



Australian Government

RIIOGD203F Prepare and operate drilling fluid systems

Release: 1

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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 apply prepare and operate drilling fluid systems in drilling. It prepares individuals to establish operational requirements, select and test equipment, prepare and pump drilling fluids and operate a hopper system.

It applies to those working in assistant 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 for operations	1.1 Obtain, interpret and confirm work requirements 1.2 Access, interpret and apply drilling fluid system 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 the personal protective equipment required for work activity 1.5 Communicate with other personnel on site as required and confirm briefings and handover details are communicated and

ELEMENT	PERFORMANCE CRITERIA
	received 1.6 Assess geographic layout and confirm type of fluid system in use is suitable 1.7 Assess operation of mud mixers, dump valves and equalising valves 1.8 Identify and locate mud pump and discharge system
2. Establish operational requirements	2.1 Clarify difficulties in carrying out instructions with relevant personnel 2.2 Confirm availability and status of necessary permits to work 2.3 Confirm availability of necessary third party utilities 2.4 Confirm availability of required quantities and type of consumables 2.5 Identify errors, omissions and shortages and take remedial action as required within functional responsibility
3. Select and test equipment	3.1 Identify and select equipment required for work activities 3.2 Identify defects in equipment and take remedial action as required within functional responsibility 3.3 Confirm equipment is functional and fit for purpose and environment in which it will be used 3.4 Lubricate fluid circulation components
4. Prepare drilling fluids	4.1 Confirm availability of sufficient quantities and types of fluids against operational requirements 4.2 Confirm tanks and mixing equipment are clean and free from contamination according to instructions 4.3 Mix and treat fluids to specification 4.4 Obtain, label in writing and store samples according to workplace procedures and operational requirements
5. Pump drilling fluids and record data	5.1 Confirm recording and monitoring devices are pre-set to required parameters 5.2 Operate equipment according to safety and operational requirements 5.3 Assist with weighing and measuring viscosity of samples and record details 5.4 Record in writing data at scheduled times and frequencies according to operational requirements
6. Conduct hopper system operating procedures	6.1 Identify type of hopper system 6.2 Operate and maintain hopper system and associated components 6.3 Measure, calculate and log in writing mud properties 6.4 Recognise, record and report changes in returns of drilling fluid

ELEMENT	PERFORMANCE CRITERIA
	and pit volumes

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
Numeracy	Interprets numerical information relating to fluid quantity, weight, viscosity, mix specifications and pit volumes
Reading	Identifies and interprets information from workplace procedures and documentation
Self-management	Monitors and minimises own exposure to worksite hazards during activities

Unit Mapping Information

Supersedes and is equivalent to RIIOGD203E Prepare and operate drilling fluid systems.

Links

Companion Volume implementation guides is found on VETNet -

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