

Report for March 27, 2017

A large part of this month has been spent researching and writing the answer to a Forest Service question regarding the replacement of the old raw well water line between the Treatment and GAC facilities. I will send the answer later today and I will copy that to the Board. I also spent a lot of time writing two Progress Reports.

Otherwise: On the 3rd, Bob Clodfelter and an associate carried out a tank inspection. It was very nice to hear them exclaim how clean our tank is after 5 years! Then they worked on calibrating the CL-10 Chlorine Analyzer.

On the 6th, the HACH technician arrived to service and calibrate the CL-17 and CL-10 analyzers. Altogether he was here for over 3 hours!

On the 7th, I worked with Dan to establish communications between the Water Plant and the CL-10 Chlorine, PH and water temperature sensors - that was 3 hours and 15 minutes. Dan returned home to complete the installation from there.

On the 9th, Jim Petrain and an associate came to remove the old Ductile Iron pipeline that had conveyed raw well water to the bag filters in the GAC building. I called Bob and we agreed it would be appropriate to shutdown the pump and valve off the remaining Ductile Iron pipeline given that no megalug bolts had been snapped off although we assumed they had been tightened to perhaps 90% of the snap point force. Because, the guys would be dismantling the other pipe only inches away, I also cracked the drain valve on a bag filter to take the pressure down from 95 to about 20 PSI. Then they went to work dismantling the other pipe, and I started to make a small repair on a PRV. Then Jim's associate said "...I just unscrewed a megalug bolt with my fingers." That was a heart stopping moment. It appears that the bolts were tightened very inadequately, very scary indeed!



I had them snap all of the megalug bolts and tighten all of the other bolts, most of the bolts needed tightening!

When that work was completed, I closed the valve on the bag filter and a slight leak appeared from the valve where water reenters the treatment building from the Chlorine contact pipeline. I brought the pressure back to 95 PSI in about 15 minutes. Then the isolation valves were opened and the pump restarted.

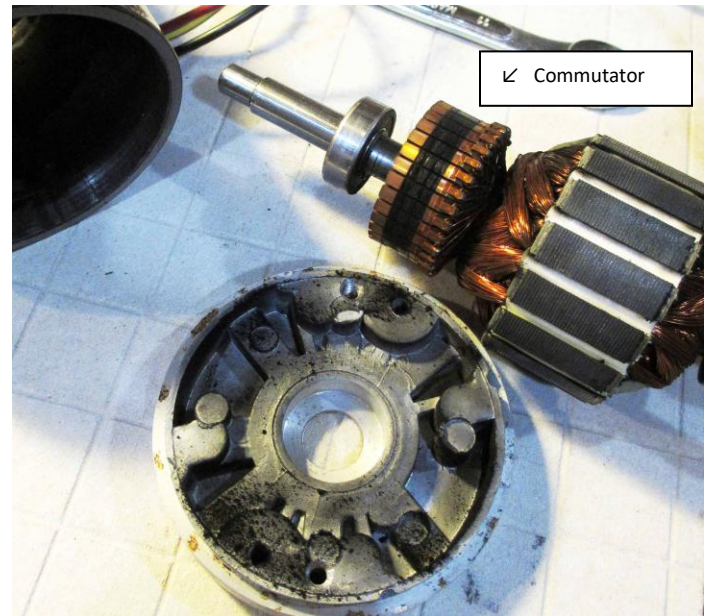
Then the 3 of us stacked the pipe in our yard and covered the pipe with tarps.

On the 11th we received word of a water main break on Sunshine Cr. That turned out to be a sewer back-up. We notified the City and they cleared a blockage in the sewer line.

On the 15th several customers raised concern that there appeared to be leaking taking place where the water main on Sunnywood Ln. had broken earlier this year. The excavation had sunken a bit and moisture from the shallow ditch by the road was the problem. I did some shoveling and returned twice to add dirt from the ditch by the road, problem solved.

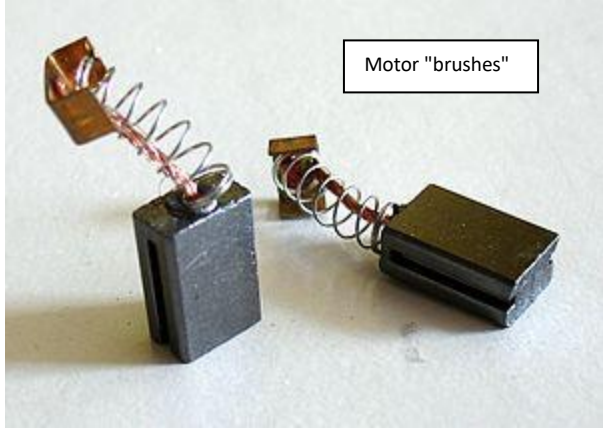
On the 22nd Dan phoned . While working from home on programming the PLC the system lost communication with the HMI (Human Machine Interface) display. I went over to the plant and restored the communication.

On the 23rd I went to the tank to check on the CL-10 and found the pump had stopped working. I took it home, dismantled it and found one of the motor brushes had burned



up. Fortunately the motor was easily dismantled, and cleaned. The commutator was burned but # 600 sand paper and a drill brought that back. And fortunately

Woodland Hardware had brushes, like the ones below. Unfortunately the springs were too long and that modification took at least an hour. Including a trip to Woodland Hardware the \$1000+ pump was back in service in just over 4 hours. With luck, this pump will give us another year or more. Meanwhile I have found better pumps at nearly half the cost.



Kent Brady, Project Manager

