



Australian Government

MSL973013 Perform basic tests

Release: 1

MSL973013 Perform basic tests

Modification History

Release	Comments
Release 1	This version was released in <i>MSL Laboratory Operations Training Package Release 2.0</i>. Supersedes and equivalent to MSL973001 Perform basic tests. Foundation skills information added. Range of conditions removed. Assessment requirements amended.

Application

This unit of competency describes the skills and knowledge to prepare samples and perform tests and measurements using standard methods with access to readily available advice from supervisors.

This unit of competency applies to laboratory/field assistants working in all industry sectors. In general, they do not calibrate equipment and make only limited adjustments to the controls. They do not interpret or analyse results or troubleshoot equipment problems.

No licensing or certification requirements exist at the time of publication. However, regulations and/or external accreditation requirements for laboratory operations exist, so local requirements should be checked. Relevant legislation, industry standards and codes of practice within Australia must also be applied.

Pre-requisite Unit

Nil

Competency Field

Testing

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

- | | | | |
|---|------------------------------------|-----|--|
| 1 | Interpret test requirements | 1.1 | Review test request to identify samples to be tested, test method and equipment involved |
| | | 1.2 | Identify hazards and workplace controls associated with the sample, preparation methods, reagents and/or |

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
			equipment
2	Prepare sample	2.1	Record sample description, compare with specification, record and report discrepancies
		2.2	Prepare sample in accordance with appropriate standard methods
3	Check equipment before use	3.1	Set up test equipment in accordance with test method
		3.2	Perform pre-use and safety checks in accordance with workplace procedures and manufacturer instructions
		3.3	Identify faulty or unsafe equipment and report to appropriate personnel
		3.4	Check calibration status of equipment and report any out-of-calibration items to appropriate personnel
4	Perform tests on samples	4.1	Identify, prepare and weigh or measure sample and standards to be tested
		4.2	Conduct tests in accordance with workplace procedures
		4.3	Record data in accordance with workplace procedures
		4.4	Perform calculations on data as required
		4.5	Identify and report out of specification or atypical results promptly to appropriate personnel
		4.6	Shut down equipment in accordance with operating procedures
5	Maintain a safe work environment	5.1	Use established safe work practices and personal protective equipment (PPE) to ensure personal safety and that of other laboratory personnel
		5.2	Minimise the generation of wastes and environmental impacts
		5.3	Ensure safe disposal of laboratory and hazardous wastes
		5.4	Clean, care for and store equipment and reagents as required

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

- Numeracy skills to calculate simple quantities using appropriate equations, units, uncertainties and precision

Other foundation skills essential to performance are explicit in the performance criteria of this unit.

Unit Mapping Information

Release 1. Supersedes MSL973001 Perform basic tests.

Links

MSL Laboratory Operations Companion Volume Implementation Guide is available from VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>

Assessment Requirements for MSL973013 Perform basic tests

Modification History

Release	Comments
Release 1	This version was released in <i>MSL Laboratory Operations Training Package Release 2.0</i>. Supersedes and equivalent to MSL973001 Perform basic tests. Foundation skills information added. Range of conditions removed. Assessment requirements amended.

Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- prepared samples using different processes
- performed at least 3 basic tests or measurements using standard methods and procedures.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- concepts of metrology, including:
 - all measurements are estimates
 - measurements belong to a population of measurements of the measured parameters
 - precision, accuracy and significant figures
 - sources of error, uncertainty and repeatability
 - traceability
- international system of units (SI)
- purpose of tests performed as part of job role and principles of the standard methods/specifications used
- sample preparation processes relevant to job role
- typical basic tests and methods relevant to job role
- measurements used for typical tests
- function of key components of the test equipment, pre-use equipment and safety checks
- sources of uncertainty in measurement and methods for control
- workplace and/or legal traceability requirements
- interpretation and recording of test result, including simple calculations
- procedures for recognising and reporting of unexpected or unusual results
- legal, ethical and work health and safety (WHS) requirements specific to the work task.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - a standard laboratory equipped with basic test equipment, common measuring instruments, materials, standard methods, workplace procedures, SDS and equipment manuals.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

MSL Laboratory Operations Companion Volume Implementation Guide is available from VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>