

# **Qualification Specification**

ProQual Level 2 Award in Introduction to Well Control and Equipment for Oil and Gas

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### Introduction

The Level 2 Award in Introduction to Well Control and Equipment for Oil and Gas is an introductory award aimed at those working in the oil, gas and associated industries.

The Regulated Qualifications Framework (RQF) is the single framework for regulated qualifications, the regulatory body for this qualification is the Office of Qualifications and Examinations Regulation (Ofqual). This qualification is accredited onto the RQF.

### **Entry Requirements**

There are no formal entry requirements for this qualification. Centres should carry out an **initial assessment** of candidate skills and knowledge to identify any gaps and help plan the assessment.

### **Qualification Profile**

Qualification title ProQual Level 2 Award in an Introduction to Well Control

and Equipment for Oil and Gas

Ofqual qualification number 610/1046/7

Level 2

Total Qualification Time 50 hours (50 GLH)

Pass or fail

Assessment Internally assessed and verified by centre staff

External quality assurance by ProQual verifiers

Qualification start date 20/6/2022

Qualification end date

#### **Qualification Structure**

Candidates must complete 1 Mandatory unit:

D/650/2915 Introduction to Well Control and Equipment for Oil and Gas

### **Centre Requirements**

Centres must be approved to offer this qualification. If your centre is not approved please complete and submit form **ProQual Additional Qualification Approval Application**.

#### Staff

Staff delivering this qualification must be appropriately qualified and occupationally competent.

#### **Assessors/Internal Quality Assurance**

For each competence-based unit centres must be able to provide at least one assessor and one internal quality assurance verifier who are suitably qualified for the specific occupational area. Assessors and internal quality assurance verifiers for competence-based units or qualifications will normally need to hold appropriate assessor or quality assurance verifier qualifications, such as:

- ProQual Level 3 Certificate in Teaching, Training and Assessing
- Award in Assessing Competence in the Work Environment
- Award in Assessing Vocationally Related Achievement
- Certificate in Assessing Vocational Achievement
- Award in the Internal Quality Assurance of Assessment Processes and Practices
- Certificate in Leading the Internal Quality Assurance of Assessment Processes and Practices

## **Support for Candidates**

Materials produced by centres to support candidates should:

- enable them to track their achievements as they progress through the learning outcomes and assessment criteria;
- provide information on where ProQual's policies and procedures can be viewed;
- provide a means of enabling Internal and External Quality Assurance staff to authenticate evidence

### **Assessment**

Candidates must demonstrate the level of knowledge and competence described in the unit. Assessment is the process of measuring a candidate's knowledge and understanding against the standards set in the qualification.

Each candidate is required to produce evidence which demonstrates their achievement of all of the learning outcomes and assessment criteria for each unit.

Evidence can include: - assignments/projects/reports

- worksheets

- portfolio of evidence

record of oral and/or written questioning

**Learning outcomes** set out what a candidate is expected to know, understand or be able to do.

**Assessment criteria** specify the standard a candidate must meet to show the learning outcome has been achieved.

Learning outcomes and assessment criteria for this qualification can be found from page 7 onwards.

### **Internal Quality Assurance**

An internal quality assurance verifier confirms that assessment decisions made in centres are made by competent and qualified assessors, that they are the result of sound and fair assessment practice and that they are recorded accurately and appropriately.

## **Adjustments to Assessment**

Adjustments to standard assessment arrangements are made on the individual needs of candidates. ProQual's Reasonable Adjustments Policy and Special Consideration Policy sets out the steps to follow when implementing reasonable adjustments and special considerations and the service that ProQual provides for some of these arrangements.

Centres should contact ProQual for further information or queries about the contents of the policy.

### **Results Enquiries and Appeals**

All enquiries relating to assessment or other decisions should be dealt with by centres, with reference to ProQual's Enquiries and Appeals Procedures.

# Certification

Candidates who demonstrate achievement of the qualification will be awarded a certificate giving the full qualification title -

ProQual Level 2 Award in Introduction to Well Control and Equipment for Oil and Gas

#### **Claiming certificates**

Centres may claim certificates for candidates who have been registered with ProQual and who have successfully achieved the required number of credits for a qualification. All certificates will be issued to the centre for successful candidates.

#### **Replacement certificates**

If a replacement certificate is required a request must be made to ProQual in writing. Replacement certificates are labelled as such and are only provided when the claim has been authenticated. Refer to the Fee Schedule for details of charges for replacement certificates.

### **Learning Outcomes and Assessment Criteria**

#### Unit D/650/2915

#### Introduction to Well Control and Equipment for Oil and Gas

Learning Outcome: The learner will:

1 Understand the origin, history and significance of oil and gas. Assessment Criterion: The Learner can:

- 1.1 Explain the science of Geology and its importance to the petroleum industry
- 1.2 Explain the different classes of rocks in terms of:
  - How they are formed
  - Their composition and
  - Their importance to hydrocarbon exploration
- 1.3 Explain the formation and storage of hydrocarbon with rock formations
- 1.4 Describe hydrocarbon exploration processes and their importance to the petroleum industry
- 2 Understand the basic principles and procedures for drilling, completions and workover of a well.
- 2.1 Explain the importance of drilling and workover reports to drilling, exploration and well intervention operations
- 2.2 Outline strategies for completion and workover exercises
- 2.3 Describe management procedures for open-hole and cased well as part of reservoir management
- 2.4 State the basic considerations and completion principles for:
  - Subsea wells
  - High Pressure, High Temperature (HPHT) wells and
  - Unconventional wells
- 2.5 Describe common well intervention techniques including wireline, coiled tubing and workover.
- 3.1 Explain preventive well control stating different measure that can be deployed
- 3.2 Highlight measurement techniques for well control parameters and the appropriate responses to specified observations
- 3.3 State the classes and types of well control equipment and describe procedures and techniques for their safe operation and application
- 3.4 Describe the most common deficiencies often present in well control systems
- 4 Be introduced to well control procedures and equipment including types of BOPs.

Understand the

fundamental principles of

maintaining well control

and the requisite well

control equipment.

- 4.1 Describe the following drill through equipment and diverter systems highlighting their major characteristics
  - Ram blowout preventer
  - Annular blowout preventer
- 4.2 Describe the characteristics of non-drill through equipment including
  - Choke and kill manifold
  - BOP gate valves
  - BOP Control systems

- 4.3 Explain the application of Inside Blowout Preventer (IBOP)s and drill string values.
- 4.4 Describe maintenance procedure for HPHT equipment
- 4.5 Describe the inspection and testing requirements and methods for
  - Blowout preventers (BOPs)
  - Choke and kill manifold
  - BOP torque tools.
- 4.6 Explain the mathematics of well control operations including accumulator calculations
- 5.1 Explain the term "well intervention" and its significance to the productive life of wells
- 5.2 Explain the variable nature of well intervention
- 5.3 List and describe the equipment requirement and operational concepts for coiled tubing and hydraulic workover units
- 5.4 Highlight the well control barrier classification for different types of well intervention methods
- 5.5 Describe procedure and mechanisms for a slick wireline operation
- 5.6 List and describe the commonly used downhole wireline equipment and tools
- 5.7 State surface wireline equipment requirements
- 5.8 Describe well pressure control and associated safety issues
- 5.9 Describe procedures and equipment required for wireline, coiled tubing and workover.
- 6 Understand possible issues associated with well integrity

5

Understand well

of workovers and

completion design to

intervention and the impact

maximizing field production

- 6.1 Explain the impact of early interaction and collaboration amongst project stakeholders on
  - Operational finances
  - Operational risks
  - Project safety
  - Project decommissioning
- 6.2 Describe well integrity implementation in accordance with relevant national and industry standards including ASI, ISO, ASTM, NORSOK D-010, IADC Manual etc.
- 6.3 State specific rules and procedures applicable for the prevention or mitigation of resulting effects of a well integrity event
- 6.4 Highlight roles and responsibilities of relevant personnel for well integrity
- 6.5 Highlight relevant personnel and their responsibilities towards the protection of well integrity
- 6.6 State the requirements for designing, operating and maintaining well equipment required for the safe containment of all wellbore fluids

### **Assessment**

There must be valid, authentic and sufficient for all the assessment criteria. However, one piece of evidence may be used to meet the requirements of more than one learning outcome or assessment criterion.



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