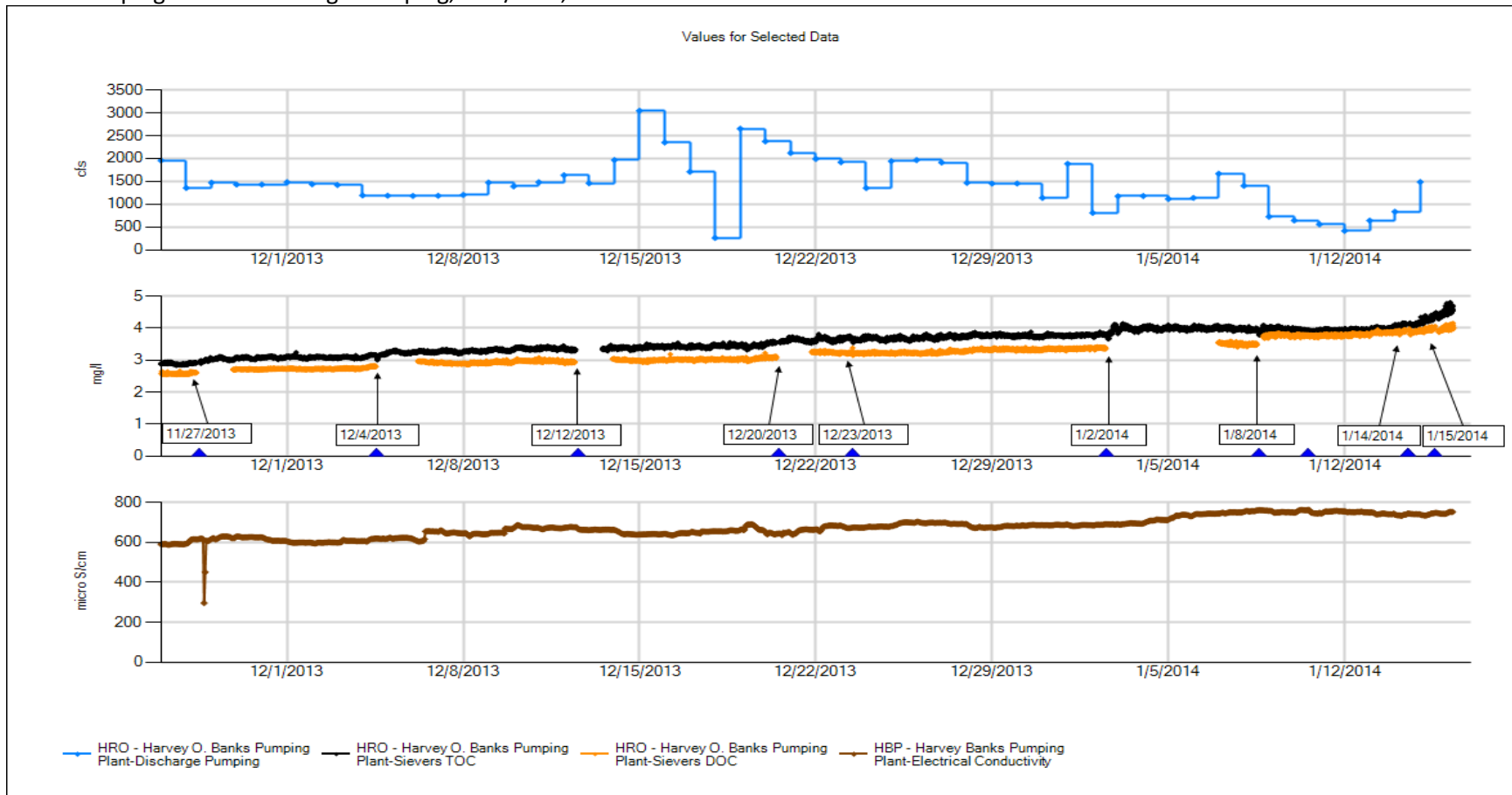
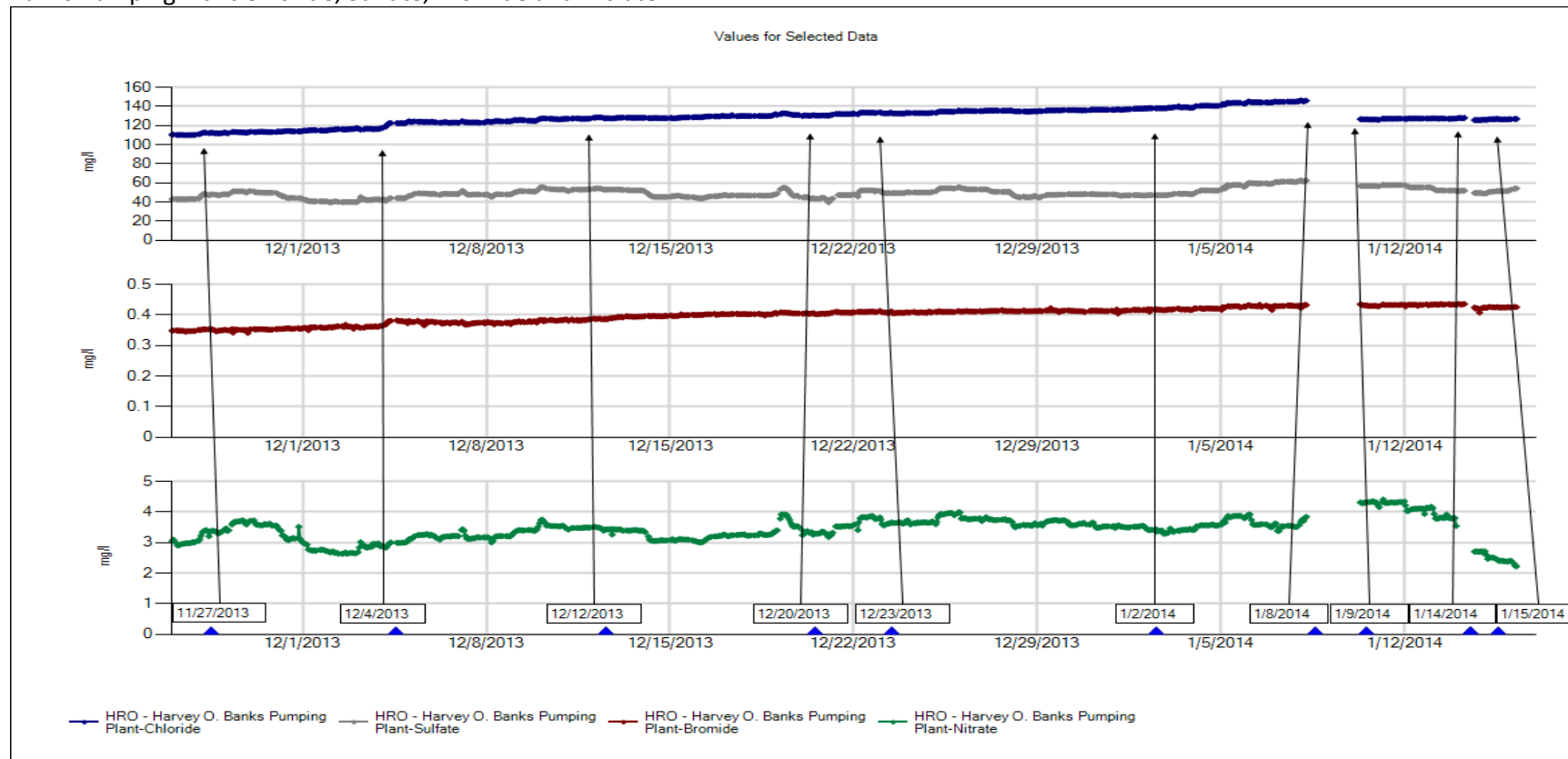


Banks Pumping Plant – Discharge Pumping, TOC/DOC, EC



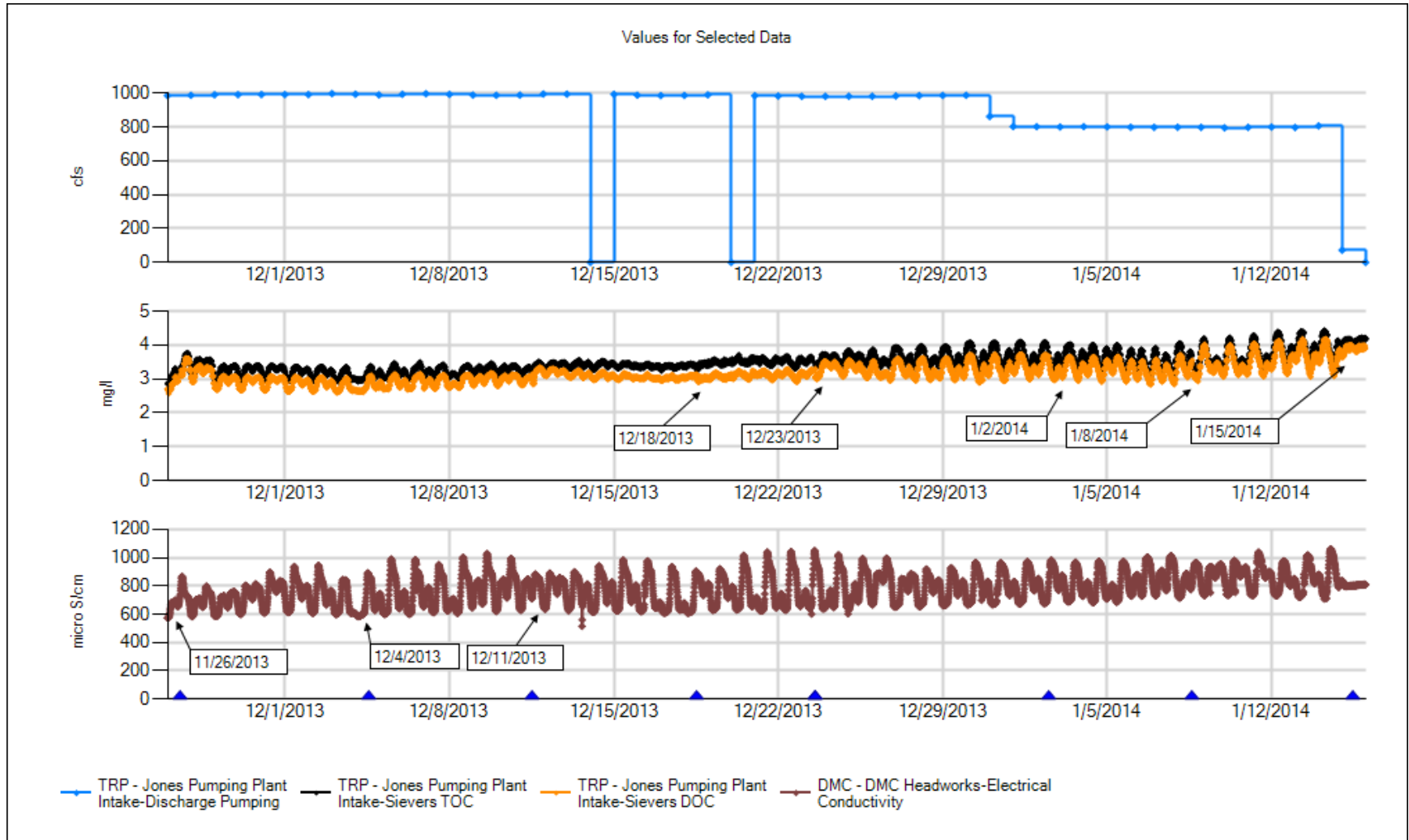
- 11/27/2013 – Station maintenance, filter change and Sievers QC.
- 12/4/2013 – Station maintenance and filter change.
- 12/12/2013 – Station Maintenance, filter change and Sievers QC.
- 12/20/2013 – Station maintenance, filter change and Sievers QC.
- 12/23/2013 – Replaced the 75 um filter with a 50 um filter.
- 1/2/2014 – Station maintenance and filter change.
- 1/8/2014 – Station maintenance and filter change.
- 1/14/2014 – Station maintenance, filter change and Sievers QC.
- 1/15/2014 – Follow-up Sievers QC

Banks Pumping Plant Chloride, Sulfate, Bromide and Nitrate



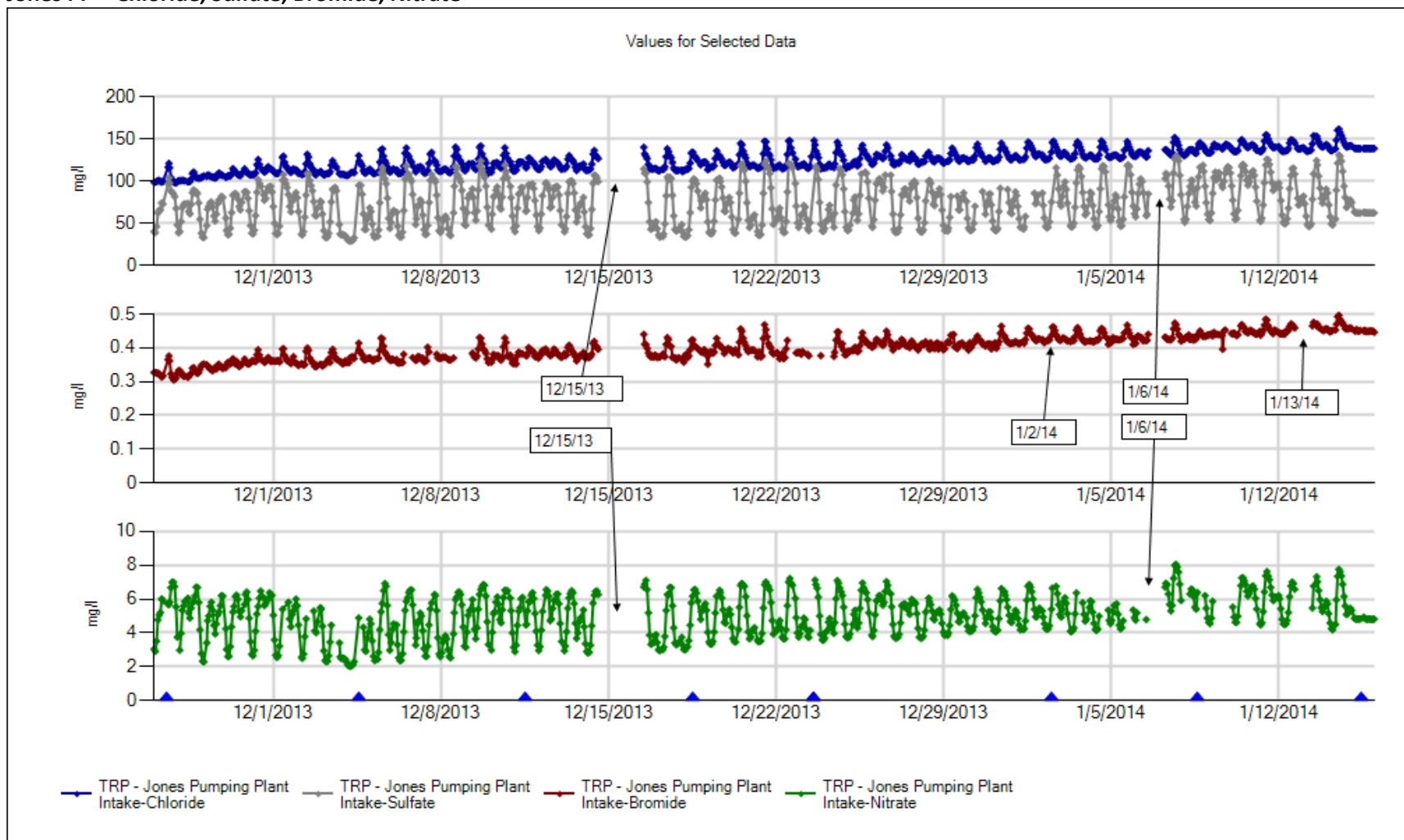
- 11/27/2013 – Station maintenance, filter change and Dionex QC.
- 12/4/2013 – Station maintenance and filter change.
- 12/12/2013 – Station maintenance, filter change and Dionex QC.
- 12/20/2013 – Station maintenance, filter change and Dionex QC.
- 12/23/2013 – Replaced the 75 um filter with a 50 um filter.
- 1/2/2014 – Station maintenance and filter change.
- 1/8/2014 – Station maintenance and filter change; replaced eluent generation cartridge.
- 1/9/2014 – Dionex troubleshoot eluent generator issue; Dionex calibration.
- 1/14/2014 – Station maintenance and Dionex re-calibration.
- 1/15/2014 – Station filter change.

Jones PP – Pumping, Organic Carbon, EC

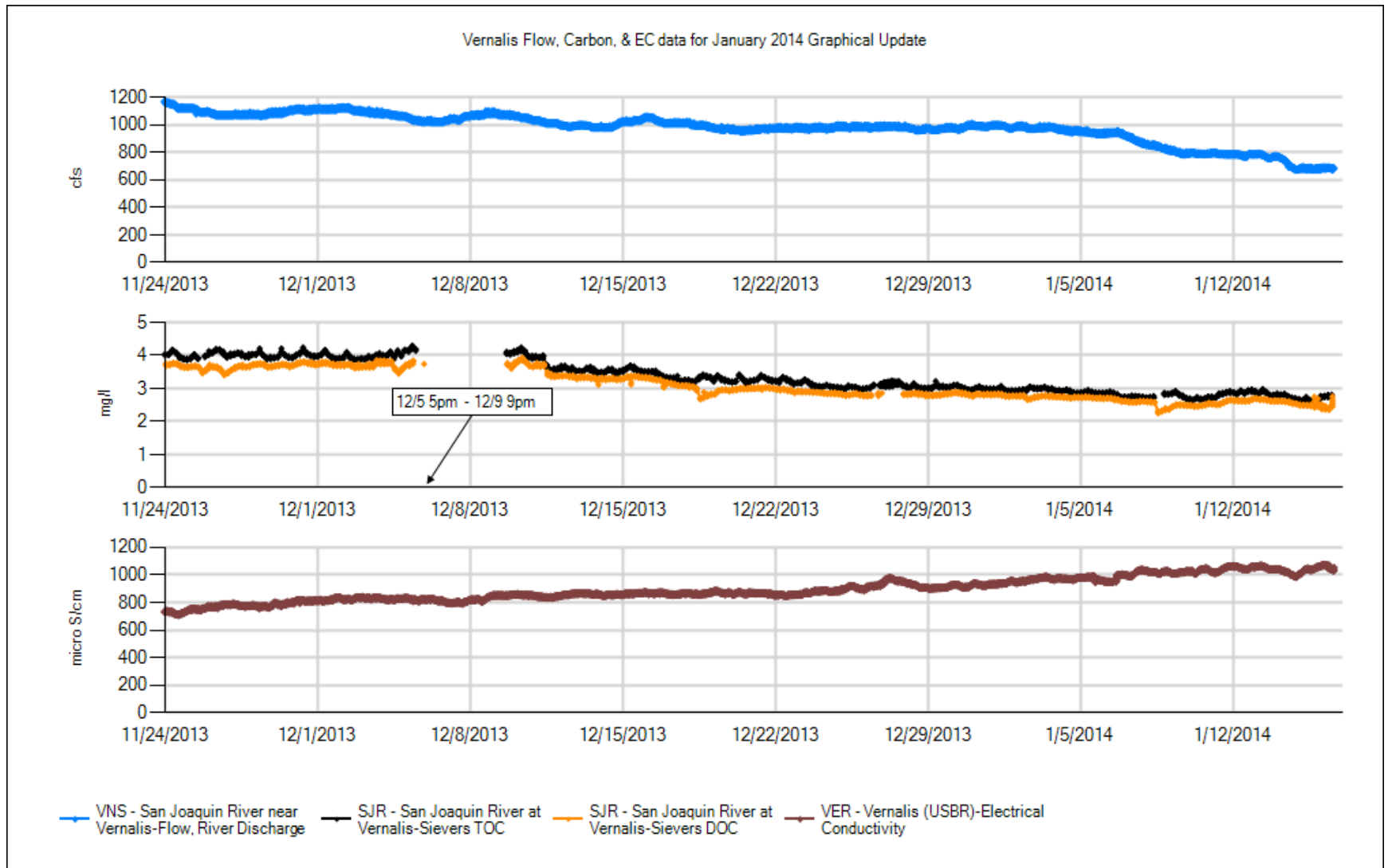


- **11/26/13** - Filter change and QC check. **12/11/13** – Filter change and QC check. **12/18/13** – changed just the 100 micron pre-filter.
- **12/23/13** – replaced acid and oxidizer cartridge. **1/2/14** – changed just the 100 micron pre-filter. **1/8/14** – changed all filters.

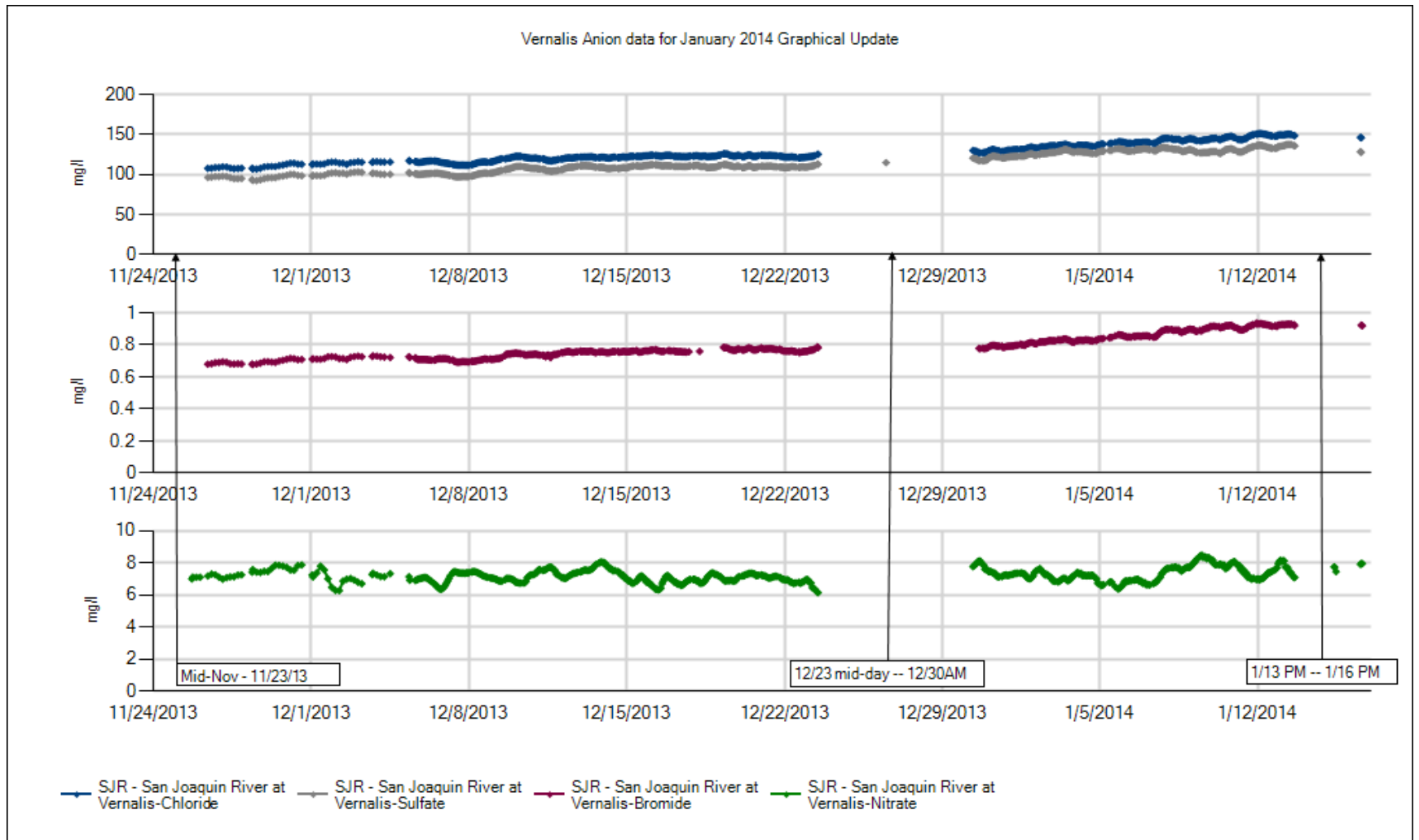
Jones PP – Chloride, Sulfate, Bromide, Nitrate



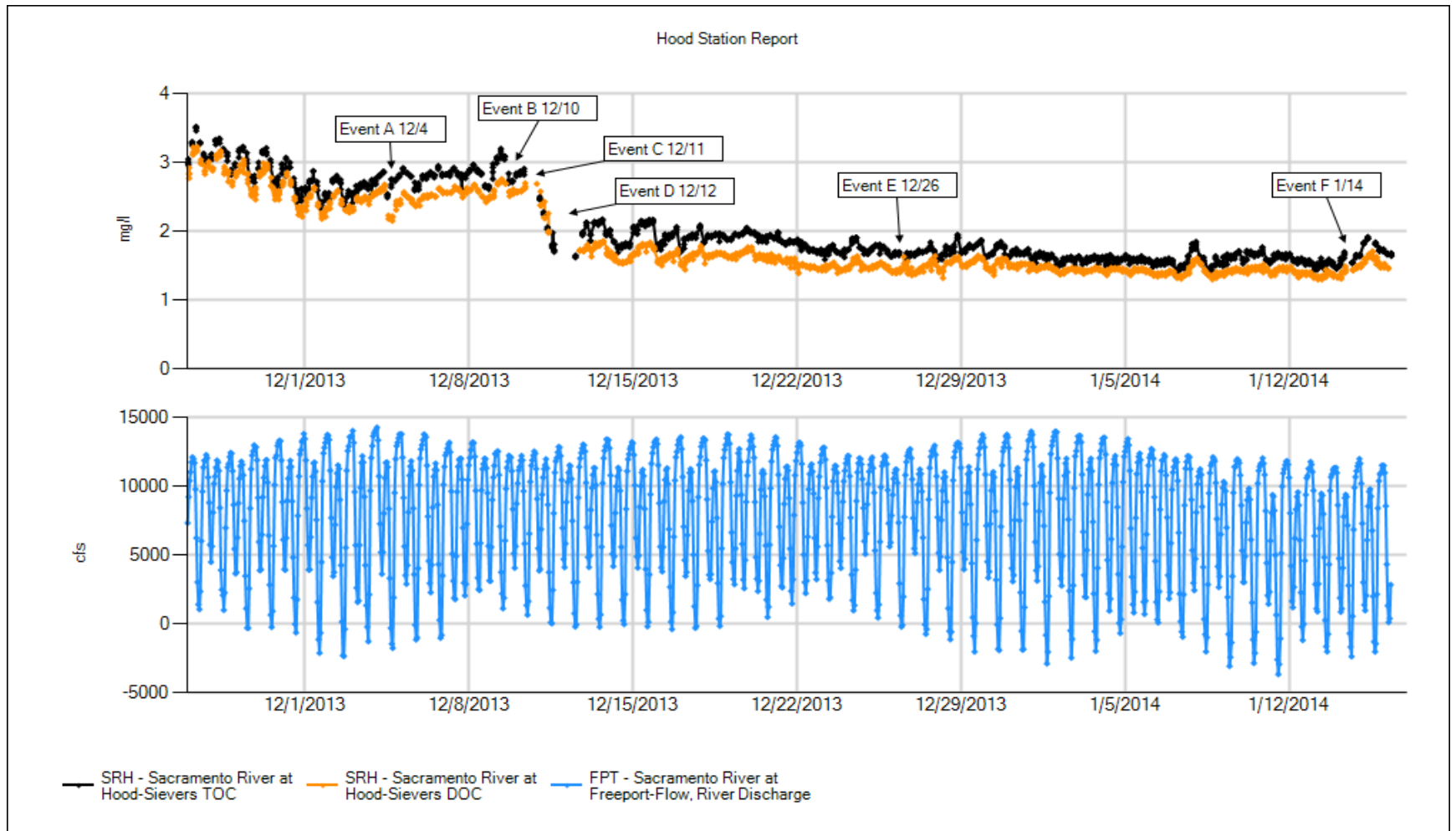
- **12/15/13** – Dionex data exceeded maximum peak levels and had to be readjusted. **1/2/14** – changed check standard and recalibrated. **1/6/14** – Dionex was recalibrated. **1/13/14** – bromide retention times had to be readjusted. **Note** – retention times for all the anions had to be adjusted and various times throughout the graph causing minor gaps in data.



12/5 – 12/9/13: Water hyacinth leaves covered the pump's intake screen, not allowing enough flow through the filters to reach the analyzers. **12/27:** Solenoid valve went bad on the TOC stream, affecting the DOC stream as well. **Filter changes:** 11/25-all filters, 12/4-prefilters, 12/9-all filters, 12/18-prefilters, 12/26-all filters, 1/2/14-prefilters, 1/8/14-prefilters, 1/15/14-all filters.



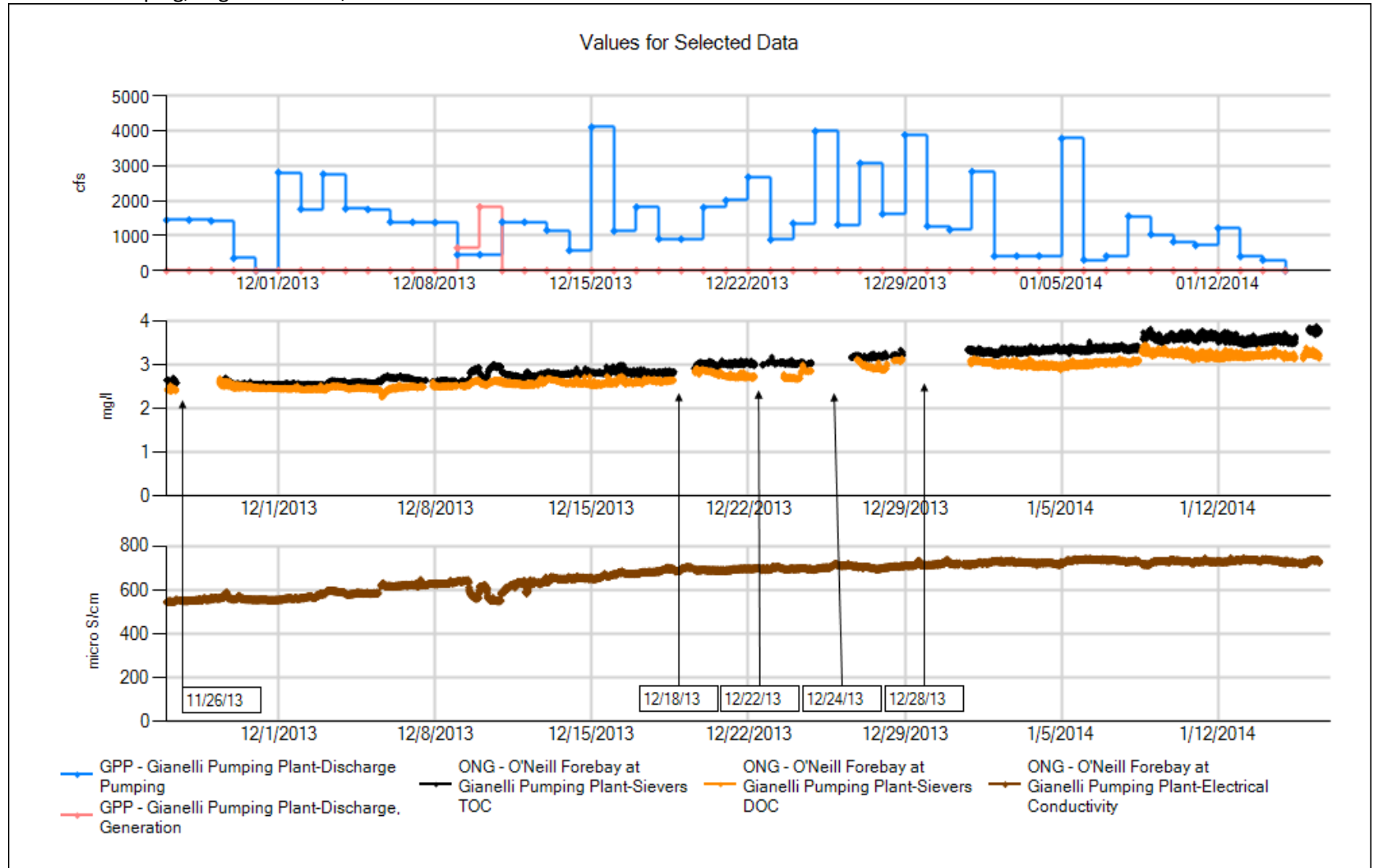
Mid-November – 11/23/13: Annual maintenance/consumable exchange followed by software/update issues not allowing the instrument to calibrate properly. Data is available back to 11/23, but not shown in this graph. **12/23 – 12/30/13:** Replaced the eluent generator and recalibrated. Data not reporting until the 12/26 QA/QC run; data available 12/26 PM through 12/30, but not imported at the time of this update. **1/13 – 1/16/14:** Recalibrated at higher standard concentrations to bracket the increased chloride and bromide concentrations in the SJR water. Problems with the first two calibrations, fixed on 1/16/14.



Significant Events: November 26th to January 16th, 2014

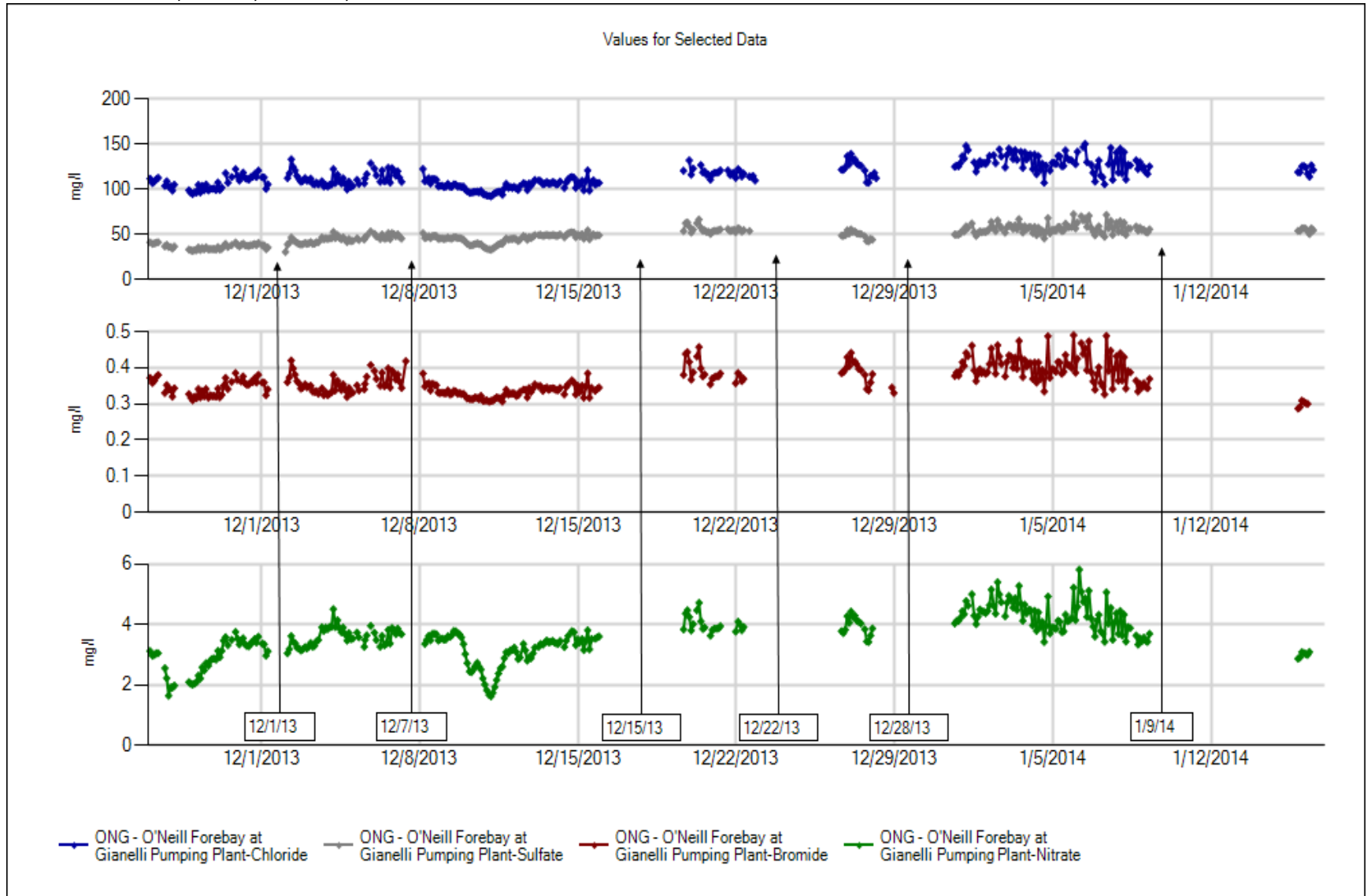
- **Event A 12/4:** Changed filters, the 100 micron for 75 micron filter and 1 micron for 10 micron filter.
- **Event B 12/10:** The sievers was making a weird noise. Sounded like the noise was coming from the DI pump, I tried to prime the DI pump.
- **Event C 12/11:** The restrictor lines were clogged, and they need to be replaced by new ones. The Sample pump was checked and there is no clogging. I also changed filters.
- **Event D 12/12:** Replaced the restrictor lines with new ones. The syringe motor failed to push the oxidizer. It was stuck in place and did not want to push the syringe, it got replaced.
- **Event E 12/26:** Changed all filters.
- **Event F 1/14:** Changed 100 and 50 micron filters. Cleaned all the lines in between the filters, and ran a hydrogen peroxide Grab sample to clean any Biological contamination inside the sievers.

Gianelli – Pumping, Organic Carbon, EC



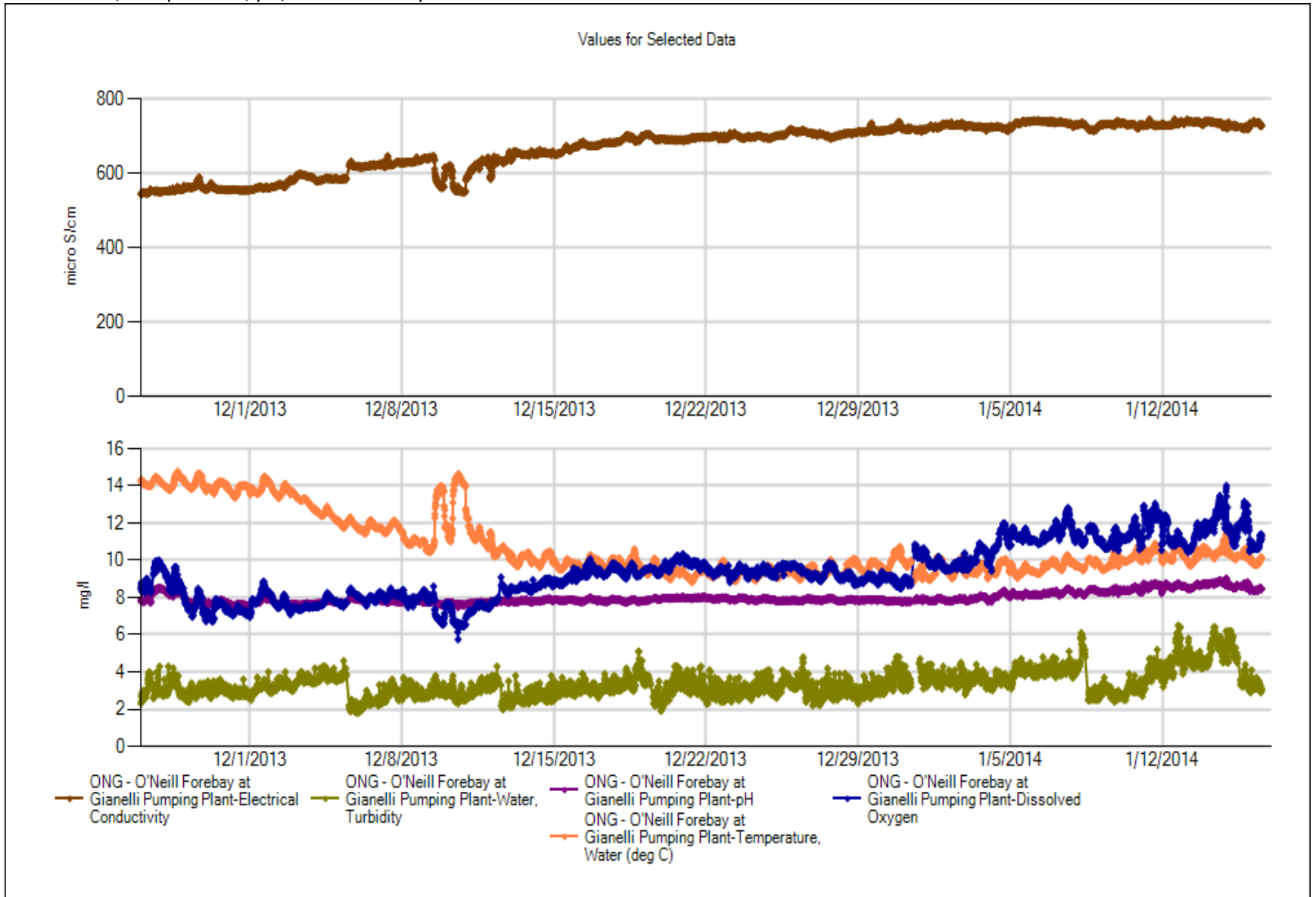
- 11/26/13 – Jumpy data following station maintenance needed to be QC'ed out.
- 12/18, 12/22, 12/24, & 12/28/13 – Low flow due to pump problem caused a Sievers' shutdown.

Gianelli – Chloride, Sulfate, Bromide, Nitrate

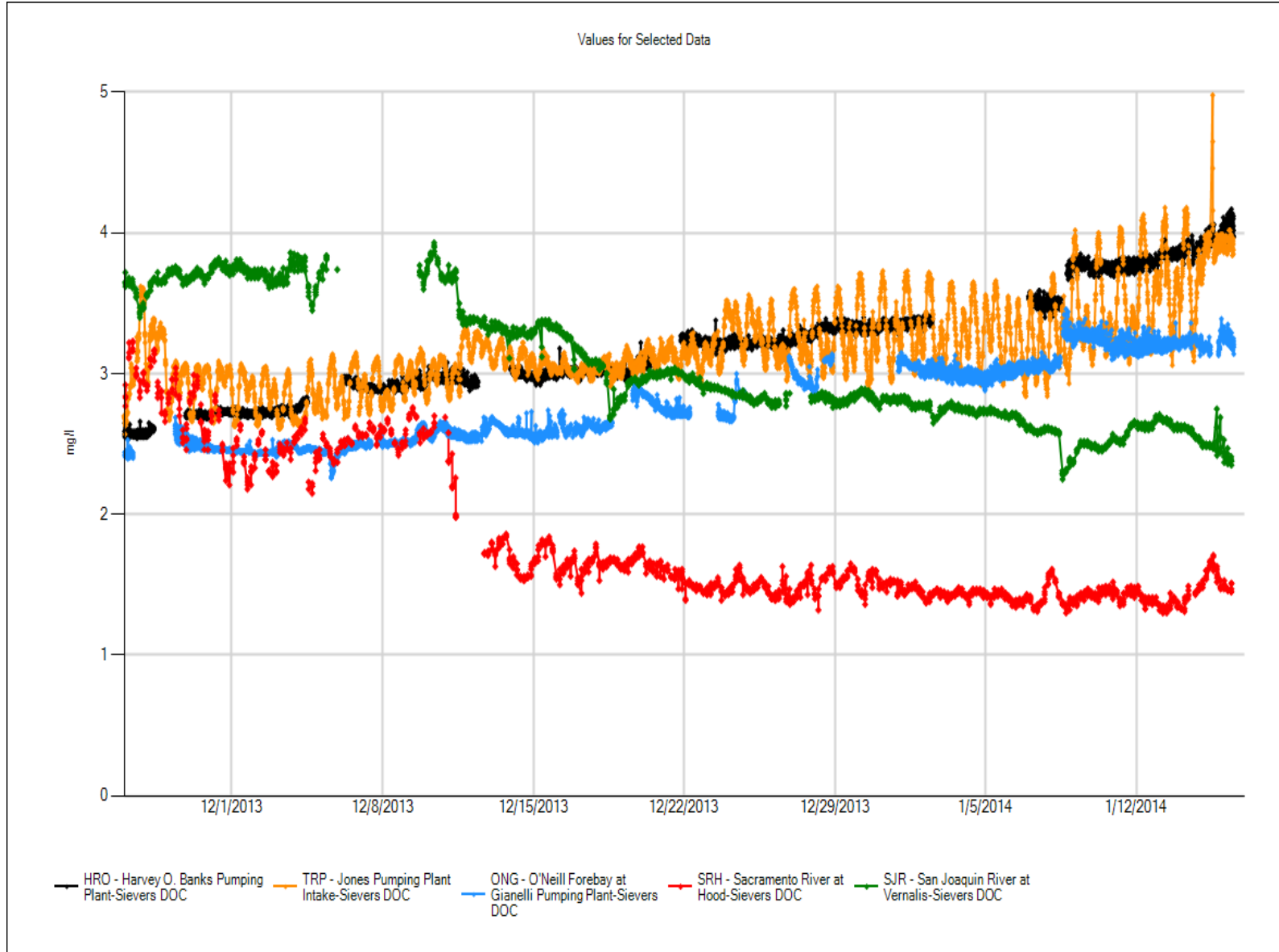


➤ Intermittent through Dec. & Jan. – Low flow due to pump problem caused errant data and system shutdowns.

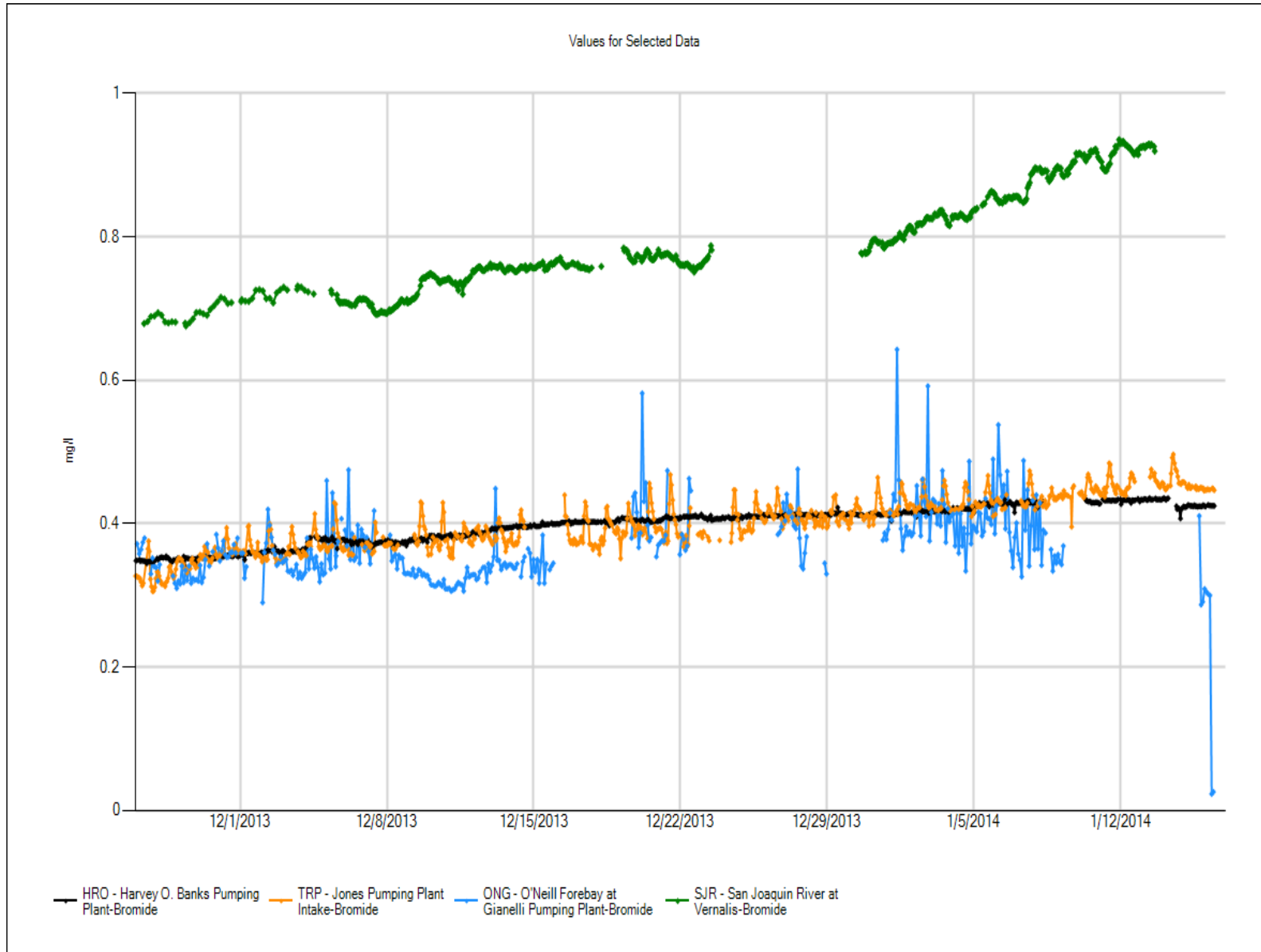
Gianelli – EC, Temperature, pH, DO & Turbidity



All Stations - DOC



All Stations - Bromide



All Stations – EC + Clifton Court

