

ECOLOGICAL RISK ASSESSMENT
PACE ANALYTICAL IS YOUR COMPLETE SOURCE FOR BIOLOGICAL TESTING

BIOOTA ANALYSIS



The bioaccumulation of toxic substances in animal and plant tissue has been of great concern for years. Determination of toxic residues in organisms populating a contaminated area is an important part of the ecological risk assessment process. Biological samples may be an indicator of contamination that is affecting the food chain – and possibly the human population. Pace Analytical offers over twenty years of experience in the analysis of biological tissues—routinely analyzing fish, amphibians, birds, mammals, and plants for environmental contaminants. Pace Analytical is currently under contract to provide these analyses to several state and federal agencies as well as private organizations.



Preparation of a wide variety of exotic biological samples in a precise, consistent manner to insure reproducible, legally defensible data is the most challenging part of the process. To meet this challenge, Pace Analytical provides not only a dedicated, experienced biota laboratory staff, but also a fully equipped biota laboratory specifically designed to handle the demands of large volume, highly complex biota projects.

Because the analysis of tissues is significantly more challenging than the analysis of water or soil, Pace Analytical has developed specific methodologies for biota analysis, which insure the accurate identification and measurement of the analytes of concern. In unique circumstances when standardized methods don't exist, project specific method development and validation services are available.

Unlike soils, which can effectively be extracted by ultrasonic disruption of a soil/solvent mixture, tissues require a more exhaustive soxhlet extraction. Because lipid (fat) based reporting is often required, the lipid content of most tissue extracts is measured and then removed, utilizing proprietary clean-up procedures to insure accurate instrumental analysis. Frequently, data must be reported on a dry weight basis—necessitating the measurement of percent moisture of the samples.

Sample Matrices

- All Environmental Matrices
- All Biota: plants, fish, amphibians, birds and mammals
- Human Fluids: blood serum, milk

Certifications

- NELAC
- Multiple States

Testing Capabilities

- Pesticides - (8081)
- PCBs - (8082, 1668, 1668A)
- BNAs - 8270, PAHs - (8270 SIM)
- Trace Metals by ICPMS - (6020)
- Low Level Mercury - (1631E)
- Methyl Mercury - (1630)
- Dioxin/Furan - (1613, 8290)
- Polybrominated Diphenyl Ethers - (1614)



Pace Analytical Services, Inc.
Minnesota Laboratory / Corporate Office
 1700 Elm Street
 Minneapolis, MN 55414
 (612) 607-1700
 www.pacelabs.com

For more information regarding biota capabilities, contact:
PH: (608) 232-3300 or (612) 751-1374 • biota@pacelabs.com