



## **St. Vrain Water Authority Monthly Activity Report April 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.

**4/1/24:** Completed daily operations. Collected quarterly compliance samples and delivered them to the lab. Completed acid and chlorine maintenance washes on UF #1.

**4/2/24:** Completed daily operations. Completed acid and chlorine maintenance washes on UF #2. After production setpoint was reached, the RO kept running and filled the interstage basin past the stop setpoint without shutting down the unit. Operation staff unsuccessfully attempted to shut off the RO from the HMI screen and had to press the E-Stop button to get the unit disabled and reset. After resetting the RO went into post-permeate production flush and then into standby. REC is contacting Wiggins for further troubleshooting to resolve this issue.

**4/3/24:** Completed daily operations.

**4/4/24:** Completed daily operations.

**4/5/24:** Completed daily operations. Testing deep well injection pump trains for next week's temperature test.

**4/8/24:** Completed daily operations.

**4/9/24:** Completed daily operations. Completed acid and chlorine maintenance washes on UF #2. Shutdown both deep well injection trains to conduct temperature tests.

**4/10/24:** Completed daily operations. Completed acid and chlorine maintenance washes on UF #1.

**4/11/24:** Completed daily operations. Ordered lab supplies, chemical equipment, and process control supplies. Filled chlorine day tank for CIP and maintenance washes.

**4/12/24:** Completed daily operations. Restarted the deep well injection system after the temperature tests were completed.

**4/15/24:** Completed daily operations.

**4/16/23:** Completed daily operations.

**4/17/24:** Completed daily operations. Conducted a tour for Burns and McDonnell and Town of Erie Water personnel with Memcor on site to explain the treatment process. Completed acid and chlorine maintenance washes on UF #1.

**4/18/24:** Completed daily operations. Operation staff attended a Teams meeting with Wigen and Plummer to troubleshoot issues with the RO Skid and determine how to resolve them. The issue appears to be a result of the Permeate Flush Tank not being filled by the time the production setpoint is reached. A follow-up meeting was scheduled to make changes to the controls and test new operational setpoints and alarms. General cleaning of the MCC room.

**4/19/24:** Completed daily operations.

**4/22/24:** Completed daily operations. Received a delivery of 93% sulfuric acid tote. Completed acid and chlorine maintenance washes on UF #2. Flushed and cleaned the UF Feed Turbidimeter.

**4/23/24:** Completed daily operations.

**4/24/24:** Completed daily operations. Completed acid maintenance washes on UF #1 and UF #2.

**4/25/24:** Completed daily operations. Attended a Teams meeting with Wigen integrator to make changes to the control narrative for the RO unit. Added additional alarms and confirmed their operation.

**4/26/24:** Completed daily operations.

**4/29/24:** Completed daily operations. Replaced the 93% sulfuric acid tote. Sun Valley Electric on site to complete electrical work around the facility.

**4/30/24:** Completed daily operations. Flushed and cleaned the Finished Water Turbidimeter and feed line.

### St. Vrain Water Authority Summary

<b>Monthly Water Totals</b>	<b>March 2024</b>	<b>April 2024</b>
Raw (MG)	2.759	1.434
Filtrate (MG)	1.186	1.365
Finished (MG)	1.008	1.023
Concentrate (MG)	0.132	0.153
<b>Finished Water Quality</b>		
Average Entry Point Free Chlorine Residual (mg/L)	1.28	1.22
Average Entry Point pH (SU)	7.45	7.45
Average Entry Point Conductivity ( $\mu$ S/m)	432	415
Average Entry Point Fluoride (mg/L)	0.54	0.56
Average Entry Point Alkalinity (mg/L)	250	241

