

# Water Quality Lab Report

#### **Prepared For:**

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### ORDER

### SAMPLE

Kit Type: Safe Home® PREMIUM

Order Number: 2024050003

**Report Date:** 05.17.24

Sample Collected: 05.01.24

Sample Received: 05.06.24

**Notes:** We use this test to test the water at our Lake. Lake Elbo in Manhattan KS. It is private lake with houses around it. We also have a cattle ranch upstream from us. We want to make sure the water is healthy for the humans and animals.

Analysis performed by our EPA-certified laboratory: Environmental Laboratories, Inc., Madison, IN 47250 Certification Numbers: M-39-01, C-39-01



# **Report Key**

This page is intended to help you gain clarity about the contents of your lab report. If you have further questions beyond the scope of this report, please contact us and one of our drinking water specialists will gladly assist you.

#### **REPORT TERMINOLOGY & DEFINITIONS**

Parameter: Specific element, compound, or condition being measured.

Instrument Limit: Lowest level of a parameter our instrument can detect (Method Detection Limit).

\*EPA Limit: Highest level of a parameter allowable by US-EPA standards.

- **mg/L:** Unit of measurement used to describe how many miligrams of a parameter is present in every liter of your water also referred to as parts per million (ppm).
  - ND: Parameter was not detected in your water sample.

Parameter Effect: Illustrates possible effects to your Health, House, or the Aesthetics of your water.

--: No EPA limit or acceptable range associated with the parameter.

### LAB RESULT QUALIFIERS

- Good: Not detected in your water sample, or the measurement falls within EPA acceptable range.
  - **Fair:** Concentration is less than half of the EPA limit, if there is a limit listed. If no EPA limit is listed, yellow indicates that we simply detected the parameter in your sample.



- Poor: Concentration is greater than half of EPA limit.
- Bad: Over EPA limit, or the measurement falls outside of EPA acceptable range.
- Fail: Your in-lab bacteria sample (not DIY) arrived at our lab more than 24hrs after collection.

#### PARAMETER EFFECTS



Aesthetics: Concentrations considered higher, or out of range, may affect taste, smell or visual appearance of your water.



**Appliances:** Concentrations considered higher, or out of range, may adversely affect your appliances, plumbing fixtures, etc.

Health: Concentrations considered higher, or out of range, may adversely affect your health.

\* EPA limits are established for public utilities and treated water supplies. These standards may be referred to as Action Levels, Maximum Contaminant Levels or Acceptable Ranges. Such standards are also valuabe for owners of well water supplies.

<u>Note:</u> Test results within EPA standards do not guarantee the safety of your water supply. Example - Lead has an Action Level of 0.015 ppm. However, no level of Lead is safe to consume. Please refer to the following link to learn more about EPA drinking water standards <u>https://www.epa.gov/dwreginfo/drinking-water-regulations</u>.



## **Test Results**

### **Inorganics**

<b>Sample ID:</b> K0524-15	Sample Location:	Outside Lake				
Parameter		Instrument Limit	Your Water	EPA Limit	Units	Effect
Bromide		4	ND		mg/L	$\overline{\mathbb{A}}$
Chloride		2.0	<u> </u>	250	mg/L	
Fluoride		0.1	0.248	2.0	mg/L	$\overline{\mathbb{A}}$
Nitrate/Nitrite-N		0.15	ND	10	mg/L	$\widehat{\mathbf{A}}$
Sulfate		1.0	0.6	250	mg/L	

### **Metals**

Sample ID: K0524-15	Sample Location:	Outside Lake				
Parameter		Instrument Limit	Your Water	EPA Limit	Units	Effect
Aluminum		0.05	ND	0.2	mg/L	$\overline{\mathbb{A}}$
Antimony		0.006	ND	0.006	mg/L	$\overline{\mathbb{A}}$
Arsenic		0.008	ND	0.010	mg/L	$\overline{\mathbf{w}}$
Barium		0.08	ND	2	mg/L	$\overline{\mathbb{A}}$
Beryllium		0.003	ND	0.004	mg/L	$\overline{\mathbf{w}}$
Boron		0.06	ND		mg/L	$\overline{\mathbb{A}}$
Cadmium		0.004	ND	0.005	mg/L	$\overline{\mathbb{A}}$
Calcium		1.0	<mark> </mark>		mg/L	<b>*</b>
Chromium		0.006	ND	0.1	mg/L	$\overline{\mathbb{A}}$
Chromium, Hexavalent		0.2	ND		mg/L	$\overline{\mathbb{A}}$
Cobalt		0.01	ND		mg/L	$\overline{\mathbb{A}}$
Copper		0.03	ND	1.0	mg/L	$\overline{\mathbb{A}}$
Iron		0.05	0.249	0.3	mg/L	$\overline{\mathbb{A}}$
Lead		0.006	ND	0.015	mg/L	$\overline{\mathbb{A}}$
Lithium		0.03	ND		mg/L	$\overline{\mathbb{A}}$
Magnesium		0.5	<mark>)</mark> 16.2		mg/L	<b>*</b>
Manganese		0.006	0.190	0.05	mg/L	$\overline{\mathbb{A}}$
Molybdenum		0.015	ND		mg/L	$\overline{\mathbb{A}}$
Nickel		0.006	ND		mg/L	$\bigcirc$



### **Metals**

Sample ID: K0524-15	Sample Location:	Outside Lake				
Parameter		Instrument Limit	Your Water	EPA Limit	Units	Effect
Phosphorus		1.0	ND		mg/L	Ś
Potassium		2.0	93.29		mg/L	Ś
Selenium		0.02	ND	0.05	mg/L	Ś
Silica		0.6	6.75		mg/L	<b>%</b>
Silicon		0.3	0 3.15		mg/L	<b>&gt;</b>
Silver		0.003	ND	0.10	mg/L	$\overline{\mathbb{A}}$
Sodium		1.0	8.37		mg/L	
Strontium		0.01	0.643		mg/L	$\overline{\mathbb{A}}$
Thallium		0.002	ND	0.002	mg/L	$\overline{\mathbb{A}}$
Tin		0.02	ND		mg/L	$\overline{\mathbb{A}}$
Vanadium		0.05	ND		mg/L	$\sim$
Zinc		0.5	ND	5.0	mg/L	

### **Physical Properties**

Sample ID: K0524-15	Sample Location:	Outside Lake				
Parameter		Instrument Limit	Your Water	EPA Limit	Units	Effect
Aggressive Index			12.1		Calculation	2
Alkalinity as CaCO3		2.0	<u> </u>		mg/L as CaCO3	2
Bicarbonate		2.0	<u> </u>		mg/L as CaCO3	Ż
Carbonate		2.0	ND		mg/L as CaCO3	2
Conductivity		1.0	9356		µmhos/cm	
Hardness as CaCO3		1.0	<b>1</b> 74	180	mg/L	2
Langelier Index			0.7		Calculation	2
рН		0.1	8.25	6.5-8.5	S.U.	$\overline{\mathbb{A}}$
Ryznar Index			6.9		Calculation	2
Tannin-Lignin		1	ND		mg/LTannic Acid	
TDS		1.0	<u> </u>	500	mg/L	
Turbidity		0.1	0 2.77		NTU	$\bigcirc$



## **Next Steps**

# After receiving your lab report, you're probably asking yourself, "Now what!?"

- Safe Home provides details about each parameter listed in your report at our Learning Center - https://envirotestkits.com/ContaminantList12\_29\_17\_v2.htm. This webpage makes it easy to begin your research on each parameter: where it comes from, what problems it may cause, how you might reduce or eliminate it.
- If you would like assistance interpreting your lab results, please navigate to our contact form https://envirotestkits.com/contact to request a call with one of our drinking water specialists.
- 3. If you have concerns about the safety of your water supply and wish to consider corrective action, share this lab report with a water treatment professional. They will be able to design a water treatment solution for most any water contaminant problem. You can also visit our Featured Vendors page to find a water treatment dealer https://envirotestkits.com/contaminants/#featured-vendors