

Dissolved Inorganic Nutrients

Spring 2008 WKoz

Water is collected into acid washed polypropylene containers for nutrient analysis at all light depths, and analyzed immediately after collection whenever possible. When necessary, samples are refrigerated at 4°C for up to 4 hours or frozen at -20 to -80°C until processing, thawed in a warm water bath (40°C) and mixed thoroughly before analysis.

Samples are processed by either segmented flow analysis on an Alpkem Flow Solution IV system with Winflow/Softpac data collection software, or by continuous flow analysis on a Lachat QuickChem 8000 Flow Injection Nutrient Analyzer with Omnion data collection software. When not processed at time of collection, samples are analyzed at the University of California Santa Barbara Marine Science Institute's Analytical Facility using continuous flow analysis on Lachat QuickChem 8000 system.

Nitrate plus nitrite and silicic acid are analyzed following the methods of Armstrong et al. (1967), and the phosphate analysis is a modification of the Bernhardt and Wilhelms (1967) methods.