

Hydraulic Fracturing and Microseismic Monitoring Project –
Bakken Research Consortium
Contract No. G-015-028

This is a project submitted by Headington Oil Company, L.P. on behalf of Continental Resources, Inc., Hess Corporation and Schlumberger Oilfield Services. Project Duration is 14 months. Total Project Costs are \$14,000,000 with \$750,000 provided from the Oil and Gas Research Fund. The purpose of this project includes the drilling of three parallel horizontal wells (two producing wells and one monitoring well) into the middle member of the Bakken Formation within a single 640-acre spacing unit. The project is located in eastern Williams County on the eastern flank of the Nesson Anticline, and the proposed spacing unit is a State of North Dakota lease uncomplicated by mineral ownership issues, surface culture or land-use constraints. The key component of the project is a central horizontal monitoring well flanked by parallel horizontal producing wells that will be fracture stimulated by different methods. Fracture initiation points and directions of propagation will be monitored by microseismic methods through the employment of geophones in the monitoring well which should allow for seismic events (induced fractures) to be recorded along the entire lengths of the offsetting producing wells. Substantial geological, engineering, and geophysical data acquired by this project should allow for the better understanding of completion effectiveness and oil recovery in the Bakken Formation. This project also has the potential use as an EOR pilot project which may have implications for CO₂ sequestration studies. *The results from this project will be held confidential through December 31, 2008*