Readington Township Well Water Testing Program 2020

While commercial water companies are required by law to test customers' water, owners of private wells are on their own. Regular monitoring of water quality is critically important to ensuring a safe water supply. Local efforts to provide community-supported testing programs help prevent exposure to drinking water contaminants by making the testing process convenient and affordable.

Each year, Readington Township partners with Raritan Headwaters (RHA) to hold a water testing event enabling residents the opportunity to test their drinking water for a variety of contaminants. The event typically serves over two hundred households per year. The excellent rate of participation in these events is due in large part to the efforts of municipal staff in conducting outreach to the community. Thanks to Readington's Environmental Commission and Board of Health, the residents of Readington are familiar with this annual program and are alerted to the event each year.

To adapt to the challenges of 2020, the Township held Covid-safe, outdoor Community Well Testing events featuring a "Same-Day Pickup and Return" drive-through process. The 2020 Community Well Testing 'Van Drive-Through Days' were held outside the Readington Township Municipal Building on October 17, 20, and 28th and outside the Three Bridges Fire Company on October 21st and 27th. During Testing Days, RHA's distinctive blue van was staffed by Environmental Commission and Readington WaterWatch volunteers and Raritan Headwaters staff who greeted residents, answered questions, and



exchanged test kits safely through the passenger side windows. Participants had the option of choosing when to return the filled sample bottles- either the very same morning they picked up their kits or on another of the scheduled well test dates. Residents had access to online registration and payment for water test kits to make the process even more convenient. While online, they could also view complete details on types of sampling and detailed instructions on how to properly fill their sample bottles. This

year the Readington Community Well Test Program also offered an online "Ask the Experts" Questions and Answers Session on Friday, October 16th.

In total, 190 residents attended the 2020 testing event to pick up a test kit or get additional information on the program. Of these, 186 households took the next step and returned water samples for testing. The following chart is a summary of data collected from these 186 wells on Primary Contaminants of Concern:

Contaminant	# wells tested in 2020	Limit or MCL*	Range of results	# wells exceeding
			(ND=NonDetect)	MCL
Coliform bacteria	186	Absent	Absent-Present	34 (18%)
Nitrate	180	10 mg/L	ND-9.61 mg/L	0 (0%)
Lead	63	15 ppb	ND – 525 ppb	2 (3%)
Radon	44	2000 pCi/L**	ND-4903.9 pCi/L	12 (27%)
Gross Alpha	17	15 pCi/L	ND- 10.3 pCi/L	0 (0%)
Arsenic	102	5 ppb	ND-9.4 ppb	14 (13.7%)
E.coli	186	Absent	Absent-Present	5 (2.7%)

* Maximum Contaminant Level (MCL). The maximum level of a contaminant which is permitted in public water supplies. Maximum contaminant levels are specified in the Primary Drinking Water Standards set by EPA for contaminants that affect the safety of public drinking water.

** There is no standard set in NJ for radon in water. Standards set in other states in our region are used as guidelines. The most protective of these standards is 2000 pCi/L in New Hampshire.

There are approximately 5000 private wells in Readington Township. Under the New Jersey Private Well Testing Act (PWTA) which was signed into law in 2001, wells must be tested for an array of contaminants upon transfer of ownership or if there is a rental on the property. The NJDEP collects and publishes data on the results of the testing which may be explored at

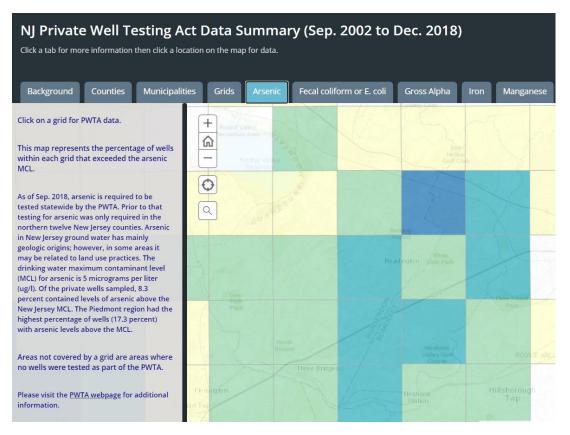
<u>https://www.nj.gov/dep/dsr/pwta/</u>. In Readington Township, 1631 wells (33%) have been tested as mandated under the PWTA between 2002 and 2018. The following table summarizes available data for Readington Township on the percent of exceedances for individual contaminants including the number of wells tested under PWTA.

Parameter	Readington Township			Hunterdon County	New Jersey
	# Wells	# Wells	Exceedance	Exceedance	Exceedance
	sampled	exceeding MCL	Rate	Rate	Rate
E. coli	1631	83	5.1%	3.2%	2.0%
Nitrate	1631	7	0.4%	0.7%	2.7%
Arsenic	1631	346	21.2%	16.3%	8.3%

Gross Alpha	1430	17	1.2%	5.5%	10.9%
VOC	1631	26	1.6%	0.6%	1.2%
Iron	1631	132	8.1%	17.5%	29.4%
Manganese	1631	55	3.4%	10.9%	19.9%
рН	1629	176	10.8%	27.4%	45.6%

Source: NJ Private Well Testing Act Data Summary (Sep. 2002 to Dec. 2018) NJDEP (2021)

https://njdep.maps.arcgis.com/apps/MapSeries/index.html?appid=826ec9fae77543caa582a787d5f088e 7



Map image from NJDEP Private Well Testing Act Data Summary (Sep. 2002 to Dec. 2018) https://njdep.maps.arcgis.com/apps/MapSeries/index.html?appid=826ec9fae77543caa582a787d5f088e

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Private well owners are responsible for the safety of their water and regular testing is the only way to know for certain that the water is safe to drink. Based on available data and current public health guidelines, residents of Readington Township are encouraged to test their wells annually for coliform bacteria and nitrates. Those residents living in older homes, built before 1987, are at greater risk of lead exposure from older pipes and solder and should test for lead in their water every 5 years even if they get their water from a public supply. Elevated levels of arsenic in well water (over 5ppb) impact about 20% of the

homes in Readington and carcinogenic volatile organic compounds may also be present, so it is best to test for these at least once but ideally every 5 years.

Furthermore, residents can protect their water supply by carefully managing activities on their property and near the well. This includes keeping hazardous chemicals out of septic systems, pumping their septic system every 3 years, and limiting the application of fertilizers to lawns and gardens. For more information on RHA's Community Well Testing Program, visit <u>www.testmywell.org</u>.

