



Township of Hillsborough

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New Jersey Private Well Testing Act Summary Results for Hillsborough

Many residents in Hillsborough Township get their potable water (aka “drinking water”) from a private well. Historically, potable wells were only required to be tested for quality after the well was first installed. After that, it was up to the resident to contact a water testing lab if they wanted to have the water tested. In 2002, New Jersey passed the Private Well Testing Act (PWTA), which made it a law that all potable wells must be tested for a wide range of possible parameters at the time of sale of the property, or every 5 years if the property is being leased.

NJDEP estimates that since the PWTA began in 2002, 25% of the state's approximately 400,000 private domestic potable wells have been tested by the PWTA. NJDEP has made available well test results for the years 2002 - 2022 (please note that individual PWTA results are not made public; results are grouped into 2 square mile grids of New Jersey. To access the complete PWTA site, see the link at the end of this document). This accumulated data is valuable, as it can be used to compare contaminants found in wells in a particular area and determine what wells should be tested for, in lieu of having the water tested for all possible contaminants, which is a good idea but costly.

Recently, the Hillsborough Health Department developed a report on potable wells in Hillsborough Township based on the PWTA data collected between 2002 and 2022 (to see this report in its entirety, please visit the Hillsborough Health Department website, or request a copy by contacting Mike Carr at mcarr@hillsborough-nj.org). This report shows the percent of wells tested in each 2 square mile grids of Hillsborough that exceeded NJ Safe Drinking Water Standards for several contaminants, and any parameter that exceeded in 10% or more of wells sampled have been highlighted in bold.

Findings of the Hillsborough Township PWTA Report

While several of the grids within Hillsborough exceeded 10% or more of the time for iron, manganese, and/or pH, these parameters are considered “Secondary”, or esthetical in nature. Again, while it is certainly advisable to follow suggested timelines for testing well water for all parameters, the PWTA report for Hillsborough indicates two “Primary” parameters, or of significant health concern, that may not often be thought of by homeowners.

One of the most significant findings of the PWTA report is that over 20% of wells sampled in Hillsborough Township exceed the state standards for Arsenic. Some 2 mile grids of Hillsborough exceeded Arsenic levels in up to 43% of wells tested. The highest levels were found in areas of the township closest to the Sourland Mountain region, which is understandable since Arsenic is naturally occurring and comes from decay of bedrock in the ground. Another note worth mentioning is that testing for Gross Alpha only became a requirement in 2018, the last year data for the report was collected, indicating its impact on wells in Hillsborough is still unknown. Similar to Arsenic, Gross Alpha is a combination of different radioactive isotopes that are naturally produced by the decay of bedrock.

Another item to note is that several contaminants have recently been added to the list of required parameters to be tested for during PWTA sampling. These include PFOA, PFOS, PFNA, PFAS, and SOC. While the number of wells that have been tested for these newly added parameters is limited (71 wells throughout the township), more than 10% have failed for both PFOS and PFOA.

This information is not made to alarm residents who have wells in Hillsborough, but to remind well owners of the importance of not only testing their wells regularly, but making sure that they are having the proper tests done. Also, it is important to remember that all data only represents a sampling of wells within the township.

Importance of Regular Well Testing

The Hillsborough Health Department strongly recommends that anyone with a private well should have it tested annually for bacteria and nitrates, and at least periodically for the full range of contaminants required by the PWTA. Additionally, it is suggested that wells be sampled for recently added parameters previously mentioned. Please see information below indicating suggested testing frequency.

Sources of Contamination, Health Impacts, & Remediation

The following is not a complete list of contamination, potential health impacts or remediation, but a list of the contaminants that were included in the PWTA report. For more information, please refer to NJDEP Private Well Testing Act.

Contaminant	Source	Potential Health Impact	Testing Frequency	Remediation
Nitrate	Naturally occurring, septic systems	Impairs ability of blood to carry oxygen.	Every other year	Reverse Osmosis
Fecal Coliform	Animal and human feces	Gastro-intestinal issues; dysentery	Every year	Chlorination; UV light
VOC	Gasoline, solvents, degreaser	Can cause cancer, damage cns & liver	At least once	Activated carbon; reverse osmosis
Gross Alpha	Naturally occurring	Risk of cancer & kidney damage	At least once	Ion exchange; reverse osmosis
Arsenic	Naturally occurring	Increased risk of cancer, diabetes, and cardiovascular disease	At least once	Distillation; Granular Ferric Adsorption
Iron	Naturally occurring	Some harmful bacteria require iron to grow	Every 5 years	Air stripping; ion exchange
Manganese	Naturally occurring	Causes problems with memory, attention, & learning	Every 5 years	Ion exchange
pH	Naturally occurring	Generally an aesthetic concern. Can leach metals into water.	Yearly	Acid Neutralizing filter; water softener

Certified Water Testing Laboratories

Below is a list of some of the water testing laboratories which practice in the area. This listing is for informational use only, and does not represent a specific Health Department endorsement. In addition, there should not be any implications derived from the order in which firms are listed. Additionally, more certified labs can be found online.

RAdata, Inc.	(973) 927-7303	www.radata.com
South Jersey Water Testing	(866) 875 - 3506	www.Sjwatertest.com
Eurofins QC Laboratories	(215) 355-3900	www.eurofinsus.com/qc
CRC Services, LLC	(732) 548-7363	
NJ Analytical Laboratories	(609) 737-3477	www.njal.com
All - State Well Testing Services	(908) 835-2510	www.all-stowelltesting.com
Garden State Laboratories	(800) 273-8901	www.gslabs.com

**** THE HILLSBOROUGH HEALTH DEPARTMENT, ALONG WITH RARITAN HEADWATERS, WILL BE CO-HOSTING WELL TESTING EVENTS AT THE HILLSBOROUGH MUNICIPAL BUILDING SEVERAL TIMES EACH YEAR. IF YOU HAVE A PRIVATE WELL AND WOULD LIKE TO HAVE IT TESTED, PLEASE CONTACT THE HILLSBOROUGH HEALTH DEPARTMENT TO CHECK FOR AN UPCOMING EVENT.**

*** It must be noted that in order to meet the requirements of the PWTA, samples must be taken by a certified professional and collected at the wellhead. If testing is only being done for the owner's knowledge, then samples may be taken from a tap or faucet.

For the complete Hillsborough Township PWTA report (2002-2022), please see "Private Well Testing Act, Full Report" under "Wells" at <https://www.hillsborough-nj.org/departments/health>

For the NJDEP PWTA site, see https://www.state.nj.us/dep/watersupply/pw_pwta.html