

How can I know if my pump company has my best interest in mind?

Our industry suffers from its share of individuals which have no scruples when it comes to getting the most they can out of every service call. Your pump company should communicate in a fashion that describes the precise problems and the solutions.

Well pumps do suffer from mechanical problems. That being said, fewer than 30% of the pumps we troubleshoot need to be pulled or replaced as the problem is often a minor one that can be dealt with on the surface. If a pump technician says you need to pull the pump, he should clearly explain why. If he doesn't, ask the following questions:

- 1. Is it the pump or the motor that has the problem?*
- 2. What is wrong with the pump/motor?*
- 3. Can you show me your diagnostic information? (Electrical current, static pressure, winding resistance and winding resistance to ground)*
- 4. How can you be sure the problem isn't with the pressure tank, pressure switch or control box?*
- 5. Do you suspect there is a problem with the wire or the pipe down in the well?*

The pump technician should be prepared to answer each of these questions promptly and the answers should make clear sense, even if you are not technically oriented. They should be able to show you motor diagnostic readings that verify problems with the motor and have flow/pressure data that show the pump is simply not meeting your flow and/or pressure requirements.

If they have given clear answers to the above questions, ask the next series of questions:

- 1. How deep is my well?*
- 2. What is the depth to water?*
- 3. What pump will you replace it with?*
- 4. How much water does the new pump produce?*

Be wary if they indicate they have just the right pump on their truck without having answered any of these important questions! Many wells do not have information printed on them as to what their depth, productivity, water level and pump type is. This information may be buried in some of your files, in the well log at the county, or in the contractor's file if they have serviced your system before. The pump

contractor needs to have the well depth and depth to water or the model number of the existing pump to have a good starting point to properly size a replacement pump. Keep in mind that there are many models of pumps within any given manufacturer to meet the variety of conditions, flows and depths of wells. Many pumps will work, but will not be the optimum, most efficient choice. It is highly unlikely that any contractor that "has just the right pump" on his truck actually does.

Be wary if the pump serviceman starts throwing around Horsepower as if it is a pump size. Horsepower simply describes how much work the pump can do, but does not describe important characteristics necessary in sizing a pump. For example Franklin Pump Systems has (6) different 1 horsepower submersible well pumps! One 1 HP model may produce 3 Gallons Per Minute at 240 PSI while another 1 HP model may produce 30 GPM at 43 PSI! Putting the 3 GPM pump in a well that is only 50 feet deep would result in premature failure of the pump! Putting the 30 GPM pump in a well that is 80 feet deep will result in very low water pressure.

Any contractor that stops and tells you he needs to confirm correct well & system information in order to put the right pump in is a good one to have! A contractor that tells you he has just the pump for you but has little to information is probably about to sell you something you don't need that will work marginally.

Some contractors try to sell you much more pump than you need! It is not uncommon for our technicians to find a very large pump installed to provide water for very minimal demands. This means you're using more power and paying more upfront than you really need to. Ask your pump contractor to tell you why he has chosen a particular pump for your application. Pumps that are oversized have the capacity to pull more water than the aquifer can supply. This means your pump may run out of water. The contractor can then sell you pump controls that turn the pump off should it run dry. We've seen some contractors sell huge pumps and then strap a valve on them to throttle the pump down to the desired output. Another waste of energy and an increased up front cost.

Once the contractor has gotten the data pertinent to your well and sized a pump that you as the customer agree to, get a quote on the cost to replace the pump, wire, pipe and any other items that aren't ready for another 10 years of service in your well. Make sure to ask the contractor to tell you the efficiency range your new pump will be operating in, how long the warranty on the equipment is for, and what that warranty covers.