

<b>Title</b>	<b>Describe rapid analytical laboratory instruments and conduct tests in a primary products food processing operation</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>5</b>

<b>Purpose</b>	People credited with this unit standard are able to describe: rapid chemistry laboratory instruments, and rapid microbiological laboratory instruments; and set up rapid technique micro-test instruments, and conduct rapid technique tests, in a primary products food processing operation.
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<b>Classification</b>	Primary Products Food Processing > Primary Products Food Processing - Operational Skills
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Legislation and standards relevant to this unit standard include but are not limited to:
  - Hazardous Substances and New Organisms Act 1996;
  - Health and Safety at Work Act 2015;
  - Health and Safety in Employment Regulations 1995;
  - Resource Management Act 1991;
  - NZS ISO/IEC 17025:2018 *General requirements for the competence of testing and calibration laboratories*; available at <http://www.standards.co.nz> and any subsequent amendments.
- 2 Definitions
 

*Organisational requirements* – instructions to staff on policies and procedures which are documented in memo, electronic or manual format and are available in the workplace.

*Primary products food processing operation* – covers a meat, dairy, seafood, fruit and vegetable and honey processing, food and beverage manufacturing, and other related industries.
- 3 All evidence presented in this unit standard must be in accordance with organisational requirements.

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### Outcomes and performance criteria

#### Outcome 1

Describe rapid chemistry laboratory instruments in a primary products food processing operation.

**Performance criteria**

- 1.1 Describe near infra-red principles in terms of rapid technique instruments.
- 1.2 Describe rapid technique instruments in terms of food products that they test.

Range evidence of two instruments from the learner's workplace is required.

**Outcome 2**

Describe rapid microbiological laboratory instruments in a primary products food processing operation.

Range rapid microbiological laboratory instruments may include but are not limited to – Polymerase Chain Reaction (PCR), Adenosine Triphosphate (ATP), Maldi-Tof, Enzyme-linked Immunoassay (ELISA), Charles River & Petrifilm; examples of two instruments are required

**Performance criteria**

- 2.1 Describe the theory of rapid technique instruments.
- 2.4 Describe the rapid technique instruments in terms of their application and expected results.

**Outcome 3**

Set up rapid technique micro-test instruments, and conduct rapid technique tests in a primary products food processing operation.

**Performance criteria**

- 3.1 Set up rapid technique micro-test instruments in accordance with manufacturer's instructions.
- 3.2 Conduct rapid technique tests.

Range evidence of two tests is required.

- 3.3 Report and follow up any non-conformance.

<b>Replacement information</b>	This unit standard replaced unit standard 4313.
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<b>Planned review date</b>	31 December 2026
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	17 September 2015	31 December 2021
Review	2	24 October 2019	31 December 2024
Reinstatement	3	24 March 2022	N/A

**Consent and Moderation Requirements (CMR) reference**

0033

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

**Comments on this unit standard**

Please contact Hanga-Aro-Rau Manufacturing, Engineering, and Logistics Workforce Development Council [qualifications@hangaarorau.nz](mailto:qualifications@hangaarorau.nz) if you wish to suggest changes to the content of this unit standard.