

## 2019 Chestnut Lane Neighborhood Groundwater Assessment Summary

### Background

In the past, elevated levels of Arsenic have been detected in groundwater in the Chestnut Lane/Davis Road/Troy Avenue area. A sampling survey was conducted in this area to look for elevated levels of Arsenic and also determine the general quality of the groundwater in the area. The samples were analyzed for bacteria, metals, anions, and volatile organic compounds (VOCs). The area surveyed is located on the southeast side of Indianapolis, IN in Franklin Township, see attached map. Letters about the survey and sampling were sent to 36 properties. Samples were taken at the request of the residents and also during a door-to-door follow up with residents who hadn't yet responded. The samples were taken during the summer months of 2019.

### Survey Results

Of the 36 properties that were sent a survey letter, 17 partook in the survey - a response rate of approximately 47%. Six of those 17 who responded were during door-to-door requests for sampling. One property was sampled just prior to beginning the survey and was unoccupied. There was one additional unoccupied property and one property with "No Trespassing" signs.

### Sampling Results

#### Bacteria

Of the 17 properties sampled, six samples (35%) showed the presence of coliform bacteria. No E.coli was detected in any of the samples. For the samples that came back with coliform bacteria, the residents were notified and chlorination instructions were sent out with results. Follow up sampling was offered and performed when requested by the resident.

#### Volatile Organic Compounds

Results for volatile organic compounds were all below detection limits.

#### Anions

All anions tested for were below the EPA's maximum contaminant levels (MCLs).

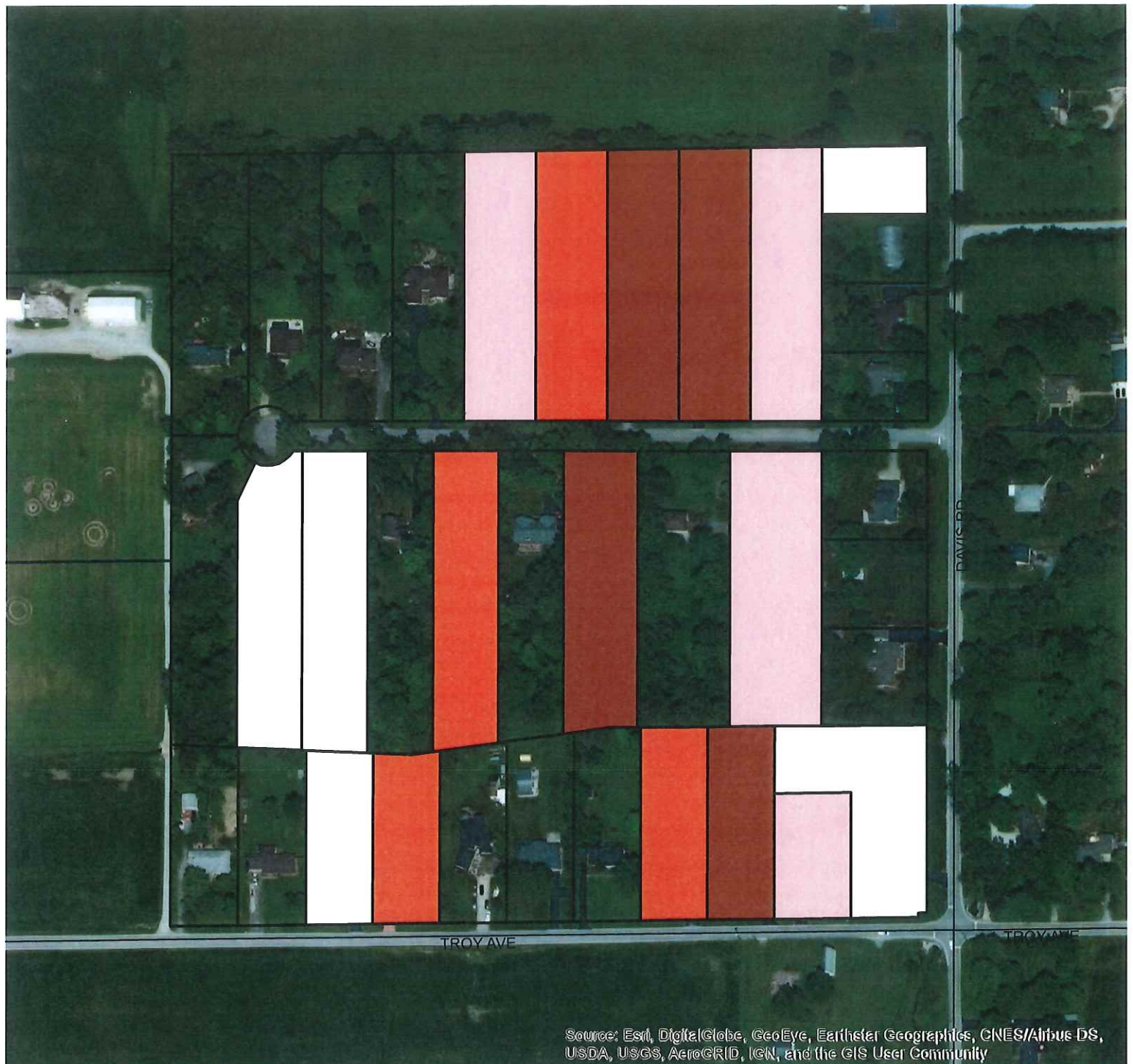
#### Metals

Arsenic was detected in 12 of the 17 samples, or approximately 70% of the properties. Of the 12 properties where arsenic was detected, four were reported to have levels of arsenic above the EPA's MCL of 10 parts per billion (ppb). One of those four had a reverse osmosis system which lowered the arsenic level to below the MCL. At five of the 17 properties, the arsenic level was below detection limits. The range of the arsenic level when it was detected was 2.8 ppb to 15 ppb, with an average concentration of 8.3 ppb. Well depth information was unavailable for six of the 17 properties. The well depths ranged from 52 feet to 221 feet, with an average depth of 104 feet. All other metals were below the EPA's MCLs.

### Conclusions

The primary focus of this groundwater survey was to look for elevated levels of Arsenic in the area. The results from the samples showed that Arsenic was detected in 12 of the 17 properties sampled (70%) and elevated levels, greater than 10 ppb, were detected in four of the 17 properties (24%). The levels of Arsenic did not seem to correlate with the depth of the wells in this study. When arsenic was detected, fact sheets with information about the potential health effects of Arsenic exposure and how to treat for Arsenic were sent out with the results.

# Chestnut Lane Groundwater Survey Summer 2019



0 0.02 0.04 0.08 0.12 0.16 Miles

## Parcels

- Survey Area
- > 10 ug/L
- 5-10 ug/L
- 1-5 ug/L
- BDL
- Major Streets