



## Lead Testing in Drinking Water

Site:

Upper Elementary School  
312 N. Center Street  
Forrest, IL 61741

Local Education Agency:  
Prairie Central C.U.S.D. 8

Completion Date:  
December 21, 2017

IDEAL Number:  
21410D



## Lead Testing in Drinking Water

### Public Act 099-0922

Public Act 099-0922, was passed into law in January 2017. The Act requires the Local Education Agency (LEA) to test for lead in all water sources used for cooking and drinking in schools built on or before January 1, 2000, where more than 10 pre-kindergarten through 5<sup>th</sup> grade children are present. The timeframe for compliance is December 31, 2017, for buildings constructed prior to January 1, 1987; and December 31, 2018, for those built between January 2, 1987 and January 1, 2000. Water samples are required to be analyzed by a method approved by the Illinois Environmental Protection Agency (IEPA) that provides a minimum reporting limit of 2 parts per billion (ppb). Notifications are required. Mitigation may be required based on test results. A Water Quality Management Plan (WQMP) is required.

### Scope of Service

On December 21, 2017, Ideal Environmental Engineering (IDEAL) performed water sampling at Upper Elementary School in Forrest, IL at the request of the LEA. IDEAL's scope of service was to provide testing and analysis for lead in drinking water in accordance with Illinois Public Act 099-0922 and to prepare and submit reports for the water testing to the LEA and IDPH.

This report is presented based on the Act. IDEAL's service excluded determining whether a tested building is subject to the Act. IDEAL recommends following the Act's requirements for all buildings tested, even if a building does not meet the Act's definition of a school building.

### Sampling Methodology

Prior to sampling, in order to verify that the required 8-18 hour water stagnation period had been met, school personnel provided IDEAL's water collector with the date and time the plumbing system had last been used. The date and time provided are recorded on the chain of custody (COC).

The water source locations were provided to IDEAL by the LEA. For each source, a first-draw 250 milliliter (mL) sample of cold water was collected in a bottle provided by an IEPA-approved laboratory. A first-draw sample is the first amount of water collected from a source. After the first draw was collected, the source was flushed for 30 seconds, followed by the collection of a second-draw 250 mL sample of water. This second sample is called a flush sample. If multiple faucets use the same drain, only one second-draw (flush) sample may have been collected.

Each bottle was placed in a position that allowed for the collection of all of the water. Care was taken to prevent overflow. Each bottle was labeled with a unique identifier (sample ID). The sample ID was recorded on the COC, which lists the location of the sample, source of the sample, and the date and time the sample was collected.

The water bottles were delivered—with the COC to show the relinquishment and receipt of the samples—to an IEPA-accredited laboratory for analysis. The laboratory's accreditation was reviewed by IDEAL to ensure that it was current for an IEPA-approved method of analysis for lead in drinking water.



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**Summary of Sampling**

34 water samples were collected from 17 sources. All results are shown in Table 1.1.

**Table 1.1: All Sample Results**

<b>Table 1.1 Sample ID</b>	<b>Sample Location Description</b>	<b>Fixture Type</b>	<b>Sample Type</b>	<b>Concentration</b>
1 UFS	Hall by Room 105 - Right	DF - Drinking Fountain	First Draw	ND
1 UFF	Hall by Room 105 - Right	DF - Drinking Fountain	Flush	ND
2 UFS	Hall by Room 105 - Left	DF - Drinking Fountain	First Draw	ND
2 UFF	Hall by Room 105 - Left	DF - Drinking Fountain	Flush	ND
3 UFS	Room 107 - Back Room	S - Sink	First Draw	6.95 ppb
3 UFF	Room 107 - Back Room	S - Sink	Flush	ND
4 UFS	Lounge	S - Sink	First Draw	8.60 ppb
4 UFF	Lounge	S - Sink	Flush	ND
5 UFS	Hall by Room 110 - Right	DF - Drinking Fountain	First Draw	ND
5 UFF	Hall by Room 110 - Right	DF - Drinking Fountain	Flush	ND
6 UFS	Hall by Room 110 - Left	DF - Drinking Fountain	First Draw	ND
6 UFF	Hall by Room 110 - Left	DF - Drinking Fountain	Flush	ND
7 UFS	Old Unit Office	S - Sink	First Draw	5.96 ppb
7 UFF	Old Unit Office	S - Sink	Flush	ND
8 UFS	Room 110	S - Sink	First Draw	4.04 ppb
8 UFF	Room 110	S - Sink	Flush	ND
9 UFS	Room 111	S - Sink	First Draw	4.72 ppb
9 UFF	Room 111	S - Sink	Flush	ND
10 UFS	Room 115 1/2 - Old Science Room	S - Sink	First Draw	6.68 ppb
10 UFF	Room 115 1/2 - Old Science Room	S - Sink	Flush	ND
11 UFS	Kitchen	KS - Kitchen Sink	First Draw	2.50 ppb
11 UFF	Kitchen	KS - Kitchen Sink	Flush	ND
12 UFS	Commons - North	DF - Drinking Fountain	First Draw	ND
12 UFF	Commons - North	DF - Drinking Fountain	Flush	ND
13 UFS	Commons - South	DF - Drinking Fountain	First Draw	ND
13 UFF	Commons - South	DF - Drinking Fountain	Flush	ND
14 UFS	Hall by Concessions & Girls' R.R.	DF - Drinking Fountain	First Draw	2.81 ppb
14 UFF	Hall by Concessions & Girls' R.R.	DF - Drinking Fountain	Flush	ND
15 UFS	Nurse Office – Restroom*	S - Sink	First Draw	ND
15 UFF	Nurse Office – Restroom*	S - Sink	Flush	5.46 ppb



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Table 1.1 Sample ID	Sample Location Description	Fixture Type	Sample Type	Concentration
16 UFS	Art Room - Right	S - Sink	First Draw	ND
16 UFF	Art Room - Right	S - Sink	Flush	ND
17 UFS	Art Room - Left	S - Sink	First Draw	2.83 ppb
17 UFF	Art Room - Left	S - Sink	Flush	3.41 ppb
ND = None Detected				

\*The hot side was sampled, as the cold side was inoperable.

Please Note: The gym drinking fountain was inoperable at the time of sampling.

