

Feb 28 2005

Subject: Proposed DUSEL site at Kimballton, Virginia

Dear Kimballton-DUSEL principal investigators,

This letter expresses my strong personal interest in conducting research at the proposed DUSEL (Deep Underground Science and Engineering Laboratory) site at Kimballton, Virginia

Kimballton is ideally situated for research in applied rock engineering and rock mass characterization. Particular advantages of the site include:

- Layered and repeated geological structure with a wide range of scales of mechanical discontinuities (bedding planes and fractures) and hydraulic pathways.
- Presence of both massive (relatively unfractured) and fractured blocks of limestone.
- Existence of large unsupported caverns at depths of 2000 ft in the existing mine, giving strong support to the feasibility of constructing large chambers at greater depths.
- A heterogeneous rock mass with imprints of multiple tectonic events.

The Kimballton-DUSEL site appears to be feasible from a geomechanical point of view and also will be of considerable interest to researchers in the rock engineering and engineering geology professions.

Sincerely,

Matthew Mauldon
Associate Professor, Virginia Tech