## **Close Interval Potential Survey**

Close Interval Potential Surveys are used to determine the effectiveness of the Cathodic Protection System by measuring the Pipe-To-Soil potentials along the pipeline between test stations. When practical, interrupted surveys are use to measure the IR-drop free, Instant Off, potentials. The primary steps taken when performing a Close Interval Survey are:

- 1. Pipe Locating
- 2. Potential Measurement
- 3. Clean Up

Our crews have over 20 years experience and include NACE Certified CP Technicians and Testers. We have performed CIP surveys on over 6,000 miles of pipelines throughout the United States. Our goals of quality, safety, and on time delivery are reflected in our work and performance.

## **Pipeline Locating**

Allied Corrosion Industry's (ACI) field survey specialists utilize only the most modern pipe locating equipment when locating the centerline and depth of a pipeline. This includes the use of locators that have the capability of using both null and peak response locating technology. ACI's modern locating equipment routinely includes locators that permit both conductive and inductive signal reception, and which also incorporates multiple frequency propagation. This equipment insures comprehensively coverage of the entire spectrum of locating frequencies and their different associated responses. This permits ACI's engineers to accurately interpret the locator's responses prior to any excavation activities to insure excavation dollars are not wasted needlessly. The locating equipment responses are routinely stored in data logging storage devices, which includes the exact GPS location of the data being stored. This capability allows ACI's engineering staff to properly analyze the data and to return back to a location if additional investigation is required. ACI is dedicated to providing the most accurate information possible to their pipeline clients. ACI makes every decision with the main thought process of optimizing the client's budget dollars so that wasteful spending is eliminated.

## **Potential Measurement**

Allied Corrosion Industry's (ACI) field proven pipeline Direct Assessment (DA) specialists are fully trained and "Operator Qualified" in the technology of taking and efficiently recording "Close Interval Survey" (CIS) pipeline potential data. Some of the typical CIS data sets that ACI routinely collects are native (un-polarized) potentials, polarized "on" potentials, and instant "off" IR-drop free potentials. The potential data sets are tagged with sub-meter accurate GPS locations, along with major surface physical attributes, which are encountered along the pipeline route, i.e. roads, creeks, fences, power lines, etc. When rectifiers are to be interrupted, ACI's survey team can accommodate any timing specification that the pipeline owner may require. ACI is also well versed in handling *telluric current* interference that typically affects the accuracy of CIS potentials. ACI owns all the major potential data management software programs. This allows ACI to furnish potential data sets that can be directly imported into the customer's data base, thus eliminating the requirement of manually entry of data. Consequently, when accurate potential data is a primary consideration that can be easily imported into the customer's data base, ACI's CIS services are the first choice of the pipeline owner/operator.

## **Clean Up**

Allied Corrosion Industries' (ACI) personnel embrace the strategy that the job is not finished until the ROW is free of all survey materials. This includes the removal of all making flags, survey wire, crew trash, and/or any other materials used during the survey. ACI takes pride in ensuring that the ROW is left in a cleaner state than before the survey was initiated.