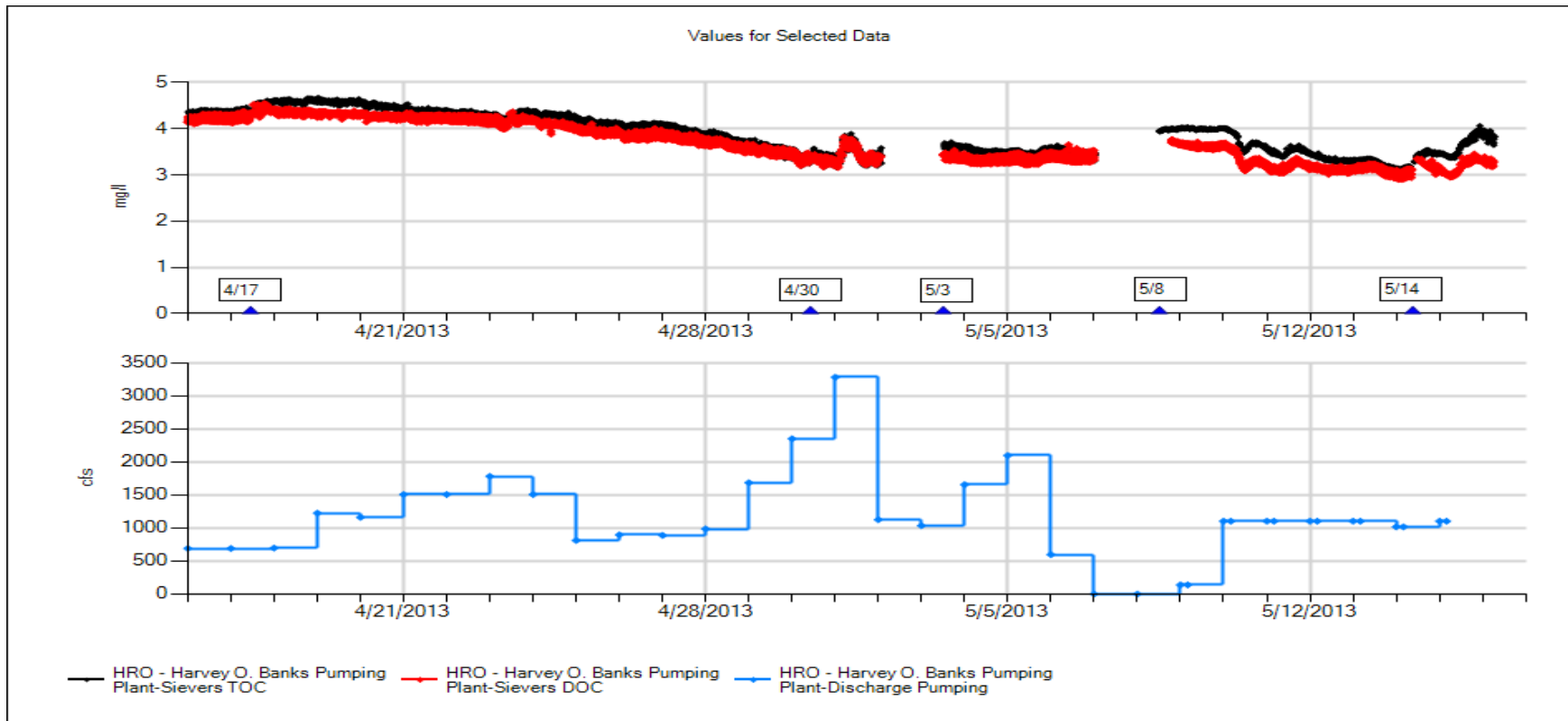


Banks Pumping Plant TOC, DOC and Discharge Pumping



4/17/2013 – Delivery system filters changed.

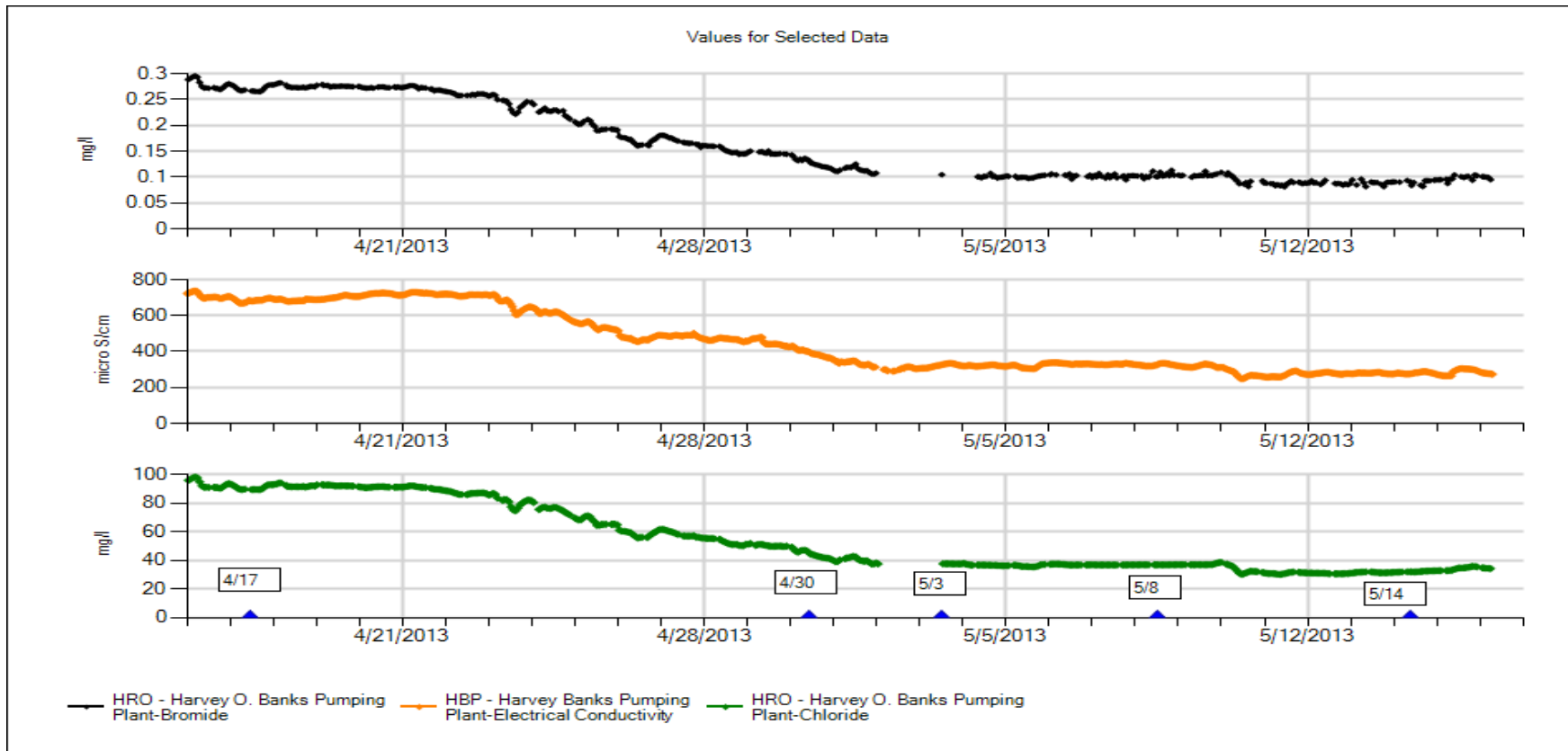
4/30/2013 - Delivery system filters changed.

5/3/2013 – The carbon unit developed an internal clog. All of the sample inlet lines were removed and flushed. The clogged line could not be cleared so it was replaced.

5/8/2013 - Delivery system filters changed.

5/14/2013 - Delivery system filters changed and lines cleaned.

Banks Pumping Plant Selected Anions and EC



4/17/2013 – Delivery system filters changed.

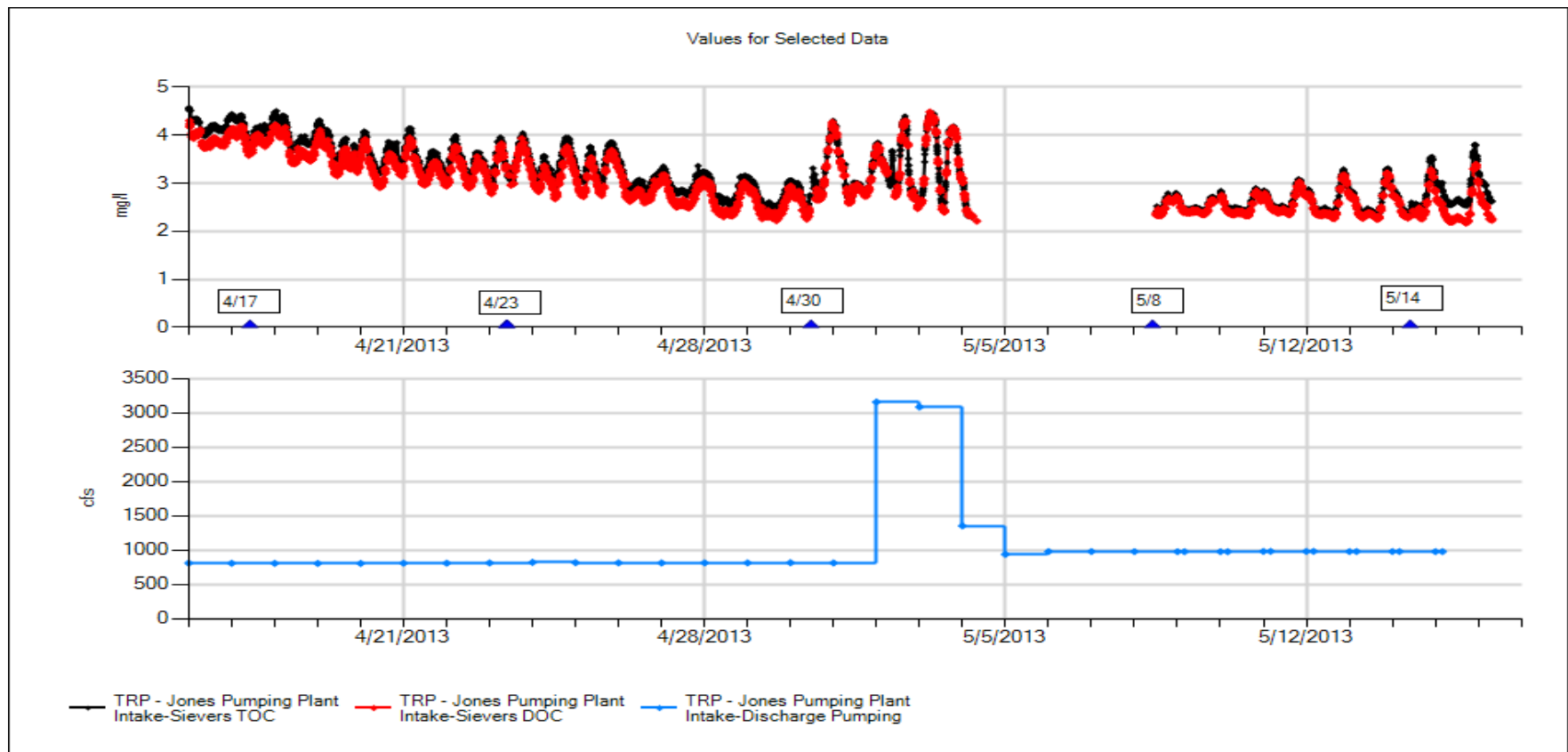
4/30/2013 - Delivery system filters changed.

5/3/2013 – The Dionex lost pressure while at the station. After some troubleshooting, the pressure was restored.

5/8/2013 - Delivery system filters changed.

5/14/2013 - Delivery system filters changed and lines cleaned.

Jones Pumping Plant TOC, DOC and Discharge Pumping



4/17/2013 – Delivery system filters changed.

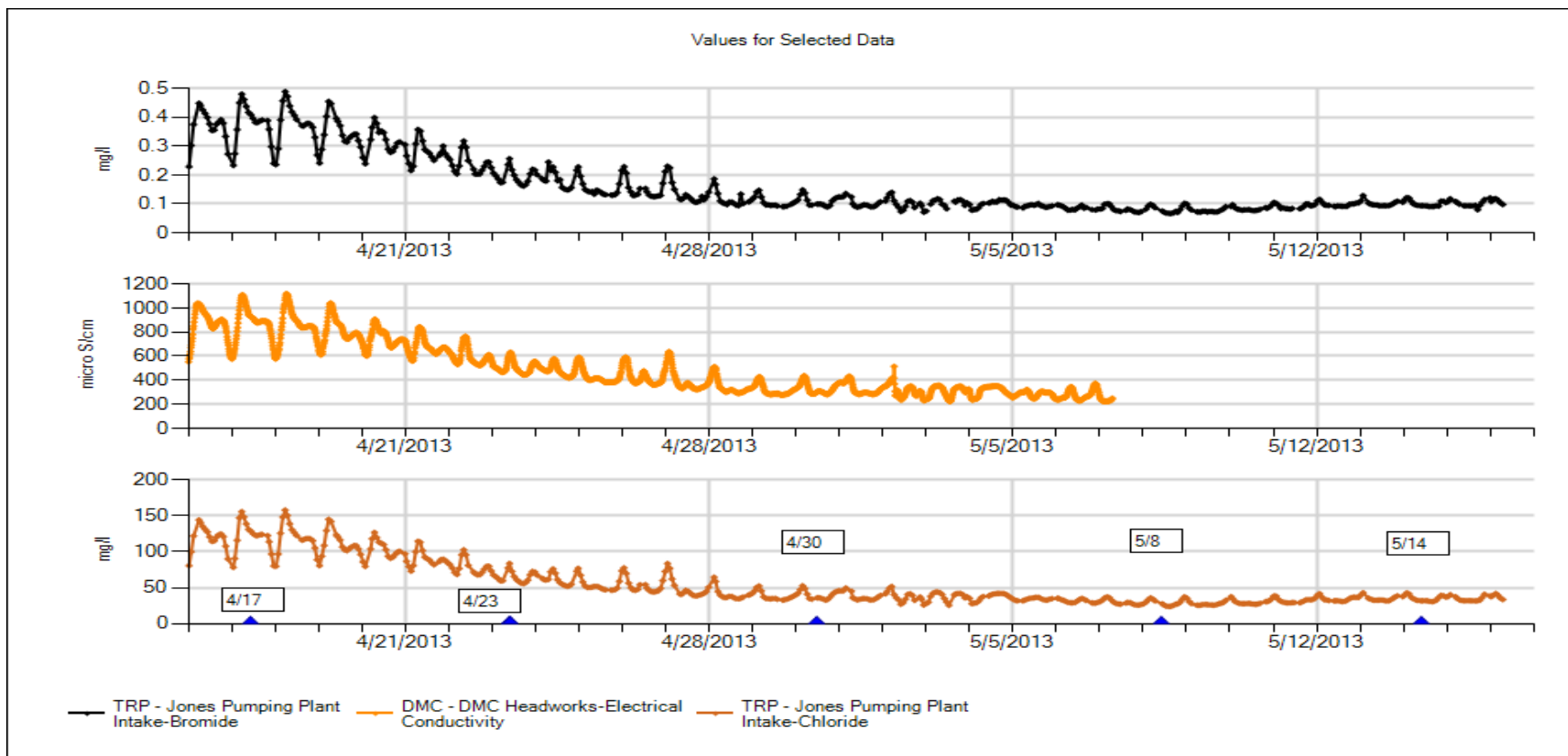
4/23/2013 – Delivery system filters changed.

4/30/2013 – Delivery system filters and tubing changed. Oxidizer replacement.

5/8/2013 – 100 um pre-filter changed. Cleaned and flushed StreamWalker lines. Flushed Sievers sample inlet lines.

5/14/2013 – Delivery system filters changed.

Jones Pumping Plant Selected Anions and EC



4/17/2013 – Delivery system filters changed.

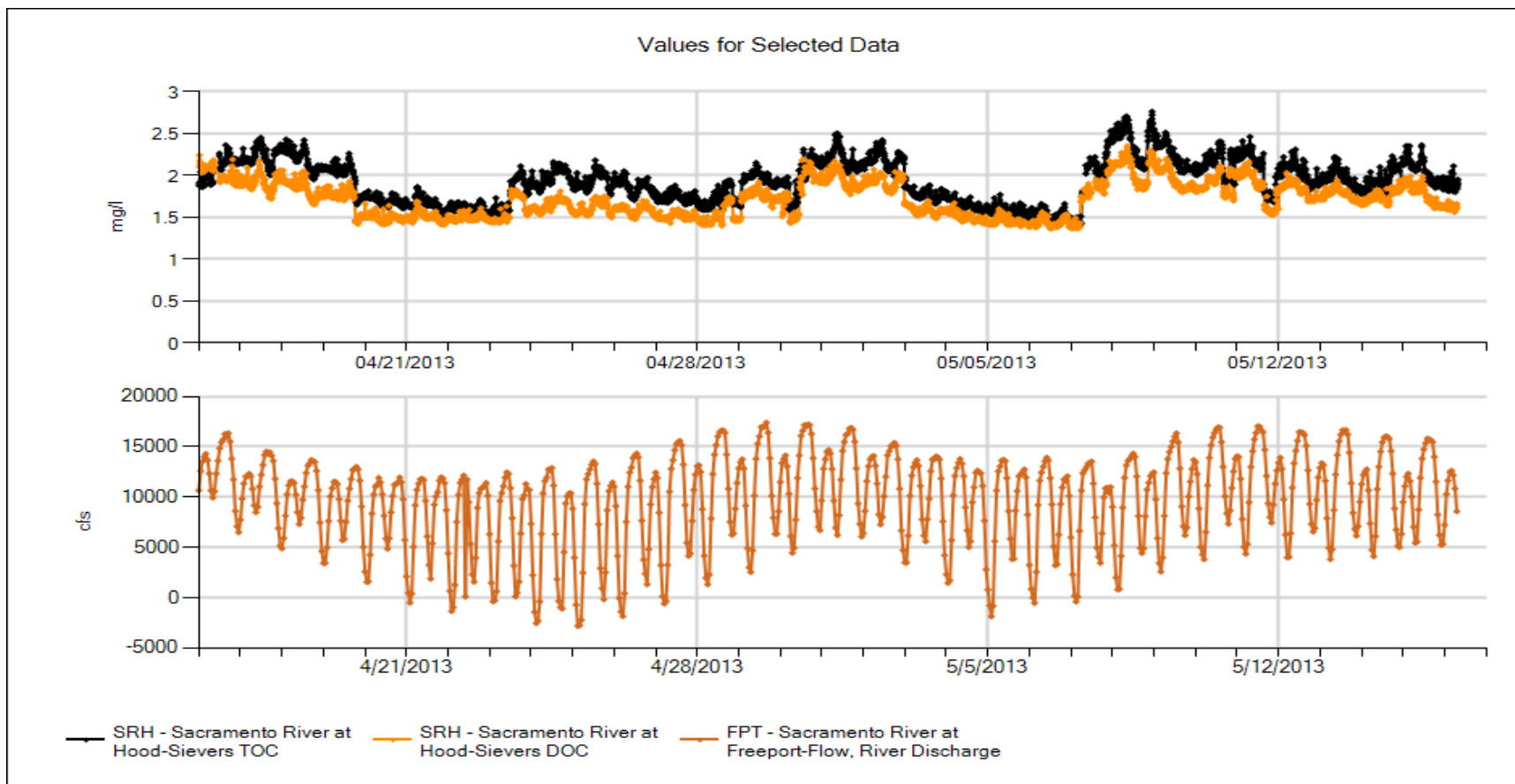
4/23/2013 – Delivery system filters changed.

4/30/2013 – Delivery system filters and tubing changed. The Sievers oxidizer was replaced.

5/8/2013 – 100 um pre-filter changed. Cleaned and flushed StreamWalker lines. Flushed Sievers sample inlet lines.

5/14/2013 – Delivery system filters changed.

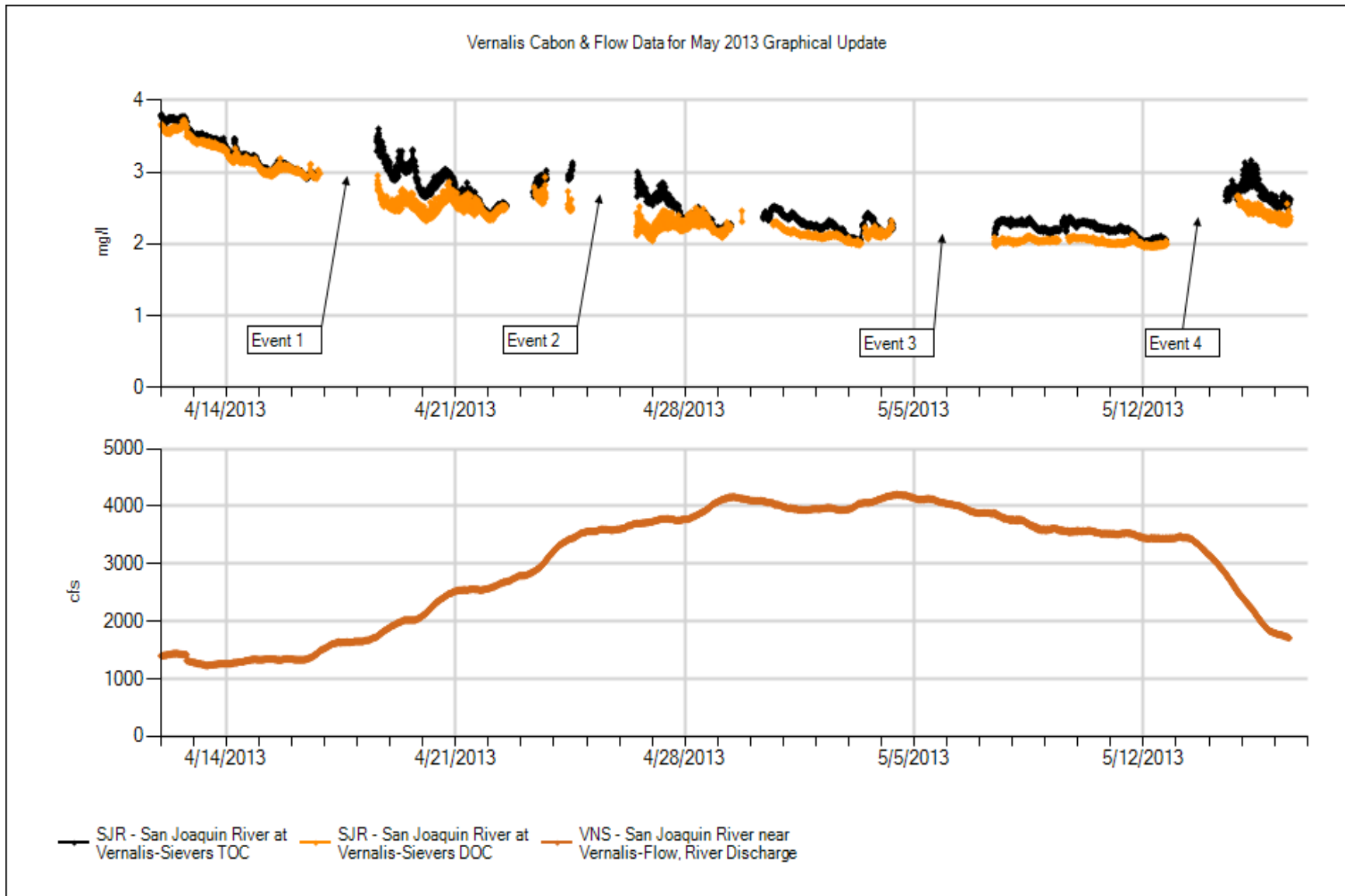
Sacramento River at Hood: TOC, DOC and Flow



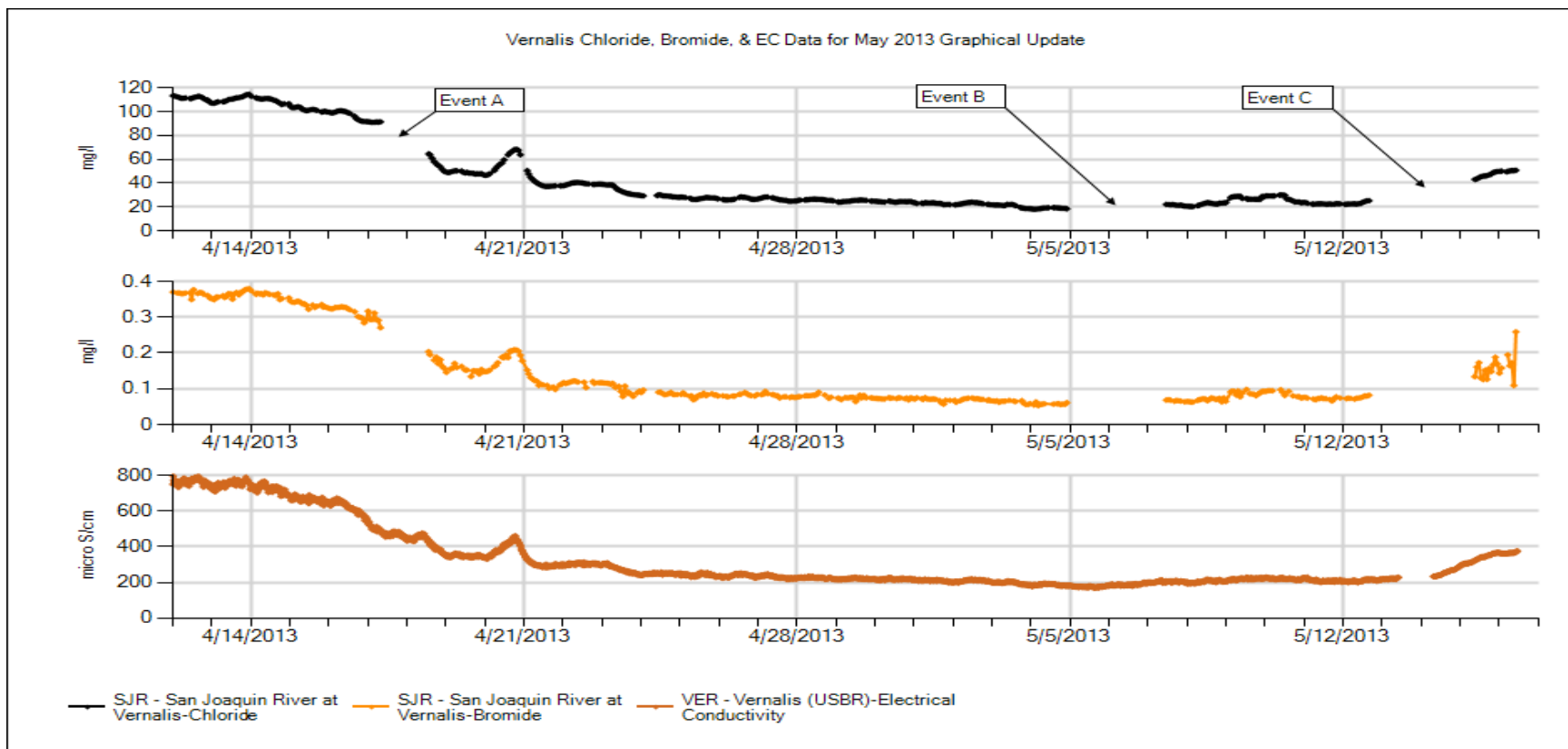
Events from 4/16/2013 – 5/16/2013

- 4/23 – filter change
- 4/30 – filter change
- 5/7 – filter change. QC check was performed but resulted in erroneous data because the incorrect standard was being used. The correct standard has been ordered and is en route.
- 5/14 – filter change

Vernalis TOC, DOC and Flow



Vernalis Selected Anions and EC



Filter changes occurred on: 4/18, 4/23, 4/24, 4/26, 4/30, 5/3, 5/7, 5/9, 5/14. Outages due to clogged filters created most data gaps.

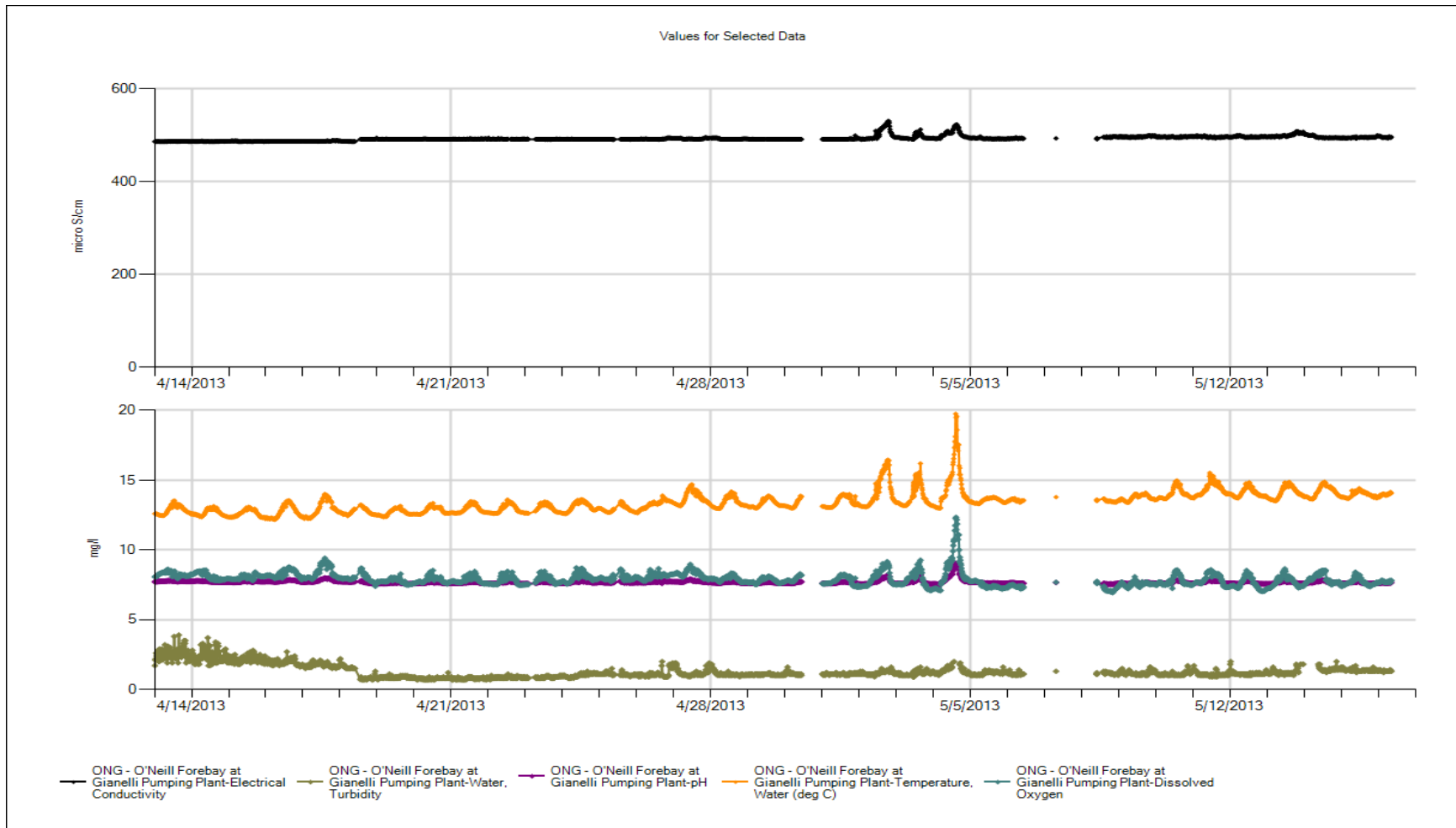
Events 1 & A were due to a bad pump motor.

Event 2 and the outages just before it were due to filter clogging and then "Error 57 Oxidizer syringe" errors on the 24th and 25th.

Events 3 & B were due to clogged filters.

Events 4 & C were due to a power outage.

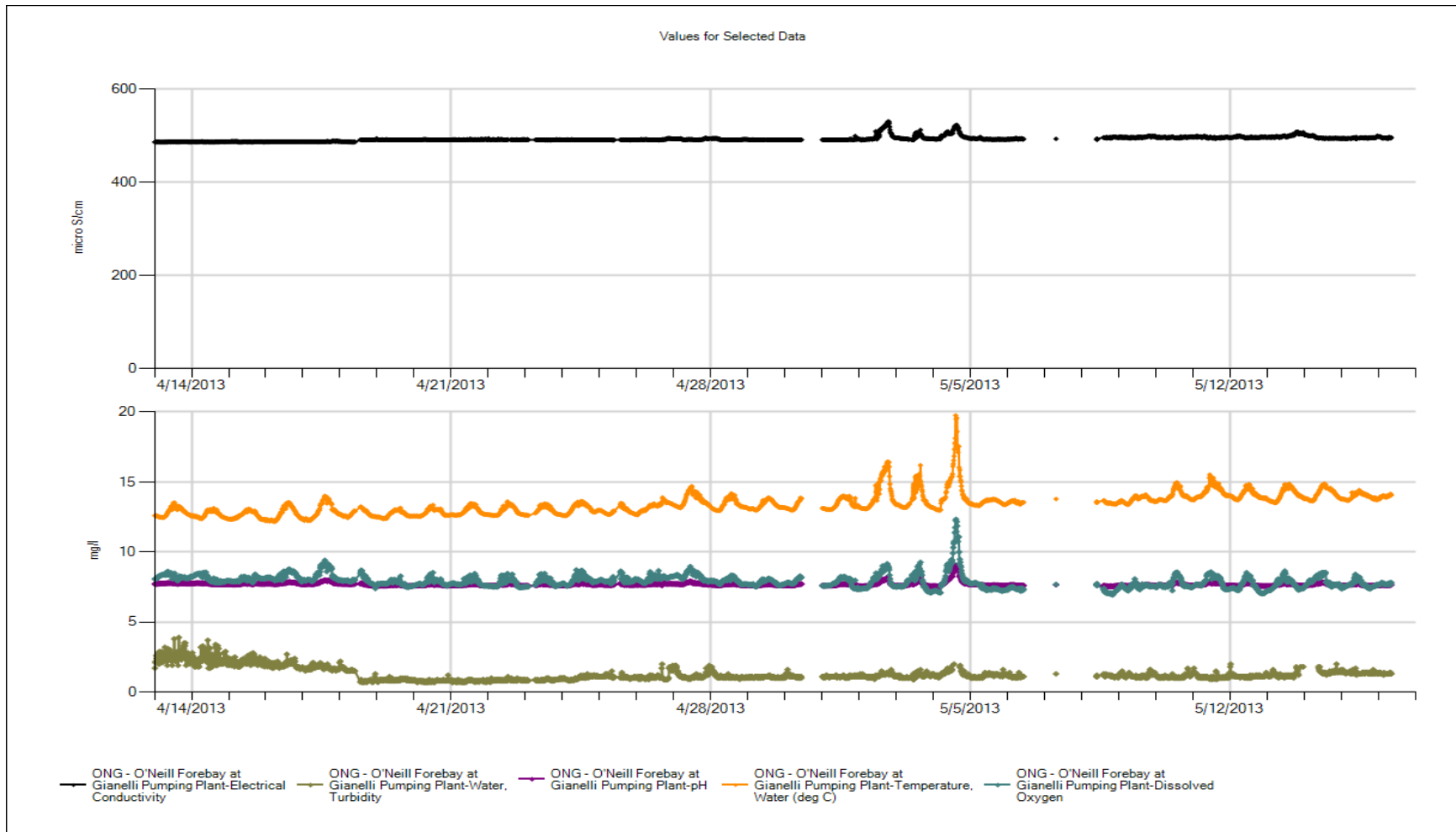
Gianelli Organic Carbon and Pumping/Generating:



Gianelli Significant Sievers Events: Apr 13, 2013 – May 16, 2013

- Air bubble in oxidizer syringe caused turbulent DOC values from 4/5 until 4/25.
- Passed QC on 4/25 and 5/8.
- Lost computer connection from 4/22 to 4/23.

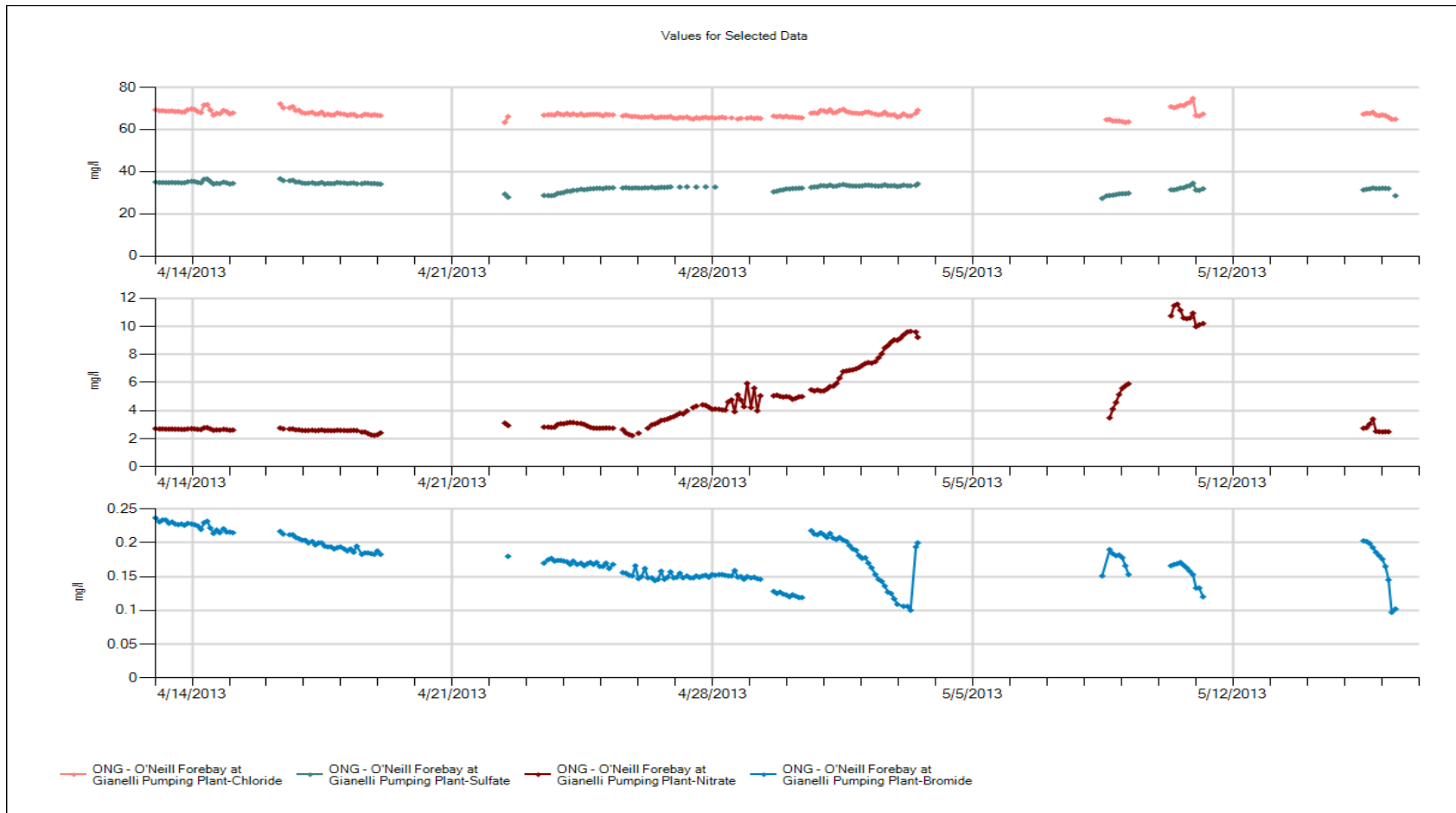
Gianelli Sonde (EC, DO, Temp, Turbidity, pH):



Gianelli Significant Sonde Events: Apr 13, 2013 – May 16, 2013

- Calibrated on **4/18**.
- Lost computer connection **4/30** and from **5/6** to **5/8**. Data will need to be backfilled.

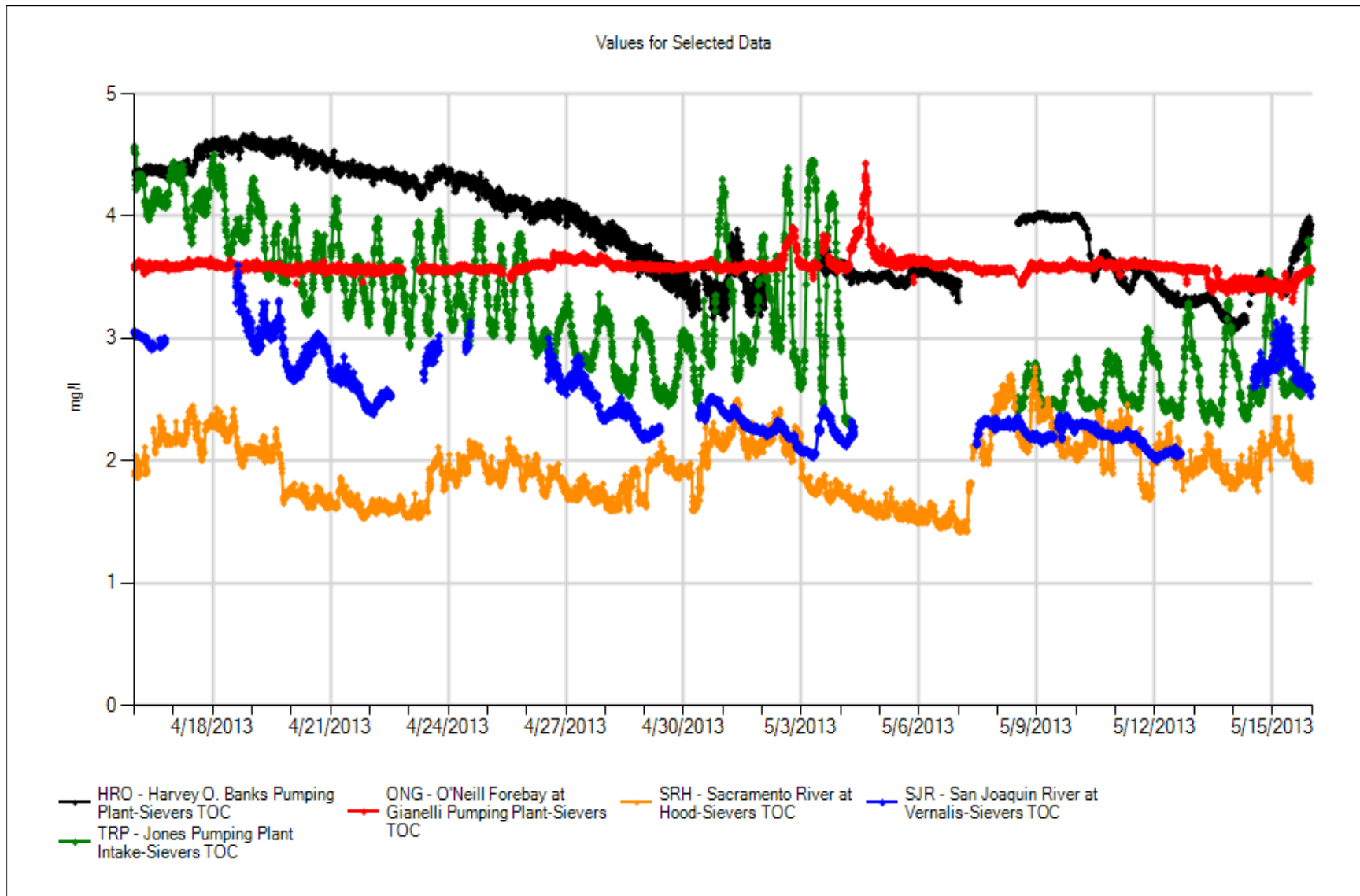
Gianelli Anions (Chloride, Sulfate, Nitrate, & Bromide):



Gianelli Significant Metrohm Events: Apr 13, 2013 – May 16, 2013

- The Metrohm shut down due to high pressure from **4/15 to 4/16**.
- Instrument lost communication with a periphery device and shut down from **4/19 to 4/23**, **5/4 to 5/8**, **5/9 to 5/10**, and **5/11 to 5/15**.
- Errors in peak analysis caused errant readings for sulfate from **4/29 to 4/30**.
- High nitrate values from **4/26 to 5/15** could be due to filter clogging.

DOC at all Stations



Bromide and EC at Banks, Jones and Vernalis

