

# Portable Soil Texture Determination Systems

## Perform Soil Particle Analysis in the Field

Soil texture is a basic physical property that determines several hydraulic characteristics including permeability, moisture retention characteristics and other related features. Our San Andreas Soil Particle Analysis Kit is a portable soil texture determination system, created to use in remote areas and underdeveloped regions, where there is limited or no access to a soils lab. The system is based on ASTM Standard D422 and consists of two carrying cases: one for sand analysis and the other for Hydrometer testing (also known as the Stoke's method). The San Andreas system comes with a SimplyData Digital Scale and software. This eliminates the need for performing calculations and provides the final results when the readings are finished.



0318K1  
San Andreas  
Soil Particle Analysis System

# Soilmoisture Ceramics

## Specialty Ceramics for Soil Science Studies and More

Soilmoisture Equipment has been perfecting the manufacture of high quality ceramics for more than 55 years. Soilmoisture ceramics (Aluminum Oxide) are inert to several chemicals. They are available with several different bubble points and flow rates. The hydrophilic ceramic is impervious to air when wet while allowing water to pass through. This extraordinary feature makes Soilmoisture ceramics the perfect choice for our soil water samplers and tensiometers. If you need a custom ceramic, our knowledgeable and skilled technicians can create ceramic parts in almost any shape and size imaginable.



# Soil Moisture Retention Characteristics

## Complete Laboratory Setups for Determining Soil Moisture Release Curves

Soil moisture retention characteristics (soil moisture release curve) describe available water under different levels of moisture content. It is a key parameter for irrigation purposes as well as construction projects, mining, oil industry and more. Soilmoisture offers a complete range of laboratory setups for your specific application. The system consists of precision pressure regulating systems (-1 to +15 bar available), pressure extractors, pressure plates or membranes, pressure pumps and other items for collecting, preparing and measuring samples.



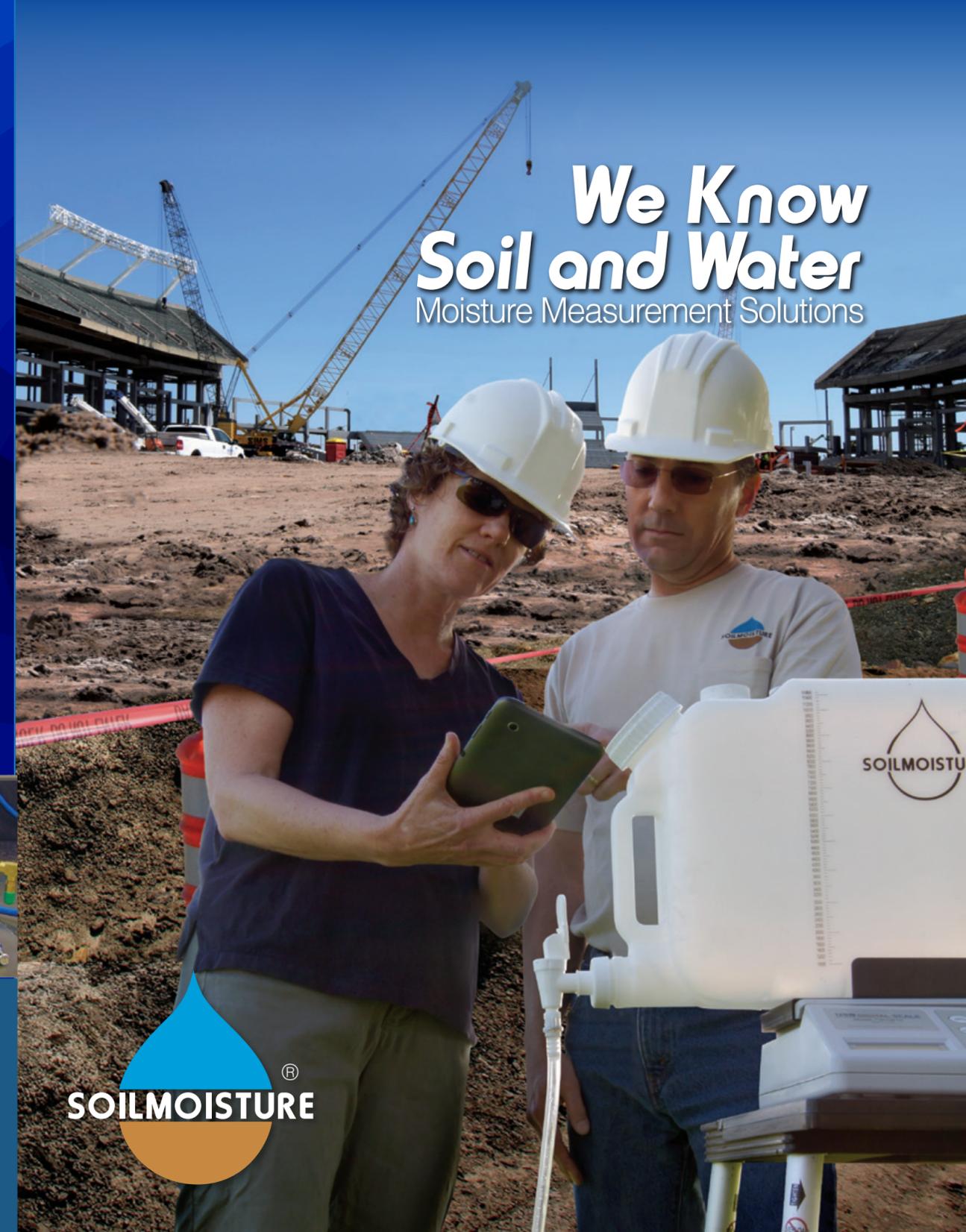
LAB0123 (0 to 15 bar) Extractor Systems



801 S. Kellogg Ave. Goleta, CA 93117 Phone: 805.964.3525 • Fax: 805.683.2189  
www.soilmoisture.com

# We Know Soil and Water

Moisture Measurement Solutions



SOILMOISTURE®

# Soil Permeability Measurement Systems

## Double Ring Infiltrometers, Borehole Permeameters, Pressure and Tension Infiltrometers

Soilmoisture Equipment Corp. carries a suite of permeameters and infiltrometers to measure hydraulic conductivity (and other related parameters) in soil and other similar materials. Soil permeability characteristics have several applications: Irrigation projects, tile and drainage systems, sewer system design, construction projects, dumping sites and landfill facilities, mining and oil industries. Our Guelph Permeameter has been the most popular permeameter in the soil sciences and we have recently introduced the first automated and most accurate borehole permeameter, the Aardvark Permeameter.



2840KIPCT Aardvark Permeameter shown



6050X3K5B MiniTrase



## Instant Soil Moisture Measurement Systems

### MiniTrase - the Most Accurate Technology Available in the Market

Soil moisture is one of the most important parameters in almost all types of soil-related activities: from irrigation applications to construction projects to environmental monitoring systems. The MiniTrase uses TDR technology to instantly and accurately determine soil-moisture content. When used with the Slammer (not shown), our most rugged probe, you can take measurements in the most hostile conditions and environments. Soilmoisture's TDR probes are not sensitive to salinity or temperature.

Standard Waveguide

Buriable Waveguide



JET FILL TENSIO METERS

## Soil-Water Potential Measurement Systems

### Several Types of Tensiometers for any Type of Application

Soilmoisture Equipment was the first company to commercialize tensiometers as the direct and most reliable method to measure soil-water potential. Soil-water potential (also known as matric potential) represents soil wetness status (and thus a plant's stress level). It is one of the most useful parameters for irrigation scheduling systems. Tensiometer readings are not sensitive to soil type or texture. Therefore readings do not need to be corrected for soil type. This is a huge advantage when compared to other methods.



2725 Series Jet Fill Tensiometers



3115 Series SAPS Unit



## Plant Water Potential Measurement Systems

### SAPS (System Analysis for Plant Stress) Is the Direct Method for Measuring Plant Water Potential

SAPS has several applications in plant physiology studies as well as irrigation projects and drought management practices. Soilmoisture provides several types of SAPS units for almost any type and size of leaves and also laboratory and field applications. When using a SAPS unit, growers can accurately measure the amount of water stress applied to crops and fine tune their irrigation practices. Vineyard managers, nut tree and other types of growers use the SAPS daily. The accurate results enable them to stress their plants just enough to enhance quality and flavor without compromising production.

## Soil-Water Samplers

With more than half a century of history in industry and research, Soilmoisture's Soil Water Samplers are highly regarded for their exceptional performance and reliability. Our unique ceramic formula makes our samplers inert to most types of chemicals. Different levels of bubble point (0.5, 1 and 2 bar) make our samplers flexible enough to fit any type of application. Soilmoisture offers soil-water samplers in almost any practical size; from very small suction cups to use in pots or soil columns up to super-sized all ceramic samplers.

### 1900 Lysimeters

The 1900 is a single port, soil water sampler and it is designed for surface installation (6 inches to 6 feet).

### 1920 Lysimeters

The 1920F1 is a vacuum/pressure sampler developed as a "remote access" instrument. It can be installed 50 feet deep with 100 feet lateral displacement.

### 1940 Lysimeters

The 1940 is used for deep installation (down to 300 feet) or where long lateral runs required. High levels of air pressure can be safely applied to 1940 to elevate sampled water up to the soil surface.

