



Australian Government

RIINHB311E Conduct mud rotary drilling operations

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 5.0.

Application

This unit describes the skills and knowledge required to conduct mud rotary drilling. It includes making up drill fluid, installation and monitoring of equipment and maintenance procedures.

It applies to those working in operational roles. They generally perform tasks involving a broad range of skilled applications in a wide variety of contexts, which may involve some discretion and judgement in selecting equipment, services and contingency measures.

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

Unit Sector

Drilling

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan and prepare for mud rotary drilling	1.1 Obtain, interpret and confirm work requirements 1.2 Access, interpret and apply mud rotary drilling documentation and confirm work activity is compliant 1.3 Identify and minimise environmental issues and potential hazards, and assess and address risks within scope of own role and according to workplace procedures 1.4 Select and wear personal protective equipment required for work activities 1.5 Communicate with other personnel at site according to work requirements and confirm briefings and handover details are communicated and received

ELEMENT	PERFORMANCE CRITERIA
2. Operate mud rotary drill in line with established requirements	2.1 Carry out prestart and start-up procedures according to manufacturer specifications and workplace procedures 2.2 Make up drill fluid according to work requirements 2.3 Set up drill string, bits, rods and casings required to complete work activity 2.4 Check, adjust and maintain fluid recirculation systems according to work requirements 2.5 Install collar and seal according to work requirements 2.6 Operate equipment and adjust parameters to suit conditions of the hole 2.7 Install casing, grout and screens to correct zones according to work requirements 2.8 Identify problems or faults and rectify or report within scope of own responsibility and according to workplace procedures
3. Complete equipment shut down and maintenance activities	3.1 Shut down and secure equipment in line with workplace procedures 3.2 Follow maintenance schedule according to work requirements 3.3 Complete and file or distribute documentation for drilling operations and equipment according to workplace procedures

Foundation Skills

This section describes those language, literacy and numeracy and employment skills that are essential to performance.

SKILL	DESCRIPTION
Reading	Identifies and interprets information from workplace procedures, policies and documentation
Numeracy	Identifies and comprehends relevant mathematical information in relation to operating mud rotary drills and fluid systems
Writing	Produces and completes workplace reports using appropriate vocabulary, grammatical structures and conventions
Oral communication	Uses listening and questioning to clarify and confirm understanding

Unit Mapping Information

Supersedes and is equivalent to RIINHB311D Conduct mud rotary drilling.

Links

Companion Volume implementation guides is found on VETNet -

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