



Australian Government

RIINHB208D Assist diamond core drilling

Release: 2

RIINHB208D Assist diamond core drilling

Modification History

Release	Comment
1	This unit replaces RIINHB208B Assist diamond 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 assist diamond core drilling in Drilling.

This unit is appropriate for those working in driller assistants roles.

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

Unit Sector

Drilling

Elements and Performance Criteria

1 Plan and prepare for assisting with diamond core drilling	1.1 Access, interpret and apply assist diamond 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 the work activity 1.5 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency 1.6 Communicate and coordinate activities with others throughout the work activity 1.7 Load, unload, move, handle and store core drilling equipment
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	and all associated tools, sampling devices and connecting equipment 1.8 Set up and stabilise racks
2 Support the core drilling process	2.1 Assemble core barrel components 2.2 Prepare drill string in readiness for tripping and drilling 2.3 Add and remove drill rods and core inner tubes 2.4 Inspect inner tube and core barrel regularly and replace worn or damaged components 2.5 Continually monitor hazards and risks, and ensure safety of self, other personnel, plant and equipment 2.6 Use rod and casing handling equipment 2.7 Store and handle diamond tools
3 Handle core samples	3.1 Dismantle inner tube for recovery of core samples 3.2 Take necessary safety precautions when handling potentially contaminated samples 3.3 Remove core samples from inner tube and place in core trays in correct sequence 3.4 Record information on core marker blocks and core box accurately and legibly 3.5 Take precautions to ensure no surface contamination of cores and delicate cores are preserved 3.6 Stack core boxes ready for storage and transportation 3.7 Clean and lubricate inner tube components and re-assemble in preparation for the next run
4 Mix drilling fluids	4.1 Check labels and read and interpret safety information and hazard codes 4.2 Apply correct mixing procedure for the drilling fluid 4.3 Carry out storage of drilling mud components and additives 4.4 Perform basic tests on drilling fluids and record and report the results
5 Carry out basic maintenance of tools and equipment	5.1 Perform inspection and checks on serviceability of core barrel components 5.2 Perform inspections and routine checks on ancillary equipment 5.3 Perform inspections and basic maintenance on rod handling equipment 5.4 Fit restraining devices to Kelly hoses

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

RIINHB208B Assist diamond core 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 RIINHB208D Assist diamond core drilling

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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 assisting with diamond core drilling including:
 - identifying and measuring core bits, reamer shells and related components
 - identifying thread types
 - identifying bits to suit thread types
 - safely storing diamond tools
 - use rod handling equipment and methods
 - adding and removing drill rods to the line string
 - refuelling vehicles, drill rigs and ancillary equipment
 - identifying and applying correct lubricants
 - identifying and applying correct handling of samples
 - conducting housekeeping
 - correctly identifying and mixing drill fluids
 - basic maintenance of mud and/or water delivery pumps
 - applying appropriate lifting techniques
 - collection of sludge and chip samples
- works effectively with others to undertake and complete the assisting with diamond core drilling 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 diamond core drilling that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - assembling core barrel components
 - preparing drill string in readiness for tripping and drilling
 - adding and removing drill rods and core inner tubes
 - dismantling inner tube for recovery of core samples
 - ensuring correct sequencing of core samples in core trays
 - applying correct mixing procedure for the drilling fluid

Knowledge Evidence

The candidate must demonstrate knowledge in assisting diamond core drilling through:

- applying the organisation and site requirements and procedures for:
 - work health and safety
 - environment issues
- identifying reasons for identification and care of samples including storage and transport
- identifying information to be placed on core boxes/core marker blocks
- identifying diamond coring equipment, components and system of names
- identifying requirements for collaring of bore holes, including equipment, methods, seals and installation
- carrying out maintenance of stuffing boxes and/or 'T' pieces
- identifying mud pumps and their applications
- applying basic knowledge of bit types and their applications to different geological conditions
- applying basic knowledge of fluid circulation system and its effect on hole integrity and sample quality

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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