

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

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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 ions 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.