

## **Unmanned Eclipse MWD - Case Study**

## The Challenge

A leading oil and gas exploration and production company,requested Black Diamond to deliver an unmanned MWD solution for their well in Garden City, Kansas, with no dedicated personnel on site.

## The Solution

Black Diamond deployed the Eclipse MWD system, designed for unmanned operations. The system was run by the Company Man and Driller after minimal training.

## The Results

The Eclipse MWD tools were set up and configured for the specific operational requirements and then loaded into their dedicated collars at the workshop. The tools were then set to "sleep" and transported to the rigsite.

The tools were picked up and run by the Company Man and Driller at the rig site, with the Eclipse MWD Wired Spearpoint proving a simple interface allowing communication with the tools on surface.

The Eclipse System then provided flawless performance, transmitting high accuracy, high speed directional data throughout the operation. The highly intuitive Eclipse Touch Surface System enabled the Company Man and Driller to take surveys on every connection in accordance with state regulations.

Black Diamond monitored the operation from its Remote Operations Center where dedicated experts provide 24-hour support and guidance.

The entire operation was run with no MWD personnel on-site, delivering real cost savings to the operator.

The operation was a resounding success, with the customer very pleased with the results achieved using the Eclipse system. The cost savings of an unmanned operation, together with the ease of use, minimal rig time during pick-up, and high accuracy data deliverables proved the value of the Eclipse system and its market-leading potential as a truly unmanned system.

Operational Data			
	Collar Size	Footage	Drilling Hours
Run 1	8.0"	1757	13.8
Run 2	6.5"	4463	42.7

Black Diamond is a leading provider of energy services, with a team of experts dedicated to delivering the best possible outcomes for our clients. Our product offering includes drill pipe, drilling tools, MWD technology, and accompanying services, and we are committed to ensuring our clients' success in every project we undertake.

The Eclipse system marks a new generation of MWD performance and ease of use. Eclipse reinvents how MWD tools can work with - and without - field operators. The toolstring arrives at the wellsite collar loaded and BHA ready with no wellsite assembly. The system can be configured as either Mud Pulse, EM, or Dual Telemetry making it ready for any formation. Eclipse includes industry leading sensors and mechanical architecture to offer Survey, Drilling Dynamics, Gamma Ray, and Azimuthal Gamma on every run.

