



**Australian Government**

# **RIIOGN303E Operate, monitor and maintain mud systems**

**Release: 1**

## RIIOGN303E Operate, monitor and maintain mud systems

### 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 recognise warning signs of kick detections and operate and maintain mud systems, mud conditioning equipment and transfer (butterfly) valves in mud pits.

This unit applies to those working in operational roles. They generally perform tasks involving a broad range of skilled applications in a wide variety of contexts, which may involve some discretion and judgement in selecting equipment, services and contingency measures.

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 for operations	1.1 Obtain, interpret and confirm work requirements 1.2 Access, interpret and apply documentation required to operate, monitor and maintain mud systems 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 personal protective equipment required for work activities

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	<p>1.5 Communicate with other personnel at site according to work requirements and confirm briefings and handover details are communicated and received</p> <p>1.6 Confirm availability and status of necessary permits to work according to operational and legislative requirements</p> <p>1.7 Confirm availability of necessary third party utilities</p>
2. Operate mud system	<p>2.1 Confirm good oilfield practice when operating equipment</p> <p>2.2 Align valves in pits and confirm correct pit usage</p>
3. Operate, maintain and repair mud conditioning equipment	<p>3.1 Identify, confirm and adjust equipment according to instructions from supervisors or mud engineers</p> <p>3.2 Clean all equipment and visually inspect for leaks and proper operation according to specifications</p> <p>3.3 Identify faults or potential faults, record and report to relevant personnel</p> <p>3.4 Replace screens and cones on shakers, desilters and desanders according to manufacturer specifications</p> <p>3.5 Perform periodic or scheduled preventative maintenance on all mud treatment units according to manufacturer specifications</p>
4. Operate and service transfer (butterfly) valves in mud pits	<p>4.1 Align valves according to manufacturer specifications</p> <p>4.2 Lubricate valve stems of butterfly valves according to manufacturer specifications</p> <p>4.3 Clean and inspect transfer valves according to manufacturer specifications</p> <p>4.4 Replace and repair defective parts as required according to manufacturer specifications</p>
5. Monitor mud systems and recognise warning signs of kicks	<p>5.1 Monitor, adjust and report pit level</p> <p>5.2 Monitor and report mud properties</p> <p>5.3 Monitor and report size of cuttings</p> <p>5.4 Monitor and report volume of mud returns</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.*

<b>SKILL</b>	<b>DESCRIPTION</b>
Reading	<ul style="list-style-type: none"> <li>Identifies and interprets information from workplace procedures, documentation and regulations</li> </ul>

<b>SKILL</b>	<b>DESCRIPTION</b>
Self-management	<ul style="list-style-type: none"><li>• Monitors and minimises own exposure to worksite hazards during activities</li></ul>
Oral communication	<ul style="list-style-type: none"><li>• Uses verbal communication techniques to communicate with others</li></ul>

## Unit Mapping Information

Supersedes and is equivalent to RIIOGN303D Operate mud.

## Links

Companion Volume implementation guides is found on VETNet -

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