

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW122718\  
 Data File : VW007921.D  
 Acq On : 26 Dec 2018 14:16  
 Operator : SY/AP  
 Sample : VSTDCCC025  
 Misc : 5.00G/10ML/MSVOA W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTD02589

Manual Integrations  
 APPROVED

MMDadoda  
 12/27/2018 4:48:46 PM

Quant Time: Dec 27 00:42:08 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM122618S.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Dec 26 13:32:17 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.84  | 114  | 94617    | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.63 | 117  | 85132    | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 43089    | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.36   | 65    | 25716    | 27.58    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 110.32% |
| 7) Chloroethane-d5             | 2.89   | 69    | 17379    | 27.66    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 110.64% |
| 10) 1,1-Dichloroethene-d2      | 4.01   | 63    | 63982    | 25.35    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 101.40% |
| 20) 2-Butanone-d5              | 7.07   | 46    | 20623    | 51.86    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 103.72% |
| 24) Chloroform-d               | 7.65   | 84    | 63543    | 25.24    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 100.96% |
| 26) 1,2-Dichloroethane-d4      | 8.31   | 65    | 38736    | 25.67    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 102.68% |
| 29) Benzene-d6                 | 8.27   | 84    | 123294   | 25.82    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 103.28% |
| 33) 1,2-Dichloropropane-d6     | 9.27   | 67    | 33439    | 25.75    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 103.00% |
| 37) Toluene-d8                 | 10.32  | 98    | 119480   | 25.69    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 102.76% |
| 38) trans-1,3-Dichloropropene- | 10.58  | 79    | 18950    | 25.42    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 101.68% |
| 39) 2-Hexanone-d5              | 10.93  | 63    | 16950    | 51.03    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 102.06% |
| 48) 1,1,2,2-Tetrachloroethane- | 12.69  | 84    | 31688    | 25.35    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 101.40% |
| 61) 1,2-Dichlorobenzene-d4     | 13.86  | 152   | 42050    | 24.16    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 96.64%  |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc   | Units | Ovalue |
|--------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane     | 2.01 | 85   | 24606m   | 23.596 | ug/L  |        |
| 3) Chloromethane               | 2.21 | 50   | 17941    | 21.831 | ug/L  | 99     |
| 5) Vinyl chloride              | 2.37 | 62   | 24402    | 23.870 | ug/L  | 98     |
| 6) Bromomethane                | 2.78 | 94   | 14612    | 24.092 | ug/L  | 97     |
| 8) Chloroethane                | 2.93 | 64   | 12239    | 24.096 | ug/L  | 98     |
| 9) Trichlorofluoromethane      | 3.26 | 101  | 20185    | 22.865 | ug/L  | 99     |
| 11) 1,1,2-Trichloro-1,2,2-trif | 4.06 | 101  | 28640m   | 23.978 | ug/L  |        |
| 12) 1,1-Dichloroethene         | 4.03 | 96   | 26582    | 24.304 | ug/L  | 94     |
| 13) Acetone                    | 4.12 | 43   | 19839    | 51.062 | ug/L  | 99     |
| 14) Carbon disulfide           | 4.37 | 76   | 83451    | 24.089 | ug/L  | 99     |
| 15) Methyl Acetate             | 4.67 | 43   | 13650    | 23.088 | ug/L  | 98     |
| 16) Methylene chloride         | 4.92 | 84   | 29938    | 19.554 | ug/L  | 99     |
| 17) Methyl tert-butyl Ether    | 5.43 | 73   | 44812    | 23.051 | ug/L  | 99     |
| 18) trans-1,2-Dichloroethene   | 5.42 | 96   | 27362    | 23.063 | ug/L  | 94     |
| 19) 1,1-Dichloroethane         | 6.21 | 63   | 46339    | 23.477 | ug/L  | 97     |
| 21) 2-Butanone                 | 7.17 | 43   | 21348    | 48.289 | ug/L  | 99     |
| 22) cis-1,2-Dichloroethene     | 7.17 | 96   | 29765    | 23.413 | ug/L  | 91     |

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| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 7.51  | 128  | 13469    | 23.531 | ug/L  | 98       |
| 25) Chloroform                  | 7.67  | 83   | 51373    | 23.110 | ug/L  | 99       |
| 27) 1,2-Dichloroethane          | 8.40  | 62   | 38437    | 23.575 | ug/L  | 100      |
| 30) Cyclohexane                 | 7.95  | 56   | 44322    | 23.665 | ug/L  | 100      |
| 31) 1,1,1-Trichloroethane       | 7.87  | 97   | 47733    | 23.386 | ug/L  | 98       |
| 32) Carbon tetrachloride        | 8.06  | 117  | 46286    | 23.620 | ug/L  | 99       |
| 34) Benzene                     | 8.32  | 78   | 106484   | 23.375 | ug/L  | 100      |
| 35) Trichloroethene             | 9.09  | 95   | 30518    | 23.058 | ug/L  | 98       |
| 36) Methylcyclohexane           | 9.34  | 83   | 53044    | 23.371 | ug/L  | 99       |
| 40) 1,2-Dichloropropane         | 9.37  | 63   | 24870    | 23.224 | ug/L  | 99       |
| 41) Bromodichloromethane        | 9.64  | 83   | 37570    | 23.856 | ug/L  | 95       |
| 42) cis-1,3-Dichloropropene     | 10.07 | 75   | 44944    | 24.044 | ug/L  | 99       |
| 43) 4-Methyl-2-pentanone        | 10.21 | 43   | 38859    | 45.849 | ug/L  | 99       |
| 44) Toluene                     | 10.38 | 91   | 119458   | 23.438 | ug/L  | 98       |
| 45) trans-1,3-Dichloropropene   | 10.60 | 75   | 40600    | 23.572 | ug/L  | 95       |
| 46) 1,1,2-Trichloroethane       | 10.79 | 97   | 21561    | 23.799 | ug/L  | 96       |
| 47) Tetrachloroethene           | 10.86 | 164  | 24081    | 22.900 | ug/L  | 93       |
| 49) 2-Hexanone                  | 10.97 | 43   | 30017    | 49.089 | ug/L  | 95       |
| 50) Dibromochloromethane        | 11.13 | 129  | 26705    | 23.137 | ug/L  | 99       |
| 51) 1,2-Dibromoethane           | 11.24 | 107  | 22285    | 24.101 | ug/L  | 96       |
| 52) Chlorobenzene               | 11.66 | 112  | 77443    | 23.341 | ug/L  | 98       |
| 53) Ethylbenzene                | 11.73 | 91   | 138391   | 23.633 | ug/L  | 98       |
| 54) m,p-Xylene                  | 11.84 | 106  | 52252    | 23.684 | ug/L  | 98       |
| 55) o-xylene                    | 12.17 | 106  | 48916    | 23.378 | ug/L  | 99       |
| 56) Styrene                     | 12.18 | 104  | 85129    | 24.004 | ug/L  | 98       |
| 57) Isopropylbenzene            | 12.47 | 105  | 141131   | 23.811 | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 12.72 | 83   | 26364    | 23.470 | ug/L  | 98       |
| 59) 1,2,3-Trichloropropane      | 12.77 | 75   | 21221    | 23.487 | ug/L  | 98       |
| 62) Bromoform                   | 12.35 | 173  | 15332    | 22.571 | ug/L  | 97       |
| 63) 1,3-Dichlorobenzene         | 13.50 | 146  | 62297    | 22.615 | ug/L  | 99       |
| 64) 1,4-Dichlorobenzene         | 13.58 | 146  | 62319    | 22.749 | ug/L  | 95       |
| 65) 1,2-Dichlorobenzene         | 13.88 | 146  | 57185    | 22.867 | ug/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan  | 14.49 | 75   | 5452     | 22.113 | ug/L  | 88       |
| 67) 1,3,5-Trichlorobenzene      | 14.63 | 180  | 45733    | 22.667 | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 15.14 | 180  | 38529    | 22.246 | ug/L  | 100      |
| 69) Naphthalene                 | 15.38 | 128  | 89980    | 22.952 | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 15.57 | 180  | 34483    | 22.491 | ug/L  | 100      |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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