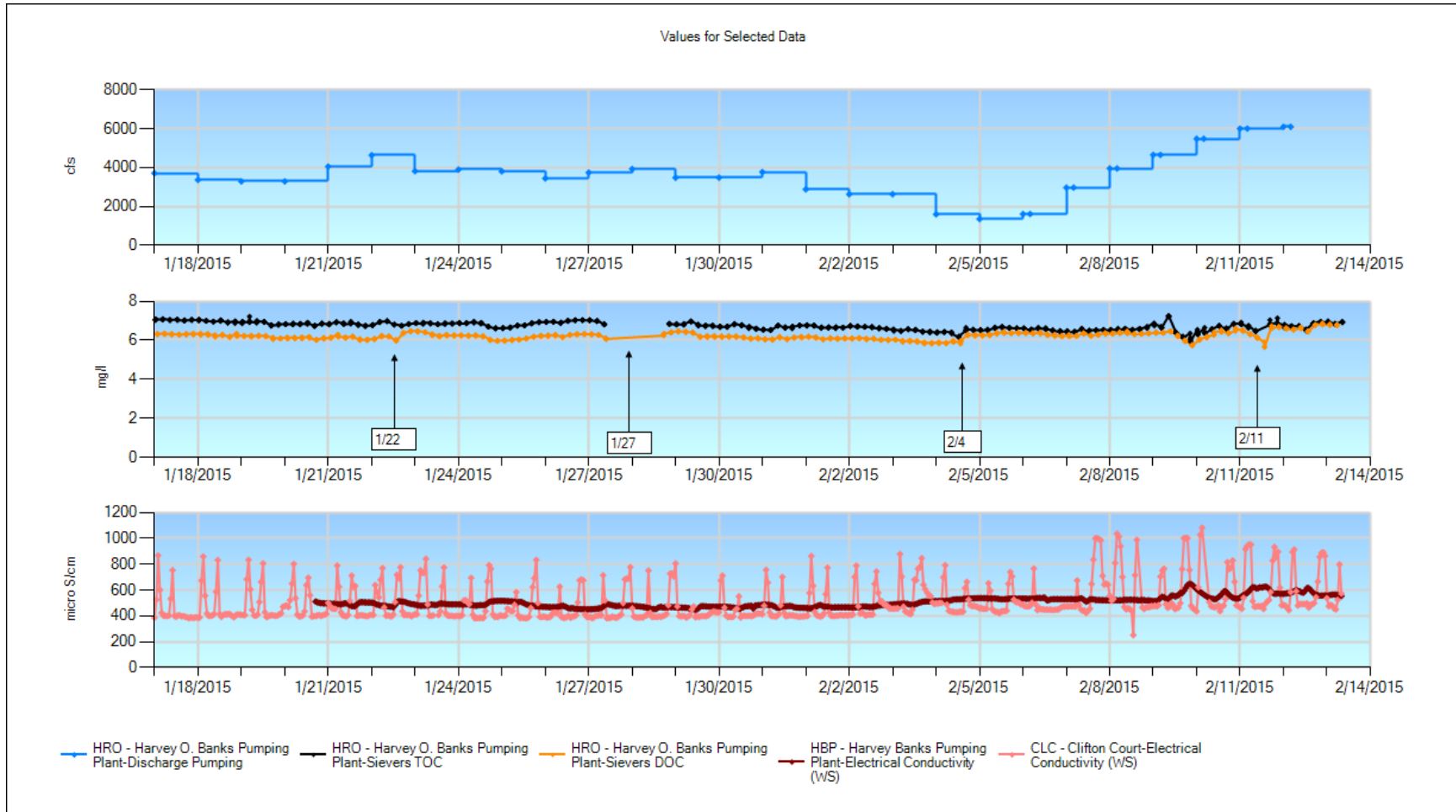


Banks Pumping Plant – Pumping, TOC, DOC and EC – Clifton Court EC



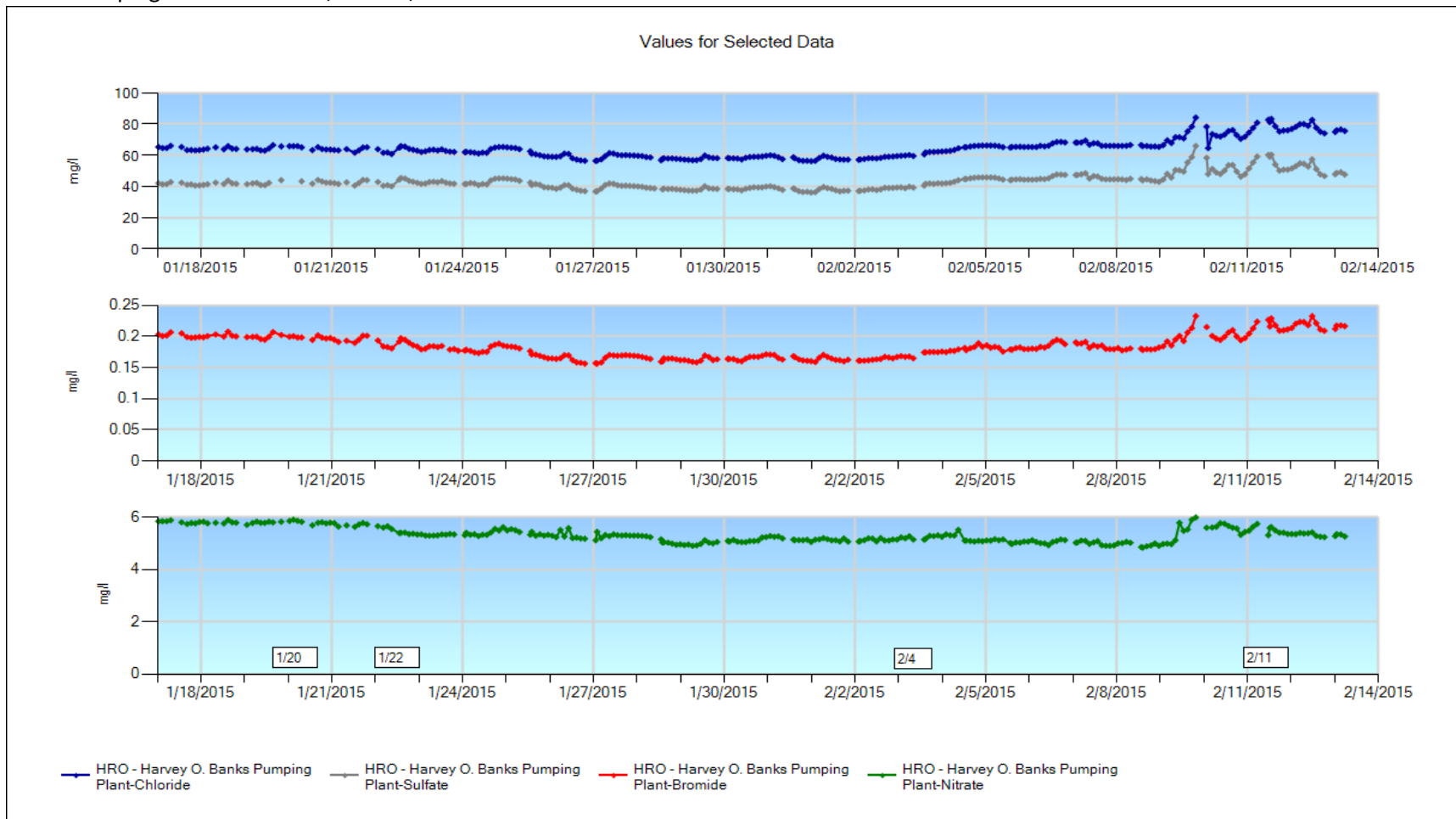
1/22 – Delivery system filter change

1/27 – Sievers preventative maintenance and calibration

2/4 – Delivery system filter change

2/11 – Delivery system filter change, QC sample analyses

Banks Pumping Plant – Chloride, Sulfate, Bromide and Nitrate



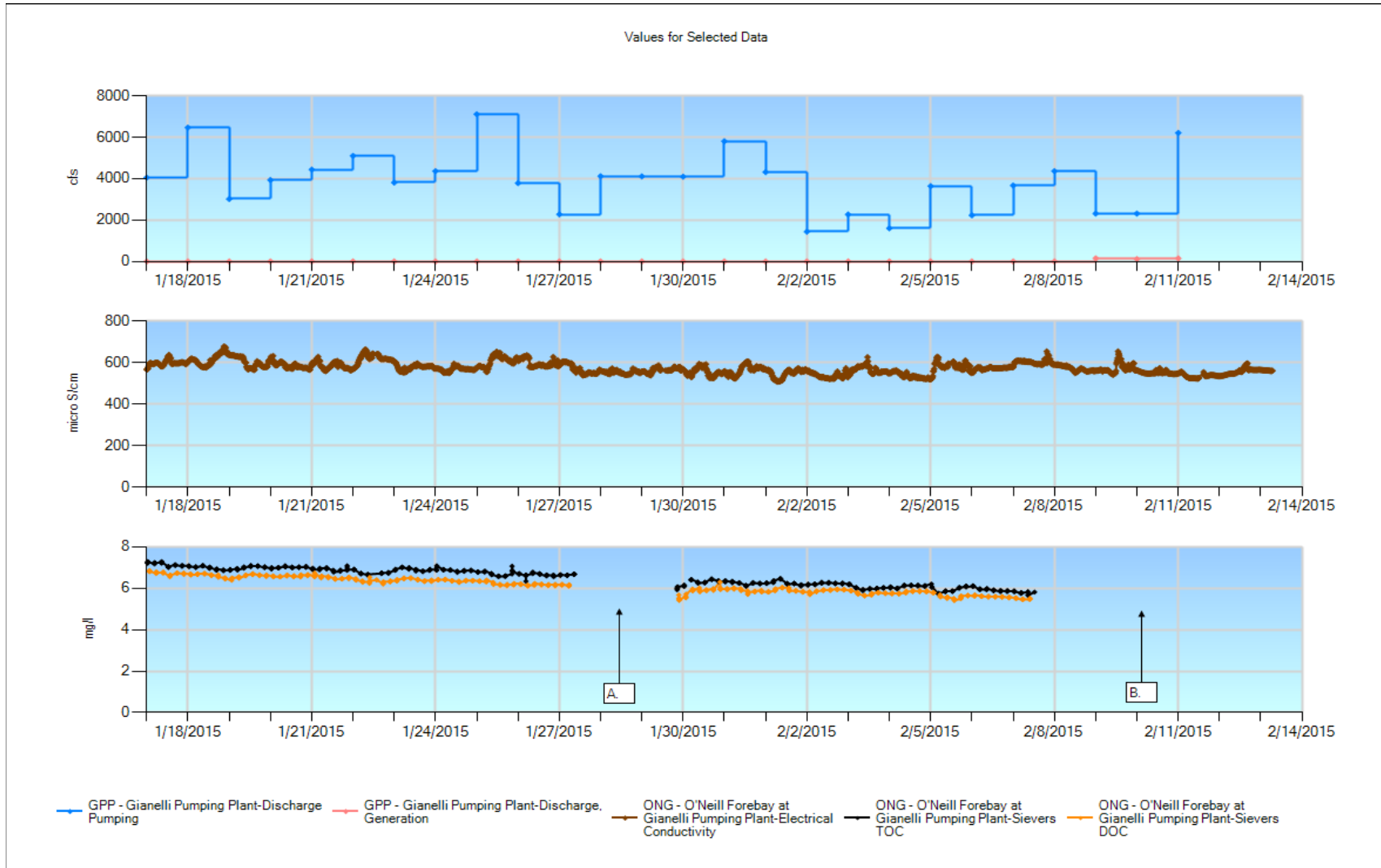
1/20 – Dionex sample flow obstruction

1/22 – Delivery system filter change

2/4 – Delivery system filter change

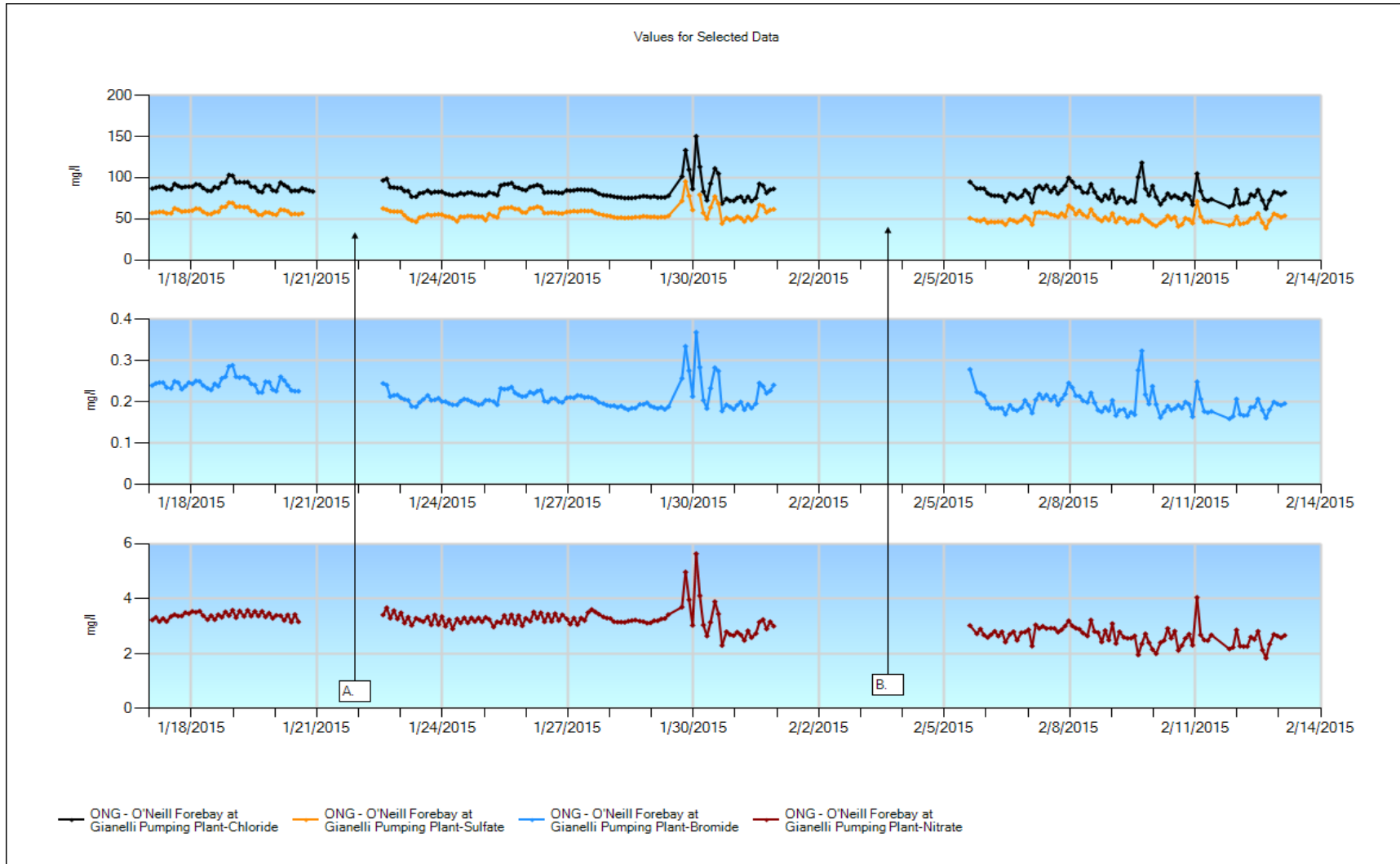
2/11 - Delivery system filter change, QC sample analyses

Gianelli – Pumping, Organic Carbon, EC



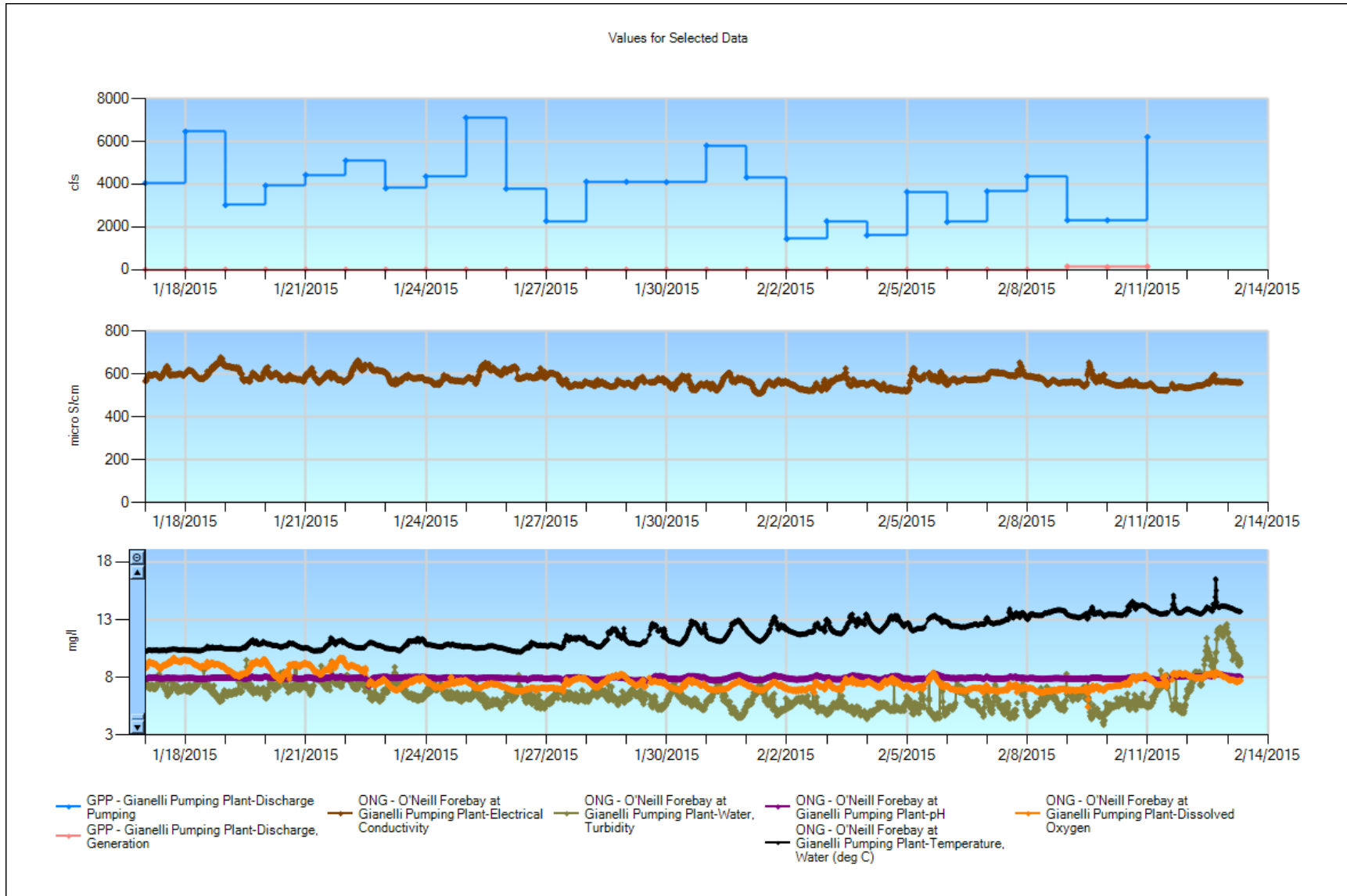
- A – Instrument out due to annual maintenance
- B – Battery backup failed, cutting the power to the instrument.

Gianelli – Chloride, Sulfate, Bromide, Nitrate

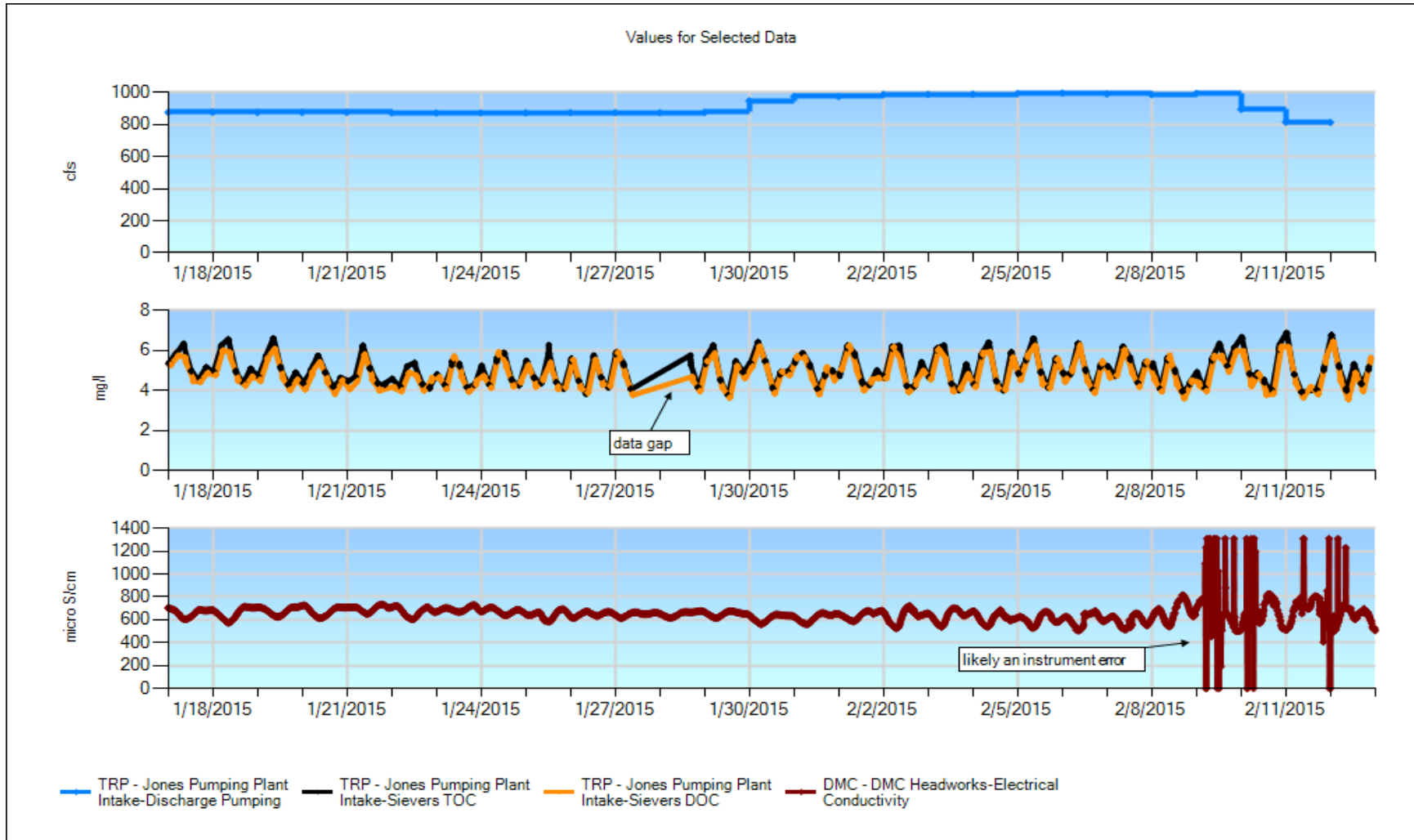


- A – Eluent dilution program pulled in air from the DI and/or sulfuric acid containers.
- B – Sulfuric acid container ran low.

Gianelli – EC, Temperature, pH, DO & Turbidity

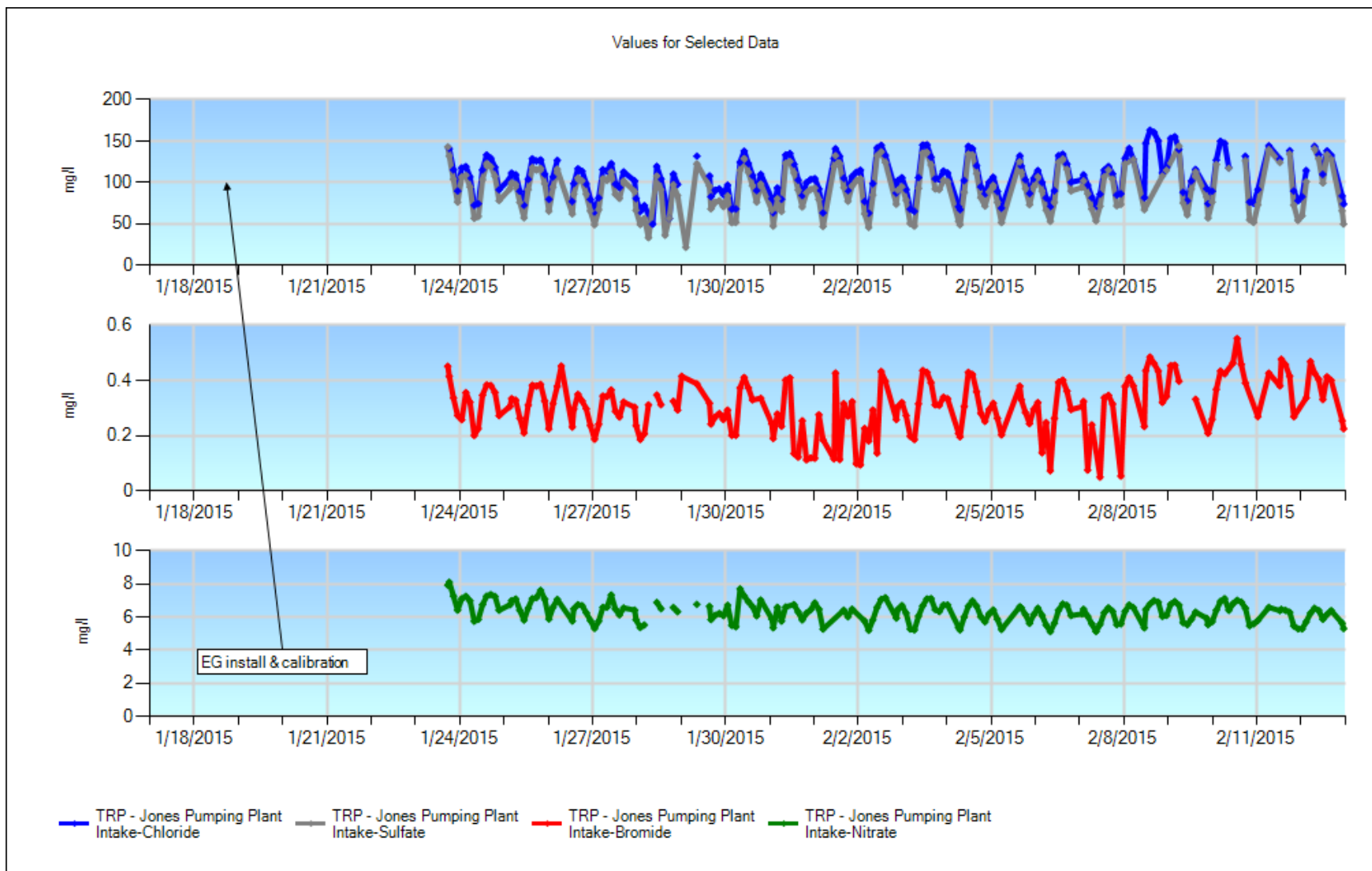


Jones PP – discharge, organic carbon, electrical conductivity



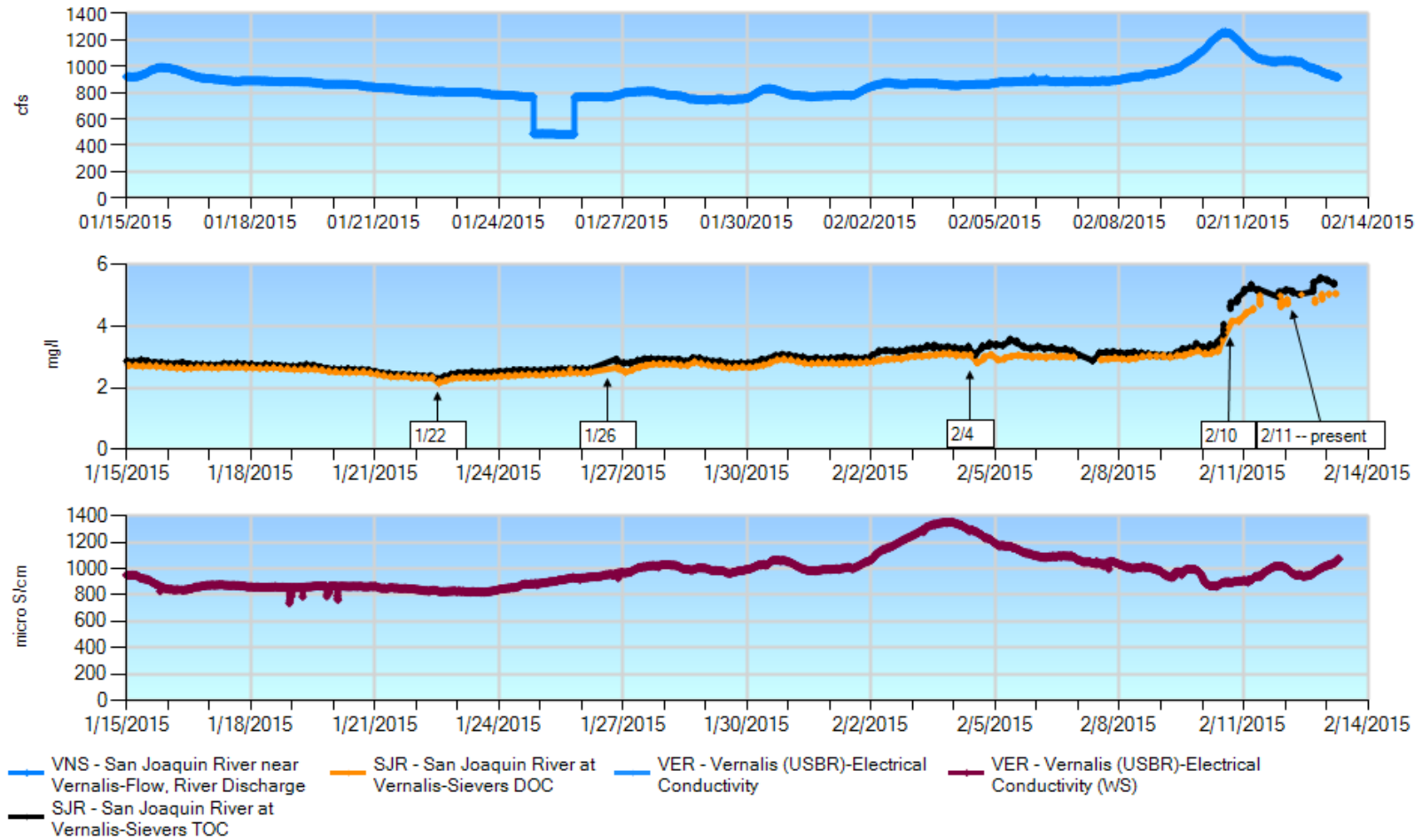
1/22 – filter change **1/27 – 1/28** – Sievers calibration and reinstall. **2/9 – 2/10** – Most likely an instrument malfunction, however this instrument is not maintained by the MWQI field unit, so I cannot say for certain what the issue is here. **2/11** – filter change.

Jones PP – anions

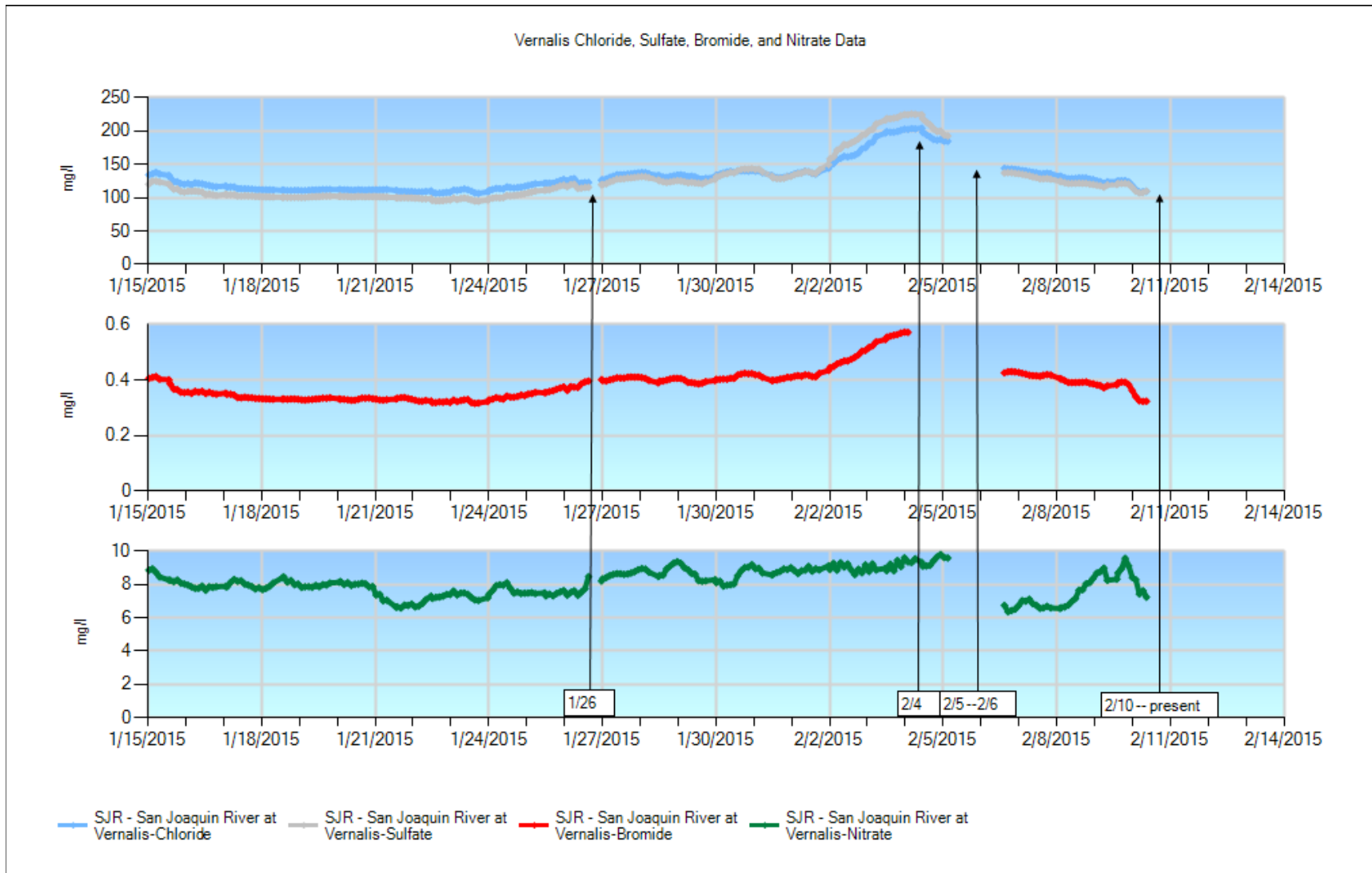


1/16 – 1/23 - replaced the eluent generator and calibrated Dionex. Initial calibrations did not look good, so additional maintenance was performed which included replacing peristaltic tubing and double deionized water. Calibration passed and is currently operational.

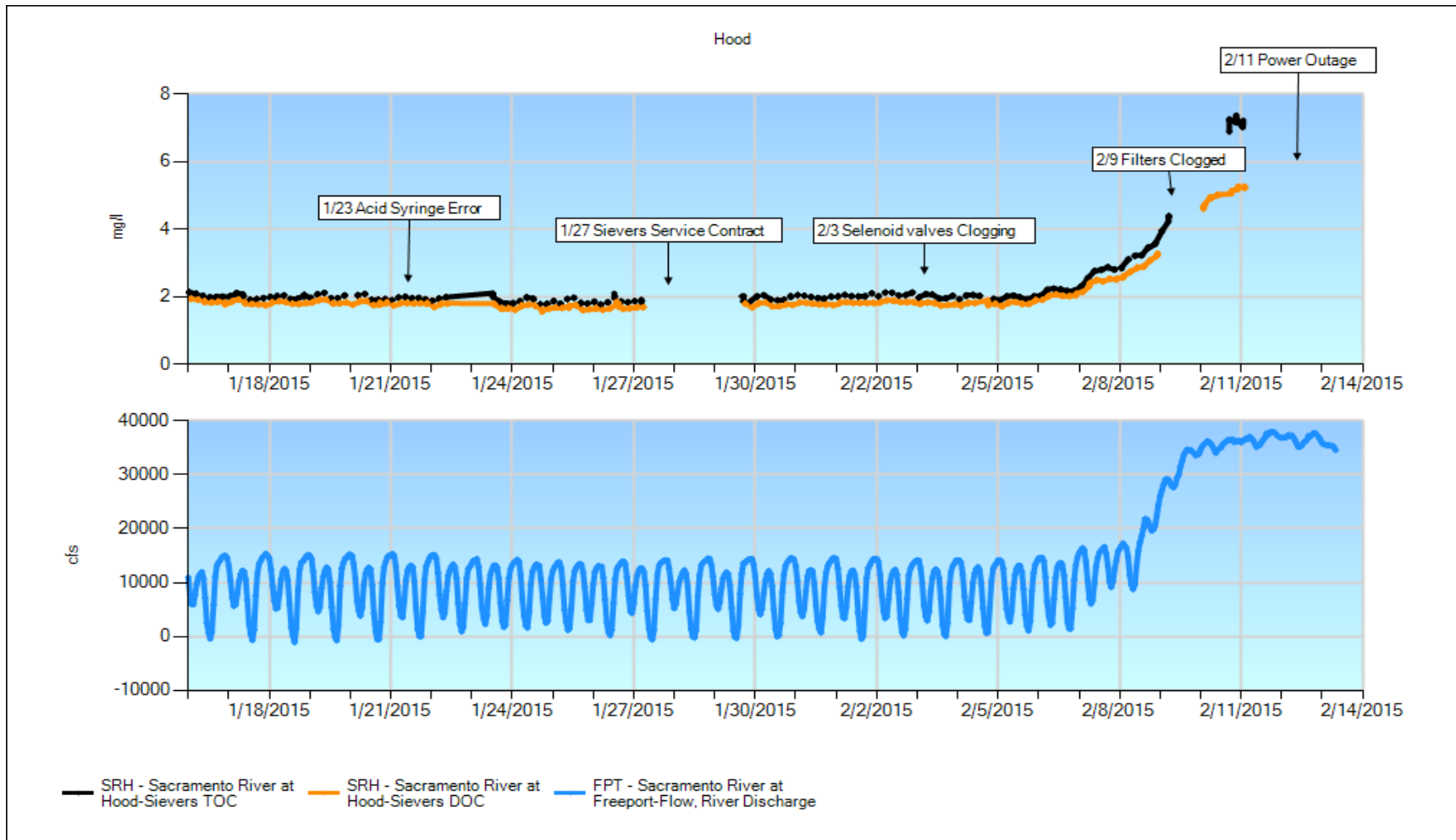
Vernalis Flow, Organic Carbon, and Electrical Conductivity Data



Filter Changes: 1/12 = all filters, 1/22 = prefilters only, 1/26 = all filters, 2/4 = prefilters only, 2/10 = all filters. **Events:** 1/26 = Annual Service by Sievers technicians. 2/10 = Main intake pump starting to fail, providing less flow/pressure. 2/11 – present = Flow restriction within the Sievers tubing or membrane modules is not allowing water to enter the analyzer fast enough, giving higher than normal DOC results for the first two samples out of five in the series, which are essentially TOC water. The first two TOC results are analysis of DOC water. Will be fixed on 2/18.



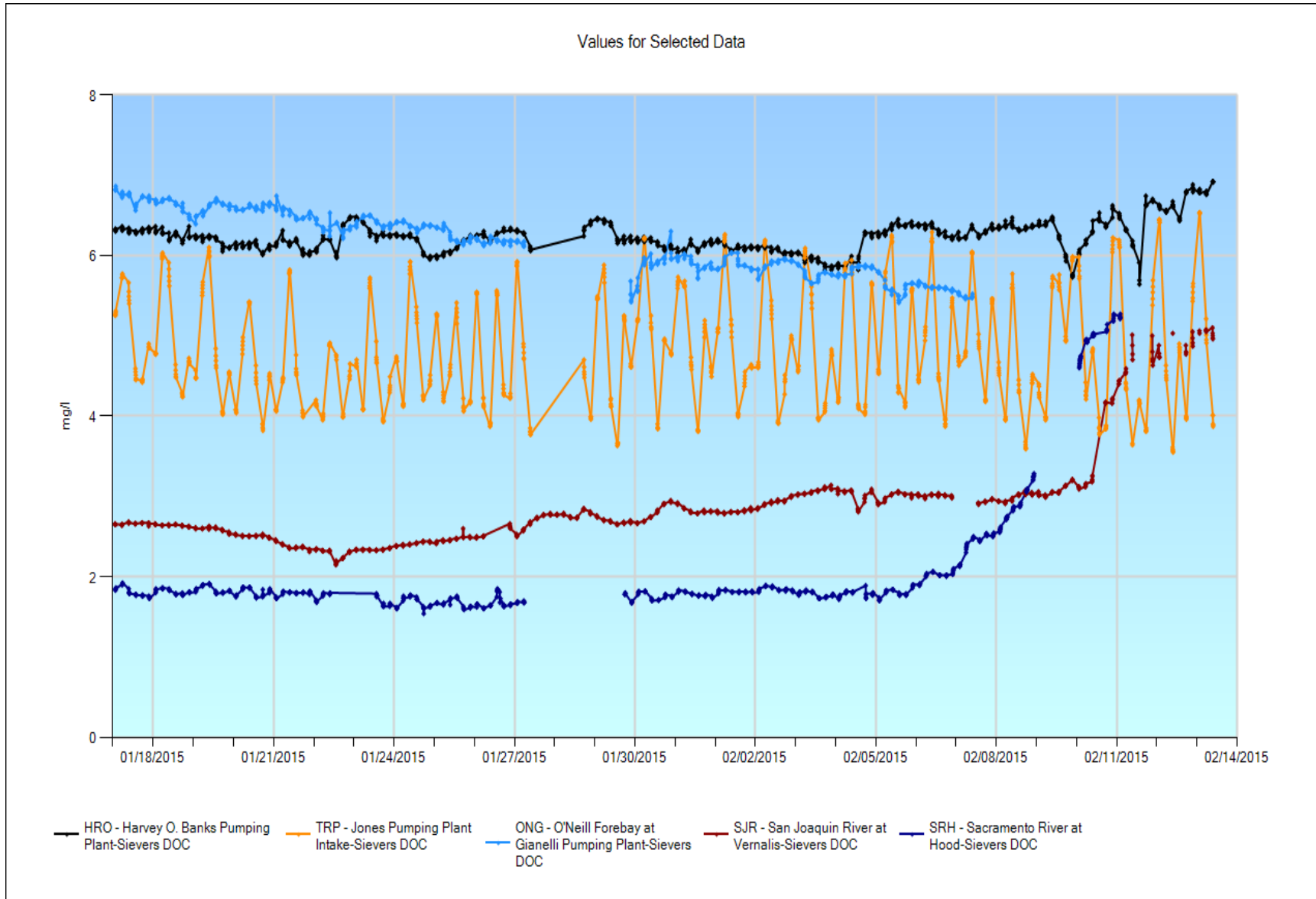
Events: **1/26** = Filter change during service event. **2/4** = Prefilter change and bromide needed a retention time shift. One day of missing data available but not updated at the time of this report. **2/5 – 2/6** = Clog in the system caused the sample pump to overpressure and shut down. Tubing was cleaned and column filters replaced. Sample pump showed evidence of a leak. Analyzer restarted. **2/10** = Analyzer lost pressure during QA/QC event. Sample pump non-responsive and needs repair or replacement. Analyzer will be down until service agreement is reached.



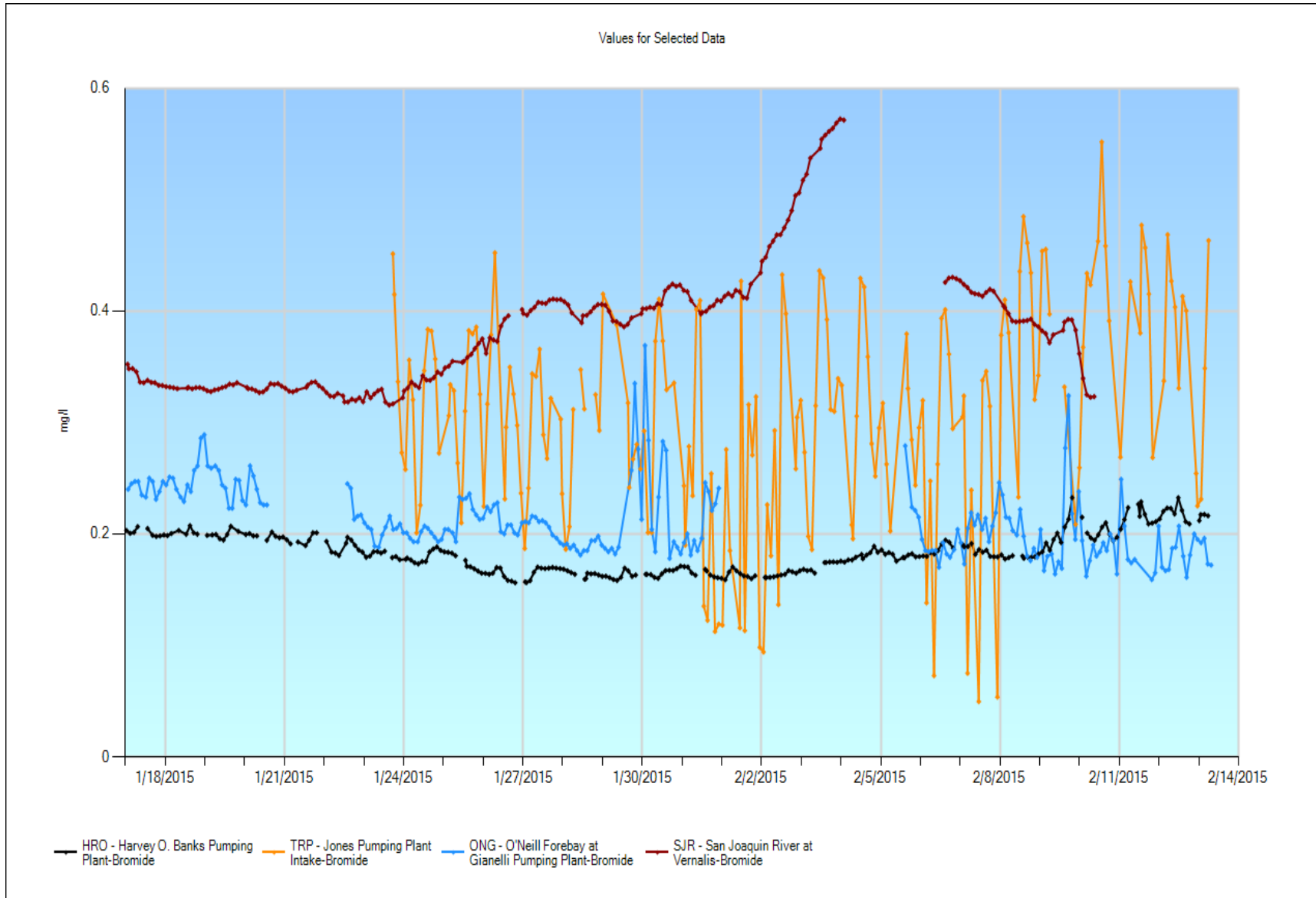
Significant Events: January 16th 2015 to February 13th 2015

- **1/23 Acid Syringe Error:** Sievers stopped working, just cleaned the Acid Syringe and sievers was operational again.
- **1/27 Sievers Service Contract:** IC and TC levels are not up to standards. Possibly to a conductivity issue due to a slow flowing DI water rate caused by the malfunction of the DI pump.
- **2/3 Solenoid Valves Cloggin:** The solenoid valves that control the stream sample water into the sievers were leaking, This Caused the sievers to continually run instead of stopping at 2 hours intervals.
- **2/9 Filters clogged:** Recent rain caused the turbidity of the Sacramento River to increase. This caused the pre-filters to clog.
- **2/11 Power Outage:** The computer and the sievers were shut down and data was not recorded.

All Stations - DOC



All Stations - Bromide



All Stations Plus Clifton Court Forebay EC

