Saxman Water Report July 2024

July has been going well with water production. We were able to get our 802 Tank level up to 15 ft, close to overflowing, with all the sunshine we have been having and no rain. I have figured out why our water plant has been having so many emergencies and I know how we are going to correct this problem. This is how it started when the last water operator was working here, he never put all the planks in at the reservoir, and then Richard and I added 2 more planks in 2023 and since then we have had a few times that the water was so bad it took 2 days for the filters to clear up, and here is why, because when we added the 2 extra planks it added about 2 more feet of depth at the reservoir which is a good thing because it added more PSI which will give us more gallons per min at the water plant without turning on any of the booster pumps. But here lies the problem when the reservoir gained 2ft of depth it allowed the water level to rise in the vault to the point where the water was bypassing the strainers allowing anything up to 8 inches in diameter to get in the water line and straight to the filters causing all the problems we have been having since then like when the SCD machine was pumping all the polymer in one day the SCD machine was on automatic and it responded accordingly to the water it was receiving because depending on if we make a 3% solution or 4% solution the SCD machine decides how much polymer percentage to pump based on its calculations by the laser particle counter which gives us our NTU number and with the Raw water bypassing the strainer this is what has been causing us to not be able to make water sometimes waiting on filter to waste for hours until the NTUs come down to a good number. Sometimes the NTUs would be in the thousands and now we know why the polymer was being overdosed those times because no amount of polymer can treat unstrained water so the SCD machine kept polymer percentage going up because it was on automatic it would go to 100% trying to treat the unstrained water causing all the problems we had, thinking it was the polymer pump or the SCD machine not knowing that the water was bypassing the strainers all those times we had high levels of rain. This is how we are going to fix the problem without having to keep an eye on the Reservoir all hours of the day and night and pulling one of the planks once the water gets high enough to bypass the strainers, the next time we shut down the plant for a backwash we will drain the reservoir and I have an 8in pipe coupler and piece of 8in HDPE pipe that will add 12in to the vent line on the strainers and the water will never be able to bypass the strainers again because this was the root of all our problems recently we thought it was a problem at the plant but it was the water bypassing the strainers causing all our machines to go haywire. Now that we know what the problem was, we can mix our polymer accordingly. Because this was also why the polymer percentage got so high in the first place because we didn't know the water was bypassing the strainers causing us to use more polymer and chlorine to treat the water. We are always making good water, but sometimes it takes more treatment than others, like when it rains, there are more

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inorganics in the water, and we must slow the GPM to prolong filter life and maintain quality of water. Now we know what the problem was and how to fix it.

Water Operator, Robert Sero

Robert Sew

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