



## SPRING WATER QUALITY REPORT 2017

Grand Springs water products are produced and manufactured in Alton, VA under the authority of the Virginia Department of Agriculture and The Federal Food and Drug Regulatory Agency (FDA).

The Food and Drug (FDA) and the Virginia Department of Agriculture both conduct un-announced visits to our facility to perform audits of our manufacturing procedures and to collect water samples for compliance with state and federal drinking water standards.

In addition to the above audits, we are audited by third party auditors to comply with the International Bottle Water compliance of the Model Code of IBWA.

We are an approved supplier to The Department of Defense and must pass a HACCP audit on an annual basis conducted by the US Army.

FDA regulations require annual source water testing for bacterial, organic, and radiological analyses. The 2017 analyses were conducted by National Testing Laboratories (Ypsilanti, MI 48197).

Grand Springs utilizes its in-house laboratory for daily analysis of bacteriological and physical parameter analyses of source water and finished products. Our multiple barrier approach involves careful control of filtration and disinfection processes, as well as, continuous monitoring and testing.

We test our products for purity and consistency throughout the bottling process and in hourly tests on finished products. The controlled process and testing assures consistency in taste and purity.

**TABLE 1: GRAND SPRINGS DISTRIBUTION SPECIFIC MINERAL ANALYSIS**

| General Mineral Analysis | Results | Detection Limit | FDA SOQ |
|--------------------------|---------|-----------------|---------|
| Bicarbonate              | 56      | 20              | -----   |
| Calcium                  | 12.0    | 2.0             | -----   |
| Chloride                 | 3.2     | 1.0             | 250     |
| Fluoride                 | 0.12    | 0.10            | 4.0     |
| Magnesium                | 3.80    | 0.10            | -----   |
| Sodium                   | 8       | 1               | -----   |
| Sulfate                  | ND      | 5               | 250     |
| Total Dissolved Solids   | 120     | 5               | 500     |
| Alkalinity               | 56      | 20              | -----   |
| PH                       | 6.5     | ----            | -----   |

ND = Not detected

**TABLE 2: PRODUCT ANALYSIS***(All results reported in mg/L except as noted)*

| Product>                                     | Results | Detection Limit | FDA SOQ |
|--|---------|-----------------|---------|
| <b><u>Inorganic Chemicals</u></b>            |         |                 |         |
| Antimony (2)                                 | ND      | 0.003           | 0.006   |
| Arsenic                                      | ND      | 0.002           | 0.010   |
| Barium                                       | ND      | 0.10            | 2.0     |
| Beryllium (2)                                | ND      | 0.001           | 0.004   |
| Cadmium                                      | ND      | 0.001           | 0.005   |
| Chromium                                     | ND      | 0.007           | 0.1     |
| Cyanide (2)                                  | ND      | 0.02            | 200     |
| Fluoride                                     | ND      | 0.10            | 4.0     |
| Lead   | ND      | 0.001           | 0.015   |
| Mercury                                      | ND      | 0.0002          | 0.002   |
| Nickel (2)                                   | ND      | 0.005           | 0.1     |
| Nitrate-N                                    | 0.93    | 0.05            | 10.0    |
| Nitrite-N                                    | ND      | 0.05            | 1.0     |
| Total Nitrate + Nitrite                      | 0.93    | 0.50            |         |
| Uranium                                      | ND      | 0.001           | 0.030   |
| Selenium                                     | ND      | 0.002           | 0.05    |
| Thallium (2)                                 | ND      | 0.001           | 0.002   |
| <b><u>Secondary Inorganic Parameters</u></b> |         |                 |         |
| Aluminum                                     | ND      | 0.05            | 0.2     |
| Chloride                                     | 3.2     | 1               | 250     |
| Copper                                       | ND      | 0.002           | 1       |
| Iron   | ND      | 0.020           | 0.3     |
| Manganese                                    | ND      | 0.004           | 0.05    |
| Silver                                       | ND      | 0.002           | 0.1     |
| Sulfate                                      | ND      | 5               | 250     |
| Total Dissolved Solids (TDS)                 | 120     | 5               | 500     |
| Zinc   | ND      | 0.004           | 5       |
| <b><u>Volatile Organic Chemicals</u></b>     |         |                 |         |
| 1,1,1-Trichloroethane                        | ND      | 0.0005          | 0.2     |
| 1,1,2-Trichloroethane                        | ND      | 0.0005          | 0.005   |
| 1,1-Dichloroethene                           | ND      | 0.0005          | 0.007   |
| 1,2,4-Trichlorobenzene                       | ND      | 0.0005          | 0.07    |
| 1,2-Dichloroethane                           | ND      | 0.0005          | 0.005   |
| 1,2-Dichloropropane                          | ND      | 0.0005          | 0.005   |
| Benzene                                      | ND      | 0.0005          | 0.005   |
| Carbon tetrachloride                         | ND      | 0.0005          | 0.005   |
| cis-1,2-Dichloroethene                       | ND      | 0.0005          | 0.07    |
| trans-1,2-Dichloroethene                     | ND      | 0.0005          | 0.1     |
| Ethylbenzene                                 | ND      | 0.0005          | 0.7     |
| Haloacetic acids, total (HAA5)               | ND      | 0.001           | 0.06    |
| Methylene chloride<br>(Dichloromethane)      | ND      | 0.0005          | 0.005   |
| Methyl tertiary butyl ether (MTBE)           | ND      | 0.0005          | -----   |
| Monochlorobenzene                            | ND      | 0.0005          | -----   |
| o-Dichlorobenzene                            | ND      | 0.0005          | 0.6     |

ND = Not detected

| Product>                                     | Results | Detection Limit | FDA SOQ |
|--|---------|-----------------|---------|
| <b><u>Volatile Organic Chemicals</u></b>     |         |                 |         |
| <b><u>(Cont'd.)</u></b>                      |         |                 |         |
| p-Dichlorobenzene                            | ND      | 0.0005          | -----   |
| Naphthalene                                  | ND      | 0.0005          | -----   |
| Styrene                                      | ND      | 0.0005          | 0.1     |
| 1,1,2,2-Tetrachloroethane                    | ND      | 0.0005          | -----   |
| Tetrachloroethene                            | ND      | 0.0005          | 0.005   |
| Toluene                                      | ND      | 0.0005          | 1       |
| Trichloroethene                              | ND      | 0.0005          | 0.005   |
| Vinyl chloride                               | ND      | 0.0005          | 0.002   |
| Xylenes (total)                              | ND      |                 | 10      |
| Bromodichloromethane                         | ND      | 0.0005          | -----   |
| Chlorodibromomethane                         | ND      | 0.0005          | -----   |
| Chloroform                                   | ND      | 0.0005          | -----   |
| Bromoform                                    | ND      | 0.0005          | -----   |
| Total Trihalomethanes                        | ND      | 0.0005          | 0.080   |
| <b><u>Semivolatile Organic Chemicals</u></b> |         |                 |         |
| Benzo(a)pyrene                               | ND      | 0.0002          | 0.0002  |
| Di(2-ethylhexyl)adipate                      | ND      | 0.0002          | 0.4     |
| Di(2-ethylhexyl)phthalate                    | ND      | 0.0006          |         |
| Hexachlorobenzene                            | ND      | 0.0001          | 0.001   |
| Hexachlorocyclopentadiene                    | ND      | 0.0001          | 0.05    |
| Total Recoverable Phenolics                  | ND      | 0.001           | -----   |
| <b><u>Synthetic Organic Chemicals</u></b>    |         |                 |         |
| 2,4,5-TP (Silvex)                            | ND      | 0.0002          | 0.05    |
| 2,4-D (Dichlorophenoxy acetic acid)          | ND      | 0.0001          | 0.07    |
| Alachlor                                     | ND      | 0.0002          | 0.002   |
| Aldicarb                                     | ND      | 0.001           |         |
| Aldicarb sulfone                             | ND      | 0.001           |         |
| Aldicarb sulfoxide                           | ND      | 0.001           |         |
| Atrazine                                     | ND      | 0.0001          | 0.003   |
| Carbofuran                                   | ND      | 0.001           | 0.04    |
| Chlordane                                    | ND      | 0.0001          | 0.002   |
| Dalapon                                      | ND      | 0.001           | 0.2     |
| Dibromochloropropane (DBCP)                  | ND      | 0.0001          | 0.0002  |
| Dinoseb                                      | ND      | 0.0002          | 0.007   |
| Dioxin (2,3,7,8-TCDD)                        | ND      | 5pg/L           | -----   |
| Diquat                                       | ND      | 0.001           | 0.02    |
| Endothall                                    | ND      | 0.009           | 0.1     |
| Endrin                                       | ND      | 0.0002          | 0.002   |
| Ethylene dibromide                           | ND      | 0.00001         | -----   |
| Glyphosate                                   | ND      | 0.006           | 0.7     |
| Heptachlor                                   | ND      | 0.00001         | 0.0004  |
| Heptachlor epoxide                           | ND      | 0.00001         | 0.0002  |
| Lindane                                      | ND      | 0.00002         | 0.0002  |
| Methoxychlor                                 | ND      | 0.0001          | 0.04    |
| Oxamyl (vydate)                              | ND      | 0.001           | 0.2     |
| Pentachlorophenol                            | ND      | 0.00004         | 0.001   |
| Picloram                                     | ND      | 0.0001          | 0.5     |
| Polychlorinated biphenyls (PCBs)             | ND      | 0.0005          | 0.0005  |
| Simazine                                     | ND      | 0.0001          | 0.004   |
| Toxaphene                                    | ND      | 0.001           | 0.003   |

ND = Not detected

| Product>                                   | Results | Detection Limit | FDA SOQ |
|--|---------|-----------------|---------|
| <b><u>Water Properties</u></b>             |         |                 |         |
| Color                                      | ND      | 3.0             | 15      |
| Turbidity                                  | ND      | 0.1             | 5       |
| pH   | 6.5     | ----            | ----    |
| Odor                                       | ND      | ----            | 3       |
| <b><u>Radiological Contaminants</u></b>    |         |                 |         |
| Gross alpha particle activity              | 1.90    | -----           | 15      |
| Gross beta particle activity               | 2.54    | -----           | 50      |
| Radium 226                                 | 0.684   | -----           | 5       |
| Radium 228                                 | 0.953   | -----           | 5       |
| <b><u>Microbiological Contaminants</u></b> |         |                 |         |
| Total Coliform                             | ND      | 1               | 0       |
| <i>E. Coli</i>                             | ND      | 1               | 0       |
| <i>Standard Plate Count</i>                | ND      | 1               | 500     |

**ANALYTICAL REPORT BY  
NATIONAL TESTING LABS  
YPSILANTI, MI**

ND = Not detected