# Integrating Teams on the Rocks of the Wessex Basin, Dorset, UK (G056)

## Tutor(s)

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## Overview

Proper integration of teams and disciplines is increasingly important in the modern energy industry. Ensuring all staff, technical, managerial and non-technical, understand the roles, concepts and language used by various disciplines as well as their requirements for data is critical for cooperation, collaboration and business success. This short course uses field observations and discussion at outcrops within the Wessex Basin to facilitate a deeper understanding of others' roles as well as providing a refresher/reminder of the fundamental importance of rocks and the data they can provide to energy provision. The Wessex Basin provides a classic example of a working petroleum system with easily accessible outcrops to illustrate source rocks, reservoirs and trapping structures. In addition, the area also provides insights into new energy and carbon reduction methods that rely on a solid understanding of the subsurface.

## Duration and Logistics

A 2-day field course in Dorset. For in-house provision the course can be extended or shortened depending on a company's requirements.

## Exertion Level

This class requires an **EASY** exertion level. Hikes are generally 1-2 km in length, on sandy and rocky beaches, coastal paths and with some irregular terrain.

## Level and Audience

**Fundamental**. The level of the trip however, can be tailored to cater for the target audience: subsurface teams, integrated project teams or raising awareness for a generalist audience.

## Objectives

Your team will learn to:

1. Appreciate what elements are required for a working Petroleum System.
2. Identify source rocks, how they form and what makes a good source rock.
3. Compare different reservoir rocks, including sandstones and chalk, to work out how they were deposited and what controls the key reservoir properties of porosity and permeability at different scales.
4. Understand what different types of subsurface data measure and what scale of information they provide e.g. seismic, well logs, core, well tests, production tests.
5. Describe different seals both above and within the reservoir intervals.
6. Understand the Petroleum Geology of the Wessex Basin including the giant Wytch Farm oilfield.

## Course Content

### Course Details

This two-day trip will illustrate the petroleum geology of the Wessex Basin using the outcrops of the Jurassic Coast of Devon and Dorset.  We will see source rocks, reservoirs, caprocks and different trapping structures and also have chance to find some fossils.

The trip can be run starting and finishing in Exeter or as a “one way” trip from Poole to Exeter (or vice versa) with an overnight stay in Lyme Regis or Bridport.

Teams may want to spend a night in a hotel (Poole or Exeter) before Day 1 and/or to add a day before or after the trip for work-related off-site meetings or other team-building activities.

### Day 1: Arrive in Dorset/Devon

Classroom:

- Course introduction and safety briefing

Fieldwork:

- Kimmeridge Clay (source rock and seal) – Kimmeridge Bay
- Chalk and Greensand (reservoirs and structures) – Lulworth Cove
- Bencliff Grit (reservoir and carrier bed/seep) – Osmington Mills
- Bridport Sands (reservoir)

*Overnight in Exeter.*

### Day 2: Fieldwork in Dorset/Devon

Fieldwork:

- Exmouth Sandstone (reservoir, faults and seals) – Orcombe Point
- Otter Sandstone (reservoir and seals) – Ladram Bay
- Blue Lias (source rock and fossils) – Lyme Regis
- Visit to Wytch Farm (gathering station viewpoint and Godlingston viewpoint)