

# Centerfire LWD Maintenance Training

This course comprehensively covers all the procedures and considerations required when maintaining the Centerfire LWD system. Drawing on the experience of the global Black Diamond support team, it assures best practice while completing a comprehensive mechanical and electrical evaluation of the system. The course is continually updated to reflect improvements to both the system and its maintenance procedures. Designed primarily for maintenance technicians, the course also benefits anyone who requires a working knowledge of the maintenance requirements of the system.

## Features and Benefits

### Comprehensive

The 3-day course covers all aspects of the maintenance of the Centerfire Resistivity and Gamma Ray system, including:

- Centerfire collar inspection
- Centerfire collar maintenance
- Centerfire Pulser maintenance
- Data verification
- Memory function verification
- Complete system function test
- Air hang calibration
- Gamma calibration verification

Aligned with all current support systems and documentation, the course delivers the most up-to-date techniques and information. Continual assessment through short written tests and practical exercises ensures all areas of the system maintenance are fully understood.

### Integrated

The course is a constituent module within the Black Diamond Centerfire LWD Maintenance Training Program. This program delivers a defined progression of e-learning, traditional teaching and on-the-job training offerings designed to support the continued development of those involved with the maintenance of the Centerfire LWD system.

### Practical

By moving much of the theory of measurement and operation to prerequisite e-learning, this course is able to maximize practical, hands-on training. Led by experienced trainers, the course delivers the opportunity for extensive practice with all current maintenance procedures and techniques.

### Accessible

Courses are held either in the Black Diamond training center or at the customer base. Central management of the training program ensures quality of content and delivery independent of course location.

### Personalized

Identifying that customers use the Centerfire system in a variety of operations and in a range of configurations, Black Diamond can draw on its broad range of operational experience to tailor training courses that match customer operations.

## Black Diamond MWD & LWD Training Programs

Introductory	Introduction to MWD E-Learning		Introduction to Drilling E-Learning	
Core	Tensor MWD	Tensor MWD E-Learning	Operations Practical (3 Days)	Rigsite OJT
			Maintenance Practical (3 Days)	Workshop OJT
	Centerfire LWD	Resistivity E-Learning Centerfire LWD E-Learning	Operations Practical (2 Days)	Rigsite OJT
			Maintenance Practical (3 Days)	Workshop OJT
Advanced	Failure Analysis E-Learning		Directional Drilling & Surveying E-Learning	
	Drilling Dynamics E-Learning		Advanced Magnetic Surveying E-Learning	