

**Environmental  
Hazards Testing**



Photo courtesy of iStockphoto.com



## **Thermo Scientific Niton XRF Analyzers**



*Screening for lead paint and on-site environmental hazards made easy, efficient, and cost effective*

## Screen for environmental hazards in seconds with point-and-shoot simplicity

### The identification and remediation of environmental contaminants is a major, costly challenge worldwide.

From hazardous site modeling and risk assessment to on-site contaminant screening and lead paint abatement, to testing for Chinese drywall, the ability to collect and efficiently analyze thousands of samples *in situ* is a fundamental requirement. Accuracy and speed are imperative; relying solely on off-site testing labs can be time consuming and expensive.

Now there is a better solution that provides near real-time results and can fit literally in the palm of your hand – the choice of the U.S. Environmental Protection Agency and other leading regulatory organizations.



### Simplify On-site Contaminant Screening with Thermo Scientific Niton XRF Analyzers

Thermo Scientific Niton XRF analyzers allow you to perform rapid, on-the-spot screening for accurate elemental identification with the simple pull of a trigger. Lightweight and ruggedly built for virtually any field environment or weather condition, you can easily detect and measure RCRA metals, priority pollutants, and U.S. EPA target analytes. Our handheld analyzers offer nearly instantaneous, legally-defensible results for fast decision making at significantly less cost than off-site laboratory testing.



# Thermo Scientific Niton XRF Analyzers



**Niton XL2 GOLDD**  
PERFORMANCE LEADER

**Thermo Scientific Niton handheld x-ray fluorescence (XRF) analyzers are revolutionizing elemental analysis with the simple pull of the trigger.**

▶ **Exceptionally fast, easy to use**

Just point and shoot. See results in seconds on a bright, color, touch-screen display.

▶ **Purpose-built**

Ruggedized with sealed construction, our analyzers are built with tough LEXAN® plastic and weigh approximately three pounds (1.36 kg) each; dust- and waterproof for worry-free use virtually anywhere. One-step system check requires no external accessories while advanced batteries support up to 10 hours of continuous operation on a single charge.

▶ **Nondestructive**

Unlike destructive testing methods, samples remain intact and undamaged.

▶ **Application-optimized**

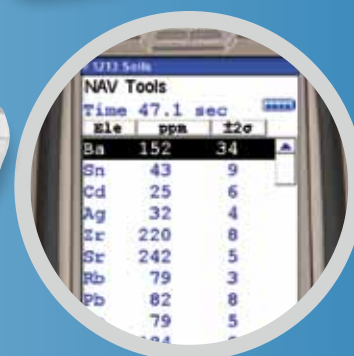
High-performance x-ray detector options are matched specifically to environmental screening applications.

▶ **Flexible communications**

Bluetooth™ wireless and USB communications interfaces are included in every analyzer. Advanced Niton Data Transfer (NDT©) PC software lets you set user permissions, print certificates of analysis to document results, or operate the analyzer right from your PC.



**Niton XL3t**  
FEATURE LEADER



**Niton XL3t GOLDD+**  
ULTIMATE PERFORMANCE AND FEATURES

**From lead paint screening and sediment analysis to the real-time delineation of contamination site boundaries and testing for Chinese drywall – choose the Thermo Scientific Niton analyzer that meets your application needs**

Niton XLp 300 Series	Niton XL2 GOLDD Series	Niton XL3t Series	Niton XL3t GOLDD+ Series
Ideal for residential lead paint testing; supported by PCS with no inconclusive range/no substrate correction	Lead screening in environmental applications	Enhanced performance for silver, cadmium, tin, and barium	Superior light element detection (Mg-S) without helium purge or vacuum; helium optional
Soil mode for outdoor risk assessment Dust mode to pre-screen clearance samples	Rapid RCRA metals analysis	Real-time delineation of contamination boundaries	CCD camera standard
Fast, easy-to-use tool for RRP Rule compliance	Light element detection (Mg-S)	Soils, sediments, painted surfaces, air filters, and liquids, including paint and waste water	Offers fastest on-site analysis of drywall and metal surfaces for sulfur attack from Chinese drywall
Consumer Products mode for complete elevated blood levels (EBL) evaluations	Ideal for gypsum testing of Chinese drywall	U.S. EPA Method 6200 compliant; meets NIOSH Method 7702 requirements	

# Environmental

## Lab-quality analysis in an instant, without leaving the site

### On-site Screening of Environmental Contaminants –

*Maximum performance with Thermo Scientific Geometrically Optimized Drift Detector (GOLDD™) technology*

- Shorter measurement times
- Lower detection limits for phosphorous, sulfur, and chlorine
- Significant reduction of RCRA element detection limits
- Ability to see toxic analytes in liquids at <10 ppm
- Improved detector performance virtually eliminates difficult inter-element interferences and overlaps
- Expanded element list (Mg-S) for real-time analysis of Chinese drywall and corrosion by-products



***The U.S. EPA and other regulatory agencies have chosen and trust Thermo Scientific Niton analyzers***

*"...my client had a demolition project and needed to identify if the building components...contained any state-identified RCRA metals that would preclude them from being used as clean fill.*

*"Bulk sampling and analyzing by wet laboratory methods would have taken too long and been cost prohibitive. Using the [Thermo Scientific Niton] XRF XL3 analyzer, we had instant results and cut our time on site, resulting in a cost savings for our client."*

***– Jack L. Gardner Jr., section chief,  
Air Quality Services, PSC***

# Hazards Screening



## Niton XLP 300 analyzer: *The ideal tool for lead paint*



The well-documented effects of lead exposure place this hazard among the highest regulatory priorities. Our Niton® XLP 300 analyzer is designed to meet the rigorous demands of lead paint testing. In fact, it is the only lead paint analyzer available supported by an ideal Performance Characteristic Sheet (PCS) documenting:

- **No inconclusive readings**
- **No substrate correction**
- **No false positive/false negative readings**

Thermo Scientific Niton XLP 300 Series analyzers provide many distinct advantages:

- Rapid RRP Rule compliance testing
- Soil mode to evaluate outdoor risks
- Dust mode to pre-screen abatement or renovation work
- Consumer Products mode for complete EBL evaluation

## Available Options and Accessories

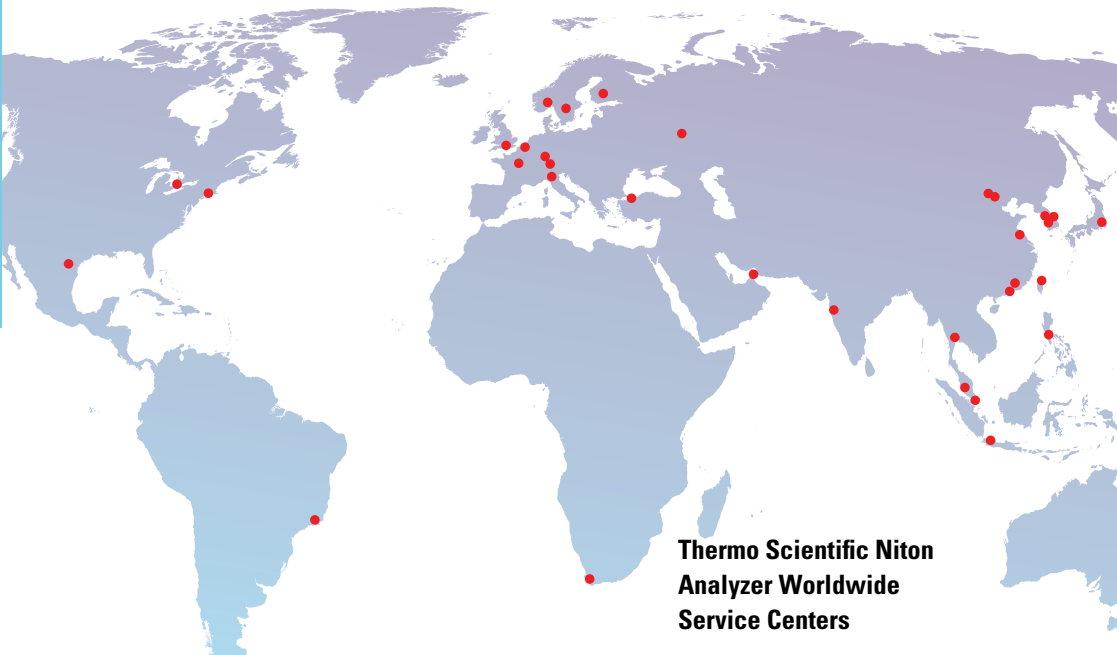
The complete Thermo Scientific Niton product line includes key accessories that simplify the task of sample analysis.

Combined with the **Extend-a-Pole™** telescoping extension pole and a **Bluetooth-equipped GPS receiver**, our analyzers help environmental professionals cover a vast amount of ground.

What's more, the **SmartStand™** portable test stand plus your laptop or PC converts the instrument into a bench top analyzer for measuring bagged or cupped samples.

The multi-purpose, ultra-portable **Field Mate™** test stand is ideal for field analysis of 32 mm sample cups and small bagged samples. Complete with a metal snap-on plate for hands-free *in-situ* analysis, the Field Mate is fully shielded and equipped with RFID for analyzer recognition.

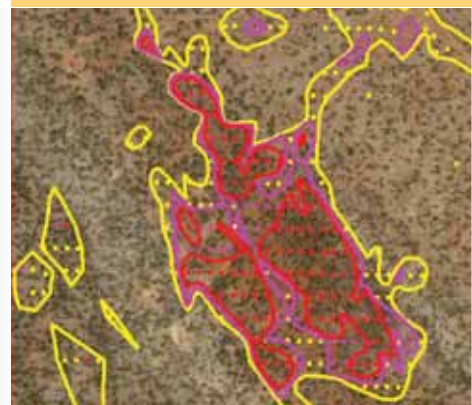




**Thermo Scientific Niton  
Analyzer Worldwide  
Service Centers**

## Superior XRF analysis solutions, backed by our worldwide sales and service

We are recognized as the leader in XRF analysis technology, serving companies in more than 75 countries on six continents. We serve our customers through corporate resources and a dedicated network of more than 70 distributors and 30 factory-trained service centers around the world to provide the most effective customer service possible. Our global reach and resources not only ensure worry-free product support, we also offer comprehensive services including application consulting and training anywhere you need them.



***More than 25,000 Thermo Scientific Niton XRF analyzers are in use daily in more than 75 countries on six continents***

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