

6th Quarterly Report – Public Page

Date of Report: February 28, 2015

Contract Number: DTPH56-13-T-000011

Prepared for: DOT Pipeline and Hazardous Material Safety Administration

Project Title: Above-Ground Detection Tools Including Disbondment and Metal Loss for all Metals Including Cast-Iron Graphitization

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For quarterly period ending: February 28, 2015

Results and Conclusions: The Field Tests commenced during March in the Chicago area. The first test was useful in determining the operating characteristics of the Spar sensors over a live piping system. GTI developed an in-house RTK correction facility that allowed better location accuracy and Spar-to-Spar time synchronization. Further testing was carried out on a 36” coated main during the July through November time frame. Excavation of the site was carried out during this reporting period and observed by GTI.

GTI has begun activities toward the construction of an in-ground facility for graphitized cast iron testing. A series of tests to characterize the cast iron samples and to calibrate the response of the Spar on these samples is first being carried out above ground. A small number of tests were carried out during this quarter; several improvements to the indoor test procedure have been identified. When these tests are completed, a technical review will be held to determine if carrying out the burial of the samples is warranted.

Plans for Future Activity: During the next quarter the following activities are planned:

- Complete the interim report on the testing of coated steel lines in Chicago
- Schedule field tests with the New York and Alabama utilities
- Completely characterize graphitized cast iron samples using BEM scanning
- Perform above ground testing of cast iron samples using Spar sensors
- Construct in-ground test strings to baseline Spar performance on graphitized cast iron
- Complete Initial Field Testing
- Continue monthly conference calls with the PHMSA representatives
- Write the next milestone, monthly, and quarterly reports.