



Australian Government

RIINHB307D Conduct conventional core drilling

Release: 2

RIINHB307D Conduct conventional core drilling

Modification History

Release	Comment
1	This unit replaces RIINHB307B Conduct conventional core drilling
2	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 conduct conventional core drilling in the Resources and Infrastructure Industry.

This unit is appropriate for those working in operational 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 conventional core drilling	1.1 Access, interpret and apply conduct conventional core 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 work activities 1.5 Communicate and coordinate activities with others throughout the work activity 1.6 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency
2. Operate core drill	2.1 Carry out pre-start and start up procedures 2.2 Identify, select and apply rig operational controls 2.3 Identify and use different drill rod or casing types, thread forms and thread make up parameters

	<p>2.4 Select appropriate drill bits and reamer shells</p> <p>2.5 Adjust inner tube length to ensure appropriate fluid flow around the core</p> <p>2.6 Use rod and casing handling equipment</p> <p>2.7 Add and break out and remove drill rods and pipes and down hole equipment</p> <p>2.8 Apply appropriate rotation speed, weight on the bit, drilling fluid flow rate and penetration rate applicable to the ground conditions</p> <p>2.9 Measure drill string components and calculate depth of hole</p> <p>2.10 Collar holes</p> <p>2.11 Install casing and seal at the collar</p>
3. Operate drill fluid system	<p>3.1 Identify hole conditions requiring the use of drilling fluid additives</p> <p>3.2 Select, prepare, apply, test and monitor suitable fluids and additives</p> <p>3.3 Monitor fluid return and solids content and implement control measures</p> <p>3.4 Monitor fluid and cuttings specific gravity and up hole velocity to ensure efficient hole clearing</p> <p>3.5 Monitor causes of pressure in fluid systems</p> <p>3.6 Select the appropriate fluid pumping rate for the hole size</p>
4. Use survey and core orientation equipment	<p>4.1 Assemble, maintain and use survey and core orientation devices</p> <p>4.2 Read and record survey data</p>
5. Take core samples	<p>5.1 Implement control measures for minimising core loss</p> <p>5.2 Identify core blockages affecting sample quality</p>
6. Respond to problems	<p>6.1 Identify possible problems in equipment or process</p> <p>6.2 Determine problems needing action</p> <p>6.3 Determine possible fault causes</p> <p>6.4 Rectify problem using appropriate solution within area of responsibility</p> <p>6.5 Follow through items initiated until final resolution has occurred</p> <p>6.6 Report problems outside area of responsibility to designated</p>

	person
7. Complete equipment maintenance and housekeeping	<ul style="list-style-type: none">7.1 Carry out shutdown and secure equipment7.2 Use the required personal protective equipment and follow safe working procedures7.3 Strip impregnated bits according to required procedures7.4 Dismantle and service head assembly7.5 Maintain drill string7.6 Maintain bit management, record required information and store bits correctly7.7 Ensure housekeeping activities are completed7.8 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

RIINHB307B Conduct conventional core drilling

Links

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