

Understanding Your Test Results

Use this table to interpret your lab results. Find where your results fall in the **Possible Results Column**.

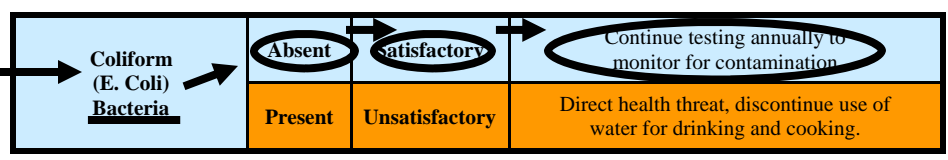
The following interpretation is based on public drinking water system standards. These standards only apply to public water

Note: ND means the parameter was not detected

Example

Laboratory Analytical Report

Analyses	Result	Units
MICROBIOLOGICAL		
Coliform, Total	Absent	per 100ml
Coliform, E-Coli	Absent	per 100ml



Parameter Name	Possible Results	Quick Interp.	Warnings and Suggestions
Alkalinity (Total as CaCO ₃)	ND or less than 100 (mg/L)	Corrosion Potential	As alkalinity decreases below 100, if pH is lower than 6.5 there is increased potential for corrosion of pipes releasing metals into the water
	100 to 200 (mg/L)	Satisfactory	Sufficient buffer potential to resist changes in pH and generally not significant scaling in pipes
	200 or more (mg/L)	Scaling Potential	Possible scaling in pipes and water heaters
Aluminum	ND or less than 0.1 (mg/L)	Satisfactory	No action necessary
	0.1 or more (mg/L)	Objectionable	Standard based on aesthetics not health; if water discoloration is troublesome, consider treatment
Antimony	ND or less than 0.006 (mg/L)	Satisfactory	Result generally shouldn't change dramatically through time, consider retesting next year if result is 0.005 or more
	0.006 or more (mg/L)	Unsatisfactory	Health risk exists; Consider water treatment and/or alternative sources; See fact sheet for more information
Arsenic	ND	Satisfactory	Retesting not necessary unless a change is suspected.
	0 to 0.010 (mg/L)	Satisfactory	Ideally, drinking water should contain no detectable arsenic; consider retesting next year if result is 0.008 or more
	0.010 or more (mg/L)	Unsatisfactory	Health risk exists; Consider water treatment and/or alternative sources; See fact sheet for more information
Barium	ND or less than 2 (mg/L)	Satisfactory	Result generally shouldn't change dramatically through time, consider retesting next year if result is 1.6 or more
	2 or more (mg/L)	Unsatisfactory	Health risk exists; Consider water treatment and/or alternative sources; See fact sheet for more information
Beryllium	ND or less than 0.004 (mg/L)	Satisfactory	Result generally shouldn't change dramatically through time, consider retesting next year if result is 0.003 or more
	0.004 or more (mg/L)	Unsatisfactory	Health risk exists; Consider water treatment and/or alternative sources; See fact sheet for more information

Parameter Name	Possible Results	Quick Interp.	Warnings and Suggestions
Bicarbonate as HCO ₃	Any Value	Satisfactory (depending on alkalinity)	Bicarbonate does not pose a health risk; bicarbonate and carbonate are closely related to alkalinity; see alkalinity
Cadmium	ND or less than 0.005 (mg/L)	Satisfactory	Result generally shouldn't change dramatically through time, consider retesting next year if result is 0.004 or more
	0.005 or more (mg/L)	Unsatisfactory	Health risk exists; Consider water treatment and/or alternative sources; See fact sheet for more information
Calcium	Any Value	Satisfactory (depending on hardness)	Calcium does not pose a health risk; calcium and magnesium together make up the hardness; hard water can cause scaling in pipes; see hardness
Carbonate as CO ₃	Any Value	Satisfactory (depending on alkalinity)	Carbonate does not pose a health risk; carbonate and bicarbonate are closely related to alkalinity; see alkalinity
Chloride	ND or less than 250 (mg/L)	Satisfactory	No action necessary
	250 or more (mg/L)	Objectionable	Standard based on aesthetics not health; if salty taste is troublesome, consider treatment
Chromium	ND or less than 0.10 (mg/L)	Satisfactory	Result generally shouldn't change dramatically through time, consider retesting next year if result is 0.08 or more
	0.10 or more (mg/L)	Unsatisfactory	Health risk exists; Consider water treatment and/or alternative sources; See fact sheet for more information
Coliform Bacteria (Total)	Absent	Satisfactory	Continue testing annually to monitor for contamination
	Present	Objectionable	No direct health threat, but coliforms should not be present in ground water; See fact sheet for more information
Coliform Bacteria (E. coli)	Absent	Satisfactory	Continue testing annually to monitor for contamination
	Present	Unsatisfactory	Direct health threat, boil water for drinking and cooking; see fact sheet for more information
Conductivity	Any Value	Satisfactory	Conductivity does not pose a health risk, it is related to total dissolved solids and is used in calculating the corrosivity
Corrosivity (Langelier Index)	Less than -2.5	High Corrosion Potential	Corrosive water can leach metals from minerals in the earth or from pipes and fixtures; treatment and/or testing for metals is recommended
	-2.5 to -0.5	Moderate Corrosion Potential	Corrosive water can leach metals from minerals in the earth or from pipes and fixtures; consider treatment and/or testing for metals
	-0.5 to 0.5	Satisfactory	Ideal range to minimize corrosion and scaling
	0.5 to 2.5	Moderate Scaling Potential	Moderate potential for scaling in pipes and hot water heaters; consider treatment
	More than 2.5	High Scaling Potential	High potential for scaling in pipes and hot water heaters; consider treatment

Parameter Name	Possible Results	Quick Interp.	Warnings and Suggestions
Copper	ND or less than 1.3 (mg/L)	Satisfactory	Pipe corrosion is a common copper source; if water is corrosive, copper concentration could change through time; consider retesting next year if result is 1.04 or more; See fact sheet for more information
	1.3 or more (mg/L)	Unsatisfactory	Health risk exists; Consider water treatment and/or alternative sources; See fact sheet for more information
Fluoride	ND or less than 0.7 (mg/L)	Satisfactory	Concentrations below 0.7 mg/L are out of the ideal range for protection of tooth enamel
	0.7 to 1.5 (mg/L)	Satisfactory	Ideal range for development and protection of tooth enamel
	1.5 to 2.0 (mg/L)	Satisfactory	Concentrations above 1.5 mg/L are out of the ideal range for protection of tooth enamel
	2.0 to 4.0 (mg/L)	Objectionable	Dental fluorosis or brownish discoloration of teeth can occur; a recent National Research Council report suggests possible health effects at concentrations in this range
	4.0 or more (mg/L)	Unsatisfactory	Health risk exists; Consider water treatment and/or alternative sources; See fact sheet for more information
Hardness (as CaCO ₃)	ND or less than 50 (mg/L)	Corrosion Potential	softer water can be more corrosive; see corrosivity
	50 to 150 (mg/L)	Satisfactory	Generally a satisfactory intermediate between corrosion and scaling; see corrosivity
	150 or more (mg/L)	Scaling Potential	Harder water can cause scaling in pipes and hot water heaters; if scaling is troublesome, consider softening
Iron (Total)	ND or less than 0.3 (mg/L)	Satisfactory	No action is necessary
	0.3 or more (mg/L)	Objectionable	High iron can cause discoloration of fixtures and/or clothing and can support iron bacteria growth leading to taste and odor problems; if troublesome, consider treatment
Lead	ND	Satisfactory	If water is corrosive, lead concentration could change through time; see corrosivity
	0 to 0.015 (mg/L)	Satisfactory	Pipe corrosion is a common lead source; if water is corrosive, lead concentration could increase; consider retesting next year if result is 0.012 or more; See fact sheet for more information
	0.015 or more (mg/L)	Unsatisfactory	Health risk exists; Consider water treatment and/or alternative sources; See fact sheet for more information
Magnesium	Any Value	Satisfactory (depending on hardness)	Magnesium does not pose a health risk; calcium and magnesium together make up the hardness; hard water can cause scaling in pipes; see hardness
Manganese	ND or less than 0.05 (mg/L)	Satisfactory	No action necessary
	0.010 or more (mg/L)	Objectionable	Standard based on aesthetics not health; if black/brown staining or bitter taste is troublesome, consider treatment
Mercury	ND or less than 0.002 (mg/L)	Satisfactory	Result generally shouldn't change dramatically through time, consider retesting next year if result is 0.0016 or more
	0.002 or more (mg/L)	Unsatisfactory	Health risk exists; Consider water treatment and/or alternative sources; See fact sheet for more information

Parameter Name	Possible Results	Quick Interp.	Warnings and Suggestions
Nitrate plus Nitrite as N	ND or less than 1 (mg/L)	Satisfactory	Continue testing annually to monitor for contamination
	1 to 4 (mg/L)	Possible Impairment	Potential pollution exists; Continue testing annually to monitor for changes
	4 to 10 (mg/L)	Above Normal Natural Levels	Above normal levels; possible contamination; continue monitoring annually for changes; Monitor more regularly if infants under the age of 1 year are consuming the water
	10 or more (mg/L)	Unsatisfactory	Health risk exists, discontinue use of water for infants under 1 year of age and persons with cardiovascular conditions; See fact sheet for more information
pH	6.5 to 8.5	Satisfactory	pH of ground water does not generally change rapidly so re-testing is not necessary unless a change is suspected.
	Less than 6.5 or More than 8.5	Objectionable	pH slightly out of the ideal range is not a direct health threat but can affect corrosivity which can leach metals from minerals in the earth or from pipes; consider a corrosivity test
Potassium	Any Value	Satisfactory	Tap water concentrations generally range from 0.5 to 8 mg/l No action is necessary
Selenium	ND or less than 0.05 (mg/L)	Satisfactory	Result generally shouldn't change dramatically through time, consider retesting next year if result is 0.04 or more
	0.05 or more (mg/L)	Unsatisfactory	Health risk exists; Consider water treatment and/or alternative sources; See fact sheet for more information
Sodium	Any Value	Satisfactory	Sodium in drinking water supplies can range from 0.4 to 1,900 mg/l; sodium intake in drinking water should be considered by people on low sodium diets in association with reducing risk of cardiovascular disease
Sodium Adsorption Ratio (SAR)	Any Value	Depends on Conductivity	Irrigation water with an SAR value above 6 poses a significant risk to physical soil characteristics; SAR risk is evaluated based on its relationship to conductivity, See fact sheet for more information
Sulfate	ND or less than 250 (mg/L)	Satisfactory	No action necessary
	250 or more (mg/L)	Objectionable	Standard based on aesthetics not health; if salty taste is troublesome, consider treatment
Thallium	ND (mg/L)	Satisfactory	No action necessary
	0.001 to 0.002 (mg/L)	Satisfactory	Ideally, drinking water should contain less than 0.001 mg/l of thallium; consider retesting next year if result is 0.001
	0.002 or more (mg/L)	Unsatisfactory	Health risk exists; Consider water treatment and/or alternative sources; See fact sheet for more information
Total Dissolved Solids	ND or less than 500 (mg/L)	Satisfactory	Total Dissolved Solids should not change significantly through time; retest if a change is suspected
	500 or more (mg/L)	Objectionable	High total dissolved solids do not generally pose a serious health risk but can cause water to be colored, taste poor, stain, and cause diarrhea in people not accustomed to the water
Zinc	ND or less than 5 (mg/L)	Satisfactory	No action necessary
	5 or more (mg/L)	Objectionable	Standard based on aesthetics not health; if metallic taste is troublesome; consider treatment