United Water & Air Distribution

Water Sample Survey & Questionnaire

Send sample & form to:
United Water - Attn. Water Lab
12209 NE Fourth Plain Blvd Suite W
Vancouver WA 98682

AQUA TEK
INNOVATIVE WATER PRODUCTS

FOR LABORATORY USE ONLY

Date Received _____

Report No. _____

Date Completed _____

NOTE: Please answer ALL appropriate questions to ensure accurate equipment recommendations

CUSTOMER

_____
Name

_____
Street

_____
Town State/Province

_____
Zip Code/P.C. Email

_____
Phone Fax

DEALER

_____
Name

_____
Street

_____
Town State/Province

_____
Zip Code/P.C. Email

_____
Phone Fax

DISTRIBUTOR

_____
Name

_____
Street

_____
Town State/Province

_____
Zip Code/P.C. Email

_____
Phone Fax

Send completed analysis to: _____ Via: _____
Contact name *Email address or fax number*

Bacterial analysis must be performed by your local health department.

HOW TO DRAW WATER SAMPLE

Use outlet nearest pump (not from bottom of pressure tank). Run water for five minutes or two pump cycles, then fill clean bottle to neck and cap immediately. Never use hot water. Return bottle with this completed form.

HOW TO MEASURE PUMPING RATE OF PUMP

1. Make certain no water is being drawn. Open spigot nearest pressure tank. When pump starts, close tap and measure time (in seconds) to refill pressure tank. This is ***cycle time.***
2. Using a container of known volume, draw water and measure volume in gallons until pump starts again. This is ***drawdown.***
3. Divide drawdown by cycle time and multiply the result by 60 to arrive at the ***pumping rate*** in gallons per minute. Insert this figure in #3 Water System.

1. Water Source

❑ City or area-wide authority
❑ Community water system (small water system usually supplying 12 homes or fewer)
Water comes from:
❑ Well ❑ Lake ❑ Reservoir ❑ River ❑ Unknown
❑ New private well - Approx age _____months
❑ Old private well - Approx age_____ months
❑ Private lake ❑ Private spring ❑ Private dugout
❑ Private cistern ❑ Other - describe _____
_____

2. Household Information

Do you now have water conditioning equipment?
❑ No ❑ Yes Type_____Size_____
❑ Single family ❑ Multi-family No. of units _____
No. persons _____No. baths _____
❑ Lawn irrigation on water system?
❑ Indoor pool ❑ Outdoor pool - Capacity _____ gallons
Water line size from source - _____inches

3. Water System

Type of Pump
❑ Constant Pressure ❑ Jet ❑ Submersible ❑ Unknown
⇦⇦⇦ Pumping rate of pump_____ gpm
Pressure Tank
❑ Air to water ❑ Bladder Capacity _____ gallons Operating pressure (low/high) _____/_____ psi

4. Water Problems

When this sample was drawn, it was:
❑ Clear ❑ Colored ❑ Cloudy
This water sample is ❑ Untreated ❑ Treated
How is it treated? _____
_____

PROBLEMS

❑ Hardness (e.g. high soap usage, bathtub ring, lime deposits, etc.)
❑ Iron Deposits - if so, is iron build-up in flush tank?
❑ Greasy ❑ Gritty ❑ Stringy (iron bacteria?)
Color of Water - ❑ Red ❑ Orange ❑ Black
❑ Greenish or blue stains on sinks, tubs, etc.
❑ Pitting of fixtures and/or pipes
❑ Sand (visible particles) ❑ Sediment or silt (cloudy)
Bad Taste - ❑ Iron ❑ Bitter ❑ Salty
Other - describe _____
Bad Odor - ❑ Rotten Egg ❑ Musty ❑ Iron
Odor is in - ❑ Cold Water ❑ Hot Water ❑ Both
Other Problems - describe _____
_____
_____
_____

5. Standard Laboratory Tests

Total Hardness	_____	gpg
Iron	_____	mg/l
Manganese	_____	mg/l
pH	_____	
Total Dissolved Solids	_____	mg/l
Silica	_____	mg/l

6. Other Tests

Hydrogen Sulfide	_____	mg/l
(test must be performed on-site)		
Tannins	_____	mg/l

7. Special Laboratory Tests

Sulfates	_____	mg/l
Alkalinity	_____	mg/l

If TDS is over 1000 ppm and hardness is less than 30% of the TDS, a total water analysis is required.

8. Explanation of Water Analysis

A. Total Hardness

This indicates the efficiency or workability of the water for everyday household use. Water in excess of 3 gpg is generally considered hard and should be softened.

B. Iron

Over 0.3 ppm of iron will cause discoloration of water and staining. Fully automatic water conditioners will correct this problem. Some extreme water situations may require filtration.

C. Manganese

Manganese is frequently encountered in iron-bearing water but to a lesser degree. Manganese is similar to iron in that it stains and clogs pipes and valves. Concentrations as low as 0.05 mg/l of manganese can cause problems.

D. pH

A scale used to measure the acidity or alkalinity of water. A pH reading below 6.5 normally indicates highly corrosive water and neutralizing equipment should be used. A pH reading in excess of 8.5 could indicate contaminated water and generally requires bacteriological and chemical analysis.

E. Hydrogen Sulfide (H_2S)

Testing for hydrogen sulfide should occur on-site. Hydrogen sulfide imparts a rotten egg odor and taste that makes water all but undrinkable and also promotes corrosion. In addition, it can foul the resin bed of a water conditioner. The use of a water conditioner is not recommended unless the water is first treated for the removal of hydrogen sulfide.

F. Total Dissolved Solids (TDS)

A measure of the soluble solids present in the water.

G. Tannins

Tannic acid is formed by decaying organic matter. Tannins alone are not harmful, although they can affect the proper operation of a chemical free iron filter.

H. Chlorides

Over 500 ppm may impart a salty taste to water.

I. Sulfates

Over 500 ppm may impart a bitter taste to water and have a slight laxative effect.

J. Alkalinity

Caused by the presence of bicarbonates, carbonates and hydroxides. Over 500 ppm creates a “soda” taste and makes skin dry.

K. Silica

Silica (silicon dioxide) is a compound of silicon and oxygen (Si02). It is a hard, glassy mineral substance which occurs in a variety of forms such as sand, quartz, sandstone, and granite.

Recommendations

Recommendations are based entirely on the information supplied and the water sample chemistry results at the time of analysis.

_____

_____

_____

_____

_____

Recommended by _____

Date _____