

2022 Indian Lake Neighborhood Groundwater Assessment Summary

Background

Each year, Marion County Public Health Department selects several neighborhoods to perform groundwater assessments as an opportunity to gather information and educate homeowners on well care. The Indian Lake neighborhood was selected this year because of its proximity to a lake and lack of data for this area.

Survey Results

A total of 53 properties were selected for this survey and invitation letters were mailed out. Of the 53 homes, 12 requested well water samples. Samples were analyzed at the MCPHD Laboratory and results were compared to EPA Drinking Water Standards. It should be noted that several houses in the neighborhood have connected to the municipal water source and only use well water for non-drinking purposes, or the well has been sealed.

Sampling Results

Bacteria

E. coli bacteria were not found in any samples, but total coliform bacteria were present in wells at 4 properties, or 33% of samples. Coliform bacteria are used as an indicator, meaning that 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.

<u>VOCs</u>

No volatile organic compounds were found above detection limits in any of the samples taken, though it should be noted that four samples were lost due to laboratory equipment problems.

Anions

Well samples were tested for the following anions: Chloride, Fluoride, Nitrates, Nitrites, Phosphates, and Sulfates. All anions detected were below the Maximum Contaminant Levels (MCLs). Fluoride was detected at low levels in 11 wells ranging from 0.61 parts per million (ppm) to 0.96 ppm, with the geometric mean being 0.63 ppm. The MCL for Fluoride is 4 ppm.

<u>Metals</u>

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 three samples at levels below MCL; Arsenic is a naturally occurring element and is common in wells sampled in Marion County. One sample showed an elevated level of Lead, but this sample was from a garage spigot so the Lead was likely leaching from plumbing fixtures rather than groundwater; the owner was advised to not use this source for drinking water.

Conclusions

This survey found coliform bacteria in 33% of samples, Arsenic in 25% of samples, and acceptable levels of Fluoride in 92% of samples. For a free test, please call MCPHD's Water Quality Department at 317-221-2266.

Survey Area for Indian Lake Groundwater Assessment



Survey Area Homes Surveyed

