

<b>Title</b>	<b>Test fluids used in machinery and equipment for variation from specification</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>3</b>

<b>Purpose</b>	People credited with this unit standard are able to prepare for testing of fluids used in machinery, test fluids and analyse results.
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<b>Classification</b>	Mechanical Engineering > Maintenance and Diagnostics in Mechanical Engineering
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<b>Available grade</b>	Achieved
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<b>Prerequisite</b>	Unit 21912, <i>Apply safe working practices on an engineering worksite</i> , or demonstrate equivalent knowledge and skills.
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### Guidance Information

- 1 Reference  
Health and Safety at Work Act 2015.
- 2 Definitions  
*Accepted industry practice* – approved codes of practice and standardised procedures accepted by the wider mechanical engineering industry sectors as examples of best practice.  
*Fluids* – water and oil used in machines.  
*Workplace procedures* – procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.
- 3 Assessment information  
The use of specialist laboratory testing equipment when testing fluids is not required for assessment against this unit standard.

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### Outcomes and performance criteria

#### Outcome 1

Prepare for testing of fluids used in machinery.

**Performance criteria**

- 1.1 Fluid testing requirements are determined, and test equipment relevant to test is prepared.
- 1.2 Fluid samples and specifications are obtained in accordance with workplace procedures.

**Outcome 2**

Test fluids and analyse results.

**Performance criteria**

- 2.1 Tests are carried out in accordance with workplace procedures.
- Range water for pH, solids, and additives;  
oil for viscosity and contamination.
- 2.2 Test results are interpreted and compared with fluid specification in accordance with workplace procedures.
- 2.3 Fluids not conforming to fluid specification are identified and reported for rectification in accordance with workplace procedures.
- 2.4 Test results are recorded in accordance with workplace procedures.

<b>Planned review date</b>	31 December 2022
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	25 October 1994	31 December 2011
Revision	2	14 April 1997	31 December 2011
Revision	3	5 January 1999	31 December 2011
Revision	4	18 September 2001	31 December 2011
Rollover and Revision	5	25 July 2006	31 December 2011
Rollover	6	20 June 2008	31 December 2014
Review	7	15 April 2011	31 December 2022
Review	8	17 August 2017	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0013
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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**Comments on this unit standard**

Please contact Competenz [qualifications@competenz.org.nz](mailto:qualifications@competenz.org.nz) if you wish to suggest changes to the content of this unit standard.