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# **Development of Dual Field MFL Inspection Technology to Detect Mechanical Damage**

**Transaction Agreement No. DTPH56-06-000016**

Project No. 203

Quarterly Status and Progress Report

November 2006 though January 2007

## **Public Page**

The Pipeline Research Council International, Inc proposes to conduct research which will evaluate the capability of in-line inspection to detect and characterize mechanical damage defects. The primary objective of the research is to provide guidance to the pipeline industry regarding the use of ILI to prioritize excavation and repair of mechanical damage. The main scope is to evaluate the use of magnetic flux leakage technologies through the use of high and low magnetic fields. These evaluations will include runs in active pipelines and the excavation results from those indications.

The work proposed here will establish the capability of the dual magnetic field MFL technology to detect mechanical damage and discriminate between critical and benign anomalies. This project will entail building a dual magnetization MFL tool and testing in an operating pipeline.

The project team has selected a 30" tool design that will take advantage of current mechanical domain knowledge. The current plan is to have one inspection in a liquid line and a second inspection in a natural gas line.