

## **Equipment Check January 2016**

Team: Ralph Lochlin, Ken Johnson, Bill Leech, Dave Truesdale, Lou Mayer, Rob Fugate, and Dan DeLotto met at Dan's home on Friday, January 29th. at 9:30 AM with all six (6) field kits.

### **Summary:**

We found Flow Meters, Colorimeters, YSI DO Meters, Minilab pH & Oakton Conductivity meters in good physical condition and working order. One of the YSI meter probes was inserted much too far into the calibration chamber and a loose cable connection on one of the flow meters. One minilab pH meter would not function and one would only calibrate on the low range, both were taken out of service. All of the YSI meters probes were refreshed.

### **Procedure:**

We did not have an oxygen standard for the YSI DO meter so we used the mean value of dissolved oxygen in a large tub of tap water instead of a true value to determine the mean and relative differences between them (range) – and not their true accuracy.

The Oakton conductivity comparisons were made to the 1413 microSiemens/cm ( $\mu\text{S}/\text{cm}$ ) standard.

Colorimeter measurements for Nitrate, Sulfate and Phosphate were performed using standard solutions. To provide an indication of the instruments capability we used the same method of comparing the mean and range of values to represent the differences between colorimeters.

The colorimeter tests need to be re-done for Nitrate in order to determine the Percent Recovery.

### **Interim Results:**

The attached charts show comparisons for our equipment.

### **Conclusion:**

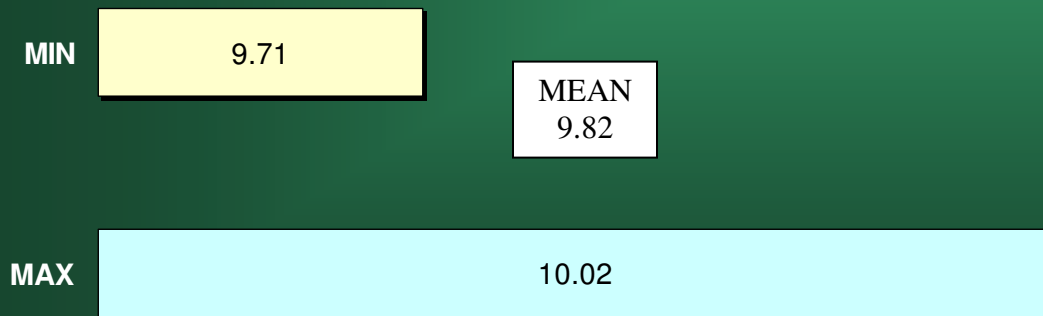
The Interim results are encouraging and indicate our equipment is in good working order. The Percent Recovery will be reported at a later date.

Team captains are reminded that they are responsible for the kit chemicals and the expiration dates. Please remove outdated chemicals and return them to Dan DeLotto.

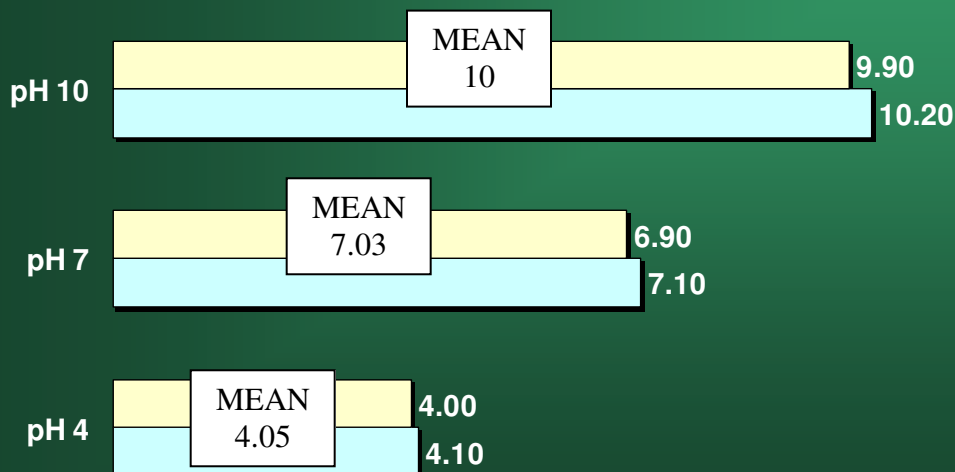
The enthusiasm and seriousness of the participants was outstanding – thank you all.  
Submitted respectfully,

Ken Johnson  
CCPaSEC Quality Control Chairman

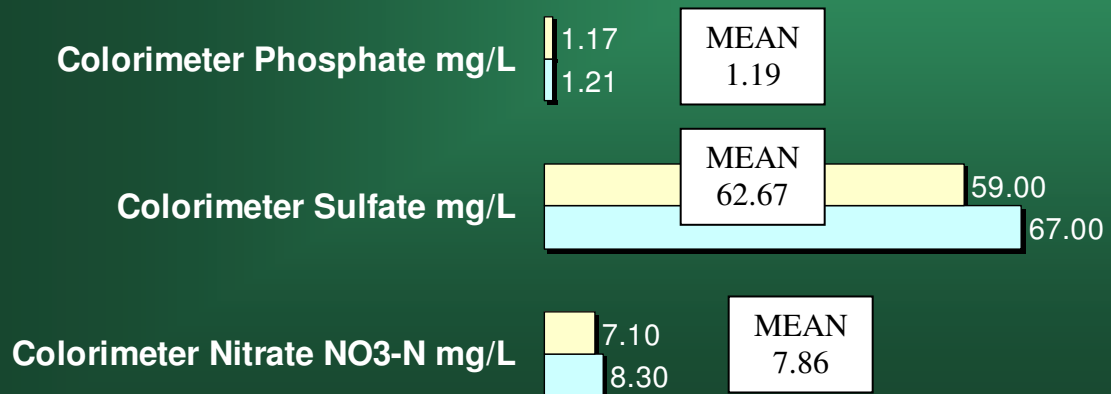
## YSI Dissolved Oxygen mg/L Range between Instruments



## pH Range between Instruments



## Colorimeter Range between Instruments



## Oakton Conductivity $\mu\text{S}/\text{cm}$ Range between Instruments

