

## **PROCEDURE DEVELOPMENT**

Each supervisor develops and documents all the procedures and methodologies used in the FTDTL and the Director validates the procedures.

Each procedure in use throughout FTDTL should include the following information where appropriate:

- A. Testing procedures to be used.
- B. Step-by-step instructions of the logical progression of the analysis.
- C. Calculations as required with the expected accuracy and precision.
- D. References to the literature.

The capacity of a method to maintain both accuracy and precision is a measure of its reliability. If a procedure has demonstrated consistent accuracy and precision over an extended period of time then the method can be considered reliable. The reliability of a procedure can only be established by checking the method, using appropriate primary standards and controls.

In order to control all the steps of a procedure, it is necessary to use analyzed control material, which is similar in composition to the unknown specimen. The control specimen is then carried through the entire test procedure in parallel with the unknown, affected by any and all variables that affect the unknown. Use of control material is one way to check on the procedure, techniques, reagents, and instrument calibration.