

NON LEAD/NON LEAD

SAMPLING STATION

LEAD/NON LEAD

🔀 LEAD/LEAD

BECAUSE IT IS PRACTICALLY IMPOSSIBLE TO DETERMINE THE LEAD CONTENT OF AN INSTALLED FIXTURE, FITTING OR PIPE, IT SHOULD BE ASSUMED THAT THE MANUFACTURE OR INSTALLATION DATE IS THE PRIMARY INDICATOR OF THE LEAD CONTENT. THEREFORE, THE CHARACTERISTICS OF BUILDINGS AND PIPING SOLDER OR FIXTURES WOULD BE BUILDINGS IN OHIO BUILT PRIOR TO 1998 OR THAT USE PLUMBING MATERIAL OR SOLDER MANUFACTURED BEFORE 1998 MAY HAVE MATERIALS WITH GREATER THAN 8% LEAD AND ARE AT A HIGHER RISK OF CONTRIBUTING LEAD TO THE DRINKING WATER THAN MATERIALS MANUFACTURED AFTER 1998. IN ADDITION, BUILDINGS BUILT AND PLUMBING MATERIALS MANUFACTURED AFTER 2014 WERE REQUIRED TO HAVE LESS THAN 0.25% LEAD BY WEIGHT AND HAVE THE LOWEST RISK FOR CONTRIBUTING LEAD TO THE DRINKING WATER. IT SHOULD BE NOTED HOWEVER THAT, ALTHOUGH PROHIBITED, SOME USE OF LEADED SOLDER OR LEADED COMPONENTS MAY HAVE OCCURRED AFTER THE PROHIBITIONS BECAME EFFECTIVE.

| UPPERTON | DR 4" WT R | W.V. | <u>MH EX 8</u> | <u>" san m</u> |
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| | V | ALCOURT ST | | |
| EX CONTRO VALVE FH & VALVE EX 6" GATE VALVE EX UG ELECTRIC | EX CONTROL VALVE | | | 2" WTR 2" WTR |
| EX 6" GATE | | PINEMOUNT DR | | |
| | | | — — E/P — _ | |
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PINEVIEW ESTATES MHP PUBLIC WATER SYSTEM # OH5702212

MAINS CATEGORY I - C900/DUCTILE IRON PIPE

CATEGORY 2 - SCH 40 GLUED CATEGORY 3 - SDR 21 GASKETED CATEGORY 4 - SDR 21 GLUED

NOTE:



Pineview Pines Water System Narrative for Lead, Solder & Fixtures

The information contained in this narrative and the system map provided was developed from previous records, actual field survey, the system operator, maintenance personnel and direct knowledge of Jones-Warner Consultants (JWCI) who prepared this document. The direct knowledge is from the recent and ongoing activities at Pineview Pines in 2016 and 2017, upgrading the facility.

Water Mains

The map depicts four categories of water mains. Category 1 is comprised of Ductile Iron Pipe and PVC C-900 with compression joint gaskets. Category 2 is comprised of Schedule 40 PVC with glued joints. Category 3 is comprised of SDR 21 PVC with gasketed joints. Category 4 is comprised of SDR 21 PVC with glued joints. Each category is depicted with an identifier color as indicated in the Table on the Map.

WELL FIELD

The water main between the east and west well is newly installed 4-inch C900 PVC with gasketed joints. The piping inside each well vault is newly installed ductile iron with gasketed joints.

DISTRIBUTION SYSTEM

The distribution system is supplied from the Well House through the east well vault utilizing a 6inch pipe. Newly installed ductile iron with gasketed joints exits the east vault and transitions to 6-inch Schedule 40 PVC with glued joints. The 6 inch line goes west on Upperton towards Pinemount Circle. It then loops around Pinemount Circle to the southwestern terminus.

The water mains supplying Pinemount Drive, Valcourt Street, Limerock Street, and the north side of Upperton Drive are 2-inch SDR 21 PVC with glued joints.

There is a 4-inch line coming from the 6-inch line in Upperton near the well house that services Upperton Drive to the south. The 4-inch line is SDR 21 PVC with gasketed joints. There are several 1-inch mains connected to the 4-inch line providing service to residents on Upperton Drive. The 1-inch lines were found to be SDR 21 PVC with glued joints.

All water mains are depicted on the map. Some of these lines are new within the system and the remainder which are older, are all comprised of either ductile iron pipe or PVC pipe. Based on our knowledge of these mains, we are confident that the water mains indicated above contain no lead joints or lead appurtenances.

Service Lines

Based upon field exploration during the recent distribution system improvement, when Pineview MHP was initially built the service branches were comprised of SDR 21 PVC with glued joints. The SDR 21 services are connected to galvanized iron/steel near each trailer pad and then transitions to PVC or copper within each trailer unit.

Due to maintenance issues of galvanized iron/steel, several services within the MHP have been upgraded to copper. However, permanent records have not been located. At this time, we do not have information indicating the extent of the replacement.

Also, due to the time frame of installation and considering the type of material and joints, we are confident that the service taps and service lines contain no lead from the main to the each trailer.

To the best of our knowledge, all service lines connected to the mains in Pineview Pines are all constructed of plastic, galvanized steel, or copper.

"It is important to also discuss the galvanized iron/steel piping. Galvanized iron pipes are actually steel pipes that are coated with a protective layer of zinc. Over many years, the zinc erodes from the galvanized pipe. Corrosion can build up on the inside walls of the galvanized piping and therefore create the potential for lead to accumulate over time. As galvanized pipes corrode and form rust, lead that has accumulated over decades is likely to be found deep in the interior walls of rusty pipe. Galvanized pipes may continue to serve as a lead source in drinking water long after all other sources of lead have been removed, including lead service lines and fixtures."

However, because it is practically impossible to determine the lead content of an installed fixture, fitting or pipe, it should be assumed that the manufacture or installation date is the primary indicator of the lead content. Therefore, the characteristics of buildings and piping solder or fixtures would be buildings in Ohio built prior to 1998 or that use plumbing material or solder manufactured before 1998 may have materials with greater than 8% lead and are at a higher risk of contributing lead to the drinking water than materials manufactured after 1998. In addition, buildings built and plumbing materials manufactured after 2014 were required to have less than 0.25% lead by weight and have the lowest risk for contributing lead to the drinking water. It should be noted however that, although prohibited, some use of leaded solder or leaded components may have occurred after the prohibitions became effective.

It is also important to note we are not aware of any historical lead issues at Pineview Pines MHP. Testing of the source water could be performed to identify if lead is present at the source. For these reasons, while we do not anticipate lead in the services, we are classifying all service branched as UNKNOWN.

Summary

In 2016 due to the park being in receivership and past water issues, JWCI did an evaluation of the water system. JWCI further was authorized to design and manage the construction of multiple improvements within the well field, water plant building and distribution system. Based on our evaluation and knowledge of the mobile home park, we feel with the a strong level of confidence that the site does not contain lead.

We believe this approach complies with the Agency's requirement for "community water systems to be conservative in their estimates and assume that lead could have been used for service line materials unless the age of the area or specific information exists to rule out lead."

Respectfully submitted,

Jones-Warner Consultants, Inc. for Pineview Pines Mobile Home Park