

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV022019\  
 Data File : VV009309.D  
 Acq On : 20 Feb 2019 19:52  
 Operator : SY/MD  
 Sample : VSTD00570  
 Misc : 5.00G/10ML/MSVOA V/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00570

Manual Integrations  
 APPROVED

MMDadoda  
 2/21/2019 4:27:05 PM

Quant Time: Feb 21 03:39:29 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM022019S.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Feb 21 03:29:18 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.67  | 114  | 155181   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 145938   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 72327    | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |       |     |       |       |      |      |
|--------------------------------|-------|-----|-------|-------|------|------|
| 4) Vinyl Chloride-d3           | 1.32  | 65  | 12134 | 4.65  | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.58  | 69  | 15536 | 3.18  | ug/L | 0.00 |
| 10) 1,1-Dichloroethene-d2      | 2.13  | 63  | 28029 | 4.00  | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 3.96  | 46  | 6833m | 10.62 | ug/L | 0.00 |
| 24) Chloroform-d               | 4.40  | 84  | 19818 | 5.23  | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.08  | 65  | 10917 | 5.07  | ug/L | 0.00 |
| 29) Benzene-d6                 | 5.10  | 84  | 41770 | 5.69  | ug/L | 0.00 |
| 33) 1,2-Dichloropropane-d6     | 6.12  | 67  | 12108 | 5.61  | ug/L | 0.00 |
| 37) Toluene-d8                 | 7.36  | 98  | 37667 | 5.30  | ug/L | 0.00 |
| 38) trans-1,3-Dichloropropene- | 7.67  | 79  | 5690  | 5.15  | ug/L | 0.00 |
| 39) 2-Hexanone-d5              | 8.14  | 63  | 5969  | 12.30 | ug/L | 0.00 |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26 | 84  | 12094 | 5.53  | ug/L | 0.00 |
| 61) 1,2-Dichlorobenzene-d4     | 11.68 | 152 | 14028 | 5.39  | ug/L | 0.00 |

## Target Compounds

|                                |      |     |       |       | Qvalue    |
|--------------------------------|------|-----|-------|-------|-----------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 9468  | 5.972 | ug/L 99   |
| 3) Chloromethane               | 1.25 | 50  | 11330 | 4.348 | ug/L 97   |
| 5) Vinyl chloride              | 1.32 | 62  | 13038 | 4.042 | ug/L 96   |
| 6) Bromomethane                | 1.53 | 94  | 12314 | 3.202 | ug/L 97   |
| 8) Chloroethane                | 1.59 | 64  | 11682 | 2.620 | ug/L 98   |
| 9) Trichlorofluoromethane      | 1.76 | 101 | 23999 | 3.650 | ug/L 96   |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101 | 14312 | 3.894 | ug/L 98   |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 12245 | 3.810 | ug/L 84   |
| 13) Acetone                    | 2.21 | 43  | 6965  | 9.879 | ug/L 100  |
| 14) Carbon disulfide           | 2.32 | 76  | 31427 | 5.591 | ug/L 96   |
| 15) Methyl Acetate             | 2.47 | 43  | 5052  | 5.335 | ug/L 91   |
| 16) Methylene chloride         | 2.53 | 84  | 13116 | 6.480 | ug/L 95   |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 26129 | 5.359 | ug/L 97   |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 10744 | 5.530 | ug/L 97   |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 18011 | 5.025 | ug/L 98   |
| 21) 2-Butanone                 | 4.05 | 43  | 6529m | 7.460 | ug/L      |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 11916 | 5.311 | ug/L 92   |
| 23) Bromochloromethane         | 4.31 | 128 | 5386  | 5.436 | ug/L 84   |
| 25) Chloroform                 | 4.43 | 83  | 18731 | 4.910 | ug/L 100  |
| 27) 1,2-Dichloroethane         | 5.18 | 62  | 12176 | 4.252 | ug/L 96   |
| 30) Cyclohexane                | 4.73 | 56  | 17064 | 4.803 | ug/L 97   |
| 31) 1,1,1-Trichloroethane      | 4.66 | 97  | 17340 | 4.912 | ug/L 100  |
| 32) Carbon tetrachloride       | 4.88 | 117 | 14204 | 4.696 | ug/L 98   |
| 34) Benzene                    | 5.15 | 78  | 41198 | 4.978 | ug/L 100  |
| 35) Trichloroethene            | 5.96 | 95  | 11176 | 5.111 | ug/L 98   |
| 36) Methylcyclohexane          | 6.18 | 83  | 20042 | 5.223 | ug/L 99   |
| 40) 1,2-Dichloropropane        | 6.22 | 63  | 10091 | 5.089 | ug/L # 87 |
| 41) Bromodichloromethane       | 6.56 | 83  | 14418 | 4.992 | ug/L 98   |
| 42) cis-1,3-Dichloropropene    | 7.07 | 75  | 16274 | 4.917 | ug/L 100  |
| 43) 4-Methyl-2-pentanone       | 7.28 | 43  | 15273 | 9.354 | ug/L 98   |

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 2/21/2019 4:27:05 PM

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 Quant Title : VOC Analysis  
 QLast Update : Thu Feb 21 03:29:18 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| -----                          |       |      |          |       |        |          |
| 44) Toluene                    | 7.43  | 91   | 44640    | 4.759 | ug/L   | 100      |
| 45) trans-1,3-Dichloropropene  | 7.69  | 75   | 14282    | 4.753 | ug/L   | 100      |
| 46) 1,1,2-Trichloroethane      | 7.88  | 97   | 8928     | 5.489 | ug/L   | 96       |
| 47) Tetrachloroethene          | 8.02  | 164  | 8999     | 4.942 | ug/L   | 96       |
| 49) 2-Hexanone                 | 8.19  | 43   | 11176    | 8.517 | ug/L   | 95       |
| 50) Dibromochloromethane       | 8.29  | 129  | 10744    | 5.115 | ug/L   | 91       |
| 51) 1,2-Dibromoethane          | 8.40  | 107  | 8659     | 5.144 | ug/L # | 98       |
| 52) Chlorobenzene              | 8.93  | 112  | 29715    | 4.855 | ug/L   | 98       |
| 53) Ethylbenzene               | 9.06  | 91   | 50605    | 4.720 | ug/L   | 100      |
| 54) m,p-Xylene                 | 9.18  | 106  | 20187    | 4.922 | ug/L   | 98       |
| 55) o-xylene                   | 9.59  | 106  | 19073    | 4.782 | ug/L   | 98       |
| 56) Styrene                    | 9.61  | 104  | 32479    | 4.723 | ug/L   | 95       |
| 57) Isopropylbenzene           | 9.98  | 105  | 51532    | 4.761 | ug/L   | 98       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 11998    | 5.228 | ug/L   | 95       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 8426     | 5.061 | ug/L   | 99       |
| 62) Bromoform                  | 9.78  | 173  | 6088     | 4.496 | ug/L # | 95       |
| 63) 1,3-Dichlorobenzene        | 11.23 | 146  | 23969    | 5.024 | ug/L   | 94       |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 24164    | 5.020 | ug/L   | 97       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 22815    | 5.057 | ug/L   | 97       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 1910     | 4.464 | ug/L # | 87       |
| 67) 1,3,5-Trichlorobenzene     | 12.70 | 180  | 17148    | 4.856 | ug/L   | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 13189    | 4.582 | ug/L   | 94       |
| 69) Naphthalene                | 13.55 | 128  | 23988    | 4.268 | ug/L   | 100      |
| 70) 1,2,3-Trichlorobenzene     | 13.80 | 180  | 11739    | 4.526 | ug/L   | 95       |
| -----                          |       |      |          |       |        |          |

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

