TECHNICAL SUMMARY

The project was divided into two separate tasks. The first was an aboveground survey of several sections of pipeline which were planned for excavation and re-coating. Techniques employed included DCVG, ACVG, PCM, and C-Scan. Approximately 2 miles of pipe in five separate sections were surveyed. The second was a visual examination of two sites after excavation. The first site was a 128' section known to have wet, rocky soil. The second was two separate excavations 203' and 125' long, separated by ~500' of unexcavated line. The areas where defects were located by the aboveground techniques were examined, and the entire surface area of each excavated section was visually examined for other defects and holidays which may not have been detected by an aboveground survey.

Results

Figures 1-3 illustrate the results for the different field sites. In all cases, there were no false positive indications. Several defects were found near the top of the pipe which were likely created during the excavation process.

Figure 1: Representation of Site #1. The black patches are areas where defects were found visually. The gray patches are areas where surveys identified defects. The sizes of these patches are related to the size of the defects discovered and/or predicted.

Figure 2: Representation of Site #2, location #1. The black patches are areas where defects were found visually. The gray patches are areas where surveys identified defects. The sizes of these patches are related to the size of the defects discovered and/or predicted.

Figure 3: Representation of Site #2, location #3. The black patches are areas where defects were found visually. The gray patches are areas where surveys identified defects. The sizes of these patches are related to the size of the defects discovered and/or predicted.