



Australian Government

RIIOGD401D Rig up, conduct pre-spud operations and rig down

Release: 3

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Modification History

Release	Comment
1	This unit replaces RIIOGD401A Rig up, conduct pre-spud operations and rig down
2	Performance Criteria amended to make requirements more explicit.
3	Required frequency and volume of evidence amended in Performance evidence. Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm.

Application

This unit describes a participant's skills and knowledge required to apply rig up, conduct pre-spud operations and rig down in Drilling.

This unit is appropriate for those working in supervisory 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 rig up, conduct pre-spud operations and rig down	1.1 Access, interpret and apply rig up, conduct pre-spud operations and rig down documentation and ensure the work activity is compliant 1.2 Obtain, read, interpret, clarify and confirm work requirements 1.3 Identify, address and report potential hazards, risks and environmental issues and implement control measures 1.4 Select and wear personal protective equipment appropriate to the work activities 1.5 Resolve coordination requirements with others at the site prior to commencing, during, and on completion of work activities
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	1.6 Carry out pre rig-up procedure inspections (by rig manager, operator and crew) 1.7 Coordinate movement of load and sequence of installation and location 1.8 Check equipment for damage and/or loss by moving contractor and report and BI
2. Rig up to spud	2.1 Receive and action rig manager authorisation to commence rig-up to spud operations 2.2 Receive detailed verbal and written instructions on use and type of mud from the operator and distribute 2.3 Identify potential rig-up problems and take corrective action 2.4 Keep rig manager informed of operations
3. Prepare for drilling of surface hole/subsea hole	3.1 Check drilling and hoist equipment, report damage to rig manager and record 3.2 Conduct equipment checks for nipping-up or cross-checked with relevant procedures 3.3 Check handling equipment for correct sizing and if fit for purpose 3.4 Confirm availability of and inspect, clean, calibrate and record tubulars 3.5 Check well control equipment 3.6 Identify special tool requirements and check if fit for purpose and approved for use
4. Prepare for pre-spud operations	4.1 Lock pipe racks with drill pipe and position drill collars 4.2 Inspect casing running tools for safety and fitness-for-purpose and rectify and/or report faults and malfunctions 4.3 Record casing tallies and report
5. Conduct operations as per drilling program	5.1 Determine optimum circulating and penetration rates and check deviations are in accordance with operators drilling program 5.2 Continually check mud cleaning equipment and screens for integrity and correct operation 5.3 Check drilling fluid quantities with sufficient being in reserve to kill well and keep hole on full trip 5.4 Record correct mud properties on tour report 5.5 Operate all equipment in accordance with manufacturer regulations and company procedures 5.6 Maintain a sound working relationship with third party

	contractors
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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

No equivalent Unit

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 RIIOGD401D Rig up, conduct pre-spud operations and rig down

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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:

- locates and applies relevant documentation, policies and procedures
- implements the requirements, procedures and techniques for the safe, effective and efficient completion of rig up, pre-spud and rig down operations including:
 - identifying, addressing and reporting potential hazards and risks
 - controlling identified hazards
 - checking equipment for damage and/or loss by moving contractor and report and BI
 - identifying, addressing and reporting environmental issues
- works effectively with others to plan, prepare and conduct rig up, pre-spud and rig down operations to meet all required outcomes including:
 - resolving coordination requirements with others at the site prior to commencing and during work activities
 - carrying out pre rig-up procedure inspections (by rig manager, operator and crew)
 - coordinating movement of load and sequence of installation and location in accordance with rig movement plan
 - preparing for and organising work activities to meet all task requirements
 - communicating clearly and concisely with others to receive and clarify work instructions
 - using a range of communication techniques and aids to advise others of work activity and exclusion zones taking corrective action

- demonstrates completion of rig up, pre-spud and rig down operations that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - identifying potential rig-up problems
 - checking drilling and hoist equipment
 - determining optimum circulating and penetration rates and checking deviations
 - receiving and actioning authorisation to commence drilling
 - identifying potential rig-down operations
 - carrying out effective supervision of rig up, pre-spud and rig down operations that meets all required outcomes

Knowledge Evidence

The candidate must demonstrate knowledge in applying the rig up, conduct pre-spud operations and rig down through:

- accessing, interpreting and applying legislative, organization and site requirements and procedures for:
 - identifying and managing risks
 - identifying, addressing and reporting environmental issues
 - setting up work activity
 - site isolation, signage and erecting barriers
 - work health and safety
 - selecting and checking for faults, all plant, tools and equipment to carry out tasks
 - optimum circulating and penetration rates
 - carrying out work to specifications
 - applying effective techniques for applying rig up, pre-spud and rig down operations
 - applying standard working practices and procedures for rig up, pre-spud and rig down operations
 - troubleshoot during drilling program
 - carrying out calculations including:
 - quantities
 - up-hole velocity
 - specific gravity
 - volume
 - hydrostatic pressures

Assessment Conditions

- An assessor of this unit must satisfy the requirements of the NVR/AQTF or their successors; 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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