

# Resistivity Principles E-Learning

The Resistivity Principles E-Learning module provides a thorough introduction to the use of resistivity measurements in the field of formation evaluation. The course presents the operational theory of the entire suite of resistivity tools and builds the ability to perform basic log analysis on their responses. This training module is intended for all who will have any involvement in the operation, maintenance or support of the resistivity tools offered by Black Diamond.

## Features and Benefits

### Comprehensive

Working from basic resistivity principles through to advanced analysis of environmental effects on log response, the course is designed to not only develop knowledge in those with little experience in the field, but to also benefit those with a functional knowledge of the discipline. The course delivers a comprehensive introduction to resistivity logging with topics including:

- The borehole environment
- Controls on resistivity
- Uses of resistivity logs
- Induction resistivity
- Propagation resistivity
- DC Tools – Laterologs
- Log analysis
- Environmental effects on resistivity logs

### Integrated

The course, although beneficial as a stand-alone unit, forms an integral module within the Centerfire LWD Operations and Centerfire LWD Maintenance Training Programs. These programs deliver 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 operation, maintenance or technical support of the Black Diamond Centerfire systems.

### Flexible Delivery

The course is delivered on-line and is divided into 6 sections, each of which should take no longer than an hour to complete. This allows the material to be completed at a place, time and pace to suit all. Understanding is assured by way of on-line tests that highlight areas which require review. Material can be reviewed as often as is required to ensure total understanding.

Courses are administered through the Black Diamond Technical Support Portal.

### Target Audience

The course benefits anyone who has any contact with resistivity systems. Essential for operations engineers and maintenance technicians who must assess the quality of resistivity measurements, it is also of great benefit to anyone involved in the support of resistivity operations.

### Cost Effective

When delivered as a prerequisite to a Practical course the e-learning is free to all attendees.

As a stand-alone training module the e-learning is extremely competitive when compared to attendance at traditional theoretical seminars.

## Black Diamond MWD & LWD Training Programs

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