



Australian Government

RIINHB219E Assist with reverse circulation drilling

Release: 1

RIINHB219E Assist with reverse circulation drilling

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 assist with reverse circulation drilling. It prepares individuals to support the reverse circulation drilling process, handle samples, use restraining devices, mix drilling fluids and carry out basic maintenance of tools and equipment.

It applies to those working in assistant driller roles. They generally work under supervision to undertake a prescribed range of functions involving known routines and procedures.

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 to assist with reverse circulation drilling	1.1 Obtain, read and confirm work requirements 1.2 Access, interpret and apply assist with reverse circulation 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 appropriate personal protective required for work activities 1.5 Communicate with other personnel on site as required and confirm briefings and handover details are communicated and

ELEMENT	PERFORMANCE CRITERIA
	<p>received</p> <p>1.6 Load, unload and move tools and equipment</p> <p>1.7 Obtain and interpret emergency procedures and identify steps in case of fire, accident and other emergencies</p>
<p>2. Support the reverse circulation drilling process</p>	<p>2.1 Fit, remove and measure bits and down-hole tools to and from drill string as required</p> <p>2.2 Prepare drill string in readiness for tripping and drilling</p> <p>2.3 Sharpen drill bits</p> <p>2.4 Add and remove drill rod to and from the drill string as required</p> <p>2.5 Inspect and maintain drill rod, bits, threads and other required down-hole equipment</p> <p>2.6 Use rod and casing handling equipment</p> <p>2.7 Install and seal casing</p> <p>2.8 Use, install and maintain stuffing boxes and collar T pieces</p>
<p>3. Handle samples</p>	<p>3.1 Obtain and lay out samples as required</p> <p>3.2 Split, bag, label and store samples for transport</p> <p>3.3 Clean and service sampling equipment</p> <p>3.4 Obtain uncontaminated samples using required sampling methods</p> <p>3.5 Identify safety precautions for handling potentially hazardous samples</p> <p>3.6 Clear blockages in sample and delivery system</p> <p>3.7 Note and report possible changes to sample quality due to blockages</p>
<p>4. Use restraining devices</p>	<p>4.1 Fit restraining devices</p> <p>4.2 Identify dangers of high velocity samples in reverse circulation drilling and take required measures to minimise hazard</p>
<p>5. Mix drilling fluids for reverse circulation /foam drilling</p>	<p>5.1 Check labels and read and interpret safety information and hazard codes as required</p> <p>5.2 Mix drilling fluids according to job requirements</p> <p>5.3 Store drilling fluid components and additives</p>
<p>6. Carry out basic maintenance of tools and equipment</p>	<p>6.1 Perform inspections and routine checks on ancillary equipment including reverse circulation compressor and injection pump</p> <p>6.2 Perform inspections and basic maintenance of rod handling equipment</p> <p>6.3 Select and maintain bit sharpening equipment</p> <p>6.4 Complete housekeeping activities to workplace requirements</p> <p>6.5 Process records according to workplace procedures</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
Oral Communication	<ul style="list-style-type: none">• Listens to short, explicit instructions for work procedures and asks questions to clarify and confirm
Self-management	<ul style="list-style-type: none">• Monitors and minimises own exposure to worksite hazards during activities

Unit Mapping Information

Supersedes and is equivalent to RIINHB219D Assist with air drilling.

Links

Companion Volume implementation guides is found on VETNet -

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