

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV010419\  
 Data File : VV009157.D  
 Acq On : 04 Jan 2019 12:10  
 Operator : SY/MD  
 Sample : VSTD05065  
 Misc : 5.00 G/10ML/MSVOA V/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05065

Manual Integrations  
 APPROVED

MMDadoda  
 1/7/2019 11:59:57 PM

Quant Time: Jan 05 04:38:44 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM010419S.M  
 Quant Title : VOC Analysis  
 QLast Update : Sat Jan 05 04:20:20 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.67  | 114  | 195842   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 177375   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 94051    | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |        |      |       |
|--------------------------------|-------|-----|--------|--------|------|-------|
| 4) Vinyl Chloride-d3           | 1.32  | 65  | 54300  | 40.55  | ug/L | 0.00  |
| 7) Chloroethane-d5             | 1.58  | 69  | 55524  | 42.73  | ug/L | 0.00  |
| 10) 1,1-Dichloroethene-d2      | 2.13  | 63  | 193423 | 43.20  | ug/L | 0.00  |
| 20) 2-Butanone-d5              | 3.95  | 46  | 88219m | 94.99  | ug/L | -0.01 |
| 24) Chloroform-d               | 4.40  | 84  | 179932 | 43.63  | ug/L | 0.00  |
| 26) 1,2-Dichloroethane-d4      | 5.08  | 65  | 100641 | 45.62  | ug/L | 0.00  |
| 29) Benzene-d6                 | 5.10  | 84  | 347968 | 44.03  | ug/L | 0.00  |
| 33) 1,2-Dichloropropane-d6     | 6.12  | 67  | 102053 | 45.04  | ug/L | 0.00  |
| 37) Toluene-d8                 | 7.36  | 98  | 329172 | 44.16  | ug/L | 0.00  |
| 38) trans-1,3-Dichloropropene- | 7.66  | 79  | 49714  | 46.24  | ug/L | 0.00  |
| 39) 2-Hexanone-d5              | 8.14  | 63  | 53687  | 100.39 | ug/L | 0.00  |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26 | 84  | 117316 | 47.11  | ug/L | 0.00  |
| 61) 1,2-Dichlorobenzene-d4     | 11.67 | 152 | 128240 | 40.34  | ug/L | 0.00  |

## Target Compounds

|                                |      |     |        |         | Qvalue    |
|--------------------------------|------|-----|--------|---------|-----------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 141168 | 44.843  | ug/L 98   |
| 3) Chloromethane               | 1.25 | 50  | 93681  | 43.938  | ug/L 98   |
| 5) Vinyl chloride              | 1.32 | 62  | 104877 | 45.939  | ug/L 99   |
| 6) Bromomethane                | 1.54 | 94  | 71310  | 44.344  | ug/L 98   |
| 8) Chloroethane                | 1.60 | 64  | 64821  | 46.073  | ug/L 97   |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 202477 | 48.376  | ug/L 99   |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 134503 | 48.253  | ug/L 99   |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 115332 | 47.709  | ug/L 96   |
| 13) Acetone                    | 2.21 | 43  | 116007 | 86.859  | ug/L 97   |
| 14) Carbon disulfide           | 2.32 | 76  | 326987 | 47.337  | ug/L 99   |
| 15) Methyl Acetate             | 2.47 | 43  | 81389  | 49.250  | ug/L 97   |
| 16) Methylene chloride         | 2.53 | 84  | 124243 | 42.464  | ug/L 99   |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 303456 | 51.249  | ug/L 99   |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 122684 | 47.888  | ug/L 95   |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 207411 | 48.753  | ug/L 100  |
| 21) 2-Butanone                 | 4.04 | 43  | 119803 | 97.536  | ug/L # 88 |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 134677 | 49.175  | ug/L 99   |
| 23) Bromochloromethane         | 4.30 | 128 | 65011  | 50.454  | ug/L 99   |
| 25) Chloroform                 | 4.43 | 83  | 222360 | 49.081  | ug/L 98   |
| 27) 1,2-Dichloroethane         | 5.18 | 62  | 149387 | 49.090  | ug/L 100  |
| 30) Cyclohexane                | 4.73 | 56  | 188756 | 48.003  | ug/L 99   |
| 31) 1,1,1-Trichloroethane      | 4.66 | 97  | 212212 | 49.209  | ug/L 100  |
| 32) Carbon tetrachloride       | 4.88 | 117 | 196362 | 49.747  | ug/L 99   |
| 34) Benzene                    | 5.15 | 78  | 469296 | 49.217  | ug/L 100  |
| 35) Trichloroethene            | 5.96 | 95  | 133099 | 48.451  | ug/L 99   |
| 36) Methylcyclohexane          | 6.18 | 83  | 224431 | 48.896  | ug/L 98   |
| 40) 1,2-Dichloropropane        | 6.22 | 63  | 113733 | 49.486  | ug/L 99   |
| 41) Bromodichloromethane       | 6.56 | 83  | 163330 | 51.847  | ug/L 100  |
| 42) cis-1,3-Dichloropropene    | 7.07 | 75  | 191413 | 52.558  | ug/L 97   |
| 43) 4-Methyl-2-pentanone       | 7.28 | 43  | 220539 | 100.670 | ug/L 98   |

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 Quant Title : VOC Analysis  
 QLast Update : Sat Jan 05 04:20:20 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| -----                          |       |      |          |         |       |          |
| 44) Toluene                    | 7.43  | 91   | 510020   | 49.611  | ug/L  | 100      |
| 45) trans-1,3-Dichloropropene  | 7.69  | 75   | 168376   | 52.806  | ug/L  | 99       |
| 46) 1,1,2-Trichloroethane      | 7.88  | 97   | 104612   | 51.500  | ug/L  | 98       |
| 47) Tetrachloroethene          | 8.02  | 164  | 114611   | 48.157  | ug/L  | 98       |
| 49) 2-Hexanone                 | 8.19  | 43   | 167189   | 103.698 | ug/L  | 99       |
| 50) Dibromochloromethane       | 8.29  | 129  | 132386   | 53.050  | ug/L  | 99       |
| 51) 1,2-Dibromoethane          | 8.40  | 107  | 108467   | 51.066  | ug/L  | 96       |
| 52) Chlorobenzene              | 8.93  | 112  | 342433   | 48.546  | ug/L  | 99       |
| 53) Ethylbenzene               | 9.06  | 91   | 579196   | 49.818  | ug/L  | 99       |
| 54) m,p-Xylene                 | 9.18  | 106  | 225108   | 49.696  | ug/L  | 99       |
| 55) o-xylene                   | 9.59  | 106  | 213086   | 50.876  | ug/L  | 99       |
| 56) Styrene                    | 9.60  | 104  | 363380   | 51.438  | ug/L  | 100      |
| 57) Isopropylbenzene           | 9.98  | 105  | 585781   | 50.408  | ug/L  | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 142906   | 52.508  | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 112373   | 51.657  | ug/L  | 98       |
| 62) Bromoform                  | 9.78  | 173  | 87474    | 52.663  | ug/L  | 98       |
| 63) 1,3-Dichlorobenzene        | 11.23 | 146  | 278305   | 46.964  | ug/L  | 100      |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 282813   | 45.784  | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 264480   | 46.853  | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 30740    | 52.454  | ug/L  | 94       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 223238   | 46.710  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 189621   | 48.745  | ug/L  | 99       |
| 69) Naphthalene                | 13.55 | 128  | 423606   | 53.462  | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene     | 13.80 | 180  | 175536   | 49.170  | ug/L  | 99       |
| -----                          |       |      |          |         |       |          |

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

