

## RESIDENTIAL ANALYSES

### Yearly Water Quality Testing

Yearly well water testing is recommended by EPA and DEQ. Testing more than once a year may be warranted in special situations such as:

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>Someone in household is pregnant or nursing</li> <li>Unexplained illnesses in the household</li> <li>There is a spill of chemicals or fuels into or near your well</li> </ul> | <ul style="list-style-type: none"> <li>Neighbors find a dangerous contaminant in their water</li> <li>Change in water taste, odor, color or clarity</li> <li>When any part of your well system is replaced or repaired</li> </ul> |
|--|---|

**Real Estate Transaction Package:** **EPA/SM**

*Testing is required for all Oregon real estate transactions when a well is the properties domestic water source.*

Colilert - 24 hour Coliform Test (presence/absence) ¥      Nitrate ¥      Arsenic ¥

**Home Well Package:** **EPA/SM**

*Most common analytes of concern affecting water quality*

Arsenic ¥	pH ¥	
Hardness (as CaCO <sub>3</sub> ) ¥	Colilert - 24 hour Coliform Test (Present or Absent) ¥	
Iron ¥	Total Dissolved Solids estimated by Conductivity ¥	
Nitrate ¥		

**Home Well Treatment System Package:** **EPA/SM**

*Additional analytes that may affect water quality and indicate installation of appropriate water treatment system*

Alkalinity, Total (as CaCO <sub>3</sub> )	Fluoride ¥	pH ¥
Arsenic ¥	Hardness as (CaCO <sub>3</sub> ) ¥	Silica
Calcium	Iron ¥	Sodium ¥
Chloride	Lead ¥	Sulfate
Color	Manganese	Turbidity
Copper ¥	Nitrate ¥	Zinc
Total Dissolved Solids Estimated by Conductivity ¥		

**Corrosion By Products Package** **EPA/SM**

Metals commonly leached from pipes and plumbing fixtures by corrosive water

Cadmium      Copper ¥      Iron ¥      Lead ¥      Zinc

¥ ALC NELAC/ORELAP accredited

\* Analysis subcontracted to another laboratory

**Total Coliform + E. coli (Drinking Water)**

Indication of whether potentially harmful bacteria may be present

Colilert - 24 hour Coliform Test (presence/absence) ‡	SM 9223 B
Colilert - 18 hour Coliform Test (presence/absence) ‡	SM 9223 B
Quant Tray (E.coli + Total coliform – CF-MPN - count) ‡	SM 9223 B

**Domestic Water Quality Indicators**

**Analyte**

*How water is affected*

<b>Alkalinity, Total (as CaCO<sub>3</sub>)</b>	SM 2320 B
<i>Measure of water's ability to neutralize acid.</i>	
<b>Arsenic ‡ (drinking water)</b>	SM 3113 B
<i>Health risk. Occurs naturally in some areas of W. Oregon</i>	
<b>Calcium</b>	SM 3111 B
<i>Main cause of hard water</i>	
<b>Chloride ‡</b>	EPA 300.0
<i>Salty taste in water</i>	
<b>Color</b>	SM 2120 B
<i>Visible tint to water</i>	
<b>Copper ‡</b>	SM 3111 B
<i>Metallic taste, blue-green staining of fixtures</i>	
<b>Fluoride ‡</b>	EPA 300.0
<i>High levels cause tooth discoloration. Recommended for dental health (0.7 to 1.2 mg/L)</i>	
<b>Hardness (as CaCO<sub>3</sub>) ‡</b>	SM 2340 C
<i>Deposits and spotting. Soaps do not lather. Lower water heater efficiency</i>	
<b>Iron ‡</b>	SM 3111 B
<i>Rusty color; sediment; metallic taste; reddish or orange staining</i>	
<b>Iron Bacteria Identification *</b>	SM 9240 B
<i>Causes a rust colored slime which can block pipes</i>	
<b>Lead ‡</b>	SM 3113 B
<i>Health risk. Usually leached from plumbing parts</i>	

‡ ALC NELAC/ORELAP accredited

\* Analysis subcontracted to another laboratory

<b>Manganese</b>	SM 3111 B
<i>Black to brown color; black staining; bitter metallic taste</i>	
<b>Mercury</b> ¥	SM 3112 B
<i>Mercury is a health hazard</i>	
<b>Nitrate</b> ¥	EPA 300.0
<i>Health risk. Widespread occurrence in ground water</i>	
<b>Pesticide and Herbicide Screen</b> *	
<i>Over 180 commonly used pesticide &amp; herbicide chemicals</i>	
<b>Petroleum Products</b> *	NWTPH-HCID
<i>Hydrocarbon Identification as gas, diesel, lube oil or heavier products</i>	
<b>Petroleum Products</b> *	NWTPH-Dx
<i>Level of Diesel contamination</i>	
<b>Petroleum Products</b> *	NWTPH-Gx
<i>Level of Gas contamination</i>	
<b>pH</b> ¥	EPA 150.1
<i>Low pH: bitter metallic taste; corrosion. High pH: slippery feel; soda taste; deposits</i>	
<b>Silica</b>	SM 4500-SiO2 C
<i>Deposits and spotting from water</i>	
<b>Sodium</b> ¥	SM 3111 B
<i>Essential nutrient. High levels can be a health concern to some people</i>	
<b>Sulfate</b>	EPA 300.0
<i>Salty taste in water</i>	
<b>Sulfide</b>	SM 4500-S2 D
<i>Sulfur or rotten eggs smell caused by hydrogen sulfide gas</i>	
<b>Total Dissolved Solids estimated by Conductivity</b> ¥	SM 2510 B
<i>Deposits and spotting; salty taste in water</i>	
<b>Turbidity</b>	SM 2130 B
<i>Measure of cloudiness of water</i>	
<b>Zinc</b>	SM 3111 B
<i>Galvanized pipe coating. Metallic taste in water</i>	

¥ ALC NELAC/ORELAP accredited

\* Analysis subcontracted to another laboratory

**Analytes in Soil/solids**

**Arsenic (Soil/Solids)**

EPA 7062

**Lead (Paint or Soil)**

EPA 3050/7470/7421

**Pesticide and Herbicide Screen \***

Over 180 commonly used pesticide & herbicide chemicals

**Petroleum Products \***

NWTPH-HCID

Hydrocarbon Identification as gas, diesel, lube oil or heavier products

**Petroleum Products \***

NWTPH-Dx

Level of Diesel contamination found

**Petroleum Products \***

NWTPH-Gx

Level of Gas contamination found

**Swimming Water / Hot Tubs / Spas**

Freshwater - E.Coli (CF-MPN) & Enterococcus

Chlorinated Pools – Heterotrophic plate count & Fecal Coliform (MTF-MPN)

Hot Tubs & Spas - Heterotrophic plate count & Fecal Coliform (MTF-MPN)

**Irrigation Water Quality Package:**

Boron, Calcium, Carbonate/Bicarbonate, Chloride. Conductivity, Copper  
Hardness, Iron, Magnesium, Nitrate, pH. Potassium, Sodium  
Sodium Adsorption Ratio, Sulfate, Total Dissolved Solids

**Lawn & Garden Analyses**

Soil Testing Packages with Lime Requirement and Guidelines\*

#1W – Good test for lawns that are performing to expectation.  
pH, Phosphorus, Potassium, Calcium, Magnesium

#2W – Good test for gardens/flowers/fruits that are performing to expectation  
pH, Phosphorus, Potassium, Calcium, Magnesium, Boron

#3W – Same as #1W with the addition of Nitrogens  
pH, Phosphorus, Potassium, Calcium, Magnesium, Nitrate, Ammonia

#6W – Extensive test with micronutrients  
pH, Phosphorus, Potassium, Calcium, Magnesium, Boron, Nitrate, Ammonia  
Sulfate, Soluble Salts, Organic Matter, Zinc, Manganese, Copper, Iron

¥ ALC NELAC/ORELAP accredited

\* Analysis subcontracted to another laboratory