

Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

October 3, 2016

Mr. Albert P. Hudson c/o K. Grace Stranch, Esq. Branstetter, Stranch & Jennings, PLLC The Freedom Center 223 Rosa L. Parks Avenue Suite 200 Nashville, Tennessee 37203

Dear Mr. Hudson:

On April 18, 2016, the Tennessee Valley Authority (TVA), the Tennessee Department of Environment and Conservation (TDEC), and the Southern Environmental Law Center (SELC) collected water samples from your well to analyze for hexavalent chromium. TVA, TDEC, and SELC also collected samples from your well in 2015. Except for the coliform results that TVA sent you in a letter dated December 2, 2015, all of the results from both the 2015 and 2016 samples show that your well water meets Tennessee Water Quality Standards for safe drinking water. TVA's sampling results from April 18 are enclosed, along with a cross-reference table to assist with reading the lab sheets.

The April 18 sampling event focused only on measuring concentrations of hexavalent chromium in your well water. Between TVA, TDEC, and SELC, a total of 18 samples of your well water were collected and analyzed. The results from these samples ranged from too low to be detected up to 100 parts-per-trillion. To put that level of measurement into perspective, one part per trillion is equivalent to detecting one drop of ink (0.05 mL) diluted into 20 Olympic-size swimming pools (2,500 m³), or measuring time to an accuracy of three seconds out of every hundred thousand years.

The EPA and Tennessee water quality standard for total chromium is 100 parts-per-billion (the same as 100,000 parts per trillion). As EPA explains on its web site (see https://www.epa.gov/dwstandardsregulations/chromium-drinking-water), hexavalent chromium currently is covered under this total chromium drinking water standard. In order to ensure that the greatest potential risk is addressed, EPA chose the standard of 100 parts-per-billion based on the assumption that a measurement of total chromium is all hexavalent chromium.

Compared to this 100 parts-per-billion standard, the highest hexavalent chromium sample result from your well on April 18 was 100 parts-per-trillion, which is 0.1 parts-per-billion.

Mr. Albert P. Hudson Page 2 October 3, 2016

To summarize, except for the coliform results reported to you on December 2, 2015, all other results from both the 2015 and 2016 samples show that your well water meets Tennessee Water Quality Standards for safe drinking water.

Sincerely,

Michael S. Clemmons Senior Project Manager Telephone (423) 751-4029 Email <u>mclemmons@tva.gov</u>

Enclosures