



Bee Cave Drilling Freeze Protection Guide



Even here in the Central Texas area, we have to worry about portions of our water well system freezing in cold weather. We want to give you a few tips here to make sure we do not need to come repair or replace your system because it froze.

LEAVE WATER RUNNING

When the weather man tells people to TRICKLE their pipes due to an upcoming freeze, he is talking to city folks. If you have a water well you need to RUN water. If you have a booster pump that is sitting outside in the elements unprotected, you need to run 5-7 gallons per minute (gpm) through it. To keep from wasting the water, run a garden hose up into the storage tank to cycle the water through. If you have a booster pump in a pump house, you can probably get by with running 2-3 gpm through the system. If you are not using a storage tank and booster pump and the water comes straight into the house, running 1 gpm through a combination of sinks in the house should be sufficient.

OUTSIDE PIPES

Hopefully your pipes are buried at least 12 inches underground whenever possible. But any exposed pipes need to be wrapped in pipe insulation and then sealed with a 2" pipe wrap electrical tape – NOT DUCT TAPE. The pipe wrap electrical tape is water proof and UV resistant so it is less likely to break down in the sunlight after a year. Where you have bends in the pipe, cut a triangle out of one side of the insulation so that it does not bunch up on the inside of the bend.



Also be sure to insulate the metal fittings, such as the relief valve, ball valve, hose bibb, check valve, and pressure gauge. For the items you want to be able to get to later (such as the pressure gauge and hose bibb) make a glove out of the pipe insulation that will tightly slip down over the item when not in use.

OUTSIDE BOOSTER PUMPS

As mentioned above, you need to run a lot of water through the pump. And you need to get a heat source on it if possible. Just don't melt the pipes. Insulating the pumps is difficult because you have to insulate the pump without also insulating the motor – which would make it overheat. As soon as you can, you need to get a pump house built to place that pump inside.

PUMP HOUSE

The best protection you can have for your well equipment is a pump house with:

1. Good Insulation and
2. A Heat Source. We prefer to use a space heater, not a heat lamp, because you never know when that bulb is going to burn out. We also like to hang the heater from the ceiling so that it does not get coated with as much dust over time which can catch on fire.

If you are going to be gone or do not want to go out and turn the heater on and off, get a thermostat control for the heater. Unlike a residential heater that kicks on and off around 60 degrees, we can sell you one that kicks on and off around 35 degrees so it is only used when really needed.

LEAVING TOWN?

If you have done the things above, you are probably fine. But it never hurts to turn off the breaker to the pump(s) and drain the water from the pressure tank and booster pump.

If you do these things, hopefully you will escape any freeze damage this winter with your water well system. If not, give us a call. We would be glad to help.