Grant Round Application for G-026-060

DIRECTOR'S COMMENTS
G—026-060
"CO_2 Enhanced Bakken Recovery Research Program"

Submitted by: Energy & Environmental Research Center
Request for $450,000; Total Project Costs $1,350,000
Duration: 15 Months

Description of the Project: The Energy & Environmental Research Center (EERC) proposes a research program to evaluate the use of CO2 to increase the ultimate recovery of Bakken oil. The objective is to use new and existing reservoir characterization and laboratory data integrated with reservoir modeling to determine the viability of CO2 for enhanced oil recovery (EOR) in the Bakken Formation. The ultimate goal of the project is to generate previously unavailable knowledge enabling informed decisions by operators regarding the use of CO2 for EOR in the Bakken Formation.

Technical Reviewers' Comments

Reviewer G-026-A1
Production from the Bakken Formation is one of the key contributors to ND economics. Any attempt to enhance production potentially has strong positive impact on ND industry. Thus, the intended project strongly supports NDIC and OGRC goals.
Recommendation: Fund

Reviewer G-026-A2
The proposed project is a significant first step in evaluating the potential of CO_2 EOR for increased oil recovery from the Bakken. This technology is probably one of the most likely methods to significantly improve the productivity of this resource. It is important to assess the potential of EOR early in the development of this resource, before infill drilling especially, because it will likely require different well and facilities design. As stated previously, it is recommended to temper expectations about this study leading to "decision making" on CO_2 EOR viability. It will just be a first step, one that focuses on basic parameters at the laboratory and core level. A real home run will be if this project sets the stage for data gathering and field trials at the well and reservoir level.
Recommendation: Fund

Reviewer G-026-A3
Having the commitment of support from Bakken producers is notably good to show the value of the project and in the event of success of the project; today's investment will pay out more than its budget with the improved oil recovery in the Bakken. Even if the economic viability of CO_2 was not supported with the project, this would save so much time and investment for individual companies to do the same effort and would bring value to the industry for other possible innovative solutions.
Recommendation: Fund

Director's Recommendations:

Recommendation: To fund in the amount of $450,000