Adaptation of MWM-Array and MFL Technology for Enhanced Detection/ Characterization of Damage from Inside Pipelines DTPH56-08-T-000009

PHMSA ACCOMPLISHMENTS

Pipeline and Hazardous Materials Safety Administration

Pipeline Safety Research and Development

Technology Development for Improved Corrosion Mitigation & Mechanical Damage Mapping

Project Abstract

JENTEK will adapt Meandering Winding Magnetometer (MWM)-Array technology and use JENTEK multi-variate inverse methods to deliver hybrid MWM-Array/MFL methods for ILI applications. For detection/sizing of internal/external corrosion, mechanical damage and SCC, with matching funds from Chevron, we will develop solutions for conventional pigs and platforms for unpiggable lines. We will also address concerns for pipelines with internal liners and coatings. Pigging platform providers will also provide matching funds.

PHMSA Funding: $ 633,943

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NET Improvement

This project adapted JENTEK's (MWM) Array and (MR) MWM Array for inspection and characterization of pipeline damage from inside the pipe using an in-line inspection or- JENTEK PIG-IT tool. Advancements were made in the sensor configuration, instrumentation layout, mechanical integration, and data processing algorithms.

US Patent under DOT Contract:
N/A

Commercial Partner

JENTEK Sensors, Inc.
http://jenteksensors.com

Courtesy of JENTEK Sensors, Inc.

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