

GRAPHITE FURNACE ATOMIC ABSORPTION SPECTROPHOTOMETER

CALIBRATION PROCEDURES

INSTRUMENT: SIMAA 6000

**Calibration of the Graphite Furnace Atomic Absorption Spectrophotometer will be completed before each usage of the instrument. The results of the calibration should be recorded in the Simaa 6000 instrument calibration log.

Procedure:

- 1. Record date.**
- 2. Turn on instrument in accordance with Simma 6000 start up procedures.**
- 3. Turn on barium and lead lamps.**
- 4. Align lamps and let warm up for twenty minutes.**
- 5. Record energy count for barium and lead.**
- 6. Calibrate instrument for barium and lead analysis using known standards.**
- 7. Record absorbance for each of the barium and lead standards.**
- 8. Record correlation coefficient for barium and lead calibrations.**
- 9. Analyze a quality control sample equivalent to the second standard.**
- 10. Record concentration of barium and lead quality control sample.**
- 11. Repeat above procedure for antimony.**