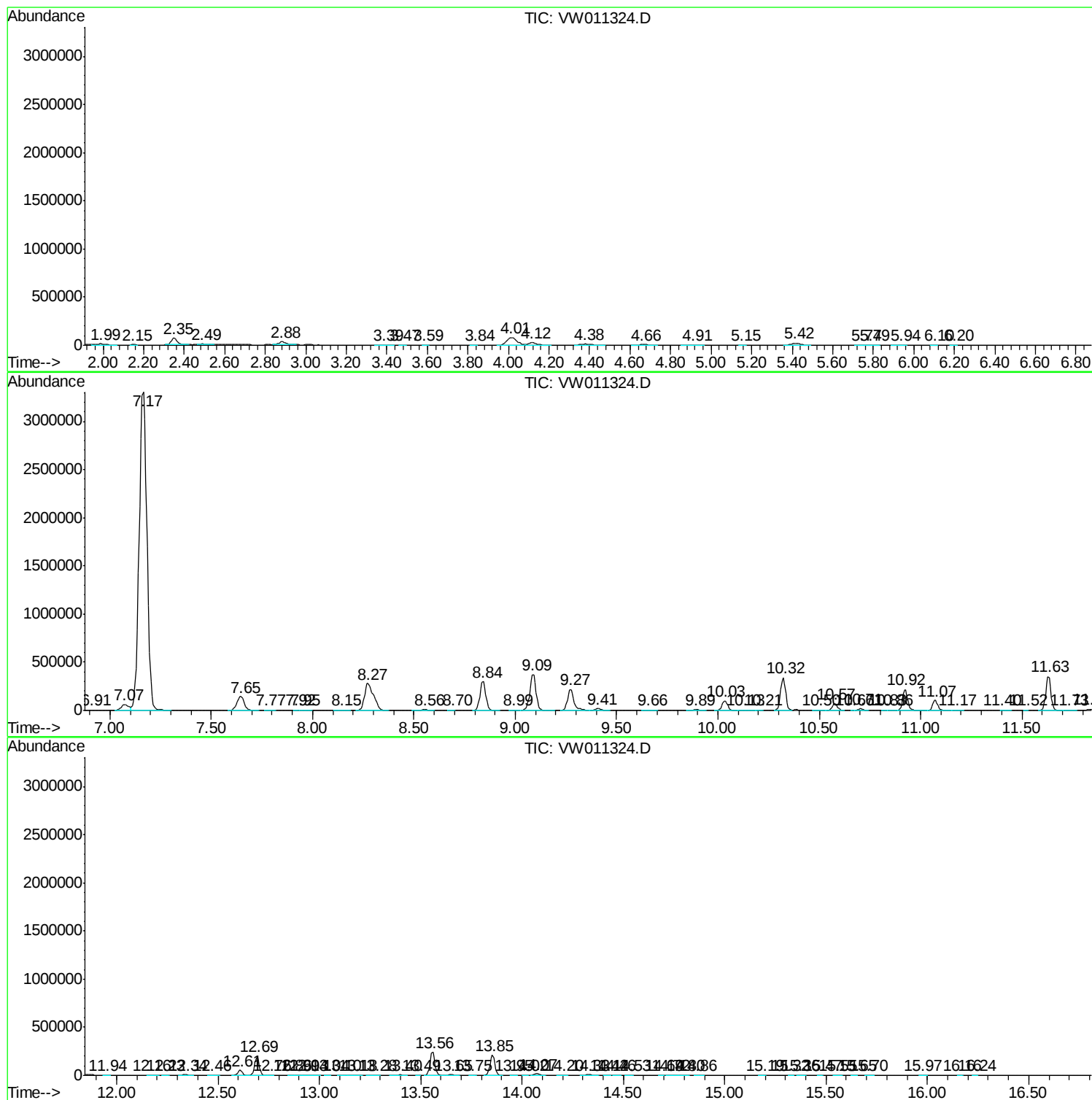
Sum of corrected areas: 16341548

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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM070219S.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\_W\METHOD\SOM2WLM070219S.M  
Quant Title : VOC Analysis

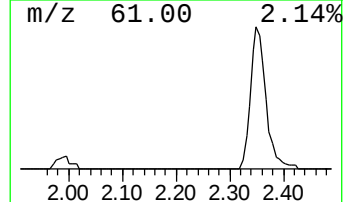
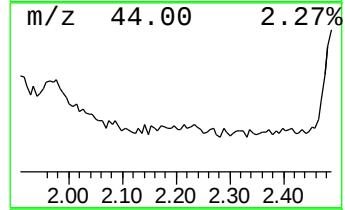
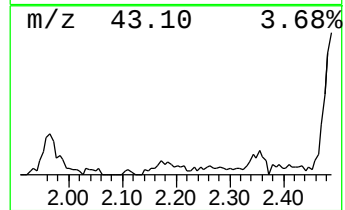
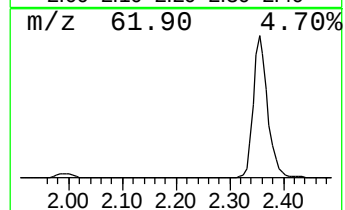
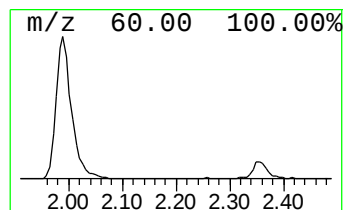
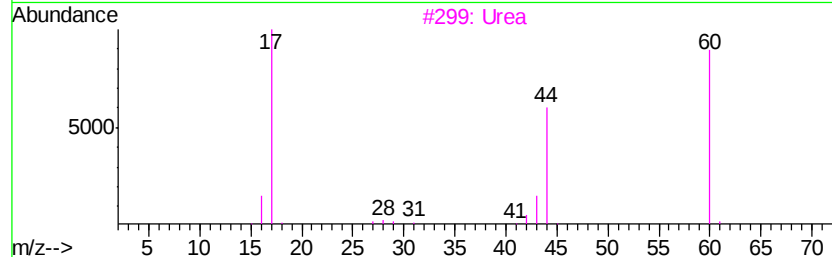
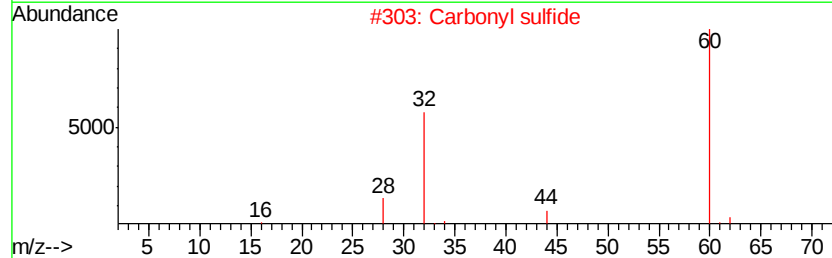
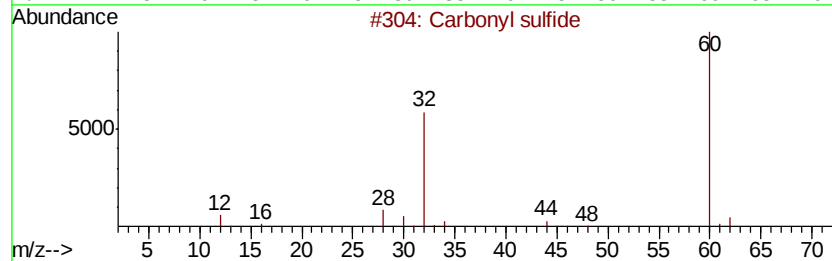
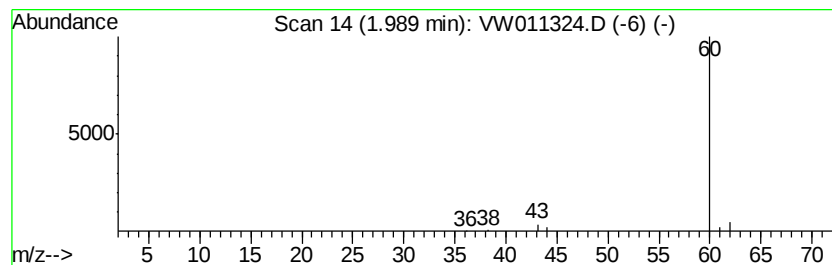
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 1 unknown-01 Concentration Rank 5

| R.T. | EstConc   | Area  | Relative to ISTD    | R.T. |
|------|-----------|-------|---------------------|------|
| 1.99 | 1.57 ug/L | 37343 | 1,4-Difluorobenzene | 8.84 |

| Hit# | of | Tentative ID             | MW | MolForm | CAS#        | Qual |
|------|----|--------------------------|----|---------|-------------|------|
| 1    | 5  | Carbonyl sulfide         | 60 | COS     | 000463-58-1 | 9    |
| 2    |    | Carbonyl sulfide         | 60 | COS     | 000463-58-1 | 5    |
| 3    |    | Urea                     | 60 | CH4N2O  | 000057-13-6 | 4    |
| 4    |    | Hydrazine, 1,1-dimethyl- | 60 | C2H8N2  | 000057-14-7 | 4    |
| 5    |    | Urea                     | 60 | CH4N2O  | 000057-13-6 | 4    |



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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM070219S.M  
Quant Title : VOC Analysis

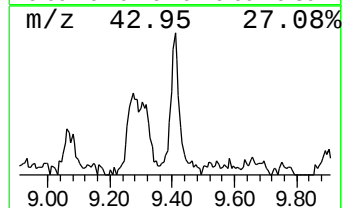
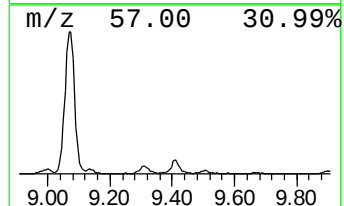
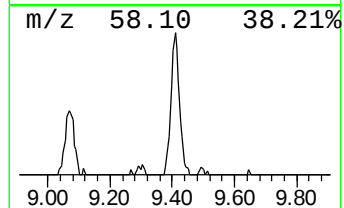
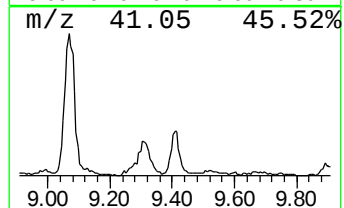
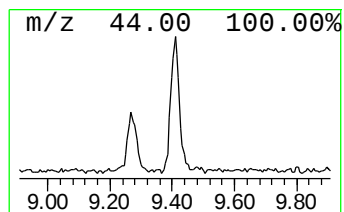
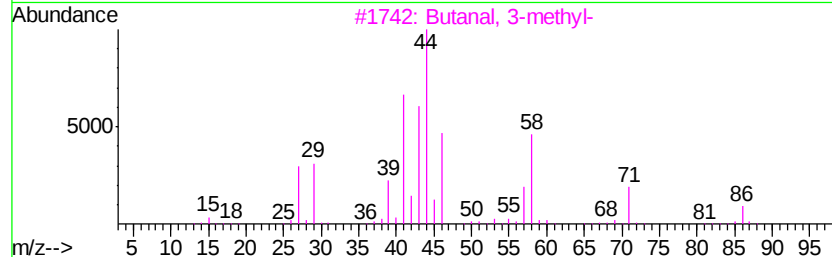
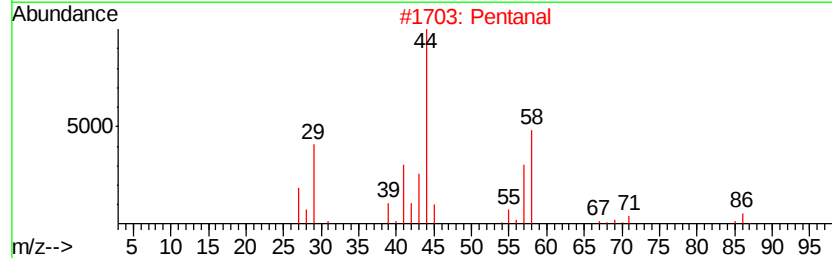
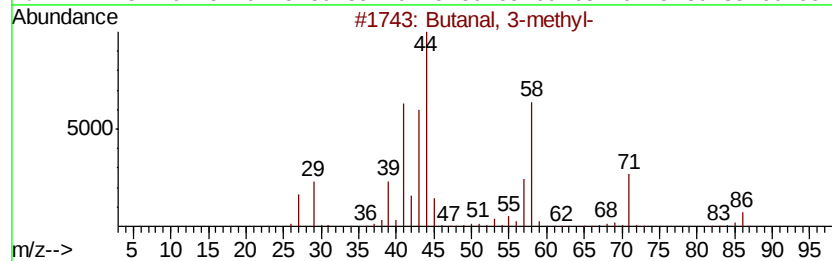
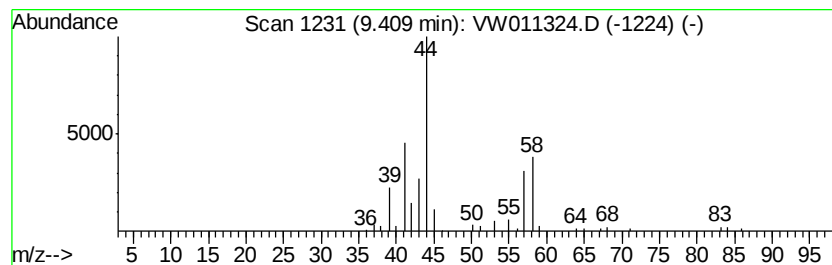
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 2 Butanal, 3-methyl- Concentration Rank 6

| R.T. | EstConc   | Area  | Relative to ISTD    | R.T. |
|------|-----------|-------|---------------------|------|
| 9.41 | 1.32 ug/L | 31356 | 1,4-Difluorobenzene | 8.84 |

| Hit# | of | Tentative ID       | MW | MolForm | CAS#        | Qual |
|------|----|--------------------|----|---------|-------------|------|
| 1    | 5  | Butanal, 3-methyl- | 86 | C5H10O  | 000590-86-3 | 83   |
| 2    |    | Pentanal           | 86 | C5H10O  | 000110-62-3 | 78   |
| 3    |    | Butanal, 3-methyl- | 86 | C5H10O  | 000590-86-3 | 74   |
| 4    |    | Pentanal           | 86 | C5H10O  | 000110-62-3 | 72   |
| 5    |    | Pentanal           | 86 | C5H10O  | 000110-62-3 | 56   |



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Operator : SY/VA  
Sample : K3863-05  
Misc : 2.94G/10ML/MSVOA W/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
A52G1

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM070219S.M  
Quant Title : VOC Analysis

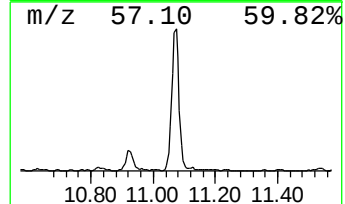
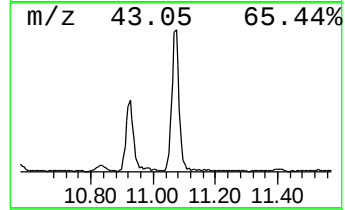
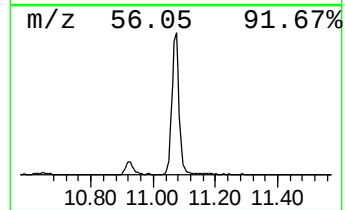
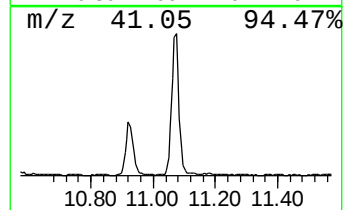
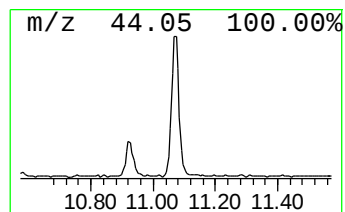
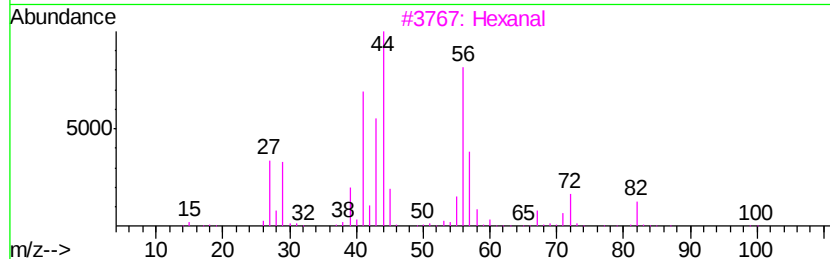
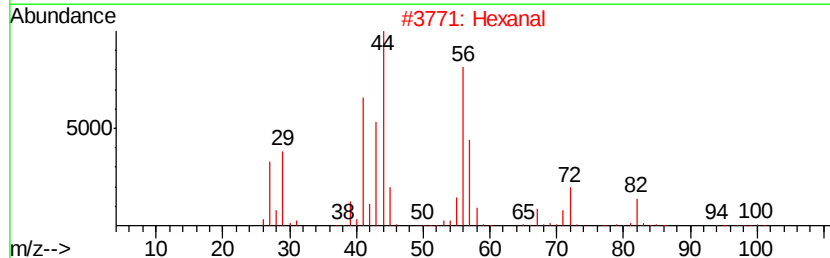
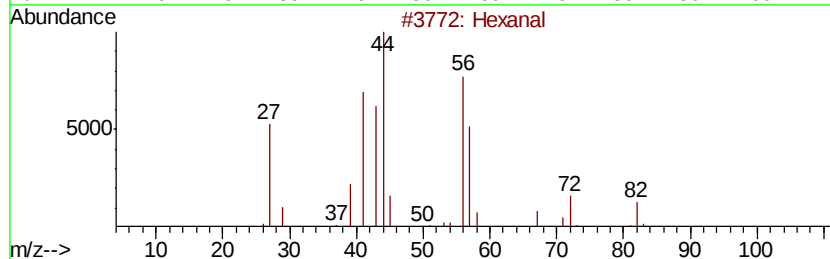
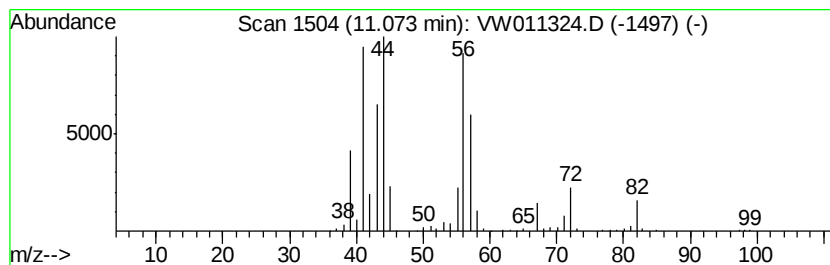
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 4 Hexanal Concentration Rank 2

| R.T.  | EstConc   | Area   | Relative to ISTD | R.T.  |
|-------|-----------|--------|------------------|-------|
| 11.07 | 7.47 ug/L | 180997 | Chlorobenzene-d5 | 11.63 |

| Hit# of | 5       | Tentative ID | MW  | MolForm | CAS#        | Qual |
|---------|---------|--------------|-----|---------|-------------|------|
| 1       | Hexanal |              | 100 | C6H12O  | 000066-25-1 | 72   |
| 2       | Hexanal |              | 100 | C6H12O  | 000066-25-1 | 72   |
| 3       | Hexanal |              | 100 | C6H12O  | 000066-25-1 | 64   |
| 4       | Hexanal |              | 100 | C6H12O  | 000066-25-1 | 64   |
| 5       | Butanal |              | 72  | C4H8O   | 000123-72-8 | 43   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_W\Data\VW071719\  
Data File : VW011324.D  
Acq On : 17 Jul 2019 23:39  
Operator : SY/VA  
Sample : K3863-05  
Misc : 2.94G/10ML/MSVOA\_W/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
A52G1

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM070219S.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 |
| unknown-01         | 1.99  | 1.6     | ug/L  | 37343    | 1                     | 8.84  | 594914 | 25.0 |
| Butanal, 3-methyl- | 9.41  | 1.3     | ug/L  | 31356    | 1                     | 8.84  | 594914 | 25.0 |
| Hexanal            | 11.07 | 7.5     | ug/L  | 180997   | 2                     | 11.63 | 605569 | 25.0 |