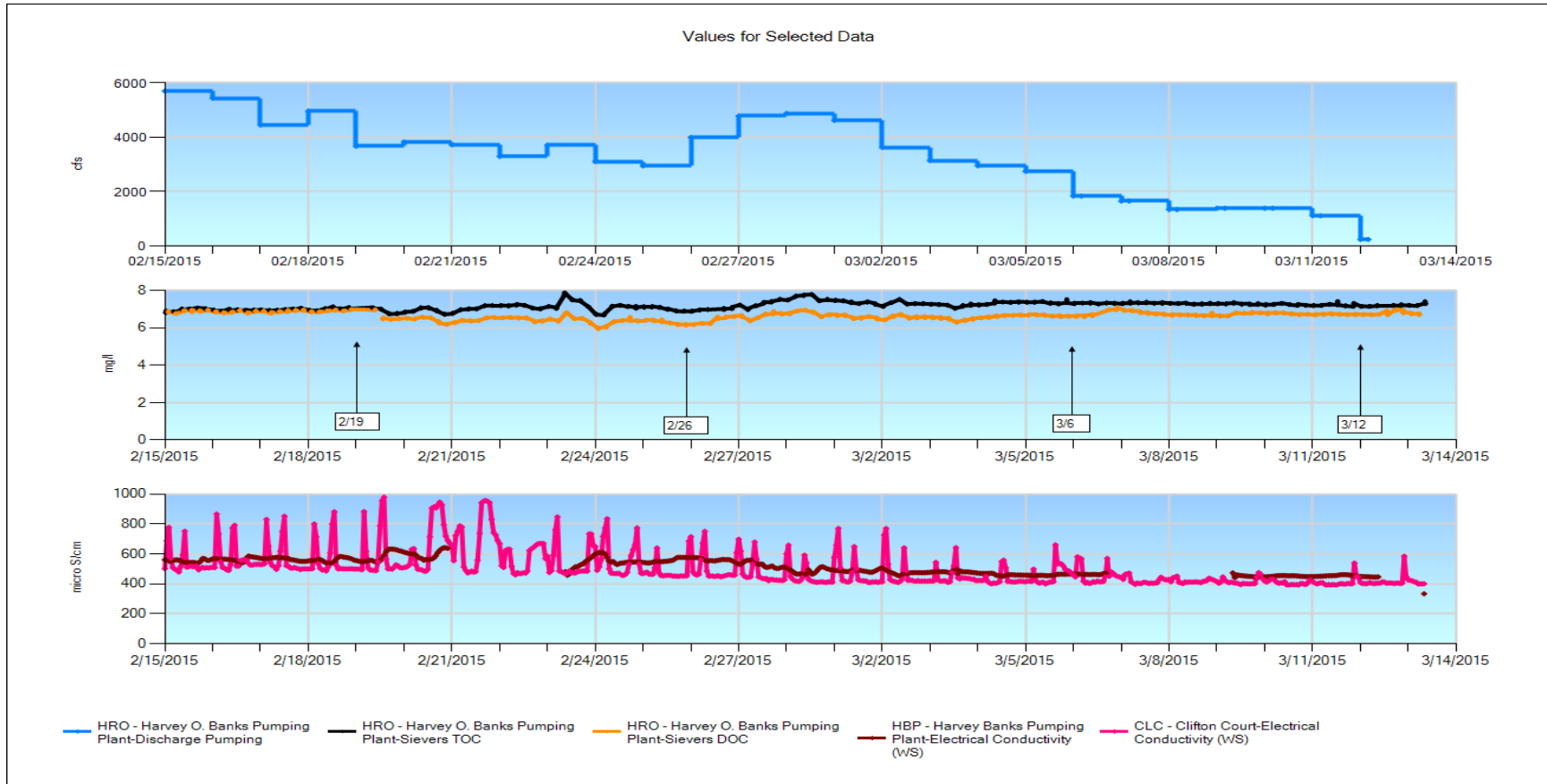


## Banks Pumping Plant: Pumping - TOC, DOC – EC



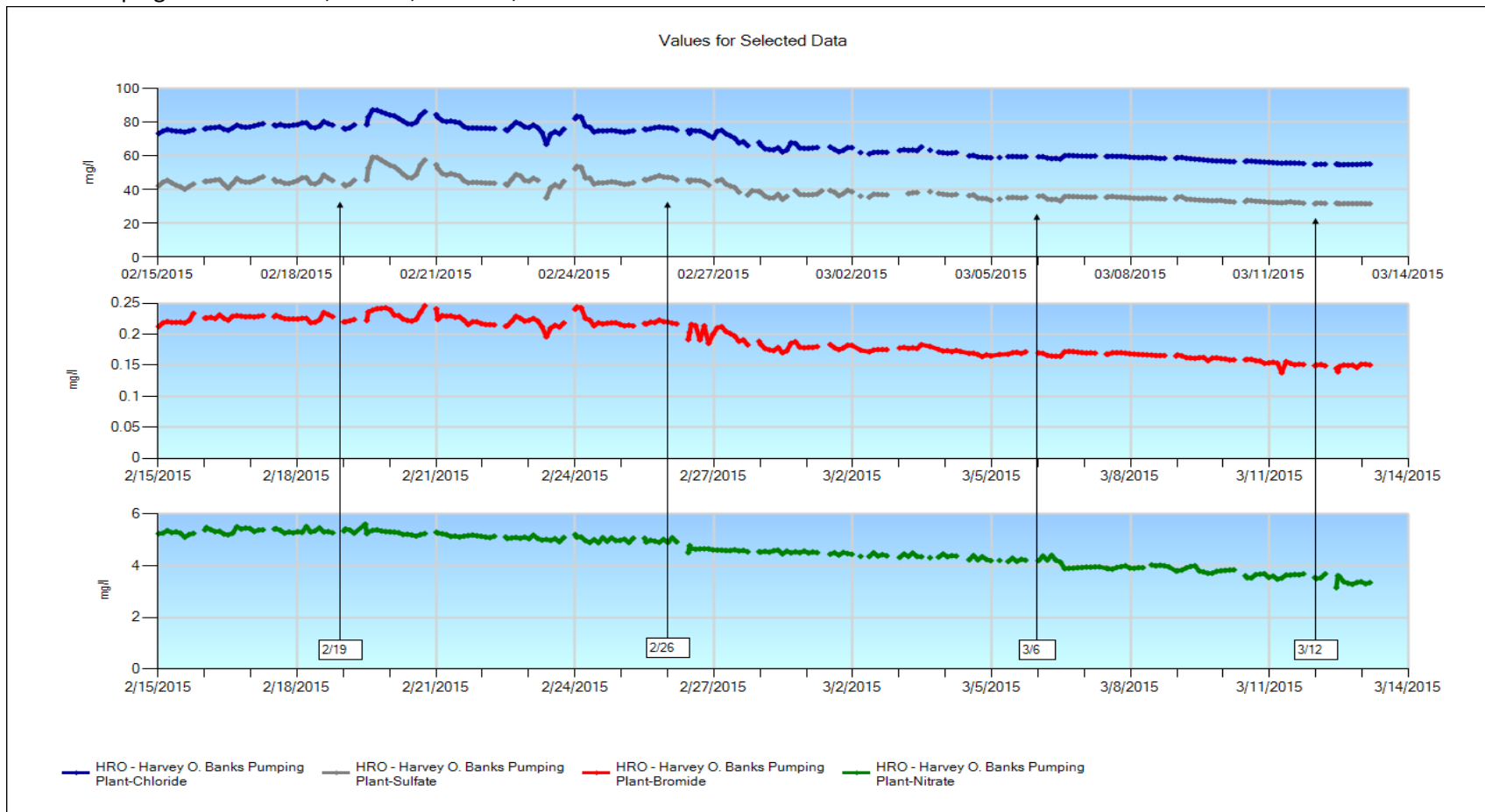
2/19 – Changed all sample delivery system filters - Prior to this station visit, DOC data were artificially elevated due to fouling of a TOC valve which prevented it from closing all the way allowing TOC water to mix with DOC water during DOC analysis.

2/26 – Changed all sample delivery system filters – Cleaned all delivery system lines – Analyzed all QC samples

3/6 – Changed all sample delivery system filters

3/12 – Replaced the 10 inch 100 um filter housing with a 20 inch housing and a 20 inch 100 um filter – Replaced the 0.45 um sample delivery system filter – Analyzed all QC samples – Steve repaired an FDOM valve issue.

## Banks Pumping Plant: Chloride, Sulfate, Bromide, Nitrate



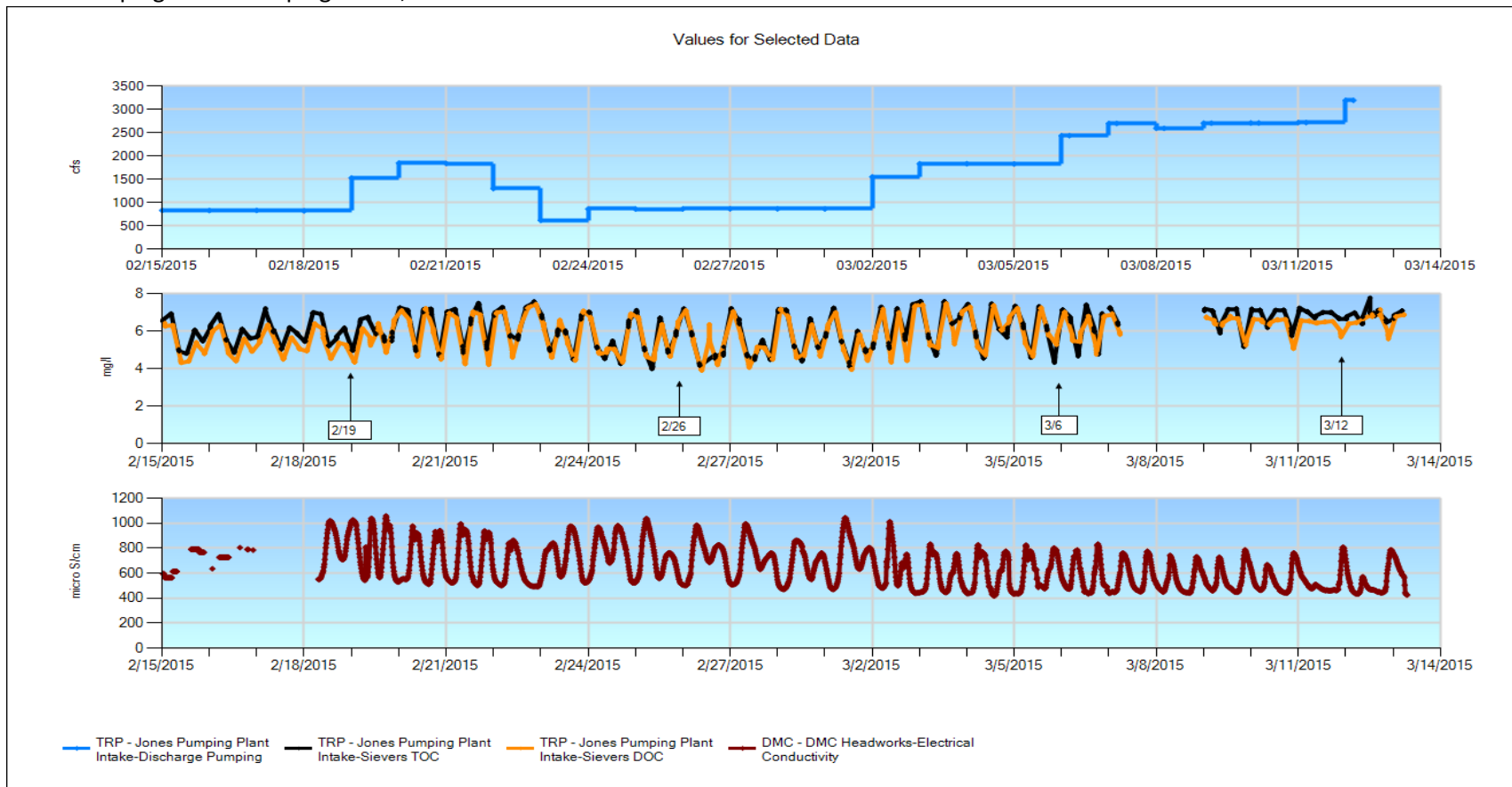
2/19 – Changed all sample delivery system filters

2/26 – Changed all sample delivery system filters – Cleaned all delivery system lines – Analyzed all QC samples

3/6 – Changed all sample delivery system filters

3/12 – Replaced the 10 inch 100 um filter housing with a 20 inch housing and a 20 inch 100 um filter – Replaced the 0.45 um sample delivery system filter – Analyzed all QC samples – Steve repaired an FDOM valve issue.

## Jones Pumping Plant: Pumping – TOC, DOC - EC



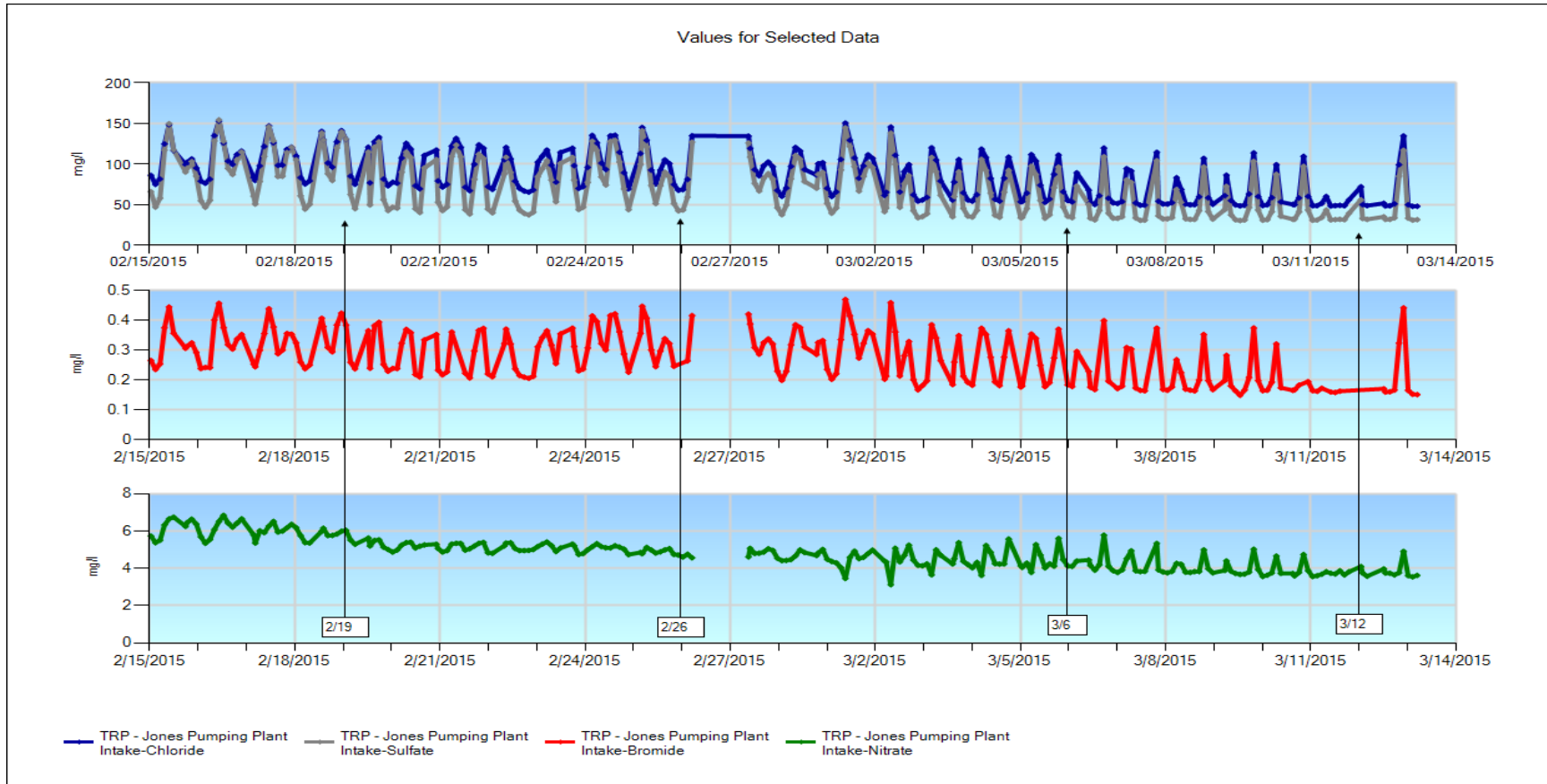
2/19 – Changed all sample delivery system filters

2/26 – Changed tubing on water delivery system – Replaced the 100 um filter with a 75 um filter – Replaced the guard and analytical column on the Dionex

3/6 – Changed all sample delivery system filters – Replaced the 10 inch 100 um filter housing with a 20 inch housing

3/12 – Changed all sample delivery system filters except the 1 um – Analyzed all QC samples

## Jones Pumping Plant: Chloride, Sulfate, Bromide, Nitrate

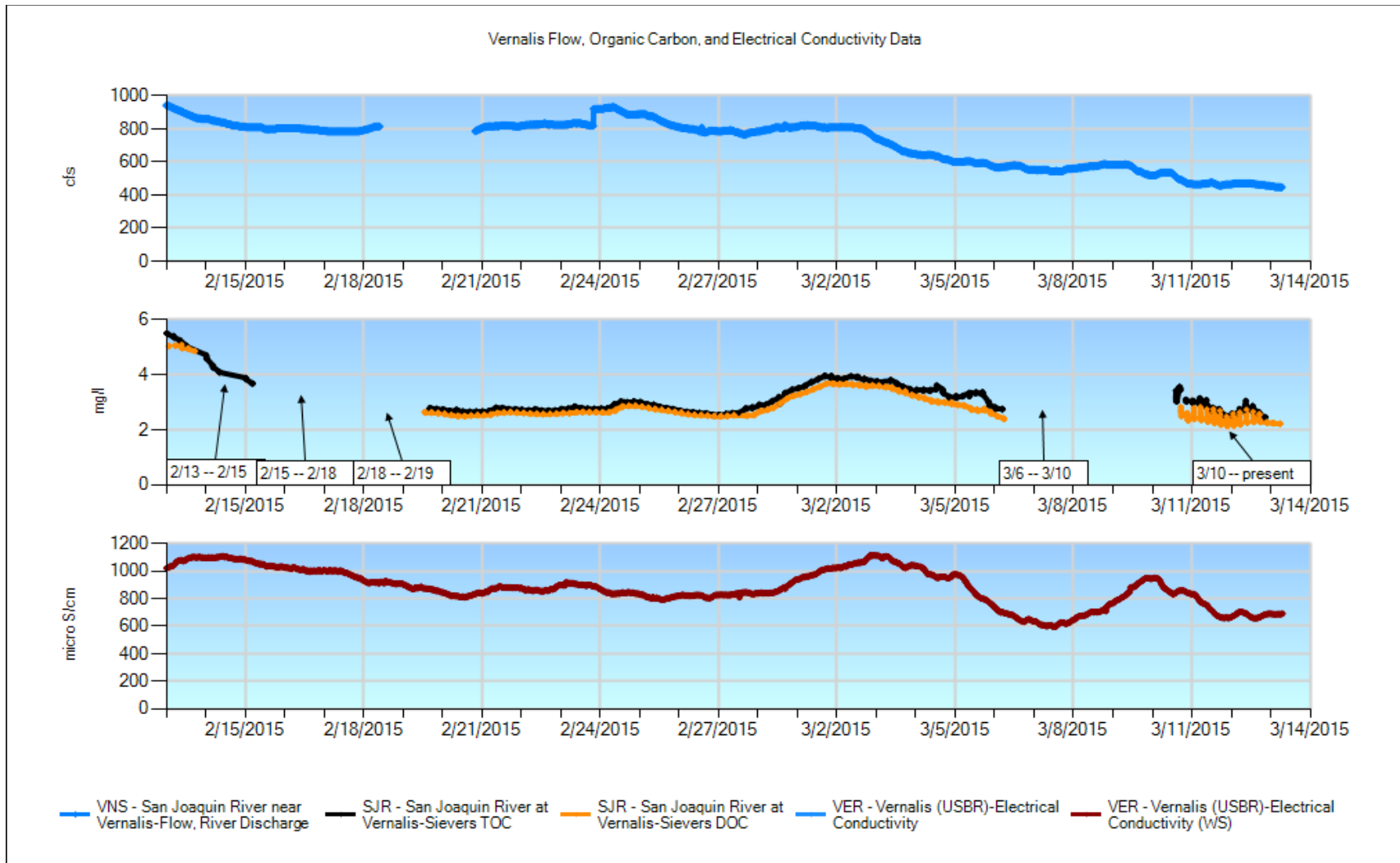


2/19 – Changed all sample delivery system filters

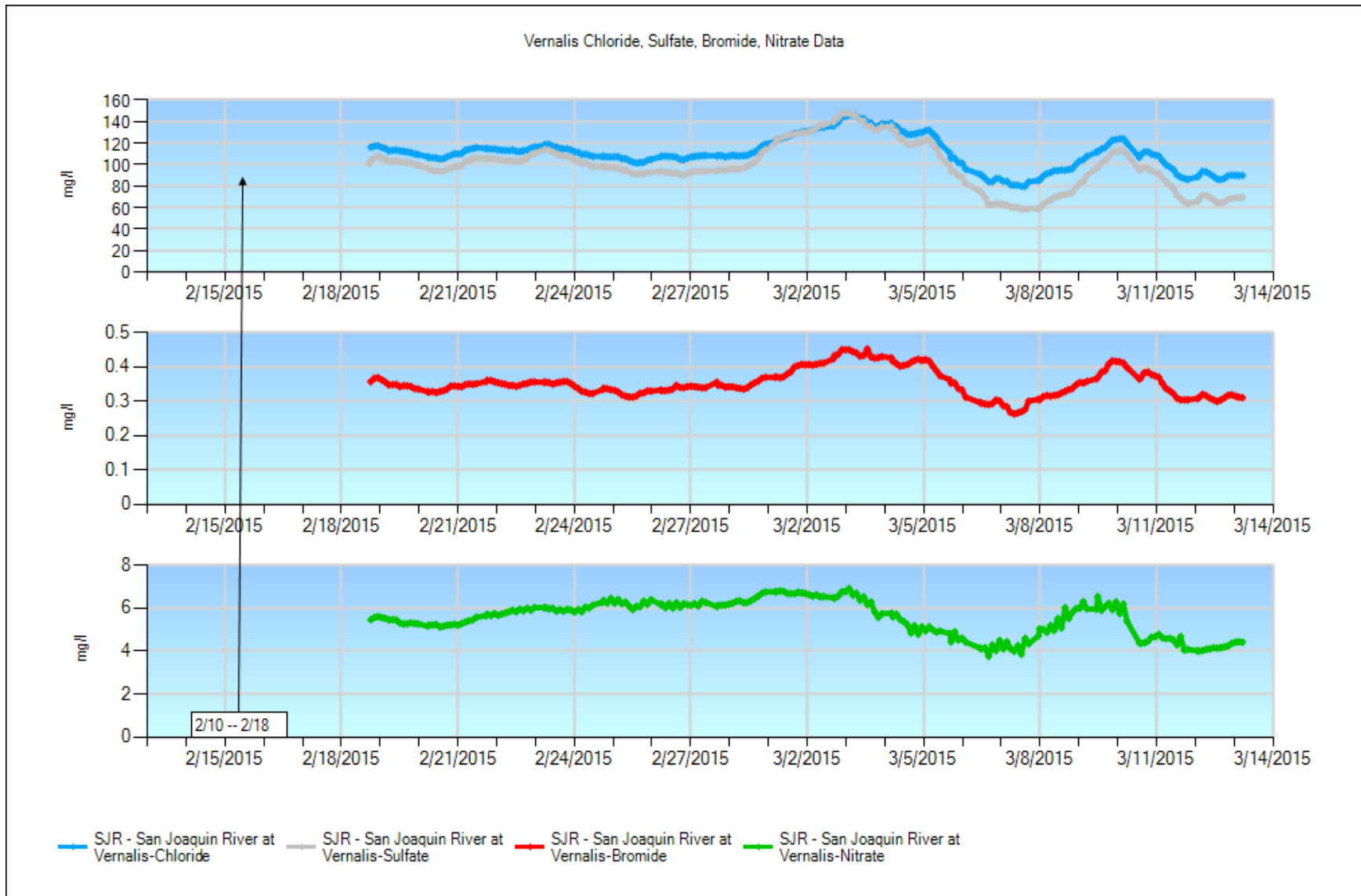
2/26 – Changed tubing on water delivery system – Replaced the 100 um filter with a 75 um filter – Replaced the guard and analytical column on the Dionex

3/6 – Changed all sample delivery system filters – Replaced the 10 inch 100 um filter housing with a 20 inch housing

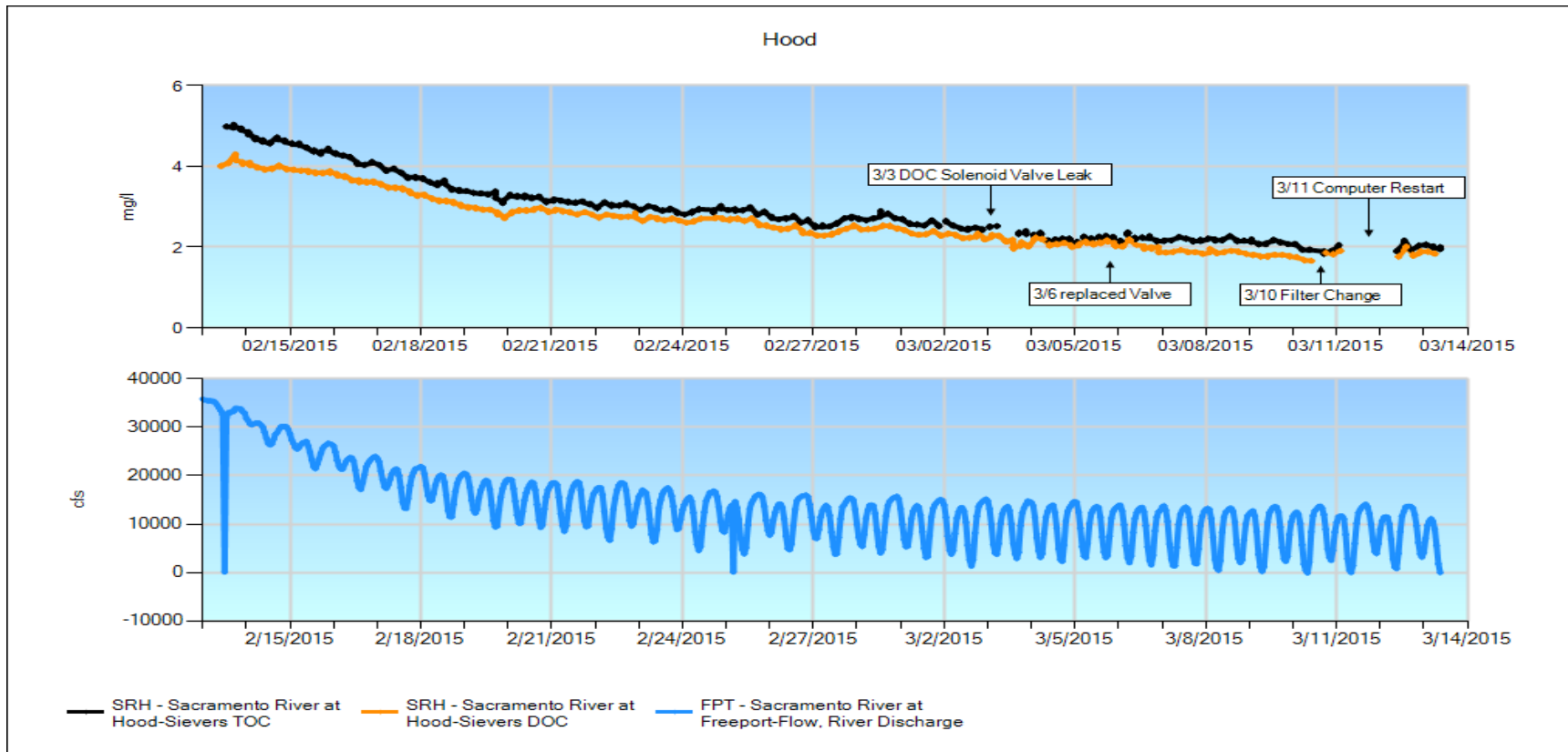
3/12 – Changed all sample delivery system filters except the 1 um – Analyzed all QC samples



**Filter Changes:** 2/10 = all filters, 2/18 = prefilters only, 2/27 = all filters, 3/10 = all filters. **Events:** 2/13 – 2/15: Failing pump not providing adequate flow, resulting in questionable data. 2/15 – 2/18: Clogged intake not allowing enough flow to initiate the Sievers into sampling. Pump cleaned on 2/18. 2/18-2/19: Data logging software, Indigo, was not functioning. Program restarted and data was exported from the Sievers and into the DMU manually. 3/6-3/10: Power outage over the weekend. 3/10 – present: TOC valve failing, causing high DOC, then burned out.



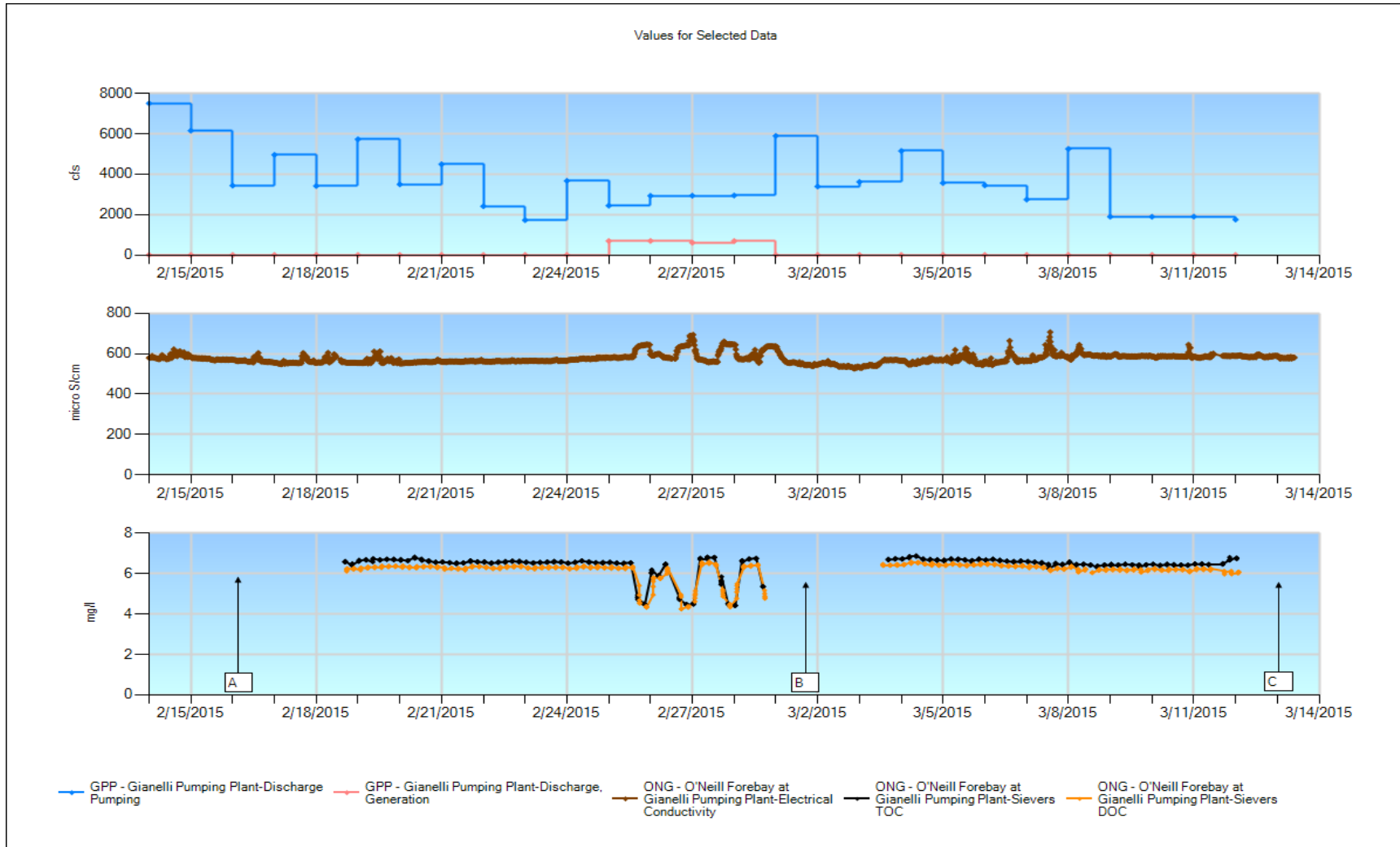
**Events: 2/10 – 2/18:** Previously thought of as a failing pump, the Dionex tech said it was “vapor lock” not allowing liquid to enter the sample pump. Another attempt at priming the system was successful and the analyzer was restarted, though the sample pump still has a minor leak.



**Significant Events:** February 13<sup>th</sup> 2015 to March 13<sup>th</sup> 2015

- **3/3 DOC Solenoid Valve leak:** The DOC solenoid valve started to leak Doc sample water while running TOC water. This resulted in a mixture of water giving false TOC readings.
- **3/6 Replaced Solenoid Valve:** Replaced the DOC valve with a new valve. These valves can be cleaned from the inside and possibly be reused.
- **3/10 Filter Change:** The DOC water line .45micron filter was not flushed with DI water prior to installing it. This caused a spike on the sample water that was omitted by the data utility automatically.
- **3/11 Computer Restart:** The computer was restarted automatically causing Indigo to close and not to report to CDEC.

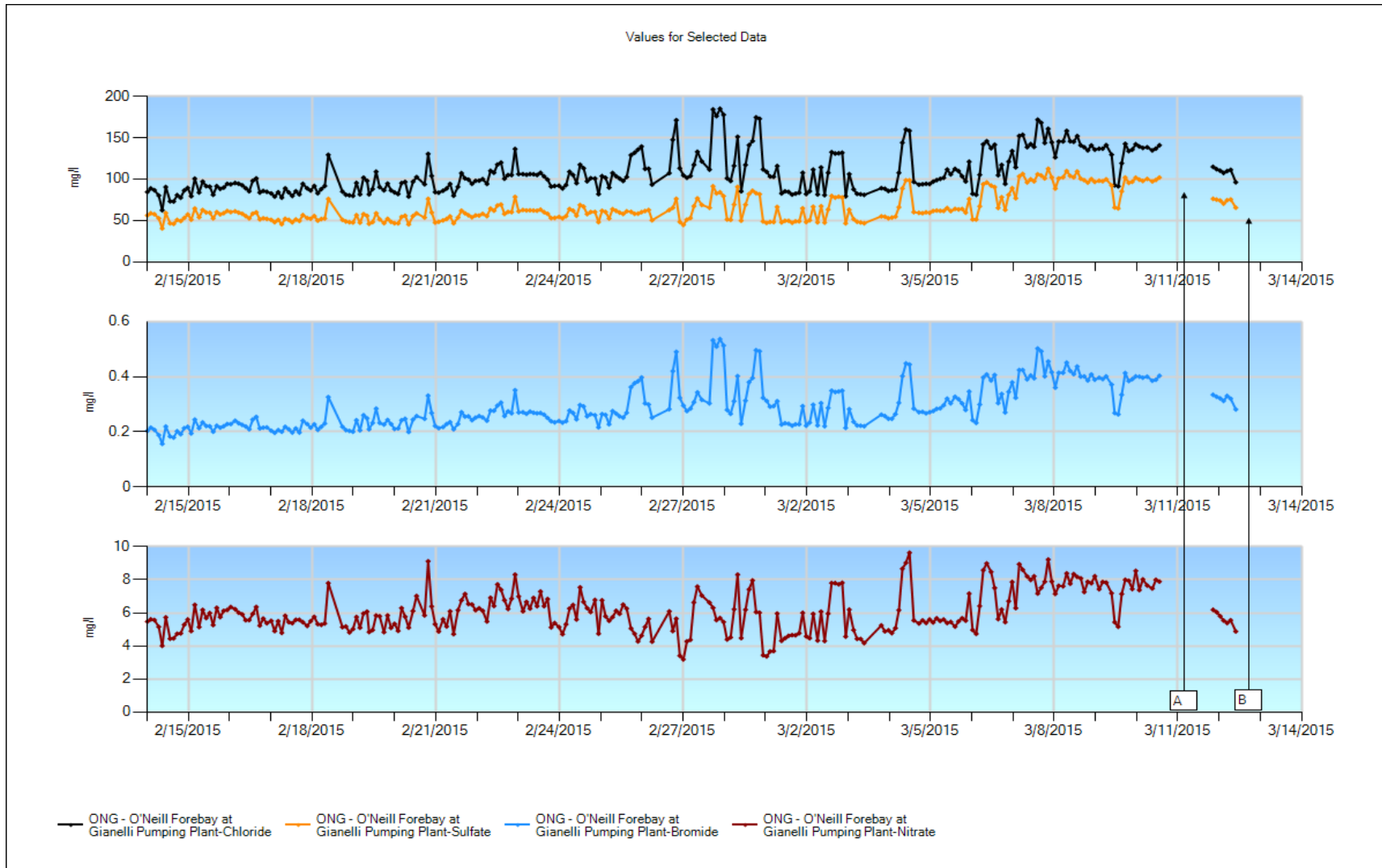
## Gianelli – Pumping, Organic Carbon, EC



- A – Backup battery failed and Sievers was left in grab mode after station visit.
- B – Oxidizer syringe motor was stuck in place; had to reset it manually.
- C – Water supply solenoid system is having a problem.

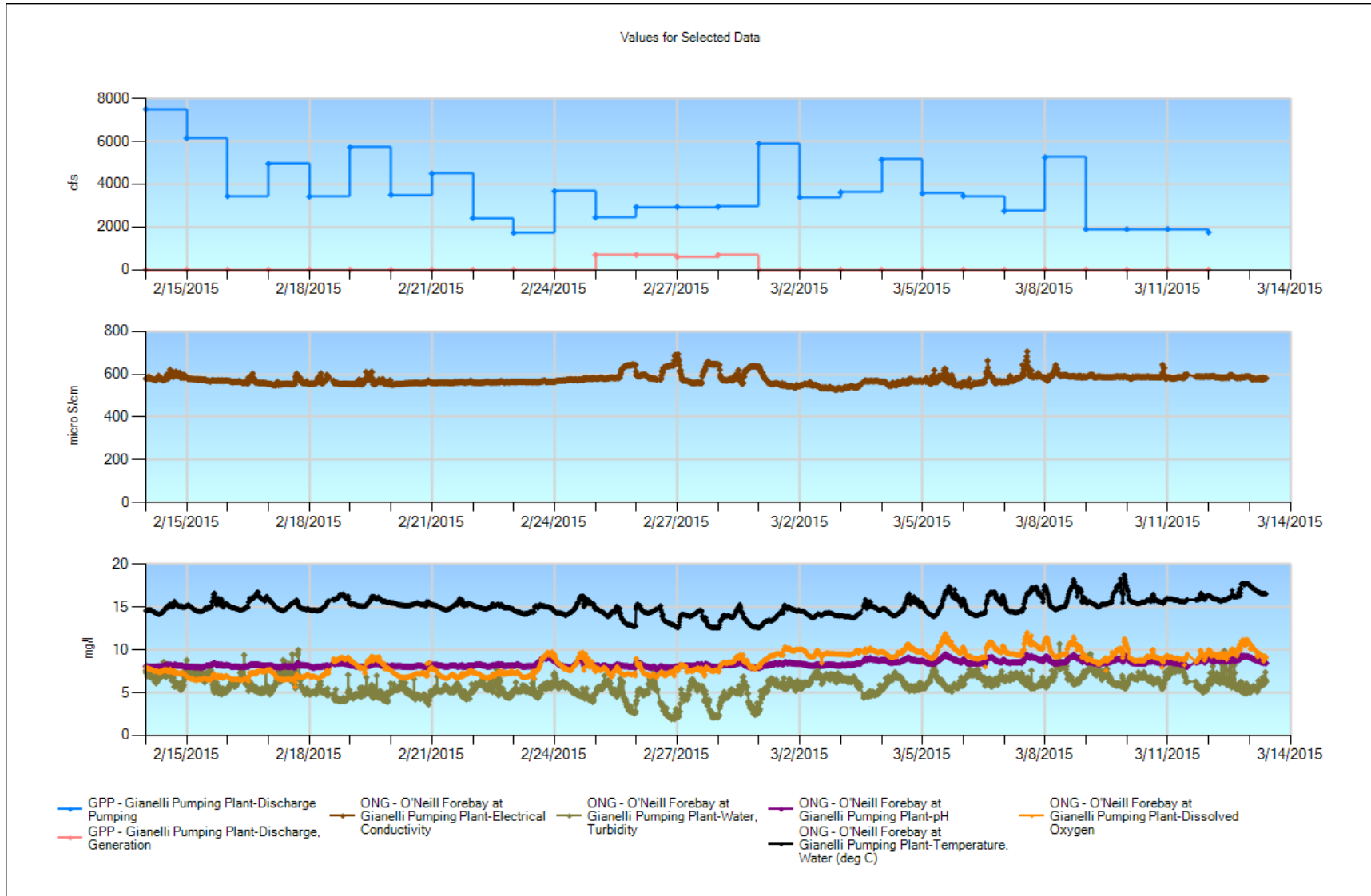


Gianelli – Chloride, Sulfate, Bromide, Nitrate

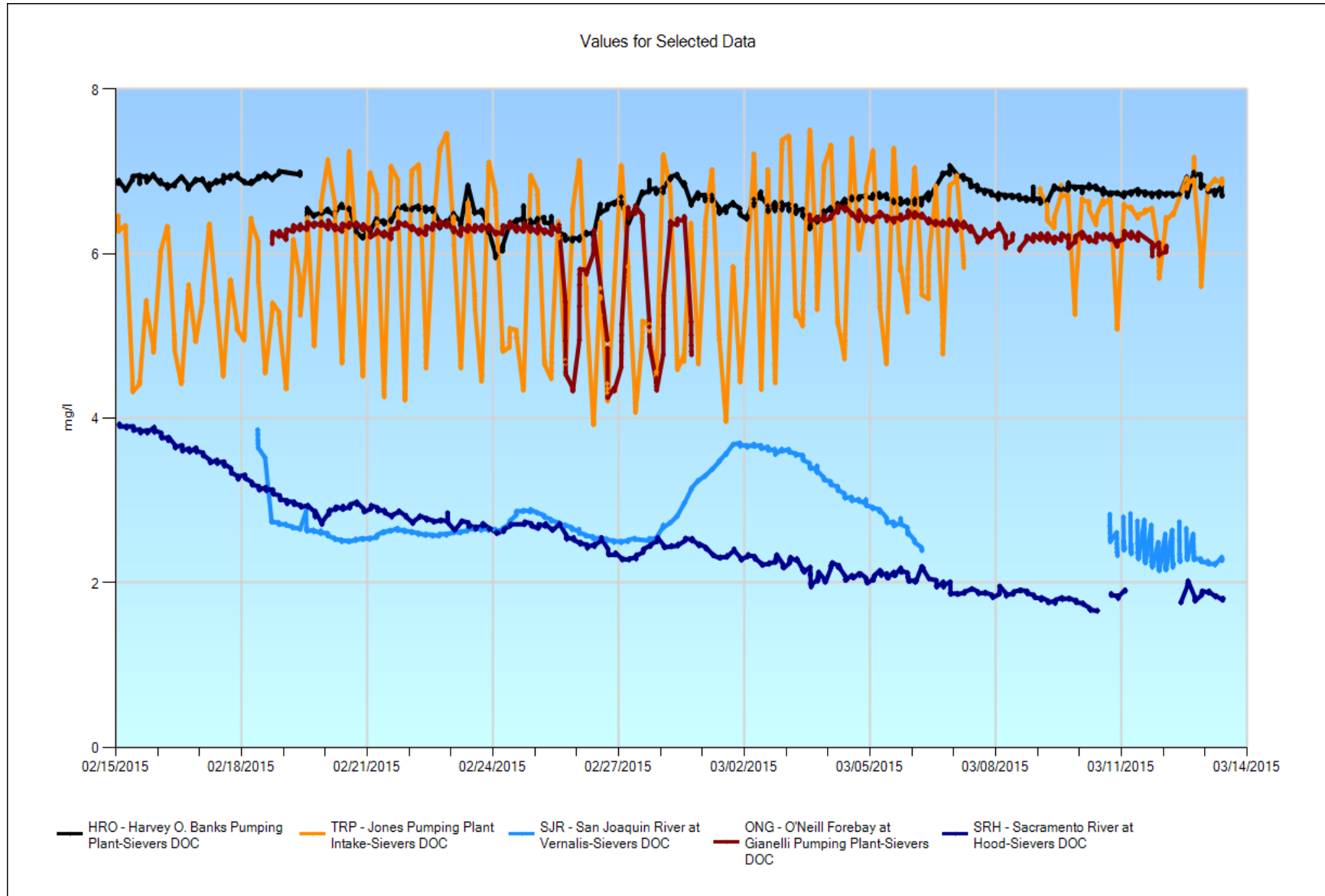


- A – The communication error returned.
- B – Low flow, possibly due to OC solenoid problem, caused errant readings.

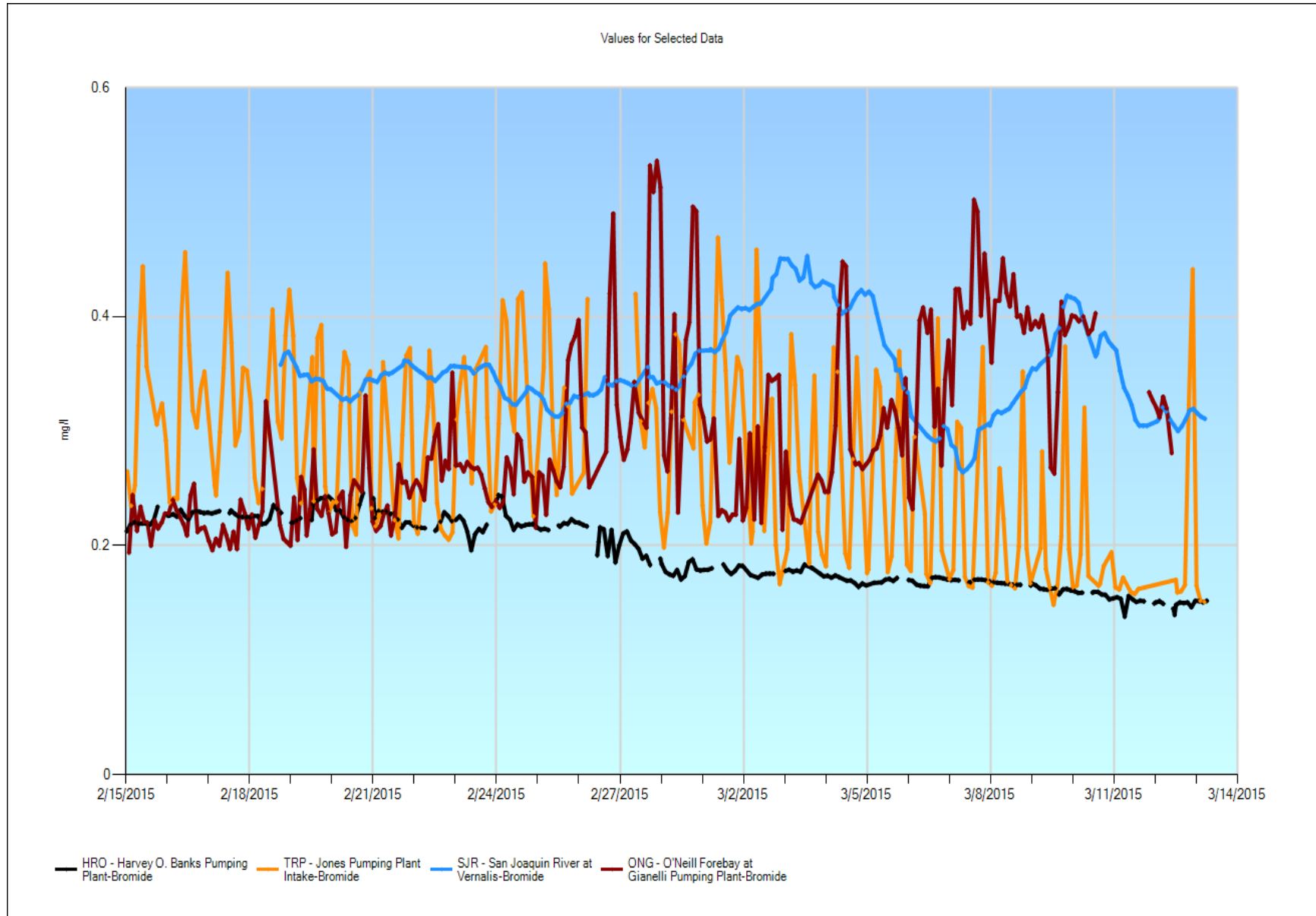
# Gianelli – EC, Temperature, pH, DO & Turbidity



# All Stations – DOC



# All Stations - Bromide



# Multiple Stations - EC

