

**Thomas E. Helton, Jr.**  
**6992 NW 29th Terr**  
**Ft. Lauderdale, FL 33309**  
**954-857-6211**

## **Education**

Florida Atlantic University, Boca Raton, FL. 1991 - 1999, Bachelor of Science in Chemistry  
Awarded April 1999  
University of Alabama, Tuscaloosa, AL 1986 - 1990, Computer Science  
Milton High School, Milton, FL 1986, Honors Graduate

## **Work Experience**

Florida Power and Light Central Lab October 2009 -- Present  
as Laboratory QA/QC Officer:

- Complete responsibility for managing and maintaining the laboratory NELAC certification including all Performance Tests studies in the environmental areas of the lab.
- Responsible for enforcing NELAC regulations to ensure laboratory remains in compliance with State Department of Health requirements, as well as updating FPL Quality Manual.
- Responsible for conducting and submitting reports for the yearly DMRQA environmental study for power plants as well as the lab to ensure compliance with EPA water discharge requirements.
- Assists the power plants with environmental sampling protocols enforced by State Department of Environmental Protection.
- Responsible for reviewing the laboratory QA/QC procedures, including analytical results, instrument calibrations and standards for both the environmental and non-environmental areas of the laboratory.
- Responsible for conducting training, internal and external audits and data validation.
- Ensures that sub-contract lab work is NELAC compliant.
- Six-Sigma Green Belt certification earned July 2011
- Review FPL Central Lab's QMP and ensure compliance with TNI regulations
- Perform root cause analysis investigations in response to audit findings, client complaints, training needs assessments, data recall events, etc. Recommend resolutions for ongoing or recurring nonconformance, and ensures implementation of appropriate corrective action
- Participate as a member of the laboratory's senior management team.
- Act as the QA representative and a representative of senior management in client meetings, regulatory meetings, open forums for discussing regulation changes, etc.
- Act as a technical resource and final authority in all matters of data quality
- Act as the focal point for ethics and data integrity issues.
- Conduct and/or oversee QA training courses. As directed by the Chemistry Team Manager or Environmental/Chemistry Team General Manager, may conduct ethics training annually or with each new employee
- Evaluate the thoroughness and effectiveness of the laboratory's training program
- Perform system audits of each department, write audit reports, and approve audit responses
- Perform data audits
- Perform special audits as deemed necessary by data audits, client inquiries, etc.
- Conduct and respond to external audits conducted by regulatory agencies
- Work with management in performing annual Management Review of the Quality System

- Assist in reviewing and/or writing of Quality Assurance Project Plans, and technical and QC specifications in contracts and proposals.
- Maintain all necessary laboratory certifications
- Manage scheduling, ordering, login, and reporting of PT samples
- Monitor new regulations, communicate them to the laboratory, and ensure compliance with the current version of regulations
- Review and approve laboratory SOPs. Write SOPs as needed
- Maintain historical indices of all technical records (e.g. SOPs, audits, ancillary equipment calibration, logbook distribution, etc.)
- Assist in and monitor laboratory's compliance with the reference methods, SOPs, and agency-specific requirements
- Maintain training records, including Demonstrations of Capability (DOCs) for all analysts
- Assist in identification of systematic problems within the laboratory.
- Track revised reports, and assist in identifying systematic improvements to minimize errors
- Track customer complaints and assists in identifying improvements
- Oversee and approve method detection limit (MDL) studies and verifications
- Participates in monthly team conference calls
- Oversee generation of control charts and control limits, update of reference tables
- Perform or arrange for calibration of laboratory support equipment which may include balances, weights, and thermometers
- Participate in Laboratory safety activities such as BBSO's, RAMF Forms, etc.
- Perform Root cause analysis for any non-acceptable PT result
- Oversee the DMRQA Report function for all Florida Plants that are required to participate
- Maintain LIMS database list of clients, users and access.

XENCO Laboratories, LLC., Miami Lakes, FL. February 2008 – October 2009  
as **Laboratory/Shell Contract Technical Director:**

- Complete responsibility for coordinating all aspects of laboratory operations, involved with environmental testing for a variety of clients including industrial, engineering contractors and consultants, municipal utilities and the private sector.
- Answer all technical questions and design analytical solutions, including advice on method selection for business clients.
- Organize staffing plans and direct the recruitment, selection, assignment and development of a technical staff of 35.
- Prepare all requests for quotations and bids, and acquire new clients.
- Acquired comprehensive knowledge of environmental regulations, including NELAC, 40 CFR 136 and the FAC.
- Complete familiarity with LIMS functions and applications.
- Responsible for accuracy and logic of analytical data and sign-off on all reports.
- Train personnel in various analytical disciplines, evaluate lab performance and supervise work proficiency studies.
- Arrange for timely completion of analytical projects.
- Prepare for HRS inspections and audits.
- Write technical documents to business clients and regulatory agencies.
- Familiarity with the technical aspects and requirement of most Standard Methods and EPA 200, 500, 600 and 8000 series methods.
- Served as in-house troubleshooter for most instrumentation in laboratory
- A complete understanding of the important analytical concepts such as retention times, response factors, initial performance checks, initial calibration, calibration curves, ccc's, matrix spikes, laboratory control samples, data qualifiers, target compounds, method detection limit studies, maximum contaminant levels and mass spectral library searches.

- Oversee the technical aspects of XENCO Laboratories Analytical Services contract with Shell Oil Products US, including securing laboratory certification in 45 states.

USBiosystems, Inc., Boca Raton, FL. August 2007 - February 2008  
as **Director of Regulatory Affairs:**

- Developed and implemented (SOPs) Standard Operating Procedures.
- Assured proper analytical testing and reporting.
- Validating data and established detection limits on advanced instrumentation.
- Trained new personnel on proper laboratory functions and ethics.
- Established and Maintained health and safety protocols including OSHA reporting requirements
- Served as the focal point for QA/QC and had the responsibility for the oversight and/or review of quality control data.
- Notified laboratory management of deficiencies in the quality system & monitored corrective actions.
- Ensured that the laboratory participates in proficiency testing programs according to NELAC and DMRQA requirements.
- Enforced quality systems regulations and review quality control data according to NELAC standards in a commercial laboratory, maintained the laboratory accreditation up to date, managed data validation of proficiency testing samples, conducted internal audits on the entire technical operation, notified the laboratory director and manager of deficiencies in the quality system, implemented and monitored corrective actions, and addressed clients QC related concerns.

XENCO Laboratories, LLC., Miami Lakes, FL. November 2005 - August 2007  
as **Laboratory Director:**

- Complete responsibility for coordinating all aspects of laboratory operations, involved with environmental testing for a variety of clients including industrial, engineering contractors and consultants, municipal utilities and the private sector.
- Answer all technical questions and design analytical solutions, including advice on method selection for business clients.
- Organize staffing plans and direct the recruitment, selection, assignment and development of a technical staff of 21.
- Prepare all requests for quotations and bids, and acquire new clients.
- Acquired comprehensive knowledge of environmental regulations, 40 CFR 136 and the FAC.
- Complete familiarity with LIMS functions and applications.
- Serve as Quality Control officer and applied QA/QC principles to improve the effectiveness of the laboratory operations.
- Responsible for accuracy and logic of analytical data and sign-off on all reports.
- Train personnel in various analytical disciplines, evaluate lab performance and supervise work proficiency studies.
- Arrange for timely completion of analytical projects.
- Prepare for HRS inspections and audits.
- Write technical documents to business clients and regulatory agencies.
- Familiarity with the technical aspects and requirement of most Standard Methods and EPA 200, 500, 600 and 8000 series methods.
- Validated methods such as EPA 200.10 (trace metals in seawater).
- Served as in-house troubleshooter for most instrumentation in laboratory
- A complete understanding of the important analytical concepts such as retention times, response factors, initial performance checks, initial calibration, calibration curves, ccc's, matrix spikes, laboratory control samples, data qualifiers, target compounds, method detection limit studies, maximum contaminant levels and mass spectral library searches.

XENCO Laboratories, LLC., Miami Lakes, FL. July 2001 - November 2005  
as **Laboratory Manager**:

- Shared responsibility, with Laboratory Director, of coordinating all aspects of laboratory operations, involved with environmental testing for a variety of clients including industrial, engineering contractors and consultants, municipal utilities and the private sector.
- Answer technical questions and design analytical solutions, including advice on method selection for business clients.
- Organize staffing plans and direct the recruitment, selection, assignment and development of a technical staff.
- Prepare quotations, bids, and acquire new clients.
- Complete familiarity with LIMS functions and applications.
- Responsible preparation and analyzing of metals by ICP-MS (EPA 200.8 and SW 6020).
- Responsible for accuracy and logic of ICP-MS data.
- Arrange for timely completion of all analytical projects in the Miami Lakes, FL. facility.
- Prepare for HRS inspections and audits.
- Familiarity with the technical aspects and requirement of most Standard Methods and EPA 200, 500, 600 and 8000 series methods.
- Served as in-house troubleshooter for most instrumentation in wet chemistry and ICP-MS.

The **City of Margate** Environmental and Engineering Services, Margate, FL. January 2000 - July 2001  
as **Chief Chemist**:

- Oversee daily activities of both the Water and Wastewater Treatment Plant Laboratories.
- Perform supervisory and advanced technical laboratory work, including method development.
- Supervise employees in data collection.
- Schedule work, leave of absence and overtime of employees.
- Evaluate employee performance and recommend any necessary disciplinary actions.
- Prepare and maintain monthly operating reports for compliance with local, state and federal regulations including EPA, OSHA, FDOH, and FDEP.
- Review all lab data and sampling procedures to ensure Quality Assurance/Quality Control procedures are followed to maintain lab certification.
- Perform chemical analyses, prepare chemical and biological media, reagents and test solutions routinely used in the laboratory.
- Performs Nutrient and Phosphorus testing using a Lachat Industries QuickChem 8000 Flow Injection Analyzer.
- Perform routine chemical and bacteriological analyses of samples collected.
- Approve the requisition of supplies, equipment and chemicals.
- Calibrates, repairs and maintains laboratory equipment.
- Work with other city departments on an as-needed basis to meet various governmental regulations.

**USBiosystems, Inc.**, Boca Raton, FL., July 1998 - January 2000

04/99 - 01/00 as **Senior Project Manager**:

- Perform technical review of projects from assigned clients
- Prepare final reports for assigned clients.
- Perform data entry on an as-needed basis.
- Prepare electronic reports for clients on an as-needed basis.
- Track projects of assigned clients.
- Point of Contact between laboratory and assigned clients.
- Provided all levels of Quality Assurance Reports to clients.
- Perform technical review of projects from assigned clients
- Prepare final reports for assigned clients.
- Track projects of assigned clients.
- Point of Contact between laboratory and assigned clients.
- Provided all levels of Quality Assurance Reports to clients.
- Perform internal audits of laboratory facility.
- Review Standardized Operating Procedures (SOPs) written by laboratory personnel.
- Assist QA Director in auditing sub-contract laboratories.

**V.O.C. Analytical Laboratories, Inc.**, Boca Raton, FL., February 1995 - 1998.

12/97 - 07/98 as **QA/QC Officer**:

- Provided all levels of Quality Assurance Reports to clients.
- Perform internal audits of laboratory facility.
- Review SOPs written by laboratory personnel.
- Assist QA Director in auditing sub-contract laboratories.
- Prepare laboratory control documents.

12/96 - 12/97 (Project Manager):

- Perform technical review of projects from assigned clients
- Prepare final reports for assigned clients.
- Track projects of assigned clients.
- Point of Contact between laboratory and assigned clients.

02/96 - 12/96 (Lead Technician):

- Responsible for the extraction of samples for PAH, PCB, Phthalates, Fuels, Herbicides, Pesticides, and BNA analysis on GC/MS, GC-FID and GC-ECD.
- Responsible for staffing, ordering supplies and budgeting for semi-volatile prep department.

02/95 - 02/96 (Technician):

- Responsible for the digestion of solids, liquids and oils in preparation for analyzing on the ICAP, AA-Graphite Furnace, and Mercury by Cold Vapor.
- Responsible for all preparatory TCLP work for Metals, Semi-Volatile Organics, Pesticides and Herbicides.
- Responsible for analyzing Drinking Water samples on Zeeman and Graphite furnace AA.

**Savannah Laboratories, Inc.**, Deerfield Beach, FL., May 1991 - February 1995.

05/91 - 02/95 (Technician):

- Responsible for the digestion of solids, liquids and oils in preparation for analyzing on the ICAP, AA-Graphite Furnace, and Mercury by Cold Vapor.
- Responsible for all preparatory TCLP work for Metals, Semi-Volatile Organics, Pesticides and Herbicides.

- Responsible for analyzing samples for Turbidity, Total and Solids, Percent Solids, pH, Conductance and Hazardous Waste Characterization.
- Responsible for analyzing samples for Nitrate, Nitrite, Fluoride, Color, Odor, BOD, CBOD, Total and Ortho-phosphorus, Chloride, Phenols and Surfactants.
- Responsible for the extraction of samples for PAH, PCB, Phthalates, Fuels, Herbicides, Pesticides, and BNA analysis on GC/MS, GC-FID, GC-ECD, TRPH and Oil/Grease by IR.
- Responsible for the analyzing samples for TRPH and Oil/Grease by IR.
- Responsible for the upkeep of data, QA/QC and EPA Methods for above analyses.

## **AFFILIATION**

Member: American Chemical Society

Member: Florida Society of Environmental Analyst