

The Blind Audit Program: An On-going QA Initiative of the Chesapeake Bay Water Quality Monitoring Program.

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Abstract: As a part of the Chesapeake Bay Water Quality Monitoring Program, the Blind Audit Program was established in 1998. Semi-annual disbursements of ampules are made to Chesapeake Bay Water Quality Monitoring Agencies. When diluted according to instructions, the samples reflect typical concentrations found in Chesapeake Bay. Ampules for high and low concentrations of inorganic N and P and high and low concentrations of organic N and P are provided.

Samples for particulate C, N, P and chlorophyll are prepared by filtering estuarine water collected from the mouth of the Patuxent River on appropriate filters. While these particulate samples are not "true" blind audit samples, they eliminate the variability of field operations between participating agencies by comparing samples prepared uniformly by one group.

Results from this program can help identify potential discrepancies between analytical methods and also provide confidence in data comparability to various users. Examples of both scenarios as well as how the data are statistically reviewed will be discussed.

The Blind Audit Program, coupled with the Chesapeake Bay Program's Coordinated Split Sample Program, help identify and correct analytical and/or field sampling problems before monitoring data are applied to a long term data base and to make management decisions.