

# WELL TESTING

INSTITUTE FOR PROFESSIONAL AND EXECUTIVE DEVELOPMENT

United Kingdom

### UNIT SPECIFICATION

www.iped-uk.com



#### **Unit Title**

Well testing

#### **Credit value**

The credit value for this unit is 30

30 credits equivalent to 300 hours of teaching and learning (10 hours is equivalent to 1 credit)

Guided learning hours (GLH) = 50 hours GLH includes lectures, tutorials and supervised study. This may vary to suit the needs and requirements of the learner and/or the approved centre of study. Directed learning = 50 hours: This includes advance reading and preparation, group study, and undertaking research tasks. Self-managed learning = 200 hours: This includes completing assignments and working through the core and additional reading texts. It also includes personal research reading via other physical and/or electronic resources.



Learning outcome	Assessment criteria
Learner will:	Learner can:
1.0 Understand the rationale behind well testing	1.1 Explain the meaning of well testing
	1.2 Evaluate the significance of testing a well
2.0 Understand how essential well tests/logs are conducted/made and evaluate their respective significance	<ul> <li>2.1 Examine how the following tests/logs are conducted/made and evaluate their respective functions</li> <li>2.1.1 Lithologic logs</li> <li>2.1.2 Drilling time logs</li> <li>2.1.3 Mud logs</li> <li>2.1.4 Wireline well logs</li> <li>2.1.5 Induction and guard logs</li> <li>2.1.6 Natural gamma ray logs</li> </ul>
	<ul> <li>2.1.7 Radioactive logs (neutron porosity log, formation density or gamma-gamma log)</li> <li>2.1.8 Caliper logs</li> <li>2.1.9 Sonic or acoustic velocity logs</li> </ul>
	2.1.10 Dip logs
	2.1.11 Nuclear magnetic resonance logs
	2.1.12 Wellbore imaging log
	2.1.13 Drillstem test
	2.1.14 Repeat formation tester
3.0 Understand safety issues and procedures in well testing	3.1 Evaluate recommended safety practices that must be followed in well testing
	3.2 Examine safety measures that must be taken with respect to:
	<ul> <li>Breathing apparatus</li> </ul>



<ul> <li>Use and storage of explosives</li> </ul>
<ul> <li>Fire fighting equipment</li> </ul>
<ul> <li>High visibility/daylight working</li> </ul>
<ul> <li>Hazard and Operability Studies (HAZOPS)</li> </ul>
<ul> <li>Certification, service testing and safety review</li> </ul>
3.3 Examine the health hazards associated with exposure to excessive
amounts of hydrogen sulphide
3.4 Analyse the precautions that can be taken against exposure to
hydrogen sulphide



## Recommended learning resources

Indicative reading	Hydrocarbon exploration and production by Graham et al (2008). ISBN: 978-0444532367
	• For a full list of textbooks and publications relevant to this unit, please contact IPED - UK.
Learning Aid	A learning resource material is provided to guide the learner/tutor and to serve as a quick reference point for contents of the programme. The student is advised not to be over reliant on the study guide but to access the relevant textbooks or other academic materials as much as possible to help him/her with the course.

