

**Improved Directional Drilling Technology for the Bakken Formation**  
**Contract No. G-017-037**

This is a project submitted by Laserlith Corporation. Project duration is 12 months. The total project costs are \$1,207,000 with \$200,000 provided from the Oil and Gas Research Fund. The purpose of the project is to redesign horizontal drilling tools by including the use of a miniature gyroscope in the drilling assemblage. In principle, miniature MEMS (Micro-Electro-Mechanical Systems) gyroscopes enable the directional sensor to be positioned next to the drill bit. The benefit is reduction of backtracking, more accurate navigation, and time-savings. The deliverable for the amount of funding that is being recommended would be resolution of the issue regarding temperature compatibility. The project reports are confidential.