

# **Significant Number of Under Reported Sulfate Ion Concentrations Prior to 3/15/1989**

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by B. Eldred

### **Issue**

Before 3/15/89, a significant number of sulfate concentrations collected on the nylon filter in Module B were under-reported. That is, the sulfate ion concentrations were low, often near 0, while the sulfur concentrations collected on a Teflon filter in Module A were significantly higher. The primary season involved was Winter 1988, when 43% of the sulfate concentrations were invalidated. The nitrate concentrations appeared to be valid and were retained.

### **Cause**

This was an analytical problem with the ion chromatography (IC) that was corrected after March 1989.

### **Long Term Solution**

The analytical problem was corrected after March 1989

### **Recommendations for Data Analysis**

The sulfate ion concentrations were invalidated and are not in the database. Missing sulfate ion data can be replaced with sulfur concentrations scaled by a factor of 3.