



# 2023 Millersville Neighborhood Groundwater Assessment Summary

## Background

The Marion County Public Health Department selected the Millersville neighborhood to assess the groundwater quality and educate homeowners on well maintenance. The Millersville neighborhood that was surveyed is bordered by 48<sup>th</sup> St to the south, Allisonville to the west, 50<sup>th</sup> St to the north, and Binford Blvd to the east. It was selected due to the lack of data for this area and the survey was conducted throughout the summer of 2023.

## Survey Results

A total of 74 properties were selected for this survey and invitation letters were mailed out. Of the 74 homes, 23 requested well water samples, resulting in a 31% response rate. Samples were analyzed at the MCPHD Laboratory and results were compared to EPA Drinking Water Standards.

## Sampling Results

### Bacteria

*E. coli* bacteria were not found in any samples, but total coliform bacteria were present in wells at 9 properties, or 39% of samples. Coliform bacteria are used as an indicator, meaning while its presence does not cause illness there could potentially be other disease-causing organisms in the water. Chlorination instructions were sent out with the lab reports and follow-up inspections were scheduled.

### VOCs

No volatile organic compounds were found above detection limits in any of the samples taken, though it should be noted that three samples were unable to be processed.

### Anions

Well samples were tested for the following anions: Chloride, Fluoride, Nitrates, Nitrites, Phosphates, and Sulfates. One sample had a Chloride level above the Maximum Contaminant Level (MCL) of 250 mg/L set by EPA. Nitrates were found at low levels at 17 of the 23 properties with a geometric mean of 1.7 mg/L; the MCL for Nitrates is 10 mg/L.

### Metals

Samples were analyzed for Arsenic, Barium, Boron, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Selenium, Thallium, and Zinc. Arsenic was detected in one sample but was below the MCL of 10 ug/L; Arsenic is a naturally occurring element and is common in wells sampled in Marion County.

## Conclusions

This survey found coliform bacteria in 39% of samples, which is consistent with other well surveys. Results also showed low levels of Nitrates in 74% of samples, Arsenic in one sample, and high Chloride level in one sample. For a free test, please call MCPHD's Water Quality Department at 317-221-2266.