Environmental & Engineering Geosciences Department of Geology
Radford University, Box 6939
Radford, Virginia 24142

February 24, 2005

Dear Committee Member,

My field of research is Engineering Geoscience. The Kimballton site offers a preferred location for this research to be pursued and I will work as a member of the Kimballton team to help make this a reality.

The features of Kimballton which appeal to me are:

1. The location within the world class tectonic feature that is the foreland thrust belt of the Southern Appalachian Mountains.

2. The variety of conditions and rock types available for diverse experimentation, including massive competent sedimentary rocks (primarily carbonates and sandstones) and thinner weaker rock layers (primarily shales and sheared fault zones).

3. The variability in fractured nature of some of the rock formations, as induced by both ancient and recent tectonic activity.

The science community that I am a member of should be represented in DUSEL because:

1. There remains a great deal to be learned about the physical and chemical nature of sedimentary rocks at great depth within a major thrust fault belt.

2. A long-term study of the distribution and orientations of joints and fractures within these intensely folded rock masses will help the science community to better understand ancient and current stress fields.

3. Experiments that induce and examine the propagation of fractures within unfractured or lightly fractured portions of rock masses may be performed that will be of universal benefit to workers in water and petroleum resource management and recovery. Both of these are of utmost importance today.

There truly is a great deal to be learned from the Kimballton DUSEL site from which society as a whole will benefit, and that could not be studied elsewhere. Thank you for giving the Kimballton site your full consideration.

Sincerely,

Chester F. Watts, PG, PhD
Dalton Professor of Geology