



**Australian Government**

# **RRIOGD301D Conduct and maintain derrick operations**

**Release: 2**

## RIIOGD301D Conduct and maintain derrick operations

### Modification History

Release	Comment
1	This unit replaces RIIOGD301A Conduct and maintain derrick operations
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 apply conduct and maintain derrick operations in Drilling.

This unit is appropriate for those working in operational roles.

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

### Unit Sector

Drilling

## Elements and Performance Criteria

<p>1. Plan and prepare for derrick operations</p>	<p>1.1 Access, interpret and apply derrick operations 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 the personal protective equipment appropriate for the work activity</p> <p>1.5 Clarify difficulties in carrying out the instructions with the relevant personnel</p> <p>1.6 Resolve coordination requirements with others at the site prior to commencing, during and on completion of the work activities and ensure briefings/handover details are read/passed on</p> <p>1.7 Confirm availability and status of necessary permits to work</p> <p>1.8 Confirm availability of necessary third party utilities</p> <p>1.9 Confirm availability of required quantities and type of consumables against operational requirements</p> <p>1.10 Identify errors, omissions and shortages and take appropriate remedial action within functional responsibility</p> <p>1.11 Inform driller of current operating conditions</p>
<p>2. Handle tubulars and equipment</p>	<p>2.1 Position tubulars and equipment according to operational requirements</p> <p>2.2 Assist in making and breaking connections where appropriate</p> <p>2.3 Identify faults and defects accurately and take appropriate remedial action within functional responsibility</p> <p>2.4 Handle equipment using safe lifting and handling techniques</p>
<p>3. Inspect and perform routine maintenance of derrick and connected equipment</p>	<p>3.1 Inspect safety lines, ropes, air hoists, monkey board, sheaves, crown block, derrick bolts, pins and welds, and all other lines and equipment in or attached to the derrick</p> <p>3.2 Lubricate air hoists, sheaves, crown block fast line guide</p> <p>3.3 Replace defective parts and effect minor repairs</p> <p>3.4 Perform jobs or tasks such as hanging back of travelling block, replacement of sheaves]</p> <p>3.5 Complete pre-raise and pre-circulation checks in accordance with statutory and company procedures</p>
<p>4. Prepare for and drill surface hole</p>	<p>4.1 Establish circulation</p>

	<p>4.2 Perform pre-spud safety checks</p> <p>4.3 Check all connections and valves to floor are in proper position</p> <p>4.4 Maintain drilling fluid volume and properties</p> <p>4.5 Inform driller of current operating conditions</p> <p>4.6 Maintain written inventory of circulation system/parts</p> <p>4.7 Check and record in writing fluid additives</p> <p>4.8 Check availability of derrick casing equipment</p> <p>4.9 Follow all operators' instructions</p>
5. Participate in head-up and pressure test	<p>5.1 Preparations for necessary equipment changes</p> <p>5.2 Prepare drilling fluid</p> <p>5.3 Assist in nipping-up</p> <p>5.4 Assist driller in BOP testing</p>
6. Drill main hole	<p>6.1 Consult driller and fluid engineer's program, and follow instructions</p> <p>6.2 Maintain housekeeping and safe practices during drilling</p> <p>6.3 Assist in completion or abandonment of well as required</p> <p>6.4 Convert between metric and imperial measurements</p> <p>6.5 Record in writing reading of depth, direction and azimuth accurately and legibly</p>
7. Prepare to commence drilling operations	<p>7.1 Align equipment on active systems for drilling</p> <p>7.2 Turn on and check all appropriate machinery</p> <p>7.3 Watch for returns if riser installed</p> <p>7.4 Measure and log in writing pit levels regularly</p>
8. Assist in running and cementing of casing	<p>8.1 Follow instructions when running casing</p> <p>8.2 Align valves and fluid system for casing fill-up line</p> <p>8.3 Rig up, function test, lubricate and operate casing stabbing board</p> <p>8.4 Attach and secure safety lines to all circulating lines</p> <p>8.5 Circulate fluid in accordance with instructions</p> <p>8.6 Mix chemicals for cementers and align pumps to cementing unit</p> <p>8.7 Weigh cement as it is being mixed</p> <p>8.8 Align fluid system for displacement of cement</p>

	8.9	Monitor returns and pits to assess circulation and returns
9. Assist Driller on drill floor	9.1	Assist in handling and nipping-up of BOP stack
	9.2	Carry out role of assistant to driller when on drill floor
10. Shutdown rig and rig out	10.1	Wash and drain circulation system
	10.2	Repair equipment
	10.3	Store equipment safely

## 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

RIIOGD301A Conduct and maintain derrick operations

## Links

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