



Australian Government

RIINHB315D Conduct top-hole hammer drilling

Release: 1

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Modification History

Not applicable.

Application

This unit describes a participant's skills and knowledge required to conduct top-hole hammer drilling in Drilling.

This unit is appropriate for those working in operational roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and industry sectors. Relevant information must be sourced prior to application of this unit

Unit Sector

Drilling

Elements and Performance Criteria

<p>1. Plan and prepare for top-hole hammer drilling</p>	<p>1.1 Access, interpret and apply top-hole drilling documentation and ensure the work activity is compliant</p> <p>1.2 Obtain, read, interpret, clarify and confirm work requirements</p> <p>1.3 Identify and address potential risks, hazards and environmental issues and implement control measures</p> <p>1.4 Select and wear personal protective equipment appropriate for work activities</p> <p>1.5 Communicate and coordinate activities with others throughout the work activity</p> <p>1.6 Select, and check for faults, tools and equipment to carry out tasks</p> <p>1.7 Check restraining devices on all pressure hoses</p> <p>1.8 Fit/replace restraining devices on pressure hoses as required</p> <p>1.9 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency</p>
<p>2. Operate top hole hammer drill</p>	<p>2.1 Carry out pre-start and start up procedures</p> <p>2.2 Identify, select and apply rig operational controls</p> <p>2.3 Select appropriate rod type, thread form and drill string components for job</p> <p>2.4 Measure and select appropriate bit for the job</p> <p>2.5 Collar hole</p> <p>2.6 Use rod handling equipment safely and correctly</p> <p>2.7 Add/break out and remove drill rods/pipes and top hole equipment</p> <p>2.8 Adjust/feed/rotate drill at right rate for optimum penetration</p> <p>2.9 Adjust impact pressure and rate to match ground conditions</p> <p>2.10 Adjust air pressure to achieve required hole clearance</p> <p>2.11 Measure line string and calculate depth of hole</p>
<p>3. Use drilling fluids as required</p>	<p>3.1 Identify hole conditions requiring the use 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>
<p>4. Respond to problems</p>	<p>4.1 Monitor operation and chips/sample/air return</p>

	4.2 Identify possible problems in equipment or process 4.3 Clear blockages 4.4 Determine other problems and maintenance tasks needing action 4.5 Determine possible fault causes 4.6 Rectify problem using appropriate solution within area of responsibility 4.7 Follow through items initiated until final resolution has occurred 4.8 Report problems outside area of responsibility to designated person
5. Complete equipment maintenance and housekeeping	5.1 Carry out shutdown procedures and secure equipment 5.2 Monitor wear 5.3 Check all equipment and hoses 5.4 Replace shanks as required 5.5 Replace/adjust and report damaged/worn parts as required 5.6 Undertake bit sharpening as required 5.7 Grease drifter as required 5.8 Ensure housekeeping activities are completed 5.9 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

RIINHB315A Conduct top-hole hammer drilling

Links

SkillsDMC RII Companion Volumes - <http://www.skillsdmc.com.au/>