



Australian Government

RIIOGD204E Perform rig floor operations

Release: 1

RIIOGD204E Perform rig floor operations

Modification History

Release	Comment
1	This unit replaces RIIOGD204D Perform rig floor operations. Substantial amendments to performance criteria. Performance and knowledge evidence amended. Added mapping table.

Application

This unit describes a participant's skills and knowledge required to perform rig floor operations in drilling.

This unit is appropriate for those working in assistant roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and industry sectors. Relevant information must be sourced prior to application of the unit.

Unit Sector

Drilling

Elements and Performance Criteria

1. Plan and prepare equipment	1.1 Access, interpret and apply rig floor operations documentation and ensure the work activity is compliant 1.2 Obtain, read, interpret, clarify and confirm work requirements 1.3 Identify and address potential risks, hazards and environmental issues and implement control measures 1.4 Select the personal protective equipment appropriate for the work activity 1.5 Conform to safe working practices and current legislative and operational requirements 1.6 Resolve coordination requirements with others at the site prior to commencing and during work activities 1.7 Confirm availability of required quantities and type of consumables 1.8 Identify errors, omissions and shortages and take appropriate
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	remedial action within functional responsibility
2. Select handling equipment	2.1 Identify and select equipment appropriate for the work to be performed and conforming to operational requirements 2.2 Confirm equipment is functional and fit for the purpose and the environment in which it will be used 2.3 Identify faults in the equipment and take appropriate remedial action taken within functional responsibility
3. Handle tubulars and equipment	3.1 Position tubulars and equipment according to operational requirements 3.2 Make and break connections safely 3.3 Identify faults and defects accurately and take appropriate remedial action within functional responsibility 3.4 Handle equipment using safe lifting and handling techniques 3.5 Record data accurately at appropriate times and frequencies
4. Prepare and run drill	4.1 Obtain and wear personal protective equipment, appropriate to task 4.2 Measure and record all down hole tools and pipe to assist driller 4.3 Convey pipe and tools to drill floor with protectors fitted and in accordance with company safety operating procedures 4.4 Check make-up/break-out equipment and slip dies for cleanliness and sharpness and secure 4.5 Inspect, service and operate manual slips correctly 4.6 Operate make-up and break-out equipment correctly 4.7 Move drill floor drilling tools and equipment in accordance with operating procedures 4.8 Apply correct manual handling techniques 4.9 Conduct thread cleaning, inspection and lubrication safely 4.10 Make up drill string, applying correct use of make-up/break-out and lifting equipment
5. Prepare, run and cement casing	5.1 Prepare casing in accordance with rig operating procedures 5.2 Prepare shoe joints in accordance with company and manufacturer's requirements 5.3 Prepare well heads/casing hangers 5.4 Prepare running tools and cementing equipment 5.5 Check lifting appliances, identify and report faults

	5.6 Check and prepare handling equipment 5.7 Prepare casing centralisers correctly 5.8 Prepare and install guide frames if applicable 5.9 Prepare appropriate well control equipment and mitigation control equipment in accordance with site requirements 5.10 Run casing in correct sequence 5.11 Fill casing safely 5.12 Connect appropriate cement line as per company procedure 5.13 Carry out cementing duties while mixing 5.14 Assist as directed in preparing, running and cementing of cementing casings
6. Run cement stinger assembly (non-standard)	6.1 Land casing at appropriate joint 6.2 Assisting running cement string inside casing as per rig specific operating procedure
7. Assist in preparation and running of blow out prevention (BOP) stack, riser and diverter package	7.1 Prepare running BOP equipment in accordance with rig operating procedures 7.2 Position BOP over the wellhead using the appropriate system 7.3 Assemble and check riser running equipment 7.4 Assemble and check appropriate pressure testing equipment 7.5 Assemble and check appropriate handling equipment
8. Examine and service drill floor equipment	8.1 Read, interpret and apply lubrication schedules 8.2 Carry out lubrication in accordance with company and manufacturer's requirements 8.3 Identify and use correct types and quantities of lubricants for applications 8.4 Check equipment such as drawworks, rotary table/head, swivel, all valves, including standpipe and choke and kill valves, wirelines and hoists and identify, report and rectify faults as appropriate
9. Maintain a high standard of rig husbandry	9.1 Maintain drill floor and equipment to company standard 9.2 Keep tools and portable equipment clean, well maintained and correctly stowed 9.3 Seal and stow flammable substances according to manufacturer's and statutory requirements 9.4 Keep covers and gratings in place, except when in use 9.5 Maintain make-up/break-out equipment, slips and dies in a

	clean and sharp condition
	9.6 Maintain non skid surfaces clean and free from oil and grease

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit. Further information is available in the Resources and Infrastructure Industry Training Package Companion Volume.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
RIIOGD204E Perform rig floor operations	RIIOGD204D Perform rig floor operations	Substantial performance criteria amendments. Performance and knowledge evidence amended	Not equivalent

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>

Assessment Requirements for RIIOGD204E Perform rig floor operations

Modification History

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Performance Evidence

Evidence is required to be collected that demonstrates a candidate's competency in this unit. Evidence must be relevant to the roles within this sector's work operations and satisfy all of the requirements of the performance criteria of this unit and include evidence that the candidate:

- competently completes all evidence activities with the ability to transfer and apply skills and knowledge to new situations and environments on more than one (1) occasion
- locates and applies applicable legislation, documentation, policies and procedures
- implements the requirements, procedures and techniques for the safe, effective and efficient completion of performing rig floor operations including:
 - safe handling of tubulars and associated equipment
 - preparation of the casing
 - preparation and operation of the drill string
 - preparation and position of the BOP over wellhead
 - preparation of well control and mitigation equipment
 - using the correct sequence and operation of equipment
 - reading, interpreting and recording in writing all measurements and data required for rig operations
 - identifying the patterns and positions of the sheaves cable and its hanging points
- works effectively with others to undertake and complete the performance of rig floor operations that meets all the required outcomes including:
 - organising work activities to meet all task requirements
 - communicating clearly and concisely with others to receive and clarify work instructions
- demonstrates completion of performing rig floor operations that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - assists in preparing, running and cementing of casing
 - prepares and operates pipe handling equipment

Knowledge Evidence

The candidate must demonstrate knowledge in of the following when performing rig floor operations:

- organisation and site requirements and procedures for:
 - rig maintenance, safety and emergency procedures
 - company and statutory safety guidelines, procedures and practices
 - equipment safe operating procedures
 - equipment condition and reporting mechanisms
- the function of the triangular mark stamped just above the casing
- what steps are taken if the well kicks whilst running casing
- lubrication techniques and their application
- normal drilling operations
- non-routine drilling operations
- conversion between metric and imperial
- a range of numerical calculations and measurements including:
 - length
 - quantities
 - volumes
 - conversion rates

Assessment Conditions

- Assessors must satisfy the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory competency requirements for assessors; and industry regulations for certification and licensing; and,
- this unit must be assessed in the context of this sector's work environment; and,
- this unit must be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- assessment may be conducted in conjunction with the assessment of other units of competency; and,
- assessment must confirm consistent performance can be applied in a range of relevant workplace circumstances; and,
- assessors must demonstrate the performance evidence, and knowledge evidence as outlined in this unit of competency, and through the minimum years of current* work experience specified below in an industry sector relevant to the outcomes of the unit; or,
- where the assessor does not meet experience requirements a co-assessment or partnership arrangement must exist between the qualified assessor and an industry subject matter expert. The industry subject matter expert should hold the unit being assessed (or an equivalent unit) and/or demonstrate equivalence of skills and knowledge at the unit level. An industry technical expert must also demonstrate skills and knowledge from the minimum years of current work experience specified below in the industry sector, including time spent in roles related to the unit being assessed; and,

- assessor and industry subject matter expert requirements differ depending on the Australian Qualifications Framework Level (AQF) of the qualification being assessed and/or industry sector as follows:

Industry sector	AQF** Level	Required assessor or industry subject matter expert experience
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Construction	1	1 Year
	2	2 Years
Drilling, Coal Mining and Extractive (Quarrying)	3-6	3 Years
Metalliferous Mining and Civil Construction	3-6	5 Years
Other sectors	Where this unit is being assessed outside of the Resources and Infrastructure Sectors, assessor and/or industry subject matter expert experience should be in-line with industry standards for the sector in which it is being assessed and, where no industry standard is specified, should comply with any relevant regulation.	

*Assessors can demonstrate current work experience through employment within industry in a role relevant to the outcomes of the unit; or, for external assessors this can be demonstrated through exposure to industry by conducting frequent site assessments across various locations.

**Where a unit is being delivered outside of a qualification the first numeric character in the unit code should be considered to indicate the AQF level.

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