

Living

C

TESTING THE

WATERS

► It's buyer beware for consumers trying to improve the quality of their tap water. About 450 firms make treatment machines. Some do what they claim, but others don't.

By Steve Pokin
The Press-Enterprise

When Kaye and Marvin Zulauf moved from Capistrano Beach into a new home in Norco last summer, they never expected they would have

to take a crash course in improving their drinking water.

Not only was the

Nature of problem varies

If you have a water problem, its nature will depend on where you live and the source of your water.

At Rudy's Restaurant in Anza, Harold and Janice Bush need a system to remove iron from their well water. Before they had one, says Janice, "The water looked kind of yucky colored."

Iron, a common

Water filtration systems for the home

No single home system solves all drinking-water problems. Effectiveness depends on the type of contaminant and its concentration, how quickly the water passes through the system (called contact time) and proper maintenance.

For drinking water high in sediment or sand, the most inexpensive solution is a filter. More expensive and elaborate systems are best used against harder-to-remove contaminants. In other words, avoid clogging a \$1,000 device with sand and dirt that can be removed with a \$7 filter and about \$45 worth of fittings and housing.

Activated-carbon filtration

Units that go under the kitchen sink generally can remove hazardous chemicals. They cost from \$50 to \$500.

Some kitchen-sink models automatically shut off after treating a pre-determined volume of water — indicating the filter must be changed. Or a water flow meter, purchased for \$50 and up, can be installed to indicate when to change the filter.

Whole-house units, up to \$800, extract contaminants not only from drinking water, but from bath and laundry water.

Watch out for: Bacteria buildup in the filter, even in periods of non-use, and especially in warm weather. The health consequences of high levels of bacteria is unclear, but it will affect taste and



laundry detergent from lathering well enough to clean clothes.

Only after they began to look for a water softener did they learn they had another drinking-water problem. The public drinking water in Norco is high in nitrate, a potentially hazardous substance whose source generally is fertilizer, animal wastes or leaky septic systems.

In fact, Norco municipal water from September through December had nitrate levels exceeding state and federal limits. In October, the city notified its 7,000 customers that tap water was unsafe for fetuses and infants under 6 months of age.

The water problem in Norco has been temporarily solved by blending water high in nitrate with water from a standby well low in nitrate.

The problem consumers face, however, is finding the right product among the maze of home water-treatment devices. Some 450 companies make the machines. It's buyer beware. Some of the machines do what they claim. Others don't. Costs can vary dramatically for devices that are equally effective.



Carla Conti/The Press-Enterprise

Janice Bush pours filtered water at Rudy's Restaurant in Anza, while husband Harold holds a pitcher of untreated water from an outside tap.

mon water complaint in America, says Mari-beth Robb, spokeswoman for the Water Quality Association, a trade association of manufacturers and retailers based in Lisle, Ill. Some 650,000 water softeners are sold a year.

Hard water tends to leave glassware spotted and clothes dirty. That's because soap does not lather well in hard water.

Hard water also can cause scale to build up on faucets, shower heads, in shower enclosures and inside plumbing. A sure sign of hard

Please see

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Anza-Aguanga area, also stains clothes and alters taste. It is not a health concern. "But you know how people eat with their eyes," she says.

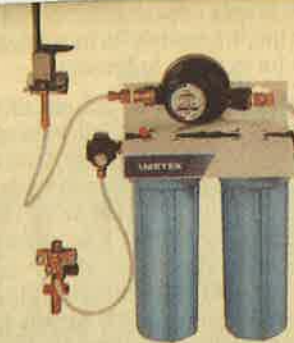
In Riverside, most drinking-water complaints concern hardness, says Ken Anderson, water-system operation manager. Hard water is the most com-

mon complaint of drinking water) and the byproducts it forms when added to water, such as chloroform; pesticides; herbicides; industrial solvents.

Not effective against: Microbial contamination, heavy metals, sodium, nitrate and nitrite, fluoride, and minerals that make

water hard. Most units are ineffective against lead. **How it works:** An activated-carbon filter is like a honeycomb. The filter material is made porous and adsorptive. Water passes through the labyrinth and contaminants stick to the walls. Works best when it works slowly. Need an even flow of water, as opposed to the water passing through a limited number of channels.

Types and cost: As low as \$20 for a faucet attachment. About \$30 for a pitcher unit that operates like a drip coffee maker. But most faucet attachments and pitcher units are not the best choice to remove dangerous contaminants. The larger the filter, the longer its effectiveness.



Distillers

Best at removing: Inorganic contaminants such as salts, nitrates, sediment, metals such as lead and calcium. In theory, they kill all microorganisms. In reality, some poorly designed models can allow untreated water into the treated water.

Not effective against: Pesticides and volatile organic chemicals, such as chloroform and benzene (used as de-greasing agents, paint thinners and varnishes) unless the unit also has an activated-carbon filter. Most distillers now have one or two such filters.

How it works: Water is boiled, then condensed, leaving behind contaminants with higher boiling points.

Types and cost: \$150 to \$430. Larger units that pump distilled water throughout the house up to \$1,500. Some have a float switch that shuts off the unit before the chamber runs dry, cutting back on scale build-up.

Please see **FILTRATION, C-5**



When to get an analysis

Those who get their drinking water from a public water company can save time and money before paying a private laboratory for testing. First, review the company's annual summary report of what's in the water. If the report is difficult to understand, ask a company employee to explain it.

A review of the report can narrow the focus of testing should you decide to hire a private laboratory to test drinking water. Testing for every known contaminant could cost over \$1,000. Testing for one or two contaminants costs only \$25 to \$50.

Here is some advice on when to have tap water tested:

- The water's appearance, taste or smell suddenly changes.
- You move to a new area and draw drinking water from a private well. Particularly important to test if the prior owner did not.
- Test a private well if you live in an area with many septic systems.
- Test a private well every year for bacteria. If there is a problem, monitor closely for several months.
- Test a private well every three years for inorganic compounds and radon.
- Test a private well for organic chemicals if the well is within a mile or two of a gasoline station, refinery, chemical plant, landfill or a military base, where fuel often is stored.
- If you live in an agricultural area or have farm animals, test each year for nitrate, or specific pesticides and herbicides.
- Test if you live near an area with many animals, such as a dairy operation.
- No matter the water source, test for lead every three years. Lead can leach from plumbing in the house. Fetuses, infants and young children are vulnerable to lead.

Sources: Ken Anderson, water-system operation manager for the city of Riverside; "Is Your Water Safe to Drink?" published by Consumer Reports Books; Velma Smith, Friends of the Earth; Larry Chrystal, with Edward S. Babcock & Sons Inc., Riverside; Chuck Strey, Riverside County Division of Environmental Health; Ray Furnas, Clinical Laboratories, San Bernardino; Robert Burns, state Office of Drinking Water; and Richard Stump, Suburban Water Testing Laboratories, Temple, Pa.



Peter Phun/The Press-Enterprise

Tips on buying a home filtration system

Find out what's wrong with the water. Pay to test it or refer to the annual report water companies must compile.

Shop around. Prices vary dramatically for machines equally effective.

Be educated. If you haven't researched the market, don't buy just because a salesperson knocks on the door.

Know your rights. If pressured into making a purchase at home, you have three days to cancel. Use certified mail to cancel; that way you have a record. (This does not apply to purchases in a store.)

Document payment. Never write a check to "cash" or to the salesperson.

Protect your investment. Get a money-back guarantee.

Check reputations. Look for products recommended by the National Sanitation Foundation or the Water Quality Association.

Look for certification. The WQA has a certification program for installers and sales personnel. Write to Consumer Representative, Water Quality Association, P.O. Box 606, Lisle, Ill. 60532. Or call: (708) 505-0160.

Know the law. Starting Oct. 6, California will require certification for devices that claim to remove a contaminant regulated by the state or federal government.

Caveat emptor. Be leery of general claims, such as, "It removes up to 90 percent of the contaminant."

Don't be fooled. Be wary of salespeople

who say your drinking water is "unsafe." With rare exception, water from municipal treatment plants is safe.

Know what you're getting into. Check difficulty of maintenance, and the cost and availability of replacement parts, such as filters.

Save paperwork. Keep sales and warranty information in case service is needed. It can be difficult to track down manufacturers.

Read Consumer Reports. The state Office of Drinking Water recommends that consumers read the January 1990 issue of Consumer Reports. The magazine tested models and made recommendations.

Water and the EPA. Contrary to what some salespeople might claim, the U.S. Environmental Protection Agency does not recommend or test the effectiveness of home water-treatment devices. Some models have U.S. EPA registration numbers — that's all.

Check the BBB. Call the local better business bureau to check a manufacturer or sales company. Call the Better Business Bureau of the Southland, San Bernardino office, (714) 825-7280.

There's no free lunch. Don't buy because you were told you will receive a prize.

Sources: Office of Drinking Water, California Department of Health Services; Clean Water Action Project; Water Quality Association; Better Business Bureau of the Southland; and the Environmental Protection Agency.

WATER: 10 to 15 million households have a treatment device

Continued from C-1
water is a ring around the bathtub.

Hardness is measured in grains-per-gallon, with anything over 4.4 considered hard. Riverside water is about 15 grains, says Anderson. (Norco's average is 22.)

Fluoride in well water is the main concern in the sparsely inhabited stretch of desert between the Coachella Valley and the Palo Verde Valley, says Don Park, a county public health engineer for the desert.

Popular device

As a result of this multitude of problems, some more serious than others, an estimated 10 to 15 million American households have a home water-treatment device, says Robb.

Not all of the machines do what they claim, says Robert Burns, with the Office of Drinking Water, California Department of Health Services in Sacramento.

Burns heads a new state program that will require certification of some home-water treatment devices before they can be sold in California.

As of Oct. 6, a device must be certified by the state if it claims to remove any contaminant regulated by the U.S. Environmental Protection Agency or the state Office of Drinking Water.

Machines that claim only to "polish" drinking water by removing non-hazardous contaminants that affect taste, appearance and odor will not have to be certified.

As a result, some manufacturers will remove health claims from advertising and others will choose not to sell in California, Burns predicts.

Burns advises consumers to be cautious of machines that promise to make drinking water safe. Treated water from municipal systems, with rare exception, already is safe by the time it comes out the tap.

On the other hand, while lead is not a major problem in California water, this hazardous element can leach from lead plumbing, brass faucets or lead soldering inside the home.

Private wells

Of course, water drawn from

pesticide residue. None of the 99 Riverside County wells in the study showed pesticide contamination.

Help is available

If there is a problem with drinking water, some consumers — particularly in Southern California — opt for the purchase of bottled water. But for those who believe it's wiser to buy a home water-treatment device, help is available.

The National Sanitation Foundation, based in Ann Arbor, Mich., and the Water Quality Association both test devices and award seals of approval. The association does not test machines that make health claims.

Comparison shopping can yield big dividends, says Burns. Similar products that are equally effective can vary in price by thousands of dollars. This is particularly true of water softeners. "There is no assurance that cost will provide additional quality," he says.

A 1988 state law regulates door-to-door salespeople who sell, rent or lease home water-treatment devices. The law was drafted after complaints of aggressive and unscrupulous sales tactics, particularly in the Santa Clara Valley (also called the Silicon Valley), near San Jose, that capitalized on isolated reports of drinking-water contamination, says Burns.

The law prohibits, for instance, placing a lien on a home to secure a sale. In addition, precipitation tests — which cause minerals and other dissolved solids to coagulate — are not to be used unless the salesperson makes it clear the test does not measure water safety.

Water laced with hazardous chemicals — usually measured in parts per billion — can be crystal clear and taste fine, says Burns.

On the national level, poor and uneducated people have been particularly vulnerable to unethical

sales tactics, says Robert Collins, with the Clean Water Action Project, a non-profit organization based in Washington, D.C.

Door-to-door salespeople have been known to drop a goldfish in a sample of tap water, says Collins. The goldfish usually dies, but not because the water is unsafe for people to drink. The chlorine or water temperature kills it.

Harold Bush of Anza admits to getting burned in trying to find a way to remove the iron from his well water at Rudy's Restaurant in Anza. He bought eight magnets for \$700 that attached to the water

line. Although the salesperson guaranteed the product and offered to help should anything go awry, Bush says he never could track him down.

"That was when I first came out here," he says. "The guy got a greenhorn."

Research works.



American Heart Association

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.....
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Carl Hauge, chief hydrogeologist with the California Department of Water Resources. The consumer is ultimately responsible for the safety of water from a private well.

Riverside County's Public Health Department routinely tests small water-service systems that serve more than 25 people or that have between four and 200 service connections.

The county does not test individual private wells, but does regulate the construction of new wells, says Chuck Strey, with the Division of Environmental Health. The county inspects the protective well casing and on a second visit draws water for a one-time, mandatory check for bacteria, fluoride, nitrate and total dissolved solids. The inspection and test costs the homeowner \$259.

With private well water, the most serious health risk is microbial contamination, says Burns. Unlike hazardous contaminants such as lead, which act slowly, the effect of microscopic pathogens such as bacteria and viruses is immediate.

Bacteria can be killed by some home water-treatment devices, but these machines must be constantly maintained, says Burns.

The problem is that home water-treatment devices are effective only some of the time, says Bill Masker, Norco public works superintendent. What is unknown is exactly when the filter, lamp or membrane — depending on the system — begins to lose its effectiveness.

Burns recommends devices that have a warning feature that signals when the device starts to fail.

Before making a purchase, homeowners should first find out what contaminants are in the water, if any, says Burns. There are private laboratories that test drinking water.

It is generally easier to test for microorganisms and inorganics, such as lead, than it is for organics, such as pesticides, solvents and the chemical byproducts of chlorination of water.

But first narrow the focus of possible testing, says Burns. Contact the local health department and ask if there are common water problems in the area. Also ask neighbors.

For those who want to test for pesticides and herbicides, find out what types are used in the area. A test for *all* pesticides or *all* herbicides can cost thousands of dollars.

A report issued last month by the California Department of Food and Agriculture showed that 6 percent of 2,761 wells tested showed some

Testing the Waters

Filtration systems for the home

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Watch out for: Need activated-carbon filter or else contaminants with boiling points lower than water can carry into the distillate.

Boiling chamber can acquire a scale coating. Without regular cleaning, can lead to rust and corrosion. Scale also insulates the chamber so it takes more energy to heat the next batch of water.

Distillation is slow, many units take hours to make a gallon of treated water. Electricity costs can be as much as 25 cents per gallon of distilled water. In summer, the heat generated is not appreciated.

Because it takes so long to distill water, the water often is distilled in advance and stored so it is available when needed. Any stored water can be a breeding ground for bacteria. Refrigeration lessens the problem.

Activated-alumina and bone char filters

How they work: Like activated-carbon filters.

Best at removing: Fluoride, which can occur naturally in water. Also added in small amounts at some treatment plants to prevent dental caries.

How they work: Alumina, a granular white powder, is a form of aluminum oxide treated to adsorb fluoride. Bone char also can be used.

Types and cost: About \$225.

Watch out for: Like activated carbon, can become contaminated with bacteria.

Reverse osmosis

Best at removing: Sediment, inorganic contaminants, such as dissolved salts, ferrous iron, fluoride, limited amounts of nitrate, lead and organic contaminants roughly 20 times bigger than a water molecule.



Not effective against: High levels of hardness minerals. Calcium and magnesium clog the system. Removes some bacteria and some viruses, but by itself not recommended for microbial contaminants.

How it works: Resembles a sieve. Using tap pressure, water is pushed through a semipermeable membrane. Ions (charged particles) and large molecules cannot pass through the membrane; water and small organic molecules do, unless there is an activated-carbon filter.

Types and cost: From \$60 to \$1,000, depending on capacity, design and cost markup. Countertop or under the sink. Most include storage tank, activated-carbon filter and another filter to remove sediment and minerals before water reaches the membrane.

Many units have an automatic flush that periodically cleans the membrane. Some have a warning light indicating the membrane is losing effective-

ness, which is done with a concentrated solution of salt, called brine.

Types and cost: \$1,000 to \$2,000, excluding labor. Prices vary dramatically, depending on water problem and cost markup.

Some models regenerate manually. Others automatically. Many Riverside County water districts and cities prohibit units that flush brine into the sewer system during regeneration. In large quantities, salty discharge can make it difficult to recycle water for irrigation.

Often, the only type of water softener allowed is a portable exchange system, in which the water-softening company comes to the home and exchanges old resin for new resin. The charge is \$15 to \$50 a month, depending on water hardness and family size. Many companies rent units.

Most whole-house systems have a bypass for connections used, for example, to water the lawn. Water high in sodium can harm grass.

Watch out for: Softened water might pose a health hazard to people at risk for high blood pressure. How much sodium ends up in the drinking water depends on the hardness of the untreated water, particularly its magnesium content.

If concerned, soften only the hot water or only the water used for laundry and bathing. Or use potassium chloride to soften water. Although more expensive, it adds potassium instead of sodium.

Softened water is more corrosive than hard water and therefore can leach lead in the plumbing. This is disputed by officials at water-softening companies, however, who say only naturally soft water is corrosive.

Ultraviolet (UV) disinfection

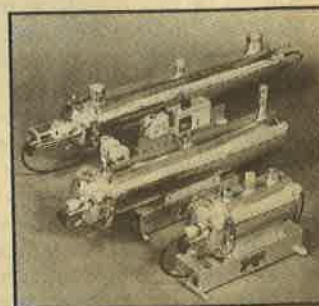
Best at removing: Microbiological pathogens, such as bacteria and viruses.

Not effective against: Inorganic contaminants, hard water. Does not remove sediment, rust or other debris. Although UV kills bacteria and viruses, it has questionable effectiveness against protozoan, such as Giardia cysts, known by campers as the cause of "beaver fever."

How it works: Water is irradiated by UV light.

Types and cost: \$100 to \$700. Some have wipers to remove sediment from the lamp's cylindrical sleeve. Some automatically adjust intensity, depending on the number of particles in the water. Particles in the water can shield bacteria and viruses from the UV light. Some units have an alarm that sounds when lamp starts to lose effectiveness.

Watch out for: Make sure the lamp has a high enough rating to ensure a safety margin in killing all bacteria and viruses. Look for a lamp with a rating of 30,000 to 40,000 microwatt seconds per square centimeter. If particles are not first filtered out,



Lead in your drinking water can come from the plumbing

By Steve Pokin
The Press-Enterprise

To know for sure whether there is lead in your drinking water, you have to test the water.

Lead is the wild card of contaminants. The lead testing done at the municipal water plant is of little help to the consumer. Lead generally does not occur naturally in water. It is leached out of plumbing. Specifically, plumbing in the home.

Like many other contaminants measured in parts per billion, lead in drinking water cannot be seen, tasted or smelled.

The current maximum level allowed in drinking water is 50 ppb. But the U.S. Environmental Protection Agency has indicated it will be making its lead standard more stringent this year, says Marjorie G. Shovlin, water-quality specialist with the Metropolitan Water District of Southern California.

Most lead problems in the home can be handled by not drinking what's called the first "draw" of the day, or drinking from a tap that has not been used in at least six hours.

If there is lead leaching from the plumbing, it will have its highest concentration during the first draw because the water has been stagnant.

Instead, says Shovlin, let the water run 30-60 seconds at each tap used — or until a noticeable change in water temperature is detected — before drinking. This might not work in high-rise buildings with long connector lines.

Lead in the plumbing is more likely to leach if the water is soft because soft water is more corrosive to plumbing. Water softeners that treat water throughout the house also can make water more corrosive, she says.

In addition, hot water is more corrosive. So if you are concerned about lead, don't use hot water for drinking, cooking or making baby formula.

Boiling drinking water does not remove lead. It does not evaporate and thus becomes more concentrated.



Kurt Miller / The Press-Enterprise

This leaded solder wire contains a warning against using it on pipes that carry drinking water.

Some studies suggest that even low levels of lead in the blood can affect a child's learning ability. The EPA estimates that drinking water contributes 10 percent to 20 percent of total lead exposure in young children.

The main source of lead in drinking water is plumbing solder made of 50 percent lead and 50 percent tin. The lead in the solder can leach into the drinking water. This blended solder was banned for plumbing use in 1988.

Although the solder is still sold and available for other uses, it should be clearly marked not to be used for plumbing, says Robert Burns, with the state Office of Drinking Water.

Homes constructed in the past five to seven years and with lead in the plumbing solder are more likely to have lead in the drinking

water coat the inside of the pipe and prevent leaching.

Lead is a dull gray color and soft enough to be scratched with a car key, says Shovlin. In addition to visually inspecting the house's plumbing, a consumer can alleviate anxiety by testing for lead for as little as \$10.

If testing indicates there is a problem that can't be handled with flushing, home water-treatment devices can remove lead. Distillation and reverse osmosis are effective systems. But both can cost hundreds of dollars.

Filter cartridges designed specifically for removal of lead — and only lead — cost less than \$100 and fit under the sink. If maintained, some models can remove lead, according to testing done by Consumer Reports magazine.

But any device is of little help if

the test goes down the drain. Needs adequate pressure at the tap. The unit might need 60 psi to work adequately, but the house might have 40 psi.

Depending upon the type of material used to make the membrane, the membrane can be damaged by water with a high chlorine content or water outside a certain pH range. Any dealer should first measure pH and chlorine content.

Reverse osmosis is slow. Many units need three to six hours to yield one gallon. Because the process takes so long, treated water is stored in advance to be available when needed. Whenever water is stored, its quality is lowered.

Water Softeners (also called Ion Exchange or Cation Exchange units)

Best at removing: Two minerals that primarily cause hard water, calcium and magnesium. Whether softer water tastes better is a personal preference. Some remove small amounts of ferrous iron.

Not effective against: Doesn't make the water safer and doesn't reduce total dissolved solids.

How it works: Water flows through tank filled with resin beads, with millions of sodium ions loosely attached to each bead. "Hard" calcium and magnesium ions exchanged for "soft" sodium ions. When the resin saturates with hard ions, it must be

Find out the form of iron contaminant. Four main types are in drinking water: ferrous iron, soluble in water; ferric iron, non-soluble, created when ferrous iron is exposed to air; organic iron; and iron bacteria, created when bacteria scavenge iron from water.

When chlorine is added to treat iron, consumers also can use an activated-carbon filter later in the process to remove the chlorine and its byproducts.

Ferrous iron: Use a resin bed, much like a water softening bed, except the beads usually are coated with an oxide of manganese. The ferrous iron is changed into ferric iron, which is then removed with a filter.

Ferric iron: Use a filter.

Organic iron: Use chlorine.

Iron bacteria: Use a filter with microscopic pores. A UV irradiator will kill the bacteria but will not remove the iron, as a filter will.

Watch out for: The type of iron contaminant can change.

Sources: Office of Drinking Water, California Department of Health Services; the U.S. Environmental Protection Agency; Consumer Reports magazine, January 1990; Metropolitan Water District of Southern California; and "Is Your Water Safe to Drink?" published by Consumer Reports Books.

Where to test

Consumers shouldn't rely on water tests done by companies that sell home water-treatment devices.

Instead, it's best to go to an independent source of information, says Robert Burns, with the state Office of Drinking Water. Have a commercial laboratory certified by the state test the water.

These are companies approved by the state to test drinking water that is provided by water companies.

Although laboratories need to be certified to test public water supplies, they do not have to be certified to test for individuals.

Also, don't assume that a company is certified in all areas, cautions Richard Spinner, a public-health chemist with the state's Environmental Laboratory Accreditation Program in Los Angeles.

Choose a laboratory certified to test drinking water, not waste water, for example. Laboratories also are not necessarily certified to test all classes of contaminants.

In Riverside County, only Edward S. Babcock & Sons, Riverside, is certified to test for all contaminants, as is Clinical Laboratories in San Bernardino.

Spinner says he cannot vouch

for water-testing businesses that do a national business and are not certified in California. But if the laboratories are certified in other states, they still must follow federal guidelines.

For microbial contamination testing, look for a laboratory close to home, he advises. Otherwise, expect to pay for overnight shipping because the water sample must be tested within 30 hours of being drawn.

Talk to someone at the testing company beforehand. Make it clear that it's drinking water being examined and explain what the suspected contaminants are. Find out what the cost will be and get instruction on how to take and store the water samples; many laboratories provide containers.

For help in choosing a testing laboratory or in evaluating the work of one, call the Southern California branch office of the Environmental Laboratory Accreditation Program, (213) 620-3564.

Testing is not foolproof. If a test shows contamination, have a different laboratory examine the water before spending a lot of money on a solution.

Here are businesses that test drinking water from the tap:

● Edward S. Babcock & Sons,

Riverside. (714) 684-1881. Lead, \$10; bacteria \$10; nitrate, \$6.50; trichloroethylene, a solvent found in small amounts in city of Riverside water, \$75.

● Clinical Laboratories, San Bernardino. (714) 825-7155. Bacteria, \$25; lead, \$20; nitrate, \$20; and heavy metals, such as arsenic and lead, \$125.

● Dean Laboratories, Corona. (714) 734-2150. Certified for bacteria, \$15, and mineral testing, including nitrate, \$10.

● National Testing Laboratories, Cleveland, Ohio. (800) 458-3330. Certified in 16 states, but not in California. Bacteria, \$25; lead, \$29; 73-item scan for minerals, bacteria and volatile organics, \$89; a 93-item scan that includes some pesticides, \$129.

● Suburban Water Testing Laboratories, Temple, Pa. (800) 433-6595. Lead, \$19; radon, \$50; and \$135 to test for 72 contaminants. Certified only in Pennsylvania.

● HomeTest, consumer division of WaterTest, Manchester, N.H. (800) 426-8378. Certified in 24 states, but not in California. Lead and 11 other items, \$19.95; some pesticides, \$44.95; some volatile organic compounds, \$44.95; and a comprehensive test that includes lead, bacteria, nitrate and fluoride, \$49.95.