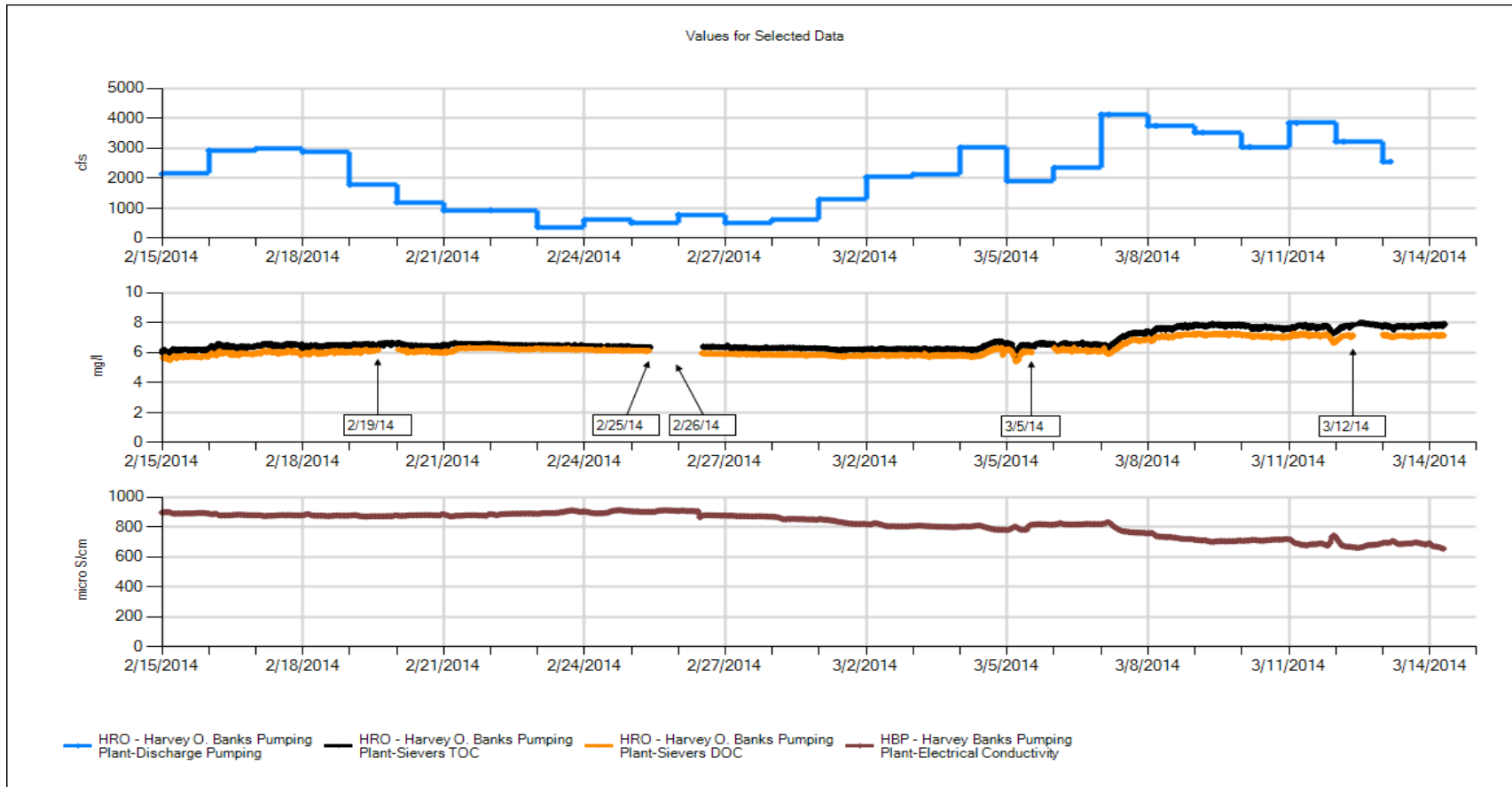
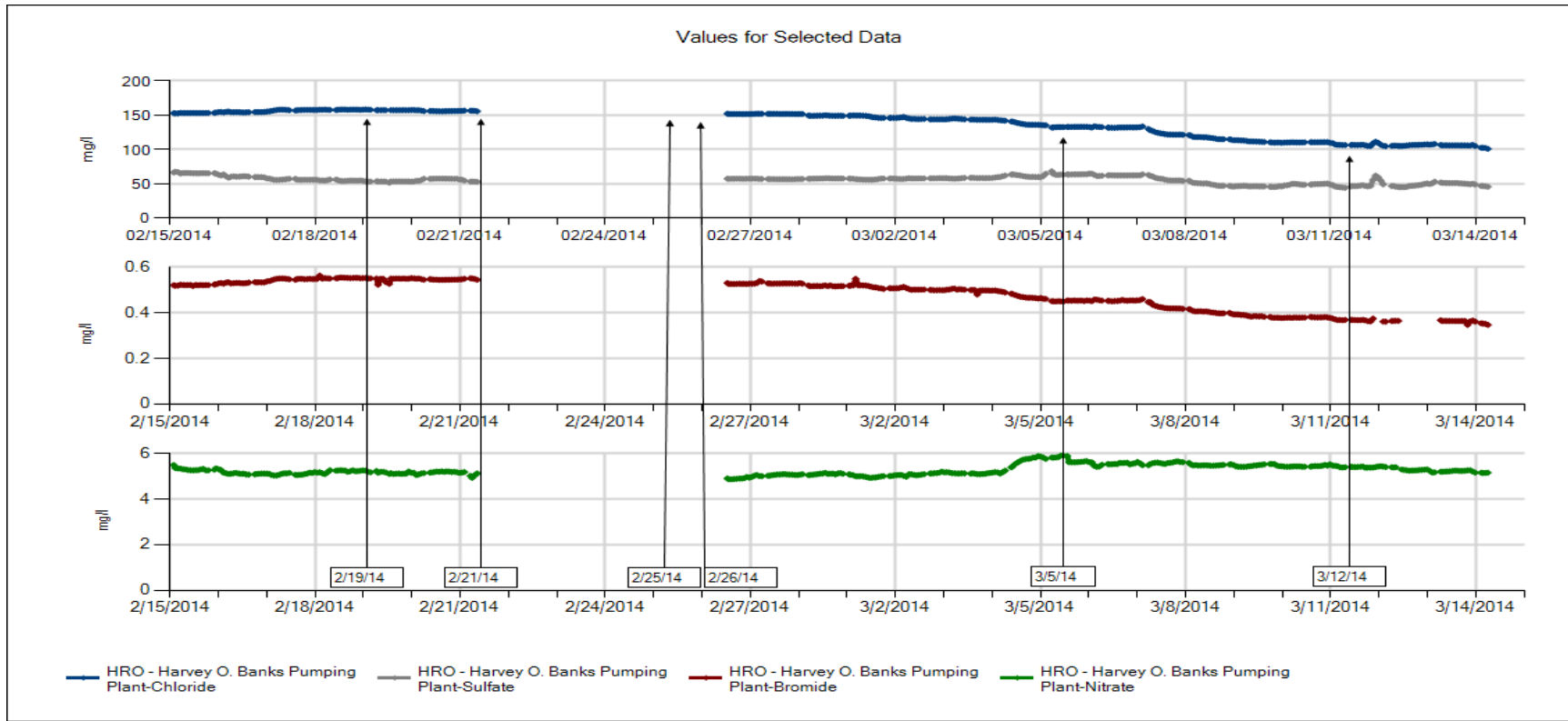


Banks Pumping Plant – Pumping, Organic Carbon and EC



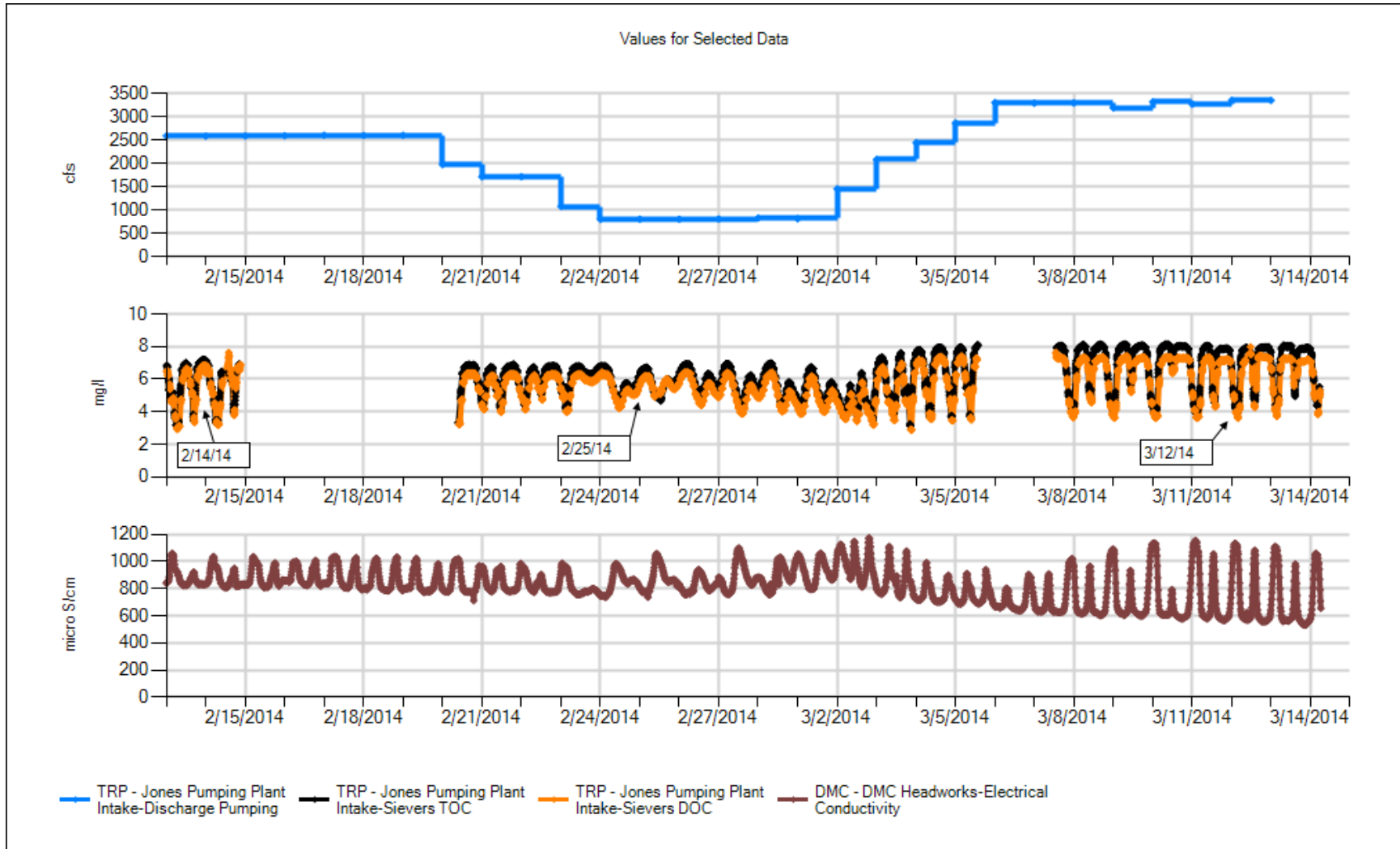
- 2/19/2014 – Delivery system filter change, all filters, 100, 50, 1, and 0.45 um
- 2/25/2014 – Delivery system filter change, all filters, 100, 50, 1, and 0.45 um – Cleaned all delivery system and StreamWalker lines – Analyzed all QC samples
- 2/26/2014 – TOC and DOC lines were inadvertently switched inside the StreamWalker. After the switch, TOC was reporting as DOC and vice versa. The lines were switched back to their correct positions.
- 3/5/2014 - Delivery system filter change, 100 and 0.45 um
- 3/12/2014 – Delivery system filter change, all filters, 100, 50, 1, and 0.45 um – Cleaned Sievers IOS – Analyzed all QC samples

Banks Pumping Plant – Chloride, Sulfate, Bromide, and Nitrate



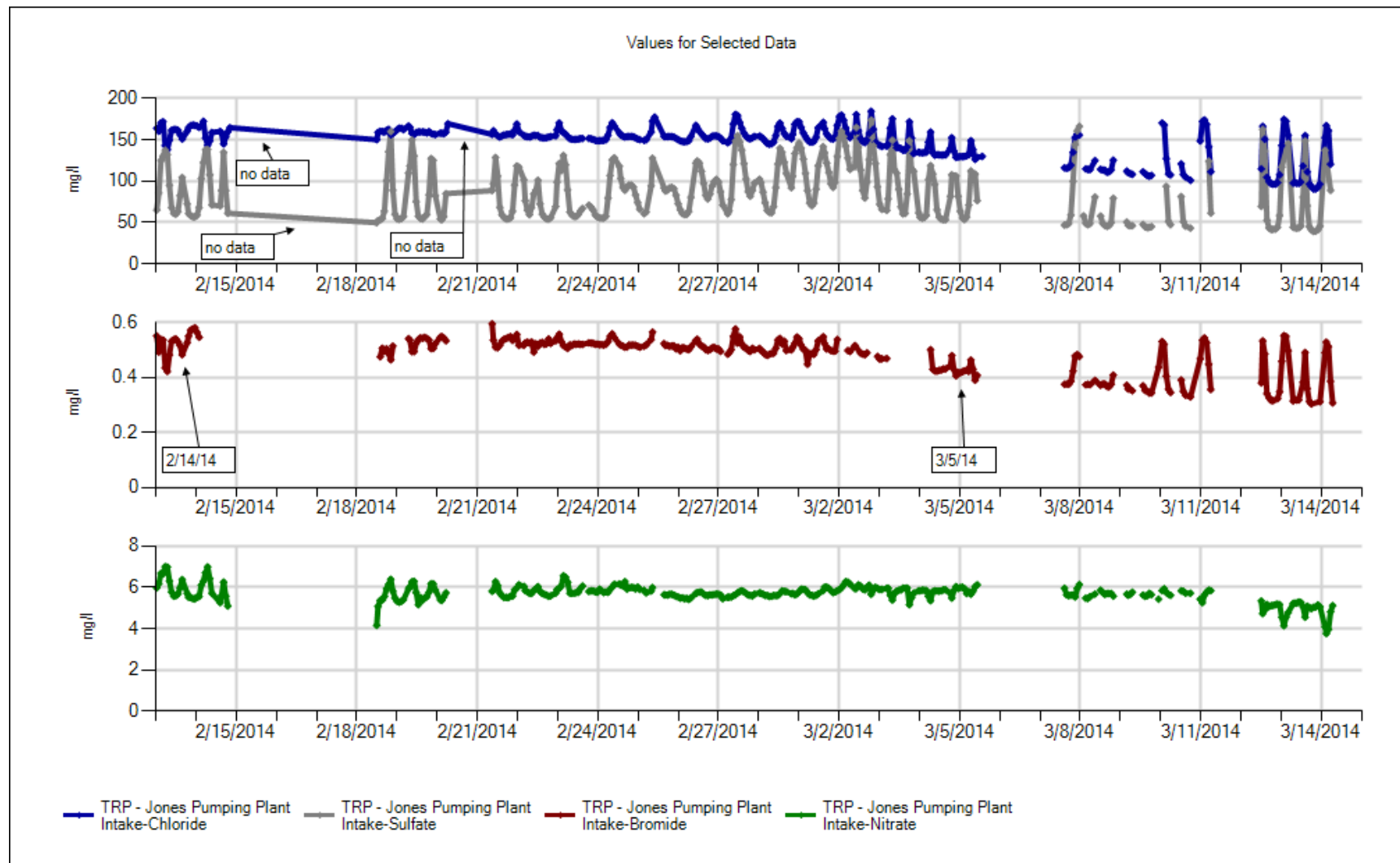
- 2/19/2014 – Delivery system filter change, all filters, 100, 50, 1, and 0.45 um
- 2/21/2014 – Anion analyzer began to show signs of potential column degradation. Data marked as unacceptable
- 2/25/2014 – Delivery system filter change, all filters, 100, 50, 1, and 0.45 um – Installed new guard and analytical columns on the anion analyzer
- 2/26/2014 – Although the anion analyzer calibration was successful, data values were well below what they should have been. After some troubleshooting, it was determined that there was a partial clog in one of the analyzer valves. Once this was cleared, values returned to their normal ranges.
- 3/5/2014 – Delivery system filter change, 100 and 0.45 um
- 3/12/2014 – Delivery system filter change, all filters, 100, 50, 1, and 0.45 um – Analyzed QC sample

Jones PP – Pumping, Organic Carbon, EC



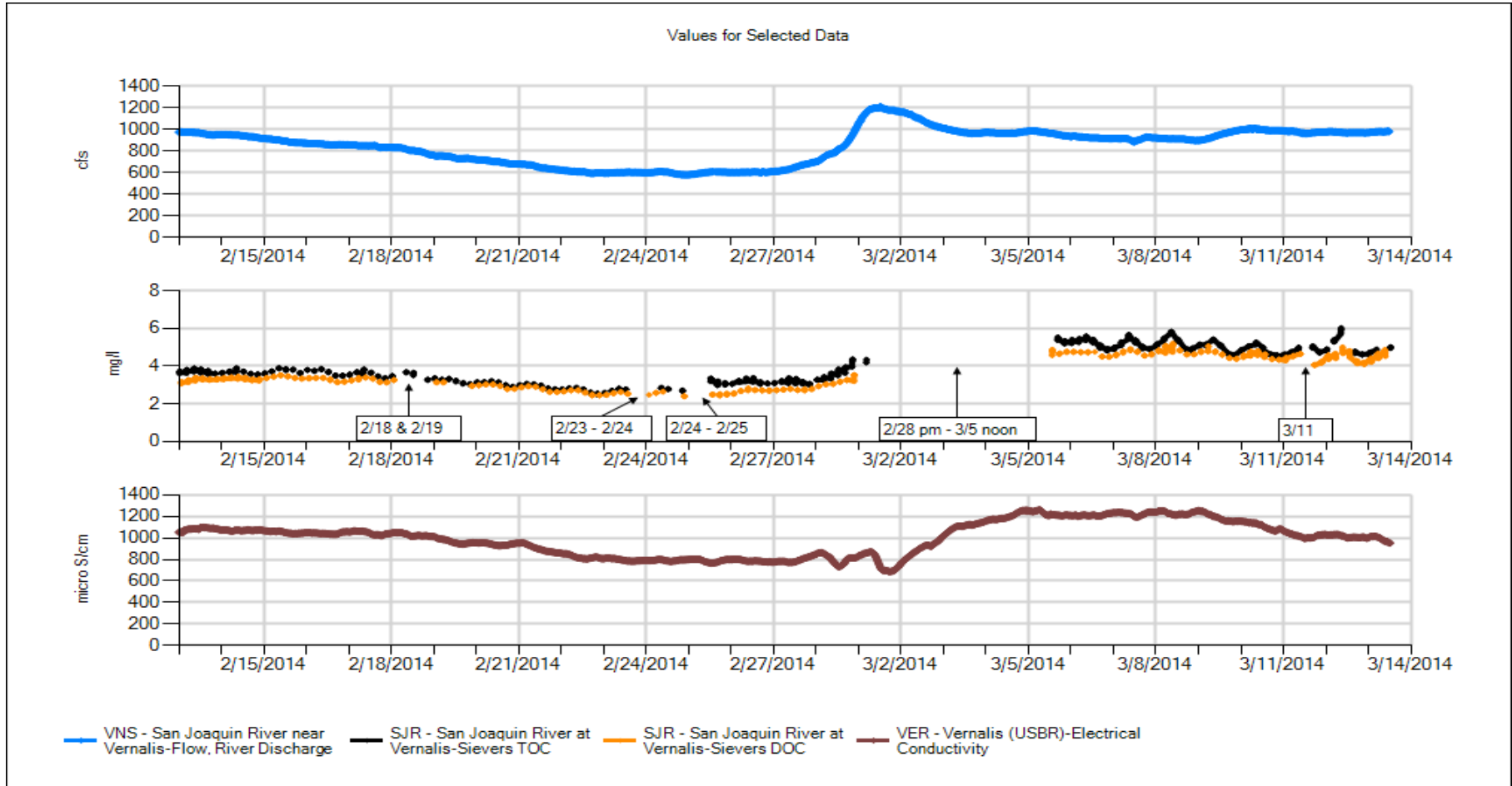
2/14 – filter change. Newly installed APC unit didn't work properly which led to a system shut down. **2/19** – Replaced UV lamp. Fixed APC unit, but the Streamwalker defaulted to factory settings creating erroneous data. **2/20** – reset Streamwalker. **2/25** – filter change. Ran QC check. **3/5-3/7** – shut down system due to a micro-rupture in the sample inlet valve. **3/7** – cleaned IOS. Changed oxidizer. **3/12** – filter change.

Jones PP – Chloride, Sulfate, Bromide, Nitrate



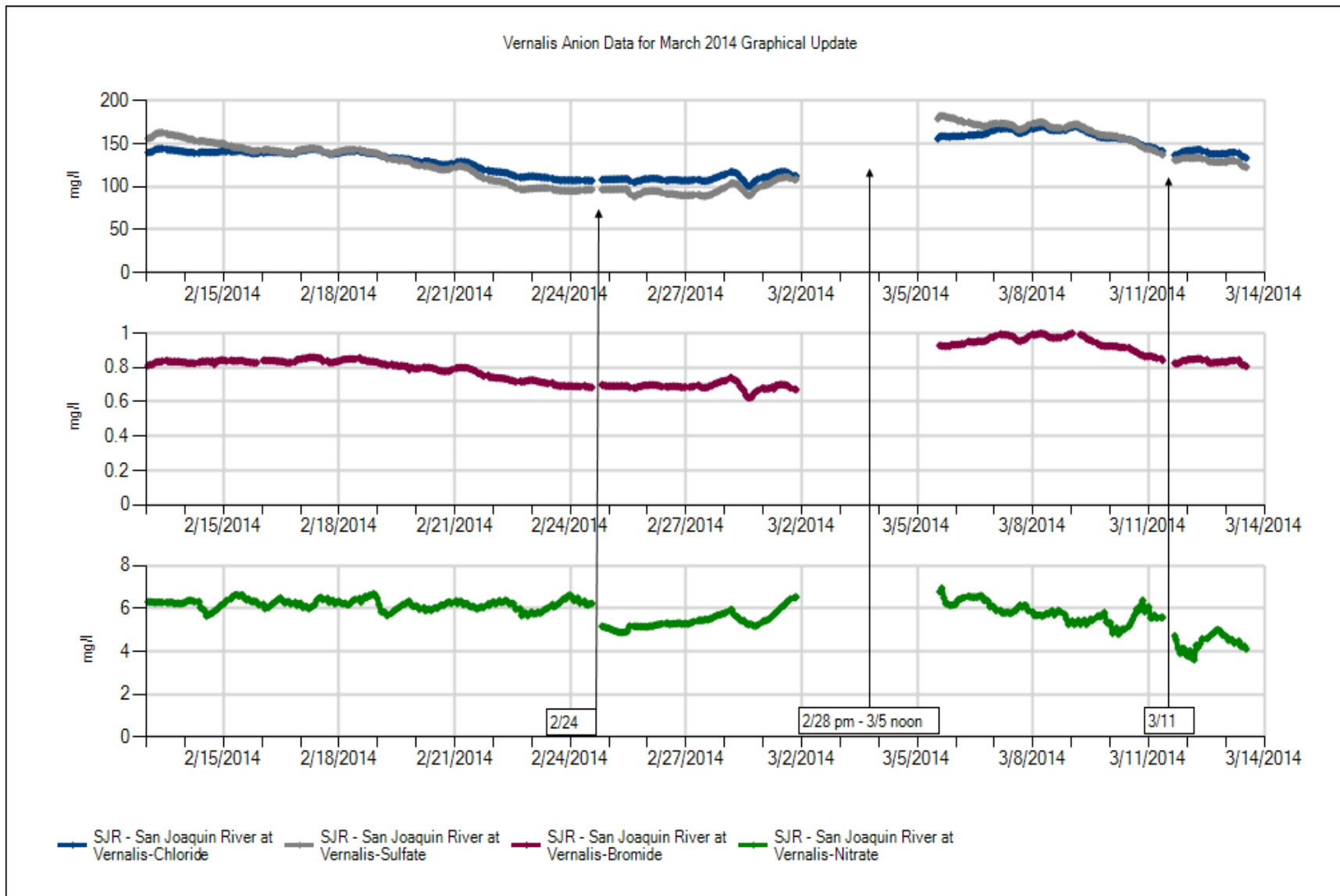
2/14 - changed sample inlet tubing. **3/15-3/18** - system reporting was turned off due to questionable data. **3/5** - made new check standard. **3/6 - 3/7** - system down due to micro-rupture in sample inlet valve. **3/8 - 3/12** - partial data loss due to partially clogged filters and valve.

Vernalis Flow, Organic Carbon, and Electrical Conductivity

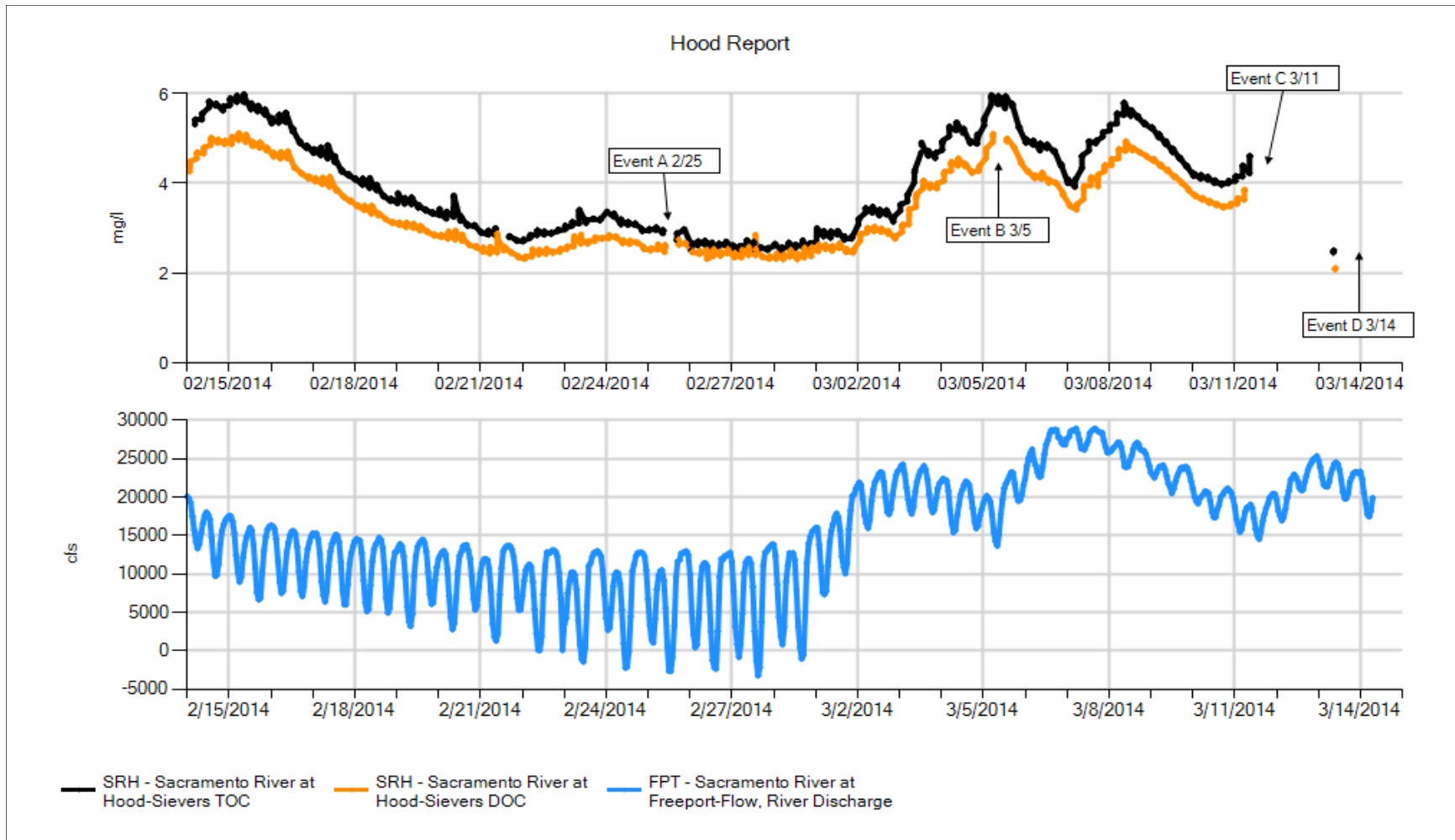


Filter Changes: 2/12 all filters, 2/24 all filters, 3/5 new 10" prefilters, 3/11 all filters. **Events:** 2/18-2/19: Malfunction of the DOC valve that resulted in no flow of filtered stream and no data. May have been a clog that cleared itself. 2/23-2/24: Pump motor failure; both pump and motor replaced. Disc filter and purge valve installed to remove sediment. RTMQC on 2/24. 2/24-2/25: Disc filter already clogged with organic debris; filter element removed while empty housing and purge valve left in service to remove some sediment. 2/28-3/5: Rain event and river pulse clogged pump with plant debris, reducing flow to the point of not pushing water through the filters. Valve adjustments made on 3/5 to compensate. Occurred on a Friday night, the beginning of Arin's extended time off and during the Delta and Cache Slough runs the next week. 3/11: RTMQC and pump rebuild to clear debris and restore normal flow. Some Sievers/stream-splitter maintenance; still more required soon.

Vernalis Chloride, Sulfate, Bromide, and Nitrate Data



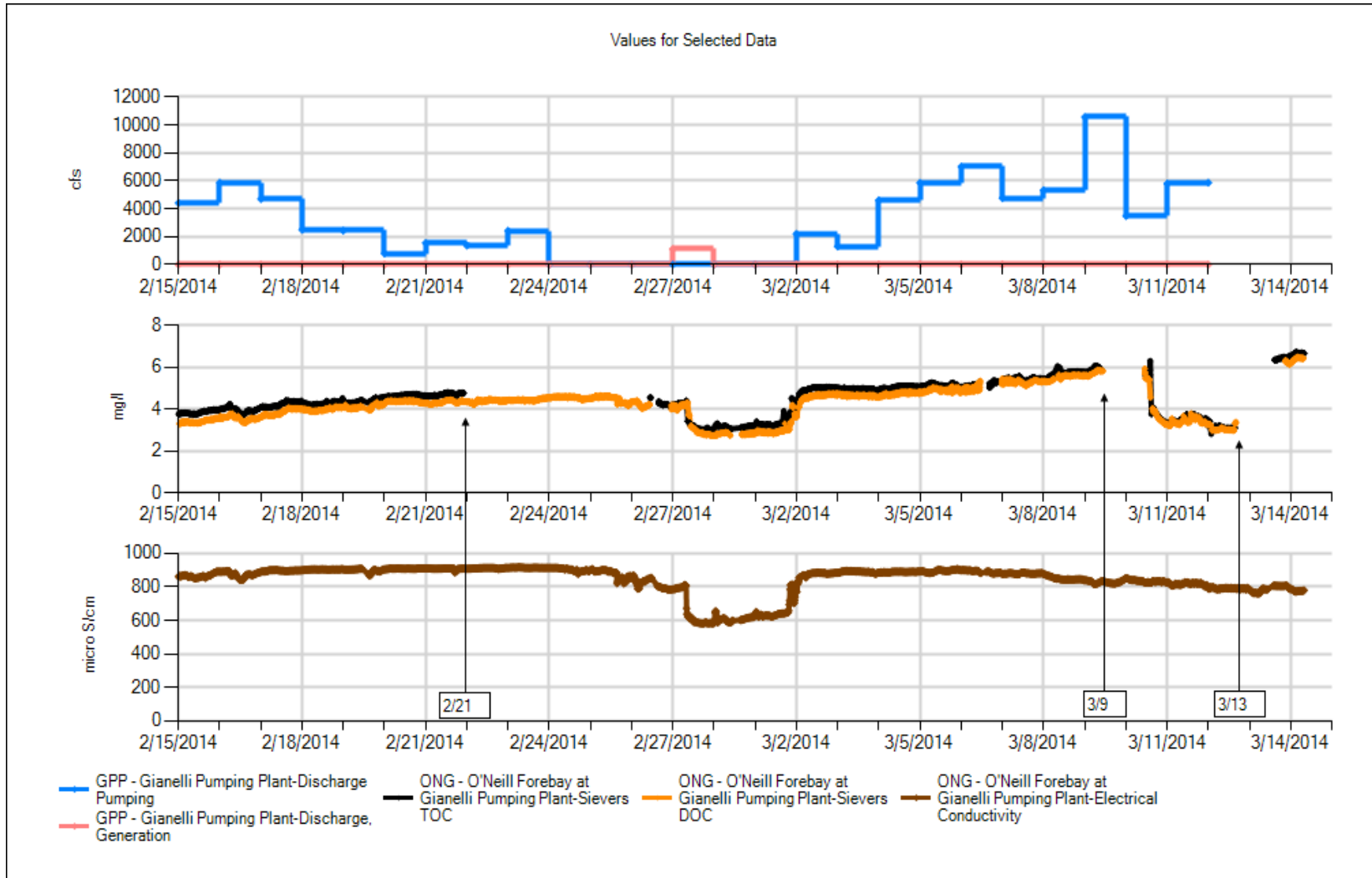
Events: 2/24: RTMQC. 2/28-3/5: Explained above. 3/11: RTMQC.



Significant Events: February 14th, 2014 to March 14th, 2014

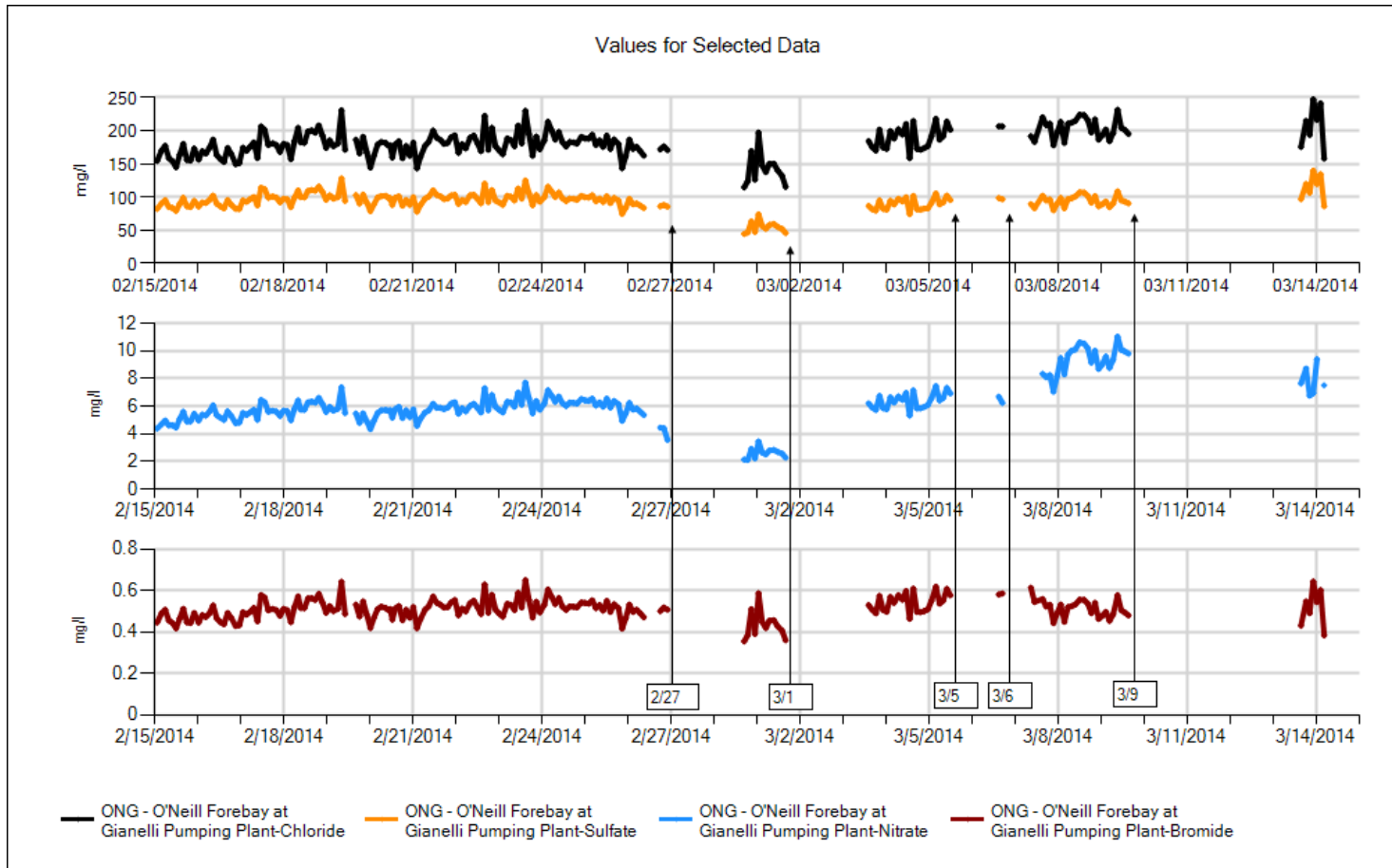
- **Event A 2/25:** Installed the APC unit, and changed all filters.
- **Event B 3/5:** Changed the 75 μ Filter.
- **Event C 3/11:** Replaced the DI pump and the resin bed. Data is missing because of a rinsing period which last 12 hours after installing the pump; Moreover, the Sievers continued to report inaccurate data so I edited out of the data utility.
- **Event D 3/14:** Installed a new firmware; however the Sievers is not reporting to the data utility or CDEC.

Gianelli – Pumping, Organic Carbon, EC



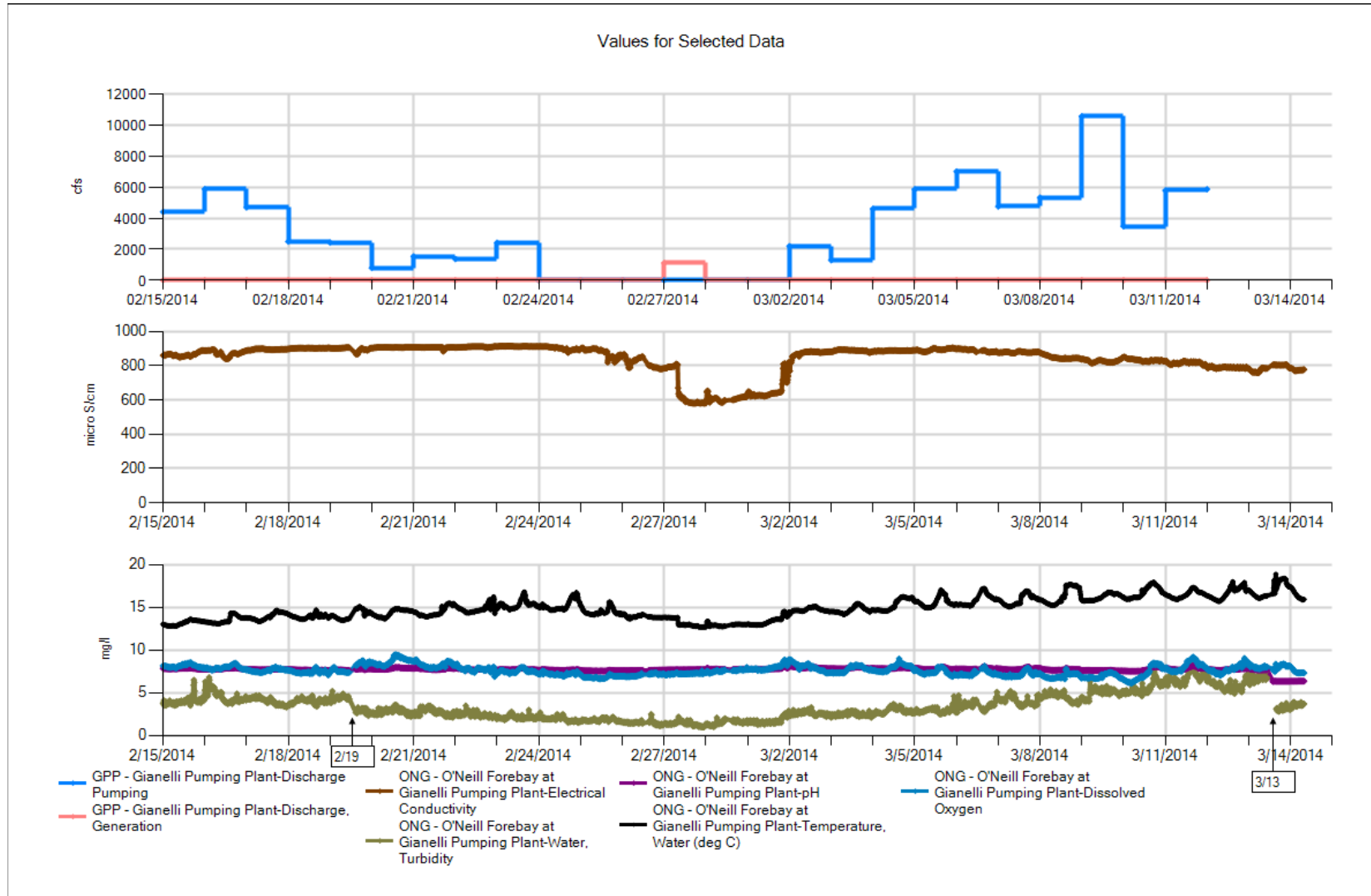
- 2/21 to 2/26 – A power outage caused the Streamwalker to get stuck on DOC.
- 3/9 to 3/10 – Low flows caused the Sievers to shutoff. It displayed an oxidizer syringe error after resuming analysis. The dip in values on 3/10 and erroneous data on 3/13 may be due to the period of low flows or the syringe error or both.

Gianelli – Chloride, Sulfate, Bromide, Nitrate



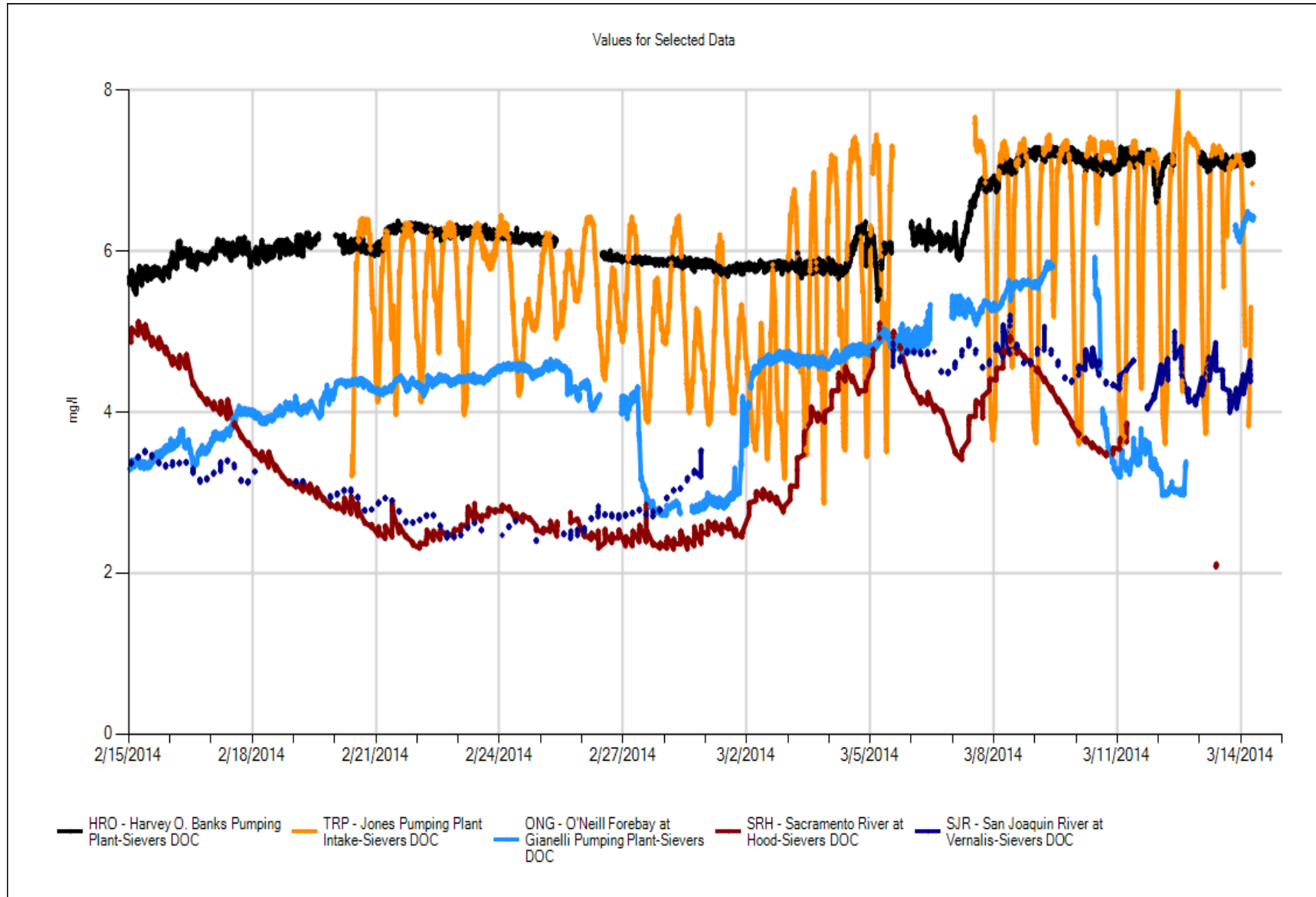
- 2/27, 3/1, 3/5 & 3/6 – The instrument shut itself down due to the ongoing communication problem. The instrument and its peripheral device were added to a new backup battery on 2/28, which allowed them to be restarted remotely; however, the underlying issue remained. On 3/13, the Metrohm software was upgraded and changes were made to how the instrument communicates with the computer to try and fix these errors.
- 3/9 to 3/13 – Low flow to the instrument caused erroneous data, which was QC'd out and data reporting was turned off until the problem could be resolved.

Gianelli – EC, Temperature, pH, DO & Turbidity

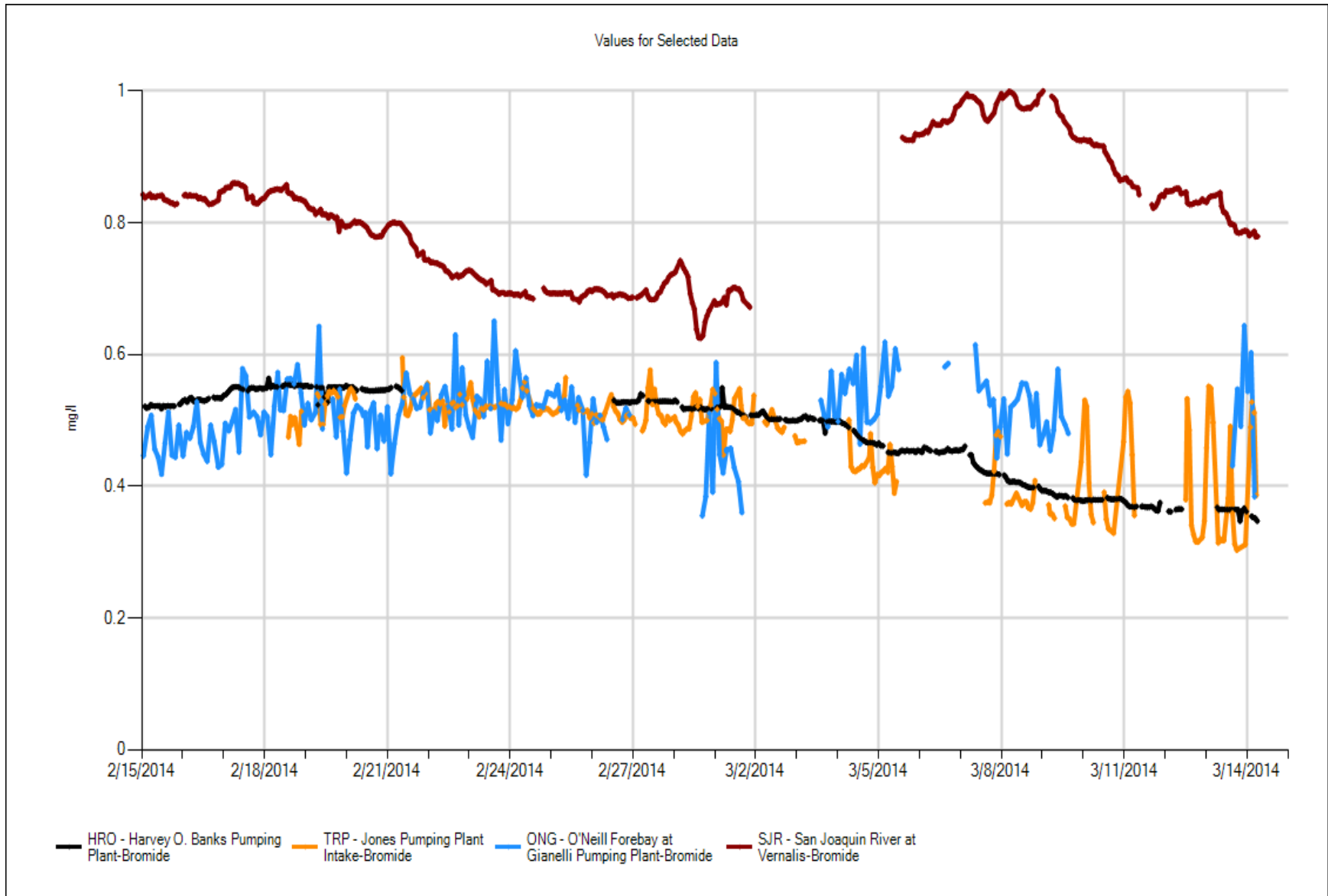


- 2/19 – Recalibrated.
- 3/13 – Cleaned a large amount of sediment and muck out of housing and off of the probes.

All Stations - DOC



All Stations - Bromide



All Stations plus Clifton Court Forebay - EC

