

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV031319\  
 Data File : VV009631.D  
 Acq On : 13 Mar 2019 09:55  
 Operator : SY/MD  
 Sample : VSTD2.578  
 Misc : 5.00G/10ML/MSVOA V/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD2.578

Manual Integrations  
 APPROVED

MMDadoda  
 3/15/2019 7:53:44 AM

Quant Time: Mar 14 07:21:09 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM031319S.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Mar 13 14:55:46 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 157769   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 147916   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 66065    | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |       |     |       |      |      |      |
|--------------------------------|-------|-----|-------|------|------|------|
| 4) Vinyl Chloride-d3           | 1.32  | 65  | 5023  | 2.42 | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.57  | 69  | 4949  | 1.70 | ug/L | 0.00 |
| 10) 1,1-Dichloroethene-d2      | 2.13  | 63  | 14457 | 2.62 | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 3.95  | 46  | 1863m | 3.47 | ug/L | 0.02 |
| 24) Chloroform-d               | 4.40  | 84  | 9642  | 2.35 | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.08  | 65  | 5309  | 2.28 | ug/L | 0.00 |
| 29) Benzene-d6                 | 5.09  | 84  | 19101 | 2.40 | ug/L | 0.00 |
| 33) 1,2-Dichloropropane-d6     | 6.12  | 67  | 5090  | 2.14 | ug/L | 0.00 |
| 37) Toluene-d8                 | 7.36  | 98  | 17323 | 2.23 | ug/L | 0.00 |
| 38) trans-1,3-Dichloropropene- | 7.67  | 79  | 2211  | 2.06 | ug/L | 0.00 |
| 39) 2-Hexanone-d5              | 8.14  | 63  | 1707  | 3.91 | ug/L | 0.01 |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26 | 84  | 4319  | 1.94 | ug/L | 0.00 |
| 61) 1,2-Dichlorobenzene-d4     | 11.68 | 152 | 6613  | 2.55 | ug/L | 0.00 |

## Target Compounds

|                                |      |     |        |              | Qvalue |
|--------------------------------|------|-----|--------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 6880   | 2.852 ug/L   | 98     |
| 3) Chloromethane               | 1.25 | 50  | 6137   | 2.804 ug/L   | 93     |
| 5) Vinyl chloride              | 1.32 | 62  | 6139   | 2.617 ug/L   | 92     |
| 6) Bromomethane                | 1.52 | 94  | 6944   | 2.482 ug/L   | 99     |
| 8) Chloroethane                | 1.59 | 64  | 4470   | 1.912 ug/L   | 100    |
| 9) Trichlorofluoromethane      | 1.76 | 101 | 13302  | 2.696 ug/L   | 100    |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101 | 7224   | 2.706 ug/L   | 97     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 6223   | 2.631 ug/L   | 89     |
| 13) Acetone                    | 2.19 | 43  | 2705   | 4.279 ug/L   | 97     |
| 14) Carbon disulfide           | 2.31 | 76  | 16431  | 2.786 ug/L # | 92     |
| 15) Methyl Acetate             | 2.46 | 43  | 2313   | 2.445 ug/L # | 82     |
| 16) Methylene chloride         | 2.53 | 84  | 7216   | 3.210 ug/L   | 90     |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 11336  | 2.292 ug/L # | 85     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 5415   | 2.648 ug/L   | 98     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 9237   | 2.584 ug/L   | 99     |
| 21) 2-Butanone                 | 4.04 | 43  | 3068m  | 3.919 ug/L   |        |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 5765   | 2.487 ug/L   | 95     |
| 23) Bromochloromethane         | 4.29 | 128 | 2688   | 2.495 ug/L   | 77     |
| 25) Chloroform                 | 4.43 | 83  | 10245m | 2.499 ug/L   |        |
| 27) 1,2-Dichloroethane         | 5.18 | 62  | 6938   | 2.433 ug/L # | 92     |
| 30) Cyclohexane                | 4.73 | 56  | 9089m  | 2.732 ug/L   |        |
| 31) 1,1,1-Trichloroethane      | 4.65 | 97  | 9018   | 2.597 ug/L # | 85     |
| 32) Carbon tetrachloride       | 4.87 | 117 | 6901   | 2.316 ug/L   | 94     |
| 34) Benzene                    | 5.14 | 78  | 22250  | 2.685 ug/L   | 100    |
| 35) Trichloroethene            | 5.96 | 95  | 6219   | 2.684 ug/L   | 98     |
| 36) Methylcyclohexane          | 6.17 | 83  | 10442  | 2.683 ug/L   | 98     |
| 40) 1,2-Dichloropropane        | 6.22 | 63  | 5228   | 2.544 ug/L # | 90     |
| 41) Bromodichloromethane       | 6.56 | 83  | 6606   | 2.355 ug/L   | 96     |
| 42) cis-1,3-Dichloropropene    | 7.07 | 75  | 7175   | 2.322 ug/L   | 98     |
| 43) 4-Methyl-2-pentanone       | 7.28 | 43  | 6481   | 4.516 ug/L # | 96     |

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 ALS Vial : 1 Sample Multiplier: 1

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 MSVOA\_V  
 ClientSampleId :  
 VSTD2.578

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 APPROVED

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 3/15/2019 7:53:44 AM

Quant Time: Mar 14 07:21:09 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM031319S.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Mar 13 14:55:46 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| -----                          |       |      |          |       |        |          |
| 44) Toluene                    | 7.43  | 91   | 23434    | 2.499 | ug/L   | 96       |
| 45) trans-1,3-Dichloropropene  | 7.70  | 75   | 5766     | 2.134 | ug/L   | 98       |
| 46) 1,1,2-Trichloroethane      | 7.88  | 97   | 4299     | 2.511 | ug/L   | 83       |
| 47) Tetrachloroethene          | 8.02  | 164  | 4920     | 2.625 | ug/L   | 95       |
| 49) 2-Hexanone                 | 8.19  | 43   | 3843     | 3.572 | ug/L # | 95       |
| 50) Dibromochloromethane       | 8.29  | 129  | 3879     | 1.999 | ug/L   | 94       |
| 51) 1,2-Dibromoethane          | 8.40  | 107  | 3664     | 2.136 | ug/L # | 98       |
| 52) Chlorobenzene              | 8.93  | 112  | 15762    | 2.593 | ug/L   | 99       |
| 53) Ethylbenzene               | 9.06  | 91   | 25334    | 2.434 | ug/L   | 99       |
| 54) m,p-Xylene                 | 9.18  | 106  | 8839     | 2.241 | ug/L   | 91       |
| 55) o-xylene                   | 9.59  | 106  | 8966     | 2.318 | ug/L   | 99       |
| 56) Styrene                    | 9.60  | 104  | 13873    | 2.252 | ug/L   | 98       |
| 57) Isopropylbenzene           | 9.98  | 105  | 23742    | 2.321 | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 4936     | 2.171 | ug/L # | 95       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 3547     | 2.147 | ug/L   | 98       |
| 62) Bromoform                  | 9.77  | 173  | 2039     | 2.011 | ug/L # | 97       |
| 63) 1,3-Dichlorobenzene        | 11.23 | 146  | 10949    | 2.532 | ug/L   | 96       |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 11750    | 2.702 | ug/L   | 98       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 9948     | 2.469 | ug/L   | 97       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 584m     | 1.946 | ug/L   |          |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 7643m    | 2.544 | ug/L   |          |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 4314     | 2.003 | ug/L   | 97       |
| 69) Naphthalene                | 13.55 | 128  | 4262     | 1.176 | ug/L # | 94       |
| 70) 1,2,3-Trichlorobenzene     | 13.80 | 180  | 3749     | 1.918 | ug/L   | 96       |
| -----                          |       |      |          |       |        |          |

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

