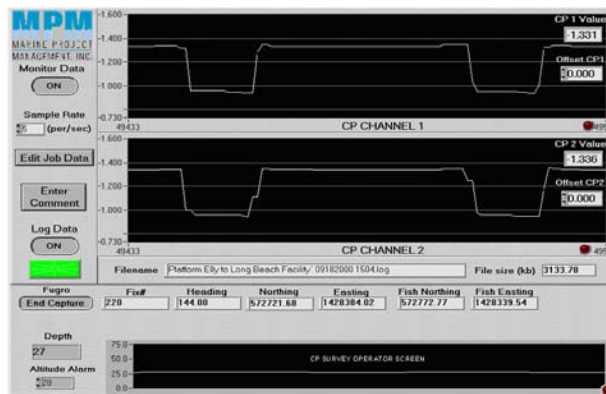




## CATHODIC PROTECTION SURVEY SYSTEM (CPSS)



MPM's CPSS is a windows-based software package integrated with specialized hardware which is primarily utilized for underwater pipeline, outfall, or platform cathodic protection surveys. The system is ideally suited for close interval underwater potential surveys configured either as a towed fish, or interfaced with a remotely operated vehicle (ROV). The CPSS acquires real time cathodic protection level data from two CP channels with  $\pm 5$  mV accuracy, and real time tow fish or ROV X/Y/Z coordinates from an integrated surface/subsurface navigation package. The system has been utilized to successfully survey in excess of 5,000 miles of underwater pipeline in the towed fish configuration, and in excess of 3,000 miles of pipeline in the ROV configuration and has features as follows:

- § The towed fish configuration is highly cost effective as surveys can be performed to water depths to (-) 500-feet, at speeds of up to 5.5-knots. CP data is collected at a minimum of every 1.9-feet along the pipeline assuming a survey speed of 5.5-knots and a sample rate of 5-samples per second.
- § The ROV configuration is adaptable to any midsized or larger ROV utilizing either spare conductors within the ROV's umbilical (TSP), or an existing RS 422 or RS 485 interface (fiber or copper). In this configuration CPSS records the data digitally and outputs the CP data via video overlay onto the ROV's video recording.

Complete survey project management, planning, execution, and reporting from one qualified supplier/contractor.