



Understanding Your Well Test Results

(House Street Disposal Site area—Belmont, MI)

October 2017

The Michigan Department of Environmental Quality (MDEQ) and Rose & Westra (also known as GZA GeoEnvironmental Inc.) tested your well water for a group of chemicals called per- and poly- fluoroalkyl substances (PFASs), sometimes known as perfluorinated chemicals (PFCs). PFASs were used by Wolverine Worldwide in the shoe-making process as waterproofing compounds. PFASs are very persistent, meaning they stay in the environment for a very long time. The Michigan Department of Health and Human Services (MDHHS) provides this fact sheet to help you understand your well water test results.

How do my results compare to the Lifetime Health Advisory (LTHA) Level?

- The U.S. Environmental Protection Agency (EPA) has set a LTHA level for two PFAS in drinking water: perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). The LTHA level is 70 parts per trillion (ppt) for PFOA and PFOS combined.
- The lab currently used reports your well test results in units called nanograms/liter (ng/L). The number 70 ppt is equal to 70 ng/L. Other labs may use different units to report well test results.

Can PFASs harm human health?

- No one can say for sure if drinking water that has PFASs in it will harm you.
- Studies in people who were exposed to PFASs found links between the chemicals and increased cholesterol, changes in the body's hormones and immune system, decreased fertility, and increased risk of certain cancers.
- Animals given high levels of PFASs showed changes to the thyroid, liver, and immune system, and harmful effects in fetal and newborn animals. Animal studies help scientists understand what could happen in people.
- Touching the water is not harmful.

What does MDHHS recommend if there are PFASs in my well water?

If you have been notified that PFASs are in your well water, MDHHS recommends you use a filter certified to reduce PFASs on your kitchen sink or use bottled water for drinking and cooking. These are both short-term solutions.

- Do not use your unfiltered well water for drinking, cooking, making baby formula or food, or washing fruits and vegetables.
- Touching the water will not harm you. You can bathe, do your dishes, launder your clothes, and clean with your water.

Understanding your PFAS well test results

To help you understand your well test results, an example of a well test results table is shown below. Your results table will include more PFASs and more columns.

Analyte Name	Result	MRL	Dil.
Perfluorooctanoic acid (PFOA)	42	1.8	1
Perfluroheptane sulfonic acid (PFHpS)	ND U	4.4	1
Perflurorononanoic acid (PFNA)	ND U	4.4	1
Perfluorooctane sulfonic acid (PFOS)	22	4.4	1

This example is based on the lab currently used; other labs may show results in a different way or with different units.

Analyte Name

- Your water sample was tested for the PFASs shown in this column.

Result

- The results were reported in ng/L. This information is found near the top right corner of your well test results page.
- If the result listed is a number, the lab found that specific PFAS in your water sample.
- If the result listed is ND, the lab did not detect, or find, that PFAS in your water sample. A “U” may be next to a ND to confirm that either the PFAS was not in the sample or the amount was so low the lab could not measure it.
- Some results might have a “E” or “J” next to them. Sometimes the lab equipment detects the PFAS but it’s difficult to accurately measure the amount in the sample. In that case, the lab estimates the amount of PFAS and shows this with the letter “E” or “J.”
- If the PFAS was also detected (found) in the blank, the lab will include a “B.” Blank samples are clean water samples used for quality control.
- If your water sample was diluted for testing, the lab will include a “D.” See the section under “Dil.”

MRL

- The Minimum Reporting Limit is the lowest amount of the PFAS that the lab’s equipment can reliably report.

Dil.

- If a “1” appears, the lab did not dilute, or thin down, your water sample when testing it. If a number larger than “1” appears, the PFAS was found in an amount too high for the lab equipment. In that case, your water sample was diluted so the lab could test it correctly.

Surrogate Name

- The section of your report that starts with this heading is part of the lab’s quality assurance report. These are not your well test results.

For more information

- The Agency for Toxic Substances and Disease Registry, has a website for these chemicals. Visit www.atsdr.cdc.gov/pfc
- Kent County Health Department has a website with information about PFASs at the House Street Disposal Site area. Visit www.accesskent.com/Health/PFAS/belmont.htm
- MDEQ/MDHHS also have a website with information on this site. Visit www.michigan.gov/belmont
- Call MDHHS at 1-800-648-6942.