



Australian Government

RINHB328 Conduct rotary air drilling

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 rotary air drilling in drilling. It prepares individuals to operate rotary air drill, use drilling fluids, maintain equipment and respond to problems.

It applies to those working in operational roles for rotary air drilling including RAB, blade, roller bit, PCD and conventional hammer drilling. This unit does not apply to Reverse Circulation (RC) drilling. 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.

Licensing, legislative and certification requirements that apply to this unit can vary between states, territories, and Industry sectors. Users must check requirements with relevant body before applying the unit.

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 rotary air drilling	1.1 Obtain, clarify and apply work instructions 1.2 Access, interpret and apply 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 Communicate with other personnel at site according to work requirements and confirm briefings and handover details are

ELEMENT	PERFORMANCE CRITERIA
	<p>communicated and received</p> <p>1.5 Select and wear required personal protective equipment, tools and equipment to carry out tasks, check for serviceability and rectify or report any faults</p> <p>1.6 Check restraining devices on all pressure hoses</p> <p>1.7 Fit and replace restraining devices on pressure hoses as required</p> <p>1.8 Obtain and interpret emergency procedures identify steps required in case of fires, accidents and other emergencies</p>
2. Operate rotary air drill	<p>2.1 Select required rod type, thread form and drill string components for job</p> <p>2.2 Measure and select appropriate bit for the job</p> <p>2.3 Conduct pre-start equipment checks and rectify or report identified faults as required</p> <p>2.4 Correctly collar hole</p> <p>2.5 Use rod handling equipment safely and correctly</p> <p>2.6 Add/break out and remove drill rod and down hole tooling/bottom hole assemblies</p> <p>2.7 Weight/feed/rotate drill at right rate for optimum penetration</p> <p>2.8 Adjust air pressure to achieve required hole clearance</p> <p>2.9 Measure line string and calculate depth of hole</p>
3. Use drilling fluids	<p>3.1 Identify hole conditions, assess requirements of dust control fluids</p> <p>3.2 Select suitable ingredients/fluids</p> <p>3.3 Prepare/monitor the preparation of required fluids</p> <p>3.4 Use dust control fluids to achieve required result</p>
4. Maintain equipment	<p>4.1 Monitor equipment wear</p> <p>4.2 Check all equipment and hoses</p> <p>4.3 Disassemble, inspect components, replace unserviceable parts and reassemble bottom hole assembly</p> <p>4.4 Replace and adjust and report damaged and worn parts as required</p>
5. Respond to problems	<p>5.1 Monitor operation and chips/sample/air return</p> <p>5.2 Identify possible problems in equipment or process</p> <p>5.3 Clear blockages safely</p> <p>5.4 Determine other problems and maintenance tasks needing action</p> <p>5.5 Determine possible fault causes</p> <p>5.6 Rectify problem using appropriate solution within area of responsibility</p> <p>5.7 Follow through items initiated until final resolution has occurred</p> <p>5.8 Verbally or in writing report problems outside area of responsibility to designated person</p>

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Reading	<ul style="list-style-type: none">Identifies and interprets information from workplace procedures, documentation, legislation and regulations
Self-management	<ul style="list-style-type: none">Monitors and minimises own exposure to worksite hazards during activities

Unit Mapping Information

New unit

Links

Companion Volume implementation guides is found on VETNet -

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