



Australian Government

RIINHB211D Assist mud rotary drilling

Release: 2

RIINHB211D Assist mud rotary drilling

Modification History

Release	Comment
1	This unit replaces RIINHB211A Assist mud rotary drilling.
2	Formatting corrections. 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 assist mud rotary drilling in the Resources and Infrastructure Industry.

This unit is appropriate for those working in drillers assistant roles.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Elements and Performance Criteria

1. Plan and prepare for assisting with mud rotary drilling	1.1 Access, interpret and apply assist mud rotary drilling 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 and wear personal protective equipment appropriate for the work activity 1.5 Communicate and coordinate activities with others throughout the work activity 1.6 Load, unload and move tools and equipment 1.7 Set up and stabilise pipe racks 1.8 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency
2. Support the rotary	2.1 Fit and remove bits, reamers and stabilizers to and from the

mud drilling process	drill string 2.2 Prepare drill string in readiness for tripping and drilling 2.3 Add and remove drill pipe and collars from the drill string 2.4 Inspect drill pipe, collars, bits, threads and associated equipment for damage 2.5 Continually monitor hazards and risks, and ensure safety of self, other personnel, plant and equipment 2.6 Use pipe and casing handling equipment
3. Handle samples	3.1 Apply safety precautions when handling potentially hazardous samples 3.2 Obtain and/or lay out disturbed samples 3.3 Bag, properly label and store samples for transport 3.4 Clean and service sampling tools 3.5 Store undisturbed samples for transport
4. Mix drilling fluids	4.1 Check labels and read and interpret safety information, hazard codes and safety data sheets (SDS) 4.2 Mix drilling fluids 4.3 Carry out storage of drilling mud components and additives 4.4 Perform basic tests on the fluid and record and report the results
5. Carry out basic maintenance of tools and equipment	5.1 Perform inspections and routine checks on ancillary equipment 5.2 Perform inspections and basic maintenance on pipe handling equipment 5.3 Complete housekeeping activities 5.4 Process records

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

RIINHB211A Assist mud rotary drilling

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 RIINHB211D Assist mud rotary drilling

Modification History

Release	Comment
1	This unit replaces RIINHB211A Assist mud rotary drilling.
2	Formatting corrections. 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.

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 assisting with mud rotary drilling including:
 - operation of ancillary equipment
 - basic maintenance of ancillary equipment
 - conducting housekeeping
- works effectively with others to undertake and complete the mud rotary drilling tasks that meets all of the required outcomes including:
 - complying with written and verbal reporting requirements and procedures
 - communicating clearly and concisely with others to receive and clarify work instructions
 - communicating clearly and concisely with others to resolve coordination requirements prior to commencing and during work activities
- demonstrates completion of assisting with mud rotary drilling that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - fitting and removing bits and reamers to and from the drill string
 - preparing drill string in readiness for tripping and drilling
 - adding and removing drill pipe to and from the drill string

- inspecting, addressing and reporting, drill pipe, bits, threads and associated equipment for damage
- correctly mixing the drilling fluid

Knowledge Evidence

The candidate must demonstrate knowledge in assisting mud rotary drilling through:

- applying the organisation and site requirements and procedures for:
 - work, health and safety
 - environmental issues
- identifying the care of samples including storage and transport
- being prepared for fire/accident/emergency
- using safety data sheets (SDS)
- using the correct types of mud pumps and understanding their applications

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

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>