

# Forest View Acres Water District

Operations Report – October/November 2020

Prepared by Gabby Begeman -ORC Water Professionals

## Arapahoe Water Plant

- The plant effectively produced 100% of demand for October and 96% for November.
- The well pump was replaced on October 29<sup>th</sup>. One days worth of water hauling (approximately 15,000 gallons) was delivered to the booster station and pumped into the system to ensure that we had water in reserve while the AWP was down for replacement.
- A failure of the AWP radio occurred on Oct 30<sup>th</sup> resulting in needing to have Jeff with Fluid Design come out and pull the radio from the SWTP and install at AWP. This restored automatic operation of the well based on tank level.
- Mission Remote Monitoring Alarm System is installed and can be configured to operate the well based on tank level if an optional Tank and Well package is purchased. The cost of the well and tank package is a one time fee of \$1200. An additional Mission box is required to be installed at the Tank (\$2500 for the unit and about \$500/yr for the service)
  - Additional alarms/trending will be set for the following:
    - Well Failure – VFD does not have an output, unfortunately this alarm cannot be installed without replacing the VFD or having the controls person create code.
    - Booster pump failure - pending
    - Water on the floor - pending
    - Well runtime - pending
    - Booster pump runtime - pending
    - Building temperature – Installed and operational.

## Booster Pump Station

- Mission Remote Monitoring Alarm System installed and operational. This system can be utilized to control the well in the event of a failure at the booster station. In lieu of the problematic radio system, an upgrade to the Mission system is being suggested to allow for relay output control and interlocking of the systems. The additional cost for the upgrade is a one time fee of \$800 and an increase in the service fee by \$183/year.
- Booster Station Alarms – Loss of Communication with AWP – This alarm has been removed from the programming to ensure the well continues to operate. ORC anticipates this function to be replaced via the Mission system with the upgrade mentioned above.

## Distribution

- A leak was found in the yard hydrant at the booster pump station. ORC attempted isolation and found the leak was prior to the isolation valve. Global Underground was promptly dispatched and fixed the leak.

- A leak was reported in the PRV pit on Red Stone Ridge Rd and Red Rock Ranch Dr. The PRV was isolated and pumped out. A leaky fitting was the culprit and has been repaired and the PRV put back into service.
- All valves within the distribution system are in the process of being located , exposed and exercised.
- Monthly bacteriological samples taken
- Quarterly disinfection byproduct samples taken

### **Meter Repairs:**

- 100% of residents that require/allow smart meters have been installed and are operational.
- Any additional issues will be addressed on individual meters as needed.

### **Surface Water Plant**

- The plant produced an effective 0% of demand for October. However, the facility was started up late in October and did produce approximately 18,000 gallons per day for a few days. Unfortunately, the meter reading sheet does not reflect this. There is a discrepancy with the numbers in the spreadsheet that is not reconcilable at this time due to a change in staff. The SWTP contributed 4% of production in November.
- The inlet was cleaned and inspected on October 29<sup>th</sup>.
- Completed monthly MOR report for state with no violations.
- The Mission system was installed at the SWTP on November 21<sup>st</sup>. The following alarms/datalogging capabilities are:
  - o Trending, datalogging and alarms for
    - Chlorine residual in plant, chlorine residual at entry point, turbidity for filtered water, turbidity for raw water.
    - Water on the floor
    - Booster low suction pressure
    - Booster pump failure
  - o Additional alarms, trending and datalogging will be installed for the following:
    - Inlet Pressure
    - Filter Flow
    - Recycle pond level
- The radio was removed on Oct 30 and installed at AWP. We have received a quote to replace the radio for approximately \$2500. This will enable the operation of the SWTP based on tank level. Currently we are bypassing the tank level and simply operating the SWTP regardless of tank level.
- See the attached quote to replace the dilapidated garage door at SWTP.

## Communications

- Failure of equipment and lack of functionality has plagued the district with problems resulting in low tank levels and many hours of control work to mitigate/remedy/improve.
- Mission systems have alleviated the need for telephone service and ultimately can provide a cellular link for communication between tank, AWP, SWTP and Booster Station with some additional units and upgrade to service plans.
- Alternatively, a more traditional approach via controls technicians and PLC's would provide a similar communication without real time data acquisition.
- A cost analysis between the two approaches will be made available at the meeting.

## Production Totals

Year	Month	SWTP Production -BW	% of Total	AWP Production	% of Total	Total Production	Total Water Sold	Percentage Discrepancy
<b>2020</b>	Jan	0	0%	2,061,922	100%	2,061,922	1,256,861	39.04%
	Feb	0	0%	1,922,915	100%	1,922,915	1,252,367	34.87%
	Mar	0	0%	1,651,707	100%	1,651,707	1,204,035	27.10%
	Apr	0	0%	1,814,822	100%	1,814,822	1,379,752	23.97%
	May	0	0%	1,997,113	100%	1,997,113	1,935,338	3.09%
	Jun	824,456	33%	1,697,757	67%	2,522,213	2,281,558	9.54%
	Jul	752,647	28%	1,916,247	72%	2,668,894	2,302,404	13.73%
	Aug	43,200	1%	2,908,781	99%	2,951,981	2,482,113	15.92%
	Sep	-33,000	-1%	2,383,030	101%	2,350,030	1,853,343	21.14%
	Oct	-6,987	0%	2,277,012	100%	2,270,025	1,418,132	37.53%
	Nov	83,666	4%	1,899,173	96%	1,982,839	1,266,632	36.12%
	Dec							
<b>Total</b>		<b>1,663,982</b>	<b>6%</b>	<b>22,530,479</b>	<b>94%</b>	<b>24,194,461</b>	<b>18,632,535</b>	<b>22.99%</b>

The discrepancy is likely high due to a combination of factors including known leaks and disparity in meter reads.

# Tri-Lakes Garage Doors LLC

15954

Jackson Creek Pkwy #B352  
Monument, CO 80132  
(719)488-2220

11/4/2020  
trilakesdoors@gmail.com

Submitted to: Gabby Begeman (303)548-3320 [gbegeman@orcwater.com](mailto:gbegeman@orcwater.com)  
4656 Redstone Ridge Rd. Monument, CO 80132

This estimate: New garage door-(1)9'x8'

- Install CHI model 4283. Raised panel design.
- Door has an R-value of 9.65. Steel backed door.
- Door and trim are evergreen in color.
- Four section door.
- 15" radius tracks.
- Heavy duty hardware.
- Support strut on all sections.
- Sections have a lifetime warranty.

**This estimate totals \$936.08**

\*Total includes furnishing all the materials and labor necessary for the completion of this estimate. Invoice due at the completion of the installation.

Respectfully submitted,  
(719)488-2220

Jim Hatley  
(719)213-1598



DOORVISIONS



## Product Summary

Model 4283

### Size

Width: 9' 0" X Height: 8' 0"

### Products

Timeless Collection : Raised Panel

### Design

Long Panel

### Thermal Requirements / Construction

R-9.65 / 2" Medium Duty 2-Sided Steel Sandwich Polystyrene Insulation - 1-13/16" Thick

### Color

Solid Colors : Evergreen

### Windows

Position : NO WINDOWS

**Please Note:** These woodtones, colors, and door panels are to be used as an indication only. Some sizes not available in all models and configurations. Refer to your local C.H.I. Dealer for the exact look of your garage door and availability.