

Report for September 10 2017

I had intended to include photos of the valve markers in the last report, here is what I had referred to:



The objective is to help an operator get to a valve buried in a dirt road as quickly as possible during an emergency.

The pump failed to shut down Sunday morning the 2nd and the tank began to overflow slightly. I went to the Tank to verify the situation and then to the Water Plant and shutdown the pump by turning off power to the pump at the circuit breaker box. I phoned Dan and we found an ethernet component showing an error. Dan came in the afternoon and removed the identical component from Well#8 and replaced the Well#9 component that had failed. We have nothing to account for the failure, there had been no overnight electrical storms to my knowledge. Perhaps storms some days before had damaged the item. Dan order a replacement for Well#8 and next week I will swap the components with Dan's remote help.

On the 4th the HACH Technician returned for his second semi-annual visit to clean and calibrate our two Chlorine analyzers, the CL-17 in the Water Plant and the CL-10 at the Tank. I cleaned the in-line filter for the CL-10, while he was cleaning the instrument it was nearly blocked with odd particles, the tech cleaned the CL-10 where these particles had lodged. I think we both realized at about the same moment that these particles could be coming from the rubber tube/hose that is used in the peristaltic pump where rollers compress the hose to create a flow. We sliced open the hose and without a doubt, the hose was disintegrating within. This

settled the question I have had which was how best to use the hose and how often to replace it. The hose should be cut into lengths of about 5" and this length of hose should be replaced about every two months.

While I was at the Water Plant I noticed that the Well #9 VFD cabinet cooling fan was making a loud grinding noise. I removed the old "muffin" fan which I had donated several years ago, it was very hot! I ordered a new fan and I installed it today including a thermostat which Dan had donated. The thermostat will shut off the fan when the pump is off and it will prevent the fan from operating during the winter when the Water Plant is cool/cold. I installed another thermostat Dan had donated to shut off the cabinet cooling fan at Well #8 some time ago.

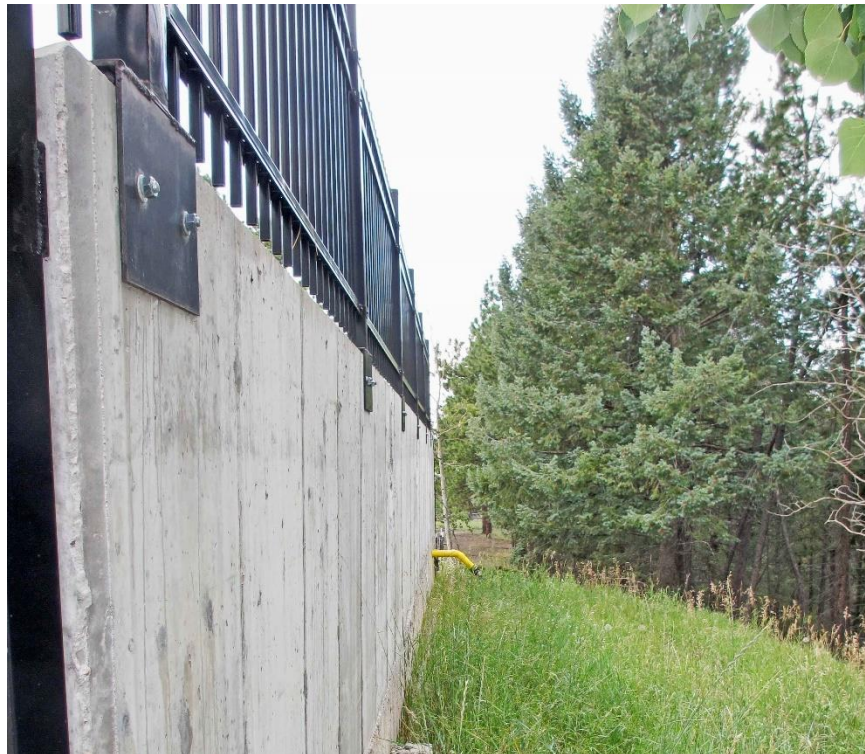


The tank overflow incident reminded me that this had happened once before after the tank was rebuilt and returned to service mid-January 2012. In that event it was apparent that the over flow pipe needed modification so it would drain more efficiently. We employed a synthetic rubber "duck-bill" valve on the pipe because they open with hardly any pressure and otherwise they close to prevent even insects from gaining access to the tank. But, the exit flow was insufficient to prevent the tank from continuing to fill albeit gradually, depending of course on the rate of production. The photo on the right is the original over flow drain. I have modified the pipe as indicated the in photos on the next page. This change should improve the flow significantly.





In the photo on the right you can see the thin line which opens to allow water to. I painted the pipe to protect it from ultra violet light. The drain is located at the north-west end of the tank.



Last week I began work on the second as-built map, from the Tank to at least Hopi Tr. and through to Sunnywood Ln. I spent some time in the intersection of Ute, Apache and Sioux Trails searching for valves but only found one 6" nail! I'm determined to find one or more valves in this intersection but I didn't even find an isolation valve for the hydrant at this intersection.

Kent Brady, Project Manager