What does the TDS test tell us?

One of the simplest ways to determine the purity of water is to do a TDS test, which can be done with a simple electronic TDS meter.

“TDS” stands for “total dissolved solids”. This is a measurement of inorganic solids that have been dissolved in the water. The easiest way to think of this is if you take a pinch of salt and put it in a glass of water, the salt dissolves but it’s still in the water. Dissolved solids in water will cause the water to conduct electricity (pure water does not conduct electricity). So a TDS meter measures the electrical conductivity of water, which is a very good way to determine the total amount of dissolved solids in the water.

Keep in mind the following points about a TDS test…

- A TDS test does not tell you what contaminants are in the water, but rather it gives you a fairly good overview of how pure the water is. Steam-distilled water, for example is high-purity water and usually reads at 0 to 5 ppm.
- A TDS test only tests for inorganic contaminants, which is only one type of contaminant. It does not test for organic contaminants, such as pesticides or solvents and it does not test for biological contaminants, such as bacteria and parasites.
- A TDS meter will typically measure in “ppm”, which stands for “parts per million”. This tells you how sensitive the equipment is. We will explain this further in another Ask Dr. Water article.

In summary, a TDS meter is a useful, simple method to get a general idea of how contaminated your water is.