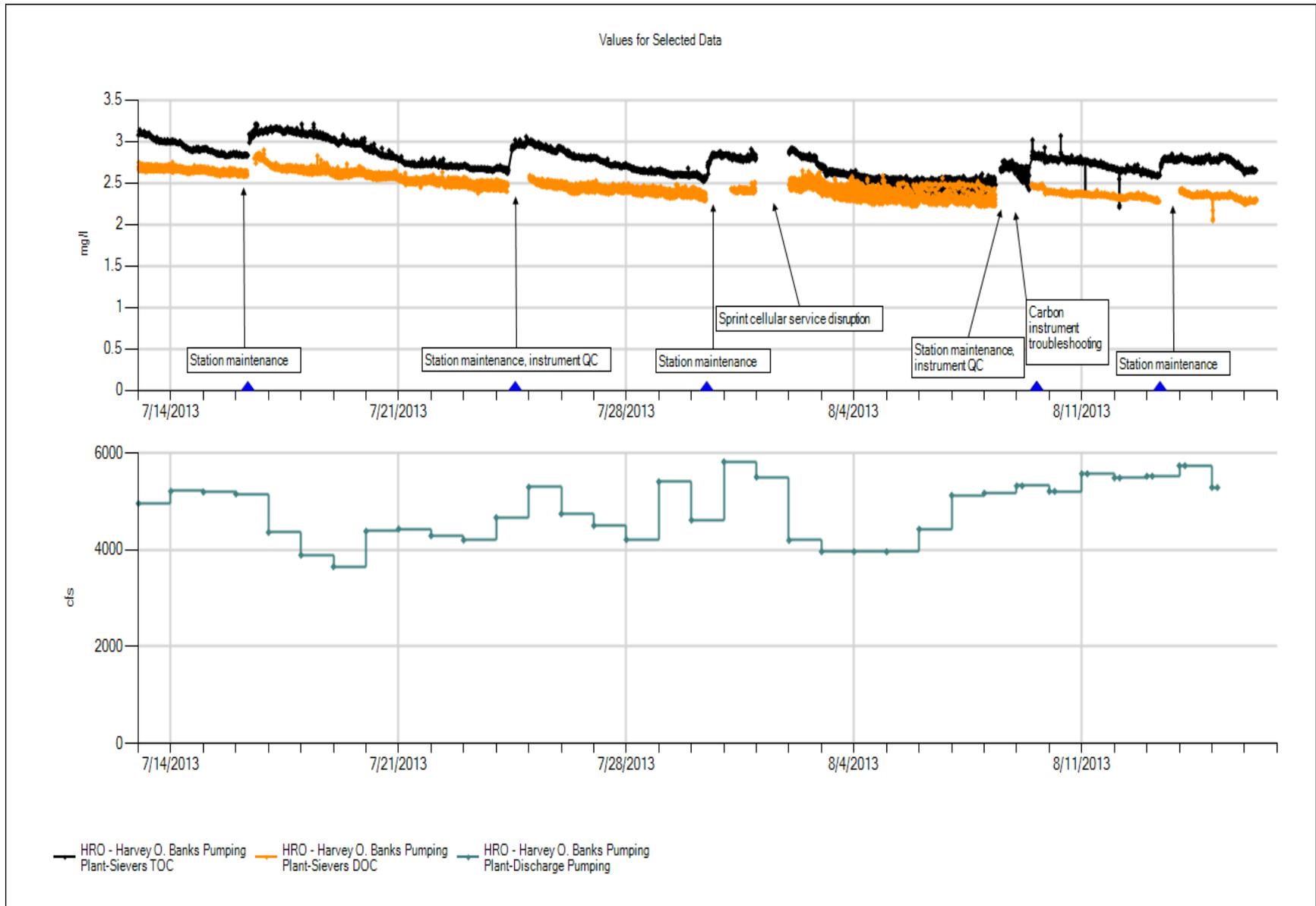
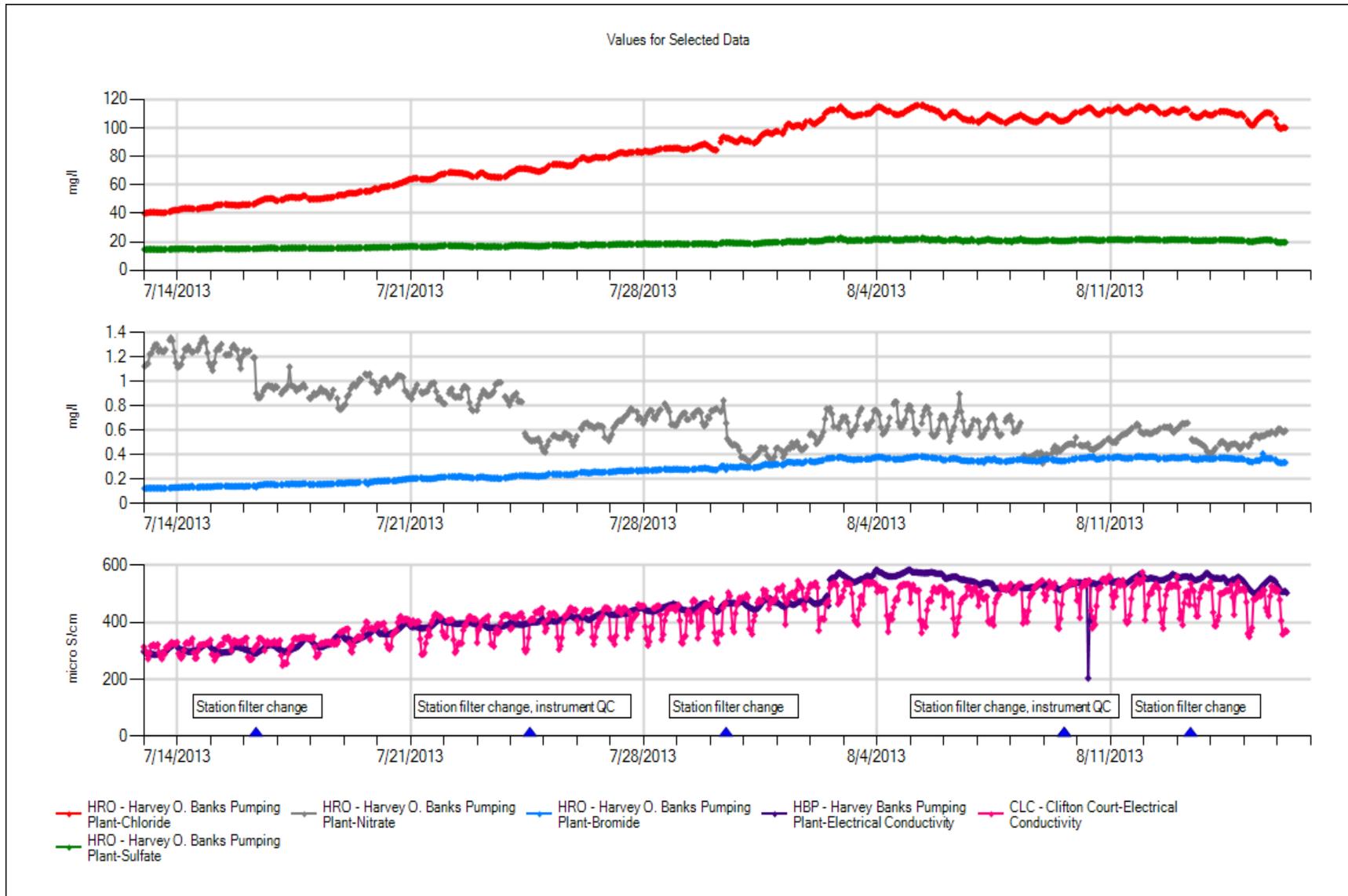


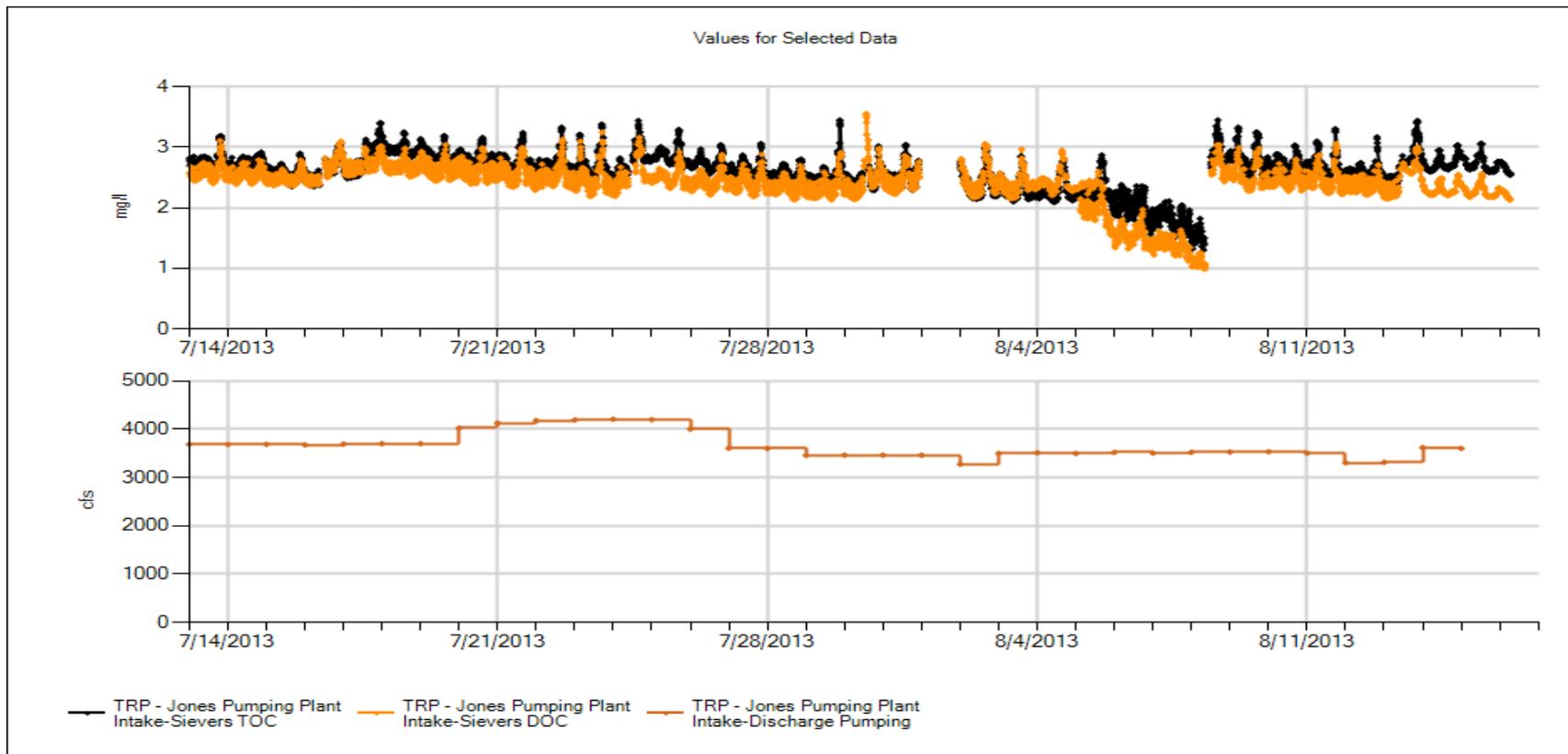
Banks PP – Organic carbon and Discharge Pumping



Banks PP – Chloride, Sulfate, Nitrate, Bromide and EC



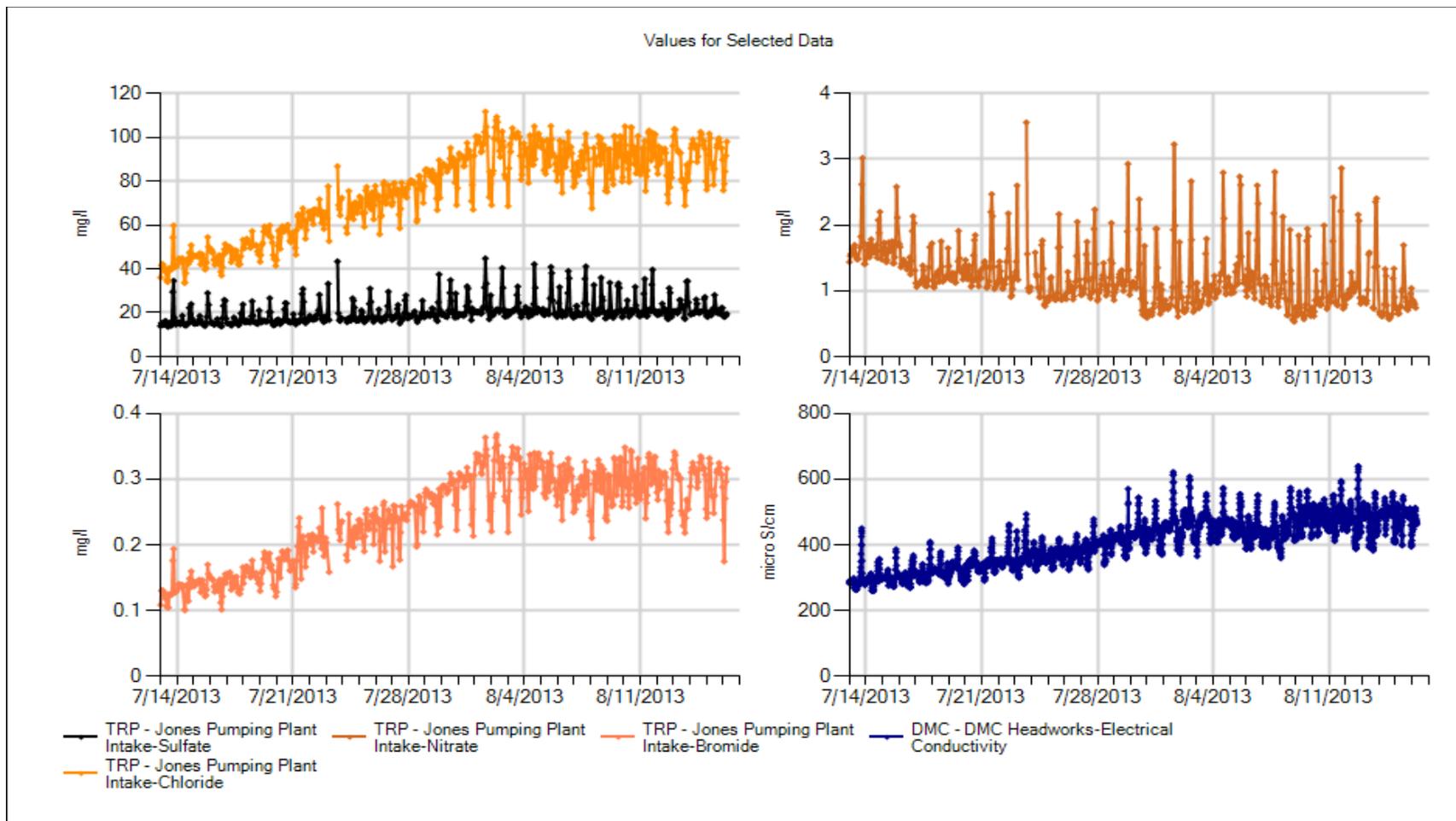
Jones Organic Carbon and Pumping



Significant events: July 15, 2013 – August 17, 2013

- 7/16 – filter change
- 7/17 – cleaned sample inlet line, waste line, and sample inlet line within the TOC analyzer.
- 7/24 – filter change and sample delivery lines cleaned.
- 7/30 – filter change
- 7/31 – network was temporarily down resulting in the data gap.
- 8/8 – filter change. Clogging and over filtration resulted in lower than normal OC levels.
- 8/13 – filter change and flow magnet chamber was cleaned, which significantly cleaned-up the OC d

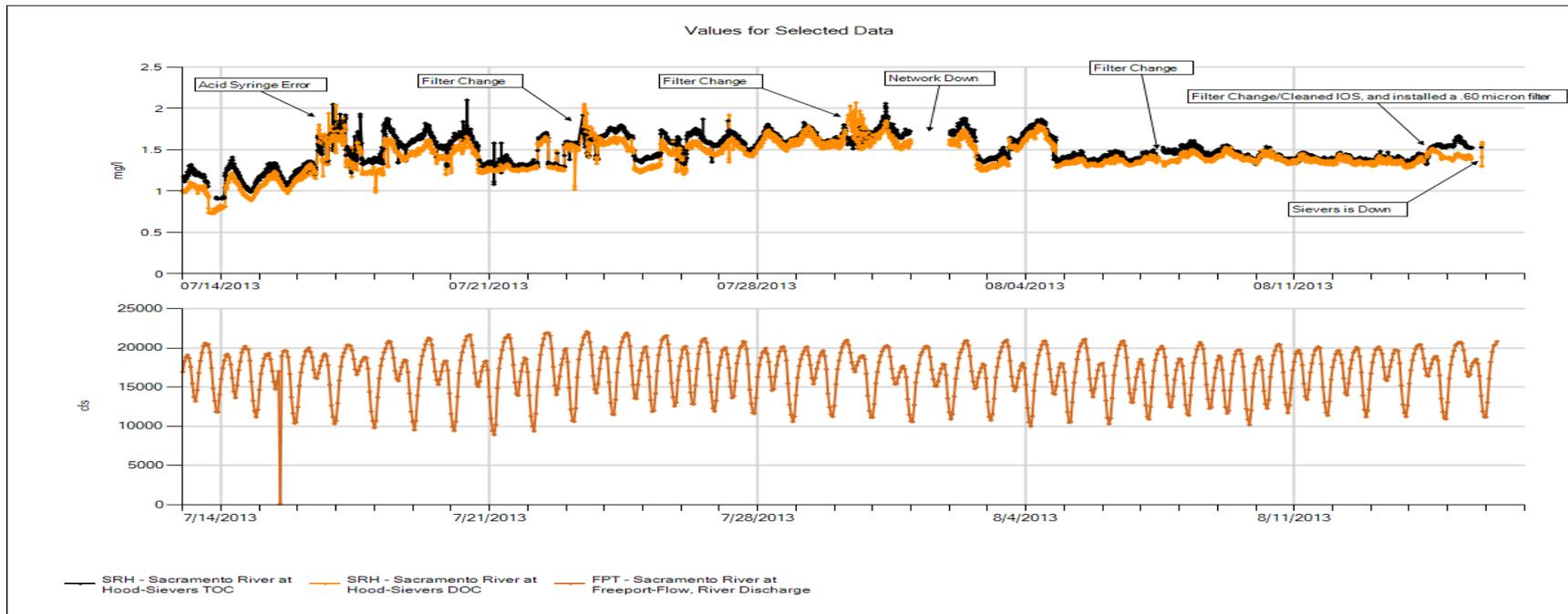
Jones anions and EC



Significant events: July 13, 2013 – August 17, 2013

- 7/17 – new check standard was added to the Dionex analyzer.
- 8/8 – double deionized water was added to the Dionex analyzer.

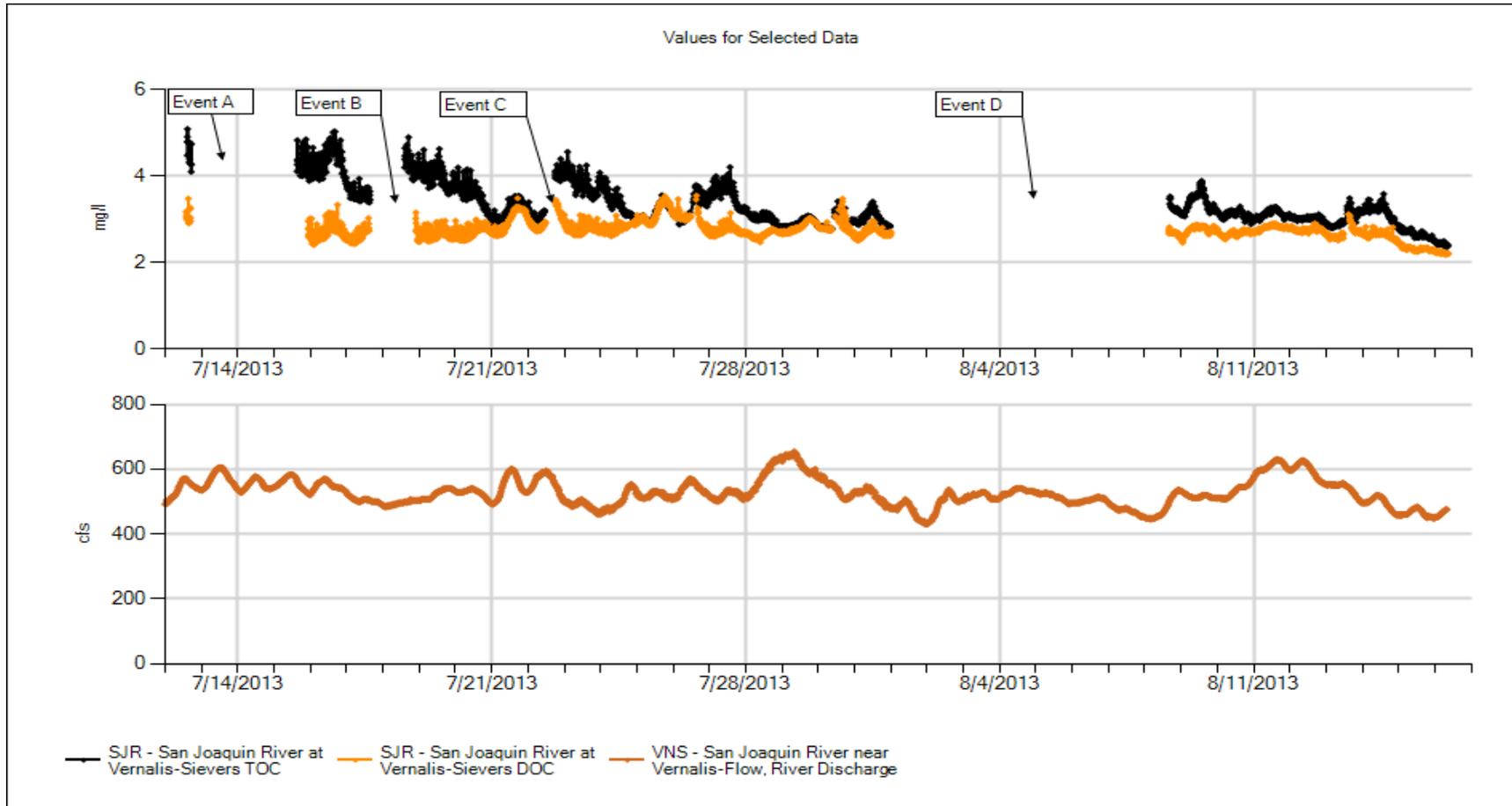
Hood Station Report



Significant Events: July 13th to August 16, 2013

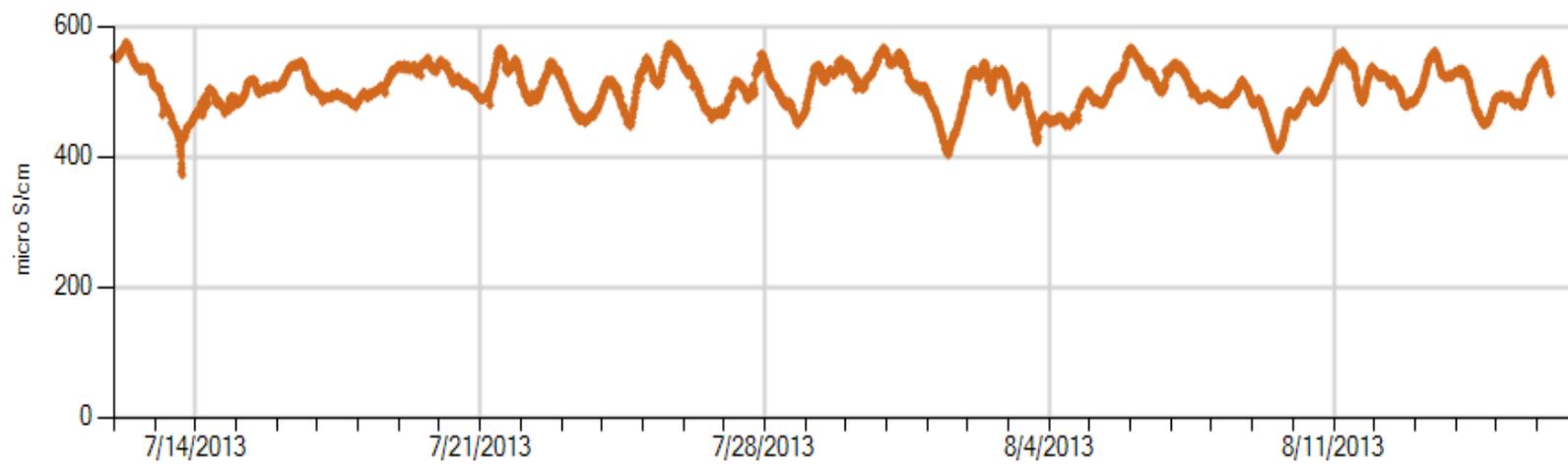
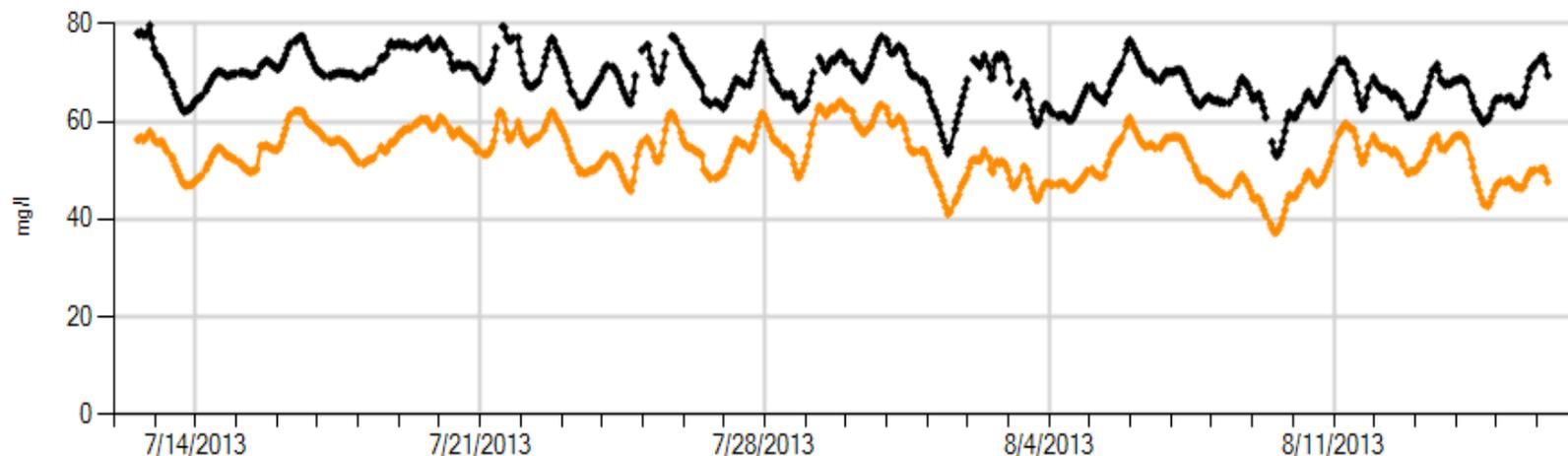
- **7/16 Acid Syringe Error:** The Syringes were not working properly. We flushed them, but the syringe motor was having trouble pulling the syringe back so it could fill up again. We had problems with both the acid and the oxidizer. Eventually the motor worked and we could continue reading but it gave us a series of erratic points.
- **7/23 Filter Change:** DOC and TOC were reversed for an unknown reason. Then it went back to normal after 7 hours.
- **7/30 Filter Change:** DOC and TOC switched places again from 7am to 10pm, and then went back to normal.
- **7/31 Network Down:** All stations with sprint modems went down sometime around 10pm. They went back online on August 2nd.
- **8/7 Filter Change.**
- **8/14 Filter Change:** Cleaned the IOS and the Flow magnet inside. Also installed a .60 micron filter between the Streamwalker and the Sievers to prevent any chunks that could get through the filters/Streamwalker and into the IOS to eventually clog it.
- **8/16 Sievers Down:** Don't know the reason yet, but I will update this situation during the meeting.

Vernalis Organic Carbon and San Joaquin River Flow

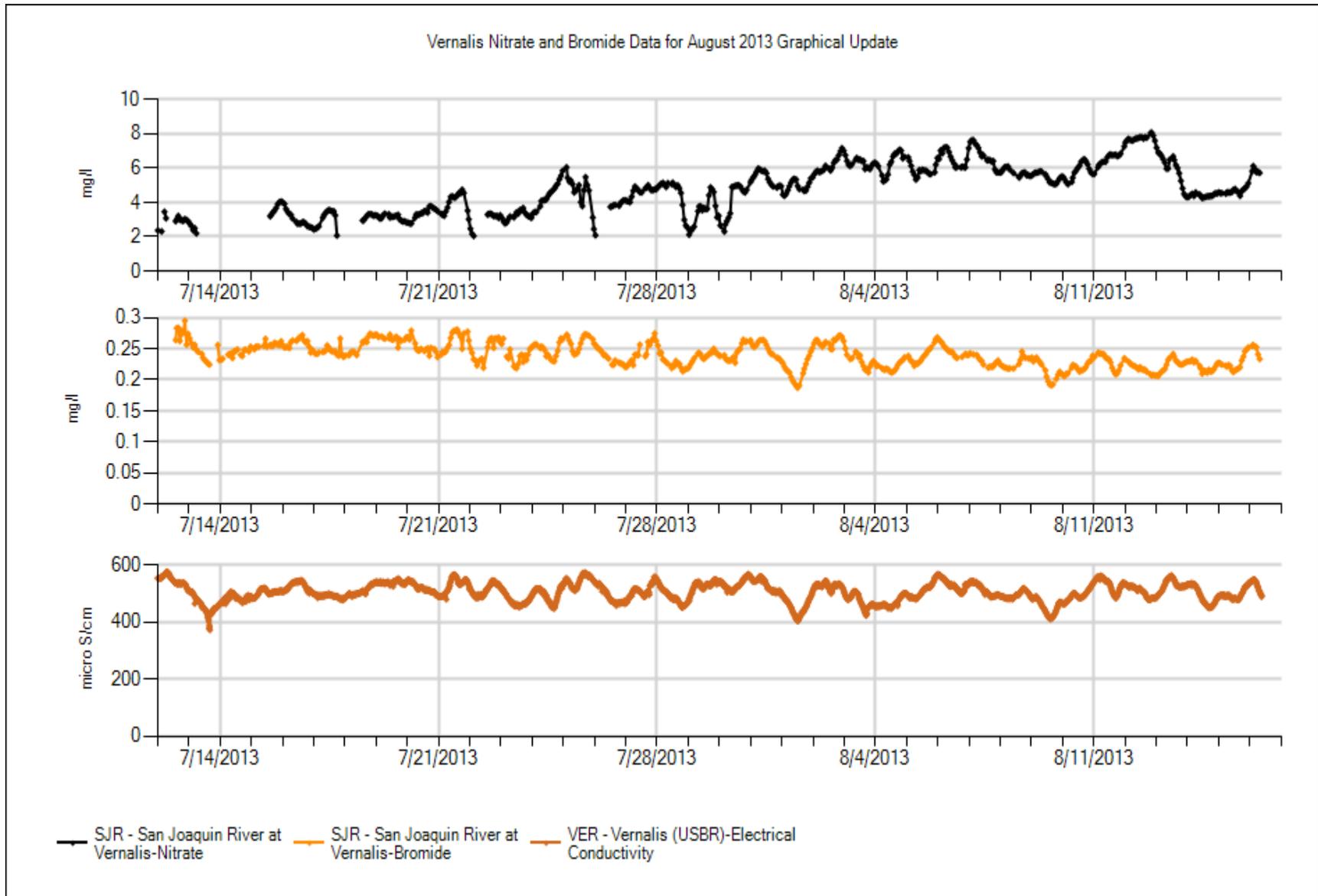


Filter changes occurred on: 7/15, 7/18, 7/22, 7/26, 7/30, 8/5, 8/8, 8/13. **Event A:** After a pump motor replacement, the Sievers had both acid delivery and syringe errors and stopped reporting on the evening of 7/12. Restarted on 7/15. **Event B:** Filters clogged, no flow getting to the instruments. **Event C:** Filters clogged, no flow getting to the instruments. **Event D:** The degasser module became clogged. It was damaged during cleaning and then removed. The IOS system was also clogged. Disassembled and cleaned on 8/8. A replacement degasser module was added on 8/13. Large gap in data due to Sievers problems occurring during the Annual Meeting and over the weekend, plus additional delays because of the monthly field runs and parts research/procurement.

Vernalis Chloride and Sulfate Data for August 2013 Graphical Update

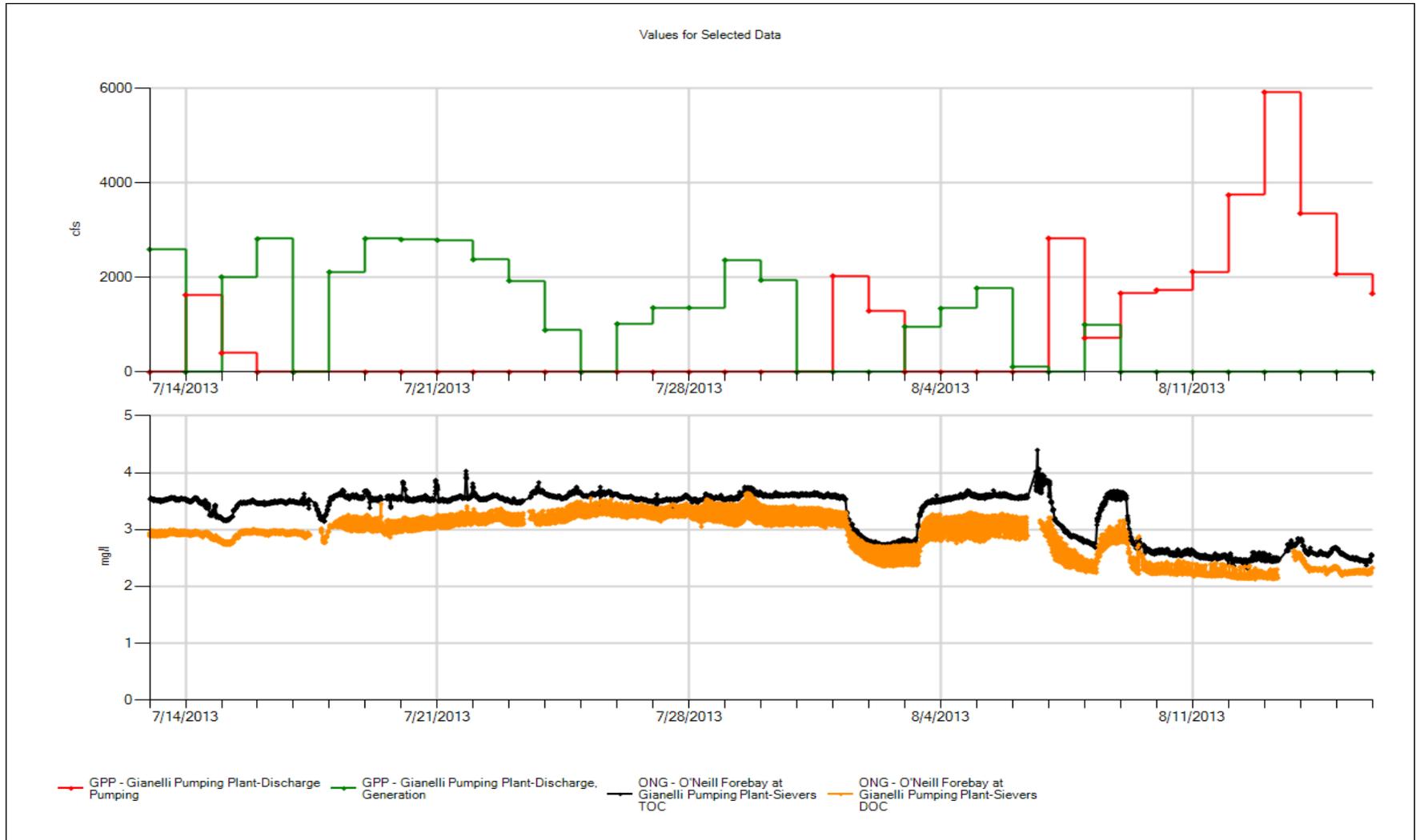


— SJR - San Joaquin River at Vernalis-Chloride — SJR - San Joaquin River at Vernalis-Sulfate — VER - Vernalis (USBR)-Electrical Conductivity



Note: Nitrate data has been affected by filter clogging, as well as biological growth in the small bore tubing that delivers sample water.

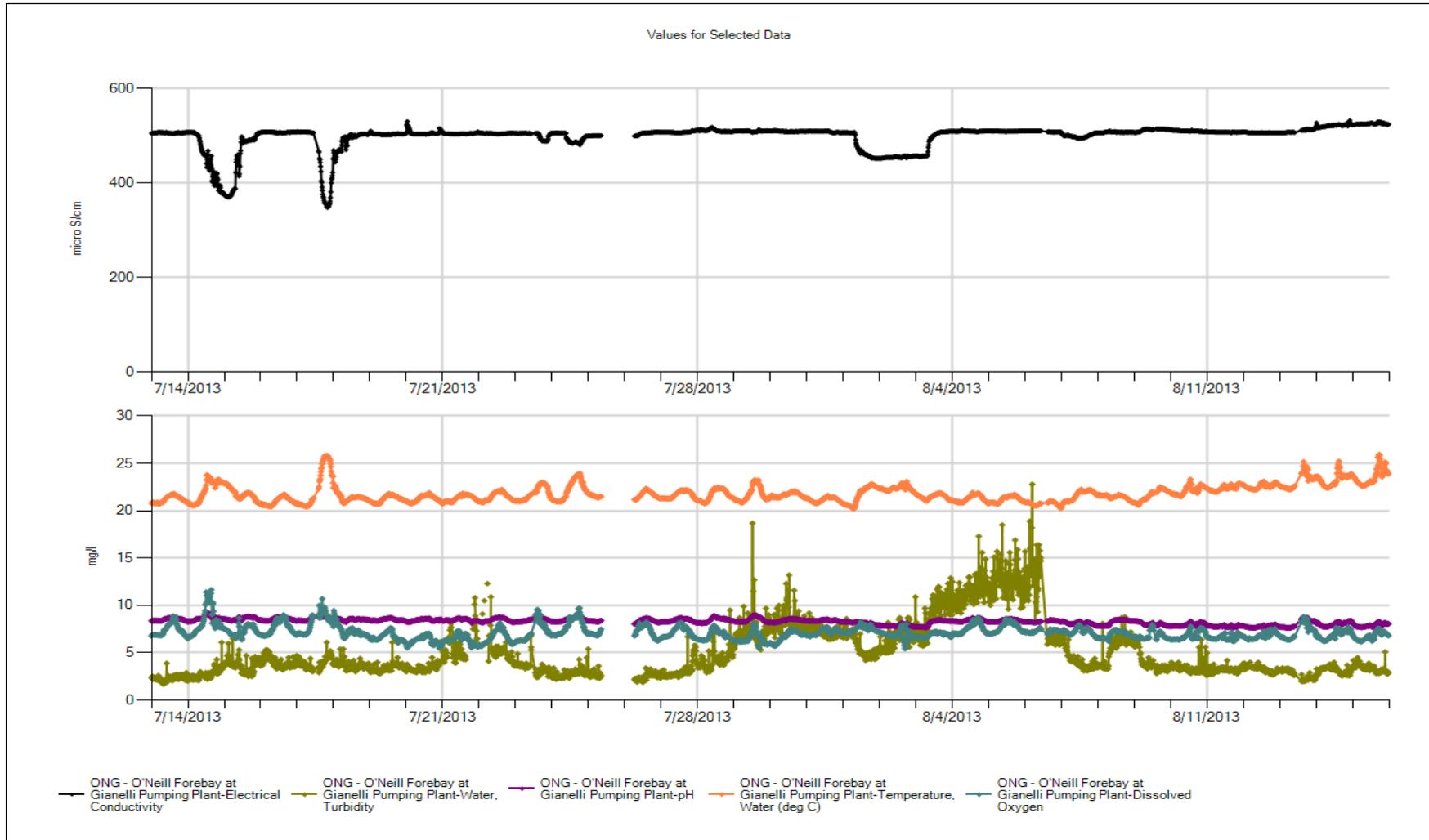
Gianelli Organic Carbon and Pumping/Generating:



Gianelli Significant Sievers Events: July 13, 2013 – Aug 16, 2013

- Changed Sievers lamp on 8/13.

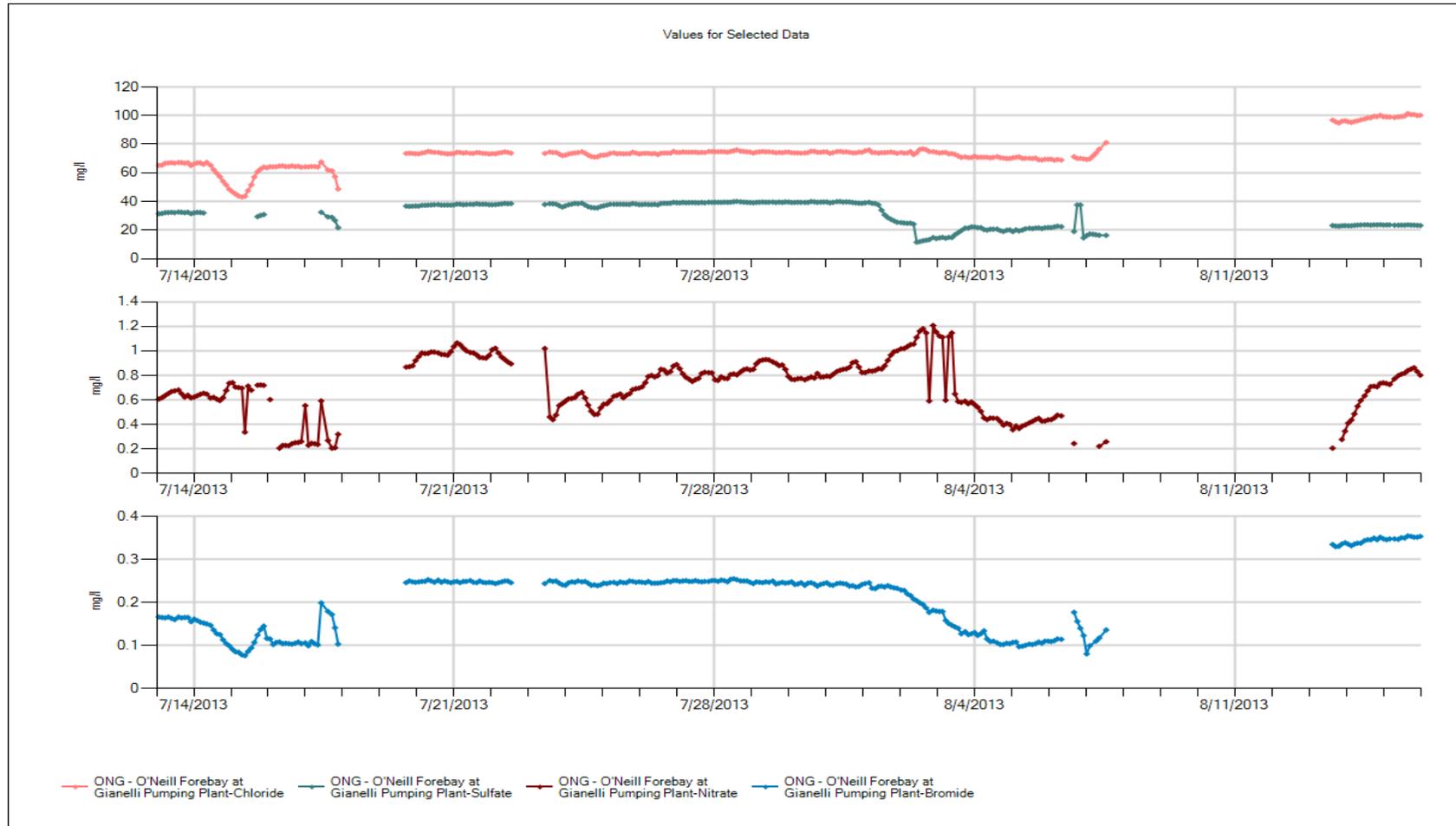
Gianelli Sonde (EC, DO, Temp, Turbidity, pH):



Gianelli Significant Sonde Events: July 13, 2013 – Aug 16, 2013

- Erratic turbidity spikes due to build up in the sonde housing.
- YSI calibrated on **8/13**.
- YSI stopped logging data on **7/25**. Missing data has been backfilled.

Gianelli Anions (Chloride, Sulfate, Nitrate, & Bromide):



Gianelli Significant Metrohm Events: July 13, 2013 – Aug 16, 2013

- Ongoing peak splitting problems **7/13** to **7/19**. Installed a new guard column on **7/19**.
- System shut itself down due to communication error on **7/22**.
- Peak splitting problems returned on **8/1**. Turned off data logging from **8/8** to **8/13**.
- Install new guard column on **8/13**. Replacement parts are being sent from Metrohm to fix the ongoing column degradation problem.