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This project is based on ongoing efforts by GTI and EWI to improve field welding and coating practices. This combined expertise, data, and experience will be augmented by pipeline welding contractors, operators and coating manufacturer application partners.

During the eighth quarter of the project:

Analysis of the previously GTI/EWI created in-field girth welds has begun. The welds were created in Houston, Texas with industry cost share partners, CCSI and CRC-Evans. They were performed to evaluate hydrogen off-gassing effects on protective coatings. The completed and coated welds were then shipped to GTI where testing has begun to evaluate coating performance. Initial pull off adhesion tests were performed which were ineffective at evaluating the coating's adhesion strength. The tests did demonstrate that the coatings did not lose significant strength because of hydrogen off-gassing. To more accurately evaluate the adhesion of the coatings, cathodic disbondment testing was begun and will be completed by the end of the coming quarter.

Additionally, corrosion testing on the simulated girth welds has been completed. These weld samples were created to relate weld geometry to coating performance. They have been coated and sectioned to analyze the coating thickness on the weld area. They were then prepared and exposed to a salt fog accelerating corrosive environment. The exposure phase has been completed and the final analysis of the samples will be finished in the coming quarter.

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