



InMass Technologies Inc. provides soil scientists, bio-remediators, regulators, environmental engineers and consultants, and mine and land reclamation experts with the technology they need to quickly identify hydric soils without extensive digging or expensive equipment.

At its West Lafayette, Ind., facility, InMass Technologies manufactures the IRIS tube™ based on a proprietary Indicator of Reduction in Soils (IRIS) technology developed at Purdue University and exclusively licensed to the company.

Hydric (wet) soils have the feature of being anaerobic, or devoid of interstitial oxygen, due to the presence of water, which limits contact with the atmosphere. In anaerobic soils, microbes are present that reduce and dissolve iron. The company's half-inch-diameter IRIS tubes™, which are rugged, plastic pipes coated with naturally occurring iron oxide, indicate hydric conditions once they have been immersed in soil for several weeks.

If the tubes are exposed to any microbial activity, they will develop a mottled appearance visible to the naked eye. The ability to cover large areas for relatively little cost, followed by easy-to-evaluate results in weeks instead of months, gives this technology the advantage over traditional methods for identifying groundwater.

**In January of 2007, the federal government included the IRIS tube™ technology as the new standard for identifying anerobic percentages in hydric soil.**

Byron Jenkinson is co-inventor of the technology that was discovered while he was a doctoral student working on a research team led by Donald Franzmeier, professor emeritus of agronomy in Purdue's College of Agriculture. Their research to determine new methods to address the issue of soil saturation and anaerobiosis was funded by the U.S. Department of Agriculture-Natural Resources Conservation Service Wet Soil Monitoring Project, which was a 10-year, \$2 million intensive study of landscape hydrology.

Applications for IRIS tubes™ include identifying and preserving wetlands, determining the depth of soil saturation, identifying failed septic systems, analyzing organic carbon present in the soil, and locating water tables.



John Jenkinson



Byron Jenkinson

## Facts & Figures

<b>ESTABLISHED:</b>	2004 – Founded by four brothers: John, Byron, Paul and David Jenkinson
<b>KEY PERSONNEL:</b>	John Jenkinson, President; Byron Jenkinson, Ph.D., Chief Research Officer; Paul Jenkinson, Vice President and Sales Director; and David Jenkinson, M.D., Communications Director
<b>FUNDING:</b>	Revenue from sales
<b>EMPLOYEES:</b>	4
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