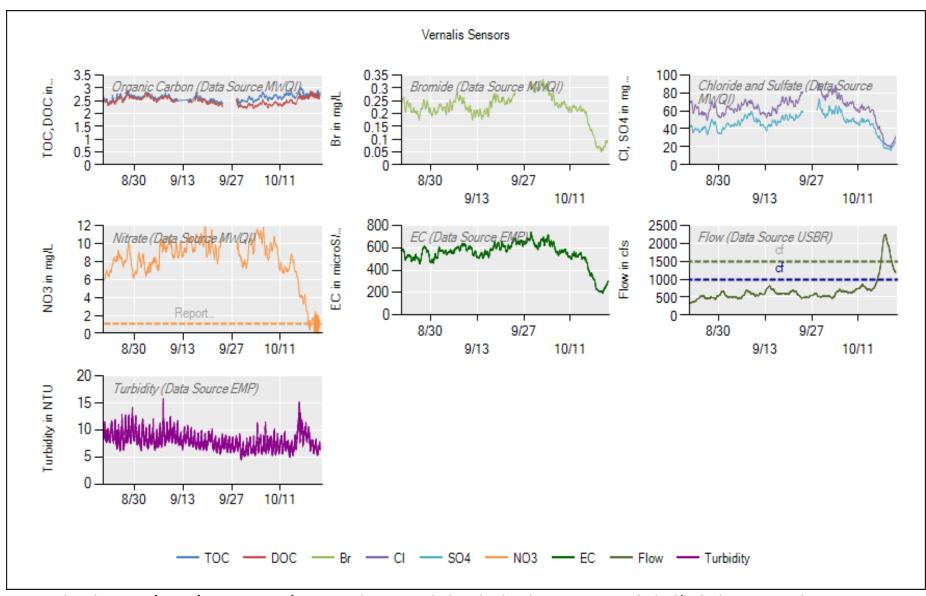
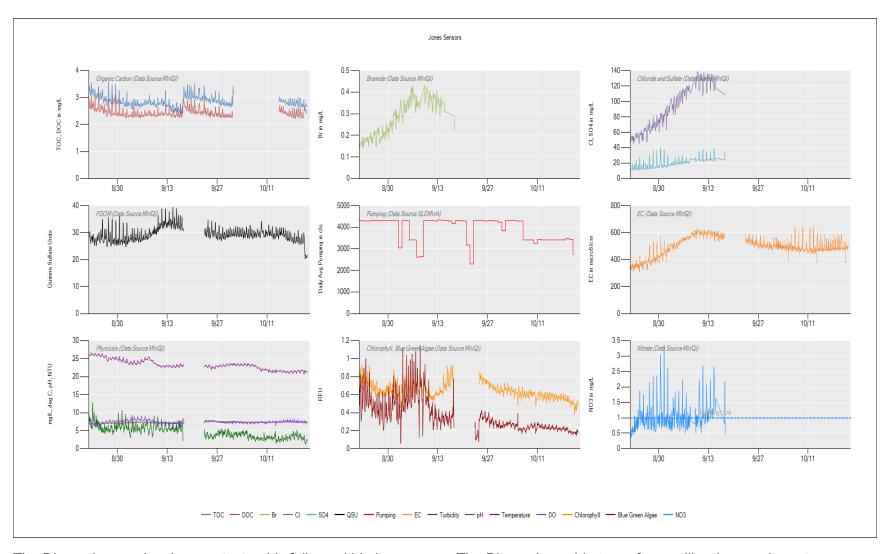


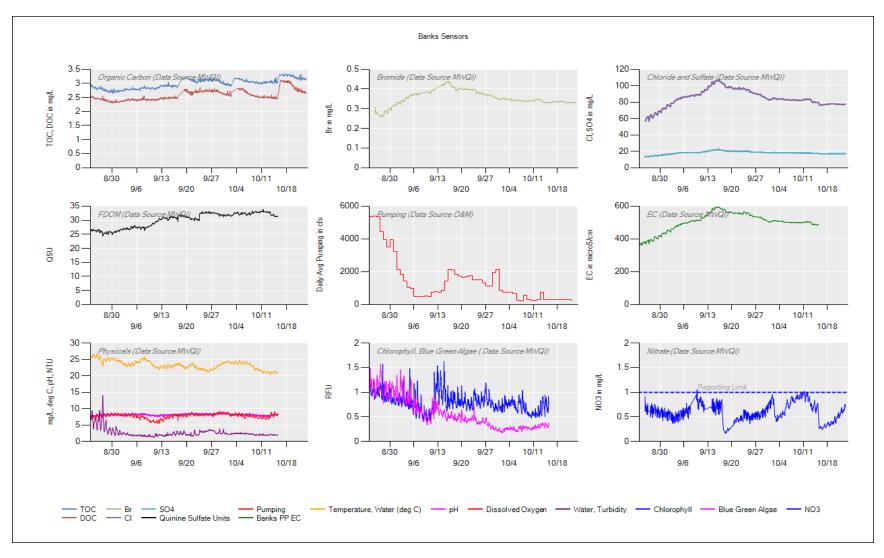
8/27: Performed cleaning maintenance on the carbon analyzer - **9/4:** Replaced the 50 um and 1 um carbon filters – **9/9:** Cleaned TOC and DOC solenoid valves – **9/15:** Replaced all system filters, analyzed all QC samples, two of the standards were out of range, re-ran them, still out of range – **9/17:** Re-analyzed QC samples, all passed – **10/13:** Carbon analyzer troubleshoot, found DOC solenoid valve was leaking, replaced the leaking valve



Events: Filter changes: 9/15, 10/15. Outages: 9/11-14: OC data stopped when the data-logging program glitched/locked-up, restarted on Monday. 9/24-28: Power outage Thursday evening. Computer, analyzers, & programs restarted on Monday. 10/18, 24, & 31: Pulse flows peak.

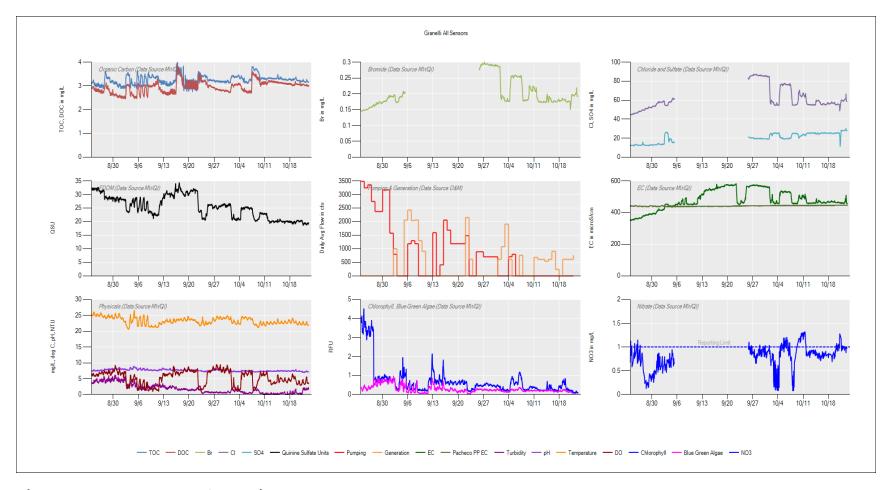


The Dionex is experiencing a catastrophic failure within its program. The Dionex is unable to perform calibrations and create new sequences. We are attempting to reinstall software programs, but this has proven difficult since the Chromeleon 6.8 software is discontinued. We are continuing to work with Dionex to bring the system back online. The Sievers was down for two weeks due to a clog deep within the system, which took some time to find. It's currently operational and reporting. The EXO was down for a few days due to the program going offline while the computer rebooted. It's currently operational and reporting.



Significant Events: August 24^{th,} 2020 to October 24^{th,} 2020

• **10/23/2020:** Sonde parameters started to not report correctly. So far, it points to a communication wiring issue with the DCP adapter that connects the Sonde to the Data logger. Possibly need to restart it, and check for wiring issues. Currently the Sonde is taking measurements internally to collect measurements.



8/27: Swapped sonde, changed filters. **9/3:** Reconnected the sonde to the sonde program. Possible issue with previous sonde Chlorophyll data. Current sonde data looks accurate. **9/16:** Performed QC on the carbon analyzer. Cleaned the TOC and DOC solenoid valves. Replaced filters. Anion analyzer is still not running, one of the consumable components needs to be replaced, it has been ordered. **9/18:** Replaced the TOC solenoid valve. **9/23:** Swapped sondes. Performed some cleaning maintenance on the carbon analyzer. **9/25:** Changed a consumable component on the anion analyzer. **10/7:** Changed filters. **10/19:** Performed maintenance and QC on the anion and carbon analyzers. **10/21:** Swapped sonde, anion analyzer tech performed annual maintenance on instrument. Previous QC run with values out of range were the result of the most recent calibration being off. Set the system to use the previous calibration which improved check standard results.

