

Cathodic Protection Services

ENGINEERING, CONSTRUCTION, MAINTENANCE & INDIRECT INSPECTION



**A HIGHER LEVEL
OF RELIABILITY®**



Cathodic Protection Services

Acuren's Cathodic Protection is part of our Pipeline Integrity Program that supports our Midstream Integrated Integrity Solutions. The Pipeline Integrity full-service program incorporates the best in Cathodic protection while leveraging support from our other pipeline solutions. Acuren's proven capabilities and readily available resources creates synergies to reduce client costs.

- Efficient designs that lead to reduced long-term operating costs
- Material selection
- Installations that are sourced locally to maximize cost savings
- Annual surveys with an engineering approach geared to lowering costs
- Monitoring
- Ongoing maintenance
- Data management that is digitally captured to reduce reporting time

ENGINEERING & CONSTRUCTION

- Manage all aspects of the construction of cathodic protection systems including:
 - ◊ System design
 - ◊ Material selection
 - ◊ Pre-job one calls and ground disturbance notifications
 - ◊ Coordination of any required subcontractors
 - ◊ Installation and commissioning
- AC mitigation
- A full report and as-built drawings of all installations is provided within 30 days of project completion
- Commission newly installed cathodic protection systems immediately following construction or connections of new pipelines into existing cathodic protection systems
- Turn-key direct assessment programs
 - ◊ Pre-assessment – review of current and historical data, determine feasibility, tool selection, define regions
 - ◊ Indirect Survey services
 - ◊ Direct Examination / exploratory digs evaluation
 - ◊ Post-assessment – root cause analysis, mitigation determination, severity ranking, reassessment interval, remaining life calculations

MONITORING & MAINTENANCE

- Annual compliance surveys, traditional or RMU method
- Ongoing maintenance and remedial repairs
- Remote monitoring installation and management
- Data management

INDIRECT / OVER-THE-LINE INSPECTION

- Direct Assessment Programs
- Depth of cover
- Close Interval Potential Survey (CIPS)
- ACVG / DCVG Survey
- Soil resistivity measurements
- Right of way status and points of interest
- Current attenuation

WHY ACUREN?

- Digital Data Capture
- Field crews create final report – eliminates mistakes and allows for firsthand knowledge to be utilized in the report
- Data is fully reviewed by QA personnel to engineering standards with enhanced productivity tools
- Reduced landowner impact – faster data acquisition, and less signal drops, results in reduced impact and risk to landowners



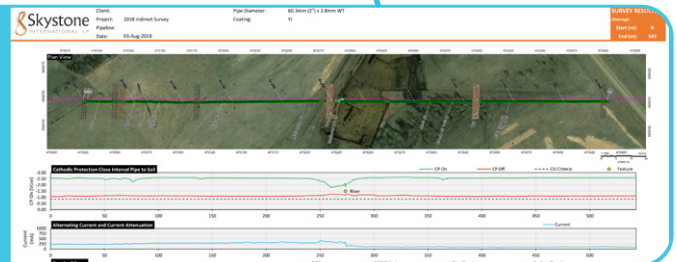


One System, One Data File, Maximum Productivity



CSV file can be uploaded directly into customer's system – no proprietary software required.

Hawkeye is a reliable and robust over-the-line survey solution that acquires, and compiles, data from a variety of testing methods through a single scan, into a consolidated report and output data set utilizing GPS to align results.



SIMULTANEOUS DATA ACQUIRED BY HAWKEYE

Standard services included:

- GIS / GPS Decimeter Location
- Depth of Cover
- Current Attenuation
- Right of way status and points of interest

Additional services available:

- Close Interval Potential Survey (CIPS)
- Alternating Current Voltage Gradient (ACVG)
- Direct Current Voltage Gradient (DCVG)

HAWKEYE SYSTEM FEATURES

- Utilization of three constellations to minimize signal drops
- Digital signal processing filters remove noise and separates signals without having to add external filters
- Analysis algorithm uses the entire collected waveform
- Data overlaid on Google Earth along with legal land description
- GIS compatible – uploadable into owner systems
- Data stored on hard drive in the field – less risk of data loss

WHY HAWKEYE?

- **Beyond max/min** – unlike other systems which just measure max and min, Hawkeye utilizes high speed (up to 200 Khz) digitizing with complete waveform analysis for all data streams
- **Precision** – utilizes sub-decimeter (3-5 cm) GPS positioning for improved accuracy
- **Stability** – system can operate on wifi or bluetooth connections for better stability
- **Robust reporting** – utilizes satellite imagery rather than schematics and can be overlaid with Google Earth and legal land description
- **No proprietary encrypted software** – raw data available in a transparent .csv file
- **Data management** – owners can upload, manage and utilize the data within their own systems

BEYOND INSPECTION



Engineered approach to
CP allows for estimated
20-40% cost savings



VIEW OUR BROCHURES



CONTACT OUR CATHODIC PROTECTION EXPERTS TODAY

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