



MEMO

To: Town of Wales Town Board
From: Robert D. Klavoon, PE Town Engineer
Date: August 4, 2023
RE: Well Water Contamination due to Natural Gas Wells

At the request of the Town of Wales Town Board, Wendel investigated potential sources of well water contamination, specifically due to natural gas wells. Wendel had a opportunity to review the 2020 Source Water Protection Plan completed by the NY Rural Water Association. In addition, our office discussed this issue with the NYSDEC and Erie County Department of Health (ECDOH). The following is a summary of our findings.

2020 NY Rural Water Report

- Report is based upon a 2014 survey
- Survey gathered information on
 - Well depth
 - Yield
 - Water Quality Concerns (smell, hardness, etc)
 - Treatment Devices
- 418 households responded to the survey
 - Online and through the mail
- Contamination Sources
 - Spills
 - Non Point Sources
 - Gas Wells

Erie County Department of Health

- ECDOH does not currently offer any free drinking water testing programs. Residents can take their own samples and submit to Public Health lab for analysis or hire a private lab.
- For testing of wells, see ECDOH's webpage <https://www3.erie.gov/envhealth/water-and-wells>
 - Scroll down to the Frequently Asked Questions section; the 6th FAQ item has recommended testing.
 - The 7th FAQ item includes a link to the Public Health Laboratory. The fee schedule and lab requisition form for Environmental testing are on the lab's webpage.
- ECDOH is in the process of setting up a water sampling program for private water wells. Sampling will include bacteriological, nitrate and lead. Estimated to be ready by Fall/Winter 2023.
- ECDOH is willing to answer questions from residents with concerns regarding their water wells and supply them with information regarding construction, pollution sources. They can also provide insight into any results for water analysis that they receive.



NYS Department of Environmental Conservation

- 3 Orphaned Gas Wells in the Town of Wales

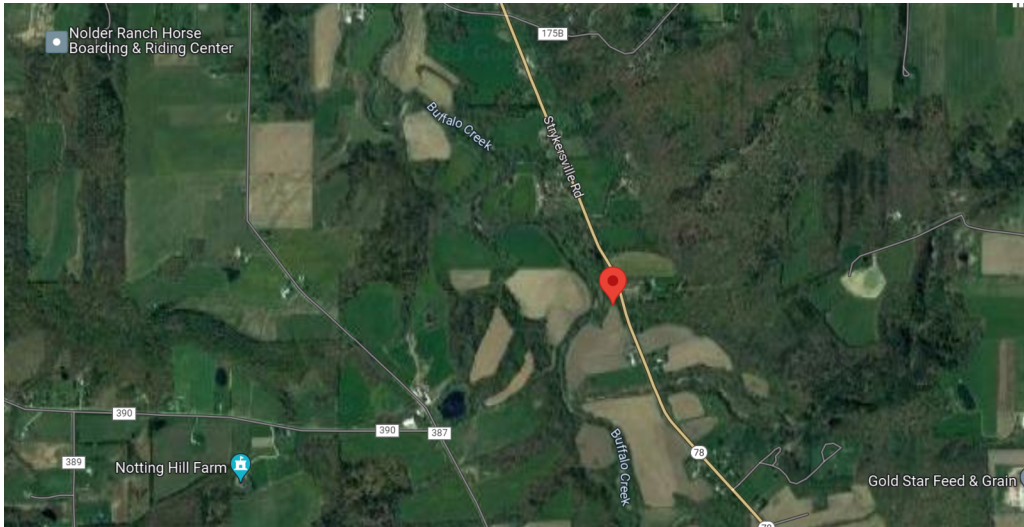
Map #	API Well Number	Well Name	Company Name	Well Type	Well Status
1	31029037570000	Forge Frank and Nellie 1	Unknown	Gas Development	Unknown Located
2	31029069060000	Foss (IGC) 1471	Unknown	Gas Development	Unknown Not Found
3	31029156000000	Clark 1	Clark Ernest	Gas Development	Unknown Located

- Two have been located and inspected, the third is completely unknown. This means the NYSDEC has a record that the well was drilled at some point in the past, but have not been able to locate where it is or what it's current status is. It is possible the well was already plugged at some point before the DEC was formed and records were kept, or it could still be out there in an undiscovered location.
- The NYSDEC does not have any set schedule for inspections of orphan wells.
 - For orphan wells, the NYSDEC does an initial inspection to locate them, and they are also scored at that point. This is done using a standard set of criteria (is the well leaking, how close is it to sensitive receptors like homes or water supplies, etc.), which is used to determine the priority for any publicly funded plugging that takes place.
 - For these three wells specifically, the two located wells were last inspected at the end of 2021, and the Unknown Not Found well was last searched for in July 2020.
- The Town of Wales is not responsible for plugging the wells. Plugging liability falls in the following order:
 - Owner/Operator, if they still exist;
 - Mineral rights owner;
 - Surface owner (if different than mineral rights owner).
- The Town is not advised if additional wells are added.
 - Public database available at <https://www.dec.ny.gov/cfm/xtapps/GasOil/>.
- As long as the landowner has not been using the well to their own benefit (such as heating their home), the NYSDEC would consider it orphaned and it would be eligible for plugging with any public funds that are available.
 - The NYSDEC focuses on the highest risk wells first, so wells may move up or down as conditions change or more wells are discovered.
- NY Works Well Plugging program
 - This program uses funds allocated in the State budget to plug orphaned oil & gas wells in the state using State contracts. Wells to be plugged are determined based on the score it receives (described above), as well as the willingness of the landowners to allow NYSDEC access in order to perform the work. If a landowner denies us access to plug the well, the NYSEC will not take further action.
 - These are NYSDEC funds, not Town or private citizens funds to be used.

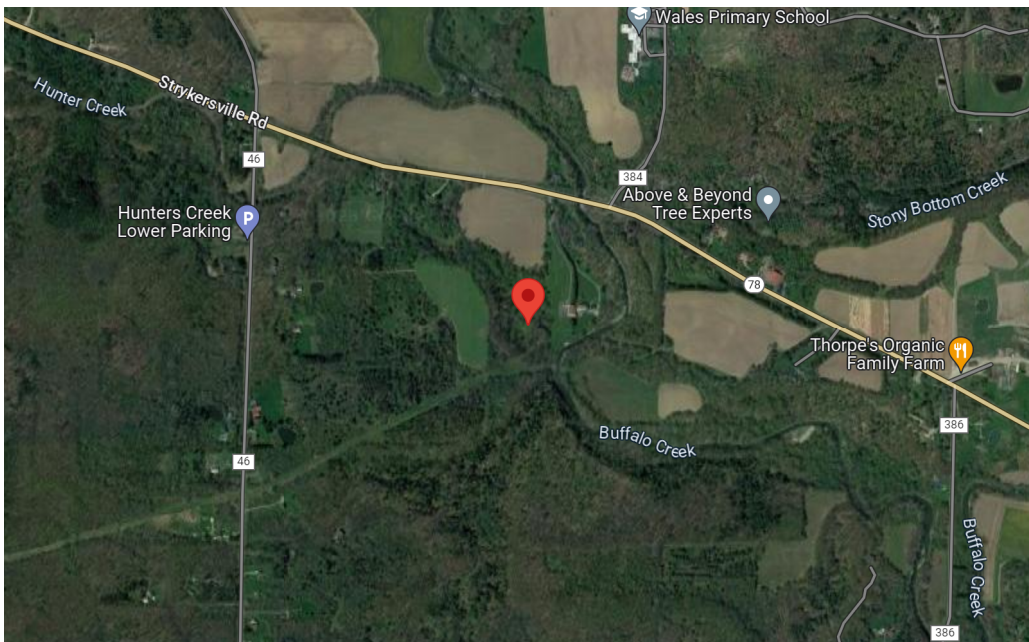
Conclusions/Recommendations

- The potential for well water contamination due to uncapped gas wells is low.
- The Town should post the links to the Erie County Department of Health website on water quality on the Town's website.
- Wendel will report back in early 2024 once the ECDOH has the well water quality testing program up and running.

Gas Well Location #1: Frank and Nellie Forge



Gas Well Location #2: Foss



Gas Well Location #3: Clark

