## Report for February 21, 2017

**Disposing of stuff:** In my quest to get the Water Plant organized and cleaned up I brought home our old CL-17 Chlorine analyzer and one we had bought for parts before Jeremy decided it was time to upgrade. Nearly two and a half hours of cleaning, photos and photo cropping and enhancing and I'm ready to get these up on e-bay and Craigslist at, I think, \$900 - a few of the 14 photos:







After a little cleaning our old unit looks really good. As I recall, it was working when it was taken out of service.

**CRWA Meeting:** I attended the CO Rural Association Equipment Expo on the 14th. Just amazing, lots of new, better more productive stuff. I believe I found substitutes for our unreliable LMI type Chlorine "dosing" pumps and for the costly little CL-10 pump in the Tank Vault. I spent a long time with a filter expert. That sent me back to search the GAC system design information. Whereas design specifications were given for the GAC it doesn't appear that any specification was given for the bag filters. We currently use 10 micron bags whereas perhaps we should be using 5 micron bags or higher quality bags to extend the life of the GAC. We will look into the matter.

I have been talking about these things with Bob Clodfelter who has temporarily replaced Chance after he resigned.

**Replacing Lovell Gulch Hydrant:** Last week Bob and I had a look at the Mueller (top of the line) year 2000 hydrant we have in the yard. It appears to be in good working condition so next week I'll phone Mark and arrange for him to use it to replace the not working hydrant on Lovell Gulch. This is a 6" (actually 5.5") hydrant and we have a used in good condition 6" valve in the yard which we can use to isolate the hydrant for maintenance. I'll order some yellow paint and get the hydrant painted.

An Insurance Question: Just a reminder, given that our insurance company ultimately caved and reimbursed the homeowners of 550 Apache Tr. for the damages they incurred as the result of the failure of a very old and unknown 4" water main under their house we should explore reimbursement of our costs which were:

- 1. On the advice of a consultant, we incurred about \$1,500 of costs to determine that mold had not developed as the result of the flooding of the heater ducts below the concrete floor on-grade, and elsewhere in the house where water came through the floor the floor in a bedroom cracked full width and water came up through the crack. This step was taken to avoid the risk that the homeowner might otherwise claim mold damage at a later date.
- 2. We incurred costs (+/-\$5000) to excavate in front of and behind the house to find the pipe and to isolate the section of the water main that passed under the house. As there was no record of the pipe line which probably predated the water system as a line belonging to the pre-existing golf course the pipe had to be cut at both locations to determine in which direction the water flowed if not in both directions, that is from behind and from the front assuming that the line may have been a bridging line between other water mains.
- 3. Unfortunately, it turned out that a second home was attached to his water main 600 Apache Tr. By having cut the water main as described, the District abandoned the water main to which both 550 and 600 were attached and for which they paid tap fees. Make no mistake, tap fees at that time were about as expensive as they are at the present in constant dollars. We incurred a cost of about \$7000 to reconnect 600 to the nearest water main a distance of about 300 feet.
- 4. Subsequently, we also had to provide the homeowner of 550 Apache Tr. with a new service connection at a cost of +/-\$4000. This job hasn't in fact been completed as we have so far not been successful in locating where the old water main was/is attached to our system. Until such time as we are able to kill that line, 550 is attached to it where it enters Apache Tr.

I think that its about it. My guess is, this water main belonged to the golf course and tapped a spring that had existed up the hill beyond the home at 550 Apache on land that wasn't platted until long after the developer's water main from the tank reached the intersection in front of 550 Apache Tr. at which time the developer of the subdivision and water system attached it to his water main and it was subsequently used to serve these two homes.

Merging the District's and City's water and sewer system: While I suspect these systems will be merged eventually and while we work to make a merger feasible and practical we should think carefully about giving up senior water rights sufficient to serve well over one a half million customers - actually, setting aside augmentation issues, we have water rights sufficient to serve 1,500,000 customers! Although we are very nearly built-out in so far as single family home units are concerned over time condominium units will likely replace some and perhaps many of those units and perhaps

double our customer base and thereby reduce costs per household perhaps by half. That isn't going to happen in the near term as zoning currently prohibits more than one housing unit per lot.

Otherwise, a merger should give us in-City rates and all rights & privileges of those who live within City limits. When this area is severely impacted by a long drought our homes and property values are currently protected by our water rights. The City will naturally protect those who live within City limits first and others only to the extent that resources allow. That could put properties in the county that are served by the City at serious risk of catastrophic loss. When trading water rights for in-City water rates etc., we must look at maintaining a substantial share of our rights, perhaps at least sufficient to supply our eventual build-out to say 500,000 customers (about 75 GPM/24/365) and give the city the balance, 138GPM/24/365.