

LEAD & COPPER OCCURRENCE IN OUR DRINKING WATER



Jackson Energy Authority constantly strives to not only protect our water supply, but also provide our customers with the safest, most reliable drinking water supply at the highest quality. However, some homes have plumbing conditions that have caused lead levels to exceed action limits in the past. The latest water samples taken inside homes showed lead and copper levels to be far below levels of concern.

LEAD RESULTS

Record #	Site ID #	Results (ppb)
1	19	0.9
2	2	0.9
3	8	0.9
4	23	0.9
5	46	0.9
6	10	0.9
7	52	0.9
8	54	0.9
9	5	0.9
10	64	0.9
11	45	0.9
12	60	0.9
13	76	0.9
14	59	0.9
15	72	0.9
16	74	0.9
17	63	0.9
18	25	0.9
19	24	0.9
20	27	0.9
21	28	0.9
22	34	1.0
23	33	1.0
24	30	1.0
25	26	1.2
26	*3	1.3
27	21	1.5
28	53	2.2
29	61	3.5
30	38	9.9

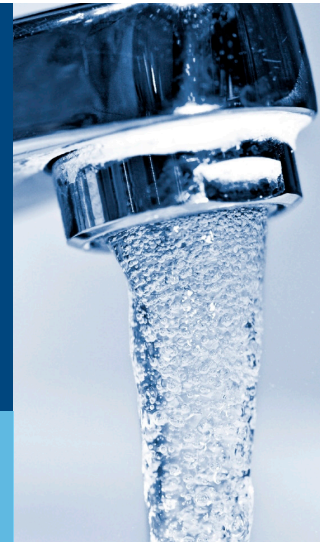
90th Percentile = 30 x 0.9 = 27 or sample #27
1.48 ppb (parts per billion) or 0.00148 ppm (parts per million)

COPPER RESULTS

Record #	Site ID #	Results (ppb)
1	3	2.5
2	54	2.5
3	27	2.6
4	52	2.7
5	19	2.9
6	10	5.3
7	74	5.5
8	23	5.7
9	26	6.7
10	30	6.8
11	76	7.9
12	72	9.0
13	63	9.5
14	61	11.0
15	25	12.6
16	53	15.0
17	64	16.9
18	2	18.5
19	8	20.4
20	45	21.2
21	60	22.2
22	46	24.5
23	28	27.9
24	59	30.5
25	33	38.6
26	5	61.6
27	21	64.9
28	24	71.8
29	34	97.2
30	38	185.0

90th Percentile = 30 x 0.9 = 27 or sample #27
64.9 ppb (parts per billion) or 0.0649ppm (parts per million)

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome plated brass faucets, and, in some cases, pipes or service lines made of lead that connect your house to the water main. In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8%. When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.



QUESTIONS? PLEASE CALL OUR WATER QUALITY LAB AT 731-422-7522. TO GET THE COMPLETE REPORT ON WATER QUALITY, VISIT WWW.JAXENERGY.COM/JEACCR.

Despite our best efforts to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings could be high. To find out whether you need to take action in your own home, have your drinking water tested by an EPA certified water testing lab to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste, or smell lead in drinking water. If a water test indicates that the drinking water drawn from a tap in your home contains lead above 15 ppb, then you should take the following precautions:

FLUSH YOUR TAP

Any time the water in a faucet has gone unused for more than six hours, the faucet should be flushed before using it for drinking or cooking. It usually uses less than one or two gallons of water and costs about 50¢ a month. Simply run the cold water faucet until the water gets noticeably colder, usually about 15-30 seconds.

Flush out any debris that has accumulated over time in your faucet aerators. Unscrew the aerator from the bottom of the faucet and run the cold water for three to five minutes.

If your house has a lead service line to the water main, you may have to flush the water for a longer time - perhaps one minute - before drinking. Even though flushing the toilet or showering flushes water through a portion of your home's plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking.

If you live in a multi-level apartment or building, letting the water flow before using it may not work to lessen your risk from lead. The plumbing systems have more, and sometimes larger, pipes than smaller buildings. Ask your landlord for help in locating the source of the lead and for advice on reducing the lead level.

Use only water from the cold water tap for drinking, cooking and especially making baby formula. Hot water is likely to contain higher levels of lead. Run cold water until it gets as cold as possible. Boiling water will not get rid of lead contamination.

CHECK YOUR HOMES' PLUMBING

The best way to determine if your home's plumbing contains lead solder, lead pipes or pipe fittings that contain lead or if the service line from the water main to your home/apartment is to contact the plumbing contractor who installed the line or by hiring a licensed plumber to perform an inspection. Lead solder was banned in 1986, so if any is found in your copper piping, contact the Tennessee Department of Environment and Conservation at 888-891-TDEC (8332) to report the violation.

CHECK YOUR HOMES' WIRING

Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere.

DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.

To get information on lead levels found in your drinking water, contact Jackson's TDEC (Tennessee Department of Environment and Conservation) Field Office at (731) 512-1200 or Jackson Energy Authority. Follow the links below for drinking water information and how you can reduce lead exposure from all sources.

Safe Drinking Water Hotline 800-426-4791 | www.epa.gov/safewater/labs | <https://www.epa.gov/ground-water-and-drinking-water>
www.tennessee.gov/environment/topic/wr-wq-dw-drinking-water | www.tennessee.gov/environment/article/wr-wq-dw-lead-and-copper-rule