Dear Committee Member,

My field of research is Environmental Geochemistry. The Kimballton site offers a suitable location for research in this are to be pursued, and I am working as a member of the Kimballton team to help make this a reality.

The features of Kimballton which appeal to me are:
The mine would be located in sedimentary rocks (predominantly limestone and shales).
Low temperature water-rock field experiments can be conducted.
The high pH solutions and water quality of the mine can be evaluated and large-scale field experiments can be conducted.
The potential for evaluating CO_2 controlling reactions in the high pH environment and the formation of secondary minerals in the field.
Evaluation of reactivity of clay minerals with different solutions in the shales.

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

This is a rare opportunity to do applied and large scale environmental field studies at depth. Investigations would have applications relating to remediation efforts, carbon sequestration by mineral reactions, and radioactive waste disposal.

Switzerland is likely going to be placing their high-level radioactive waste in shales and they likely would be interested in collaborating with our team in designing relevant experiments in the subsurface.

Sincerely,

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