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PRESS RELEASE

Breakthrough Technology: ANDalyze Introduces Real-time Water Testing for Heavy Metals Powered by DNA

ANDalyze offers a new sensor/fluorimeter platform solution for simplifying the on-site testing and analysis of water for heavy metal contamination. This new product requires no special knowledge of chemistry, greatly reducing operational testing time and cost for the water industry.

Champaign, IL, USA, October 6th, 2009: [ANDalyze](#) has developed an innovative heavy metals sensor platform technology for water testing powered by DNA technology. The technology replaces older time consuming methods for water testing that required knowledge and use of chemicals. The company's product is a combination of a hand-held, ruggedized fluorimeter and a DNA sensor that gives highly accurate readings in less than two minutes. It meets US EPA standards for accuracy and specificity of target contaminants such as lead (*DNA sensors for other contaminants will be available in the near future*). This solution is ideal for both government water resource authorities and industrial / corporate operations where accurate water testing is a critical requirement. This product, the [AND1000 Fluorimeter](#), is a breakthrough in efficiency, testing accuracy and ease-of use. No special skill or knowledge of chemistry is required to operate the device and no hazardous chemicals are used.

Video demo - [Click here](#).

Protecting public health by providing safe drinking water to citizens served by community water systems is and will always be a serious concern of government agencies, public water suppliers and private industry around the world. There is a great need to make the on-site testing of these water supplies easier and more affordable to better understand the contamination levels. This completely new method for testing water, using DNA technology, greatly reduces the time, effort, cost and complexity of testing water samples for contaminants such as lead in drinking water.

EPA Award Winning Technology

One of the most important discoveries in the last decade is that DNA and RNA are not only materials for genetic information storage and transfer, but also catalysts for a variety of biological reactions, and thus called catalytic DNA/RNA, (deoxy) ribozymes, or DNA/ RNAzymes. Because metal ions play

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ANDalyze - Real-time Water Testing for Heavy Metals using the Power of DNA

essential roles in the structure and function of DNAzymes, the study and application of these new metalloenzymes has become a new frontier in bioinorganic chemistry. The catalytic DNAzyme technology for this solution was developed in the laboratory of Dr. Yi Lu of the University of Illinois. From this technology ANDalyze has created an easy-to-use product for detecting and quantifying heavy metals in water.

The ANDalyze DNAzyme sensors are at the heart of the technology solution

The product is a universal platform that offers simple, fast, inexpensive and reliable detection of trace metals and other target chemicals. Measuring the metal ions is done through a reaction that occurs when a water sample containing a target metal ion contaminant (such as lead) is introduced to a DNA powered sensor specific for that contaminant. The test is performed by taking a water sample, injecting it through the sensor housing, and into the *AND1000 Fluorimeter*. The reaction produces fluorescence (light) in direct correlation to the amount of metal ion present. The amount of light is measured by the fluorimeter. ANDalyze has designed, manufactured and modernized the *AND1000 Fluorimeter* which, in combination with the consumable DNA sensors can quickly measure water contaminants at a sample site. This method greatly reduces the time and effort required by current technologies. This advantage creates a cost savings for organizations that are responsible for water testing of public drinking water supplies or industrial water operations.

The ANDalyze solution consists of consumable DNA Sensors for Lead and Uranium (available now) in combination with the *AND1000 Fluorimeter* (which can interpret both existing DNA sensors and all future released DNA sensors for copper, cadmium, mercury, silver and other target contaminants). Pricing of the ANDalyze solution will be based on volume commitments of DNA sensors, but even with the addition of the *AND1000 Fluorimeter* the price will be significantly below any comparable solution available on the market today.

Company contact and product information can be found at www.andalyze.com.