

Bryte Lab Quality Control background information

August 24, 2009

All laboratories that perform public drinking water analyses in the United States are required to be accredited by the United States Environmental Protection Agency (USEPA). USEPA can delegate this authority to a state agency that meets USEPA's competency requirements. In California, USEPA has delegated the authority for accrediting environmental laboratories to the California Department of Public Health (CDPH), Environmental Laboratory Accreditation Program (ELAP). Online accreditation information is available at:

<http://www.cdph.ca.gov/certlic/labs/Pages/ELAP-CAInformation.aspx>

Laboratories are only required to be accredited for the analyses (Field of Testing or FoT) that they perform. Application process involves a site visit by ELAP technical staff and successfully analyzing blind Performance Evaluation (PE) samples. Accreditation lasts two years and the laboratory must successfully participate in an independently administered blind PE sample analysis every year. The laboratory is required to maintain a Quality Assurance manual. ELAP maintains a listing of California environmental accredited laboratories is maintained online at the above website (attach). As of 8/20/2009, DWR's Bryte Lab is listed at line 114 (certificate number 1244).

Bryte Lab QC Batch Procedures

QC batch procedures are method specific. For TOC, the QC batch analytical procedure is generally as follows:

- A. Method blank
- B. Calibrations (3-5 points)
  - a) correlation coefficient > 0.995
  - b) % Relative Standard Deviation
- C. LCS and LCS Duplicates
- D. Environmental Samples (approximately 10 samples per QC batch) and their Duplicates
- E. Sample Spikes and Spike Duplicated
- F. Check Standards
- G. Bracketing Standards (Control)

The documents in the supplementary Electronic Information include Bryte Lab QC manual, copy USEPA Method 415.3 and QC data during the study period.

Abbreviation	Title
ELAP	Environmental Laboratory Accreditation Program
LCS	Laboratory Control Sample
PE	Performance Evaluation
QC	Quality Control
USEPA	United States Environmental Protection Agency

NOTE on Field Instrument

It is not currently possible to run equivalent QC batches on field instruments. The field instruments are calibrated manually by the field crew as per manufacturers' specifications or as needed.