

# Biographical Summary

## A. Dallas Wait, Ph.D., Principal

Dr. Wait is a chemistry expert with over 30 years of experience characterizing consumer products, evaluating the source and fate of chemicals in the environment, designing test method and quality assurance programs, interpreting data, and determining the validity and usability of chemistry measurements and sampling procedures. Dr. Wait directs Gradient's Data Quality Management Practice, and his consultations often resolve data quality issues, aid in agency negotiations concerning data usability, and provide pivotal chemistry testimony. More recently, his practice has expanded into the dietary supplement industry, resolving product adulteration and testing reliability issues. He is on the editorial board for three peer-reviewed journals, coauthored the second edition of US EPA's SW 846 RCRA Test Method Manual, and has published over thirty journal articles and a book chapter on the topic of data quality. Dr. Wait is a member of numerous scientific work groups and science advisory boards involved in developing and evaluating test methods and quality assurance programs. Before joining Gradient in 1989, he was Technical Director, Vice President, and cofounder of ENSECO's ERCO Laboratory, a nationally prominent environmental laboratory involved, in part, with oil spill research, agency method development studies, aquatic toxicology GLP testing support, consumer product analysis, and site investigations.

## Representative Projects

**Adulteration of Dietary Supplements:** Investigated possible whey dietary supplement adulteration by an ethanol manufacturing plant proposed to be constructed adjacent to the supplement manufacturing facility.

**Lead Content/Faucets:** Evaluated the applicability and implementation of NSF extraction procedures to determine the leachability of lead from faucet systems regulated under California Proposition 65.

**Steroids in Dietary Supplements:** Conducted a forensic investigation into the presence and source of anabolic steroids in a dietary supplement.

**Data Usability/Lab Fraud Assessment:** Testified on benzene measurement and representative sampling issues associated with testing petroleum refinery process wastewaters regulated under NESHAP. Issues concerning fraudulent laboratory activities were significant in the case.

**US EPA Office of Water Peer Review:** Peer reviewed documents detailing detection limit and quantitation concepts for regulatory analytical chemistry methods in response to a settlement agreement between various trade associations and US EPA.

**PCB Data Usability/Sampling Assessment:** Testified on data quality issues mainly associated with PCB analyses for numerous site investigations at an operating manufacturing facility. Subsequently designed a new sampling and analysis program. Also provided opinions regarding the identification of PCBs (congener fingerprinting) for the purpose of source allocation, and designed novel wipe sampling procedures for porous surfaces to evaluate potential dermal uptake of PCBs.

**Historical TCE Testing Practices:** Testified on testing and sampling practices for THMs and TCE in drinking water that municipalities should have been implementing during the early 1980s.



## Practice Areas & Expertise

- Consumer Product Characterization
- Natural Product Chemistry
- Environmental Chemistry & Forensics
- Data Quality & Usability
- Test Method Evaluation & Design
- Historical Analytical Chemistry Practices

## Education

Ph.D., Organic Chemistry,  
University of Rhode Island

B.S., Chemistry,  
University of Rhode Island

## Selected Publications

Wait, AD. 2010. "Data quality and transparency in the dietary supplement industry." *Food Drug Law Journal* 65:471-487.

Wait, AD; Ramsey, C. 2007. "The Measurement Process." In *Introduction to Environmental Forensics, Second Edition*. Eds: Murphy, BL; Morrisson, RD. pp83-128.

Mattuck, RL; Blanchet, RJ; Wait, AD. 2005. "Data representativeness for risk assessment." *Environmental Forensics* 6:65-70.

Wait, AD. 2002. "Challenges in producing defensible environmental chemistry measurements for litigation." *Environmental Claims Journal* 14:415-454.

Wait, AD. 2001. "Environmental forensic chemistry and sound science in the courtroom." *Fordham Environmental Law Journal* 12:293-325.

Wait, AD. 2000. "Evolution of organic analytical methods in environmental forensic chemistry." *Environmental Forensics* 1:37-46.



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