



South Dakota Department of
Environment and Natural Resources
Geological Survey Program
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October 18, 2016

Todd J. Kenner
President/CEO
RESPEC
3824 Jet Drive
Rapid City, South Dakota 57703

Dear Mr. Kenner,

This letter is in support of the efforts of RESPEC and the South Dakota School of Mines & Technology to secure research funds for the U.S. Department of Energy's (DOE) Deep Borehole Field Test: Characterization Borehole Investigations (DOE solicitation number DE-SOL-0010181). The proposed work would provide unprecedented information on the deep Precambrian-age rocks beneath a part of South Dakota to a depth of approximately 16,400 feet. The documentation and testing of these rocks would generate an extremely high quality control point that can be used for the future evaluation of nearby geology by industry, other researchers, or the South Dakota Department of Environment and Natural Resources' Geological Survey Program.

The information to be produced would, among other things, provide insight into the type(s), thickness(es), and behavior of nearly 12,000 feet of the crystalline Precambrian-age rocks, the age of ground water contained in those rocks, and the temperatures at depth. This information could possibly be used in mineral exploration and development of geothermal resources.

DENR is a staunch proponent of using the best scientific research and facts available to shape environmental and natural resource management decisions. As is the case with any significant research, there are commonly unforeseen uses of information gathered and discoveries made. I suspect the same will be true with the Deep Borehole Field Test and that information will be put to immediate use in the scientific community and will ultimately be applied for societal benefit. DENR's Geological Survey Program stands with your team of scientists and other professionals in support of the proposal.

Sincerely,

Derric L. Iles
State Geologist

Cc: Dr. Lance Roberts, South Dakota School of Mines & Technology