

Jordan Road Neighborhood Groundwater Assessment Summary

Background

Jordan Road is located just west of South Meridian St and north of Southport Rd in the Linden Wood neighborhood of Perry Township. Previous sampling in this area had revealed elevated arsenic levels, so letters were sent to thirty-one residences requesting permission to evaluate the well water quality. The survey took place from April through August of 2021.

Survey Results

Out of 31 properties surveyed, only 3 were sampled, resulting in a 9.7% response rate.

Sampling Results

Bacteria

Coliform bacteria were found in two of the three samples for a 66.6% unsatisfactory rate. This rate is fairly high compared to other surveys, but difficult to determine due to the small number of samples.

VOCs

No volatile organic compounds were found above detection limits in any of the samples taken.

Anions

Well samples were tested for the following anions: Chloride, Fluoride, Nitrates, Nitrites, Phosphates, and Sulfates. All anions were below the Maximum Contaminant Levels (MCLs).

<u>Metals</u>

Samples were analyzed for the following metals: Arsenic, Barium, Boron, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Selenium, Thallium, and Zinc. The only metal detected above the MCL was Arsenic, which has an MCL of 10 parts per billion (ppb). Arsenic was elevated at 15.5 ppb in one sample or 33% of the samples taken. The Arsenic results ranged from 2.9 ppb to 16.5 ppb, with the average being 7.6 ppb. Fact sheets on Arsenic in drinking water were distributed to those residences.

Conclusions

In conclusion, the two contaminants found during this groundwater survey were coliform bacteria and Arsenic. The presence of Arsenic does not appear to be from a manufacturing/manmade source and is similar in detection levels with other areas of naturally occurring Arsenic throughout the county. Coliform bacteria are present in nearly half of all well samples throughout the county, so the presence of coliform in two out of three wells sampled is not a concern. The major limitation was the low response rate and few samples collected, which makes characterizing the groundwater quality difficult.



Map showing properties surveyed (green) and those sampled (pink)