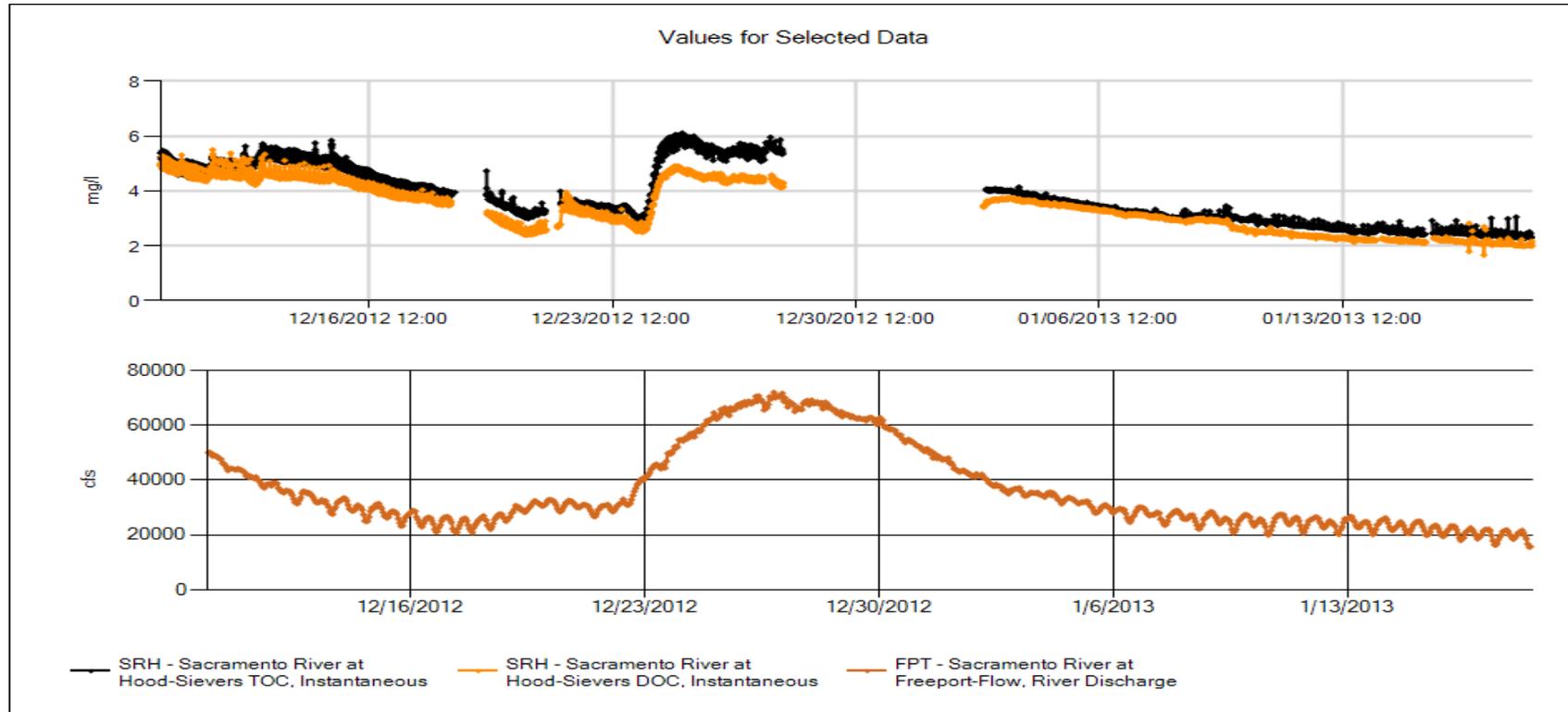


RTDF Graphical Station Update: December 2012- January 2013

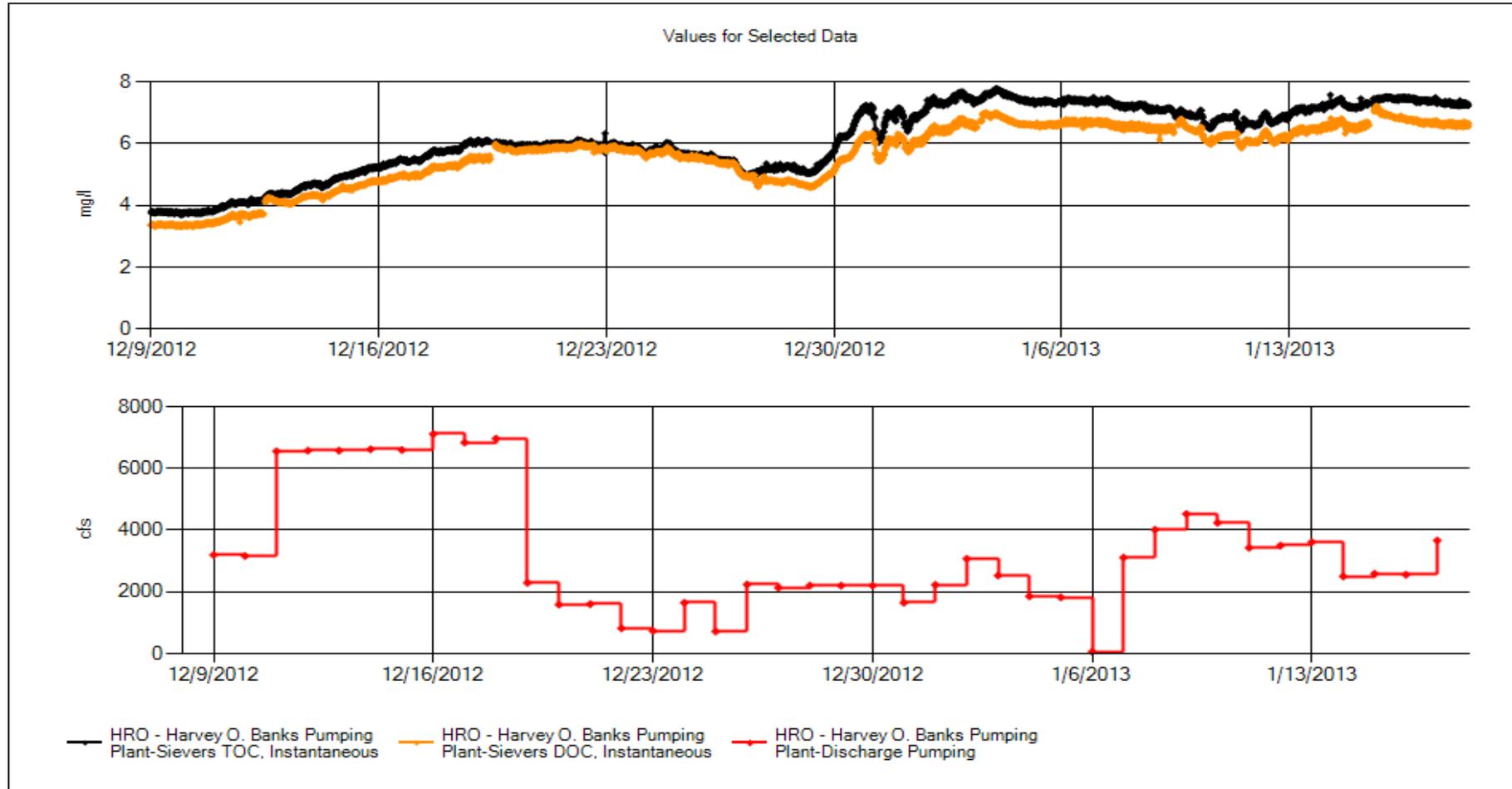
Sacramento River at Hood: organic carbon and river discharge



Significant events: 12/10/2012 – 1/17/2013

- **12/10** – There is significant overlap between the TOC and DOC. This was due to a difference in time recorded by the Sievers and computer. The time was corrected remotely. After the correction there was better separation between the TOC and DOC readings.
- **12/19** – The Sievers TOC instrument and the computer time was off by 6 minutes. The time was adjusted so they matched. We're not sure why the time seems to drift. It might be due to the fact that power outages throw the time off thus creating TOC and DOC overlap.
- **12/21** – The Sievers TOC instrument stopped reporting at 2:09AM. It seems there was a power outage at the station. The Sievers started running again a little after 10:00AM. The DOC flow was very low, so the 75 um and the 0.45 um filter were changed.
- **12/27 – 1/2**: The Siever was down due to technical difficulties with the instrument.
- **1/2** – The Sievers shut off at 1:30AM and restarted at 11:22AM for unknown reasons.
- **1/8** – Changed out pre-filters and replaced oxidizer cartridge.

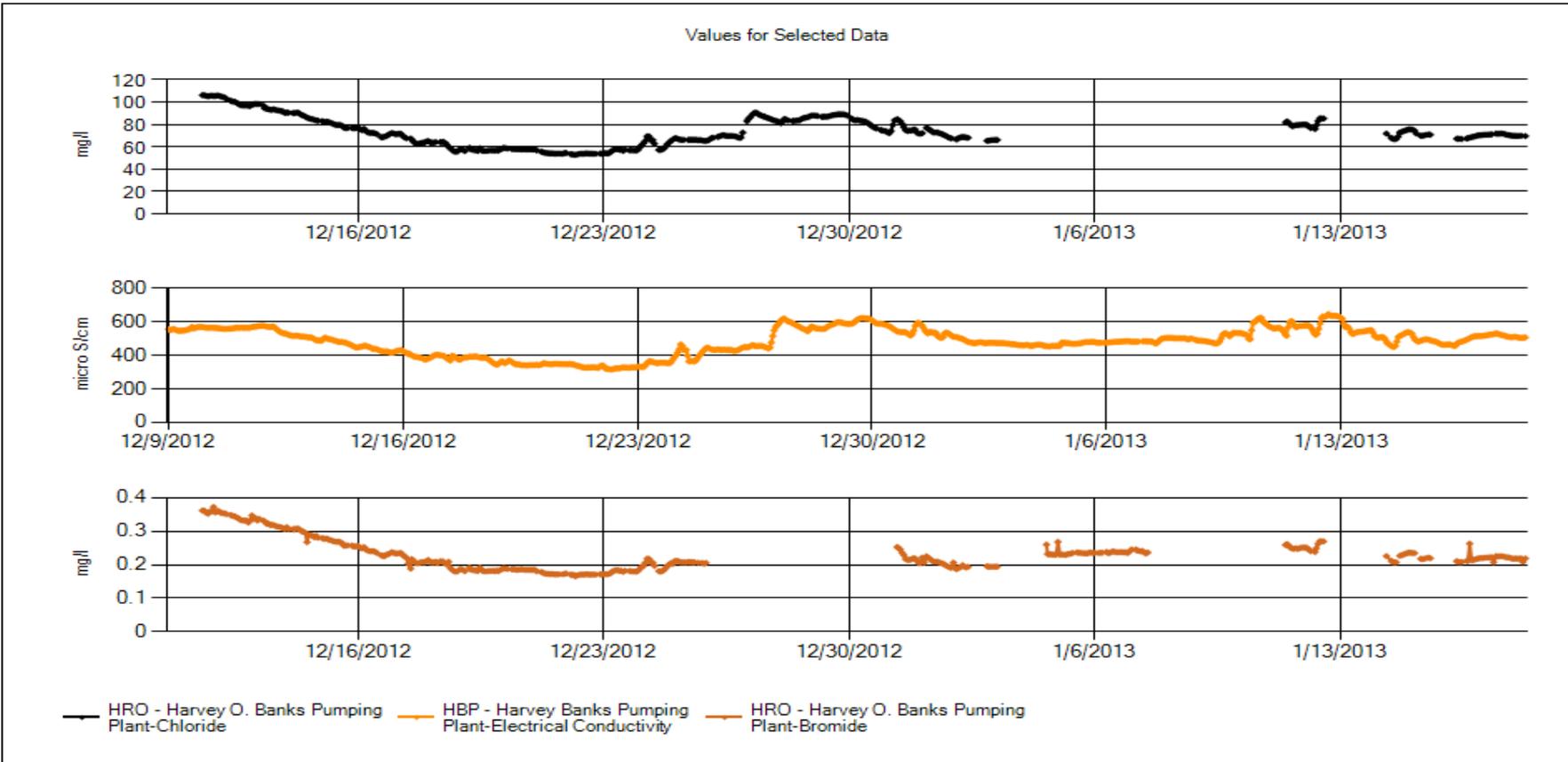
Banks organic carbon and pumping



Significant events: 12/9/2012 – 1/17/2013

- **12/12** – Delivery system filter change.
- **12/19** - Delivery system filter change.
- **12/27** - Delivery system filter change.
- **1/3** - Delivery system filter change.
- **1/9** - Delivery system filter change.
- **1/15** - Delivery system filter change.

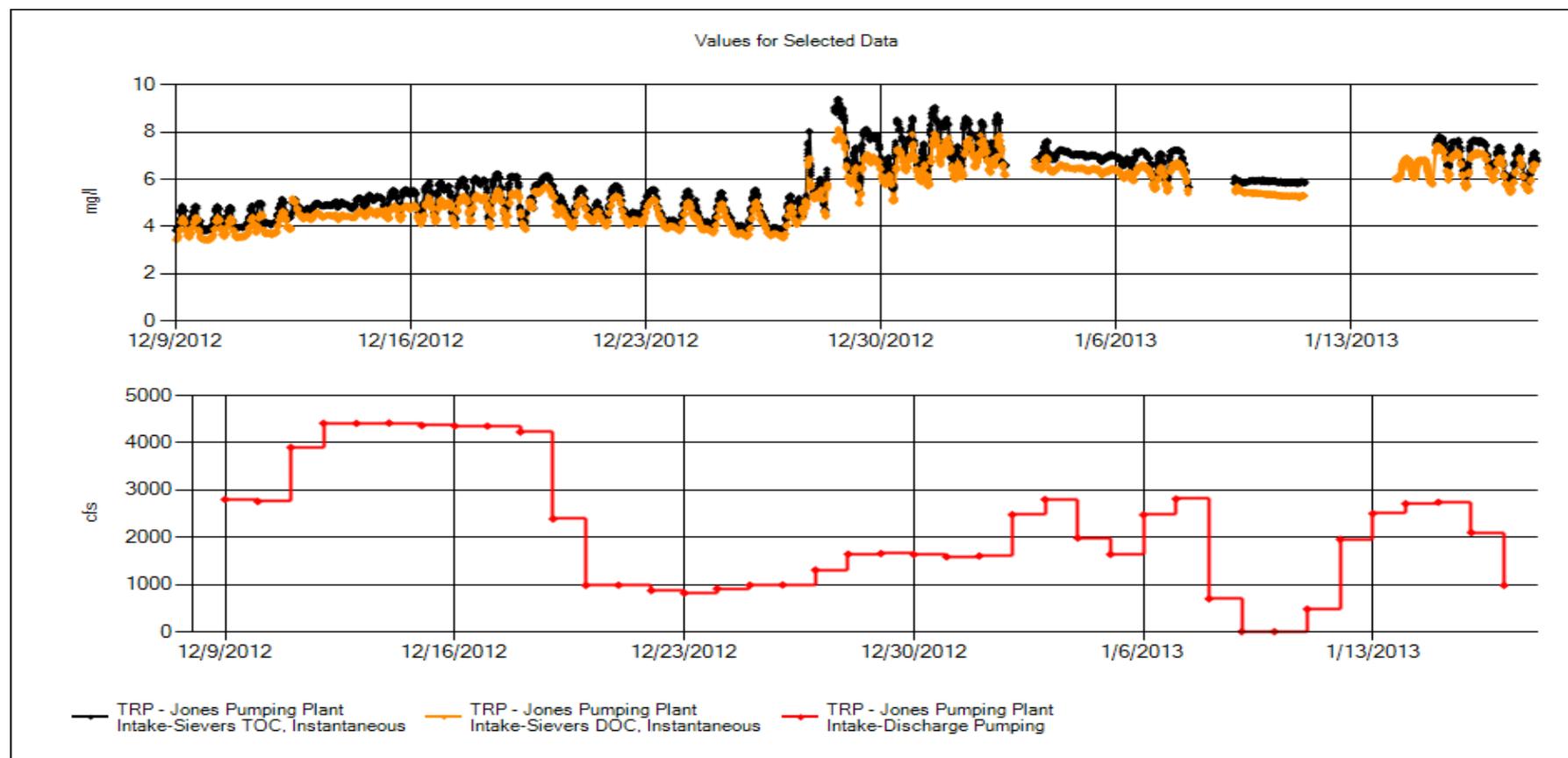
Banks Selected Anions and EC



Significant events: 12/9/2012 – 1/17/2013

- **12/12** – Delivery system filter change.
- **12/19** - Delivery system filter change.
- **12/27** - Delivery system filter change. Dionex recalibration attempted. The calibration failed and after multiple days of troubleshooting, on Jan 11th a bad valve was found to be the issue. In the mean time, an older calibration curve was inserted into the program so that data could be acquired. Currently the instrument is stopping periodically due to the valve issue but it is being restarted as soon as possible. A new valve has been ordered and should be installed the week of the 21st.
- **1/3** - Delivery system filter change.
- **1/9** - Delivery system filter change.
- **1/15** - Delivery system filter change.

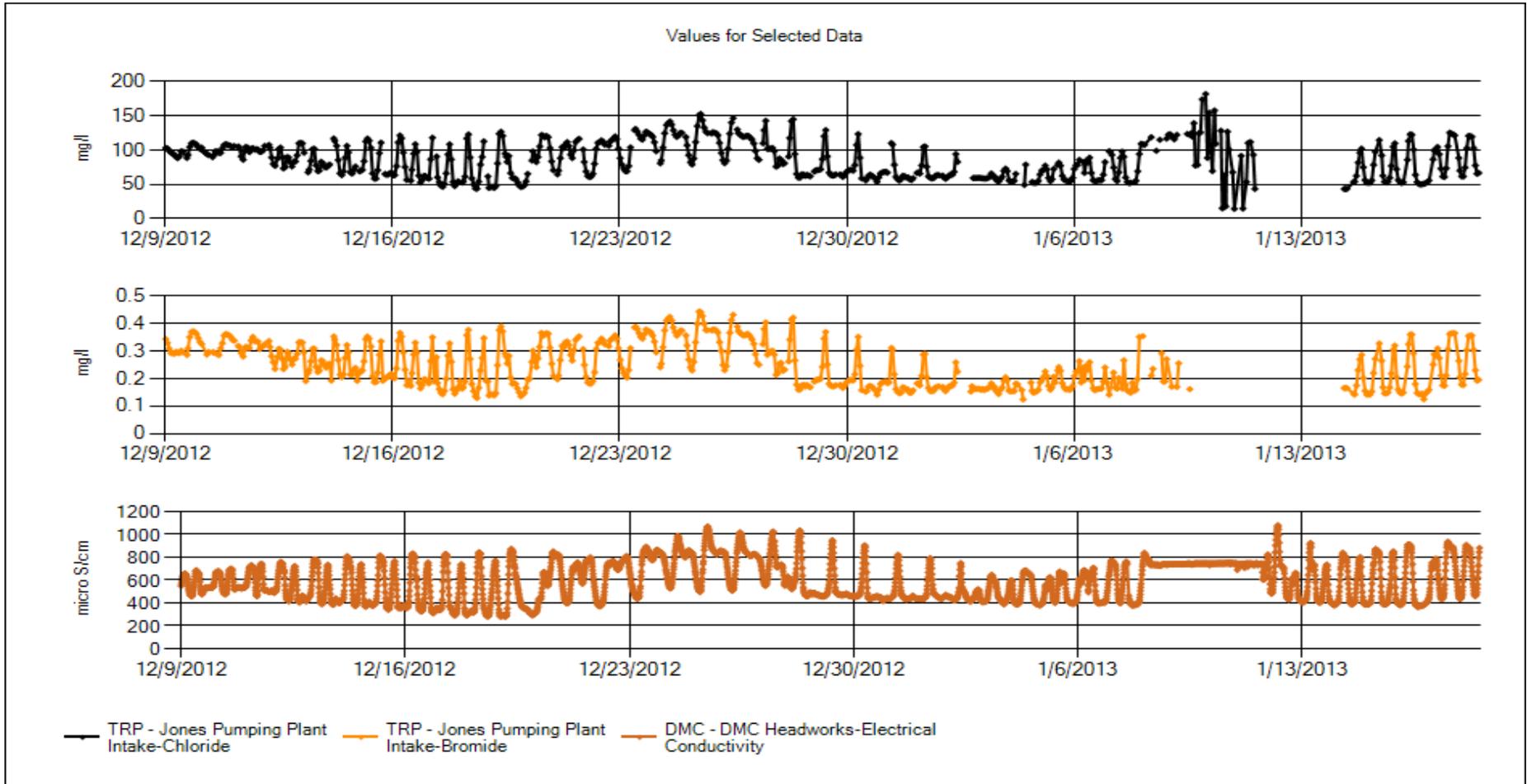
Jones Organic Carbon and Pumping



Significant events: 12/9/2012 – 1/17/2013

- **12/19** – Delivery system filter change
- **1/3** – No flow to the instrument. Changed the delivery system filters. Adjusted sample inflow from DMC valve.
- **1/9** – Flow issue to the instrument. Opened the sample inlet valve to allow more water to come through. Changed the delivery system filters.
- **1/11** – Due to reporting errors from the Dionex, an attempt was made on Friday afternoon to restart the computer remotely. The hope was that by restarting the computer, the reporting errors on the Dionex would disappear. The restart was unsuccessful due to a spotty connection to the Jones computer. The computer was successfully restarted on Monday the 14th.
- **1/14** - Because of the restart, the StreamWalker stream splitter allowed only DOC to come through so only DOC was reported until the 15th.
- **1/15** – Changed the 100 um and 0.45 um filters.

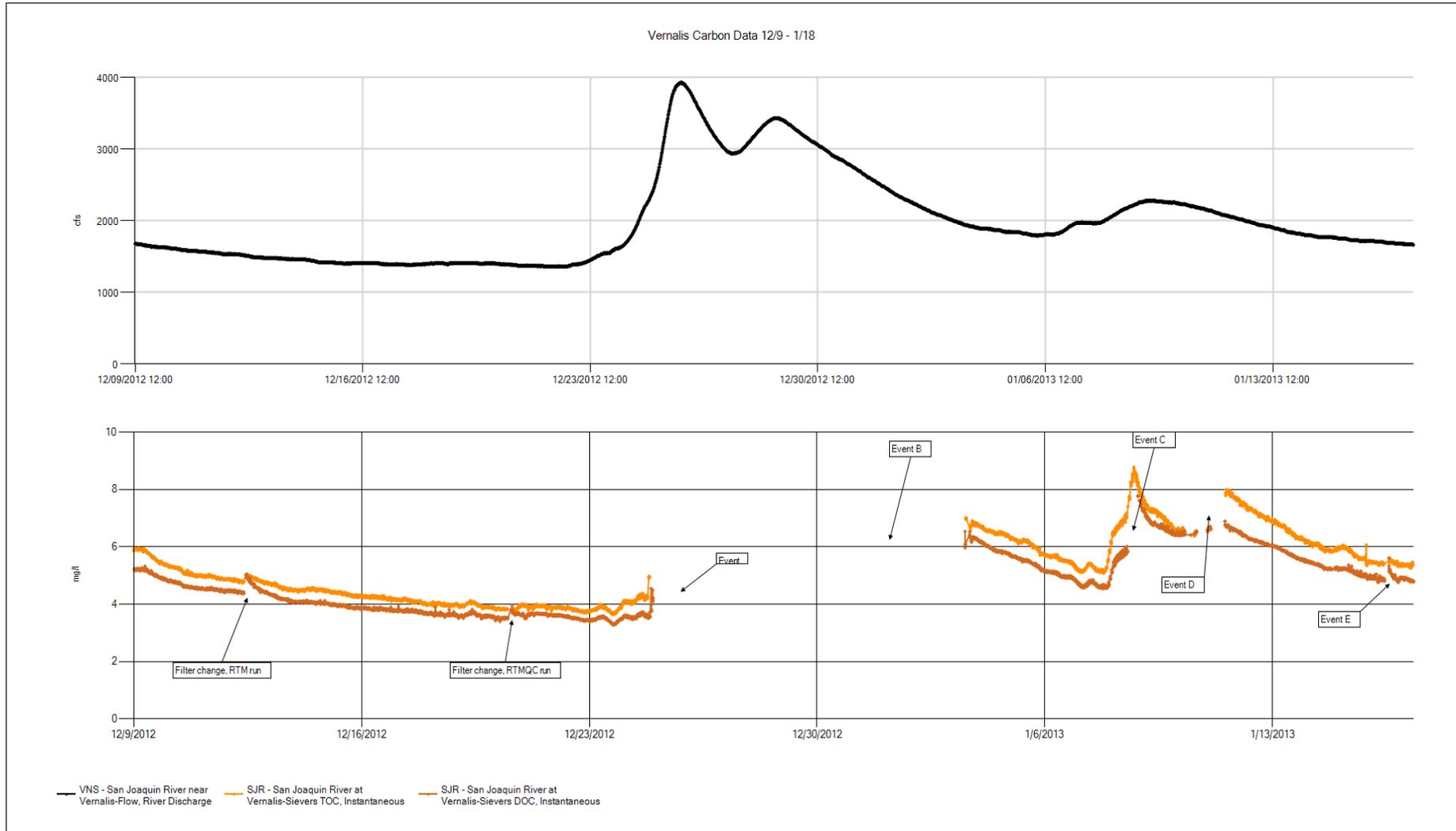
Jones selected anions and EC



Significant events: 12/9/2012 – 1/17/2013

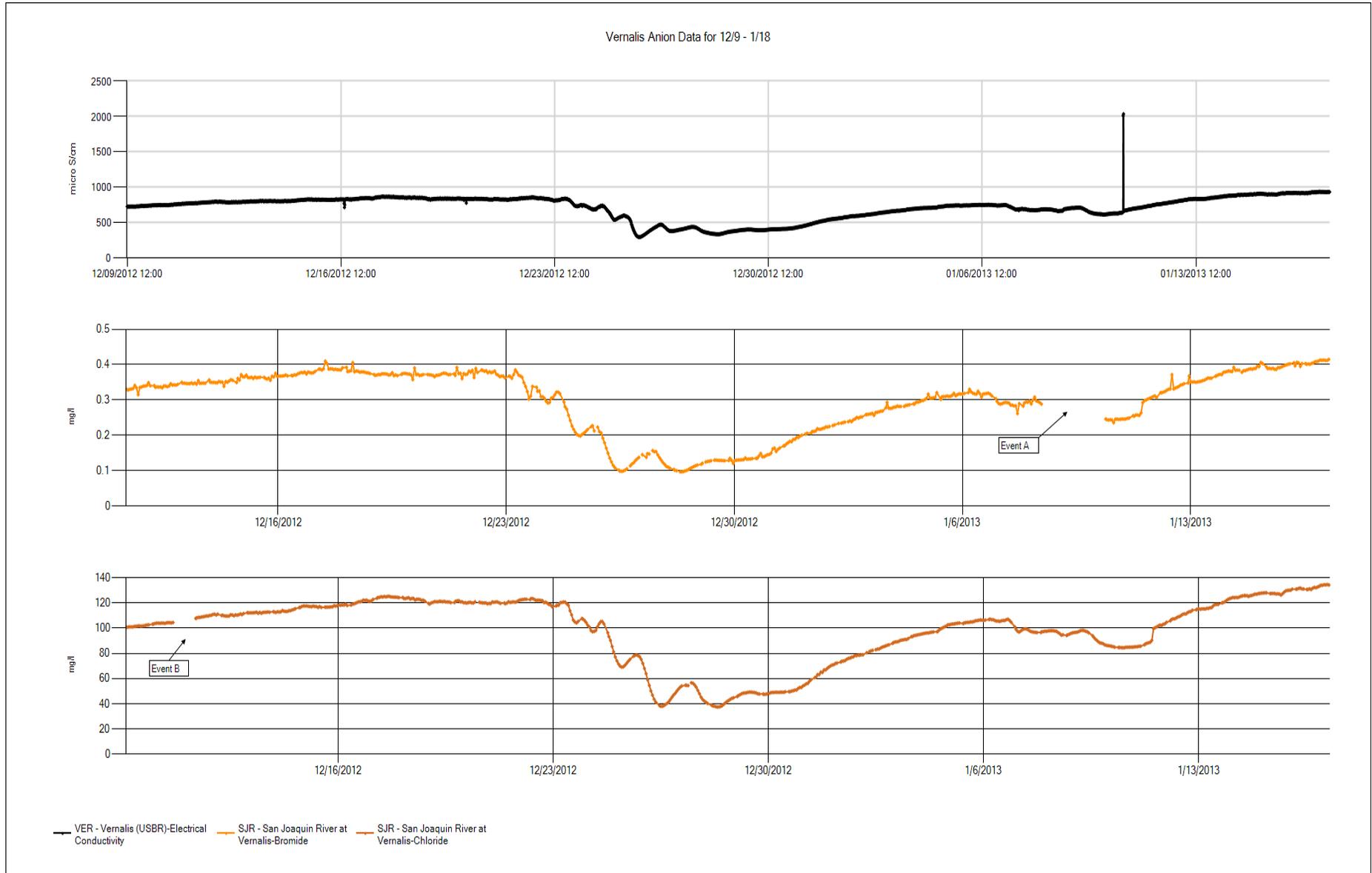
- **12/19** – Delivery system filter change
- **1/3** – Delivery system filter change
- **1/9** – Delivery system filter change. Flow issue to the instrument. Opened the sample inlet valve more to allow more water to come through.
- **1/11** – Due to reporting errors from the Dionex, an attempt was made on Friday afternoon to restart the computer remotely. The hope was that by restarting the computer, the reporting errors on the Dionex would disappear. The restart was unsuccessful due to a spotty connection to the Jones computer. The computer was successfully restarted on Monday the 14th and the reporting issue was solved at the end of the day.

San Joaquin River nr Vernalis: Organic Carbon and River Flow data



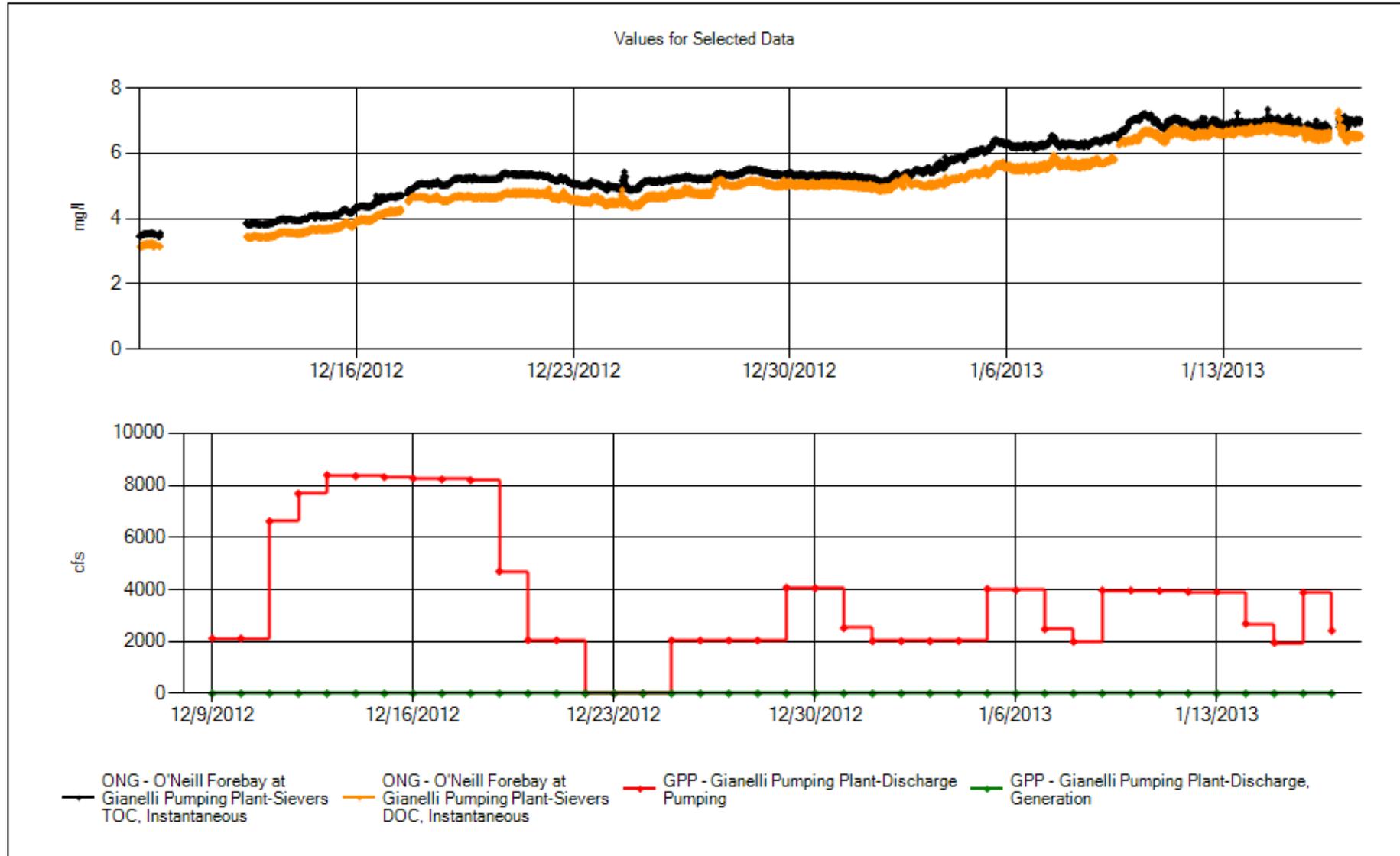
- **Event A:** Sievers incurred an "Oxidizer Syringe Error". Arin was on vacation from 12/21 - 1/2 and made repairs on 1/3.
- **Event B:** StreamWalker was in "idle" mode, may have had a power outage, or went idle due to Sievers error.
- **Event C:** DOC 0.45 micron filter clogged, then changed. The 100 micron for TOC had sufficient flow at this time, but should have been changed.
- **Event D:** TOC 100 micron filters clogged, then changed. Flow was reduced and overfiltered, so TOC was underreported earlier.
- **Event E:** Filter change during RTMQC. As in earlier examples, DOC is spiked at first due to filters leaching.

San Joaquin River nr Vernalis: Anion and EC data



- **Event A:** Retention time shift. Previously mislabeled peaks have been corrected.
- **Event B:** Retention time shift. Previously mislabeled peaks have been corrected.

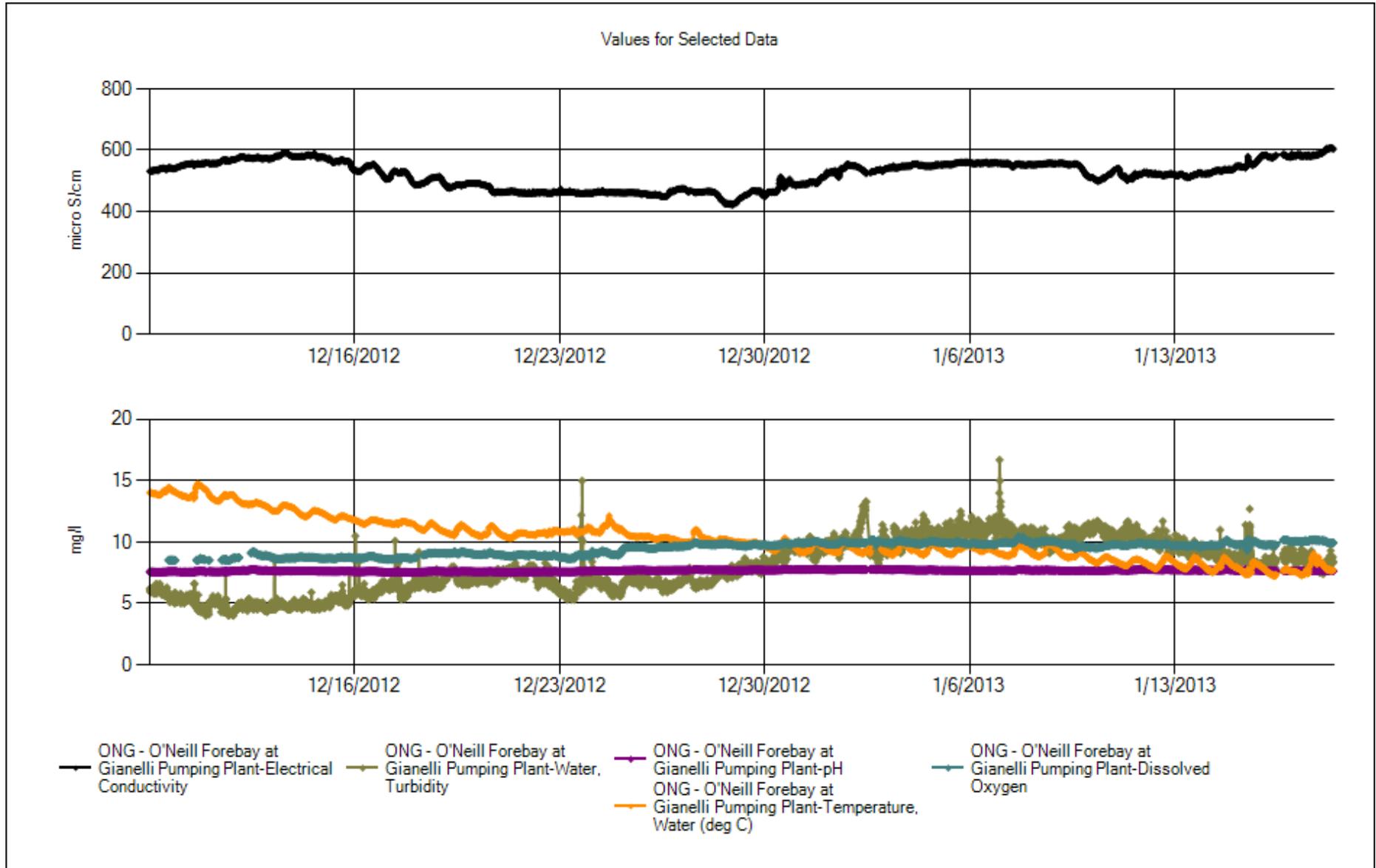
Gianelli Station: Organic Carbon and Pumping/Generating



Gianelli Significant TOC Events: Dec 9, 2012 – Jan 18, 2012

- **12/9** - Sievers ran out of acid

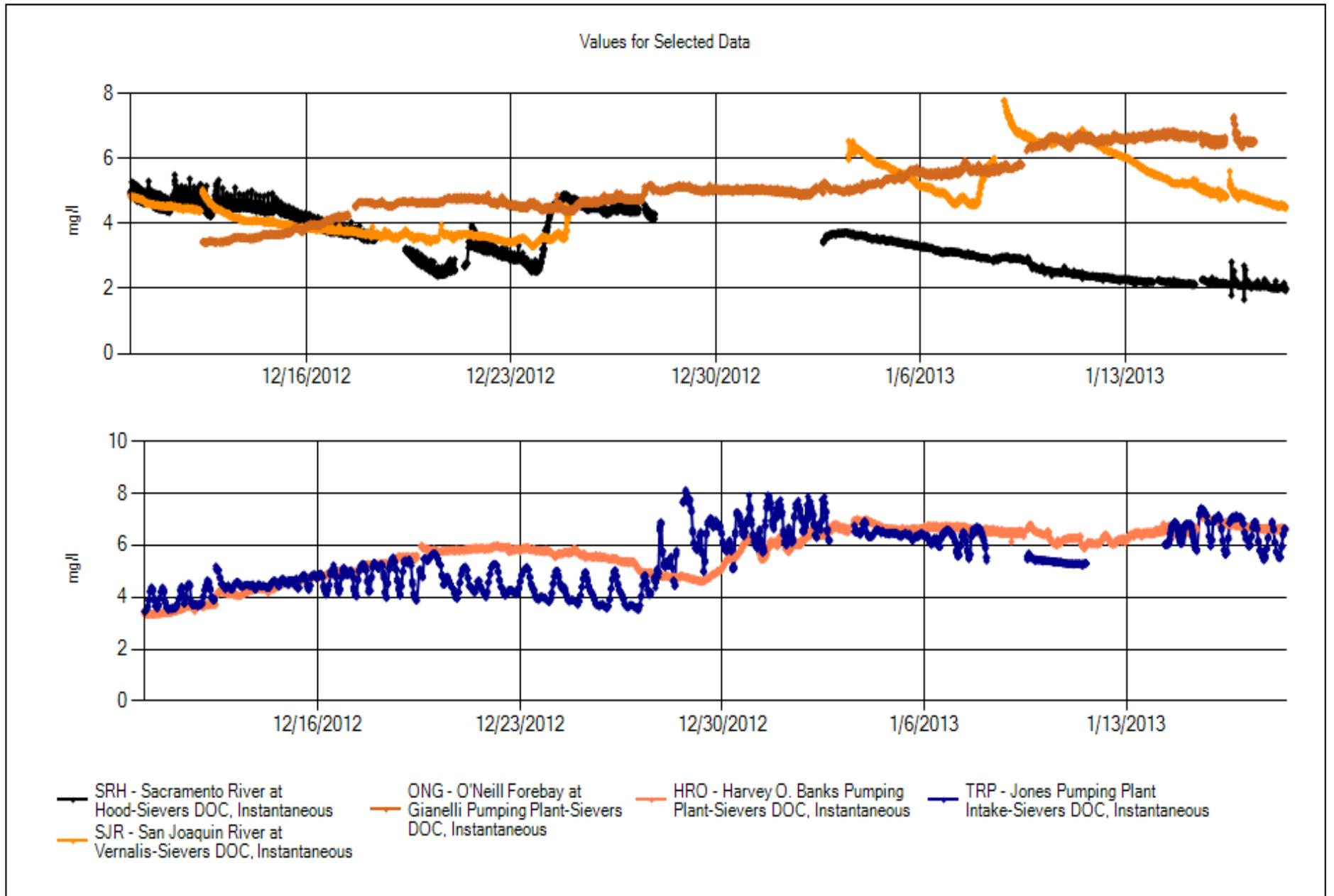
Gianelli Sonde (EC, DO, Temp, Turbidity, pH)



Gianelli Significant Sonde Events: Sept 15, 2012 – Oct 19, 2012

- 12/7 and 1/16 - YSI calibrated and passed QC.

DOC at all stations



Bromide and EC at Banks, Jones and Vernalis

