



St. Vrain Water Authority Monthly Activity Report July 2024

Daily Operations include completing site walk-through, recording daily flow totals and chemical levels, and recording daily process control data. Completion of plant start-up and visual inspection of plant equipment. Collect and analyze daily lab samples. Completion of end of day shutdown and lock up.

7/1/24: Completed daily operations. Performed a chlorine maintenance wash on UF #2. Plummer Associates, Inc. and Colorado Civil Group, Inc. onsite to review plant upgrade project to ensure the current process is not affected.

7/2/24: Completed daily operations. Cleaning company onsite to clean the Conference Room, Control Room, and Lab.

7/3/24: Completed daily operations. Performed an acid maintenance wash on UF #1.

7/4/24: Plant off for the holiday.

7/5/24: Completed daily operations. Performed a chlorine maintenance wash on UF #1 and then performed an acid maintenance wash on UF #2.

7/8/24: Completed daily operations. Performed a chlorine maintenance wash on UF #2. Cleaned and flushed raw water and finished water turbidity analyzers. Intertek onsite to certify the Motor Control Center (MCC) room has a fire rated door.

7/9/24: Completed daily operations. Picked up supply order from REC office.

7/10/24: Completed daily operations. Completed an acid maintenance wash on UF #1. Cleaned and flushed finished water turbidity analyzer.

7/11/24: Completed daily operations.

7/12/24: Completed daily operations. Performed an acid maintenance wash on UF #2 and a chlorine maintenance wash on UF #1. Completed housekeeping in plant process room. Isolated one calcite contact tank to reduce the detention time and lower the finished water alkalinity.

7/15/24: Completed daily operations. Performed a chlorine maintenance wash on UF #2.

7/16/23: Completed daily operations. Additional REC operators onsite to assist with replacing the empty chlorine gas cylinder with a new chlorine gas cylinder.

7/17/24: Completed daily operations. Performed an acid maintenance wash on UF #1. Hach onsite to review tour the facility and add update the annual renewal of service contract.

7/18/24: Completed daily operations. Cleaned and flushed the raw water turbidity analyzer and the raw water pH probe. Completed general housekeeping around the plant.

7/19/24: Completed daily operations. Performed a chlorine maintenance wash on UF #1 and performed an acid maintenance wash on UF #2. Organized the main chemical room barrel. Cleaning company was onsite to clean the office spaces. Picked up supply order from REC offices and placed an order for lab supplies.

7/22/24: Completed daily operations. Performed a chlorine maintenance wash on UF #2. Filled the RO antiscalant and sodium hydroxide day tanks.

7/23/24: Completed daily operations. Automation Electronics was onsite to install a new digital pressure gage that will now directly relay data from the injection well house to the HMI/PLC display.

7/24/24: Completed daily operations. Filled RO antiscalant and sodium bisulfite day tanks. Cleaned and flushed compliance point turbidity analyzer.

7/25/24: Completed daily operations. Clean and flushed the raw water and finished water turbidity analyzers. Calibrated the raw water pH probe.

7/26/24: Completed daily operations.

7/29/24: Completed daily operations. Reset a digital card fault on the chemical dosing PLC.

7/30/24: Completed daily operations. Completed maintenance on the lab bench top pH probe. Placed supply order for pH analyzer gel and cleaning solution. Cleaned and flushed finished water turbidity analyzer and the UF #1 turbidity analyzer.. American Water Chemicals (AWC) onsite to collect RO samples for antiscalant analysis. Black Label Services (BLS) onsite to reinstall calibrated water meter for Deep Well Injection Pump Train #2 and remove Deep Well Injection Pump Train #1 water meter to be sent to Emerson/Rosemount for recalibration.

7/31/24: Completed daily operations. Performed a Clean In Place (CIP) on UF # 1. Colorado Civil Group, Inc., and Town of Firestone board members onsite to tour the plant. Prepping the UF CIP tank to do a chlorine CIP for UF # 1 tomorrow. Orkin was onsite to perform quarterly service of pest/rodent control devices.

St. Vrain Water Authority Summary

Monthly Water Totals	July 2024	July 2023
Raw (MG)	1.875	1.357
Filtrate (MG)	1.644	1.272
Finished (MG)	1.390	1.109
Concentrate (MG)	0.205	0.130
Finished Water Quality		
Average Entry Point Free Chlorine Residual (mg/L)	1.18	1.71
Average Entry Point pH (SU)	7.47	7.67
Average Entry Point Conductivity (µS/m)	406	294
Average Entry Point Fluoride (mg/L)	0.67	0.63
Average Entry Point Alkalinity (mg/L)	235	146

